



Underground Drainage Systems

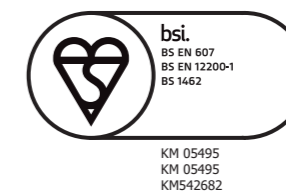


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Innovation & Expertise


Marley Underground Drainage Systems

The Marley Plumbing & Drainage range of underground systems include the solid wall range, predominately for round the house drainage and Quantum structured wall range for sewer and highway drainage applications.




Standards

British Standards

A wide range of components featured in this price list conform to British Standard Specifications, many items bear the British Standards Institution's Kite Mark symbol, , as indicated throughout this price list. The presence of this mark on, or in relation to, a product is an assurance that the goods have been produced under a system of supervision, control and testing, operated during manufacture and including periodical inspection of the manufacturer's works in accordance with the Certification Mark Scheme.

Agrément Certificates

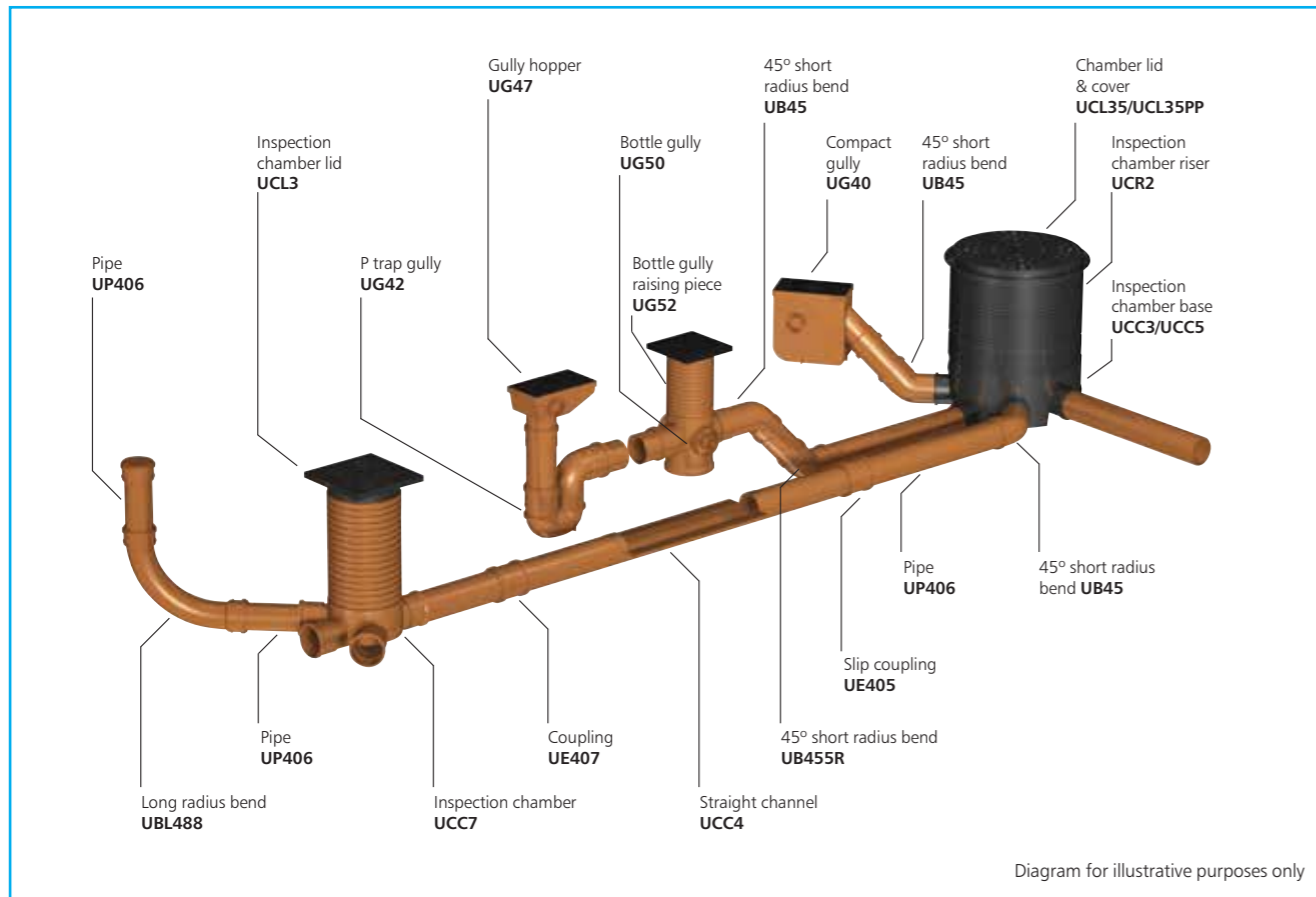
Certain components and systems illustrated in this price list have been independently assessed and are the subject of certification by the British Board of Agrément. These items are indicated by the BBA symbol, , throughout this price list.

Copies of Marley Plumbing & Drainage BBA Certificates are freely available from the Company upon request or from marleypd.co.uk.

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Key features of the Marley solid wall system

- 82mm, 110mm & 160mm diameters
- Private drainage
- Plain ended and socketted pipe
- Adaptors to other materials
- Access fittings
- 250mm and 450mm inspection chambers
- Adjustable and variable bends
- A wide range of gullies
- Manufactured to BS EN 1401
- BBA 88/1977 certification
- A number of solid wall fittings are also suitable for use with 150mm quantum and highway pipes.

Quantum Sewer – PVCu

- 150mm, 225mm & 300mm diameters
- Suitable for adoptable foul and surface water sewers
- Private foul and surface water applications.

Quantum Highway – PVCu

- 150mm, 225mm and 300mm, diameters
- Highway surface water carrier and filter drains
- Private surface water applications.

Large diameter Quantum Highway – HDPE

- 375mm, 450mm and 600mm diameters.
- Pipes are available in fully slotted, half slotted and solid wall options.
- BBA certificate no.11/H172.

Quantum is manufactured in two grades, sewer and highway, and offers the following benefits over traditional materials

- The flexibility to tolerate ground movement without damage, whilst withstanding the combined effects of backfill and loading
- Fewer joints to reduce the likelihood of leaks and blockages
- A high level of chemical resistance to the wide range of substances found in both effluent and contaminated soils
- A smooth bore gives good hydraulic performance
- A red stripe, printed down the length of the pipe, aids identification of sewer pipe
- BBA 94/2985 certification on Quantum Sewer for private foul and surface water applications
- BBA 09/H146 & BBA 98/3486 certification on Quantum Highway
- WIS 4-35-01 certification on Quantum Sewer for adoptable foul and surface water sewers.



Key components

The Marley underground drainage range offers a comprehensive range of standard fittings including bends, branches and couplings.

Pictured is a selection of key components within the range. For a complete listing of the below ground range, see pages 26-43.



Inspection chambers

250mm and 450mm inspection chambers can be used as an alternative to traditional manholes for standard and deep inspection. See page 16-19 for installation data. (see Below Ground Price List, page 6)

450x160mm chamber base (UCC5), riser (UCR2), lid (UCL35PP) & clip (UCC10). Can be used for deep inspection



Deep inspection chamber 450x110mm chamber base (UCC3D), riser (UCR3), access ring (UCLRR), lid (UCL35PP) & clip (UCC10D)



250mm chamber (UCC7) & lid (UCL2)



250mm chamber (UCC7) & lid (UCL3)



Anti-flood valves (USW130 & USW140)

An anti-flood valve is a simple and effective way to eliminate backflow through drainage systems. The Marley range consists of double flap options, available in 110 and 160mm. The flaps in the valve open to allow discharge. In a potential flood situation, the rising water levels seal the flap(s) shut, alleviating the risk of the water backing up into a property.

The internal profile is designed to avoid any interrupted flow and provides full access for pipe cleaning or rodding. (see Below Ground Price List, page 9)



Anti-flood valve (USW130 & USW140) double flap

Bottle gully (UG50)

Ideal for new or replacement installations. Accepts waste and rainwater pipes. A fully rotating gully body allows the outlet to face the required direction of the drain connection.

A removable rubber plug provides access for rodding. UG52 optional raising piece available. (see Below Ground Price List, page 8)



Bottle gully (UG50)

Adjustable bends

Available in 110 and 160mm with a solvent weld joint or as 110mm mechanical or multiflex bends.

The solvent weld bend can be adjusted by cutting the fitting at the required angle and solvent welding the two sections together.

The mechanical bend provides a 'twist and lock' solution to achieve the desired angle of between 5° and 30°. (see Below Ground Price List, page 5)

Multiflex bends are available as socket/spigot or socket/socket (shown) and can be adjusted from 0°-90°.

Code	Angle achieved
UB47	21° - 90°
UB67	15° - 90°



Mechanical bend (UB47M)



Adjustable bend (UB47)



Multiflex bend (UDSB110)

Statutory requirements

The following standards deal with drainage design:

- BS EN 752: Drain and sewer systems outside buildings.
- BS EN 1610: Construction and testing of drains and Sewers.

The design and layout of drainage and sewerage systems should comply with The Building Regulations and Water Authority Specification. Reference should also be made to the Sewers for Adoption manual.

The following information is provided only as a general guide to good practice for the design of underground drainage systems. For full details please consult the relevant documents referred to above.

Means of access

Access is required to drainage installations for testing, inspection and removal of debris. Access to drainage allowing rodding in both directions can be provided by inspection chambers, manholes and other access fittings. Rodding eyes provide access for clearance of debris in the direction of flow only and should thus be used in conjunction with an access chamber or manhole at a point downstream.

No part of the drain or sewer should be more than 50m away from a manhole. The distance between points should therefore not exceed 100m.

For full guidance as to provision of access, reference should be made to BS EN 752. The table below details the maximum spacing of the access points as detailed in the above standard.

Gradients

Foul water drainage systems are generally designed to run at a maximum of three quarters full bore. Pipe gradients should be established such that the velocity does not fall below 0.70 m/s to ensure adequate self-cleansing.

A 110mm foul drain taking the discharge of less than 1 l/s should be laid at a 1:40 (25mm per metre) fall. A foul drain taking the discharge from a minimum of one WC can be laid at 1:80 (12.5mm per metre).

Gullies incorporating in foul water or combined drainage systems must have a 50mm minimum water seal.

The table below is taken from BS EN 752 and provides guidance on minimum gradients for different size drains

Gradients

Peak flow (a) litres/second	PVCu pipe size (mm)	Minimum gradient
<1	82	1:40
	110	1:40
>1	82	1:80
	110	1:80 (b)
	160	1:150 (c)

- (a) Peak flow based on probability flow calculation method
- (b) Minimum 1 WC
- (c) Minimum 5 WCs

Surface water drainage systems may be designed to run full bore.

Physical characteristics

Dimensions and weights

Pipe	Material	BS nominal size (mm)	Min	Max	Wall thickness (mm)	Weight kg/metre
Solid wall	PVCu	82	82.4	82.7	3.0	1.2
		110	110.0	110.3	3.2	1.7
		160	160.0	160.4	4.0	3.0
Quantum Sewer	PVCu	150	145	160	-	1.85
		225	226	250	-	4.20
		300	297	330	-	7.00
Quantum Highway	PVCu	150	148	160	-	1.25
		225	230	250	-	2.75
		300	302	330	-	4.65
Quantum Highway	HDPE	375	396	465	-	8.50
		450	496	580	-	13.30
		600	598	700	-	20.83

Pipe strength

Pipe strength	Pipe type	Pipe size	SN N/m ² @ 20°C
Minimum short-term ring stiffness	Marley solid wall	110mm	8000
	Marley solid wall	160mm	4000
Minimum short-term ring stiffness	Quantum Sewer	-	8000
	Quantum Highway	-	6000
Minimum two-year ring stiffness	Quantum Sewer	-	4000
	Quantum Highway	-	3000

Solid wall perforated pipe

110mm solid wall perforated pipe is manufactured to the dimensional requirements of BS EN 1401-1. Pipe has two rows of slots that are 60mm apart and 1.75mm wide. Slot sizes as detailed in the table below.

The slotted cross sectional area for both solid wall and Quantum pipes exceed the perforation requirements of the Department of Transport 'Specification for Highway Works' 2001. This requires a minimum perforated area of 1000mm²/m irrespective of pipe diameter.

Quantum perforated pipes

Quantum highway pipes are available in 150, 225, 300, 375, 450 and 600mm sizes, in either fully slotted or half slotted options. Slot sizes are detailed in the table below.

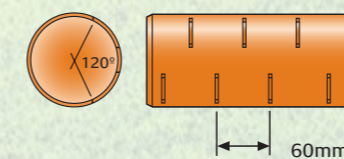
Means of access

	Access fitting		To branch or junction	Shallow inspection chamber	Manhole or deep inspection chamber
	1	2			
Start of external drain*	12	12	-	22	45
Rodding eye	22	22	22	45	45
Type 1 access fitting 150 x 100mm	-	-	12	22	22
Type 2 access fitting 225 x 100mm	-	-	22	45	45
Shallow inspection chamber	22	45	22	45	45
Manhole or deep inspection chamber	-	-	-	45	90

* Stack or ground floor appliance

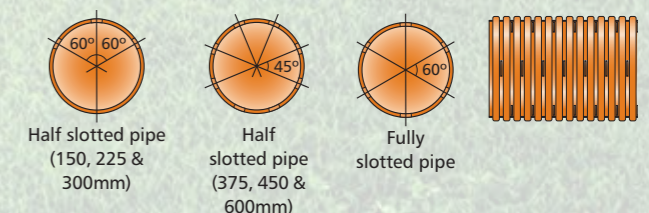
Solid wall perforated pipe

Pipe size (mm)	Slot width (mm)	Slot length (mm)	Slotted pipe (mm ² /m)
110	1.75	24	2041



Quantum perforated pipes

Nominal pipe size (mm)	Slot width (mm)	Slot length (mm)	Area half slotted pipe (mm ² /m)	Area fully slotted pipe (mm ² /m)
150	1.5	22	3000	6000
225	1.5	38	3500	7000
300	1.5	58	4000	8000
375	3.5	35-40	11270	22540
450	3.5	35-40	9310	18620
600	3.5	35-40	7350	14700



Pipe laying

The following information is based on the recommendations in BS 5955: Part 6 'Installation of PVCu pipework for gravity drains and sewers' and BS EN 1610 'Construction and testing of drains and sewers' and is intended as a general guide to good practice in the selection of bedding and backfill materials for Marley solid wall and Quantum underground drainage systems.

Excavation

Trenches should not be open for extended periods in advance of pipe laying and should be backfilled as soon as possible. It is essential that the sides of the trench are adequately supported during pipe laying. Trench widths should be as narrow as is practicable but not less than the pipe diameter plus 300mm to allow adequate sidefill to be placed. Deeper excavations should ideally incorporate a sub-trench in accordance with the diagram below.

Granular material for bed & surround of PVCu drains and sewers

Suitable imported granular material for bedding and surrounding PVCu solid wall and Quantum pipes for private and adoptable sewer applications is detailed in the table below:

Grading complying with the requirements of BS EN 1610.



Bedding & backfill

Where the as-dug material is suitable*, the bottom of the trench may be trimmed to form the pipe bed and the as-dug soil used as sidefill and backfill in accordance with BS EN 1610 bedding construction type B (see drawing below).

Where the as-dug material is unsuitable as bed and surround, installation should be carried out in accordance with BS EN 1610 bedding construction type 1, as shown below.

Trenches should be excavated to allow for the depth of bedding material. Before any pipework is installed the bedding material should be laid evenly along the bottom of the trench.

The sidefill material must be the same as the bedding material and extended to the crown of the pipe and be thoroughly compacted.

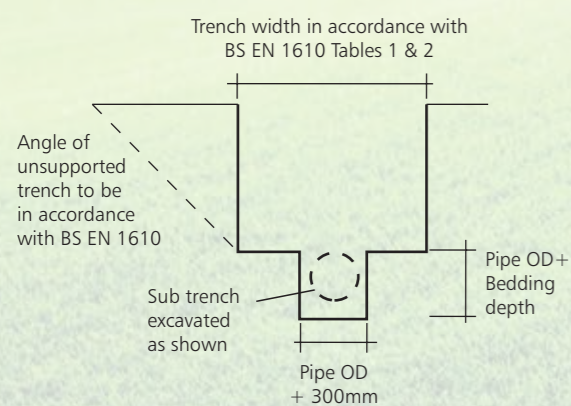
Where the backfill above the pipe contains stones larger than 40mm or where the pipework is deeper than 2m in poor ground, the granular material must extend at least 100mm above the pipe crown. Alternatively, backfill material can be graded to eliminate stones exceeding 40mm and this selected material used for the first 300mm above the pipe.

When the pipes are to be laid in rock, compacted sand or gravel, or in very soft or wet ground requiring mechanical means of trimming, the bedding should be a minimum of 100mm.

*Suitable material is defined as material in accordance with the recommendations of BS 5955: Part 6: Appendix A, having a maximum particle size not exceeding 20mm.



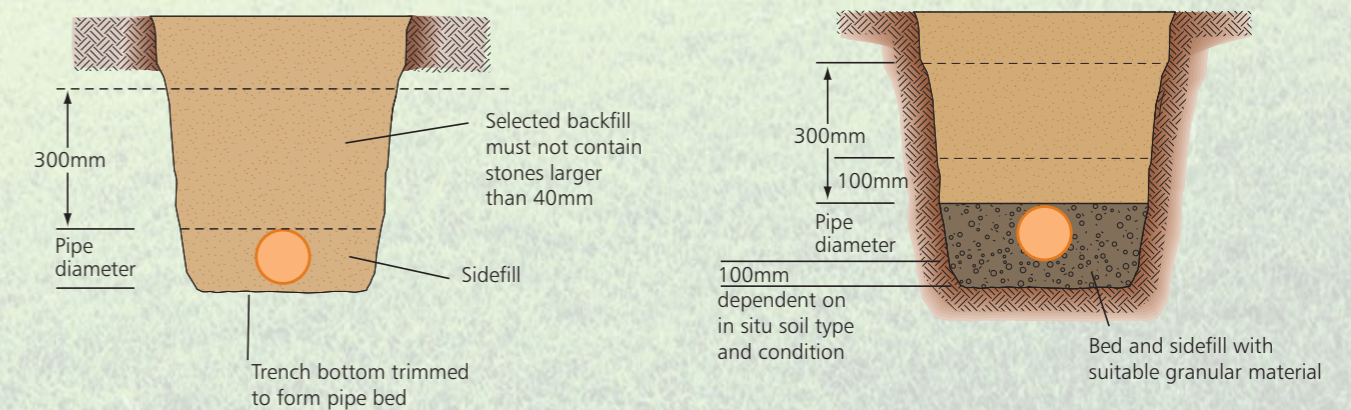
Excavation



Granular material

Nominal pipe size	Granular material size
100/110mm	10mm nominal single-size 14 to 5mm course graded
150/160mm	10 or 14mm nominal single-size 14 to 5mm course graded
150/225mm and over	10,14 or 20mm nominal single-size 14 or 20 to 5mm course graded

Bedding & backfill



Pipe laying

It is important to ensure that the ground is prepared correctly and that suitable bedding and backfill material is used, depending on the soil type and the loading required.

Shallow domestic drains

Pipes laid at depths less than 600mm and which are not under a road should, where necessary, be protected against damage by placing over them a layer of concrete, paving slabs or similar. A minimum 75mm cushioning layer of granular material must be laid between pipes and the slabs or concrete.

Where drains are laid in fields, additional protection may be required from heavy vehicles and equipment. It is recommended that the installation is carried out with a concrete slab spanning the trench as shown for drains under private roads (on opposite page below).

Drains under solid ground floors

Drains often have to be laid under buildings in order to connect sanitary pipework which has been positioned some distance from the outer walls. Where this occurs, deep hardcore within the foundation boundaries should be compacted first. The trench for the pipe should then be excavated and suitable material employed for the bedding and backfilling operation. If trenches are dug from original ground, pipes may be laid and surrounded as necessary before the top layer of hardcore is formed. Where a pipe passes through a wall or foundation of a building, a lintel or sleeve should be built-in to provide clearance around the pipe.

Concrete bed & surround

The flexible nature of PVCu pipes enables them to accommodate ground movement and other differential settlement that may occur under normal conditions. Therefore, the use of concrete bed and surround is not recommended and only under special circumstances, at very shallow cover depths or where it is necessary to safeguard foundations, should it be used. Where the use of concrete bed and surround is unavoidable, it is recommended that pipes are laid in 3 metre lengths and a compressible board is shaped to fit around each joint. Pipes should also be wrapped with polythene to prevent the ingress of cement slurry into ring seal joints.

Drains under private roads

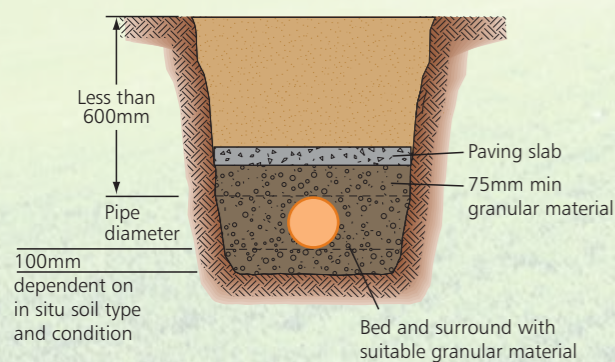
If the depth of cover under a road or driveway is less than 0.9m, a concrete slab spanning the trench width is required.

Adoptable sewers under roads

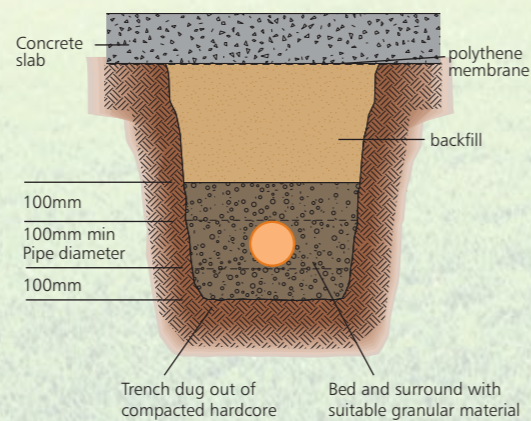
For adoptable sewer applications pipe bedding details should be in accordance with the Water Industry Specification. Selected as-dug material may be used for bedding and sidefill provided it meets the evaluation procedure and compaction fraction test values specified in WIS 4-08-01. The minimum cover under public roads should be 1.2m to the top of the pipe. The above information is for general guidance only and detailed proposals with regard to bedding and sidefill materials for sewers must be submitted to the relevant Adopting Authority for formal approval at the design stage of the project.



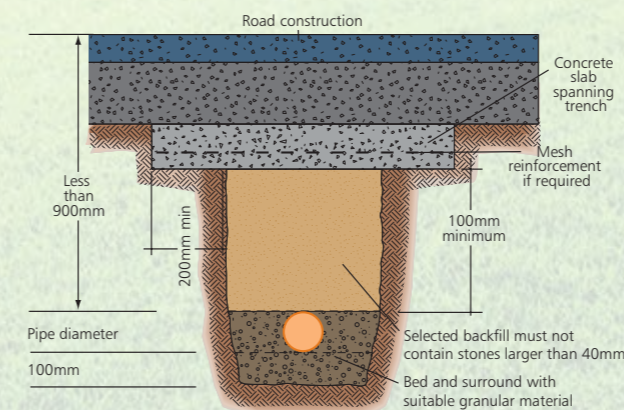
Shallow domestic drains



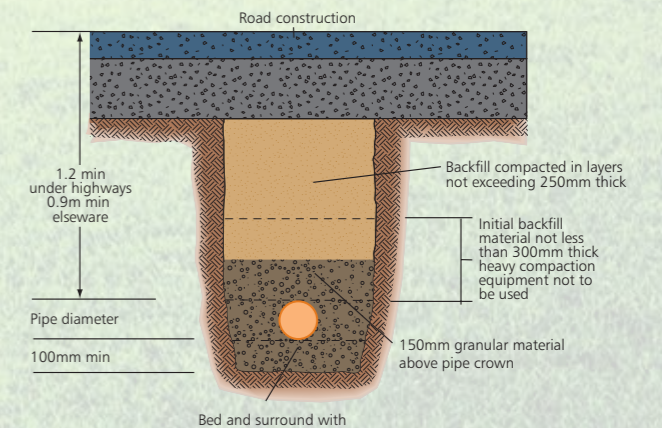
Drains under solid ground floors



Drains under private roads



Adoptable sewers under roads

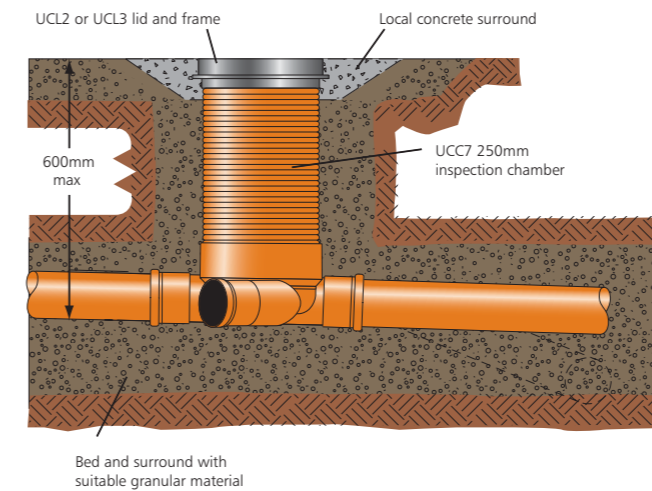




Installation data

Shallow inspection chambers

250mm inspection chambers



250mm inspection chambers may be used as an alternative to traditional manholes for invert depths up to 600mm. Intermediate depths can be accommodated by cutting the chamber riser using a hard tipped handsaw or similar.

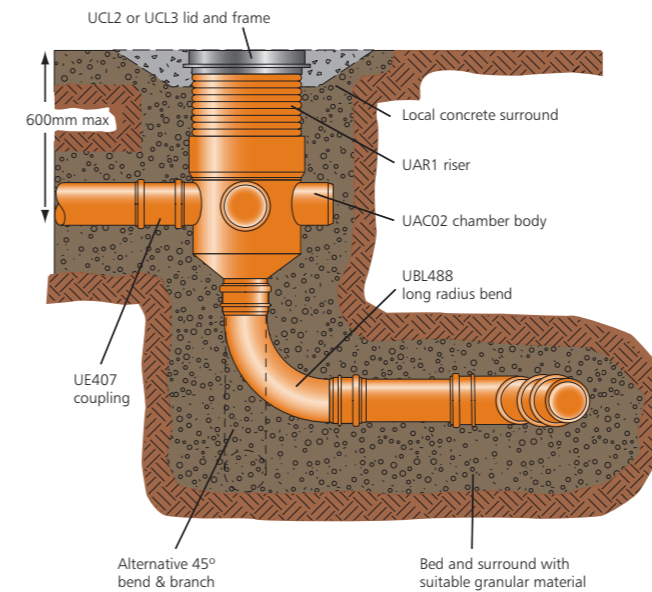
The UCC7 is a one piece, level invert chamber with push-fit inlet and outlet sockets, making installation quick and easy.

Square or circular PVCu lids and frames are available for use with 250mm diameter inspection chambers and meet the loading requirements of BS EN 124 Class A15.

An alternative to the UCC7 is the level invert chamber base UAC44 with separate riser UAR1. Both square or circular lids and frames are suitable for use with this inspection chamber assembly.

Where the UCC7 or UAC44 inspection chambers are used to make a 90° change of direction in the drain, 45° bends should be fitted to the inlet and outlet connections to maintain a level invert through the chamber. It is also recommended that the peak flow in the drain is always discharged through the main channel and chambers are rotated accordingly on site to accommodate this.

250mm bottom outlet inspection chambers



The 250mm bottom outlet inspection chamber UAC02 provides a multiple collection point for branch drains from one or more dwellings and may also serve as a rodding and testing point for the main drain. The 110mm bottom outlet ensures that discharges from the side branches are quickly transmitted to the main drain which may be situated directly under the chamber or to one side at a lower level.

The bottom outlet chamber is ideal for situations where the main drain runs parallel to a building at a lower level as this allows the chamber to be positioned directly above the drain. Connection is then made using a back drop arrangement with a 45° branch and bend to the main drain.

Each chamber has four 110mm spigot inlets, three of which are open and the fourth can be opened for use if necessary. The UE43 plug can be used to blank off connections not required and the chamber riser UAR1 cut to accommodate invert depths of less than 600mm.

The UCL2 circular or UCL3 square lid and frame can be used to provide access to the chamber at ground level.

Inspection chambers

450mm inspection chambers may be used as an alternative to traditionally constructed manholes for invert depths of up to 1.2 metres. Intermediate depths can easily be accommodated by simply cutting a riser, between the ribbed sections, to the desired height using a fine tooth saw.

450mm inspection chambers

Chambers should be installed on a 100mm bed of suitable as-dug or granular material and care should be taken to ensure the bedding material is evenly compacted under the base so that the chamber is fully supported.

During the installation stage and prior to backfilling, it is recommended that chamber riser retaining clips UCC10 are fitted to maintain vertical alignment of the chamber during the backfilling operation.

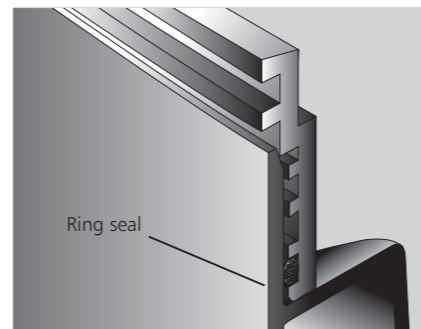
Sidefill material should extend to just below ground level and the cast iron cover and frame set in a concrete plinth.

Two versions of chamber base are available, the UCC3 has 110mm inlets and outlet and the UCC5 has 110/160mm inlets and 160mm outlet. Both have ring seal socket connections.

When connecting the UCC3 or UCC5 chamber base to a riser, the ring seal is always located in the first groove, as detailed opposite. To ease jointing it is recommended that silicone lubricant is used.

The UCC5 160mm chamber base is fully compatible with 150mm Quantum pipe. This is achieved by removing the snap cap and seal from the chamber base and inserting Quantum pipe into the socket, with the seal located into the first corrugation of pipe.

450mm inspection chambers are designed to withstand water testing in accordance with BS EN 1610.



110mm (UCC3) / 160mm (UCC5)

450mm deep inspection chambers

For the installation of an inspection chamber deeper than 1.2m, the regulations require the clear opening to be reduced to 350mm to prevent man entry. Inspection and maintenance should be carried out by remotely operated equipment and the maximum depth is limited to 4m. Access is only permitted when there is no other alternative.

For full details please refer to the Building Regulations (England & Wales) Approved Document H – Drainage & Waste Disposal – April 2002 or Part 3 of the Building (Scotland) Regulations 2004 BSEN 752.

The 110mm deep inspection chamber UCC3D incorporates reinforcing ribs on the underside of the chamber and a single UCR3 chamber riser rod welded to the chamber base.

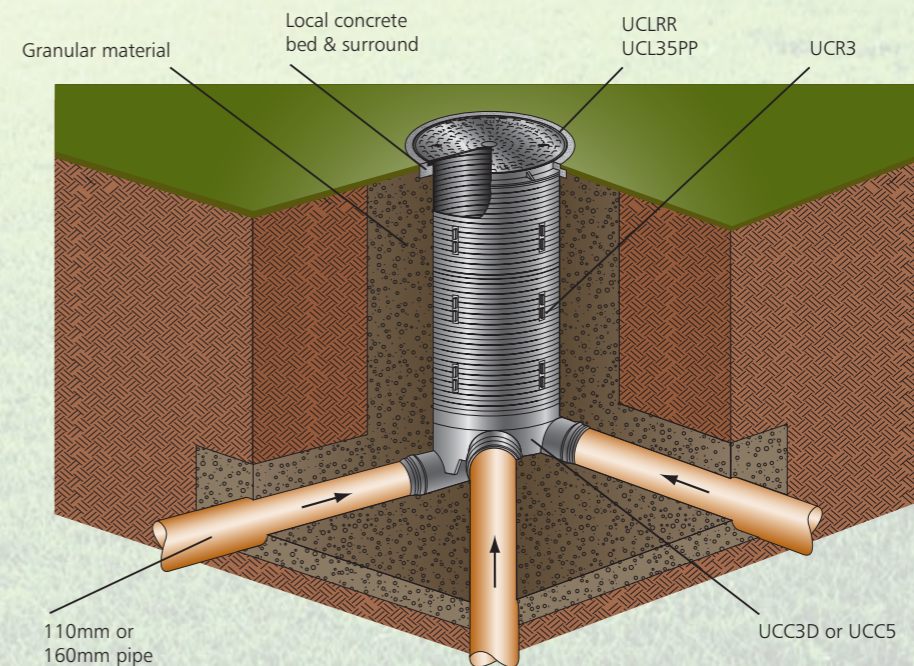
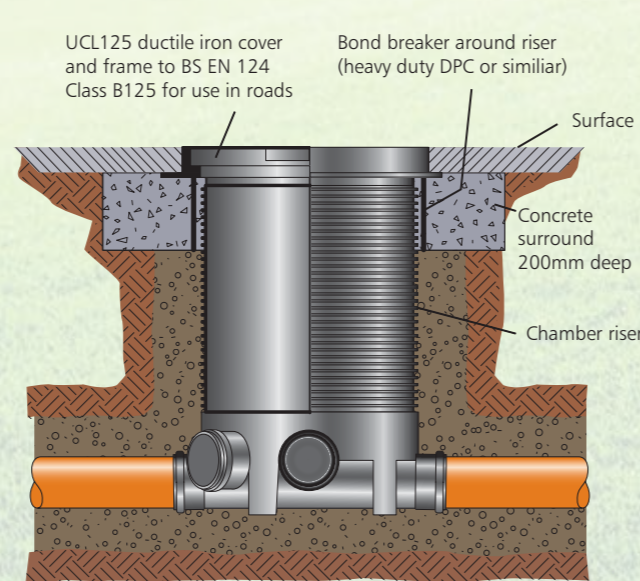
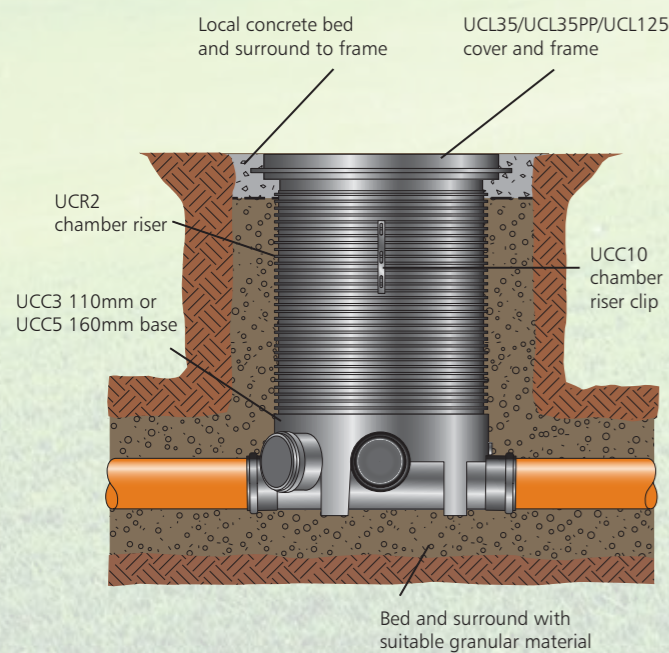
Please note that the standard UCC3 chamber base and UCR2 riser are not suitable for deep inspection applications.

Featuring increased ring stiffness over our standard inspection chamber riser, the UCR3 deep inspection riser must be used for all deep inspection applications.

Identifiable by tabs marked 'Deep Inspection' on the inside, each riser is 480mm high (effective height 440mm) and is supplied with a 450mm ring seal.

The UCR3 must be used in conjunction with the UCC5 or UCC3D inspection chambers for deep inspection.

The reduced access ring (UCLRR) fits into the UCL35PP lid and creates the required restricted opening for non-man entry.



Gully combinations

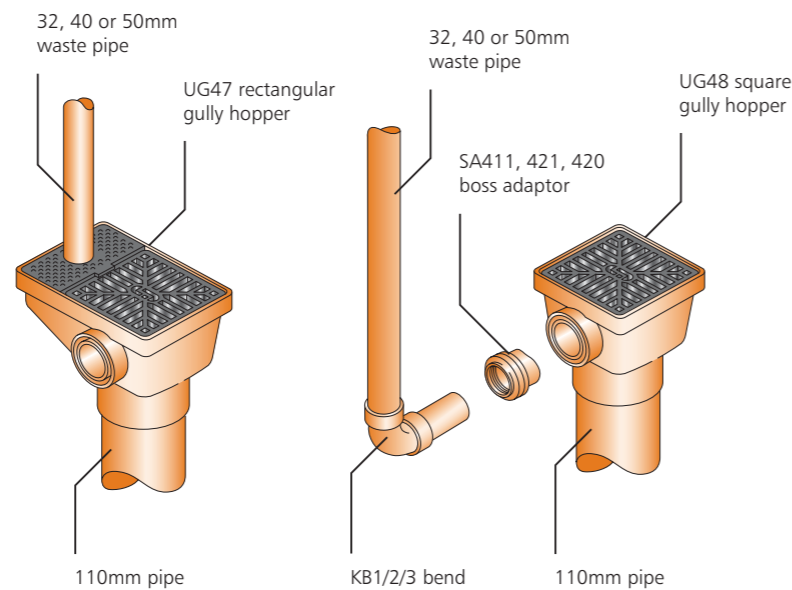
A comprehensive range of gully components are available, allowing a wide variety of gully combinations to be assembled on site to accommodate different applications.

Square or rectangular gully hoppers

The square or rectangular gully hoppers UG47/UG48 and the gully inlet raising piece UW401 all have connections for small diameter pipework above the trap water level but below the gully grating.

Waste pipes can be connected using standard Marley universal boss adaptors, as illustrated.

The larger diameter upstands on the square or rectangular gully hoppers are designed to provide a solvent socket connection for 68mm circular rainwater pipes.

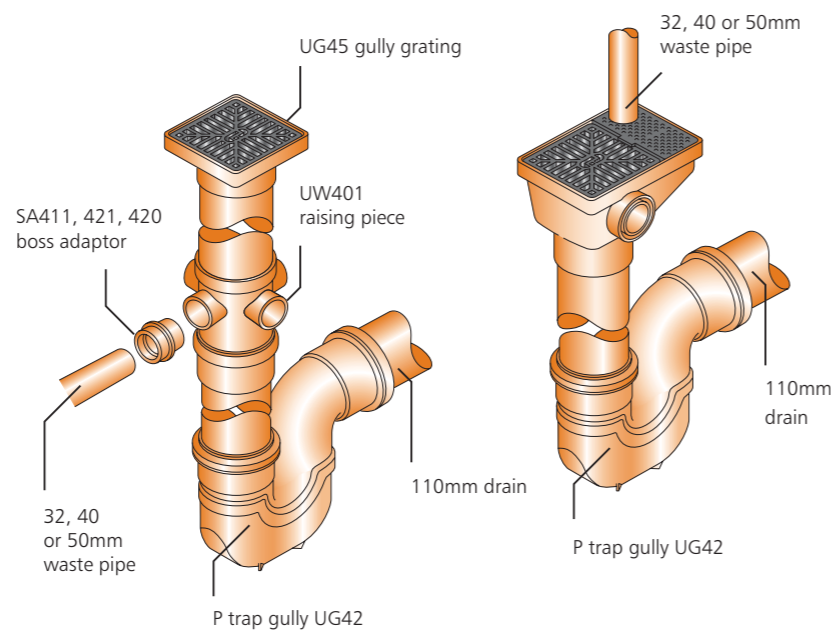


P trap gully

The double socket design of the UG42 P Trap Gully makes it ideal for use in restricted spaces and allows the trap to be orientated to suit the direction of the outlet pipe.

Both the square UG48 and rectangular UG47 hoppers can be connected to the gully using a short length of 110mm pipe cut to suit ground level.

The UG45 gully grating can also be used with the UW401 raising piece to receive waste pipe connections below ground level.

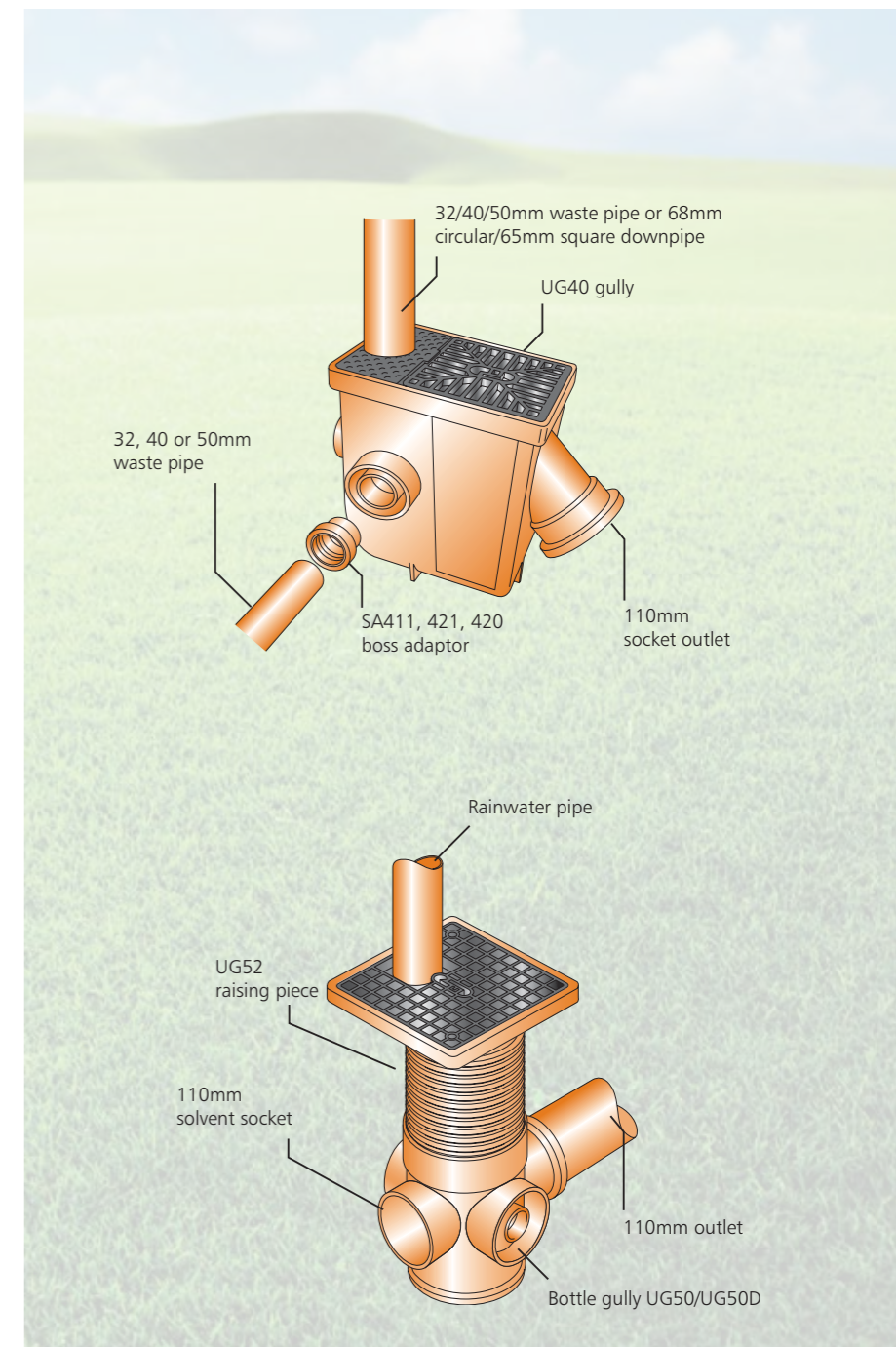


Compact gully

The UG40 compact gully is simple in design, it features a unique design of baffle plate which, when removed, provides full access to the main body for cleaning and rodding purposes.

Where a very shallow invert is required a UB45 110mm x 45° socket/spigot bend can be connected into the gully outlet.

The larger boss upstands on the gully accept 68mm rainwater pipe connections and the smaller upstands allow 32, 40 and 50mm pipes to be connected using the appropriate boss connector.



Bottle gully

The UG50 bottle gully is ideal for new or replacement installations and it provides the facility for direct 110mm connections and waste pipe connections via boss adaptors.

The fully rotating gully body allows the outlet to be orientated to suit the drain connection. A removable rubber plug provides access for cleaning.

The gully raising piece UG52 allows the gully to be installed at depths up to 520mm.

Installation procedure for bottle gully

1. Cut raising piece to required length by saw cutting midway between external corrugations.
2. Remove sealing ring from gully frame spigot and place in first corrugation of raising piece.
3. Lubricate and push fit raising piece into top of gully body.
4. Gully frame spigot can then be solvent welded into top of raising piece. The gully grating may be secured to the frame if necessary with two 6 x 13mm self tapping pan head corrosion resistant screws (not supplied).

Making the connection

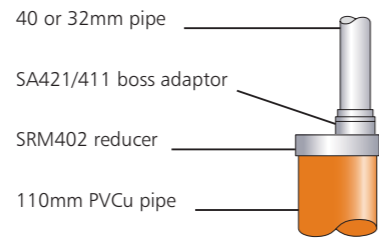
Marley offer a range of adaptors which allow connections from soil or rainwater to drain, making the process quick and straightforward.

Stub waste connections

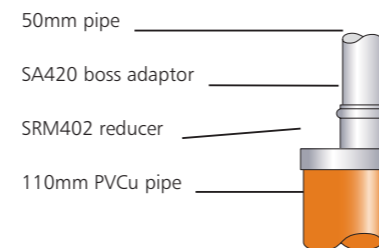
Isolated ground floor sanitary appliances are frequently supplied with their own 110mm drain in the form of an oversized and unventilated branch.

There are two methods of connecting waste pipework direct to drain. The SRM402 reducer may be used and solvent welded onto a plain spigot-upstand of pipe.

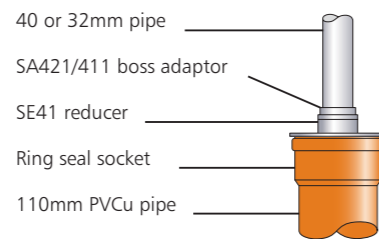
With the SE41 reducer a flexible connection is provided at floor level as this fitting push fits into a ring seal socket. Standard Marley boss adaptors are used with both types of reducer.



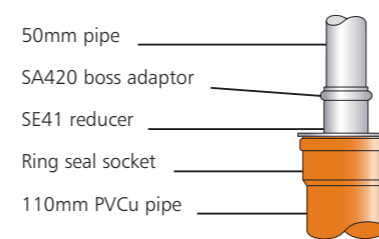
110mm PVCu to 40 or 32mm pipe



110mm PVCu to 50mm pipe



110mm PVCu to 40 or 32mm pipe



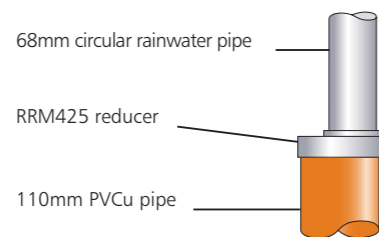
110mm PVCu to 50mm pipe

Rainwater pipe connections

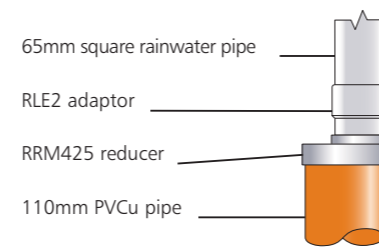
External rainwater pipes usually connect direct to the drain or, depending on the design of the sewerage system, via a gully trap.

Where rainwater pipes connect directly to a drain and are of different sizes, a suitable reducer and adaptor fitting will be required.

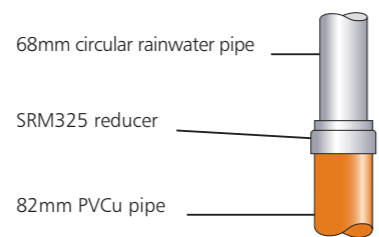
The diameter of 110mm PVCu solid wall above and below ground drainage systems are the same and therefore direct connection may be achieved without an adaptor.



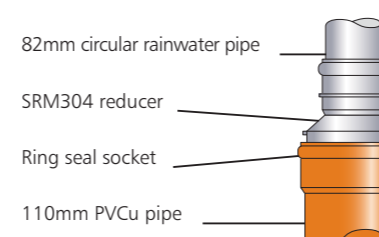
110mm PVCu to 68mm circular rainwater pipe



110mm PVCu to 65mm square rainwater pipe



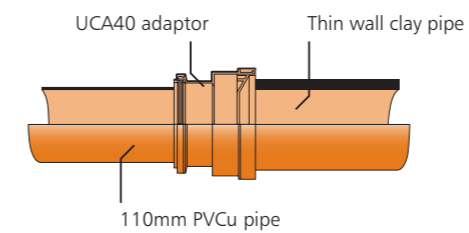
82mm PVCu to 82mm circular rainwater pipe



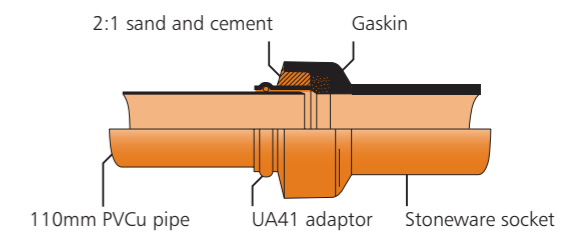
110mm PVCu to 82mm circular rainwater pipe

Connections to other materials

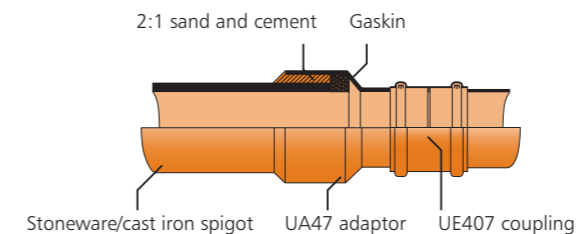
Marley also offer a range of adaptors allowing connections to be made to other materials, including clay. This allows for the replacement of existing sections of the pipe or simply to connect a new system to an existing one.



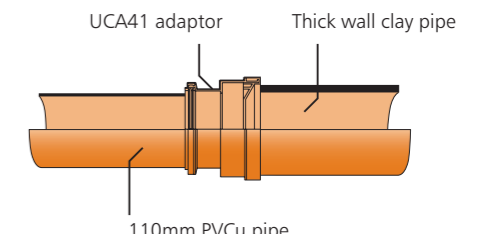
PVCu pipe socket to thin wall clayware socket



PVCu spigot to stoneware socket



PVCu socket to stoneware/cast iron spigot



PVCu pipe socket to thick wall clayware socket

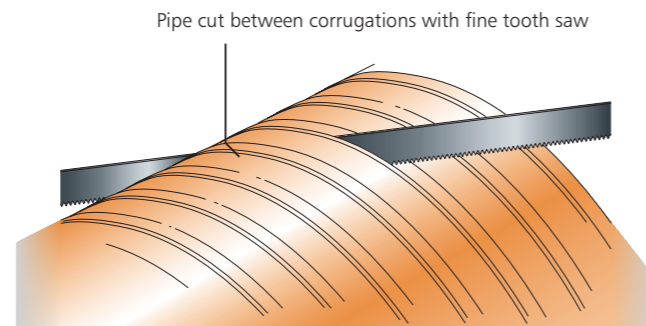
The UMA45 adaptor can be used to connect 160mm solid wall drainage pipes to BS EN 1401 to 150mm diameter nominal size clayware pipes as shown on page 23.

Making the connection

Cutting and jointing Quantum pipes

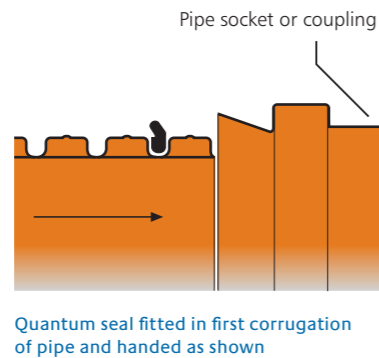
Quantum pipes may be easily cut to length on site if required using a fine tooth saw. Saw cuts should be made square to the pipe midway between the corrugations. It is not necessary to chamfer the end of the pipe after cutting.

Unlike joints on standard solid wall pipe, where the ring seal is located in a housing within the socket, with Quantum pipe the ring seal is fitted around the pipe.



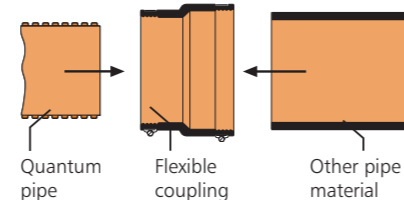
The procedure for jointing is as follows:

1. Ensure that the end of the pipe and inside the socket are free from swarf, grit, etc.
2. Fit seal into the first corrugation of the pipe making sure that the seal is correctly handed, as shown right, and that it is not twisted.
3. Apply lubricant around the pipe seal and inside the socket.
4. Push pipe fully into the socket either by hand or by using a timber block and lever on the other end of the pipe.



Flexible couplings

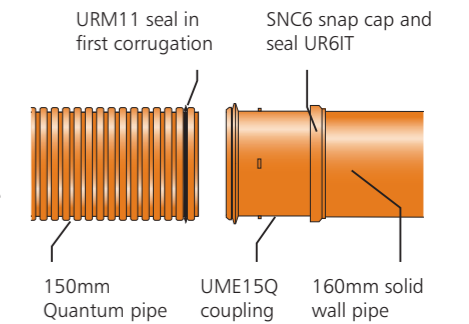
The range of flexible couplings allow connections to be made between Quantum pipes and pipes of other materials.



Quantum couplings, bends, branches and reducers have an all socket configuration and jointing these to Quantum pipe is achieved in the same way as described above.

Connection to 160mm solid wall pipe

All 150mm Quantum sockets have been designed for use with Quantum pipes and 160mm solid wall pipes to BS EN 1401. To adapt a Quantum fitting to accept 160mm solid wall drainage pipe, a snap cap SNC6 and seal UR61T must be fitted to the end of the socket to enable a connection to be made, as shown right.



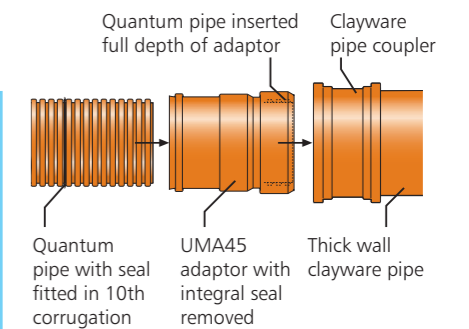
Quantum to thick wall clayware

The UMA45 adaptor may be used to connect 150mm Quantum pipe to Densleeve or Hepsleeve 188mm outside diameter clayware pipe.

The adaptor is designed to allow Quantum pipe to be jointed with clayware pipe using a standard clayware pipe coupler.

Installation procedure

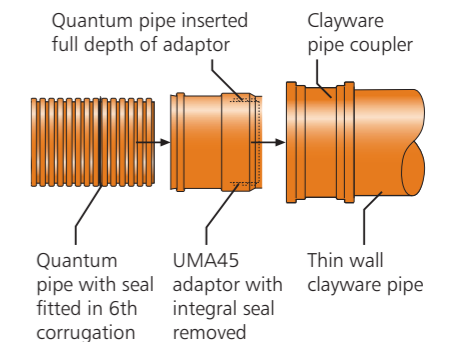
1. Remove factory fitted 'T' seal from adaptor socket.
2. Fit Quantum seal on the pipe in the 10th corrugation from the end of the pipe ensuring the seal is correctly handed.
3. Lubricate the seal and inside the socket of the adaptor. Push the adaptor over the pipe, ensuring the pipe passes completely through the adaptor until the end of the pipe aligns with the end of the adaptor.
4. Lubricate the adaptor spigot and push into the clayware pipe coupler up to the central register.



Quantum to thin wall clayware

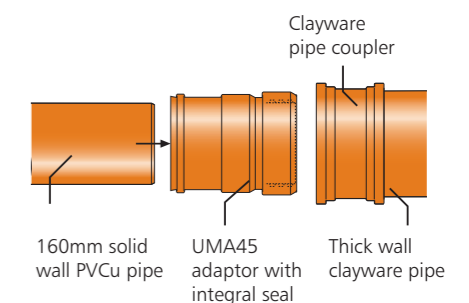
The same adaptor can also be used to connect 150mm Quantum pipe to Hepsleeve or Supersleeve 178mm outside diameter clayware pipe. For this application the end spigot of the adaptor is first removed using a fine tooth saw. The remaining section of the adaptor is then suitable for connecting directly into a standard polypropylene clayware pipe coupler as shown right.

The installation sequence for this application is similar to that previously described but the seal is fitted on the Quantum pipe in the 6th corrugation from the end of the pipe to take into account the shortened length of the adaptor.



Solid wall PVCu pipe to clayware

The UMA45 adaptor can also be used as supplied to connect 160mm solid wall PVCu pipe to clayware drainage, as shown right.



British & European Standards

BS 4660 & BS EN 1401

Thermoplastics ancillary fittings of nominal sizes 110 and 160 for below ground gravity drainage and sewerage.

BS 4962

Specification for plastic pipes and fittings for use as subsoil field drains.

BS EN 14680

Adhesives for non-pressure thermoplastic pipe systems.

BS 7158

Plastic inspection chambers for drains and sewers.

BS EN 124

Gully tops and manhole tops for vehicular and pedestrian areas. Design requirements, type testing, marking, quality control.

BS EN 295

Vitrified clay pipes & fittings and pipe joints for drains and sewers.

BS EN 681-1

Elastomeric seals. Material requirements for pipe joint seals used in water and drainage applications.

BS EN 752

Drain & Sewer Systems outside buildings.

BS EN 1295-1

Structural design of buried pipelines under various conditions of loading. General requirements.

BS EN 1610

Construction & Testing of Drains & Sewers.

BS EN 13476-3

Plastics piping systems for non-pressure drainage and sewerage, structured wall piping systems with smooth bore and profiled external surface.

BS EN ISO 9001: 2008

Quality management systems.

BS EN ISO 14001: 2004

Environmental management systems requirements with guidance for use.

BBA 11/H172

Quantum Highway Drainage System. 375-600mm pipes and couplings.

BBA 88/1977

Marley Underground Drainage System.

BBA 09/H146

Quantum Highway PVCu Twinwall Drainage System.

BBA 94/2985

Marley Quantum Sewer PVCu Twinwall Underground Drainage and Sewerage System.

BBA 98/3486

Marley Quantum Highway PVCu Twinwall Surface Water Drainage System.

WIS 4-08-01

Bedding and sidefill materials for buried pipelines.



Marley PVCu Soil

Standard PVCu soil systems to BS EN 1329: 2000. Ideal for domestic and commercial applications, including branch connections to other materials. Available in 82mm, 110mm and 160mm, ring seal and solvent weld jointing variants.



Marley HDPE

Marley Akatherm HDPE is a drainage system which offers an alternative solution to cast iron. It is particularly suited for commercial applications or where a product with high impact or abrasion resistance is required, such as hospitals, hotels, schools, as well as residential buildings. HDPE will also cope with temperature variations of -40°C to 100°C making it ideal for external as well as internal installations.



Marley dBlue

An acoustic soil and waste range with a triple layered pipe providing quick, hygienic removal of sanitary waste water. The noise generated by the flow of water is dramatically reduced – making it perfect for multi-occupancy apartment blocks and high specification developments.



Marley waste systems

A wide range of PVC-C, ABS and polypropylene waste ranges from 32mm to 50mm and in a variety of colours. Available with solvent weld, compression and push fit jointing.



Marley rainwater

Seven gutter profiles and five downpipe options provide a rainwater solution for any application. Advanced Life⁴ technology on four of the key profiles, coupled with the benefits of the Easyclip and notching capability combine to make the Marley rainwater range the most comprehensive available.



Marley Alutec

Alutec offer modern and traditional aluminium rainwater profiles, providing solutions for any type of building. Aluminium has high visual appeal and durability, lasting for 50 years or more. The product portfolio includes Evolve; easy to install, low cost gutter systems in four profiles. The rainwater ranges are complemented by aluminium soffit and fascia systems and roof & floor outlets.

Accreditations



Certificate No. 88/1977
94/2985
98/3486
09/H146
11/H172

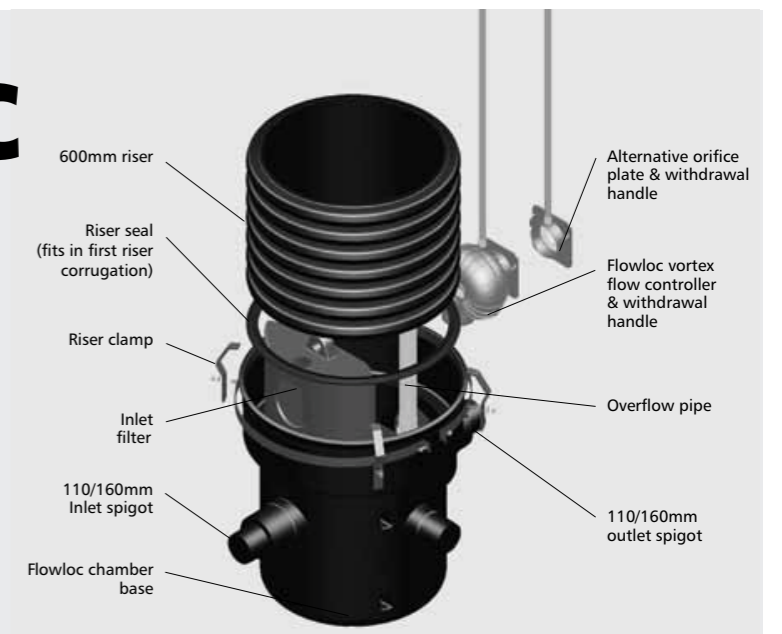


KM 05495
KM 05495
KM542682



flowloc

- Heavy duty aluminium flow controller and coupling system, electro coated for long service life. Available to suit a wide range of flow rates.
- Supplied within a chamber base with an integrated filter providing protection against controller blockage.
- Suitable for use with tank depths up to 4m.
- All components readily removable from surface for ease of maintenance.
- The chamber base is also suitable for installation within a conventional man entry inspection chamber if required.



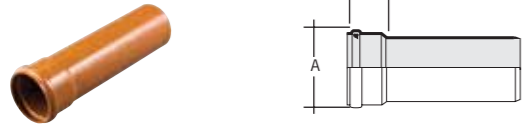
Solid wall drainage systems

PIPE



Size mm	Code	Length	Colour	Qty
110	UL403	3m	O	1
110	UL406	6m	O	1
160	UL606	6m	O	1

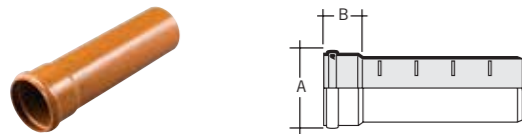
Double spigot with chamfer each end



Size mm	Code	Length	A	B	Colour	Qty
110	UP403	3m	128	70	O	1
160	UP603	3m	182	107	O	1
110	UP406	6m	128	70	O	1
160	UP606	6m	182	107	O	1

Push fit socket

SLOTTED PIPE



Size mm	Code	Length	A	B	Colour	Qty
110	UPP406	6m	128	70	O	1

Push fit socket

STRAIGHT COUPLINGS



Push fit polypropylene coupling

Size mm	Code	A	B	Colour	Qty
110	UE407	102	50	O	20

(supplied in U.V. resistant polythene bags)



Push fit coupling

Size mm	Code	A	B	Colour	Qty
110	UE406	128	61	O	8
160	UME15C	170	83	O	4



Push fit slip coupling

Size mm	Code	A	Colour	Qty
110	UE405	128	O	8
160	UME16C	170	O	4

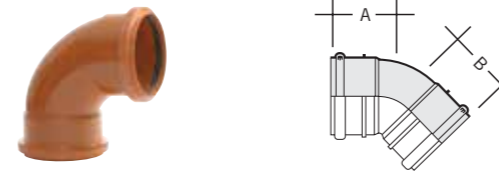
STRAIGHT COUPLING



Loose pipe socket

Size mm	Code	Length	A	B	Colour	Qty
110	UE400	109m	61	48	O	8
160	UE600	190m	107	77	O	4

SHORT RADIUS BENDS



Size mm	Code	Angle	A	B	Colour	Qty
110	UB41	87½°	175	182	O	4
160	UB61	87½°	236	232	O	1
110	UB45	45°	145	125	O	4
160	UB65	45°	130	118	O	1
110	UB430R	30°	89	82	O	4
160	UB69	30°	160	150	O	1
110	UB420	20°	102	81	O	1
160	UB68	15°	150	110	O	1
110	UB410	10°	98	75	O	1

Push-fit socket/spigot



Size mm	Code	Angle	A	B	Colour	Qty
110	UB411	87½°	158	158	O	4
160	UMB19C	87½°	200	200	O	1
110	UB455	45°	95	95	O	4
160	UMB14C	45°	115	115	O	1
110	UB4300R	30°	80	80	O	4
160	UMB13C	30°	105	105	O	1
110	UB4200	20°	102	81	O	1
160	UMB11C	15°	95	95	O	1
110	UB4100	10°	98	76	O	1

Double push-fit socket

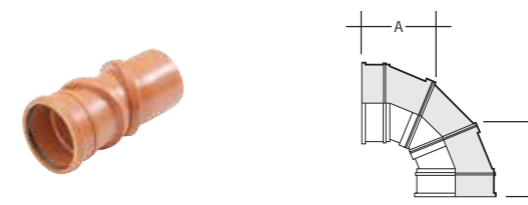
ADJUSTABLE BENDS



Size mm	Code	Angle	A	B	Colour	Qty
110	UB47	21-90°	210	205	O	4
160	UB67	15-90°	285	275	O	2

Socket should be solvent welded

MULTIFLEX BENDS



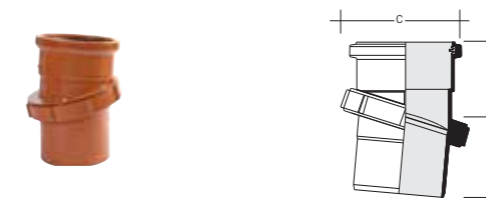
Size mm	Code	Angle	A	B	Colour	Qty
110	USB110	0-90°	205	205	O	1

Single socket

Size mm	Code	Angle	A	B	Colour	Qty
110	UDSB110	0-90°	205	205	O	1

Double socket

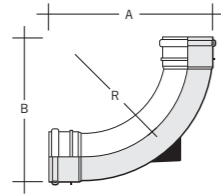
MECHANICAL BEND



Size mm	Code	Angle	A	B	Colour	Qty
110	UB47M	5-30°	200	177	O	1

Solid wall drainage systems

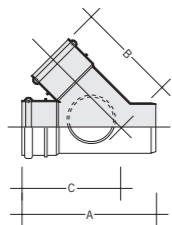
LONG RADIUS BEND



Size mm	Code	Angle	A	B	R	Colour	Qty
110	UBL488	87½°	310	360	270	O	4

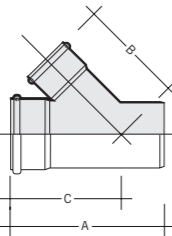
Socket/socket

EQUAL BRANCHES



Size mm	Code	Angle	A	B	C	Colour	Qty
110	UY401	87½°	300	150		O	4
160	UY601	87½°	400	200		O	2
110	UY46	45°	320	205	205	O	4
160	UY63	45°	400	280	280	O	2

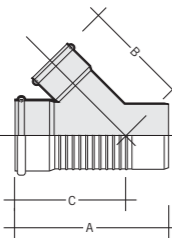
Socket/spigot



Size mm	Code	Angle	A	B	C	Colour	Qty
110	UY400	87½°	300	150		O	4
160	UMY13C	87½°	400	200		O	2
110	UY466	45°	325	215	200	O	4
160	UMY11C	45°	400	280	280	O	2

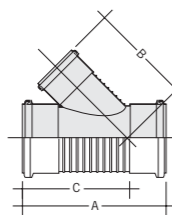
All socket

UNEQUAL BRANCHES



Size mm	Code	Angle	A	B	C	Colour	Qty
160 x 110	UY64	87½°	340	180	126	O	2
160 x 110	UY66	45°	357	245	254	O	2

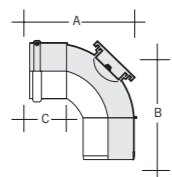
Socket/spigot



Size mm	Code	Angle	A	B	C	Colour	Qty
160 x 110	UMY12C	87½°	340	180	252	O	2
160 x 110	UMY10C	45°	316	232	236	O	2

All socket

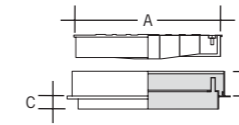
ACCESS BEND



Size mm	Code	Angle	A	B	C	Colour	Qty
110	UB42	87½°	172	174	80	O	4

With rear access, socket/spigot
Fitted with a twist and lock access cap which can be secured with a No. 8 screw

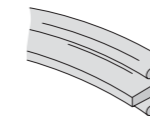
INSPECTION CHAMBER LID & FRAME



Size mm	Code	A	B	C	Colour	Qty
250	UCL2	280	50	20	B	1

PVCu (A15 loading)

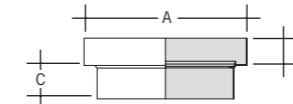
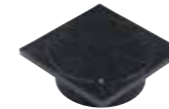
SPARE RING SEAL



Size mm	Code	Colour	Qty
250	SR250	B	1

Optional for UCL2 PVCu lid

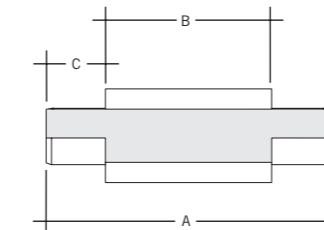
SQUARE LID & FRAME



Size mm	Code	A	B	C	Colour	Qty
250	UCL3	318	20	78	B	1

A15 loading

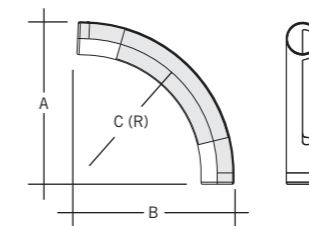
STRAIGHT DOUBLE SPIGOT OPEN CHANNEL



Size mm	Code	A	B	C	Colour	Qty
110	UCC4	1500	610	445	O	1

Double spigot, keyed for sand/cement benching
1.5m long, with 600mm opening

LONG RADIUS OPEN CHANNEL BEND



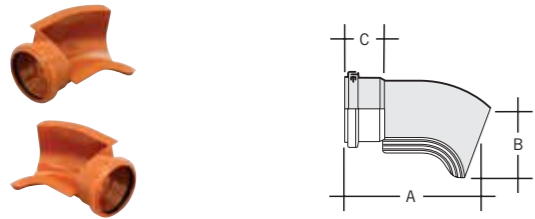
Size mm	Code	Angle	A	B	C	Colour	Qty
110	UCB48L	87½°	310	360	270	O	1

Double spigot, keyed for sand/cement benching

Solid wall drainage systems

Inspection chambers

SLIPPER BENDS



Size mm	Code	A	B	C	Colour	Qty
Left hand						
110	USB41	230	120	65	O	1
Right hand						
110	USB42	230	120	65	O	1

Push-fit socket, keyed for sand/cement benching.
Bend may be trimmed to adjust the angle of entry to the manhole.

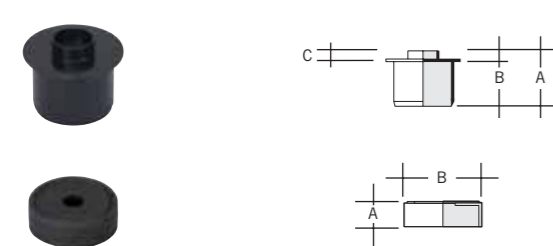
LEVEL INVERT REDUCERS



Size mm	Code	A	B	C	Colour	Qty
110-82	URM304	135	67	54	O	4
160-110	URM604	219	90	82	O	4

Spigot/socket

CONCENTRIC REDUCERS



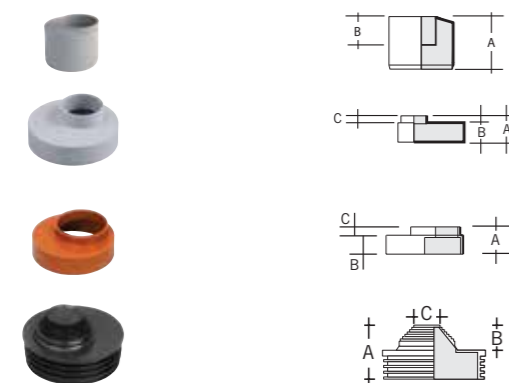
Size mm	Code	A	B	C	Colour	Qty
110-50	SE41	103	80	19	B G	1

Spigot to boss upstand

Size mm	Code	A	B	Colour	Qty
110	UA42	31	104	B	100

110 x 68/65mm

ECCENTRIC REDUCERS



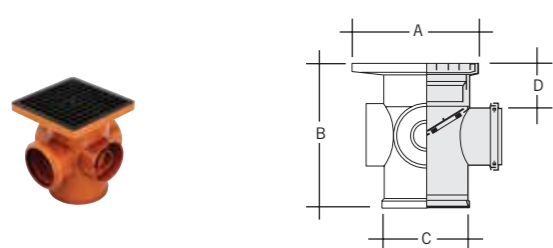
Size mm	Code	A	B	C	Colour	Qty
82-50	SRM30	70	48	19	B G	90
110-50	SRM402	48	25	19	B G	10

Solvent socket to boss upstand

Size mm	Code	A	B	C	Colour	Qty
110-68	URM425	40	25	12	O	10
110	UA43	58	25	34	B	1

URM425 Solvent socket to 68mm downpipe
UA43 Universal waste to 110mm drain

BOTTLE GULLY



Size mm	Code	A	B	C	D	Colour	Qty
110	UG50	237	277	152	95	O	1

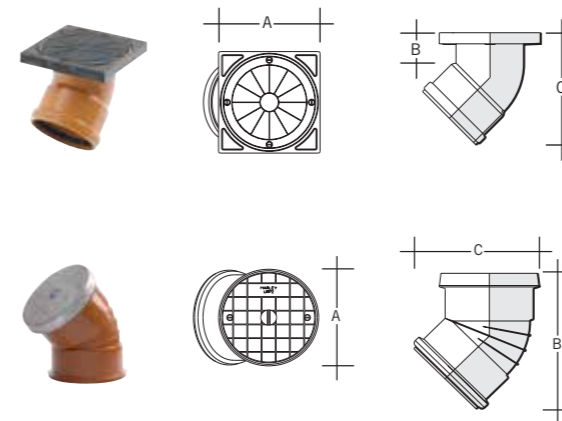
A15 loading
Push fit socket outlet, three 110mm solvent weld inlets with 50mm boss upstands and rodding access

Bottle gully with back inlet plugged

Size mm	Code	A	B	C	D	Colour	Qty
110	UG50D	237	277	152	95	O	1

A15 loading

RODDING POINT



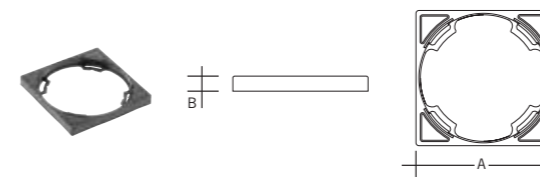
Size mm	Code	Angle	A	B	C	Colour	Qty
110	URP1	45°	164	68	70	O	10

A15 loading. Black cover with four screw fixings and seal

Size mm	Code	Angle	A	B	C	Colour	Qty
160	URP2C	45°	190	92	89	O	4

A15 loading. Aluminium cover with two screw fixings

SQUARE RODDING POINT COVER (SPARE)



Size mm	Code	A	B	Colour	Qty
110	URPFSQ	163	18	B	10

For use with URP1

ACCESS CAP



Size mm	Code	A	B	Colour	Qty
110	UE42	130	30	O	50
160	UE62	195	40	O	15

Solvent socket

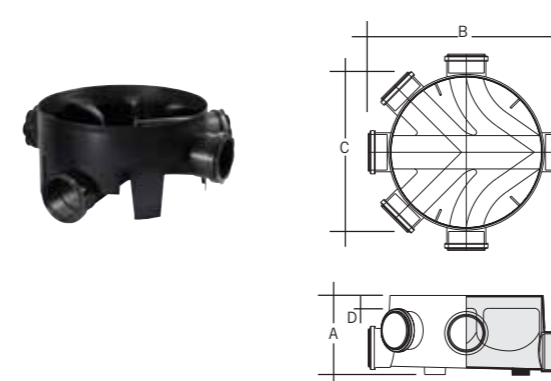
PRESSURE PLUG



Size mm	Code	A	B	Colour	Qty
110	UE43	110	30	O	135
160	UE64	160	30	O	30

Push fits into plain end of pipe

450MM INSPECTION CHAMBER BASES



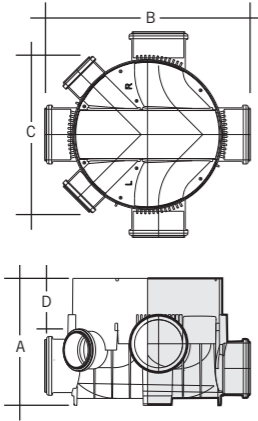
Size mm	Code	A	B	C	D	Colour	Qty
110	UCC3	245	608	608	50	B	1

Supplied with 4 blanking plugs. Max invert depth 1.2m (when used with UCR2 riser). 245mm high. All 110mm connections.

The 'D' dimension relates to the height of side branches above invert of main channel

Inspection chambers

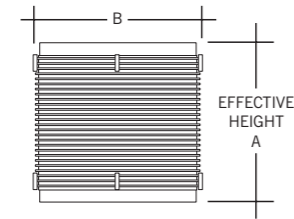
450MM INSPECTION CHAMBER BASES



Size mm	Code	A	B	C	D	Colour	Qty
110/160	UCC5	80	75	490	192	B	1

The A and B dimensions relate to the height of side branches above invert level of main channel.
Max invert depth 4m (when used with UCR3 riser)
All socket connections. 400mm high, 110 and 160mm, connections.

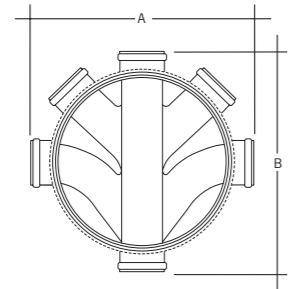
CHAMBER RISER



Size mm	Code	A	B	Colour	Qty
450	UCR2	390	450	B	1

Push fit ring seal joint into chamber base. 430mm high, includes one 450mm seal.
For use with UCC3/5 for invert depths up to 1.2m

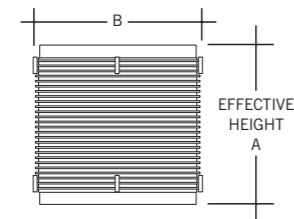
DEEP INSPECTION CHAMBER



Size mm	Code	A	B	Colour	Qty
110	UCC3D	608	608	B	1

Max invert depth 4m (when used with UCR3 riser)
All socket connections.
655mm high

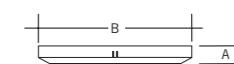
DEEP INSPECTION CHAMBER RISER



Size mm	Code	A	B	Colour	Qty
450	UCR3	410	488	B	1

For use with UCC3D or UCC5 when invert depth is greater than 1.2m.
Max invert depth 4m
480mm high
Includes one 450mm seal

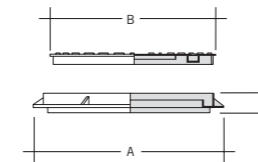
REDUCED ACCESS RING



Size mm	Code	A	B	Colour	Qty
450	UCLRR	60	455	B	1

Provides 350mm restricted opening. Snap lock connection to the frame of the UCL35PP and UCL35SQ

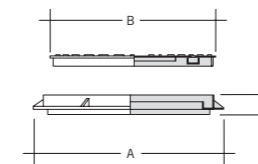
CAST IRON COVER AND FRAME



Size mm	Code	A	B	C	Colour	Qty
450	UCL35	517	490	40	B	1

3.5 tonnes. Domestic driveway loading

POLYPROPYLENE COVER AND FRAME



Size mm	Code	A	B	C	Colour	Qty
450	UCL35PP	547	494	70	B	1

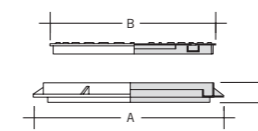
3.5 tonnes. Domestic driveway loading



Size mm	Code	A	B	C	Colour	Qty
450	UCL35SQ	547	494	70	B	1

3.5 tonnes. Domestic driveway loading

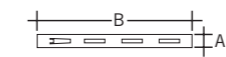
DUCTILE IRON LID AND CAST IRON FRAME



Size mm	Code	A	B	C	Colour	Qty
450	UCL125	547	492	48	B	1

12.5 tonnes

CHAMBER RISER CLIP

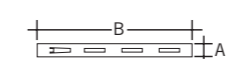


PK10

Code	A	B	Qty
UCC10	19	200	10

For use with UCR2 riser

DEEP INSPECTION CHAMBER RISER CLIP

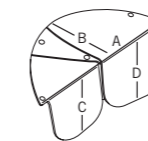


PK10

Code	A	B	Qty
UCC10D	19	204	10

For use with UCR3 riser.
Zintec coated, supplied in packet of 10.
Used to connect chamber to riser and riser to riser.

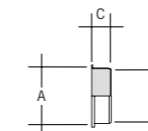
INSPECTION CHAMBER INSERTS



Code	A	B	C	D	Colour	Qty
Left hand UCB1	425	159	171	167	B	1
Right hand UCB2	425	159	167	171	B	1

For use with the UCC5 inspection chamber

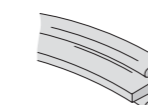
SPARE BLANKING PLUG



Size mm	Code	A	B	C	Colour	Qty
110	UCP1	117	110	40	B	70
160	UCP2	165	160	60	B	1

Black polypropylene
For use with UCC3/5

SPARE RING SEAL



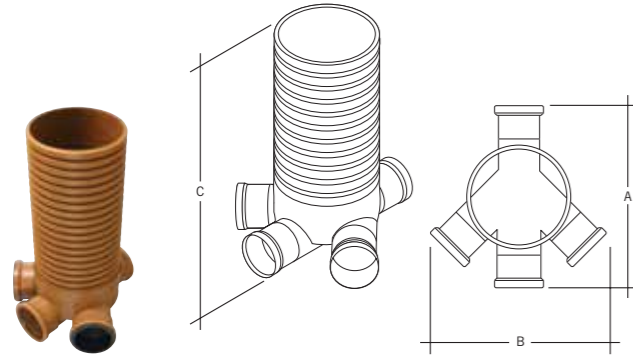
Size mm	Code	Colour	Qty
450	SR450	B	1

For use with UCR2/3

Inspection chambers

Gullies

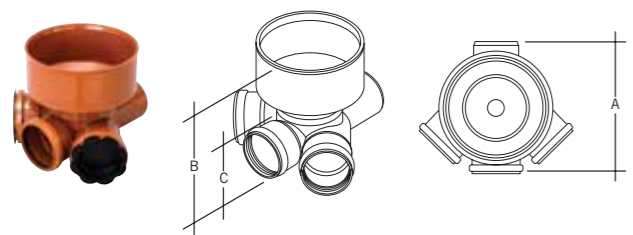
LEVEL INVERT INSPECTION CHAMBER



Size mm	Code	A	B	C	Colour	Qty
250	UCC7	380	420	600	O	1

Maximum invert depth - 600mm
All 110mm socket connections

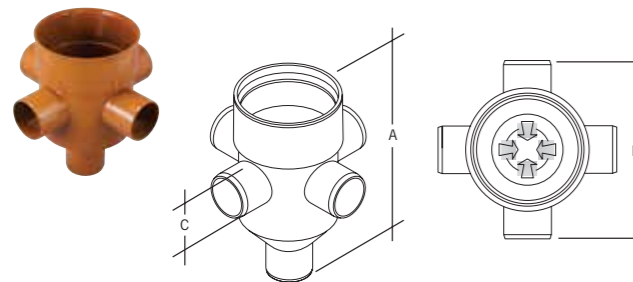
DOUBLE BRANCH CHAMBER BASE



Size mm	Code	A	B	C	Colour	Qty
250	UAC44	344	275	170	O	1

45° equal connections
Includes two socket plugs and profiled insert
Maximum invert depth - 600mm

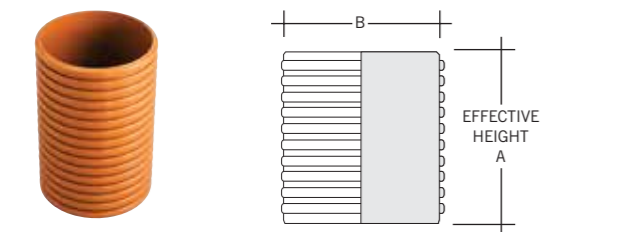
BOTTOM OUTLET CHAMBER BODY



Size mm	Code	A	B	C	Colour	Qty
250	UAC02	428	415	120	O	1

Maximum invert depth to side connections - 600mm
90° equal connections
4 x 110mm upstands, 3 open connections

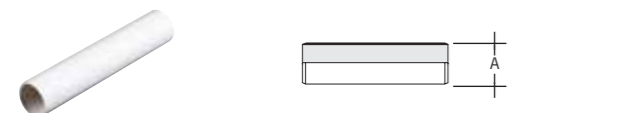
CHAMBER RISER



Size mm	Code	A	B	Colour	Qty
250	UAR1	375	250	O	1

For use with UAC44 & UAC02

LIFTING HANDLE



Size mm	Code	Length	A	Colour	Qty
40	KP204W	4	40	W	10

For use with UAC44

SPARE BOTTLE GULLY GRID



Size mm	Code	A	B	Colour	Qty
Sealed lid	UG51	228	23	B	1
Sealed lid	UG51SA	228	45	B	1

For use with UG50 bottle gully

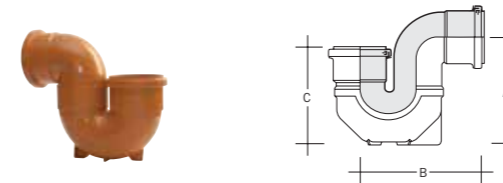
BOTTLE GULLY RAISING PIECE



Size mm	Code	A	B	Colour	Qty
160	UG52	160	352	O	1

For use with bottle gully UG50 to adjust invert level of trap outlet

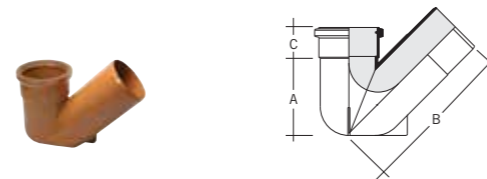
'P' TRAP GULLY



Size mm	Code	A	B	C	Colour	Qty
110	UG42	240	270	215	O	1

Push-fit socket inlet, 87½° socket outlet

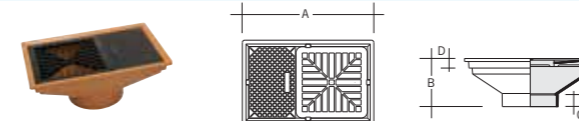
GULLY TRAP BASE



Size mm	Code	A	B	C	Colour	Qty
110	UG44	170	294	28	O	4

Solvent socket inlet, 45° spigot outlet

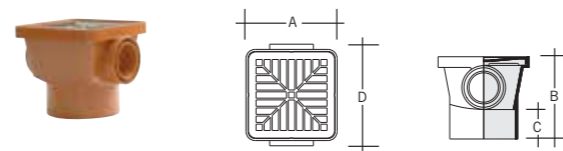
RECTANGULAR HOPPER



Size mm	Code	A	B	C	Colour	Qty
110	UG47	232	142	50	O	4

Solvent socket, accepts 68mm downpipe inside larger boss with two 50mm boss upstands
Grating meets requirements of BS 4660: 2000 load Class K3

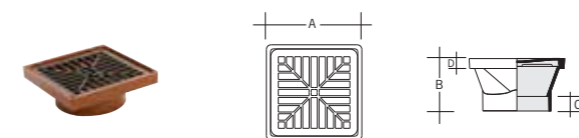
SQUARE HOPPER



Size mm	Code	A	B	C	Colour	Qty
110	UG48	160	142	50	O	4

Solvent socket, accepts 68mm downpipe inside larger boss with two 50mm boss upstands
Grating meets requirements of BS 4660: 2000 load Class K3

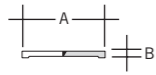
GRATING ASSEMBLY



Size mm	Code	A	B	C	Colour	Qty
110	UG45	162	55	28	O	30

Solvent socket
Grating meets requirements of BS 4660: 2000 load Class K3

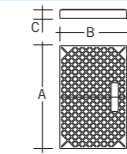
SPARE GULLY GRID



Size mm	Code	A	B	Colour	Qty
110	UG46	149	14	B	20

For use with UG40 gully and UG45, UG47 & UG48 gully hoppers

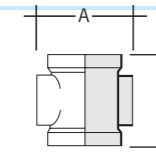
SPARE GULLY BACK PLATE



Size mm	Code	A	B	C	Colour	Qty
110	UG49	150	80	16	B	20

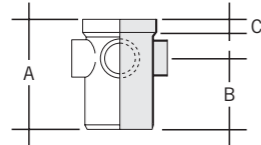
For use with UG40 gully and UG47 gully hoppers

INLET RAISING PIECES



Size mm	Code	A	B	Colour	Qty
110	UWS43	148	156	O	4

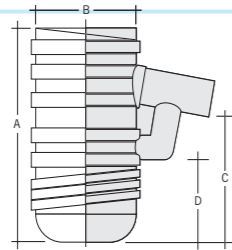
2 x 82mm upstands



Size mm	Code	A	B	C	Colour	Qty
110	UW401	181	125	20	O	4

Solvent socket/spigot, four 50mm boss upstands, one open

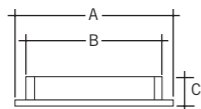
YARD GULLY



Size mm	Code	A	B	C	D	Colour	Qty
110	UYG40	634	315	392	238	B	1

Black high density polyethylene with spigot outlet and removable rodding access plug

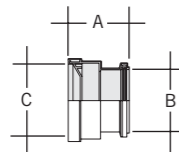
GRATING AND FRAME FOR YARD GULLY



Size mm	Code	A	B	C	Colour	Qty
400	UYG42	400	320	75	B	1

Cast iron with hinged grating
B125 loading (12.5 tonne test load) suitable for car park areas

ADAPTORS



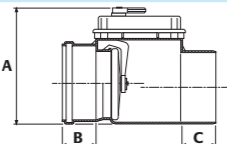
Size mm	Code	A	B	C	Colour	Qty
110	UCA40	120	110	130	B	1

Socket/socket to suit thin wall clayware spigot pipe

Size mm	Code	A	B	C	Colour	Qty
110	UCA41	120	110	138	B	1

Socket/socket to suit thick wall clayware pipe

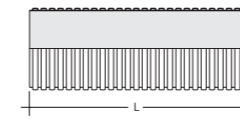
ANTI-FLOOD VALVE



Size mm	Code	A	B	C	Colour	Qty
110	USW130	175	52	69	B	1
160	USW140	225	100	92	B	1

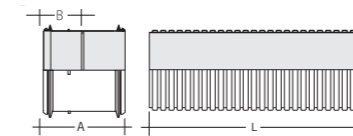
Double flap

QUANTUM SEWER PIPE



Size mm	Code	Length	Colour	Qty
150	ULS13	3m	O	46
225	ULS23	3m	O	16
300	ULS33	3m	O	9
150	ULS16	6m	O	46

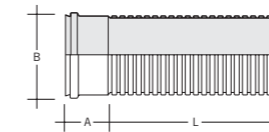
Double spigot



Size mm	Code	Length	A	B	Colour	Qty
150	UPS13*	3m	170	83	O	46
225	UPS23	3m	220	94	O	16
300	UPS33	3m	237	110	O	9
150	UPS16*	6m	170	83	O	46
225	UPS26	6m	220	94	O	16
300	UPS36	6m	237	110	O	9

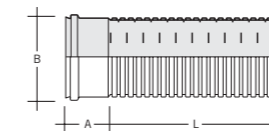
*Pipe with coupling and seals

QUANTUM HIGHWAY PIPE



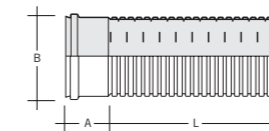
Size mm	Code	Length	A	B	Colour	Qty
150	UPH16	6m	90	175	O	46
225	UPH26	6m	125	275	O	16
300	UPH36	6m	110	340	O	9

Push-fit socket



Size mm	Code	Length	A	B	Colour	Qty
150	USH16	6m	90	175	O	46
225	USH26	6m	125	275	O	16
300	USH36	6m	110	340	O	9

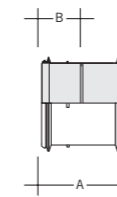
Half slotted socket
Order seals if necessary



Size mm	Code	Length	A	B	Colour	Qty
150	UHH16	6m	90	175	O	46
225	UHH26	6m	125	275	O	16
300	UHH36	6m	110	340	O	9

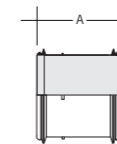
Fully slotted socket
Order seals if necessary

COUPLINGS



Straight

Size mm	Code	A	B	Colour	Qty
150	UME15Q	170	83	O	4
225	UME25	220	94	O	2
300	UME35	237	110	O	2

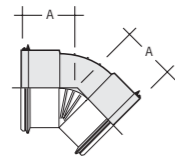


Slip

Size mm	Code	A	Colour	Qty
150	UME16Q	170	O	4
225	UME26	220	O	2
300	UME36	237	O	2

Quantum Drainage

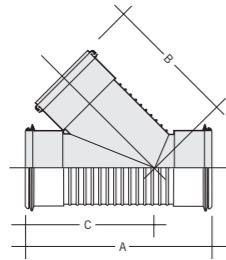
BENDS



Size mm	Code	Angle	A	Colour	Qty
150	UMB19Q	87½°	200	O	2
225	UMB29	87½°	595	O	2
300	UMB39	87½°	730	O	2
150	UMB14Q	45°	115	O	2
225	UMB24	45°	160	O	2
300	UMB34	45°	195	O	2
150	UMB13Q	30°	105	O	2
225	UMB23	30°	145	O	2
300	UMB33	30°	175	O	2
150	UMB11Q	15°	95	O	2
225	UMB21	15°	125	O	2
300	UMB31	15°	150	O	2

Double socket

EQUAL BRANCH



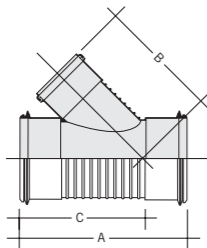
Size mm	Code	Angle	A	B	C	Colour	Qty
150	UMY13Q*	87½°	400	200	280	O	2

All socket

Size mm	Code	Angle	A	B	C	Colour	Qty
150	UMY11Q*	45°	400	280	280	O	2
225	UMY22	45°	655	430	460	O	2
300	UMY33	45°	800	540	575	O	2

All socket

UNEQUAL BRANCH



87½°

Size mm	Code	A	B	C	Colour	Qty
150x110	UMY12Q*	340	180	236	O	2

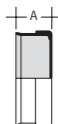
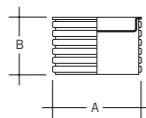
45°

Size mm	Code	A	B	C	Colour	Qty
150x110	UMY10Q*	316	232	236	O	2
225x110	UMY20	370	300	300	O	1
225x150	UMY21*	440	340	340	O	1
300x110	UMY30	520	375	425	O	1
300x150	UMY31*	590	425	460	O	1
300x225	UMY32	700	520	480	O	1

* Supplied with black snap cap.

To convert 150mm branch to accept 160mm solid wall pipe, a snap cap SNC6 and ring seal SR160T must be fitted.

PLUGS



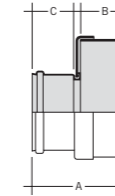
Socket plug

Size mm	Code	A	B	Colour	Qty
150	UMJ11	160	110	O	1

End cap

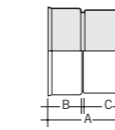
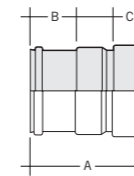
Size mm	Code	A	Colour	Qty
150	UMK11	70	O	1
225	UMK21	95	O	1
300	UMK31	110	O	11

LEVEL INVERT REDUCER



Size mm	Code	A	B	C	Colour	Qty
225x150	UML21	200	95	90	O	1
300x225	UML32	240	110	95	O	1

ADAPTORS



Size mm	Code	A	B	C	Colour	Qty
150	UMA45	230	90	60	O	1

Quantum/solid wall
PVC to clayware pipe coupler

Size mm	Code	A	B	C	Colour	Qty
150	UMA17	160	71	82	O	1

Quantum socket to solid wall spigot

FLEXIBLE COUPLING



Size mm	Code	A	Colour	Qty
150	UMD17	150	B	1
225	UMD27	130	B	1
300	UMD37	160	B	1

PIPE SEALS



PK5



PK5



Size mm	Code	Colour	Qty
150	UMR150	B	5
225	UMR225	B	5
300	UMR300	B	5

Quantum pipe seal

Size mm	Code	Colour	Qty
150	SR160T	B	5

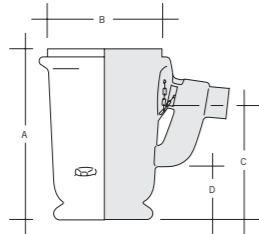
BS 4660 seal to convert Quantum 150mm sockets
for use with BS EN 1401 pipe

Size mm	Code	Colour	Qty
150	SNC6	O	1

Snap cap to convert Quantum 150mm sockets

for use with BS EN 1401 pipe

POLYETHYLENE GULLY POT LINER



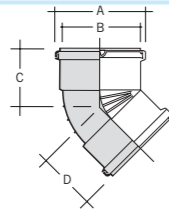
Size mm	Code	A	B	C	D	Colour	Qty
150	UMA43	760	500	520	220	B	1

90 litres
760mm deep x 500mm diameter

Size mm	Code	A	B	C	D	Colour	Qty
150	UMA49	920	500	680	380	B	1

112 litres
920mm deep x 500mm diameter

RODDING POINT



45°

Size mm	Code	A	B	C	D	Colour	Qty
150	URP2Q	190	160	115	105	O	1

Socketed with aluminium cover

SILICONE LUBRICANT

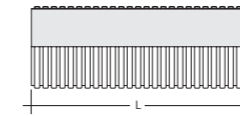
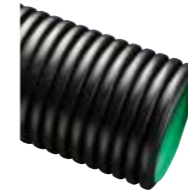


Tub 1kg

Code	Qty
UMA41	1

Water Research Centre Approved

6M PIPE



Solid wall

Size mm	Code	Length	Colour	Qty
375	UPH375*	6m	B	1
450	UPH450*	6m	B	1
600	UPH600*	6m	B	1

Half perforated

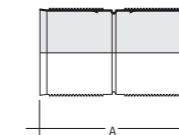
Size mm	Code	Length	Colour	Qty
375	USH375	6m	B	1
450	USH450	6m	B	1
600	USH600	6m	B	1

Fully perforated

Size mm	Code	Length	Colour	Qty
375	UHH375	6m	B	1
450	UHH450	6m	B	1
600	UHH600	6m	B	1

All pipes are socketed, or supplied with coupling and seal

COUPLING



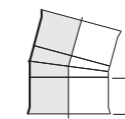
Size mm	Code	A	Colour	Qty
375	UME375*	330	B	1
450	UME450*	396	B	1
600	UME600*	490	B	1

SEALING RING



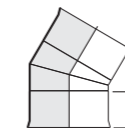
Size mm	Code	Colour	Qty
375	UMR375*	B	1
450	UMR450*	B	1
600	UMR600*	B	1

BEND



11.25°

Size mm	Code	A	Colour	Qty
375	UMB3751	225	B	1
450	UMB4501	275	B	1
600	UMB6001	325	B	1



22.5°

Size mm	Code	A	Colour	Qty
375	UMB3752	225	B	1
450	UMB4502	245	B	1
600	UMB6002	325	B	1

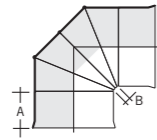


45°

Size mm	Code	A	Colour	Qty
375	UMB3754*	225	B	1
450	UMB4504*	245	B	1
600	UMB6004	325	B	1

Large diameter quantum highway

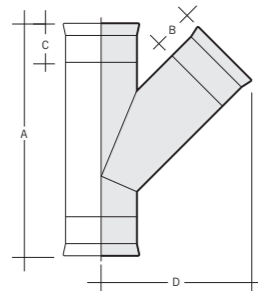
BEND



90°						
Size mm	Code	A	B	Colour		Qty
375	UMB3759	250	90	B	☰	1
450	UMB4509	290	100	B	☰	1
600	UMB6009	370	100	B	☰	1

160, 250 and 315mm branch connections are spigot ended and need to be used in conjunction with couplings and seals. For 160mm branch, use UME15C coupling. For 250mm branch, use UMD23 coupling. For 300mm branch use UMD33 coupling. Remove one snap cap and seal from UME15C to convert to 150mm quantum. The 375, 450 and 600mm branches are all socketed.

BRANCH



45°							
Size mm	Code	A	B	C	D	Colour	Qty
375x160	UMY3751*	795	80	185	595	B	1
375x250	UMY3752	970	140	185	695	B	1
375x315	UMY3753	1100	160	185	795	B	1
375x375	UMY3754	1240	185	185	760	B	☰
450x160	UMY4501*	970	80	200	640	B	1
450x250	UMY4502	1130	140	200	735	B	1
450x315	UMY4503	1230	160	200	840	B	1
450x375	UMY4504	1390	185	200	800	B	☰
450x450	UMY4505	1490	200	200	895	B	☰
600x160	UMY6001	995	80	240	730	B	1
600x250	UMY6002	1190	140	240	825	B	1
600x315	UMY6003	1320	160	240	930	B	1
600x375	UMY6004	1505	185	240	890	B	☰
600x450	UMY6005	1640	200	240	985	B	☰
600x600	UMY6006	1900	240	240	1190	B	☰

90°							
Size mm	Code	A	B	C	D	Colour	Qty
375x160	UMT3751	665	80	185	585	B	1
375x250	UMT3752	815	140	185	620	B	1
375x315	UMT3753	840	160	185	675	B	1
375x375	UMT3754	1000	185	185	500	B	☰
450x160	UMT4501	710	80	200	580	B	1
450x250	UMT4502	815	140	200	665	B	1
450x315	UMT4503	870	160	200	720	B	1
450x375	UMT4504	980	185	200	540	B	☰
450x450	UMT4505	1320	200	200	660	B	☰
600x160	UMT6001	865	80	240	620	B	1
600x250	UMT6002	1060	140	240	665	B	1
600x315	UMT6003	1125	160	240	810	B	1
600x375	UMT6004	1190	185	240	630	B	☰
600x450	UMT6005	1450	200	240	760	B	☰
600x600	UMT6006	1650	240	240	825	B	☰

FLEXIBLE COUPLING



Size mm	Code	A	B	C	Colour	Qty
250/225mm	UMD23	250	150	250	B	1
315/300mm	UMD33	315	190	315	B	1

* Available in stock. All other products have a 28 day lead time. **Seals to be ordered separately if required.**

Ancillary Items

SOLVENT CEMENT



	Code	Qty
Tub 250ml	KS10	1

To BS EN 1329, BS EN 1401, BS EN 1455 & BS 4576

SOLVENT CEMENT



	Code	Qty
Tube with sponge applicator 50g	SZ50	1
Tub 100g	SZ100	1
Aerosol* 400ml	SZ400	1
Tub 500g	SZ500	1
Tub 1kg	UMA41	1

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PIPE RING SEALS



'T' ring			
Size mm	Code	Colour	Qty
110	SR110T	B	5
160	SR160T	B	5

To BS EN 681/1

SNAP CAP



Size mm	Code	Colour	Qty
160	SNCG	O	1



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