

Elegance Cast Iron Effect Rainwater, Ring Seal Soil & Vent Systems

Product Guide



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For when you need a touch of *Elegance*

The Marshall Tufflex Elegance range has been enhanced and extended with new system profiles, the addition of soil products and the introduction of new notched gutter concept.

Together with the original core range, Elegance provides you with a range of cast iron effect products from a proven, reliable manufacturer and available alongside other Marshall Tufflex products from merchants nationwide.

The superior textured finish of Marshall Tufflex Elegance Cast Iron Effect systems looks just like the traditional product. It's perfect for premium homes and houses in conservation areas.



About Marshall Tufflex

Elegance is just one range within the comprehensive portfolio of above and below ground waste and drainage products from Marshall Tufflex.

Our extensive expertise and experience in this field, combined with our leading edge manufacturing technologies, ensure that our products are supplied to the highest quality standards and service levels.

We are also mindful of our obligations as a responsible supplier to minimise the environmental impact of our product operations. This is expressed in our environmental management and sustainability policies.

Marshall Tufflex products are available from a wide ranging network of plumbing and builders merchants throughout the UK.

Standards & accreditation

Our manufacturing plants are certified to internationally recognised quality and environmental standards, including ISO 9001:2008 and ISO 14001:2004.

For further information, visit www.tufflex-drainage.com



Certificate No. FM00318
Registration
BS EN ISO 9001: 2008



Certificate No.
08302-2007-AE-LDN-UKAS
Registration
BS EN ISO 14001 : 2004



The Marshall Tufflex Elegance range is a stylish range of guttering and downpipe products with a decorative effect that combines the look of a traditional cast iron system with all of the product & installation benefits of using PVC-U as the manufacturing material.

Stylish and functional

The result is a traditional looking, but modern and efficient, rainwater ring seal soil and vent system that has none of the degradation drawbacks of cast iron installations. Every attention to detail has been taken in creating the Elegance range, which offers a lightweight, low maintenance solution with a more distinctive design style. Elegance is suitable for all residential new build and renovation projects.

Easy to use

Elegance not only looks great it is easy to store and handle too. Once on site Elegance is quick to assemble and install. Elegance is fully compatible with most other modern rainwater and soil systems but also incorporates some bespoke features:

- Our unique lugged brackets ensure a secure fit, whilst remaining compact and unobtrusive in design
- Our decorative hopper has been designed to replicate the look of traditional cast iron systems
- The innovative new notched gutter system, available on the Ogee profile, ensures a secure fit for retaining clips and prevents guttering becoming detached due to heat expansion

Key features and benefits

The Elegance range looks great on any property and is particularly suitable for premium homes and houses within conservation areas. Other system benefits include:

- Supplied ready to fit without the need for painting or protective coatings
- Quick to install, reducing total installation cost. (No metal primer, spanners, paint or disc cutters required)
- Durable and long-lasting finish without the need to apply corrosion control traditionally used with cast iron systems
- Elegance products are UV stabilised to protect against colour fade
- Lower installation, product and maintenance costs
- Wide range of roof structure design solutions can be achieved
- Lightweight construction for easy handling, assembly and installation
- Elegance is suitable for both new build and residential renovation projects

10 year guarantee



Provided the system has been fitted in accordance with our published installation recommendations (visit www.tufflex-drainage.com for the latest version) All Marshall Tufflex Elegance products are guaranteed for 10 years. (See websites for full details)

NOTCHED GUTTER

A notch above the rest

* Patent Pending



The revolutionary new Marshall Tufflex Notched Gutter is a true innovation within rainwater systems.

This patented product* has first been introduced to the new Ogee profile system within the Elegance range of cast iron effect rainwater systems. We have developed the system to counteract the potential problem of gutters becoming dislodged from their fittings during warm weather. This problem can occur when heat expansion causes the gutter to dislodge from the retaining clip.



With the new Marshall Tufflex Notched Gutter, dislodgement due to heat expansion and the resulting leaky joints, is a thing of the past. The leading edge of the gutter is notched and the system uses a flexible band clip to secure the gutter. The notches on the gutter are simply matched to the band clip and snapped into place. (See diagram 1)

An added benefit of the Notched Gutter system is the inclusion of grooves between the notches, which act as cutting markers. Wherever possible notched gutters should be cut at the mid-point of the notch as indicated by the mark. (See diagram 2)

To complete the installation fascia brackets should be fixed at centres not exceeding 1.0m.

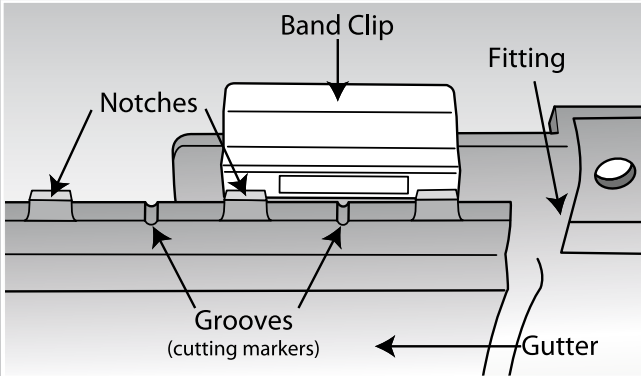


Diagram 1

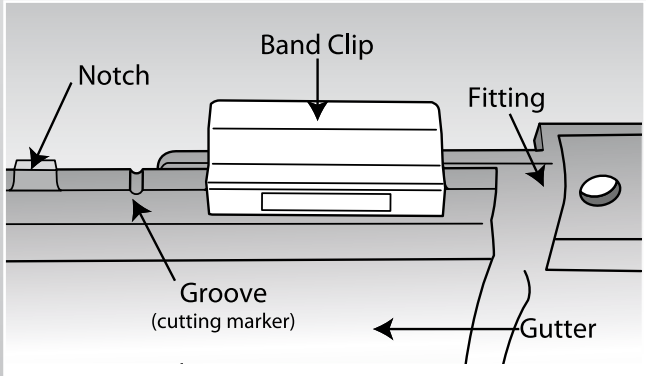


Diagram 2

OGEE NOTCHED

Stylish & traditional



The Marshall Tufflex Elegance cast iron effect rainwater system has been further extended with the addition of an Ogee profile.

The Elegance Ogee system most closely resembles the profiles found on original cast iron installations. So when you want to preserve that traditional look on a period home, Elegance Ogee is the natural choice.

The Elegance Ogee profile is an extra capacity system consisting of 130mm gutters in either 2.0m or 4.0m lengths. A full range of fittings and adaptors is available.

All of the fittings within our range will connect to other Marshall Tufflex Ogee products and, of course, to the cast iron effect downpipe systems that form part of the Elegance range.

HALF ROUND

The original Elegance system



The Elegance half-round system has been at the core of the Marshall Tufflex cast iron effect range since its launch and has proven very popular with consumers looking to combine the flexibility and durability of plastic materials with the stylish, premium appearance of traditional cast iron systems.

All of our original half-round products continue to be available in the new extended Elegance line-up. This includes 114 x 51mm (w x d) section gutter in both 2.0m or 4.0m lengths and a full range of fittings, brackets and accessories.

New for 2011 are the Plastic to Metal Gutter Adaptors for the Elegance Half Round System which are a quick and easy solution to connecting the Elegance range to traditional cast iron systems

DOWNPIPES

The Marshall Tufflex Elegance range is designed in such a way that each profile system in the range utilises a common downpipe.

This ensures that merchant and installer stockholding can be kept to a minimum and that you will always have the right pipes available, whichever system profile is being fitted. Elegance downpipes are supplied at 68.5mm diameter as standard and are available in 2.5m, 4.0m, and 5.5m lengths.

A range of fittings and accessories is available, including offset bends, to complete the installation.

We also offer a bespoke service for fabricated offset bends to your specific requirement, between 0mm and 500mm. Please visit www.tufflex-drainage.com for further information on our fabrication service.



RING SEAL SOIL & VENT

Completing the Elegance line up is a new range of ring seal soil and vent products in a matching cast iron effect finish.

Our soil and vent range is based on a 110mm soil pipe, supplied in 3.0m length, and selection of sockets, bends and vent terminals.

The Marshall Tufflex Elegance soil and vent range uses our popular ring seal push-fit system, for quick and easy installation.



Ogee Extra Capacity Guttering

SIZE: 130 X 70MM



COMPONENT	PRODUCT DESCRIPTION	PACK QTY	CODE NO.	
	2m Ogee Gutter Black	1	CIROG00B	Patent Pending 
	4m Ogee Gutter Black	1	CIROG01B	
	Ogee Gutter Union Bracket Black	1	CIROG02B	
	Ogee Gutter 90° External Angle Black	1	CIROG03B	
	Ogee Gutter 90° Internal Angle Black	1	CIROG13B	
	Ogee Gutter 135° External Angle Black	1	CIROG04B	
	Ogee Gutter 135° Internal Angle Black	1	CIROG14B	
	Ogee Gutter 150° External Angle Black	1	CIROG21B	
Made to order in 14 Days	Ogee Fabricated Gutter Angle Black		CIROG96	
	Ogee Gutter Running Outlet Black (Recommended for use with CIR5231B or CIRH720B)	1	CIROG05B	
	Ogee Gutter Stop End External L/H Black	1	CIROG07B	
	Ogee Gutter Stop End External R/H Black	1	CIROG17B	
	Ogee Gutter Stop End Internal L/H Black	1	CIROG08B	
	Ogee Gutter Stop End Internal R/H Black	1	CIROG18B	
	Ogee Gutter Fascia Bracket Black	10	CIROG09B	

Ogee Extra Capacity Guttering

SIZE: 130 X 70MM



COMPONENT	PRODUCT DESCRIPTION	PACK QTY	CODE NO.	
	Ogee Gutter Connector To Ogee Cast Iron L/H Black	1	CIROG15B	
	Ogee Gutter Connector To Ogee Cast Iron R/H Black	1	CIROG19B	
	Ogee Running Outlet Adaptor To Round Downpipe Black (Recommended for use with CIROG05B)	1	CIRS231B	
	Ogee Running Outlet Adaptor To Round Downpipe Black (Recommended for use with CIROG05B)	1	CIRH720B	

Half Round

SIZE: 114MM X 51MM



COMPONENT	PRODUCT DESCRIPTION	PACK QTY	CODE NO.	
	Half Round Gutter 2m Black	1	CIRG2BK	
	Half Round Gutter 4m Black	1	CIRG4BK	
	Union Bracket Black	1	CIRU1BK	
	Angle 90° Black	1	CIRA1BK	
	Angle 135° Black	1	CIRA2BK	
Made to order in 14 Days	Half Round Fabricated Gutter Angle	1	CIRSPECIAL	
	Running Outlet Black	1	CIRO1BK	
	Stop End Outlet Black	1	CIRO2BK	
	Stop End External Black	1	CIRE1BK	
	Stop End Internal Black	1	CIRE2BK	
	Fascia Bracket Black	10	CIRFB1BK	
NEW	Plastic to Metal Gutter Adaptor - Half Round to Half Round	1	CIRR116	
	Plastic to Metal Gutter Adaptor - Half Round to Ogee L/H	1	CIRR117	
	Plastic to Metal Gutter Adaptor - Half Round to Ogee R/H	1	CIRR118	





















Downpipe Systems

SIZE: 68.5MM ROUND PROFILE

COMPONENT	PRODUCT DESCRIPTION	PACK QTY	CODE NO.	
	2.5m Downpipe Black	1	CIRP25BK	
	4m Downpipe Black	1	CIRP4BK	
	5.5m Downpipe Black	1	CIRP55BK	
	Pipe Socket Black	1	CIRS1BK	
	Pipe Clip Black	10	CIRC1BK	
	Lugged Bracket Black	1	CIRL1BK	
	Bend 90° Black	1	CIRB1BK	
	Offset Bend 112° Black	1	CIRB2BK	
	Shoe Black	1	CIRB3BK	
	Branch 112° Black	1	CIRY1BK	
	Decorative Hopper Black	1	CIRH1BK	Patented Product 
	Offsets 75mm	1	CIRB4BK	
	Offsets 150mm	1	CIRB5BK	
	Offsets 305mm	1	CIRB6BK	
	Adjustable Offset Bend - 0mm to 500mm 		CIRB7BK	
	Made to order in 14 Days Fabricated Offset Bend - 0mm to 500mm		CIROBSPECIAL	

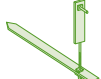
Ring Seal Soil & Vent

SIZE: 110MM

COMPONENT	PRODUCT DESCRIPTION	PACK QTY	CODE NO.	
	3m Soil Pipe Single Socket Black	1	CISP430B	
	Soil Double Socket Black	1	CISH44B	
	Soil Pipe Bracket Socket Black	1	CISC45B	
	92.5° Soil Bend Single Socket Black	1	CISB409B	
	135° Soil Bend Single Socket Black	1	CISB412B	
	92.5° Soil Bend Double Socket Black	1	CISB417B	
	92.5° Equal Single Branch Black	1	CIST401B	
	92.5° Soil Access Bend Black	1	CISB413B	
	Soil Access Pipe Single Socket Black	1	CISA43B	
	Soil Vent Terminal Black	1	CISV42B	

Ancillaries

SIZE: 110MM

COMPONENT	PRODUCT DESCRIPTION	PACK QTY	CODE NO.	
	Joint Lubricant			
	500ml Bottle	1	SG500	
	1kg Tub	1	LUBX1	
	2.5 kg Tub	1	LUBX2.5	
	Aerosol Lubricant			
	400ml	12	SG300	
	Galvanised Metal Bracket			
	Rise and Fall Bracket (fascia bracket required)	1	RR114	

Technical Information

Any drainage system should have sufficient capacity to carry the expected flows of water at any point in the system. The actual flow in the system depends upon the area to be drained, the rainfall intensity and the position of the outlets.

Gutter Installation

BS EN 12056-3:2000 states that gutters should be normally level (with a gradient of between 1mm/m and 3mm/m where practicable).

This standard also states that “where snow is likely to lie on roofs, the front edge of the gutter should not be higher than the projected line of the roof, unless snow guards or other precautions are used.”

Gutter Capacity

The profile and dimensions of a gutter determines the maximum flow rate (capacity), currently given in litres/second. The height of gutter profile determines the maximum length of gutter run before resultant overflow at the ‘high point’ (i.e. stop-end or mid-way between outlets) calculated per BS EN 12056-3:2000 as 50 x height.

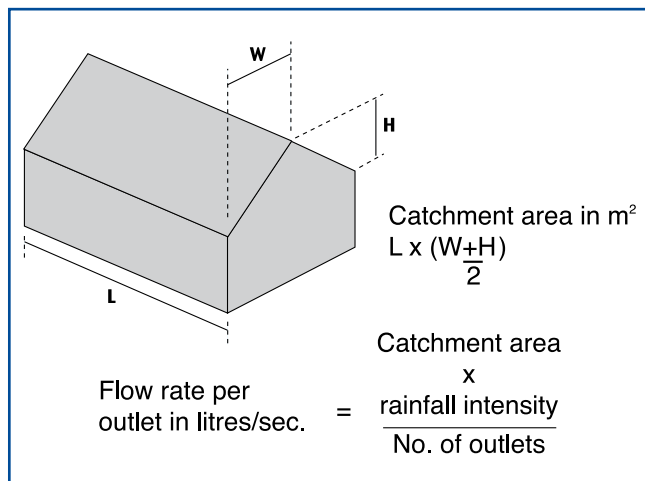
It is most important to consider the position and number of outlets as well as the size of gutter.

Rainfall Intensity

Rainfall and storm intensities vary between differing locations within the UK and a number of pages are devoted in BS EN 12056-3:2000 to variations and safety factors, relating to various types of buildings and gutter locations. Eaves gutters should be designed using a one year storm event, and the intensity found from maps in BS EN 12056-3:2000.

Catchment Area

In accordance with BS EN 12056-3:2000 the drainable catchment area of a pitched roof is calculated by adding half the height to the plan width and multiplying by the length as follows:



Design Flow Rate - End Outlet in Gutter			
Outlet Size (mm)	Max flow rate (l/s) to BS EN 12056	Max distance to stop end	Max distance between outlets (m)
68dia	0.66	2.5	4.87

Design Flow Rate - Centre Outlet in Gutter				
Outlet Size (mm)	Max flow rate (l/s) to BS EN 12056	Max flow rate (l/s) to BS6367	Max distance to stop end	Max distance between outlets (m)
68dia	1.32	1.4	2.5	4.87

Characteristics of the Marshall Tufflex Elegance Rainwater System

Properties

Specific gravity 1.35-1.45

Co-efficient of

Linear expansion 7x10⁻⁵/m/°C
 Water absorption Negligible
 Oxygen index 42%

Vicat Softening Temperature

Black Average Extrusion 80.5°C Moulding 76°C

Chemical Resistance

The material is virtually unaffected by solutions of inorganic acids, alkalis and salts and is resistant to many organic chemicals. It may be softened by some organic materials such as ketones and aromatic compounds. It will not corrode.

Standards

Rainwater systems are manufactured to comply with the requirements of BS EN 607:1996; BS EN 1462:1997; EN 12200-1:2000; BS 4576-1:1989 where applicable.

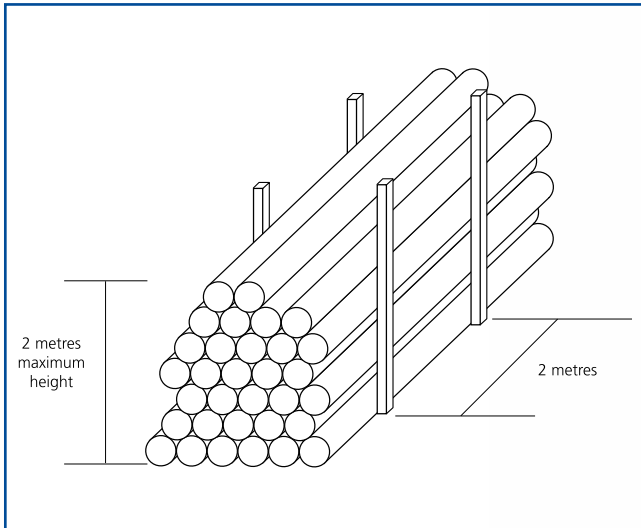
Installation Guide

Installation instructions for all Marshall Tufflex systems are available on request. When fitting our products, the Building Regulations should be followed.

Handling and storage

Although rainwater gutter, downpipe and the associated fittings are strong and lightweight, care must be taken when handling. Extra precaution should be taken in cold conditions due to the reduction in impact strength of plastic products.

All gutter and downpipe extrusions should be stored away from direct sunlight and preferably under cover. When stored in any form of racking all extrusions should be supported at no more than two meter intervals.



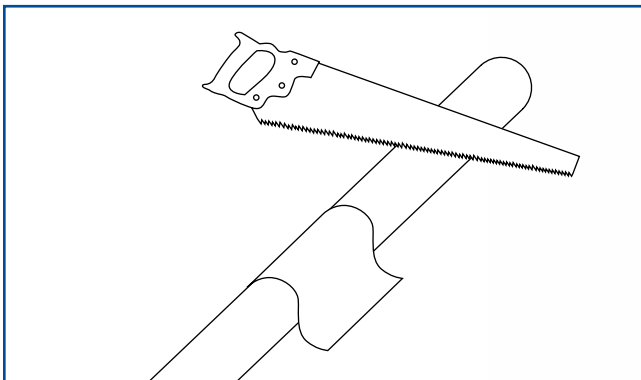
Fittings should be kept under cover in their respective packaging until such time as required for installation.

Solvent cement should be kept out of direct sunlight or away from any other heat source.

Jointing Brackets and Supports

Preparing gutters & pipes

All rainwater gutters and pipes must be squarely cut and all burrs must be removed. It is recommended that a fine toothed handsaw is used. Care must be taken when cutting gutters and pipes in cold or damp conditions due to the slippery nature of the pipe surface.



Installation Instructions for Ogee Notched Gutter

Preparation of Gutter

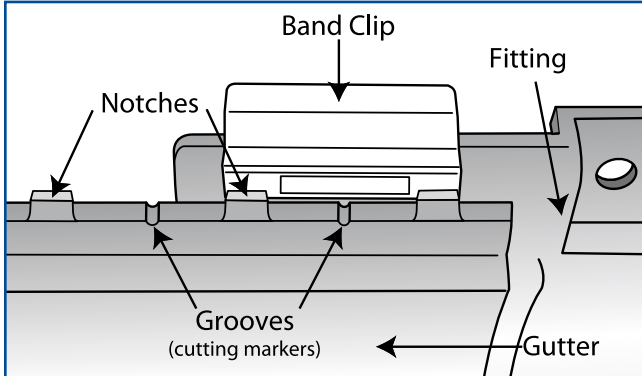
1. Gutter must be squarely cut and all burrs removed, Marshall Tufflex recommend the use of a fine toothed handsaw. Extra care must be taken in damp conditions due to the slippery nature of the gutter surface.
2. Where possible Notched gutter should be cut at the mid-point of the notch as indicated by the mark.

Gutter Supports

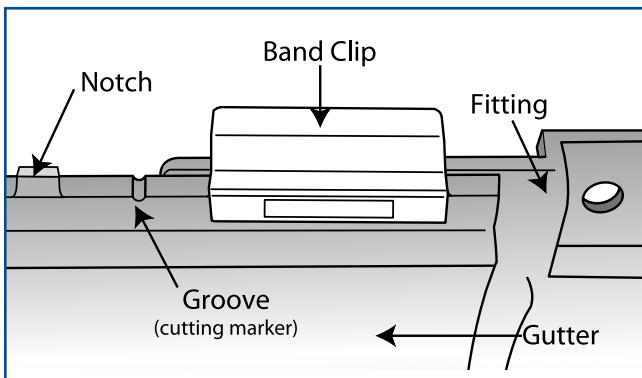
1. Fascia Brackets should be fixed at centres not exceeding 1.0 metre.
2. When installing the notched gutter into existing fascia brackets, please bear in mind the notches when working out your centres.

Gutter Fittings

1. Marshall Tufflex Notched Gutter uses a flexible band clip to secure the gutter. There is no need to remove this clip to complete installation.
2. When offering the gutter into the fitting, the notches need to be matched to the band clip as shown in the diagram opposite.
3. Insertion depths are marked on all jointing fittings. However, the specific installation of notched gutter DOES NOT REQUIRE THE GUTTER TO BE FITTED TO THE "INSERT TO HERE" LINE. The notches allow for sufficient expansion and contraction of the gutter in the fitting.



Position of notches prior to installation, demonstrating position



Position of gutter in Union, showing gutter fitted under clip.

Installation Instructions for Ring Seal Soil & Vent System

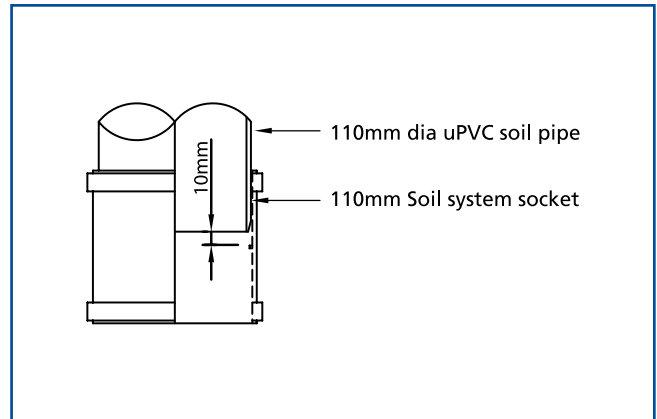
Standards

EN1329-1 110mm PVC-u soil pipe and fittings

Jointing

Push-Fit (Ring Seal) Jointing

1. Where plain end pipe is being used, ensure that the pipe is cut square to its axis and that all burrs are removed.
2. Chamfer the end of the pipe to prevent the ring seal being damaged or displaced when the pipe is inserted into the socket. Fittings with spigot ends are moulded with a chamfer during manufacture.
3. Lubricate the spigot or ring seal with silicone grease or aerosol lubricant.
4. Insert the pipe or fitting into the socket and then withdraw it by approximately 10mm to allow for expansion of the pipework.



The following table indicates the approximate number of joints that can be made for each pipe diameter with cleaning fluid and silicone grease.

	Pipe Diameter - 110mm
Cleaning Fluid 250ml - CODE CF250	20
Silicone Grease 100ml - CODE SG100	20

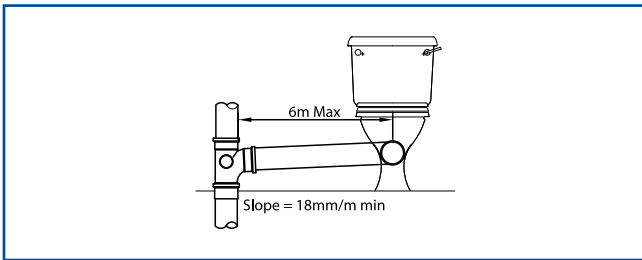
Support

The following table shows recommended pipe support centres for horizontal and vertical pipework.

	Pipe Diameter - 110mm
Horizontal	0.9m
Vertical	1.8m

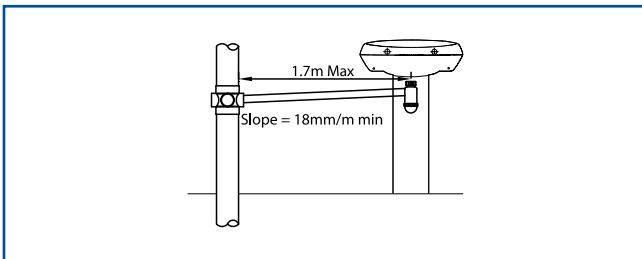
Branch connection details

The following information shows the requirements of the Building Regulations with regard to length of unventilated branch discharge pipes and corresponding gradients.



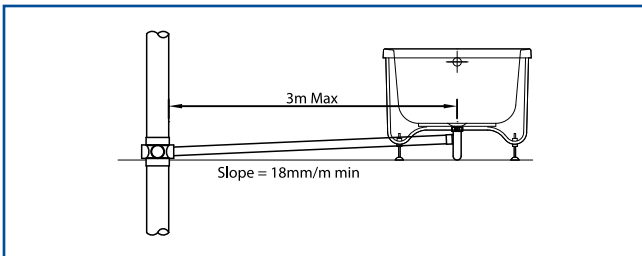
WC

1. Requirement for single WC.
2. A maximum of 8 WC's may be connected to an unventilated soil branch. The length is limited to 15m max. In this case.
3. Pipe diameter = 110mm.
4. It is only permitted to use 82mm diameter pipework when the outlet of the WC pan itself is less than 80mm diameter.



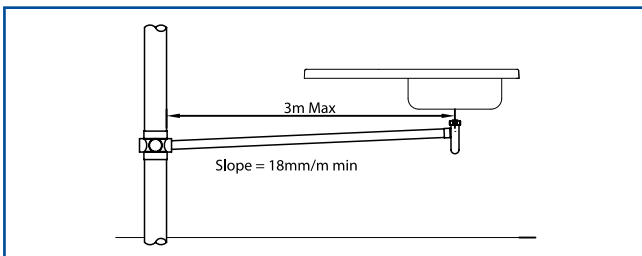
Wash Basin (including Bidet)

1. Where maximum length is exceeded, an anti-siphon trap or anti-siphon unit should be used.
2. Pipe diameter – 32mm.
3. If 40mm diameter pipe is used, max length is 3m.



Bath (including Shower)

1. Pipe diameter = 40mm
2. If 50mm diameter pipe is used, max length is 4m.

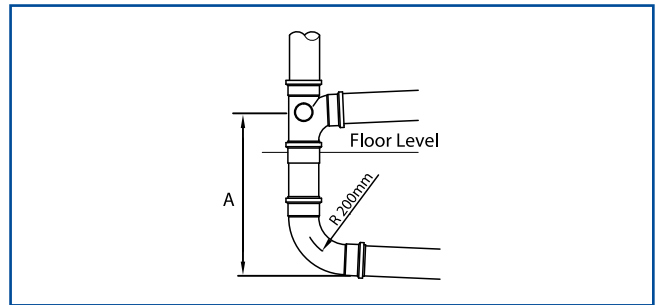


Sink

1. Pipe diameter = 40mm
2. If 50mm diameter pipe is used, max length is 4m

Connections to base of stacks

The minimum vertical distances between connections to the stack and the invert of the underground drainage system are shown below:



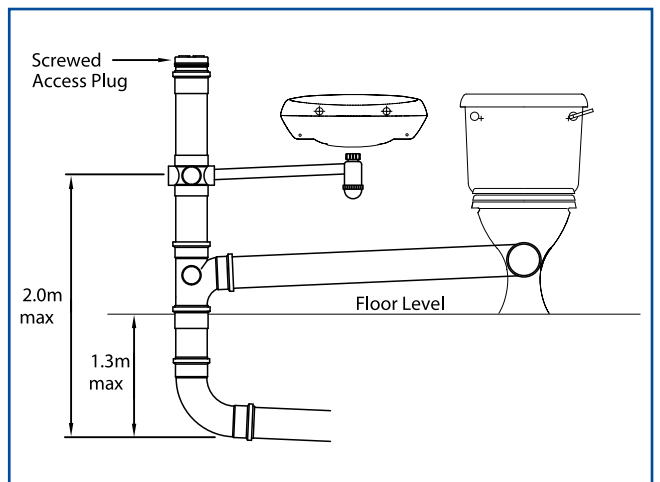
- A = 450mm min for buildings up to 3 storeys
 750mm min for buildings up to 4 and 5 storeys

For buildings between 5 and 20 storeys, the ground floor appliances should connect direct to drain or to their own soil stack.

For buildings over 20 storeys, both ground and first floor appliances should connect to their own soil stack.

Stub Stacks

For ground floor appliances, a short unventilated stack may be used, provided it discharges into a ventilated drain and distances do not exceed those shown in the diagram below. Stub stacks may also be used on upper floors where the discharge from the stack is to a ventilated soil stack.





Elegance Cast Iron Effect Rainwater, Ring Seal Soil & Vent System

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Approved Stockist

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