

Classical cast iron rainwater pipe and gutter systems



Saint-Gobain PAM UK manufactures the Classical range of traditional rainwater and gutter systems designed in accordance with BS 460. Cast iron gutters and downpipes have been manufactured at the Telford site for over 100 years servicing the housing and construction markets, recognised for their aesthetic charm, strength to withstand high winds, heavy snow, and vandalism and above all their long life capabilities.

No other material can match the character, durability, strength or appeal of cast iron and—most importantly—only cast iron can preserve the intentions of the original architect and the aesthetic integrity of the building.

Applications

- Listed and traditional properties
- Ecclesiastical buildings i.e. Churches
- Homes of high quality and appearance
- Farm buildings and barn conversions
- Public Houses
- Railway buildings
- Self-build homes of character
- Properties in conservation areas
- Pre-1960 homes—refurbishment
- Inner city buildings
- Sport/recreation buildings

Benefits

- **Strength**
 - > High resistance to impact (accidental and vandalism) a major consideration for inner cities, town shopping precincts and schools etc.
 - > Secure against—heavy snow falls and high winds
 - > Rigidity to comfortably accommodate the weight of ladders for routine maintenance
 - > The physical properties of cast iron will be sustained throughout its life (provided adequately painted and maintained)
- **Acoustics**
 - > Will not rattle in high winds
 - > Will not twist/creak due to temperature changes
 - > Excellent sound deadening properties—therefore no significant sound of running or dripping water disturbing the peace
- **Appearance**
 - > Cast iron has aesthetic charm that simply cannot be matched by other materials
 - > Retains and enhances the traditional character of the building
 - > Can be painted any colour to match building
 - > Enhances perception of the value to the property
 - > Many profiles to match virtually all architectural styles
- **Longevity**
 - > Naturally durable up to 100 years
- **Far more cost effective over longer term**
 - lasting 5 times that of plastic look-a-like systems (assuming they last 20 years)
 - > Cost effective in long term
 - > Minimal maintenance: If installed correctly to the manufacturer's recommendations (refer to Installation Guide), cast iron systems should require little structural maintenance throughout their life only periodical painting approximately every 5 years or longer (depending on location and climatic conditions)
- **Green material**
 - > Manufactured from up to 97% recycled content
 - > 100% recyclable at the end of its long life—indeinitely
 - > Eliminates unnecessary replacement and waste—NO LANDFILL LEGACY
 - > Profile designs have changed little over the years. Therefore new components can easily be integrated into existing systems, avoiding costs of complete replacement



Why Choose Cast Iron?

The material properties of cast iron have long been recognised and it is these which make it particularly suitable for the rainwater systems of listed buildings and wherever conservation is an issue.

Revised Planning Practice Guide PPS5 for Historic Environment.

The Department and Local Government, and English Heritage advises:

- A change from original materials usually requires building consent
- Point 189 supports the use of materials appropriate to the relevant period, such as cast iron for gutters and downpipes for many Georgian and Victorian buildings



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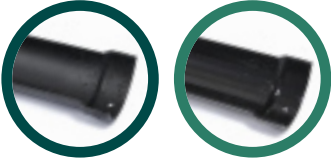
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Technical Calculations and
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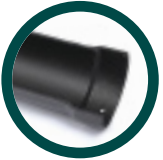
Range

Classical gutter profiles available

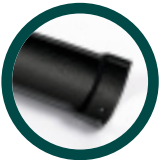
- Half Round sizes: 100mm (4"), 115mm (4.5"), 125mm (5") and 150mm (6")



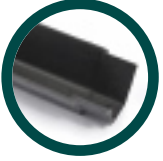
- Deep Half Round: 100mm x 75mm (4" x 3"), 125mm x 75mm (5" x 3")



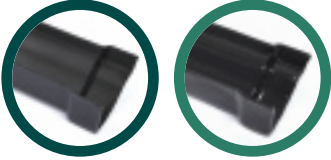
- Beaded Half Round: 100mm (4"), 115mm (4.5") and 125mm (5")



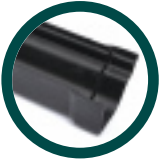
- Moulded: 100mm x 75mm (4"x3") 125mm x 100mm (5"x4") and 150mm x 100mm (6"x4")



- Ogee: 100mm (4"), 115mm (4.5") and 125mm (5")



- Notts Ogee: 115mm (4.5")



Rainwater pipe profiles

- Circular pipes: 65mm (2.5"), 75mm (3") and 100mm (4")



No Eared



Eared

- Rectangular: 100mm (4") x 75mm (3")



Standard Classical finish

All standard Classical products are supplied in a black water based primer coating for on-site painting to the colour of your choice. Ensure use an appropriate paint that is suitable for overpainting a water based primer. A paint often used by approved installers is Bradite.

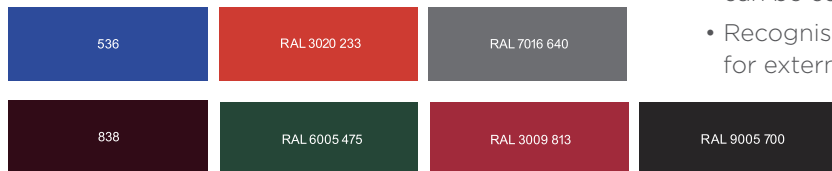


Classical Plus

Classical cast iron rainwater and gutter systems supplied in high performance black semi-gloss finished coat for immediate installation.

Coating:

- High performing Polymer Powder Alloy (PPA571)
- Black semi-gloss RAL 9005 700 as standard to an average thickness of 200 microns
- Black as standard available on half round and ogee gutters and circular downpipe systems from stock. Other profiles to order.
- Classical products coated in PPA571 have been salt spray and ultra-violet resistance tested for up to 1500 hours
- This test is an indicator only used in the automotive industry and is particularly aggressive and so difficult to relate to paint life expectancy
- Classical Plus—PPA571 colour range—Price on application



Please note: Actual RAL colours when applied to the product may vary from these representations.

White, or very light colours, are not available.



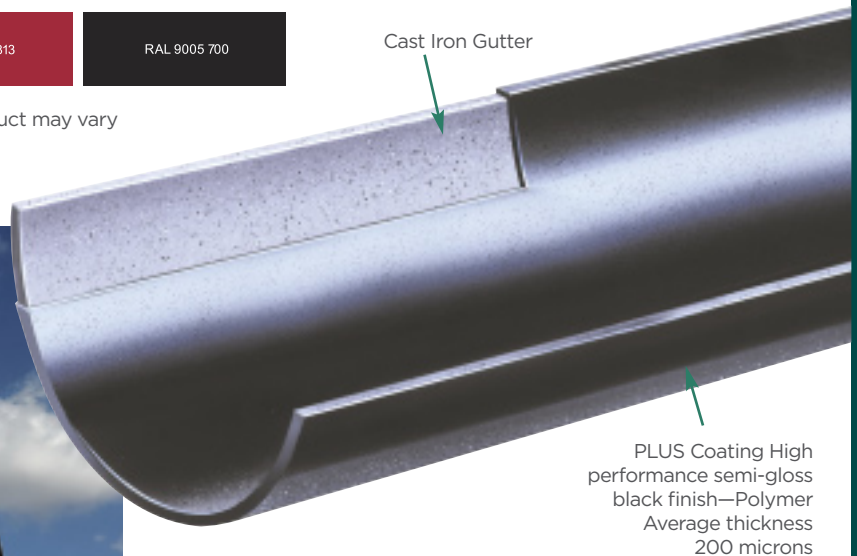
- Other colours to a specified RAL can be applied but are Polyester coated NOT PPA571
- PAM will not supply Classical Plus in white or very light colours

The range is supplied in finished coat for immediate installation. When installation is complete it is important to inspect and any slight damage to the coating is repaired with the touch-up paint available product code 192549 (primer) and 192550 (topcoat). Also any pipe/gutter cut ends.

- Product is supplied wrapped to protect from damage.

Benefits

- Finished product for immediate installation
- No painting on site
- Reduces total installed time by up to 60%
- Factory applied coating to a consistent standard
- When used with gutter jointing kits installation can be completed in a day
- Recognised paint system for the coating of metal for external applications



Coastal location

- PAM will not supply Classical Plus to properties located within 5 miles of the sea coast. PAM recommends cast iron is painted on site using a high quality paint for coastal regions.
- The expectation of performance will depend on:
 - > Colour chosen (white will highlight any imperfection in the coating)
 - > A Sufficient paint system has been applied before installation
 - > Undercoat / Topcoat
 - > 3 x layers would be recommended on top of primer coat
 - > All damage to paint surface during installation must be adequately made good on completion



Rainwater Diverter Kit

The Classical range now includes a Rainwater Diverter in cast iron, enabling homeowners to utilise natural resources effectively, and save money on their water bills.

The Rainwater Diverter is obtainable in kit format in sizes 65mm and 75mm diameter in standard primer or PLUS finish for installing into a new or an existing system.

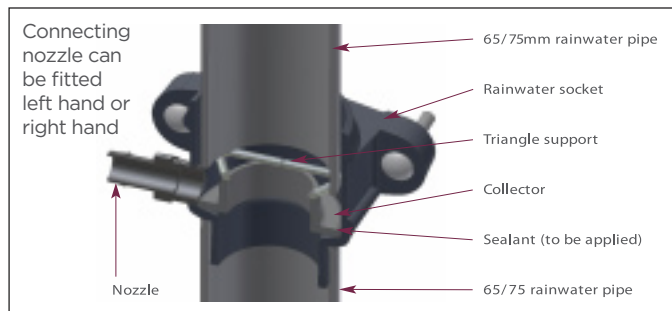
Complete with all connecting plugs and a tube to connect to most water butts, the diverter mechanism fits inside a standard eared loose socket (A586), and is bag packed, with a step by step instruction installation guide.

Installation

- Simply determine the size and capacity water butt to be used
- Fix the socket into the downpipe with the outlet at a similar level to the inlet of the water butt and allow for a slight fall
- When installed the collector should be no higher than the top of the water butt so that when the water butt is full the water will flow back down the rainwater pipe
- Secure the socket back to the wall using 8mm x 75mm coach screws and wall plugs. Drop the triangular spacer on top of the collector to prevent the pipe above slipping down. Insert the rainwater pipe from above and fix back to the wall.



Water butt not included











Diverter kit Contents




	Tank Connector		Triangle Spacer
	Nozzle		Collector Pipe
	Collector		Eared Socket A586

Supplied in a bag with fixing instructions.



DESCRIPTION	SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		ΔDSC.	PLUS	
					PRODUCT CODE	UNIT PRICE £		PRODUCT CODE	UNIT PRICE £
HALF ROUND GUTTER AND CONNECTIONS									
Half Round Gutter (1,830mm length)									
					G800		G800		
	100	1	6.2	A	192191	48.39	A	192551	64.29
	115	1	7.4	A	192192	50.44	A	192552	66.09
	125	1	8.3	A	192193	59.04	A	192553	76.97
	150	1	10.4	A	192194	97.51	A	192554	118.49
90° Angle Double Socket									
					G802D		G802D		
	100	1	1.1	B	192224	24.43	C	192566	27.95
	115	1	1.3	B	192225	25.91	C	192567	29.35
	125	1	1.5	B	192226	33.59	C	192568	36.45
90° Right-Hand Angle									
					G801		G801		
	100	1	0.9	B	192004	20.21	C	192500	24.01
	115	1	1.3	A	192006	20.76	C	192502	24.57
	125	1	1.4	C	192008	24.45	C	192504	28.02
	150	1	2.0	C	192010	44.73	C	192506	70.84
90° Left-Hand Angle									
					G802		G802		
	100	1	0.9	B	192012	20.21	C	192508	24.01
	115	1	1.3	B	192014	20.76	C	192510	24.57
	125	1	1.4	C	192016	24.45	C	192512	28.02
	150	1	2.0	C	192018	44.73	C	192514	70.84
135° Right-Hand Angle									
					G801		G801		
	100	1	0.8	C	192003	20.61	C	192499	24.01
	115	1	0.9	C	192005	20.76	C	192501	24.57
	125	1	1.3	C	192007	30.76	C	192503	33.71
	150	1	1.6	C	192009	45.60	C	192505	70.84
135° Left-Hand Angle									
					G802		G802		
	100	1	0.8	C	192011	20.61	C	192507	24.01
	115	1	0.9	C	192013	20.76	C	192509	24.57
	125	1	1.3	C	192015	31.29	C	192511	33.71
	150	1	1.6	C	192017	45.60	C	192513	70.84
Union Clip									
					G803		G803		
	100	1	0.5	B	192019	13.32	C	192515	17.72
	115	1	0.5	B	192020	16.59	C	192516	20.38
	125	1	0.7	B	192021	18.77	C	192517	22.68
	150	1	0.7	C	192022	21.06	C	192518	40.91
Stopend for Spigot—External									
					G804		G804		
	100	1	0.4	A	192023	6.80	B	192519	10.35
	115	1	0.4	A	192024	8.77	B	192520	12.03
	125	1	0.6	A	192025	8.77	B	192521	12.03
	150	1	0.6	B	192026	12.21	C	192522	17.17
Stopend for Socket—Internal									
					G805		G805		
	100	1	0.3	A	192027	6.80	B	192523	10.35
	115	1	0.3	A	192028	8.77	B	192524	12.03
	125	1	0.5	A	192029	8.77	B	192525	12.03
	150	1	0.6	B	192030	12.21	C	192526	17.17

DESCRIPTION	SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		PLUS			
					PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £	
Nozzle										
					G806		G806			
	Nozzle with 65mm Outlet									
	100	1	1.1	A	192031	19.66	B	192527	23.51	
	115	1	1.3	A	192033	21.44	B	192529	25.16	
	125	1	1.4	B	192035	24.45	C	192531	28.02	
	Nozzle with 75mm Outlet									
	100	1	1.3	B	192032	19.66	C	192528	23.51	
	115	1	1.4	A	192034	21.44	C	192530	25.16	
	125	1	1.4	A	192036	24.45	B	192532	28.02	
	150	1	1.8	C	192037	42.39	C	192533	59.71	
	Nozzle with 100mm Outlet									
	150	1	1.8	B	192038	42.39	C	192534	59.71	
Dropend with Socket										
					G807		G807			
	Dropend with Socket and 65mm Outlet									
	100	1	0.9	B	192039	23.07	C	192535	30.24	
	115	1	0.9	B	192040	25.86	C	192536	32.70	
	Dropend with Socket and 75mm Outlet									
	125	1	1.1	B	192041	28.90	B	192537	35.34	
	150	1	1.8	C	192042	48.51	C	192538	59.71	
	Dropend with Socket and 100mm Outlet									
	150	1	2.2	C	192043	49.45	C	192539	59.71	
	Dropend with Spigot									
						G808		G808		
		Dropend with Spigot and 65mm Outlet								
100		1	0.9	B	192044	23.07	C	192540	30.24	
115		1	0.9	C	192045	25.86	C	192541	32.70	
Dropend with Spigot and 75mm Outlet										
125		1	1.0	C	192046	29.46	C	192542	35.34	
150		1	1.4	C	192047	49.45	C	192543	59.71	
Dropend with Spigot and 100mm Outlet										
150		1	2.2	C	192048	49.45	C	192544	59.71	
Cast Iron Fascia Bracket										
						G809		G809		
		100	1	—	A	192049	5.68	A	192545	7.21
	115	1	—	A	192050	5.68	A	192546	7.81	
	125	1	—	A	192051	5.68	A	192547	8.33	
	150	1	—	A	192052	7.18	B	192548	8.57	
Mild Steel Rise and Fall Bracket. Please note this product is GALVANISED and requires painting after installation										
					G872					
	100	1	0.4	A	256523	11.32	—	—	—	
	115	1	0.4	A	256524	11.32	—	—	—	
	125	1	0.4	A	256525	11.64	—	—	—	
	150	1	0.4	B	256526	11.84	—	—	—	
Mild Steel Rise and Fall Bracket with retaining lip. Please note this product is GALVANISED and requires painting after installation										
					G877					
	100	1	0.4	A	220703	11.32	—	—	—	
	115	1	0.4	A	220704	11.32	—	—	—	
	125	1	0.4	B	220705	11.64	—	—	—	
Mild Steel Rise and Fall Bracket with retaining lip and understay. Please note this product is GALVANISED and requires painting after installation										
					G877					
	100	1	0.4	B	220731	16.69	—	—	—	
	115	1	0.4	B	220732	16.88	—	—	—	
	125	1	0.4	C	220733	18.45	—	—	—	
	150	1	0.4	B	220734	17.73	—	—	—	

DESCRIPTION	SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		PLUS		
					PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
Top Fix Rafter Bracket in Galvanised Mild Steel									
					G871	GALVANISED		G871	
	100	1	0.3	A	192247	5.40	B	192391	7.53
	115	1	0.3	A	192248	5.40	C	192392	7.53
	125	1	0.3	A	192249	5.61	B	192393	7.73
	150	1	0.3	B	192250	8.47	C	192394	10.37
Side Fix Rafter Bracket in Galvanised Mild Steel									
					G870	GALVANISED		G870	
	100	1	0.3	A	192243	5.40	B	192388	7.53
	115	1	0.3	A	192244	5.40	C	192387	7.53
	125	1	0.3	A	192245	5.61	A	192389	7.73
	150	1	0.3	B	192246	8.47	C	192390	10.37
Drive-in Bracket with Retaining Lip. Please note this product is GALVANISED and requires painting after installation									
					G878				
	100	1	—	B	220706	12.24	—	—	—
	115	1	—	C	220707	12.28	—	—	—
	125	1	—	C	220708	12.31	—	—	—

ACCESSORIES

Cast Iron Jointing Kit to suit 100, 115 and 125mm sized standard half round gutter systems (Pack of 20)



				G873		G873		
—	20	0.3	A	192284	42.62	A	192284	42.62

Plus Coating Black Touch-up Paint—Primer

0.5 Litre Tin	1	—	—	—	—	C	192549	26.76
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Plus Coating Black Touch-up Paint—Top Coat

0.5 Litre Tin	1	—	—	—	—	C	192550	26.76
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How to use the Cast Iron Jointing Kit

1. Push screw through spigot of gutter or fitting and then through the hole in the gasket material. The hole in the gasket is a tight fit and will locate on the screw while the joint is being made.
2. Locate the screw, seal and spigot of the gutter or fitting into the socket of the gutter or fitting and fix square nut to the end of the screw.
3. Ensure the seal is sitting squarely in the socket and tighten the nut on the screw. (It may be necessary to hold the screw with a screw driver as the seal is compressed.)
4. Trim excess rubber at the edge of the joint with a sharp bladed knife.
5. Paint gutters, joint and screws as per installation guide.






PRIMED							PLUS		
DESCRIPTION	SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
BEADED HALF ROUND GUTTER AND CONNECTIONS									
Half Round Gutter (1,830mm length)									
					G820		G820		
	100	1	9.0	A	192197	48.39	C	223167	64.37
	115	1	10.8	A	192198	50.44	C	213645	67.18
	125	1	12.2	A	192199	59.04	C	209694	74.73
					G822D		G822D		
	100	1	1.3	C	238998	20.97	C	248068	25.26
	115	1	1.7	B	236531	21.24	C	246992	25.63
	125	1	1.8	B	238999	25.87	C	240067	31.24
					G822D		G822D		
	100	1	1.0	C	238996	20.97	C	248067	25.26
	115	1	1.3	C	236532	21.24	C	248070	25.63
	125	1	1.4	C	238997	25.87	C	248071	31.24
Union Clip									
					G823		G823		
	100	1	0.7	C	192091	13.29	C	223172	16.03
	115	1	0.7	B	192092	16.22	C	213643	19.57
	125	1	0.8	B	192093	18.77	C	209691	22.65
					G824		G824		
	100	1	0.5	B	192094	6.80	C	223173	8.19
	115	1	0.5	A	192095	8.77	C	213617	10.59
	125	1	0.5	A	192096	8.80	C	209680	10.62
					G825		G825		
	100	1	0.3	C	192097	6.80	C	223174	8.19
	115	1	0.4	A	192098	8.77	C	213616	10.59
	125	1	0.5	B	192099	8.80	C	209678	10.59
Nozzles									
					G826		G826		
	Nozzle with 65mm Outlet								
	100	1	1.8	C	192100	20.94	C	223175	25.26
	115	1	1.3	A	192101	21.44	C	213615	25.85
	125	1	1.4	B	192103	25.36	C	223179	30.62
	Nozzle with 75mm Outlet								
115	1	1.4	C	192102	21.85	C	223176	26.34	
125	1	1.5	C	192104	25.36	C	209677	30.62	
Cast Iron Fascia Bracket									
					G809		G809		
	100	1	0.3	A	192049	5.68	A	192545	7.21
	115	1	0.3	A	192050	5.68	A	192546	7.81
125	1	0.3	A	192051	5.68	A	192547	8.33	
Mild Steel Rise and Fall Bracket. Please note this product is GALVANISED and requires painting after installation									
					G872				
	100	1	0.4	A	256523	11.32	—	—	—
	115	1	0.4	A	256524	11.32	—	—	—
125	1	0.4	A	256525	11.64	—	—	—	

DESCRIPTION	SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		ΔDSC.	PLUS	
					PRODUCT CODE	UNIT PRICE £		PRODUCT CODE	UNIT PRICE £
DEEP HALF ROUND GUTTER AND CONNECTIONS									
Gutter (1,830mm length)									
	100 x 75mm	1	13.6	A	G810 192195	81.01	C	G810 218539	99.21
	125 x 75mm	1	14.0	A	192196	104.69	C	210572	128.20
90° Right Hand Angle									
	100 x 75mm	1	3.2	C	G811 192054	55.54	C	G811 219622	63.52
135° Right Hand Angle									
	100 x 75mm	1	3.2	C	G811 192053	55.54	C	G811 223180	63.52
90° Left Hand Angle									
	100 x 75mm	1	3.2	C	G812 192058	55.54	C	G812 219623	63.52
135° Left Hand Angle									
	100 x 75mm	1	3.2	C	G812 192057	55.54	C	G812 223181	63.52
	125 x 75mm	1	3.4	B	G812D 256634	70.52	C	G812D 258066	80.60
	125 x 75mm	1	3.4	C	G812D 256635	70.52	C	G812D 257921	80.60
Union Clip									
	100 x 75mm	1	0.5	C	G813 192061	22.26	C	G813 219624	28.28
	125 x 75mm	1	0.5	C	192062	23.58	C	223186	29.96
Stop End for Spigot—External									
	100 x 75mm	1	0.8	B	G814 192063	19.51	C	G814 218552	22.29
	125 x 75mm	1	0.7	B	192064	24.04	C	210558	27.47
Stop End for Socket—Internal									
	100 x 75mm	1	0.6	C	G815 192065	19.51	C	G815 218553	22.29
	125 x 75mm	1	0.6	B	192066	24.04	C	210557	27.47
Nozzles									
					G816		G816		
	Nozzle with 65mm Outlet								
	100 x 75mm	1	1.8	C	192067	55.54	C	223182	63.52
	125 x 75mm	1	2.5	C	192069	71.92	C	223187	82.20
	Nozzle with 75mm Outlet								
	100 x 75mm	1	1.8	C	192068	55.54	C	218554	63.52
Cast Iron Fascia Bracket									
	100 x 75mm	1	0.3	B	G819 192077	19.14	C	G819 218555	21.88
	125 x 75mm	1	0.7	A	192078	23.58	C	210571	26.95

Prices exclude VAT *Made to order
^ΔDelivery Service Category DSC (see page 13)

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DESCRIPTION	SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		PLUS		
					PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
Mild Steel Rise and Fall Bracket. Please note this product is GALVANISED and requires painting after installation									
	100 x 75mm	1	—	B	227013	16.38	—	—	—
	125 x 75mm	1	—	B	225821	17.49	—	—	—
Top Fix Rafter Bracket in Galvanised Mild Steel. Please note this product is GALVANISED and requires painting after installation									
	100 x 75mm	1	—	B	225560	18.35	—	—	—
	125 x 75mm	1	—	B	206955	19.08	—	—	—
Side Fix Rafter Bracket in Galvanised Mild Steel. Please note this product is GALVANISED and requires painting after installation									
	100 x 75mm	1	—	C	214902	19.08	—	—	—
	125 x 75mm	1	—	B	225051	20.57	—	—	—



OGEE GUTTER AND CONNECTIONS

Ogee Gutter (1,830mm length)



G840						G840		
100	1	9.0	A	192204	53.96	C	199748	73.42
115	1	10.5	A	192206	59.37	B	199803	76.32
125	1	12.5	A	192208	62.29	B	199824	79.50

90° Internal Angle



G841						G841		
100	1	1.0	C	192137	21.06	C	199793	24.74
115	1	1.5	C	192139	22.82	C	199805	26.23
125	1	1.9	C	192141	24.89	C	199828	28.02

135° Internal Angle



G841						G841		
100	1	1.0	C	192136	21.87	C	199792	25.03
115	1	1.0	C	192138	23.72	C	199804	26.98
125	1	1.8	C	192140	31.28	C	199827	34.13

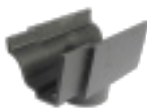

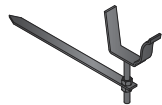



90° External Angle



G842						G842		
100	1	1.0	C	192143	21.06	C	199795	24.74
115	1	1.4	B	192145	22.82	C	199780	26.23
125	1	1.5	B	192147	24.89	C	199830	28.02

DESCRIPTION	SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		PLUS		
					PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
OGEE GUTTER AND CONNECTIONS continued									
135° External Angle									
					G842		G842		
	100	1	1.0	C	192142	21.87	C	199794	25.03
	115	1	1.1	C	192144	23.72	C	199806	26.98
	125	1	1.4	C	192146	31.28	C	199829	34.13
Union Clip									
					G843		G843		
	100	1	0.7	C	192148	13.32	C	199796	17.72
	115	1	0.7	C	192149	16.22	C	199813	20.05
	125	1	0.7	B	192150	18.77	C	199851	22.68
Stop End for Socket—Internal									
					G844		G844		
	100	1	0.3	C	192151	6.94	C	199798	10.44
	115	1	0.5	B	192152	8.99	C	199814	12.12
	125	1	0.5	B	192153	8.99	C	199852	13.64
Stop End for Spigot—External									
					G845		G845		
	100	1	0.5	C	192154	6.94	C	199800	10.44
	115	1	0.5	B	192155	8.99	C	199815	12.12
	125	1	0.6	B	192156	8.99	C	199871	13.64
Nozzles									
					G846		G846		
	Nozzle with 65mm Outlet								
	100	1	1.3	B	192157	21.45	C	199801	24.98
	115	1	1.5	B	192158	22.82	C	199834	26.30
	125	1	1.9	C	192159	24.89	C	199873	28.35
	Nozzle with 75mm Outlet								
125	1	1.9	B	192160	24.89	C	199874	28.35	
Fascia Bracket									
					G849		G849		
	100	1	0.3	A	192169	6.16	C	199802	7.61
	115	1	0.3	A	192170	6.16	B	199837	8.19
	125	1	0.5	A	192171	6.96	B	199876	9.42
Rise and Fall Bracket. Please note this product is GALVANISED and requires painting after installation									
					G874				
	100	1	0.5	C	208278	11.90	—	—	—
	115	1	0.5	C	208280	11.90	—	—	—
	125	1	0.5	C	208281	12.01	—	—	—
Top Fix Rafter Bracket in Galvanised Mild Steel. Please note this product is GALVANISED and requires painting after installation									
					G875				
	100	1	0.4	C	208282	8.80	—	—	—
	115	1	0.4	C	208283	8.80	—	—	—
	125	1	0.4	C	208284	9.30	—	—	—
Side Fix Rafter Bracket in Galvanised Mild Steel. Please note this product is GALVANISED and requires painting after installation									
					G876				
	100	1	0.4	C	208285	8.80	—	—	—
	115	1	0.4	C	208286	8.80	—	—	—
	125	1	0.4	C	208287	9.30	—	—	—












DESCRIPTION	SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		PLUS		
					PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
MOULDED GUTTER AND CONNECTIONS									
Moulded Gutter (1,830mm length)									
					G830			G830	
	100 x 75mm	1	11.0	A	192200	92.73	C	204868	113.55
	125 x 100mm	1	18.0	A	192202	135.95	A	206382	166.49
	150 x 100mm	1	19.0	A	192621	201.67	C	223199	246.98
90° Internal Angle									
					G831			G831	
	100 x 75mm	1	2.0	C	192113	51.23	C	223188	61.83
	125 x 100mm	1	2.3	C	192115	73.59	C	206383	88.81
	150 x 100mm	1	3.4	B	192668	100.29	C	223200	121.03
90° External Angle									
					G832			G832	
	100 x 75mm	1	2.0	C	192117	52.22	C	204869	61.83
	125 x 100mm	1	2.3	C	192119	73.59	C	206385	88.81
	150 x 100mm	1	3.4	C	208227	100.29	C	223202	121.03
135° Internal Angle									
					G831			G831	
	100 x 75mm	1	2.0	C	192112	51.23	C	223189	61.83
	125 x 100mm	1	3.2	C	192114	73.59	C	223194	88.81
	150 x 100mm	1	2.6	C	208230	100.29	C	223201	121.03
135° External Angle									
					G832			G832	
	100 x 75mm	1	1.2	C	192116	52.22	C	223190	62.99
	125 x 100mm	1	1.5	C	192118	73.59	C	223195	88.81
	150 x 100mm	1	2.6	C	208272	100.29	C	223203	121.03
Union Clip									
					G833			G833	
	100 x 75mm	1	0.5	C	192120	21.85	C	223191	26.34
	125 x 100mm	1	0.6	B	192121	25.32	C	206386	30.55
	150 x 100mm	1	0.7	B	208276	33.45	C	223204	40.37
Stop End for Spigot—Left Hand									
					G834			G834	
	100 x 75mm	1	0.5	C	192122	19.56	C	204874	23.61
	125 x 100mm	1	0.7	C	192123	25.32	C	206388	30.55
	150 x 100mm	1	0.8	B	192665	33.45	C	223205	40.37
Stop End for Socket—Right Hand									
					G835			G835	
	100 x 75mm	1	0.7	C	192124	19.56	C	204875	23.61
	125 x 100mm	1	0.9	C	192125	25.32	C	206387	30.55
	150 x 100mm	1	1.0	B	192666	33.45	C	223206	40.37
Nozzles									
					G836			G836	
	Nozzle with 65mm Outlet								
	100 x 75mm	1	2.0	C	192126	52.22	C	223192	62.99
	125 x 100mm	1	2.0	C	192128	73.59	C	223196	88.81
	150 x 100mm	1	3.9	C	221821	99.68	C	223207	120.29
	Nozzle with 75mm Outlet								
	100 x 75mm	1	2.0	C	192127	52.22	C	204876	62.99
	125 x 100mm	1	2.0	C	192129	73.59	C	206390	88.81
	150 x 100mm	1	3.9	C	192667	99.68	C	223208	120.29
	Nozzle with 100mm Outlet								
	125 x 100mm	1	2.0	C	192130	75.02	C	223197	90.51
	150 x 100mm	1	4.0	C	208273	99.68	C	223209	120.29

DESCRIPTION	SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		PLUS		
					PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
MOULDED GUTTER AND CONNECTIONS continued									
Nozzles continued									
	G836					G836			
	Nozzle with 100 x 75mm Outlet								
	125 x 100mm	1	2.3	C	192131	75.02	C	206389	90.51
	150 x 100mm	1	4.0	C	206930	99.68	C	223210	120.29
Fascia Bracket									
	G839					G839			
	100 x 75mm	1	0.5	B	192267	10.36	C	223193	12.50
	125 x 100mm	1	0.6	A	192242	10.36	C	223198	12.50
	150 x 100mm	1	0.6	A	192623	11.20	B	223212	12.35
Rise and Fall Bracket in Galvanised Mild Steel. Please note this product is GALVANISED and requires painting after installation									
	†100 x 75mm	1	0.4	C	240305	28.53	—	—	—
	†125 x 100mm	1	0.5	C	230033	35.49	—	—	—
	†150 x 100mm	1	0.6	C	248203	35.49	—	—	—
Rise and Fall Bracket with Understay in Galvanised Mild Steel. Please note this product is GALVANISED and requires painting after installation									
	†100 x 75mm	1	0.5	C	MTO	40.19	—	—	—
	†125 x 100mm	1	0.6	C	MTO	42.83	—	—	—
	†150 x 100mm	1	0.7	C	226093	42.83	—	—	—
Top Fix Rafter Bracket in Galvanised Mild Steel. Please note this product is GALVANISED and requires painting after installation									
	†100 x 75mm	1	0.2	C	230392	25.86	—	—	—
	125 x 100mm	1	0.3	C	233283	28.08	—	—	—
	150 x 100mm	1	0.3	B	222138	31.04	—	—	—
Side Fix Rafter Bracket in Galvanised Mild Steel. Please note this product is GALVANISED and requires painting after installation									
	†100 x 75mm	1	0.2	C	MTO	27.36	—	—	—
	125 x 100mm	1	0.3	C	223380	29.99	—	—	—
	150 x 100mm	1	0.3	C	226081	32.67	—	—	—













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DESCRIPTION	SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		PLUS		
					PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
NOTTS OG GUTTER AND CONNECTIONS									
Notts OG Gutter (1,830mm length)									
	115mm	1	14.5	A	G850 192210	95.85	A	G850 219546	117.38
90° Internal Angle									
	115mm	1	2.0	C	G851 192173	55.28	C	G851 219532	63.17
135° Internal Angle									
	115mm	1	2.0	C	G851 192172	55.28	C	G851 223213	63.17
90° External Angle									
	115mm	1	2.0	C	G852 192175	55.28	C	G852 219533	63.17
135° External Angle									
	115mm	1	2.0	C	G852 192174	55.28	C	G852 223214	63.17
Union Clip									
	115mm	1	0.8	C	G853 192176	22.72	C	G853 219538	25.96
Stop End for Spigot—External									
	115mm	1	0.6	B	G854 192177	18.71	B	G854 219536	21.37
Stop End for Socket—Internal									
	115mm	1	0.6	B	G855 192178	18.71	B	G855 219537	21.37
Nozzles									
					G856		G856		
	Nozzle with 65mm Outlet								
	115mm	1	2.4	C	192179	65.01	C	223215	74.34
	Nozzle with 75mm Outlet								
	115mm	1	2.4	B	192180	54.36	B	219535	62.15
Fascia Bracket to suit Notts OG									
	115mm	1	0.5	B	G859 192183	18.71	C	G859 219539	21.37
Rise and Fall Bracket in Galvanised Mild Steel to suit Notts OG. Please note this product is GALVANISED and requires painting after installation									
	115mm	1	0.4	B	220963	31.40	—	—	—
Top Fix Rafter Bracket in Galvanised Mild Steel to suit Notts OG. Please note this product is GALVANISED and requires painting after installation									
	†115mm	1	0.2	C	221397	18.09	—	—	—
Side Fix Rafter Bracket in Galvanised Mild Steel to suit Notts OG. Please note this product is GALVANISED and requires painting after installation									
	115mm	1	0.2	C	220964	18.09	—	—	—

DESCRIPTION		SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		PLUS		
						PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
ROUND PIPES AND FITTINGS										
Single Socket Pipes—Eared (1,830mm length)										
						A585			A585	
	65mm	1	10.3	A	191912	94.24	A	192448	111.25	
	75mm	1	12.5	A	191916	94.24	A	192450	111.25	
	100mm	1	16.0	A	191919	126.56	A	192452	156.73	
Corner Pipes—Eared (1,830mm length)										
Corner pipes available on request										
Single Socket Pipes—No Ears (1,830mm length)										
						A585			A585	
	65mm	1	10.1	A	191910	88.19	B	192447	105.69	
	75mm	1	12.1	A	191914	88.19	B	192449	105.69	
	100mm	1	15.5	A	191918	120.40	C	192451	150.50	
Plain Barrels (1,750mm length)										
						A585			A585	
	65mm	1	9.0	A	192216	75.49	C	192558	86.95	
	75mm	1	11.0	B	192217	75.49	C	192559	86.95	
	100mm	1	14.0	B	192218	100.65	C	192560	119.26	
Loose Sockets—Eared										
						A586			A586	
	65mm	1	1.3	A	191921	18.43	B	192453	25.36	
	75mm	1	1.5	A	191922	18.43	B	192454	25.36	
	100mm	1	2.0	A	191923	24.89	B	192455	31.94	
Loose Sockets—No Ears										
						A586			A586	
	65mm	1	0.9	A	192219	13.75	C	192561	20.46	
	75mm	1	1.1	A	192220	13.75	B	192562	20.46	
	100mm	1	1.3	B	192221	19.79	C	192563	26.70	
Corner Loose Sockets										
Corner sockets available on request										
Cast Iron Wall Spacer Plate for use with Eared Classical Rainwater Pipes and Shoes										
						A584			A584	
	65mm	1	0.2	A	192213	8.02	B	192555	9.52	
	75mm	1	0.3	A	192214	8.16	B	192556	9.70	
	100mm	1	0.4	B	192215	8.29	B	192557	9.78	
	30mm Wood Bobbins—one size fits all (Pack of 10)									
	65mm	10	0.1	B	242200	17.14	B	242200	17.14	
	75mm	10	0.1	B	242200	17.14	B	242200	17.14	
	100mm	10	0.1	B	242200	17.14	B	242200	17.14	
	Pipenails (Pack of 10)									
	Length 75mm	10	—	B	242231	5.08	B	242211	5.08	
	Length 100mm	10	—	B	242232	5.72	B	242232	5.72	
Shoes Front										
						A588			A588	
	Shoes Front—Eared									
	65mm	1	2.3	A	191924	45.94	B	192456	53.09	
	75mm	1	2.8	A	191925	45.94	A	192457	53.09	
	100mm	1	4.5	A	191926	61.01	B	192458	67.47	
	Shoes Front—No Ears									
	65mm	1	2.2	A	192227	39.86	C	192569	46.90	
	75mm	1	2.3	B	192228	39.86	C	192570	46.90	
	100mm	1	3.8	C	191927	53.68	C	192459	61.12	

DESCRIPTION		SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		PLUS		
						PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
Anti-Splash Shoes										
						A589		A589		
	Anti-Splash Shoes—Eared									
	65mm	1	4.5	C	259738	57.46	C	259748	63.22	
	75mm	1	4.2	C	259744	57.46	C	259752	63.22	
	Anti-Splash Shoes—No Ears									
	65mm	1	4.0	C	259742	55.16	C	259750	60.92	
75mm	1	3.7	C	259746	55.16	C	259753	60.92		
Access Pipe										
						A590		A590		
	Eared									
	65mm	1	2.9	C	192410	103.48	C	192412	112.18	
	75mm	1	3.8	C	192411	107.34	C	192413	117.36	
	100mm	1	5.5	C	192223	151.02	C	192565	170.30	
	No Ears									
	65mm	1	2.4	C	191928	71.58	C	192460	79.49	
	75mm	1	3.4	B	191929	75.15	C	192461	83.22	
	100mm	1	4.9	C	192222	133.89	C	192564	143.60	
Diverter Kits—include Tank Connector and Collector Pipe, packed in a bag, with fixing instructions										
						A593		A593		
	Diverter Kits—Left Hand Connection Waterbutt									
	65mm	1	1.6	C	192395	54.44	C	192397	62.31	
	75mm	1	1.8	C	192396	54.44	C	192398	62.31	
	Diverter Kits—Right Hand Connection Waterbutt									
	65mm	1	1.6	C	214840	54.44	C	217407	62.31	
Water Butt not included		75mm	1	1.8	B	217408	54.44	C	217409	62.31
92° Bends										
						A591		A591		
	65mm	1	1.9	B	191930	28.13	C	192462	34.84	
	75mm	1	2.6	B	191933	34.14	C	192465	41.05	
	100mm	1	4.3	B	191936	48.22	C	192468	55.51	
112° Bends										
						A591		A591		
	65mm	1	1.9	A	191931	28.67	B	192463	34.84	
	75mm	1	2.3	A	191934	34.14	B	192466	41.05	
	100mm	1	3.8	B	191937	48.22	C	192469	55.51	
135° Bends										
						A591		A591		
	65mm	1	1.6	A	191932	28.13	C	192464	34.84	
	75mm	1	1.9	A	191935	32.22	C	192467	39.08	
	100mm	1	2.9	B	191938	70.79	C	192470	78.70	
92° Branches										
						A592		A592		
	65mm	1	3.0	C	191939	59.04	C	192471	65.87	
	75mm	1	4.0	C	191942	65.10	C	192474	71.96	
	100mm	1	5.9	B	191945	75.86	C	192477	84.26	
112° Branches										
						A592		A592		
	65mm	1	3.0	B	191940	59.04	C	192472	65.87	
	75mm	1	3.5	B	191943	65.10	C	192475	71.96	
135° Branches										
						A592		A592		
	65mm	1	3.3	B	191941	59.04	C	192473	65.87	
	75mm	1	3.6	C	191944	65.10	C	192476	71.96	

DESCRIPTION		SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		PLUS		
						PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £

ROUND PIPES AND FITTINGS continued

Offsets



A594						A594			
75mm Projection Offset									
65mm	1	2.3	A	191946	43.05	C	192478	50.16	
75mm	1	2.7	A	191953	43.05	B	192485	50.16	
100mm	1	4.7	B	191960	81.21	C	192492	89.37	
115mm Projection Offset									
65mm	1	2.6	B	191947	43.05	C	192479	50.16	
75mm	1	2.7	B	191954	43.05	C	192486	50.16	
100mm	1	4.1	C	191961	82.75	C	192493	89.37	
150mm Projection Offset									
65mm	1	3.2	A	191948	43.05	C	192480	50.16	
75mm	1	3.5	A	191955	43.05	B	192487	50.16	
100mm	1	5.9	B	191962	81.21	C	192494	89.37	
225mm Projection Offset									
65mm	1	3.4	A	191949	50.10	C	192481	57.46	
75mm	1	3.8	A	191956	50.10	B	192488	57.46	
100mm	1	6.2	C	191963	98.36	C	192495	106.99	

Offsets



A594						A594			
305mm Projection Offset									
65mm	1	3.8	B	191950	58.73	C	192482	66.25	
75mm	1	5.0	B	191957	61.60	C	192489	69.19	
100mm	1	6.4	C	191964	100.28	C	192496	106.99	
380mm Projection Offset									
65mm	1	4.5	C	191951	117.12	C	192483	126.26	
75mm	1	6.4	B	191958	117.12	C	192490	130.01	
100mm	1	6.8	C	191965	159.91	C	192497	170.08	
455mm Projection Offset									
65mm	1	5.9	B	191952	137.15	C	192484	146.77	
75mm	1	6.8	B	191959	137.15	C	192491	146.77	
100mm	1	7.7	C	191966	198.09	C	192498	205.54	

Pipes and fittings outside the standard range will be considered for manufacture on a quotational basis

Wall Bracket in Galvanised Steel

GALVANISED

PLUS COAT



A548						A548				
65mm	1	0.2	A	192301	16.13	B	192400		19.15	
75mm	1	0.2	A	192302	16.20	B	192401		19.27	
100mm	1	0.4	A	192303	16.39	B	192402		19.45	

Pipe Clip with Spike



65mm	1	0.2	C	223286	26.13	—	—	—	—	—
75mm	1	0.3	C	223134	27.33	—	—	—	—	—
100mm	1	0.4	C	223133	27.33	—	—	—	—	—

Pipes and fittings outside the standard range will be considered for manufacture on a quotational basis

Drive-In Spike



A549										
65mm	1	0.2	A	256541	6.04	—	—	—	—	—
75mm	1	0.3	A	256542	6.04	—	—	—	—	—

Pipes and fittings outside the standard range will be considered for manufacture on a quotational basis

DESCRIPTION		SIZE Ø mm	PACK SIZE	WEIGHT KG	^Δ DSC.	PRIMED		PLUS		
						PRODUCT CODE	UNIT PRICE £	^Δ DSC.	PRODUCT CODE	UNIT PRICE £

RAINWATER HEADS

Flat Hopper Heads



A750						A750		
Flat Hopper Heads 210 x 160 x 185mm								
65mm	1	3.9	B	191904	116.64	C	192441	125.75
75mm	1	4.0	C	191905	116.64	C	192442	125.75
Flat Hopper Heads 250 x 215 x 215mm								
100mm	1	6.2	C	191906	138.23	C	192443	145.01

Flat Hoppers 305 x 186 x 200mm



A751						A751				
65mm	1	6.0	C	222660	116.53	C	222661	126.85		
75mm	1	6.0	C	222662	116.53	C	222663	126.85		

Flat Hopper Corners



A751						A751				
65mm	1	6.0	C	230093	136.79	C	MTO	138.30		
75mm	1	6.0	C	234336	136.79	C	236421	138.30		

Box Heads 225 x 125 x 125mm



A841						A841				
65mm	1	3.6	C	191907	162.14	C	192444	178.44		
75mm	1	3.6	C	191908	162.14	C	192445	178.44		

Box Head 280 x 150 x 130mm



A842						A842				
100mm	1	5.4	C	191909	223.88	C	192446	240.74		

Rectangular Head 300 x 250 x 200mm



A484						A484				
65mm	1	12.4	C	191897	210.59	C	192435	237.55		
75mm	1	12.4	B	191898	210.59	C	192436	237.55		
100mm	1	12.4	B	191899	210.59	C	192437	246.72		

Castellated Rectangular Head 250 x 180 x 175mm



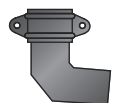
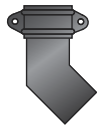
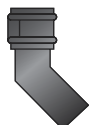
A485						A485				
65mm	1	6.8	C	191901	151.18	C	192438	219.31		

Rectangular Head 250 x 180 x 175mm



A485						A485				
75mm	1	6.8	B	191902	151.18	C	192439	170.95		
100mm	1	6.8	B	191903	151.18	C	192440	170.95		

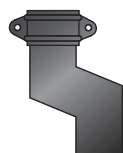
DESCRIPTION	SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		PLUS		
					PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
RECTANGULAR PIPES & FITTINGS									
Classical Pipes (1,830mm length)									
	A601								
	Classical Pipes—Eared								
	100 x 75mm	1	30	A	191968	271.79		Can be supplied in the Plus finished coat on a made to order basis	
	Classical Pipes—No ears								
	100 x 75mm	1	30	B	191967	267.34		Can be supplied in the Plus finished coat on a made to order basis	
Front Shoe									
	A603								
	Front Shoe—Eared								
	100 x 75mm	1	4.8	B	191970	183.82		Can be supplied in the Plus finished coat on a made to order basis	
	Front Shoe—No Ears								
	100 x 75mm	1	4.5	C	191969	149.73		Can be supplied in the Plus finished coat on a made to order basis	
Side Shoe									
	A613								
	Right Hand Side Shoe—Eared								
	100 x 75mm	1	5.4	C	191999	228.14		Can be supplied in the Plus finished coat on a made to order basis	
	Left Hand Side Shoe—Eared								
	100 x 75mm	1	5.9	C	192000	228.14		Can be supplied in the Plus finished coat on a made to order basis	
	No Ears								
	100 x 75mm	1	5.9	C	191998	182.46		Can be supplied in the Plus finished coat on a made to order basis	
Loose Socket									
	A604								
	Loose Socket—Eared								
	100 x 75mm	1	3.2	C	191972	93.97		Can be supplied in the Plus finished coat on a made to order basis	
	Loose Socket—No Ears								
	100 x 75mm	1	2.5	C	191971	89.15		Can be supplied in the Plus finished coat on a made to order basis	
Built in Holderbat									
	A605								
	100 x 75mm	1	2.0	C	191973	76.06		Can be supplied in the Plus finished coat on a made to order basis	
Earbands									
	A606								
	Ornamental Earbands (as Trefoil)								
	100 x 75mm	1	1.4	C	191974	60.62		Can be supplied in the Plus finished coat on a made to order basis	
	Plain Earbands								
	100 x 75mm	1	1.6	C	191975	58.65		Can be supplied in the Plus finished coat on a made to order basis	
Rectangular Head 300 x 250 x 200mm									
	A484								
	100 x 75mm	1	12.4	C	191900	210.59		Can be supplied in the Plus finished coat on a made to order basis	

DESCRIPTION	SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		PLUS		
					PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
112.5° Side Bends									
	A607								
	Right Hand 112.5° Side Bends—Eared								
	100 x 75mm	1	6.8	C	191978	174.94		Can be supplied in the Plus finished coat on a made to order basis	
	Left Hand 112.5° Side Bends—Eared								
	100 x 75mm	1	6.8	C	191977	174.94		Can be supplied in the Plus finished coat on a made to order basis	
	112.5° Side Bends—No Ears								
	100 x 75mm	1	6.6	C	191976	138.40		Can be supplied in the Plus finished coat on a made to order basis	
92.5° Side Bends									
	A608								
	Right Hand 92.5° Side Bends—Eared								
	100 x 75mm	1	8.2	C	191980	174.94		Can be supplied in the Plus finished coat on a made to order basis	
	Left Hand 92.5° Side Bends—Eared								
	100 x 75mm	1	8.2	C	197170	174.94		Can be supplied in the Plus finished coat on a made to order basis	
	92.5° Side Bends—No Ears								
	100 x 75mm	1	7.8	C	191979	138.40		Can be supplied in the Plus finished coat on a made to order basis	
135° Side Bends									
	A609								
	Right Hand 135° Side Bends—Eared								
	100 x 75mm	1	6.0	C	191983	174.94		Can be supplied in the Plus finished coat on a made to order basis	
	Left Hand 135° Side Bends—Eared								
	100 x 75mm	1	6.0	C	191982	174.94		Can be supplied in the Plus finished coat on a made to order basis	
	135° Side Bends—No Ears								
	100 x 75mm	1	5.8	C	191981	138.40		Can be supplied in the Plus finished coat on a made to order basis	
112° Front Bends									
	A610								
	112° Front Bends—Eared								
	100 x 75mm	1	7.7	C	191985	147.24		Can be supplied in the Plus finished coat on a made to order basis	
	112° Front Bends—No Ears								
	100 x 75mm	1	7.5	C	191984	131.41		Can be supplied in the Plus finished coat on a made to order basis	
92.5° Front Bends									
	A610								
	92.5° Front Bends—Eared								
	100 x 75mm	1	7.5	C	191989	147.24		Can be supplied in the Plus finished coat on a made to order basis	
	92.5° Front Bends—No Ears								
	100 x 75mm	1	7.3	C	191988	131.03		Can be supplied in the Plus finished coat on a made to order basis	
135° Front Bends									
	A610								
	135° Front Bends—Eared								
	100 x 75mm	1	7.1	C	191987	150.06		Can be supplied in the Plus finished coat on a made to order basis	
	135° Front Bends—No Ears								
	100 x 75mm	1	6.9	C	191986	131.62		Can be supplied in the Plus finished coat on a made to order basis	

DESCRIPTION	SIZE Ø mm	PACK SIZE	WEIGHT KG	ΔDSC.	PRIMED		PLUS		
					PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £

RECTANGULAR PIPES & FITTINGS continued

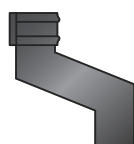
Side Offset



A611

150mm Side Offset Projection—Eared						
100 x 75mm	1	9.0	C	191992	234.10	Can be supplied in the Plus finished coat on a made to order basis
75mm Side Offset Projection—No Ears						
100 x 75mm	1	7.3	C	191990	182.32	Can be supplied in the Plus finished coat on a made to order basis
115mm Side Offset Projection—No Ears						
100 x 75mm	1	7.6	C	191991	189.63	Can be supplied in the Plus finished coat on a made to order basis
225mm Side Offset Projection—No Ears						
100 x 75mm	1	9.0	C	191993	236.27	Can be supplied in the Plus finished coat on a made to order basis
305mm Side Offset Projection—No Ears						
100 x 75mm	1	11.0	C	191994	272.26	Can be supplied in the Plus finished coat on a made to order basis

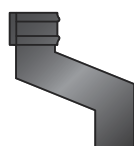
112.5° Offsets



A612

75mm 112.5° Offset Projection—No Ears						Can be supplied in the Plus finished coat on a made to order basis
100 x 75mm	1	7.8	C	191208	138.71	
150mm 112.5° Offset Projection—No Ears						Can be supplied in the Plus finished coat on a made to order basis
100 x 75mm	1	8.4	C	191209	153.29	
225mm 112.5° Offset Projection—No Ears						Can be supplied in the Plus finished coat on a made to order basis
100 x 75mm	1	8.2	C	191210	189.78	
305mm 112.5° Offset Projection—No Ears						Can be supplied in the Plus finished coat on a made to order basis
100 x 75mm	1	11.0	C	191211	225.79	
381mm 112.5° Offset Projection—No Ears						Can be supplied in the Plus finished coat on a made to order basis
100 x 75mm	1	11.2	C	237368	254.10	

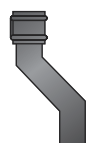
112.5° Offsets Continued



A612

75mm 112.5° Offset Projection—Eared						
100 x 75mm	1	8.0	C	191995	177.45	Can be supplied in the Plus finished coat on a made to order basis
150mm 112.5° Offset Projection—Eared						
100 x 75mm	1	8.6	C	191996	191.35	Can be supplied in the Plus finished coat on a made to order basis
225mm 112.5° Offset Projection—Eared						
100 x 75mm	1	8.4	C	197171	246.40	Can be supplied in the Plus finished coat on a made to order basis
305mm 112.5° Offset Projection—Eared						
100 x 75mm	1	11.4	C	191997	263.36	Can be supplied in the Plus finished coat on a made to order basis

Plinth Offsets



A615

115mm Plinth Offset Projection—Eared						
100 x 75mm	1	8.6	C	192002	184.39	Can be supplied in the Plus finished coat on a made to order basis
115mm Plinth Offset Projection—No Ears						
100 x 75mm	1	8.2	C	192001	143.17	Can be supplied in the Plus finished coat on a made to order basis

Technical Calculations

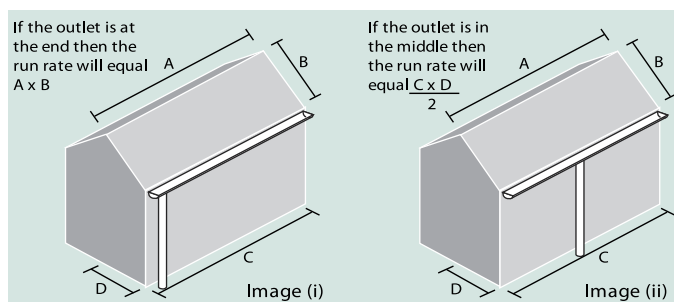
To select the size of the Classical rainwater system the following method should be used.

Rainfall Intensity

For roof drainage calculations it is usual to assume a rate of rainfall of 75mm/h. Regional differences are more significant in relation to total rainfall than to peak intensities and can be ignored. Short storms of higher intensity do occur and should be taken into consideration where overflowing cannot be tolerated.

Step 1—Calculating the area

The first stage of the calculation is determining the largest catchment area. The two most simple ways are illustrated in images (i) and (ii) taking into consideration the outlet position. Image (i), $A \times B$ = catchment area. Image (ii), $C \times D \times \text{pitch factor}$ = catchment area.



Step 2—determine run off rate

Catchment area (m^2) \times rainfall intensity in l/s (mm/h 3,600) = Answer 'A' (l/s)

Table 1—Roof Pitch Factor

Roof Angle	Factor	Roof Angle	Factor
15	1.13	35	1.26
17.5	1.16	37.5	1.39
20	1.18	40	1.43
22.5	1.21	42.5	1.46
25	1.24	45	1.50
27.5	1.26	47.5	1.55
30	1.29		

Step 3

Longest gutter run to an outlet (length in mm)
 gutter depth (mm) = Answer 'B'

Step 4

Using Answer 'B', consult Table 2 for the next highest reduction factor.

Table 2—Reduction Factors

Answer 'B'	Reduction Factor
50	1.00
100	0.93
150	0.86
200	0.80

Step 5

Answer 'A' Reduction Factor = Total Flowrate in l/s.

Step 6

Using the total flowrate, consult Table 3 for the appropriate gutter profile and size.

Table 3—Gutter Capacities

Gutter Type and Size						
Capacity l/sec	Half Round	Beaded Half Round	Deep Half Round	Ogee	Moulded No. 46	Notts Ogee
3.10	—	—	—	—	150x100	—
1.75	—	—	125x75	—	—	—
1.50	—	—	—	—	—	—
1.42	—	—	—	—	125x100	—
1.40	150	—	—	—	—	—
1.39	—	—	—	—	—	—
1.24	—	—	100x75	—	—	—
1.07	—	—	—	—	—	115
0.97	—	125	—	—	—	—
0.94	125	—	—	—	—	—
0.79	115	115	—	—	—	—
0.71	—	—	—	125	—	—
0.67	—	—	—	—	100x75	—
0.59	—	100	—	115	—	—
0.53	100	—	—	—	—	—
0.41	—	—	—	100	—	—

*All gutter and pipe capacities have been tested by HR. Wallingford

If you require your calculations checked, please contact our Technical Department 01952 262529

Table 4—Pipe Capacities

Pipe Diameter (mm)	Capacity Litres/Second
65	2.00
75	3.00
100	7.00
75 x 75	3.30
100 x 75	4.00
100 x 100	5.90
100 x 125	7.40

Installation Advice

General

When working on gutters or fascias at height it is advisable to use scaffolding in preference to ladders. If you are using a ladder please take the following points into consideration: (These points are for guidance only)

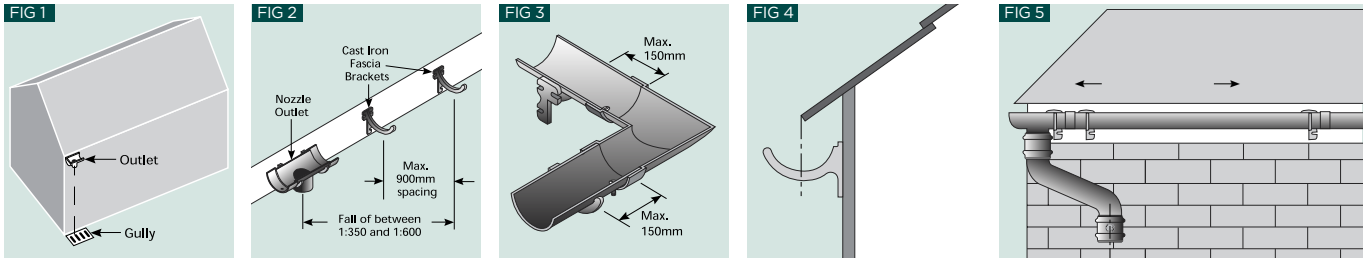
1. Ensure the ladder is based on level ground, preferably not soil or grass. If the ladder is based on soil or grass then place a board beneath the legs to spread the load and prevent sinking.
2. If possible, tie the top of the ladder to ring bolts at eaves level. Before fitting pipes/ gutters, ensure that all pieces have been primed and painted, including all cut ends to prevent corrosion. If any pipes/gutters have been cut/drilled, ensure that there are no loose filings on the system as these will quickly discolour the product.
3. We strongly recommend that you do not work alone. Removal and installation of cast iron guttering generally requires two people. Before replacing an existing system it is advisable to inspect and repair fascia and wall faces before beginning a new installation. All fascias must be in good condition before new guttering is installed as the weight of the cast iron gutters could cause rotten fascias to fall causing damage or injury to property or persons below. If the building does not have fascia boards, contact your local builders merchant for advice on suitable support brackets, or contact our Technical Advisory department on 01952 262529

Maintenance

Cast iron rainwater gutter systems are designed and manufactured to give many years of reliable service, but to achieve this, regular inspection and minimal routine maintenance should be carried out including:

1. Annually check and clear the gutter systems & rainwater heads of any leaves and debris that could cause a potential blockage (may require more checks if in close proximity of trees etc).
2. Also inspect the condition of the paintwork at the same time as 1. wiping clean any film built up, to protect the surface finish.
3. Also check on security of fixings and joints. If the manufacturers installation and paint suppliers instructions are adhered to re-painting should not be required for approx 5 years or longer. (Unless subject to aggressive atmospheric conditions i.e. coastal towns and providing the integrity of the finish coat is maintained).

Gutter Installation



Step 1

Identify route which rainwater will take.

Step 2

Locate gully/connection to drain and position outlet, taking into account offset projection. (Fig. 1)

Step 3

Approximately 75mm-100mm from the end of the run fit a bracket, taking into account the fall down to the outlet. Note: For other brackets see 'General Notes' (on previous page). Fix the remaining gutter brackets at maximum centres of 900mm (more frequently in areas prone to high snowfall) along the fall line (as shown in Fig. 2). Additional brackets should be fitted at a maximum of 150mm from angles and outlets (as shown in Fig. 3). Brackets should

be fixed using corrosion resistant wood screws 5mm x 25mm round or pan headed. Use plumbline or string for alignment when bracketing. **Please Note:** When using OG and moulded profiles, we recommend that fascia brackets are used wherever possible.

Step 4

Ensure brackets are installed so that centre of gutter is beneath the tile edge. (Fig. 4) See installation advice, general re: Fascia Board (on previous page).

Step 5

Position gutters loosely within brackets and assess installation for fall and offset position to rainwater pipe. Make adjustments as required. (Fig. 5)

Jointing—Half Round Profile



If installing Half Round Profile Gutters, The New Cast Iron Jointing Kit (*Product Code 192284*) can be used as an alternative to the traditional method. Kit contains enough materials to seal 20 Half Round Gutter Joints (and is suitable for the 100, 115 and 125mm HR sizes. For 150mm HR, see Fig. 10 on next page).

1. Push screw through spigot of gutter or fitting and then through the hole in the gasket material. The hole in the gasket is a tight fit and will locate on the screw while the joint is being made. (Fig. 6)
2. Locate the screw, seal and spigot of the gutter or fitting into the socket of the gutter or fitting and fix square nut and washer to the end of the screw. (Fig. 7)
3. Ensure the seal is sitting squarely in the socket and tighten the nut on the screw. (It may be necessary to hold the screw with a screw driver as the seal is compressed. (Fig. 8)
4. Trim excess rubber at the edge of the joint with a sharp bladed knife. (Fig. 9)
5. Paint gutters, joint and screws to the equivalent standard of the finish coat.



Installation Advice continued

Beaded Half Round, Deep Half Round, Moulded No.46, OG and Notts OG

Gutter sockets should be joined to spigots with a specialist rubberised bitumen gutter sealant or a low modulus silicon sealant, then fixed with a corrosion resistant round/pan head setscrew and nut, M6 x 20mm long. (Fig. 10) Spread sufficient sealant within the socket, applying additional sealant under the head of the setscrew, when bringing the parts together. The nut should then be finger tightened. Any excess that appears should then be removed. Allow the sealant to 'cure' and then tighten the nut and bolt. Do not over-tighten as this could damage the gutter. (Fig. 11) Repeat this procedure for all joints. See notes regarding replacement gutters.

Note: Before installing gutters and fittings, ensure that all pieces have been suitably painted. See painting/finish methods. If any gutters have been cut, ensure that there are no loose filings on the system as these will quickly discolour the product, and suitably paint to match the finish coat.



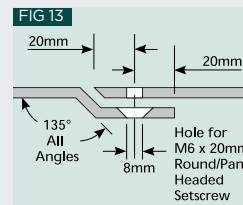
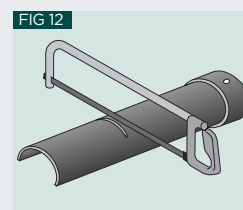
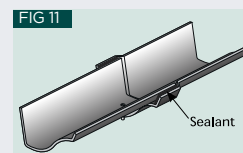
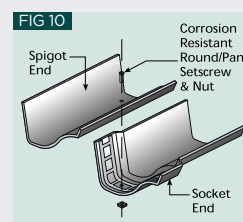
Cutting

Gutters can be cut using a hacksaw, the blade should be tungsten tipped with 50 teeth per inch (Fig. 12). A powered saw or disc cutter can be used.

Note: Please observe the necessary safety precautions recommended by the tool manufacturer.

Drilling Gutters

Hole size is 8mm ($\frac{5}{16}$ ") and should be positioned centrally 20mm from the spigot of the gutter (Fig. 13). The hole in a fitting socket will provide a useful template. We recommend the use of tungsten tipped drills or a good quality masonry drill.



Pipe Installation (Bottom Up)

Step 1

Using plumbline from centre of nozzle/offset, determine position of shoe or connection to drain. (Fig. 14)

Step 2 (Eared Pipe)

Determine the position of the fixings and drill suitable holes to take rawlplugs or anchors. 8mm x 50mm min. non corrosive fixing should be used without wall spacer plate, 8mm x 75mm min. non corrosive fixing with wall spacer plate. (Fig. 15)

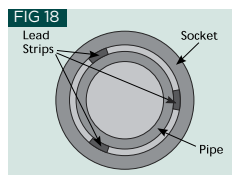
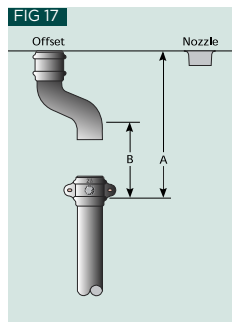
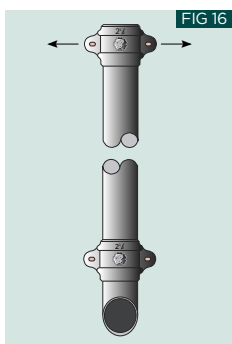
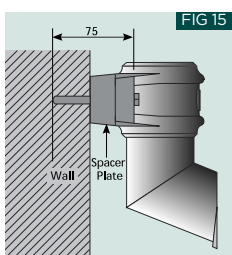
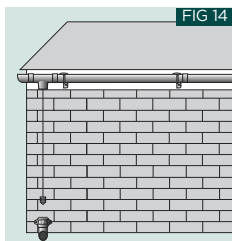
Note: Cast Iron Spacer plates may be required if wall is uneven and will also allow for easier maintenance. These should be fixed with the flat back plate to the back of the pipe ear.

Step 3

The pipe spigot is offered into the shoe socket and positioned in line with the plumbline, hole centres are then marked through centre of elongated holes in ears, this will allow for adjustment. (Fig. 16)

Step 4

Drill and fix as shoe.



Step 5

Repeat until last full length is fixed, ensuring in each case that the pipe spigot is fully seated in supporting socket.

Step 6

The last pipe length should be measured from the internal base of the socket to the underside of the gutter nozzle (A), or to the spigot of the offset (B), remembering to include the depth of socket in overall length. (Fig. 17)

Step 7

Cut pipe to length allowing 5mm for clearance on length and fix as previously described. **Note:** It may be necessary to lift gutter to locate nozzle in the pipe socket.

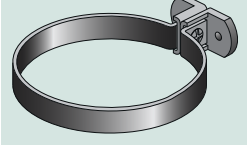
Step 8

Finally, to centralise and secure pipe joints, use wedges made up from sheet lead cut into 30mm strips, rolled and tapped, between socket and pipe. This should be inserted in 3 places to avoid any rattle. (Fig. 18)

FIG 19


Unneared Pipe Fixing

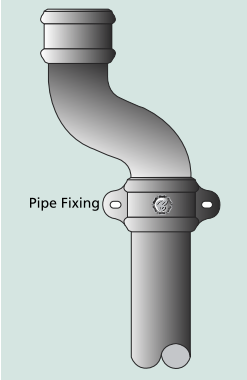
These can be fixed using a drive in spike (tradename, Holdfast), wrought iron or galvanised mild steel. (Fig. 19) A wall fixing bracket made in galvanised mild steel can also be used by drilling suitable holes and inserting rawlplugs to take 50mm (depth) screw. The bracket will then be located to the back plate supplied. (Fig. 20).

FIG 20


Note: For rectangular pipes, a cast iron decorative ear band can be supplied by Saint-Gobain PAM UK for fixing pipes to the wall.

Top Down Fixing—Fixed Socket

This is the reverse procedure to the previous section. The first pipe to be fixed is positioned and marked relative to the offset/gutter nozzle. (Fig. 21) The process is repeated up to the last full pipe length. The pipe at the base of the stack will have to be cut to length relative to the shoe.

FIG 21


Loose Socketed Pipe—Top Down (Fig.22)

Step 1

The loose socket is located and fixed so that it fully supports the offset, or is located beneath the nozzle.

Step 2

A pipe barrel is then inserted into the inlet of the loose socket.

Step 3

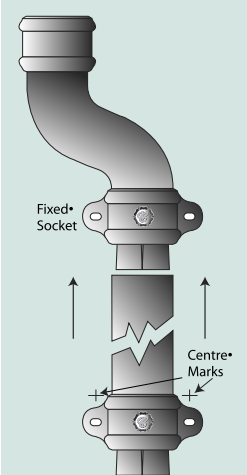
Both pipe and socket are then offered to the fixed socket spigot ensuring that the pipe end is located to the underside of the fixed socket.

Step 4

Holes on the loose socket are marked, drilled and socket is then fixed.

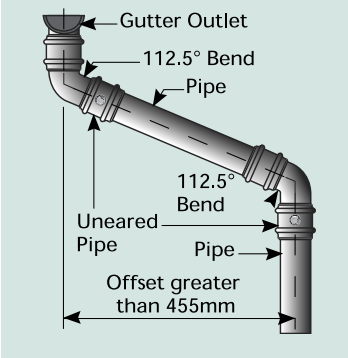
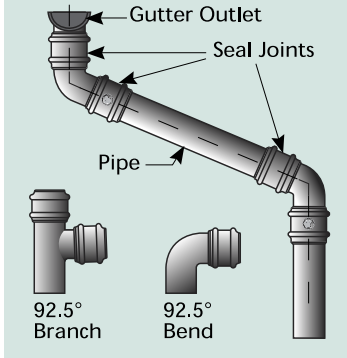
Step 5

This is repeated until stack is completed.

FIG 22


Additional Information—Making Up Offsets

When the projection of the fascia is in excess of 455mm the offset is formed with a pipe offcut, and two 112° bends (as shown in Fig. 23 & 24)

FIG 23

FIG 24




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