

UK
CA

Ensign
Page 08



Pre-Assembly
Page 26



Timesaver
Page 34



VortX
Page 56



Classical Rainwater
Page 70



Cast Iron above & below ground drainage and rainwater systems

• Ensign • Timesaver • VortX • Classical Rainwater

Saint-Gobain PAM specialises in the manufacture of cast iron above and below ground drainage systems, for Commercial, Public and Residential buildings.

LEADING DRAINAGE PRODUCTS

We lead markets in the supply of:

- **Cast iron soil and rainwater systems, and suspended pipework in basements and car parks and buried under building drainage**
- Ductile iron water and sewer pipes, fittings, valves & couplings & adaptors
- Ductile iron access covers & gratings

Across each of these categories we can provide:

- Innovative products and processes
- Specialist engineering services
- Total technical support

INNOVATION

With Saint-Gobain PAM and the PAM brand, you can be assured of Quality, Innovation and Technical Expertise at all times.

QUALITY ASSURANCE

All parts of our operation have audited quality management systems and fully satisfy BS EN ISO 9001:2015. The majority of products are third-party assessed and approved against all relevant worldwide regulations and standards.

SUSTAINABILITY

We continually invest time, energy and expertise to create an extensive range of innovative solutions which are easy to install, simple to joint and simply offer better value for money in terms of total life costs.

COMPLETE SERVICE GLOBAL EXPERTISE

Complete service integration.

Saint-Gobain PAM UK is the UK arm of Saint-Gobain PAM, the international pipelines company, which employs around 9000 people and generates annual sales of £1.2 billion in over 120 countries. Together they form part of the Saint-Gobain group, one of the world's leading multinational organisations.

TECHNICAL SUPPORT

With the international support of parent company Saint-Gobain, we are able to offer unrivalled technical support, a total solution approach and unparalleled quality and innovation. A UK-based business, with two foundries and a distribution centre in the Midlands, we combine international reach with local, specific solutions across all of our customers.

Customer Service

SAINT-GOBAIN PAM —CUSTOMER CHARTER

Your 1st Choice through the actions of our people

- Passionate about customer satisfaction
- Enterprising in support of our customers' aims
- Trustworthy by keeping our promises

WEBSITE:
www.pamdrainage.co.uk

SALES ENQUIRIES
Telephone: 01952 262529
Email: enquiries.pam@saint-gobain.com

CUSTOMER SERVICE TEAM
Telephone: 01952 262508
Email: orders.pam@saint-gobain.com



Delivery Service Category (DSC) timescales

Saint-Gobain PAM provide a product availability structure for all its products to enable contractors and distributors to plan supply more effectively on projects.

The products are categorised as follows and are shown against each product in the price list tables.

Category	Description	Within Working Days
A	Products manufactured for ex-stock availability. Any out-of-stock situation should be quickly resolved.	5
B	Products manufactured and a stock level will be held based on average demand.	5-15
C	Products generally of lower demand—some stock may be held or made to order.	15-30

Look for the DSC key at the top of the pages: **A** =5 **B** =5-15 **C** =15-30

If there is a product you require faster than the time-scale above please call our sales team on 01952 262508.

Proud of our UK Manufacturing Heritage

At its foundry in Telford, Shropshire, the birthplace of cast iron production in the UK, PAM remains at the forefront of the design and manufacturing of high-performing cast iron above and below ground drainage systems for commercial, public and residential buildings. PAM France manufactures the 3m pipes and the Telford site manufactures the fittings and ductile iron couplings and brackets to complete the ranges for all PAM's the worldwide markets.



SYSTEM, PRODUCT AND SUSTAINABILITY ACCREDITATION

BS EN ISO 50001:2018

For Energy Management Systems.
Programme of Continual Improvement
exceeding targets for energy reduction
Certificate Number: ENMS710926

BS EN ISO 9001:2015

Quality Management Systems
Certificate Number: FM12908

BS EN ISO 14001:2015

Environmental Management Systems
Certificate Number: EMS83973

BS EN ISO 45001:2018

Health & Safety Management Systems
Certificate Number: OHS 570684

CEMARS

Certified Emissions Measurement
And Reduction Scheme
Certificate Number: 2016053J
CEMARS certification demonstrates
the Company's commitment
to measuring, managing and reducing
greenhouse gas emissions
in a robust and credible way.

BES 6001

Responsible Sourcing of Construction Materials
Certificate Number: BES600635

Product Certification

BS EN 877:1999+A1:2006

Ensign/EEZI-FIT

Cast iron pipes and fittings, their joints and accessories for the
evacuation of water from buildings. Requirements, test methods
and quality assurance.
Certificate Number: KM51733

BS 416-2:1990

Timesaver Soil

Discharge and ventilating pipes and fittings, sand-cast
or spun in cast iron. Specification for socketless systems
Certificate Number: KM06979

BS 437:2008

Timesaver Drain

Specification for cast iron drain pipes, fittings and their
joints for socketed and socketless systems
Certificate Number: KM06980

We are pleased to announce that
our Ensign and Eezi-Fit range is now
UKCA marked. The UKCA mark came
into effect on 1st January 2021 and the
CE mark will no longer be recognised
on the Great Britain market from 1st
January 2022.

By using the UKCA mark we declare
that our product conforms to BS EN
877:1999+A1:2006, AVCP system
3 for the reaction of fire to the
product and system 4 for all other
characteristics. These tests have been
conducted in a UKAS accredited lab in
the UK. Our declaration of conformity
and technical documentation
is available on our website.



Cast Iron
Pipes and
Fittings
KM06978
KITEMARK™

ISO 9001
Quality
Management
Systems
CERTIFIED

FM12908

ISO 14001
Environmental
Management
CERTIFIED

EMS83973

ISO 45001
Occupational
Health and Safety
Management
CERTIFIED

OHS 570684

ISO 50001
Energy
Management
CERTIFIED

ENMS710926



WHAT'S NEW?

NEW

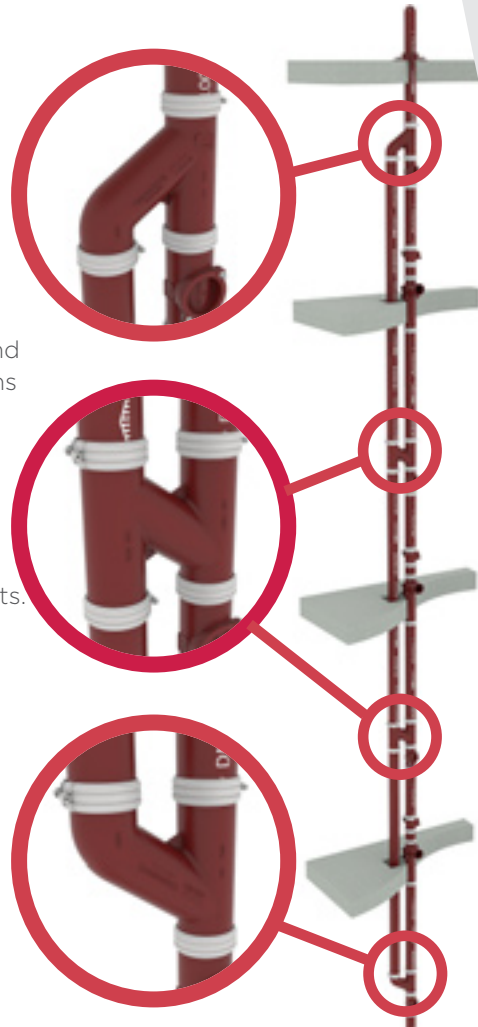
Ensign Venting Branches

Our new venting branches have multiple advantages for everyone involved with a project.

They are currently available in two sizes, DN100-100 and DN100-50, and is another example of PAM's innovations to meet the future market needs. Key benefits are:

- The reduction of the number of components gives a 30% material saving and therefore gives linked environmental benefits
- Enables designers to specify a single piece fitting when venting soil stacks rather than using lots of parts.
- The pipe centres are as close together as possible which could mean there could be more living space within the building which is very valuable, especially in city locations.
- This will also reduce the number of parts required for an assembly and therefore save contractors installation time on site.
- Remove the need to cut a small bit of pipe, therefore reducing risk, noise, time and materials.

Please refer to page 18 for the product details or find our data sheets on our website.



NEW

Pre-Assembly Stack Service See page 26

PAM have launched a new pre-assembly service for the Ensign cast iron above ground drainage system.

Who wants to save 60% time on-site?

Do you want to reduce site movements?

Do you want to build a simple and safe system?

Who doesn't want to improve their environmental impact?

Please scan the QR code with your phone for a link to the 3 minute cartoon with all the key points or visit our website for further information.



 YouTube

PLEASE CLICK
THE CIRCLE
TO VIEW THE
VIDEO AND
FIND OUT
MORE



Please contact your regional technical sales manager for details



BIM READY

Saint-Gobain PAM aims to ease the burden on developers, specifiers and contractors in the early stages of construction by providing two levels of BIM library and supporting elements.

The new releases include a full-data object library, a platform that provides supporting information and free individual BIM files of all products and systems.

These include a BS EN 877:1999+A1:2006 'Generic Cast Iron' content package for use in early design stages, with fittings parametrically modelled, and in standard geometric settings. The files contain only the most vital information, reducing the time and effort required to create early stage plans. These 'data-light' designs can also be overwritten with the full data specification libraries without issue, speeding up later stages of development that require more detailed plans streamlining conversion from design to as built work flow.

The PAM BIM Libraries are designed to aid the data transition between Public Health consultant's and Main Contract MEP design engineers, creating a leaner process that reduces design time. As the transitions usually require more explicit data being added to models, Saint-Gobain PAM are also currently creating plugins to quickly add the full data, either automatically by system type, or through floor level and manual area selection.

By providing small file sizes in the generic content, it will make it easier for early stage specification in BIM and will speed up the whole planning process; this in turn will create measurable cost and time savings for our customers.

Available content



BS EN 877:1999 +A1:2006
CAST IRON
GENERIC BIM
LIBRARY



BS 437:2008
CAST IRON
GENERIC BIM
LIBRARY



**ENSIGN SOIL
& EEZI-FIT BIM
LIBRARY**
BS EN
877:1999
+A1:2006



**ENSIGN
DRAIN BIM
LIBRARY**
BS EN
877:1999
+A1:2006



**TIMESAVER
DRAIN BIM
LIBRARY**
BS 437:2008

BIM SERVICES

PAM has been developing BIM level 2 libraries in Revit for its ranges of soil and drain products.

Call our Technical team for further help:
01952 262529



CLICK THE CIRCLE
TO SEE HOW
EFFECTIVE IT IS
TO DESIGN IN REVIT
WITH OUR PRE-
ASSEMBLY LIBRARY



NEW



NEW REGISTRATION REQUIRED
TO KEEP UP TO DATE WITH NEW
CONTENT/REVISED



FULL PARAMETRIC PIPE SYSTEMS
GENERIC AND FULL DATA



ACCESS TO DESIGN AID PLUGINS



ACCESS TO GUIDANCE VIDEOS
AND 'HOW TO?' FAQs



Converter Plugin - coming Soon



BS EN 877:1999+A1:2006 CAST IRON GENERIC LIBRARY

- Generic cast iron content
 - > Full range of Cast Iron fittings
 - > All families have 'real geometry'
 - > Generic coupling with 'fixing zone' visibility
 - > All fittings have constrained couplings which can be turned on/off
 - > No 'Manufacturer' data
 - > All files are lightweight 500KB max.



CLICK THE CIRCLE
TO SEE HOW FAST
AND EASY IT
IS TO DESIGN WITH
OUR BIM LIBRARY

PAM'S CAST IRON ENSIGN SOIL LIBRARY

- Ensign soil full data content
 - > The Saint-Gobain Conversion Plugin will overwrite the generic content to the Ensign content
 - > Minor modifications to project design stages
 - > Time saving design for main contract BIM Engineers.



**For more information call our
Technical team: 01952 262529**

Ensign cast iron drainage system



Ensign is the market leading cast iron above and below ground drainage system kitemark approved to BS EN 877:1999+A1:2006, providing complete drainage solutions, transporting fluid waste and rainwater through the building out and beyond.

ABOVE GROUND APPLICATIONS: RED COATED

- Sanitary soil (Foul) drainage
- Vent & waste
- Rainwater pipework

The Ensign cast iron system is first choice for commercial, public and residential buildings, particularly medium to high rise buildings which require robust and safe solutions for basements and lower levels to the vertical risers.



Ensign Above Ground Pipe



Major Benefits:

Fire Safety

- Ensign is fire rated to the safest level possible = A1 in accordance with BS EN 13501-1:2018
- New Requirement B4: External fire spread
 - > Full compliance with the latest Building Regulations Doc B (Fire Safety)
 - > On any residential building over 18m high. All materials which become part of an external wall or specified attachment
 - > To be classified minimum of non-combustible level A2 s1,do.
- Ensign cast iron requires no special fire protection saving time and cost
 - > Non-combustible—will not fuel a fire
 - > A1 rating = minimal smoke emission—the biggest killer in the first 30 minutes of any fire
 - > Installed using iron or steel brackets cast iron stacks will not collapse
 - > Cast iron will not produce molten droplets unlike HDPE that can potentially spread fire down a building

Other Benefits

- **Environmentally** considered to be the best material
 - > 100% recyclable at the end of its long life—continually.
 - > Manufactured from up to 99% recycled content
 - > Longevity to last the life of the building averaging 70 years for sanitary soil and rainwater systems.
- **Acoustically** cast iron is the quietest material on the market
 - > Outperforms acoustic plastic systems by up to 8 dB(A)
 - > Saves on acoustic insulation
- **Expansion co-efficient** is virtually the same as concrete
 - > No requirement for expansion joints like for HDPE
 - > Simplifies installation
- **Less bracketary** saving installation cost
 - > Simple brackets—no complicated rail systems



Why Ensign Cast Iron?

- High quality pipes manufactured by PAM in France using the De Lavaud process
 - > Pipe has greater impact and crush resistance
 - > Its surface hardness is reduced making it much easier to cut on site.
- High performing mechanical joint solutions that can perform from 0.5 bar to in excess of 10 bar
 - > Ductile iron couplings red epoxy coated with continuity ribs
 - > Stainless steel single bolt couplings for speed and simplicity of installation
 - > Grip collars that can over-clamp the iron and steel coupling to give additional pressure performance at sensitive areas.
 - > High pressure couplings comprising of all stainless steel components:



- > PAM Grip—with grip for up to 10 bar without restraint
- > PAM Flex—Non grip for up to 10 bar but fully restrained
- 50–600mm diameter range
- Strong robust ductile iron brackets
 - > Acoustic dampeners can be fitted for the ultimate acoustic performance
- The most comprehensive range of swept branches in compliance with BS EN 12056-2:2000 and Public Health best practice
- The most optimised range in cast iron for waste connection fittings
 - > Compression fit or BSP threaded boss pipes
 - > Single and double swept long tail branches with boss options
 - > Multi-waste manifold connectors in 100 and 150mm
 - > Short standard manifold
 - > New multi-waste manifold for low level connection 6 x 2" BSP inlets in 100 and 150mm diameter with extended spigots
 - > New corner manifold with 3 x 2" BSP inlets with extended spigot in 100mm



For more information on the NEW Pre-Assembly Service see page 26



BELOW GROUND APPLICATIONS: GREY COATED

- Underbuilding drainage often requiring to be encased in concrete
- First choice in areas: Unstable land/Soil containing methane gases/Shallow trenches
- Bridge drainage.

Benefits

- Robust proven material—fit and forget
 - > Superior crushing strength of cast iron
 - > The best material to cope with the high temperatures of the concrete curing process during encasement
- Flexible mechanical couplings—to accommodate ground movement
- Natural longevity.

Why Ensign Cast Iron?

- 100mm to 600mm diameter range
- Range of couplings
 - > Ductile iron mechanical up to 300mm
 - > Cast iron push-fit couplings in 100 and 150mm for fast pipe laying
 - > High performance Stainless Steel couplings 400-600mm
- Ensign drain pipes have an external Zinc coat applied in line with BS EN 877:1999+A1:2006. Internally, the Ensign pipes are epoxy lined to an average thickness of 250 microns—virtually twice that of competitor systems.
- New range of inspection chambers with rectangular access (See page 24)



Ensign Below Ground Pipe



Ensign Drain Couplings



Ensign Drain Push-fit Couplings

PERFORMANCE STANDARDS

BS EN 877:1999+A1:2006

- KM 51733 kitemark certification for above and below ground use
- Below ground pipe to standard BS EN 877:1999+A1:2006—require the application of an external Zinc layer of 130gr/m².

CE AND UKCA MARK

- Ensign is manufactured to BS EN 877:1999+A1:2006—a European harmonised standard and as such under the construction products directive must be UKCA not CE marked by Law. The manufacturer must make a product declaration of performance in conjunction with BS EN 877:1999+A1:2006 (DoP), and must be fire rated after a test carried out at an accredited Fire Research establishment. Ensign has been tested at EXOVA in Warrington and rated A1

The Ensign DoP is available on the PAM website.

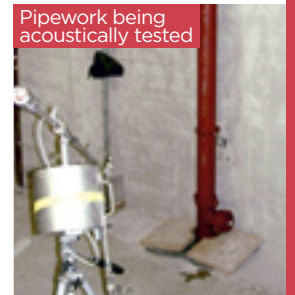
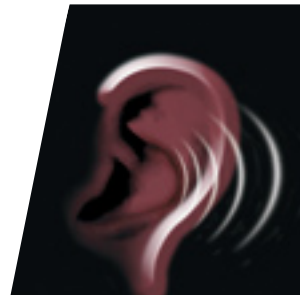
BS EN 14366:2004

- Laboratory measurement of noise from waste water systems
- Ensign has been tested at the Fraunhofer Institute in Germany and has the lowest level of acoustic measurement when using PAM acoustic brackets.

FIRE PERFORMANCE

- Reaction to fire category A1
- Fire resistance
 - > Building Regulations Document B—No special protection required
 - > ASFP Red Book guidance—Pipe penetration between floors and walls made with a mortar based material.

UK
CA



CLICK THE CIRCLE
TO WATCH THE
FIRE TEST VIDEO



For more information on performance standards and safety guidance
visit our website: www.pamdrainage.co.uk

Alternatively contact technical enquiries on **01952 262529**
or email technical.pam@saint-gobain.com

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▲			BELOW GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
3m Pipe									
  Pipe caps available for onsite storage					EP000			ED000	
	50	35	12.5	A	156363	79.73	—	—	—
	70	41	17.0	A	156455	92.24	—	—	—
	100	38	24.5	A	156563	109.76	A	155349	143.28
	125	23	34.3	C	156736	176.09	—	—	—
	150	20	41.0	A	156827	217.45	A	155414	285.48
	200	10	67.4	B	156951	363.36	B	155448	482.58
	250	8	97.3	B	157049	507.67	B	155476	709.45
	300	6	126.8	C	157114	632.22	B	155493	883.57
	400	1	177.7	C	157171	1,241.64	C	155508	1,431.49
	500	1	244.9	C	157187	1,544.16	C	155511	1,662.16
600	1	321.9	C	157203	1,882.77	C	175630	2,043.19	
Two Piece Iron Ductile Couplings (EPDM Gaskets)									
 300mm diameter is 4 piece 400mm, 500mm, 600mm diameter couplings see below EC002HP					EC002			ED001	
	50	32	0.6	A	156398	11.95	—	—	—
	70	27	0.7	A	156493	13.17	—	—	—
	100	20	1.1	A	156634	17.12	A	155369	24.16
	125	12	0.9	C	156777	21.25	—	—	—
	150	8	1.7	A	156888	34.31	A	155433	49.35
	200	4	3.7	A	156998	76.71	A	155462	109.97
	250	1	4.4	B	175552	109.86	B	175591	140.01
300	1	6.5	B	175510	127.14	B	175592	160.37	
Grip Collars Stainless Steel									
 **To overclamp ductile iron coupling EC002 To give 5 bar unrestrained Will overclamp all sizes Stainless Steel EC002NG Couplings					EC002GC				
	50	10	0.5	B	221261	38.33	—	—	—
	70	10	0.7	B	221267	44.80	—	—	—
	**100	10	0.9	B	220750	59.44	—	—	—
	**150	4	1.2	B	221270	84.86	—	—	—
	**200	3	1.7	C	221271	116.78	—	—	—
	250	1	1.7	C	227039	193.49	—	—	—
	300	1	1.7	C	227040	217.47	—	—	—
PAM-GRIP Stainless Steel High Performance Coupling with Grip (EPDM Gaskets)									
 All steel components are Grade 316 EPDM gasket Nitrile available on request					EC002HP-G			EC002HP-G	
	50	1	0.6	B	269439	138.38	B	269439	138.38
	70	1	1.0	B	269440	181.81	B	269440	181.81
	100	1	1.1	B	269441	210.84	B	269441	210.84
	150	1	2.3	B	269442	348.15	B	269442	348.15
	200	1	5.6	B	269443	471.09	B	269443	471.09
	250	1	6.5	B	269444	637.59	B	269444	637.59
	300	1	7.2	B	269445	652.08	B	269445	652.08
	400	1	10.3	B	269446	723.78	B	269446	723.78
	500	1	16.9	C	269447	1,066.93	C	269447	1,066.93
600	1	19.6	C	269448	1,139.28	C	269448	1,139.28	
PAM-FLEX High Performance Coupling Non-Grip (EPDM Gaskets)									
 All steel components are Grade 316 EPDM gasket Nitrile available on request					EC002HP			EC002HP	
	50	1	0.6	B	269450	116.63	B	269450	116.63
	70	1	1.0	B	269451	158.26	B	269451	158.26
	100	1	1.1	B	269452	186.42	B	269452	186.42
	150	1	2.3	B	269453	221.36	B	269453	221.36
	200	1	4.1	B	269454	289.36	B	269454	289.36
	250	1	4.6	B	269455	326.49	B	269455	326.49
	300	1	5	B	269456	355.78	B	269456	355.78
	400	1	5.8	B	269457	435.07	B	269457	435.07
	500	1	6.6	C	269458	513.72	C	269458	513.72
600	1	7.4	C	269459	533.71	C	269459	533.71	

Note — Coupling requires restraining to perform to higher pressures

Please note for removal and re-installation of the bolts for the HP couplings will require MolyKote (code 278599) applied to the threads. Please call the technical team for details on 01952 262529.

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▲			BELOW GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
Stainless Steel couplings Rapid NG (EPDM Rubber Gasket)									
	EC002NG								
	50	100	0.2	A	210424	11.95	—	—	—
	70	140	0.3	A	210425	13.17	—	—	—
	100	100	0.5	A	210427	17.12	—	—	—
	125	50	0.6	C	210428	21.25	—	—	—
	150	50	0.7	A	210429	34.31	—	—	—
	200	20	0.8	B	210430	76.71	—	—	—
	250	4	0.9	B	228759	109.86	—	—	—
	300	4	1.0	B	228771	127.14	—	—	—
Nitrile Gaskets available on request									
Push-fit Cast Iron Drain Couplings									
	ED004								
	100	1	1.5	—	—	—	A	175622	26.46
	150	1	2.5	—	—	—	A	175623	51.94
EEZI-FIT Couplings									
	EZ001								
	100	12	1.3	A	208191	18.67	—	—	—
	150	1	2.0	C	216312	37.31	—	—	—
Ductile Iron Pipe Brackets									
				EF048			ED048		
	50	48	0.3	A	156408	10.80	—	—	—
	70	30	0.5	A	156505	10.80	—	—	—
	100	30	0.6	A	156646	12.48	B	175593	14.45
	150	16	0.8	A	156898	23.10	B	175594	27.36
	200	8	1.5	B	177745	85.67	C	177743	104.27
Ductile Iron Pipe Bracket Fitted with Acoustic Dampener—Tested to BS EN 14366:2004									
	EF048AD								
	50	48	0.5	B	199881	20.99	—	—	—
	70	30	0.6	B	199882	20.99	—	—	—
	100	30	0.7	A	199883	22.40	—	—	—
	150	16	1.0	B	199884	27.99	—	—	—
Ductile Iron Pipe Bracket (Double Braced)									
	EF049								
	100	1	0.8	B	177744	13.66	—	—	—
Vertical Mild Steel Bracket									
	EF048MS								
	125	1	1.1	B	192259	21.75	—	—	—
Stand Off Mild Steel Brackets									
	EF048MS								
	200	1	2.0	B	192414	34.39	—	—	—
	250	1	2.5	B	192260	47.39	—	—	—
	300	1	2.7	C	192261	52.21	—	—	—
	400	1	3.3	C	192362	76.92	—	—	—
Split Band Mild Steel Brackets									
	EF048SMBS								
	400	1	2.3	C	261761	66.03	—	—	—
	500	1	2.9	C	261762	94.50	—	—	—
Rubber Lined Mild Steel Brackets									
	EF048MSL								
	50	50	0.1	B	251197	5.76	—	—	—
	70/75	50	0.2	B	251198	8.78	—	—	—
	100	25	0.3	B	251199	10.52	—	—	—
	150	20	0.4	B	251201	15.35	—	—	—
	200	10	0.6	C	251202	27.20	—	—	—
	250	10	1.6	C	251203	44.98	—	—	—
	300	10	1.8	C	251204	89.76	—	—	—

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▲			BELOW GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
88° Short Radius Bends									
 * 100 & 150 below ground only for rainwater					EF002			ED002	
	50	1	0.7	A	191437	20.66	—	—	—
	70	1	1.3	A	191442	23.25	—	—	—
	100	1	1.9	A	191447	27.54	C	271397	30.66*
	125	1	3.2	C	191454	40.57	—	—	—
	150	1	4.4	A	191459	49.47	C	278339	58.20*
	200	1	9.8	C	191462	158.05	—	—	—
	250	1	17.3	C	191463	287.35	—	—	—
	300	1	27.4	C	191431	473.21	—	—	—
400	1	72.7	C	265224	751.58	—	—	—	
69° Short Radius Bends									
					EF002				
	50	1	0.6	C	191436	20.66	—	—	—
	70	1	1.2	C	191441	23.25	—	—	—
	100	1	2.1	C	191446	27.54	—	—	—
150	1	4.2	C	191458	49.47	—	—	—	
67° Short Radius Bends									
					EF002				
	200	1	7.8	C	156968	147.27	—	—	—
	250	1	14.7	C	157067	287.35	—	—	—
300	1	20.0	C	157132	404.20	—	—	—	
45° Short Radius Bends									
					EF002			ED002	
	50	1	0.6	A	191435	20.66	—	—	—
	70	1	0.9	A	191440	23.25	—	—	—
	100	1	1.4	A	191445	27.54	A	191765	32.44
	125	1	2.3	C	191452	40.57	—	—	—
	150	1	3.0	A	191457	49.47	B	191766	58.20
	200	1	6.8	B	191461	147.27	C	191767	169.36
	250	1	10.9	B	191464	287.35	C	191879	336.88
	300	1	18.7	C	191432	404.20	C	191880	457.18
	400	1	35.0	C	192335	1,043.59	C	192370	1,088.96
	500	1	53.0	C	192376	1,700.16	C	192382	1,564.15
	600	1	92.0	C	192377	1,847.56	C	192383	2,014.20
30° Short Radius Bends									
					EF002			ED002	
	50	1	0.5	C	191434	20.66	—	—	—
	70	1	0.7	C	191439	23.25	—	—	—
	100	1	1.5	A	191444	27.54	A	191768	32.44
	150	1	3.2	C	191456	49.47	B	191769	58.20
	200	1	7.0	C	155933	147.27	C	265382	176.72
	250	1	9.7	C	155948	287.35	C	265380	344.83
	300	1	15.5	C	155960	404.20	C	265379	525.46
400	1	34.6	C	264752	638.43	C	266308	725.36	
15° Short Radius Bends									
					EF002			ED002	
	50	1	0.4	C	191433	20.66	—	—	—
	70	1	0.7	C	191438	23.25	—	—	—
	100	1	1.3	A	191443	27.54	A	191770	32.44
	150	1	2.5	C	191455	49.47	B	191771	58.20
	200	1	4.6	C	155932	147.27	C	265381	176.72
400	1	19.3	C	269726	502.31	C	270324	653.01	
45° Medium Radius Bends									
								ED02M	
	100	1	3.5	—	—	—	B	191772	55.23
150	1	5.9	—	—	—	C	191773	137.45	

* 100 & 150 below ground only for rainwater

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▲			BELOW GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
88° Medium & Long Radius Bends									
					EF02L			ED02L	
	100 LR	1	4.8	A	191549	70.01	A	191774	75.77
	150 MR	1	8.7	B	191550	200.67	B	191775	227.24
22° Long Radius Bends									
					EF02L			ED02L	
	100 LR	1	2.0	C	191548	51.63	C	191776	55.64
88° Heel Rest Bends									
								ED007	
	100	1	5.7	—	—	—	B	192289	94.15
	150	1	9.9		—	—	C	192290	231.61
88° Short Radius Bends with Rear Access									
					EF005				
	70	1	1.8	C	156472	45.10	—	—	—
	100	1	3.3	A	156589	65.87	—	—	—
	150	1	4.5	B	156845	115.88	—	—	—
88° Long Radius Bend with Rear Access									
					EF05L			ED05L	
	100	1	5.7	B	156607	85.21	C	191777	100.25
88° Medium Radius Bend with Rear Access									
					EF05M			ED05M	
	150	1	10.7	C	192357	207.00	C	192358	231.61
88° Long Tail Bend									
					EF055				
	100	1	4.4	C	191567	53.29	—	—	—
45° Long Tail Bend									
					EF055			ED055	
	100	1	4.0	C	191566	53.29	C	191778	56.74
88° Long Tail Double Bend									
					EF054				
	70	1	3.1	C	191837	74.80	—	—	—
	100	1	4.4	C	191838	82.52	—	—	—
NEW Roof Penetration Flanges									
					EF076				
	75	1	6.1	C	205922	175.56	—	—	—
	100	1	6.6	C	205924	185.11	—	—	—
	150	1	6.6	C	238554	335.03	—	—	—

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▲			BELOW GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
88° Single Tee Branches (equal and unequal)									
	EF006								
	50x50	1	1.0	B	191469	33.14	—	—	—
	70x50	1	1.5	C	191472	35.02	—	—	—
	70x70	1	1.7	B	191475	35.02	—	—	—
	100x50	1	2.0	B	191479	48.02	—	—	—
	100x70	1	2.3	C	191482	48.02	—	—	—
	100x100	1	2.7	A	191485	44.60	—	—	—
	125x100	1	4.0	C	191490	89.47	—	—	—
	125x125	1	4.2	C	191492	96.28	—	—	—
	150x100	1	4.6	B	191497	103.39	—	—	—
	150x125	1	5.8	C	191499	119.54	—	—	—
	150x150	1	6.0	C	191501	106.71	—	—	—
	200x200	1	13.3	C	191505	365.48	—	—	—
250x250	1	22.6	C	191508	645.04	—	—	—	
300x300	1	35.5	C	191466	829.97	—	—	—	
69° Single Branches (equal and unequal)									
	EF006								
	ED006								
	50x50	1	1.0	C	191468	33.14	—	—	—
	70x50	1	1.4	C	191471	35.02	—	—	—
	70x70	1	1.7	C	191474	35.02	—	—	—
	100x50	1	2.2	C	191478	48.02	—	—	—
	100x70	1	2.7	C	191481	48.02	—	—	—
	100x100	1	2.7	C	191484	44.60	C	191781	52.39
150x100	1	5.1	C	191496	104.71	C	191851	123.11	
45° Single Branches (equal and unequal)									
	EF006								
	ED006								
	50x50	1	1.3	A	191467	33.14	—	—	—
	70x50	1	1.8	C	191470	35.02	—	—	—
	70x70	1	2.3	B	191473	35.02	—	—	—
	100x50	1	2.4	A	191477	48.02	—	—	—
	100x70	1	2.7	B	191480	48.02	—	—	—
	100x100	1	3.7	A	191483	44.60	A	191782	52.39
	125x70	1	4.0	C	191488	96.28	—	—	—
	125x100	1	5.3	C	191489	89.47	—	—	—
	125x125	1	5.6	C	191491	96.28	—	—	—
	150x70	1	5.1	B	191494	104.71	—	—	—
	150x100	1	5.7	B	191495	104.71	B	191783	123.11
	150x125	1	8.0	C	191498	129.05	—	—	—
	150x150	1	8.4	B	191500	106.71	C	191784	125.49
	200x100	1	9.6	C	191502	268.68	C	191785	315.98
	200x150	1	14.2	C	191503	276.34	C	191786	315.98
	200x200	1	19.4	C	191504	299.24	C	191787	339.00
	+ 250x100	1	13.6	C	157073	343.34	C	259817	383.34
	+ 250x150	1	17.3	C	157075	343.34	C	259816	383.34
	+ 250x200	1	24.3	C	157078	429.19	C	265383	515.03
	250x250	1	32.2	C	191507	643.54	C	191881	756.13
	+ 300x100	1	19.3	C	157138	566.51	C	264870	679.80
	+ 300x150	1	23.2	C	157140	566.51	C	264869	679.80
	+ 300x200	1	28.4	C	157141	600.85	—	—	—
	+ 300x250	1	37.2	C	157142	600.85	—	—	—
	300x300	1	54.8	C	191465	829.97	C	191882	1,090.66
	400x300	1	60.0	C	192339	1,988.05	C	192384	1,873.30
	400x400	1	94.7	C	192336	2,359.48	C	192373	2,026.34
	+ 500x500	1	175.0	C	192378	3,510.24	C	192385	3,245.89
+ 600x600	1	215.0	C	192379	3,586.40	C	192386	3,984.90	

Note: to comply to BS EN 12056 part 2 use a Swept Radius, see opposite page.

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▲			BELOW GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
88° Single Branch (Swept Radius) (see BS EN 12056 part 2)									
					EF06R			ED06R	
	70x70	1	2.2	B	156539	42.65	—	—	—
	100x50	1	2.4	B	156611	56.13	—	—	—
	100x70	1	2.9	C	156612	56.13	—	—	—
	100x100	1	3.3	A	156696	50.95	B	191788	57.97
	150x100	1	7.6	B	156869	121.40	C	191789	195.45
	150x150	1	11.7	C	156926	202.11	C	191790	197.03
	200x150	1	13.0	C	156985	341.68	C	191791	401.88
200x200	1	21.0	C	157025	359.79	C	191792	423.26	
88° Single Branch (Swept Radius) with Rear Access (see BS EN 12056 part 2)									
					EF07R			ED07R	
	70x70	1	3.0	C	156540	62.52	—	—	—
	100x50	1	3.2	C	156614	84.80	—	—	—
	100x70	1	3.5	C	156621	84.80	—	—	—
	100x100	1	4.3	B	156697	88.01	C	191793	99.78
	150x100	1	8.9	C	156875	202.41	C	191794	210.57
150x150	1	13.0	C	156927	246.92	C	191795	211.06	
88° Double Tee Branches (equal and unequal)									
					EF010				
	100x50	1	2.2	C	155825	47.27	—	—	—
	†100x70	1	2.7	C	155826	56.65	—	—	—
	100x100	1	3.3	B	191511	64.16	—	—	—
150x100	1	5.7	C	155907	143.53	—	—	—	
69° Double Branches									
					EF010			ED010	
	100x100	1	3.4	C	191510	70.52	C	191796	83.03
45° Double Branches (equal and unequal)									
					EF010			ED010	
	100x100	1	4.7	B	191509	66.58	C	191798	75.47
	150x100	1	8.0	C	191512	197.40	C	191799	219.18
	150x150	1	12.6	C	191513	265.45	C	191800	296.42
200x200	1	25.3	C	191514	367.89	C	191801	381.35	
88° Double Branches (Swept Radius) (equal and unequal) (see BS EN 12056 part 2)									
					EF010R			ED010R	
	100x100	1	4.2	B	157643	65.12	C	185373	76.56
	150x100	1	7.6	C	156862	292.29	C	191803	264.91
88° Long Tail Tee Branch									
					EF056				
	100x100	1	5.1	C	191568	156.64	—	—	—
45° Long Tail Branches (equal and unequal)									
					EF056				
	100x100	1	5.9	C	156723	156.64	—	—	—
	150x150	1	18.3	C	156938	293.75	—	—	—

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▲			BELOW GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
88° Corner Branch (Swept Radius) (equal)									
	100x100	1	4.4	B	EF035R 264739	116.81	—	—	—
88° Corner Branches (equal and unequal)									
	100x100	1	3.5	C	EF035 191558	116.81	—	—	—
	150x100	1	7.1	C	155919	136.38	—	—	—
45° Corner Branch									
	100x100	1	5.9	C	EF035 156716	116.81	—	—	—
88° Long Tail Corner Branch									
	100x100	1	7.5	C	EF036 191559	184.04	—	—	—
88° Single Long Arm Branch									
	100	1	6.0	C	EF008 156726	114.15	—	—	—
NEW	Interconnecting Venting Branch								
	100x100	1	6.9	B	EF013 270320	75.12	—	—	—
	100x50	1	3.8	B	279102	70.51	—	—	—
DN100-100	DN100-50								
NEW	Entry/Terminal Venting Branch								
	100x100	1	5.9	B	EF013 270303	89.34	—	—	—
	100x50	1	3.2	B	279105	84.42	—	—	—
DN100-100	DN100-50	The same product can be used either way up at the top or bottom of the system.							
NEW	45° Rodding Branch								
	100	1	7.0	A	EF009 266138	114.46	—	—	—
NEW	88° Rodding Branch								
	100	1	7.6	A	EF009 266135	153.50	—	—	—

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DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▲			BELOW GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
Access Pipes with Round Door									
					EF014			ED014	
	50	1	1.6	B	191516	55.08	—	—	—
	70	1	2.0	B	191517	58.28	—	—	—
	100	1	3.1	A	191518	64.04	C	191805	72.12
	150	1	6.2	B	191519	115.93	C	191806	120.03
Access Pipes with Rectangular Door									
					EF015			ED015	
	100	1	7.2	B	191840	123.84	C	191807	143.93
	125	1	9.0	C	191521	128.87	—	—	—
	150	1	12.7	B	191841	193.92	C	191808	225.09
	200	1	21.5	C	191522	385.16	C	191809	453.06
	250	1	38.5	C	191523	606.05	C	191883	734.27
	300	1	50.0	C	191520	755.99	C	191884	876.63
Offsets									
					EF024				
	100x75	1	2.3	C	191526	42.35	—	—	—
	50x130	1	1.5	C	191524	35.03	—	—	—
	70x130	1	2.2	C	191525	53.15	—	—	—
	100x130	1	3.8	C	191527	69.82	—	—	—
Taper Pipes									
					EF028			ED028	
	70x50	1	0.5	B	191532	31.80	—	—	—
	100x50	1	0.9	A	191533	37.40	—	—	—
	100x70	1	0.9	A	191534	37.40	—	—	—
	125x50	1	1.2	C	191842	37.60	—	—	—
	125x70	1	1.5	C	191536	37.60	—	—	—
	125x100	1	1.6	C	191537	37.60	—	—	—
	150x50	1	1.7	C	191538	71.76	—	—	—
	150x70	1	1.8	C	191539	71.76	—	—	—
	150x100	1	2.2	B	191540	71.76	B	191810	77.47
	150x125	1	2.0	C	191541	71.76	—	—	—
	200x100	1	3.5	C	191542	116.56	C	191811	137.12
	200x125	1	3.4	C	191543	116.56	—	—	—
	200x150	1	3.9	C	191544	116.56	C	191812	137.12
	250x100	1	5.9	C	191545	240.75	C	191889	282.22
	250x150	1	6.1	C	191546	240.75	C	191886	282.22
	250x200	1	6.1	C	191547	240.75	C	191892	282.22
	300x150	1	10.4	C	191529	330.94	C	191890	392.85
	300x200	1	11.0	C	191530	330.94	C	191891	392.85
	300x250	1	12.7	C	191531	330.94	C	191885	392.85
†PAM can manufacture large diameter tapers to most sizes i.e. 500x200 on a made to order basis (Price on application)	400x300	1	20.0	C	157163	414.18	C	155504	491.43
	500X150	1	26.5	C	270326	972.84	C	265404	1,068.37
	500x400	1	27.9	C	157184	972.84	C	270327	1,068.37
'P' Trap Plain (Supplied with support lug)									
					EF034			ED034	
	100	1	4.5	A	156666	51.10	C	191815	60.18
'P' Trap with Head Access (*Supplied without support lug only)									
					EF037			ED037	
	50*	1	2.0	B	156419	78.08	—	—	—
	70	1	2.7	C	156518	78.08	—	—	—
	100	1	5.2	B	156667	84.53	C	182482	98.51
	150	1	11.6	B	156911	151.20	C	182483	167.77

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▲			BELOW GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £
Branch Trap									
	EF080								
	100	1	10.2	C	191587	185.29	—	—	—
Stench Trap									
	EF081								
	100	1	17.4	C	155841	384.85	—	—	—
	150	1	38.0	C	155921	812.16	—	—	—
Asphalt Roof Connector									
	EF073								
	100	1	2.1	C	191581	77.61	—	—	—
Movement Connector									
	EF058								
	50	1	2.4	C	156038	123.44	—	—	—
	100	1	4.4	B	192304	152.96	—	—	—
	150	1	7.8	C	156235	182.49	—	—	—
Expansion Plugs									
	EF074					ED074			
	50	1	0.2	C	156374	36.35	—	—	—
	70	1	0.4	C	191582	21.96	—	—	—
	100	1	0.7	B	191583	27.34	C	191823	36.47
	150	1	1.5	C	191584	49.06	C	191824	67.14
	200	1	4.1	C	156961	160.62	—	—	—
	250	1	6.0	C	157060	152.94	—	—	—
	300	1	9.1	C	157125	311.39	—	—	—
Blank Ends Plain									
	EF070					ED070			
	50	1	0.2	A	191570	8.31	—	—	—
	70	1	0.4	B	191571	8.78	—	—	—
	100	1	0.8	A	191572	10.23	B	191818	12.06
	125	1	1.1	C	191573	12.28	—	—	—
	150	1	2.0	B	191574	14.77	B	191819	17.27
	200	1	3.2	B	191575	65.23	C	191820	76.76
	250	1	5.7	C	191576	133.29	C	191887	156.24
	300	1	11.0	C	191569	273.44	C	191888	241.36
	400	1	17.3	C	261894	284.65	C	265190	341.58
	500	1	24.0	C	261892	332.45	C	267710	398.94
Blank Ends with 50mm Push-fit Connector									
	EF071					ED071			
	70	1	0.4	C	191577	19.59	—	—	—
	100	1	1.0	C	191578	21.14	C	191821	24.85
	150	1	1.6	C	191580	25.40	C	191822	29.90
Blank Ends D/T 2" BSP									
	EF071T								
	100	1	0.9	B	191579	24.83	—	—	—
Universal Connector EPDM									
	EF071R								
	50x56/48/40 (OD Dimensions)	1	0.1	B	155759	17.00	—	—	—

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▲			BELOW GROUND ▼					
				ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £			
Blank End with Waste Push-fit Connector												
	100x38/32	1	0.4	EF077								
				C	191585	18.98	—	—	—			
Strap On Boss												
				EF133								
				70	1	1.1	C	265078	87.30	—	—	—
				100	1	1.4	B	262891	70.77	—	—	—
				150	1	1.6	C	262890	87.30	—	—	—
Single Boss Pipes 50mm Compression												
				EF090								
				50	1	1.2	B	156371	46.56	—	—	—
				70	1	1.6	B	156460	46.56	—	—	—
				100	1	2.1	A	156573	56.92	—	—	—
				150	1	3.8	C	156836	92.80	—	—	—
Single Boss Pipe D/T 2" BSP												
				EF090T								
				100	1	1.7	B	191847	59.58	—	—	—
Double Boss Pipes 50mm Compression Opposed												
				EF091								
				100	1	2.7	B	156575	73.54	—	—	—
				150	1	4.4	C	192359	142.33	—	—	—
Double Boss Pipe D/T 2" BSP Opposed												
				EF091T								
				100	1	2.2	C	191848	76.18	—	—	—
Double Boss Pipe 50mm Compression at 90°												
				EF092								
				100	1	2.9	C	191849	73.54	—	—	—
Double Boss Pipes D/T 2" BSPT at 90°												
				EF092T								
				100	1	2.0	C	191850	76.18	—	—	—
				70	1	1.4	C	245545	86.38	—	—	—
Plastic Moulded Plug to blank off Boss Pipes (Supplied to merchants in bags of 10)												
	50	10	—	EF093								
				C	192255	30.74	—	—	—			
Manifold Connectors												
				EF094								
				100	1	3.2	C	175626	113.53	—	—	—
				150	1	6.0	C	175629	158.16	—	—	—
NEW Multi-Waste Manifold Connector 6 x 50mm BSP Inlets												
				EF095								
				100	1	12.8	B	261138	213.44	—	—	—
				150	1	17.3	C	261434	272.75	—	—	—

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▲			BELOW GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £



Corner Multi-Waste Manifold Connector 4 x 50mm BSP Inlets



EF099

100	1	10.4	C	270321	196.41	—	—	—
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88° Single Long Tail Boss Branch Swept Radius with 4 x 50mm Push-fit Bosses (2 Left Hand, 2 Right Hand) (see BS EN 12056 part 2)



EF096

100	1	10.0	C	208644	270.44	—	—	—
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Bosses require drilling out using a 51mm hole saw.
Rubber grommets supplied in bags of 10. Product code 208205 (see page 25)
See Page 25 for hole saw accessories.

88° Double Long Tail Boss Branch Swept Radius with 4 x 50mm Push-fit Bosses (see BS EN 12056 part 2)



EF097

100	1	11.0	C	208653	281.71	—	—	—
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Bosses require drilling out using a 51mm hole saw.
Rubber grommets supplied in bags of 10. Product code 208205 (see page 25)
See Page 25 for hole saw accessories.

Stack Support Pipes



EF050

70	1	1.8	C	191856	44.32	—	—	—
100	1	2.8	B	191562	49.31	—	—	—
125	1	3.6	C	191563	54.69	—	—	—
150	1	4.8	C	191564	78.02	—	—	—

Stack Support Brackets supplied with rubber seal



EF051

70	1	1.1	C	191857	28.68	—	—	—
100	1	1.5	B	191843	39.39	—	—	—
125	1	1.7	C	191844	42.13	—	—	—
150	1	2.6	C	191845	57.08	—	—	—

Stack Support Pipes Complete with Bracket and Seal



EF050/51

200	1	10.0	C	157014	353.23	—	—	—
250	1	18.5	C	157097	535.47	—	—	—
300	1	30.8	C	157160	691.07	—	—	—
400	1	64.8	C	269859	1,957.59	—	—	—
500	1	89.8	C	269733	2,270.48	—	—	—

Stack Support Pipe Cantilever Arm Bracket (Galvanised Steel)



EF052

—	1	2.0	C	192329	33.05	—	—	—
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Stack Support Pipe Cantilever Arm Bracket with Support (for stack support pipes 200–300mm in diameter) (Galvanised Steel)



EF052

—	1	4.3	C	192330	86.14	—	—	—
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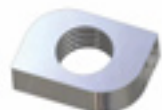
DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▲			BELOW GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £

Stack Support Pipe Console Bracket (Galvanised Steel)



EF052									
—	1	4.6	C	192331	79.13	—	—	—	—

Clamp for support brackets



EF052									
—	1	0.3	C	192332	1.36	—	—	—	—

Transitional Connectors



EF059									
100	1	1.8	C	156650	58.30	—	—	—	—
150	1	4.2	C	156902	107.24	—	—	—	—

Ensign EEZI-FIT cast iron drainage systems

EEZI-FIT is intended for use for gravity above ground sanitary applications in accordance with BS EN 12056-2:2000 (0.5 bar performance—kitemark approved).

Ideal for multi-floor applications EEZI-FIT is the ideal system for projects with long vertical soil stacks, such as flats and apartments, hotels, office blocks etc; where the main stack will remain unchanged over time.

Benefits

- All the benefits of cast iron with the advantages of push-fit assembly. The system utilises a new gasket design that makes jointing simple, and completed in seconds. Electrical continuity can be accommodated.
- EEZI-FIT connects to standard Ensign double spigot pipe and is fully compatible with all Ensign plain-ended fittings.
- The installation of an Ensign mechanical joint positioned in the system can allow dismantling for future retro-fit.

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ΔDSC.	PRODUCT CODE	UNIT PRICE £
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EEZI-FIT Couplings



EZ001						
100	12	1.3	A	208191	18.67	
150	1	2.0	C	216312	37.31	

88° Short Radius Bends



EZ002						
100	1	2.4	B	208192	37.28	
150	1	5.0	C	216313	70.07	

45° Short Radius Bends



EZ002						
100	1	1.8	B	208193	37.28	
150	1	3.8	C	216319	70.07	

Boss Pipe Push-Fit with Single 50mm Waste (Supplied with grommets)



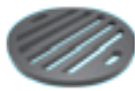
EZ090						
100	1	2.1	B	208199	59.29	

SPARES RANGE—EEZI-FIT ACCESSORIES

Gaskets (Bag of 10)



100	10	—	C	208204	29.18	
150	10	—	C	216316	30.89	

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▲			BELOW GROUND ▼			
				ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £	
Ensign to Supersleve Connectors										
	ED076									
	100	1	1.8	—	—	—	C	191813	47.51	
	150	1	4.6	—	—	—	C	191814	83.13	
Bellmouth Gully Inlet Body Only										
	ED060									
	100	1	2.4	—	—	—	C	191825	66.27	
	150	1	2.9	—	—	—	C	191826	109.09	
Shown with plain grating, code is for body only										
Bellmouth Gully Inlet Body with fitted Sealing Plate										
 (Grey only)	ED066									
	100	1	4.4	—	—	—	C	191852	89.81	
	150	1	5.2	—	—	—	C	191853	153.33	
200mm Plain Grating to suit Bellmouth Gully Inlet										
	ED065									
	200	1	1.6	—	—	—	B	191828	15.45	
Puddle Flanges										
	ED078									
	(Grey only) 100	1	4.6	—	—	—	C	191829	83.57	
	(Grey only) 150	1	6.6	—	—	—	C	191830	103.16	
	(Black only) 250	1	13.0	—	—	—	C	192318	132.86	
	(Black only) 300	1	20.0	—	—	—	C	192319	160.05	
Multi-clamp Puddle Flange										
	ED078									
	(Grey only) 200	1	6.1	—	—	—	C	191831	262.73	
45° Inspection Chamber Circular Access										
	ED012									
	100x100	1	17.4	—	—	—	C	191832	330.64	
	150x100	1	18.8	—	—	—	C	191833	428.28	
	150x150	1	20.6	—	—	—	C	191834	543.68	
NEW	45° Inspection Chamber Rectangular Access One Branch each side									
	ED016									
	100x100	1	9.3	—	—	—	C	269013	368.54	
	150x100	PLEASE CONTACT THE TECHNICAL TEAM								
	150x150	PLEASE CONTACT THE TECHNICAL TEAM								
NEW	45° Inspection Chamber Rectangular Access Two Branches each side									
	ED017									
	100x100	1	16.8	—	—	—	C	270301	705.34	
	150x100	PLEASE CONTACT THE TECHNICAL TEAM								
	150x150	PLEASE CONTACT THE TECHNICAL TEAM								

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▲			BELOW GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £	ΔDSC.	PRODUCT CODE	UNIT PRICE £

TOOLS & ANCILLARY PRODUCTS

T-Box Spanner									
				EF098			—		
	—	1	—	B	191200	9.50	—	—	—
Ratchet Spanner									
				EF100			—		
	—	1	—	B	191201	87.01	—	—	—
13mm Deep Socket									
				EF101			—		
	13mm	1	—	B	191202	21.88	—	—	—
Allen Key Socket Adaptor									
				EF102			—		
	—	1	—	B	191753	21.88	—	—	—

TOUCH-UP PAINTS

Ensign 'Extrem 1K' (Cut-ends treatment)—Acrylic Resin Touch-up Paint for Red and Grey Systems (Quick-dry, non drip, brush applied)									
									
	—	1	0.5	C	226962	38.15	—	—	—
Two-part, touch-up Paint spray for Red System									
									
	0.4L	1	—	C	216317	56.37	—	—	—
Two-part, touch-up Paint spray for Grey System									
									
	0.4L	1	—	—	—	—	C	216318	56.92

SPARES RANGE—ACCESSORIES

Rubber Grommets Boss Connections (Bag of 10)						
						
	—	10	—	C	208205	29.18
51mm Hole Saw for Cast Iron						
						
	—	—	—	C	208206	40.99
Hole Saw Arbour with Drill for EEZI-FIT & Timesaver						
						
	—	—	—	C	192327	50.86
Pilot Drill for EEZI-FIT & Timesaver						
						
	—	—	—	C	192328	12.81
Lubricant for push-fit assembly (500g Tub)						
						
	—	500g Tub	—	C	199037	24.27

PAM Pre-Assembly Stack Solutions

PAM have now launched a new pre-assembly service for the Ensign cast iron above ground drainage system.

The service offers so much more than just pre-assembly.

This service requires close collaboration between the complete supply chain. We will manage the process from product selection, bespoke stack design, manufacture, distribution with our partners and on site assistance. The results will provide a reduction of time on-site with the added assurance of the consistent product assembly.

On-site benefits

- Reduces on-site installation time by up to 60%
 - > Reducing on-site labour costs
- All stacks are air tested at the factory as standard prior to dispatch
- Stacks supplied in purpose made stillages
 - > For robust storage
 - > For easy movements on site
- Minimal on-site wastage
 - > No surplus products ordered
 - > Reduced pipe cutting
- Cast iron flexibility
 - > Connecting pipe between floors cut on site to allow for on-site variances
- Designed for one-person handling

Design benefits

- Early collaboration ensures optimised stack designs offering the best solutions
- Drawings provided for approval
- Greater level of accuracy

Material Benefits

- Cast iron pre-assembled stack solutions are fire rated to the safest level possible, A1.
- Acoustically cast iron is the quietest material on the market
 - > May not need additional insulation
- Flexible couplings with high speed assembly
 - > The stainless steel rapid coupling is nearly 3 times quicker than fusion welded joints in HDPE — (Luckins pricing guide)
- No concern about expansion when temperatures fluctuate
 - > Cast iron pre-assemblies will remain straight and not bow



We will work with you at the start of the project to identify the most effective use of products.



Your stacks will be designed from our current offer of Pre-Assembly stacks or we will design a bespoke stack for your project.



Once the drawings have been signed and we have your order, your stacks will be Pre-Assembled within 2 weeks.



Delivery can be planned to the hour



Installation will be 60% faster on-site



The Service

STAGE 1

EARLY COLLABORATION

Our team will engage with you at the early stages of the project to evaluate the possibilities and benefits of using a pre-assembly solution. Through early collaboration the team can identify any unique requirements and design a solution to meet your needs.



STAGE 2

ESTIMATION

From the designs the technical team can calculate an accurate initial estimation.

STAGE 3

STACK DESIGNS APPROVAL

PAM will provide detailed CAD drawings and 3D models of the stack arrangements for site approval. The stacks are fully compliant with BS EN 12056-2:2000 ensuring all soil stack branches are swept radius in accordance with the guidelines.

STAGE 4

SIMPLIFIED ORDERING THROUGH THE MERCHANT

The PAM pre-assembly stacks are set up with a standard product code and are ordered in the same way as standard individual Ensign components, through the merchant distributor.



STAGE 5

ASSEMBLY AND AIR TEST

The ordered stack arrangements are then assembled within 2 weeks in a purpose made stillage at the PAM manufacturing site in Telford. When each stack is fully assembled it is air pressure tested as standard to 0.5 bar for 5 minutes exceeding the requirements of BS EN 12056-2:2000, saving considerable on-site labour time. The stacks are then labelled with the relevant location reference and floor level in accordance with the drawings.



STAGE 6 LOGISTICS

The unique stillages are designed to restrict movement of the stack assemblies during transportation to the project site. The stillage design also allows for easy off-load via fork lift or hoist and have wheels fitted to facilitate movement around the site.



STAGE 7

FLEXIBILITY ON-SITE

The PAM pre-assembly soil stacks are based on a standard 1.75m length. The stacks are designed to be suitable as a one-person lift and average around 20 kg, falling well within the health and safety guidelines. To fully connect each floor a soil pipe is cut on site, which allows flexibility for any site variances.

STAGE 8

INSTALLATION SUPPORT

The PAM team will liaise with stakeholders throughout the project providing guidance and support to ensure a smooth installation.

Prices exclude VAT
Pre-Assembly products are all made to order



			ABOVE GROUND ▲	
STACK DESCRIPTION	SIZE Ø mm	STACK WEIGHT KG	PRODUCT CODE	STACK PRICE £
100mm Pipe Stack with Access Pipe				



			SA002	
100	15.9		270478	253.26
Stack Assembly Contains:				
100mm Pipe Cut to 1,500mm*	EP000	1		
100mm Rapid NG S/S Coupling	EC002NG	2		
100mm Round Access Pipe	EF014	1		

			ABOVE GROUND ▲	
STACK DESCRIPTION	SIZE Ø mm	STACK WEIGHT KG	PRODUCT CODE	STACK PRICE £
100mm Pipe Stack with Access Pipe and High Level Boss Pipe				



			SA005	
100	17.7		270329	388.89
Stack Assembly Contains:				
100mm Pipe Cut to Suit*	EP000	1		
100mm Pipe Cut to 425mm*	EP000	1		
100mm Rapid NG S/S Coupling	EC002NG	4		
100mm Round Access Pipe	EF014	1		
100mm Single Boss Pipe	EF090	1		

100mm Pipe Stack with Access Pipe and Low Level Double Opposed Boss Pipe				
--	--	--	--	--



			SA006	
100	17.8		271078	347.84
Stack Assembly Contains:				
100mm Pipe Cut to Suit*	EP000	1		
100mm Rapid NG S/S Coupling	EC002NG	3		
100mm Round Access Pipe	EF014	1		
100mm Double Opposed Boss Pipe	EF091	1		

100mm Pipe Stack with Access Pipe and Low Level Boss Pipe				
---	--	--	--	--



			SA003	
100	17.2		271076	331.22
Stack Assembly Contains:				
100mm Pipe Cut to 1,350mm*	EP000	1		
100mm Rapid NG S/S Coupling	EC002NG	3		
100mm Round Access Pipe	EF014	1		
100mm Single Boss Pipe	EF090	1		

100mm Pipe Stack with Access Pipe and High Level Double Opposed Boss Pipe				
---	--	--	--	--



			SA007	
100	18.3		271079	395.37
Stack Assembly Contains:				
100mm Pipe Cut to Suit*	EP000	1		
100mm Pipe Cut to 425mm*	EP000	1		
100mm Rapid NG S/S Coupling	EC002NG	4		
100mm Round Access Pipe	EF014	1		
100mm Double Opposed Boss Pipe	EF091	1		

100mm Pipe Stack with Access Pipe and High and Low Level Single Boss Pipe				
---	--	--	--	--



			SA004	
100	19.1		271077	466.97
Stack Assembly Contains:				
100mm Pipe Cut to Suit*	EP000	1		
100mm Pipe Cut to 270mm*	EP000	1		
100mm Rapid NG S/S Coupling	EC002NG	5		
100mm Round Access Pipe	EF014	1		
100mm Single Boss Pipe	EF090	2		

100mm Pipe Stack with Access Pipe and High and Low Level Double Opposed Boss Pipe				
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			SA008	
100	21.5		271080	500.21
Stack Assembly Contains:				
100mm Pipe Cut to Suit*	EP000	1		
100mm Pipe Cut to 270mm*	EP000	1		
100mm Rapid NG S/S Coupling	EC002NG	5		
100mm Round Access Pipe	EF014	1		
100mm Double Opposed Boss Pipe	EF091	2		

			ABOVE GROUND ▲	
STACK DESCRIPTION	SIZE Ø mm	STACK WEIGHT KG	PRODUCT CODE	STACK PRICE £
100mm Pipe Stack with Access Pipe, High Level Single Boss Pipe, Single Radius Branch and Low Level Single Boss Pipe				

**SA009**

100	20.2	271081	476.52
Stack Assembly Contains:			
100mm Pipe Cut to 925mm*	EP000	1	
100mm Rapid NG S/S Coupling	EC002NG	5	
100mm Round Access Pipe	EF014	1	
100mm Single Boss Pipe	EF090	2	
100 x 100mm Radius Branch x 88°	EF06R	1	

			ABOVE GROUND ▲	
STACK DESCRIPTION	SIZE Ø mm	STACK WEIGHT KG	PRODUCT CODE	STACK PRICE £
100mm Pipe Stack with Access, High Level Double Opposed Boss Pipe, Double Radius Branch and Low Level Double Opposed Boss Pipe				

**SA013**

100	22.3	271084	523.94
Stack Assembly Contains:			
100mm Pipe Cut to 925mm*	EP000	1	
100mm Rapid NG S/S Coupling	EC002NG	5	
100mm Round Access Pipe	EF014	1	
100mm Double Opposed Boss Pipe	EF091	2	
100 x 100 x 100mm Double Radius Branch x 88°	EF010R	1	

100mm Pipe Stack with Access Pipe, High Level Single Boss Pipe and Single Radius Branch				
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**SA010**

100	19.3	271082	456.12
Stack Assembly Contains:			
100mm Pipe Cut to 925mm*	EP000	1	
100mm Pipe Cut to 155mm*	EP000	1	
100mm Rapid NG S/S Coupling	EC002NG	5	
100mm Round Access Pipe	EF014	1	
100mm Single Boss Pipe	EF090	1	
100 x 100mm Radius Branch x 88°	EF06R	1	

100mm Pipe Stack with Access, High Level Single Boss Pipe, Double Radius Branch and Low Level Double Opposed Boss Pipe				
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**SA014**

100	21.7	271085	507.32
Stack Assembly Contains:			
100mm Pipe Cut to 925mm*	EP000	1	
100mm Rapid NG S/S Coupling	EC002NG	5	
100mm Round Access Pipe	EF014	1	
100mm Single Boss Pipe	EF090	1	
100mm Double Opposed Boss Pipe	EF091	1	
100 x 100 x 100mm Double Radius Branch x 88°	EF010R	1	

100mm Pipe Stack with Access Pipe, Single Radius Branch and Low Level Single Boss Pipe				
--	--	--	--	--

**SA011**

100	18.8	271083	398.45
Stack Assembly Contains:			
100mm Pipe Cut to 1,055mm*	EP000	1	
100mm Rapid NG S/S Coupling	EC002NG	4	
100mm Round Access Pipe	EF014	1	
100mm Single Boss Pipe	EF090	1	
100 x 100mm Radius Branch x 88°	EF06R	1	

100mm Pipe Stack with Access, High Level Double Opposed Boss Pipe, Double Radius Branch and Low Level Single Boss Pipe				
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**SA015**

100	21.7	271086	537.74
Stack Assembly Contains:			
100mm Pipe Cut to 925mm*	EP000	1	
100mm Rapid NG S/S Coupling	EC002NG	5	
100mm Round Access Pipe	EF014	1	
100mm Single Boss Pipe	EF090	1	
100mm Double Opposed Boss Pipe	EF091	1	
100 x 100 x 100mm Double Radius Branch x 88°	EF010R	1	

100mm Pipe Stack with Access Pipe and Single Radius Branch				
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**SA012**

100	18.0	270330	428.86
Stack Assembly Contains:			
100mm Pipe Cut to Suit*	EP000	1	
100mm Pipe Cut to 155mm*	EP000	1	
100mm Rapid NG S/S Coupling	EC002NG	4	
100mm Round Access Pipe	EF014	1	
100 x 100mm Radius Branch x 88°	EF06R	1	

100mm Pipe Stack with Access, High Level Double Opposed Boss Pipe and Double Radius Branch				
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**SA016**

100	20.8	271087	486.90
Stack Assembly Contains:			
100mm Pipe Cut to 925mm*	EP000	1	
100mm Pipe Cut to 155mm*	EP000	1	
100mm Rapid NG S/S Coupling	EC002NG	5	
100mm Round Access Pipe	EF014	1	
100mm Double Opposed Boss Pipe	EF091	1	
100 x 100 x 100mm Double Radius Branch x 88°	EF010R	1	

Trade Price List July 2021

Prices exclude VAT
Pre-Assembly products are all made to order

			ABOVE GROUND ▲	
STACK DESCRIPTION	SIZE Ø mm	STACK WEIGHT KG	PRODUCT CODE	STACK PRICE £
100mm Pipe Stack with Access, High Level Boss Pipe, Double Radius Branch and Low Level Single Boss Pipe				



SA017

100	22.3	271088	523.94
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Stack Assembly Contains:

100mm Pipe Cut to 925mm*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	5
100mm Round Access Pipe	EF014	1
100mm Single Boss Pipe	EF090	2
100 x 100 x 100mm Double Radius Branch x 88°	EF010R	1

STACK DESCRIPTION	SIZE Ø mm	STACK WEIGHT KG	ABOVE GROUND ▲	
			PRODUCT CODE	STACK PRICE £
100mm Pipe Stack with Access, High Level Double 90° Boss Pipe, Double Corner Radius Branch and Low Level Double Opposed Boss Pipe				



SA021

100	22.7	271092	575.63
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Stack Assembly Contains:

100mm Pipe Cut to 925mm*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	5
100mm Round Access Pipe	EF014	1
100mm Double 90° Boss Pipe	EF092	1
100mm Double Opposed Boss Pipe	EF091	1
100 x 100 x 100mm Double Corner Radius Branch x 88°	EF035R	1

100mm Pipe Stack with Access, High Level Double 90° Boss Pipe, Double Corner Radius Branch and Low Level Double 90° Boss Pipe				
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SA018

100	22.9	271089	575.63
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Stack Assembly Contains:

100mm Pipe Cut to 925mm*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	5
100mm Round Access Pipe	EF014	1
100mm Double 90° Boss Pipe	EF092	2
100 x 100 x 100mm Double Radius Branch x 88°	EF035R	1

100mm Pipe Stack with Access, High Level Double Opposed Boss Pipe, Double Corner Radius Branch and Low Level Double 90° Boss Pipe				
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SA022

100	22.7	271093	575.63
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Stack Assembly Contains:

100mm Pipe Cut to 925mm*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	5
100mm Round Access Pipe	EF014	1
100mm Double 90° Boss Pipe	EF092	1
100mm Double Opposed Boss Pipe	EF091	1
100 x 100 x 100mm Double Corner Radius Branch x 88°	EF035R	1

100mm Pipe Stack with Access, High Level Double Corner 90° Boss Pipe and Double Corner Radius Branch				
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SA019

100	21.2	271090	538.60
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Stack Assembly Contains:

100mm Pipe Cut to 925mm*	EP000	1
100mm Pipe Cut to 155mm*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	5
100mm Round Access Pipe	EF014	1
100mm Double 90° Boss Pipe	EF092	1
100 x 100 x 100mm Double Corner Radius Branch x 88°	EF035R	1

100mm Pipe Stack with Access, High Level Single Boss Pipe, Double Corner Radius Branch and Low Level Single Boss Pipe				
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SA023

100	21.3	271094	542.38
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Stack Assembly Contains:

100mm Pipe Cut to 925mm*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	5
100mm Round Access Pipe	EF014	1
100mm Single Boss Pipe	EF090	2
100 x 100 x 100mm Double Corner Radius Branch x 88°	EF035R	1

100mm Pipe Stack with Access, Double Corner Radius Branch and Low Level Double 90° Boss Pipe				
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SA020

100	21.2	271091	505.32
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Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	4
100mm Round Access Pipe	EF014	1
100mm Double 90° Boss Pipe	EF092	1
100 x 100 x 100mm Double Corner Radius Branch x 88°	EF035R	1

* price based on length for this design, but our Technical Team can price up any length to suit your project.

100mm Pipe Stack with Access and Double Corner Radius Branch				
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SA024

100	19.1	271095	443.90
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Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Pipe Cut to 155mm*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	4
100mm Round Access Pipe	EF014	1
100 x 100 x 100mm Double Corner Radius Branch x 88°	EF035R	1

* price based on length for this design, but our Technical Team can price up any length to suit your project.

* price based on length for this design, but our Technical Team can price up any length to suit your project.

			ABOVE GROUND ▲	
STACK DESCRIPTION	SIZE Ø mm	STACK WEIGHT KG	PRODUCT CODE	STACK PRICE £
100mm Pipe Stack with Access and Double Radius Branch				



SA025

100

18.9

271096

392.22

Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Pipe Cut to 155mm*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	4
100mm Round Access Pipe	EF014	1
100 x 100 x 100mm Double Radius Branch x 88°	EF010R	1

			ABOVE GROUND ▲	
STACK DESCRIPTION	SIZE Ø mm	STACK WEIGHT KG	PRODUCT CODE	STACK PRICE £
100mm Pipe Stack with Access, High Level Double 90° Boss Pipe, Double Corner Radius Branch and Multi-Waste Manifold				



SA029

100

29.4

271101

698.45

Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	5
100mm Round Access Pipe	EF014	1
100mm Double 90° Boss Pipe	EF092	1
100 x 100 x 100mm Double Corner Radius Branch x 88°	EF035R	1
100mm Multi-Waste Manifold Connector	EF095	1

100mm Pipe Stack with Access, Double Radius Branch and Multi-Waste Manifold				
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SA026

100

26.3

271097

569.18

Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	4
100mm Round Access Pipe	EF014	1
100 x 100 x 100mm Double Radius Branch x 88°	EF010R	1
100mm Multi-Waste Manifold Connector	EF095	1

100mm Pipe Stack with Access, High Level Double 90° Boss Pipe, Double Corner Radius Branch and Multi-Waste Corner Manifold				
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SA030

100

27.5

271102

600.29

Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	5
100mm Round Access Pipe	EF014	1
100mm Double 90° Boss Pipe	EF092	1
100 x 100 x 100mm Double Corner Radius Branch x 88°	EF035R	1
100mm Multi-Waste Corner Manifold Connector	EF099	1

100mm Pipe Stack with Access, Double Radius Corner Branch and Multi-Waste Manifold				
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SA027

100

26.5

271099

620.87

Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	4
100mm Round Access Pipe	EF014	1
100 x 100 x 100mm Double Corner Radius Branch x 88°	EF035R	1
100mm Multi-Waste Manifold Connector	EF095	1

100mm Pipe Stack with Access, High Level Double Opposed Boss Pipe, Double Radius Branch and Multi-Waste Corner Manifold				
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SA031

100

27.1

271103

548.60

Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	5
100mm Round Access Pipe	EF014	1
100mm Double Opposed Boss Pipe	EF091	1
100 x 100 x 100mm Double Radius Branch x 88°	EF010R	1
100mm Multi-Waste Corner Manifold Connector	EF099	1

100mm Pipe Stack with Access, High Level Double Opposed Boss Pipe, Double Radius Branch and Multi-Waste Manifold				
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SA028

100

29.0

271100

646.77

Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	5
100mm Round Access Pipe	EF014	1
100mm Double Opposed Boss Pipe	EF091	1
100 x 100 x 100mm Double Radius Branch x 88°	EF010R	1
100mm Multi-Waste Manifold Connector	EF095	1

100mm Pipe Stack with Access, Double Radius Branch and Multi-Waste Corner Manifold				
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SA032

100

25.1

271104

453.90

Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	4
100mm Round Access Pipe	EF014	1
100 x 100 x 100mm Double Radius Branch x 88°	EF010R	1
100mm Multi-Waste Corner Manifold Connector	EF099	1

Trade Price List July 2021

* price based on length for this design, but our Technical Team can price up any length to suit your project.

Prices exclude VAT
Pre-Assembly products are all made to order

			ABOVE GROUND ▲	
STACK DESCRIPTION	SIZE Ø mm	STACK WEIGHT KG	PRODUCT CODE	STACK PRICE £
100mm Pipe Stack with Access, Double Corner Radius Branch and Multi-Waste Corner Manifold				



SA033

100	25.3	271105	505.59
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Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	4
100mm Round Access Pipe	EF014	1
100 x 100 x 100mm Double Corner Radius Branch x 88°	EF035R	1
100mm Multi-Waste Corner Manifold Connector	EF099	1

			ABOVE GROUND ▲	
STACK DESCRIPTION	SIZE Ø mm	STACK WEIGHT KG	PRODUCT CODE	STACK PRICE £
100mm Pipe Stack with High Level Single Branch x 50mm				



SA037

100	16.2	271108	297.22
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Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Pipe Cut to 450mm*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	3
100 x 50mm Single Branch x 45°	EF006	1

100mm Pipe Stack with Access, Single Radius Branch and Multi-Waste Corner Manifold				
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SA034

100	24.2	271106	439.73
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Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	4
100mm Round Access Pipe	EF014	1
100 x 100mm Radius Branch x 88°	EF06R	1
100mm Multi-Waste Corner Manifold Connector	EF099	1

100mm Pipe Stack with Access Pipe and High Level Single Branch x 50mm				
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SA038

100	17.8	271109	378.77
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Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Pipe Cut to 185mm*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	4
100mm Round Access Pipe	EF014	1
100 x 50mm Single Branch x 45°	EF006	1

100mm Pipe Stack with Access, High Level Single Boss Pipe, Single Radius Branch and Multi-Waste Corner Manifold				
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SA035

100	22.5	271107	517.82
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Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	5
100mm Round Access Pipe	EF014	1
100mm Single Boss Pipe	EF090	1
100 x 100mm Radius Branch x 88°	EF06R	1
100mm Multi-Waste Corner Manifold Connector	EF099	1

100mm Pipe Stack with High Level Single Branch x 100mm				
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SA039

100	17.0	271111	291.36
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Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Pipe Cut to 450mm*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	3
100 x 100mm Single Branch x 45°	EF006	1

100mm Pipe Stack with Access and Multi-Waste Corner Manifold				
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SA036

100	20.2	270328	372.50
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Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	3
100mm Round Access Pipe	EF014	1
100mm Multi-Waste Corner Manifold Connector	EF099	1

100mm Pipe Stack with Access Pipe and High Level Single Branch x 100mm				
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SA040

100	18.4	271112	371.70
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Stack Assembly Contains:

100mm Pipe Cut to Suit*	EP000	1
100mm Pipe Cut to 185mm*	EP000	1
100mm Rapid NG S/S Coupling	EC002NG	4
100mm Round Access Pipe	EF014	1
100 x 100mm Single Branch x 45°	EF006	1

NEW

Pre-Assembled Stack Solutions

1. SAVING

Modern methods of manufacturing are now offering massive savings and with our Pre-Assembly Solution we have seen up to a **60%** saving!

60%
TIME SAVING



2. FACTORY CONTROLS

The stacks are designed, made bespoke to your needs, assembled, air-tested and inspected in our factory in Telford. The stacks will be assembled within 2 weeks from order.

3. PLANNED DELIVERIES

With our distribution partners we can plan delivery of your stacks to suit your build programme.



4. SITE EFFICIENCY

When installing them on site you will become more efficient than traditional methods.



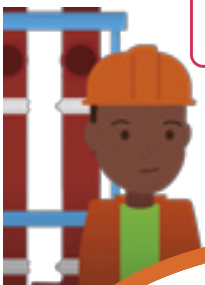
5. SITE SAFETY AND SPACE

Less space and time will be required on site, which will not only help with social distancing, but will also reduce the need for cutting and storing products on-site.



6. IMPROVED RESULTS

- ✓ Reduced time on site
- ✓ Improved quality
- ✓ Reduced environmental impact



Click the
Circle with the YouTube
logo above to see the full
video on YouTube!



Please contact your regional technical sales manager for details

Timesaver cast iron drainage systems



TIMESAVER DRAIN

The Timesaver drain cast iron below ground system has been the first choice for under-building drainage for commercial, public and residential buildings since 1980.

Product Standard

BS 437:2008 Timesaver is kitemark approved

Applications

- Underbuilding drainage—encased in concrete
- Pipework to be laid in shallow trenches
- Under roads
- Unstable ground
- Ground containing methane
- Bridges

Features

- 100, 150 and 225mm diameter pipes and fittings
- Two piece ductile iron couplings
- Section thickness from 8-15mm
- Range of traditional British Standard fittings
 - > Bellmouth Gullies/inlets
 - > Gully traps
 - > Raising pieces
 - > Anti-flooding traps



Benefits

- Exceptional crush resistance—vastly superior to other materials

> Timesaver BS 437:2008	150 KN/m
> Clay	40 KN/m
> Plastic	6 KN/m
- Robust strength
 - > To withstand over vigorous rodding/jetting
 - > Can be installed where ground is unstable
 - > Can be installed in shallow trenches
- Less bedding materials required saving cost
 - > Can be laid in 'as dug' trenches
- Fit and forget peace of mind
 - > BS 437:2008 connectivity with existing cast iron drainage systems.
 - > Exceptional service life

Encasing pipework in the concrete slab

- Cast iron has the proven strength and crush resistance to withstand the weight of the concrete and remain robust during the pouring process unlike the more volatile lighter-weight plastic materials which can require filling to weigh them down.
- Cast iron is not affected by the high temperatures generated during the pouring and curing process—which can reach temperatures in excess of 70°, depending on the volume of concrete.
- Cost of failure can be very high if concrete slabs require digging up to repair drainage failures.



All benefits of cast iron

- Non-combustible fire rated A1
- Excellent acoustic properties
- Minimal expansion
- Strong and robust
- Excellent environmental properties:
 - > Made from up to 99% recycled content
 - > 100% recyclable
 - > Long life span

TIMESAVER DRAIN & SOIL

Coating

- 3m Pipes:
 - > Internally lined with an ochre two-part epoxy coating
 - > Externally coated in a black acrylic paint.
- Fittings and couplings
 - > Internally and externally coated in a black water-based paint

Overpainting

- The Timesaver coating shall accept over-coating with alkyd and water based paints normally used on metallic structures



TECHNICAL SERVICES

Technical Enquiries: 01952 262529

Email: technical.pam@saint-gobain.com

Do you want your projects to be more effective and use the latest products and services?

Our Technical Team is here to help you get the best from our products and services to ensure you deliver your project in the best way for the environment, site efficiency and at the best total project price. Please contact our team to see how they can help you today. Below is an example of the typical services and timescales that they can offer.

SERVICE	GUIDE LEAD TIME
Quotation from Standard Material List	4hrs
Quotation from Complex Material List	1-2 days
Single Drawing Take-Off	2 days
Medium Sized Drawing Take-Off (2-6 Drawings)	4-5 days
Large Project Take-Off (7+ Drawings)	Agreed on a project basis
Day-to-Day Technical Enquiries	1hr-2 days
Classical Rainwater Materials Lists and Specials	1-2 days
Classical Rainwater Drawing Take-Off — Dwellings	2-3 days
Classical Rainwater Drawing Take-Off — Public Buildings	3-4 days

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ΔDSC.	BELOW GROUND ▼		
					PRODUCT CODE	UNIT PRICE £	
3m Double Spigot Pipe							
					TD00		
	100	26	56.1	A	156568	209.86	
	150	11	95.1	A	156832	388.45	
	225	4	195.0	A	157042	1,162.80	
Standard Coupling (EPDM Gasket)							
					TD01		
	100	8	2.8	A	191294	44.80	
	150	6	3.9	A	191295	54.28	
	225	1	8.4	A	191296	124.39	
Continuity Clip to suit TD01 Coupling (Bag of 25)							
					GT96L		
	100/150	25	0.8	C	191190	96.73	
Continuity Clip to suit TD01 Coupling (Bag of 25)							
					GT968		
	225	25	0.1	C	191193	107.72	
Stepped Coupling (EPDM Gasket)							
					TD02		
	100	8	2.8	A	191297	46.49	
	150	6	3.9	A	191298	56.58	
Continuity Clip to suit TD02 Coupling (Bag of 25)							
					GT96T		
	100	25	0.9	C	191191	74.05	
Continuity Clip to suit TD02 Coupling (Bag of 25)							
					GT96T6		
	150	25	0.9	C	191192	80.85	
Hanging Bracket or Wall Fixing—cast iron							
					TD640		
	100	1	2.3	B	191358	37.52	
	150	1	2.8	B	191359	39.65	
	Mild Steel Hanging Bracket or Wall Fixing M12						
	225	1	4.0	B	192374	113.10	

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	BELOW GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £
Medium Radius Bends						
	TD06					
	87.5° Medium Radius Bends					
	100	1	8.1	A	191219	83.85
	150	1	16.0	A	191225	192.91
	225	1	41.5	B	191229	585.27
	80° Medium Radius Bend					
	100	1	8.7	C	191218	89.55
	67.5° Medium Radius Bends					
	100	1	7.5	C	191217	89.55
	150	1	13.8	C	191224	192.91
	60° Medium Radius Bend					
	100	1	6.0	B	191216	83.85
	45° Medium Radius Bends					
	100	1	5.8	A	191215	71.25
	150	1	10.1	B	191223	154.37
	225	1	31.8	B	191228	585.27
	35° Medium Radius Bends					
	100	1	4.6	A	191214	71.25
	150	1	9.3	B	191222	192.91
	22.5° Medium Radius Bends					
	100	1	3.6	A	191213	71.25
	150	1	7.2	B	191221	144.55
	225	1	18.4	B	191227	585.27
	10° Medium Radius Bends					
100	1	3.0	A	191212	71.25	
150	1	5.2	B	191220	144.55	
225	1	13.0	C	191226	585.27	
87.5 Medium Radius Bend with Heel Rest						
	TD07					
	100	1	9.2	A	191230	96.17
	150	1	18.0	B	191231	267.66
Medium Radius Bend with Rear Access						
	TD08					
	87.5°					
	100	1	11.4	C	191233	184.02
	150	1	20.3	C	191235	409.02
	225	1	57.8	C	191237	896.65
	45°					
	100	1	8.7	C	191232	180.50
	150	1	15.9	C	191234	440.87
225	1	46.8	C	191236	896.65	
Medium Radius Bend with Side Access						
	TD09					
	87.5° Medium Radius Bend Side Access					
	100	1	12.4	C	191239	232.94
	150	1	20.5	C	191241	409.02
	225	1	57.5	C	191243	874.82
	45° Medium Radius Bend Side Access					
	100	1	10.0	C	191238	220.21
	150	1	26.6	C	191240	534.50
225	1	46.8	C	191242	874.82	

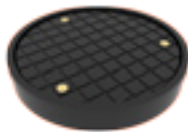
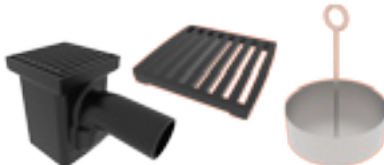
DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ΔDSC.	BELOW GROUND ▼	
					PRODUCT CODE	UNIT PRICE £
87.5° Long Radius Bend						
	TD15					
	100	1	12.9	B	191244	138.54
	150	1	24.1	C	191245	277.15
87.5° Long Radius Bend with Heel Rest						
	TD22					
	100	1	15.1	B	191246	148.95
	150	1	28.0	C	191247	326.57
87.5° Long Tail Bend (815mm)						
	TD102					
	100 x 815	1	18.6	C	191289	212.49
87.5° Long Tail Bend (850mm) Large Radius						
	TD104					
	†100 x 850	1	33.0	C	197173	520.08
	†100 x 850	1	54.0	C	192699	838.54
45° Clearing Arm Bend						
	TD425					
	100	1	11.9	C	191292	162.29
Plain Single Branches						
	TD37					
	87.5° Plain Branches					
	100 x 100	1	7.6	A	191250	111.22
	150 x 100	1	17.7	B	191252	240.18
	150 x 150	1	21.8	C	191254	274.46
	225 x 100	1	40.0	C	191256	710.88
	225 x 150	1	46.3	C	191258	758.18
	225 x 225	1	58.5	C	191260	842.75
	67.5° Plain Branch					
	100 x 100	1	8.9	C	191249	117.08
	45° Plain Branches					
	100 x 100	1	11.4	A	191248	111.22
	150 x 100	1	16.6	B	191251	251.42
	150 x 150	1	25.3	B	191253	274.46
	225 x 100	1	42.0	C	191255	710.88
	225 x 150	1	45.8	C	191257	758.18
	225 x 225	1	64.4	C	191259	842.75

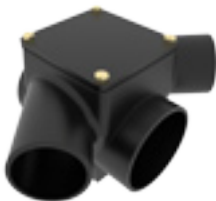
DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	BELOW GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £
Single Branches with Access Door—Right Hand						
	TD51					
	87.5° Branch with Access Door—Right Hand					
	100 x 100	1	14.2	C	191262	256.55
	150 x 100	1	21.4	C	191264	473.64
	225 x 150	1	67.3	C	191267	1,105.66
	225 x 225	1	79.5	C	191269	1,175.42
	45° Branch with Access Door—Right Hand					
	100 x 100	1	15.0	C	191261	256.55
	150 x 100	1	21.9	C	191263	454.12
	225 x 100	1	62.8	C	191265	1,071.61
	225 x 150	1	66.8	C	191266	1,105.66
	225 x 225	1	85.4	C	191268	1,175.42
	Single Branches with Rear Access					
	TD52					
	87.5° Branch with Rear Access					
	100 x 100	1	13.4	C	191271	256.55
	150 x 100	1	22.9	C	191273	473.64
	225 x 100	1	62.8	C	191275	1,071.61
	225 x 150	1	62.4	C	191276	1,105.66
	225 x 225	1	79.5	C	191278	1,175.42
	45° Branch with Rear Access					
	100 x 100	1	16.1	C	191270	268.91
	150 x 100	1	22.9	C	191272	454.12
	225 x 100	1	63.0	C	191274	1,071.61
	225 x 225	1	84.40	C	191277	1,175.42
	Single Branches with Access Door—Left Hand					
	TD53					
	87.5° Branches with Access Door—Left Hand					
	100 x 100	1	11.7	C	191280	268.91
	150 x 100	1	21.2	C	191282	473.64
	225 x 100	1	61.0	C	191284	1,071.61
	225 x 150	1	67.3	C	191286	1,105.66
	225 x 225	1	79.5	C	191288	1,175.42
	45° Branches with Access Door—Left Hand					
	100 x 100	1	15.0	C	191279	268.91
	150 x 100	1	21.2	C	191281	454.12
	225 x 100	1	62.8	C	191283	1,071.61
	225 x 150	1	66.8	C	191285	1,105.66
	225 x 225	1	85.4	C	191287	1,175.42
Double Plain Branch 87.5°						
	TD447					
	100 x 100	1	10.6	C	191293	189.10
Access Pipes						
	TD56					
	100	1	9.7	B	191344	207.12
	150	1	15.4	C	191345	378.21
	225	1	62.6	C	191346	918.72

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ΔDSC.	BELOW GROUND ▼	
					PRODUCT CODE	UNIT PRICE £
Taper Pipe						
	TD41					
	150 x 100	1	3.5	B	191333	109.27
	225 x 100	1	13.6	B	191334	280.18
	225 x 150	1	13.4	B	191335	280.18
	*225 x 200	1	6.2	C	191336	249.68
*Connects with a 200 and 250mm Ensign coupling (ED001)						
*225 x 250	1	9.8	C	192431	260.03	
Socket Ferrule with C.I. Cap						
	TD36					
	100	1	3.4	C	191330	141.44
Blank End—Plain (for BSP Blank End Connection use GT71 and Stepped Coupling TD02)						
	TD34					
	100	1	1.3	A	191326	36.05
	150	1	2.5	B	191327	68.77
	225	1	10.7	B	191328	316.66
Transitional Pipe Adaptor from Timesaver Drain to Supersleve						
	TD118					
	100	1	2.1	B	191350	57.87
	150	1	5.0	B	191351	101.33
Gully Trap—Plain						
	TD60					
	87.5° Gully Trap—Plain					
	100	1	12.1	B	191399	111.22
	150	1	24.4	C	191400	276.73
	45° Gully Trap—Plain					
	100	1	11.5	C	191398	295.77
	180° Gully Trap—Plain					
100	1	14.1	C	191397	151.96	
87.5° Gully Trap with Surface Access						
	TD107					
	100	1	23.3	C	191402	321.59
87.5° Gully Trap with 225mm Inlet						
	TD64					
	100	1	24.0	C	191401	271.43
Horizontal Running Trap with Double Access						
	TD475					
	100	1	23.0	C	191404	554.35
	150	1	55.4	C	191405	945.31
	225	1	143.0	C	191406	2,714.02

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ΔDSC.	BELOW GROUND ▼	
					PRODUCT CODE	UNIT PRICE £
Gully Inlet—Plain (Body Only)						
	100	1	8.4	B	TD500	
					191301	115.84
Gully Inlet with Horizontal Branch (Body Only)						
	100 x 100	1	10.5	C	TD105	
					191299	155.64
Gully Inlet with Vertical Branch (Body Only)						
	100 x 100	1	13.7	C	TD106	
					191300	155.64
Plain Raising Piece 190mm to Bellmouth TD500/TD105/TD106						
	100 x 150 high	1	7.8	C	TD525	
					191303	319.10
					100 x 300 high	1
Plain Grate						
	200	1	1.6	B	TD612	
					191385	14.20
Solid Cover						
	200	1	2.1	C	TD613	
					191386	62.56
Hinged and Locking Grate						
	200	1	1.9	C	TD614	
					191387	224.58
Sealed Plate and Frame						
	200	1	2.8	B	TD615	
					191388	114.19
Greased Sealed Cover and Frame						
	200	1	1.7	C	TD616	
					191389	125.65

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ΔDSC.	BELOW GROUND ▼	
					PRODUCT CODE	UNIT PRICE £
Raising Piece—Plain 225mm Ø						
					TD678	
	75 high	1	9.5	C	191363	171.07
	115 high	1	11.6	C	191365	194.87
	150 high	1	13.5	C	191364	227.02
	225 high	1	17.0	C	191366	241.38
300 high	1	21.5	C	191367	251.89	
Raising Piece with 100mm Ø Inlet						
					TD108	
	225 high	1	19.1	C	191347	231.08
Raising Piece with 3 x 100mm Ø 90° Inlets						
					TD111	
	225 high	1	23.1	C	191348	614.27
Gully Inlet—Tapered Plain						
					TD684	
	100	1	12.9	B	191368	163.93
	150	1	16.0	C	191369	184.93
Gully Inlet—Tapered with 100mm Ø Inlet						
					TD120	
	100 x 100	1	14.2	C	191352	213.36
Gully Inlet—Tapered with 3 x 100mm Ø 90° Inlets						
					TD123	
	100 x 100	1	20.3	C	191353	354.62
Light Grate						
					TD650	
	265	1	3.6	B	191390	31.84
Heavy Grate						
					TD651	
	265	1	8.0	B	191391	54.28
Hinged and Locking Grate						
					TD653	
	265	1	5.3	C	191360	317.14

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ΔDSC.	BELOW GROUND ▼					
					PRODUCT CODE	UNIT PRICE £				
Sealed Plate and Frame										
	265	1	5.2	C	TD661					
					191361	105.53				
Grease Sealed Cover and Frame										
	265	1	6.5	C	TD662					
					191362	293.88				
Trapless Gully with 87.5° Outlet										
	100	1	17.7	C	TD467					
					191403	273.64				
Deans Trap 600mm Deep with 87.5° Outlet										
	100	1	55.4	C	TD550					
					191407	550.93				
					Galvanised Sediment Pan					
					1	1.9	C	191181	200.90	
Can be used with grating options TD650 to TD653 and TD661/2										
Gully Trap—435mm Deep with 87.5° Outlet										
	100	1	30.8	B	TD551					
					191408	459.90				
					Galvanised Sediment Pan					
					—	1	2.0	C	191182	185.78
Can be used with grating options TD650 to TD653 and TD661/2										
Square Top Gully Trap—255 x 250 x 415mm Deep with 87.5° Outlet										
	100	1	26.8	C	TD553					
					191381	379.27				
					Galvanised Sediment Pan					
					—	1	1.0	C	191183	78.21
					Grate to suit					
—	1	3.2	C	191380	174.20					
Garage Gully—300 x 545mm Deep with 87.5° Outlet										
	100	1	80.7	C	TD554					
					191410	1,169.39				
					Galvanised Sediment Pan					
					—	1	3.0	C	191184	256.81
					Grate to suit					
					—	1	23.0	B	191382	145.73
This product is available with 1, 2 or 3 Fresh Air Inlets — P.O.A.										
Raising Piece for TD554										
	305mm Ø x 75mm high	1	12.7	C	TD559					
					191354	234.63				
					305mm Ø x 150mm high	1	20.4	C	191356	270.68
					305mm Ø x 300mm high	1	37.0	C	191355	459.10

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ΔDSC.	BELOW GROUND ▼	
					PRODUCT CODE	UNIT PRICE £
Trapless Gully Trap—300 x 615mm Deep with 87.5° Outlet						
	TD556					
	100	1	45.4	C	191409	427.55
	Galvanised Sediment Pan					
	—	1	1.9	C	191181	200.90
Garage Gully Trap—405 x 610mm Deep with 87.5° Outlet						
	TD558					
	100	1	74.6	C	191418	1,302.47
	Galvanised Sediment Pan					
	—	1	3.9	C	191185	218.62
	Grate to suit					
	—	1	23.1	C	191383	198.07
Airtight Inspection Eye Cover						
	TD724					
	100	1	11.1	C	191394	223.32
	150	1	14.0	C	191395	253.04
Anti-Flooding Valve						
	TD756					
	225	1	22.6	C	191421	878.04
Loose Puddle Flange						
	TD777					
	100	1	3.7	B	191371	95.68
	150	1	5.6	C	191372	102.77
	225	1	8.1	C	191373	287.96
Inspection Chamber with one branch each side						
	TD14					
	100 x 100	1	19.6	B	191306	391.99
	150 x 100	1	24.7	B	191307	507.86
	150 x 150	1	42.8	C	191308	644.47
	†225 x 100	1	100.0	C	191309	1,902.76
	†225 x 150	1	110.0	C	191310	2,059.08
	†225 x 225	1	174.0	C	191311	2,538.64
Inspection Chambers with two branches each side						
	TD17					
	100 x 100	1	40.3	B	191312	771.66
	150 x 100	1	55.9	C	191313	1,031.45
	150 x 150	1	87.2	C	191314	1,286.89
	†225 x 100	1	210.0	C	191315	2,837.04
	†225 x 150	1	210.8	C	191316	2,886.99
	†225 x 225	1	240.0	C	191317	3,899.42

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	BELOW GROUND ▼ ΔDSC.	PRODUCT CODE	UNIT PRICE £

'Eureka' Anti-Flood Trunk Valve (Double Spigot)



150	1	44.0	C	TD750 191420	3,594.11
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Intercepting Traps fitted with Plug – Traditional BS 437 fittings



100	1	32.7	C	TD477 191602	919.83
150	1	57.2	C	191603	1,414.60

Intercepting Trap fitted with Plug



100	1	35.7	C	TD479 191605	1,218.87
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Intercepting Traps



100	1	34.1	C	TD481 191607	1,034.29
150	1	57.1	C	191610	1,488.06

Can be supplied with 100 mm Fresh Air Inlet LH or RH — P.O.A.

'Eureka' Anti-Flooding Trunk Valve (Socket and Spigot)



100	1	42.2	C	TD750 191593	3,193.65
†225	1	244.1	C	191594	9,089.01
†300	1	414.3	C	191870	16,641.74

The PAM range of traditional drain anti-flooding traps and valves are progressively being updated.

This involves the removal of the traditional socket and the spigot bead, which will simplify installation, enabling connections to be made with standard ductile iron mechanical couplings.

See example of modified 225mm TD750 on the following page.

'Eureka' Anti-Flooding Trunk Valve



†100	1	76.9	C	TD752 191595	4,245.58
†150	1	126.1	C	191596	5,297.52
†225	1	381.4	C	191597	11,215.58

Timesaver Soil cast iron drainage systems

TIMESAVER SOIL

The Timesaver soil system, was the first mechanically jointed cast iron system launched in 1973, for use on above ground soil and waste, vent and rainwater installations serving commercial, public and residential buildings for over 40 years.

Product Standard

BS 416-2:1990 mechanically jointed systems
Timesaver is Kitemark approved

Applications

Refurbishment

- Prestigious commercial buildings built in the late 1970's to the late 90's which are serviced by cast iron soil stacks, will most likely be Timesaver or traditional socket and spigot soil systems. If the building is to be refurbished or changes are to be made retaining some of the existing pipework—then Timesaver is the best suited to connect to the original pipework.
- Heritage external soil stacks—traditional appearance sanitary soil pipework installed on the outside of the building.
- Commercial, public and residential buildings
 - > Sanitary soil, vent and waste pipes
 - > Internal rainwater systems

Features

- 50, 75, 100 and 150mm diameter pipes and fittings
- 1.8m (6ft) double spigot pipes in 75 and 100mm
- Two piece ductile iron mechanical couplings
 - > Electrical continuity clips available supplied separately in bags
- Traditional 'Heritage' push-fit sockets
 - > 50, 75 and 100mm (150mm see Ensign)
- Comprehensive fittings range
 - > Swept branches in compliance with BS EN 12056-2:2000
 - > Access bends and branches
 - > Waste connection fittings



Benefits

- Push-fit Heritage style couplings
 - > To give traditional appearance without the labour intensive caulking of socket and spigot pipework
 - > The most inclusive range 50-100mm
- Pipes available in 1.8m (6ft) in 75 and 100mm diameters to support this field of application
- Complete range of pipes and fittings to support refurbishment of existing Timesaver stacks in commercial buildings
- All benefits of cast iron
 - > Non-combustible fire rated A1
 - > Excellent acoustic properties
 - > Minimal expansion
 - > Strong and robust
 - > Excellent environmental properties:
 - > Made from up to 99% recycled content
 - > 100% recyclable
 - > Long life span

TIMESAVER DRAIN & SOIL

Coating

- 3m Pipes:
 - > Internally lined with an ochre two-part epoxy coating
 - > Externally coated in a black acrylic paint.
- Fittings and couplings
 - > Internally and externally coated in a black water-based paint

Overpainting

- The Timesaver coating shall accept over-coating with alkyd and water based paints normally used on metallic structures

Prices exclude VAT

^ΔDelivery Service Category DSC (see page 3)

A =5 B =5-15 C =15-30

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £
3m Double Spigot Pipe						
	GT00					
	50	53	19.5	A	156366	116.88
	75	50	25.0	A	156456	130.73
	100	38	28.0	A	156567	158.02
	150	26	43.0	A	156831	329.95
Standard Coupling (EPDM Gasket)						
	GT01					
	50	32	0.9	A	191691	20.16
	75	24	1.1	A	191692	22.28
	100	15	1.4	A	191693	29.08
	150	8	3.1	A	191694	58.06
Continuity Clip to suit GT01 Standard Coupling (Bag of 25)						
	GT96S					
	50/75/100	25	0.6	C	191189	87.88
Continuity Clip to suit GT01 Standard Coupling (Bag of 25)						
	GT96L					
	150	25	0.8	C	191190	96.73
Conversion Coupling (EPDM Gasket)						
 * Connects to 70mm Ensigns	GT12					
	65 x 75	1	1.3	A	191695	23.59
	*70 x 75	1	1.2	A	191429	23.59
	90 x 100	1	1.5	A	191696	30.40
Wall Fixing Bracket (can be fitted with Acoustic Dampener to order)						
	GT48					
	50	48	0.3	A	191720	13.51
	75	30	0.5	A	191721	14.80
	100	30	0.6	A	191722	15.16
	150	16	0.8	A	191723	28.09
Short Radius Plain Bends						
	GT02					
	87.5° Short Radius Plain Bends					
	50	1	1.3	A	191620	35.53
	75	1	2.6	A	191622	40.19
	100	1	4.7	A	191631	49.19
	150	1	4.4	C	191634	87.83
	67.5° Short Radius Plain Bend					
	100	1	2.2	C	191625	49.19
	45° Short Radius Plain Bends					
	50	1	0.5	A	191619	35.53
	75	1	2.4	A	191621	40.19
	100	1	3.3	A	191626	49.19
	150	1	3.1	B	191632	87.83
	11° Short Radius Plain Bend					
	100	1	1.3	C	191628	42.39

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £
Short Radius Bends with Rear Access						
	GT03					
	87.5° Short Radius Bends with Rear Access					
	50	1	1.9	B	191636	87.58
	75	1	3.6	B	191638	95.02
	100	1	4.3	B	191642	104.03
	150	1	6.1	C	191644	147.75
	45° Short Radius Bends with Rear Access					
	75	1	3.9	C	191637	95.02
	100	1	4.6	C	191640	104.03
	150	1	8.1	C	191643	147.75
87.5° Short Radius Bend with Side Access						
	GT04					
	100	1	4.8	C	191646	104.03
Long Radius Bends						
	GT02L					
	87.5° Long Radius Bends					
	75	1	4.6	C	191623	80.62
	100	1	4.7	B	191630	79.64
	150	1	8.5	C	191635	173.67
	45° Long Radius Bend					
	100	1	6.0	C	191627	85.05
	22.5° Long Radius Bends					
	100	1	1.9	C	191624	79.64
	150	1	5.6	C	191633	191.63
5° Long Radius Bend						
100	1	1.4	C	191629	49.19	
87.5° Long Radius Bends with Rear Access						
	GT03L					
	87.5° Long Radius Bends with Rear Access					
	75	1	5.9	C	191639	119.12
	100	1	5.8	C	191641	134.56
	150	1	10.7	C	191645	237.04
87.5° Long Radius Bend with Side Access						
	GT04L					
	100	1	7.5	C	191647	134.56
87.5° Long Tail Bend 250mm Long						
	GT43					
	100	1	4.3	C	191688	63.54

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ΔDSC.	ABOVE GROUND ▼	
					PRODUCT CODE	UNIT PRICE £

87.5° Long Tail Bend 815mm Long



GT55						
100	1	15.1	C	191689	217.83	

Single Branches



GT06						
87.5° Swept Radius Branches (Equal and unequal)						
50 x 50	1	1.0	B	191649	53.47	
75 x 50	1	2.5	B	191651	60.52	
75 x 75	1	3.2	C	191653	60.52	
100 x 50	1	2.4	B	191655	76.07	
100 x 75	1	4.1	C	191657	76.07	
100 x 100	1	3.3	A	191660	76.07	
150 x 100	1	7.6	C	191662	144.20	
150 x 150	1	11.7	C	191664	188.48	
67.5° Plain Branch						
100 x 100	1	2.5	C	191658	76.07	
45° Branches (Equal and unequal)						
50 x 50	1	1.4	C	191648	53.47	
75 x 50	1	3.5	C	191650	68.49	
75 x 75	1	4.4	C	191652	73.87	
100 x 50	1	2.4	C	191654	76.07	
100 x 75	1	4.9	C	191656	90.44	
100 x 100	1	3.7	B	191659	76.07	
150 x 100	1	5.8	C	191661	211.57	
150 x 150	1	8.5	C	191663	188.48	

87.5° Long Tail Branch Swept Radius 915mm Long



GT56						
100 x 100	1	7.0	C	191690	210.65	

Single Branches with Rear Access



GT07						
87.5° Single Branches Swept Radius with Rear Access (Equal and unequal)						
50 x 50	1	2.7	C	191665	116.47	
75 x 50	1	3.0	C	191666	116.47	
75 x 75	1	3.6	C	191668	116.47	
100 x 50	1	3.2	C	191670	130.95	
100 x 75	1	4.8	C	191672	130.95	
100 x 100	1	4.1	B	191674	130.95	
150 x 100	1	9.0	C	191676	234.29	
150 x 150	1	12.0	C	191678	278.75	
45° Single Branches with Rear Access (Equal and unequal)						
100 x 100	1	6.9	C	191673	130.95	
150 x 100	1	10.8	C	191675	253.90	

87.5° Single Branch Swept Radius with Side Access—Right Hand



GT08						
100 x 100	1	5.7	C	191679	130.95	

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ΔDSC.	ABOVE GROUND ▼	
					PRODUCT CODE	UNIT PRICE £
87.5° Single Branch Swept Radius with Side Access—Left Hand						
	GT09					
	100 x 100	1	5.8	C	191680	130.95
Double Branches						
	GT10					
	87.5° Double Branches—Swept Radius (Equal and unequal)					
	75 x 75	1	4.9	C	191681	89.88
	100 x 100	1	4.3	C	191683	94.06
	150 x 100	1	10.7	C	191684	264.85
	45° Double Branch					
	100 x 100	1	4.5	C	191682	94.06
87.5° Double Branch—Swept Radius with Access						
	GT11					
	100 x 100	1	7.0	C	191685	148.94
Parallel Branch						
	GT32					
	100 x 100	1	7.9	C	191686	92.79
87.5° Corner Swept Radius Branch						
	GT35					
	100 x 100	1	3.4	C	191687	133.71
87.5° Branch Swept Radius with 1 x 50mm BSP Boss Back						
	GT06					
	100	1	5.4	C	191743	101.86
87.5° Branch Swept Radius with 1 x 50mm BSP Boss Right Hand						
	GT06					
	100	1	4.7	C	191745	101.86
87.5° Branch Swept Radius with 1 x 50mm BSP Boss Left Hand						
	GT06					
	100	1	4.7	C	191744	101.86
Access Pipes with Round Door						
	GT14					
	75	1	4.1	A	191697	85.51
	100	1	3.2	A	191698	89.88
	150	1	6.3	C	191699	149.50

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ΔDSC.	ABOVE GROUND ▼	
					PRODUCT CODE	UNIT PRICE £
Access Pipes with Rectangular Door						
					GT15	
	100	1	7.2	C	191700	177.07
	150	1	16.4	C	191701	271.06
Offsets						
	Diameter x Projection				GT24	
	75 x 75	1	2.4	C	191702	52.46
	75 x 115	1	3.4	C	191704	57.66
	75 x 150	1	3.7	C	191703	67.74
	100 x 75	1	2.2	B	191705	51.76
	100 x 115	1	3.6	C	191709	73.04
	100 x 150	1	4.7	C	191706	73.04
	100 x 225	1	5.6	C	191707	95.84
	100 x 300	1	6.8	C	191708	91.45
Taper Pipes						
					GT28	
	75 x 50	1	0.6	C	191710	48.89
	100 x 50	1	0.9	C	191711	62.05
	100 x 75	1	0.9	B	191712	62.05
	150 x 100	1	2.2	C	191713	120.78
Asphalt Roof Vent Connector						
					GT73	
	100	1	2.1	C	191733	84.96
Blank Ends—Plain						
					GT70	
	50	1	0.2	B	191724	12.35
	75	1	0.5	B	191725	15.42
	100	1	0.8	A	191726	14.94
	150	1	1.9	C	191727	21.59
Blank Ends with 50mm Push-fit Connector						
					GT71	
	75	1	0.5	C	191728	30.37
	100	1	0.9	C	191729	32.58
	150	1	2.0	C	191731	39.15
Blank Ends D/T 2" BSP						
					GT71T	
	100	1	0.9	C	191730	36.88
Universal Connector EPDM						
					EF07IR	
	50 x 56/48/40 (OD Dimension)	1	0.1	B	155759	17.00

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ΔDSC.	ABOVE GROUND ▼	
					PRODUCT CODE	UNIT PRICE £
'P' Trap						
	GT34					
	100	1	4.4	C	191714	78.86
'P' Traps with Heel Access (*No Support Lug)						
	GT37					
	*50	1	2.0	C	191715	120.69
	*75	1	6.7	C	191716	120.69
	100	1	5.3	C	191717	133.75
	150	1	12.0	C	191718	233.53
Bellmouth Gully Inlet						
	GT483					
	100	1	2.4	C	191737	114.14
	Grate to suit					
	—	1	1.6	B	191385	14.20
Loose Puddle Flange (Grey Epoxy Coated)						
	ED078					
	100	1	4.0	C	191829	83.57
Boss Pipes 150mm Long with Single Boss						
	GT106					
	Boss Pipes—150mm Long with Single Boss and 50mm Waste Compression Joints					
	50	1	1.1	C	192236	73.56
	100	1	2.2	A	192237	87.83
	150	1	3.8	C	192239	143.37
	Boss Pipes—150mm Long with Single Boss and D/T 50mm BSP					
	75	1	1.7	A	191739	73.56
	100	1	1.7	B	192238	90.60
Boss Pipes 150mm Long with 2 x 50mm Bosses Opposed and 50mm Waste Compression Joint						
	GT109					
	100	2	2.5	C	192240	113.61
	150	2	4.5	C	192360	162.30
Boss Pipes 150mm Long with 2 x 50mm Bosses at 90° and 50mm Waste Compression Joint						
	GT115					
	100	2	2.8	C	192241	113.61

DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ABOVE GROUND ▼		
				ΔDSC.	PRODUCT CODE	UNIT PRICE £

	GT133					
	100	1	1.2	A	192323	72.14
	Hole Saw Arbour with Drill (Accessory Tools for use with GT133)					
	—	1	0.2	C	192327	50.86
	64mm Hole Saw for Cast Iron (Accessory Tools for use with GT133)					
	—	1	0.2	C	192326	52.02
	Pilot Drill (Accessory Tools for use with GT133)					
	—	1	0.03	C	192328	12.81
Boss Pipe 240mm Long with 2 x 50mm Bosses In Line and Push-Fit Connection						

	GT132					
	100	2	3.1	C	191742	114.79

ACCESSORIES

	EF100					
	—	1	0.6	B	191201	87.01

	EF098					
	—	1	0.1	B	191200	9.50

	EF101					
	—	1	0.1	B	191202	21.88



Timesaver Heritage System

Timesaver is a mechanically jointed cast iron soil system to BS 416-2:1990, British Standard Kitemark approved. The range includes push-fit couplings that turn a mechanical system into one with a traditional socket appearance of yesteryear, as depicted in BS 416-1:1990 — but without the labour intensive caulked jointing method. Supplied in a black water based primer coat the product is easy to overpaint and is the modern solution for external cast iron soil stacks, often seen on listed buildings, pre-1960's housing and properties situated in areas of conservation.

The Heritage couplings are available in 50, 75, 100 and 150mm diameters that connect standard Timesaver pipe and fittings. Pipes are available in 3m lengths for 50mm and 150mm diameter (also available on 75 and 100mm) and 1.8m (6ft) lengths in 75 and 100mm diameters

Coupling Gaskets

Saint-Gobain PAM have introduced new gaskets for the Heritage couplings to ease installation further.



specifically introduced to meet this field of application.

The Heritage couplings are available in three types:

- With fixing ears to fit to the wall
- Plain without ears for connection only
- Slip version available to use when pipework already installed.



1 Apply a small amount of lubricant (i.e. lubricant prod code 199037 on the lip of the rubber gaskets, both ends, to ease insertion of pipe/fittings.

2 Push joint over the end of pipe/fitting. Ensuring the central register is abutted against the spigot edge evenly. If the joint is eared, fix to wall using anti-corrosion coach screws or similar.

3 Push the second pipe or fitting into the gasket again ensuring that the spigot is abutted.

The rubber seals are factory fitted to the socket, and a suitable lubricant is recommended to ease the assembly.



DESCRIPTION	SIZE Ø mm	PACK SIZE	NOMINAL WEIGHT KG	ΔDSC.	ABOVE GROUND ▼	
					PRODUCT CODE	UNIT PRICE £
Double Spigot Pipe						
					GT00	
	50 x 3m	35	19.5	A	156366	116.88
	75 x 1.8m (6ft)	1	15.0	A	206854	85.46
	100 x 1.8m (6ft)	1	18.5	A	192423	100.43
	150 x 3m	20	43.0	A	156831	329.95
Heritage Plain Couplings—Push-fit Joint						
					GT05P	
	50	1	1.4	A	192418	31.94
	75	1	1.4	A	206855	35.07
	100	1	1.8	A	192421	36.70
	150	1	3.6	C	266537	59.26
Heritage Couplings Eared—Push-fit Joint						
					GT05E	
	50	1	1.4	A	192417	32.92
	75	1	2.1	A	206856	36.12
	100	1	2.6	A	192420	39.87
	150	1	3.6	C	266536	62.58
Heritage Couplings Slip—Push-fit Joint						
					GT05S	
	50	1	1.4	C	192419	41.38
	75	1	1.9	C	206836	42.98
	100	1	2.6	B	192422	48.33
	150	1	3.6	C	266538	69.66
Single Gasket to suit 100mm Push-fit Joint						
	100	1	0.1	C	156133	5.55
Stepped Conversion Coupler (100mm to 90mm)						
	100 x 90	1	1.8	C	GT05T 259732	37.96
Bracket to Suit 100mm Eared (EC001E/GT05E) Push-fit Joint						
	100	1	0.2	C	EF053 192333	50.32
450mm Extended Arm Bracket						
	100	1	0.2	C	EF053A 192363	50.32
Cast Iron Wall Spacer Plate						
	50	1	0.2	C	192424	7.28
	75	1	0.3	C	206838	7.28
	100	1	0.4	B	192425	7.28
Lubricant 500g Tub (To suit Eared Push-fit Joints GT05E)						
	—	1	0.4	C	199037	24.27

VortX roof and floor drainage

Roof outlets



VortX is a new range of roof, floor and shower drainage products designed in compliance with BS EN 1253 criteria and backed by the quality commitment of the PAM brand with nearly 100 years' experience in drainage.

Product Standard: BS EN 1253

Applications

- Various flat roof structures
 - > Concrete
 - > Timber
 - > Lightweight metal structure
- Warm, cold and inverted roofs
- Parapet wall construction
- Load bearing situations exposed to vehicular traffic i.e. car parks

Features—Cast iron bodies with spigots or BSP

- Vertical spigot roof outlets in 100mm and 150mm diameters
 - > 88° and 45° angled roof outlets in 100mm
 - > Flexible clamping ring
- Balcony outlets with Flat or notched gratings
- Two-way or parapet outlets
- Smaller diameter outlets (50/70mm):
 - > 100mm BSP Outlets with reducing spigot adaptors VX-F501
- Raising pieces and gravel guard

Coatings

Grey epoxy

- Cast iron bodies

Black Polyester

- Domical gratings to suit vertical and angled roof outlets
- All clamping rings
- All raising pieces

Sheradised coating

- Flat gratings to suit vertical and angled roof outlets
- Flat and notched gratings to suit balcony outlets.

Benefits

- Strong and robust performance
- Clamping Ring on the vertical and angled roof outlets can accommodate a liquid membrane of 2-3mm to full membranes with hot bitumen of 8mm
- Robust domical gratings in cast iron
- Quality coatings with proven performance for these applications
 - > Black polyester for performance in sunlight
 - > Sheradised gratings to protect for load bearing applications
- Optimised range of bodies
- High flow rates—tested by CRM Rainwater Drainage Consultancy
 - > 150mm vertical roof outlet achieved 14.5 l/s
- Cost-effective solutions compared to Aluminium outlets

VortX roof outlets utilising spigot adapters to connect small diameter pipework



Prices exclude VAT

^ADelivery Service Category DSC (see page 3)

A =5

B =5-15

C =15-30

DESCRIPTION	SIZE	PACK SIZE	NOMINAL WEIGHT KG	FLOW RATE L/S	LOADING CLASS	^A DSC.	PRODUCT CODE	UNIT PRICE £
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ROOF OUTLETS

Vertical Roof Outlet with Flat Grate and 110mm Spigot (Suitable for car park applications)



110mm OD Spigot	1	10.5	8.1	L15	B	VX-R100	241180	119.58
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For 150mm use 6" BSP with spigot adapter

Vertical Roof Outlet with Dome Grate and 110mm Spigot



110mm OD Spigot	1	8.9	10.7	K3	B	VX-R105	241181	119.58
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For 150mm use 6" BSP with spigot adapter

Vertical Roof Outlets with Flat Grate (Suitable for car park applications)



4" BSP	1	10.5	8.1	L15	B	VX-R150	241182	126.43
6" BSP	1	14.9	14.2	L15	C		247428	245.96

Vertical Roof Outlets with Dome Grate



4" BSP	1	8.9	10.7	K3	B	VX-R155	241183	126.43
6" BSP	1	12.4	14.5	K3	C		247418	245.96

For smaller diameter outlets 70mm and 50mm call Technical Department on 01952 262529

Horizontal Roof Outlet 88° with Flat Grate



4" BSP	1	6.5	8.1	L15	C	VX-R250	255262	133.94
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Horizontal Roof Outlet 88° with Dome Grate



4" BSP	1	7.9	10.7	K3	C	VX-R255	255261	133.94
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Angled Roof Outlet 45° with Flat Grate



4" BSP	1	8.5	8.1	L15	C	VX-R251	255250	133.94
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Angled Roof Outlet 45° with Dome Grate



4" BSP	1	9.9	10.7	K3	C	VX-R256	255249	133.94
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Please Note: Flow rates calculated based on 35mm head independently tested in accordance with BS EN 1253

Balcony Roof Outlet with Flat Grate and 110mm Spigot

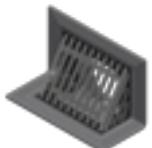


110mm OD Spigot	1	6.3	4.99	K3	B	VX-R300	241184	102.53
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Balcony Roof Outlets with Notched Grate and 110mm Spigot



110mm OD Spigot x 100mm	1	5.8	4.99	K3	C	VX-R305	241187	102.53
110mm Spigot x 75mm	1	6.1	4.15	K3	C		241186	102.53
110mm Spigot x 50mm	1	6.3	1.41	K3	C		241185	102.53

DESCRIPTION	SIZE	PACK SIZE	NOMINAL WEIGHT KG	FLOW RATE L/S	LOADING CLASS	ΔDSC.	PRODUCT CODE	UNIT PRICE £
Balcony Roof Outlet with Flat Grate								
	VX-R350							
	4" BSP	1	6.2	4.99	K3	B	241188	116.18
Balcony Roof Outlets with Notched Grate								
	VX-R355							
	4" BSP x 100mm	1	5.8	4.99	K3	C	241191	116.18
	4" BSP x 75mm	1	6.0	4.15	K3	C	241190	116.18
	4" BSP x 50mm	1	6.2	1.41	K3	C	241189	116.18
For smaller diameter outlets 70mm and 50mm use spigot adapter VX-500/VX-F501								
Two Way Outlet with Angled Steel Grate								
	VX-R500							
	4" BSP	1	6.2	1.09	K3	C	241192	97.04
For smaller diameter outlets 70mm and 50mm use spigot adapter VX-500/VX-F501								
Two Way Outlet with Flat Steel Grate								
	VX-R501							
	4" BSP	1	6.2	1.09	K3	C	247964	99.09
For smaller diameter outlets 70mm and 50mm use spigot adapter VX-500/VX-F501								
Two Way Outlet with Boxed Steel Grate								
	VX-R502							
	4" BSP	1	6.2	1.09	K3	C	248015	99.79
For smaller diameter outlets 70mm and 50mm use spigot adapter VX-500/VX-F501								
Push-fit Two Way Down Spout								
	VX-R510							
	110mm OD	1	2.2	—	—	C	253762	68.33
Raising Piece to suit 100mm and 150mm Vertical Outlets								
	VX-R710							
	285 x 75mm high	1	2.5	—	—	B	241193	47.84
Raising Piece to suit Balcony Outlets								
	VX-R720							
	50mm effective height	1	0.9	—	—	C	241194	47.84
BSP Spigot Adaptors								
	VX-F500							
	4" BSP to 110mm	Length 215mm	1	2.7	—	—	C	227131
	4" BSP to 110mm	450mm	1	5.4	—	—	C	270322
	6" BSP to 160mm	300mm	1	4.6	—	—	C	247429
	6" BSP to 160mm	450mm	1	8.0	—	—	C	269866
	**3" BSP to 80mm	215mm	1	2.1	—	—	C	234204
	**2" BSP to 60mm	215mm	1	1.3	—	—	C	234205
	**2" BSP to 56mm	215mm	1	1.1	—	—	C	234207
**Used with reducing bushes								

DESCRIPTION	SIZE	PACK SIZE	NOMINAL WEIGHT KG	FLOW RATE L/S	LOADING CLASS	^A DSC.	PRODUCT CODE	UNIT PRICE £
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BSP Adaptors

VX-F501



Eccentric							
300 x 80mm to 4"	1	2.8	—	—	C	256614	30.50
Concentric							
300 x 80mm to 4"	1	2.8	—	—	C	256615	30.50
300 x 60mm to 4"	1	2.3	—	—	C	256613	25.22

BSP Reducing Bushes

VX-F510



4" x 3"	1	1.1	—	—	B	227136	21.00
4" x 2"	1	1.9	—	—	B	227137	21.00

ACCESSORIES

Domical Grate Suites with Vertical Angled Outlets



	1	2.4	—	—	C	247775	58.09
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Flat Grates—to suit Vertical Angled Outlets



100mm	1	4.0	—	—	C	247776	48.52
150mm	1	4.8	—	—	C	247777	48.52

Stainless Steel Gravel Guard & Strainers—to suit Vertical Angled Outlets



Gravel Guard						VX-R730	
290 x 155mm	1	0.2	—	—	C	247752	75.85
Strainers						VX-R740	
290mm x 300mm	1	3.3	—	—	C	253154	146.93
290mm x 200mm	1	2.8	—	—	C	253155	139.77

Clamping Rings—to suit Vertical Angled Outlets

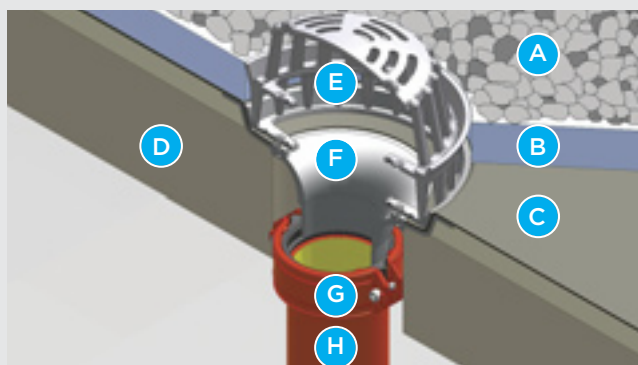


100mm	1	1.3	—	—	C	247778	40.33
150mm	1	3.3	—	—	C	247779	40.33

Warm Roof Applications

Vertical spigot outlet with raising piece

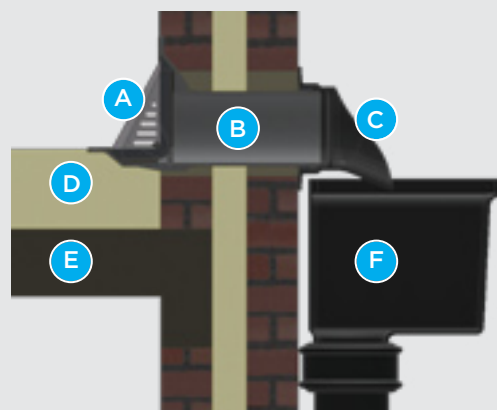
- A. Gravel
- B. Unslulation
- C. Membrane
- D. Concrete Deck
- E. Raising Extension Piece VX-R710
- F. VX-R105 Spigot Body
- G. Ensign Coupling EC002
- H. Ensign Pipework



All roof outlets are tested to BS EN 1253

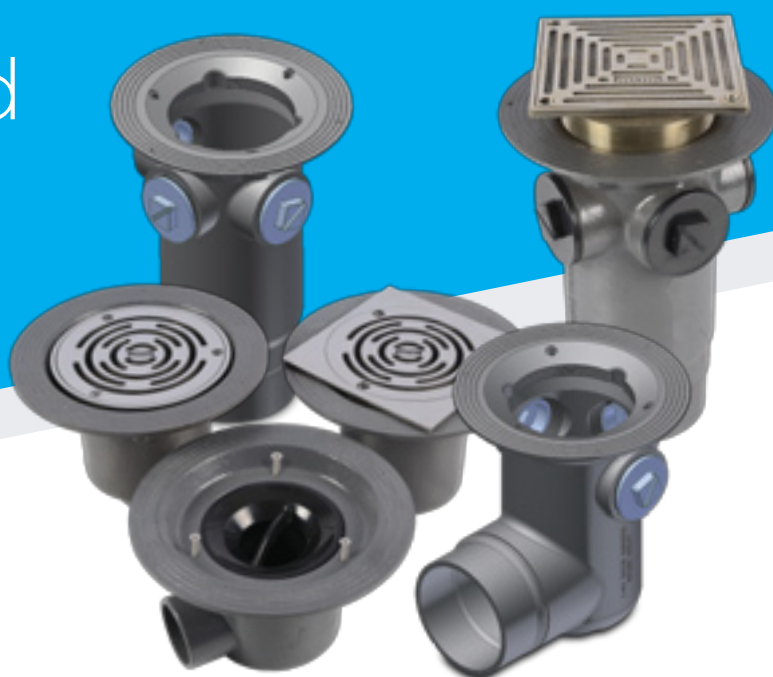
2-way outlet with spigot adaptor

- A. VX-R500
- B. VX-F500 Adaptor
- C. VX-R510 2-way downspout
- D. Insulation
- E. Concrete Deck
- F. Cast Iron Rainwater Head



VortX roof and floor drainage

Floor drainage products



PAM VortX offers a simplified range of floor drainage products for most applications

Applications:

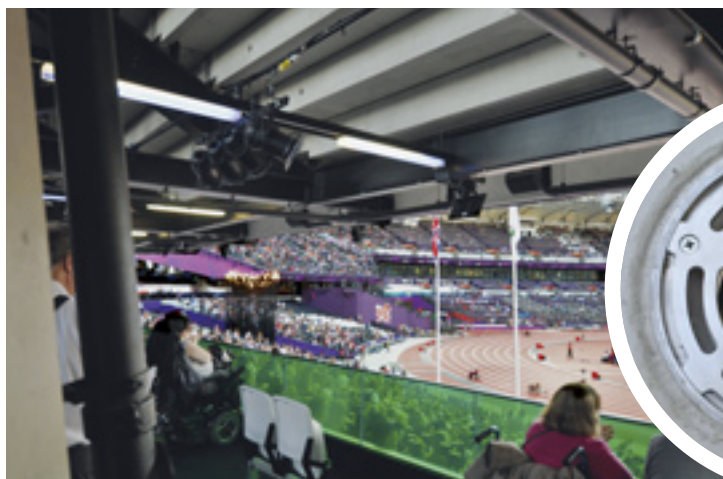
- Suitable for all commercial and industrial applications
- Grates available for tiled, marble, terrazzo, concrete, vinyl and resin floors.
- Gratings Load class options as depicted in BS EN 1253:
 - > K3—Pedestrian areas and wet room applications such as shower areas, bathrooms, swimming baths, leisure centres, balconies, retail areas, hotels, offices, schools, public buildings, hospitals, prisons, terraces and roof gardens
 - > L15—Areas of light vehicular traffic such as cycle ways and domestic drives
 - > M125—Car parks
- Gratings and rodding eyes:
 - > Nickel bronze & stainless steel
 - > Cast iron
 - > New Anti-Ligature stainless-steel gratings
- Full range of accessories
 - > Funnels
 - > Security screws
 - > Cast iron raising pieces
 - > Spigot adaptors for various pipe diameter connections

Features

- Simplified range of trapped and untrapped cast iron gullies
- Lighter weight P-Trap and S-Trap gullies
- New cast iron modular gullies with spigot/BSP outlets that configure to:
 - > Deep sumps/bell traps/brewery traps

Benefits

- Simplified range easy to navigate and specify
- S-trap offers space saving—only requiring a 180mm core hole
 - > Saving cost
- Cast iron gullies are robust and are grey epoxy coated
- Spigot adaptors to connect to most pipe sizes and materials
- New modular deep sump gullies that can configure to bell and brewery type traps.



PAM Saint-Gobain products were used throughout the Olympic Stadium in London including the VortX grating shown above



Prices exclude VAT

^ADelivery Service Category DSC (see page 3)

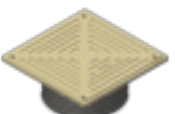
A =5

B =5-15

C =15-30

DESCRIPTION	SIZE	PACK SIZE	NOMINAL WEIGHT KG	FLOW RATE L/S	LOADING CLASS	^A DSC.	PRODUCT CODE	UNIT PRICE £
FLOOR DRAIN GRATINGS								
150mm Circular Gratings in Nickel Bronze								
	S 150mm NPSM	1	1.7	2.0	K3	C	VX-F010 227049	67.02
	S 150mm Direct Fit	1	1.7	2.0	K3	C	233415	67.02
150mm Circular Gratings in Stainless Steel								
	S 150mm NPSM	1	1.5	2.0	K3	C	VX-F020 227050	122.59
	S 150mm Direct Fit	1	1.5	2.0	K3	C	233407	122.59
150mm Square Gratings in Nickel Bronze								
	S 150mm NPSM	1	1.3	2.2	K3	C	VX-F030 227101	72.73
	S 150mm Direct Fit	1	1.3	2.2	K3	C	233408	72.73
150mm Square Gratings in Stainless Steel								
	S 150mm NPSM	1	1.2	2.2	K3	C	VX-F040 227102	122.59
	S 150mm Direct Fit	1	1.2	2.2	K3	C	233421	122.59
200mm Square Gratings in Nickel Bronze								
	S 200mm NPSM	1	3.1	3.0	K3	C	VX-F050 227103	138.75
	S 200mm Direct Fit	1	3.1	3.0	K3	C	233423	138.75
200mm Square Gratings in Stainless Steel								
	S 200mm NPSM	1	2.8	3.0	K3	C	VX-F060 227104	195.31
	S 200mm Direct Fit	1	2.8	3.0	K3	C	233424	195.31
150mm Circular Gratings in Nickel Bronze for Vinyl Floors								
	S 150mm NPSM	1	2.3	1.85	K3	C	VX-F070 227111	108.48
	S 150mm Direct Fit	1	2.3	1.85	K3	C	233434	108.48
150mm Circular Gratings in Stainless Steel for Vinyl Floors								
	S 150mm NPSM	1	2.1	1.85	K3	C	VX-F080 227112	174.77
	S 150mm Direct Fit	1	2.1	1.85	K3	C	233435	174.77
150mm Circular Gratings in Cast Iron								
	150mm NPSM	1	2.9	1.5	L15	C	VX-F090 247771	64.31
	150mm Direct Fit	1	3.0	1.5	L15	C	247773	64.31
150mm Square Gratings in Cast Iron								
	150mm NPSM	1	2.9	1.5	L15	C	VX-F100 247772	69.03
	150mm Direct Fit	1	3.0	1.5	L15	C	247774	69.03
Circular Anti-Ligature Grating in Stainless Steel								
	S 150mm NPSM	1	1.5	1.1	K3	C	VX-F021 250676	153.78

S = Standard Finish

DESCRIPTION	SIZE	PACK SIZE	NOMINAL WEIGHT KG	FLOW RATE L/S	LOADING CLASS	^DSC.	PRODUCT CODE	UNIT PRICE £
Square Anti-Ligature Grating in Stainless Steel								
	S 150mm NPSM	1	1.6	1.1	K3	C	VX-F041 250677	153.78
Circular Anti-Ligature Grating in Stainless Steel for Vinyl Floors								
	S 170mm	1	2.1	1.1	K3	C	VX-F081 250678	177.00
FLOOR DRAIN RODDING EYES								
150mm Circular Rodding Eyes in Nickel Bronze								
	S 150mm NPSM	1	1.8	N/A	K3	C	VX-F015 227105	69.58
	S 150mm Direct Fit	1	1.8	N/A	K3	C	233426	69.58
150mm Circular Rodding Eyes in Stainless Steel								
	S 150mm NPSM	1	1.6	N/A	K3	C	VX-F025 227106	153.41
	S 150mm Direct Fit	1	1.6	N/A	K3	C	233427	153.41
150mm Square Rodding Eyes in Nickel Bronze								
	S 150mm NPSM	1	1.4	N/A	K3	C	VX-F035 227107	75.30
	S 150mm Direct Fit	1	1.4	N/A	K3	C	233428	75.30
150mm Square Rodding Eyes in Stainless Steel								
	S 150mm NPSM	1	1.3	N/A	K3	C	VX-F045 227108	153.41
	S 150mm Direct Fit	1	1.3	N/A	K3	C	233430	153.41
200mm Square Rodding Eyes in Nickel Bronze								
	S 200mm NPSM	1	3.4	N/A	K3	C	VX-F055 227109	153.41
	S 200mm Direct Fit	1	3.4	N/A	K3	C	233431	153.41
200mm Square Rodding Eyes in Stainless Steel								
	S 200mm NPSM	1	3.1	N/A	K3	C	VX-F065 227110	195.31
	S 200mm Direct Fit	1	3.1	N/A	K3	C	233433	195.31
150mm Circular Rodding Eyes in Nickel Bronze for Vinyl Floors								
	S 150mm NPSM	1	2.4	N/A	K3	C	VX-F075 227113	125.18
	S 150mm Direct Fit	1	2.4	N/A	K3	C	233438	125.18
150mm Circular Rodding Eyes in Stainless Steel for Vinyl Floors								
	S 150mm NPSM	1	2.2	N/A	K3	C	VX-F085 227114	185.32
	S 150mm Direct Fit	1	2.2	N/A	K3	C	233439	185.32
ABS Airtight Bung (Can be fitted to Rodding Eyes to make a double seal)								
	105mm	1	0.1	N/A	—	C	VX-F430 241195	4.90

DESCRIPTION	SIZE	PACK SIZE	NOMINAL WEIGHT KG	FLOW RATE L/S	LOADING CLASS	^A DSC.	PRODUCT CODE	UNIT PRICE £	
FLOOR DRAINS									
Untrapped Floor Gullies with Medium Sump (110mm)									
	110mm	1	2.4	—	—	C	VX-F200 227119	22.77	
Untrapped Floor Gullies with Medium Sump (4" BSP)									
	4" BSP	1	2.6	—	—	C	VX-F200 227118	27.96	
Untrapped Floor Gully with Sumpless Body									
	110mm NPSM	1	1.6	—	—	C	VX-F210 227120	26.57	
P Trap Floor Gully									
	110mm	1	6.4	—	—	C	VX-F220 227129	72.15	
S Trap Floor Gully									
	110mm	1	6.4	—	—	C	VX-F230 227130	72.15	
Clamping Ring to suit Floor Gullies									
	205mm	1	0.7	—	—	C	VX-F205 233440	10.09	
Raising Pieces									
	20-40mm	1	0.8	—	—	C	VX-F350 227121	27.02	
	40-95mm	1	1.5	—	—	C	227122	33.85	
	95-140mm	1	2.0	—	—	C	227123	41.88	
BSP Spigot Adaptors									
	Length							VX-F500	
	4" BSP to 110mm	215mm	1	2.7	—	—	C	227131	21.00
	4" BSP to 110mm	450mm	1	5.4	—	—	C	270322	82.99
	6" BSP to 160mm	300mm	1	4.6	—	—	C	247429	77.40
	6" BSP to 160mm	450mm	1	8.0	—	—	C	269866	46.61
	**3" BSP to 80mm	215mm	1	2.1	—	—	C	234204	16.46
	**2" BSP to 60mm	215mm	1	1.3	—	—	C	234205	13.30
	**2" BSP to 56mm	215mm	1	1.1	—	—	C	234207	13.30
**Used with reducing bushes									
BSP Reducing Bushes									
	VX-F510								
	4" x 3"	1	1.1	—	—	B	227136	21.00	
	4" x 2"	1	1.9	—	—	B	227137	21.00	

S = Standard Finish

DESCRIPTION	SIZE	PACK SIZE	NOMINAL WEIGHT KG	FLOW RATE L/S	LOADING CLASS	ΔDSC.	PRODUCT CODE	UNIT PRICE £
DEEP SUMP GULLIES								
Cast Iron Deep Sump Body with 3 x 2" BSP Inlets—Epoxy-coated								
							VX-F215	
	110mm OD Spigot Outlet	1	12.3	—	—	C	260384	122.68
	4" BSP Outlet	1	11.5	—	—	C	260385	136.57
	6" BSP Outlet	1	10.1	—	—	C	260386	145.02
Body can also include 4" BSP inlet upon request								
Bell Trap Body with 3 x 2" BSP Inlets and 4" NPSM reducing collar—Epoxy-coated Cast Iron								
							VX-F250	
	110mm OD Spigot Outlet/NPSM	1	12.3	—	—	C	260387	225.82
	4" BSP Outlet/NPSM	1	11.5	—	—	C	260388	239.66
Can be fitted with Nickel Bronze/Stainless Steel Gratings								
Body can also include 4" BSP inlet upon request								
Brewery Trap 3 x 2" BSP Inlets with 300mm Square Cast Iron Grating—Body Epoxy-coated Cast Iron/Grating Sheradised								
							VX-F240	
	110mm OD Spigot Outlet	1	29.6	—	—	C	260389	491.62
Body can also include 4" BSP inlet upon request								
Brewery Trap 3 x 2" BSP Inlets with 300mm Square Cast Iron Grating—Body Epoxy-coated Cast Iron/Grating Sheradised								
							VX-F244	
	4" BSP Outlet	1	28.6	—	—	C	260390	506.09
Body can also include 4" BSP inlet upon request								
Galvanised Steel Filter Basket to suit Deep Sump and Bell Trap								
							VX-F415	
	188 x 60mm	1	0.5	—	—	C	260391	125.45
300 x 300mm Square Grating in Ductile Iron—Sheradised to suit VXF215/250								
							VX-F110	
	8" NPSM	1	14	—	M125	C	260392	128.80
							VX-F130	
	4" NPSM	1	14.5	—	M125	C	260393	123.32
300 x 300mm Square Grating in Ductile Iron—Sheradised to suit Bell Trap VX-F250								
							VX-F110	
	200mm Direct Fit	1	14.0	—	M125	C	260394	125.76
							VX-F120	
	150mm Direct Fit	1	14.1	—	—	C	260395	123.68
							VX-130	
	100mm Direct Fit	1	14.4	—	—	C	260396	120.36
Reducing Ring to suit Bell Trap and Deep Sump—Epoxy-coated Cast Iron								
							VX-F206	
	4" NPSM	1	0.5	—	—	C	260397	43.24

DESCRIPTION	SIZE	PACK SIZE	NOMINAL WEIGHT KG	FLOW RATE L/S	LOADING CLASS	^A DSC.	PRODUCT CODE	UNIT PRICE £
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ACCESSORIES – FLOOR DRAIN

Screws & Allen Key (Bag of 4 Security Screws and Allen Key)

	—	1	0.1	—	—	C	VX-F420 233455	5.60
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Oval Funnel in Nickel Bronze

	—	1	0.7	—	—	C	VX-F305 227116	91.16
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Circle Funnel in Nickel Bronze

	—	1	0.3	—	—	C	VX-F300 227117	53.16
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Circle Funnel in Stainless Steel

	—	1	0.2	—	—	C	VX-F310 227115	55.89
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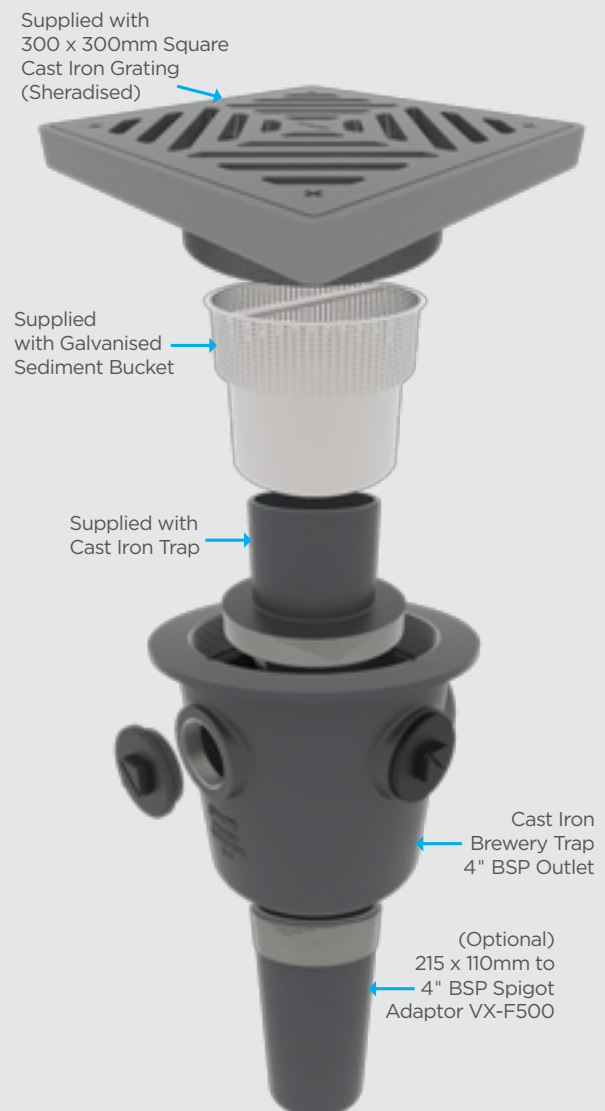
VortX Bell Trap Arrangement



Bill of material

Item	Code	Product Code
Cast Iron Bell Trap 110mm Spigot	VX-F250	260387
Cast Iron Reducing Ring	VX-F206	260397
Cast Iron Clamping Ring	VX-F205	233440
Nickel Bronze Grating 150mm Circular	VX-F010	227049

VortX Brewery Trap



VortX roof and floor drainage

Shower drains



Robust cast iron shower gullies in 100mm and 50mm with a range of stainless-steel gratings to suit most types of solid or suspended floor construction.

Applications

- Commercial, public and residential buildings
- Solid or suspended floors
- Tiled or flexible sheet floor membranes
- Anti-ligature gratings for incarceration areas i.e. prisons, etc.

Features

- Vertical and horizontal shower gullies 100mm and 50mm
- Cast iron grey epoxy coated
- 50mm removable bottle trap with unique twist and lock mechanism
- Stainless-steel gratings
- Anti-ligature gratings
- Polished finished available to order

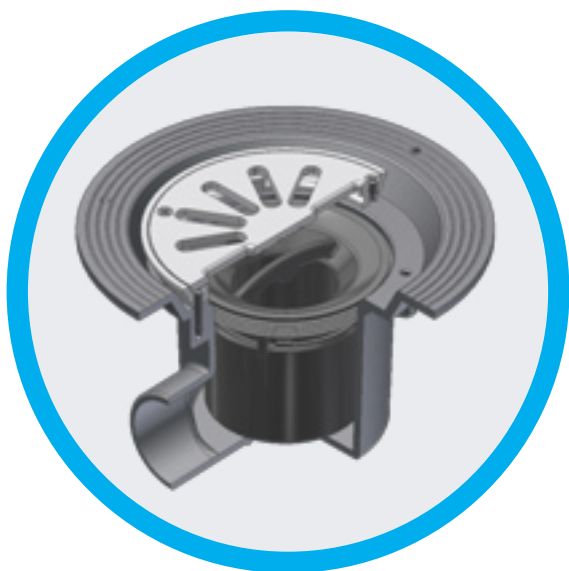


Benefits

- Simplified range
- Robust cast iron solutions
- Unique twist and lock removable trap
- Available in kit format
- Cost effective with other materials

Shower Drain Kits

VortX shower drain kits consist of a cast iron body with vertical or horizontal outlet, a removable bottle trap and a stainless-steel grating of choice either in standard or polished finish supplied all together in a cardboard box.



Prices exclude VAT

^ADelivery Service Category DSC (see page 3)

A =5

B =5-15

C =15-30

DESCRIPTION	SIZE	PACK SIZE	NOMINAL WEIGHT KG	FLOW RATE L/S	LOADING CLASS	^A DSC.	PRODUCT CODE	UNIT PRICE £
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SHOWER DRAIN KITS

Shower Drain Kit with 110mm Cast Iron Vertical—Supplied complete in a box



Kit includes:
VX-S260 110mm Vertical Shower Drain
and VX-F400 Bottle Trap
plus a Stainless Steel Grating to suit listed below

TO ORDER THE WHOLE KIT
PLEASE USE THE CODE LISTED
NEXT TO THE REQUIRED GRATING

Shower Drain Kit 110mm Cast Iron Vertical with VX-S270 150mm Circular Stainless Steel Grating for Vinyl Floor

s 150mm

1

3.3

1.1

K3

C

239376

117.58



Shower Drain Kit 110mm Cast Iron Vertical with VX-S270 150mm Decorative Stainless Steel Grating for Vinyl Floor

s 150mm

1

3.2

1.1

K3

C

239736

117.58



Shower Drain Kit 110mm Cast Iron Vertical with VX-S271 150mm Square Stainless Steel Grating for Vinyl Floor

s 150mm

1

3.5

1.1

K3

C

239734

119.78



Shower Drain Kit 110mm Cast Iron Vertical with VX-S271 150mm Decorative Square Stainless Steel Grating for Tiled Floor

s 150mm

1

3.4

1.1

K3

C

239738

119.78



Shower Drain Kit with 60mm Cast Iron Vertical Shower Drain—Supplied complete in a box



Kit includes:
VX-S260 60mm Shower Drain
and VX-F400 Bottle Trap
plus a Stainless Steel Grating to suit listed below

TO ORDER THE WHOLE KIT
PLEASE USE THE CODE LISTED
NEXT TO THE REQUIRED GRATING

Shower Drain Kit 60mm Cast Iron Vertical Shower Drain with VX-S270 150mm Circular Stainless Steel Grating for Vinyl Floor

s 150mm

1

3.3

1.1

K3

C

239740

117.58



Shower Drain Kit 60mm Cast Iron Vertical Shower Drain with VX-S270 150mm Decorative Stainless Steel Grating for Vinyl Floor

s 150mm

1

3.3

1.1

K3

C

239744

117.58



Shower Drain Kit 60mm Cast Iron Vertical Shower Drain with VX-S271 150mm Square Stainless Steel Grating for Vinyl Floor

s 150mm

1

3.5

1.1

K3

C

239742

119.78



Shower Drain Kit 60mm Cast Iron Vertical Shower Drain with VX-S271 150mm Decorative Square Stainless Steel Grating for Vinyl Floor

s 150mm

1

3.4

1.1

K3

C

239746

119.78



S = Standard Finish

Orders & Customer Services: 01952 262508 Email: orders.pam@saint-gobain.com

DESCRIPTION	SIZE	PACK SIZE	NOMINAL WEIGHT KG	FLOW RATE L/S	LOADING CLASS	ΔDSC.	PRODUCT CODE	UNIT PRICE £
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Shower Drain Kit with 60mm Cast Iron Horizontal Shower Drain—Supplied complete in a box



Kit includes:
VX-S261 60mm Shower Drain
and VX-F400 Bottle Trap
plus a Stainless Steel Grating to suit listed below

TO ORDER THE WHOLE KIT
PLEASE USE THE CODE LISTED
NEXT TO THE REQUIRED GRATING

Shower Drain Kit 60mm Cast Iron Horizontal Shower Drain with VX-S270 150mm Circular Stainless Steel Grating for Vinyl Floor	s 150mm	1	3.4	0.9	K3	C	239748	117.58
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Shower Drain Kit 60mm Cast Iron Horizontal Shower Drain with VX-S270 150mm Decorative Stainless Steel Grating for Vinyl Floor	s 150mm	1	3.3	0.9	K3	C	239752	117.58
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Shower Drain Kit 60mm Cast Iron Horizontal Shower Drain with VX-S271 150mm Square Stainless Steel Grating for Vinyl Floor	s 150mm	1	3.6	0.9	K3	C	239750	119.78
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Shower Drain Kit 60mm Cast Iron Horizontal Shower Drain with VX-S271 150mm Decorative Square Stainless Steel Grating for Tiled Floor	s 150mm	1	3.5	0.9	K3	C	239754	119.78
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SHOWER DRAINS

Cast Iron Shower Drains (Body only) Vertical

	110mm OD	1	2.4	—	—	C	VX-S260 227125	35.03
	60mm OD	1	2.4	—	—	C	227126	35.03

Cast Iron Shower Drain (Body only) Horizontal



60mm OD	1	2.5	—	—	C	VX-S261 227127	35.03
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Removable Bottle Trap ABS



50mm Trap	1	0.1	—	—	C	VX-F400 227128	26.60
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Stainless Steel Filter Basket to suit Shower Drains



110mm	1	0.2	—	—	C	VX-F410 227138	29.43
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Circular Stainless Steel Gratings to suit Shower Drains for Vinyl Floor



S	150mm	1	0.8	Horiz/Vert Drain	K3	C	VX-S270 227132	55.96
				0.9/1.1				

Circular Decorative Stainless Steel Gratings to suit Shower Drains for Vinyl Floor



S	150mm	1	0.7	Horiz/Vert Drain	K3	C	VX-S270 227133	55.96
				0.9/1.1				

DESCRIPTION	SIZE	PACK SIZE	NOMINAL WEIGHT KG	FLOW RATE L/S	LOADING CLASS	^A DSC.	PRODUCT CODE	UNIT PRICE £	
Square Steel Gratings to suit Shower Drains for Vinyl Floor									
	S	150mm	1	1.0	0.9/1.1	K3	C	VX-S271 227134	58.13
Decorative Square Steel Gratings to suit Shower Drains for Tiled Floor									
	S	150mm	1	0.9	0.9/1.1	K3	C	VX-S271 227135	58.13
Circular Anti-Ligature Stainless Steel Grating to suit Shower Drains for Vinyl Floors									
	S	150mm	1	0.8	0.9/1.1	K3	C	VX-S272 250679	66.98
Square Anti-ligature Stainless Steel Grating to suit Shower Drains for Tiled Floors									
	S	150mm	1	1.0	0.9/1.1	K3	C	VX-S273 250680	69.09



S = Standard Finish

Classical cast iron rainwater pipe and gutter systems



Saint-Gobain PAM manufactures the Classical range of traditional rainwater and gutter systems designed in accordance with BS 460:2002+A2:2007. 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 99% 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



Classical Rainwater Contents

Page 74

Half Round Gutter
and Connections

Page 77

Beaded Half Round Gutter
and Connections

Page 78

Deep Half Round Gutter
and Connections

Page 80

Ogee Gutter
and Connections

Page 82

Moulded Gutter
and Connections

Page 84

Notts OG Gutter
and Connections

Page 86

Round Pipes
and Fittings

Page 90

Rainwater Heads

Page 91

Rectangular Pipes
and Fittings

Page 94

Technical Calculations

 PRIMED
  PLUS COATED
 All other Plus products coated to order

Range

Classical gutter profiles available

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



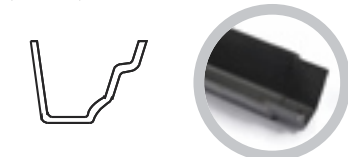
- Deep Half Round: 100mm x 75mm (4" x 3"), 125mm x 75mm (5" x 3")



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



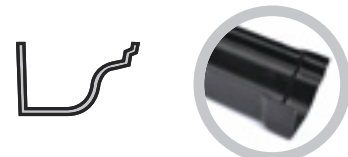
- Moulded: 100mm x 75mm (4"x3") 125mm x 100mm (5"x4") and 150mm x 100mm (6"x4")



- 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

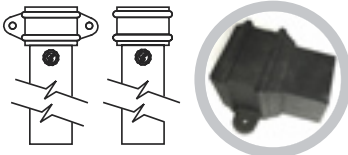


Eared



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

Eared No Eared



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.



For further information
please click the circle to visit
www.pamdrainage.co.uk or call our
Internal Sales Team on 0115 930 0681.

CLASSICAL PLUS

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

Coating:

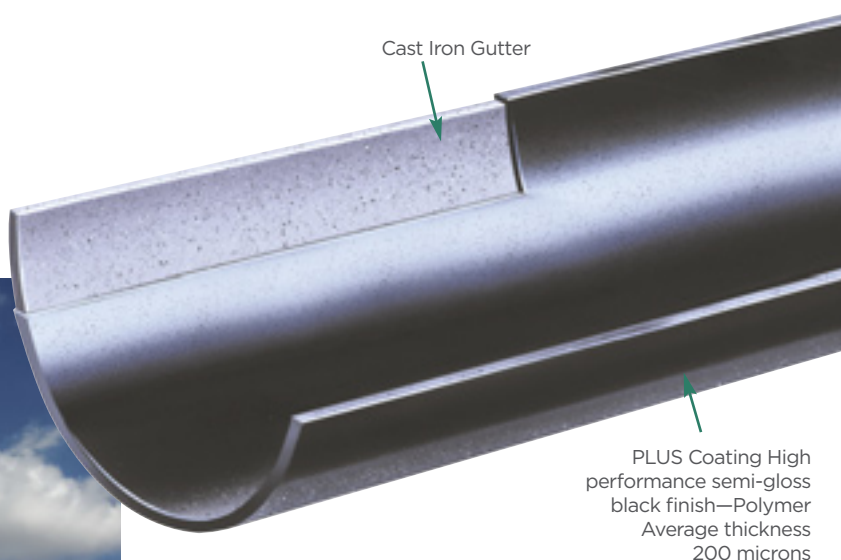
- High performing Polymer Powder Alloy (PPA571)
- Black semi-gloss RAL 9005 700 as standard to an average thickness of 200 microns
- Black as standard available on half round and ogee gutters and circular downpipe systems from stock. Other profiles to order.
- Classical products coated in PPA571 have 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

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 will need to be repainted.

- 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



TECHNICAL POINTS

- 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

DESCRIPTION	COATING	SIZE Ø mm											
		100			115			125			150		
		PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £

HALF ROUND GUTTER AND CONNECTIONS

Half Round Gutter 1.83m length – Pack size 1 (100mm = 6.2kg, 115mm = 7.4kg, 125mm = 8.3kg & 150mm = 10.4kg) **G800**



PLUS	192551	A	70.86	192552	A	72.83	192553	A	84.83	192554	A	130.58
PRIMED	192191	A	53.33	192192	A	55.59	192193	A	65.07	192194	A	107.47

90° Angle Double Socket – Pack size 1 (100mm = 1.1kg, 115mm = 1.3kg & 125mm = 1.5kg) **G802D**



PLUS	192566	C	30.81	192567	C	32.35	192568	B	40.17	–	–	–
PRIMED	192224	B	26.92	192225	A	28.56	192226	B	37.02	–	–	–

90° Right-Hand Angle – Pack size 1 (100mm = 0.9kg, 115mm = 1.3kg, 125mm = 1.4kg & 150mm = 2.0kg) **G801**



PLUS	192500	C	26.46	192502	C	27.08	192504	C	30.88	192506	C	78.08
PRIMED	192004	A	22.28	192006	A	22.88	192008	C	26.94	192010	C	49.29

90° Left-Hand Angle – Pack size 1 (100mm = 0.9kg, 115mm = 1.3kg, 125mm = 1.4kg & 150mm = 2.0kg) **G802**



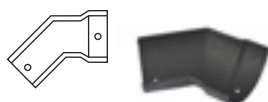
PLUS	192508	C	26.46	192510	C	27.08	192512	C	30.88	192514	C	78.08
PRIMED	192012	B	22.28	192014	A	22.88	192016	B	26.94	192018	C	49.29

135° Right-Hand Angle – Pack size 1 (100mm = 0.8kg, 115mm = 0.9kg, 125mm = 1.3kg & 150mm = 1.6kg) **G801**



PLUS	192499	C	26.46	192501	C	27.08	192503	C	37.15	192505	C	78.08
PRIMED	192003	C	22.72	192005	C	22.88	192007	C	33.90	192009	C	50.26

135° Left-Hand Angle – Pack size 1 (100mm = 0.8kg, 115mm = 0.9kg, 125mm = 1.3kg & 150mm = 1.6kg) **G802**



PLUS	192507	C	26.46	192509	C	27.08	192511	C	37.15	192513	C	78.08
PRIMED	192011	C	22.72	192013	C	22.88	192015	C	34.49	192017	C	50.26

Union Clip – Pack size 1 (100mm & 115mm = 0.5kg, 125mm = 0.7kg & 150mm = 0.7kg) **G803**



PLUS	192515	C	19.53	192516	B	22.46	192517	C	25.00	192518	C	45.09
PRIMED	192019	B	14.68	192020	A	18.29	192021	A	20.68	192022	B	23.21

Stopend for Spigot–External – Pack size 1 (100mm & 115mm = 0.4kg, 125mm = 0.6kg & 150mm = 0.6kg) **G804**



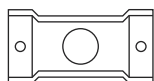
PLUS	192519	B	11.41	192520	A	13.26	192521	A	13.26	192522	C	18.93
PRIMED	192023	A	7.49	192024	A	9.66	192025	A	9.66	192026	B	13.46

Stopend for Socket–Internal – Pack size 1 (100mm & 115mm = 0.3kg, 125mm = 0.5kg & 150mm = 0.6kg) **G805**



PLUS	192523	B	11.41	192524	B	13.26	192525	B	13.26	192526	C	18.93
PRIMED	192027	A	7.49	192028	A	9.66	192029	A	9.66	192030	B	13.46

DESCRIPTION	COATING	SIZE Ø mm												
		100			115			125			150			
		PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £	
Nozzles – Pack size 1														G806



Nozzle with 65mm Outlet – (100mm = 1.1kg, 115mm = 1.3kg & 125mm = 1.4kg)										
PLUS	192527	B	25.92	192529	B	27.72	192531	C	30.88	–
PRIMED	192031	A	21.67	192033	A	23.63	192035	A	26.94	–



Nozzle with 75mm Outlet – (100mm = 1.3kg, 115mm & 125mm = 1.4kg & 150mm = 1.8kg)										
PLUS	192528	C	25.92	192530	B	27.72	192532	A	30.88	192533 C 65.81
PRIMED	192032	B	21.67	192034	A	23.63	192036	A	26.94	192037 B 46.72

Nozzle with 100mm Outlet – (150mm 1.8kg)										
PLUS	–	–	–	–	–	–	–	–	–	192534 C 65.81
PRIMED	–	–	–	–	–	–	–	–	–	192038 C 46.72

Dropend with Socket – Pack size 1	G807
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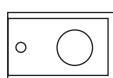
Dropend with Socket and 65mm Outlet – (100mm & 115mm = 0.9kg)										
PLUS	192535	C	33.33	192536	B	36.04	–	–	–	–
PRIMED	192039	B	25.42	192040	A	28.50	–	–	–	–



Dropend with Socket and 75mm Outlet – (125mm = 1.1kg & 150mm 1.8kg)										
PLUS	–	–	–	–	–	–	192537 B 38.95	192538 C 65.81		
PRIMED	–	–	–	–	–	–	192041 B 31.85	192042 C 53.47		

Dropend with Socket and 100mm Outlet – (150mm = 2.2kg)										
PLUS	–	–	–	–	–	–	–	–	–	192539 C 65.81
PRIMED	–	–	–	–	–	–	–	–	–	192043 C 54.50

Dropend with Spigot – Pack size 1	G808
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Dropend with Spigot and 65mm Outlet – (100mm & 115mm = 0.9kg)										
PLUS	192540	C	33.33	192541	C	36.04	–	–	–	–
PRIMED	192044	B	25.42	192045	C	28.50	–	–	–	–



Dropend with Spigot and 75mm Outlet – (125mm = 1.0kg & 150mm 1.4kg)										
PLUS	–	–	–	–	–	–	192542 C 38.95	192543 C 65.81		
PRIMED	–	–	–	–	–	–	192046 C 32.46	192047 C 54.50		

Dropend with Spigot and 100mm Outlet – (150mm = 2.2kg)										
PLUS	–	–	–	–	–	–	–	–	–	192544 C 65.81
PRIMED	–	–	–	–	–	–	–	–	–	192048 C 54.50

Cast Iron Fascia Bracket – Pack size 1 (100mm, 115mm, 125mm = 0.3kg & 150mm = 0.376kg)	G809
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PLUS	192545	A	7.95	192546	A	8.60	192547	A	9.18	192548	A	9.45
PRIMED	192049	A	6.26	192050	A	6.26	192051	A	6.26	192052	A	7.92

DESCRIPTION	COATING	SIZE Ø mm											
		100			115			125			150		
		PRODUCT CODE	^Δ DSC.	UNIT PRICE £	PRODUCT CODE	^Δ DSC.	UNIT PRICE £	PRODUCT CODE	^Δ DSC.	UNIT PRICE £	PRODUCT CODE	^Δ DSC.	UNIT PRICE £
Mild Steel Rise and Fall Bracket – Pack size 1 (100mm, 115mm, 125mm & 150mm = 0.4kg)													G872

Mild Steel Rise and Fall Bracket – Pack size 1 (100mm, 115mm, 125mm & 150mm = 0.4kg)

G872



GALV	256523	A	12.48	256524	A	12.48	256525	A	12.83	256526	B	13.05
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Please note this product is **GALVANISED** and requires painting after installation

Mild Steel Rise and Fall Bracket with retaining lip – Pack size 1 (100mm, 115mm & 125mm = 0.4kg)

G877



GALV	220703	A	12.48	220704	A	12.48	220705	A	12.83	–	–	–
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Please note this product is **GALVANISED** and requires painting after installation

Mild Steel Rise and Fall Bracket with retaining lip and understay – Pack size 1 (100mm, 115mm, 125mm & 150mm = 0.4kg)

G877



GALV	220731	B	18.39	220732	B	18.61	220733	B	20.33	220734	B	19.54
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Please note this product is **GALVANISED** and requires painting after installation

Top Fix Rafter Bracket in Galvanised Mild Steel – Pack size 1 (100mm, 115mm, 125mm & 150mm = 0.3kg)

G871



PLUS	192391	B	8.30	192392	B	8.30	192393	B	8.52	192394	C	11.43
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GALV	192247	A	5.95	192248	A	5.95	192249	A	6.18	192250	B	9.33
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Please note this product is **GALVANISED** and requires painting after installation

Side Fix Rafter Bracket in Galvanised Mild Steel – Pack size 1 (100mm, 115mm, 125mm & 150mm = 0.3kg)

G870



PLUS	192388	B	8.30	192387	B	8.30	192389	A	8.52	192390	B	11.43
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GALV	192243	A	5.95	192244	A	5.95	192245	A	6.18	192246	A	9.33
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Please note this product is **GALVANISED** and requires painting after installation

Drive-in Bracket with Retaining Lip – Pack size 1(100mm, 115mm & 125mm = 0.335kg)

G878



GALV	220706	B	13.49	220707	C	13.54	220708	C	13.57	–	–	–
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Please note this product is **GALVANISED** and requires painting after installation

ACCESSORIES

Cast Iron Jointing Kit – Pack of 20 to suit 100, 115 and 125mm sized standard half round gutter systems (0.3kg)

G873



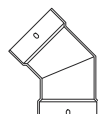
	192284	A	46.97
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Plus Coating Black Touch-up Paint–Primer – Pack size 1 (0.5 Litre Tin)

	192549	C	29.49
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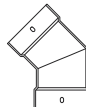
Plus Coating Black Touch-up Paint–Top Coat – Pack size 1 (0.5 Litre Tin)

	192550	B	29.49
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DESCRIPTION	COATING	SIZE Ø mm								
		100			115			125		
		PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £
BEADED HALF ROUND GUTTER AND CONNECTIONS										
Half Round Gutter 1.83m length – Pack size 1 (100mm = 9.0kg, 115mm = 10.8kg & 125mm = 12.2kg)										G820
 	PLUS	223167	C	70.94	213645	B	74.04	209694	C	82.36
	PRIMED	192197	A	53.33	192198	A	55.59	192199	A	65.07
90° Angle Double Socket – Pack size 1 (100mm = 1.3kg, 115mm = 1.7kg & 125mm = 1.8kg)										G822D
 	PLUS	248068	C	27.84	246992	C	28.25	240067	C	34.43
	PRIMED	238998	B	23.11	236531	A	23.41	238999	A	28.52
135° Angle Double Socket – Pack size 1 (100mm = 1.0kg, 115mm = 1.3kg & 125mm = 1.4kg)										G822D
 	PLUS	248067	C	27.84	248070	C	28.25	248071	C	34.43
	PRIMED	238996	C	23.11	236532	B	23.41	238997	C	28.52
Union Clip – Pack size 1 (100mm , 115mm = 0.7kg & 125mm = 0.8kg)										G823
 	PLUS	223172	C	17.67	213643	C	21.57	209691	C	24.96
	PRIMED	192091	B	14.65	192092	B	17.88	192093	B	20.68
Stop End for Spigot External – Pack size 1 (100mm , 115mm & 125mm = 0.5kg)										G824
 	PLUS	223173	C	9.03	213617	B	11.67	209680	C	11.71
	PRIMED	192094	B	7.49	192095	A	9.66	192096	A	9.69
Stop End for Socket Internal – Pack size 1 (100mm = 0.3kg, 115mm = 0.4kg & 125mm = 0.5kg)										G825
 	PLUS	223174	C	9.03	213616	B	11.67	209678	C	11.67
	PRIMED	192097	C	7.49	192098	A	9.66	192099	B	9.69
Nozzles – Pack size 1										G826
 	Nozzle with 65mm Outlet – (100mm = 1.36kg, 115mm = 1.46kg & 125mm = 1.45kg)									
	PLUS	223175	C	27.84	213615	C	28.49	223179	C	33.75
	PRIMED	192100	A	23.08	192101	A	23.63	192103	B	27.95
	Nozzle with 75mm Outlet – (115mm = 1.4kg & 125mm = 1.5kg)									
	PLUS	–	–	–	223176	C	29.03	209677	C	33.75
PRIMED	–	–	–	192102	B	24.09	192104	B	27.95	
Cast Iron Fascia Bracket – Pack size 1 (100mm, 115mm & 125mm = 0.3kg)										G809
 	PLUS	192545	A	7.95	192546	A	8.60	192547	A	9.18
	PRIMED	192049	A	6.26	192050	A	6.26	192051	A	6.26
Mild Steel Rise and Fall Bracket – Pack size 1 (100mm, 115mm & 125mm = 0.4kg)										G872
	GALV	256523	A	12.48	256524	A	12.48	256525	A	12.83

Please note this product is **GALVANISED** and requires painting after installation

Please note this product is **GALVANISED** and requires painting after installation

DESCRIPTION	COATING	SIZE Ø mm						
		100 x 75mm			125 x 75mm			
		PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £	
DEEP HALF ROUND GUTTER AND CONNECTIONS								
Gutter 1.83m length – Pack size 1 (100 x 75mm = 13.6kg & 125 x 75mm = 14.0kg)								
		PLUS	218539	C	109.34	210572	C	141.29
		PRIMED	192195	A	89.28	192196	A	115.38
90° Right Hand Angle – Pack size 1 (100 x 75mm = 3.2kg)								
		PLUS	219622	C	70.01	–	–	–
		PRIMED	192054	C	61.21	–	–	–
135° Right Hand Angle – Pack size 1 (100 x 75mm = 3.2kg)								
		PLUS	223180	C	70.01	–	–	–
		PRIMED	192053	C	61.21	–	–	–
90° Left Hand Angle – Pack size 1 (100 x 75mm = 3.2kg)								
		PLUS	219623	C	70.01	–	–	–
		PRIMED	192058	C	61.21	–	–	–
135° Left Hand Angle – Pack size 1 (100 x 75mm = 3.2kg)								
		PLUS	223181	C	70.01	–	–	–
		PRIMED	192057	C	61.21	–	–	–
90° Double Socket Angle – Pack size 1 (125 x 75mm = 3.4kg)								
		PLUS	–	–	–	258066	C	88.83
		PRIMED	–	–	–	256634	B	77.72
135° Double Socket Angle – Pack size 1 (125 x 75mm = 3.4kg)								
		PLUS	–	–	–	257921	C	88.83
		PRIMED	–	–	–	256635	C	77.72
Union Clip – Pack size 1 (100 x 75mm & 125 x 75mm = 0.5kg)								
		PLUS	219624	C	31.17	223186	C	33.02
		PRIMED	192061	C	24.54	192062	C	25.99
Stop End for Spigot–External – Pack size 1 (100 x 75mm = 0.8kg & 125 x 75mm = 0.7kg)								
		PLUS	218552	C	24.57	210558	C	30.27
		PRIMED	192063	B	21.51	192064	B	26.49

DESCRIPTION	COATING	SIZE Ø mm					
		100 x 75mm			125 x 75mm		
		PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £
Stop End for Socket–Internal – Pack size 1 (100 x 75mm & 125 x 75mm = 0.6kg)							G815



PLUS	218553	C	24.57	210557	C	30.27
PRIMED	192065	C	21.51	192066	B	26.49

Nozzles – Pack size 1**G816****Nozzle with 65mm Outlet – (100 x 75mm = 1.8kg & 125 x 75mm = 2.5kg)**

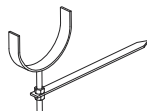
PLUS	223182	C	70.01	223187	C	90.60
PRIMED	192067	C	61.21	192069	C	79.27

**Nozzle with 75mm Outlet – (100 x 75mm = 1.8kg & 125 x 75mm = 2.5kg)**

PLUS	218554	C	70.01	210559	C	88.83
PRIMED	192068	C	61.21	192070	B	77.72

Cast Iron Fascia Bracket – Pack size 1 (100 x 75mm = 0.3kg & 125 x 75mm = 0.7kg)**G819**

PLUS	218555	C	24.12	210571	C	29.70
PRIMED	192077	A	21.09	192078	A	25.99

Mild Steel Rise and Fall Bracket – Pack size 1 (100 x 75mm = 0.185kg & 125 x 75mm = 0.488kg)

GALV	227013	B	18.05	225821	B	19.27
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Please note this product is **GALVANISED** and requires painting after installation**Top Fix Rafter Bracket in Galvanised Mild Steel – Pack size 1 (100 x 75mm = 0.25kg & 125 x 75mm = 0.36kg)**

GALV	225560	B	20.22	206955	B	21.03
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Please note this product is **GALVANISED** and requires painting after installation**Side Fix Rafter Bracket in Galvanised Mild Steel – Pack size 1 (100 x 75mm = 0.5kg & 125 x 75mm = 0.34kg)**

GALV	214902	C	21.03	225051	A	22.67
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Please note this product is **GALVANISED** and requires painting after installation

DESCRIPTION	COATING	SIZE Ø mm								
		100			115			125		
		PRODUCT CODE	^Δ DSC.	UNIT PRICE £	PRODUCT CODE	^Δ DSC.	UNIT PRICE £	PRODUCT CODE	^Δ DSC.	UNIT PRICE £

Ogee Gutter AND CONNECTIONS

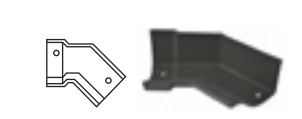
Ogee Gutter 1.83m length – Pack size 1 (100mm = 9.0kg, 115mm = 10.5kg & 125mm = 12.5kg) **G840**

	PLUS	199748	B	80.91	199803	B	84.11	199824	B	87.62
	PRIMED	192204	A	59.47	192206	A	65.43	192208	A	68.65

90° Internal Angle – Pack size 1 (100mm = 1.0kg, 115mm = 1.5kg & 125mm = 1.9kg) **G841**

	PLUS	199793	C	27.26	199805	C	28.91	199828	C	30.88
	PRIMED	192137	C	23.21	192139	C	25.15	192141	C	27.43

135° Internal Angle – Pack size 1 (100mm & 115mm = 1.0kg & 125mm = 1.8kg) **G841**

	PLUS	199792	C	27.58	199804	C	29.74	199827	C	37.61
	PRIMED	192136	C	24.11	192138	C	26.14	192140	C	34.48

90° External Angle – Pack size 1 (100mm = 1.0kg, 115mm = 1.4kg & 125mm = 1.5kg) **G842**

	PLUS	199795	C	27.26	199780	C	28.91	199830	C	30.88
	PRIMED	192143	C	23.21	192145	B	25.15	192147	B	27.43

135° External Angle – Pack size 1 (100mm = 1.0kg, 115mm = 1.1kg & 125mm = 1.4kg) **G842**

	PLUS	199794	C	27.58	199806	C	29.74	199829	C	37.61
	PRIMED	192142	C	24.11	192144	C	26.14	192146	C	34.48

Union Clip – Pack size 1 (100mm, 115mm & 125mm = 0.7kg) **G843**

	PLUS	199796	C	19.53	199813	C	22.10	199851	C	25.00
	PRIMED	192148	C	14.68	192149	B	17.88	192150	B	20.68

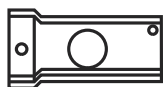
Stop End for Socket–Internal – Pack size 1 (100mm = 0.3kg, 115mm & 125mm = 0.5kg) **G844**

	PLUS	199798	C	11.50	199814	C	13.35	199852	C	15.03
	PRIMED	192151	B	7.65	192152	B	9.91	192153	B	9.91

Stop End for Spigot–External – Pack size 1 (100mm & 115mm = 0.5kg & 125mm = 0.6kg) **G845**

	PLUS	199800	C	11.50	199815	C	13.35	199871	C	15.03
	PRIMED	192154	B	7.65	192155	B	9.91	192156	B	9.91

DESCRIPTION	COATING	SIZE Ø mm								
		100			115			125		
		PRODUCT CODE	^Δ DISC.	UNIT PRICE £	PRODUCT CODE	^Δ DISC.	UNIT PRICE £	PRODUCT CODE	^Δ DISC.	UNIT PRICE £

Nozzles – Pack size 1**G846****Nozzle with 65mm Outlet – (100mm = 1.3kg, 115mm = 1.5kg & 125mm = 1.9kg)**

PLUS	199801	C	27.53	199834	C	28.99	199873	C	31.24
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PRIMED	192157	B	23.64	192158	B	25.15	192159	C	27.43
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**Nozzle with 75mm Outlet – (125mm = 1.9kg)**

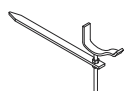
PLUS	–	–	–	–	–	–	199874	C	31.24
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PRIMED	–	–	–	–	–	–	192160	B	27.43
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Fascia Bracket – Pack size 1 (100mm & 115mm = 0.3kg & 125mm = 0.5kg)**G849**

PLUS	199802	B	8.39	199837	B	9.03	199876	B	10.38
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PRIMED	192169	A	6.78	192170	A	6.78	192171	A	7.67
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Rise and Fall Bracket – Pack size 1 (100mm, 115mm & 125mm = 0.5kg)**G874**

GALV	256528	C	13.12	256529	C	13.12	256530	C	13.24
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Please note this product is **GALVANISED** and requires painting after installation**Top Fix Rafter Bracket in Galvanised Mild Steel – Pack size 1 (100mm, 115mm & 125mm = 0.4kg)****G875**

GALV	208282	C	9.69	208283	C	9.69	208284	B	10.25
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Please note this product is **GALVANISED** and requires painting after installation**Side Fix Rafter Bracket in Galvanised Mild Steel – Pack size 1 (100mm, 115mm & 125mm = 0.4kg)****G876**

GALV	208285	C	9.69	208286	C	9.69	208287	C	10.25
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Please note this product is **GALVANISED** and requires painting after installation

DESCRIPTION	COATING	SIZE Ø mm								
		100 x 75mm			125 x 100mm			150 x 100mm		
		PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £

MOULDED GUTTER AND CONNECTIONS

Moulded Gutter 1.83m length – Pack size 1 (100 x 75mm = 11kg, 125 x 100mm = 18kg & 150 x 100mm = 19kg) **G830**



PLUS	204868	B	125.15	206382	B	183.48	223199	B	272.20
PRIMED	192200	A	102.20	192202	A	149.83	192621	A	222.26

90° Internal Angle – Pack size 1 (100 x 75mm = 2.0kg, 125 x 100mm = 2.3kg & 150 x 100mm = 3.4kg) **G831**



PLUS	223188	C	68.14	206383	C	97.87	223200	C	133.39
PRIMED	192113	C	56.46	192115	C	81.11	192668	B	110.53

90° External Angle – Pack size 1 (100 x 75mm = 2.0kg, 125 x 100mm = 2.3kg & 150 x 100mm = 3.4kg) **G832**



PLUS	204869	C	68.14	206385	C	97.87	223202	C	133.39
PRIMED	192117	C	57.56	192119	C	81.11	208227	B	110.53

135° Internal Angle – Pack size 1 (100 x 75mm = 2.0kg, 125 x 100mm = 3.2kg & 150 x 100mm = 2.6kg) **G831**



PLUS	223189	C	68.14	223194	C	97.87	223201	C	133.39
PRIMED	192112	C	56.46	192114	C	81.11	208230	C	110.53

135° External Angle – Pack size 1 (100 x 75mm = 1.2kg, 125 x 100mm = 1.5kg & 150 x 100mm = 2.6kg) **G832**



PLUS	223190	C	69.42	223195	C	97.87	223203	C	133.39
PRIMED	192116	C	57.56	192118	C	81.11	208272	C	110.53

Union Clip – Pack size 1 (100 x 75mm = 0.5kg, 125 x 100mm = 0.6kg & 150 x 100mm = 0.7kg) **G833**



PLUS	223191	C	29.03	206386	C	33.67	223204	C	44.49
PRIMED	192120	C	24.09	192121	B	27.91	208276	B	36.86

Stop End for Spigot–Left Hand – Pack size 1 (100 x 75mm = 0.5kg, 125 x 100mm = 0.7kg & 150 x 100mm = 0.8kg) **G834**



PLUS	204874	C	26.02	206388	C	33.67	223205	C	44.49
PRIMED	192122	C	21.56	192123	C	27.91	192665	B	36.86

Stop End for Spigot–Right Hand – Pack size 1 (100 x 75mm = 0.7kg, 125 x 100mm = 0.9kg & 150 x 100mm = 1.0kg) **G835**



PLUS	204875	C	26.02	206387	C	33.67	223206	C	44.49
PRIMED	192124	C	21.56	192125	C	27.91	192666	B	36.86

DESCRIPTION	COATING	SIZE Ø mm									
		100 x 75mm			125 x 100mm			150 x 100mm			
		PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £	
Nozzles – Pack size 1											G836



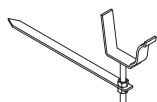
Nozzle with 65mm Outlet – (100 x 75mm & 125 x 100mm = 2kg & 150 x 100mm = 3.9kg)										
PLUS	223192	C	POA	223196	C	POA	223207	C	POA	
PRIMED	192126	B	POA	192128	C	POA	221821	C	POA	
Nozzle with 75mm Outlet – (100 x 75mm & 125 x 100mm = 2kg & 150 x 100mm = 3.9kg)										
PLUS	204876	C	POA	206390	C	POA	223208	C	POA	
PRIMED	192127	B	POA	192129	C	POA	192667	B	POA	
Nozzle with 100mm Outlet – (125 x 100mm = 2kg & 150 x 100mm = 4.0kg)										
PLUS	–	–	–	223197	C	POA	223209	C	POA	
PRIMED	–	–	–	192130	C	POA	208273	B	POA	
Nozzle with 100 x 75mm Outlet – (125 x 100mm = 2.3kg & 150 x 100mm = 4kg)										
PLUS	–	–	–	206389	C	POA	223210	C	POA	
PRIMED	–	–	–	192131	C	POA	206930	C	POA	

Fascia Bracket – Pack size 1 (100 x 75mm = 0.5kg, 125 x 100mm & 150 x 100mm = 0.6kg) **G839**



PLUS	223193	C	13.78	223198	C	13.78	223212	C	13.61	
PRIMED	192267	A	11.42	192242	A	11.42	192623	A	12.35	

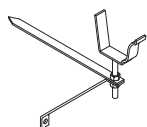
Rise and Fall Bracket in Galvanised Mild Steel – Pack size 1 (100 x 75mm = 0.4kg, 125 x 100mm = 0.5kg & 150 x 100mm = 0.6kg)



GALV	†240305	C	31.45	†230033	C	39.11	†248203	C	39.11	
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Please note this product is **GALVANISED** and requires painting after installation

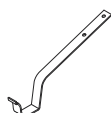
Rise and Fall Bracket with Understay in Galvanised Mild Steel – Pack size 1 (100 x 75mm = 0.5kg, 125 x 100mm = 0.6kg & 150 x 100mm = 0.7kg)



GALV	†MTO	C	POA	†MTO	C	POA	†226093	C	47.20	
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Please note this product is **GALVANISED** and requires painting after installation

Top Fix Rafter Bracket in Galvanised Mild Steel – Pack size 1 (100 x 75mm = 0.2kg, 125 x 100mm & 150 x 100mm = 0.3kg)



GALV	†230392	C	28.50	233283	C	30.94	222138	C	34.21	
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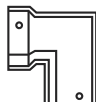
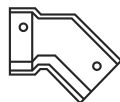
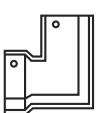
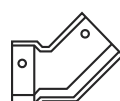
Please note this product is **GALVANISED** and requires painting after installation

Side Fix Rafter Bracket in Galvanised Mild Steel – Pack size 1 (100 x 75mm = 0.2kg, 125 x 100mm & 150 x 100mm = 0.3kg)



GALV	†239379	C	POA	223380	C	33.05	226081	C	36.01	
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Please note this product is **GALVANISED** and requires painting after installation

DESCRIPTION	COATING	SIZE Ø mm			
		115mm			
		PRODUCT CODE	ΔDSC.	UNIT PRICE £	
NOTTS OG GUTTER AND CONNECTIONS					
Notts OG Gutter 1.83m length – Pack size 1 (115mm = 14.5kg)					
G850					
		PLUS	219546	C	129.36
		PRIMED	192210	A	105.64
90° Internal Angle – Pack size 1 (115mm = 2kg)					
G851					
		PLUS	219532	C	69.62
		PRIMED	192173	C	60.93
135° Internal Angle – Pack size 1 (115mm = 2kg)					
G851					
		PLUS	223213	C	69.62
		PRIMED	192172	C	60.93
90° External Angle – Pack size 1 (115mm = 2kg)					
G852					
		PLUS	219533	C	69.62
		PRIMED	192175	C	60.93
135° External Angle – Pack size 1 (115mm = 2kg)					
G852					
		PLUS	223214	C	69.62
		PRIMED	192174	C	60.93
Union Clip – Pack size 1 (115mm = 0.8kg)					
G853					
		PLUS	219538	C	28.61
		PRIMED	192176	C	25.04
Stop End for Spigot–External – Pack size 1 (115mm = 0.6kg)					
G854					
		PLUS	219536	C	23.55
		PRIMED	192177	A	20.62
Stop End for Socket–Internal – Pack size 1 (115mm = 0.6kg)					
G855					
		PLUS	219537	C	23.55
		PRIMED	192178	A	20.62

DESCRIPTION	COATING	SIZE Ø mm		
		115mm		
		PRODUCT CODE	ΔDSC.	UNIT PRICE £
Nozzles – Pack size 1				G856


Nozzle with 65mm Outlet – (115mm = 2.4kg)

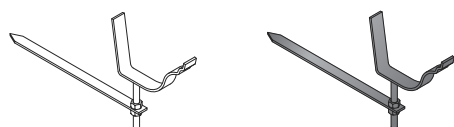
PLUS	223215	C	81.93
PRIMED	192179	C	71.65

Nozzle with 75mm Outlet – (115mm = 2.4kg)

PLUS	219535	C	68.49
PRIMED	192180	B	59.91

Fascia Bracket to suit Notts OG – Pack size 1 (115mm = 0.5kg)


PLUS	219539	C	23.55
PRIMED	192183	A	20.62

Rise and Fall Bracket in Galvanised Mild Steel to suit Notts OG – Pack size 1 (115mm = 0.4kg)


GALVANISED	220963	B	34.60
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Please note this product is **GALVANISED** and requires painting after installation

Top Fix Rafter Bracket in Galvanised Mild Steel to suit Notts OG – Pack size 1 (115mm = 0.2kg)


GALVANISED	+221397	C	26.31
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Please note this product is **GALVANISED** and requires painting after installation

Side Fix Rafter Bracket in Galvanised Mild Steel to suit Notts OG – Pack size 1 (115mm = 0.2kg)

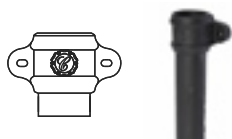

GALVANISED	220964	C	19.93
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Please note this product is **GALVANISED** and requires painting after installation

DESCRIPTION	COATING	SIZE Ø mm								
		65mm			75mm			100mm		
		PRODUCT CODE	^Δ DSC.	UNIT PRICE £	PRODUCT CODE	^Δ DSC.	UNIT PRICE £	PRODUCT CODE	^Δ DSC.	UNIT PRICE £

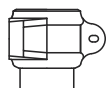
ROUND PIPES AND FITTINGS

Single Socket Pipes—Eared 1.83m length – Pack size 1 (65mm = 10.3kg, 75mm = 12.5kg & 100mm = 16kg) **A585**



PLUS	192448	A	122.61	192450	A	122.61	192452	A	172.73
PRIMED	191912	A	103.86	191916	A	103.86	191919	A	139.49

Corner Pipes—Eared 1.83m length – Pack size 1 (65mm = 10.3kg, 75mm = 12.5kg & 100mm = 16kg) **A585**



PLUS	–	–	–	–	–	–	247761	C	251.84
PRIMED	244025	–	POA	266982	–	POA	241867	C	POA

Single Socket Pipes—No Ears 1.83m length – Pack size 1 (65mm = 10.1kg, 75mm = 12.1kg & 100mm = 15.5kg) **A585**



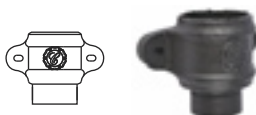
PLUS	192447	B	116.48	192449	A	116.48	192451	C	165.87
PRIMED	191910	A	97.20	191914	A	97.20	191918	A	132.69

Plain Barrels 1.75m length – Pack size 1 (65mm = 9kg, 75mm = 11kg & 100mm = 14kg) **A585**



PLUS	192558	B	95.83	192559	A	95.83	192560	B	131.44
PRIMED	192216	A	83.19	192217	A	83.19	192218	A	110.93

Loose Sockets—Eared – Pack size 1 (65mm = 1.3kg, 75mm = 1.5kg & 100mm = 2kg) **A586**



PLUS	192453	A	27.95	192454	A	27.95	192455	B	35.20
PRIMED	191921	A	20.31	191922	A	20.31	191923	A	27.43

Loose Sockets—No Ears – Pack size 1 (65mm = 0.9kg, 75mm = 1.1kg & 100mm = 1.3kg) **A586**



PLUS	192561	C	22.54	192562	B	22.54	192563	C	29.43
PRIMED	192219	A	15.15	192220	A	15.15	192221	B	21.81

Corner Loose Sockets – Pack size 1 (75mm = 2kg)



PLUS	–	–	–	266859	C	59.89	–	–	–
PRIMED	–	–	–	266858	C	POA	–	–	–

Cast Iron Wall Spacer Plate for use with Eared Classical Rainwater Pipes and Shoes – Pack size 1 (65mm = 0.2kg, 75mm = 0.3kg & 100mm = 0.4kg) **A584**



PLUS	192555	B	10.50	192556	B	10.69	192557	A	10.77
PRIMED	192213	A	8.84	192214	A	8.99	192215	A	9.14

30mm Wood Bobbins—one size fits all – Pack size 10 (65mm, 75mm & 100mm = 0.1kg)



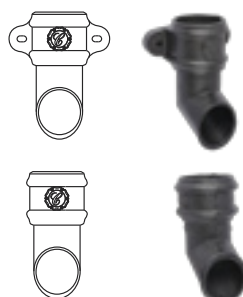
–	242200	A	18.89						
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Pipe Nails – Pack size 10



–	–	–	242231	B	5.60	242232	A	6.30	
					Length 75mm			Length 100mm	

DESCRIPTION	COATING	SIZE Ø mm								
		65mm			75mm			100mm		
		PRODUCT CODE	^Δ DSC.	UNIT PRICE £	PRODUCT CODE	^Δ DSC.	UNIT PRICE £	PRODUCT CODE	^Δ DSC.	UNIT PRICE £

Shoes Front – Pack size 1
A588


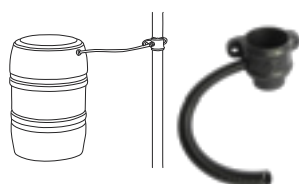
Shoes Front–Eared – (65mm = 2.3kg, 75mm = 2.8kg & 100mm = 4.5kg)										
PLUS	192456	A	58.51	192457	A	58.51	192458	B	74.35	
PRIMED	191924	A	50.63	191925	A	50.63	191926	A	67.24	
Shoes Front–No Ears – (65mm = 2.2kg, 75mm = 2.3kg & 100mm = 3.8kg)										
PLUS	192569	C	51.69	192570	C	51.69	192459	C	67.36	
PRIMED	192227	A	43.93	192228	B	43.93	191927	C	59.16	

Anti-Splash Shoes – Pack size 1
A589


Anti-Splash Shoes–Eared – (65mm = 4.5kg & 75mm = 4.2kg)										
PLUS	259748	C	69.68	259752	C	69.68	–	–	–	
PRIMED	259738	C	63.32	259744	C	63.32	–	–	–	
Anti-Splash Shoes–No Ears – (65mm = 4kg & 75mm = 3.7kg)										
PLUS	259750	C	67.14	259753	C	67.14	–	–	–	
PRIMED	259742	C	60.79	259746	C	60.79	–	–	–	

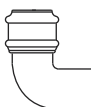
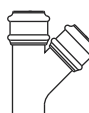
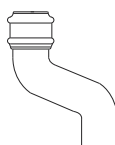
Access Pipe – Pack size 1
A590


Access Pipe–Eared – (65mm = 2.9kg, 75mm = 3.8kg & 100mm = 5.5kg)										
PLUS	192412	C	123.64	192413	C	129.34	192565	C	187.69	
PRIMED	192410	C	114.04	192411	C	118.30	192223	C	166.44	
Access Pipe–No Ears – (65mm = 2.4kg, 75mm = 3.4kg & 100mm = 4.9kg)										
PLUS	192460	C	87.60	192461	C	91.72	192564	C	158.26	
PRIMED	191928	A	78.89	191929	B	82.82	192222	B	147.56	

Diverter Kits – Pack size 1 – include Tank Connector and Collector Pipe, packed in a bag, with fixing instructions
A593


Water Butt not included

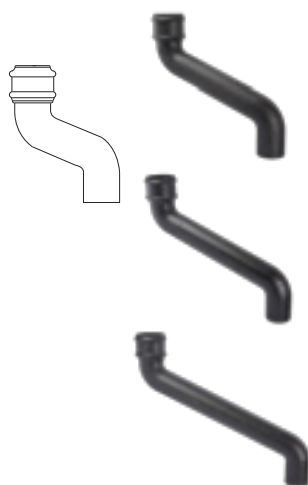
Diverter Kits–Left Hand Connection Waterbutt – (65mm = 1.6kg & 75mm = 1.8kg)										
PLUS	192397	C	68.67	192398	C	68.67	–	–	–	
PRIMED	192395	C	59.99	192396	C	59.99	–	–	–	
Diverter Kits–Right Hand Connection Waterbutt – (65mm = 1.6kg & 75mm = 1.8kg)										
PLUS	217407	C	68.67	217409	C	68.67	–	–	–	
PRIMED	214840	C	59.99	217408	B	59.99	–	–	–	

DESCRIPTION		COATING	SIZE Ø mm								
			65mm			75mm			100mm		
			PRODUCT CODE	^Δ DSC.	UNIT PRICE £	PRODUCT CODE	^Δ DSC.	UNIT PRICE £	PRODUCT CODE	^Δ DSC.	UNIT PRICE £
92° Bends – Pack size 1 (65mm = 1.9kg, 75mm = 2.6kg & 100mm = 4.3kg)											A591
 	PLUS	192462	B	38.40	192465	B	45.24	192468	B	61.18	
	PRIMED	191930	A	31.00	191933	A	37.62	191936	B	53.15	
112° Bends – Pack size 1 (65mm = 1.9kg, 75mm = 2.3kg & 100mm = 3.8kg)											A591
 	PLUS	192463	B	38.40	192466	B	45.24	192469	C	61.18	
	PRIMED	191931	A	31.60	191934	A	37.62	191937	A	53.15	
135° Bends – Pack size 1 (65mm = 1.6kg, 75mm = 1.9kg & 100mm = 2.9kg)											A591
 	PLUS	192464	C	38.40	192467	B	43.07	192470	C	86.73	
	PRIMED	191932	A	31.00	191935	A	35.51	191938	A	78.01	
92° Branches – Pack size 1 (65mm = 3kg, 75mm = 4kg & 100mm = 5.9kg)											A592
 	PLUS	192471	C	72.60	192474	C	79.31	192477	C	92.87	
	PRIMED	191939	C	65.07	191942	C	71.74	191945	C	83.61	
112° Branches – Pack size 1 (65mm = 3kg & 75mm = 3.5kg)											A592
 	PLUS	192472	C	72.60	192475	B	79.31	–	–	–	
	PRIMED	191940	B	65.07	191943	B	71.74	–	–	–	
135° Branches – Pack size 1 (65mm = 3.3kg & 75mm = 3.6kg)											A592
 	PLUS	192473	C	72.60	192476	B	79.31	–	–	–	
	PRIMED	191941	B	65.07	191944	C	71.74	–	–	–	
Offsets – Pack size 1											A594
 	75mm Projection Offset – (65mm = 2.3kg, 75mm = 2.7kg & 100mm = 4.7kg)										
	PLUS	192478	B	55.28	192485	B	55.28	192492	C	98.49	
 	115mm Projection Offset – (65mm = 2.6kg, 75mm = 2.7kg & 100mm = 4.1kg)										
	PLUS	192479	B	55.28	192486	C	55.28	192493	C	98.49	
 	150mm Projection Offset – (65mm = 3.2kg, 75mm = 3.5kg & 100mm = 5.9kg)										
	PLUS	192480	B	55.28	192487	B	55.28	192494	C	98.49	
 	225mm Projection Offset – (65mm = 3.4kg, 75mm = 3.8kg & 100mm = 6.2kg)										
	PLUS	192481	C	63.32	192488	B	63.32	192495	C	117.91	
	PRIMED	191949	A	55.21	191956	A	55.21	191963	B	108.40	

DESCRIPTION	COATING	SIZE Ø mm								
		65mm			75mm			100mm		
		PRODUCT CODE	^Δ DSC.	UNIT PRICE £	PRODUCT CODE	^Δ DSC.	UNIT PRICE £	PRODUCT CODE	^Δ DSC.	UNIT PRICE £

Offsets continued – Pack size 1

A594



305mm Projection Offset – (65mm = 3.8kg, 75mm = 5kg & 100mm = 6.4kg)										
PLUS	192482	C	73.02	192489	C	76.26	192496	C	117.91	
PRIMED	191950	A	64.72	191957	B	67.89	191964	C	110.52	
380mm Projection Offset – (65mm = 4.5kg, 75mm = 6.4kg & 100mm = 6.8kg)										
PLUS	192483	C	139.15	192490	C	143.28	192497	C	187.44	
PRIMED	191951	B	129.07	191958	B	129.07	191965	C	176.24	
455mm Projection Offset – (65mm = 5.9kg, 75mm = 6.8kg & 100mm = 7.7kg)										
PLUS	192484	C	161.75	192491	C	161.75	192498	C	226.53	
PRIMED	191952	B	151.15	191959	B	151.15	191966	C	218.31	

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

Wall Bracket – Pack size 1 (65mm & 75mm = 0.2kg & 100mm = 0.4kg)

A548



PLUS	192400	B	21.10	192401	A	21.24	192402	A	21.43	
GALV	192301	A	17.77	192302	A	17.86	192303	A	18.06	

Please note this product is **GALVANISED** and requires painting after installation

Pipe Clip with Spike – Pack size 1 (65mm = 0.2kg, 75mm = 0.3kg & 100mm = 0.4kg)

A549



GALV	223286	C	28.79	223134	C	30.12	223133	B	30.12	
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Please note this product is **GALVANISED** and requires painting after installation

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

Drive-In Spike – Pack size 1 (65mm = 0.2kg, 75mm = 0.3kg & 100mm = 0.4kg)

A549



PRIMED	256541	A	6.66	256542	A	6.66	–	–	–	
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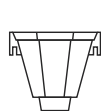
Pipes and fittings outside the standard range will be considered for manufacture on a quotational basis

DESCRIPTION	COATING	SIZE Ø mm								
		65mm			75mm			100mm		
		PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £	PRODUCT CODE	ΔDSC.	UNIT PRICE £

RAINWATER HEADS

Flat Hopper Heads – Pack size 1 (65mm = 3.9kg, 75mm = 4kg & 100mm = 6.2kg)

A750



Flat Hopper Heads 210 x 160 x 185mm

PLUS	192441	C	138.59	192442	C	138.59	–	–	–
PRIMED	191904	B	128.55	191905	C	128.55	–	–	–

Flat Hopper Heads 250 x 215 x 215mm

PLUS	–	–	–	–	–	–	192443	C	159.82
PRIMED	–	–	–	–	–	–	191906	C	152.35

Flat Hoppers 305 x 186 x 200mm – Pack size 1 (65mm & 75mm = 6kg)

A751



PLUS	222661	C	139.81	222663	C	139.81	–	–	–
PRIMED	222660	C	128.43	222662	B	128.43	–	–	–

Flat Hopper Corners – Pack size 1 (65mm & 75mm = 6kg)

A751



PLUS	†222661	C	139.81	236421	C	132.73	–	–	–
PRIMED	†230093	C	131.28	234336	C	131.28	–	–	–

Box Heads 225 x 125 x 125mm – Pack size 1 (65mm & 75mm = 3.6kg)

A841



PLUS	192444	C	196.66	192445	C	196.66	–	–	–
PRIMED	191907	C	178.69	191908	C	178.69	–	–	–

Box Head 280 x 150 x 130mm – Pack size 1 (100mm = 5.4kg)

A842



PLUS	–	–	–	–	–	–	192446	C	265.32
PRIMED	–	–	–	–	–	–	191909	C	246.74

Rectangular Head 300 x 250 x 200mm – Pack size 1 (65mm, 75mm & 100mm = 12.4kg)

A484



PLUS	192435	C	261.81	192436	C	261.81	192437	C	271.91
PRIMED	191897	C	232.09	191898	B	232.09	191899	B	232.09

Castellated Rectangular Head 250 x 180 x 175mm – Pack size 1 (65mm = 6.8kg)

A485



PLUS	192438	C	241.70	–	–	–	–	–	–
PRIMED	191901	C	166.62	–	–	–	–	–	–

Rectangular Head 250 x 180 x 175mm – Pack size 1 (75mm & 100mm = 6.8kg)

A485



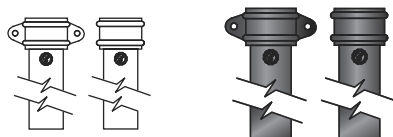
PLUS	–	–	–	192439	C	188.41	192440	C	188.41
PRIMED	–	–	–	191902	B	166.62	191903	B	166.62

DESCRIPTION		COATING	SIZE Ø mm		
			100 x 75mm		
			PRODUCT CODE	ΔDSC.	UNIT PRICE £

RECTANGULAR PIPES & FITTINGS

Classical Pipes 1.83m length – Pack size 1 (100 x 75mm = 30kg)

A601



Classical Pipes–Eared

PRIMED	191968	A	299.54
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Classical Pipes–No ears

PRIMED	191967	A	294.64
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Front Shoe – Pack size 1

A603



Front Shoe–Eared – (100 x 75mm = 4.8kg)

PRIMED	191970	C	202.58
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Front Shoe–No ears – (100 x 75mm = 4.5kg)

PRIMED	191969	C	165.02
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Side Shoe – Pack size 1

A613



Side fittings diagrams are Right Handed

Right Hand Side Shoe–Eared – (100 x 75mm = 5.4kg)

PRIMED	191999	C	251.43
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Left Hand Side Shoe–Eared – (100 x 75mm = 5.9kg)

PRIMED	192000	C	251.43
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No ears – (100 x 75mm = 5.9kg)

PRIMED	191998	A	201.09
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Loose Socket – Pack size 1

A604



Loose Socket–Eared – (100 x 75mm = 3.2kg)

PRIMED	191972	C	103.57
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Loose Socket–No ears – (100 x 75mm = 2.5kg)

PRIMED	191971	C	98.25
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Built in Holderbat – Pack size 1 (100 x 75mm = 2kg)

A605



PRIMED	191973	C	83.82
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Earbands – Pack size 1

A606



Ornamental Earbands (as Trefoil) – (100 x 75mm = 1.4kg)

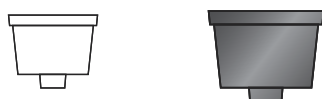
PRIMED	191974	B	66.81
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Plain Earbands – (100 x 75mm = 1.6kg)

PRIMED	191975	C	64.64
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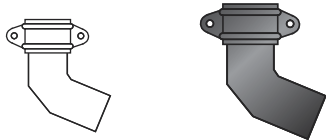
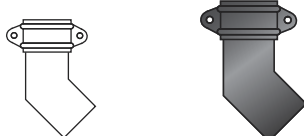
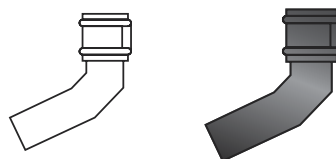
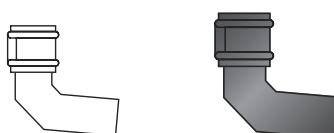
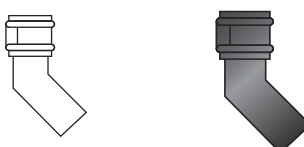
Rectangular Head 300 x 250 x 200mm – Pack size 1 (100 x 75mm = 12.4kg)

A484

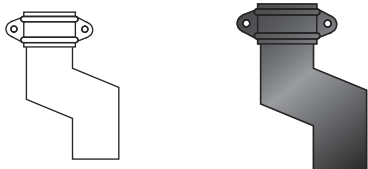


PRIMED	191900	C	232.09
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Please note that Rectangular Pipes and Fittings can be supplied in the Plus finish coat on a made to order basis

DESCRIPTION		COATING	SIZE Ø mm		
			100 x 75mm		
			PRODUCT CODE	^Δ DSC.	UNIT PRICE £
112.5° Side Bends – Pack size 1		A607			
	Right Hand 112.5° Side Bends–Eared – (100 x 75mm = 6.8kg)				
	PRIMED	191978	C	192.80	
	Left Hand 112.5° Side Bends–Eared – (100 x 75mm = 6.8kg)				
PRIMED	191977	C	192.80		
112.5° Side Bends–No Ears – (100 x 75mm = 6.6kg)					
PRIMED	191976	C	152.53		
92.5° Side Bends – Pack size 1		A608			
	Right Hand 92.5° Side Bends–Eared – (100 x 75mm = 8.2kg)				
	PRIMED	191980	C	192.80	
	Left Hand 92.5° Side Bends–Eared – (100 x 75mm = 8.2kg)				
PRIMED	197170	C	192.80		
92.5° Side Bends–No Ears – (100 x 75mm = 7.8kg)					
PRIMED	191979	C	152.53		
135° Side Bends – Pack size 1		A609			
	Right Hand 135° Side Bends–Eared – (100 x 75mm = 6kg)				
	PRIMED	191983	C	192.80	
	Left Hand 135° Side Bends–Eared – (100 x 75mm = 6kg)				
PRIMED	191982	C	192.80		
135° Side Bends–No Ears – (100 x 75mm = 5.8kg)					
PRIMED	191981	C	152.53		
112° Front Bends – Pack size 1		A610			
	112° Front Bends–Eared – (100 x 75mm = 7.7kg)				
	PRIMED	191985	C	162.28	
	112° Front Bends–No ears – (100 x 75mm = 7.5kg)				
PRIMED	191984	C	144.82		
92.5° Front Bends – Pack size 1		A610			
	92.5° Front Bends–Eared – (100 x 75mm = 7.5kg)				
	PRIMED	191989	C	162.28	
	92.5° Front Bends–No Ears – (100 x 75mm = 7.3kg)				
PRIMED	191988	C	144.41		
135° Front Bends – Pack size 1		A610			
	135° Front Bends–Eared – (100 x 75mm = 7.1kg)				
	PRIMED	191987	C	165.38	
	135° Front Bends–No Ears – (100 x 75mm = 6.9kg)				
PRIMED	191986	C	145.06		

DESCRIPTION		COATING	SIZE Ø mm	
			100 x 75mm	
			PRODUCT CODE	UNIT PRICE £
Side Offset – Pack size 1			Δ DSC.	A611



150mm Side Offset Projection–Eared – (100 x 75mm = 9kg)			
PRIMED	191992	C	258.00

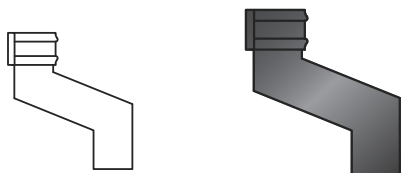
75mm Side Offset Projection–No Ears – (100 x 75mm = 7.3kg)			
PRIMED	191990	C	200.94

115mm Side Offset Projection–No Ears – (100 x 75mm = 7.6kg)			
PRIMED	191991	C	208.99

225mm Side Offset Projection–No Ears – (100 x 75mm = 9kg)			
PRIMED	191993	C	260.40

305mm Side Offset Projection–No Ears – (100 x 75mm = 11kg)			
PRIMED	191994	C	300.06

112.5° Offsets – Pack size 1 A612



75mm 112.5° Offset Projection–No Ears – (100 x 75mm = 7.8kg)			
PRIMED	191208	C	152.87

150mm 112.5° Offset Projection–No Ears – (100 x 75mm = 8.4kg)			
PRIMED	191209	C	168.94

225mm 112.5° Offset Projection–No Ears – (100 x 75mm = 8.2kg)			
PRIMED	191210	C	209.15

305mm 112.5° Offset Projection–No Ears – (100 x 75mm = 11kg)			
PRIMED	191211	C	248.84

381mm 112.5° Offset Projection–No Ears – (100 x 75mm = 11.2kg)			
PRIMED	237368	C	280.04

457mm 112.5° Offset Projection–No Ears – (100 x 75mm = 14.5kg)			
PRIMED	237369	C	POA

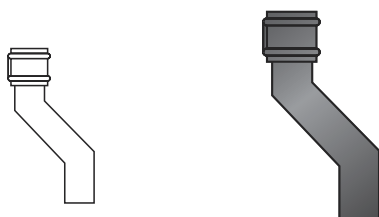
75mm 112.5° Offset Projection–Eared – (100 x 75mm = 8kg)			
PRIMED	191995	C	195.56

150mm 112.5° Offset Projection–Eared – (100 x 75mm = 8.6kg)			
PRIMED	191996	C	210.89

225mm 112.5° Offset Projection–Eared – (100 x 75mm = 8.4kg)			
PRIMED	197171	C	271.56

305mm 112.5° Offset Projection–Eared – (100 x 75mm = 11.4kg)			
PRIMED	191997	C	290.25

Plinth Offsets – Pack size 1 A615



75mm Plinth Offset Projection–No Ears – (100 x 75mm = 7.8kg)			
PRIMED	257472	C	152.87

115mm Plinth Offset Projection–Eared – (100 x 75mm = 8.6kg)			
PRIMED	192002	C	203.21

115mm Plinth Offset Projection–No Ears – (100 x 75mm = 8.2kg)			
PRIMED	192001	C	157.79

Technical Calculations

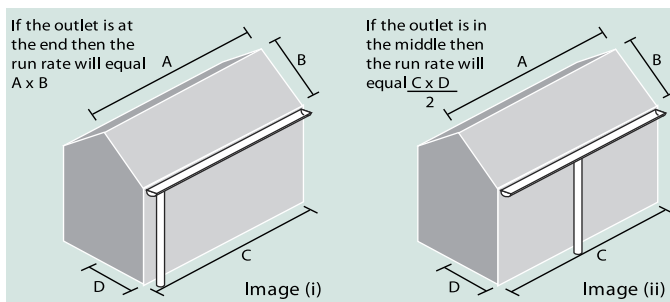
To select the size of the Classical rainwater system the following method should be used.

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) x 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 flow rate in l/s.

Step 6

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

Table 3—Gutter Capacities

Gutter Type and Size						
Capacity 1/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	—	—

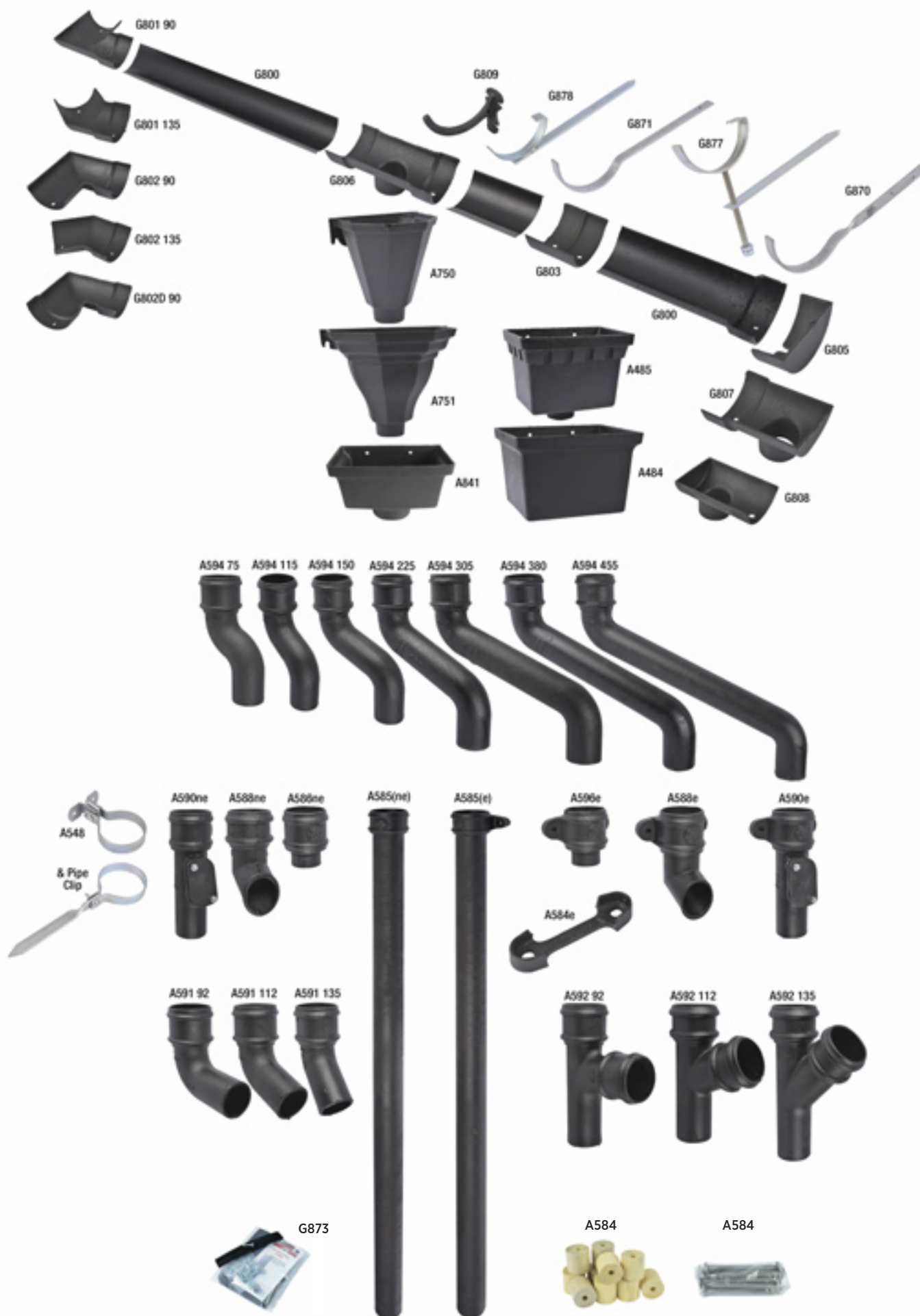
*All gutter and pipe capacities have been tested by HR. Wallingford

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

Classical Rainwater Components Diagram





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After Sales

If you have concerns about anything after you've received your order, please let us know

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