

# **Underground Drainage Systems**



# **FloPlast**

## HIGH QUALITY UNDERGROUND DRAINAGE SYSTEM



FloPlast 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 (SN8)

## BS EN 13476-2: 2007

Structured Wall Piping Systems (SN8)

## BS4660: 2000 PVC-U

Ancillary Items (Rodding Eyes, Access fittings etc)

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

BS EN 13598 - 1: 2010 Plastic Inspection Chamber for Drainage.

"Plastic piping systems for non-pressure underground drainage and sewerage. Unplasticised polyvinyl chloride (PVC-U). Polypropylene (PP) and Polyethylene (PE)."

Part 1: Specification for ancillary fittings including shallow inspection chambers.

For CE DOP's (Declaration of Performance), please refer to our website at www.floplast.co.uk.

Drainage Pipe has a British Standard Kitemark.







## Standards/Quality Control

FloPlast operations embrace quality, environment and energy management systems which have been accredited by BSI to BS EN ISO 9001:2008 Certificate No. FM 501414, BS EN ISO 14001:2004 Certificate No. EMS 538445, BS EN ISO 18001:2007 Certificate No. OHS 593622 501414 and ISO 50001:2011 Certificate No. ENMS 638370.



ISO

BS OHSAS

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











## Transport, Handling & Storage

**FloPlast** PVC-U pipes are supplied in secure bales bound with straps within timber frames, **FloPlast** recommend that the movement of bales is carried out by the 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.

Code

SC250

CE

## **ANCILLARIES**





## 110MM PIPE & FITTINGS BS 4660:2000, BS EN 1401-1:2009, BS EN 124:1994, BS EN 13598 - 1:2010

- 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.

Manufacturers that produce to these standards: BS EN 1401:2009 / BS 4660:2000 BS 7158:2001 / BS EN 124:1994	110mm	160mm
Hepworth	1	1
Brett Martin	1	1
Osma/Wavin	1	1
Polypipe	1	1
Polypipe Terrain	1	1
Marley	1	1
Hunter	1	1

#### FloPlast Installation Videos

Our step-by-step installation videos (available online), make it clearer and easier to get to grips with the

all the technical elements involved in what may be a complex process.

Visit www.floplast.co.uk and download a pdf step by step guide to help with your installation.



.2009, B3 LIN	124.1994, B3 LIN 13398 - 1.2010	
Product		Code
Pipe		_
-		
	Plain Ended 3m	D043
	(Bale quantity 50) 6m	D046
1/10	Single Socket 3m	D143
	(Bale quantity 50) 6m	D146
Di C li	1	
Pipe Couplin	9	
The same		
	Single Socket Coupling	D124
	Double Socket Coupling	
	Removable centre stop for use as slip coupling	D105
	nomerable come step for each as any coopining	
Single Socke	t Bends	
	071/ ° D   (c       / (c + -) )	D1/1
	87½° Bend (Socket/Spigot)	D161
1	45° Bend (Socket/Spigot)	D163
	000 D	5111
	30° Bend (Socket/Spigot)	D164
	15° Bend (Socket/Spigot)	D167
Double Socke	et Bends	
	871/2° Bend	D561
	0,71 20.10	200.
- Colombia	45° Bend	D563
and the same of	30° Bend	D564
	15° Bend	D567
	15 Bella	D307
///	87½° Rest Bend	D571
	07 72 Resi Berid	D3/ 1
W	077/9 C 11	D.C70
	87½° Settlement Rest bend	D570
~~		
	0-90° Adjustable Bend	5.5.40
	(PP-Do not solvent weld)	D560
110mm non-	return valve	
	110 No Pot	
AND A STATE OF	110mm Non-Return Valve-Single Flap	D550
	Taite Single Hup	
Large Radius	Bends	
	87½° Plain End	D281
-	45° Plain End	D283
	87½° PE with Channel Access	D581
*	45° PE with Channel Access	D583

## 110MM PIPE & FITTINGS BS 4660:2000, BS EN 1401-1:2009, BS EN 124:1994, BS 7158:2001







Product		Code					
Equal Junctic	ons						
	87½° Junction (Double Socket) 45° Junction (Double Socket)						
	$87 V_2^\circ$ Junction (Triple Socket) $45^\circ$ Junction (Triple Socket)	D191 D211					
Access Fitting	gs						
	87½° Access Bend (Socket/spigot)	D169					
8	Access Pipe (Socket/spigot)						
	Screwed Access Cap (Spigot)	D292					
Channel Access Pipe PE 1.5m							
Rodding Poir	nts						
	PCV Oval Rodding Point (Spigot)	D881					
	PCV Oval Rodding Point (Socketed)						
PCV Square Rodding Point (Spigot)							
-	PCV Square Rodding Point (Sockeled)	D884					

Product		Code					
Universal Tro	ıps						
	Universal Gully Trap (Socket/Spigot 45°)						
T	Low Back 'P' Trap	D501					
	Leaf/Debris Interceptor Gully (Black)						
	Spare Square Grid (Polypropylene)						
Universal Tro	ips	,					
	Square Blank Cover Grid						
Square Hopper Including Polypropylene Grid							
	Rectangle Blank Cover Grid	D507					



D506

Rectangular Hopper (Including Polypropylene Grid)

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

DrainGuard

Fits round and square downpipe (Black)	DG1



## 110MM PIPE & FITTINGS BS 4660:2000, BS EN 1401-1:2009, BS EN 124:1994, BS EN 13598 - 1:2010

Product		Code				
Bottle Gully 1	raps -					
	Bottle Gully Circular Grid	D510				
	NEW Bottle Gully Square Grid	D515				
1	Bottle Gully Rectangular Grid	D520				
	Back Inlet Bottle Gully Rectangular Grid	D530				
	Back Inlet Bottle Gully Circular Grid	D540				
	Round Hopper and Grid (215mm diameter with height adjustment of 32mm)	D514				
	NEW Square Hopper and Grid (216x216mm with height adjustment of 32mm)	D518				
	Rectangular Hopper and Grid (295x216mm with height adjustment of 32mm)	D524				
	200mm Riser					
Adaptors						
	110x50mm Waste Adaptor (Grey/Black/White)	SP95				
-	110x68mm Rainwater Adaptor (Grey/Black/White)	SP96				
	Universal Waste Adaptor (32/40/50mm)	D95				
0	Universal Rainwater Adaptor (Square/Round)	D96				
	80x110mm Adaptor					
	160×110mm Level Invert (Socket/Spigot)	D99				
	Supersleve Clay Adaptor DS (Black) Hepsleve Clay Adaptor DS (Black)	D100 D101				

#### Features & Benefits

- 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.

Product		Code				
Drain Connec	ctor					
(Black/Grey only)						
Connects directly into plastic pipe.	o socket of a cast iron clay or plastic pipe system to provide a so	cket for				
Flexible Coup	olings, Connectors and Adaptors					
	Flexi-Coupling 98mm-115mm	D102				
Flexi-Adaptor A: 98mm-115mm B: 120mm-136mm						
Socket Plug						
		D296				

## 110MM PIPE & FITTINGS BS 4660:2000, BS EN 1401-1:2009, BS EN 124:1994, BS 7158:2001

Product

Mini Access Chamber - 300 Diameter (MAC)

270mm Deep Multi Inlet Chamber



	Base - 5x110mm flexible inlets / Supplied with 4 socket plugs (Allows for 0-20° of movement)	D800
	270mm 45° Inlet Chamber Base - 3x110mm flexible inlets / Supplied with 2 socket plugs (Allows for 0-20° of movement)	D801
	270mm 90° Inlet Chamber Base - 3x110mm flexible inlets / Supplied with 2 socket plugs (Allows for 0-20° of movement)	D802
7	270mm 45° Inlet Chamber Base - 3x110mm Fixed inlets / Supplied with 2 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 (35kN)	D830
\$	Block Paving Cover 300mm Square/Round	D932

Code

Conforms to the requirements of SfA7.

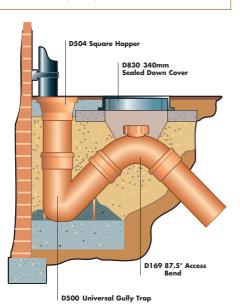
\*To conform with new document H Building Regulations H2000 use D930 or D931 as required.



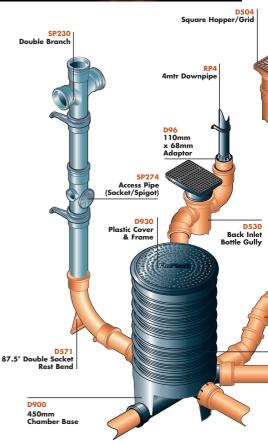
## **UNDERGROUND DRAINAGE**

# 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).



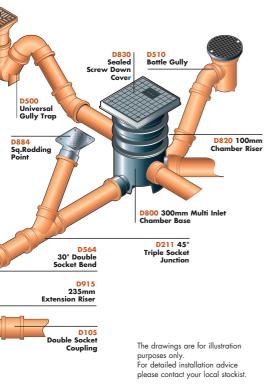


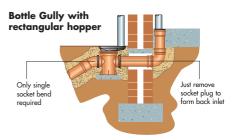


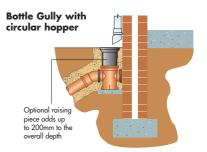
## **Back Inlet Bottle Gully (BIG)**

- 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.











## **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 EN 13598 - 1: 2010 Plastic Inspection Chamber for drainage.

UK Patent No. GB2357127.

## 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

## 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 D915 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).

Meets with the requirements of Sewers for Adoption - 7th Edition (SfA7), type 3 and 4 typical inspection chamber detail

LIC Invert Depth (mm)	270	505	740	975	1210	1445	1680	1915	2150	2385	2620	2855	3090
Number of Riser Required	Base only		2	3	4	5	6	7	8	9	10	11	12
Cover Required	450 ma	)mm (	D930 openir n of 1	ig up	to a		3	350mi maxin	(D9 m ope	ning i	up to )Omm	a I	

## **160MM PIPE & FITTINGS, PVC-U** BS EN 1401-1:2009, BS EN 124:1994, BS 7158:2001







	Total				
Product			Code	Product	Code
Pipe ♥				160/110mm Unequal junctions	
	Plain Ended (bale quantity 33)	6m	6D046	160×110mm 87½° Junction (Double socket)	6D198
	olligie oocker	3m 6m	6D143 6D146	160×110mm 45° Junction (Double socket)	6D218
Pipe coupling				160mm Large Inspection Chamber - 450 Diameter (LIC)	
N po docprime	Double Socket Coupling Removable centre stop for use as slip coupling		6D105	160mm x 160mm 90° Chamber Base With two 45° 110mm Inlets	6D900
Single socke	t bends 🛡			Use a proprietary adhesive such as Siroflex MS Polymer or CT1 Sealant & Construction Adhesive to seal first riser to base.	
	87½° Bend (Socket/spigot) 45° Bend (Socket/spigot)		6D161 6D163	235mm Fytonsian Biser	D915
1	30° Bend (Socket/spigot) 15° Bend (Socket/spigot)		6D164 6D167	Riser Sealing Ring	
Double socket bends ♥				(Use with each riser)	D935
	87½° Bend		6D561	235mm Extension Riser and Seal	D916
	45° Bend 30° Bend 15° Bend		6D563 6D564 6D567	(Can be cut to size)	
Adaptors				450mm Plastic Cover & Frame (35 kN)	D930*
	160x110mm Level Invert (Socket/spigot)		D99	450mm Plastic Cover & Frame	
	Flexi-Adaptor Cast iron/160mm	C€	6D102	With 350mm restricted access (35 kN) (For use with I.C. over 1.2mtr deep up to 3mtr)	D931*
Ť DÂ	Clay Adaptor A: 160mm-180mm B: 180mm-200mm	C€	6D104	Cast Iron cover & Plastic Frame (35 kN)	D923
Equal junction				*To conform with new document H Building Regulations H2000 use D930 or D931 as	s required.
Equal pricing	87½° Junction (Double Socket)		6D190		

www.floplast.co.uk Underground Systems 11

6D210

6D191

6D211

45° Junction (Double Socket) 87½° Junction (Triple Socket)

45° Junction (Triple Socket)



## **INSTALLATION GUIDE**

## 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:

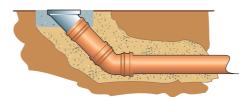
- SP96 110mm x 68mm Rainwater Adaptor for round downpipe. RDS2 should be used with SP96 for connection to 65mm square downpipe.
- D96 Universal Rainwater Adaptor for square and round downpipe.
- D95 Universal Waste Adaptor for 32mm, 40mm and 50mm waste pipe connection to 110mm Soil/ Drainage.

Connection to other materials such as Cast Iron, Supersleve and Hepsleve, 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.

For SfA7 installations this chamber can be installed up to 2000mm

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.





Scan with your smart phone to watch our Underground installation video

## 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 D915 must be used and cut to suit, by cutting just above the bottom most large flange/rib.



## **GroundGuard GROUND REINFORCEMENT SYSTEM**

**GroundGuard** is a linked paving system, manufactured from Polyethylene, that provides a durable safe and eco-friendly surface for grass reinforcement, ground stabilisation and gravel retention for pedestrian and vehicle access areas.

## GroundGuard is suitable for:

- Additional/overflow grass car parks.
- Walkways and disabled access routes.
- Golf buggy paths.
- Driveways and residential lawn parking.

Product		Code
GroundGuard	l Tiles	
	Pack of 20 = 3 square metres 1 Tile = 390 x 390 x 40mm	G40
	Tested in excess of 200 tonnes per square metre spread load	

## LAND DRAINAGE CORRUGATED COLED LAND DRAINAGE PIPE MANUFACTURED IN PVCu

\*Price per pack of 20

**Land Drainage** is used to remove excess water from fields and gardens, in fact any area where excessive water is a problem.

The perforations allow seeping water to ingress the pipe, capillary action then maintains the water within the pipe allowing it to flow to its destination i.e. Stormwater Attenuation Tanks, also known as Modular Plastic Geo Cellular Units (egg crates) or a watercourse (stream, lake etc).

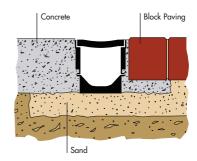
## **System Features**

- Perforated and coiled land drainage pipe is manufactured in HDPE.
- Normally used in agriculture and in building construction sites.
- Particularly beneficial in areas with heavy ground conditions i.e. clay.
- Relieves hydrostatic pressure.

Product	No Size O.D	Code
Land Drainage - 25n	ı Coil	
	80mm × 25m 100mm × 25m	L8025
Couplings		
	80mm 100mm	LC80 LC100
Multi-Junction Branch	1	
	80/100mm	Ы100

## FloDrain DOMESTIC CHANNEL DRAINANGE

- Quality domestic surface Channel Drainage 110mm x 100mm (Internal channel dimensions).
- 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.



## FloDrain DOMESTIC CHANNEL DRAINANGE

Product		Code
Channel - 1 Metre length including grate		
	(€	D700
Drain Corner		
	(€	D710
Garage Pack		
	(€	D750
(Consists of 3xD700 plus 1xD711 and 1xD712)		
End Cap		
	C€	D711
End Outlet		
O	(€	D712
Channel Drain with Galvanised Grate		
	(€	D701
Drain Corner with Galvanised Grate		
	(€	D720
Galvanised Garage Pack		
	€	D751
(Consists of 3xD701 plus 1xD711 and 1xD712)		
Sump/Trap Unit and Basket		
	C€	
	• • •	D732

Product	Code
Threshold Channel Drain - 1m	
(€	D730
Channel Drain Jointing Clip	
(€	D734

# Domestic Channel Drainage Easy To Install With Concrete or Paving

- 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.
- Allow a fall of approx. 5mm for every 1m length (1:200).
- Start installation at lowest point of the run to accommodate any cut lengths which should be installed at the point furthest from the outlet.
- FloDrain joints and end caps to be sealed with silicone sealant.
- 6. Use an end cap at highest point of FloDrain.
- 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.
- 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.
- Allow 72 hours to cure before vehicle use or removing grates.
- 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

# **FloPlast** building the future

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## Other systems available:











































