House Building Product Specifier







House Building

Key environmental issues such as sustainable urban drainage (SUDS), flood prevention and the increasing use of brown field sites are causing the House Building market within the UK to change. Effects such as these increase the demands placed on suppliers and the products and services they offer.

At JDP we have continued to diversify our product range to respond to these changes and continue to grow share within this market because JDP is recognised as a specialist in the supply of high quality product systems for house building.

> Our staff will be pleased to offer expert product advice and application guidance for existing and potential customers be they Self Build or National Housing Developers.

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Total Service and Solutions for House Building

Our attention to detail and genuine care for our customers combined with one of the most comprehensive product portfolios, stocked in depth has contributed to our continued success in this market. Our underlying philosophy at JDP is that the customer need not go anywhere else to source materials.

We offer technical support and advice, as well as on site takeoffs, formally approved products which offer solutions for site preparation and construction.

No matter what the requirement, large or small, JDP is the first port of call for the house builder, offering a fast, friendly, efficient, knowledgeable and customer focused service.

JDP offer the following benefits to customers within the house building market: -

- Product and application expertise
- Specialised product ranges
- High quality performance products
- Technical support
- Nationwide availability
- Nationwide distribution via. JDP vehicle fleet
- One to one contact
- Pricing consistency



Estate Road Products			
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Estate Road Products



- Concrete Kerbs Recycled Kerbs Recycled Kerb Drainage
- Gullies Gratings Covers & Frames Concrete Manhole Rings
- Preformed Chambers Rectangular Concrete Chamber Sections
- Engineering Bricks Street Furniture



JDP stocks a comprehensive range of estate road products designed to meet the needs of the house building market.

The range includes British Standard kerbs, kerb drainage products, gullies, and ductile iron manhole covers and gratings to suit a wide selection of low traffic

intensity applications, including estate roads and driveways. Also available are many of the associated products required by contractors such as engineering bricks, concrete chamber sections and concrete manhole rings.





Concrete Kerbs / British Standard Kerb

Our JDP branches offer a wide range of concrete kerbs as specified in the current version of BS EN 1340. Due to our close partnerships with the industry's leading manufacturers we can ensure our customers are provided with leading brand quality products from local branches.

In addition to the products in this section a full range of aesthetic kerbs is available in our Commercial, Public & Industrial Buildings Product Specifier.

Features and benefits

All straight units and the majority of radius units are hydraulically pressed. Other radius units are hammer-compacted.

Applications

Designed to withstand occasional vehicular impact.

Standard Kerbs

	Code	Description
1 1 7	180100866	150x305 HB1
1	180100860	125x255 HB2
	180100855	125x150 HB3

Droppers and Crossing Kerbs

?*	Code	Description
	180101074	125x255 mm HB – 125x150 mm BN (LH) DL1
- m-	180101113	125x255 mm HB – 125x150 mm BN (RH) DR1
/ 1	180100879	125x255 mm SP – 125x150 mm BN (LH) DL2
2 /2	180100952	125x255 mm SP – 125x150 mm BN (RH) DR2
	180100658	125x150 mm BN As Crossing Kerb

Radius Droppers (Available in 4, 5, 6, 8 and 10m External Radius Only)

	Code	Description	
J /	LH	RH	
1	180141369	180141368	125x255 mm HB – 125x150 mm BN 4m
	180141371	180141370	125x255 mm HB – 125x150 mm BN 5m
	180141373	180141372	125x255 mm HB – 125x150 mm BN 6m
÷ //	180141375	180141374	125x255 mm HB - 125x150 mm BN 8m
-0H0 - 1	180141377	180141376	125x255 mm HB – 125x150 mm BN 10m



Radius Kerbs

~	125x255 HB External	125x255 HB Internal	125x150 BN External	125x150 BN Internal	Size of Radius	Units per ¹ / ₄ circle
	180141318	-	-	-	0.5	1
	180140755	180141319	180141321	-	1	2
	180140849	180141320	180141178	-	2	4
	180140850	180141042	180141179	180141202	3	6
~	180140851	180141043	180141180	180141203	4	8
	180140852	180141044	180141181	180141204	5	10
	180140853	180141045	180141182	180141205	6	12
	180140854	180141046	180141183	180141206	8	16
	180140855	180141047	180141184	180141207	10	20
	180140856	180141048	180141185	180141208	15	30

The table shown is an approximate guide only.

All radii over 15 m (40 ft) can be achieved by using standard 914 mm (3 ft) or 609 mm (2 ft) kerbs.

Before ordering, check availability of size and profile.

Also when ordering, please state the dimensions first, then the profile, then the radii followed by Internal or External. e.g. 125x150 HB 6M Ext

Quadrants

	Code	Description
1	180100854	305x255 mm QHB
d maxim	180100853	455x255 mm QHB

Transition Kerbs

	Code	Description
л	180100852	125x255 mm HB RH – 125x255 mm SP LH TR
1	180100923	125x255 mm HB LH – 125x255 mm SP RH TL

Angles

	Code	Description
	180101177	125x255 mm HB Ext Angle HBXA
385	180101218	125x255 mm HB Int Angle HBIA

Edging Kerbs

Edging kerbs are designed to retain the surface structure between the roadside kerb and the loose ground, such as pavements.

Applications

- City roads
- Carriageways
- Urban areasHighways
- Commercial sites
 Industrial sites

T	Code	Description	
*	180100576	50 X 150 X 914 Edging Kerb Flat Top EF	
T D	180100589	89 50 X 205 X 914 Edging Kerb Flat Top EF	
₽↓	180100569	50 X 150 X 914 Bullnose Edging EBN	
	180101072	50 X 205 X 914 Bullnose Edging EBN	
8	180101615	50 X 150 X 914 Round Top Edging RT	
_ 50	180103772	50 X 205 X 914 Round Top Edging RT	

Abbreviation Guide: HB Half Battered, BN, Bullnosed, SP 45° Splayed, RH Right Hand, LH Left Hand, RT Round Top Edging, EF Flat Top Edging, EBN Bullnosed Edging, TR Transition Right, TL Transition Left

Standards

British Standard kerb products comply with the performance levels in European Standard BS EN 1340.

Installation Guide

These products should be installed in accordance to BS7533 Part 6. They form edge restraints for other paving materials, pedestrian/vehicle segregation and drainage collectors for surface water. Foundations for units can either be a well compacted bed of fresh concrete or a 1:3 cement : sand mortar (12-40mm thick) on a preformed concrete race.

The base concrete, to grade ST1, should be a minimum 150mm thick and extended 150mm beyond the edge of the unit where haunching is required.

Haunching for units as appropriate should be with a concrete grade ST1. It is necessary to ensure a good bond between haunching concrete, unit and base. Allow to gain sufficient strength before laying adjacent paving material. Lay units to line and level with a paviours maul such as that they are within 3mm of the design alignment. Joints should be close joints (trowel thickness) for natural stone and concrete units, laid dry.





Recycled Kerbs

The construction industry has made great progress over the last few years to re-engineer products, making them more user friendly and to reduce the risk of long term injury brought about through improper and/or repetitive manual handling.

These lightweight, environmentally-friendly recycled polymer composite kerbstones will help all specifiers and contractors to comply with Government aims of building a sustainable future. More importantly, it will enable contractors to continue to lay kerbstones exactly as they have done for generations, but in a quicker and safer fashion.

They comply with Health & Safety guidelines concerning the manual handling of kerbstones.

A standard HB2 kerb weighs under 6kg, compared to its concrete equivalent of 67kg and the Health and Safety limit of 20kg for manually handled kerbstones.

They also match the aesthetic appearance of concrete kerbstones and can also assist Local Authorities in achieving Agenda 21 targets.

This focuses on economic, social and environmental agendas, and aims to develop solutions to problems through encouraging better, more efficient practices, with particular reference to sustainability.



Features & Benefits

WEIGHS UNDER 6KG

Its lightweight design enables operatives to quickly position and lay the kerbs. Trials indicate lay rates up to 4 times faster. Being so light makes them extremely easy to store and transport without the use of heavy goods vehicles.

NO MECHANICAL HANDLING EQUIPMENT REQUIRED

Removing the need for mechanical handling equipment, speeds up lay rates and vastly reduces the working space required.

SAFE TO HANDLE

The obvious solution where the health and safety risk assessment does not permit the use of handling equipment; for example, where there is an uneven surface or where the risk of traffic accidents is too high. Mitigates against repetitive strain injury.

HIGHLY RESISTANT

Resistant to the typical chemicals and road salts used in highway construction and maintenance.

AIDS COMPLIANCE WITH ISO 14001

Helps achieve compliance with ISO 14001 and the objectives of the Egan report.

MADE FROM RECYCLED POLYMER BLEND

The use of reprocessed material supports government efforts to increase the volume of recycled materials used in a sustainable manner in the construction industry namely, The Government's Sustainable Buildings Task Force. Redundant kerb can be recycled.

INSTALLED THE SAME WAY BUT MUCH QUICKER AND WITH IMMEDIATE 100% ALIGNMENT

Can be installed exactly as traditional concrete kerbs have been for decades but quicker and safer. No retraining of kerbing operatives is required. The product can be cut with hand tools making less noise and dust than with the concrete equivalent and the kerb is easily knocked down to level. Installers' exposure to Dermatitis and other skin disorders through concrete handling are removed. The interlocking feature ensures 100% alignment every time.

Applications

- Highways
- Commercial sites City roads

Designed to withstand occasional vehicular impact.

Industrial sites

HB2 Range

BN3 Range



Accessories

 Straight • Droppers

SP1 Range



Accessories

- Straight 90° Angles Internal
 - & External

Standards BBA HAPAS accredited

Installation Guide

A semi dry mixed concrete of 10mm aggregate for the bed/race, the latter having a slump of 50mm (ST1 / BS 8500), is required. For the hauching/backing the material is to have a 20/30mm slump. The string line is to be set up on pins and set to correct level. The concrete is to be placed along the intended line behind the string. The concrete should then be spread and struck level with a shovel, leaving no high or low points. Check that the minimum specified thickness of concrete at least is under the struck concrete surface.

The Kerb is then to be taken from the pallet or truck and placed on the concrete bed, laying from the left offering it to the string line. This is done from the verge/footway side, holding the Kerb with both hands. It is then to be adjusted into position using a small rubber hand maul. With a hand on the top, the surface is then to be tapped into position until flush with the string line.

The second unit is then introduced by offering it to the string line at the end of the first Kerb. Ensure that the male alignment spigot on the end face of laid kerb is located within in the female slot of the kerb being laid. The Kerb has a 2.5mm lug integrated into the side face to reduce contact between kerbs, which in turn facilitates the reduction of spalled kerbs during installation. The laying process is then repeated, checking that the first Kerb has not been disturbed, adjusting as necessary with the rubber maul. Successive Kerb units can then be added to the line.

On completion of the kerb line, backing concrete is to be run out from the shute behind the Kerb, covering the lateral flange, keying the Kerb to the haunching and race. The kerb layer then faces off the front of the kerb race, trimming flush to the front flange of the Kerb. The rest of the haunching should be trowelled into shape and then the line of the kerb should be checked again for accuracy.





Recycled Kerb Drainage

Over recent years the use of Combined Kerb Drainage has grown rapidly, with engineers appreciating the advantages offered over the traditional gully and pipe drainage systems, for car parks and carriageways. Lightweight kerb drainage system, manufactured from 100% recycled waste destined for landfill and 70% lighter than conventional concrete. Recycled Kerb Drainage negates the extra cost and time incurred with the vacuum lifters and grabs needed for traditional concrete kerbs.

For a more extensive range of Kerb Drainage systems including concrete & polymer concrete please see our Civil Engineering & Utilities Product Specifier.





Features & Benefits

- Combined kerb drainage system
- Made from 100% recycled material
- 100% recyclable
- Extremely lightweight being some 70% lighter than conventional concrete or polyester concrete equivalent, yet is strong and robust.
- Available in 305mm and 480mm high units to half battered HB1 profile, and has a full range of components including droppers, centre stones, inspection and gully units, radius kerbs etc.
- 3 inlets in the face of the kerb unit, offering better hydraulic performance, and enabling surface water to drain more quickly from the carriageway.
- One-piece unit 500mm long, with a high-impact resistance and has a positive interlock between all components.
- Resistant to most forms of effluents found in highway situations, and has a finish in common with standard concrete kerbs.

Standard Drainage Unit

Code	Description
1801305SU	100x305 mm HB1 Unit
1801480SU	100x480 mm HB1 Unit

Applications

- Urban road schemes
- Trunk roads
- Roundabouts
- Traffic calming situations
- Car parks

A full range of accessories is available making a complete system.

- 90° Internal angle
- 90° Quadrants
- Internal radius units 11-25m
- External radius units 6-7m / 8-10m / 11-25m
- Crossing units

- Drop kerbs
- Rodding access & outlet unit
- Ductile iron gully top cover & base
- End caps / outlet plugs
- End / back outlet drain unions

Shallow Drainage Unit

This shallow kerb unit is available as splayed or half battered and is ideal where construction depths are limited i.e. concrete slabs/ bridge decks, also where low flows are anticipated (narrow/short lengths bridge decks).

It allows continuity of kerb drainage from carriageways over structures. When located on Bridge Decks, sub-surface slots are incorporated to drain the asphalt matrix. A wide range of components is available, such as End Units, End Outlet Units, Expansion Joint Assemblies, and Inspection Units.

Standards

Load tested up to D400 under EN1433 Fully compliant to Highways Agency (HA) IAN117/08 and EN1433

Please Note:

Traditionally, combined kerb drainage system failures are due to side wheel loads, irrespective of the compressive loading capabilities of the product, but EN1433 and DIN19580 do not specify a test for side impact loads.

However, it is designed to have a high impact resistance to side wheel loads therefore we recommend the C250kN installation detail with a well compacted road construction.

Installation Guide

Through a policy of material and process development, Recycled Kerb Drainage has a finish almost identical to a standard Concrete Kerb Drainage.

- Excavate through to line and level.
- Lay out units prior to installation to ensure all rodding access units and outlets are positioned correctly.
- Start at outfall and work away, finished line and level should be pre-determined.
- If sealant is to be applied please apply to the unit not yet laid then butt together keep joints clean of concrete bedding material.
- A 2mm gap should be left between units (trowel thickness) to allow for contraction and expansion.
- The male/female joint will ease installation procedure as line will be easier to achieve.
- Asphalt can be laid to the pre-marked line shown on units to offer a 125mm kerbface. Asphalt will adhere to the face so pre-pitching is not required.
- Units should be cleaned prior to hand over.

C250kN



D400kN





Gullies / HDPE & PVC Gullies

Gullies are suitable for road or yard drainage applications. A high quality plastic, easy to handle and install, alternative to heavy concrete and clay gullies. They are suitable for both trapped and untrapped systems and are easily adapted to various pipe systems.

A range of accessories is available, including gully cover slabs that key into the gully and eliminate the need for brickwork to finished level.

The Davigulli has been designed by JDP through understanding the needs of both the installer and the local authority who maintain the system. Through the BBA accreditation JDP's customers have commented on the Davigulli, proving its quality...."good product-many thousands used in the region" "used/specified for 10 years and on in excess of 1000 sites".

The Davigulli is particularly beneficial for ease of cleaning with its smooth chamfered sides.

The Dykagully has the benefit of a specially designed integrated grate, which can independently rotate eliminating the need for additional brickwork or a cover slab.

Features and benefits

- Lightness and superior strength
- Effective keying into the concrete surround
- Nested gullies lock together for easy handling, transportation and safer storage on site
- Adaptors available to suit a range of pipe systems

Road Gullies 160mm O/let

	Code	Description	Diameter mm	Capacity litres
	0601DG750	750mm Davigulli	450	80
	0602DG900	900mm Davigulli	450	104
	0602RG750X450	750mm Road Gully	450	80
	0602RG900X450	900mm Road Gully	450	104
	0601PG	750mm Pavement Gully	375	
Ø	0610MA100	Multi Adaptor 160 x 160-178mm		
	0612RF150X25	150mm Ridgiflex x 25m		

Yard Gullies 110mm O/let

1	Code	Description	Diameter mm	Capacity litres
1	0603UGBASE110	700mm Dykagully Base	315	20
	0603UGSTOP	Dykagully Hinged Grating Class B125 (Rotating)		
	0603UGSILT	Dykagully Silt Bucket		
	0601RG600X300	600mm Midigully	300	24
	0601RGSB	Midigully Silt Bucket		





BBA Certified product

Installation Guide

Plastic gully pots shall be set on and surrounded by ST2 concrete. The surround shall be 200mm thick with a 100mm bed above the base slab in 14.

Alternatively, a 150 mm surround of ST4 concrete using Sulphate-resisting cement and 20mm nominal size aggregate may be used.

Concrete Gullies

BS5911-6:2004

We offer a range of precast concrete road gullies with 150mm trapped outlets, manufactured to meet Design Chemical Class 4 as defined in BRE Special digest 1 ' Concrete in aggressive ground' Part 4 : Design guides for specific precast products'.

Gullies are produced monolithically from fully automated machines, providing a strong robust unit, needing no concrete surround and not subject to flotation.

For quick and efficient offloading, an attachment is available which can be quickly fitted to a standard forklift truck, or suitable mechanical off loader. The attachment enables concrete gullies to be handled and offloaded in pairs.

Precast concrete road gullies can be supplied with adaptors for connection to clay or plastic pipes.

	Code	I/Dia (mm) A	Nominal Wall Thickness (mm)	Width (mm) B	Effective Depth (mm) C	Capacity (litres)	Weight per Unit (kg)	Outlet I/Dia (mm) D	Approximate Measurement (mm) E	No. per Full 23.5 Tonne Load
	1801300450GULLY	300			450	14	120	150	250	
2	1801300600GULLY	300			600	23	151	150		
1 1	1801375750GULLY	375	55	698	750	50	188	150	250	125
22	1801375900GULLY	375	55	698	900	69	216	150	250	108
	1801450750GULLY	450	55	560	750	70	223	150	250	105
	1801450900GULLY	450	55	560	900	95	255	150	250	92
	18014501050GULLY	450	55	560	1050	120	287	150	250	81
	18014501200GULLY	450			1200	151	325	150	250	

Gully Cover Slabs - 450mm Dia

0	Code	Slab	Overall Dimension (mm)	Kg
	1801LSS600	Square	750 x 650 x 100	80
	1801LSS675	U	585 x 650 x 100	50



Standards

Concrete gullies available from JDP comply with BS5911-6:2004

Installation Guide

Concrete gully pots shall be installed in accordance with BBA approval requirements. The Engineer would expect the pots to be set on and surrounded by 150mm of ST2 concrete sulphate resistant cement.

Gratings / Ductile Iron Gratings

100 Deep- Heavy Duty Ductile Iron, Hinged & Double Triangular Gratings & Frames Usage: Group 4 - Estate roads, carriageways & main roads for fast moving traffic

JDP offer an in depth range of ductile iron gratings suitable for surface water drainage in estate roads and car park areas.

Features and benefits

- Manufactured to BS EN124 Class D400
- Kitemarked for third party assurance of quality
- 40 Tonne safe test load
- Captive reversible side hinge for increased safety / security or double triangular non rock three point suspension for stability & silent operation
- Ductile iron for improved weight to strength ratio
- Black coated finish

Double Triangular

	Code	Clear Opening (mm)	Depth (mm)	Overall Frame (mm)	Weight	Waterway (cm²)
	0621KD41D	420 x 420	100	570 x 500	42	1026
and second states	0621KD41DNN*	440 x 400	100	580 x 456	40	1180

Hinged

	Code	Clear Opening (mm)	Depth (mm)	Overall Frame (mm)	Weight	Waterway (cm²)
	0621KD50DNN*	440 x 400	100	550 x 520	38	1167
	0621CLKS180KMD	430 x 370	100	580 x 456	32	1080
	0621KD51D	380 x 310	100	565 x 410	32	659
	0621KD52D	500 x 350	100	650 x 435	42	982
	0621KD56D*	440 x 400	100	550 x 525	38	1100

Hinged Pedestrian Style Grate

	Code	Clear Opening (mm)	Depth (mm)	Overall Frame (mm)	Weight	Waterway (cm²)
	0621KD50DP	420 x 420	100	570 x 500	48	785
Constitution of the second	0621KD51DP	380 x 310	100	560 x 410	36	328

*HA104/02 compliant, for a full range of gratings that are HA104/02 compliant please see our Civil Engineering & Utilities Product Specifier.

75mm Deep- Heavy Duty Ductile Iron, Hinged & Double Triangular Gully Gratings & Frames Usage: Group 3 Slow moving heavy traffic & areas not exceeding 500mm from the kerbside

Features and benefits

- Manufactured to BS EN124 Class C250
- Kitemarked for third party assurance of quality
- Captive reversible side hinge for increased safety / security or double triangular non rock three point suspension for stability & silent operation
- Ductile iron for improved weight to strength ratio
- Black coated finish

Double Triangular

1777	Code	Clear Opening (mm)	Depth (mm)	Overall Frame (mm)	Weight	Waterway (cm²)
N///A	0621KD41C	445 x 445	75	535 x 500	38	950

Hinged

	Code	Clear Opening (mm)	Depth (mm)	Overall Frame (mm)	Weight	Waterway (cm²)
	0621KD72	300 x 300	50	360 x 340	16	450
	0621KD73	300 x 300 Dished	50	360 x 340	16	450
	0621KD51C	380 x 310	75	472 x 370	22	764
	# 0621KD51CPL	380 x 310	75	555 x 410	28	543
and the state of the	0621KD50C-N	420 x 420	75	520 x 510	29	1100

#Pedestrian style grating and locked as standard

Standards

See page 19.

BS EN 124 includes loading categories for certain application areas. It is the responsibility of the engineer to ensure that the correct product is specified:

"The appropriate class of manhole top or gully top to be used depends on the place of installation.

The selection of the appropriate class is the responsibility of the designer. Where there is any doubt the stronger class should be selected." Clause 5 BS EN124:1994.



Covers & Frames / Heavy & Medium Duty Ductile Iron Covers

100 Deep- Heavy Duty Ductile Iron Access Covers & Frames Usage: Group 4 - Estate roads, carriageways & main roads for fast moving traffic

JDP offer an in depth range of ductile iron covers suitable for surface water drainage in estate roads and car park areas. A full range of HA104/02 compliant covers & frames for use in highly trafficked areas or where particular specification demands is listed in our Civil Engineering & Utilities Product Specifier.

Features and benefits

- Manufactured to BS EN124 Class D400
- Kitemarked for third party assurance of quality
- 40 Tonne safe test load
- Non rock for added stability & silent operation
- Ductile iron for improved weight to strength ratio
- Black coated finish
- Optional badging i.e. FW, SW

	Code	Clear Opening (mm)	Depth (mm)	Overall Frame (mm)	Weight
	0621KD8	450 x 450	100	600 x 600	60
	0621KD9	600 x 450	100	750 x 600	81
	0621KD100	600 x 600	100	700 x 700	72
	0621KD120	675 x 675	100	775 x 775	97
S STATISTICS	0621KD140	750 x 600	100	900 x 750	120
- Constant and a set	0621KD150	750 x 750	100	900 x 900	140
The part of the second s	0621KD160	900 x 600	100	1050 x 750	156
	0621KD170	900 x 900	100	1050 x 1050	220
	0621KD190	1220 x 675	100	1335 X 810	210

75mm Deep- Heavy Duty Ductile Iron, Single Seal Solid Top Access Covers & Frames Usage: Group 3 Slow moving heavy traffic & areas not exceeding 500mm from the kerbside

Features and benefits

- Manufactured to BS EN124 Class C250
- Kitemarked for third party assurance of quality
- Full single seal gives airtight seal when packed with grease
- Suitable for slow moving heavy traffic
- Ductile iron for improved weight to strength ratio
- Black coated finish
- Optional badging i.e. FW, SW

	Code	Clear Opening (mm)	Depth (mm)	Overall Frame (mm)	Weight
	0621KD60C	450 x 450	75	550 x 550	49
	0621KD61C	600 x 450	75	700 x 550	60
	0621KD62C	600 x 600	75	700 x 700	75
-	0621KD63C	750 x 600	75	850 x 700	89
	0621KD64C	750 x 750	75	850 x 850	119
	0621KD65C	900 x 600	75	1000 x 750	121
	0621KD66C	900 x 900	75	1000 x 1000	160

Medium Duty Ductile Iron Access Covers & Frames

Usage: Group 2 for use in car parks, pedestrian areas with vehicular access and driveways

Features and benefits

- Manufactured to BS EN124 class B125
- Kitemarked for third party assurance of quality
- Single seal versions give airtight seal when packed with grease
- Slide out units are un-sealed and allow easy removal
- Ductile iron for improved weight to strength ratio
- Black coated finish

	Code	Clear Opening (mm)	Seal	Depth (mm)	Overall Frame (mm)	Weight
	0621KD3240	450 x 450	Single Seal	40	540 x 540	30
	0621KD3340	600 x 450	Single Seal	40	690 x 540	38
	0621KD3340S	600 x 450	Slide Out	40	690 x 540	34
	0621KD3375W	600 x 450	Slide Out	75	760 x 610	41
	0621KD3440	600 x 600	Single Seal	40	690 x 690	47
	0621KD3440S	600 x 600	Slide Out	40	690 x 690	40
	0621KD3475	600 x 600	Plain	75	690 x 690	50
	0621KD34C	600mm Dia	Single Seal	75	690mm Dia	36
	0621KD34AS	675 x 675	Slide Out	40	765 x 765	50
	0621KD3540	750 x 600	Single Seal	40	840 x 690	60
	0621KD3640S	750 x 750	Slide Out	40	850 x 850	72
	0621KD3740	900 x 600	Single Seal	40	1000 x 700	66
	0621KD3840S	1220 x 675 Twin Cover	Slide Out	40	1320 x 775	110





Standards

All gratings and covers supplied by JDP are manufactured to the required British and European Standard Specification - BS EN124: 1994. JDP ensures that its manufacturing partners only supply gratings and covers which are manufactured in line with BS EN 9001 quality systems, and are approved by BSI as a Kitemark registered firm. We are aware that quality is of key importance to specifiers and installers of road building products and customers can rest assured that the range supplied by JDP meets the highest standards.

HA104 compliant where stipulated.

BSI KITEMARKED- BS EN124- F900, E600, D400, C250, B125

BS EN 124 includes loading categories for certain application areas. It is the responsibility of the engineer to ensure that the correct product is specified:

"The appropriate class of manhole top or gully top to be used depends on the place of installation. The selection of the appropriate class is the responsibility of the designer. Where there is any doubt the stronger class should be selected." Clause 5 BS EN124:1994.

Iron loadings



Class A15 -group 1 nor use in pedeestrian and cycling areas only. Class B125 -group 2 for use in car parks & pedestrian areas where no heavy vehicles have access. Class C250 -group 2 for areas where slow moving heavy traffic has access

such as forecourts, industrial sites & kerbside up to 500mm from kerb & 200mm into the verge/path.





Installation Guide

General Notes

To achieve maximum effectiveness and strength ironwork must be lifted / installed / bedded in the correct way, poor workmanship in installation is a big cause of ironwork failure. Ironwork that has been lifted poorly will "move" and settle, making the road unsafe, and cause premature failure of the ironwork / pavement construction / surfacing / overlay.

The basic requirements amount to good practice, the chamber shall be soundly constructed and pointed (if brickwork), some chambers / gully pots are pre-made in concrete.

The gully pots that are preformed in plastic MUST be completely surrounded with fresh concrete, according to the specification, if the gully is to achieve the correct load carrying strength. Failure to achieve this total surround of appropriate, fresh, concrete is often a cause of the settlement of ironwork.

Ironwork in general shall be bedded on an approved mortar, quite often a rapid setting mortar, e.g. a strength of 10n/mm squared at 2 hours.

- 1) Covers and frames are manufactured as a unit ensure that corresponding covers and frames match and fit correctly before commencing installation.
- 2) The frame of an access cover must be fully supported. Any load placed onto the access cover is transferred to the structural opening via the frame. If the frame is only partially supported, the unit will not carry the load it is designed for and will ultimately fail please see sketches below.



- **3)** Mortar bedding material must be placed around the opening immediately after mixing. It should be placed at a depth approximately 5mm greater than the required bedding thickness and spread across the full width of the chamber wall. Deep trowel marks in the bedding should be filled and the surface of the bedding floated to an approximately even finish.
- 4) The frame should be lowered onto the bedding as soon as possible. The frame must be placed on the bedding so that all webs of the frame are fully supported by the frame supporting structure. The webs must not overhang the internal faces of the frame supporting structure. There must be no voids in the bedding beneath the frame. Special care must be taken in the vicinity of the cover seatings.
- 5) The frame must be carefully tamped down to the required level and slope. This can be achieved to the Specification requirements by placing a straight edge over the frame webs and surrounding carriageway or other level control points as appropriate.
- 6) Any holes within the frame must be infilled with bedding material and the flanges of the frame enveloped by a minimum thickness of 10mm of the same material. A greater thickness may be applied provided that sufficient depth is left available for placement of any surfacing layers.
- 7) Exposed surfaces of the bedding around the outside of the frame must be floated to fill any voids and remove any loose fragments and the exposed surface of the bedding material inside the chamber must be pointed to a smooth finish.
- 8) The cover should be placed in the frame by a mechanical lifting device or suitable lifting keys after the bedding material has sufficiently set.
- 9) No surround material must be placed in contact with the frame until the bedding has achieved sufficient tensile and compressive strength.





Bedding Mortars & Tarmac

JDP provide a range of BBA & Highways Agency approved cement, bitumen and resin based products for use in highway construction and reinstatement works.

Cold Lay Macadam

Permanent cold lay surfacing macadam gives first time permanent reinstatements and pothole repairs in footways, footpaths, cycle tracks and roads. The product It is suitable for both permanent and temporary repairs to potholes and reinstatement areas.

Rapid Set Bedding Mortars

Rapid strength bedding mortars for bedding ironwork, such as manhole cover frames during repairs, may be trafficked when the strength is expected to be 20N/mm2. A family of products designed for the bedding of manhole frames and road furniture with specific timing for road opening within 45 / 60 / 90 / 120 or 180 minutes.

Environmentally Friendly Bedding Mortar

New generation, environmentally friendly bedding mortar specifically formulated for the bedding of ironwork conforming to the Highways Agency Design Manual for Roads and Bridges: Mortars for Bedding ironwork, HA104/02, part5, clause 6.1 and is suitable for use in wet weather conditions.

Polyester Resin Mortars

Polyester resin based products available in summer and winter grades designed to allow road opening in the shortest time possible include. Ultra rapid grout, designed to flow into areas under frames being installed on vehicular roadways. Ultra rapid mortar, designed for bedding and leveling of all frames in vehicular surfaces. Kerb fixing, designed for fixing kerbs with high value adhesion to asphalt.

Rapid Set Concrete

Premium grade rapid setting concrete. Designed for rapid reinstatement of all road and street furniture at ambient temperatures down to +1°C. Hardens within 10 minutes to allow continuation work. Can be hand mixed, ideal for use by mobile repair teams.

Concrete Manhole Rings

We offer a complete range of precast concrete rings from DN 900 to DN 4000 in varying depths with tongue and groove joints manufactured to meet Design Chemical Class 4 as defined in BRE Special digest 1 ' Concrete in aggressive ground' Part 4 : Design guides for specific precast products'.

Manufacturers Quality Assurance scheme in accordance with the European Standard enabling products in the range DN900-3000 to be kitemarked.

Note:

A constructed precast concrete manhole is a strong, durable structure with its own inherent strength and does not require a concrete surround.

	DN	Avai	lable Dep	oth of Sec	tion	Approx Wall	Approx Weight
	DN	0.25m	0.5m	0.75m	1.0m	mm	kg
078	900	•	•	•	•	70	530
17	1050	•	•	•	•	80	710
((1953)) e	1200	•	•	•	•	90	912
	1350		•	•	•	95	1080
a car charter ca	1500		•	•	•	105	1330
	1800		•	•	•	115	1760
	2100		•	•	•	125	2140
	2400		•	•	•	140	2740
	2700		•	•	•	150	3400
	3000		•	•	•	165	4140
	3660			•	•	185	5300
	4000			•	•	200	6360

Concrete Manhole Rings

DN 1350, DN 3660, DN 4000 are not covered by the British Standard, but comply with all the relevant provisions of the European Standard. DN4000 is supplied in 2 halves.

Manhole chamber sections are supplied with nominal 50mm diameter holes for lifting purposes:

- 2 Number in DN 1800 & below
- 3 Number in DN 2100 & above

Shaft/chamber sections can be supplied:

- with or without fixed double steps
- perforated with 75mm diameter holes for use as soakaways
- with holes or cut outs
- with bases cast in

Recommended minimum Chamber diameters to suit pipe sizes

Largest Pipe	Chamber
DN	DN
Less than 375	1200
375 - 450	1350
500 - 700	1500
750 - 900	1800

Manhole Cover Slabs



	Chamber	Donth	Overall	Standard Access Sizes					Weight (kg)
	DN	Depui	DN	600x600	675x675	750x750	750x600	1200x675	675 ² Access
	900	150	1060	С	С	Х	Х	Х	130
	1050	150	1230	Е	Е	С	To order	Х	235
LINT are	1200	150	1400	Е	Е	С	E	To order	355
They man	1350 *	150	1560	Е	Е	To order	E	С	475
	1500	150	1730	Е	Е	To order	E	С	790
	1800	175	2050	Е	Е	To order	E	Е	1210
	2100	180	2370	Е	Е	To order	E	E	1745
	2400	180	2700	Е	Е	To order	E	Е	2375
	2700	205	3020	Е	Е	To order	E	Е	3335
	3000	225	3350	Е	Е	To order	E	Е	4585
	3660 *	275	3960	To order	E	To order	To order	To order	7760
	4000 *	275	4500	To order	E	To order	To order	To order	10040

* Not Kitemarked

Note:

- 1. DN900 and 1050 are the only slabs in which a 600x600 access complies with the European Standard
- 2. All slabs detailed are Type 2
- 3. Weights available on request as they are dependant on the access size
- 4. C denotes central position
 - E denotes eccentric position

As defined in the British Standard

- 5. Non standard slabs and accesses can be designed and supplied to order
- 6. DN3660 cover slab is supplied in 3 sections
- 7. DN4000 cover slabs can be supplied in 2 or 3 sections dependant on the opening required
- 8. All accesses have 75 x 75 corner chamfers
- 9. All cover slabs are 'heavy duty' and are suitable or use in main roads

Landing Slabs

Landing slabs to suit DN 1500 chamber section and above are supplied with a 900mm circular access.

Reducing Slabs

Standard reducing slabs are supplied to suit the various chamber sections, from DN 1050 to DN 3000, and have a 900, 1050 or 1200mm diameter circular access. DN 3660 and 4000 reducing slabs are also available but are not covered by the European Standard. Other shaft sizes are available on request.





Manhole Steps

Polypropylene coated mild steel double steps to BS EN 13101:2004 are fitted to manhole sections when required

- Polypropylene coated stainless steel steps are available on request
- Manhole sections fitted with double steps can be used in any depth configuration

Standards

All units are manufactured and tested in accordance with BS EN 1917:2002/ BS5911-3:2002. All units are supplied with suitable points for lifting purposes.

Polypropylene coated mild steel double steps to BS EN 13101:2004

Installation Guide

This section describes the recommended procedure for the installation of precast concrete manholes.

- a) Place the bottom unit with either integral precast, or insitu concrete base.
- b) Erect the required number of standard components and seal the joints as appropriate all in accordance with the design.
- c) Place a reinforced concrete cover slab on top.
- d) If required place a corbel slab then add the appropriate number of adjusting units.
- e) Fit the manhole top for access from ground level.

Jointing to pipeline

To allow for any differential settlement between manhole and pipeline, short "butt" pipes, either spigot or socket, should be built into the manhole wall so that a flexible joint is incorporated as close as possible to the outside of the manhole or the concrete surround if used. Depending on ground conditions, short length pipes (rockers) then connect these butt pipes to the incoming pipe runs. Additional care must be taken to ensure that the joints are properly made.

Sealants

Manholes can be jointed quickly and easily with a rubber bitumen compound such as Tok Strip or other approved sealant providing a watertight seal without the use of a concrete surround.

Code	Unit Nominal Size (mm)	Sealant Length (per joint)	Sealant Size	Primer
08206X50X6LS	600 x 450	2.5m	6mm x 50mm	5 litres per 100m
08206X50X6LS	750 x 600	3.0m	6mm x 50mm	5 litres per 100m
082012X60X6LS	1000 x 675	3.5m	12mm x 60mm	5 litres per 75m
082012X60X6LS	1200 x 750	4.5m	12mm x 60mm	5 litres per 75m
08205LITRELSP	5 litres long strip primer			







Preformed Chambers

Reducing construction time and resources required on site is a continual challenge and opportunity to manufacturers and distributors. JDP strive to be involved in the latest advances in new and existing materials and technologies which offer engineers solutions.

Manhole

Provides a sealed system for waste water management in manhole construction, replacing the need for the groundworker to form on site. Can also be used for surface water.



Features & Benefits

- Creates an immediate watertight structure
- Clean access for inspection, reduces maintenance and running costs
- Accommodates all combinations and variations in entry / exit pipes
- Reduced labour activity in manhole, improves safety
- Eliminates material wastage associated with in-situ method
- Eliminates effects of poor site practice and weather conditions
- HDPE version can be made bespoke to full chamber height for a complete off site solution
- Concrete version accepts manhole rings to create chamber

Catchpit

This chamber provides a sealed sump manhole, which can be connected with adaptors to uPVC, twinwall, clay, ductile iron and concrete pipes.



Features & Benefits

- Creates an immediate watertight structure
- Limited wet trades required in manhole construction
- Accommodates all types of pipes used in manhole construction
- Reduced labour activity in manhole
- Eliminates material wastage associated with in-situ method
- HDPE version can be made bespoke to full chamber height for a complete off site solution
- Concrete version accepts manhole rings to create chamber

Rectangular Concrete Chamber Sections

Loose steps can be supplied for use with the 1200x750 and 1475x1025 sections.

Rectangular Inspection Chambers

	Code	Size (mm)	Effective Depth (mm)	Wall Thickness (mm)	Nominal Weight of Unit (kg)	Number of Units Per Pallet
	18011200RHHS	1200x750	150	75	115	8
and the second	18011200500RHHS	1200x750	500	75	390	-
the second	18011200750RHHS	1200x750	750	75	600	-
	18011400RHHS	1475x1025	250	100	355	-

Rectangular Cover Slabs

and the second second	Code	Size (mm)	Access (mm)	Effective Thickness (mm)	Nominal Weight of Units (kg)	Number of Units Per Pallet
	18011200RMHCSH	1200x750HD	600x600	144	310	5
1 011	18011209060RMHCSH	1200x750HD	900x600	144	235	5
	18011200RMHTS	1200x750HD	1200x675	125	230	5
	180111475RMHCSH	1475x1025HD	600x600	144	640	-
11	18011479060RMHCSH	1475X1025HD	900x600	144	580	-
A State of the	18011475RMHTS	1475X1025HD	1200x675	144	485	-

Standards

Chamber sections and cover slabs are manufactured to BS EN1917:2002 / BS 5911-3:2002. Rectangular covers and cover surrounds are manufactured to satisfy Class A15 loading situations to BS EN 124. All units are to sulfate resistance Class 4.

Heavy Duty - These cover slabs may be used together with the appropriate duty proprietary cover and frame in main road situations, equivalent to a wheel load of 112kN.

Installation Guide

See page 23.



Engineering Bricks

Engineering Bricks are used for their performance characteristics rather than their appearance and are most suited for groundworks, manholes and sewers, retaining walls and other situations where strength and resistance to frost attack and water are the most important factor.

Code	Description	
2099ENGBRICK	Engineering Brick Class B	



Standards

Engineering bricks are defined in BS 6100 'Glossary of building and civil engineering terms' as 'brick sized fired clay units having a dense and strong semi vitreous body, conforming to defined limits for water absorption and compressive strength.'

In BS 3921 Engineering Bricks are classified as A or B based on minimum compressive strength and maximum water absorption not falling below 70 N/mm2 – 4.5% and 50 N/mm2 – 7% respectively.

Installation Guide

Mortar is just as exposed as the brick.

Generally, and especially in the North West of England and Scotland, please note the different mortar mixes in the table below:

	Mortar designation	Type of mortar (proportion by volume)			Aortar Type of mortar (proportion by volume) Mean compressive strength at 28 days		Mean compressive strength at 28 days	
		Cement: lime: sand	Masonry cement: sand	Cement: sand with plasticizer	Preliminary (laboratory) tests	Site tests		
Increasing ability strength locaccommodate movement, e.g. due to settlement, temperature and moisture changes	(i) (ii) (iii) (iv)	1 : 0 to ¹ /4 : 3 1 : ¹ /2 : 4 to 4 ¹ /2 1 : 1 : 5 to 6 1 : 2 : 8 to 9	1 : 2 ¹ / ₂ to 3 ¹ / ₂ 1 : 4 to 5 1 : 5 ¹ / ₂ to 6 ¹ / ₂	1 : 3 to 4 1 : 5 to 6 1 : 7 to 8	N/mm ² 16.0 6.5 3.6 1.5	N/mm ² 11.0 4.5 2.5 1.0		
Direction of change in properti is shown by the arrows	es	Increasing resistance to frost attack during construction Improvement in bond and consequent resistance to rain penetration						

Note 1. Where mortar of a given compressive strength is required by the designer, the mix proportions should be determined from tests following the recommendations of appendix A of BS 5628: Part 1: 1978.

Note 2. The different types of mortar that comprise any one designation are approximately equivalent in compressive strength and do not generally differ greatly in their other properties. Some general differences between types of mortar are indicated by the arrows at the bottom of the table, but these differences can be reduced (see BS 5628: Part 3: 2001 clause 5.7).

Note 3. The range of sand contents is to allow for the effects of the differences in grading upon the properties of the mortar. In general, the lower proportion of sand applies to grade G of BS 1200 whilst the higher proportion applies to grade S of BS 1200.

Note 4. The proportions are based on dry hydrated lime. The proportion of lime by volume may be increased by up to 50% (V/V) in order to obtain workability.

Note 5. At the discretion of the designer, air entraining admixtures may be added to lime: sand mixes to improve their early frost resistance. (Ready mixed lime: sand mixes may contain such admixtures)

Street Furniture

JDP supply a range of street furniture products manufactured from recycled materials. Precast concrete bollards are also supplied.

Recycled Bollards

Features & Benefits

- 100% recycled plastic
- Agenda 21 and best value compliant
- Solid durable & hardwearing
- Rot & maintenance free

- Textured surface finish
- Knot, splinter & corrosion free
- Easy to install
- Various styles



Dimensions: Available in two sizes: 120 diameter x 1500mm and 150 diameter x 1500mm Unit Weight: 22kgs Order Code: D/R

Domed Top - Round Base



Dimensions: 150 diameter x 1500mm Unit Weight: 25kgs Order Code: R/R

Radius Top - Round Base



Chamfered Top - Round Base

Dimensions: 150 diameter x 1500mm Unit Weight: 22kgs Order Code: C/R



Flat Top - Round Base

Dimensions: 150 diameter x 1500mm Unit Weight: 22kgs Order Code: F/R



Domed Top - Square Base

Dimensions: 145 x 145 x 1500mm Unit Weight: 23kgs Order Code: D/S



Pyramid Top - Square Base

Dimensions: 145 x 145 x 1500mm Unit Weight: 25kgs Order Code: P/S

Precast Concrete Bollards



Standard Grey finish and textured Grey finish are available in both sizes

Other Products in the Recycled Range









Benches & Seating

Signage



Underground Sewer Systems



- Dyka Underground Drainage House Inspection Chambers
- Non Entry Inspection Chambers Covers & Frames
- Adoptable Sewer Clay Pipes Flexible Couplers Test Equipment



Many years of experience in the manufacturing and supply of underground sewer systems enables JDP to offer the house builder a product portfolio which provides a total system solution.

In addition to products developed and manufactured in our own factories, our policy and aim is to supply products of the highest quality from leading

manufacturers within the industry, thereby ensuring the best offer for every application. The range includes EN1401-1 underground drainage and fittings, inspection chambers, covers and frames, adoptable sewer, clay pipes as well as flexible couplers and test equipment.





Dyka Underground Drainage (Inc Chambers & Risers)

JDP offer a comprehensive range of EN1401-1 underground drainage pipe and fittings from 82 to160mm diameter with plain ended pipes and separate push-fit couplings or socketed pipes and fittings for use in housing drainage.

Pipes and fittings / underground drainage ranges are manufactured from unplasticised polyvinyl chloride (PVC-U). Gullies are manufactured from PVC-U, polypropylene (PP) or polyethylene (PE). Couplings can contain a rubber sealing ring manufactured from styrene butadiene rubber (SBR).

Pipe

	82mm	110mm	160mm
 Plain Ended Solid Pipe x 3m	01063DP3	01064DP3	01066DP3
Plain Ended Solid Pipe x 6m	01063DP6	01064DP6	01066DP6
Single Socket Solid Pipe x 3m		01064DP3S	01066DP3S
Single Socket Solid Pipe x 6m		01064DP6S	01066DP6S
Single Socket Perforated Pipe x 6m		01064DP6SP	01066DP6SP

Couplers

	82mm	110mm	160mm
Double Socket Coupler	01023D20D	01024D20D	01026D20D
Double Socket Slip Coupler		01024D20DSC	01026D20DSC
Single Socket Coupler		01024D69	01026D69

Double Socket Bends

		82mm	110mm	160mm
	15° Double Socket Bend		01024D29D	01026D29D
	30° Double Socket Bend		01024D27D	01026D27D
S	45° Double Socket Bend	01023D25D	01024D25D	01026D25D
	90° Double Socket Bend	01023D23D	01024D23D	01026D23D
	90° Double Socket Longer Radius Bend		01024D23DX	
	90° Double Socket Rest Bend		01024D21D	
	0-30° Double Socket Adjustable Bend		01024DV40D	



Single Socket Bends



		82mm	110mm	160mm
-	15° Single Socket Bend		01024D29	01026D29
	30° Single Socket Bend		01024D27	01026D27
	45° Single Socket Bend		01024D25	01026D25
	90° Single Socket Bend		01024D23	01026D23
	90° Single Socket Rest Bend		01024D21	
-	0-30° Single Socket Adjustable Bend		01024DV40	

PE Long Radius Bends

-		82mm	110mm	160mm
~	11.25º Plain Ended Bend		01024D42	01026D42
	22.5° Plain Ended Bend		01024D41	01026D41
	45° Plain Ended Bend		01024D28	01026D28
	90° Plain Ended Bend		01024D22	01026D22

Equal Junctions

		82mm	110mm	160mm
1	45° Triple Socket Junction		01024D33D	01026D33D
	90° Triple Socket Junction	01023D33D	01024D30D	01026D30D
	45° Double Socket Junction		01024D33	01026D33
	90° Double Socket Junction		01024D30	01026D30

Unequal Junctions 160mm x 110mm

		82mm	110mm	160mm
	45° Triple Socket Junction			010264D33D
	90° Triple Socket Junction			010264D30D
	45° Double Socket Junction			010264D33
	90° Double Socket Junction			010264D30

Gullys & Traps

-		82mm	110mm	160mm
	Round Plain Bottle Gully		01024DBG	
	Round Back Inlet Bottle Gully		01024DBGBI	
	Square Back Inlet Bottle Gully		01024DG89	
	45° Universal Gully Trap		01024DG90	
	Lowback P Trap		01024DG91	
	Square Hopper Head		01024DG92	
	Rectangular Hopper Head		01024DG93	

Reducers & Adaptors

2		82mm	110mm	160mm
	Universal Rainwater Adaptor		01024D76	
	Universal Waste Adaptor		01024DW200	
	68mm Rnd Rainwater Adaptor		01023DW25	
	110mm x 82mm Level Invert Reducer		010243DT	
	160mm x 110mm Level Invert Reducer			010264DT

Plugs & Caps

9		82mm	110mm	160mm
	Ріре Сар		01024D67	01026D67
	Socket Plug		01024D68	01026D68
	Temporary Site Cap		01024D65	

Access Fittings

		82mm	110mm	160mm
9	Oval Alu Sealed Rodding Eye		01024DRE	01026DRE
	Square Alu Sealed Rodding Eye		01024DRESS	
	Screwed Access Cap	01023D64	01024D64	01026D64
	87.5° Access Bend		01024DA23D	
	Access Pipe		01024DAD60	01026DAD60



Non Return Anti-Flood Valves

1		82mm	110mm	160mm
	Non Return Valve		01024DNRV	01026DNRV

Lubricant & Solvents

	0.5kg Lubricant Tub	2001LUB.5
	1kg Lubricant Tub	2001LUB1
	2.5kg Lubricant Tub	2001LUB2.5
	Cleaning Fluid 250ml	0102CF250
	Liquid Weld 250ml Cement	0102SC250

PP Inspection Chambers

		82mm	110mm	160mm	
	Shallow Inspection Chamber – Max 600mm Depth				
	320mm x 170mm Deep Chamber Base 110mm		01024DSMB		
	320mm x 135mm Chamber Riser c/w sealing Ring		01024DSMR1		
LEO	460mm dia. Inspection Chamber – Max	1200mm Depth			
	460mm x 250mm Deep Chamber Base 110mm		01024DLMB		
	460mm x 280mm Deep Unequal Chamber Base 160mm x 110mm			01026DLMB	
	460mm x 235mm Deep Chamber Riser c/w Sealing Ring		01024DLMR		
	Spare 460mm Riser Sealing Ring		01024DLMRS		
	750mm Manhole Base 160mm for use with Concrete Manhole Rings			0104UG616	
	Access Bowl Self Cleaning Access Bowl enables cor without need for manholes.	nnection to underlyi	ng drain run up to ʻ	10 meters deep	
	460mm Access Bowl x 110mm		01024DMB		
	460mm Access Bowl Riser c/w Sealing Ring		01024DI235R		
and the second	110mm Access Bowl Inlet Connector		01024DM1		

** For selction of covers see Covers & Frames for PPI Chambers page 37.
Manholes and Preformed Plastic Inspection Chambers

Access may be provided by (non-man-entry) inspection chambers or (man-entry) manholes depending on the depth at which the drain is laid. The guiding principle in the location of manholes or inspection chambers is that they should be so situated as to allow every length of drain to be accessible for maintenance inspection and removal of debris.

In general, manholes or inspection chambers should be provided in the following situations:

- 1. At all changes of direction on drains (except for drains where the change in direction is not too great for cleaning).
- 2. At all changes of gradient on drains (except for drains where the change in gradient is not too great for cleaning).
- 3. At all drain junctions where cleaning is not otherwise possible.
- 4. On a drain within 12m from a junction between that drain and another drain, unless there is an inspection chamber situated at that junction.
- 5. At the head of each length of drain.
- 6. At all changes in pipe diameter.

Table NB.2 of the British Standard for Drains and Sewers Systems Outside Buildings recommends that pre-formed 450mm diameter chamber with 450mm diameter covers are acceptable up to 1.2m in depth.

Standards

Underground drainage systems are manufactured to the highest possible standards and comply with BS 4660:2000 and BS EN 1401-1:1998 which specifies the requirements for underground pipes and fittings.

The Europe-wide manufacturing standard BS EN 1401-1:1998 replaced BS 4660 in 2000 and BS 5481 in 1999. The 110mm and 160mm access fittings are not included in the new standard and conform to BS 4660:2000. Rubber seals conform to BS EN 681:1996.

All systems are capable of meeting the design, layout, construction, testing and maintenance requirements in BS EN 752: Parts 1 to 4:1996 to 1998 Drain and sewer systems outside buildings and BS EN 1610:1998 Construction and testing of drains and sewers.

Installation Guide

Suitable joint lubricant should be used for joining socketed pipe and fittings as recommended by manufacturers and supplied by JDP.

Pipe

The surround for back fill should extend to the trench width in normal trench situations. Unplasticized PVC pipes are relatively flexible and rely partly on external support to resist deformation. Therefore, it is of primary importance that the fill material, particularly the bedding and side fill, should be compacted in order to prevent excessive deformation.

It is desirable that vertical deformation should be limited to 5% on completion of the backfilling, which can only be achieved by proper compaction of the backfill (Please refer to Codes of Practice BS5955 and BS8301).



It is essential to avoid high stress concentrations and sharp objects such as large stones or flints which should not be allowed to come into contact with the surface of the pipe.

The flexible nature of unplasticized PVC pipes helps them to accommodate deformations resulting from ground movement or from other differential settlement under normal circumstances.

Plastic Inspection Chambers

Preformed inspection chambers can be used for invert depths of up to 1.2m. The chamber should be placed on suitable compacted material so that it is evenly supported.

When the base is in position the bungs can be removed and pipes inserted as appropriate. The risers are then placed on the base to reach the desired invert. The use of sealing rings should be used to seal each joint. The top riser can be trimmed to suit finished ground level. It is recommended that the cover and frame are fitted at this point to stop any foreign matter from entering the chamber. Backfilling may then take place around the chamber base and the connecting pipes, using suitable granular material. Backfilling continues to within 160mm of ground level. A concrete plinth is then cast, in which the plastic cover and frame sit.



150mm minimum concrete around the top of the riser to provide support to the cover and frame.

Granular material sidefill and bedding for pipe.

Polypropylene Lockable Cover & Frame 3.5 Tonne.



Concrete to surround the base and risers to provide support for the inspection chamber cover and frame.

BS EN124 Class B125 Ductile Cover & Frame.

House Inspection Chambers

JDP provide a range of concrete rectangular House Inspection chamber sections with easy install joints and various cover slabs to take manhole covers. Chambers using 600x450mm through 1000x675mm sections are considered non man entry and steps are not required.

House Inspection chambers can be jointed quickly and easily with a rubber bitumen compound such as Tok Strip, or other approved sealant providing a watertight seal without the use of a concrete surround.

Features and benefits

- Ease of installation
- Concrete sections to take dug out material or concrete backfill
- Easy access when installed
- Various sizes available

House Inspection Chamber

	Code	Size (mm)	Effective Depth (mm)	Wall Thickness (mm)	Nominal Weight of Unit (kg)	Number of Units Per Pallet
	18016045150HIC	600 x 450	152	51	45	32
- 11	18016045225HIC	600 x 450	229	51	65	20
	18016045300HIC	600 x 450	305	51	85	16
	18017560150HIC	750 x 600	152	60	65	18
and the second	18017560225HIC	750 x 600	229	60	100	12
and the second	18011067150HIC	1000 x 675	152	64	85	16
1	18011067225HIC	1000 x 675	229	64	125	10
	18011200RHHS	1200 x 750	150	75	115	8

House Inspection Chamber Top Section C/W Concrete Cover

-	Code	Size (mm)	Access (mm)	Wall Thickness (mm)	Nominal Weight of Unit (kg)	Number of Units Per Pallet
Terrana and the second	18016045CS	600 x 450	600 x 450	110	103	16
all second a	18017560CS	750 x 600	600 x 450	122	121	12
	18011067CS	1000 x 675	600 x 450	140	162	12



House Inspection Chamber Top Section For Metal Cover

	Code	Size (mm)	Access (mm)	Wall Thickness (mm)	Nominal Weight of Unit (kg)	Number of Units Per Pallet
Annual An	18016045TS	600 x 450	600 x 450	64	41	24
	18017560TS	750 x 600	600 x 450	70	58	24
	18011067TS	1000 x 675	600 x 450	76	105	20
	18011067TS	1000 x 675	750 x 600	76	70	20
	18011275TS	1200 x 750	600 x 600	69	150	5
	18011275TS	1200 x 750	900 x 600	65	125	5

Standards

Chamber sections and cover slabs are manufactured to BS EN1917:2002 / BS 5911-4:2002. Rectangular covers and cover surrounds are manufactured to satisfy Class A15 loading situations to BS EN 124. All units are to sulfate resistance Class 4.

Light Duty - All chamber sections, cover slabs and concrete covers are for use in areas of light loading as imposed by a car or light van, equivalent to a wheel load of 15kN.

Installation Guide

The concrete chambers can be installed and backfilled with dug out material or surrounded in concrete. Tongue and groove joint can be sealed using a Tok strip sealant or butyl resin sealant.

Non-Entry Inspection Chambers

JDP supply a range of Non-Entry Inspection Chambers suitable for all access and maintenance of drains (i.e. rodding) achieved from the surface. For health and safety reasons, there is a restriction just beneath the cover to deter human entry.

One of the key drainage issues in recent years has been Health and Safety; in particular the insistence by installation and maintenance operators to have access to drainage systems via manholes. Unfortunately, this ability to physically 'get into' drains has resulted in a number of fatalities, either involving workers slipping and falling, or because of noxious gases, which are often trapped in underground chambers.

Planning Policy Guidance 3 (PPG3) states:

"No person at work shall enter a confined space to carry out work for any purpose, unless it is not reasonably practicable to achieve that purpose without such entry."

Features and benefits

- Can be installed to a maximum depth of 3m
- Tough polypropylene construction
- Lightweight
- Safer than conventional manhole rings
- Quicker installation
- Cost effective

Applications

For use to max. depth of 3m & max. 35kN loading

Inspection Chamber Base Units - EN1401-1 Sewer

	Code	Pipe Size (mm)	Description
	01014D923	110	DS Equal NIC Base - 110mm straight main channel with 2x45° & 2x90° 110mm right/left hand branch entries. Supplied complete with sealing ring for shaft and three blank-off plugs.
	01016D936	160	DS Unequal NIC Base - 160mm straight main channel with 2x90° 160mm right/left hand branch entries. Supplied complete with sealing ring for shaft and one blank-off plug.
	01016D937	160 x 110	DS Equal NIC Base - 160mm straight main channel with 2x45° & 2x90° 110mm right/left hand branch entries. Supplied complete with sealing ring for shaft and three blank-off plugs.





Inspection Chamber Base Units – Ultra Rib

Code	Pipe Size (mm)	Description
02026UR936	150	DS Equal NIC Base - 150mm straight main channel with 2x90° 150mm right/left hand branch entries. Supplied complete with sealing ring for shaft and one blank-off plug.
02026UR937	150 x 110	DS Unequal NIC Base - 150mm straight main channel with 2x45° & 2x90° 110mm right/left hand branch entries. Supplied complete with sealing ring for shaft and three blank-off plugs.

Inspection Chamber Shaft

	Code	Description
	02026D938	Inspection Chamber Shaft - 3.0m length
ļ.	02026D934	Inspection Chamber Shaft - 1.5m length

Covers & Frames For Non Entry Inspection Chambers

Code	Description
0621CLKS451	P/E Polypropylene 450mm square cover & frame - suitable for foot traffic only. When surrounded by a concrete plinth can be used in situations with a loading up to 35kN, i.e. domestic driveways. For depths less than 1.2m.
0621CLKS499	350mm Restrictor Ring - for use with 0621CLKS499. For depths greater than 1.2m.
01016D940	NIC Telescopic Adaptor - suitable for use with 4D943 cover & frame. Allows height adjustment and accommodation of slope. Restricted to 350mm internal diameter.
01016D917	NIC Ring Seal (spare).

Standards

Building Regulations

Non-entry inspection chambers are referred to in the 2002 edition of Approved Document H (AD H) for England and Wales, and BS EN 752, "Drain and sewer systems outside buildings". Table 11 of the AD specifies suitable dimensions for the chambers and covers, and Table 13, the maximum spacings.

The maximum distance between chambers should not exceed 45m, although in most housing developments chambers are likely to be much closer.

NHBC Recommendations

If non-entry chambers meet with BS 7158 for a specified invert depth, then they can be used. The invert depth should not exceed that specified by the manufacturer (3m for the products currently available).

Installation Guide

- 1. Bed NIC base on minimum 100mm 'as-dug' or granular material
- 2. Make pipe connections as required by the standard jointing method. Ensure the main through channel is always used
- 3. Cut the NIC shaft to the appropriate length using a fine-toothed saw
- 4. Ensure shaft and base are free from dust, dirt and grit which could prevent an effective seal
- 5. Fit sealing ring between first and second ribs from shaft end
- 6. Lubricate the whole of the base socket. Align shaft and push home
- 7. Surround the chamber with 150mm of material similar to that used for bedding
- 8. Insert appropriate cover and frame into the shaft depending on depth
- 9. If 3.5 tonnes loading capacity is required, cast a 150x150mm concrete plinth of suitable strength around cover and frame

Covers & Frames (light & medium duty)

Covers & Frames for Circular PPI Chambers

JDP supply covers in, polypropylene, galvanised, cast and ductile iron for use with circular preformed plastic inspection chambers.

Features and benefits

- Wide range of styles
- Available in Polypropylene, Cast & Ductile Iron
- Loadings from 10kN to 125kN
- With or without screw down covers and screw fixing for inspection chamber risers
- Polypropylene screw lock covers fully compliant to Part H of Building Regulations

	Code	Clear Opening (mm)	Loading (kN)	Seal	Unit Description
All the second second	01024DSMCS	300	35	Single	Square screw lock polypropylene cover & frame
	01024DSMCR	300	10	Single	Round screw lock polypropylene cover & frame
	0621UDC700	300	125	Single	Round ductile cover & frame
	01024DLMCS	450	35	Single	Square screw lock polypropylene cover & frame
	01024DLMCR	450	35	Single	Round screw lock polypropylene cover & frame
	0620CD470	450	35	Single	450mm dual lock recess cover & frame (grass/gravel)
(September 1997)	0621E10ACP	450	15	Single	Round cast cover & plastic frame
	0621KD30	450	125	Single	Square ductile cover & frame
	0621KD31	450	125	Single	Round ductile cover & frame
	0621KD31L	450	125	Single	Round screw lock ductile cover & frame



Recessed Block Paviour Pressed Steel Manhole Covers and Frames

Features and benefits

- One piece pressed cover extra strength without obstruction
- Galvanised after manufacture to BS EN1461
- Aesthetically pleasing finish

	Code	Clear Opening (mm)	Depth (mm)	Overall Size (mm)	Loading
	0622CLKS300SR #	300 dia	80	440x440x98	10T
	0622CLKS450SR #	450 dia	80	580x580x93	10T
	0622CLKS790R	600x450	80	740x590x98	10T
	0622CLKS791R	600x600	80	740x740x98	10T
	0622CLKS793R	750x600	80	850x700x105	10T
	0622CLKS790R/100	600X450	100	700x550x105	10T
	0622CLKS791R/100	600x600	100	700x700x105	10T

Square to Round for use with PPIC Chambers

Recessed Tray Pressed Steel Manhole Covers and Frames

Features and benefits

- One piece pressed cover extra strength without obstruction
- Factory fitted neoprene sealing gasket to prevent odours
- Suitable for internal flooring & external applications
- Galvanised after manufacture to BS EN1461
- Brass & Stainless edging available on request
- Aesthetically pleasing finish

Code	Clear Opening (mm)	Overall Size (mm)	Depth (mm)
0622T1G3	300x300	396x396x50	46
0622CLKS46SL	450 dia	580x580x55	46
0622T11G3	600x450	740x590x46	46
0622T16G3	600x600	740x740x46	46

See installation guide under Standard Pressed Steel Manhole Covers and Frames page 41.

Pressed Steel Manhole Covers and Frames

Features and benefits

- Pressed pattern lid
- 25mm or 40mm deep frames produced
- Lids underbraced, where required, to meet required load rating
- Manufactured to standard sizes only to enable economic design
- Standard products produced are single seal non-lock and double seal locking
- 600 x 450 x 25mm clear opening covers in all loadings are available with single seal polypropylene frame
- Galvanised after manufacture to BS EN1461

	450 x 450 Code	600 x 450 Code	600 x 600 Code	Single SealType: (non-locking)
	062250BG	062250CG	062250DG	Pedestrian duty
	062251BG	062251CG	062251DG	5 tonne G.L.V.W
	062252BG	062252CG	062252DG	10 tonne G.L.V.W

	450 x 450 Code	600 x 450 Code	600 x 600 Code	Double Seal Type: (locking)
	0622DS50BG	0622DS50CG	0622DS50DG	Pedestrian duty
	0622DS51BG	0622DS51CG	0622DS51DG	5 tonne G.L.V.W
	0622DS52BG	0622DS52CG	0622DS52DG	10 tonne G.L.V.W

Standards

Galvanised to BS EN ISO 1461 as standard

Steel access cover loadings

All steel covers are manufactured to FACTA loadings in line with the gross laden vehicle weight (complete vehicle weight) of vehicles that are likely to travel over them i.e. 5 tonne gross laden vehicle or 10 tonne gross laden vehicle etc. This is where the term GLVW (gross laden vehicle weight) comes from. Occasionally loadings are asked for as wheel loads. This is known as slow moving wheel load (SMWL). It is important to establish what loading is required, as a 10 tonne GLVW cover will not hold a 10 tonne wheel load (SMWL). Furthermore if the vehicle has a small wheel footprint (for example a forklift truck) specially reinforced covers are required to account for the reduced cover contact area and the effect it has on the cover.





CLASS A

For use in pedestrian areas only.

CLASS AA

Areas with vehicular traffic up to 5 tonnes (GLVW) or 1.5 tonnes (SMWL).

CLASS AAA

Areas with vehicular traffic up to 10 tonnes (GLVW) or 2.5 tonnes (SMWL).

Light Duty Grey Iron Single/ Double Seal Access Covers & Frames Usage: Areas accessible only by pedestrians and cyclists.

Features and benefits

- Manufactured to BS EN124 Class A15
- Single seal versions give airtight seal when packed with grease
- Double sealed versions available for additional sealing
- Suitable for areas only accessible by pedestrians & pedal cyclists
- 1.5 Tonne safe test load
- Black coated finish

Code	Clear Opening (mm)	Seal	Depth (mm)	Overall Frame (mm)	Weight (kgs)
0621E10A1	450 x 450	Single	42	532 x 532	28
0621E10B1	600 x 450	Single	42	682 x 532	24
0621E10C	600 Dia	Single	42	682 dia	30
0621E10C1	600 x 600	Single	42	682 x 682	31
0621E10D	750 x 600	Single	42	836 x 686	59
0621E10F	900 x 600	Single	44	986 x 686	80
0621E11B	600 x 450	Double	42	732 x 852	52
0621E11C	600 x 600	Double	42	740 x 740	62

Standards

BSI KITEMARKED - BS EN124-A15

BS EN 124 includes loading categories for certain application areas. It is the responsibility of the engineer to ensure that the correct product is specified: "The appropriate class of manhole top or gully top to be used depends on the place of installation. The selection of the appropriate class is the responsibility of the designer. Where there is any doubt the stronger class should be selected." Clause 5 BS EN124:1994.

Iron loadings



Installation Guide

trunk roads, carriageways & hard shoulders.

- 1. Covers and frames are manufactured as a unit ensure that corresponding covers and frames match and fit correctly before commencing installation.
- 2. The frame of an access cover must be fully supported. Any load placed onto the access cover is transferred to the structural opening via the frame. If the frame is only partially supported, the unit will not carry the load it is designed for and will ultimately fail please see sketches below.
- **3.** Recessed covers (excluding paving infill) must be fully infilled with grade C25 concrete, by volume, 1 cement, 2 sand, 3 coarse aggregate (9.5 to 3mm), to achieve their stated loading capacity.





Adoptable Sewer

EN1401-1 Sewer Drain

From JDP's nationwide branches we are able to offer Sewer Drain – larger diameter pipes (200 to 630mm diameter) in unplasticised polyvinyl chloride (PVC-U) with plain ended pipes and push fit sockets or socketed pipes and fittings for adoptable sewers, and surface water in industrial, commercial and highway drainage.

Features and benefits

- Joint integrity under extreme conditions
- Resistance to potential damage from cleaning and maintenance operations
- Light weight pipes and fittings for ease of handling, storage and installation
- Durable and robust for installation and maintenance operations
- Supplied in lengths up to 6 metres for reduced jointing operations
- Available in stiffness class 8 for proven resistance to deformation
- Excellent resistance to biological and chemical attack
- Inbuilt flexibility to accommodate ground settlement

Pipe

	200mm	250mm	315mm
Plain Ended Solid Pipe x 6m	02018DP6	020110DP6	020112DP6
Single Socket Solid Pipe x 6m	02018DP6S	020110DP6S	020112DP6S
Single Socket Perforated Pipe x 6m	02018DP6SP	020110DP6SP	020112DP6SP

Couplers

	200mm	250mm	315mm
Double Socket Coupler	0206US2002RS	0206US2502RS	0206US3152RS
Double Socket Slip Coupler	0206USS2002RS	0206USS2502RS	0206USS3152RS

Double Socket Bends

		200mm	250mm	315mm
5	15° Double Socket Bend	0206UB20015AS	0206UB25015AS	0206UB2315AS
	30° Double Socket Bend	0206UB20030AS	0206UB25030AS	0206UB31530AS
	45° Double Socket Bend	0206UB20045AS	0206UB25045AS	0206UB31545AS
	90° Double Socket Bend	0206UB20090AS	0206UB25090AS	0206UB31590AS

Single Socket Bends

		200mm	250mm	315mm
	15° Single Socket Bend	0206UB20015SS	0206UB25015SS	0206UB31515SS
	30° Single Socket Bend	0206UB20030SS	0206UB25030SS	0206UB31530SS
	45° Single Socket Bend	0206UB20045SS	0206UB25045SS	0206UB31545SS
	90° Single Socket Bend	0206UB20090SS	0206UB25090SS	0206UB31590SS

Equal Junctions

		200mm	250mm	315mm
	45° Triple Socket Junction	0206UT20045AS	0206UT25045AS	0206UT31545AS
	45° Double Socket Junction	0206UT20045SS	0206UT25045SS	0206UT31545SS

Unequal Junctions

		200mm	250mm	315mm
-	45° Triple Socket Junction (110mm)	0206UT201145AS	0206UT251145AS	0206UT311145AS
	45° Triple Socket Junction (160mm)	0206UT201645AS	0206UT251645AS	0206UT311645AS
	45° Triple Socket Junction (200mm)	-	0206UT252045AS	0206UT312045AS
	45° Double Socket Junction (110mm)	0206UT201145SS	0206UT251145SS	0206UT311145SS
	45° Double Socket Junction (160mm)	0206UT201645SS	0206UT251645SS	0206UT311645SS
	45° Double Socket Junction (200mm)	-	0206UT252045SS	0206UT312045SS

Reducers – Level Invert

		200mm	250mm	315mm
-	200mm x 160mm	0206UR2016SS	-	-
	250mm x 200mm	-	0206UR2520SS	-
	315mm x 250mm	-	-	0206UR3125SS

Plugs & Caps

0		200mm	250mm	315mm
	Pipe Cap	0206UPC200TC	0206UPC250TC	0206UPC315TC
	Socket Plug	0206USP200TC	0206USP250TC	0206USP315TC



Standards

The Europe-wide manufacturing standard BS EN 1401-1: 1998 replaced BS 5481 in 1999.

Installation Guide

Suitable joint lubricant should be used for joining socketed pipe and fittings as recommended by manufacturers and supplied by JDP.

Pipe

The surround used for back fill should extend to the trench width in normal trench situations. The external loads (backfill and surcharge) imposed on a pipe of rigid material, (such as vitrified clay, concrete, asbestos cement or cast iron) are supported mainly (sometimes wholly) by the resistance of the pipe to circumferential bending. On the other hand unplasticized PVC pipes, being relatively flexible, offer less resistance to circumferential deformation and rely partly on external support to resist deformation. Therefore, it is of primary importance for unplasticized PVC pipes that fill material, particularly the bedding and side fill, should be properly compacted in order to prevent excessive deformation.

It is desirable that vertical deformation should be limited to 5% on completion of the backfilling, which can only be achieved by proper compaction of the backfill (Please refer to Codes of Practice BS5955 and BS8301).

It is essential to avoid high stress concentrations and sharp objects such as large stones or flints which should not be allowed to come into contact with the surface of the pipe.

The flexible nature of unplasticized PVC pipes helps them to accommodate deformations resulting from ground movement or from other differential settlement under normal circumstances.

UltraRib

Suitable for adoptable and non-adoptable foul and surface water applications, the UltraRib system is available in 150mm, 225mm and 300mm diameters. The BBA certified system is also Kitemarked under the BSI certification scheme to WIS 4-35-01 for pipe and couplers. The system has a smooth inner surface with concentric external ribs. This provides exceptional axial rigidity and enhanced radial strength.

Pipe

		150mm	225mm	300mm
(Jerrer 1	S/S Pipe x 3m	02036U3S	02039U3S	020312U3S

Couplers

\cap		150mm	225mm	300mm
\bigcirc	D/S Slip Coupler – for new branch entry connections and repairs	02036UDSC	02039UDSC	020312UDSC
	D/S Pipe Coupler – for jointing UltraRib pipe	02036UD	02039UD	020312UD

Adaptors

		150mm	225mm	300mm
()	Ultra Rib socket to BS EN1401 spigot	02036U71		
m	Ultra Rib spigot to BS EN1401 socket	02036U72		
	Ultra Rib socket to BS EN1401 socket	02036U77		
	Ultra Rib socket to Supersleeve socket	02036U70SS		
	Ultra Rib socket to Densleeve socket	02036U70DS		
	Ultra Rib socket to BS1401 / Clay and Concrete	2004AR1500	2004AR2250	2004AR3000

Reducers

		150mm	225mm	300mm
A	S/S Level Invert Reducer – to 110mm pipe	02036U4T		
()LJJ	S/S Level Invert Reducer – to 150mm pipe		02039U6T	
S.M.	S/S Level Invert Reducer – to 225mm pipe			020212U9T

Short Radius Bends – Double Socket

		150mm	225mm	300mm
bed .	D/S Bend - 87 ^{1/2°}	02036UD23D	02039UD23D	020312UD23D
4	D/S Bend - 45°	02036UD25D	02039UD25D	020312UD25D
	D/S Bend - 30°	02036UD27D	02039UD27D	020312UD27D
40	D/S Bend - 15°	02036UD29D	02039UD29D	020312UD29D

Ħ



Equal Junction - to UltraRib spigot

0		150mm	225mm	300mm
0	A/S Junction 45°	02036UJD	02039UJD	020312UJD

Unequal Junction - to BS EN 1401

0		150mm	225mm	300mm
	A/S Junction 45° 150mm x 110mm	02036U4D33		
	A/S Junction 45º 150mm x 160mm	02036U6D33		
	A/S Junction 45° 225mm x 110mm		02039U4D33	
	A/S Junction 45º 225mm x 160mm		02039U6D33	
	A/S Junction 45° 300mm x 110mm			020312U4D33
	A/S Junction 45° 300mm x 160mm			020312U6D33

Unequal Junction - 45° - to UltraRib spigot

\bigcirc		150mm	225mm	300mm
r an	A/S Junction 225mm x 150mm		02039U6JD	
	A/S Junction 300mm x 150mm			020312U6JD
	A/S Junction 300mm x 225mm			020312U9JD

Inspection Chambers – 450mm diameter for use to max invert depth of 1200mm

MER		150mm	225mm	300mm
	460mm x 280mm Deep PP Inspection Chamber Base 160mm O/L (with 2 x 160mm 90° & entries 2 x 110mm 45° branch entries)	01026DLMB		
	460mm x 235mm Deep Chamber Riser c/w Sealing Ring	01014D925		

* Use 02036U71 Adaptor to connect to 150mm UltraRib

End Caps & Socket Plugs

(1)		150mm	225mm	300mm
	End Cap	02036U68		
0LD	Socket Plug		02029U68	020212U68

Standards

Water Industry Specification 4 - 35 - 01 Guidance Note

WIS 4-35-01 is the UK specification for thermoplastic structured wall pipes for gravity sewer applications. Water Industry engineers and consultants can be confident that by specifying sewer pipes to WIS 4-35-01 the materials used will meet the stringent performance levels for adoptable sewers laid down by the UK Water Companies and Scottish Regional Water Authorities.

The specification, which was developed by Water UK in conjunction with participating members of the BPF Pipes Group, BSI, BBA and WRc, follows extensive research and investigation and sets out a comprehensive range of performance based tests including long term structural performance, joint integrity under extreme loading conditions and, resistance to potential damage from sewer cleaning and maintenance practices.

Installation Guide

Suitable joint lubricant should be used for joining socketed pipe and fittings as recommended by manufacturers and supplied by JDP.

The surround used for back fill should extend to the trench width in normal trench situations. The external loads (backfill and surcharge) imposed on a pipe of rigid material, (such as vitrified clay, concrete, asbestos cement or cast iron) are supported mainly (sometimes wholly) by the resistance of the pipe to circumferential bending. On the other hand unplasticized PVC pipes, being relatively flexible, offer less resistance to circumferential deformation and rely partly on external support to resist deformation. Therefore, it is of primary importance for unplasticized PVC pipes that fill material, particularly the bedding and side fill, should be properly compacted in order to prevent excessive deformation.

It is desirable that vertical deformation should be limited to 5% on completion of the backfilling, which can only be achieved by proper compaction of the backfill (Please refer to Codes of Practice BS5955 and BS8301).

It is essential to avoid high stress concentrations and sharp objects such as large stones or flints which should not be allowed to come into contact with the surface of the pipe.

The flexible nature of unplasticized PVC pipes helps them to accommodate deformations resulting from ground movement or from other differential settlement under normal circumstances.



Clay Pipes

JDP branches offer a comprehensive range of clay pipe for underground drainage.

A full system is offered from DN100 to DN300 with an extensive range of fittings, including bends, junctions, tapers and access items, particularly suitable for building drainage applications.

Clay can be used in conjunction with other underground and above-ground systems. Connections are made using purpose made connectors and adaptors or by use of Flexible Couplings.

Plain-end with fittings with flexible sleeve couplings, to comply with the stringent requirements of BS EN295.

Rocker Pipe E

Length	Size (mm)	Code
0.6m	150	170317016
0.6m	225	170317012
0.6m	300	170317004

Pipe c/w Coupling

-	Length	Size (mm)	Code
and the second second	1.6m	100	170322001
	1.75m	150	170322002
	1.75m	225	170322003
	1.75m	300	170322005

Couplings - EPDM Seals

	Size (mm)	Code
	100	170320008
	150	170320010
	225	170320013
	300	170320015

Underground Sewer Systems

Universal Jointing Lubricant

NAMOR UBRICANT	S	ize	Code	
	1 Kg		2001LUB100	
	2.5 Kg		2001LUB250	
DN Pipe Size	100mm 150mm		225mm	300mm
Average no. of joints per kg	100	50	30	24

Bends

-	Size (mm)	90°	45°	22.5°	11.25°
	100	170319001	170319007	170319016	170319021
	150	170319002	170319008	170319017	170319022
	225	170319004	170319010	170319019	170319024
	300	170319005	170319011	170319020	170319025

Rest Bend

P	Size (mm)	Code
21	100	170319029
	150	170319030

Taper

	Size (mm)	Code
	100-150	170319134
	150-225	170319138
	225-300	170319140

52



Junctions

	Size (mm)	Oblique 45°	Square 90°
	100 x 100	170319035	170319067
	150 x 100	170319036	170319068
	150 x 150	170319037	170319069
	225 x 100	170309043	170319074
	225 x 150	170309044	170319075
	225 x 225	170319045	170319076
	300 x 100	170319046	170319077
	300 x 150	170309048	170319078
	300 x 225	170319050	170319079
	300 x 300	170319051	170319080

Gullies

1	Size (mm)	Code
	Universal Gully	
-	100	170319316
	Paving Gully	
	100	170319318
	Rainwater Gully	
	100	170319332

Low Back P Trap

Size (mm)	Code
100	170319200
150	170319201

Hoppers

1	Size (mm)	Top Size (mm)	Code
	Square		
	100	150 x 150	170319204
	Horizontal		
	100	150 x 150	170319206
T	Vertical		
	100	150 x 150	170319213
22	Rectangular		
	100	335 x 205	170319193
	150	335 x 205	170319194
	Square Grating		
		152 x 152	170360026

Rodding Eye Point

	Size (mm)	Connect with	Code
St. 1.1	100	standard coupling	170319033
	150	DC7	01026DRE
	100/150	standard coupling	170315085

Universal Manholes

Clay X UPVC PPIC Inlet Adaptor			
	Size (mm)	OD of Adaptor Pipe (mm)	Code
	100	110	170315072

**USE 170315072 Adaptor with PP inspection chambers in EN1401-1 Underground Drainage page 30.



Adaptors

	Clay DN Size (mm)	Nominal Pipe OD (mm)	Purpose	Code
	100	110	DV/C 9 Deinweter Dines	170315021
Ma.	150	160	rvo a nalliwatel ripes	170315025
	100	118	Underground Cost Iron	170315024
	150	173	Underground Gast non	170315027
	100	123	Densleeve to Supersleeve	170315034
	150	180		170315035
	150	178		170315057
	225	268	Twinwall Drainage Pipes	170315055
	300	354		170315056

Uni-Drain Connector connects to 34-82mm round or square soil pipes

Size (mm)	Code
100	170315048

Stoppers

	Size (mm)	Code	
		100	170315009
	150	170315010	
		225	170315012
		300	170319133

Saddles

<u>_</u>	Size (mm)	Main Pipe	Oblique 45º	Square 90°
イーチ	100	Small up to 200	170319087	170319111
	100	Med up to 400	170319091	170319115
-9-	100	Large over 400	170319093	170319117
	150	Med up to 400	170319099	170319123
	150	Large over 400	170319101	170319125

Channel Pipes - Butt

Size (mm)	Length	Code
150	1m	170305008
225	1m	170305052
300	1m	170305053

Channel Bends - Butt

Mr.	Size (mm)	90°	45°	22.5°	11.25°
	100mm	170309018	170309023	170309027	170309031
	150mm	170309019	170309024	170309028	170309032
	225mm	170309021	170309026	170309030	170309034

Socketed channel bends including 300mm available on request

Channel Junctions - Butt Oblique 45° & Curved Square 90°

Size (mm)	LH Oblique 45°	LH Square 90°	RH Oblique 45º	RH Square 90°
 100 x 100	170309503	170309532	170309504	170309533
150 x 100	170309505	170309530	170309506	170309531
150 x 150	170309507	170309529	170309508	170309528
225 x 100	170309509	170309548	170309510	170309549
225 x 150	170309511	170309536	170309512	170309537
225 x 225	170309513	170309540	170309514	170309539
300 x 100	170309331	170309414	170309332	170309415
300 x 150	170339333	170309416	170309334	170309417
300 x 225	170309335	170309418	170309336	170309419
300 x 300	170309337	170309420	170309338	170309421

Socketed channel bends including 300mm available on request

Double Oblique 45°



	Size (mm)	Double	Beeches
5	100	170309445	170309301
	150	170309447	170309303
	225	170309450	170309306

3/4 Section Bends

	Size (mm)	Туре	LH Code	RH Code
	100	С	170309093	170309094
	100	D	170309095	170309096
	100	E	170309097	170309098
	100	F	170309099	170309100
	150	С	170309109	170309110
115 FR	150	D	170309111	170309112
LH RH	150	E	170309113	170309114
DIRECTION OF FLOW	150	F	170309115	170309116

Channel Tapers - Butt

	Size (mm)	Increaser/Reducer
	100 x 150	170309527
	150 x 225	170309538
	225 x 300	170309544

A channel is a LEFT HAND fitting when it is viewed from the spigot towards socket (ie against the direction of flow, the socket projects to the LEFT. Similarly when the socket projects to the RIGHT the channel is a RIGHT HAND fitting.



Aggressive Environments

The standard clay pipes, polypropylene couplings and elastomeric sealing rings are resistant to attack from substances which are commonly encountered in sewers.

Where more aggressive effluents or environments are present, other types of coupling seals may be required. Alternatively, a range of fully chemical resistant pipes is available as are pipes and fittings for high temperature operations.

Standards

The clay system meets the latest technical requirements of the Building Regulations, BS8005 and BS8301.

Vitrified clay plain-end pipes and fittings with flexible polypropylene coupling joints, all to BS EN295-1: System G.

BS EN295-1 includes a variety of crushing strengths for each nominal size of pipe as it takes into account the strength requirements in various parts of Europe.

Clayware

Vitrified clay plain-end pipes and fittings, manufactured in accordance with the requirements of BS EN295-1. The standard lengths of pipes are convenient for handling and laying and allow for flexible joints at sufficiently frequent intervals to enable the pipeline to withstand settlement or other ground movement after installation.

Sleeve Couplings

Manufactured in high impact polypropylene with elastomeric seals providing watertight, flexible mechanical joint assemblies, complying with BS EN295-1: System G.

Standard Coupling Seals

These are manufactured from elastomers conforming to the performance requirements of BS EN681-1.

Joint Performance

Clay joint assemblies meet all the requirements of BS EN295-1. They accept angular deflection and shear resistance without leakage, when tested under an internal or external water pressure of 50kPa (5 metres head).

Installation

Clay pipes can usually be laid directly on a hand trimmed natural trench bottom with selected, excavated materials (Class D Bedding) used as backfill.



Flexible Couplers

JDP offers a comprehensive range of pipe connection and repair couplers, bushes, puddle flanges and end stops. We provide the most extensive range of couplings available, specifically designed to connect and repair pipelines of different materials or sizes used in sewerage, drainage and other underground applications.

When excavation work is required to repair a damaged pipe, our couplings will reduce the amount of time required, and minor differences in pipe diameter can be accommodated. Larger diameter differences are installed using a suitably sized bush.

The combination of a durable design and excellent sealing properties enables our couplings to provide a reliable seal on rough pipe surfaces e.g. concrete, and a high performance seal on smooth surfaces e.g. PVCu.

Our couplings can be combined with bushes in order to act as an adaptor between pipelines of widely differing outside diameters. A bush will be required by the contractor when connecting pipes of different materials or sizes i.e. when outside diameters of the joints exceeds 12mm.

We can also supply standard couplings with nitrile sleeves.

Features and benefits

- Durable design ensuring a high performance and reliable seal
- Stainless steel shear band provides excellent resistance to heavy loads and shear forces
- Reduces excavation work
- Shear band ensures joint flexibility and pipe alignment
- High performance sealing properties of the couplings eliminates need for grouting in most applications
- WIS 4-41-01 approved

Applications

When used individually or combined with bushes, our couplings have many applications in the construction, repair and maintenance of pipe systems:

- As a joint for plain ended pipes
- Repair and maintenance of existing pipelines
- Connecting short and cut lengths of pipe
- Making post construction connections to an existing pipeline
- Reconnection of laterals on renovated sewers
- Introducing rocker pipe outside manholes or structures

Standard Couplings (Up to 620mm Diameter)

Standard Couplings are specifically designed to connect and repair pipelines with different materials or sizes used in sewerage, drainage and other underground applications.



Underground Sewer Systems

Standard Couplings (100 - 790mm Diameter)

Code	Size Range (mm)	Width (mm)
2004SC115	100-115	120
2004SC120	105-122	120
2004SC125	110-125	120
2004SC137	120-137	120
2004SC150	130-150	120
2004SC162	137-162	120
2004SC175	150-175	120
2004SC180	160-182	120
2004SC190	165-190	150
2004SC200	175-200	150
2004SC215	187-212	150
2004SC225	200-225	150
2004SC250	225-250	150
2004SC275	250-275	150
2004SC290	265-290	150
2004SC310	285-310	185
2004SC320	290-320	185
2004SC335	310-335	185
2004SC345	315-345	185
2004SC350	325-350	185
2004SC360	335-360	185
2004SC385	355-385	185
2004SC410	385-410	185
2004SC425	400-425	185
2004SC430	400-430	185
2004SC445	415-445	185
2004SC465	435-465	185
2004SC475	445-475	185
2004SC490	460-490	185
2004SC510	480-510	185
2004SC525	495-525	185
2004SC540	510-540	185
2004SC545	515-545	185
2004SC550	520-550	185
2004SC560	530-560	185
2004SC570	540-570	185
2004SC580	550-580	185
2004SC600	570-600	185
2004SC620	590-620	185
2004SC690	665-690	185
2004SC790	765-790	185





Drain Couplings (80 - 275mm)

Drain couplings are used in drainage systems where resistance to earth loads normally provided by a sheer ring is not required. They have many applications in the construction, repair and maintenance of drainage and other small diameter non pressure pipe systems.



Code	Size Range A/B (mm)	Width (mm)
2004DC95	80-95	100
2004DC115	110-115	100
2004DC125	110-125	100
2004DC135	120-135	120
2004DC150	135-150	120
2004DC165	150-165	120
2004DC175	160-175	120
2004DC185	170-185	120
2004DC195	180-195	120
2004DC215	200-215	150
2004DC225	210-225	150
2004DC250	235-250	150
2004DC275	260-275	150

Adaptor Couplings (35-420mm Diameter)

Adaptor Couplings have a moulded elastomeric sleeve with different diameters at each end to enable different outside diameters to be connected economically and quickly. The sleeve is fitted with 2 stainless steel clamping bands by which they are secure at both ends.



Universal Range

Code	Size Range A/B (mm)	Width (mm)
2004AC4000	121-136/110-121	100
2004AC6000	180-200/160-180	150
2004AC9001	260-285/180-205	150

For Structural Walled Plastic Pipes

Code	Size Range A/B (mm)	Width (mm)
2004AR1500	160-170/170-192	100
2004AR2250	240-250/260-285	130
2004AR3000	325-335/360-385	160

Drainage Adaptors

Code	Size Range A (mm)	Size Range B (mm)	Width C (mm)
2004AC1153	100 - 115	40 - 50	100
2004AC1154	100 - 115	53 - 63	100
2004AC1155	100 - 115	75 - 89	100
2004AC1251	110 - 125	80 - 95	120
2004AC5144	110 - 125	100 - 115	120
2004AC1360	121 - 136	75 - 89	100
2004AC1361	121 - 136	80 - 95	120
2004AC1362	121 - 136	100 - 115	120
2004AC1451	130 - 145	95 - 110	100
2004AC1452	130 - 145	110 - 125	120
2004AC1501	135 - 150	100 - 115	100
2004AC1602	144 - 160	110 - 125	120
2004AC1603	144 - 160	121 - 136	120
2004AC1701	155 - 170	100 - 115	150
2004AC1702	155 - 170	110 - 125	120
2004AC1703	155 - 170	130 - 145	120
2004AC1801	160 - 180	100 - 115	150
2004AC1802	160 - 180	110 - 125	150
2004AC1805	160 - 180	155 - 170	150
2004AC1922	170 - 192	110 - 125	120
2004AC1923	170 - 192	121 - 136	120
2004AC1924	170 - 192	144 - 160	120
2004AC1991	180 - 200	100 - 115	150
2004AC1993	180 - 200	121 - 136	150
2004AC2000	180 - 200	130 - 145	150
2004AC2001	180 - 200	155 - 170	150
2004AC2102	185 - 210	110 - 125	150
2004AC2104	185 - 210	130 - 145	150
2004AC2105	185 - 210	144 - 160	150
2004AC2152 o/s	200 - 115	100 - 115	150
2004AC2203	195 - 220	155 - 170	150
2004AC2303	205 - 230	130 - 145	165
2004AC2352	210 - 235	110 - 125	150
2004AC2353	210 - 235	121 - 136	150
2004AC2354	210 - 235	144 - 160	150
2004AC2355	210 - 235	170 - 192	150
2004AC2356	210 - 235	190 - 215	150
2004AC2505	225 - 250	155 - 170	150
2004AC2507	225 - 250	195 - 220	150
2004AC2508	225 - 250	205 - 230	150
2004AC2654	240 - 265	144 - 160	150
2004AC2655	240 - 265	170 - 192	150
2004AC2656	240 - 265	190 - 215	150
2004AC2657	240 - 265	210 - 235	150

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Drainage Adaptors (contd)

Code	Size Range A (mm)	Size Range B (mm)	Width C (mm)
2004AC2753	250 - 275	155 - 170	165
2004AC2755	250 - 275	195 - 220	165
2004AC2904	265 - 290	144 - 160	150
2004AC2905	265 - 290	170 - 192	165
2004AC2906	265 - 290	190 - 215	150
2004AC2907	265 - 290	210 - 235	150
2004AC2908	265 - 290	240 - 265	150
2004AC3003 o/s	275 - 300	180 - 200	150
2004AC3157	290 - 315	245 - 270	165
2004AC3158	290 - 315	260 - 285	165
2004AC3204	295 - 320	144 - 160	150
2004AC3205	295 - 320	170 - 192	150
2004AC3206	295 - 320	190 - 215	150
2004AC3207	295 - 320	210 - 235	150
2004AC3208	295 - 320	240 - 265	150
2004AC3209	295 - 320	265 - 290	150
2004AC3257	300 - 325	250 - 275	165
2004AC3307	305 - 330	245 - 270	150
2004AC3351 o/s	310 - 335	180 - 205	150
2004AC3357	310 - 335	295 - 320	150
2004AC3600	335 - 360	295 - 320	165
2004AC3606	335 - 360	190 - 215	165
2004AC3607	335 - 360	210 - 235	165
2004AC3608	335 - 360	240 - 260	165
2004AC3609	335 - 360	265 - 290	165
2004AC3708	345 - 370	300 - 325	165
2004AC3709	345 - 370	310 - 335	165
2004AC3850	360 - 385	300 - 325	165
2004AC3858	360 - 385	240 - 265	165
2004AC3859	360 - 385	265 - 290	165
2004AC4208	395 - 420	240 - 265	165
2004AC4209	395 - 420	265 - 290	165

o/s = offset

Sewer Saddle

Code	Size (mm)	Angle	Saddle Size Range (mm)
2004TA11090	105 — 120	90°	152 — 395
2004TA12590	115 — 130	90°	200 - 400
2004TA16090	150 — 170	90°	200 — 395
2004TA20090	175 — 200	90°	300 - 500
2004TA11045	105 – 115	45°	152 — 395
2004TA16045	150 — 165	45°	200 - 395

Twistee Saddles



Versatile sewer saddle designed to make lateral connections to clay and concrete main sewers quick and simple. The spigot will connect to a DN160 uPVC lateral pipe or to and DN150 lateral using a Flexible rubber adaptor coupling.

	Main Sewer Dimensions			
Code	Min Dia	Max Dia	Min Wall Thickness	Core Hole Dia
2004MTS15001	300	375	32	186mm+/-1mm
2004MTS15002	400	600	32	186mm+/-1mm
2004MTS15003	675	NA	32	186mm+/-1mm

Lateral Connector

	Code	Size (mm)	Hole Size (mm)
1	2004LC110	110	127
Minnellin	2004LC160	160	177

The Lateral Connectors provide a fast cost effective method of connecting lateral pipes to twinwall or ribbed pipes.

Tools



Installation

Standard/Extra Wide/Euro Couplings

Insertion of a junction or repair of existing pipeline using Standard Extra Wide Couplings

Recommended Tightening Torques (Nm)

Standard / Extra Wide Couplings	
Up to 300mm	10
300 to 620mm	13
Large standard /Extra Wide Couplings	
Up to 1200mm	20
Over 1200mm	25
Drain & Adaptor Couplings	6
Lateral Connectors & Saddles	6



- A. Cut section from pipeline using pipe cutter or disc saw and remove.
- B. This should be about 20mm longer than the junction or short pipe length to be installed.
- C. Loosen clamps on coupling and slide onto each end of existing pipeline then position new junction or short pipe length. (Lubricant not required.)
- D. Place pencil mark half a coupling width from each joint.
- E. Using these pencil marks, centre a coupling over one joint at a time.
- F. Tighten the worm drive units in sequence across the width of the coupling to recommended torque. Central shear ring is on the coupling, this should be tightened first.
- G. Upon completion of joints, carefully tamp bedding material under the pipe.

Adaptor / Drain

Installing Drain Couplings

- A. Slide the coupling fully onto pipe; positon next pipe.
- B. Mark one pipe with a pencil, half a coupling width from the joint.
- C. Centre coupling over joint.
- D. Tighten clamps to recommended torque and tamp bedding material under pipe.

Installing Adaptor Couplings

- A. Slide coupling fully onto larger pipe.
- B. Mark smaller pipe with a pencil, half a coupling width from the joint.
- C. Insert smaller pipe up to the mark.
- Tighten clamps to recommended torque and tamp bedding material under pipe.





Underground Sewer Systems

Lateral Connector

- A. Drill 90° hole to pipe axis
- B. Clean and file drill hole
- C. Press Lateral Connector (L.C.) into socket
- D. Pull L.C. up until bottom flange is tight against inside wall pipe
- E. Mark incoming lateral pipe 80mm from end/ lubricate pipe and L.C.
- F. Now press pipe down to lowest stop (mark disappears). Tighten the clamp to 6 Nm.



Standards

Pressure Ratings Standard Couplings and Bushes

Up to 620mm	2.5 bar	635mm to 995mm	1.0 bar
Over 995mm	0.6 bar	Extra wide couplings	0.6 bar

Standard Couplings and Bushes up to 620mm comply with WIS 4-41-01. EN 295-4, EN 681-1





Test Equipment

JDP offers a full range of test equipment for this purpose including the latest technology in super nylon. Tests should be carried out before back filling or bedding on or surrounding in concrete. Tests should be made manhole to manhole. The tests should be carried out by inserting drain plugs at each end of the pipe and assembling the 'U' Air Kit as illustrated. Air is pumped in by hand bellows until the pressure of 100mm is indicated on the gauge. Provided the air pressure does not fall below 75mm in a 5 minute period, the drain is deemed to have passed the test.

Steel Test Plugs

	Code	Description
	200173061	4" Steel Drain Test Plug
	200173091	6" Steel Drain Test Plug
	200173381	10" Steel Drain Test Plug
	200173561	9" Steel Drain Test Plug
	200173581	12" Steel Drain Test Plug

Nylon Test Plugs

Code	Description
200174061	4" Nylon Drain Test Plug
200174091	6" Nylon Drain Test Plug

PVC Air Bags c/w PVC hose & turn off tap

60	Code	Description
	200183031	4" PVC Air Bag
	200183051	6" PVC Air Bag
	200184011	Pump for Inflatable Bags

Air Test Kit contains `U' air gauge, hand bellows, approx. 2m (6'6") rubber tubing, 13mm (1/2 ") nipple cap, `Y' piece and full operating instructions

Code	Description
200179109	Drain Air Test Kit
 200179119	Drain Air Test Kit c/w Plugs

Camstopper Drain Test Plugs

The fast action lever and modern design brings many benefits including:

- Strong durable stopper design
- Suitable for 100mm to 225mm pipes, drains and sewers
- Simple stopper installation = more than 6 times quicker
- Non-man entry stopper retrieval = 15 times quicker removal
- Compliance with confined spaces regulations 1997

Camstopper Test Plugs

	Code	Description
	2011CAM100	4" Camstopper Test Plug
	2011CAM150	6" Camstopper Test Plug
	2011CAM225	9" Camstopper Test Plug

Camstopper Test Kit

	Code	Description
<u>e</u>	2011AIR002	4" Camstopper Test Kit (2 Stoppers)
	2011AIR003	6" Camstopper Test Kit (2 Stoppers)
	20113MRID	Camstopper 3m Remote Installation Device

Standards

All new drains and sewers laid in the UK must be subjected to an air pressure test in accordance with BS 8005.

Installation

Air tests must be carried out in accordance with instructions provided. Methods of installation for test plugs will be screw down to expand rubber to seal manhole entry or pipe.

The Camstopper retains the benefits of the traditional design of discs and a rubber seal, but the method of installation is now through a lever action instead of tightening with a wing nut.

Retrieving the Camstopper is also simplified, as the operator does not even have to enter the manhole or chamber and can simply pull the Camstopper out of the pipe, drain or sewer by tying a rope around the handle, or using the remote installation device, avoiding the torrent of sewage that follows a stopper release!



Sewage Treatment Solutions



• Treatment Plants • Septic Tanks • Cesspools • Pump Stations



A philosophy of offering the best solution for the application has enabled JDP to achieve a strong position in the supply of domestic sewage treatment products, attaining a combination of installation and long term cost savings for customers along the way.

2010 sees the introduction of the new European EN12566 guidelines, that requires manufacturers to submit their treatment plant to a strict uniform testing regime that will accurately measure and compare the performance of treatment plant up to 50 population.

These tests identify how much pollution the plant removes from the sewage, what level of maintenance is required, what power is absorbed and therefore give the user a true basis for comparison.





With the continued tightening of environmental legislation the correct handling and discharge of domestic sewage has become a very important aspect for the house builder for dwellings not on mains drainage.

JDP's experience, supplier relationships and knowledge of regulations enable us to advise and help house builders avoid potentially costly mistakes by installing the most appropriate solution for the treatment of domestic waste.
SewageTreatment Plants

JDP offers a comprehensive range of sewage treatment plants designed to treat the sewage from developments where access to the main sewer is not possible. From those suitable for a single dwelling, through to plants suitable for new housing estates.

Sewage treatment plants operate by providing an environment in which aerobic bacteria are cultured. These bacteria survive by using biological matter in the sewage as a food source. To provide optimum treatment the bacteria need free access to oxygen and immersion in the sewage effluent. The majority of package plant work by providing a fixed medium that the bacteria adhere to, and a means of interfacing this with regular supplies of oxygen and biological material.

Primary Settlement Tank

The gross solids form sludge at the bottom of the tank and lighter social debris forms a crust on the surface. The sludge and crust should be removed periodically in accordance with the plant design. The settled liquor that is contained between the sludge and crust passes forward for treatment in the Biological Aerated Filter.

Treatment

This is the treatment zone and it contains a set of inactive modular media blocks that provide a large surface area on which naturally occurring bacteria can develop. The bacteria require oxygen which is supplied by a linear low-pressure compressor via porous membranes, beneath the media bed. The bacteria naturally feed on the settled sewage to further reduce the levels of Biological Oxygen Demand (BOD), Suspended Solids (SS) and Ammonia (NH3) in order to comply with the evermore stringent requirements of the Regulatory Authorities.

Final Settlement Tank

As the bacteria in the Biological Aerated Filter dies off, it falls away from the media and is passed forward to the final settlement tank where it settles out, further reducing the level of suspended solids in the final effluent. Design features include a benched bottom to ensure concentrated settlement, and a sludge return system returning settled humus sludge back to the first stage of the primary settlement tank.

Final Effluent Discharge

Depending on the local ground conditions and the final effluent quality required by the local Environment Agency (England and Wales) Scottish Environmental Protection Agency (Scotland), discharge can be directly into a water course. However in some cases an additional filter bed constructed of smooth internal half perforated pipe, usually to EN1401-1 standard is required as part of the system to further break down the effluent.

Reed beds are also available from JDP where local water authorities request a better quality of effluent than that discharged from a standard treatment plant.



Features and benefits

- Low running costs
- Very low maintenance
- Lockable cover
- High process performance
- Near silent operation
- Very low energy consumption
- No nauseous smells or pollution to offend neighbours
- Actively treats sewage before safely discharging it
- Complies with environmental regulations
- Improves resale value of the property
- Available with standard gravity outlet, or optional pumped outlet where the soakaway or discharge point is at a higher level. The outlet pump is housed within the body of the plant.

Applications

The range of treatment plants provides an economic solution for anything from a single dwelling upwards. These plants are designed to suit the specific application using the following criteria:

- 1. Maximum potential population being served.
- 2. Final effluent quality required by the local Environment Agency (England and Wales) or Scottish Environmental Protection Agency (Scotland).

It is important to ensure you obtain the relevant authorising consent from the EA (England & Wales) or SEPA (Scotland) before installing. Your local JDP branch can give advice on how to obtain this.

Treatment plants are designed and built to suit the individual requirements of each application. However there are recognised standard sizes and treatment qualities for domestic use.

It is a regulatory requirement to have a sampling point so that effluent quality can be periodically checked by regulatory bodies. JDP supply a sample chamber to suit all outlet depths and screw locking covers to suit.

Code	Description
3001250X1MSCH	250mm x 1m Sample Chamber 110mm O/L
01014D325	250mm Sealed Cover & Frame



Standards

Building regulations apply PPG4 Guidelines apply from July 2008 EN12566 Part 3 - The New European Standard for Domestic Sewage Treatment Plants

Installation Guide

Siting the Unit

British Standard BS: 6297-1983 recommends that sewage treatment works should be as far away from habitable buildings as is economically practicable. The direction of the prevailing wind should be considered in relation to any properties when siting the works. The sludge emptying contractor's vehicle will probably have a maximum reach of 30 metres, but the depth from the ground level to the bottom of the tank must not exceed 5 metres.

The installation should be carried out in accordance with the requirements of the Construction and Building Regulations. An inspection chamber should be installed upstream of the Treatment Plant.

For discharge quality sampling purposes a sampling chamber can be provided (optional extra).

BEFORE INSTALLING YOUR TANK

- Read Full Installation Guide provided with delivery of goods.
- Ensure Building Regulation approval.
- Ensure consent of discharge is approved from the environment agency.
- Ensure access for desludging tanker. (Building regulations suggest 30m max).
- Check orientation and heights of inlet and outlets.
- Use a pump to keep excavation clean and free from rising ground water during installation.

DO:

- Use the correct backfill material.
- Site tank at furthest practical location from habitable dwellings. Most building regulations recommend a minimum of 7m.
- Fit the correct cover & frame (pedestrian duty) LOCKABLE.
- Consider drainage falls, generally 1 in 60/70 between house and tank and max. 1 in 200 for filter bed system.
- Lift the tank using adequate ropes or slings through both of the lugs fitted either side of the neck.

DO NOT:

- Subject the tank to impact or contact with sharp edges.
- Add neck extensions to the tank, nor, build a brick manhole above the tank neck (as this increases burial depth of the tank beyond that which it was designed for). We do not recommend extending the neck of the tank under any circumstances.
- Install tank deeper than the depth that the fitted neck will allow.
- Install in trafficked areas without a suitable load bearing slab.
- Site the tank so that it is subjected to excess ground pressure (e.g. sloping sites) or applied loads such as may be generated by the proximity of vehicular traffic.
- Lift using only one of the lugs.
- Fill an unsupported tank.

Service Agreement

Although of a minimal nature, it is advised that the plant is serviced periodically to help ensure many years of trouble-free operation. Service Agreements are available through your local JDP.

This is a requirement of the new PPG4 guidelines.



Septic Tanks

JDP offers a range of septic tanks designed to settle the effluent, for situations where there is no mains drainage for the domestic sewage waste to discharge. Capacities available as standard: 2,800 litres - 54,000 litres. Other sizes available upon request.

Septic Tanks are historically the most common solution. However they do not treat the sewage, they only settle it. Because of even stricter environmental regulations septic tanks have become less common. The effluent cannot be discharged directly into a water course, and so a filter bed in a herringbone layout, constructed of smooth internal half perforated pipe, usually to EN1401-1 standard (see Davisoak later in this section) is required as part of the system to break down the biological matter. This means that the ground conditions and correct design and installation of the filter bed are critical to the performance of the system.

Features and benefits

- Low cost installation and maintenance
- Lockable cover
- Available in GRP or PE

Applications

The range of septic tanks provides an economic solution for anything from a single dwelling upwards, with the clarified effluent discharging to an underground filter bed system.

To ensure a septic tank is suitable the following information is essential:

- 1. Discharge will not be directly into a water course (stream, lake etc).
- 2. Consent to discharge from the EA (England & Wales) or SEPA (Scotland).
- Results of a percolation test based on BS6297 recommendations to establish size of filter bed required. The filter bed is a key component in the effective treatment and dispersal of the effluent.



NB. Do not be tempted to install a septic tank as a cheap option without the necessary consent. It could prove a very costly mistake.

All standard septic tanks are supplied with a 1m invert inlet. For deeper inverts heavy duty version should be used. The following tables indicate general sizes and data, however this will vary depending on manufacturer and specific application.

GRP Septic Tanks

Code	Description	
1105PST285	2800Ltr Spherical GRP Septic Tank	
1105PST385	3800Ltr Spherical GRP Septic Tank	
1105PST485	4500Ltr Spherical GRP Septic Tank	
1105PST605	6000Ltr Spherical GRP Septic Tank	

*Covers used must be cover neck and vent pipe

PE Septic Tanks

Code	Description
1111RST600	2800Ltr Plastic Septic Tank
1111RST800	3800Ltr Plastic Septic Tank
1111RST1000	4500Ltr Plastic Septic Tank

*PE Septic Tanks supplied c/w cover

Standards

Building regulations apply

Installation Guide

See page 72.





Treatment Plant and Septic Tank Soakaway

Whilst great advances have been made in wastewater technology, land drainage remains reliant on traditional techniques. Now JDP can offer a revolutionary new product called Davisoak that redefines the method of dispersing water into soil.

Features and benefits

- Speed of installation up to 4 times faster than traditional methods
- Lightweight increases handling capability and reduces Health & Safety hazards
- Single manpower installation less labour and plant intensive
- Minimises site waste and dispoal costs
- Flexibility removes need for boxes or chambers
- Ideal for sites with restricted access
- Higher water dispersion rate than traditional methods
- Reduced site impact minimal reinstatement and clean up
- Standard 110mm underground drainage pipe & fittings

Applications

Treatment Plants and Septic Tanks:

Davisoak replaces the perforated pipework of a 'herring-bone' drainage field. Davisoak's storage and flow characteristics typically achieve 35% more surface area than natural aggregates, resulting in enhanced water treatment capabilities and a reduction in long term clogging.

Effluent Drainage:

Davisoak may replace traditional 'carrier' drainage from a treatment plant to discharge point.

Seasonal Soakaways:

Davisoak is ideal to install as a 'seasonal soakaway' flowing from a treatment plant.

A seasonal soakaway allows infiltration of treated effluent where ground conditions permit or transfers effluent to an alternative discharge point when ground conditions are unfavourable.

Soil Porosity

To establish the overall length of a drain run required, a soil porosity test may be necessary. The following procedure should be adopted:

- Excavate a hole 300mm square by 300mm deep below the proposed invert level of the land drain
- Fill hole with water to a depth of 300mm and allow to drain away overnight
- Refill to a depth of 300mm and observe the time taken to drain from 75% full to 25% full level (ie: a depth of 150mm). Divide this time by 150mm. The answer gives the average time in seconds (Vp) required for the water to drop 1mm.

Repeat this excercise two more times with at least two trial holes. Calculate the average time.

By reference to the table opposite, the length of the drain run required for various capacity tanks may be established.

Drainage field disposal should only be used on test values (Vp) between 12 and 100. Where a Vp value falls outside these limits, our technical team can advise.

The table opposite indicates typical meterage for septic tank applications, assuming a trench width of 450mm. Approximately 20% less drainage is required for Sewage Treatment Plants as treated effluent is of a higher standard. For other applications and further information, please consult your local JDP branch.

Soil Porosity Test Data

		Overall length of drain run required (m)					
Time taken to fall 150mm (mins)	Equivalent value of Vp in sec/mm	2800 litres (4 persons)	3800 litres (10 persons)	4800 litres (14 persons)	6000 litres (22 persons)	7500 litres (30 persons)	9000 litres (38 persons)
20	8	18	44	62	98	133	169
30	12	27	67	93	147	200	253
40	16	36	89	124	196	267	338
60	24	53	133	187	293	400	507
120	48	107	267	373	587	800	1013
180	72	160	400	560	880	1200	1520

Traditional 110mm EN1401 half perforated sewer pipe can also be supplied by JDP.



Code	Description
0530FD1241	300mm x 3m Davisoak Perf Sewer Pipe

For fittings use Dyka Underground Drainage page 30.





Cesspools

Cesspools are designed to store the effluent, as a result, a large tank and regular emptying is required, making this the least cost effective solution. Therefore cesspools should only be considered where there is no mains drainage for the domestic sewage waste to discharge and no consent to discharge into soakaway or a watercourse can be obtained.



JDP offers a range of cesspools, generally

capacities available as standard are: 2,800 litres - 60,000 litres. Other sizes available upon request.

Features and benefits

- Fully sealed unit ensuring no effluent discharge
- Lockable cover
- Optional high level alarm

Applications

Domestic dwellings where discharge of sewage effluent to a soakaway system or a watercourse is not possible. From April 2002 the capacity suitable for two residents is 18,180 litres. This size should be increased by 6,800 litres for each additional user. Smaller or larger cesspools for non-domestic applications, such as temporary construction site offices, are also available.

All standard cesspools are supplied with a 1m invert inlet. For deeper inverts heavy duty version should be used. The following table indicates general sizes and data, however this will vary depending on manufacturer and specific application.

Capacity Ltrs	Overall Length (mm)	Overall Width (mm)	Inlet Level to Base of Tank (mm)
18180	4320	2800	2730
22500	5090	2800	2730
27000	6190	2800	2730
36000	7740	2800	2730
45000	45000 9460		2730
55000	11180	2800	2730

Standards

Building regulations apply

Installation Guide

See page 72.

Pump Stations

JDP offers a comprehensive range of pump stations from settled effluent to crude waste applications with single or twin pumps with float switches and high level alarms systems. For single dwellings through to stations suitable for new housing estates.

Features and benefits

- Cost effective solution to reach mains drainage
- Bespoke system, engineered to suit the criteria of any particular application
- Available in GRP or PE
- Capable of pumping solid or liquid waste
- Both single and duplex systems are available using pumps from quality manufacturers
- High level alarms available
- Power failure storage capacity
- Can be used in combination with treatment plants or septic tanks



Applications

Package pump stations are used for pumping crude sewage to a main sewer drain or treated effluent from a septic tank or treatment plant to a soak away or watercourse.

Pump chambers are designed and built to suit the individual requirements of each application. JDP offer the following different systems:

- Settled effluent pump set. (For pumping settled effluent to soakaway).
- Single crude pump station. (For pumping raw sewage from property to holding tank or main sewer pipe).
- Duel twin crude pump station (For pumping raw sewage from property to holding tank or main sewer pipe). With standby system.

All pumping chambers are designed and built subject to type of dwelling, distance to be pumped, and height / fall.

In addition to the pump station, the system will require a black polyethylene pumping main, to transport the effluent under pressure, which the manufacturer will specify and JDP can supply.

Standards

Building regulations apply

Installation Guide

See page 72.

Service Agreement

Although of a minimal nature, it is advised that the plant is serviced periodically to help ensure many years of trouble-free operation. Service Agreements are available through your local JDP.





Black Polyethylene Pumping Main

	MDPE 12.5Bar	HPPE 10Bar
	63mm	90mm
6m	090263BK6	101190N76
25m	090263BK25	-
50m	090263BK50	101132097050
100m	090263BK100	101132097100
150m	090263BK150	-

Other sizes available to suit all applications

Standards

EN12201

Installation Guide

See page 122.





Surface Water Drainage

- Twinwall Surface Water Drainage Concrete Drainage Pipe
- Box Culverts
 Channel Drainage
 Land Drainage
 Headwalls
- Polybed
 PolyAgg



JDP provides a range of products & solutions for surface & stormwater drainage, these are supplied in line with the requirements for sustainable urban development, by balancing the different issues that should be influencing the design.

Used in conjunction with the SUDS solutions in section Surface Water Mangement, these products collect, transport and discharge the surface water to the various

points within the system.

The range of products in this section can be used in a combined approach to offer the best solution required for the project.

This versatility within such an in depth product range, means that the specialist knowledge and advice that JDP can provide often gives the designer, installer and owner opportunities to gain installation and long term cost savings.





Sustainability is a key word in today's House Building, with this in mind JDP offer a number of products in this section that are manufactured from recycled materials, and the majority of products are manufactured from plastic which is 100% recyclable at the end of it's useful life.





TwinWall Surface Water Drainage

JDP offer a complete system of TwinWall Drainage, which is a structured wall pipe and is the complete technical and commercial answer to all non-pressure, surface and sub-surface water drainage applications. TwinWall pipes have been installed on thousands of civil engineering projects including highway, rail and airport infrastructure projects.

TwinWall is manufactured by a twin extrusion process. TwinWall comprises of two HDPE (high density polyethylene) pipes which are extruded simultaneously, one inside the other, and heat welded together in one continuous process.

The pipes are black in colour, the outer wall being corrugated and the inner wall having a smooth finish to assist the hydraulic flow. A comprehensive range of push fit fittings and sealing rings are also available for each diameter.

TwinWall pipes are available in carrier, fully perforated and solid invert configurations. TwinWall is approved for roads and building. For an even more comprehensive range including sizes up to 3000mm please see the Civil Engineering & Utilities product specifier book.

JDP also offer a range of TwinWall with a BBA certificate from 150 – 600mm which is manufactured from recycled plastic. This is a benefit to contractors and local authorities who need to meet stringent environmental conditions attached to developments. For more information on this product range and other recycled products please contact your local JDP branch.

Features and benefits

- Full range from 100 to 1050mm
- Fewer joints means faster installation and less potential for leakage
- Structured wall design for a high ring stiffness
- Optimised weight for reduced health and safety risks and ease of transport, handling and installation
- TwinWall pipes have a weight less than 6% of the equivalent size of concrete pipe
- Strong yet flexible design allows pipeline to withstand some ground movement and differential settlement
- Robust, impact and abrasion resistant construction
- Low friction inner wall for far superior hydraulic performance
- Integral sockets available in diameters 150mm to 900mm

Plain Ended Carrier Drain Order seals and couplings separately

	Nominal Size (mm)	ID (mm)	OD (mm)	Length (m)	Weight (kg/m)	Code
	100	100	118	6	0.8	0401RD100X6S
	150	150	178	6	1.6	0401TW150X6PE
	225	225	267	6	3.6	0401TW225X6PE
	300	300	355	6	5.4	0401TW300X6PE
	375	375	435	6	7.4	0401RD375X6S

Socketed Carrier Drain Order seals separately

	Nominal Size (mm)	ID (mm)	OD (mm)	Length (m)	Weight (kg/m)	Code
O	400	400	457	6	8.2	0401RD400X6SC
	450	450	512	6	10.2	0401RD450X6SC
	500	500	569	6	11.8	0401RD500X6SC
	600	592	674	6	15.5	0401RD600X6SC

Plain Ended Filter Drain Order couplings separately

	Nominal Size (mm)	ID (mm)	OD (mm)	Length (m)	Weight (kg/m)	Code
	100	100	118	6	0.8	0401RD100X6P
	150	150	178	6	1.6	0401TW150X6PEP
	225	225	267	6	3.6	0401TW225X6PEP
	300	300	355	6	5.4	0401TW300X6PEP
	375	375	435	6	7.4	0401RD375X6P

All sizes also available as Half Perforated

Socketed Filter Drain

	Nominal Size (mm)	ID (mm)	OD (mm)	Length (m)	Weight (kg/m)	Code
O	400	400	457	6	8.2	0401RD400X6PC
	450	450	512	6	10.2	0401RD450X6PC
	500	500	569	6	11.8	0401RD500X6PC
	600	592	674	6	15.5	0401RD600X6PC

All sizes also available as Half Perforated



Double Socket Couplings



	Nominal Size (mm)	Code
	100	0401CRD100
	150	0401CRD150
	225	0401CRD225
	300	0401CRD300
	375	0401CRD375
	400	0401CRD400DS
	450	0401CRD450DS
	500	0401CRD500DS
	600	0401CRD600DS

Sealing Rings (Plain End Pipe)

	Nominal Size (mm)	Code
Ø	100	0401STW100
	150	0401STW150
	225	0401STW225
	300	0401STW300

Sealing Rings (Socketed Pipe)

Ø	Nominal Size (mm)	Code
	375	0401375SR
	400	0401400SR
	450	0401450SR
	500	0401500SR
	600	0401600SR

End Caps

\bigcirc	Nominal Size (mm)	Code
	100	0401EC1059
	150	0401EC1778
	225	0401EC5064
	300	0401EC6010

DS Bends

	Nominal Size (mm)	11.25º /15º	22.5° /30°	45°	90°
	100	0401B100X1125	0401B100X225	0401B100X45	0401B100X90
	150	0401B150X15	0401B150X30	0401B150X45	0401B150X90
\bigcirc	225	0401B225X1125	0401B225X225	0401B225X45	0401B225X90
	300	0401B300X1125	0401B300X225	0401B300X45	0401B300X90
	375	0401B375X1125	0401B375X225	0401B375X45	0401B375X90
	400	0401B400X1125	0401B400X225	0401B400X45	0401B400X90
	450	0401B450X1125	0401B450X225	0401B450X45	0401B450X90
	500	0401B500X1125	0401B500X225	0401B500X45	0401B500X90
	600	0401B600X1125	0401B600X225	0401B600X45	0401B600X90

* Other Bends can be fabricated to order

Equal Junctions

TS / DS	Nominal Size (mm)	45° Code	90° Code
TS	100	0401100YJ	0401100TJ
TS	150	0401150YJ	0401150TJ
TS	225	0401225X225YJ	0401225X225TJ
TS	300	0401300X200YJ	0401300X300TJ
TS	375	0401375X375YJ	0401375X375TJ
TS	400	0401400X400YJ	0401400X400TJ
TS	450	0401450X450YJ	0401450X450TJ
TS	500	0401500X500YJ	0401500X500TJ
TS	600	0401600X600YJ	0401600X600TJ

TS = Triple Socket

Unequal Junctions

	TC / DC	Nominal S	Size (mm)	45º Codo	00º Codo		
	13/03	Main	Branch	45 Coue	30 Code		
	TS	150	100	0401150X100YJ	0401150X100TJ		
	TS	225	150	0401225YJ	0401225TJ		
	TS	225	100	0401225X100YJ	0401225X100TJ		
	TS	300	225	0401300X225YJ	0401300X225TJ		
	TS	300	150	0401300YJ	0401300TJ		
	TS	300	225	0401300X225YJ	0401300X225TJ		
	TS	375	150	0401375YJ	0401375TJ		
	TS	400	150	0401400X150YJ	0401400X150TJ		
	TS	450	150	0401450X150YJ	0401450X150TJ		
	TS	500	150	0401500X150YJ	0401500X150TJ		
	TS	600	150	0401600X150YJ	0401600X150TJ		

TS = Triple Socket, DS = Double Socket * Other junctions can be fabricated to specific requirements

Level Invert Reducers



	Size A (mm)	Size B (mm)	Code
	150	100	0401ARD150100
	225	150	0401ARD225150
	300	225	0401ARD300225
	300	150	0401ARD300150
	375	225	0401ARD375225
	375	300	0401ARD375300
	450	300	0401ARD450300
	450	375	0401ARD450375
	500	150	0401ARD300150
	600	150	0401ARD600150
	600	300	0401ARD600300

* Other Reducers can be fabricated to order

Adaptors

4	\bigcirc	Size (mm)	To Pipe	Code
	\sim	100 Socket	110mm BS EN 1401 Spigot	0401ARD100110
\bigcirc	\mathbf{Y}	150 Socket	160mm BS EN 1401 Spigot	0401ARD150160

* Other Adaptors can be fabricated to order

Standards

TwinWall products are covered with British Board of Agrément Certificate BBA.

Installation Guide

General

TwinWall unslotted carrier pipes and slotted filter pipes and couplings must be installed in accordance with highway authority requirements and clauses 503, 505 and 518 of the manual of contract documents for highway works.

Installation

- 1) For typical laying, trench and backfilling specification details reference should be made to the manual of contract documents for highway works, volume 3 drawing No F1, Types T and S and F2, Types G, H and I.
- 2) Pipes are cut easily using conventional hand tools, and should be cut square between the corrugations.
- **3)** For a watertight joint, the pipe ends and coupler should be cleaned and the rubber seal fitted externally between the first and second corrugation in the pipe. The inside of the coupler should be lubricated and the pipe pushed fully home to the central register either by hand, or using a lever if necessary.
- 4) TwinWall slotted & unslotted pipes and couplings must be protected against damage from site construction traffic.
- 5) Care should be taken during backfill to maintain the line and level of the pipeline. If necessary, the pipe should be restrained to prevent uplift.

Concrete Drainage Pipe

JDP offer an extensive range of precast concrete flexible jointed pipes from 225mm to 2100mm including rocker pipes, bends, junctions and fittings. Suitable for storm water and sewer drainage applications.

Features and benefits

- Proven 100 year service life
- Manufactured to European and British Standards
- Rigid pipe structure not designed to deform
- Inherent strength and durability
- Minimal bedding requirement less bedding material required and therefore less muck away off site
- Can be laid to depths of 8-12 metres
- Low reliance on site workmanship to achieve installed strength
- High resistance to water jetting
- Low risk of floatation in areas with high groundwater table
- Resistant to rodent attack

Applications

- Storm water drainage
- Sewer drainage

Standard Pipes

Standard Sizes (mm)		225	300	375	450	525	600	675	750	825	900	1050	1200	1350	1500	1800	2100
Internal Diameter (DN)	А	225	300	375	450	525	600	675	750	805	900	1050	1200	1350	1500	1800	2100
Barrel Diameter	В	335	416	501	586	681	776	901	996	975	1080	1266	1460	1620	1790	2130	2460
Socket Diameter	С	392	497	575	665	760	852	960	1060	1130	1235	1420	1590	1800	2010	2380	2650
Effective Length	D	1700	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500	2500
Approx. Weight	Kg.	216	449	590	729	974	1245	1818	2158	1691	2057	2756	3626	4416	5330	7302	9160



Standards

BS EN1916: 2002 / BS5911-1: 2002

Installation Guide

Jointing

- 1) Correctly position and bed the first pipe. Prepare the bedding for the second pipe and hollow out for incoming spigot to prevent bedding material entering the joint.
- 2) Ensure the joint ring is of the correct size and the spigot and socket are clean and undamaged.
- 3) Ensure the joint ring is not twisted, is correctly located on the spigot and is the right way round.
- 4) Lubricants must not be used where 'G' and Lamell rings are supplied. Lubrication is required with the 'integral' joint.
- 5) Ensure the pipe to be jointed is adequately supported. The spigot should be centered carefully in the socket before jointing is completed, making sure bedding material does not enter the joint at any time.

Box Culverts





These units are specifically used for culverting highways, storm and foul sewers, sea outfalls, tunnels and subways, underpasses and stream crossings. In addition they can also be used as tanks for attenuation of storm or foul water and can be provided with dished inverts or channels for dry weather flow.

Features and benefits

- High flow capacities in low gradient and restricted headroom
- Individually designed to meet precise external loading conditions
- For shallow or deep fill

Applications

- Storm and foul drainage
- Attenuation
- Culverting highways
- Subways & underpasses
- Stream crossings

These units are available in sizes 1 m (W) x 0.5m (H) with a flow rate of 0.58 m³/s, to 4 m (W) x 2.5m (H) with a flow rate of 33.53 m³/s, in either 1, 1.5 or 2m lengths depending on the unit.

Standards

Precast concrete box culverts are produced to comply with BS EN 14844 and subject to a third party quality management scheme as a BS Registered manufacturer. Designs and materials are in accordance with BS 5400, BS 8110, BS 8500 and BD 31/01 as appropriate.

Installation Guide

It is generally recommended that the culvert should be installed on a 200mm thick granular bedding as specified for Highway Works (MCHDHW) or UK WIR Ltd 'Civil engineering specification for the water industry'. Alternative bedding designs using insitu concrete and blinding or piling may be required in poor ground.

For further details of structural or hydraulic designs please contact your local JDP.

Channel Drainage

JDP are the only national distributor of the only fully recycled plastic channel drainage system in the UK. This in-depth range of Hauraton surface water channel drainage for house building and many other market sectors, offers high quality products for individual solutions.

The Hauraton Recyfix plastic channel drainage for house building includes a range of channels from 100mm to 300mm width, 60 to 381mm height and loading class up to D400.



Plastic, galvanized and ductile iron gratings, in slotted, mesh, perforated, paverslot and solid options makes this the most comprehensive range on the market.

We also supply channels, in fibre reinforced concrete or Polyethylene – Polypropylene (PE – PP) plastic, up to loading class F900. Please ask your local JDP branch for more details, or see our Commercial, Public & Industrial Buildings product specifier.

Features and benefits

- The high-quality recycling material and optimum shape for PE-PP plastic channels ensure a high stability combined with low weight
- Highest resistant against influences of the weather, frost and road salt and many aggressive liquids
- U-Profile for optimal drainage performance and self cleaning effect particularly supported by the PE-PP plastic material
- Recyfix channels are durably UV-Stabilised and breaking resistant
- Preformed outlets on side and bottom of channel
- Also available as Recyfix Standard Plus with steel edge angle housing
- Comprehensive range of accessories: Trash boxes, end caps, foul air traps, locking catches and numerous grating options

Recyfix-Top Channel

Features and benefits

- Manufactured from recycled plastic
- Recycled HDPE plastic mesh or galvanized slotted grating option
- Paverslot option ideal for Block Paving areas

Applications

- Driveways
- Patios
- Paved areas
- Garage doorways



- And	Code	Description Internal Height/Overall Height
and a	120144050	Recyfix T Channel x 1000mm c/w Plastic Mesh Grating
and the second	120144000	Recyfix T Channel x 1000mm c/w Galvanised Slotted Grating
and a start	120144100	Recyfix Channel Pack incl. 1 Adaptor for pipe joint 70/100mm dia, 2 bolts, 2 end caps and instructions
Sand	120144150	Recyfix T Paverslot Channel x 1000mm

Recyfix-Standard Channel

Features and benefits

- Manufactured from recycled plastic
- Various grating options up to class C250
- Paverslot option ideal for Block Paving areas
- Available in 100 300mm internal width
- Available in 60 381mm overall height
- Can hot tarmac up to the channel

Applications

- Driveways
- Patios
- Paved areas
- Car parks

Recyfix-Standard 100 Channel

	Code	Description Internal Height/Overall Height
Bar	120140230	36/60mm Deep Recyfix Standard Channel x 1000mm
anpan P	120140235	56/80mm Deep Recyfix Standard Channel x 1000mm
	120140200	103/135mm Deep Recyfix Standard Channel x 1000mm
-	120140242	152/185mm Deep Recyfix Standard Channel x 1000mm
- -	120140252	Recyfix Standard Trash Box c/w HDPE Mud Bucket x 500mm
	120140290	Foul Air Trap 100mm ID for Trash Box
	120140295	Vertical Foul Air Trap 100mm ID
	120140281	End Cap (with outlet option)
	120140275	Locking Bar & Bolt - Ductile Iron Slotted/GUGI/Mesh Gratings

Recyfix-Standard 100 Channel Gratings

	Code	Description	Load Class	Length (mm)	Slot Size (mm)
	12015067	Gugi Ductile Iron Mesh Grating	C250	500	20 x 30
	12015066	Ductile Iron Slotted Grating	C250	500	81 x 14
	12015070	Galvanised Slotted Grating	Car Traffic	1000	80 x 10
	12015078	Galvanised Mesh Grating	Car Traffic	1000	30 x 10
	12015180	Galvanised Mesh Grating	B125	1000	30 x 10
	12015185	Galvanised Perforated Grating	A15	1000	6 dia
and the second	120140271	Galvanised Solid Cover	A15	1000	-
	12015715	12.5mm Paverslot Cover x 1000mm – Symmetric C250	C250	1000	12.5
	12015615	12.5mm Paverslot Cover x 1000mm – Asymmetric C250	C250	1000	12.5
5. 1	12015740	Paverslot Access Covers – Symmetric C250 for use with 120140252 Trash Box	C250	500	12.5
Ser 1	12015640	Paverslot Access Covers – Asymmetric C250 for use with 120140252 Trash Box	C250	500	12.5





Recyfix-Standard 150 Channel

Sec.	Code	Description
	120140100	160/192mm Deep Recyfix Standard Channel x 1000mm
	Available on Request	Recyfix Standard Trash Box c/w HDPE Mud Bucket x 500mm
	120140295	Vertical Foul Air Trap 100mm ID
	120140191	End Cap (with outlet option)
	120198260	Locking Bar & Bolt – Ductile Iron Gratings
	120198265	Locking Bar & Bolt – Galvanised Steel Gratings

Recyfix-Standard 150 Channel Gratings

Code	Description	Load Class	Length (mm)	Slot Size (mm)
120140168	Gugi Ductile Iron Mesh Grating, Black	C250	500	20 x 30
120140169	Gugi Ductile Iron Mesh Grating, Galvanised	C250	500	20 x 30
120140160	Galvanised Slotted Grating	A15	1000	80 x 10
120140173	Galvanised Mesh Grating	B125	1000	30 x 10
1201410	12.5mm Paverslot Cover x 1000mm – Symmetric D400	C250	1000	12.5
1201450	12.5mm Paverslot Cover x 1000mm – Asymmetric D400	C250	1000	12.5
1201470	Paverslot Access Covers – Symmetric D400 for use with 120140252 Trash Box	C250	500	12.5
1201475	Paverslot Access Covers – Asymmetric D400 for use with Trash Box	C250	500	12.5

For other sizes please see our Commercial, Public & Industrial Buildings product specifier.

Recyfix-Standard Plus Channel

Features and benefits

- Manufactured from recycled plastic
- Slotted or mesh ductile iron grating options up to class C250
- Steel edge angle housing support
- Available in 100 200mm width internal width
- Available in 60 235mm overall height
- Can hot tarmac up to the channel
- Complies with EN 1433

Applications

- Driveways
- Car parks
- Industrial / commercial

Recyfix-Standard Plus 100 Channel

	with D400 GUGI	Ductile Iron Mesh Grating, Black
	120140369	36/60mm Deep Recyfix Standard Channel x 1000mm
Contract of the second s	120140374	56/80mm Deep Recyfix Standard Channel x 1000mm
A CONTRACTOR	120140370	103/135mm Deep Recyfix Standard Channel x 1000mm
A second	120140390	152/185mm Deep Recyfix Standard Channel x 1000mm
	with C250 GUGI	Ductile Iron Mesh Grating, Black
	120140359	36/60mm Deep Recyfix Standard Channel x 1000mm
Contract of the second s	120140364	56/80mm Deep Recyfix Standard Channel x 1000mm
A STORE STORE	120140360	103/135mm Deep Recyfix Standard Channel x 1000mm
Care -	120140380	152/185mm Deep Recyfix Standard Channel x 1000mm
	with C250 Ducti	le Iron Slotted Grating, Black
	120140362	36/60mm Deep Recyfix Standard Channel x 1000mm
1000	120140367	56/80mm Deep Recyfix Standard Channel x 1000mm
Contraction of the second	120140361	103/135mm Deep Recyfix Standard Channel x 1000mm
ψ.	120140381	152/185mm Deep Recyfix Standard Channel x 1000mm
	with Narrow Slo	t C250 Ductile Iron Slotted Grating, Black
	120140372	36/60mm Deep Recyfix Standard Channel x 1000mm
and the second s	120140377	56/80mm Deep Recyfix Standard Channel x 1000mm
the state of the s	120140363	103/135mm Deep Recyfix Standard Channel x 1000mm





Recyfix-Standard Plus 100 Trash Boxes

	120140355	with D400 GUGI Ductile Iron Mesh Grating, Black
	120140358	with C250 GUGI Ductile Iron Mesh Grating, Black
5	120140356	with C250 Ductile Iron Slotted Grating, Black
1	120140357	with Narrow Slot C250 Ductile Iron Slotted Grating, Black
	120140290	Foul Air Trap 100mm ID for Trash Box

Recyfix-Standard Plus 150 Channel

	with GUGI Ductile Iron Mesh Grating, Black		
	120141080	160/192mm Deep Recyfix Standard Channel x 1000mm D400	
Search .	120141075	160/192mm Deep Recyfix Standard Channel x 1000mm C250	

For other sizes please see our Commercial, Public & Industrial Buildings product specifier.

Standards

Standard Plus channel complies with EN 1433 Ductile iron gratings BS EN124

Installation Guide

- Prepare trench by laying crushed stone and compacting the sub-soil frost resistance.
- Install end caps to the first and last channels. Cut out apertures for pipe joint, screw on adapter and connect pipework.
- The adjoining surface must be 3-5mm higher than the top of the channel system.
- Horizontal forces on the channel or concrete benching are to be eliminated by the use of expansion joints.
- Channels must be prevented from being damaged mechanically during installation, e.g. during compacting of the adjoining surfaces.
- Channels should be installed with grating in place.

Land Drainage

JDP offer a comprehensive range of land drainage pipe and associated products, we also understand that whatever drainage is required, efficient drainage is essential to maintain a good ground surface. Loss of use due to water logging or turf damage can result in unable to use land.

An efficient land drainage pipe will eliminate water logging and improved drainage will result in improved soil structure and a better quality vegetation and grass.

Purpose-made junctions and connectors should always be used when joining pipes.

Features and benefits

- Flexible
- Cost effective
- Land drainage to BS4962
- 60mm to 200mm available in coils
- Comprehensive range of fittings
- Members of a recognised drainage association
- Knowledge and understanding of drainage applications

Perf Coil Kite Marked BS4962

	050460HC25	60mm Perf Land Drain Coil x 25m PVC
	050460HC50	60mm Perf Land Drain Coil x 50m PVC
11	050460HC150	60mm Perf Land Drain Coil x 150m PVC
2	050480HC25	80mm Perf Land Drain Coil x 25m PVC
	050480HC50	80mm Perf Land Drain Coil x 50m PVC
	050480HC100	80mm Perf Land Drain Coil x 100m PVC
	0504100HC25	100mm Perf Land Drain Coil x 25m PVC
	0504100HC50	100mm Perf Land Drain Coil x 50m PVC
	0504100HC100	100mm Perf Land Drain Coil x 100m PVC
	0504160HC25	160mm Perf Land Drain Coil x 25m PVC
	0504160HC50	160mm Perf Land Drain Coil x 50m PVC
	0504200HC40	200mm Perf Land Drain Coil x 40m PVC

Uunperf Coil Kite Marked BS4962

the war	050460HC150U	60mm Unperf Land Drain Coil x 150m PVC
	050480HC100U	80mm Unperf Land Drain Coil x 100m PVC
	0504100HC100U	100mm Unperf Land Drain Coil x 100m PVC
	0504125HC75U	125mm Unperf Land Drain Coil x 75m PVC
	0504160HC45U	160mm Unperf Land Drain Coil x 45m PVC
	0504160HC50U	160mm Unperf Land Drain Coil x 50m PVC
	0504200HC40U	200mm Unperf Land Drain Coil x 40m PVC







	0504SP6025	60mm Perf Coil x 25m
	0504SP6050	60mm Perf Coil x 50m
	0504SP60150	60mm Perf Coil x 150m
	0504SP8025	80mm Perf Coil x 25m
	0504SP8050	80mm Perf Coil x 50m
	0504SP80100	80mm Perf Coil x 100m
	0504SP10025	100mm Perf Coil x 25m
	0504SP10050	100mm Perf Coil x 50m
	0504SP100100	100mm Perf Coil x 100m
	0504SP16040	160mm Perf Coil x 40m
	0504SP16045	160mm Perf Coil x 45m
	0504SP16050	160mm Perf Coil x 50m

Unperf Coil Non Kite Marked

	0504SU60150	60mm Unperf Coil x 150m
	0504SU8050	80mm Unperf Coil x 50m
	0504SU80100	80mm Unperf Coil x 100m
	0504SU10025	100mm Unperf Coil x 25m
	0504SU10050	100mm Unperf Coil x 50m
	0504SU100100	100mm Unperf Coil x 100m
	0504SU16040	160mm Unperf Coil x 40m
	0504SU16045	160mm Unperf Coil x 45m
	0504SU16050	160mm Unperf Coil x 50m

Wrapped Filter Coil

	050560WCX150	60mm Wrapped Perf Land Drain Coil x 150m
	050580WCX100	80mm Wrapped Perf Land Drain Coil x 100m
	0505100WCX100	100mm Wrapped Perf Land Drain Coil x 100m
	0505160WCX50	160mm Wrapped Perf Land Drain Coil x 50m

Connectors

2	0511DC60	60mm Coil Connector
	0511DC80	80mm Coil Connector
	0511DC100	100mm Coil Connector
	0511DC125	125mm Coil Connector
	0511DC160	160mm Coil Connector
	0511DC200	200mm Coil Connector

Surface Water Drainage

End Caps

	0511HEC60	60mm Coil End Cap
	0511HEC80	80mm Coil End Cap
	0511HEC100	100mm Coil End Cap
	0511HEC125	125mm Coil End Cap
•	0511HEC160	160mm Coil End Cap

Branches

051060MB	60mm Junction
051080MB	80 x 60/80mm Multi Junction
0511LDJ100	100 x 60-100mm Multibranch Junction
0510CDJ10M	80/100 x 60-100mm Maxi Multi Junction
0511LDJ160	160 x 60-160mm Multibranch Junction
0510CDJ160M	125/160 x 60-160mm Maxi Multi Junction
	051060MB 051080MB 0511LDJ100 0510CDJ10M 0511LDJ160 0510CDJ160M

Standards

Plastic land drainage BS4962 where specified.

Installation Guide

Drainage plans should clearly show the location of the drain runs, spacings, levels and other relevant information necessary for the correct installation.

The minimum depth of cover on any piped drain should be at least 450mm to protect the pipe from damage due to surface traffic or maintenance operations such as deep spiking.

Inspection chambers and silt traps should be incorporated into the scheme to allow for inspection and maintenance.

Consideration should be given as to whether the soil arisings from the works are to remain on site or be removed.

The choice of permeable backfill is imperative to the long-term success of the drainage scheme as, by definition, it allows passage of water from the surface to the pipe. All backfill material placed over drains should be durable, evenly graded and free from pollutants.

All drainage outfalls into watercourses should incorporate suitable headwalls fitted with a vermin guard.



Headwalls

Many new developments require outfalls into streams & rivers or to balancing ponds. JDP supply a range of headwalls to prevent bank erosion, including small glass reinforced concrete (GRC), large preformed concrete and also polymer headwalls. This range caters for pipe from 100mm to 900mm diameter.

These can be fitted with a full range of accessories including handrails, pipe guards, trash screens, anti vermin grills, flap valves and penstocks.

Features & Benefits

- Prefabricated off-site
- Speedy and efficient to install (minimising on-site labour)
- Particularly applicable in cases where limited installation time is given due to tides etc.
- Cost effective solution
- No on-site shuttering required
- Polymer headwalls can be made in a range of colours and from recycled material

GRC Headwalls

	0599GRCDI	Glass Reinforced Concrete Pipe Drain Inlet
	0599GRCHEAD	Glass Reinforced Concrete Headwall (Large) B102
	0599GRCHEADWALL	Large Glass Reinforced Concrete Headwall
	0599HEADWALL	480mm x 440mm GP Headwall



Preformed Concrete Headwalls

PolyBed

PolyBed is a unique Recycled expanded Polystyrene aggregate supported drainage system, fully accredited by national bodies such as Scottish Type Approval Scheme for building (STAS), Local Authority Building Control (LABC) and National House Building Council (NHBC).

In shallow application PolyBed offers a consistent void ratio in excess of 30%, which compares favourably with natural aggregates which typically vary between 10-30%. It is especially good for installation in areas with poor access such as railway embankments.

PolyBed can be used in conjunction with PolyAgg to give greater drainage and storage performance and for earth retaining structures.

Features & Benefits

- Unique solutions for Filter Drain and SUDS requirements
- Manufactured from fully recycled feedstock
- Independently validated and approved by national bodies, LABC/ STAS/ NHBC
- Extremely lightweight in 3 metre lengths
- Attenuation averages 50% improvement over indigenous aggregate
- Proven applications in sport and leisure
- Civil engineering applications including retaining walls
- Reduced overall installation cost

Applications

- Railway embankments
- Reduced access areas
- Wet areas that heavy machines cannot access
- Retaining walls
- SUDS solutions
- Storm water drainage and soakaways
- Land drainage

<u></u>	Part No.	Description	Typical Application
	0530FD1231G	300mm x 3m Single Wall Geotextile wrapping	Sub surface drainage, soakaways, french drains and filter infiltration drains, infiltration systems, foundation and retaining wall drainage systems
	0530FD1232	300mm x 3m TwinWall	Unperforated carrier pipe wall unperforated for all storm water carrier pipe applications
	0530FD1206	300mm EPS collar	All Single Wall applications, polystyrene surround for connecting coupler
	0511DC100	Single wall connecting coupler	For connecting single wall pipe lengths
	04034TW205	TwinWall connecting coupler	For connecting TwinWall pipe lengths
	04034TW117	TwinWall sealing ring	For sealing TwinWall connecting couplers



PolyAgg

PolyAgg is a replacement for indigenous aggregate in drainage and earth retaining structures; PolyAgg is manufactured in 300mm diameter bundles x 3 metre lengths. The product benefits from being extremely lightweight in manufacture.

PolyAgg offer voids, which achieve at least 50%, increase over natural aggregates.

PolyAgg can be used in conjunction with PolyBed to give greater drainage and storage performance.

Features & Benefits

- Extremely lightweight aggregate replacement
- Up to 40% quicker to install than standard aggregate
- Voids achieve a 50% increase over natural aggregate and therefore offer substantially improved water storage
- Proven application in civil engineering projects such as retaining walls and embankments
- Manufactured from fully recycled feedstock
- Manufactured in 3 metre lengths
- Reduced overall installation cost

Applications

- Retaining walls
- SUDS solutions
- Storm water drainage
- Land drainage
- Extra soakaway capacity for PolyBed



Part No.	Description	Typical Application
0530FD1230	300mm x 3m Lightweight fill	All Single Wall applications, polystyrene surround for connecting coupler

Standards

NHBC and STAS approved for building and filter beds Accredited by LABC BBA approved TwinWall BS4962 approved single wall land drain

Installation Guide

For standard trench applications

For single pipe installations it is recommended that a 450mm wide trench be excavated.

Connect lengths together using appropriate coupling. Lay lengths into trench. Backfill with material excavated.

For retaining wall applications

Hold the PolyAgg in place either by tying or using rigid steel bars, backfill directly up against the PolyAgg.



Surface Water Management (SUDS)

- SUDS Solutions (Infiltration/Attenuation)
- Infiltration Geotextiles & Attenuation Membranes
- Flow Control Valves & Chambers
- Silt Traps, Leaf Filters & Treatment Filters



At JDP we understand the concept of sustainable water management and that it is a major driver in today's UK housebuilding industry. This is why we offer a range of solutions to meet specific site requirements. We also offer technical and installation support, please contact your local branch for details.

Recent legislation has seen more pressure on local planning authorities and specifiers to implement Sustainable Urban Drainage Solutions (SUDS) wherever possible. As this legislation builds it becomes imperative to specify the correct sustainable drainage solution.



Sustainable Drainage Systems are much more than

a single product. The objective is to design a system to deal with the flow at source, rather than transferring the problem further down the watercourse:



- Each site should tackle the problem with management and control measures. These should be designed to meet most objectives
- Control and manage stormwater to reduce the impact of urbanization
- Protect and enhance local water quality and the recharge of groundwater

• Reuse stormwater to reduce load on local resources and to integrate into the local environment

JDP has a number of products that provide effective and practical Infiltration / Soakaway & Attenuation / Storage Sustainable Urban Drainage Systems. Used in a combined approach these products can provide a system that offers the best solution required for your current or future projects.

This approach means knowledge and understanding of a wide variety of techniques and products for SUDS solutions is available to you through JDP, including the connecting Pipework, Gullies, Leaf Filters, Flow Control Valves and Membranes that complete the system.





SUDS Solutions (Infiltration/Attenuation)

Modular Crates, Rainbox® Inspectable Crates, Large Diameter HDPE Pipes, Tunnel System, Attenuation Tanks,

Modular Crates

These modular plastic crates have lead the way in attenuation and infiltration in recent years. Wrapped in either a non permeable membrane and protective fleece (needle punched fibre geotextile) for storage, or a permeable geotextile for soakaway (both available from JDP), they provide capacities from 190 litres to an infinite size.

Applications

- Soakaway or storage applications
- Trafficked or non trafficked applications
- Large or small storage capacity
- Shallow and deep excavation up to maximum of 5.5m in good ground
- Narrow strips, or use in restricted areas
- Any storage volume from 1 crate to 1000+

Features & Benefits

- 95% void ratio providing greater storage capacity and reduced excavation and disposal costs
- Modular units allow flexibility of shape-ideal for shallow excavation systems, narrow strips, or use in restricted areas
- For trafficked areas upto a minimum 60 tonnes per square metre load bearing capacity (Extra duty only)
- BBA Certified
- Cells are light enough to carry providing health and safety benefits
- Speed and ease of installation

Lite

non trafficked applications



2m depth in good ground conditions 1m (I) x 0.5m (w) x 0.4m (h) 20 ton compressive strength

Heavy trafficked applications



3.8m depth in good ground conditions 1m (I) x 0.5m (w) x 0.4m (h) 40 ton compressive strength

Extra trafficked applications



5.5m depth in good ground conditions 1m (I) x 0.5m (w) x 0.21m (h) 60 ton compressive strength

Unique Hybrid Solution

Benefits

Lite, Heavy and Extra crates can be integrated together on an installation, resulting in a hybrid modular system containing all three versions or just Heavy and Lite cells which accommodates the differing burial depths, offering significant cost saving in some applications.



Rainbox® Inspectable Crates

JDP offer a modular plastic inspectable crate that can be inspected via manholes connected directly to the system.

The dimensions of the two versions of the Rainbox® II crate (inspectable and non-inspectable) are identical, allowing optimization of the design of the structure. The inspection network can be composed in a systematic way (all the modules of the lowest level of the tank) or in a more targeted way (arrangement of several main channels allowing an adequate inspection of the structure).





The presence of an ND160 channel within the inspectable version enables inspection through the passage with a camera.

The complete operation can be followed at the surface on control monitors to ensure that the under ground tank is free of silt. The Rainbox® module has been tested and will withstand the use of a hydrojet at a pressure of 120 bars.

As with other crates the Rainbox® crates are wrapped in either a non permeable membrane and protective fleece (needle punched fibre geotextile) for storage, or a permeable geotextile for soakaway applications.

Applications

- Inspectable or non inspectable applications
- Soakaway or storage applications
- Trafficked and non trafficked applications
- Large or small storage capacity
- Shallow and deep excavation
- Narrow strips, or use in restricted areas
- Any storage volume from 1 crate to 1000+

Features & Benefits

- Inspectable and cleanable
- Easily inspected with a push-rod camera
- Prefitted inspection modules, ready for use in the tried and tested modular crate system
- 95% void ratio
- 60 Tonne loading capacity
- Burial upto 5m depth
- Modules are 16kg, light enough to carry
- Speed and ease of installation





General characteristics

Versions Dimensions	-	inspectable / non-ins L 1200 x W 600 x H	pectable 420mm	1.1	11
Gross volume	-	300 L			3 AN
Useful volume	-	285 L			- Start
Void ratio	-	95%			·
Materials	-	PP			210
Recyclable	-	100%			· .
Module link-up	-	by clips		and the second s	

Specific characteristics

	Connectio		
Code	Standard in ND 110/125/160	Optional in ND 200/250/315	Weight
1120360014 Version non inspectable	3 x ND110 + 3 ND125 + 6 ND160*	Specific crate (consult us)	Approx 15kg
1120360015 Version inspectable	6 x ND110 + 6 ND125 + 12 ND160	Specific crate (consult us)	Approx 16kg
1120369012 Link Clips	-	-	-

* Optimisable to: 6 xND110 + 6 ND125 + 12 ND160 (use of a reducer).

Design Layout

The inspection network can be composed in a systematic way (all the modules of the lowest level of the tank) or in a more targeted way (arrangement of several main channels allowing an adequate inspection of the structure).

The inspection of the structure is done from the lower level which constitutes the zone closest to the potential sedimentation. The dimensions of the various versions of the Rainbox® II module (inspectable and non-inspectable) being identical, optimisation of the design of the structure is thus made possible by the association of the two types.



Large Diameter HDPE Pipes

Large diameter HDPE pipes are a tried and tested method for carrying stormwater underground. To form a tank structure they include welded end plates and can also include manifolds to join individual lines together.

Applications

- Soakaway or storage applications
- Trafficked or non trafficked applications
- Large or small storage capacity
- Deep excavation systems to maximum of 6m as standard
- Where large amounts of silt & debris contamination is present in stormwater runoff
- Where access for inspection is a requirement
- Accepted for adoption by water authorities *may vary between regions
- Ability to design and manufacture pipe strength to suit the exact application providing cost effective solutions
- Highways Agency approved

Features & Benefits

- Large range available up to 3000mm diameter
- Trafficked areas up to HGV loading or non trafficked applications
- BBA Certified
- Tanks of any size can be fabricated
- Can be configured to provide access for inspection
- Lightweight for ease of handling and installation combined with high stiffness and durability
- Suitable for flushing and jetting maintenance
- Pipe strength can be customized to suit site conditions









Tunnel System

The Hydro Chamber tunnel system is backfilled with 35-50mm clean washed crushed stone, the stone / chamber combination provides excellent structural strength as shown in independent field tests where the chambers were exposed to loads four times that expected in service.

Applications

- Soakaway or storage applications
- Trafficked and non trafficked applications
- Excavation depths in excess of 3.5m
- System sizes from $2m^3 >10,000m^3$
- Large or small storage capacity
- Where access for inspection is required
- Accepted for adoption by water authorities *may vary between regions

Features & Benefits

- WRc certification
- Superior structural strength
- Field tested to 200kN single axel load
- Silt / grit management system
- Suitable for visual and camera inspection
- Suitable for flushing and jetting maintenance
- Unique watertight pipe joint (HydroSeal)
- Stackable for transport and site storage
- Foundation design guidelines
- Technical support and project management available

HydroChamber 800 Specification



Overall Dimensions (mm): 2325 x 1265 x 800 Installed Dimensions (mm): 2175 x 1265 x 800 Nominal Chamber Storage (m³): 1.40


Attenuation Tanks

These GRP preformed tanks are made off site ready for installation in a concrete surround. As well as Attenuation Tanks, Rainwater Harvesting Tanks can be used as part of a SUDS solution, see the Water Recycling section in our Commercial, Public & Industrial Buildings Specifier.

Applications

- Storage applications
- Trafficked or non trafficked applications
- Large or small storage capacity an unlimited size can be achieved by interconnecting tanks
- Practically all ground conditions, even high water tables
- Accepted for adoption
- Where access for inspection is required

Features & Benefits

- Easy and quick to install, no complicated on site assembly
- Trafficked or non trafficked applications
- Deep excavation systems to 5m
- Suitable for all ground conditions
- BBA certified tanks available
- Available in 2 in line and 1 off line systems
- Suitable for flushing and jetting maintenance
- Single tanks up to 275,000lts can be interconnected to create larger storage volumes

In-Line Attenuation Tanks

In-line systems are designed to allow water to back up through the tank, and drain by gravity through the separate GRP chamber, housing a vortex flow regulator, or within the balancing tank itself.

V1: Orifice Tank Systems



- Based on pressure, with flow being regulated through holes (varying sizes) in an orifice plate
- Simple and inexpensive system

V2: Vortex Control Tank Systems



- Based on creating a rotating flow around an opening at high speed to limit outflow
- Works in a similar way to a bath: a vortex reduces the flow even though there is water to drain

Off-Line Attenuation Tanks

Off-line attenuation tanks have a flow regulator in a separate chamber, and so allows water to build up and even overspill into storage tanks to cope with even the worst of situations.

V3: Off-line System





Infiltration Geotextiles & Attenuation Membranes

For the installation of Infiltration and Attenuation Crates JDP offer a range of permeable geotextiles and non-permeable membranes and protective fleeces (needle punched fibre geotextile), designed to complete the system. In addition to these products a supply and fit service can also be offered for large projects, particularly where a sealed attenuation tank is required.

Features & Benefits

- Membranes for all applications
- Complete systems
- Supply and fit option

Applications

- Wrapping crates for Infiltration / Soakaway applications
- Wrapping crates for Attenuation / Storage applications

Products

Infiltration / Soakaway Applications

For soakaway applications we provide woven and non-woven geotextiles. These offer high permeability and strength, ideal for infiltration crates.

See Road Building section for our full range of geotextiles.

Attenuation / Storage Applications

For storage applications we offer impermeable polyethylene membranes in a roll form along with joining tapes and top hat pipe seals to enable sealing of pipe inlet/outlet junctions with storage tank. Together with needle punched Fibre (non-woven) geotextile protection fleece to minimise risk of puncture to impermeable membrane from sharps in backfill material.

Installation Service





If a fully welded system is required we can supply materials and labour to site. The contractor shall excavate the hole whilst our fully approved installer will install the crates, geotextile protection fleece, and impermeable membrane with fully welded seams (any membrane thickness from 0.75mm to 2mm is available) and securely welded pipe entries and vent pipes. The contractor is then left to backfill around tank.

Standards

Supply and fit option - Our suppliers carry all necessary public liability insurances and CIS5 certification.

Flow Control Valves & Chambers

JDP supply Flow Control Valves as individual units (in stainless steel or plastic) or complete with chamber (in concrete or HDPE) to bespoke design as part of a SUDS system to control the rate at which stormwater leaves a particular site. A typical application of these valves is to control the flow from storm water attenuation / infiltration tanks preventing downstream flooding during periods of heavy rainfall.

The valve controls fluid flow by hydraulic effect without requiring moving parts. At low flow rates, the valve allows water to enter through the inlet passing to the outlet unrestricted. However, at high flow rates water enters through the inlet with enough energy to create a vortex in the chamber. This vortex controls flow to the specified discharge rate.



Design Requirements

- Head Depth from invert level of outlet to the top water level upstream
- Flow Required discharge
- Type of application ie. foul, combined or stormwater
- Any details of the proposed application, manhole details or control chamber proposals

Applications

Flow Controls can be used wherever there is a need to limit the rate of forward flow of surface water within a drainage system. Typical schemes include:

- Source Control/SUDS Schemes
- Traditional Attenuation Storage
- Energy Dissipation / Velocity Control

Stormcheck Vortex Flow Control Chamber

These HDPE plastic chambers are made to specific requirements according to the application, providing a sealed chamber ready to install complete with a stainless steel flow control device. This makes the Stormcheck Chamber one of the easiest products to install.







Features & Benefits

- Pre-Fabricated to customer specification
- Choice of depth up to a maximum invert level of six metres
- Choice of chamber size, 1050mm, 1200mm, 1500mm, 1800mm
- Lightweight chamber design
- Tough and durable product
- A sealed chamber, built to exacting specifications and delivered to site ready to be installed
- The factory fitted vortex flow control device saves the contractor the time and expense of on-site construction
- Vortex flow control devices are widely recognised as being the most hydraulically efficient means of flow regulation. The unique design utilising no moving parts, means they are virtually maintenance free.
- Stormcheck Chambers are manufactured with an integral sump for silt catchment and an optional drain down system to ease maintenance and silt removal
- The Stormcheck Chamber can be integrated with any SUDS solution

Hydro-Brake

One of the easiest to install, is the Hydro-Brake® Chamber, supplied by CPM which comprises a precast reinforced concrete chamber base containing a bespoke Hydro-Brake® Flow Control Valve.

A range of outlet pipe sizes are also available to suit site requirements. Once lifted into position, the connecting pipework can be installed. Depending on the overall depth of chamber required, further concrete rings can be added and the cover slab positioned (additional concrete rings and cover slab sold separately).



Features & Benefits

Bespoke Design

Every Hydro-Brake® Chamber includes a made-to measure Hydro-Brake® Flow Control designed to suit the site specific design. Standard units also have benching for the flow control preformed in the chamber. Step Irons can also be pre-fitted within the chamber if required.

• Inlets / Outlets

Inlet hole(s) of up to 600mm diameter ID can be cored / formed to the customer's exact specification. A range of outlet sizes is available to suit.

Rapid Installation

The Hydro-Brake[®] Chamber is delivered to site as one complete unit with the Hydro-Brake[®] Flow Control already installed in position. This guarantees the flow control is fitted correctly.

• Simple Construction

The strength of the reinforced concrete chamber eliminates the need for a concrete surround.

Cost Saving

The use of a Hydro-Brake[®] Flow Control can reduce the upstream storage volume requirement by up to 30%. This can significantly reduce capital expenditure.

Minimal Maintenance

The integral Hydro-Brake® Flow Control is totally self-activating, has no moving parts and requires no power to operate.

A Diameter (mm)	B Height (mm)	C Height to Invert (mm)	D Height from to Top (mm)	Weight (Kg)	Outlet Size Options (mm)	Maximum Inlet Diameter (mm)
1200	1250	630	620	2150	150, 225 & 300	300
1500	1750	710	1040	3970	225/300 & 375/450	600

Option 1 - Hydro-Brake® Chamber with High Level Overflow



This chamber includes an emergency overflow. The design incorporates a cored hole at the desired height to accommodate a reverse backdrop pipe arrangement. This is an alternative design to a weir wall configuration and can be incorporated in the 1200mm, 1500mm and 2000mm diameter chambers (see Option 3).

Option 2 - Hydro-Brake® Chamber with Adjacent Penstock



Although the Flow Control includes an integral bypass allowing for drain down and full rodding / jetting, certain Water Companies may also require a completely separate bypass. In these instances we can provide a 150, 225 or 300mm diameter penstock (suitable for up to 6m on seating pressure). The penstock is mounted on the headwall by the side of the Flow Control which can be opened for emergency discharge. Please note that this design is only available in the 1500mm and 2000mm diameter chambers. If required, both the Flow Control and penstock can be mounted on a weir wall (see option 3).

Option 3 - Hydro-Brake® Chamber with Integral Weir Wall



This chamber design includes a reinforced concrete weir wall, complete with premounted Flow Control. The weir wall can be constructed at various heights to suit design requirements.

As with the previous option, the weir wall configuration can also include a penstock located alongside the Flow Control (if required).

Please note that this option is only available with the 2000mm diameter chamber.

Option 4 - Hydro-Brake® Chamber with Complex Flow Controls



With increasing legislation requesting staged discharge rates linked to an assortment of return periods, solving for a single flow rate under a given return period is not always acceptable. Under these circumstances the outflow hydrograph from the control chamber (the point at which the forward flow is restricted) is particularly complicated and cannot usually be achieved with the use of a single flow control device.

With the use of appropriate modelling software a solution can be found using 'complex flow controls'- placing two or more controls in parallel.





Hydro-Valve

The plastic Hydro-Valve is designed with a curved back to be installed on the internal wall of a 1200mm diameter concrete or plastic chamber.

Features & Benefits

- Manufactured to customised specifications
- Self activating and self cleaning
- Minimal maintenance
- The outlet opening is 3-6 times larger than conventional controls
- Reduce storage requirements by up to 30% compared to an orifice plate
- Curved back with neoprene seal allows ease of installation compared with conventional vortex valves
- The Hydro-Valve unit is attached to the inside of a standard 1200mm (diameter) manhole with six steel anchors (supplied)
- Available to suit rectangular manholes upon request
- Full installation drawings are supplied with Hydro-Valve

JDP can also supply individual Stainless Steel flow control valves



Silt Traps, Leaf Filters and Treatment Filters

One of the topical issues with Attenuation and Infiltration systems is how to prevent silt entering the system and how to manage silt that does enter the system. Prevention is the obvious first choice.

Additionally minimising pollution of the natural watercourse, in line with new legislation and guidelines such as the Water Framework Directive is becoming increasingly important. This is where the use of a Treatment Filter is necessary.

Silt Traps

These bespoke fabricated solutions stop the ingress of silt and debris through the use of specific filters designed to suit particular requirements.

Applications

All SUDS solutions

Features & Benefits

- Prevents ingress of debris into structure, extending its useful life
- Lightweight chamber design
- Tough and durable product
- Pre-fabricated off-site and delivered ready to install
- Choice of chamber sizes from 1050mm, 1200mm, 1500mm, 1800mm and 2100mm
- Inlets and outlets supplied with integral sockets as standard
- Provides easy access maintenance points for silt collection prior to the attenuation structure

Leaf Filters

As with the Silt Traps, Leaf filters are a bespoke fabrication to stop the ingress of leafs through the use of specific filters. Their use is predominantly in conjunction with GRP Attenuation Tanks.

Applications

Used with GRP Attenuation Tanks

Features & Benefits

- Self cleaning
- Low maintenance
- Filters for roofs up to 3000m2
- Pre-fabricated off-site and delivered ready to install
- Tough and durable product

Treatment Filters

New legislation and guidelines such as the Water Framework Directive calls for stricter water quality discharged into the environment. JDP offers regulatory-compliant solutions for dealing with the issues of water quality from surface water run-off from roofs, car parks, and the most polluted roads, even in heavily trafficked areas.

These products are not a substitute for use as Oil Separators, see Surface Water Drainage section for Oil Separators.

Applications

Highway runoffSUDS projects

- Car parks
- Industrial commercial areas
- Vehicle maintenance wash down
- Wetland projects







Features & Benefits

- 4 stage filtration for oil retention, chemical separation, filtration and sedimentation
- Low maintenance
- Source control
- Easy to install
- Off site solution
- 3 versions for, traffic, heavy traffic and roof applications



Downstream Defender®

The Downstream Defender (*), supplied by CPM, is an ideal solution for the prevention or reduction of solids and pollutants entering water storage areas where settlement can occur, leading to a build up over time. The system is a hydrodynamic separator which is incorporated into a reinforced concrete chamber.

The design of the internal components directs stormwater downwards and around the periphery of the chamber inducing a rotational flow. A unique flow pattern created within the



chamber encourages the solids separation, the silt sediment sinks and floatable debris floats. Both are then prevented from re-entering the main flow path.

Whilst this product has an oil retention element it is not a substitute for Oil Separators, see Surface Water Drainage section for Oil Separators.

Features & Benefits

- Available in sizes 1000mm to 3000mm diameter
- No moving parts
- Highly effective with minimal head loss
- Inline & same level inlet & outlet pipes
- Small footprint
- No concrete backfill required
- 1000mm & 1200mm sizes delivered complete
- Other sizes delivered in easy to construct component systems



Rainwater Storage & Harvesting

- Fully Integrated Rainwater Harvesting Garden Rain Trap
- Above Ground Rainwater Storage & Harvesting



Scarcity of water and in particular it's fluctuating availability due to changing rainfall patterns is a key driver for the need to harvest rain as a key resource in all areas of the country.

From something as simple as a Water Butt to a fully integrated Rainwater Harvesting system JDP can offer solutions for new build as well as retrofit solutions.

Fully Integrated Rainwater Harvesting

JDP offers the complete range of rainwater harvesting systems. Rainwater harvesting is not a new concept. Only recently have the benefits been recognised now that mains water supplied from the tap has become a much more precious (and restricted) commodity.

The system works by taking the rain from your roof gutters, filtering out leaves and debris and storing the water in an underground tank.

The water is then pumped into the house to be used for non-potable applications such as toilet flushing and washing machines. If the tank runs empty, the system switches to mains supply.

JDPs rainwater harvesting systems offers a host of benefits to both domestic properties and large commercial buildings, whether as a new-build or retrofit option:

Key Facts

- Average domestic water consumption
- = 157 litres per day*
- Average daily cost per household = 81 pence per day*
- The average household water bill has increased 39.1% since 1989 *
- The roof on an average 4-bed family home captures more than 100,000 litres of rainwater each year**
- A typical family uses 70,000 litres of water each year on toilet flushing, clothes washing and outside use**
- One third of all water used in the home gets flushed down the toilet



- Rainwater harvesting in Germany is over 100 times the current use in the UK
- Rainwater harvesting in the UK has increased by approximately 300% in the last two years
- * Source: OFWAT 'water facts', May 2006
- ** Source: UK Rainwater Harvesting Association (UKRHA)



There are two system options Gravity or Direct. The size of the holding tank for either of these systems is determined by the specific site requirements. Together with our partners JDP can offer a solution to suit these precise needs.

Gravity System

The Gravity System is ideal for domestic applications. The main advantage of this system is that in the event of power failure or rain stocks running dry, the system will automatically switch to mains water supply to ensure continuity of service.

Direct System

The Direct System is used where it is impractical to have a header tank, therefore water is pumped straight from the underground holding tank to the various appliances. The main advantage of this system is that rainwater is delivered to the appliances at mains pressure (3.5bar).

Standards

BBA Certificate

Installation Guide

Easy to install, simple to maintain, automatic in operation; the domestic rainwater harvesting system has been developed to provide the homeowner with a 'fit-and-forget' system, ensuring an automatic supply of harvested rainwater.

Designed to be as user-friendly as possible, the system utilises much of the existing pipework within the building. The main requirement being the installation of a rainwater storage tank (with internal pump), selected to meet the roof area's water catchment yield and household requirements.

For smaller non integrated rainwater storage systems see Above Ground Rainwater Storage & Harvesting page 118.

Garden Rain Trap

Garden rain traps offer the convenience of a water butt, but with the benefit of being concealed below ground and being able to store vastly more rainwater. The system can be used all year round to water the garden, operate sprinklers or wash the car.



Features & Benefits

- Inexpensive underground storage
- Virtually maintenance free
- Supplied with 30m hose and integral water pump
- Simple on/off switch operation
- Integral leaf filter
- Available in GRP or PE

Applications

• Rainwater storage below ground

	1406RT2800	1406RT3800	1406RT4600
Capacity Itr	2800	3800	4600
Diameter mm	1905	2070	2080
Height (inlet/outlet) mm	1565	1795	2035
Weight kg	125	180	210

Installation Guide

Easy to install, simple to maintain, automatic in operation; the domestic rainwater harvesting system has been developed to provide the homeowner with a 'fit-and-forget' system.





Above Ground Rainwater Storage & Harvesting

Water has become a key environmental issue and with charges for its use and for sewerage services, it makes no sense for us to let gallons of free rainwater run off our roofs and straight down the drain.

For this reason JDP supply a comprehensive range of plastic water butts for domestic rainwater storage. For the serious water user JDP can provide larger plastic tanks for rainwater storage, suitable for above ground, or underground tanks manufactured in Fibreglass (GRP). Both offer significantly larger volumes of storage than standard water butts.

Water Butts

Efficient, compact and inexpensive, these rainwater storage units are a smart practical addition to any property.

Features & Benefits

- Manufactured from high quality medium density polyethylene tough and durable
- Weatherproof
- Maintenance free
- Ultraviolet stabilised for protection from sunlight
- Rotationally moulded in one piece to provide a stress-free container of uniform wall thickness
- Recyclable

Applications

• Rainwater storage

	Code	Description	H.	Code	Description
11	1406WB100BG	Capacity: 100ltrs Diameter: 380mm Height: 940mm		1406WB190BG	Capacity: 190ltrs Diameter: 420mm Height: 960mm Lockable Lid

Code	Description	Code	Description
1406WB200BG	Capacity: 200ltrs Diameter: 660mm Height: 970mm	1406WB280BG	Capacity: 280ltrs Diameter: 660mm Height: 848mm Lockable lid

Code	Description		Code	Description
1401WBSTAND	Suitable for 190 and 200 ltr water butts. Other sizes available.	1	1401RAINDIVKIT	For diverting rain from 65mm square or 68mm round downpipes

Code	Description		Code	Description
1406RAINCONKIT	For connecting two butts together	1	1406WC10STD	10 Ltr Watering Can with Rose

RainStore Tanks

Providing larger storage capacity than the standard water butt, these rainwater storage tanks are styled to compliment any property and come complete with a standard diverter kit.

Features & Benefits

- Manufactured from high quality medium density polyethylene tough and durable
- Weatherproof
- Maintenance free
- Ultraviolet stabilised for protection from sunlight
- Rotationally moulded in one piece to provide a stress-free container of uniform wall thickness
- Recyclable

Applications

• Rainwater storage

Code	Description	1 2	Code	Description
1406RS333CR #	Ltr/Gal: 333 Diameter: 600mm Height: 1635mm		1406RS555CR #	Ltr/Gal: 555 Depth: 540mm Width: 880mm Height: 2085mm

Code	Description	Code	Description
1406RW700 *	Ltr/Gal: 700 Length: 1550mm Width: 650mm Height: 978mm	1406RW900	Ltr/Gal: 900 Length: 1510mm Width: 695mm Height: 1190mm

Also available in green

* Also available in sandstone and granite

For larger rainwater storage tanks and potable water storage tanks please refer to our Commercial, Public and Industrial Buildings or Sports and Recreation Parks product specifier.

Installation Guide

All tank installations must be sited on a fully supported flat base and comply with manufacturers instructions for the specific size of tank used.



Ducting Systems



- Coloured Twinwall Ducting Twinwall Split Duct
- General Purpose Twinwall Ducting
- ENATS 12-24 Class 2 Power Ducting Perforated Gas Ducting
- General Purpose uPVC Daviduct Telecommunications Ducting
- Cable TV Fibre Optics Ducting uPVC Duct Repair Kit
- Draw Cord Access Chamber Systems BT Chambers



JDPs comprehensive range of duct pipe systems caters for all aspects of building works and enables total identification, protection and access to cables and service pipes.

Manufactured to British and European standards, where required, these systems have been used extensively for highways, housing developments, commercial

projects and industrial infrastructure applications.

With a proven range of protection and access products and hundreds of individual products and sizes to choose from, JDPs protection and access systems provide a complete solution for almost any application.





Coloured Twinwall Ducting

These ducting systems offer the advantages of a lightweight flexible product combined with high strength and durability. Produced to the standard BS EN50086-2.4 recommendations. Manufactured in polyethylene the pipe is normally supplied in either 6 metre lengths or 50 metre coils. The external corrugated profile gives the product added strength and the internal bore is smooth to prevent cables from snagging. If required a watertight joint may be achieved by using two profile seals.

Colour Codes Explained

 Black 	В	Electricity/Power Cables
Red	R	High Voltage Electricity
 Yellow 	Y	Gas Service
Blue	BL	Water Service
Green	GR	Cable TV / Fibre Optics
Grey	GY	Telecommunications



Features and benefits

- Compliance with BS EN 50086-2-4: Type 450N, normal duty impact resistance
- Manufactured in polyethylene with excellent impact resistance at low temperatures
- Long coil lengths available for reduced jointing
- Factory installed draw cord and couplings on coils
- Optional sealing rings for sealed systems
- Identification colours for services
- Low weight, high strength



Coils

A	ID / OD (mm)	32/40	40/50	50/63	75/90	94/110	137/160
	Pipe x50m	0707RC4050	0707RC5050	0707RC6350	0707RC9050	0707RC11050	0707RC16050#
	Couplers	0707CRC40	0707CRC50	0707CRC63	0707CRC90	0707CRC110	0707CRC160
000	Seals	0707RCS40	0707RCS50	0707RCS63	0707RCS90	0707RCS110	0707RCS160
	End Caps	0707RCE40	0707RCE50	0707RCE63	0707RCE90	0707RCE110	0707RCE160

* When ordering pipe add colour code, B = Black, BL = Blue, Y = Yellow, GR = Green

Available in 25m

Lengths

1.17.	ID / OD (mm)	94/110	100/120	125/145	137/160	150/178
14//	Pipe	0707ENTW94X6	0707ENTW100X6	0707ENTW125X6	0707ENTW137X6	0707ENTW150X6
	Couplers	0707CRC110	0707CRC120	0707CRC145	0707CRC160	0707CRC178
-	Seals	0707RCS110	0707RCS120	0707RCS145	0707RCS160	0707RCS178
So	End Caps	0707RCE110	0707RCE120	0707RCE145	0707RCE160	0707RCE178
	11.25º Bends	0707BDRB94X11	0707BDRB120X11	0707BDRB145X11	0707BDRB137X11	0707BDRB178X11
0	22.5° Bends	0707BDRB94X22	0707BDRB120X22	0707BDRB145X22	0707BDRB137X22	0707BDRB178X22
In	45⁰ Bends	0707BDRB94X45	0707BDRB120X45	0707BDRB145X45	0707BDRB137X45	0707BDRB178X45
Щ	90⁰ Bends	0707BDRB94X90	0707BDRB120X90	0707BDRB145X90	0707BDRB137X90	0707BDRB178X90

* When ordering pipe add colour code, B = Black, BL = Blue, Y = Yellow, GR = Green. Also available in 225 & 300mm ID.

Standards

Produced to the standard BS EN50086-2.4

Installation Guide

Twinwall Split Duct

An ideal solution for ducting existing cables, or repairing damaged ducting this product is available in short lengths as standard.

Features and benefits

- Ideal for ducting existing cables
- Supplied complete with dowels & ties

	0707ENTWS94X1BE	94/110mm Split Duct x 1m	
	0707ENTWS100X1BE	100/120mm Split Duct x 1m	
	0707ENTWS125X1BE	125/145mm Split Duct x 1m	
COLUMN THE REAL OF	0707ENTWS150X1BE	150/178mm Split Duct x 1m	
	0707ENTWS94X3BE	94/110mm Split Duct x 3m	
and the second	0707ENTWS100X3BE	100/120mm Split Duct x 3m	
	0707ENTWS125X3BE	125/145mm Split Duct x 3m	
	0707ENTWS150X3BE	150/178mm Split Duct x 3m	

Standards BS EN 50086-2-4:1994.

Installation Guide

See pages 114 & 115.

General Purpose Twinwall Ducting

JDP also offer non Kite Marked ducting, which retains many of the same benefits as the BS EN50086-2.4 system, for applications which do not require a full BS EN specification ducting.

Features and benefits

- Meets minimum impact requirements but not covered by BS EN50086:2:4
- Ideal as a superior alternative to General Purpose uPVC Daviduct for non specified applications



* Available in Black only.

Standards

Non certified, meets minimum stiffness and impact requirements of BS EN 50086:2:4: Type 450 compression resistances only.

Installation Guide



ENATS 12-24 Class 2 Power Ducting

Manufactured in MDPE or HDPE ESI-12-24 Power Ducting is available in both straight lengths and coils. It can be used for either open trench or trenchless applications.

Features and benefits

- Can be used for either open trench or trenchless applications
- Long coil lengths for reduced jointing
- Meets ESI-12-24 requirements
- High impact strength

Twinwall HDPE – Class 2

	ID / OD (mm)	94/110	100/118	125/148	150/178
	Pipe 6m	0707RB94X6	0707RB100X6	0707RB125X6	0707RB150X6
	Couplers	0707CRB94	0707CRB100	0707CRB125	0707CRB150
0	Seals	0707SRD94	0707SRD100	0707SRD125	0707SRD150
ego	End Caps	0707RBEC94	0707EC1059	0707EC3051	0707EC1778
0	11.25° Bends	0707RBDB94X11X0.42	0707B1001125	0707RB125X11X2.4	0707RB150X11X2.4
	22.5° Bends	0707RBDB94X22X0.42	0707B1002250	0707RB125X22X2.4	0707RB150X22X2.4
	45° Bends	0707B9445X450	0707B10045X450	0707B12545X610	0707B15045X610
	90° Bends	0707B9490X450	0707B10090X450	0707B12590X610	0707B15090X610

MDPE/HDPE Coils

	ID/OD (mm)	32/37mm	38/44mm	46/54mm	50/60mm
	25m	0705PD/002X25E	0705PD/003X25E	0705PD/005X25E	0705PD/004X25E
	50m	0705PD/002X50E	0705PD/003X50E	0705PD/005A	0705PD/004
	100m	0705PD/002	0705PD/003		
\bigcirc	Coupling	0705C/PD002	0705C/PD003	0705C/PD005	0705C/PD004

Standards

Complies with the electrical supply industry specification for ducts, ESI-12-24.

Installation Guide

JDP supply power ducting to the specification required by all of the UK Electricity network operators





Perforated Gas Ducting

Perforated Gas Ducting is a singlewall perforated polyethylene duct manufactured to BS4962 as specified by Transco.

Features and benefits

- Manufactured to BS4962 as specified by Transco
- Available in various sizes and coil lengths

		60mm	80mm	100mm
(CC)	25m	-	070268073	070268070
	50m	070268075	070268072	070268069
	100m	-	070268071	070268068
	150m	070268074	-	-

Standards

Manufactured to BS4962.

Installation Guide

General Purpose uPVC Daviduct

Daviduct is a cost effective alternative to higher specification systems, for use in light and medium duty applications. The products are manufactured to traditionally accepted dimensions but do not meet the requirements of BS EN 50086-2-4:1994. General Purpose ducting is not suitable for Highways Agency applications and will require a higher standard of installation than more robust systems for successful performance.

Features and benefits

- Cost effective alternative to higher specification systems
- Light and medium duty alternative

0	ID/OD (mm)	2″ (50/54)	3″ (85/89)	4" (110/114)	6″ (162/168)	8″ (193/200)
	Pipe 6m SS	07012DD	07013DD	07014DD	07016DD	07018DD
$\langle \rangle$	Couplers	07092DBGP	07093DBGP	07094DBGP	07096DBGP	07098DBGP
0	End Caps	0709DUCT2AE	0709DUCT3AE	0709DUCT4BE	0709DUCT6BE	0709DUCT8BE
	11.25º Bends	07092DBGP1125	07093DBGP1125	07094DBGP1125	07096DBGP1125	07098DBGP1125
R	22.5° Bends	07092DBGP225	07093DBGP225	07094DBGP225	07096DBGP225	07098DBGP225
	45° Bends	07092DBGP45	07093DBGP45	07094DBGP45	07096DBGP45	07098DBGP45
5	90° Bends	07092DBGP90	07093DBGP90	07094DBGP90	07096DBGP90	07098DBGP90
R	45° Y Junction	07092JF45YJ	07093JF45YJ	07094JF45YJ	07096JF45YJ	07098JF45YJ
6/9	90º T Junction	07092JF90TJ	07093JF90TJ	07094JF90TJ	07096JF90TJ	07098JF90TJ

Standards

Manufactured to traditionally accepted dimensions, but are not covered by any approvals.

Installation Guide





uPVC Telecommunications Ducting

uPVC Telecommunications ducting systems supplied by JDP are fully approved for use on the national BT network. This grey ducting system is available in 54mm or 96.5mm.

Features and benefits

- As specified by British Telecom
- Durable high quality construction

Grey Telecommunications uPVC Duct

10	ID/OD (mm)	49/54	90/96.5
	Pipe 6m SS	070154DX6G	0701PVUD96/31X6G
\sim	Couplers	070954DRUMSCGY	0709965JFSCGY
0	11.25º Bends	070954DRUM11GY	0709965JF11GY
9	22.5° Bends	070954DRUM22GY	0709965JF22GY
	45° Bends	070954DRUM45GY	0709965JF45GY
61	90° Bends	070954DRUM90GY	0709965JF90GY

Standards

Manufactured in accordance with dimensions and performance requirements, tried and tested by the telecommunications industry. EN50086:2:4

Installation Guide

uPVC Cable TV / Fibre Optics Ducting

We offer a range of specialist uPVC Cable TV / Fibre Optics ducting systems, manufactured in accordance with dimensions and performance requirements tried and tested by the industry and supplied in green.

Features and benefits

- Durable high quality construction
- Manufactured to recognised industry standards

Green Cable TV uPVC Duct

0	ID/OD (mm)	49/54	90/96.5
	Pipe 6m SS	070154DX6	070196.5DX6GR
\sim	Couplers	070954DRUMCG	0709965DRUMCG
0	11.25° Bends	070954DRUM1125G	0709965DRUM1125G
1	22.5° Bends	070954DRUM225G	0709965DRUM225G
	45º Bends	070954DRUM45G	0709965DRUM45G
6	90° Bends	070954DRUM90G	0709965DRUM90G

Standards

Manufactured in accordance with dimensions and performance requirements, tried and tested by the telecommunications industry. EN50086:2:4.

Installation Guide

The following installation notes are a guide, specific installation for each type of duct will depend on the application and site conditions.

Twin-Walled High Density Polyethylene Ducting must be installed in accordance with the general requirements and any additional site requirements. Other ducting should be laid in accordance to these installation guides.

The general requirements are to be in accordance with Manual of Contracts Documents for Highway Works (MCHW), Volume 3, as shown below.

Ducting laid in depths of cover other than those specified below must be laid in accordance with the procedures described in the contract with the Highways Agency (HA).

Twinwall duct must be adequately protected against damage from site construction traffic and from agricultural or similar operations.

When used as ducts for fibre optic cabling the recommendations in BS 7718:1996 should be followed.



Typical Unsealed Standard Duct Installations Type A Shallow Ducts (750 To 1200 Cover)



Type B Deep Ducts (Over 1200 Cover)



carriageway surface

formation level class 8 lower trench fill for capping if

ducts laid first

pipe bedding material to clause 503 of the SHW¹¹

pipe bedding depth for ductile iron ducts

pipe bedding depth for PVC-U ducts





Minimum Clearance Between Duct And Drain



Procedure (Unsealed)

Joints are made by the simple push-fit of one duct length into the coupler attached to the adjacent length, ensuring that the connection is fully made.

Inspection points can be made in the conventional manner depending upon the type of services to be installed.

uPVC Duct Repair Kit

Features and benefits

- Ideal for repairing existing ducting
- Supplied complete with couplings & ties

Duct Repair Kit

	0709SD096X3	96.5mm Split Duct X 3m
	0709SD110X3	110mm Split Duct X 3m
	0709SDRK096	96.5mm Duct Repair Kit
	0709SDRK110	110mm Duct Repair Kit

^{*}Available in Green or Grey

Draw Cord

Draw Cord

	0711DCORD220	220m x 6mm Thick Coil
	0711DCORD500	500m x 6mm Thick Drum
	0711DRAW8X220	220m x 8mm Thick Coil

*For Marker Tapes see Accessories section

Access Chamber Systems

JDP offer our Access Box Systems for Street Lighting, Traffic Signals and the Communications Industry. Our Access Box System is suitable and accepted by the water, rail and CCTV sectors. In fact, wherever there is a need for cables and draw pits, this range of products can be used.

Our Access Box Chamber sections are manufactured in one piece for high strength and rigidity. Identical sections can be stacked to obtain the required height, up to 1metre deep.

A wide range of chamber sections is available, all of which have preformed trepanned rings to simplify cut outs which suit a variety of ducts. Hole sizes are designed to provide a snug fit but allow for variations in duct entry angle.

The lightweight sections are surrounded by in-situ concrete and offer substantial savings in time and money over traditional brick chambers.





In addition to our range of Access Box Chamber systems we offer high strength anti-slip composite covers available to complement the most popular access chamber sizes. All covers comfortably exceed testing requirements, wet and dry.

The covers are supplied with a deep seated cast aluminium framework which is designed to bear on the reinstated ground allowing flexibility on line and level relative to the chamber.

Standard in black, the anti-slip cover can be supplied badged or plain as required. Other colours can be made to order.

The covers are supplied with a simple locking device as standard. The non-ferrous lid has no scrap value and is corrosion and maintenance free.

Where loading demands, a full range of lockable and non-lockable Galvanised Steel Covers and Frames is available.

Features and benefits

- Recyclable
- Economical solution
- Anti slip covers
- No specialist labour required
- High impact resistance
- Badging & various colours available on request
 - Approved by many Local Authorities and Utility Sectors
 - Suitable for most ducting applications
 - Can be used for other applications instead of brick built chambers
- Multiple connection sizes up to 160mm

Access Chamber System

Access Chambers

	073069121	300mm x 300mm x 335mm	Access Box
	073069124	300mm x 450mm x 335mm	Access Box
9001000	073069012	450mm x 450mm x 335mm	Access Box
Color -	073069123	450mm x 600mm x 335mm	Access Box
	073069122	600mm x 600mm x 335mm	Access Box

Composite Covers & Frames

	073069128	300mm x 300mm Composite Cover & Galv. Frame B125
	073069129	300mm x 450mm Composite Cover & Galv. Frame B125
	073069127	450mm x 450mm Composite Cover & Galv. Frame B125
	073069126	450mm x 600mm Composite Cover & Galv. Frame B125
	073069125	600mm x 600mm Composite Cover & Galv. Frame B125

Galvanised Covers & Frames

2	073069101	300mm x 300mm Galvanised Cover Frame
	073069098	300mm x 450mm Galvanised Cover Frame
	073069099	450mm x 450mm Galvanised Cover Frame
	073069100	450mm x 600mm Galvanised Cover Frame
	073069102	600mm x 600mm Galvanised Cover Frame

Ductile Covers & Frames



Standards

Access and pole boxes are designed to meet the requirements of the Traffic Control Signals Unit (TCSU) specification.

Installation Guide

- Excavate to the depth of appropriate number of chambers (maximum of 3), plus additional 40mm for depth of base.
- Install chamber centrally within trench.
- Base of excavated area to be well compacted granular material or concrete slab. A drainage hole is required within the base to allow excess water to drain freely.
- Before connecting the duct, the trepanned holes will require cutting out to required diameter. Access boxes take from 63mm to 160mm OD duct pipes.
- Allow minimum of 150mm surrounding the chamber for solid concrete support, which should be of semi-dry workable mixture.
- Ensure concrete fill is evenly distributed around the chamber and level with the top surface. Concrete the frame in at the appropriate height.



50mm Drain hole through concrete



BT Chambers

Preformed BT access chambers offer users a de-skilled, fast track construction method with a single site visit and without the need for concrete backfill. In installations carried out for BT, complete chambers were constructed from excavation to reinstatement in just over one hour.

Manhole steps, cable bearers, brackets and other chamber furniture are easily accommodated within the modular access chambers design and can be factory fitted as an option.

Features and benefits

Excellent side wall stiffness. Unlike other preformed chambers available, no bracing is required during backfilling or compaction.

- No requirement for concrete surround 'as dug' or type 1 backfill will be suitable
- Perfect for overbuilding on existing network
- No second visit to site required
- Deskilled installation process
- Reduced signing / guarding costs
- Reduced public liability risk
- Ease of cutting duct entries etc.
- No site material waste
- 11 point BT installation check is reduced to only 4 point check with a Salmor chamber, minimizing risk of failed installation
- Designed & tested with BT

BT Quadbox Chamber Boxes & Replacement Covers

Access Chambers

0720BT4	BT 4 Chamber
0720BT6	BT 6 Chamber

Concrete Covers

0720BT4CC	BT 4 Concrete Cover
0720BT6CC	BT 6 Concrete Cover

Recessed Block Paviour Covers

0720BT4RC	BT 4 Recessed Cover
0720BT6RC	BT 6 Recessed Cover



In addition to these access box systems JDP offer a range of Modular Access Chambers a modern replacement for brick built chambers.

The high quality preformed access chamber is an excellent cost effective alternative for a traditional brick built access chamber, with all the benefits of the BT Chamber and can be supplied from 450 x 450mm to 4000mm x 4000mm.

Concrete covers & cover slabs, or specialist spring loaded, locking galvanised manhole covers to suit these chambers are also available.

Standards

BT has now approved Quadbox for use in its national network; the first and only BT approved modular joint box system.

Both chamber systems are available with an optional prefitted secondary security system, which has been independently tested to category C of Loss Prevention Board Standard 1175.

The modular access systems offer a number of significant health & safety benefits to users.

The chambers have been independently certified to the European standard for construction materials BS EN ISO 11925-2:2002.

Installation Guide



Typical QUADBOX installation



The use of preformed chambers significantly de-skills the installation process and eliminates the requirement for specialist box building teams. In most cases the use of chambers eliminates the requirement for concrete surrounds.



Mains Supply & Service Connections



- Water Service MDPE Plasson Water Service Fittings
- Water Meter Boxes & Stop Tap Chambers Water Meter Manifolds
- Barrier Pipe System Gas Service MDPE Plasson Gas Service Fittings
- Gas Meter Boxes Electricity Meter Boxes



JDP offers a full range of pipeline products for the potable, non potable water and gas markets.

We are a market leader in distribution of these products which includes a blue medium density polyethylene water pipe system suitable for potable (drinking)

water distribution.

Gas Pipe PE 80 medium density yellow pipe is available for below ground use for gas distribution.

Polyethylene (PE) has a number of significant advantages over the traditional materials such as steel or ductile iron. These include lower weight, freedom from corrosion, and the ability to coil long lengths of pipe.

Barrier pipe for below ground use for conveying potable water in brownfield / contaminated sites PE 80 (MDPE) with aluminium barrier for contamination

protection.





Water Service MDPE

JDP supplies in depth stocks of blue potable water pipe, for below ground use, medium density polyethylene (PE80) service pipes, in sizes 20 to 63mm for house building service connections. For sizes 90 to 1200mm please refer to the Civil Engineering and Utilities product specifier.

Features and benefits

- PE has good resistance to a wide range of chemicals
- Freedom from corrosion
- Ability to coil long lengths of pipe
- Significant advantages over the traditional materials such as steel or ductile iron
- Universally accepted as a established alternative to ductile iron, and PVCu pipes

Applications

For service pipe applications for potable water systems

Water Service MDPE

		20mm	25mm	32mm	50mm	63mm
	6m	-	-	-	090150MD6	090163MD6
	25m	090120MD25	090125MD25	090132MD25	090150MD25	090163MD25
	50m	090120MD50	090125MD50	090132MD50	090150MD50	090163MD50
V	100m	090120MD100	090125MD100	090132MD100	090150MD100	090163MD100
	150m	090120MD150	090125MD150	090132MD150	090150MD150	090163MD150

Standards

BS EN12201 Potable Water

Installation Guide

Below Ground

Conventional Open Cut Trenching

The current practice in the UK is to lay service pipes at 750mm cover, measured from the pipe crown.

The width of the trench should be the minimum of pipe O.D. plus 250mm to allow for the correct compaction of sidefill.

The location of cables and pipes from other utilities should be identified prior to excavation.

Polyethylene may in some instances be laid directly onto the trimmed trench bottom where the soil is uniform, fine grained and free from large stones and flints.

In other cases the trench should be excavated to a depth to allow for a minimum 100mm bed of gravel, crushed stone or coarse sand. A sand/gravel mix is also acceptable, provided the gravel is less than 20mm in size.

Further details on bed and fill materials are given in WIS 4-08-01.

Polyethylene is a flexible material and can deform under load without damage. It is however, important that any deformation is minimised and that the placement of the correct sidefill and initial backfill materials is carried out correctly with adequate compaction.

A minimum 100mm cover should be placed above the crown of the pipe, with heavy compaction equipment not being used with less than 300mm cover. Backfilling can then proceed in 300mm layers.





Trench reinstatement in highways is covered in the NRASWA "Specification for the Reinstatement of Openings in Highways", 1992. This code was introduced with the aim that all highway reinstatement is completed as soon as possible to a consistent prescribed performance criteria.

Trench backfilling should commence as soon as possible after pipe laying to give the pipe protection from damage from objects possibly falling into the trench. To protect the pipe from potential future interference damage it is good practice to install a marker tape 300mm above pipe crown.

Marker tapes can also include a tracer wire to allow future identification of the pipeline.

Plasson Water Service Fittings

JDP can boast the most comprehensive range of compression fittings and adaptors with its range from Plasson, a supplier that gives genuine commitment to quality. The basic fitting is a dedicated product for joining metric PE pipe. It will securely join the pipe without any additional components. The fittings can be easily converted for use with other materials simply by adding a conversion set.

We offer a full range of conversion sets to provide exceptional adaptability.

These innovative products have now revolutionized the way of connecting polyethylene pipes.

Features and benefits

- Dual action sealing
- Uncompromising reliability
- Time saving joining method
- Assured conveyance of contents to final destination
- Fast & easy installation
- Connections to copper, lead, steel, PVC, polyethylene service pipes

Applications

For connecting all types of water service pipes with assured conveyance of contents to final destination

Plasson Water Service Fittings

	Code	Description		Code	Description
	Couplings			Reducing Coupling	
	0911701020	20mm		0911711025X20	25mm x 20mm
	0911701025	25mm		0911711032X20	32mm x 20mm
	0911701032	32mm		0911711032X25	32mm x 25mm
	0911701050	50mm		0911711050X32	50mm x 32mm
	0911701063	63mm		0911711063X50	63mm x 50mm

Plasson Water Service Fittings (contd)

	Code	Description		Code	Description
	Male Adaptor BSP T	hread		Female Adaptor BSP	Thread
	0911702020X1/2	20mm x ¹ /2"		0911703020X1/2	20mm x ¹ /2"
	0911702025X3/4	25mm x ³ /4"		0911703025X3/4	25mm x ³ /4"
	0911702032X1	32mm x 1"		0911703032X1	32mm x 1"
	091170205011/2	50mm x 1 ¹ /2"		091170305011/2	50mm x 1 ¹ /2"
	0911702063X2	63mm x 2"		0911703063X2	63mm x 2"

	Code	Description
	90º Tee	
	0911704020	20mm
	0911704025	25mm
	0911704032	32mm
	0911704050	50mm
	0911704063	63mm

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Code	Description
90° Elbow	
0911705020	20mm
0911705025	25mm
0911705032	32mm
0911705050	50mm
0911705063	63mm

	Code	Description
	End Plug	
	09117120X20	20mm
	09117120X25	25mm
+	09117120X32	32mm
	09117120X50	50mm
	09117120X63	63mm



Code	Description
Blanking Plug	
0911712920	20mm
0911712925	25mm
0911712932	32mm
0911712950	50mm
0911712963	63mm

	Code	Description	
	90º Tee with Female Offtake		
-	0911714020X1/2	20mm x ¹ /2"	
0 20	0911714025X3/4	25mm x ³ /4"	
	0911714032X1	32mm x 1"	
	091171405011/2	50mm x 1 ¹ /2	
	0911714063X2	63mm x 2"	



Code	Description
90° Elbow with Fema	ale Offtake
09117150201/2	20mm x ¹ /2"
0911715025X3/4	25mm x ³ /4"
0911715032X1	32mm x 1"
091171505011/2	50mm x 1 ¹ /2"
0911715063X2	63mm x 2"



Plasson Water Service Fittings (contd)

	Code	Description
- film	90º Reducing Tee	
	0911734025X20	25mm x 20mm
0	0911734032X25	32mm x 25mm
	0911734050X32	50mm x 32mm
	0911734063X50	63mm x 50mm

Code	Description
Pipe Liner	
0911795020	20mm
0911795025	25mm
0911795032	32mm
0911795040	40mm
0911795050	50mm
0911795063	63mm

	Code	Description	
	Dedicated PE to Copper Connector		
- E	0911743615X20	15mm x 20mm	
	0911743615X25	15mm x 25mm	
	0911743622X25	22mm x 25mm	
	0911743628X32	28mm x 32mm	
	0911743615X20	15mm x 20mm	

B .	Code	Description
	Compression Stopco	ck BS5433
	0911340720	20mm
100	0911340725	25mm
	0911340732	32mm

Code	Description
Reducing Set	
0911793025X20	25mm x 20mm
0911793032X20	32mm x 20mm
0911793032X25	32mm x 25mm
0911793050X25	50mm x 25mm
0911793050X32	50mm x 32mm
0911793063X25	63mm x 25mm
0911793063X32	63mm x 32mm
0911793063X50	63mm x 50mm

Code	Description
Plass 4 Universal Co	oupling
09117701715-22	25mm x 15-22mm
09117701720-27	25mm x 20-27mm
09117701720-2732	32mm x 20-27mm
09117701727-35	25mm x 27-35mm
09117701727-3532	32mm x 27-35mm
09117701735-50	50mm x 35-50mm



	Code	Description
Universal Stop Tap BS5433/1010 Type		S5433/1010 Type
	0911905020	20mm
	0911905025	25mm
	0911905032	32mm

Plasson Water Service Fittings (contd)

	Code	Description		Code	Description
6	Plastic Wall Plate El	bow		Brass Wall Plate Elbow	
	0911775020	20mm		091190552012	20mm X" ¹ /2"
	0911775025	25mm		091190552534	25mm X 3/4"
-	Code	Description	T	Code	Description
	Bib Tap - Ball Type		100	Bib Tap Hose Union w	ith Double Check Valve
- T.	09112100X1/2	1/2"	-	09119056X1/2	1/2"
0	09112100X3/4	3/4"	4	09119056X3/4	3/4"
-	Code	Description	-	Code	Description
555	DZR Double Check \	/alve	X. 0	Pipe Shears	
ALC: NO	09119057X3/4	3/4"	1	091160125	20/32mm
	09119057X1	1"		091160126	20/63mm
-	Code	Description	P	Code	Description
5	Pipe Squeeze Off To	ol		Plasson Wrench	
	091160123	16/32mm	C	0911799016/40	16/40mm
10	09116012332/63	32/63mm	•	0911799040/75	40/75mm
	Code	Description	\cap	Code	Description
Chamfer Tool				Universal Strap Wrer	nch
	0911796020/63	20/63mm		09117992	20/90mm
A full range of ada	aptors is also availat	ole to provide excep	tional adaptability		
Standards	AS	en la	HD Class D 7789	LD Class MDPE D 7787 7950	Metric U-PVC 7970 Galvanised
	PRO	Dedio	ated Imperial to		Steel 7896

Installation Guide

Installation is as easy as saying ABCD

- Undo the nut until 3-4 threads are visible.
- Insert the required Pipe Liner into the pipe.
- Insert pipe into the fitting until the stop.
- Tighten the nut firmly with a Plasson wrench.





Water Meter Boxes & Stop Tap Chambers

JDP supply water meter boxes with or without insulated water pipe ducting, designed for either below or above ground installation. Suitable for new connections, or 'retro fitting', when a household has chosen to change to a metered water supply, the easily installed meter boxes offer simple water connections with an integral control valve.

Underground Water Meter & Stop Tap Chambers

Features and benefits

- Telescopic height adjustable shaft
- Rotating cover
- Frost protection

Applications

For new connections, or for when a household has chosen to change to a metered water supply.

-	Code	Description
	09113513	Water meter boundary box and stop valve
_	0905BB1	Sealed telescopic water meter boundary box and stop valve
•	0904BB6	Contaminated ground sealed water meter boundary box and stop valve

Meter boxes require 0908WM112DCON concentric water meter

Code	Description
09113610	Stop Tap Chamber Complete

Standards

Meter box WRAS approved

Installation Guide

- Place chamber on firm ground and connect pipe, ensuring directional flow matches arrow on base.
- Open lid and adjust telescopic chamber to finished ground level.
- Close lid and backfill the hole with 150mm layers of granular soil, compact each layer to just below the headbox.
- Adjust head to ensure lid will suit finish ground level. Ensure the frost protection foam is fitted inside.

Aboveground Water Meter Chambers

The Groundbreaker meter box is manufactured from 90% recycled polypropylene by an injection moulding process and designed to fit on the outside wall of the building. Compliant with 'Secure by Design' criteria, Building Regulations Part M and Radon alleviation designs and within PPG3 Planning Guidelines, fixing on the surface of the wall.
Features and benefits: Groundbreaker

- Adaptor available for: Link to 3/4 inch BSP thread
- Above ground versions allow connections to hosepipes etc.
- Water control easily available above ground
- Water control at the point of delivery
- Ideal for independent water management
- Temperature tested: -15°C for 5 days
- Non-return valve (anti-syphonage) built in
- Outer shell is UV stabilised & impact resistant
- Universal key access

Features and benefits: Wallfit

- Ideal for all domestic applications
- Compact body size
- Durable but lightweight (made from Acetal)
- Fits into conventional metric brickwork (it has an adjustable depth up to 325mm)
- Accommodates all standard concentric type water meters
- Incorporates an integral meter carrier and isolating valve
- Lockable and opened with a standard triangular key
- Accepts 25mm MDPE inlet and 22mm

Applications

- For new connections requiring metered supply
- Groundbreaker is ideal for a retro-fit water meter installation



Meter boxes require 0908WM112DCON concentric water meter

Standards

Groundbreaker

- Compliant with 'Secure by Design' criteria Compliant with Building Regulations Part M
- Insulation exceeds WRAS and water industry standards
- PPG3 Planning Guidelines compliant with Radon alleviation designs



Installation Guide

Groundbreaker

Installation is by drilling and fixing to outside wall and connections are made by compression and threaded for water meter.

Tools required: Drill, 7mm masonry bit, screwdriver (Philips type)

Water Meter Manifolds

Features and benefits

- Allows multiple metering in one confined area
- Fits 600x450mm underground chamber as required by some water authorities

Applications

• Ideal for blocks of flats and apartments

	Code	Description
	09113530001 /2	Manifold Kit - centre feed with screw down valve 4 / 6 port
	09113530003 /4	Manifold Kit – centre feed with $^{1\!/\!4}$ turn ball valve 4 / 6 port
	09113530005 /6 /7	Manifold Kit – end feed with screw down value 3 / 4 / 6 port
0	09113530008 /9 /10	Manifold Kit – end feed with $^{1/4}$ turn ball valve 3 / 4 / 6 port

1	Code	Description
	09113524004	Plain Manifold – centre feed 4 port
	09113524006	Plain Manifold – centre feed 6 port

Code	Description
09113523003	Plain Manifold – end feed 3 port
09113523004	Plain Manifold – end feed 4 port
09113523006	Plain Manifold – end feed 6 port

	Code	Description
	09113511	25mm Water Meter Manifold Assembly screw down valve

	Code	Description
	09113509	25mm Water Meter Manifold Assembly 1/4 turn ball valve

Code	Description
09113510	15mm Water Meter Manifold

Manifold kits require 0908WM112DCON concentric water meter

* Gunmetal meter manifolds also available

Water Meter

9	Code	Description
	0908WM112DCON	1 ¹ /2" Class D Concentric Water Meter

Standards



Installation Guide

- 1) Meters should be installed in a cabinet/access box for ease of access.
- 2) Threads must be sealed with a suitable WRAS approved sealing tape or compound.

Barrier Pipe System

JDP supplies a barrier pipe that is specifically designed for use in areas of contaminated ground. These are typically urban brownfield sites under development where there are known contaminants in the ground. Such sites would normally exclude the use of conventional plastic pipe products and require the use of specialist protected barrier products.

The Barrier Pipe is multi-layered, and incorporates an aluminum barrier layer. This is sandwiched between two layers of conventional polyethylene, which is widely used for the manufacture of potable water pipe systems. This pipe system can be installed using conventional open cut trenching methods.

The system includes a range of fittings, which have been specifically designed for use with the pipe. Each fitting is supplied with an insert designed to maintain the integrity of the pipe.

The fitting incorporates an integral O-ring seal and grip ring, providing a fully sealed and end load resistant joint, which guarantees total impermeability to contaminant ingress. Being made from Dezincification Resistant Brass (DZR) these fittings require no external wrapping to seal the system unlike some systems.



Features and benefits

- Impermeable Barrier Protects potable drinking water from organic and inorganic contamination
- Flexible Construction Easy to handle and install
- Cost Effective Long term, reliable solution
- **Corrosion Resistant** Enables the development of brownfield sites with a flexible, corrosion resistant plastic pipe system
- Engineered Joint Fitting Offering no path for the ingress of contaminants
- Ease of Installation Requires no pipe preparation or external wrapping

Applications

Barrier pipe is specifically designed for use in areas of contaminated ground for safe distribution of potable water.

Pipe

Code	Description
0904PGP2550	25mm Barrier Pipe X 50m
0904PGP3250	32mm Barrier Pipe X 50m
0904PGP636	63mm Barrier Pipe X 6m
0904PGP6325	63mm Barrier Pipe X 25m
0904PGP6350	63mm Barrier Pipe X 50m

DZR Brass Fittings

	Code	Description		Code	Description
	Coupling			Transition Coupling t	o PE
	0904PGF25SC	25mm		0904PGF2525TC	25mm x 25mm
	00040050000	00		0904PGF6363TC	63mm x 63mm
	0904PGF325C	32mm			
	0904PGF63SC	63mm		Code	Description
		6899	Transition Coupling to Copper		
	Code	Description		0904PGF2515TC	25mm x 15mm
A.S.	Male Coupling			0904PGF2522TC	25mm x 22mm
	000 400 505 470	05 2/1	[
	0904PGFZ5IVI1C	25mm x 3/4"		Code	Description
	0904PGF32MTC	32mm x 1"	(AND AND A		
			100	Reducer	
	0904PGF63MTC	63mm x 2″		090471903225	32mm x 25mm

	Code	Description		Code	Description
	Female Coupling			Equal Tee	
	0904PGF25FTC	25mm x ^{3/4} "	100	0904PGF25T	25mm
	0904PGF32FTC	32mm x 1"		0904PGF32T	32mm
	0904PGF63FTC	63mm x 2"		0904PGF63T	63mm

		Code	Description	Code	Description
1	ALL CO	Elbow 90°		Elbow 45°	
	0/0	0904PGF2590E	25mm		
		0904PGF32E	32mm	0904PGE6345E	63mm
		0904PGF63E	63mm	0304 0103432	OSHIM
		0904PGF3290E			
		0904PGF6390E			

Standards

- The core pipe and outer layer of barrier pipe is conventional MDPE (PE 80) material meeting the requirements of BS EN12201 and WIS 4-32-17: Polyethylene Pressure Pipes for Pressurised Water Supply - BS6920 Water Quality testing
- The core pipe standard polyethylene service pipe is kitemarked to BS EN 12201 (BS EN12201 supersedes BS6572)
- Compliant with DWI Regulation 31 (formally Regulation 25)
- Barrier pipe fittings are WRc, DVGW and KIWA approved
- WRAS approved
- The product should be installed as a system (pipe & fittings) in accordance to WIS-32-19 Polyethylene Pressure Pipe Systems with and Aluminum Barrier for potable water supply.

Fitting Installation

- Ensure the pipe is cut square and cleanly, using approved 'ratchet style' pipe cutters on the 25 and 32mm and using a fine tooth saw or wheeled cutter on the 63mm.
 Important Note: If the pipe end is not cut cleanly, deburred and square prior to connection to a fitting, a satisfactory seal will not be achieved.
- 2) Check the pipe is clean, push the insert fully into the pipe end. For 63mm the pipe end needs to be chamfered on both the inner and outer edges with the rubber o'rings on the insert lubricated using a suitable approved WRC lubricant. The insert on the 63mm may need to be tapped in using a soft face mallet or timber across the end.
- **3)** Take the fitting and loosen the nut by one complete turn. Do not dismantle completely, only sufficient to ensure the grip ring is loose.
- **4)** Using an indelible marker pen clearly mark the depth of entry on the pipe, measured up to the pipe stop and push the pipe fully home. The depth of entries are:

25mm = 30mm

32mm = 34mm

63mm = 70mm

Important Note: A good seal is only achieved when the pipe is pushed past the 'O' ring up to the pipe stop. The 63mm fitting has 2 sets of rubber o'ring seals. Please ensure the pipe is pushed fully home up to the stop.

5) Fully tighten the nut until it is up against the body to ensure the fitting seals correctly. Important Note: Check that the depth of entry mark is visible and aligns with the edge of the nut once tightened fully.



Pipe Installation

See page 122 for pipe installation.



Gas Service MDPE

JDP supplies a comprehensive range of Gas service MDPE Pipe (PE 80) in yellow for below ground use for gas distribution.

Features and benefits

- PE has good resistance to a wide range of chemicals
- Freedom from corrosion
- Ability to coil long lengths of pipe
- Significant advantages over the traditional materials such as steel or ductile iron

Applications

- Distributing gas service below ground to household meter boxes
- Suitable for natural gas and LPG

Yellow Gas Service MDPE 12.5Bar

172		20mm	25mm	32mm	50mm	63mm
	50m	090320G50	090325G50	090332G50	090350G50	090363G50
	100m	090320G100	090325G100	090332G100	090350G100	090363G100

Standards

16 to 630mm PL2 - Part 1

Installation Guide

See page 122.

Plasson Gas Service Fittings

Plasson's range of gas compression fittings offers a wide range of connections, including the unique Plass4 adaptors to galvanised steel and iron.

Features and benefits

- Dual seals to comply with latest specification
- Available in sizes 20 63mm
- MOP 5.5 rated
- Complies with GIS/PL3

Applications

• Suitable for connecting all Gas service MDPE pipes up to 63mm

	Code	Description		Code	Description
	Coupling	-		Plass4 Universal Elbow	
6	0903G70105020	20mm	_	0903G770575025022	25mm x 15-22mm
	0903G70105025	25mm		0903G770575025027	25mm x 20-27mm
	0903G70105032	32mm		0903G770575025035	25mm x 27-35mm
	0903G70105063	63mm			
	Code	Description		Code	Description
	Reducing Coupling			90° Tee	
	0903G7110502520	25mm x 20mm	THE .	0903G70405020	20mm
	0903G7110503220	32mm x 20mm	0	0903G70405025	25mm
	0903G7110503225	32mm x 25mm		0903G70405032	32mm
				0903G70405063	63mm
	Code	Description			
	90° Elbow			Code	Description
	0903G70505020	20mm	-	90° Reducing Tee	
	0903G70505025	25mm		0903G7340502520	25mm x 20mm
	0903G70505032	32mm		0903G7340503225	32mm x 25mm
	0903G70505063	63mm		0903G7340506332	63mm x 32mm
	Code	Description			
	Coue	Description		Code	Description
	Plass4 Universal Cou	pling		End Can	
	0903G770175025022	25mm x 15-22mm		0903G71205020	20mm
	0903G770175025027	25mm x 20-27mm	U	0903G71205025	25mm
	0903G770175025035	25mm x 27-35mm		0903G71205032	32mm
	0903G770175032027	32mm x 20-27mm		0903671205062	63mm
	09030770175032035	JZIIIIII X Z1-JJMM		0303071203003	JUJIIII

Standards

Complies with Gas Industry Standard (GIS) /PL3

Installation Guide

Gas connections should only be made by a registered gas installer



Gas Meter Boxes

A range of domestic gas meter boxes is supplied by JDP, recessed for cavity walls, surface wall mounting or ground level installation. All meter boxes come with bracket and union adaptor for accepting gas meters and service pipe connection.

Features and benefits

- Supplied with standard connection brackets for meters
- Supplied with standard service pipe union connection
- Range of accessories and spares
- Available in white or brown

Applications

- Surface wall mounting
- Recessed cavity wall mounting
- Ground level surface wall mounting

	Code	Colour	Description
	0720MB4	Wh	Gas Flush Meter Box White
	0720SBGAS	Wh	Gas Meter Box Surface Mounted White
Statement of the local division of the local	0720MB6	Wh	Gas Meter Box Spare Door
CONSECTOR COMPANY	0720MB10	Gr	GRP Riser Tube x 1m
The second se	0720MB7	BI	38mm OD / 32mm ID 90D Gas Bend
-	0720MB6	Wh	Spare Door (Vented)
	0720UB1	Br, Wh	Gas Unibox Brown
100 C	0720UBL	Br, Wh	Unibox Spare Door
Statute of the	0720MB100		Spare Meter Box Key (10 Pack)

BI = Black, Br = Brown, Gr = Grey, Wh = White

Standards

There is currently no recognised uniform standard within the UK, however these units conform to BS6400 ventilation requirements

Installation Guide

- Either in cavity wall or mounted to surface of wall
- It is essential to ensure that the cavity is not breached

Electricity Meter Boxes

The supply of electricity cable to the property is the domain of the local electricity service provider. However ducting such as in the Ducting Systems section page 105, and electricity meter boxes are requirements of the house builder. JDP supply electricity meter boxes suitable for cavity walls or surface wall mounting. Both types are supplied complete with meter board for fixing the meter to.

Features and benefits

- Supplied with meter board as standard
- Accessories and spares

Applications

- Surface wall mounting
- Recessed cavity wall mounting

-	5.44	Code	Colour	Description
- HE	1	0720MB1	Wh	Electricity Meter Box Flush
		0720SB1	Wh	Electricity Meter Box Surface Mounted
		0720MB2	Wh	Spare Door
and in case of	-	0720MB3	BI, Wh	32/38mm Elec Hockey Stick x 1.5m
Stanford	CONTRACTOR OF	0720MB100		Spare Meter Box Key (10 Pack)

BI = Black, Wh = White

Standards

ESI-12-3

Installation Guide

- Either in cavity wall or mounted to the wall surface
- It is essential to ensure that the cavity is not breached



Geotextile & Membrane Technology



- Geotextiles Fibre Geotextiles Woven Geotextiles Geogrid
- Damp Proof Membrane Gas Membranes



JDP offer a wide range of geotextiles, geogrids, damp proof membranes and gas membranes for separation, reinforcement, filtration and protection.

Whilst there are commonly used products for more standard applications, there is also a wide range of products available to offer specific and unique solutions to a range of separation, reinforcement, filtration and protection problems. In these cases please consult JDP for the best solution available to you.



Geotextiles

Both woven and non-woven geotextiles can be used in the same applications.

There is no hard and fast rule that only one type is suitable for one specific application. Selection is dependent on site-specific factors and costs.

In typical road and building foundation situations, the most important performance requirements of the geotextile are to provide separation and reinforcement. Consequently, the puncture resistance and tensile strength properties of the geotextile selected are the most significant.

In such cases a woven geotextile could normally be selected due to performance and cost benefits.

So what exactly is a geotextile?

Geotextiles are permeable fabrics made from polypropylene or polyester. Used under the surface they can increase the load-bearing and lifespan of roads, driveways, embankments and drainage ditches. Resistant to soil acids and alkalis and impervious to fungi or rot, they come in two types: Woven and non-woven referred to as Fibre geotextiles.

How will a geotextile help me to do a better job?

Geotextiles have three key functions: Separation, Reinforcement and Filtration.

Separation

Without a geotextile, aggregate and subsoil can mix causing excessive settlement, which in return causes rutting. Using a geotextile over the subsoil before laying the aggregate will prevent downward movement as well as the upward pumping of weak subsoil into clean stone.

Reinforcement

By spreading the load horizontally across a wide area geotextiles can increase compaction of the aggregate base; improving the strength and extending the life of all types of paved and unpaved traffic areas.





Filtration

Geotextiles retain fine particles in the soil while allowing the free movement of water. In this way they can restrict soil from migrating into perforated drainage pipes and prevent them from silting up. Used in stone-filled drainage ditches they provide a continuous and consistent filter and produce a higher quality construction – even better it reduces the depth needed so you won't have to dig as deep!



How can a geotextile save me money?

First of all you'll spend less on materials – the right grade of geotextile will maintain the same load support with less aggregate. This also means you'll spend less time excavating, and because they give a more durable result it's less likely that you'll need to return to repair minor defects. All of this means that a geotextile, far from being an extra cost, will easily pay for itself and more. There's no need for training or special tools either and it's so easy to install that your mum could do it!

I thought they were just for weed control?

Weed control just happens to be one of the added extras that geotextiles give on top of all the other benefits.

Why is a geotextile better than a weed fabric?

Most weed suppression fabrics are very weak and light. Geotextiles are at least 3 times stronger and more durable too. Try using them on bare soil and covered with mulch or gravel for long-term weed control and moisture conservation.

What's the difference between a woven and non-woven geotextile?

Woven geotextiles are manufactured by weaving together narrow strips of film, whilst nonwoven geotextiles are created by entangling plastic fibres or bonding them chemically or with heat.

Wovens increase the load capacity of traffic areas by distributing weight more evenly. Nonwovens also do this but combine excellent drainage and filtration to prevent the pooling of surface water.

Both have outstanding separation properties to prevent sub-base contamination, which can result in an uneven surface and construction failure.

Fibre Geotextiles



JDP offers a non-woven Fibre geotextile range manufactured from polypropylene staple fibres. This range is resistant to all naturally occurring soil alkalis and acids and fungal attacks. As well as this, our non-woven Fibre geotextile is UV stabilised and will not rot.

Using non-woven Fibre geotextile between different construction layers avoids the mixing of these layers giving increased bearing capacity as well as significant savings on time and materials.

What's more, the high water flow and excellent filter properties combined with its exceptional mechanical properties, ensures that fine grained particles are retained at the same time as allowing the free movement of water. In this way stability is improved and the life of the construction is considerably prolonged.

Features and benefits

- Uniformity
- High strength and elongation
- Superior wearing and abrasion resistant properties
- Unique hydraulic capability
- No delamination



Applications Filtration

The pore structure of JDPs Fibre geotextiles are designed to retain particles whilst allowing the free movement of water making it possible to separate two layers during intense hydraulic activity. This avoids the migration of layers, which could reduce load-bearing capacity, and maintains water flow with minimum loss of pressure.

Drainage

JDPs Fibre geotextiles enables excess water to be drained away from the construction – not by passing through the fabric but by flowing in the plane of the fabric away from the construction. This ensures reliable ongoing drainage of fluids with minimum loss of pressure.

Separation

Strong and flexible, Fibre geotextile prevents the sub-base mixing with the sub-grade maintaining the integrity of the construction. This increases the load-bearing capability and provides long-term stability of the foundation layers.

Protection

The excellent puncture resistance and thickness of Fibre geotextiles makes them ideal for protecting impermeable membranes. Fibre protection geotextiles are laid below and/or above the membrane, forming a protective layer and preventing puncture of the liner.

Reinforcement

The mechanical properties of JDPs Fibre geotextile, make it ideal for reinforcing slopes and other soil structures. Reinforcing with the appropriate Fibre geotextile product prevents vertical soil walls and steep slopes from collapsing, increasing the lifespan of these types of construction.

Stress Relieving

Fibre geotextile offers a flexible, precompressed, nonwoven solution designed especially for stress relieving. Paving fabric is ideal for both new road construction and road maintenance as it absorbs differential movements in the road layers, preventing reflective cracking. The bitumen saturated paving fabric also forms a waterproof interlayer, protecting the subsoil from water intrusion and thereby avoiding the loss of bearing capacity.



Full Rolls

Contract And and	Code	Description	Permeability (l/sec/m2)	CBR Puncture Resistance
DESEN	1601NW1919	4.5m Fibre Geotextile x 100m	100	1000
	1601NW2020	4.5m Fibre Geotextile x 100m	100	1400

Mini Packs

1 77	Code	Description
	1601NWR10	Fibre Patio Pack 1m x 10m
11	1601NWR20	Fibre Patio Pack 1m x 20m
	1601NWR30	Fibre Patio Pack 1m x 30m
The second secon	1601NWR50	Fibre Patio Pack 2m x 50m

Standards

Non-woven Fibre geotextiles are CE marked in accordance with The Construction Products Directive (CPD 89/106/EEC). CE marking demonstrates conformity to The Construction Products Directive (CPD 89/106/EEC) and indicates the stringent testing and certification of Factory Production Control (FPC) that our non-woven Fibre geotextiles have gone through to meet the highest European standards.

Installation Guide

In line with manufacturers recommendations for each application.



Woven Geotextiles

JDP offer a range of woven geotextiles that are strong, robust and durable, made from extruded polypropylene tapes. The industry-leading design has created a geotextile that combines high tensile strength with exceptional puncture resistance to give outstanding performance and longevity.



Add to this its exceptional resistance to acids, alkalis organic compounds and UV and it's easy to see why it's one of the best-selling geotextiles in use today.

Features and benefits

- High tensile strength
- Exceptional puncture resistance
- Outstanding performance and longevity
- Exceptional resistance to acids, alkalis organic compounds and UV
- One of the best-selling geotextiles in use today

Applications

Separation

Using woven geotextiles to separate the aggregate base from the subgrade soil gives substantial improvement to roadway performance, and significantly reduces maintenance costs by preventing these two materials from mixing. Without an effective geotextile, the aggregate base can break down and become mixed with water and soil creating mud - this reduces the shear strength and compaction of the aggregate. Woven geotextiles provide long-term separation by improving compaction and preventing the contamination of the aggregate. With such a comprehensive range we can provide woven geotextiles to suit a wide variety of subgrades or soils.

Reinforcement

By spreading the load horizontally across a wide area JDPs woven geotextiles can increase compaction of the aggregate base to reduce rutting and improve strength. Using woven geotextiles for reinforcement improves the load-bearing capacity of soft soils and its ability to withstand vertical loads.

Furthermore woven geotextiles enables the effective fill thickness to be maintained by reducing the intermixing and punching of fill material into the subsoil.

Drainage and Filtration

JDPs range of woven geotextiles offer an improved method from traditional drainage systems such as French drains. These systems produce mixed results due to their reliance on graded materials, which are expected to prevent the drainage pipe from clogging.

Wrapping less expensive ungraded gravels in woven geotextile allows water to pass through and acts as a barrier to soil particles. In this way, woven geotextiles create a natural filter adjacent to the geotextile, giving a more reliable filtration capability. Available in a wide range of pore sizes it can be matched with differing soil types for optimum performance.

Unpaved Roadways

With soft subgrades, high traffic loads and large rutting, unpaved roads can often result in high maintenance. Using our woven geotextiles in these situations can help you lower costs by saving money on the amount of aggregate needed and reducing ongoing repairs. A soft subgrade covered with the appropriate grade provides stability by spreading loads over a wider foundation, increasing roadway life.

Paved Roadways

JDPs woven polypropylene geotextiles provide an inexpensive and time-proven solution to the leading cause of pavement failure - aggregate contamination. This can be avoided by laying JDPs woven geotextile between the subgrade and the aggregate layer. In addition to preventing these two layers from combining it also improves subsurface drainage, extending the life of paved roads and parking areas.

Full Rolls

States 1	Code	Description	Permeability (l/sec/m2)	CBR Puncture Resistance
100.200.14	16011919	4.5m Woven Geotextile x 100m	20	1500
the second s	16012020	4.5m Woven Geotextile x 100m	10	1800

Mini Packs

	Code	Description
	1601PAVEWAY	4.5m x 11m Mini Pack
and	1601PAVEWAYMINI	14m x 1m Mini Roll



Standards

JDPs woven polypropylene geotextiles are CE marked in accordance with The Construction Products Directive (CPD 89/106/EEC). CE marking demonstrates conformity to The Construction Products Directive (CPD 89/106/EEC) and indicates the stringent testing and certification of Factory Production Control (FPC) that JDPs woven geotextiles have gone through to meet the highest European geotextile standards.

Installation Guide

In line with manufacturers recommendations for each application.





Geogrid

JDP offers a range of extruded polypropylene and woven polyester geogrids, which are widely accepted as giving the best performance and longer-lasting results for soil reinforcement.

Extruded geogrids, such as Tenax fall into two categories to suit a wide variety of applications: the mono-orientated TT range (strength in one direction) offers the ideal solution for the construction of embankments and earth walls that are stable at inclinations of up to 80°. The bi-orientated LBO range (strength in both



directions) offers extremely high performance for ground stabilisation in road construction.

Woven geogrids offer high strength at low elongation and are available as a bi-axial geogrid (strength in both directions) and as a uni-axial geogrid (strength in one direction). These geogrids offer cost savings against extruded geogrids where such a high performance is not required.

Whatever the nature of your project, JDP will give you expert advice in selecting, the appropriate product and offer cost effective solutions.

Features and benefits

- Tensile reinforcement
- Distribute loads more effectively
- Reduce rutting and shear failure
- Increases the bearing capacity of soft sub-soil
- Provides the lateral confinement required to prevent the pumping of sub-grade fines increasing longevity and reducing the need for maintenance
- Extruded polypropylene geogrids have an open structure with rigid ribs and junctions that create a more efficient interlocking action between the geogrid and the fill to give improved performance

Applications

- Paved and unpaved roads
- Airport runways
- Industrial yards
- Embankment foundations over soft soil
- Retaining wall and steep slope construction
- Railroad ballast reinforcement
- Soil reinforcement of building foundations

Code	Description	
1601LB0220	4m x 50m Tennax	220
1601LB0330	4m x 50m Tennax	330
1601LBO440	4m x 50m Tennax	440

How Geogrid works with the fill material



The base of a road on soft subgrade will quickly deform, with rutting at the surface and difficulty of movements for the vehicles. Closely spaced layers of geogrids considerably stiffen the road base, while geocomposites maintain the separation between the fill and the subgrade while providing positive drainage. Geotextile membranes provide the drainage, separation and reinforcement required to stabilize the base of roads on soft subgrade.

The detail to the left shows the difference Geogrid have on a typical construction e.g. eliminate rutting and reduce stone depth.





Standards



Installation Guide

In line with manufacturers recommendations for each application.





Damp Proof Membrane

JDP supply a range of damproof membranes (DPM), polyethylene membranes for use in solid concrete ground floors that are not subject to hydrostatic pressure, to protect buildings against water from the ground.

Features and benefits

- High resistance to puncture
- Supplied in rolls
- Ease of joining or overlapping
- Tough reliable material

Applications

• Concrete floors to protect buildings against damp / water from the ground

	Code	Description	
	15014X25BBA250	BBA DPM Blue 250MU	4m x 25m
	15014X25BBA300	BBA DPM Blue 300MU	4m x 25m
	15014X125BBA500	BBA DPM Blue 500MU	4m x 12.5m
	1501SEALTAPE	DPM Jointing Tape	75mm x 33m

Also available in black

Standards

Manufactured in accordance to BBA certification

Installation Guide

Should be in accordance with the manufacturer's instructions and Clause 11 of CP 102: 1973, the relevant clauses of BS 8000-4: 1989.

Unless the base is smooth a surface blinding of soft sand (or similar material) should be used to prevent puncturing during installation or when the concrete or screed is being placed. Sheets must be clean and free from dirt and grease.

Adjacent sheets should be overlapped by at least 150 mm and should be bound with mastic strips and sealed with 100 mm wide girth jointing tape.

Alternatively, when it is not possible to keep the sheet dry, a double-welded fold should be formed using at least 300 mm of the membrane. It is essential that the fold be held in position prior to placing the concrete, e.g. by weighting with bricks.

Gas Membranes

JDP supply a range of Gas Membrane and Venting Systems. Environmental legislation draws attention to the potential hazard of soilbased gases migrating into buildings. In particular Brownfield sites and developments within proximity of landfill sites are more exposed to this risk. Gas Membrane and Venting Systems Methane, Carbon Dioxide, Carbon Monoxide, Hydrogen, Hydrogen Sulphide and Radon are all such gases that could result in high risks to building occupants, therefore preventative measures should be put in place to stop gas migrating into the building / structure.



Features and benefits

- Allows for building on land with gas contamination
- Full systems complete with top hats, sealing tapes and vents available

Applications

- Gas Venting is collection and dispersal system under the structural slab
- Gas Membrane which provides a continuous gas and vapour barrier across the whole footprint of the slab

JDP provides a number of solutions to deal with these problems from simple gas membranes to a total active or passive venting and membrane system.

The selection of the correct system is determined by the gas regime, venting requirement and building design. This requires specialist knowledge to ensure the appropriate system is designed correctly, JDP in conjunction with leading environmental consultants provide a full package solution from design through to supply of the selected system.



Standards

Our range of gas membranes can be incorporated into robust gas protection designs that meet the guidelines provided CIRIA 149 and it's derivative documents including the recently published CIRIA C659 report - *Assessing risks posed by ground gases to buildings*.

Installation Guide

In line with manufacturers recommendations for each application.

Hot & Cold Water Systems



- Hot & Cold Plumbing Underfloor Heating
- Underfloor Pipe Ducting Geothermal Pipe Systems



JDP offers a complete range of systems for hot and cold plumbing and heating.

Our ranges include Polybutelyne, PEX (cross linked polyethylene) and Geothermal pipe systems. Whether for use as a simple internal water supply connection or a designed package using distribution manifolds and heating controls, JDP can supply the solution for you.





Hot & Cold Plumbing

JDP offers a complete range of Hot & Cold Plumbing Systems; designed for water supply, tap connections and radiator connections.

JDP supplies polybutylene pipes and fittings for hot and cold water supply and radiator central heating. In sizes from 10mm to 28mm. These flexible systems can be used for any internal hot and cold water distribution.



Features and benefits

- Fast to install
- Easier to install than conventional copper pipe
- Withstands damage at high and low temperatures
- Less joints required
- Connects to Copper and Polyethelene water supply
- Point to point distribution valves available negating the need for any under floor / hidden access joints
- If water freezes pipe does not burst
- Silent running
- Reduced thermal heat loss

Applications

- Cold water supply
- Hot water supply
- Radiator central heating connections

Contact your local branch for more information.



Underfloor Heating

JDP offers a complete range of systems for Underfloor Heating. Offering a complete package design service through its partner suppliers, which ensures the product you install meets all of your heating needs.

By determining key factors of the installation site, the heat requirements for each room, zones are calculated and drawings are produced within a few working days, to allow the customer to comment on or amend details as required.

After this, generally a period for considering the design, making comments and amendments is necessary to ensure all parties are confident before the package is made and delivered.



Features and benefits

- Gives a comfortable, even temperature
- Low operating temperature makes it efficient
- Less dust circulation
- No restriction on interior design
- Maximize internal floor space
- Low maintenance

Applications

- Concrete floors
- Screeded floors
- Joisted floors
- Battened timber floors
- Floating floors
- Sprung timber sports floors
- Existing floor overlay system

The system is designed and installed as a package to suit the specific application; however the component parts will consist of a combination of the following:

Polybutelene Pipe

Tough yet extremely flexible, Polybutelene pipes have a pressure/temperature rating which allows for continuous use at a temperature up to 95°C at 6 bar (Depending on system used).

PEX Pipe

This cross linked Polyethylene, is designed for it's exceptional strength pressure/temperature rating which allows for continuous use at a temperature up to 95°C at 6 bar (Depending on system used).

Distribution Manifolds

These central distribution points are where warm water is pumped from the boiler, into the flow section of the manifold, around the various circuits of underfloor heating pipe, back into the return section of the manifold and then back to the boiler.

Controls

A complete range of controls including, mixers, and pumps are supplied to suit the specific application to provide the correct water temperature and flow around our UFH pipes. Room thermostats are available in standard, electronic, remote sensing or floor sensing types.





Underfloor Pipe Ducting

This PVCu duct system is an ideal solution for installing pipe in concrete floors, whilst maintaining an access point.

Features and benefits

- Quick and easy to install
- Allows access to pipe work

Applications

• Ducting plumbing pipe work in concrete flooring

50mm Deep x 150mm Wide

	Code	Description
	0916FD50	Underfloor Pipe Duct For 10, 15 & 22mm pipework. Requires 12mm thickness cover board.
	0916FD52	Floor Duct Union
\bigcirc	0916FD53	Floor Duct 90° Bend
	0916FD54	Floor Duct Tee
	0916FD55	Floor Duct End Cap

70mm Deep x 150mm Wide

~	Code	Description
	0916FD70	70mm Underfloor Pipe Duct For 28mm pipework. Duct only – fittings fabricated on site. Requires 12mm thickness cover board.

Geothermal Pipe System

Geothermal pipe is a black polyethylene pipe used for its physical and thermal properties, which make it ideal for burying as a ground source heating pipe for Ground Sourced Heat Pumps.



Features and benefits

- High fracture toughness
- High fatigue resistance
- Flexible
- Economical heating solution
- Environmentally friendly

Applications

- Residential and commercial applications
- Ground sourced heat pumps

Available in 32 and 40mm diameters, in coil lengths 100, 250, 300 and 400m, it is compatible with the Plasson range of water supply fittings.

Standards

Black Polyethylene manufactured to relevant standards

Installation Guide

Can be installed "slinky" form or loops.

Above Ground Systems



- Rainwater Systems Fascia Soil & Vent Pipe Waste Systems
- Flexible Couplings & Adaptors



A full range of above ground products in lightweight, low maintenance, durable plastic is stocked by JDP.

JDP can supply the complete system in a range of colours. Soil and vent pipes for WC's, waste systems for sinks and bathrooms and appliances, fascia boards for

roofline protection and rainwater systems to take the water from the roofline to the underground drains. The range includes the new "Cast Style" Rainwater and 110mm Soil systems.





Rainwater Systems

JDP stock several styles of rainwater system including "Cast Style" with various capacities to suit any application. Manufactured in uPVC they offer the correct profile to complement any domestic property. Being made from uPVC they are low maintenance and are produced in a range of colours.

Features and benefits

- Very low maintenance
- Comprehensive range of styles and colours
- Easy to install
- Offers cost savings against metal gutter systems

Applications

- All roofline drainage applications, where water is to be captured and transported to below ground drainage pipe systems
- To select the gutter size appropriate to your requirements, two factors must be taken into consideration. A guide to maximum roof area is included in the system selector on page 157
 - Roof area
 - Gutter flow capacity

For further reference, refer to BS EN 12056-3:2000 'Roof drainage, layout and calculation'





uPVC Rainwater System Selector

	Gutter Profile	Maximum Roof Area	Downpipe System	Colour Choice
	112mm Half Round	40m ²	68mm	G,B,W,BR,CI
	114mm Square	73m ²	65mm	G,B,W,BR
Ś	114mm Hi-Cap Deep Capacity	88m²	68/80mm	G,B,W,BR,CI
	110mm Niagara Ogee	104m²	65/68/80mm	B,W,BR,CI
	170mm Xtraflo High Capacity	206m ²	110mm	G, B

G = Grey, B = Black, W = White, BR = Brown, CI = Cast Iron

*Figures quoted above are worst case scenarios, flow capacity is dependent on the position of the outlet. For advice please ask your local JDP branch.



New generation Cast Iron effect uPVC rainwater system available in 3 profiles.

This system offers an excellent mix of heritage aesthetics whilst retaining all the advantages of a modern uPVC System. For full details contact your local JDP branch.

Above Ground Systems

Rainwater Guttering

_	Descri	ption	112mm Half Round	110mm Ogee	114mm Hi-Cap	170mm Xtraflo	114mm Square Line
	2m Gut	ter	0302RG2	-	-	-	0302RGS2
	4m Gut	ter	0302RG4	0302RGN4	0302RGH4	0302RGX4	0302RGS4
D	Union E	Bracket	0302RU1	0302RUN1	0302RUH1	0302RUX1	0302RUS1
S	90º Angle	External Internal	0302RA1	0302RAN2 0302RAN1	0302RAH1	0302RAX1	0302RAS1
de la companya de la	135° Angle	External Internal	0302RA2	0302RAN4 0302RAN3	0302RAH2	-	0302RAS2
L)	Fabrica Angles	ted	0302RA9*	0302RAN9*	0302RAH9*	0302RAX9*	0302RAS9*
(J	Runnin	g Outlet	0302R01	0302RON1	0302R0H1	0302R0X1	0302ROS1
	Short S End Ou	top tlet	0302R02	0302RON2/3	-	-	0302ROS2
I	Stop End Externa	L/Hand R/Hand	0302RE1	0302REN1 0302REN2	0302REH1	0302REX1	0302RES1
\bigcirc	Stop End External		0302RE2	0302REN3 0302REN4	0302REH2	0302REX2	0302RES2
K.	Fascia	Bracket	0302RK1	0302RKN1	0302RKH1	0302RKX1	0302RKS1
	Top Ha Fascia	ng Bracket	-	0302RKN2	0302RKH2	-	-
J	Top Rat	ter	0302RR1	0302RR1	0302RR1	0302RR5	0302RR1
J	Side Ra	ifter	0302RR2	0302RR2	0302RR2	0302RR6	0302RR2
L	Rise &	Fall	0302RF1	0302RF1	0302RF1	-	0302RF1

*Angle must be specified when ordering



Rainwater Downpipe

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Description	68mm Round	65mm Square
2.5m Downpipe	0302RP2.5	0302RPS2.5
4m Downpipe	0302RP4	0302RPS4
5.5m Downpipe	0302RP5.5	0302RPS5.5
Pipe Connector	0302RS1	0302RSS1
Bracket	0302RC1/2/3	0302RCS1/2/3
Square to Round Pipe Adaptor	0302RDS2	0302RDS2
112.5° Offset Bend	0302RB2	0302RBS2
92.5° Offset Bend	0302RB1	0302RBS1
Adjustable Offset Bend	-	0302RBS5
Shoe	0302RB3	0302RBS3
112.5° Branch	0302RY1	0302RYS1
Access Pipe	0302RX1	0302RXS1
Hopper Head – Standard	0302RHS1	
Rainwater Diverter Kit - fits square or round	0302RVS1	

Standards BS EN607: 2004, BS NE 12200-1:2000, BS NE 1462: 2004

Installation Guide

- Position the gutter outlet vertically above the drain inlet or gully from which the rainwater will be conveyed to the underground drainage system.
- Fix the outlet in position on the fascia allowing for whatever fall, if any, is required.
- Fix the gutter support bracket furthest from the outlet at a position on the fascia which will produce a run of gutter either horizontal or to the desired fall.
- Stretch a line taut between the fixed outlet and support bracket, establishing a straight gutter line.
- Fix the remainder of the fittings to the fascia following this line, a joint bracket being positioned at each junction of two gutter sections.
- Where, due to the absence of a fascia or the design of the building, support fittings cannot be fixed, the rafter top bracket and side bracket provide alternatives.
- Rise and fall brackets driven into the wall will support the gutter system where there is no fascia and rafter brackets are impractical. Position these against alternate sides of joint brackets, running outlets or angles along the installation to prevent excessive thermal movement in any one direction.

Fascia

JDP offer a range of fascia for use in new build, replacement or refurbishment, where boards can be used to cover existing timber. Contact your local JDP branch for details of the range available.

Features and benefits

- Virtually no maintenance
- Comprehensive range of colours
- Easy to install
- Durability in all conditions
- Good insulating properties

Applications

- Finishing rooflines on domestic buildings
- Provide ventilation to roof space in accordance to Building Regulations







Standards

Class 1 fire rating in accordance with BS476: Part 5 1979 & BS476: Part 7 1997

Installation Guide

- Boards should only be fixed at temperatures between 0°C and 30°C
- A 5mm gap to be allowed for thermal movement at joints and at box ends
- Use adequate length of nails/pins
- Only secure boards to sound timber
- Fixings should be at a maximum of 600mm

Soil and Vent Pipe

Whether you require push fit ring seal or solvent weld, JDP can offer a complete range of uPVC Soil and Vent systems. Lightweight and easy to install, they are available in a range of colours inclusing white, black and grey in 110mm. 82 and160mm also available. The system includes a range of Pan Connectors for connecting the WC.

Features and benefits

- Virtually no maintenance
- Comprehensive range of styles and colours
- Easy to install
- · Offers cost savings against metal soil and vent systems

Applications

- Venting foul and waste water pipes
- Connecting above ground foul and waste water pipes from sinks and toilets etc. to below ground drainage pipe systems

Ring Seal Soil & Vent

Plain End Pipe

·	Description	4in / 110mm
	3m length	0302SP1
	4.0m length	0302SP2

Single Socket Pipe

 Description	4in / 110mm
3m length	0302SP3
4.0m length	0302SP4

Single Socket

Description	4in / 110mm
	0302SP124

Double Socket

Description	4in / 110mm
Remove Centre	0302SP105

Stop for Slip Coupling.

Pipe Clips (Plastic)

\bigcirc	Description	4in / 110mm
	Pipe	0302SP82
\bigcirc	Socket	0302SP83
	Pipe	0302SP82
	Socket	0302SP83

Bend (Single Socket)

Description	4in / 110mm
92 ¹ /2 ⁰	0302SP161
112 ¹ /2°	0302SP162
135°	0302SP163

Bend (Double Socket)

	Description	4in / 110mm
\sim	92 ¹ /2 ⁰	0302SP561

Offset Bend 135° (Double Socket)

	Description	4in / 110mm
\otimes	135°	0302SP440

Offset Bend 135° (Socket/Spigot)

\sim	Description	4in / 110mm	
Σ	135°	0302SP435	

Access Bend 921/2° (Single Socket)



Description	4in / 110mm
Description	4117 11011111
92 ¹ /2 ⁰	0302SP169

Single Branch

	Description	4in / 110mm
\odot	921/2° Equal (2 Boss)	0302SP190
	112 ¹ /2° Equal	0302SP200
	135° Equal	0302SP210

Adjustable Bend (Ring Seal/Spigot)

Description	4in / 110mm
0-90° (Polypropylene)	0302SP560

(Grey only). Do not Solvent Weld.

Boss Adaptor (Rubber) Push Fit

 Description	4in / 110mm
32mm	0302SP10
 40mm	0302SP11
50mm	0302SP12

Solvent Adaptor for ABS or MuPVC BS5255 Pipe only

—	Description	4in / 110mm
	32mm BS5255	0302SP20
	40mm BS5255	0302SP21
	50mm BS5255	0302SP22

Vent Cowl

Description	4in / 110mm
	0302SP310
Access Branch

Description	4in / 110mm
\$ 92 ¹ /2° (4 Boss)	0302SP502

Boss Pipe

	Description	4in / 110mm
\odot	Ring Seal	0302SP581

Requires Boss Adaptor.

Short Boss Pipe

Description	4in / 110mm
Double Solvent Socket	0302SP583

Requires Boss Adaptor.

Strap Boss (Open)

±	Description	4in / 110mm
Ŏ	Back Fix Nut & Bolt	0302SP319

Requires Boss Adaptor.

Access Pipe (Single Socket)

	Description	4in / 110mm
[⊕!	110mm – 3 Boss	0302SP274

A



Socket Plug

Description	4in / 110mm
	0302SP296

Reducers

Description	4in / 110mm
110 x 82mm Soil	0302SP97
110 x 68mm Rainwater	0302SP96
160 x 110mm	0302D99

Vent Flashing Sleeve

Description	4in / 110mm
(Weathering Collar)	0302SP300

Vent Terminal

Description	4in / 110mm
(Balloon Grating)	0302SP302

*Polypropylene do not solvent weld.

Weathering Slate (Rubber/Aluminium)

Description	4in / 110mm
457 x 457mm Angled	0302SP320

Access Cap

ſ	Description	4in / 110mm
	Screwed/Spigot Tail	0302SP292

Drain Connector

5	Description	4in / 110mm
		0302\$P107

Double Branch

Description	4in / 110mm
92 ¹ /2 ⁰	0302SP320

Only for use in vertical position

* When ordering please add colour to code, G = Grey, B = Black, W = White, BR = Brown

i.e. 0304SP430G

Soil Manifold Polypropylene (Grey) Accepts up to 4 Waste Inlets

20	Description	4" / 110mm
See.	Soil Manifold	0302SP588

(One open boss) 32/40/50mm connections.

Air Admittance Valves (Grey, Black & White)

	Description	Code
	110mm PVC-U External Push Fit	0302AX110
l d	110mm PVC-U Solvent Socket	0302AV110
	110mm PVC-U Push Fit Socket	0302AF110

To convert to 82mm Solvent Socket Valve, remove seal from 110mm push fit AF110.

82mm & 110mm valves include Polystyrene Insulating Head Cover as per Building Regulations.

Insulating cover no longer required, Floplast valves are BSI tested to BS12389 - A1, temp range of -20°C - +60°C

Fire Protection Sleeves (Metal) 4 Hour

FR	Description	Code	
E.O.	110mm Fire Protection Sleeves	0302FC110	

Metal shell contains intumescent material. New compact type, use where plastic pipes penetrate walls and floors.



Kwickfit WC Pan Connectors White Polypropylene - 110mm / 4in. Do not solvent weld.

Description	Code		Description	Code
Straight	0302SP101	D	Offset – 12mm	0302SP102
 90° 'S' (225mm Leg)	0302SP103		Extension	0302\$P104
Swan Neck 90° (Set back for	0302SP100		Piece (200mm)	000201104
104° 'P'	0302SP108		Flexible Connector (110dia. x 580mm) Version	0302SP106

Standards

BSEN1329-1 & BS4514

Installation Guide

- 1) Cut pipe cleanly at right angles to its axis using a fine tooth saw
- 2) Chamfer spigot end to ensure sealing ring is not displaced when inserted
- 3) Ensure all components are clean, dry and free of dust
- 4) Lubricate evenly round the pipe or fitting
- 5) Allow a minimum12mm expansion gap when inserted

Maximum distances for pipe support (BS EN 12056:2000)					
Vertical Horizontal					
82mm	2m	1m			
110mm 2m		1m			
160mm	2m	1m			

Further guidance should be sought by reference to BS EN 12056:2000 Gravity Drainage Systems inside Buildings.

Waste Systems

JDP supply Waste Systems in solvent MuPVC and ABS as well as push fit and compression systems in polypropylene. These include a range of waste traps.

Features and benefits

- Virtually no maintenance
- Comprehensive range of colours
- Easy to install
- Leak free jointing

Applications

• Carrying waste water from sinks, bathrooms and appliances to soil and vent pipes or directly into underground drains

Solvent Weld Waste System Grey, White & Black (50mm Grey, White & Black) A.B.S.

	Code	Description		Code	Description	
	Wastepipe 3m lengths			Swept Bend – 92 ¹ /2°		
	0302WS01	32mm	6	0302WS14	32mm	
	0302WS02	40mm		0302WS15	40mm	
	0302WS03	50mm		0302WS16	50mm	

4	Code	Description		Code	Description
	Knuckle Bend – 90°			Obtuse Bend – 135°	
	0302WS10	32mm	\bigtriangledown	0302WS18	32mm
	0302WS11	40mm		0302WS19	40mm
	0302WS12	50mm		0302WS20	50mm

2	Code	Description		Code	Description
	Swept Tee – 92 ¹ /2°			Swivel Bend - 921/2°	
	0302WS22	32mm		0302WS26	32mm
	0302WS23	40mm		0302WS27	40mm
	0302WS24	50mm		0302WS28	50mm

\bigtriangledown	Code	Description	Code	Description
	Spigot Bend – 45°		Straight Coupling	
	0302WS76	32mm	0302WS07	32mm
			0302WS08	40mm
	0302WS77 40mm	0302WS09	50mm	



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	Code	Description		Code	Description
	Expansion Coupling		di)—	Screwed Access Plug	
				0302WS30	32mm
_	0304WS61	32mm	100	0302WS31	40mm
				0302WS32	50mm
	Code	Description		Code	Description
	Threaded Coupling -	- BSP Female		Reducer	
	0302WS66	32mm		0302WS38	40 x 32mm
				0302WS39	50 x 32mm
	0302WS67	40mm		0302WS40	50 x 40mm
	Code	Description		Code	Description
\cap	Pipe Clip			Tank Connector	
_} {L	0302WS34	32mm		0302WS60	32mm
	0302WS35	40mm		000011/004	
	0302WS36	50mm		030200561	40mm
	Code	Description		Code	Description
r h	Crossed Tee - 92 ^{1/2°}			Junction – 135°	
5'6				0302WS42	32mm
9	U3U2W\\$58	40mm		0302WS43	40mm
	Code	Description			
(TTT)	Adaptor – Male Iror	1			
	0302WS63	32mm			
	0302WS64	40mm			

* When ordering please add colour to code, G = Grey, B = Black, W = White, BR = Brown i.e. 0302SP420G

Push-fit Waste System Grey, Black & White (50mm Grey & Black only) Polypropylene - Do not solvent weld

	Code	Description		Code	Description	
	Wastepipe 3m lengt	ths		Swept Bend – 92 ¹ /2°		
	0302WP01	32mm	(C'	0302WP14	32mm	
	0302WP02	40mm	\Leftrightarrow	0302WP15	40mm	
	0302WP03	50mm		0302WP16	50mm	
	Code	Description		Code	Description	
	Knuckle Bend – 90°			Obtuse Bend – 135°)	
	0302WP10	32mm	\sim	0302WP18	32mm	
	0302WP11	40mm	0	0302WP19	40mm	
	0302WP12	50mm		0302WP20	50mm	
	Code	Description	_	Code	Description	
	Swept Tee – 91 ¹ /4°			Swivel Bend – 90°		
F 4	0302WP22	32mm		0302WP26	32mm	
رايىسىسى	0302WP23	40mm		00001112		
	0302WP24	50mm		0302WP27	4Umm	
	Code	Description		Code	Description	
(T-T)	Code Straight Coupling	Description		Code Reducer	Description	
	Code Straight Coupling 0302WP07	Description 32mm		Code Reducer 0302WP38	Description 40 x 32mm	
	Code Straight Coupling 0302WP07 0302WP08	Description 32mm 40mm		Code Reducer 0302WP38 0302WP39	Description 40 x 32mm 50 x 32mm	
	Code Straight Coupling 0302WP07 0302WP08 0302WP09	Description 32mm 40mm 50mm		Code Reducer 0302WP38 0302WP39 0302WP40	Description 40 x 32mm 50 x 32mm 50 x 40mm	
	Code Straight Coupling 0302WP07 0302WP08 0302WP09	Description 32mm 40mm 50mm		Code Reducer 0302WP38 0302WP39 0302WP40	Description 40 x 32mm 50 x 32mm 50 x 40mm	
	Code Straight Coupling 0302WP07 0302WP08 0302WP09 Code	Description 32mm 40mm 50mm Description		Code Reducer 0302WP38 0302WP39 0302WP40	Description 40 x 32mm 50 x 32mm 50 x 40mm Description	
	Code Straight Coupling 0302WP07 0302WP08 0302WP09 Code Socket Plug	Description 32mm 40mm 50mm Description		Code Reducer 0302WP38 0302WP39 0302WP40 Code Pipe Clip	Description 40 x 32mm 50 x 32mm 50 x 40mm Description	
	Code Straight Coupling 0302WP07 0302WP08 0302WP09 Code Socket Plug 0302WP30	Description 32mm 40mm 50mm Description 32mm	n	Code Reducer 0302WP38 0302WP39 0302WP40 Code Pipe Clip 0302WP34	Description 40 x 32mm 50 x 32mm 50 x 40mm Description	
	Code Straight Coupling 0302WP07 0302WP08 0302WP09 Code Socket Plug 0302WP30 0302WP31	Description 32mm 40mm 50mm Description 32mm 40mm	n	Code Reducer 0302WP38 0302WP39 0302WP40 Code Pipe Clip 0302WP34 0302WP35	Description 40 x 32mm 50 x 32mm 50 x 40mm Description 32mm 40mm	
	Code Straight Coupling 0302WP07 0302WP08 0302WP09 Code Socket Plug 0302WP30 0302WP31 0302WP32	Description 32mm 40mm 50mm Description 32mm 40mm 50mm	n	Code Reducer 0302WP38 0302WP39 0302WP40 Code Pipe Clip 0302WP34 0302WP35 0302WP36	Description 40 x 32mm 50 x 32mm 50 x 40mm Description 32mm 40mm 50mm	
	Code Straight Coupling O302WP07 0302WP08 0302WP09 Code Socket Plug 0302WP30 0302WP31 0302WP32 Code Code	Description 32mm 40mm 50mm Description 32mm 40mm 50mm Description	n	Code Reducer 0302WP38 0302WP39 0302WP40 Code Pipe Clip 0302WP35 0302WP36	Description 40 x 32mm 50 x 32mm 50 x 40mm Description 32mm 40mm 50mm	
	Code Straight Coupling 0302WP07 0302WP08 0302WP09 Code Socket Plug 0302WP30 0302WP31 0302WP31 0302WP32 Code Code	Description 32mm 40mm 50mm Description 32mm 40mm 50mm Description	n	Code Reducer 0302WP38 0302WP39 0302WP40	Description 40 x 32mm 50 x 32mm 50 x 40mm Description 32mm 40mm 50mm	
	Code Straight Coupling 0302WP07 0302WP08 0302WP09 Code Socket Plug 0302WP30 0302WP30 0302WP31 0302WP32 Code Code Code	Description 32mm 40mm 50mm Description 32mm 40mm 50mm Description 32mm 40mm 50mm 1000 10		Code Reducer 0302WP38 0302WP39 0302WP40	Description 40 x 32mm 50 x 32mm 50 x 40mm Description 32mm 40mm 50mm	

* When ordering please add colour to code, G = Grey, B = Black, W = White, BR = Brown

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Universal Compression Waste (White) Polypropylene - Do not solvent weld 11/4 inch / 32mm & 11/2 inch / 40mm nominal (Fittings accept BS5254, BS5255 & Copper Pipe)

	Code	Description		Code	Description
	Wastepipe (3 metre) (also in grey)			Straight Connector	
	0302WP01	32mm		0302WC07	32mm
	0302WP02	40mm		0302WC08	40mm
	Code	Description		Code	Description
	Knuckle Bend – 90°			Obtuse Bend – 135°	
	0302WC10	32mm		0302WC18	32mm
	0302WC11	40mm		0302WC19	40mm
	Code	Description	-18	Code	Description
BY TE	Equal Tee – 91 ¹ /4 °			Swivel Elbow – 90°	
	0302WC22	32mm		0302WC26	32mm
	0202\\//022			000014/007	
	030200623	40mm		030200027	40mm
	Code	40mm Description		Code	40mm Description
ET E	Code Reducer 40 x 32mm	40mm Description	0	Code Pipe Clip (also in gra	40mm Description
	Code Reducer 40 x 32mm	40mm Description 40mm	n	Code Pipe Clip (also in gro 0302WP34	40mm Description 29) 32mm

Traps (White) Polypropylene

e.	Code	Description		Code	Description
L	Bottle Trap – 75mm	Seal		Bath Trap – 20mm Seal with Cleaning Eye	
	0302TB37	32mm		020275042	40mm
\cup	0302TW47	40mm		U3UZ15B4Z	
Ū	Code	Description		Code	Description
	Shower Trap – 19mr	n Seal		Shower Trap – 19mr	n Seal
	0302TH41	32mm (70mm Plastic Grid)		0302TH43	32mm (70mm Chrome Plated Grid)

Removable Waste for easy cleaning



Removable Waste for easy cleaning

Anti-Syphon Units (White)

	Code	Description	
	ABS Solvent Spigot		
	0302AF32	32mm	
	0302AF32	40mm	
	0302AF32	50mm	

Lubricants & Solvents

	Code	Description
DYKA	0302SG100	Silicone grease
No. of Concession, No. of Conces	0302SL400	Aerosol Lubricant
A CHINE	0102CF250	Cleaning Fluid 250ml
. All Par	0302SC125	Solvent cement
	0302SC250	Solvent cement

Standards

ABS solvent weld systems to BS EN1455-1 Polypropylene push fit systems to BS EN1451-1 Waste traps to BS EN274

Installation Guide

Push Fit

- 1) Cut pipe cleanly at right angles to its axis using a fine tooth saw
- 2) Chamfer spigot end to ensure sealing ring is not displaced when inserted
- 3) Ensure all components are clean, dry and free of dust
- 4) Lubricate evenly round the pipe or fitting
- 5) Insert spigot allowing for an expansion gap when inserted

Solvent

- 1) Cut pipe cleanly at right angles to its axis using a fine tooth saw
- 2) Read instruction on the solvent and ensure there is sufficient ventilation
- 3) Ensure all components are clean, dry and free of dust
- 4) Clean surfaces of spigot and socket with the degreasing cleaner
- 5) Apply one coat evenly to both surfaces using the applicator or paint brush
- 6) Each joint must be completed within 11/2 minutes
- 7) Hold for 20-30 seconds and remove any surplus solvent cement
- 8) The joint may be handled after 10 minutes and commissioned after 24 hours





Maximum distances for pipe support (BS EN 12056:2000)				
	Vertical Horizontal			
32mm	1.2m	0.5m		
40mm	1.2m	0.5m		
50mm	1.2m	0.6m		

Further guidance should be sought by reference to BS EN 12056:2000 Gravity Drainage Systems inside Buildings.

Flexible Couplings & Adaptors

Plumbing Range (30-100mm Diameter)

JDP offers a comprehensive range of pipe connection and repair couplers, specifically designed to connect and repair pipelines of different materials or sizes used in sewerage, drainage and waste applications.

The combination of a durable design and excellent sealing properties enables our couplings to provide a reliable seal on rough pipe surfaces e.g. concrete, and a high performance seal on smooth surfaces e.g. PVCu.

Features and benefits

- Durable design ensuring a high performance and reliable seal
- Stainless steel shear band provides excellent resistance to heavy loads and shear forces
- Shear band ensures joint flexibility and pipe alignment
- High performance sealing properties of the couplings eliminates need for grouting in most applications

Applications

Our couplings have many applications in the construction, repair and maintenance of pipe systems:

- As a joint for plain ended pipes
- Repair and maintenance of existing pipelines
- Connecting short and cut lengths of pipe
- Making post construction connections to an existing pipeline
- As an adaptor

Part Number	Size Range (mm)
2004PC35	30-35
2004PC43	38-43
2004PC56	48-56
2004PC68	60-68
2004PC76	67-76
2004PC85	76-85
2004PC92	82-92
2004PC100	90-100

Part Number	Size Range (mm)	Small End (mm)
2004PAC0301	30-34	24-28
2004PAC0431	38-43	30-35
2004PAC0562	48-56	38-43
2004PAC0682	60-68	38-43
2004PAC0923	82-92	48-56
2004PAC0924	82-90	60-68
2004PAC0923 2004PAC0924	82-92 82-90	48-56 60-68



Adaptor range of plumbing couplings connect pipes with differing outside diameters whether due to different pipe materials or sizes.

The Straight Couplings are suitable for pipes with similar outside diameters whatever pipe size or material. They are used to connect smaller diameter pipes in most low/non pressure plumbing systems.



Storage Tanks



• Oil Storage • Fuel Storage & Dispensing Systems



JDP is committed to protecting the environment and minimising the risk of pollution, offering the definitive solution to safe storage, distribution and safe handling of fuels and chemicals.

We also offer a comprehensive range of potable and non potable water storage containment tanks, as well as rain water storage tanks and water butts.

Don't get caught out

Every year there are more than 5,000 pollution incidents involving oil and fuels. Although these affect land, the vast majority also affect the water environment. On average an oil spill costs a typical business up to £30,000 in fines, clean up charges and production losses. In order to help you avoid the risk of such fines, JDP have included the following information regarding the domestic oil storage regulations.





Q. What regulations affect domestic fuel storage?

The control of Pollution (oil storage) (England) Regulations 2001.

Q. To which sites do they apply?

Private dwellings storing over 3500 litres but it should be noted that Building Regulations reduce this to 2500 litres.

Q. What is the timescale?

The timescale for the control of Pollution (Oil Storage) (England) Regulations 2001 was 1st September 2005, whereby all relevant domestic installations affected must be bunded.

Q. How can I ensure that a bund complies with the regulations?

Install an integrally bunded tank (OFST100). Alternatively you could build a masonry or concrete bund that complies with the stringent requirements of the Pollution Prevention Guidance notes PPG 2 (above ground oil tanks) and PPG 26 (oil drum storage) issued by the Environment Agency. Masonry and concrete bunds are covered by Ciria Report 163. The JDP range of bunded tanks will meet all your regulatory needs in one easy step.

Q. If I install the wrong type of tank now, must it be changed?

Yes, it must be replaced with a bunded tank, or be bunded straight away.

Q. Where else should a bunded tank be installed?

When on completion of the OFTEC form TI/133 (risk assessment) by an OFTEC qualified Engineer, your tank is deemed to need bunding. If any of the following checks apply:

- Tank capacity in excess of 2500 litres
- Tank within 10 metres of controlled water
- Tank located where a spillage could run into an open drain or to a loose fitting manhole cover
- Tank within 50 metres of a borehole spring
- Tank over hard ground or hard-surfaced ground that could enable spillage run-off to reach controlled water
- Tank located in a position where the vent pipe outlet is not visible from the fill point
- Tank supplying heating oil to a building other than a single family dwelling



Oil Storage

JDP have dedicated many years towards helping to develop innovative solutions that not only address environmental concerns about safe storage, but champions them.

With standard and all-inclusive ranges available, JDP now provides the most comprehensive range of single skin and bunded plastic oil tanks and bunded fuel storage / distribution tanks. The all-inclusive range is featured in this section.

Telemetry

The telemetry transmitter offers homeowners complete peace of mind and the reassurance that they will never run short of oil again, by being able to clearly read the oil level inside the tank from the plug-in receiver inside your home. All oil tanks in this section come with this feature.

Top Outlet

For the additional safe storage tank, your single skin tank can be fitted with a top outlet.

Single Skin Tanks

Our range of single skin tanks are feature-packed storage systems specifically suited to domestic applications where bunding is not a legal requirement. The unique tank design can be supplied in a number of options from the basic standard tank through to the all-inclusive tank version featured in this range.

Beneath the lid of every single skin tank is the 'tank pack', including a telemetry transmitter and plug-in receiver, 5-year life battery (optional on standard tank), lever valve with integral filter bowl and PTFE compound to seal the joints.

Features & Benefits

- Built-in intelligence
- Range of sizes
- Low level telemetry warning system

Applications

• Fuel storage for domestic applications where bunding is not a legal requirement

	Code	Description		Code	Description
	1401R1000TT	Ltr/Gal: 1200/260 Length: 1785mm Width: 1370mm Height: 925mm	5	1401R1225TT	Ltr/Gal: 1225/270 Length: 1775mm Width: 740mm Height: 1400mm
	Code	Description		Code	Description
	1401LP1200TT	Ltr/Gal: 1200/260 Length: 1785mm Width: 1370mm Height: 925mm		1401H1300TT	Ltr/Gal: 1300/285 Length: 1735mm Width: 1090mm Height: 1145mm
	Code	Description		Code	Description
	1401H1800TT	Ltr/Gal: 1800/400 Length: 2170mm Width: 1125mm Height: 1170mm		1401H2500TT	Ltr/Gal: 2500/550 Length: 2265mm Width: 1285mm Height: 1315mm
	Code	Description		Code	Description
	1401V1300TT	Ltr/Gal: 1300/285 Diameter: 1210mm		1401V2500TT	Ltr/Gal: 2500/550 Diameter: 1635mm

Top outlet also available

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Standards



Installation Guide

All tank installations must be sited on a fully supported flat base and comply with manufacturers instructions for the specific size of tank used.

Tanks must be installed / commissioned by a registered OFTEC installer.





Bunded Tanks

JDPs range of bunded tanks represent the most advanced range of integrally bunded oil storage systems available within the EU.

Designed to exceed all current oil storage regulations, the range is factory fitted with a complete pro-active fuel monitoring system. This system not only monitors oil levels within the tank but can also act as a bund safety sensor.

Specifically designed for commercial, industrial, institutional and agricultural properties where bunded tanks are now compulsory, the range is also becoming ever more popular amongst domestic users for its safe and environmental features.

Bunded tank installations are compulsory at all locations where storage is greater than 2500 litres.

Features & Benefits

- Integrally bunded
- Range of sizes
- Pro-Active fuel monitoring system
- Exceeds all current oil storage regulations

Applications

Safe storage of fuels with protective bund for commercial and domestic applications

Code	Description
1401ES1000B	Ltr/Gal: 1000/220 Length: 2140mm Width: 695mm Height: 1500mm

 Code	Description	Code	Description
1401ES1225B	Ltr/Gal: 1225/270 Length: 2075mm Width: 1030mm Height: 1560mm	1401ES1300B	Ltr/Gal: 1300/285 Length: 1935mm Width: 1265mm Height: 1310mm
Code	Description	Code	Description
1401ES1800B	Ltr/Gal: 1800/400 Length: 2360mm Width: 1300mm Height: 1345mm	1401ES2500B	Ltr/Gal: 2500/550 Length: 2450mm Width: 1425mm Height: 1465mm

Top outlet also available

Standards



Installation Guide

All tank installations must be sited on a fully supported flat base and comply with manufacturers instructions for the specific size of tank used.

Tanks must be installed / commissioned by a registered OFTEC installer.

Oil Tank Connections

To compliment the range of oil tanks, JDP supply plastic and copper oil pipe suitable for underground use.

	Code	Description
	0905100IL	10mm Plastic Oil Pipe
	0905150IL	15mm Plastic Oil Pipe
$+$ \vee //	0901T10P	10mm Plastic Coated Copper x 25m
	0901T15PW	15mm Plastic Coated Copper x 25m

	Code	Description
	0905KBB3	The use of a fire valve as a safety provision with all oil-burning equipment having a remote source of oil is required by authorities including The Fire Protection Association and OFTEC.
J	KBB Remote Fire Valve 3m*	 non electrical safety valve manual reset sensor systems fails to safety if broken 2 alternative temperature settings as required by BS 5410 Pts 1 & 2 OFCERT licensed manual on/off *remote sensing up to 9m (30ft) available
	1401TLOOP Tiger Loop	De-aeration of the Tigerloop® ensures that oil passing through the oil pump to the burner nozzle is air-free. This allows highly efficient combustion without dripping problems leading to soot build up. A Tigerloop® installation will achieve better fuel efficiency through lower oil consumption. The Advantages of Tigerloop
Toption Har and the		 Safely handles suction line air leaks Reduces running vacuum for clear, foam-free oil at the nozzle Removes air entrained in oil during transporting and delivery Eliminates potential leak hazard by eliminating the return line Preheats oil for cleaner combustion Extends filter element life



Fuel Storage & Dispensing Systems

On Site Fuel Storage and Dispensing Systems

EU and domestic regulations state that all fuel-dispensing tanks must be bunded. The JDP fuel station offers customers a complete bunded solution providing safe, lockable on-site fuel storage. The complete fuel station range, including storage and dispensing tanks, have been specifically designed to answer the needs of both the commercial company with mobile transport requirements, and farmers with on-site fuel storage requirements.

JDPs fuel station tanks are bunded with a choice of pump (up to 75 litres per minute electric or battery powered), flow meter and auto shut-off nozzle, all safely secured within a totally enclosed and lockable cabinet.

All-inclusive tanks come fitted with the SpillStop overfill protective device (OPD), the bunded tank range is one of the most advanced and secure tanks on the market meeting all legal requirements for bunded tanks within a 10-metre area of a water source. The intelligent tank range is fitted with a top outlet providing a complete and integrally bunded storage solution.

Features & Benefits

- Complies with EU & Domestic Regulations
- Complete bunded safe, lockable solution for on-site fuel storage
- SpillStop overflow protective system
- Choice of pump up to 75 litres per minute electric or battery powered

Applications

• On site fuel storage and dispensing

Code	Description
1401FM1300GR	Capacity: 285 gallons (1300 litres) Length: 1890mm Width: 1245mm Height: 1785mm

A CONTRACT OF	Code	Description
	1401FM2500GR	Capacity: 550 gallons (2500 litres) Length: 2430 mm Width: 1420 mm Height: 1855 mm

For a range of larger oil and fuel storage and dispensing tanks please refer to our Commercial, Public and Industrial Buildings or Agriculture, Horticulture and Aquaculture product specifier.

Portable Fuel Dispensing System

Light and portable, the ADR approved TruckMaster fuel dispensing system simply straps onto the back of a truck, enabling you to carry the diesel you need to refuel on-site. That means swifter, safer delivery – saving valuable time and money.

Features & Benefits

- Safest Option with the TruckMaster, on-site safety is assured as fuels can be transported without the requirement of heavy steel drums or jerry cans, which are liable to spill
- The TruckMaster carriage requirements offer flexibility in that the vehicle driver does not require ADR training, the vehicle does not need orange hazard plates and the driver does not require a TREM (Road Transport Emergency) card. However, the driver is required under ADR regulations to carry a two kilogram fire extinguisher.

Applications

• Complete solution for mobile fuel distribution



Code	Description		Code	Description	
1401TM430	Ltr/Gal: Top Length: Base Length: Width: Height:	430/95 1156mm 980mm 842mm 860mm	1401TM900	Ltr/Gal: Top Length: Base Length: Width: Height:	900/198 1400mm 1100mm 1000mm 1200mm

Standards

ADR approved (International Carriage of Dangerous Goods by Roads).

The TruckMaster is a UN approved IBC (Intermediate Bulk Container) suitable for the transportation of diesel fuels.



Installation Guide

All tank installations must be sited on a fully supported flat base and comply with manufacturers instructions for the specific size of tank used.

Tanks must be installed / commissioned by a registered OFTEC installer.

Landscape Finishing Products



- Block Paving Flag Paving Tactile Paving
- Decorative Edging Kerbs



JDP fully understand the importance of landscape finishing products and because of this we offer a comprehensive range of quality, traditional and contemporary products to satisfy the needs of the house builder.

Our natural and aggregate product ranges can cope with all applications, whether it be a private heritage housing development or a modern civic centre.





Block Paving

JDP offer a comprehensive range of block paving to meet the various designs required. We also understand that Paving Collections for driveways need to be durable, versatile, stylish, and are required in a variety of colours.

Before you make a decision on the type of paving you would like, think about the style of property, the colour of the bricks and the look that you are hoping for, is it traditional or a contemporary modern feel?

We also recommend that when laying paving, particularly block paving, you use products from three packs at a time, mixing individual blocks to avoid colour patching.

We advise that you see for yourself a completed driveway or one of JDPs in-branch display areas. This will give you a better representation of the products and colours available.

Features & Benefits

- Various designs
- Durable
- Stylish
- Modern
- Extensive range

Applications

- Estate roads
- Driveways
- Patio
- Pedestrian areas

Block Paving Application Selector / Sustainable Range

	Key Applications	Other Applications	Other Features	Colours	Textures
and the second	 Pedestrian areas Shopping precincts 	• N/A	Uses secondary and recycled materials, minimising waste	Black Fleck	• Textured
	 Sustainable drainage systems Footways Residential roads Car parking 	• N/A	 Provides permeable surface for sustainable drainage systems Pencil edge option avaiable 	 Brindle Charcoal Grey Red 	• N/A



Block Paving Application Selector / Natural Stone Range

	Key Applications	Other Applications	Other Features	Colours	Textures
	 Prestige shopping precincts and pedestrian areas Prestige heritage 	 Commercial and corporate areas Public and civic spaces 	 Wide range of aesthetic options Hard wearing Easy-to-lay granite matts available 	 Dark Grey Silver Grey Pink Others on request 	FlameFine Picked
F	 Prestige shopping precincts and pedestrian areas Prestige heritage 	 Commercial and corporate areas Public and civic spaces 	 Wide range of aesthetic options Hard wearing 	Yorkstone Setts: Moorland Highmoor Sandstone Setts: Rainbow, Lapis, Grey, Sunset, Winter Green, Autumn	Diamond Sawn Riven

Block Paving Application Selector / Commercial / Domestic Ranges

	Key Applications	Other Applications	Other Features	Colour	Textures
	 Prestige building developments Prestige pedestrian 	 Roadways Car parks	Herringbone pattern suited to vehicular traffic	Silver GreyAnthraciteCharcoalBuff	Washed
A STREET	 Prestige building developments Prestige pedestrian 	RoadwaysCar parks	Herringbone pattern suited to vehicular traffic	CreamSilver GreyCharcoal	• Textured
	Shopping precinctsPedestrian areas	• Car parks	• Use of granite aggregate increases durability	CharcoalGrey	• Textured
	 New pedestrian areas Established pedestrian areas 	 Heritage sites Conservation sites 	 80mm version for trafficking by HGV Herringbone for extra strength 	 Graphite Rustic Autumn (Woburn Rumbled only) 	• N/A
Dictor	 Shopping precincts Pedestrian areas HGV loading (80mm only) Access roads 	• N/A	 Pencil edge option Mechanical lay option available 	 Autumn Brindle Buff Burnt Oker Charcoal Grey Marigold Red 	• N/A
	 Pedestrian rural areas Pedestrian heritage areas 	• N/A	Suitable for vehicle overrun if set in concrete	• Silver Grey	• N/A

Standards

BS EN 1338 - Concrete Paving Blocks

Installation Guide

Preparation

Mark out the area of the planned paving, allowing approx. 300mm over at each free edge to make handling materials and haunching of edgings or kerbs that much easier. Use sand, a spray marker or string and stakes to mark out the area.

Make sure you know the approximate location of any services such as electricity, gas, cable TV etc.

Excavation

Dig off as required, and dispose of soil. Dig depth for a typical domestic driveway is 200mm below finished paving level, based on 100mm sub-base, 40mm sand bed and 60mm block. Typical builders' skips hold approximately 4.5 m³ of excavated material, which, assuming a 200mm dig depth, works out that each 20-25 m² of paving will require 1 skip to dispose of spoil. Remember that excavated material bulks up by 20-30%, so each 1m³ dug out will become 1.3m³ for disposal.

If the excavated sub-grade is suspect, clayey, riddled with Mares Tails or other pernicious, deep-rooted weeds, JDP can supply you with an appropriate geo-textile that can be laid over the sub-grade. These geo-textiles can act as root barriers, and help to keep the overlying sub-base material from sinking into a clayey or softish sub-grade. However, they are not a substitute for a sub-base, and will only be of benefit if a proper sub-base is laid above the geo-textile.

Make sure any soft spots are excavated and backfilled with compacted sub-base material. Remember, it's better to dig too deeply than too shallow.

Edge Courses

Set up taut string lines to guide line and level of edge courses. Lay edging bricks on concrete bed. Once you are satisfied that the straight lines are indeed straight, and that the curves are 'sweet', the edgings should be solidly haunched with concrete at least 75mm thick.

Bedding

Spread, level and compact bedding sand, and screed to correct level. If using a 45° pattern, lay out starter course of blocks square or parallel to the building. 90° patterns are best started at a corner or main edge of the building.

Block laying

Continue to lay all full blocks, making sure you work from a section of already laid paving, not from the screeded bedding course. When all the full blocks are laid, check for alignment by checking the lines with a taut string line and adjusting as necessary, then cut in at the edges.

Finishing off

Fix recess trays and gully covers, if necessary. Check paving for compliance and compact the paving with a vibrating plate compactor (wacker plate). Make 4-6 passes over each section of paving, alternating passes at 90° to the previous pass. With clay pavers and some of the more decorative concrete blocks, you may need to use a mat attached to the base of the plate compactor to prevent spalling damage to the edges of the bricks. Brush in dry jointing sand and make final compaction.







Block Paving Laying Patterns

Stretcher bond



90° herringbone



Parquet



Single sized herringbone



45° herringbone



Offset herringbone



Random stretcher bond



Stretcher bond baroco







Flag Paving

JDP offers a range of Concrete Flag Paving which offers a clean, hardwearing and aesthetically pleasing surface. The flags are produced in a range of square or rectangular sizes - in different thicknesses, which can be combined to form patterns.

Flags can be divided into three main categories: Standard, Small Element and Decorative. Standard and Small Element flags are manufactured to BS EN 1339, to standard sizes in controlled factory conditions.

Flags are manufactured using three processes: semi-dry, wet-pressed and wet-cast; a secondary process may be applied to produce a variety of surfaces - textured, profiled, ground or polished - with or without chamfers. Stable inorganic pigments are used to provide a range of intrinsic permanent colours, further increasing choice. Flags are also available to reproduce the colour and texture of natural stone including split, sawn and tooled finishes.

The level and type of pedestrian and vehicular use on a pavement determine the size and thickness of the flag, the selection of laying courses, the jointing materials and the depth of pavement construction below the flag.

Reinforced flags are also now available which offer superior performance.

Features & Benefits

- Hard wearing
- Various sizes
- Variety of finishes
- Different colours
- Complies with British Standard

Applications

- Pedestrian areas, paths
- Pedestrian areas with occasional car or HGV overrun

BS Standard Paving

Size (mm)	Thickness (mm)	BS Ref.	Weight per unit (kg)	Units per m²	Units per tonne	Colours
450 x 600	50	A50	31	3.7	32	All colours
600 x 600	50	B50	42	2.77	24	All colours
600 x 750	50	C50	52	2.22	19	All colours
600 x 900	50	D50	63	1.85	16	All colours
450 x 600	63	A63	40	3.7	25	All colours
600 x 600	63	B63	52	2.77	19	All colours
600 x 750	63	C63	66	2.22	15	All colours
600 x 900	63	D63	77	1.85	13	All colours

Colours available = Grey, Buff, Red

BS Small Element Paving

Size (mm)	Thickness (mm)	BS Ref.	Weight per unit (kg)	Units per m²	Lift weight (tonnes)	Colours
300 x 300	60	G60	13	11.11	0.44	Grey
400 x 400	50	F50	19	6.25	0.74	Grey
400 x 400	65	F65	24	6.25	0.78	All colours
450 x 450	50	E50	24	4.94	0.94	Grey, Buff
450 x 450	70	E70	34	4.94	1.00	Grey, Buff
430 x 300	65	B63	20	7.41	1.25	Grey, Buff

Colours available = Grey, Buff, Red

Standards

- Manufactured to BS EN 1339
- BS EN 1341 Natural Stone Flag Paving

Installation Guide

The following table gives a guide to the type and thickness of flag which should be used for various applications.

Suitability of flags for various applications

Designation	Nominal Size (mm)	Thickness (mm)	Pedestrian Only	Vehicular 1	Vehicular 2	Vehicular 3
А	600 x 450	50 or 63	1	1	🗸 63mm	×
В	600 x 600	50 or 63	1	1	🗸 63mm	×
С	600 x 750	50 or 63	1	🗸 63mm	×	×
D	600 x 900	50 or 63	1	1	×	×
E (small element)	450 x 450	50 or 70	1	1	🗸 70mm	🗸 70mm
F (small element)	400 x 400	50 or 65	1	1	🗸 65mm	🗸 65mm
G (small element)	300 x 300	50 or 60	1	1	🗸 60mm	🗸 60mm

Key:

Vehicular 1 - very occasional use by cars and light mechanical sweepers, e.g. unprotected footways in no parking areas or where overrun is not a problem. These flags can be laid on either a sand or mortar laying course.

Vehicular 2 - footways where vehicles cross to access house driveways. The preferred laying course is sand.

Vehicular 3 - footways where cars and occasional commercial vehicles run over; unprotected pedestrian precincts with about 25 commercial vehicles each day; fire tender access ways. These flags to only be laid on a sand laying course.

Flag Laying Patterns



The wide range of flag sizes and the ability to combine two or more sizes together allows the designer to create a large number of patterns or bonds. When used in combination with concrete block paving, any shape of site can be surfaced and any ironwork or break in pattern accommodated. The two most common flag paving patterns are 'Stack Bond and 'Broken Bond'. Broken Bond can be further sub-divided into 'Transverse Broken Bond' and 'Longitudinal Broken Bond, all as shown below. These patterns can be used with flags of different sizes to improve the appearance of paving on narrow footways.

Stack bond

Longitudinal broken bond



Transverse broken bond



Broken bond with block or half flag infill



Flag Paving for Vehicles

Broken Bond should be used in areas subject to vehicular trafficking, with the straight unbroken joints at 90° to the main direction of travel of the vehicles. A flexible pavement construction (using sand rather than a mortar laying course) should always be used with Small Element flags for areas, which will be used occasionally by cars and/or commercial vehicles.

Detailing

The relatively large size of flag paving units means that cutting flags - at boundaries or where ironwork and street furniture intrude into the paved area - is inevitable. Good detailing and selection of the correct flag can reduce the need for cutting and improve the appearance of the finished pavement. In addition, concrete block paving units can be used to fill in small areas, e.g., at a boundary or around an intrusion in the pavement - the smaller units are better suited to accommodate irregularities or breaks in the pattern. The amount of cutting required is reduced while the integrity of the pavement is retained.

Edge restraints

The paved area must be adequately restrained at the edges to prevent movement of the pavement or of individual flags. Edge restraints resist lateral movement and restrict loss of laying course material at the boundaries. They should be suitable for the relevant application and sufficiently robust to withstand damage if overrun by vehicles is anticipated. The diagrams on page 194/195 illustrate some typical edge restraints.

Whenever a flag with a chamfer is cut, avoid placing the cut face of the flag against an adjacent edge restraint. Cut faces should be positioned against an adjacent flag chamfer to reduce the visual intrusion of the square-cut edge. Where cutting is necessary, flagged areas can also be 'picture framed' with concrete block paving in stretcher or header courses in a similar manner to that used in block paving. The visual intrusion of cut flag edges is reduced by the block chamfers.

Manhole surrounds

Flags can be cut to fit around manholes or other obstructions in the pavement. The cut edge of a chamfered flag can be obtrusive and may detract from the overall appearance; a solution is to replace the cut flags with block paving, used as illustrated in the examples below.

Manhole in flagged pavement - 1



Manhole in flagged pavement - 2



Falls

Flag paving provides a paved surface that is virtually impermeable. Flags with mortared joints are resistant to water penetration immediately after setting. Sand filled joints develop water resistance in early life. A flag pavement therefore requires gradients for drainage of surface water. Minimum crossfalls of 2.5% (1:40) and longitudinal falls of 1.25% (1:80) are recommended, wherever possible.





Tactile Paving

JDP offers a range of Concrete deterrent, tactile, demarcation and warning paving featuring the appropriate surface designs and complying, where required, with the relevant British Standards and Building Regulations.

Features & Benefits

- Hard wearing
- Various sizes
- Designed to assist visually impaired pedestrians
- Different colours to suit specific guidelines
- Complies with British Standard

Applications

- Pedestrian areas, paths
- Pedestrian areas with occasional vehicular overrun

	Thickness (mm)	Size (mm)	Colours	Key Applications
Hazard Warning	50	400x400	Buff *Grey, *Red	Identifies any type of potential hazard Can also be used to mark shared
	65	450x450	*All colours	cycle/pedestrian routes
Blister Paving	50	400x400	*All colours	Identifies the location of a drop kerb and crossing:
	65	400x400	*All colours	Uncontrolled crossing (Buff) Controlled crossing (Red)
	50	450x450	Buff, Red, *Grey	
Guidance Paving	70	450x450	*All colours	
	50	400x400	Grey, Buff, *Red	To guide pedestrians through potential hazards Para rounded to warn of abarga in direction
Cycleway	65	400x400	*All colours	
000	50	400x400	Grey, Buff, *Red	Used to mark shared pedestrian/cycle routes
	65	400x400	*All colours	

Tactile Paving

*Colour made to order only

Standards

- Manufactured to BS EN 1339
- Complies with BS 7997

Installation Guide

See Flag Paving section page 198.

Decorative Edging Kerbs

JDP offer a wide range of different styles of edging kerbs. Choosing the correct edging is often the key to a stunning drive or patio. All JDP edging kerbs are available in complementary colours and many are dual purpose units that give a minimum of 2 installation profiles.

Features & Benefits

- Range of different styles
- Colours to complement flag or block paving
- Various installation profiles
- Long lasting design

Applications

• Kerb edging for driveway and path areas

Products

A full range of decorative paving and kerbs are available from your local JDP. Please contact your local branch for full details of ranges offered.





Building Materials



- Cement Aggregates Reinforcing Mesh Concrete Blocks
- Lintels Ventilation Products



JDP offer a range of building materials for building and civil engineering applications.

The products in this section complement the core product ranges within this product selector and are generally required when installing them. JDP aim to

give the House Builder a "one stop shop" whilst retaining a specialist service and knowledge in the products that it supplies.





Cement

JDP offers a range of cements for civil engineering, building applications, ready-mixed concrete, and concrete products.

Features & Benefits

- Consistent strength meeting all the conformity criteria in BS EN 197-1
- Compatible with admixtures

Applications

• For use as a bonding ingredient for mortar mix or concrete



Code	Description	Uses
1806CEMENT	25kg Bag Cement	General purpose cement for most applications
1806PROCEM	25kg Bag Pro Cement	General purpose cement for all types of concrete, including structural concrete, mortars, renders and screeds
1806MASTERCRETE	25kg Bag Mastercrete Cement	The first choice for internal and external general purpose non-structural concrete, mortars, renders and screeds
1806CEMENTWH	25kg Bag Cement White	A white Portland cement without pigments or additives, for concretes intended to remain visible, renders, mortars and grouts
1806SULFACRETE	25kg Bag Sulfacrete Cement	A low alkali cement with a high sulfate resistance and a moderate heat hydration. For use where ground conditions require sulphate resisting concrete or mortar
1806MORTAR	20kg Bag Mortar Mix	A highly workable masonry cement
1806EXTRARAPID	25kg Extra Rapid Cement	Rapid hardening and setting properties making it suitable for repairs and maintenance work. Available in water repellent, plastic packaging
1806POSTCRETE	20kg Postcrete Cement	A rapid setting mix of cement, aggregates and hardeners

Admixtures such as air-entraining mortar plasticizers, such as Febmix, designed to enhance the workability and freeze thaw resistance of brick and block laying mortars are also available from JDP.

Standards

Cements are quality assured with independent third party certification and carry a CE Mark.

Installation Guide

Trial mixes are recommended to determine the optimum mix proportions. The cement content must be correct and the water: cement ratio as low as possible consistent with satisfactory placing, thorough compaction and effective curing. Refer to the following documents:

- BS EN 206-1: Concrete
- BS 8500: Concrete-Complementary British Standard to BS EN 206-1
- BS 5628: Part 3 Use of Masonry



Aggregates

JDP offers a wide range of aggregates that are durable and versatile. Aggregates can be used in a wide variety of applications including concrete and asphalt production, sub-base, capping and drainage systems as well as for decorative purposes.



Features & Benefits

- Available in 25kg or 1 tonne bulk bags
- Decorative and practical uses

Applications

- Pipework bedding or filter material
- Bulk fill material
- General and specialist construction
- Driveway and pathway finishes
- Decorative landscaping

Product name	What's it like?	What's it for?				
20/40mm Coarse Aggregate	Single sized and graded coarse	Can be used in concrete and asphalt				
20/32.5mm Coarse Aggregate	limestone, crushed granite, crushed	surround, filter media) and for decorative uses.				
10/20mm Coarse Aggregate	gritstone, crushed & uncrushed gravel and secondary aggregates.					
6/14mm Coarse Aggregate						
4/10mm Coarse Aggregate						
2/6mm Coarse Aggregate						
4/40mm Graded Aggregate						
4/20mm Graded Aggregate						
2/14mm Graded Aggregate						
0/40mm All-In Aggregate						
0/20mm All-In Aggregate						
0/10mm All-In Aggregate						
0/6.3mm All-In Aggregate						

Product name	What's it like?	What's it for?				
0/4mm Fine Aggregate (Coarse)	Natural sands and crushed rock fine	Can be used in concrete, asphalt and mortar				
0/4mm Fine Aggregate (Medium)	aggregates in the size range 0-4mm.	as bedding for block paving.				
Bedding Sand						
0/2mm Fine Aggregate (Medium)	Natural sands and crushed rock fine					
0/2mm Fine Aggregate (Fine)	aggregates in the size range o-zmm.					
Building Sand						
Crusher Run	Well graded crushed rock in the	Generally used as bulk fill to stabilize structures and pavements. May also be used for footpaths or as a temporary running surface.				
Quarry Scalpings	size range u-125mm.					
6F Capping Materials						
Type 1 Granular Sub-Base						
Walling Stone	Large single-sized crushed rock in	For use as dry stone walling.				
Armour Stone	the size range 100-500mm.	For use in sea and river defence work.				
Railway Track Ballast		For use in bedding under railway tracks.				
Gablon Stone		Ideal filling for Gabion baskets.				
Rockery Stone		Ideal for use in the garden.				
Golden Amber Gravel	Single-sized gravels.	Can be used in a range of decorative				
Eversley Gold		applications e.g. univeways and footpaths.				

Ordering the right amount

When you are ready to order the aggregates you require, please have the following measurements available.

- a) The length of the area
- b) The width of the area
- c) The depth of the area

Aggregates are sourced within the local region; therefore JDP's offering may vary from branch to branch. Please contact your local JDP for details.

Standards

Depending on the application, JDP are able to supply materials in full compliance with all of the following British and European Standards:

- BS EN 12620
- BS EN 13043
- BS EN 13285
- BS EN 13242
- BS EN 13450
- BS EN 13383
- BS 8007 and Specification for Highway Works



Reinforcing Mesh

JDP supply reinforcing mesh for general concreting applications.



DC	Mesh Siz Nominal of Wires	ze Pitch	Wire Sizes		Cross Se Area per Metre W		Nominal Weight per m²	Sheets per	Sheet	Sheets	Square Metres
Reference	Main	Cross	Main	Cross	Main	Cross	(kg)	(approx)	(kg)	Bundle	tonne
A393M	200mm	200mm	10mm	10mm	393mm²	393mm²	6.16	23	44.35	26	162.34
A252M	200mm	200mm	8mm	8mm	252mm²	252mm ²	3.95	35	28.44	30	253.16
A193M	200mm	200mm	7mm	7mm	193mm ²	193mm ²	3.02	46	21.74	50	331.31
A142M	200mm	200mm	6mm	6mm	142mm ²	142mm ²	2.22	63	15.98	50	450.45
B785M	100mm	200mm	10mm	8mm	785mm²	252mm ²	8.14	17	58.61	20	122.85

Concrete Blocks

JDP offer a range of standard concrete blocks for the building and civil engineering market.


Features & Benefits

- Completely fire resistant
- Excellent sound insulation
- Ideal background for dry lining, wet finishes and fixings
- Inherent thermal mass acts as heat store
- Recyclable
- Proven and familiar building method no risk
- Widely and readily available
- Cost effective
- Standard finish for rendering and close textured for direct decoration available

Applications

- Internal & external leaves of cavity walls
- Solid walls
- Separating / party walls
- Partitions
- Multi-storey
- Foundations
- Beam & block floor

Code	Description	Size (mm)
1801100X215MBLK	Dense Concrete Block	100 x 215 x 440
1801140X215MBLK	Dense Concrete Block	140 x 215 x 440

Standards

BS EN 771-3 which covers the BS requirements of all types of concrete block (and brick) units

Installation Guide

Careful selection of mortar is essential. Extensive guidance is given in the BS 5628 suite of masonry design standards. The location of the block work is an important consideration, and as a guide stronger mortars will be required in high exposure situations. Similarly the design of walls employing high strength blocks, typically 10N/mm or greater, will result in enhanced load bearing capacity when designation (ii) or (i) mortar mixes are used. However, for the construction of most internal walls in inner leaves of cavity walls above ground, it is common practice to specify mortars no stronger than 1:1:6 cement, lime, sand composition or similar designation (iii) mix or general purpose to BS 5628-3.

All types of aggregate block are suitable for use to the inner leaf of external cavity walls, or internal walls below ground. For the external leaf of external cavity walls, or solid external walls, dense, lightweight 7/mm² blocks or aggregate block with a density of at least 1500kg/m³ are all suitable. Where unusual ground conditions exist, or for more information contact your local JDP branch.



Lintels

JDP offer a range of Prestressed and high strength lintels. The Prestressed lintel is one of the most specified lintel ranges in the country. The method of manufacture gives a high performance pre-stressed concrete unit designed to be used in plastered situations. This range can also be used as ground beams being able to be used directly off pad foundations saving you time and money. If used in conjunction with our steel lintel can comply with part E: 2002 and Part L: 2002 to solve thermal bridging and acoustic problems.



Features & Benefits

- Chemical resistance
- Fire resistance
- Wide range for a variety of applications
- Variety of finishes

Lintels have low water absorption and as a result of the quality controlled Hi-Spec dense concrete mix used in their manufacture, they can therefore be used underground provided that the ends of the lintels have a minimum 45mm cover of mortar to the ends of the reinforcing strands.

Applications

- Building support beams
- Service lintels

Lintels are available to suit a wide range of applications, using the following criteria:

 Wall Thickness
 100, 140, 190, 220 or 254mm

 Clear Span
 700-3200mm

 Fire resistance
 none – 4hrs

 Finish
 Fair faced finish, Chemical resistance, Coloured finish, Economy, Steel 'L' section, Radius lintels, Steel 'C' section

	Code	Description	Size (mm)
	1806CL10065600	ER1 Prestressed Concrete Lintel	100 x 65 x 600
•	1806CL10065900	ER1 Prestressed Concrete Lintel	100 x 65 x 900
	1806CL100651200	ER1 Prestressed Concrete Lintel	100 x 65 x 1200
	1806CL100651500	ER1 Prestressed Concrete Lintel	100 x 65 x 1500
•	1806CL100140900	ER2 Prestressed Concrete Lintel	100 x 140x 900
	1806CL1001401200	ER2 Prestressed Concrete Lintel	100 x 140 x 1200
	1806CL1001401500	ER2 Prestressed Concrete Lintel	100 x 140 x 1500
	1806CL14065900	ER3 Prestressed Concrete Lintel	140 x 65 x 900
•	1806CL140651200	ER3 Prestressed Concrete Lintel	140 x 65 x 1200
	1806CL140651500	ER3 Prestressed Concrete Lintel	140 x 65 x 1500
<u></u>	1806CL22065900	ER4 Prestressed Concrete Lintel	220 x 65 x 900
\ • • /	1806CL220651200	ER4 Prestressed Concrete Lintel	220 x 65 x 1200
	1806CL220651500	ER4 Prestressed Concrete Lintel	220 x 65 x 1500

All Prestressed lintels are available in standard lengths from 600 to 3600mm long.

Concrete lintels are also available in short lengths for use as high compression padstones.

Standards

- The design of prestressed concrete lintels complies with BS8110 part 1:1997: section 4
- Lintels are manufactured in accordance with BS5977: part 2:1983
- Materials used in the manufacture of prestressed lintels comply with BS12 and BS882
- The prestressing strand/wire complies with BS5896

Installation Guide

Lintels should be carefully bedded on a full mortar joint.

Wall ties should be positioned in accordance with current building regulations.

A damp proof course should be used for all lintels in external walls, and must be fixed in accordance with building regulations.

In cavity construction, it is recommended that both internal and external leaves be taken up uniformly. For spans in excess of 1200mm, it is good practice to provide temporary support (at 1200mm centres). If lintels are supporting concrete floor load, a minimum lintel depth of 140mm is recommended to allow for impact loads during the actual placing of concrete flooring.

Cutting

Concrete lintels may be cut using a high-speed disc cutter. Use of this should be by a properly trained operative taking due regard of current Health and Safety regulations.



Ventilation Products

JDP supply plastic ventilation products for use in general building applications, in line with building control regulations.



Code	Description
1806G930TR	G930TR Plastic Airbrick Terracotta
1806G935	G935 Plastic Cavity Sleeve
1806G960	G960 Plastic Telescopic Underfloor Ventilator
1806G961	G961 Plastic Vert Extension Sleeve
1806G962	G962 Plastic Remote Void Vent



Accessories

• Underground Marker Tapes • Contaminated Ground Warning Indicator • Road Safety & Traffic Management

• Personal Protective Equipment (PPE) • Tools & Equipment



JDP offer a range of accessories for use with the core product ranges in this product selector.

JDP are committed to providing customers with all the products they need, making it easier to source full requirements from one supplier. A range of products including marker tapes, standpipes, tools, safety wear and hoses are therefore available from JDP trade counters.

These products compliment the main product ranges and systems within this book, please visit our trade counters to see the full range offering.







Underground Marker Tapes

Coloured and marked with standard text for easy identification, our marker tapes are the most economical way of warning excavators of buried services below ground. Specific colours and text can be made to order.



Features & Benefits

- Four grades available
- Premium manufactured to ESI-12-23
- Detectable and Tape Tile manufactured to BS EN12613: 2001
- Soil tolerance from pH 2.5 to pH 11 inclusive

Applications

Premium Range 100 microns thick 150mm x 365m

	Code	Description
	2003ELECCABLE	Electric Cable Warning Tape
	2003GASMAIN	Yellow Gas Warning Tape
	2003WATERPIPE	Blue Water Warning Tape
	2003TELEPHONE	Telephone Warning Tape
	2003FIBRE	Fibre Optic Cable Warning Tape
Comme Conversion	2003FOULSEWER	Red Foul Sewer Warning Tape
	2003SEWERAGE	Sewerage Pumping Main Warning Tape

Economy Range 50 microns thick 150mm x 365m

	Code	Description
	2003ELECECON	Economy Yellow Electric Warning Tape
	2003GASECON	Economy Yellow Gas Warning Tape
	2003WATERECON	Economy Blue Water Warning Tape
	2003TELEECON	Economy Green Telephone Warning Tape
Roman Lances Contest	2003FIBREECON	Economy Fibre Optic Warning Tape
	2003FOULSEWECON	Economy Foul Sewer Warning Tape

Accessories

Detectable Range 200mm x 100m

	Code	Description
	2003DETMESHECB	Yellow Electric Dectectamesh
	2003DETMESHGPB	Yellow Gas Dectectamesh
	2003DETMESHWMB	Blue Water Dectectamesh
	2003DETMESHTCB	Green Telephone Dectectamesh
No.	2003DETMESHF0	Green Fibre Optic Dectectamesh
	2003DETMESHSPB	Red Sewer Below Dectectamesh

Tape Tile 2.5mm x 40m heavy-duty cable protection

	Code	Description
	2003UKT02ELE150	150mm Marker Tile Electric
• » Z	2003UKT02ELE200	200mm Marker Tile Electric

Standards Premium to ESI 12-23 Detectable and Tape Tile to BS EN12613: 2001

Contaminated Ground Warning Indicator

For Brownfield sites where contamination is present, JDP offer products to indicate the presence of contaminated soil, to ensure anyone carrying out future excavations have adequate warning.

Features & Benefits

- Highly visible over large areas
- Rot proof
- Available as an indicator or a combined geotextile & indicator
- Excellent filtration

Applications

• Highlight border between clean and contaminated soil layers

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Road Safety & Traffic Management

Plastic mesh barrier fencing, hazard warning tapes and pins for use on construction sites are available from JDP.

Hi Vis. Barrier Fencing

Code	Description
200255BF	5.5Kg Orange Barrier Fencing 1m x 50m
20028BF	8Kg Orange Barrier Fencing 1m x 50m
2002PINS	Support Pins

Hazard Warning Tape

12	Code	Description
	2003HAZARD100	Hazard Warning Tape Red/White Str 75mm x 100m
PA.	2003HAZARD	Hazard Warning Tape Red/White Str 75mm x 500m

Cones & Signs

	Code	Description
	2040267330	Road Cone 30" Composition Rubber D2
	2040473202	Triangular Road Sign Frame c/w provision for supplementary plate
	20404770	Men at Work Road Sign Plate Class 2

* For a comprehensive range of Cones & Signs available, please contact your local JDP branch.

Trench Cover

The Trench Cover is the perfect solution for maintaining access and overcoming the hazard of trenches and excavations in pavements and footways during construction work. Manufactured from glass reinforced composite material the Trench Cover is strengthened with the inclusion of steel mesh reinforcement. The cover is designed to withstand a maximum vehicle weight of 2000kgs (500kgs per wheel) and complies fully with the UK's DETR Safety at Streetworks and Roadworks Code of Practice.

Code	Description
2001B15001	GRC Trench Cover 1195mm x 795mm



Personal Protective Equipment (PPE)

JDP offer a range of essential health and safety ware for construction sites.

	Code	Description
	2040272000	Muff Ear Lightweight BS 6344 Pt1
	2040053305	Waistcoat H/V Yellow EN471/2 2 B/B L
	2040053605	Rainguard Suit PVC Yellow L/XL/XXL
	2040296800	Knee Pads Economy
	2040269700	Glove PVC Knitted Wrist
	2040270100	Basic Goggle
the sea	2040267901	Helmet JSP Mk3 Comfort White
	2040272200	Spectacle Visitor EN166F

Tools & Equipment

A comprehensive range of tools is available at JDP trade counters. Including hammers, trowels, pipe cutters and shovels, using quality brands, the range is designed to suit the needs of the contractor when installing and servicing the many products that JDP supply.



Contractors Tools



Accessorie

* For a more comprehensive range of Hand Tools please visit or contact your local JDP branch.



Drain Clearing

	Code	Description
	200160341	Drain Clear Rod Kit
	200147011	Drain Clear Rod Kit c/w Case
	2001DR1	36" Universal Drain Rod
	2001DRPLUNGER	Drain 4" Rubber Plunger
	2001DRSCRAPER	Drain 4" Drop Scraper
	2001DRWHEEL	Drain Clearing Wheel
	2001DRWORM	Drain Double Worm Screw

Drain Tracing Dye

	Code	Description
	2001DYEB	Drain Trace Dye Blue (200g)
	2001DYEG	Drain Trace Dye Green (200g)
	2001DYER	Drain Trace Dye Red (200g)

Buckets & Barrows

A CONTRACT	Code	Description
- 00-6	2099WB	Contractor's Wheelbarrow
	2008F066A	Builder's Bucket Black
	2008F066B	Builder's Bucket Yellow

Manhole Lifting Keys

TIPE	Code	Description
	20019100L	Light Duty Lighting Keys
	200191012	12" Manhole Lifting Keys (Pair)
	200191020	20" Manhole Lifting Keys (Pair)
	200191024	24" Manhole Lifting Keys (Pair)
	20019100R	Recessed Cover Lifting Keys (Pair)

Pipe Cutter

Code	Description
2001PPC110	110mm Pipe Cutter
2040PCCT	Pipe Cone Chamfering Tool

Spray Marker Paint

Ideal for site and survey marking, these marker sprays are available in several colours.

	Code	Description
	2040331101	Spray Marker Paint Contract White 750ml
	2040331102	Spray Marker Paint Contract Yellow 750ml
	2040331103	Spray Marker Paint Contract Green 750ml
Contraction	2040331105	Spray Marker Paint Contract Blue 750ml
and the second	2040331106	Spray Marker Paint Contract Red 750ml
	2040331108	Spray Marker Paint Contract Orange 750ml

Water Supply Tools

Standpipes ideal for use as temporary water supplies on construction sites are available from JDP.

12 5	Code	Description
	0820SPDCV	Standpipe c/w Double Check Valve & Bib Tap
	0820SPDCVM	Standpipe with Water Meter
	0820SPA212	Aluminium 2 1/2" Standpipe
	0820SPFB	Standpipes in Frost Boxes
	0820VTKEY1M	Valve Tee Key 1mtr
	0820TOBYKEY	Toby Key - Heavy Duty Stop Tap Key
//	200191072	Stop Tap Key, 42" Long Channel Type
1 2	200192500	1/2" Stop Cock Key, 42" Long





	Code	Description
	2005LAG2225F	22 x 25mm Foam Lagging 2m
	2005LAG2225R	22 x 25mm Rubber Insulation 2m slit
	2005LAG229F	22 x 9mm Foam Lagging 2m
\bigcirc	2005LAG229R	22 x 9mm Rubber Insulation 2m slit
	2005LAG2825F	28 x 25mm Foam Lagging 2m
	2005LAG2825R	28 x 25mm Rubber Insulation 2m slit
	2005LAG289F	28 x 9mm Foam Lagging 2m
	2005LAG289R	28 x 9mm Rubber Insulation 2m slit
	2005LAG3525F	35 x 25mm Foam Lagging 2m
	2005LAG3525R	35 x 25mm Rubber Insulation 2m slit
	2005LAG359F	35 x 9mm Foam Lagging 2m
	2005LAG359R	35 x 9mm Rubber Insulation 2m slit
	2005PAINT2.5	21/2 litre Paint
	2005ADH1.5	1/2 litre Adhesive
	200525TAPE33	25mm Black PVC Tape x 33m

Hoses

JDP supply reinforced, kink and abrasive resistant hose for construction sites, commercial and domestic use.

Contraction of the second	Code	Description
	1901TOR12X25	1/2" Yellow Hose x 25m
	1901TOR12X50	1/2" Yellow Hose x 50m
	1901TOR12X100	1/2" Yellow Hose x 100m

*Hose connections and bib taps are also available.

Submersible Pumps

Ű	Code	Description
	0803TOP1	TOP/1 Sub Pump Auto 230/150 10M H05 Cable Cellar Drainage
	0803TOP2	TOP/2 Sub Pump Auto 230/150 10M Cable Cellar Drainage

Protective Sheeting

A	Code	Description
	2040241005	Tarpaulin Reinforced PVC 5.4 X 3.5m Blue
	2040241105	Tarpaulin Reinforced PVC 6 X 4.5m Blue

Technical Support

To provide first class customer service, our Technical Support Department offers in-depth design and technical help for anything from small enquiries to full underground sewer drainage systems or advanced roof drainage projects.



Hydraulic Designing

Exceptional weather events, such as those in Carlisle, Boscastle and Tewkesbury, have made flood prevention a significant environment issue. Even as global climate change accelerates, the stormwater management systems used in future projects are under increasing scrutiny and not just from building regulations, but also from the public.

That's why, at JDP, we use cutting edge technology to design and develop a system that is bespoke to your project, using accurate rainfall data for each area. This creates an economical bespoke design of foul or surface water systems that specifies required sizes of any retention tanks or ponds and any necessary flow controls and pumps to help adequately protect homes and businesses.

Sewer Adoption

We know that the adoption of sewers can have many pitfalls. That's why our Technical Department keeps fully up to date with all the sewer adoption legislation for England & Wales and Scotland.

Environmental Permits

Formally known as Consent to Discharge, our Technical Department can help guide you through this process, providing help & support every step of the way.





Products for Specialist Applications

JDP are dedicated to finding and introducing products that offer solutions to House Builders. Such products are invaluable in solving problems and offering options to architects and contractors alike, providing quick cost effective solutions to otherwise costly and complex situations.

Products for Sustainable Urban Drainage Solutions (SUDS)

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JDP would like to thank the following manufacturing partners for their support.

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FloPlast 🛛 hauraton



PRODUCT

conder

BALMORAL



CPM

CHARCON





























Polypipe







Branch Listing

SCOTLAND

- INVERNESS The Pipe Yard
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 Fax: 01463 717819
- INVERURIE Kintore Business Park Inverurie AB51 0YQ Tel: 01467 633332 Fax: 01467 633180
- 3 EDINBURGH
 - Westerton Road East Mains Industrial Estate Broxburn EH52 5AU Tel: 01506 854626 Fax: 01506 856554
- GLASGOW Dixon Place College Milton, East Kilbride Glasgow G74 5JF Tel: 01355 235581 Fax: 01355 244167

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- S LONGTOWN Townfoot Industrial Estate Longtown, Carlisle CA6 5LY Tel: 01228 792391 Fax: 01228 792335
- BIRTLEY Penshaw Way Portobello Industrial Estate Birtley, Chester-Le-Street DH3 2SA Tel: 0191 410 9522 Fax: 0191 410 0966

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