

# Plastic Drainage

Keyline offers a comprehensive range of products suitable for all building, foul, surface water and land drainage applications - including new innovative, cost-effective systems for compliance with the amended Building Regulations Part H (England and Wales) and the Scottish Building Standards technical handbooks.



## Dimensions and Availability

Product	Nominal Diameter mm									Pipe Length m
	82*	110*	150/160*	225	300	375	450	500	600	

### 1. OsmaDrain

Solid	yes	yes	yes	no	no	no	no	no	no	3 & 6
Slotted	no	yes	yes	no	no	no	no	no	no	6

### 2. UltraRib

no	no	yes	yes	yes	no	no	no	no	3 & 6
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### 3. TwinWall

Solid	no	yes	yes	yes	yes	yes	yes	yes	yes	6
Perforated	no	yes	yes	yes	yes	yes	yes	yes	yes	6
Half Perforated	no	no	yes	yes	yes	yes	yes	yes	yes	6

\* 82, 110 and 160mm OsmaDrain pipes are described by the outside diameter; all other pipes are described by the inside diameter.

### 1. OsmaDrain: building drainage connections to main sewers

The OsmaDrain system includes a wide range of bends, junctions, and other fittings, including inspection chambers and adaptors, allowing connection to traditional cast iron and clayware drains.

### 2. UltraRib: foul and surface water drainage

The pipe is available socketed and plain ended in a choice of lengths. There is a full range of bends, junctions, and other fittings, including adaptors allowing connection to, for example, cast iron and clayware drains.

### 3. TwinWall: surface and sub-surface water drainage

It may be supplied either solid for use as a carrier drain, or half or fully perforated for use as filter drains.

## OsmaDrain: building drainage connections to main sewers

The OsmaDrain system is designed for use in gravity drainage installations at depths of up to 10m, with outfalls into Local Authority sewers, private treatment plants, and cesspools, and for surface water drainage into soakaways or watercourses.


Available in diameters of 82, 110 and 160mm the OsmaDrain system, includes a comprehensive range of fittings to accommodate all installation requirements.

**PVC-U provides superior self-cleansing properties at low velocities and this can often help to reduce excavation depths and permit the use of smaller diameter pipes, as well as possibly obviating the need for a pumped system.**




### OsmaDrain 82mm System

Supplier Code	Description	Keyline Code
3D073	P/E Pipe - 3m	794981
3D076	P/E Pipe - 6m	712034
3D105	D/S Slip Coupler	712035
3D116	Snap Cap (spare)	794983
3D124	S/SW Coupler	712036
3D130	'T' Ring (spare)	794985
3D161	S/S Bend - 87½°	712038
3D163	S/S Bend - 45°	712039
3D190	S/S Junction - 87½°	712040
3D205	D/S Pipe Coupler	794986
3D209	P/E Adaptor 68mm RW Pipe	712037
3D561	D/S Bend - 87½°	794987


## OsmaDrain 110mm System

Supplier Code	Description	Keyline Code	Supplier Code	Description	Keyline Code	
4D066	P/E Slotted Pipe - 6m	712245	4D131	Protection Sleeve	710586	
4D073	P/E Pipe - 3m	710578	4D149	Rainwater Adaptor x 68mm	710582	
4D076	P/E Pipe - 6m	710579	4D159	Universal Drain Adaptor	816358	
4S085	Socket Bracket Brace Assembly	813564	4D161	S/S Bend - 87½°	710587	
4S086	Pipe Bracket Assembly	818101	4D162	S/S Bend - 67½°	710588	
4D095	S/S Reducer - 110mm x 82mm	710032	4D163	S/S Bend - 45°	710589	
4D104	D/S Coupler (for slotted pipe)	758730	4D166	S/S Bend - 30°	710590	
4D105	D/S Slip Coupler	710580	4D167	S/S Bend - 15°	710591	
4D107	S/S Adaptor - to clay socket	710581	4D168	S/S Bend - 11¼°	712006	
4D115	S/S Settlement Socket	758733	4D169	S/S Access Bend - 87½°	710592	
4D116	Snap Cap and Seal	710583		4D173	S/S Adjustable Bend - 30° - for variable angles up to 30°, rotate segments to achieve required angle	712242
4D124	S/SW Coupler	710585		4D181	S/S LR Bend - 87½°	711861
4D128	S/S Adaptor - to clay spigot	710584				
4D129	D/S Adaptor - to thinwall clay	712046				


## OsmaDrain 110mm System cont.

	Supplier Code	Description	Keyline Code		Supplier Code	Description	Keyline Code
	4D183	S/S LR Bend - 45°	710593				
	4D190	S/S Equal Junction - 87½°	710594				
	4D193	D/S Equal Junction - 87½°	710595				
	4D205	D/S Pipe Coupler	710596				
	4D210	S/S Equal Junction - 45°	710597				
	4D213	D/S Equal Junction - 45°	710598				
	4D274	S/S Access Pipe	710599				
	4D281	P/E LR Bend - 87½°	758751				
	4D283	P/E LR Bend - 45°	890955				
	4D290	S/S Screwed Access Cover	711862				
	4D292	P/E Screwed Access Cover - allows full bore access to the drainage system for cleaning, fits into standard OsmaDrain ring seal socket	710600				
	4D295	Temporary Site Cap	935063				
					4D296	P/E Socket Plug - incorporates one closed boss socket position, will form either a 32mm, 40mm or 50mm waste pipe connection when fitted with the appropriate boss socket adaptor	710601
					4D297	P/E Socket Plug (open)	758731
					4D298	Internal Drain Connector - 32/40mm	870066
					4D299	Internal Drain Connector - 50mm	870067
					4D314	Ring Seal for 4D325 (spare)	711900
					4D317	Rodding Eye Gasket - oval (spare)	758734
					4D318	Rodding Eye Screws - new style (pkt 4)	838181
					4D325	S/S Cover & Frame - 250mm diameter - suitable for use in situations requiring a maximum loading of up to 10kN (1T), where the frame of the cover is supported in service by a concrete plinth	710039


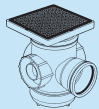
## OsmaDrain 110mm System cont.

Supplier Code	Description	Keyline Code	Supplier Code	Description	Keyline Code	
4D328	S.I.C. Cover (spare)	794988	4D421	Inspection Junction Gasket (spare)	758741	
4D360	P/E Square Rodding Eye	988730	4D492	S/S Equal Double Inspection Junction	869436	
4S380	Cleaner - 250ml can	860838	4D494	Inspection Junction Plug (spare)	869437	
4S383	Solvent No. 2 - 125ml can	860839	4D500	S/S Universal Gully Trap	710606	
4S384	Solvent No. 2 - 250ml can	860840	4D503	SW/S Plain Hopper	710607	
4D391	Soluble Lubricant - 0.5kg tub	712044	4D504	SW/S Vertical Inlet Hopper	710608	
4S391	Silicone Lubricant - 50g tube	519235	4D505	Vertical Inlet Cover (spare)	710609	
4D392	Silicone Lubricant - 0.5kg tub	758767	4D506	Universal Gully Grating (spare)	710610	
4S392	Silicone Lubricant Spray - 400ml	523524	4D507	P/E Plain Hopper	710612	
4S394	Solvent Cement Filler - 200g tube	792362	4D508	P/E Vertical Inlet Hopper - with 150mm long spigot	710613	
4D395	Soluble Lubricant - 2.5kg tub	794989		4D526	Sealed Access Plate	710616
4D398	S/S Boss Adaptor - 1¼/32	794990		4D527	P/E Sealed Access Hopper	710615
4D399	S/S Boss Adaptor - 1½/40	711860				
4D418	Inspection Junction Washers (pkt 4)	758736				
4D420	S/S Inspection Pipe	869435				

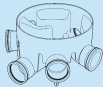
## OsmaDrain 110mm System cont.

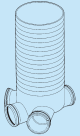
	Supplier Code	Description	Keyline Code		Supplier Code	Description	Keyline Code
	4D561	D/S Bend - 87½°	710618		4D589	S/S Bossed Pipe	710626
	4D562	D/S Bend - 67½°	710619		4D593	D/S Access Junction - 87½°	710627
	4D563	D/S Bend - 45°	710620		4D700	S/S Bottle Gully	943614
	4D566	D/S Bend - 30°	710621		4D701	S/S Yard Gully	943615
	4D567	D/S Bend - 15°	710622		4D702	Sealed Access Cover	943616
	4D568	D/S Bend - 11¼°	712007		4D706	Vertical Inlet Grating & Frame	846302
	4D569	D/S Access Bend - 87½°	710623		4D708	Square Grating and Frame	525075
	4D573	D/S Adjustable Bend - 30°	712241		4D720	Vertical Inlet Grating	-
	4D581	D/S LR Bend - 87½° - satisfies recommendations of BS 5572: 1994 for base of soil stack applications. Manufactured with cut out marks to convert to a Channel Bend for use within traditional manholes	710624		4D722	Square Inlet Grating	-
	4D583	D/S LR Bend - 45°	710625		4D782	S/S Channel Branch Bend - short - LH	711866
	4D585	D/S LR Channel Bend - 90°	711878		4D783	S/S Channel Branch Bend - short - RH	711867
	4D587	D/S LR Channel Bend - 45°	794991		4D787	S/S Channel Branch Bend - long - LH	758752
					4D788	S/S Channel Branch Bend - long - RH	758753
					4D792	SW/½S Channel Junction - 87½° - LH	710631
					4D793	SW/½S Channel Junction - 87½° - RH	710632

## OsmaDrain 110mm System cont.

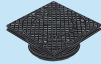
	Supplier Code	Description	Keyline Code		Supplier Code	Description	Keyline Code
	4D794	SW/½S Channel Junction - 45° - LH	710633		4D901	S/S Bottle Gully - 87½° (open)	712242
	4D795	SW/½S Channel Junction - 45° - RH	710634		4D902	Access Liner for 593 (spare)	712246
	4D800	P/E Trapped Yard Gully - 600mm overall depth, supplied complete with removable rubber bung for rodding access	817733		4D904	Screwed Access Cap (spare)	758743
	4D810	DI Grating/Frame - B125	817734		4D906	Bottle Gully Grating (spare)	758761
	4D815	Perforated Catchment Bucket	817735		4D908	Bottle Gully Cover and Frame (spare)	758754
	4D864	SW/½S Half Connector	711868		4D909	Access Liner for Bends (spare)	758744
	4D868	SW/½S Access Pipe	711869		4D910	D/S Multi-base IC Base - straight	813825
	4D874	P/E Channel Access Pipe	711870		4D911	D/S Multi-base IC Base - single 90° - LH	813831
	4D900	S/S Bottle Gully - 87½° - provides access to the drainage system for cleaning, supplied with all bosses closed	711865		4D912	D/S Multi-base IC Base - single 90° - RH	813832
					4D913	D/S Multi-base IC Base - single 45° - LH	813833
					4D914	D/S Multi-base IC Base - single 45° - RH	813834
					4D915	Sealed Access Cover	758762
					4D916	Bottle Gully Riser	860966
					4D917	D/S Multi-Base IC Base - double 45°	813835
					4D918	D/S Multi-Base IC Base - bend 90°	813836

## OsmaDrain 110mm System cont.

	Supplier Code	Description	Keyline Code
	4D919	DI Grating for 4D900/901	845564
	4D922	D/S Universal IC Base - 270mm invert - 110mm straight main channel with four 110mm (2 x 45° and 2 x 90°) right/left hand branch entries. Supplied with 3 blank-off plugs for use in unused side entries	712243
	4D923	D/S Equal NIC Base 110mm x 110mm	538723
	4D925	Universal IC Shaft - 230mm - for use with 4D922, 6D928 and 6D929	712244
	4D926	Universal IC Plug (spare)	710637
	4D930	Inspection Junction Cover - small (spare)	758745
	4D932	Universal IC Sealant (spare)	758764
	4D933	D/S Multi-Base IC Base - twin LH	813837
	4D934	D/S Multi-Base IC Base - twin RH	813838
	4D935	D/S Multi-Base IC Base - double 90°	813840

	Supplier Code	Description	Keyline Code
	4D937	P/E Multi-Base IC Shaft - 150mm	813849
	4D942	DI Cover/Frame - B125	878277
	4D943	P/E PP, Square Cover/Frame	982048
	4D945	Square Recessed Steel Cover/PP Frame	878280
	4D946	Square Recessed Steel Cover/PP Frame - sealed	878284
	4D947	UIC 450mm PP Round Cover and Frame	538399
	4D948	Chamber Channel Cover - LH	758755
	4D949	Chamber Channel Cover - RH	758756
	4D955	Lifting Keys	878294
	4D957	MB Shaft Seal (spare)	838183
	4D960	D/S Shallow IC - 600mm - 600mm invert depth, supplied with 2 profiled, blank-off plugs for use in unused side entries	758749





## OsmaDrain 110mm System cont.

	Supplier Code	Description	Keyline Code
	4D961	P/E Sealed Cover/Adjacent Frame - 250mm diameter - suitable for use in situations requiring a maximum loading of up to 10kN (1T) where the frame is supported in service by a concrete plinth	870068
	4D964	Shallow IC Plug (spare)	758750
	4D969	P/E Multi-Base Cover/Frame	813851
	4D992	Access Cap Gasket (spare)	758748
	4D993	Bottle Gully Plug - new style (spare)	838184

## OsmaDrain 160mm System


Supplier Code	Description	Keyline Code	Supplier Code	Description	Keyline Code
6D066	P/E Slotted Pipe - 6m	758501	6D161	S/S Bend - 87½°	710053
6D073	P/E Pipe - 3m	712008	6D163	S/S Bend - 45°	710054
6D076	P/E Pipe - 6m	711892	6D166	S/S Bend - 30°	710055
6S085	Socket Bracket Brace Assembly	757995	6D167	S/S Bend - 15°	710056
6S086	Pipe Bracket Assembly	757996	6D190	S/S Equal Junction - 87½°	710058
6D099	S/S Reducer - 160mm x 110mm	711893	6D193	D/S Equal Junction - 87½°	711894
6D104	D/S Coupler (for slotted pipe)	758502	6D198	S/S Unequal Junction - 87½°	710059
6D105	D/S Slip Coupler	758499	6D199	D/S Unequal Junction - 87½°	758496
6D116	Snap Cap (spare)	758504	6D205	D/S Pipe Coupler	710060
6D124	S/SW Coupler	710049	6D210	S/S Equal Junction - 45°	710061
6D128	S/S Adaptor - to clay spigot	710050	6D213	D/S Equal Junction - 45°	711895
6D129	D/S Adaptor - to thinwall clay. Connector to BS EN 295 thin wall clay spigot	794993	6D218	S/S Unequal Junction - 45°	710062
6D130	'T' Ring (spare)	710051	6D219	D/S Unequal Junction - 45°	711901
6D131	Protection Sleeve	710052	6D274	S/S Access Pipe	710063
			6D281	P/E LR Bend - 87½°	710122

## OsmaDrain 160mm System cont.

	Supplier Code	Description	Keyline Code		Supplier Code	Description	Keyline Code
	6D283	P/E LR Bend - 45°	794994		6D784	S/S Channel Branch Bend - 87½° - LH	758505
	6D290	S/S Screwed Access Cover	711896		6D785	S/S Channel Branch Bend - 87½° - RH	758506
	6D292	P/E Screwed Access Cover - allows full bore access to the drainage system for cleaning, fits into a standard OsmaDrain ring seal socket	710064		6D874	P/E Channel Access Pipe	711897
	6D296	P/E Socket Plug	710065	6D875	P/E Manhole Base - 160mm x 110mm	758510	
	6D360	P/E Square Rodding Eye	988729	6D876	P/E Manhole Base - 160mm x 160mm - 160mm straight main channel with four 160mm (2 x 45° and 2 x 90°) right/left hand branch entries. Supplied with all inlets and outlets sealed	711899	
	6D561	D/S Bend - 87½°	710073	6D917	NIC Ring Seal (spare)	995456	
	6D563	D/S Bend - 45°	710074	6D928	D/S Equal Inspection Base - 160mm x 160mm	857459	
	6D566	D/S Bend - 30°	710075		6D929	D/S Unequal Inspection Base - 160mm x 110mm - 160mm straight main channel with four 110mm (2 x 45° and 2 x 90°) right/left hand branch entries. Supplied with 3 blank-off plugs for use in unused side entries	857460
	6D567	D/S Bend - 15°	710076		6D931	P/E Polypropylene Square Cover and Frame 350mm	717783
	6D585	D/S LR Channel Bend - 90°	710078				
	6D587	D/S LR Channel Bend - 45°	710079				
	6D780	S/S Channel Branch Bend - 45° - LH	710081				
	6D781	S/S Channel Branch Bend - 45° - RH	710082				

## OsmaDrain 160mm System cont.

	Supplier Code	Description	Keyline Code
	6D932	350mm Restrictor Ring (spare)	717790
	6D936	D/S Equal NIC Base - 160mm x 160mm - 160mm straight main channel with two 160mm x 90° right/left hand branch entries. Supplied complete with sealing ring and one blank-off plug for use in unused side entries	995429
	6D937	D/S Unequal NIC Base - 160mm x 110mm - 160mm straight main channel with four 110mm (2 x 90° and 2 x 45°) right/left hand branch entries. Supplied complete with sealing ring and three blank-off plugs for use in unused side entries	995430

	Supplier Code	Description	Keyline Code
	6D938	NIC Inspection Chamber Shaft - 3m length - for use with 4D923, 6D936 and 6D937 NIC bases	995435
	6D934	NIC Shaft 1.5m length	507163
	6D940	NIC Telescopic Adaptor	848035

## UltraRib: foul and surface water drainage

UltraRib is a PVC-U pipe system designed for adoptable sewer installations. The pipe has a smooth inner surface and is reinforced externally with a pattern of integral, concentric ribs which provide exceptional axial rigidity and enhanced radial strength without a significant increase in weight.

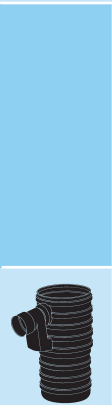



UltraRib is manufactured to comply with the requirements of Water Industry Standard WIS 4-35-01 and is Kitemarked under the BSI Product Certification Scheme. The system has been awarded Agrément Certificates number 98/3472 and 89/R046 covering all foul and surface water applications.

**The system employs fully socketed joints for security and ease of installation. The design of the socket prevents accidental displacement of the O ring during installation, and the resulting joint provides a flush fit between the internal bore of the pipe and the fitting. The assembled joint provides built-in accommodation for differential movement without damage.**

## UltraRib 150mm System

	Supplier Code	Description	Keyline Code
	6UR043	S/S Pipe - 3m	800813
	6UR046	S/S Pipe - 6m	800814
	6UR073	P/E Pipe - 3m	800808
	6UR099	S/S Reducer - 150mm x 110mm - level invert reducer to BS EN 1401 OsmaDrain spigot	800831
	6UR105	D/S Slip Coupler	800816
	6UR106	D/S Adaptor - to clay or concrete spigot	800820
	6UR117	Ring Seal (spare)	800902
	6UR118	Ring Seal - channel fittings (spare)	800903
	6UR128	S/S Adaptor - connector to BS 1211 or BS 437 cast iron spigot or BS EN 245 clay spigot	800818
	6UR129	D/S Adaptor - to thinwall clay spigot	800822

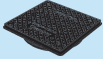


## UltraRib 150mm System cont.

	Supplier Code	Description	Keyline Code		Supplier Code	Description	Keyline Code	
	6UR141	S/S Adaptor - to BS EN 1401 spigot	800828		6UR296	P/E Socket Plug	806542	
	6UR142	D/S Adaptor - to BS EN 1401 socket	800829		6UR395	Soluble Lubricant - 2.5kg tub	833443	
	6UR143	S/S Adaptor - to BS EN 1401 socket	800830		6UR396	Soluble Lubricant - 5kg tub	833444	
	6UR163	S/S Bend - 45°	-		6UR560	D/S Bend - 87½° - to BS EN 1401 spigot	800832	
	6UR193	D/S Equal Junction - 87½°	800843		6UR561	D/S Bend - 87½°	800839	
	6UR199	D/S Junction (150 x 110) - 87½°	800845		6UR563	D/S Bend - 45°	800840	
	6UR205	D/S Pipe Coupler - for jointing UltraRib pipe	800817		6UR566	D/S Bend - 30°	800841	
					6UR567	D/S Bend - 15°	800842	
	6UR213	D/S Equal Junction - 45°	800844		6UR590	S/S Road Gully - 350mm diameter	995278	
	6UR219	D/S Junction (150 x 110) - 45°	800846			6UR600	S/S Road Gully - 450mm diameter x 900mm overall depth trapped road gully	816362
	6UR290	S/S Screwed Access Cover	800879					
	6UR292	P/E Screwed Access Cover - fits into an UltraRib socket to allow full access to the sewerage system for cleaning	800878	6UR780	S/S Channel Branch Bend - 45° - LH	800883		




## UltraRib 150mm System cont.

Supplier Code	Description	Keyline Code	Supplier Code	Description	Keyline Code
6UR781	S/S Channel Branch Bend - 45° - RH	800884	6UR869	S/S Rocker Pipe	806543
6UR784	S/S Channel Branch Bend - 87½° - LH	870944	6UR874	P/E Channel Access Pipe	800882
6UR785	S/S Channel Branch Bend - 87½° - RH	870948	6UR875	P/E Manhole Base - 150mm x 110mm	800855
6UR794	SW/½S Channel Junction - 45° - LH	800892	6UR876	P/E Manhole Base - 150mm x 150mm	800856
6UR795	SW/½S Channel Junction - 45° - RH	800893	6D917	NIC Ring Seal (spare)	995456
6UR796	SW/½S Channel Junction - 45° LH (150 x 110)	800894	4D925	IC Shaft - 230mm effective length - for use with 6UR928 and 6UR929	712244
6UR797	SW/½S Channel Junction - 45° RH (150 x 110)	800896	6UR928	D/S Equal Inspection Chamber Base 450mm diameter - 150mm x 150mm - 150mm straight main channel with two 150mm x 90° right/left hand branch entries. Supplied with one blank-off plug for use in unused side entry	857470
6UR798	SW/½S Channel Bend - 45° - LH	800897	6UR929	D/S Unequal Insp Base - 150mm x 110mm	857481
6UR799	SW/½S Channel Bend - 45° - RH	800898	6D934	NIC Shaft 1.5m length	507163
6UR861	SW/½S Channel Bend - 87½°	870950			
6UR863	SW/½S Channel Bend - 45°	800885			
6UR866	SW/½S Channel Bend - 30°	800886			
6UR867	SW/½S Channel Bend - 15°	800887			
6UR868	SW/½S Channel Access Pipe	800881			


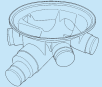
## UltraRib 150mm System cont.

	Supplier Code	Description	Keyline Code		Supplier Code	Description	Keyline Code
	6D931	P/E Polypropylene Square Cover and Frame	717783		4D942	DI Cover/Frame - B125	878277
	6D932	350mm Restrictor Ring (spare)	717790		4D943	PP Sealed Square Cover/Frame - suitable for use with foot traffic only. When surrounded by a concrete plinth, can be used in situations with loading up to 50kN (5T) i.e. domestic driveways	982048
	6UR936	D/S Equal NIC Base 150mm x 150mm	995432		4D947	450mm Polypropylene Round Cover and Frame	538377
	6UR937	D/S Unequal NIC Base 150mm x 110mm - 150mm straight main channel with four 110mm (2 x 90° and 2 x 45°) right/left hand branch entries. Supplied complete with sealing ring and three blank-off plugs for use in unused side entries	995433		4D955	Lifting Keys	878294
	6D938	NIC Inspection Chamber Shaft - 3m length - for use with 6UR936 and 6UR937 NIC bases	995435	6UR993	Testing Plug	800901	
	6D940	NIC Telescopic Adaptor	848035				

## UltraRib 225mm System

	Supplier Code	Description	Keyline Code		Supplier Code	Description	Keyline Code	
	9UR043	S/S Pipe - 3m	833450		9UR296	P/E Socket Plug	833464	
	9UR046	S/S Pipe - 6m	833451		9UR561	D/S Bend - 90°	833467	
	9UR073	P/E Pipe - 3m	833448			9UR563	D/S Bend - 45°	833468
	9UR095	S/S Reducer - 225mm x 150mm - level invert reducer	833453			9UR566	D/S Bend - 30°	833470
	9UR105	D/S Slip Coupler	833454		9UR567	D/S Bend - 15°	833472	
	9UR109	D/S Adaptor - to clay spigot	833455		9UR853	SW/½S Channel Access Bend - 45°	833488	
	9UR117	Ring Seal (spare)	833456		9UR861	SW/½S Channel Bend - 87½°	870940	
	9UR205	D/S Pipe Coupler	833457		9UR863	SW/½S Channel Bend - 45°	833489	
	9UR213	D/S Equal Junction - 45°	833458		9UR866	SW/½S Channel Bend - 30°	833491	
	9UR224	D/S Junction (225 x 110) - 45°	833459			9UR867	SW/½S Channel Bend - 15°	833492
	9UR226	D/S Junction (225 x 160) - 45°	833461		9UR868	SW/½S Channel Access Pipe	961724	
	9UR227	D/S Junction (225 x 150) - 45°	833462					
	9UR229	D/S Slip Junction (225 x 150) - 45°	844978					






## UltraRib 225mm System cont.

	Supplier Code	Description	Keyline Code
	9UR869	S/S Rocker Pipe - 600mm effective length	833494
	9UR874	P/E Channel Access Pipe	833495
	9UR877	P/E Manhole Base - 225mm x 225mm	833496
	9UR878	P/E Manhole Base - 225mm x 150mm - 225mm straight main channel with four 150mm (2 x 45° and 2 x 90°), right/left hand branch entries. Supplied with inlets and outlets sealed	833498



UltraRib Range

## UltraRib 300mm System

	Supplier Code	Description	Keyline Code		Supplier Code	Description	Keyline Code	
	12UR043	S/S Pipe - 3m	833516		12UR240	D/S Junction (300 x 225) - 45°	833532	
	12UR073	P/E Pipe - 3m	833511			12UR296	P/E Socket Plug - allows full bore access into the sewerage system for cleaning	833534
	12UR093	S/S Reducer - 300mm x 225mm - level invert reducer	833518			12UR561	D/S Bend - 90°	833536
	12UR105	D/S Slip Coupler - for new branch connections and repairs	833520		12UR563	D/S Bend - 45°	833537	
	12UR112	D/S Adaptor - to concrete spigot	833523		12UR566	D/S Bend - 30°	833541	
	12UR117	Ring Seal (spare)	833526		12UR567	D/S Bend - 15°	833543	
	12UR205	D/S Pipe Coupler	833528		12UR869	S/S Rocker Pipe - 600mm effective length	833546	
	12UR213	D/S Equal Junction - 45°	833529			12UR874	P/E Channel Access Pipe - accommodates 6 x 150mm side branch entries, three per side	833547
	12UR236	D/S Junction (300 x 160) - 45°	833530					
	12UR237	D/S Junction (300 x 150) - 45°	833531					
	12UR239	D/S Slip Junction (300 x 150) - 45°	838179					



## Tegra 600: non-entry inspection chamber

Safer, cost-effective access for pipe inspection and maintenance

### Key Benefits

- Significantly lighter than traditional concrete ring manholes
- Easily manoeuvred on site by hand: no heavy machinery required for lifting and placing
- Can be installed and backfilled within one day (typical concrete manhole takes up to three days): significant saving of time and costs
- Reduced Health and Safety risks to personnel during installation and service
- Prevents personnel access to a potentially hazardous environment: pipe inspection and maintenance carried out from ground level
- Sockets allow up to 7.5° pipe movement in any direction: extra flexibility for successful, secure connection to pipe line and level

### Applications

- For maintenance inspection of buried pipework more than 1.2 metres deep (where restricted access is required)
- Non-adoptable domestic and industrial/commercial drainage applications
- Connects to Wavin UltraRib and TwinWall\* drainage systems 150mm, 225mm and 300mm pipe

\*with adaptors

## Advantages

- Strong polypropylene construction
- Lightweight and easy to handle
- Safer on site and in service
- Faster, lower-cost installation
- Flexible sockets: allowing up to 7.5° of movement in any direction

Straight base.  
30°, 90° and equal  
cross base  
configurations are  
also available

Moveable socket:  
up to 7.5° in  
any direction



Tegra 600

## Tegra 600

Supplier Code	Description
6NE100	150mm UltraRib Straight Tegra Base
6NE200	150mm UltraRib 90° Tegra Base
6NE300	150mm UltraRib 30° Tegra Base
6NE400	150mm UltraRib Cross Tegra Base
9NE100	225mm UltraRib Straight Tegra Base
9NE200	225mm UltraRib 90° Tegra Base
9NE300	225mm UltraRib 30° Tegra Base
9NE400	225mm UltraRib Cross Tegra Base
12NE100	300mm UltraRib Straight Tegra Base
12NE200	300mm UltraRib 90° Tegra Base
12NE300	300mm UltraRib 30° Tegra Base
12NE400	300mm UltraRib Cross Tegra Base
9NE930	Tegra Restrictor Cap
600TW076	6m Shaft of Unperforated 600mm dia TwinWall

## TwinWall: surface and sub-surface water drainage

Wavin TwinWall is a cost-effective pipe system intended for use as a direct alternative to all non-pressurised gravity drain systems other than where Local Authority adoption is necessary. Typical applications include highway filter and carrier drains, rail track drainage, and unadoptable surface water drains, for example on industrial or commercial developments.

The TwinWall construction helps to maintain flexibility and reduce the possibility of impact damage on site.



TwinWall Range

## TwinWall 100mm System

Supplier Code	Description	Keyline Code
4TW076	P/E Pipe - 6m unperforated	554550
4TW117	Ring Seal	554553
4TW176	P/E Pipe - 6m perforated	554551
4TW205	D/S Pipe Coupler	554552
4TW750	TwinWall End Cap	554554

## TwinWall 150mm System

Supplier Code	Description	Keyline Code	Supplier Code	Description	Keyline Code	
6TW076	P/E Pipe - 6m	885279	6TW176	P/E Pipe - 6m perforated	885280	
6TW097	D/S Reducer - 6TW x 4TW	554555	6TW193	D/S Junction 87.5°	554556	
6TW099	D/S Level Invert Reducer	885370	6TW205	D/S Pipe Coupler	885282	
6TW117	Ring Seal	885283	6TW213	D/S Junction 45°	885369	
6TW128	S/S Adaptor to Cast Iron or Clay Spigot	958333	6TW276	P/E Pipe - 6m half perforated	923631	
6TW129	D/S Adaptor Connector to Thin Wall Clay Spigot	-	6TW560	D/S Adaptor Bend - 87½ OD x TW	958470	
6TW141	S/S Adaptor 6TW Socket x 160mm BS EN 1401 Spigot	924181	6TW561	D/S Bend - 87½°	885288	
6TW142	D/S Adaptor 6TW Socket x 160mm BS EN1401 Socket	924168	6TW563	D/S Bend - 45°	885289	
6TW144	S/S Adaptor 6UR Spigot x 160mm Flexible Pipe Socket	885285	6TW566	D/S Bend - 30°	923851	
6TW145	S/S Adaptor 6UR Spigot x 6TW Socket	885286	6TW567	D/S Bend - 15°	923892	
6TW146	S/S Adaptor 6TW Spigot x 160 Flexible Pipe Socket	885287		6TW650	P/E Road Gully - 450mm diameter x 900mm deep	947550
6TW147	S/S Adaptor Bend 6UR Spigot x 6TW Socket	958451		6TW651	P/E Road Gully - 450mm diameter x 750mm deep	947551
6TW148	D/S Adaptor UR x TW Socket	988760	6TW750	TwinWall End Cap	554557	

## TwinWall 225mm System

Supplier Code	Description	Keyline Code
9TW076	P/E Pipe - 6m unperforated	885292
9TW095	D/S Level Invert Reducer	885302
9TW117	Ring Seal	885298
9TW148	D/S Adaptor UR x TW Socket	988759
9TW176	P/E Pipe - 6m perforated	885293
9TW205	D/S Pipe Coupler	885294
9TW213	D/S Junction 45°	885300
9TW227	D/S Junction 45° 225 x 150	885301
9TW276	P/E Pipe - 6m half perforated	924323
9TW561	D/S Bend - 87½°	885299
9TW563	D/S Bend - 45°	885297
9TW566	D/S Bend - 30°	924453
9TW567	D/S Bend - 15°	924481
9TW750	TwinWall End Cap	554558

## TwinWall 300mm System

Supplier Code	Description	Keyline Code
12TW076	P/E Pipe - 6m unperforated	885303
12TW093	D/S Level Invert Reducer	885311
12TW117	Ring Seal	885306
12TW176	P/E Pipe - 6m perforated	885304
12TW205	D/S Pipe Coupler	885305
12TW213	D/S Junction 45°	897809
12TW237	D/S Junction 45° 300 x 150	885309
12TW240	D/S Junction 45° 300 x 225	885310
12TW276	P/E Pipe - 6m half perforated	897584
12TW561	D/S Bend - 87½°	885307
12TW563	D/S Bend - 45°	885371
12TW566	D/S Bend - 30°	897739
12TW567	D/S Bend - 15°	897774
12TW750	TwinWall End Cap	554559

## TwinWall 375mm System

Supplier Code	Description	Keyline Code	Supplier Code	Description	Keyline Code
375TW046	S/S Pipe - 6m unperforated	505716	375TW205	D/S Pipe Coupler	505735
375TW056	S/S Pipe - 6m half perforated	505717	375TW225x45	S/S Unequal Junction - 45° - 375mm x 225mm	505744
375TW066	S/S Pipe - 6m perforated	505718	375TW225x90	S/S Unequal Junction - 90° - 375mm x 225mm	505749
375TW076	P/E Pipe - 6m unperforated	505720	375TW300x45	S/S Unequal Junction - 45° - 375mm x 300mm	505745
375TW086	P/E Pipe - 6m perforated	505722	375TW375x45	S/S Equal Junction - 45° - 375mm x 375mm	505737
375TW096	P/E Pipe - 6m half perforated	505724	375TW375x90	S/S Equal Junction - 90° - 375mm x 375mm	505736
375TW099	S/S Reducer - 300mm x 375mm	505725	375TW750	TwinWall End Cap	554560
375TW117	Ring Seal	505726			
375TW150x45	S/S Unequal Junction - 45° - 375mm x 150mm	505739			
375TW150x90	S/S Unequal Junction - 90° - 375mm x 150mm	505747			
375TW161	S/S Bend - 87.5°	505729			
375TW163	S/S Bend - 45°	505731			
375TW166	S/S Bend - 30°	505732			
375TW167	S/S Bend - 15°	505733			

## TwinWall 450mm System

Supplier Code	Description	Keyline Code	Supplier Code	Description	Keyline Code
450TW046	S/S Pipe - 6m unperforated	505756	450TW205	D/S Pipe Coupler	505776
450TW056	S/S Pipe - 6m half perforated	505757	450TW225x45	S/S Unequal Junction - 45° - 450mm x 225mm	505781
450TW066	S/S Pipe - 6m perforated	505759	450TW225x90	S/S Unequal Junction - 90° - 450mm x 225mm	505785
450TW076	P/E Pipe - 6m unperforated	505760	450TW300x45	S/S Unequal Junction - 45° - 450mm x 300mm	505782
450TW086	P/E Pipe - 6m perforated	505762	450TW375x45	S/S Unequal Junction - 45° - 450mm x 375mm	505783
450TW096	P/E Pipe - 6m half perforated	505764	450TW450x45	S/S Equal Junction - 45° - 450mm x 450mm	505779
450TW099	S/S Reducer - 450mm x 375mm	505766	450TW450x90	S/S Equal Junction - 90° - 450mm x 450mm	505778
450TW117	Ring Seal	505768	450TW750	TwinWall End Cap	554561
450TW150x45	S/S Unequal Junction - 45° - 450mm x 150mm	505780			
450TW150x90	S/S Unequal Junction - 90° - 450mm x 150mm	505784			
450TW161	S/S Bend - 87.5°	505769			
450TW163	S/S Bend - 45°	505771			
450TW166	S/S Bend - 30°	505773			
450TW167	S/S Bend - 15°	505775			

## TwinWall 500mm System

Supplier Code	Description	Keyline Code	Supplier Code	Description	Keyline Code
500TW046	S/S Pipe - 6m unperforated	505786	500TW205	D/S Pipe Coupler	505803
500TW056	S/S Pipe - 6m half perforated	505787	500TW225x45	S/S Unequal Junction - 45° - 500mm x 225mm	505808
500TW066	S/S Pipe - 6m perforated	505788	500TW300x45	S/S Unequal Junction - 45° - 500mm x 300mm	505809
500TW076	P/E Pipe - 6m unperforated	505789	500TW375x45	S/S Unequal Junction - 45° - 500mm x 375mm	505812
500TW086	P/E Pipe - 6m perforated	505790	500TW450x45	S/S Unequal Junction - 45° - 500mm x 450mm	505814
500TW096	P/E Pipe - 6m half perforated	505791	500TW500x45	S/S Equal Junction - 45° - 500mm x 500mm	505806
500TW099	S/S Reducer - 500mm x 450mm	505792	500TW500x90	S/S Equal Junction - 90° - 500mm x 500mm	505805
500TW117	Ring Seal	505793	500TW750	TwinWall End Cap	554562
500TW150x45	S/S Unequal Junction - 45° - 500mm x 150mm	505807			
500TW150x90	S/S Unequal Junction - 90° - 500mm x 150mm	505815			
500TW161	S/S Bend - 87.5°	505795			
500TW163	S/S Bend - 45°	505797			
500TW166	S/S Bend - 30°	505800			
500TW167	S/S Bend - 15°	505801			

## TwinWall 600mm System


Supplier Code	Description	Keyline Code	Supplier Code	Description	Keyline Code
600TW046	S/S Pipe - 6m unperforated	505817	600TW205	D/S Pipe Coupler	505833
600TW056	S/S Pipe - 6m half perforated	505820	600TW225x45	S/S Unequal Junction - 45° - 600mm x 225mm	505840
600TW066	S/S Pipe - 6m perforated	505822	600TW300x45	S/S Unequal Junction - 45° - 600mm x 300mm	505842
600TW076	P/E Pipe - 6m unperforated	505823	600TW375x45	S/S Unequal Junction - 45° - 600mm x 375mm	505843
600TW086	P/E Pipe - 6m perforated	505824	600TW450x45	S/S Unequal Junction - 45° - 600mm x 450mm	505844
600TW096	P/E Pipe - 6m half perforated	505825	600TW500x45	S/S Unequal Junction - 45° - 600mm x 500mm	505846
600TW099	S/S Reducer - 600mm x 500mm	505826	600TW600x45	S/S Equal Junction - 45° - 600mm x 600mm	505836
600TW117	Ring Seal	505827	600TW600x90	S/S Equal Junction - 90° - 600mm x 600mm	505834
600TW150x45	S/S Unequal Junction - 45° - 600mm x 150mm	505838	600TW750	TwinWall End Cap	554563
600TW150x90	S/S Unequal Junction - 90° - 600mm x 150mm	505847			
600TW161	S/S Bend - 87.5°	505828			
600TW163	S/S Bend - 45°	505829			
600TW166	S/S Bend - 30°	505830			
600TW167	S/S Bend - 15°	505831			

## Land Drainage: surface and sub-surface water drainage


A corrugated PVC-U pipe system which has been designed to provide cost effective land drainage. It is quickly and easily installed using either open cut or trenchless methods.

Land Drainage can be used in a variety of civil engineering and agricultural situations where its use will improve the condition, traffickability and workability of soils.

It complies with the requirements of BS 4962 and carries the BSI Kitemark.

Land Drainage 80mm System			
	Supplier Code	Description	Keyline Code
	80D025	S/S Coil - 25m	711880
	80D050	S/S Coil - 50m	897450
	80D100	S/S Coil - 100m	885312
	80D104	D/S Coupler - for jointing Land Drainage pipe	711883
	80D200	D/S Junction - 67½°	711885
	80D297	S/S End Cap	711888

## Land Drainage 100mm System

	Supplier Code	Description	Keyline Code
	100D025	S/S Coil - 25m	711879
	100D050	S/S Coil - 50m	897467
	100D098	D/S Reducer - 100mm x 80mm	711882
	100D100	S/S Coil - 100m	885313
	100D104	D/S Coupler	711884
	100D200	D/S Junction - 67½°	711886
	100D208	D/S Junction (100 x 80) - 67½°	711887
	100D297	S/S End Cap	711889
	100D600	Type 8 FinDrain 100mm x 100m	355758