FloPlast

building the future

Underground Drainage Systems

FloPlast

High Quality Underground Drainage System

are an established market leader in the manufacture and supply of Plastic Building and Plumbing systems in the UK. The Company's specialist areas are PVC-UE Roofline, Window & Cladding Systems, Rainwater Systems, Soil & Waste Systems, Hot & Cold Plumbing Systems, and Underground Drainage Systems.

FloPlast Underground Drainage Systems comply where applicable with the requirements of the following British Standards.

BS EN 1401-1: 2009 PVC-U
Underground Drainage Systems

BS4660: 2000 PVC-U
Ancilliary Items (Rodding Eyes, Access fittings etc)

BS EN 124: 1994 Access Covers, Gratings and Frames.

BS 7158: 2001 Plastic Inspection Chamber for Drainage.

Drainage Pipe has a British Standard Kitemark.

Standards/Quality Control

FloPlast operates quality and environment management systems which have been accredited by BSI to both BS EN ISO 9001:2008 Certificate No. FM 501414 and BS EN ISO 14001:2004 Certificate No. EMS 538445.

All products are subject to continuous quality control procedures and products manufactured to British Standard Specifications are marked accordingly.

BBA BRITISH BOARD OF AGREMENT CERTIFICATE No. 00/3795

BBA BRITISH BOARD OF AGREMENT CERTIFICATE No. 86/1944

nssPlus

BMF SUPPLIER MEMBER

Transport, Handling & Storage

FloPlast PVC-U pipes are supplied in secure bales bound with straps within timber frames, **FloPlast** recommend that movement of bales is carried out by fork lift or other mechanical device using webbing or rope strings.

The bales may be stacked up to a maximum of three high, providing that the timber frames are placed on each other.

Fittings are generally supplied in plastic bags and should be stored away from direct sunlight. If they have to be stored outside, the bags should be opened to prevent temperature build-up.

Application

FloPlast Underground Drainage Systems are designed for use in gravity drainage and sewerage installations at depths of up to ten metres.

Composition

All drainage pipes and the majority of fittings are manufactured from unplasticised Polyvinyl Chloride (PVC-U). Inspection chambers, 0-90° adjustable bend, gully traps and gully grids are manufactured from polypropylene.

Colour

Pipes and fittings are manufactured in Golden Brown with exceptions as indicated in the product guide.

Terms & Conditions of Sale

Goods are sold subject to our Standard Terms and Conditions of Sale, copies of which are available upon request.

FloPlast Limited reserve the right to modify or extend any product range or published information without prior notice.

FloPlast

110mm Pipe & Fittings

BS 4660:2000, BS EN 1401-1:2009, BS EN 124:1994, BS 7158:2001

- **FloPlast** Socketed Underground Pipe incorporates the latest blown end technology. The easy fit rubber seal is held in place via a circular plastic insert allowing a retention of the seal in transit and a perfect connection for jointing.
- All Push-Fit underground fittings have a captive seal and snap cap which are designed to be user-friendly - no sharp edges, and with space restrictions in mind, allow for an easy fit connection. The seal is double ribbed, and the sockets incorporate a recessed area to provide space for the rubber seal to locate as the pipe is inserted, forming a high-capacity pressure point.

BS EN 1401:2009 / BS 4660:2000 BS 7158:2001 / BS EN 124:1994	110mm	160mm
Hepworth	✓	✓
Brett Martin	✓	✓
Osma/Wavin	✓	✓
Polypipe	✓	✓
Polypipe Terrain	✓	✓
Marley	✓	✓
Hunter	✓	✓

Terracotta

Pipe-Plain Ended

SIZE	CODE
3m	D043
6m	D046

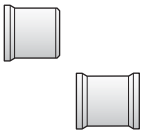
Bale Quantity - 50

Pipe-Single Socket

SIZE	CODE
3m	D143
6m	D146

Bale Quantity - 50

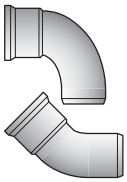
Pipe Couplings



	CODE
Single Socket	D124
Double Socket*	D105

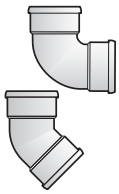
*Removable centre stop for use as Slip Coupling

Single Socket Bends

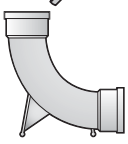


	CODE
87½° Bend (Socket/Spigot)	D161
45° Bend (Socket/Spigot)	D163
30° Bend (Socket/Spigot)	D164
15° Bend (Socket/Spigot)	D167

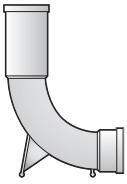
Double Socket Bends



	CODE
87½° Bend	D561
45° Bend	D563
30° Bend	D564
15° Bend	D567



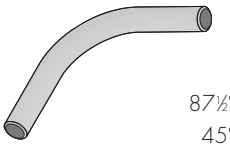
87½° Rest Bend D571



87½° Settlement Rest Bend D570

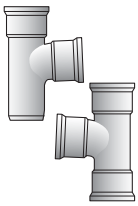
0-90° Adjustable Bend D560
(PP- Do not solvent weld)

Long Radius Bends



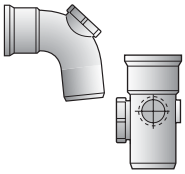
	CODE
87½° Plain end	D281
45° Plain end	D283
87½° PE with Channel Access	D581
45° PE with Channel Access	D583

Equal Junctions



	CODE
87½° Junction (Double Socket)	D190
45° Junction (Double Socket)	D210
87½° Junction (Triple Socket)	D191
45° Junction (Triple Socket)	D211

Access Fittings



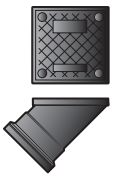
	CODE
87½° Access Bend (Socket/Spigot)	D169
Access Pipe (Socket/Spigot)	D274

Screwed Access Cap D292

Channel Access Pipe PE 1.5m D870

PVC Oval Rodding Point (Spigot) D881

PVC Oval Rodding Point (Socketed) D882



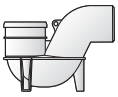
PVC Sq. Rodding Point (Spigot) D883

PVC Sq. Rodding Point (Socketed) D884

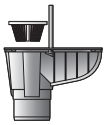
(45° rodding point with sealed access cover suitable for a loading up to 10 kN (1 tonne) where the frame of the cover is supported by a concrete plinth).

Universal Gully Traps

	CODE
Universal Gully Trap (Socket/Spigot 45°)	D500



Low Back 'P' Trap (Socket/Spigot 90°) D501



Leaf/Debris Interceptor (Black) D94

Spare Square Grid (Polypropylene) D502

Square Hopper incl' Polypropylene grid D504

Rectangular Hopper incl' Polypropylene Grid D506

DrainGuard

	CODE
DrainGuard (black) (Fits square & round downpipe)	DG1

FloPlast

110mm Pipe & Fittings BS 4660:2000, BS EN 1401-1:2009, BS EN 124:1994, BS 7158:2001

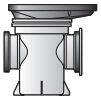
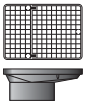
- Provides an efficient means of waste water drainage and foul discharge from above ground drainage systems.
- Manufactured in PVC-U to give a strong durable product, lightweight and easy to work with and suitable for high temperatures and waste discharge.
- Fittings have an aesthetic modern look, are compact in size yet remain within the British Standard specification.
- Push-Fit joint through an innovatively designed seal and snap cap system.
- Comprehensive range of fittings to suit most installations and which integrate with all FloPlast Above and Below Ground Drainage Systems.
- Colours available: Terracotta.

Ancillaries

	CODE
800gm Lubricant Gel	SG800
Water Council Approved KIWA KM 51564 BS6209	
100gm Silicone Grease	SG100
400ml Silicone Lubricant Spray	SL400
125ml Solvent Cement BS6209	SC125
250ml Solvent Cement	SC250

Terracotta

Bottle Gully Traps

	CODE
 Bottle Gully Circular Grid	D510
 Bottle Gully Rectangular Grid	D520
 Back Inlet Bottle Gully Rectangular Grid	D530
 Back Inlet Bottle Gully Circular Grid	D540
 Round Hopper & Grid (215mm Diameter with height adjustment of 32mm)	D514
 Rectangular Hopper & Grid (295mm x 216mm overall size with height adjustment of 32mm)	D524
 200mm Riser	D505

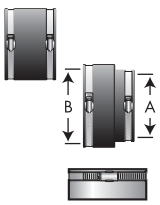
Adaptors

	CODE
 110x50mm Waste Adaptor (Grey/Black)	SP95
 110x68mm Rainwater Adaptor (Grey/Black)	SP96
 Universal Waste Adaptor (32/40/50mm)	D95
 Universal Rainwater Adaptor (Sq/Rd)	D96
 80x110mm Adaptor	D97
 160x110mm Level Invert (Socket/Spigot)	D99
 Supersleve Clay Adaptor (Black)	D100
 Hepsleve Clay Adaptor (Black)	D101

Drain Connector (Grey/Black)

	CODE
	SP107

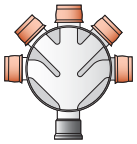
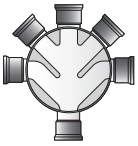
Flexible Coupling and Adaptor

	SIZE	CODE
	Flexi-coupling 98mm -115mm	D102
	Flexi-adaptor A = 98mm - 115mm B = 120mm - 136mm	D103
	End Cap 105mm -116mm	SP113

Socket Plug

	CODE
	D296

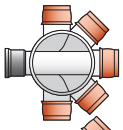
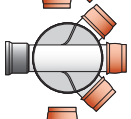
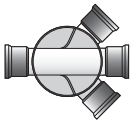
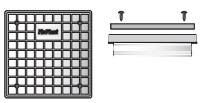
Large Inspection Chamber - 450mm Diameter (LIC)

	CODE
 270mm deep Chamber Base - 5x110mm flexible inlets Supplied with 4 socket plugs (Allows for 0-20° of movement)	D900
 270mm deep Chamber Base - 5x110mm fixed inlets Supplied with 4 socket plugs	D910
 235mm Extension Riser (can be cut to size)	D915
Riser Sealing Ring (use with each Riser)	D935
 450mm screw down Plastic Cover & Frame (35 kN)	D930
 450mm Sealed screw down Plastic Cover & Frame with 350mm restricted access (for use with I.C. over 1.2mtr deep up to 3mtr) (35 kN)	D931

(To conform with new document H Building Regulations H2000 use D930 or D931 as required)

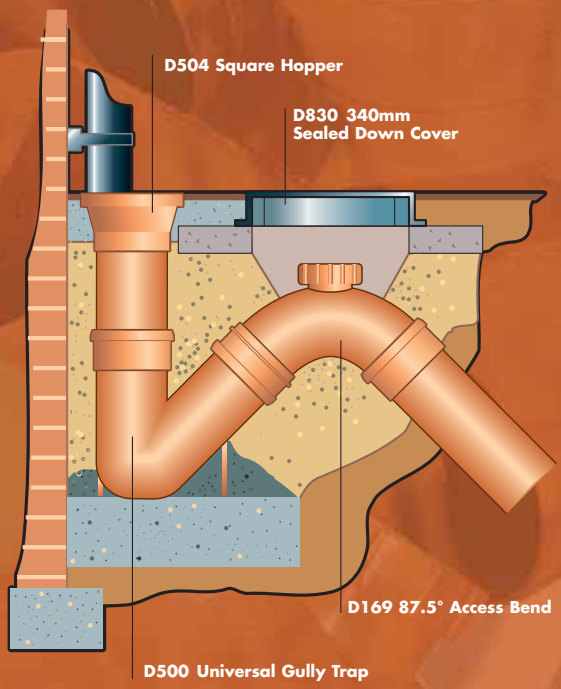
 Cast Iron Cover & Plastic Frame (35 kN)	D923

Mini Access Chamber - 300mm Diameter (MAC)

	CODE
270mm deep Multi inlet Chamber Base - 5x110mm flexible inlets supplied with four socket plugs (allows 0-20° of movement)	D800
 270mm 45° inlet Chamber Base - 3x110mm flexible inlets supplied with two socket plugs (allows 0-20° of movement)	D801
 270mm 90° inlet Chamber Base - 3x110mm flexible inlets supplied with two socket plugs (allows 0-20° of movement)	D802
 270mm 45° inlet Chamber Base - 3x110mm fixed inlets supplied with two socket plugs	D810
 100mm Chamber Riser with integral rubber ring (60mm cut down facility)	D820
 200mm Chamber Riser with integral rubber ring (60/100/150mm cut down facility)	D822
 340mm Sealed Screw down cover and frame (35 kN)	D830

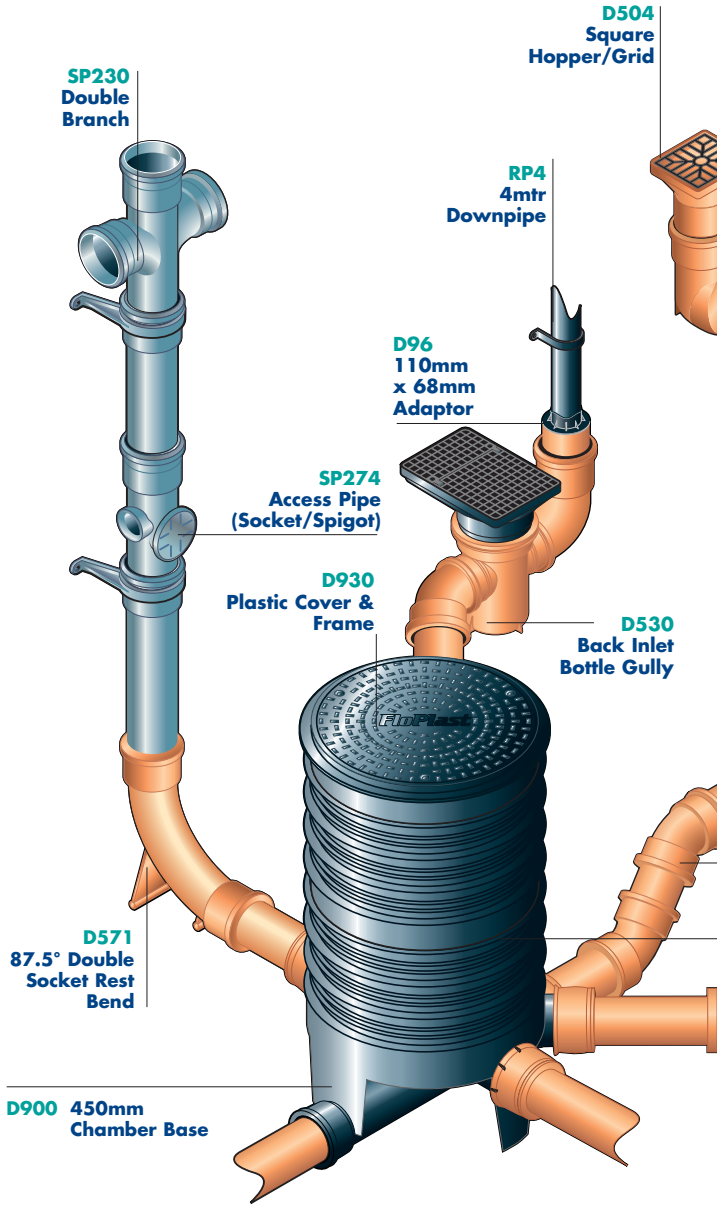
Installation Guide - Universal Gully Trap with access facility

- The gully should be assembled out of the ground.
- Place the gully on a substantial base e.g. Pre-cast concrete slab, bricks etc and stabilise by concreting base up to the level where the supporting feet meet the gully body. Ensure that concrete does not enter the ring seal joint.
- Connect the Access Bend (D169) onto the 45° spigot end of the gully using **FloPlast** Silicone Lubricant to assist with easy insertion.
- Make connection to drainage run using Socketed Pipe (D146).
- Backfill with suitable material to the required level.
- To complete the access installation, set in concrete an airtight 340mm Sealed PVC Cover and Frame (D830).



D169
87.5°
Access Bend

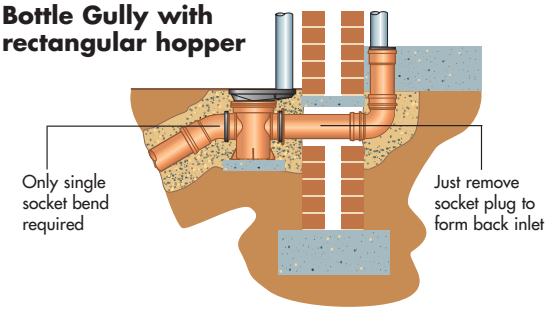
D560
0-90° Adjustable Bend



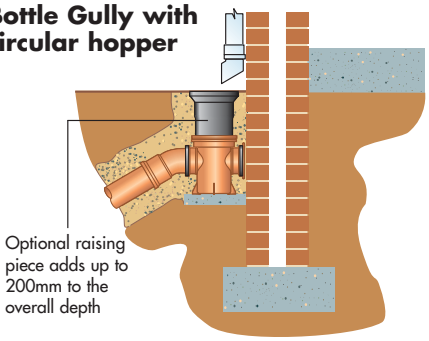
Back Inlet Bottle Gully (BIG)

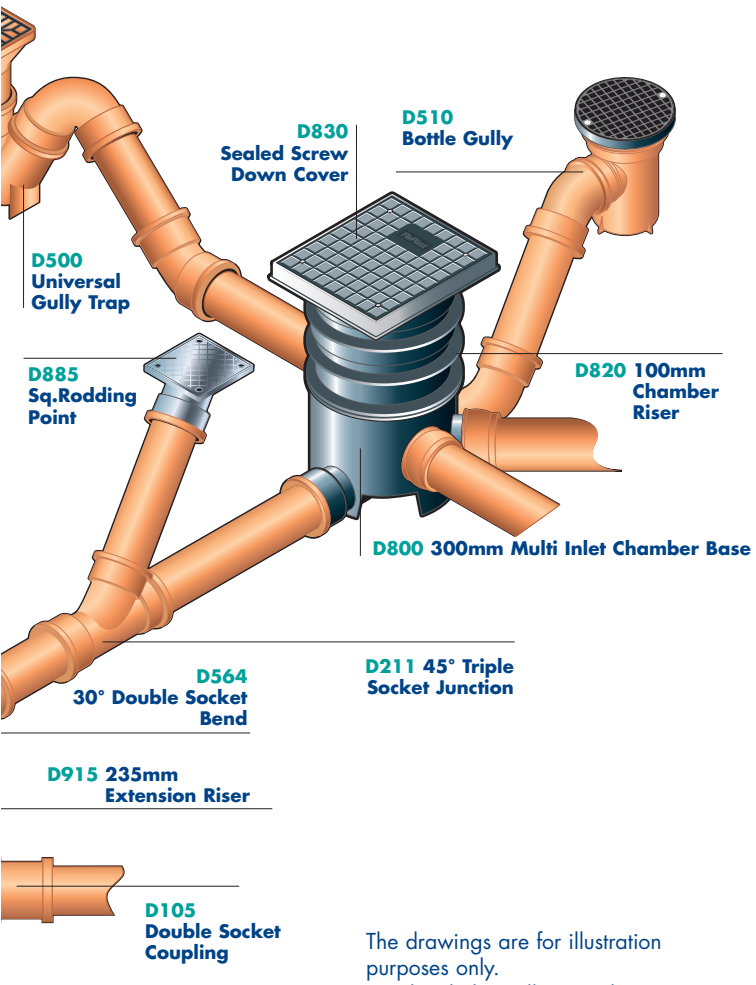
- Screw down, hinged rectangular heavy duty hopper.
- Heavy duty circular hopper available (D540).
- Both hoppers allow for height adjustment of 32mm.
- Sealed dip tube easily removed for rodding purposes.
- Gully riser allows an increase of invert depth up to 200mm (D505). Maximum of one riser only.
- Back inlet socket plug easily removed. No need to drill.

Bottle Gully with rectangular hopper



Bottle Gully with circular hopper





The drawings are for illustration purposes only.
For detailed installation advice please contact your local stockist.

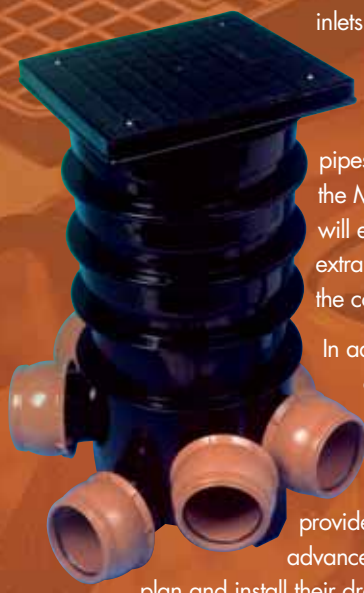
FloPlast

Inspection Chambers (Polypropylene)

FloPlast 300mm Mini Access Chamber and 450mm Large Inspection Chamber offer an alternative to traditional manholes and may be used in depths of up to 600mm for the MAC, 1200mm and 3000mm for the Large Inspection Chamber.

300mm Mini Access Chamber (MAC)

FloPlast innovative design for the MAC, brings unrivalled flexibility to the underground drainage market.



The MAC has flexible connections for all inlets allowing a 10° movement in any direction.

This is of great assistance to the installer where the connecting pipes are not perfectly aligned with the MAC inlets. In many instances it will eliminate the need to install an extra bend and provide a saving on the cost of the installation.

In addition, the variety of inlet combinations available on the **FloPlast** Mini Access Chamber and the choice of two chamber risers, 100mm and 200mm, provide installers with a significant advance in the ease of which they can plan and install their drainage system. The MAC base is designed to facilitate the stacking of bases on top of one another to give a space saving storage solution for the merchant stockist.

In summary, the **FloPlast** Mini Access Chamber design and flexibility provides a practical, innovative and cost effective solution for the provision of access in a drainage system.

BS 7158: 2001 Plastic Inspection Chamber for drainage.

UK Patent No. GB2357127.

450mm Diameter Large Inspection Chamber (LIC)

FloPlast product innovation is again demonstrated with its 450mm Diameter Large Inspection Chamber.

To comply with the changes to Approved Document H of The Building Regulations 2000, significant research and development has gone into the design of this unique product. The Chamber base incorporates five 110mm flexible inlets, which allow 10° of movement in any direction.

The plastic cover and frame can take loadings of up to a maximum of 35kN. Should the connection of D930/D931 cover and frame be required directly to the base D900/D910, then riser D935 must be used and cut to suit, by cutting just above the bottom most large flange/rib.

(Please ensure Sealing Rings are used in conjunction with each riser section).

FloPlast installation details are concise, however they are provided as general guidelines only.

FloPlast recommend that reference should be made to the appropriate Codes of Practice for Underground Drainage Systems.

European Standards BS EN 752: 1997 Drain and sewer systems outside buildings and BS EN 1610: 1998 Construction and testing of drains and sewers, have been introduced. These have replaced British Standards BS8301 (Code of Practice for Building Drainage).

Useful Measurements for Installation of MAC & LIC

	Mac	inc' Lid
Base only	270	300
Base + one riser (100mm)	370	400
Base + one riser (200mm)	470	500
Base + (1 x 100 x 1 x 200) risers	570	600

LIC Invert Depth (mm)	270	505	740	975	1210	1445	1680	1915	2150	2385	2620	2855	3090
Number of Risers Required	Base only	1	2	3	4	5	6	7	8	9	10	11	12
Cover required	(D930) 450mm opening up to a maximum of 1200mm					(D931) 350mm opening up to a maximum of 3000mm							

160mm Pipe & Fittings, PVC-U BS EN 1401-1:2009, BS EN 124:1994, BS 7158:2001

Pipe-Plain Ended

SIZE	CODE
6m	6D046

Bale Quantity - 35

Pipe-Single Socket

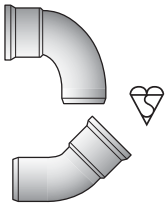
SIZE	CODE
3m	6D143
6m	6D146

Bale Quantity - 35

Pipe Coupling

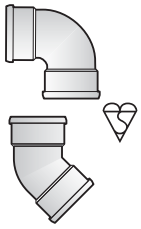
	CODE
Double Socket	6D105

Single Socket Bends



	CODE
87½° Bend (Socket/Spigot)	6D161
45° Bend (Socket/Spigot)	6D163
30° Bend (Socket/Spigot)	6D164
15° Bend (Socket/Spigot)	6D167

Double Socket Bends

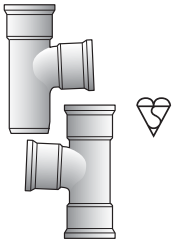


	CODE
87½° Bend	6D561
45° Bend	6D563
30° Bend	6D564
15° Bend	6D567

Adaptors

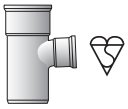
	CODE
160x110mm Level Invert Socket/Spigot	D99
Flexi-adaptor Cast Iron/160mm	6D102
Clay Adaptor A = 160mm - 180mm B = 180mm - 200mm	6D104

Equal Junctions



	CODE
87½° Junction (Double Socket)	6D190
45° Junction (Double Socket)	6D210
87½° Junction (Triple Socket)	6D191
45° Junction (Triple Socket)	6D211

160/110 Unequal Junctions



	CODE
160 x 110mm 87½° Junction (Double Socket)	6D198
160 x 110mm 45° Junction (Double Socket)	6D218

160mm Large Inspection Chamber - 450mm Diameter (LIC)

	CODE
160mm x 160mm 90° Chamber Base - with two 45° 110mm Inlets	6D900
160mm Base adaptor to riser	6D990
235mm Extension Riser (can be cut to size)	D915
Riser Sealing Ring (use with each Riser)	D935
450mm screw down Plastic Cover & Frame (35 kN)	D930
450mm Sealed screw down Plastic Cover & Frame with 350mm restricted access (35 kN) (for use with I.C. over 1.2mtr deep up to 3mtr)	D931
Cast Iron Cover & Plastic Frame (35 kN)	D923

(To conform with new document H Building Regulations H2000 use D930 or D931 as required)

Ancillaries

	CODE
800gm Lubricant Gel	SG800
Water Council Approved KIWA KM 51564 BS6209	
100gm Silicone Grease	SG100
400ml Silicone Lubricant Spray	SL400
125ml Solvent Cement BS6209	SC125
250ml Solvent Cement	SC250

Trench Detail and Backfill Material

The trench should be constructed 300mm wider than the outside diameter of the pipe to be installed. Where the "as dug" material is suitable, the bottom of the trenches may be trimmed to form a pipe bed. The material can also be used as a sidefill and backfill. Imported granular backfill materials such as pea shingle, used in accordance with the recommendations of BS5955 Part 6: 1980 Appendix A, having a nominal particle size not exceeding 10mm, should be used as required up to and over the crown of the pipe. When this has been achieved the "as dug" material can be replaced into the trench. Once 300mm of material has been replaced, mechanical compaction can commence.

Testing

Testing of all drainage installations should be carried out in accordance with the requirements of the appropriate approving authority, using either air or water testing. References should be made to current editions of Building Regulations (Approved Document 'H') BS EN 752:1997 and BS EN 1610:1998. Where drainage appears inside buildings BS EN 12056 should also be consulted.

Jointing

Pipe End Preparation

When cutting pipes ensure that all ends are chamfered and are free from swarf, grit and dirt.

Ring Seal Joints

The **FloPlast** Ring Seal Joint acts as both a seal and expansion joint. The following sequence should be adhered to:

- Check that all ring seal sockets are properly located in their recessed position.
- Ensure spigots and ring seal sockets are dry, clean and free from grit and dirt.
- Lubricate all ring seal fittings. This will allow for a fast and efficient connection.
- Ensure all pipes and fittings are in the correct position.
- Insert pipe fully into the socket, then withdraw pipe by a minimum of 12mm. This will allow for expansion.

Adaptors

External rainwater downpipes can be connected directly to a surface water drain or, depending on the design, via a gully trap to the underground drainage system.

The diameter of FloPlast's 110mm PVC-U above and below ground drainage systems are the same and therefore a direct connection may be achieved without the use of an adaptor. Where rainwater pipes connect directly to a drain, a suitable reducer will be required as follows:

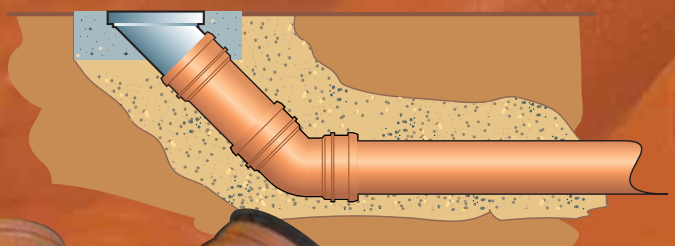
- SP96 110mm x 68mm Rainwater Adaptor for round downpipe. RDS2 should be used with SP96 for connection to 65mm square downpipe.
- D96 Universal Rainwater Adaptor for square and round downpipe.
- D95 Universal Waste Adaptor for 32mm, 40mm and 50mm waste pipe connection to 110mm Soil/Drainage.

Connection to other materials such as Cast Iron, Supersleeve and Hepsleeve, is achieved by the use of a range of rigid and flexible couplings and adaptors.

Access and Rodding Points

Access is very important on all installations for testing, inspection, and removal of any blockage or debris. Rodding in both directions can be achieved by using a Mini Access Chamber (MAC) or 450mm Large Inspection Chamber (LIC) in conjunction with access fittings.

Rodding points are more commonly used in storm water drainage systems where the rodding point is located at the head of the drain run connection to a chamber, and being no further than 22 metres away from the chamber. The rodding point should be enclosed in a concrete surround to provide support and to ensure that it does not become mislaid at ground level.



Inspection Chambers

Mini Access Chamber (MAC)

A mini access chamber has a relatively narrow riser shaft, and is used for inspecting, clearing, and rodding a drain line.

The narrowness of the riser shaft permits limited clearing and rodding to a maximum depth to invert of 600mm.

Any unused side connections should be sealed with a plain socket plug.

Should bends be required to change direction, these should be sited at the point of entry to the chamber.

Side branches of the chamber should not be used to change direction of the main flow, as a self-cleansing flow through the chamber cannot be guaranteed.

Intermediate depths can be achieved by cutting a riser at the indicated points.

The frame and cover should also be adjusted to suit the level of the adjacent ground and surrounded in a minimum of 50mm of concrete.

Large Inspection Chamber (LIC)

incorporating Non Man Entry Restricted Access Cover & Frame

The large diameter of the riser shafts of inspection chambers enables them to be installed to a maximum depth to invert of 1200mm when used in conjunction with a 450mm opening cover and frame. The chamber complies with Approved Document H of the Building Regulations 2000 by using the 350mm reduced opening cover and frame for installations over 1200mm up to a maximum of 3000mm invert depth.

The chamber is installed on a suitable bed dependent on the quality of the trench and backfill materials.

Backfilling is continued up to approximately 50mm of the finished ground level.

The frame and cover are placed on a bed of concrete around the top of the uppermost shaft, and adjusted to the finished level.

The frame is securely fixed through the wall of the chamber at the set location points using self-tapping screws. The cover is then secured to the frame with the captive screws. It is impossible for the cover to be removed without undoing the screws.

Intermediate depths can be achieved by cutting the riser at 60mm intervals; the frame also has 55mm of telescopic adjustment.

Any unused side connections should be sealed with a plain socket plug.

Should bends be required to change direction, these should be sited at the point of entry to the chamber.

Side branches of the chamber should not be used to change the direction of the main flow, as a self-cleansing flow through the chamber cannot be guaranteed.

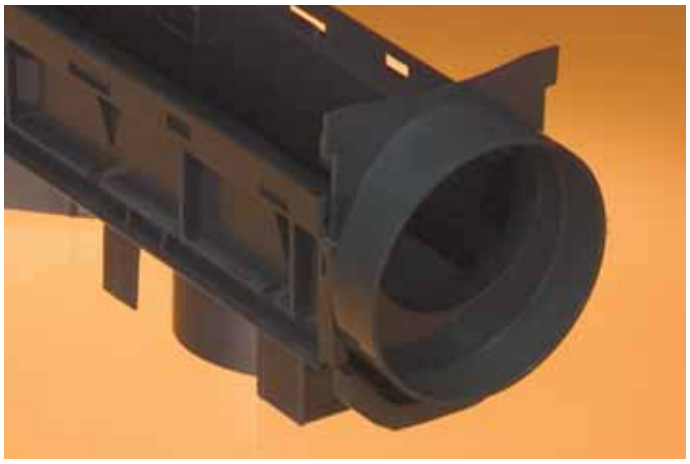
Should the connection of D930/D931 cover and frame be required directly to the base D900/D910, then riser D935 must be used and cut to suit, by cutting just above the bottom most large flange/rib.

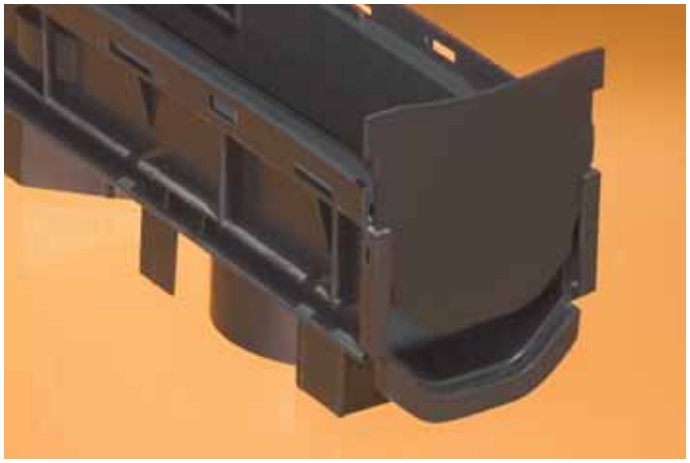
When installing the 160mm Large Inspection Chamber, it is necessary to use the base adaptor ring, this allows the use of the 160mm Inspection Chamber Base, and the existing riser and lid products developed for the 110mm Inspection Chamber, please refer to the items for the **FloPlast** 160mm range on page 11.

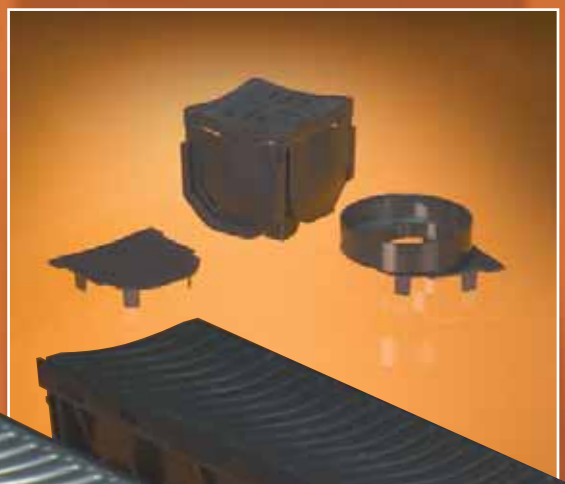
FloPlast

FloDrain Domestic Channel Drainage

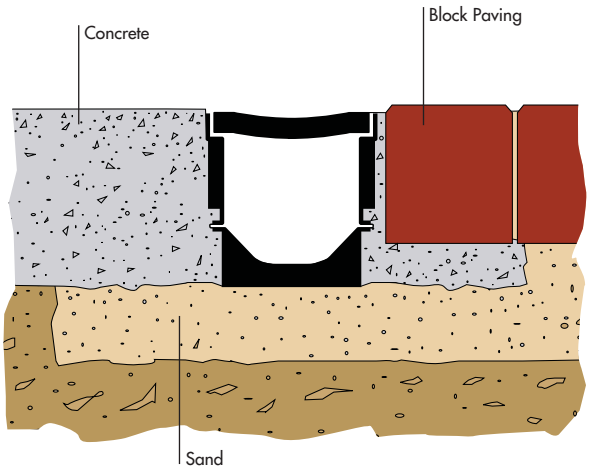
- Quality domestic surface Channel Drainage 110mm x 100mm.
- Anti-slip heel guard grating.
- Garage Pack available (3 x 1m length, End Cap and Outlet).
- 5 tonne spread load. 1.5 tonne point load.
- 4 outlets per length for maximum flexibility.
- Quad section for corners and junctions.
- Concave grid for maximum flow.



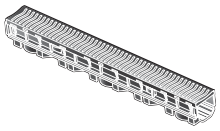




IN COMPLIANCE WITH BUILDING REGULATIONS PART H



Channel-1 Metre Length (Including Grate)

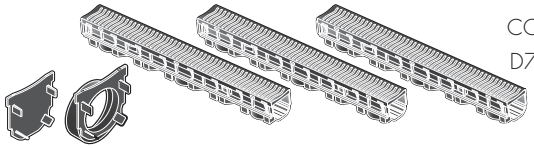


CODE
D700

Drain Corner

CODE
D710

Garage Pack



CODE
D750

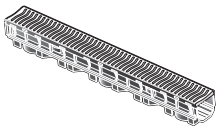
End Cap

CODE
D711

End Outlet

CODE
D712

Channel Drain with Galvanised Grate

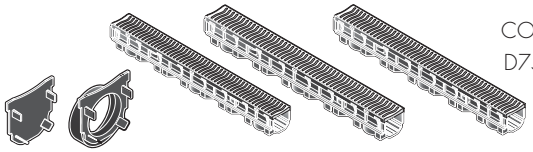


CODE
D701

Drain Corner with Galvanised Grate

CODE
D720

Galvanised Garage Pack



CODE
D751

Galvanised Locking Bars (2 pack)

CODE
D725

Domestic Channel Drainage
Easy To Install With Concrete or Paving

1. Dig trench for FloDrain, allowing for 50mm deep compacted sand base and wide enough for a minimum of 100mm backfill of concrete on each side.
2. Fix a string line to finishing height of grate 2mm below final surface level.
3. Allow a fall of approx. 5mm for every 1m length (1:200).
4. Start installation at lowest point of the run to accommodate any cut lengths which should be installed at the point furthest from the outlet.
5. FloDrain joints and end caps to be sealed with silicone sealant.
6. Use an End Cap at highest point of FloDrain.
7. Connect the lowest end of FloDrain to 110mm PVC-U BS EN1401 drainage pipe using either an end outlet or the preformed channel bottom outlet to allow water to drain away. Contact **FloPlast** for additional coupling details for other connections e.g. clay pipes etc.
8. FloDrain can be cut to length with a hacksaw. Install with grate fitted.
9. Protect grate with tape before concrete is poured.
10. Finish concrete 2mm above level of grate.
11. Allow 72 hours to cure before vehicle use or removing grates.
12. To remove grate, simply run a screwdriver along the edge of the grate to dislodge.
13. If installing block paving or paving slabs, haunch around channel with concrete to a height which allows the depth of the block or slab to finish 2mm above the level of grate.

All FloDrain Installations must be set in Concrete.

Should additional security be required when installing channel drainage with the galvanised grate, locking bars D725 (2per 1 mtr length) are required.

FloPlast
building the future

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FM 501414 EMS 538445

www.floplast.co.uk

30/06/2010

Other systems available

PVC-UE Roofline, Window & Cladding Systems

PVC-U Rainwater Systems

Soil & Waste Systems

'Alprene' Compression Fittings for MDPE

FloFit Push-fit Hot & Cold Plumbing Systems