JDP





Commercial, Public & Industrial Buildings

Product Specifier

Commercial, Public & Industrial Buildings

From the roof to the river JDP has extensive knowledge to assist with the design and specification of complete storm water management solutions. Using products from our key suppliers as well as our parent company, we offer a diverse range of options to cover virtually any application.

VACURAIN® is a BBA approved syphonic roof drainage system with unique properties and produced by our parent company to bring the rainfall to ground level efficiently. JDP offers further experience of infiltration and attenuation to achieve strict SUDS output for the development all the way to the river.

Total Service and Solutions for Commercial, Public & Industrial Buildings

Comprehensive product ranges for all designs of below ground drainage from channel drain to pollution interceptors are available from JDP. Technical knowledge and in-house design capability at our factory enable the architect or developer to hand the total drainage package from "Roof to River" over to JDP.

In short, JDP is the one-stop shop solutions provider for the drainage and water management requirements for commercial, public and industrial buildings.

JDP offer the following benefits to customers within the commercial, public and industrial buildings 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

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Rainwater Systems

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JDP can supply both Syphonic and Gravity roof drainage systems to take water from the roof to the underground drains and onto Rainwater Recycling Systems, and SUDs solutions, see SUDs solutions section.

The unique syphonic roof drainage system VACURAIN ®, designed and manufactured by JDP's parent company DYKA, demonstrates the distinctive position that JDP has in the market place for distributing high quality, innovative products for even the most demanding applications.

uPVC Gravity Rainwater Systems are also available from JDP for roof areas up to 310m2 in a range of colours.

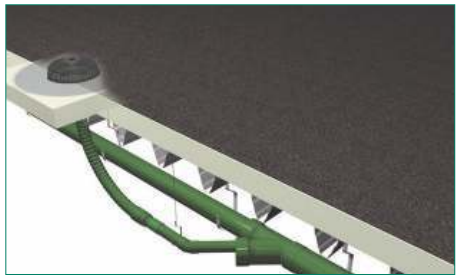
This range of products copes with large or small developments, using products which incorporate ease of installation, aesthetics, high quality and low maintenance into their design.

VACURAIN® Syphonic System

The need for syphonic roof drainage

In response to the need for a quick, efficient and cost effective way to drain rainwater from larger roofs JDP has developed the VACURAIN® roof rainwater drainage system.

A high-quality solution using a system that is discreetly integrated into the building, VACURAIN® is ideal for rainwater discharge in utility projects with special architectonic or architectural requirements.



JDP VACURAIN® is a Self-Priming Syphonic System. This Self-Priming system uses small pipe diameters that facilitate a syphonic effect resulting in swifter rainwater drainage. Until the nineties syphonic systems were made out of PE. JDP made a further improvement of this system in PVC.

Compared to the original PE-system, the JDP VACURAIN®-system offers important advantages:

A small coefficient of expansion, an inexpensive jointing and anchoring method and a low materials price. Moreover, JDP VACURAIN® is easy to install and has fire resistant properties. Once installed JDP VACURAIN® fully utilizes the advantages of a closed system:

- The reduced pipe diameters result in an aesthetic system, and make it easy to mount the discharge pipes out of view.
- Increased architectural possibilities for the designer.
- A higher return on investment for the principal.

JDP VACURAIN® is designed with major, prestigious developments in mind where Quality Assurance is vital. Functionality of the system is warranted and it is manufactured according to a patented technique. In a nutshell: a system that fully meets present-day requirements.

What is VACURAIN®

Syphonic drainage has been installed in the UK for many years, however, in recent times, as a result of the importance of sustainability in building design and construction; the benefits of this proven system are at last being increasingly recognised by architects, builders and contractors.

Syphonic drainage works through baffle plates inserted into the outlets, which restrict air from entering the top of the system. When combined with appropriate sized pipe work, this allows the system to run at full bore. The action of water dropping down the down pipe causes negative pressure to form at the top, which can be used to suck water along a collector pipe, installed horizontally connecting to the outlets at high level.

'VACURAIN®' is a PVC-U solvent weld watertight solution used for roof drainage on industrial, commercial and public buildings. The system is a self-priming roof drainage solution that will convey rainwater from the roof to below ground drainage systems.

The roof outlets are available for use with flexible roofing materials and bituminised asphalt with connections to pipe work with adaptors to all other 'VACURAIN®' modified PVC-U pipes.

Each roof outlet has an aluminium lower body with polypropylene vortex disc and polypropylene grating and outlet to connect to a polyethylene/polypropylene flexible hose with integrated push fit socket with bayonet catch, these hoses are used to absorb longitudinal expansion and transverse displacement allowing for pressure variations in the system.

Key features:

- Revolutionary rainwater drainage system
- Full flow
- High drainage capacity of roof outlets
- Results in less roof outlets
- Smaller diameters of the pipes
- Roof outlets drain the rainwater internally

Benefits vs. conventional systems

A recent project comparison was made between a conventional gravity system using 110mm pipes at a 50% fill ratio and the 'VACURAIN®' syphonic system requiring only 50mm diameter pipes at full bore. On this basis, the syphonic system was specified and the contractor able to gain additional benefits through the use of fewer and smaller diameter pipes throughout. Just one or two down pipes can be located at the end of the building, reducing the need for columns and allowing the architect to make better use of floor space.

With a syphonic drainage system, underground drainage requirements can be significantly reduced, both internally and externally, providing considerable savings in time and labour.

Benefits

Ease of assembly

The PVC system contains as few components as possible

- Easy to handle
- Lower chance of assembly error

The PVC system is glued together

- No time consuming welding equipment needed
- Pre-assembly on the ground is easily possible

Rapid installation

The roof outlets are connected to the drainage pipes through a flexible hose, simply to be clicked on to the roof outlet and the pipes

- **No heat welding**

The installation is hung up in open tension free special VACURAIN® clips

- Therefore pre-assembly on the ground is possible
- **Gain in installation time compared with traditional UV systems can offer up to 50% time saving**

VACURAIN IS SIMPLER AND FASTER TO INSTALL THAN ANY OTHER SYSTEM ON THE MARKET, THEREBY OFFERING SIGNIFICANT COST BENEFITS!

Durable, reliable and JDP guaranteed

- The flexible hose, combined with the special clips and the low expansion coefficient of the impact modified PVC make the installation of the VACURAIN® system tension free, durable and reliable
- Several hundred thousand VACURAIN® roof outlets have already been installed throughout the years across Europe
- JDP is fully confident of its system. Therefore **Vacurain products are guaranteed for 10 years**

BBA approved

- BBA certified product quality assurance

Assistance from design to realisation

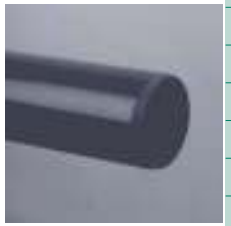
Special own-made computer program calculates and designs the system

- A complete installation plan
- Installation calculations
- Materials requirement
- A detailed offer to the customer
- Specialist advice and support to customers

Applications

- Industrial Buildings – Warehouses
- Shops – Shopping malls
- Hospitals and offices
- Apartment buildings

Plain Ended Pipe in 5m lengths



Code	Size
25012702169	40mm
25012702266	50mm
25012702363	63mm
25012702460	75mm
25012702568	90mm
25012702665	110mm
25012702762	125mm
25012702860	160mm
25012702964	200mm

Double Socket Coupler

Code	Size
25012729105	40mm
25012729202	50mm
25012729300	63mm
25012729407	75mm
25012729504	90mm
25012729601	110mm
25012729709	125mm
25012729806	160mm
25012729905	200mm

Expansion-Piece

Code	Size
25012742209	50mm
25012742403	63mm
25012742500	75mm
25012742608	90mm
25012742705	110mm
25012742802	125mm
25012743000	160mm
25012743106	200mm

Single Socket 45 Degree Bends

Code	Size
25012712105	40mm
25012712202	50mm
25012712300	63mm
25012712407	75mm
25012712504	90mm
25012712601	110mm
25012712709	125mm
25012712806	160mm

Double Socket 45 Degree Bends

Code	Size
25012714108	40mm
25012714205	50mm
25012714302	63mm
25012714400	75mm
25012714507	90mm
25012714604	110mm
25012714701	125mm
25012714809	160mm
25012714906	200mm

Double Socket 90 Degree Bends

Code	Size
25012716100	40mm
25012716208	50mm
25012716305	63mm
25012716402	75mm
25012716500	90mm
25012716607	110mm
25012716704	125mm
25012716801	160mm
25012716906	200mm

All Socket 45 Degree T-Piece

Code	Size
25012718103	40mm
25012718405	50mm
25012718707	63mm
25012719002	75mm
25012719304	90mm
25012719800	110mm
25012720108	125mm
25012720400	160mm
25012720505	200mm

Concentric Reducer

Code	Size
25012731100	50 x 40mm

Excentric Reducer

Code	Size
25012724200	63 x 40mm
25012724308	63 x 50mm
25012724502	75 x 50mm
25012724600	75 x 63mm
25012724707	90 x 40mm
25012724804	90 x 50mm
25012724901	90 x 63mm
25012725002	90 x 75mm
25012725207	110 x 40mm
25012725304	110 x 50mm
25012725401	110 x 63mm
25012725509	110 x 75mm
25012725606	110 x 90mm
25012725800	125 x 40mm
25012725908	125 x 50mm
25012726009	125 x 63mm
25012726106	125 x 75mm
25012726203	125 x 90mm

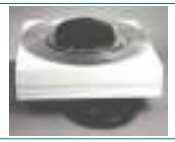
Excentric Reducer cont'd

Code	Size
25012726408	125 x 110mm
25012726602	160 x 40mm
25012726700	160 x 50mm
25012726807	160 x 63mm
25012726904	160 x 75mm
25012727005	160 x 90mm
25012727102	160 x 110mm
25012727200	160 x 125mm
25012727402	200 x 160mm

Aluminium Roof Outlets for Bitumen Surfaces

Code	Size
25012736100	50mm
25012736705	75mm

Aluminium Roof Outlets for Plastic Membrane Surfaces



Code	Size
25012736008	50mm
25012736608	75mm

Stainless Steel Roof Outlets for Gutters

Code	Size
25012736005	50mm

Flexible Hoses

Code	Size
25012739105	50 x 40mm
25012739202	50 x 50mm
25012739206	50 x 63mm
25012739303	75 x 75mm

Outlet Click-Coupler

Code	Size
25015850305	50mm
25015850308	75mm

Outlet Locking Ring

Code	Size
25015849806	50mm
25015849808	75mm

Hose Connector Piece

Code	Size
25012743604	40mm
25012743701	50mm
25012743906	63mm
25012744007	75mm

J-Brackets for Collector Pipe Support

Code	Size
25012734109	40mm
25012734206	50mm
25012734400	63mm
25012734508	75mm
25012734605	90mm
25012734800	110mm
25012734907	125mm
25012735105	160mm
25012735204	200mm

Closed Brackets for Fixed Support

Code	Size
25011780101	40mm
25011780103	50mm
25011780107	63mm
25011780202	75mm
25011780204	90mm
25011780206	110mm
25011780301	125mm
25011780305	160mm
25011780402	200mm

PVC Solvent Cement

Code	Size
250113000	1/4 Litre Tin
250114006	1 Litre Tin
250115002	5 Litre Tin
250116009	10 Litre Tin
250117005	25 Litre Tin

PVC Cleaning Fluid

Code	Size
250116004	1/4 Litre Tin
250115008	1 Litre Tin

System Requirements Calculation

In order to design a system that will function optimally, JDP uses a computer program calculating all possible combinations of diameters. Calculations for a VACURAIN®-system also consider the requirements of the national standards. JDP will do the calculations for you. All we need are the correct parameters which are-:

- Length of the building
- Width of the building
- Height of the building
- Pitch slope direction
- Gradient
- Desired position(s) of down pipe(s)
- Roofing material (bitumen, synthetic material...)

Standards

The 'VACURAIN®' system is used in accordance with BS EN 12056-2:2000 and BS EN 12056-3: 2000.

The 'VACURAIN®' system is covered by **BBA** certification certificate number 06/4387. RIBA approved technical CPD seminars and NBS R10 specification clauses can be provided.

Installation Guide

Design Considerations

There are various reasons to opt for JDP VACURAIN®.

If the architect prefers to keep pipes hidden, JDP VACURAIN® offers unlimited possibilities. As the system is based on very small diameter pipes within the building, the pipework can be easily hidden above a false ceiling or in chases.

JDP VACURAIN® advantages will be quickly apparent in larger flat and slightly pitched roofs normally drained with extensive gutters and downpipes. Due to the larger water discharge per outlet, there are a reduced number of discharges compared to conventional rainwater drainage systems. Moreover, pipe diameters are considerably smaller, hence the lower cost price of the VACURAIN® system. And finally, the system is very easy to assemble not requiring the electrofusion couplings of PE systems.

Critical for the final design are roof area and slope, height of the building, roof construction and pipe zones. It is also important to know whether gravel will be applied on the roof. This data determines the location of the roof outlets and the capacity of the pipes. Locations and capacity of secondary systems can also be derived.

The quantity of precipitation is a fixed calculation value equaling a heavy shower (300 to 500 litres per second per hectare, depending and in accordance with the national applicable standards – BS EN 12056 part3). Extremely heavy and rare downpours call for a larger capacity. Therefore, secondary systems or overflows are necessary (in accordance with the national applicable standards – BS EN 12056 part3). In the case of roofs closed in by other buildings, special precautions should be taken.

Usually the outlets are positioned in flat areas of the roof. The flat area is, so to speak, the collection reservoir for the all rainwater. Roofs should also be provided with a slope.

The constructor shall determine the slope, while taking into consideration:

- The weight of the roof
- The variable load placed on the roof
- The minimum inclination in operational mode for water discharge

As a rule the gradient of the slope is 15 mm/m. Outlets are, obviously, always mounted in the lowest part. Installation in a gutter is also possible, in some circumstances.

If so desired, each outlet can be equipped with a down pipe. From a point of view of cost, however, it is more advantageous to connect a number of outlets to one single down pipe.

VACURAIN® pipes and fittings should not be used in situations where extreme soil settlement may occur.

Installation

General

In accordance with requirements of the VACURAIN® warranty, only products from the JDP series or those that comply with the quality requirements indicated below may be used.

Couplers with rubber washers may not be used or expansion elements in collector pipes except where indicated by JDP.

Construction Considerations

For a copy of our VACURAIN® full installation and maintenance guide please contact your local JDP branch or representative.

uPVC Gravity System

JDP offer Roofline 6"/150mm and Superline 5"/125mm half round gutter systems which are suitable for large industrial and commercial buildings, using 110mm (see section 2 Soil & Waste Systems) and 68mm round down pipes, respectively. Available in Black and Grey, our Rainwater System will give you more than just outstanding, high quality products, more than good looks and first class performance. You'll get:

- A choice of two colours
- The right gutter for the building size and type
- A system that's fast and easy to install
- Products that won't let you down and the reassurance of the right expert advice and support

Applications

Commercial & industrial gravity gutter systems

- 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 table below
  - Roof area
  - Gutter Flow Capacity
- For further reference, refer to BS EN 12056-3:2000 'Roof drainage, layout and calculation'

Maximum Effective Roof Area (m^2)

	Running outlet at END of gutter	Running outlet at END of gutter	Running outlet at CENTRE of gutter	Running outlet at CENTRE of gutter
	Gutter laid level	Gutter laid at fall 1:600	Gutter laid level	Gutter laid at fall 1:600
RoofLine 6"/150mm	111	155	222	310
SuperLine 5"/125mm	75	90	151	180

Features & Benefits

uPVC gutters are totally unaffected by even the most heavily polluted atmosphere, or by impurities in the rainwater.

RoofLine is self-coloured. They may, however, be painted with normal household paints if an alternative colour is required. Oil based gloss paint is the most suitable for this purpose. For best results, slightly abrade the surface with sandpaper and clean thoroughly before painting.

Physical Attack

Plastic has no scrap value and is therefore less likely to be targeted by vandals or thieves.

Ultra Violet Light

Osma RoofLine gutter, pipe and fittings are resistant to the effects of ultra violet light. Although the colour may fade slightly after a number of year's exposure to strong sunlight, no integral damage occurs.

Half Round Gutter Systems

	Description	Superline 5" / 125mm Half Round Gutter	Roofline 6" / 150mm Half Round Gutter
	Gutter	03015T574	03016T674
	Union	03015T574	03016T609
	Support Bracket	03015T519	03016T619
	Spacer	03010T44	03010T044
	Outlet	03015T508	03016T606
	Stopend - Int	03015T510	03016T610
	Stopend - Ext	03015T511	03016T611
	Gutter Angle 90 Deg	03015T503	03016T603
	Gutter Angle 45 Deg	03015T504	-
	Fabricated Angles To Order	-	-

*Superline available in B = Black, N = Brown
*Roofline available in B = Black, G = Grey

Half Round Gutter Systems

	Description	Superline 5" / 125mm Half Round Gutter	Roofline 6" / 150mm Half Round Gutter
	Rise and Fall	03015T594	03016T694
	Build-in Spike – 200mm long	03010T985	03010T985
	Build-in Spike – 300mm long	03010T986	03010T986
	Drive-in Spike – 200mm long	03010T988	03010T988
	Drive-in Spike – 300mm long	03010T989	03010T989
	Top Rafter Brkt – 300mm long	03016T695	03016T695
	Side Rafter Brkt – 300mm long	03016T696	03016T696
	Adjustable Top Rafter	03010T147	03010T147
	Adjustable Side Rafter	03010T148	03010T148

* For 110mm downpipes see section 2. uPVC Soil & Vent Pipe

Rainwater Downpipe

	Description	68mm Round Downpipe
	2m Downpipe	03010T082
	2.75m Downpipe	03010T086
	4m Downpipe	03010T084
	5.5m Downpipe	03010T088
	Pipe Connector	03010T024
	Pipe Bracket	03010T034
	Socket Bracket	03010T038
	Offset Bend - socket	03010T025
	Offset Bend - spigot	03010T026
	Long Tail Offset Bend - spigot	03010T027
	Pipe Bend 87.5°	03010T161
	Pipe Shoe	03010T037
	Pipe Branch 67.5° Branch	03010T035
	Access Pipe	03010T274
	Hopper Head	03010T332

Standards

- BS4576: Part 1:1989

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.

Roof Outlets

82mm and 110mm uPVC Domed Roof Outlets are also available for flat roof applications.

- For flat roofs
- May be installed in mastic asphalt or built-up roofing
- For roof areas up to a maximum of (with one downpipe):
  - 143m³ (2.97 ltrs/sec) for 82mm (code 03013S414G)
  - 209m² (4.35 ltrs/sec) for 110mm (code 03014S414G)

Soil & Waste Systems

- Soil & Vent Systems • Low Noise System • Waste Systems
- Polypropylene Soil & Waste Systems • DYKA HDPE Soil & Waste System
- Floor Gullies & Linear Drainage • Flexible Couplings & Adaptors

JDP supply a range of complete soil and waste systems for use in commercial and industrial buildings.

From chemical and heat resistant HDPE and Polypropylene through to the latest uPVC silent soil & vent pipes, JDP supply one of the broadest ranges of Soil & Waste Systems on the market. A variety of jointing methods are available including Electrofusion, Solvent Weld and Ring Seal, giving a combination of peace of mind and speed of installation.

Soil & Vent Systems

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, and in sizes 82, 110 and 160mm. 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

uPVC Ring Seal Soil & Vent

Plain End Pipe

Description	3in / 82mm	4in / 110mm	6in / 160mm
3m length		03014S073	
4m length	03013S074	03014S074	03016S074

Single Socket Pipe

Description	3in / 82mm	4in / 110mm	6in / 160mm
2m length	03013S042	03014S042	03014S042
2.5m length		03014S050	
3m length	03013S043	03014S043	03016S043
4m length	03013S044	03014S044	03016S044

Pipe Brackets

Description	3in / 82mm	4in / 110mm	6in / 160mm
Pipe	03013S082	03014S082	03016S082
Socket	03013S083	03014S083	
Pipe or Socket BZP coated steel	03013S084	03014S084	03016S084

Suspended Bracketing System

Description	3in / 82mm	4in / 110mm	6in / 160mm
Adjustable Pipe Bracket Assembly (pack) containing Threaded Rod, Threaded Bracket, Bracket Plate and Pipe/Socket Bracket) - BZP coated steel		03014S086	03016S086
Adjustable Socket Bracket and Brace Assembly (pack) containing Threaded Rod, Threaded Bracket, Bracket Plate and Pipe/Socket Bracket) - BZP coated steel		03014S085	03016S085

Double Socket

Description	3in / 82mm	4in / 110mm	6in / 160mm
	03013S105	03014S105	03016S105

Single Socket

Description	3in / 82mm	4in / 110mm	6in / 160mm
	03013S124	03014S124	03016S124

Reducers

Description	3in / 82mm	4in / 110mm	6in / 160mm
Internal Drain Connector x 32/40mm		03014D298	
Internal Drain Connector x 50mm		03014D299	
82 x 50mm	03013S094		
110 x 50mm		03014S096	
110 x 82mm		03014S095	
160 x 110mm			03016S099

Bend (Single Socket)

Description	3in / 82mm	4in / 110mm	6in / 160mm
87½°	03013S161	03014S161	03016S161
76½°		03014S164	
67.5°	03013S162	03014S162	03016S162
45°	03013S163	03014S163	03016S163
30°		03014S166	
15°		03014S167	

Offset Bend 45° (Double Socket)

Description	3in / 82mm	4in / 110mm	6in / 160mm
45°		03014S445	

Offset Bend 45° (Socket/Spigot)

Description	3in / 82mm	4in / 110mm	6in / 160mm
45°	03013S444	03014S444	

Adjustable Bend (Single Socket)

Description	3in / 82mm	4in / 110mm	6in / 160mm
0-30° (Polypropylene)		03014S173	
0-90° (Polypropylene)		03014S179	

Single Branch

Description	3in / 82mm	4in / 110mm	6in / 160mm
87½° Equal	03013S190	03014S190	03016S190
87½° Equal (5 Boss)		03014S195	
76° Equal		03014S220	
67½° Equal	03013S200	03014S200	
45° Equal		03014S210	
87½° Unequal			03016S198

Double Branch

Description	3in / 82mm	4in / 110mm	6in / 160mm
87½° Equal		03014S230	
45° Equal		03014S250	
87½° Unequal			03016S238
87½° Corner Branch		03014S291	

Boss Adaptor (Rubber) Push Fit

Description	3in / 82mm	4in / 110mm	6in / 160mm
32mm / 40mm	03014S298		
50mm	03014S299		

Straight Adaptor Solvent/Ring Seal

Description	3in / 82mm	4in / 110mm	6in / 160mm
32mm	03012S398		
40mm	03012S399		
50mm	03012S402		
50mm 90°	03012S360		

Boss Pipe

Description	3in / 82mm	4in / 110mm	6in / 160mm
32mm Boss D/SW		03014S583	
40mm Boss D/SW		03014S584	
Short Boss Pipe D/SW		03014S588	

Strap Boss

Description	3in / 82mm	4in / 110mm	6in / 160mm
	0303S319	03014S319	

Access Fittings

Description	3in / 82mm	4in / 110mm	6in / 160mm
Access Bend 87½° S/S		03014S169	
Access Branch 87½° S/S		03014S502	
Access Pipe S/S – Bossed X3	03013S274	03014S274	03016S274
Access Saddle		03014S275	
Access Plug	03013S292	03014S292	03016S292

P/E Socket Plug

Description	3in / 82mm	4in / 110mm	6in / 160mm
One boss socket		03014S296	

Balloon Grating

Description	3in / 82mm	4in / 110mm	6in / 160mm
	03013S302	03014S302	03016S302

Weathering Collar

Description	3in / 82mm	4in / 110mm	6in / 160mm
	03013S300	03014S300	03016S300

SW/S Vent Cowl

Description	3in / 82mm	4in / 110mm	6in / 160mm
	03013S310	03014S302	03016S302
		03014S700	
		03014S709	

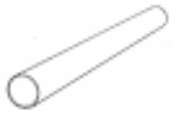
Pipe Flashings

Description	3in / 82mm	4in / 110mm	6in / 160mm
450 x 450 Pitched	03014S283		
600 x 600 Pitched	03014S285		
400 x 400 Flat	03014S281		

* When ordering please add colour to code, G = Grey, B = Black, W = White, BR = Brown
i.e. 03014S043G

uPVC Solvent Weld Soil & Vent

Plain End Pipe



Description	4in / 110mm	6in / 160mm
3m length	03014S073	
4m length	03014S074	03016S074

Pipe Brackets

Description	4in / 110mm	6in / 160mm
Pipe	03014S082	03016S082
Socket	03014S083	
Pipe or Socket BZP coated steel	03014S084	03016S084

Suspended Bracketing System

Description	4in / 110mm	6in / 160mm
Adjustable Pipe Bracket Assembly (pack) containing Threaded Rod, Threaded Bracket, Bracket Plate and Pipe/Socket Bracket) - BZP coated steel	03014S086	03016S086
Adjustable Socket Bracket and Brace Assembly (pack) containing Threaded Rod, Threaded Bracket, Bracket Plate and Pipe/Socket Bracket) - BZP coated steel	03014S085	03016S085

Double Socket D/SW

Description	4in / 110mm	6in / 160mm
	003014S104	03016S104

Single Socket S/SW

Description	4in / 110mm	6in / 160mm
	03014S124	03016S124

Double Socket D/S – for repairs

Description	4in / 110mm	6in / 160mm
Remove Centre	03014S105	03016S105

Stop for Slip Coupling

Reducers

Description	4in / 110mm	6in / 160mm
110 x 50mm SW/S	03014S496	
160 x 110mm SW/S		03016S499

Bend D/SW

Description	4in / 110mm	6in / 160mm
87½°	03014S461	03016S461
67.5°	03014S462	
45°	03014S463	03016S463

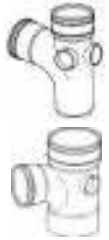
Bend SW/S

Description	4in / 110mm	6in / 160mm
45°	03014S263	
111/4 °	03014S268	
Long Tail 87½°	03014S260	

Offset Bends

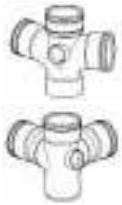
Description	4in / 110mm	6in / 160mm
SW/S	03014S435	
D/SW	03014S450	

Single Branch



Description	4in / 110mm	6in / 160mm
87½° Equal D/SW	03014S490	03016S490
87½° Equal SW/S	03014S290	
87½° Equal (5 Boss) D/SW	03014S495	
87½° Unequal D/SW		03016S498
45° Equal D/SW	03014S410	

Double Branch



Description	4in / 110mm	6in / 160mm
87½° Equal D/SW	03014S430	
87½° Corner Branch SW/S	03014S491	

Boss Socket Adaptors

Description	4in / 110mm	6in / 160mm
32mm SW/S	03012S298	
40mm SW/S	03012S299	
50mm SW/S	03012S403	

Boss Pipe

Description	4in / 110mm	6in / 160mm
32mm Boss D/SW	03014S483	
40mm Boss D/SW	03014S484	
Plain x4 Boss D/SW	03014S586	
Plain x4 Boss SW/S	03014S585	
Short Boss Pipe D/SW	03014S588	

Strap Boss

Description	4in / 110mm	6in / 160mm
	03014S319	

Access Fittings

Description	4in / 110mm	6in / 160mm
Access Bend 87½° SW/S	03014S469	
Access Branch 87½° D/SW	03014S493	
Access Pipe SW/S – Bossed	03014S574	03016S474
Access Saddle	03014S275	
P/E	03014S292	03016S292
SW/S	03014S492	

Socket Plug

Description	4in / 110mm	6in / 160mm
P/E One boss socket	03014S296	

* When ordering please add colour to code, G = Grey, B = Black, W = White, BR = Brown
i.e. 03014S043G

Soil Manifolds

Description	Code
Soil Manifold	03014S595
6 Boss Manifold	03014S597
All Fit Reducer 40/32mm	03012S354
All Fit Reduction Bend 50/40mm	03012S355
All Fit 90° Spigot Bend 50mm	03012S356

Air Admittance Valves

Description	Code
Air Admittance Valves (White)	
110mm can also be adapted for 82mm	03014S304

Fire Stop Seal

Description	Code
82mm	03013S001
110mm	03014S001
160mm	03016S001

Easy Fit Pan Connectors

Description	Code
Straight	0301WC004
90°	0301WC904
14°	0301WC144

Description	Code
Offset	0301WC204
Straight Extension Piece	0301WC404

WC Connectors (for WC's to BS 5503)

Description	Code
P/E WC Connector - 2.5°	03014S791
P/E WC Connector - 14°	03014S711
P/E WC Connector - 90°	03014S771
P/E Access Connector - 90°	03014S761

Description	Code
SW/S WC Connector - 2.5°	03014S792
SW/S WC Connector - 14°	03014S712
SW/S WC Connector - 90°	03014S772
SW/S Access Connector - 90°	03014S762

Abbreviations

P/E: Pipe and fittings with both ends plain or with one plain end and one special end.
S/S: Pipe and fittings with one or more ring-seal or push-fit sockets, but always one plain or special end.
D/S: Fittings with ring-seal or push-fit sockets at all ends.
S/SW: Fittings with one or more ring-seal sockets but always one solvent socket.
SW/S: Fittings with one or more solvent sockets and one plain or special end.
D/SW: Fittings with solvent sockets at all ends.

Standards

BSEN1329-1 & BS4514

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 1½ 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
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.

Low Noise System

Being a low noise, push-fit soil system, Osma SiTech offers the ideal solution for effective sound-reduction in a variety of projects.

The UK construction industry is, more than ever, seeking new ways to control noise in buildings. Recent changes to Part E of the Building Regulations mean that acoustic standards in buildings are now higher than ever.

SiTech exceeds these regulations, while keeping costs relatively low. Compared to cast iron installations, SiTech is a practical and affordable alternative to absorb sound. It delivers the required acoustic performance but with the added bonus of being lightweight and easy to install.

Manufactured from reinforced polypropylene, the 110mm pipe and fittings reduces installation time, material costs and there is no need for specialist fitters - a professional plumber can easily install the system!

SiTech is an innovative and future proof solution, ensuring the system is effective in years to come, at an affordable cost.

OSMA SiTech

Features and benefits

- Fittings and Flexibility
  A full range of fittings ensure flexible, space saving and efficient installations
- Quality and Reliability
  Manufactured from reinforced polypropylene, and developed for long term performance, SiTech is a quality, future proof, solution
- Lower Noise
  Independently tested, and exceeding DIN 4109 requirements, SiTech helps achieve the highest acoustic performance standards required by building regulations
- Easy Installation
  With a simple push-fit system, installation is much easier and takes less time when compared to cast iron or HDPE - and there is no need for expensive specialists, it can be installed by any professional plumber!
- Multiple Applications
  Apartments, houses, museums, schools, hospitals, office buildings... ideal for any project

Waste Systems

JDP supply Waste Systems to BS5254 and BS5255 in solvent MuPVC and ABS as well as push fit and compression systems in polypropylene. These systems 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

ABS Solvent Weld Waste System Grey, White, Black, & Brown (50mm Grey, White & Black)

Code	Description
Wastepipe 3m lengths	
03014Z073	32mm
03015Z073	40mm
03012Z073	50mm

Code	Description
Wastepipe 4m lengths	
03014Z074	32mm
03015Z074	40mm
03012Z074	50mm

Code	Description
Pipe Bracket	
03014Z081	32mm
03015Z081	40mm
03012Z081	50mm

Code	Description
Pipe Clip	
03014Z082	32mm
03015Z082	40mm

Code	Description
Double Socket Coupling	
03014Z104	32mm
03015Z104	40mm
03012Z104	50mm

Code	Description
Expansion Socket	
03014Z124	32mm
03015Z124	40mm
03012Z124	50mm

Code	Description
Swept Bend - 87½°	
03014Z161	32mm
03015Z161	40mm
03012Z161	50mm

Code	Description
Knuckle Bend - 90°	
03014Z160	32mm
03015Z160	40mm
03012Z160	50mm

Code	Description
Obtuse Bend - 45°	
03014Z163	32mm
03015Z163	40mm
03012Z163	50mm

Code	Description
Long Tail Bend - 90°	
03014Z260	32mm
03015Z260	40mm

Code	Description
Long Tail Bend - 87½°	
03012Z359	50mm

Code	Description
Swept Tee - 87½°	
03014Z190	32mm
03015Z190	40mm
03012Z190	50mm

Code	Description
Crossed Tee - 92½°	
03015Z230	40mm
03012Z230	50mm

Code	Description
Tee - 45°	
03014Z210	32mm
03015Z210	40mm
03012Z210	50mm

Code	Description
Screwed Access Plug	
03014Z292	32mm
03015Z292	40mm
03012Z292	50mm

Code	Description
Reducer Level Invert	
03015Z085	40 x 32mm
03012Z088	50 x 32mm
03012Z086	50 x 40mm

Code	Description
Reducer Concentric	
03015Z455	40 x 32mm
03012Z347	50 x 32mm synthetic rubber

Code	Description
Straight Tank Connector	
03014Z185	32mm
03015Z185	40mm

Code	Description
Cap & Liner	
03014Z364	32mm
03015Z364	40mm

Code	Description
Female Iron Connector	
03014Z127	32mm
03015Z127	40mm
03012Z127	50mm

Code	Description
Male Iron Connector	
03014Z128	32mm
03015Z128	40mm
03012Z128	50mm

* When ordering please add colour to code, G = Grey, B = Black, W = White, BR = Brown
i.e. 0304SP430G

MuPVC Solvent Weld Waste System White, Black, Olive & Brown (50mm Grey, White & Black).

Code	Description
Wastepipe 3m lengths	
03014M073	32mm
03015M073	40mm
03012M073	50mm

Code	Description
Pipe Bracket	
03014M081	32mm
03015M081	40mm
03012M081	50mm

Code	Description
Double Socket Coupling	
03014M104	32mm
03015M104	40mm
03012M104	50mm

Code	Description
Expansion Socket	
03014M124	32mm
03015M124	40mm
03012M124	50mm

Code	Description
Swept Bend - 87½°	
03014M161	32mm
03015M161	40mm
03012M161	50mm

Code	Description
Knuckle Bend - 90°	
03014M160	32mm
03015M160	40mm
03012M160	50mm

Code	Description
Obtuse Bend - 45°	
03014M163	32mm
03015M163	40mm
03012M163	50mm

Code	Description
Long Tail Bend - 90°	
03014M260	32mm
03015M260	40mm
03012M260	50mm

Code	Description
Swept Tee - 87½°	
03014M190	32mm
03015M190	40mm
03012M190	50mm

Code	Description
Tee - 45°	
03014M210	32mm
03015M210	40mm
03012M210	50mm

Code	Description
Screwed Access Plug	
03014M292	32mm
03012M292	40mm
03012M292	50mm

Code	Description
Reducer Level Invert	
03012M458	50 X 32mm
03012M456	50 X 40mm

Code	Description
Reducer Concentric	
03015M455	40 x 32mm
03012M347	50 x 32mm synthetic rubber

Code	Description
Straight Tank Connector	
03014Z185	32mm
03015Z185	40mm

Code	Description
Cap & Liner	
03014Z364	32mm
03015Z364	40mm

Code	Description
Female Iron Connector	
03014Z127	32mm
03015Z127	40mm
03012Z127	50mm

Code	Description
Male Iron Connector	
03014Z128	32mm
03015Z128	40mm
03012Z128	50mm

* When ordering please add colour to code, G = Grey, B = Black, W = White, BR = Brown
i.e. 0304SP430G

Polypropylene Push-fit Waste System White, Black, Olive & Brown (50mm Grey, White & Black)

Code	Description
Wastepipe 3m lengths	
03014W073	32mm
03015W073	40mm
03012W073	50mm

Code	Description
Pipe Bracket	
03014W081	32mm
03015W081	40mm
03012W081	50mm

Code	Description
Double Socket Coupling	
03014W105	32mm
03015W105	40mm
03012W105	50mm

Code	Description
Swept Tee - 87½°	
03014W161	32mm
03015W161	40mm
03012W161	50mm

Code	Description
Knuckle Bend - 90°	
03014W160	32mm
03015W160	40mm
03012W160	50mm

Code	Description
Obtuse Bend - 45°	
03014W163	32mm
03015W163	40mm
03012W163	50mm

Code	Description
Long Tail Bend - 90°	
03014W260	32mm
03015W260	40mm
03012W260	50mm

Code	Description
Swept Tee - 87½°	
03014W190	32mm
03015W190	40mm
03012W190	50mm

Code	Description
Access Plug	
03014W292	32mm
03012W292	40mm
03012W292	50mm

Code	Description
Reducer	
03015W084	40 x 32mm
03012W088	50 x 32mm
03012W086	50 x 40mm

* When ordering please add colour to code, G = Grey, B = Black, W = White, BR = Brown
i.e. 0304SP430G

Traps (White)

Description	Code
32mm Bottle Trap - 76mm Seal	03014V812
40mm Bottle Trap - 76mm Seal	03015V812
40mm Shower Trap - 50mm Seal	03015V824
40mm Bath Trap - 76mm Seal	03015V846
40mm Washing Machine Half Trap - 76mm	03015V864
40mm Washing Machine Trap + Standpipe	03015V870

Shower Gullies

Description	Code
Shower Gully for Tiled Floor	03012V500
Adaptor for 2V500 Stainless Steel	03012V501
Shower Gully – sheet floor	03012V510
Shower Gully – sheet floor stainless steel	03015V511

Air Admittance Valves

Description	Code
Air Admittance Valves (White)	
40mm and 32mm	03014S303

Fire Stop Seal

Description	Code
50mm	03012S001

Lubricants & Solvents

Description	Code
Degreasing Cleaner – 125ml can	03014S379
Degreasing Cleaner – 250ml can	03014S380
Solvent cement – 125ml can	03014S383
Solvent cement – 250ml can	03014S384
Solvent cement – 500ml can	03014S385
Gap Filling Cement – 200g tube	03014S394
Silicone Lubricant – 50g tube	03014S391
Silicone Spray - 400ml can	03014S392

Standards

ABS solvent weld systems to BS EN1455-1
Polypropylene push fit systems to BS EN1451-1
MuPVC solvent systems to BS EN1329-1 and BS EN1566-1
Waste traps to BS3943

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 1½ 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	0.5m

Further guidance should be sought by reference to BS EN 12056:2000 Gravity Drainage Systems inside Buildings.

Polypropylene Soil & Waste Systems

Polypropylene Soil & Waste Systems offer an effective way of dealing with high temperature and chemicals in Industrial and Commercial applications. Polypropylene systems excel in high temperatures and chemical resistant installations.

Being lightweight it offers significant time savings in installation and enables professional plumbers to install without the need for time consuming welding when compared to other systems. Polypropylene also has good properties to resist heat from concrete when laid in concrete flooring.

The range of products from 32 – 160mm in black and from 32 – 110mm in white is comprehensive (larger sizes are available) and is installed in the same way as standard rubber ring sealed soil and waste systems, with the exception of the need for additional heat expansion fixing brackets.

Features and benefits

- Quick & easy to install
- No specialist tooling required
- Excellent chemical resistant
- Temperature resistant from 0°C to 95°C
- High impact resistance
- Lightweight - Polypropylene is one of the lightest materials available for drainage
- Full range of fittings available

Applications

- Installations requiring chemical or heat resistance
- All buildings and projects including commercial kitchens, schools, hospitals and factories.

In such applications it is important to know the volumes and nature of the waste being disposed of. i.e. acids, solvents and detergents. How corrosive or dangerous the waste is and what temperature it will be disposed at should also be considered.

For full details of the range of products please contact your nearest JDP branch.

DYKA HDPE Soil & Waste System

JDP offer a Dyka HDPE waste system that will give the total solution for all types of drainage including above ground, below ground and chemical waste.

It provides the appropriate solution for every requirement: whether in residential or industrial construction, for laboratories, conventionally installed or prefabricated, embedded in concrete or underground.

The variety of fittings and jointing method ensures ease of installation in any application, allowing innovative design, compatible with any building.

Features and benefits

Acoustic properties

- Dyka HDPE provides superior acoustic properties when compared with cast iron

Chemical and temperature resistance

- Dyka HDPE offers considerable resistance to contaminated liquids
- Safe to use when transferring heated or cooled liquids

Crush resistance & flexibility

- The flexibility of Dyka HDPE guarantees crush resistance and superior performance in applications where pipes pass through expansion joints or are subject to traffic vibration

Resistance to abrasion

- Dyka HDPE is very resistant to abrasion; its extra thick walls offer superior protection from both internal and external abrasion

Lightweight

- Dyka HDPE combines toughness and durability with the advantage of being lightweight

Electrofusion

- Electrofusion is the ideal connection on-site, for subsequent changes or wherever access is restricted

Applications

Building drainage

Dyka HDPE installations are suitable for use in a wide range of Commercial and Industrial buildings, Hospitals and Laboratories.

The wide range of jointing methods available, combined with flexibility in design ensures that Dyka HDPE provides a solution for any application and guarantees that the installation is easy and quick.

Installation in concrete

The flexibility, the easy processing and the abrasion resistance of the Dyka HDPE drainage system make it ideal for using the system in concrete.

Underground drainage

Like in domestic drainage systems, the choice of the material is also crucial for installation underground.

The resistance to abrasion both internal and external combined with crush resistance and flexibility enable Dyka HDPE system to be installed in the ground.

PE 80 Pipes

Code	OD(mm)	ID(mm)	L(mm)
03102870150	40	34,0	5
03102870258	50	44,0	5
03102870452	63	57,0	5
03102870550	75	69,0	5
03102870657	90	84,0	5
03102870754	110	103,2	5
03102870851	125	117,2	5
03102871050	160	150,2	5
03102871254	200	187,6	5
03102871459	250	234,6	5
03102871653	315	295,6	5

Electrofusion Couplings

Code	OD(mm)
03102950208	40
03102910202	50
03102910204	56
03102910206	63
03102910208	75
03102910301	90
03102910303	110

Single Socket Couplings

Code	OD(mm)
03102911000	40
03102911108	50
03102911205	56
03102911302	63
03102911400	75
03102911507	90
03102911604	110

Double Socket Couplings

Code	OD(mm)
03102910602	160
03102910604	200
03102910606	250
03102910608	315

Expansion Sockets

Code	OD(mm)
03102907001	40
03102907003	50
03102907208	63
03102907305	75
03102907402	90
03102907500	110
03102907607	125
03102907704	160
03102907801	200
03102907909	250
03102908000	315

Bend 30°

Code	OD(mm)
03102892006	200
03102892103	250
03102892200	315

Bend 45°

Code	OD(mm)
03102889005	40
03102889102	50
03102889200	56
03102889307	63
03102889404	75
03102889501	90
03102889609	110
03102889706	125
03102889803	160
03102889900	200
03102890003	250
03102890100	315

Bend 88½°

Code	OD(mm)
03102891000	40
03102891107	50
03102891301	63
03102891409	75
03102891506	90
03102891603	110
03102891700	125
03102891808	160

Bend 90° (Segmented)

Code	OD(mm)
03102888009	200
03102888106	250
03102888203	315

Bend 90° (Long Tail)

Code	OD(mm)	L(mm)
03102887100	40 x 40	150
03102887207	50 x 50	180
03102887401	63 x 63	210
03102887509	75 x 75	210
03102887606	90 x 90	240
03102887703	110 x 110	270
03102887800	125 x 125	200
03102887908	160 x 160	140

Equal Y-Branch 45°

Code	OD(mm)
03102894203	40
03102894408	50
03102894602	56
03102895005	63
03102895501	75
03102896001	90
03102896702	110
03102897202	125
03102897601	160
03102898004	200
03102898500	250
03102899108	315

Unequal Y-Branch 45°

Code	OD(mm)
03102894300	50 x 40
03102894505	56 x 50
03102894807	63 x 50
03102895200	75 x 50
03102895706	90 x 50
03102895900	90 x 75
03102896109	110 x 40
03102896206	110 x 50
03102896508	110 x 75
03102896605	110 x 90
03102896907	125 x 75
03102897105	125 x 110
03102897402	160 x 75
03102897407	160 x 110
03102897504	160 x 125
03102897709	200 x 110
03102897806	200 x 125
03102897903	200 x 160
03102898306	250 x 160
03102898403	250 x 200
03102898802	315 x 160
03102898900	315 x 200
03102899000	315 x 250

Equal T-Branch 88½°

Code	OD(mm)
03102900203	40
03102900408	50
03102900602	56
03102901005	63
03102901501	75
03102902001	90
03102902702	110
03102903300	125
03102903601	160
03102904004	200
03102904500	250
03102905108	315

Unequal T-Branch 88½°

Code	OD(mm)
03102900300	50 x 40
03102901200	75 x 50
03102901900	90 x 75
03102902206	110 x 50
03102902508	110 x 75
03102902605	110 x 90
03102903008	125 x 75
03102903202	125 x 110
03102903407	160 x 110
03102903504	160 x 125
03102903709	200 x 110
03102903806	200 x 125
03102903903	200 x 160
03102904306	250 x 160
03102904403	250 x 200
03102904608	315 x 110
03102904802	315 x 160
03102904900	315 x 200
03102905000	315 x 250

Double Y-Branch 45°

Code	OD(mm)
03102893908	110 x 110

Double Y-Branch 60°

Code	OD(mm)
03102936704	110

Swept T-Branch 88½°

Code	OD(mm)
03102905205	110

Double Branchball 90°

Code	OD(mm)
03102933209	110 x 75
03102933306	110 x 90
03102933403	110 x 110
03102933504	125 x 125

Double Branchball 180°

Code	OD(mm)
03102933802	110 x 75
03102933900	110 x 90
03102934000	110 x 110
03102934200	125 x 125

Concentric Reducer

Code	OD(mm)
03102884003	40 x 32

Short Eccentric Reducers

Code	OD(mm)
03102880008	50 x 40
03102880202	56 x 50
03102880300	63 x 40
03102880407	63 x 50
03102880504	63 x 56
03102880601	75 x 40
03102880709	75 x 50
03102880806	75 x 56
03102880903	75 x 63
03102881000	90 x 40
03102881004	90 x 50
03102881101	90 x 56
03102881209	90 x 63
03102881306	90 x 75
03102881403	110 x 40
03102881500	110 x 50
03102881608	110 x 56
03102881705	110 x 63
03102881802	110 x 75
03102881900	110 x 90
03101660101	125 x 50
03101660209	125 x 56
03101660306	125 x 63
03102882302	125 x 75
03102882400	125 x 90
03102882507	125 x 110
03102882604	160 x 110
03102882701	160 x 125

Long Eccentric Reducers

Code	OD(mm)
03102883309	200 x 110
03102883406	200 x 125
03102883503	200 x 160
03102883600	250 x 200
03101661302	315 x 200
03102883805	315 x 250

PE Weld On Caps

Code	OD(mm)
03102914107	40
03102914204	50
03102914409	63
03102914506	75
03102914603	90
03102914700	110
03102914808	125
03102914905	160

Access End Cap

Code	OD(mm)
03102913003	40
03102913100	50
03102913305	63
03102913402	75
03102913500	90
03102913607	110

Protection Caps

Code	OD(mm)
03102604000	40
03102605007	50
03102916304	63
03102606003	75
03102613000	90
03102607000	110
03102608006	125
03102611007	160

Access Pipe with Screwed Access Cover 90°

Code	OD(mm)
03102906309	110
03102906406	125
03102906503	160

Blank End Cap

Code	OD(mm)
03102912007	40
03102912104	50
03102912309	63
03102912406	75
03102912503	90
03102912600	110

Flange Bushings (Anchor Pipe)

Code	OD(mm)
03102915103	40
03102915200	50
03102915308	56
03102915405	63
03102915502	75
03102915600	90
03102915707	110

Flange Ends

Code	OD(mm)
03102940100	50
03102940104	63
03102940106	75
03102940108	90
03102940201	110
03102940203	125
03102940205	160
03102940207	200
03102940300	250
03102940302	315

Flange Rings

Code	OD(mm)
03106759904	50
03106760007	63
03106760104	75
03106760201	90
03106760309	110
03106760406	125
03106760503	160
03108200203	200
03108200300	250
03108200408	315

Flange Seals

Code	OD(mm)
03102940500	50
03102940504	63
03102940506	75
03102940508	90
03102940601	110
03102940603	125
03102940605	160
03102940607	200
03102940700	250
03102940702	315

Adaptor PE to cast iron, steel, asbestos (shrinks through heat)

Code	OD(mm)
03102918204	50 x 73
03102918208	50 x 90
03102918303	63 x 90
03102918307	75 x 80
03102918404	75 x 90
03102918406	75 x 100
03102918408	90 x 110
03102918500	110 x 125
03101683209	110 x 140
03102919001	125 x 150
03102919003	160 x 195
03102919005	200 x 230
03102919007	250 x 280
03102919100	315 x 355

Steel Adaptor

Code	OD(mm)
03102931508	50 x 58.0
03102931605	75 x 76.1
03102931702	110 x 109.0
03102931800	125 x 135.0
03102931907	160 x 161.0

PE Adaptor

Code	OD(mm)
03102930200	40 x 1"
03102930501	50 x 1"
03102930609	50 x 1¼"
03102930706	50 x 1½"
03102930900	63 x 2"

PE Adaptor to Other Materials

Code	OD(mm)
03102931001	50 x 1¼"
03102931109	50 x 1½"
03102931303	63 x 2"

Extended Fitting with Nut

Code	OD(mm)
03102920409	40 x 1¼"
03102920506	40 x 1½"
03102920603	40 x 2"
03102920700	50 x 1¼"
03102920808	50 x 1½"
03102920905	50 x 2"

Spigot/Socket P-Trap

Code	OD(mm)
03102921804	40 x 40
03102921806	40 x 50
03102921808	50 x 50

Double Spigot P-Trap

Code	OD(mm)
03102921905	75 x 75
03102921906	90 x 90
03102921907	110 x 110

S-Trap

Code	OD(mm)
03102921800	40 x 40
03102921802	50 x 50

Trap Connection Socket

Code	OD(mm)
03102921006	40 x 46
03102921103	50 x 46
03102921200	50 x 58

Trap Connection Bend

Code	OD(mm)
03102921502	40 x 46
03102921600	50 x 46
03102921707	50 x 58

Rubber Transition Ring

Code	OD(mm)
03102948109	46 & 32
03102948206	46 & 40
03102948508	58 & 32
03102948605	58 & 40
03102948702	58 & 50

WC Floor Socket (including temporary cap)

Code	OD(mm)
03102922703	110 x 110

Rubber Collar

Code	OD(mm)
03102922708	110

Pipe Clamps

Code	OD(mm)
03101698405	32
03101698701	40
03101698903	50

Closed Bracket

Code	OD(mm)
03104290801	32
03104290909	40
03104291000	50

Snap Bracket

Code	OD(mm)
03104291808	32
03104291905	40
03104292006	50
03104292502	75

Bracket for use with Mounting Eye

Code	OD(mm)
03101711903	40
03101712900	50
03101715500	75
03101725305	90
03101718908	110
03101719904	125
03101720902	160

Mounting Eye

Code	OD(mm)
03100702408	M6
03100702604	M8

Pipe Bracket with ½" Thread

Code	OD(mm)
03102924900	40
03102925001	50
03102925206	63
03102925303	75
03102925400	90
03102925508	110
03102925605	125
03102925702	160

Pipe Bracket with 1" Thread

Code	OD(mm)
03102925800	200
03102925907	250
03102924803	315

Bracket Half Shell

Code	OD(mm)
03101691007	40
03102927101	50
03102927306	63
03102927403	75
03102927500	90
03102927608	110
03102927705	125
03102927802	160

Inlay Band (for use with pipe brackets with ½" and 1" threads)

Code	OD(mm)
03102927900	10m long and 31mm wide

Half Shells (Galvanised)

Code	OD(mm)
03102927901	16 x 3000
03102927903	20 x 3000
03102927905	25 x 3000
03102927907	32 x 3000
03102928000	40 x 3000
03102928108	50 x 3000
03102928302	63 x 3000
03102928400	75 x 3000
03102928507	90 x 3000
03102928604	110 x 3000
03102928701	125 x 3000
03102928809	160 x 3000
03102928906	200 x 3000

Half Shells (Black)

Code	OD(mm)
03102943000	40 x 3000
03102943107	50 x 3000
03102943301	63 x 3000
03102943409	75 x 3000
03102943506	90 x 3000
03102943603	110 x 3000
03102943700	125 x 3000
03102943808	160 x 3000

Cable Ties

Code	OD(mm)
03104075102	7,6 / 368
03104075200	9,0 / 810

Floor Gullies & Linear Drainage

JDP supply a range of specialist floor gullies and channels with gratings or access covers, for use in commercial, industrial and public buildings. Manufactured from high quality materials including stainless steel and bronze for even the most exacting applications such as hospitals and commercial kitchens.

Floor Gullies

Applications

For use in, on and near all kinds of buildings such as hospitals, schools, hotels, restaurants, factories, airports, oil rigs, shopping malls, supermarkets and leisure centres.

Applications and Description

Trapped and non-trapped versions are available with bodies of cast iron, stainless steel, gunmetal or plastic for connection to all kinds and sizes of pipework in general use.

A wide selection of styles and sizes of gratings and access covers, manufactured of nickel bronze with satin finish, sherardized ductile iron or stainless steel is available for use in pedestrian areas, with certain models suited for light vehicular traffic.

Vari-Level gratings and access covers are height-adjustable with a fine thread to enable accurate installation at finished floor level; direct connection versions are available to enable direct connection to pipework.

Gullies are available to suit various floors and floor finishes including ceramic tiles, marble, asphalt, sheet floorcovering such as vinyl, and metal decks such as on oil rigs.

Custom-made products can be designed and manufactured to suit particular applications.

Linear Drainage

Applications and Description

Suitable for pedestrian and light traffic areas, gratings of different styles and sizes, of stainless steel, nickel bronze, polished bronze and non-ferrous metals, are available for use in standard or purpose-made stainless steel channels or frames.

Hidden channel is suited for draining large areas finished with block paving.

Jubilee and Budget are modular linear drainage systems.

Also available are tree grilles, supaslot and channel and grating for firefighting lifts.

Most channel types can be manufactured with dual level drainage, providing secondary drainage at membrane level if required.

Certain channel profiles and perforated gratings can be manufactured in curved sections where required.

For more information on these products please contact your local JDP branch.

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

Drain Couplings

Part Number	Size Range (mm)
2004DC32	24-32
2004DC40	32-40
2004DC50	42-50
2004DC65	55-65
2004DC75	65-75
2004DC89	75-89
2004DC100	85-100

Adaptor Couplings

Part Number	Size Range (mm)	Small End (mm)
2004PAC0401	32-40	24-32
2004PAC0501	40-50	24-32
2004PAC0502	40-50	32-40
2004PAC0632	53-63	32-40
2004PAC0633	53-63	40-50
2004PAC0893	75-89	40-50
2004PAC0894	75-89	53-63
2004AC1153	100-115	40-50
2004AC1154	100-115	53-63
2004AC1155	100-115	75-89

Puddle Flanges (32-1300mm diameter)

Puddle Flanges provide an effective solution against water penetration along the pipe and can be used with many common materials including PE and other plastic pipes, providing that the surface of the pipe is clean, smooth and pore free.

Puddle Flanges ensure a watertight seal where pipes pass through the walls of tanks, swimming pools etc. They can also be used where they pass through the walls of basements, manholes or other structures below groundwater level.

Puddle Flanges are manufactured from EPDM material that provides chemical resistance to a variety of acids and alkalis.

JDP can provide a range of puddle flanges that are preformed or fabricated to meet specific site requirements.

Features and benefits

- A cost effective solution
- Easy to install with steel or stainless steel clamping bands
- Suitable for various pipe materials
- Can be installed in ceilings, floors and walls
- Good chemical resistance to acids and alkalis

Applications

- Puddle Flanges consist of a range of elastomeric flanges up to 1299mm which are designed to be clamped around a pipe before it is cast into a wall
- Utilised on pipework through walls and floor slabs e.g. construction of swimming pools
- Used in conjunction with industrial floor drains
- Domestic & commercial applications e.g. water supply, drainage
- Any diameter of pipe fixings in concrete shafts

Water Recycling Management

- Rainwater Harvesting • Rain Trap
- Above Ground Rainwater Storage & Harvesting

Whether you are looking to save running costs, build a sustainable environmental alternative or manage stormwater.

JDP can evaluate your project to provide designs for cost effective, easy to use rainwater harvesting systems that are tailored to the project.

Commercial, industrial and public buildings with a large roof or surface area possess a natural facility to collect masses of water, and therefore return massive cuts in water bills. Even smaller developments can produce enough water to generate returns on the initial investment, as well as being part of a SUDS solution.

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 the roof gutters, filtering out leaves and debris and storing the water in an underground tank.

The water is then pumped into the building 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 small and large commercial buildings, whether as a new-build or retrofit option. These systems are designed and manufactured to bespoke requirements.

Applications

The bigger the roof, the bigger the catchment, the bigger the benefits. This is why the system is so ideally suited to commercial applications:

- Schools and public buildings
- Commercial offices
- Warehouses and factories
- Housing Associations
- Industrial developments
- Farms and agriculture
- Plant nurseries and garden centres

Features & Benefits

Sustainable

Commercial premises generally have a greater demand for non-potable water for cleaning and toilet facilities, and by having a large roof area these buildings possess a natural facility to recoup large amounts of water and, in turn, deliver substantial savings.

Flood Prevention

Another benefit of rainwater recycling systems is that they can help to avert flooding by controlling surface run-off. Many local authorities are now demanding that the discharge of surface water from some development sites must be no greater than if the land was being used for agricultural purposes.

Commercial Savings

Savings for businesses, which tend to consume much greater quantities of water, can soon be realised. For example, a typical hotel in the South West of England, which is on a water meter and uses water for a variety of non-potable purposes, including toilet flushing and laundry, could save the £15,000 cost of a system in about two and a half years. These calculations are based on a roof area of 2,000m^2, which could collect up to 2,714,000 litres of water per annum, based on an average annual rainfall of 1357mm each year. A combined water charge per m^3 of £2.26 puts the value of useable rainwater at £6,133.64 per annum.

Less Energy Consumption

Rainwater recycling systems can also bring other advantages including the fact that water companies need less storage capacity and less energy is used in bringing water up to drinking quality.

Meets Planning Requirements

Rainwater recycling systems can enable developers to meet such stringent planning requirements by reducing the surface run-off during heavy rainfall. When the rainwater has been recycled, it passes through the foul system, rather than the storm drains, meaning it poses no flood risk.

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 *not on all systems

Installation Guide

The civil engineering contractor is responsible for the excavation of the storage tank hole, and for connecting the drainage, ducting and supply pipe to the tank when in place, and backfilling with concrete. The leaf filter installation and location are also their responsibility.

The plumber carries out the internal connections to the supply pipe and control unit.

Electrical installation consists of wiring a mains supply (240v) into the control unit via a dedicated RCD, and wiring in the six-core signal cable for the depth sensor.

To conclude, rainwater recycling provides a viable means of conserving water supplies and making the best use of a natural resource that we simply can no longer afford to throw down the drain.

Rain Trap

JDP also offer the RainTrap, which offers vastly more rainwater storage capacity than a water butt, but with the same convenience. It also benefits from being concealed below ground. The system can be used year round to water gardens, operate sprinklers or wash vehicles.

Applications

- Rainwater storage below ground

Features & Benefits

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

	1406RT2800	1406RT3800	1406RT4600
Capacity ltr	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 rainwater harvesting system has been developed to provide the homeowner with a 'fit-and-forget' system.

Above Ground Rainwater Storage & Harvesting

When you need above ground commercial scale rainwater storage to reduce your water bills and help the environment, JDP's commercial range features capacities from 1,300 to 10,000 litres, sizes that will really make a difference to metered properties and areas prone to water restrictions in summer months. The Commercial RainStore range is registered with the Water Technology List which is an Enhanced Capital Allowance Scheme (UK only) enabling businesses to claim 100% first year capital allowances on investments in technologies and products that encourage sustainable water use.

Features & Benefits

- Reduced water bills
- Multiple tanks can be linked
- Manufactured in high quality recyclable polyethylene
- Light weight and easy to handle
- Low maintenance
- UV stabilised
- Corrosion resistant
- Fully vented
- Cost effective
- No excavation required

Code	Description
1401RS1300	Ltr/Gal: 1300/285 Diameter: 1210mm Height: 1415mm

Code	Description
1401RS2500	Ltr/Gal: 2500/550 Diameter: 1635mm Height: 1450mm

Code	Description
1401RS3600	Ltr/Gal: 3600/800 Diameter: 1885mm Height: 1855mm

Code	Description
1401RS5000	Ltr/Gal: 5000/1100 Diameter: 2035mm Height: 2265mm

Code	Description
1401RS10000	Ltr/Gal: 10000/2200 Diameter: 2630mm Height: 2500mm

Surface Water Management
- SUDS Solutions

- SUDS Solutions • Flow Control Valves & Chambers
- Downstream Defender®

At JDP we understand the concept of sustainable water management and that it is a major driver in today's UK construction industry. This is why we offer a range of solutions to meet specific site requirements.

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, Chambers and Catchpits that complete the system.

SUDS Solutions

Infiltration & Attenuation Crates, Large Diameter HDPE Pipes, Tunnel System, Attenuation Tanks, HICAP Drainage and Retention System, Permeable Block Paving,

Infiltration & Attenuation Crates

These modular plastic crates have lead the way in attenuation and infiltration in recent years. Wrapped in either a non permeable membrane for storage, or a permeable geotextile for soakaway (both available from JDP, see Geotextile & Membrane Technology section) 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 up to minimum 40 tonnes per square metre load bearing capacity (heavy duty only). Crates up to 60 tonnes also available
- BBA Certified
- Cells are light enough to carry providing health and safety benefits
- Speed and ease of installation

Polystorm Lite
non trafficked applications

2m depth in good ground conditions
1m (l) x 0.5m (w) x 0.4m (h)

Polystorm
trafficked applications

3.8m depth in good ground conditions
1m (l) x 0.5m (w) x 0.4m (h)

Polystorm Heavy
trafficked applications

5.5m depth in good ground conditions
1m (l) x 0.5m (w) x 0.21m (h)

Unique Polystorm Hybrid Solution

Benefits

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

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

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 2m³ - >10,000m³
- 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 this book.

Applications

- Storage applications
- Trafficked or non trafficked applications
- Large or small storage capacity
- 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
- Available in 2 in line and 1 off line systems
- Suitable for flushing and jetting maintenance

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

- The storage tank is emptied using in-built pumps which are automatically activated after a storm has passed
- System provides a shallow inlet to outlet ratio and so can withstand larger flows of stormwater
- Patent pending

HICAP Drainage and Retention System

HICAP is a high capacity drainage channel which is extremely versatile, with unique features and benefits. It creates a complete surface water drainage and attenuation system collecting and storing water where it falls, which either negates the need for any additional storage on the development, or significantly reducing the size of any separate attenuation solution.

Applications

- Storage applications
- Trafficked or non trafficked applications
- Moderate or small storage capacity
- Practically all ground conditions, even high water tables

Features & Benefits

- Easy and quick to install
- Trafficked or non trafficked applications
- Suitable for all ground conditions
- Manufactured from recycled PP-PE
- Combined drainage and storage system
- Collects and stores surface water where it falls

The range of HiCap-Channels

For full details on HICAP see page 98.

Types of Slots

Pedestrian

Traffic

Industrial

Permeable Block Paving

Permeable Block Paving offers a system integrated with necessary access areas for commercial, industrial and public buildings. Small gaps between the blocks allow water to filtrate through to either a granular sub-base or a shallow crate, collecting and storing water where it falls.

Applications

- Soakaway and attenuation applications
- Trafficked or non trafficked applications
- Block paved areas
- Large or small storage capacity
- Practically all ground conditions, even high water tables
- Where shallow excavation is required

Features & Benefits

- Under road construction
- Trafficked upto HGV or non trafficked applications
- Collects and stores / drains surface water where it falls
- Shallow excavation system
- Suitable for all ground conditions

Flow Control Valves & Chambers

JDP supply Flow Control Valves as individual units or complete with chamber to bespoke design as part of a SUDS system to control the rate at which stormwater leaves a particular site. Stormwater is stored on site in an underground storage or soakaway tanks in this section. A typical application of this valve is to control the flow from storm water attenuation 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 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 and 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.

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

Downstream Defender®

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 and 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 Seperators, see Surface Water Drainage section for Oil Seperators.

Applications

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

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

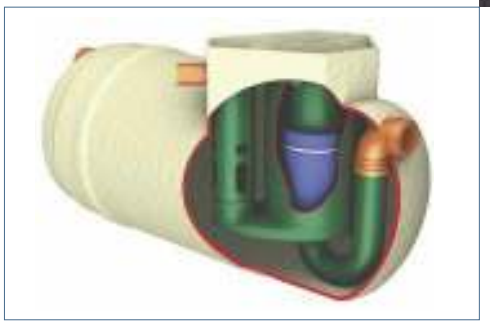
Surface Water Drainage

- Separators • Channel Drainage
- HICAP Drainage & Retention System
- TwinWall Surface Water Drainage • Non Return & Flap Valves
- Concrete Drainage Pipe • Box Culverts • 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 buildings, 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.

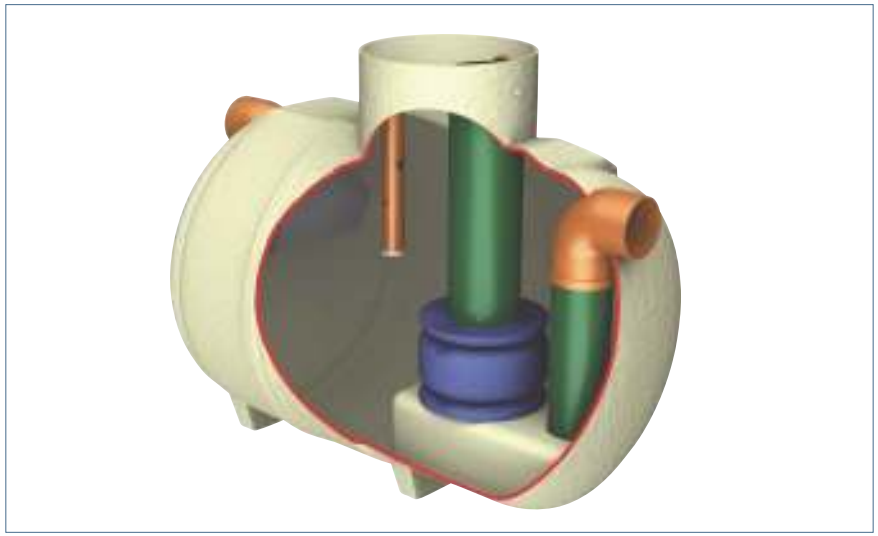
Separators

Surface water drains normally discharge to a watercourse or indirectly into underground waters (groundwater) via a soakaway. Contamination of surface water by oil, chemicals or suspended solids can cause these discharges to have a serious impact on the receiving water.

Oil separators are installed on surface water drainage systems to protect receiving waters from pollution by oil, which may be present due to minor leaks from vehicles and plant, from accidental spillage or due to deliberate and illegal tipping into drains.

Note that throughout this section the term 'separator' is used instead of the term 'interceptor'. The terms have the same meaning.

Bypass Separator



Information required to specify a nominal size Bypass Separator:

- The calculated flow rate (NS) or the drainage area served (m^3). Designs are based on the assumption that any interconnecting pipework fitted elsewhere on site does not impede flow into or out of the separator
- The required discharge standard. This will decide whether a Class 1 or Class 2 unit is required
- The drain invert inlet depth
- Pipework type, size and orientation

Each bypass separator design includes the necessary volume requirements for:

- Oil separation capacity
- Oil storage volume
- Silt storage capacity
- Coalescer

Features & Benefits

- Light and easy to install
- Class 1 and Class 2 designs
- Independently tested and performance sampled, certified by the BSI
- Comprehensive range with rapid availability
- Inclusive of silt storage volume
- Oil alarm system available
- Fitted inlet/outlet connectors
- Vent points within necks
- Extension access shafts for deep inverts
- Maintenance from ground level

Applications

Bypass separators are used when it is considered an acceptable risk not to provide full treatment, for very high flows, and are used, where the risk of a large spillage and heavy rainfall occurring at the same time is small .e.g

- Surface car parks
- Roadways
- Lightly contaminated commercial areas

Operation

100% of the liquid, up to the unit's designated flow passes through both chambers of the unit. The separation chamber retains the lighter than water pollutants, oils and petrol which rise to the surface. These pollutants are stored within the separator. The separated water discharges from the unit by gravity. If the flow rate rises above the unit's nominal size rating, the excess flow is diverted by a bypass arrangement and discharged without passing through the separation chamber. This ensures that excess flows will not cause 'wash out' of stored pollutants.

Performance

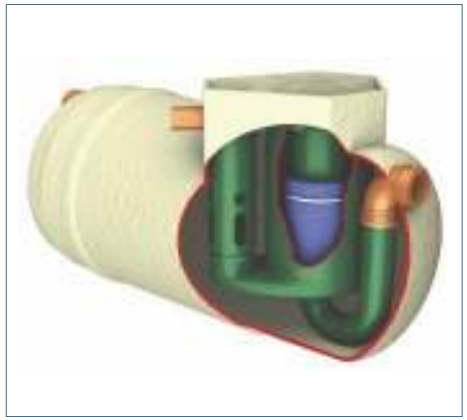
The unit is designed to treat 10% of peak flow. The calculated drainage areas served by each separator are indicated according to the formula given by PPG-3 NSB = 0.0018A(m^2).
Flows generated by higher rainfall rates will pass through part of the separator and bypass the main separation chamber.

Class 1 separators are designed to achieve a concentration of 5mg/litre of oil under standard test conditions.
Class 2 separators are designed to achieve a concentration of 100mg/litre of oil under standard test conditions.

Full Retention Separator

Each full retention separator design includes the necessary volume requirements for:

- Oil separation capacity
- Oil storage volume
- Silt storage capacity and incorporating a Coalescer (class 1 units only)
- Coalescer
- Automatic closure device



Features & Benefits

- Light and easy to install
- Comprehensive range
- Independently tested and performance sampled, certified by the BSI
- Class 1 and Class 2 designs
- Inclusive of silt storage volume
- Oil alarm system available
- Rapid availability
- Fitted inlet/outlet connectors
- Vent points within necks
- Extension access shafts for deep inverts
- Maintenance from ground level

Applications

- Fuel distribution depots
- Vehicle workshops
- Scrap yards
- Garage forecourts

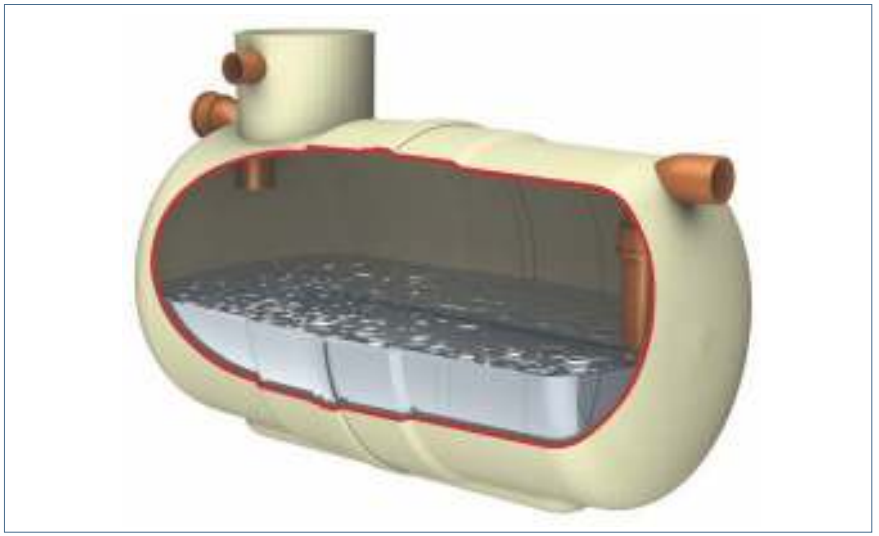
Operation

Contaminated water enters the unit, the internal design and configuration ensures that the liquid is retained for a sufficient period to ensure inactive conditions within the separator. Lighter than water pollutants, such as oils and petrol, rise to the surface of the water and are retained within the separator. Separated liquid discharges.
An automatic closure device seals off the outlet when the retained oil reaches the pre-determined level. Retained oil must be emptied from the unit once that level of oil is reached and the closure device is operated.

Performance

Under PPG3 guidelines Separators are tested to EN 858-1. The NS number denotes the flow at which the separator operates and is only able to be applied to products which have been independently tested and certified.
The British Standards Institute (BSI) has tested the required range of separators and has certified their performance in relation to their flow and process performance.

Washdown & Silt Separator Range



Washdown Separators

This unit can be used in areas such as car wash and other cleaning facilities that discharge directly into a foul drain, which feeds to a municipal treatment facility. If emulsifiers are present the discharge must not be allowed to enter a NS class 1 or class 2 unit.

Features & Benefits

- Light and easy to install
- Comprehensive range
- Inclusive of silt storage volume
- Rapid availability
- Fitted inlet/outlet connectors
- Vent points within necks
- Extension access shafts for deep inverts
- Maintenance from ground level

Performance

Washdown facilities must not be allowed to discharge directly into either surface water or any oil/water separator discharging into a surface water as they utilise emulsifiers, soaps and detergents, which can dissolve and disperse the oils and upset the separation process.

Standards

Separators are governed and tested by PPG3 guidelines
Tested to EN 858-1

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.

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 commercial and many other market sectors, offers high quality products for individual solutions.

The Hauraton Recyfix plastic channel drainage for commercial buildings includes a range of channels from 100mm to 300mm width, 60 to 381mm height and loading class up to F900.

The Faserfix range of fibre reinforced concrete channel drain with its KS Side-Lock boltless locking system and extremely robust construction offers total peace of mind in even the most demanding installations. The full range is available in 100 – 500mm internal width and 160 to 660mm overall height. For the largest sizes see our Civil Engineering and Utilities product specifier.

A huge selection of plastic, galvanized and ductile iron gratings, in slotted, mesh, perforated, paverslot and solid options makes this the most comprehensive range on the market.

Faserfix Super KS Channel

Features & Benefits

- Manufactured from KS Side-Lock boltless locking system
- Extremely robust
- Available with built in falls
- Grating options up to F900
- Steel edge angle housing (stainless steel optional)
- Available in 100 – 500mm internal width
- Available in 160 to 660mm overall height
- Complies with EN 1433

Applications

- Industrial / commercial
- Airports
- Port installations
- Container terminals
- Military areas
- Power plants
- Car parks
- Roads and motorways

Faserfix Super KS 100 Channel

Code	Description / Internal Height/Overall Height
12018000	100/160mm Deep Faserfix Super 100 KS Channel x 1000mm
12018042	154/214mm Deep Faserfix Super 100 KS Channel x 1000mm
12018044	184/244mm Deep Faserfix Super 100 KS Channel x 1000mm
12018044	214/274mm Deep Faserfix Super 100 KS Channel x 1000mm
12018052	500mm Deep Faserfix Super 100 KS Trash Box x 500mm - Galvanised Bucket
12018081	160mm Faserfix Super 100 KS Steel End Cap
12018082	214mm Faserfix Super 100 KS Steel End Cap
12018083	274mm Faserfix Super 100 KS Steel End Cap
12018087	160mm Faserfix Super 100 KS Steel End Cap with uPVC outlet
12018089	214mm Faserfix Super 100 KS Steel End Cap with uPVC outlet
12018090	274mm Faserfix Super 100 KS Steel End Cap with uPVC outlet

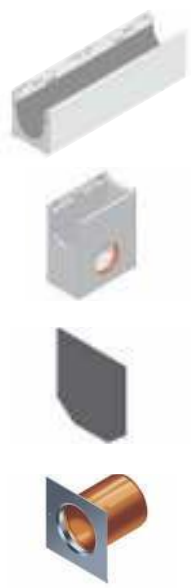
*Available with 0.6% in line fall, 20 parts from 12018201 to 12018220

Faserfix Super KS 150 Channel

Code	Description / Internal Height/Overall Height
120111000	150/220mm Deep Faserfix Super 150 KS Channel x 1000mm
120111042	195/265mm Deep Faserfix Super 150 KS Channel x 1000mm
120111044	245/315mm Deep Faserfix Super 150 KS Channel x 1000mm
120111052	600mm Deep Faserfix Super 150 Trash Box x 500mm
120111081	220mm Faserfix Super 150 KS Steel End Cap
120111082	265mm Faserfix Super 150 KS Steel End Cap
120111083	370mm Faserfix Super 150 KS Steel End Cap
120111088	315mm Faserfix Super 150 KS Steel End Cap with uPVC outlet

*Available with 0.5% in line fall, 10 parts from 120111001 to 120111010

Faserfix Super KS 200 Channel



Code	Description / Internal Height/Overall Height
120112000	200/275mm Deep Faserfix Super 200 KS Channel x 1000mm
120112042	245/320mm Deep Faserfix Super 200 KS Channel x 1000mm
120112043	270/345mm Deep Faserfix Super 200 KS Channel x 1000mm
120112044	295/370mm Deep Faserfix Super 200 KS Channel x 1000mm
120112044	600mm Deep Faserfix Super 200 Trash Box x 500mm
120112081	220mm Faserfix Super 200 KS Steel End Cap
120112082	265mm Faserfix Super 200 KS Steel End Cap
120112083	370mm Faserfix Super 200 KS Steel End Cap
120112088	315mm Faserfix Super 200 KS Steel End Cap with uPVC outlet

*Available with 0.5% in line fall, 10 parts from 120112001 to 120112010

Faserfix Super KS 300 Channel

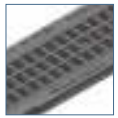
Code	Description / Internal Height/Overall Height
120114040	250/340mm Deep Faserfix Super KS 300 Channel x 1000mm
12011408	Faserfix Steel End Cap

*For other sizes please see our Civil Engineering & Utilities product specifier

Safety in Pedestrian Zones

FASERFIX SUPER channels with their great choice of gratings are also used in pedestrian zones, on market squares and other public areas. To provide greater safety for pedestrians, the gratings with narrow slot sizes were developed.

Faserfix Super KS Channel Gratings

Load Class	GUGI-Ductile Iron mesh grating*	Ductile Iron grating*	Mesh grating*	Slotted grating*	Perforated grating*	Closed grating*	Longitudinal grating*
							
A 15				100			100
B 125			100				
C 250		100, 150 200	100, 150 200	100	100	100	
D 400		100, 150 200					
E 600	100, 150 200	100, 150	100, 150 200			100	
F 900	100	100, 150					

*Sizes are nominal widths

Recyfix Super KS Channel

Features & Benefits

- Manufactured from recycled plastic
- KS Side-Lock boltless locking system
- Grating options up to F900
- Steel edge angle housing (stainless steel optional)
- Available in 100 – 300mm internal width
- Available in 153 to 416mm overall height
- Complies with EN 1433

Applications

- Industrial / commercial
- Exhibition centres
- Railway stations
- Airports
- Port installations
- Military areas
- Power plants

Recyfix Super KS 100 Channel

Code	Description Internal Height/Overall Height
120141100	105/153mm Deep Recyfix Super 100 KS Channel x 1000mm
120141152	438mm Deep Recyfix Super 100 KS Trash Box x 500mm
120141181	Recyfix Super 100 KS Steel End Cap
120141186	Recyfix Super 100 KS Steel End Cap (with outlet option)
120140290	Foul Air Trap 100mm inside
120140295	Foul Air Trap Vertical 100mm

*Channel shown as Combi article c/w grate

Recyfix Super KS 150 Channel

Code	Description Internal Height/Overall Height
120140500	162/210mm Deep Recyfix Super 150 KS Channel x 1000mm
120141052	496mm Deep Recyfix Super 150 Trash Box x 500mm
120140591	Recyfix Super 150 KS End Cap (with outlet option)
120140191	Recyfix Super KS 150 End Cap Combined PE-PP 70/100mm O/L
120140295	Foul Air Trap Vertical 100mm

*Channel shown as Combi article c/w grate

Recyfix Super KS 200 Channel

Code	Description Internal Height/Overall Height
120141342	155/203mm Deep Recyfix Super 200 KS Channel x 1000mm
120141344	205/253mm Deep Recyfix Super 200 KS Channel x 1000mm
120112052	570mm Deep Recyfix Super 200 Trash Box x 500mm
120140692	Recyfix Super KS 200 End Cap Combined PE-PP 70/100mm O/L
120112081	Recyfix Steel End Cap Closed
120140295	Foul Air Trap Vertical 100mm

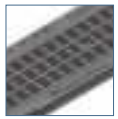
*Channel shown as Combi article c/w grate

Recyfix Super KS 300 Channel

Code	Description Internal Height/Overall Height
120140900*	322/416mm Deep Recyfix Super 300 Channel x 1000mm

*Channel shown as Combi article c/w grate

Recyfix Super KS Channel Gratings

Load Class	GUGI-Ductile Iron mesh grating*		Ductile Iron grating*	Mesh grating*	Reinforced Slotted grating*	Perforated grating*	Closed grating*	Longitudinal grating*
	Super KS	Super						
								
A 15					100			100
B 125				100				
C 250			100, 150 200	100, 150 200	100	100	100	
D 400	150		100, 150 200	150				
E 600	100, 150 200	300	100, 150 200	100, 150 200			100	
F 900								

*The measurements listed are internal widths

Recyfix Plus Channel

Features and benefits

- Manufactured from recycled plastic
- Slotted or mesh ductile iron grating options up to class D400
- Galvanised Steel edge angle housing support (stainless steel optional)
- Available in 100 - 300mm internal width
- Available in 60 - 381mm overall height
- Can hot tarmac up to the channel
- Complies with EN 1433

Applications

- Driveways
- Car parks
- Industrial / commercial
- Exhibition Centres / Railway Stations

Recyfix Plus 100 Channel

with D400 GUGI Ductile Iron Mesh Grating, Black	
120140369	36/60mm Deep Recyfix Standard Channel x 1000mm
120140374	56/80mm Deep Recyfix Standard Channel x 1000mm
120140370	103/135mm Deep Recyfix Standard Channel x 1000mm
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
120140364	56/80mm Deep Recyfix Standard Channel x 1000mm
120140360	103/135mm Deep Recyfix Standard Channel x 1000mm
120140380	152/185mm Deep Recyfix Standard Channel x 1000mm

with C250 Ductile Iron Slotted Grating, Black	
120140362	36/60mm Deep Recyfix Standard Channel x 1000mm
120140367	56/80mm Deep Recyfix Standard Channel x 1000mm
120140361	103/135mm Deep Recyfix Standard Channel x 1000mm
120140381	152/185mm Deep Recyfix Standard Channel x 1000mm

with Narrow Slot C250 Ductile Iron Slotted Grating, Black	
120140372	36/60mm Deep Recyfix Standard Channel x 1000mm
120140377	56/80mm Deep Recyfix Standard Channel x 1000mm
120140363	103/135mm Deep Recyfix Standard Channel x 1000mm
120140383	152/185mm Deep Recyfix Standard Channel x 1000mm

Recyfix Plus 100 Trash Boxes

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

Recyfix Plus 150 Channel

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

Recyfix Plus 200 Channel

With Gugi Ductile Iron Mesh Grating, Black	
120140770	153/186mm Deep Recyfix Standard Channel x 1000mm C250
120140777	203/235mm Deep Recyfix Standard Channel x 1000mm D400

Recyfix Plus 300 Channel

With Gugi Ductile Iron Mesh Grating, Black	
120141970	??/290mm Deep Recyfix Standard Channel x 1000mm C250

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
- Complies with EN 1433

Applications

- Driveways
- Patios
- Paved areas
- Car parks

Recyfix-Standard 100 Channel

Code	Description / Internal Height/Overall Height
120140230	36/60mm Deep Recyfix Standard Channel x 1000mm
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
120140275	Locking Bar & Bolt – Ductile Iron Slotted/GUGI/Mesh Gratings
120140281	End Cap (with outlet option)
120140284	End Cap 60mm
120140291	End Cap 80mm
120140281	End Cap (with outlet option) 60mm
120140283	End Cap (with outlet option) 60mm

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

Recyfix-Standard 100 Channel Gratings (contd)

Code	Description	Load Class	Length (mm)	Slot Size (mm)
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
12015740	Paverslot Access Covers – Symmetric C250 for use with 120140252 Trash Box	C250	500	12.5
12015640	Paverslot Access Covers – Asymmetric C250 for use with 120140252 Trash Box	C250	500	12.5

Recyfix-Standard 150 Channel

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

Standards

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.

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

Code	Description
120144050	Recyfix T Channel x 1000mm c/w Plastic Mesh Grating
120144000	Recyfix T Channel x 1000mm c/w Galvanised Slotted Grating
120144100	Recyfix Channel Pack incl. 1 Adaptor for pipe joint 70/100mm dia, 2 bolts, 2 end caps and instructions
120144150	Recyfix T Paverslot Channel x 1000mm

HICAP Drainage and Retention System - Recyfix

HICAP is a high capacity drainage channel which is extremely versatile, with unique features and benefits. Not only can the different sizes be combined together, but with the introduction of Recyfix Plus or Recyfix Standard channel drainage range, and Envirokerb kerb drainage (see Access Road Products section) it creates a complete surface water drainage and attenuation system for all commercial, industrial and public building applications.

Features & Benefits

- Easy to install and level
- Lightweight material means easy manual handling
- Unique slot design giving a high quality, aesthetically pleasing finish
- Manufactured from recycled PP-PE
- Complete range for all areas of application up to Class F900
- Integral tongue and groove joints
- Slots supplied with protective tape to avoid ingress of dirt, which is easy to remove
- Hydraulic calculation program and individual design support

Applications

- Parking areas
- Supermarkets
- Shopping centres
- Pedestrian areas
- Airports
- Industrial estates
- Cargo handling & loading yards
- Power stations
- Ports

The range of RECYFIX-HiCap-Channels

Available in 200 or 300mm top neck heights

1. RECYFIX HICAP channel 100 in PE-PP with inlet adapter and integrated ductile iron grating
2. The connector is used to connect to the next nominal size up.
3. RECYFIX HICAP channel 150 in PE-PP with inlet adapter and integrated ductile iron grating
4. T-connector for connecting to branches
5. RECYFIX HICAP channel 200 in PE-PP with inlet adapter and integrated ductile iron grating
6. RECYFIX HICAP channel 300 in PE-PPc with inlet adapter and integrated ductile iron grating
7. RECYFIX HICAP channel 680 in PE-PP with inlet adapter and integrated ductile iron grating
8. End cap 100
9. End cap 680 with canal connection option

Standards

RECYFIX HICAP channels have been tested to comply with DIN EN 1433 and are suitable for installation in loading classes A 15 to F 900

Category A 15 | Category B 125 | Category C 250 | Category D 400 | Category E 600 | Category F 900

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 1050mm please see the Civil Engineering & Utilities product specifier book.

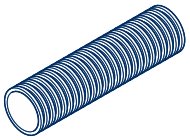
***JDP also offer a range of TwinWall with a BBA certificate from 150 – 600mm which is manufactured from recycled plastic.** This is a benefit to contractors and local authorities who need to meet stringent environmental conditions attached to developments. For more information on this product range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

For more products that are recycled please see Products for Specialist Applications section at the back of the brochure.

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

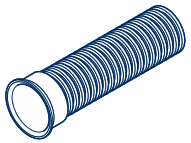
Plain Ended Carrier Drain Order seals and couplings separately if required



Nominal Size (mm)	ID (mm)	OD (mm)	Length (m)	Weight (kg/m)	Code
100	100	118	6	0.8	04034TW076
150	150	178	6	1.5	04036TW076
225	225	268	6	3.7	04039TW076
300	300	353	6	5.9	040312TW076

All sizes also available as Perforated – TW176, or Half Perforated - TW276

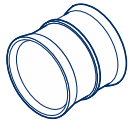
Socketed Carrier Drain Order seals and couplings separately if required



Nominal Size (mm)	ID (mm)	OD (mm)	Length (m)	Weight (kg/m)	Code
375	375	427	6	6.9	0403375TW046
450	450	512	6	9.7	0403450TW046
500	500	570	6	12.8	0403500TW046
600	600	680	6	17.8	0403600TW046

All sizes also available as Perforated - TW066, or Half Perforated - TW056

Double Socket Couplings



Nominal Size (mm)	Code
100	04034TW205
150	04036TW205
225	04039TW205
300	040312TW205
375	0403375TW205
450	0403450TW205
500	0403500TW205
600	0403600TW205

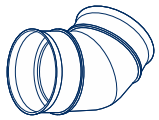
Sealing Rings

Nominal Size (mm)	Code
100	04034TW117
150	04036TW117
225	04039TW117
300	040312TW117
375	0403375TW117
450	0403450TW117
500	0403500TW117
600	0403600TW117

End Caps

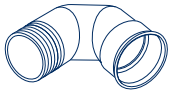
Nominal Size (mm)	Code
100	04034TW750
150	04036TW750
225	04039TW750
300	040312TW750
375	0403375TW750
450	0403450TW750
600	0403600TW750

DS Bends



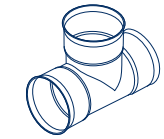
Nominal Size (mm)	15º	30º	45º	90º
150	04036TW567	04036TW566	04036TW563	04036TW561
225	04039TW567	04039TW566	04039TW563	04039TW561
300	040312TW567	040312TW566	040312TW563	040312TW561

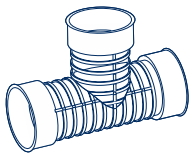
SS Bends



Nominal Size (mm)	15º	30º	45º	90º
375	0403375TW167	0403375TW166	0403375TW163	0403375TW161
450	0403450TW167	0403450TW166	0403450TW163	0403450TW161
500	0403500TW167	0403500TW166	0403500TW163	0403500TW161
600	0403600TW167	0403600TW166	0403600TW163	0403600TW161

Equal Junctions





TS / DS	Nominal Size (mm)	45º Code	90º Code
TS	150	04036TW213	04036TW193
TS	225	04039TW213	-
TS	300	040312TW213	-
DS	375	040312TW213	-
DS	450	0403450TW450X45	0403450TW450X90
DS	500	0403500TW500X45	0403500TW500X90
DS	600	0403600TW600X45	0403600TW600X90

TS = Triple Socket, DS = Double Socket

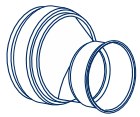
Unequal Junctions

TS / DS	Nominal Size (mm)		45º Code	90º Code
	Main	Branch		
TS	225	150	04039TW227	-
TS	300	150	040312TW237	-
TS	300	225	040312TW240	-
DS	375	150	0403375TW150X45	0403375TW150X90
DS	375	225	0403375TW225X45	0403375TW225X90
DS	375	300	0403375TW300X45	-
DS	450	150	0403450TW150X45	0403450TW150X90
DS	450	225	0403450TW225X45	0403450TW225X90
DS	450	300	0403450TW300X45	-
DS	450	375	0403450TW375X45	-
DS	500	150	0403500TW150X45	0403500TW150X90
DS	500	225	0403500TW225X45	-
DS	500	300	0403500TW300X45	-
DS	500	375	0403500TW375X45	-
DS	500	450	0403500TW450X45	-
DS	600	150	0403600TW150X45	0403600TW150X90
DS	600	225	0403600TW225X45	-
DS	600	300	0403600TW300X45	-
DS	600	375	0403600TW375X45	-
DS	600	450	0403600TW450X45	-
DS	600	500	0403600TW500X45	-

TS = Triple Socket, DS = Double Socket

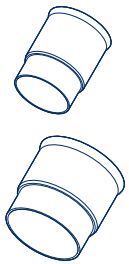
* Other junctions can be fabricated to specific requirements

Level Invert Reducers



Size A (mm)	Size B (mm)	Code
150	100	04036TW097
225	150	04039TW095
300	225	040312TW093
375	300	0403375TW099
450	375	0403450TW099
500	450	0403500TW099
600	500	0403600TW099

TwinWall Adaptors



Size (mm)	To Pipe	Code
150 spigot	110mm BS EN 1401 socket	04036TW099
150 socket	160mm BS EN 1401 spigot	04036TW141
150 socket	160mm BS EN 1401 socket	04036TW142
150 socket	150mm Ultra Rib spigot	04036TW145
150 socket	150mm Ultra Rib socket	04036TW148
225 socket	225mm Ultra Rib socket	04039TW148
150 socket	150mm BS 1211 or BS 437 cast iron spigot or BS EN295 clay spigot	04036TW128
150 socket	150mm BS EN 295 thinwall clay spigot	04036TW129

By adapting to BS EN1401 pipe the range of fittings in the Underground Sewer Systems section can be used

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.

Non-Return & Flap Valves

Non-Return Valves

JDP supply a range of non-return valves (NRV's) from DN100 to DN600 complying with the requirements of BSEN 13564 – 'Anti-flooding devices for buildings'.
Non-return valves or backwater valves are used within sewerage and drainage systems to eliminate the risk of flood damage by the backflow of sewage or flood water into properties through low level entries such as low level drain gullies, toilets and washing machine outlets. These valves are also used in commercial and industrial applications where non-pressure flow control is required.

REDI Advantages

- DN100 to DN600
- 0.5 bar (5m head)
- uPVC body
- EPDM seal (Nitrile seal optional)
- To BSEN 681-1
- Easily connected to any type of pipe material

Norham Advantages

- DN100 to DN600
- 1 bar (10m head)
- Glass reinforced plastic body (GRP)
- EPDM seal (Nitrile seal optional)
- To BSEN 10088-2
- Easily connected to any type of pipe material

Flap Valves

A range of GRP flap valves designed for ease of installation due to their low weight but with exceptional mechanical strength and durability are available from JDP.

The principal applications for flap valves are for surface water drainage associated with river, estuary and sea water outfalls to prevent backflow into the sewer and for final effluent outfalls from wastewater treatment works to prevent flood damaged within the works.

Multi-N

Advantages

- Resistant to 1bar (10m head) back pressure (Multi – CD 0.8 bar)
- Most sizes can be handled by one person due to low weight
- Low weight ensures ease of installation
- Multi – N can be connected to the spigot of the outfall pipe
- High mechanical strength
- High resistance to corrosion and ultraviolet degradation
- Seals at a low level of back pressure
- Low operating head due to low weight
- Low maintenance

Multi-CD

A more extensive range of Flap Valves is available in the Civil Engineering and Utilities product specifier.

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)	A	225	300	375	450	525	600	675	750	805	900	1050	1200	1350	1500	1800	2100
Barrel Diameter	B	335	416	501	586	681	776	901	996	975	1080	1266	1460	1620	1790	2130	2460
Socket Diameter	C	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 1m (W) x 0.5m (H) with a flow rate of 0.58 m^3/s, to 4m (W) x 2.5m (H) with a flow rate of 33.53 m^3/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.

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).

PolyBed is a mature product with over 20 years of application internationally including the USA. It is extremely lightweight in construction and is manufactured in 200 & 300mm sizes to encompass 75mm and 100mm land drain.

PolyBed has a proven track record in sport & leisure activities including Golf courses and is extensively used by a number of national house builders in drainage and earth retaining structures.

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%.

The high capacity of the PolyBed system makes it a cost effective solution to storm water soakaways and septic tank applications.

The system enhances the natural capacity of the ground to drain and store water and therefore it is an ideal SUDS solution in various applications. PolyBed can be used in conjunction with PolyAgg to give greater drainage and storage performance.

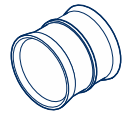
Features and benefits

- 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

- Retaining walls
- SUDS solutions
- Storm water drainage and soakaways
- Land drainage

Part No.	Product	Description	Wrapping	Typical Application
0530FD1231G	PolyBed	300mm x 3m Single wall corrugated perforated pipe	Geotextile	Sub surface drainage fields, soakaways, french drains and filter infiltration drains, land drainage for subsurface irrigation and infiltration systems, foundation and retaining wall drainage systems
0530FD1232	PolyBed	300mm x 3m Twin wall unperforated carrier pipe		Unperforated carrier pipe for all storm water applications
0530FD1233G	PolyBed	300mm x 3m Twin wall perforated pipe	Geotextile	Perforated pipe for all applications
0530FD1233	PolyBed	300mm x 3m Twin wall perforated pipe		Septic tanks and bio-treatment plants
0530FD1206	PolyBed Collar	300mm EPS collar surround for connecting coupler		All applications



Part No.	Description	Typical Application
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

Standards

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

Installation Guide

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.

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 and 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
- Septic tank filter bed (when used in conjunction with PolyBed TwinWall)

Part No.	Product	Description	Typical Application
0530FD1230	PolyAgg Bundle	300mm x 3m Lightweight fill	All applications

Standards

NHBC and STAS approved for building and filter beds for septic tanks
Accredited by LABC

Installation Guide

For standard trench applications, see PolyBed installation guide.

For retaining wall applications, hold the PolyAgg in place either by tying or using rigid steel bars, backfill directly up against the PolyAgg.

Sewage Treatment Solutions

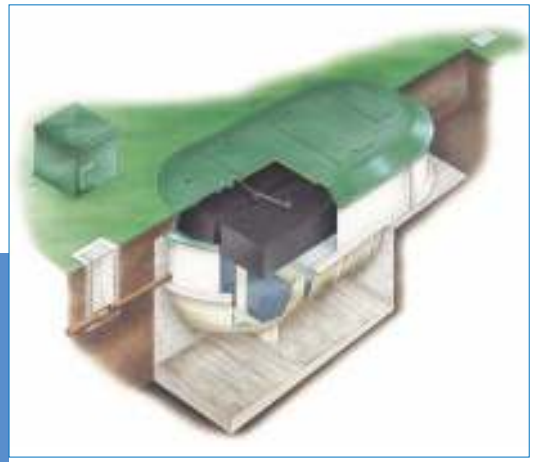
- Sewage Treatment Plants • Septic Tanks
- Puraflo Tertiary Treatment System
- Treatment Plant & Septic Tank Soakaway • Cesspools
- Pump Stations • Polyethylene Pumping Main • Grease Traps

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

JDP offers a variety of solutions designed to treat the sewage from a vast range of products which include the latest developments and standards.

With the continued tightening of environmental legislation the correct handling and discharge of sewage from developments not on mains drainage and waste water that is discharged into main adoptable drains has become a very important aspect for commercial, public & industrial buildings.

JDP's experience, supplier relationships and knowledge of regulations enable us to advise and help these market sectors avoiding potentially costly mistakes by installing the most appropriate solution for the treatment of 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 the smallest units, through to plants for large commercial, public & industrial buildings.

The correct sizing of the plant is crucial to the quality of the water discharged as is the prevention of grease build up inside that plant. See Grease Traps later in this section.

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

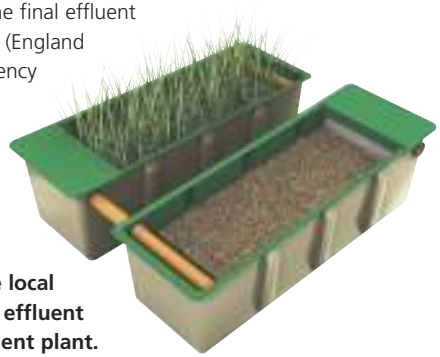
This is the treatment zone and it contains a set of inactive modular media blocks that provide a large surface area on which naturally occurring bacteria can develop. The bacteria require oxygen which is supplied by a linear low-pressure compressor via porous membranes, beneath the media bed. The bacteria 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.

Standards

Building regulations apply
PPG4 Guidelines apply
EN1566

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. Building regulations recommend a minimum of 7m.
- Fit the correct cover & frame (pedestrian duty) LOCKABLE.
- Consider drainage falls, generally 1 in 60/70 between building 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).
3. Results of a percolation test based on BS6297 recommendations to establish size of filter bed required.

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.

Standards

Building regulations apply

Installation Guide

See pages 112 / 113.

Puraflo Tertiary Treatment System

The Puraflo Peat Bio-Filter is designed to provide effective, cost efficient, low maintenance, secondary and / or tertiary wastewater treatment for Treatment Plants or Septic Tanks.

The long term research on the performance of this system shows extremely high treatment efficiency with significant reductions in the BOD and TSS content of the wastewater and similarly high reductions in faecal coliforms and bacterial numbers.

Puraflo Multiple Module System

The modular nature of the system provides maximum design flexibility for secondary and tertiary treatment across a range of applications. Additional modules can also be added to existing Puraflo systems to provide increased capacity where required.

Puraflo Peat Filter Bed

The peat media can also be housed in site constructed retaining structures depending on specific requirements.

How Does It Work?

The wastewater flows into a watertight primary / septic tank. The solids settle and the liquid effluent flows by gravity to a pump / sump chamber through an outlet filter.

The liquid effluent is pumped intermittently to the Puraflo modules where it is dispersed evenly onto the surface of the peat fibre and percolates through the media.

Treatment of wastewater within the system is achieved by a combination of unique physical, chemical and biological interaction between the wastewater and the fibrous peat media.

Considerable BOD, TSS and NH3-N reductions are achieved and the system is also very effective in the elimination of enteric bacteria contained in the wastewaster.

The treated liquid emerges from the Puraflo modules and disperses into the ground through as percolation area or is collected for disposal by other means.

The Puraflo system is low maintenance and requires no desludging or backwashing.

Features and benefits

- Simple design, installation and operation
- Secondary and Tertiary treatment
- High treated effluent quality
- Low capital and operating costs
- Intermittent pumping means reduced power consumption
- Flexible, modular design
- Seasonal or intermittent use
- Retrofits existing plants to improve effluent quality

Applications

- Proven effective in situations of intermittent or seasonal loading
- Retro fit to existing Treatment Plant /or Septic Tanks to improve effluent discharge quality
- Sewage treatment for sites without mains sewer drainage

System Design

Population Equivalent P.E.	Maximum DailyFlow M3/d	Applied Organic Load Kg/d BOD	No Of Modules	Associated Septic Tank
20	3.6	1.2	8	5.6
50	9	3	18	11
80	14.4	4.8	28	16.4
100	18	6	36	20
150	27	9	54	29

System Performance

Parameter	Influent	Effluent
B.O.D (mg/l)	300	20
T.S.S. (mg/l)	200	30
NH3-N (mg/l)	30	5
Total Coliforms	1 x 108	>99.9%
Pathogenic Bacteria	Present	Absent

* CFU's per 100ml **Including Salmonella, Staphylococcus and Shigella species, Pseudomonas aeruginosa and Sulphide reducing Clostridia

Installation Guide

The Puraflo system is installed and commissioned by the manufacturer

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

Time taken to fall 150mm (mins)	Equivalent value of Vp in sec/mm	Overall length of drain run required (m)					
		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.

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 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	9460	2800	2730
55000	11180	2800	2730

Standards

Building regulations apply

Installation Guide

See pages 112 / 113.

Pump Stations

JDP offers a range of High Capacity Package Pumping Systems for Commercial applications of settled effluent and crude waste applications. Package Pump Stations are also available for surface water applications with the same main features and benefits, but designed to the requirements of water rather than sewage. These Pump Stations are available complete with single or twin pumps with float switches and high level alarm systems with built in storage up to 24hrs if requested.

As the specification by Municipal Agencies has increased over the years, emergency storage requirements have become a mainstay for most applications in line with current legislation.

To accommodate this, JDP offers a range of pumping stations which incorporate storage requirements which can be expanded to cater for most applications prior to pumping.

The correct sizing of the pump station is crucial to the performance as is the prevention of grease build up inside that plant. See Grease Traps later in this section.

Features and benefits

- Single tank installation up to 80m³ (multiple tank systems available)
- Multiple valve chamber location and invert options
- Weir cover screen prevents solids passing into main storage chamber
- High level alarm (as applicable)
- Unique weir screen cleaning facility removes need to access the chamber during maintenance
- Totally sealed system
- Factory pre-fabricated under controlled conditions to ensure consistent high quality construction
- Minimal on-site assembly
- 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
- Power failure storage capacity
- Can be used in combination with treatment plants or septic tanks
- Easy to install - one piece tank chamber
- Less crainage requirements compared to concrete pumping stations
- On-site Health & Safety issues are minimised - no requirement for personnel to enter the tank during excavation on-site to complete installation work
- Reduced maintenance - easy cleaning out of holding tank
- Shallower excavation compared to concrete pumping stations

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. Surface water drainage versions are also available.

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 application, distance to be pumped, and height / fall.
- Surface water pumping systems (for pumping surface water run-off from hard standings or roof areas. Careful calculation of the run-off areas is essential when sizing these pump stations)

The storage pumping system range is suitable for the following applications:

- Housing developments with up to 24hr storage requirements (10 - 500 houses)
- Commercial developments
- Industrial developments
- Hotels and restaurants
- Caravan and camping sites

The comprehensive range of quality pumps offers solutions for most applications. Pump sizes range from 0.35kW to 12kW for the standard package pumping system.

Standards

Building regulations apply

Installation Guide

See page 112 / 113.

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.

Polyethylene Pumping Main

Black Polyethylene Pumping Main

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

For other sizes available to suit all applications please see our Civil Engineering & Utilities product specifier
Full range of fittings available through your local JDP

Standards

EN13244

Installation Guide

See page 239.

Grease Traps

JDP supply a range of grease traps for small restaurants, public houses & canteens, complimented by an extensive range of grease separators for applications such as larger restaurants, hotels, etc, where a grease separator should be considered to give additional volume.

Operation

Traps and separators allow fats and grease to naturally separate out from water, allowing their removal prior to the wastewater reaching the drainage system.

The trap or separator should be installed close to the source of contamination before any foul waste can enter the drainage flow and to suit the expected liquid temperature.

Features and benefits

- Durable GRP one piece construction
- Lockable pedestrian duty access covers
- Integral vegetable peelings basket or scoop
- Standard models suitable for up to 400 meals per day
- Larger units available as separators for tanker emptying up to 45000 lt. capacity

Applications

An effective and hygenic method of separating fat and grease from wastewater flow. Grease traps will, by the removal of fat and grease:

- Greatly reduce incidents of blocked drains from catering establishments
- Improve the performance of septic tanks and field drains
- Prevent contamination of small sewage treatment plants

Installation Guide

Positioning

The units should be positioned close to the source of contamination, but should also consider the temperature and the nature of the discharge as well as accessibility for emptying. Our experience indicates that units should be at least 12-15m away from the source of the contamination. This distance is normally sufficient to allow cooling of most kitchen wastewaters when the discharge temperature is < 60°C.

Grease Traps are installed in dedicated kitchen outlets prior to the treatment plant. The installation should be arranged for gravity feed and discharge.

The site of installation should also take into account the need for regular access to remove grease from the surface, debris from the basket (if fitted) and periodic complete emptying possibly requiring road tanker access. Units should not be installed beneath pavements or car parks.

For further installation information consult manufacturer's guidance.

Underground Sewer Systems

- EN1401-1 Underground Drainage • 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 contractor 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.

EN1401-1 Underground Drainage (Inc Chambers & Risers)

JDP offer a comprehensive range of underground drainage and fittings from 82 to160mm diameter with plain ended pipes and separate push-fit couplings or socketed pipes and fittings for use in underground 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
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
11.25° 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
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		01024DBGI	
Square Back Inlet Bottle Gully		01024DG89	
45° Universal Gully Trap		01024DG90	
Lowback P Trap		01024DG91	
Square Hopper Head		01024DG92	
Square Sealed Hopper Top		01024DG92S	
Rectangular Hopper Head		01024DG93	

Reducers & Adaptors

	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

	82mm	110mm	160mm
Pipe Cap		01024D67	01026D67
Socket Plug		01024D68	01026D68
Temporary Site Cap		01024D65	

Access Fittings

	82mm	110mm	160mm
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		01024D60	01026D60

Non Return Anti-Flood Valves

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

Lubricant & Solvents


0.5kg Lubricant Tub	0102LUB.5
1kg Lubricant Tub	0102LUB1
2.5kg Lubricant Tub	0102LUB2.5
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 Chamber Base 110mm		01024DSMB	
320mm x 135mm Chamber Riser		01024DSMB1	
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 connection to underlying drain run up to 10 meters deep without need for manholes.			
460mm Access Bowl x 110mm		01024DMB	
460mm Access Bowl Riser c/w Sealing Ring		01024DI235R	
110mm Access Bowl Inlet Connector		01024DM1	

** For selction of covers see Covers & Frames for PPI Chambers page 136.

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).

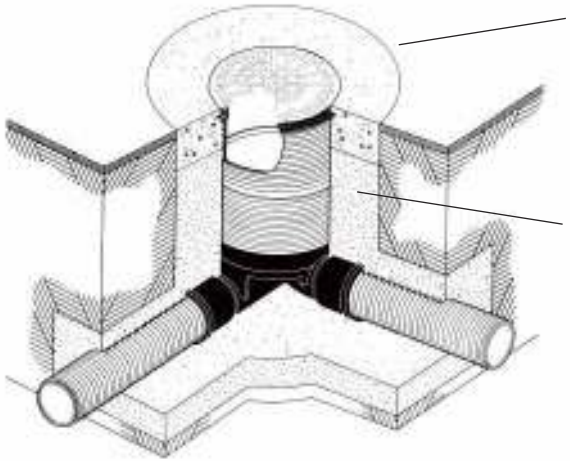
It is essential to avoid high stress concentrations and sharp objects such as large stones or flints which should not be allowed to come into contact with the surface of the pipe.

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

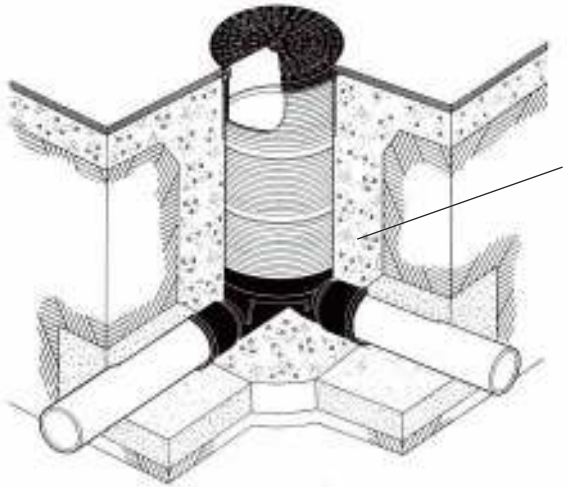
Plastic Inspection Chambers

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.



Polypropylene Lockable Cover & Frame 3.5 Tonne.



BS EN124 Class B125 Ductile Cover & Frame.

Inspection Chambers

JDP provide a range of concrete rectangular 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.

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

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
18016045225HIC	600 x 450	229	51	65	20
18016045300HIC	600 x 450	305	51	85	16
18017560150HIC	750 x 600	152	60	65	18
18017560225HIC	750 x 600	229	60	100	12
18011067150HIC	1000 x 675	152	64	85	16
18011067225HIC	1000 x 675	229	64	125	10
18011200RHHS	1200 x 750	150	75	115	8

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
18016045CS	600 x 450	600 x 450	110	103	16
18017560CS	750 x 600	600 x 450	122	121	12
18011067CS	1000 x 675	600 x 450	140	162	12

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
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."

NIC 500 Non-Entry Inspection Chambers

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
- Can be adapted to other pipe materials

Applications

- For use to max. depth of 3m & max. 35kN loading
- Alternative solution to concrete chambers up to 1200mm diameter
- 110 & 150mm sewer and surface water drainage

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.

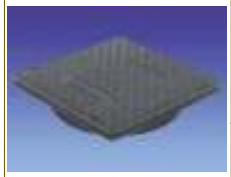
Inspection Chamber Base Units – Ultra Rib

	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
	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.
	02026D940	NIC Telescopic Adaptor - suitable for use with 4D943 cover & frame. Allows height adjustment and accommodation of slope. Restricted to 350mm internal diameter.
	02026D917	NIC Ring Seal (spare).

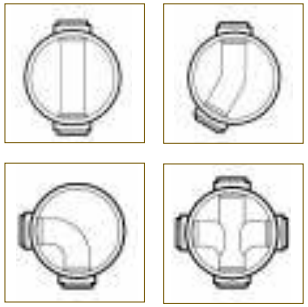
Tegra 600 Non-Entry Inspection Chambers

An alternative to concrete manholes the Tegra 600 range of non-entry inspection chambers are used for maintenance or inspection of sewers or drains, where the invert is between 1.2m and 5m.

A variety of 600mm diameter preformed bases (suitable for 150mm, 225mm and 300mm diameter pipes) are combined with a 600mm Twinwall pipe shaft and topped-off with a restricted opening cap.

Features and benefits

- Strong polypropylene construction
- Lightweight and easy to handle
- Faster, lower-cost installation
- Flexible sockets allowing 7.5deg of movement in any direction
- Can be installed to a maximum depth of 5m
- Can be adapted to other pipe materials



Applications

- For maintenance inspection of buried pipework more than 1.2metres deep (where restricted access is required)
- Non-adoptable domestic and industrial/commercial drainage applications
- Suitable for use in carriageways
- Connects to sewer and surface water drainage systems
- Alternative solution to concrete chambers up to 1200mm diameter

Code	Pipe Size (mm)	Description
02026NE100	150	Straight Base
02026NE200	150	90 deg Base
02026NE300	150	30 deg Base
02026NE400	150	Cross Base
02029NE100	225	Straight Base
02029NE200	225	90 deg Base
02029NE300	225	30 deg Base
02029NE400	225	Cross Base
020212NE100	300	Straight Base
020212NE200	300	90 deg Base
020212NE300	300	30 deg Base
020212NE400	300	Cross Base
0403600TW076	600	TwinWall pipe shaft x 6m
0403600TW073	600	TwinWall pipe shaft x 3m
02029NE930	600	Restrictor Cap – 350mm opening

Bases supplied c/w Ultra Rib seals and Twinwall pipe shaft seal

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 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.

Installation Guide

1. Bed the 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 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
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
0621E10ACP	450	15	Single	Round cast cover & plastic frame
0621E10ACPL	450	15	Single	Round screw lock 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 Manhole Covers and Frames

Standard products and bespoke products manufactured to specific requirements can be supplied. These covers are fitted with a single neoprene seal as standard, making them suitable for all public areas where there is a necessity to provide an effective seal to prevent the escape of foul odours and noxious gases.
The covers can also be manufactured to cover large distances of ducting whilst still retaining an effective seal.

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
- Available in a variety of finishes and options
- Aesthetically pleasing finish

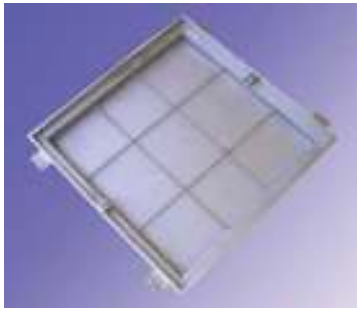
Galvanised

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 142.

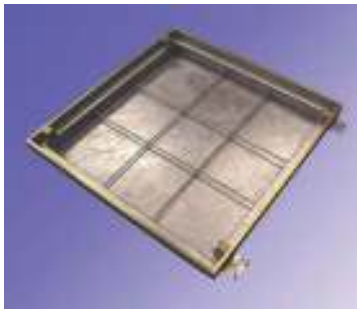
Aluminum Edged

These covers are generally for use in tiled areas. They provide a flush finish that is both aesthetically pleasing and practical. Aluminium edged covers are ideal for shop floors, corridors and all other areas where there is pedestrian traffic.



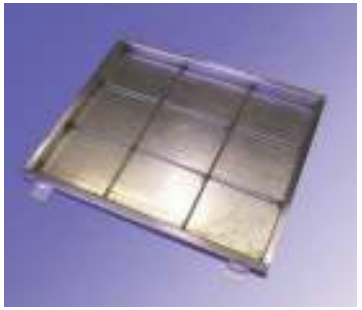
Brass Edged

These covers are generally for use in tiled areas. They provide a flush finish that is both aesthetically pleasing and practical. Brass edged covers are ideal for shop floors, corridors and all other areas where there is pedestrian traffic.



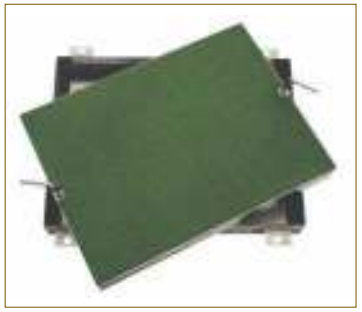
Stainless Steel Edged Covers

These covers are generally used in tiled areas but can also be in-filled to suit vinyl or carpet. They provide a flush finish that is both aesthetically pleasing and practical. Stainless Steel edged covers are ideal for shop floors corridors and all other areas where there is pedestrian traffic. Covers can also be manufactured entirely from stainless steel for use in catering and washroom areas. Edging comes with a satin finish as standard but can be supplied with a mirror finish if desired.

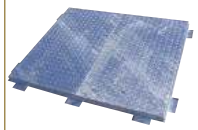


Eco Cover

The eco cover has been developed exclusively by FSP to disguise the eyesore of conventional steel topped covers by blending inconspicuously with surrounding turf. This cover is ideal for front lawns and golf courses. It comes fitted with a neoprene seal to prevent the egress of any foul odours from the chamber beneath. These covers are easily installed, and can be filled with soil, turf or grass seed.



Bespoke Options



Finish
• Galvanised Mild Steel
• Stainless Steel Grade 304
• Stainless Steel Grade 316
• Brass Edged
• Aluminium Edged
• Stainless Steel Edged

Loading
• Pedestrian Duty
• Light Duty
• Medium Duty
• Heavy Duty
• Extra Heavy Duty
• Special Loadings

Sealing
• Unsealed
• Neoprene Seal
• Double Neoprene Seal

Locking
• Slotted Csk Screw
• Home Office Approved
• Socket Csk Screw

Other
• Hinged
• Safety Grille
• Inner Sealing Plate
• Peep Hole
• Multiples

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.

Steel loadings

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

BS EN124-A15

BSI KITEMARKED- BS EN124- B125

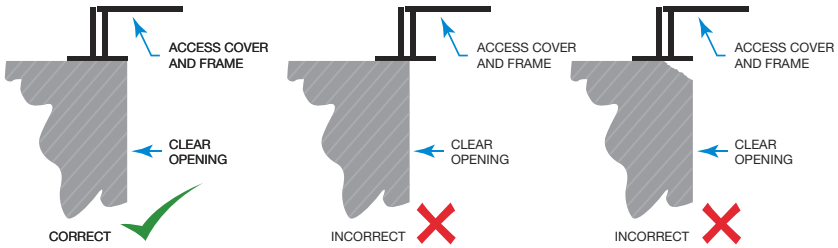
BS EN 124 includes loading categories for certain application areas. It is the responsibility of the engineer to ensure that the correct product is specified: "The appropriate class of manhole top or gully top to be used depends on the place of installation. The selection of the appropriate class is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

Iron loadings

Standard loadings

Installation Guide

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
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

	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
P/E Pipe x 3m	02026UR073	02029UR073	020212UR073
S/S Pipe x 3m	02026UR043	02029UR043	020212UR043
S/S Pipe x 6m	02026UR046	02029UR046	

Rocker Pipe

	150mm	225mm	300mm
S/S Rocker Pipe -600mm effective length	02026UR869	02029UR869	020212UR869

Couplers

	150mm	225mm	300mm
D/S Slip Coupler – for new branch entry connections and repairs	02026UR105	02029UR105	020212UR105
D/S Pipe Coupler – for jointing UltraRib pipe	02026UR205	02029UR205	020212UR205

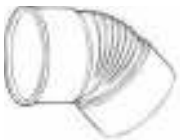
Adaptors

	150mm	225mm	300mm
S/S Adaptor – connector to BS 1211 or BS437 cast iron spigot or BS EN 245 clay spigot	02026UR128		
D/S Adaptor – to clay or concrete spigot	02026UR106	02029UR109	020212UR112
D/S Adaptor – connector to BS EN 295 thinwall clay spigot	02026UR129		
S/S Adaptor – 6UR socket x 160mm BS EN1401 spigot	02026UR141		
D/S Adaptor – 6UR socket x 160mm BS EN1401 socket	02026UR142		
S/S Adaptor – 6UR socket x 160mm BS EN1401 socket	02026UR143		

Reducers

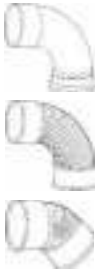
	150mm	225mm	300mm
S/S Level Invert Reducer – to 110mm pipe	02026UR099		
S/S Level Invert Reducer – to 150mm pipe		02029UR095	
S/S Level Invert Reducer – to 225mm pipe			020212UR093

Short Radius Bends – Single Socket



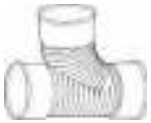
	150mm	225mm	300mm
S/S Bend - 45°	02026UR163		

Short Radius Bends – Double Socket



	150mm	225mm	300mm
D/S Bend - 87½° - to 6UR socket x 160mm BS EN 1401 socket	02026UR560		
D/S Bend - 87½°	02026UR561	02029UR561	020212UR561
D/S Bend - 45°	02026UR563	02029UR563	020212UR563
D/S Bend - 30°	02026UR566	02029UR566	020212UR566
D/S Bend - 15°	02026UR567	02029UR567	020212UR567

Equal Junction - to UltraRib spigot



	150mm	225mm	300mm
D/S Junction 87½°	02026UR193		
D/S Junction 45°	02026UR213	02029UR213	020212UR213

Unequal Junction - to BS EN 1401 spigot

	150mm	225mm	300mm
D/S Junction 87½° 150mm x 110mm	02026UR199		
D/S Junction 45° 150mm x 110mm	02026UR219		
D/S Junction 45° 225mm x 110mm		02029UR224	
D/S Junction 45° 225mm x 160mm		02029UR228	
D/S Junction 45° 300mm x 160mm			020212UR236

Unequal Junction - 45° - to UltraRib spigot

	150mm	225mm	300mm
D/S Junction 225mm x 150mm		02029UR227	
D/S Junction 300mm x 150mm			020212UR237
D/S Junction 300mm x 225mm			020212UR240

Unequal Slip Junction - 45° - to UltraRib spigot

	150mm	225mm	300mm
D/S Slip Junction 225mm x 150mm		02029UR229	
D/S Slip Junction 300mm x 150mm			020212UR239

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

	150mm	225mm	300mm
D/S Equal Inspection Chamber Base - 150mm straight main channel with two 150mm x 90° right/left hand branch entries. Supplied with 1 blank - off plug for use in unused side entries.	02026UR928		
D/S Unequal Inspection Chamber Base - 150mm straight main channel with four 110mm (2 x 45° and 2 x 90°) right/left hand branch entries. Supplied with 3 blank-off plugs for use in unused side entries.	02026UR929		
Inspection Chamber Shaft - 230mm effective length.	02024D925		

Manhole Bases – 750mm diameter

	150mm	225mm	300mm
P/E Unequal Manhole Base - 150mm or 225mm straight main channel with four 110mm or 150mm (2 x 45° and 2 x 90°), right/left hand branch entries. Supplied with all inlets and outlets sealed. For use with traditional manholes only.			
- 150mm x 110mm	02026UR875		
- 225mm x 150mm		02029UR878	

Manhole Bases – 750mm diameter

	150mm	225mm	300mm
P/E Equal Manhole Base - 150mm or 225mm straight main channel with either four 150mm (2 x 45° and 2 x 90°), right/left hand branch entries, or, two 225mm (2 x 90°), right/left hand branch entries. Supplied with all inlets and outlets sealed. For use with traditional manholes only.			
- 150mm x 150mm	02026UR876		
- 225mm x 225mm		02029UR877	

* For more chambers see Non Entry Inspection Chambers section.

Screwed Access Fittings

	150mm	225mm	300mm
P/E Screwed Access Cover - allows full bore access to the sewerage system for cleaning, fits into a standard UltraRib socket.	02026UR292		
S/S Screwed Access Cover - allows full bore access to the sewerage system for cleaning, fits onto a standard UltraRib spigot.	02026UR290		

Socket Plugs

	150mm	225mm	300mm
P/E Socket Plug - allows full bore access to the sewerage system for cleaning, fits into a standard UltraRib socket.	02026UR296	02029UR296	020212UR296

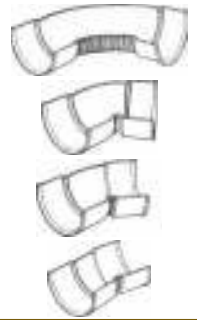
Channel Access Pipes

	150mm	225mm	300mm
P/E Channel Access Pipe – accommodates 4 x 150mm side branch entries (two per side).	02026UR874	02029UR874	020212UR874
SW/1/2S Channel Access Pipe - level invert, with channel spigot.	02026UR868	02029UR868	

Channel Branch Bends

	150mm	225mm	300mm
S/S Adjustable Channel Branch Bend - 45°- left hand, 3/4 section - cut to suit	02026UR780		
S/S Adjustable Channel Branch Bend - 45°- right hand, 3/4 section - cut to suit	02026UR781		
S/S Adjustable Channel Branch Bend - 87 1/2°- left hand, 3/4 section - cut to suit	02026UR784		
S/S Adjustable Channel Branch Bend - 87 1/2°- right hand, 3/4 section - cut to suit	02026UR785		

Short Radius Channel Bends



	150mm	225mm	300mm
SW/1/2S Short Radius Channel Bend - 87 1/2° - 1/2 section	02026UR861	02029UR861	
SW/1/2S Short Radius Channel Bend - 45° - 1/2 section	02026UR863	02029UR863	
SW/1/2S Short Radius Channel Bend - 30° - 1/2 section	02026UR866	02029UR866	
SW/1/2S Short Radius Channel Bend - 15° - 1/2 section	02026UR867	02029UR867	

Equal Channel Access Junctions

	150mm	225mm	300mm
SW/1/2S Junction - 45° - left hand, level invert	02026UR794		
SW/1/2S Junction - 45° - right hand, level invert	02026UR795		

Unequal Channel Access Junctions

	150mm	225mm	300mm
SW/1/2S Junction - 45° - left hand, level invert – 150mm x 110mm	02026UR796		
SW/1/2S Junction - 45° - right hand, level invert – 150mm x 110mm	02026UR797		

Channel Access Bend - 45°

	150mm	225mm	300mm
SW/1/2S Channel Access Bend - Short - left hand, level invert	02026UR798		
SW/1/2S Channel Access Bend - Short - right hand, level invert	02026UR799		
SW/1/2S Channel Access Bend - Long - left/right hand, level invert		02029UR859	

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.

Chemical Drainage Systems

As well as traditional Clay Pipes featured in this section, a comprehensive range of Hathernware clay pipe is available from JDP. This specialist drainage product covers the most aggressive of discharges and extreme conditions, as well as thermal shock - a phenomenon commonly encountered within the process industries where extremes of temperature variation can put significant structural strains on a drainage system.

Contact your local JDP for more details.

Rocker Pipe

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

Pipe

Length	Size (mm)	Code
1.6m	100	170317011
1.75m	150	170317022
1.75m	200	170317018
1.75m	225	170317020
1.75m	250	170317019
1.75m	300	170317021

Couplings - EPDM Seals

Size (mm)	Code
100	170320008
150	170320010
200	170320012
225	170320013
250	170320028
300	170320015

Universal Jointing Lubricant

Size	Code
1 Kg	170350001
2.5 Kg	170350002

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

Size (mm)	Code
100	170319029
150	170319030

Taper

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

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

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

Size (mm)	Top Size (mm)	Code
Square		
100	150 x 150	170319204
Horizontal		
100	150 x 150	170319206
Vertical		
100	150 x 150	170319213
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
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 128.

Adaptors

Clay DN Size (mm)	Nominal Pipe OD (mm)	Purpose	Code
100	110	PVC & Rainwater Pipes	170315021
150	160		170315025
100	118	Underground Cast Iron	170315024
150	173		170315027
100	123	Densleeve to Supersleeve	170315034
150	180		170315035
150	178	Twinwall Drainage Pipes	170315057
225	268		170315055
300	354		170315056

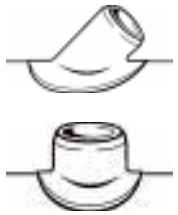
Uni-Drain Connector connects to 34-82mm round or square soil pipes

Size (mm)	Code
100	170315048

Stoppers

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

Saddles



Size (mm)	Main Pipe	Oblique 45°	Square 90°
100	Small up to 200	170319087	170319111
100	Med up to 400	170319091	170319115
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	170305057
225	1m	170305058
300	1m	170305059

Channel Pipes - Socketed

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

Channel Bends - Socketed

Size (mm)	90º	45º	22.5º	11.25º
Left Hand				
	170309001	170309035	170309053	170309071
	170309002	170309036	170309054	170309073
	170309004	170309038	170309056	170309077
	170309006	170309040	170309058	170309081
Right Hand				
	170309010	170309044	170309062	170309072
	170309011	170309045	170309063	170309074
	170309012	170309047	170309065	170309078
	170309014	170309049	170309067	170309082

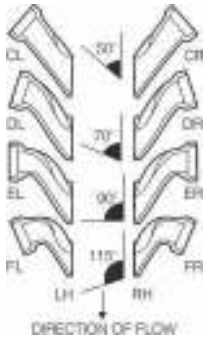
Channel Junctions - Socketed Oblique 45º & Curved Square 90º

Size (mm)	LH Oblique 45º	LH Square 90º	RH Oblique 45º	RH Square 90º
100 x 100	170309319	170309402	170309320	170309403
150 x 100	170309321	170309404	170309322	170309405
150 x 150	170309323	170309406	170309324	170309407
225 x 100	170309325	170309408	170309326	170309409
225 x 150	170309327	170309410	170309328	170309411
225 x 225	170309329	170309412	170309330	170309413
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

Double Oblique 45º

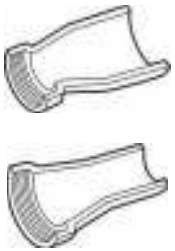
Size (mm)	Double	Beeches
100	170309445	170309301
150	170309447	170309303
225	170309450	170309306

3/4 Section Bends



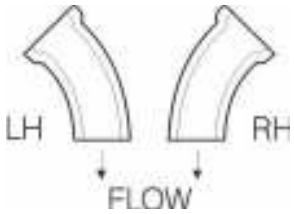
Size (mm)	Type	LH Code	RH Code
100	C	170309093	170309094
100	D	170309095	170309096
100	E	170309097	170309098
100	F	170309099	170309100
150	C	170309109	170309110
150	D	170309111	170309112
150	E	170309113	170309114
150	F	170309115	170309116

Channel Tapers - Socketed



Size (mm)	Increaser	Reducer
100 x 150	170309471	170309476
150 x 225	170309472	170309477
225 x 300	170309473	170309478

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.

Standard Couplings (Up to 620mm Diameter)

Part Number	Size Range (mm)	Width (mm)
2004SC115	110-115	100
2004SC120	110-121	120
2004SC125	110-125	120
2004SC137	120-137	120
2004SC150	125-150	120
2004SC165	140-165	120
2004SC175	150-175	120
2004SC180	160-182	120
2004SC200	175-200	150
2004SC215	190-215	150
2004SC225	200-225	150
2004SC250	225-250	150
2004SC265	240-265	150
2004SC275	250-275	150
2004SC290	265-290	150
2004SC310	285-310	185
2004SC320	295-320	185
2004SC335	305-335	185
2004SC345	315-345	185
2004SC360	340-360	185
2004SC385	355-385	185
2004SC410	385-410	185
2004SC425	400-425	185
2004SC430	405-430	185
2004SC445	420-445	185
2004SC465	435-465	185
2004SC490	465-490	185
2004SC510	480-510	185
2004SC525	495-525	185
2004SC540	510-540	185
2004SC550	520-550	185
2004SC560	530-560	185
2004SC580	555-580	185
2004SC600	570-600	185
2004SC620	590-620	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.

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

Part Number	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

Part Number	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 Range

Part Number	Size Range A/B (mm)	Width (mm)
2004AC1225	110-122/48-56	100
2004AC1201	105-120/35-45	100
2004AC1226	110-122/60-68	100
2004AC1221	110-122/80-95	100
2004AC5144	110-125/100-115	100
2004AC1361	121-136/80-95	100
2004AC1362	121-136/100-115	100
2004AC1452	130-145/110-125	120
2004AC1552	140-155/90-105	120
2004AC1602	144-160/110-122	120
2004AC1603	144-160/121-136	120
2004AC1702	155-170/130-145	120
2004AC1703	170-192/110-122	120
2004AC1922	170-192/110-122	120
2004AC1923	170-192/121-136	120
2004AC1924	170-192/144-160	120
2004AC2000	180-200/130-145	150
2004AC2001	180-200/155-170	150
2004AC2100	185-210/100-115	150
2004AC2101	185-210/160-180	150
2004AC2152o/s	195-215/100-115	150
2004AC2154	190-215/150-165	150
2004AC2254	200-225/160-175	150
2004AC2352	210-235/110-122	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
2004AC2654	240-265/144-160	150
2004AC2655	240-265/170-192	150
2004AC2656	240-265/190-215	150
2004AC2657	240-265/210-235	150
2004AC2754	250-275/160-175	150
2004AC2756	250-275/200-225	150
2004AC2904	265-290/144-160	150
2004AC2907	265-290/210-235	150
2004AC2908	270-295/235-260	150
2004AC2956o/s	270-295/185-210	150
2004AC3204	295-320/144-160	150
2004AC3205	295-320/170-192	150
2004AC3207	295-320/210-235	150
2004AC3208	295-320/240-265	150
2004AC3209	295-320/265-290	150
2004AC3351o/s	310-335/180-205	150
2004AC3608	335-360/240-265	165

Flexible Saddle Range

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

Tools

Code	Description
2004MTSOA	150mm Strap Wrench
2004MTSCORE	186mm Diamond Core Dril

Lateral Connector

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

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

Sewer Saddle

Code	Size (mm)	Angle	Saddle Size Range (mm)
2004TA11090	110	90°	152-395
2004TA16090	160	90°	200-395
2004TA11045	110	45°	152-395
2004TA16045	160	45°	200-395

Sewer Saddles provide a quick economical method of making lateral connections at 45° or 90°, to existing smooth wall pipes.

Installation

Standard/Extra Wide/Euro Couplings

Standards

- Complies with WIS 4-41-01 (all public sewers and sewers for adoption).

- Measure and cut section from pipeline using cutter or disc saw and then remove.
- The cut should be about 20mm longer than the junction or new section of pipeline to be inserted.
- Loosen the coupling's stainless steel clamps and slide onto each end of the existing pipeline. No lubricant is required. Position new junction into pipeline.
- OR position the new section into the pipe.
- Place pencil mark half a coupling width from each joint and using these pencil marks, centre a coupling over one joint at a time.
- Tighten the worm drive units in sequence across the width of the coupling to the recommended torque. (Alternatively tighten the central shear band and then the clamps).
- Once assembled, carefully tamp the bedding under the pipeline.
- Prior to backfill, re-tighten all worm drives to the recommended torque.

N.B When connecting concrete pipe (particularly vertical cast) it is often necessary to apply a neat cement grout to the sealing area, providing a smooth surface and ensuring an airtight seal. On some pipes (concrete and iron) it may be required to smooth out the mould line in the area of the joint. Please contact JDP for more information.

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

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
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!

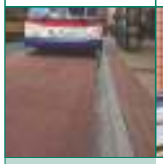
Access Road Products

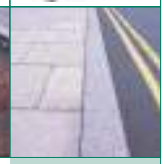
• Kerbs • Kerb Drainage • Gullies • Gratings • Covers & Frames
• Concrete Manhole Rings • Rectangular Concrete Chamber Sections
• Engineering Bricks • Street Furniture

JDP stocks a comprehensive range of access road products designed to meet the needs of the Commercial Public & Industrial 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 and heavy traffic intensity applications, including commercial, public & industrial access roads and premises. Also available are many of the associated products required by contractors such as engineering bricks, concrete chamber sections and concrete manhole rings.

Kerbs / Application Selector

	Access Kerb	HGV Kerb	Cairnhill Kerb	Natural Granite	K-Lite™ Kerb
Product Identification	 	 	 	 	 
Trafficking	• Designed to withstand occasional bus impact	• Designed to withstand occasional HGV impact while directing vehicle wheels back on to roadway	• Designed to withstand occasional impact	• Solid natural granite – designed to withstand occasional impact	• Designed to withstand occasional impact
Features	• Wide range of profiles to suit access requirements • Integral marker bump • Available in natural granite to order	• High strength for busy routes • Damage resistant • Will accept signage	• Replicates whin kerbs • Suited to urban and rural environments • Non-slip finish • Extremely durable	• Damage resistant and extremely durable • Suited to urban and rural environments • Ideal for traditional or conservation areas • Various finishes	• Light in weight • Maintains strength • Easy to handle and transport • Meets HSE guidelines
Accessories	• Dropper units • Quadrants to certain profiles	• Radius units • Dropper units • Quadrants	• Crossing units	• Crossing units • Dropper units • Quadrants • Radius units • Edging • Channels • Paving • Setts • Access kerbs/other special kerbs	• Crossing units • Dropper units • Quadrants • Radius units • Paving
Colours	• Grey	• Grey	• Charcoal	• Silver Grey (stocked) • Grey • Wide variety of colours made to order	• Grey
Texture	• Standard • Natural Granite	• Standard	• Riven	• Fine picked, flamed • Standard or fair picked • Other finishes available	• Standard

	K-Lite™ Traditional	Countryside Classic	BS Kerb	Block Kerb	EcoKerb
Product Identification	 	 	 	 	 
Trafficking	• Designed to withstand occasional bus impact	• Designed to withstand occasional bus impact	• Designed to withstand occasional bus impact	• Designed to withstand occasional bus impact	• Designed to withstand occasional bus impact
Features	• Textured appearance • Durable • Ideal for traditional or conservation areas • Easy to handle • Meets HSE guidelines	• Textured appearance • Durable • Ideal for traditional or conservation areas • Classic and Classic Wide Top options	• Meets British Standards	• Colour co-ordinates with Europa block paving • Provides subtle alternative to more traditional kerbs	• Uses secondary and recycled materials, minimising waste • Manufacturing process minimises energy
Accessories	• n/a	• Crossing units • Radius units • Dropper units • Quadrants • Internal and external angles • Flat top edging	• Crossing units • Dropper units • Radius kerbs • Internal and external angles • Quadrants • Offlets • Marginal strips • Marker channels • Non standard options	• Crossing units • Radius units • Internal angle • External angle • Dropper units	• Crossing units • Dropper units • Radius kerbs • Quadrants
Colours	• Dark Grey • Silver Grey	• Silver Grey	• Grey	• Grey • Red • Charcoal • Brindle	• Black Fleck
Texture	• Textured	• Textured	• Standard	• Standard	• Textured

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.

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
180100866	150x305 HB1
180100860	125x255 HB2
180100855	125x150 HB3

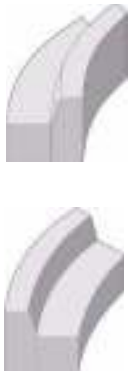
Droppers and Crossing Kerbs

Code	Description
180101704	125x255 mm HB – 125x150 mm BN (LH) DL1
180101705	125x255 mm HB – 125x150 mm BN (RH) DR1
180100879	125x255 mm SP – 125x150 mm BN (LH) DL2
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	
LH	RH	
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
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 ¼ 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

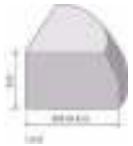
The table shown is an approximate guide only.

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
180100854	305x255 mm QHB
180100853	455x255 mm QHB

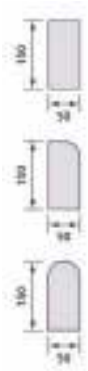
Transition Kerbs

Code	Description
180101099	125x255 mm HB RH – 125x255 mm SP LH TR
180100983	125x255 mm HB LH – 125x255 mm SP RH TL

Angles

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

Edging Kerbs



Code	Description
180100576	50 X 150 X 914 Edging Kerb Flat Top EF
180100589	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
180101615	50 X 150 X 914 Round Top Edging ER
180103772	50 X 205 X 914 Round Top Edging ER

Abbreviation Guide: **HB** Half Battered, **BN**, Bullnosed, **SP** 45° Splayed, **RH** Right Hand, **LH** Left Hand, **ER** 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.

Kerb Drainage

Available from the JDP branch network is a range of the latest integrated kerb drainage systems which offer an alternative to conventional kerb, gully and drain. Endeavouring to supply the commercial, public & industrial market with the best solution for each application products include:

- Concrete Kerb Drainage
- Envirokerb Recycled Plastic Kerb Drainage

Concrete Kerb Drainage

Available from the recognised Charcon brand are two integrated kerb drainage systems.

Mini Highway

Offers a combination of efficient drainage capability with compact design. Mini Highway is a two part kerb drainage system with a compact design with no loss of strength. Manufactured from high quality granite and quartzite using both wet and semi-dry processes.

Features and benefits

- Integrated kerb profile and linear drainage system
- Multiple inlet holes along length of kerb for fast water take off
- Maintains kerb profile for greater aesthetic appeal in city centres
- Compact design minimises installation cost with no loss of strength

Applications

- City roads
- Commercial developments
- Urban roads
- Access roads

Dimension (mm)	Base unit	Top unit
Length (approx)	500	500
Width (approx)	250	250
Depth (approx)	235, 285, 335	254

Inlet dimensions 55 x 107 mm ellipse (approx)

Standards

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

Installation Guide

See page 173.

Highway Ultra

A one or two piece polymer concrete combined drainage system for towns and city centres providing surface water drainage solutions for a variety of applications. Highway Ultra has resistance to frost and road salts. Highway Ultra is manufactured from high quality quartzite, granite and basalt bound in a resin compound.

Features and benefits

- One or two piece system available
- 2 depths dependant on drainage requirements
- Resistant to frost, ageing and road salts
- Minimal disruption during installation compared to other systems
- Large inlet openings for fast efficient drain off

Applications

- City roads
- Town centres
- Urban areas

Product	Length (mm)	Depth (mm)	Width (mm)
Shallow one piece unit	500	320	154
Deep one piece unit	500	500	154
Shallow base unit	500	130	154
Deep base unit	500	310	154
Standard top	500	190	154

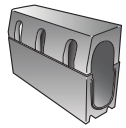
Standards

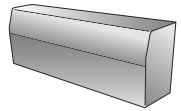
British Standard kerb products comply with the performance levels in European Standard BS EN 1340

Installation Guide

See page 173.

Recycled Plastic Envirokerb





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. Envirokerb is a revolutionary lightweight kerb drainage system, manufactured from 100% recycled plastic waste destined for landfill and 70% lighter than conventional concrete.
Envirokerb negates the extra cost and time incurred with the vacuum lifters and grabs needed for traditional concrete kerbs.

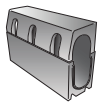
Features and benefits

Envirokerb is a revolutionary combined kerb drainage system.
Envirokerb is made from recycled plastic composite material.
Envirokerb is extremely lightweight being some 70% lighter than conventional concrete or polyester concrete equivalent, yet is strong and robust.
Envirokerb is 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.
Envirokerb has 3 inlets in the face of the kerb unit, offering better hydraulic performance, and enabling surface water to drain more quickly from the carriageway.
Envirokerb is a one-piece unit 500mm long, with a high-impact resistance and has a positive interlock between all components.
Envirokerb is resistant to most forms of effluents found in highway situations, and has a finish in common with standard concrete kerbs.

Applications

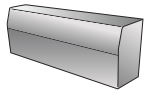
- Urban road schemes
- Trunk roads
- Roundabouts
- Traffic calming situations
- Car parks

Envirokerb Standard Drainage Unit



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

Envirokerb Standard Kerb Unit



Code	Description
18016X12STD	150x305 mm HB HB1
18015X10STD	125x255 mm HB HB2

Standards

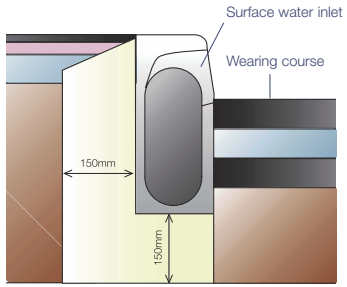
Envirokerb is tested in accordance with EN1433 and achieved loading D400 or C250 depending upon installation requirements.

Installation Guide

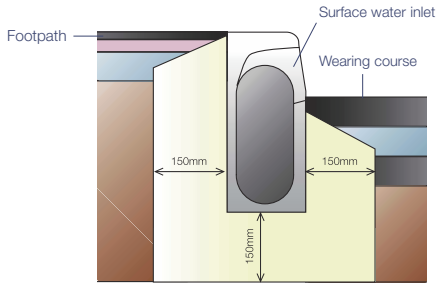
Through a policy of material and process development, Envirokerb has a finish almost identical to a standard Concrete Kerb Drainage.

- 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



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, Envirokerb 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.

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 Rigigully	450	80
0602RG900X450	900mm Rigigully	450	104
0601PG	750mm Pavement Gully	375	
0610MA100	Multi Adaptor 160 x 160-178mm		
0612RF150X25	150/178mm Ridgiflex x 25m		

Yard Gullies 110mm O/let

Code	Description	Diameter mm	Capacity litres
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		

* Bespoke Dyka gullies are available contact your local JDP branch for details.

Standards

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	
1801300600GULLY	300			600	23	151	150		
1801375750GULLY	375	55	698	750	50	188	150	250	125
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

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

150mm Deep- Heavy Duty Ductile Iron, Double Triangular Gratings & Frames

Usage: Group 6 Areas with extremely high wheel loads such as dockyards and airports

Features and benefits

- Manufactured to BS EN124 Class F900
- 90 Tonne safe test load
- HA104/02 compliant
- Kitemarked for third party assurance of quality
- 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 Kg	Waterway (cm²)
0621KD41F	450 x 400	150	610 x 542	91	1028

150mm Deep- Heavy Duty Ductile Iron, Hinged & Double Triangular Gratings & Frames

Usage: Group 4 Carriageways & Main Roads for Fast Moving Traffic

Features and benefits

- Manufactured to BS EN124 Class D400
- Kitemarked for third party assurance of quality
- 40 Tonne safe test load
- HA104/02 compliant
- 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 Kg	Waterway (cm²)
0621KD41D6NN	440 x 400	150	550 x 520	50	1180
0621KD43D6N	600 x 600	150	750 x 750	92	2020
0621KD44D	1000 x 450	150	1150 x 540	99	2021

Hinged

Code	Clear Opening (mm)	Depth (mm)	Overall Frame (mm)	Weight Kg	Waterway (cm²)
0621KD50D6NN	440 x 400	150	560 x 530	58	1171
0621KD52D6*	500 x 350	150	650 x 435	52	730
0621KD57D**	750 x 450	150	910 x 550	90	2216

*Rear kerb hinged, **Dished.

100mm Deep- Heavy Duty Ductile Iron, Hinged & Double Triangular Gratings & Frames

Usage: Group 4 Carriageways & Main Roads for Fast Moving Traffic

Features and benefits

- Manufactured to BS EN124 Class D400
- Kitemarked for third party assurance of quality
- 40 Tonne safe test load
- HA104/02 compliant
- 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 Kg	Waterway (cm²)
0621KD41D	420 X 420	100	570 x 500	42	1026
0621KD41DNN	440 X 400	100	550 x 520	40	1180
0621KD43DN	600 x 600	100	750 x 750	82	2020

Hinged

Code	Clear Opening (mm)	Depth (mm)	Overall Frame (mm)	Weight Kg	Waterway (cm²)
0621KD51D	380 x 310	100	565 x 410	32	659
0621KD50DNN	440 X 400	100	550 x 520	38	1167
0621KD56D*	440 x 400	100	550 x 525	38	1100
0621KD53D	450 x 450	100	580 x 525	33	1428
0621KD52D	500 x 350	100	650 x 435	42	982
0621KD54D	600 x 450	100	750 x 550	54	1650
0621KD57D**	750 x 450	150	910 x 550	90	2216

*Rear kerb hinged, **Dished.

Hinged Pedestrian Style Grate

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

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

Hinged

Code	Clear Opening (mm)	Depth (mm)	Overall Frame (mm)	Weight Kg	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
0621KD51CB	380 x 310	75	555 x 410	22	764
#0621KD51CPL	380 x 310	75	555 x 410	28	543
0621KD50C-N	420 x 420	75	520 x 510	29	1100

Non Rock Double Triangular

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

#Pedestrian style grating and locked as standard

Standards

All gratings supplied by JDP are manufactured to the required British and European Standard Specification - BS EN124: 1994. JDP ensures that its manufacturing partners only supply 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 estate road products and customers can rest assured that the range supplied by JDP meets the highest standards.

BSI KITEMARKED- BS EN124- F900, D400 & C250

Installation Guide

See page 189.

150mm Deep- Heavy Duty Ductile Iron Access Covers & Frames

Usage: Group 6 Areas with extremely high wheel loads such as dockyards and airports

Features and benefits

- Manufactured to BS EN124 Class F900
- 90 Tonne safe test load
- HA104/02 compliant
- Kitemarked for third party assurance of quality
- 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 Kg
0621KD10F	600 x 600	150	950 x 950	173

150mm Deep- Heavy Duty Ductile Iron Access Covers & Frames

Usage: Group 4 & 5 Areas where high wheel loads are evident such as dockyards etc

Features and benefits

- Manufactured to BS EN124 Class E600
- 60 Tonne safe test load
- HA104/02 compliant
- Kitemarked for third party assurance of quality
- Non rock for added stability & silent operation
- Ductile iron for improved weight to strength ratio
- Black coated finish
- Optional badging – i.e. FW, SW
- Optional sealing plates, pressure plates

Code	Clear Opening (mm)	Depth (mm)	Overall Frame (mm)	Weight Kg
0621KD10E	600 X 600	150	880 x 880	160
0621KD12E	675 x 675	150	955 x 955	150
*0621KD19E	1220 x 675	150	1500 x 955	225

150mm Deep- Heavy Duty Ductile Iron Access Covers & Frames

Usage: Group 4 Carriageways & Main Roads for Fast Moving Traffic

Features and benefits

- Manufactured to BS EN124 Class D400
- Kitemarked for third party assurance of quality
- 40 Tonne safe test load
- HA104/02 compliant
- 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 Kg
KD100-6*	600 X 600	150	690 x 690	88
KD10-6	600 X 600	150	750 x 750	97
KD10-6-125	600 X 600	150	750 x 750	106
KD120-6*	675 X 675	150	776 x 776	108
KD12-6	675 X 675	150	825 x 825	119
KD12-6-125	675 X 675	150	825 x 825	125
KD14-6	750 X 600	150	900 x 750	145
KD15-6	750 X 750	150	900 x 900	175
KD16-6	900 X 600	150	1050 x 750	190
KD17-6	900 x 900	150	1050 x 1050	265
KD19-6	1220 x 675	150	1370 x 825	232
KD19-6-125	1220 x 675	150	1370 x 825	232
KD20-6	1830 x 675	150	1980 x 825	348
KD21-6	1200 x 900	150	1350 x 1050	290

* Not HA104/02 compliant, suitable for access & estate roads

100mm Deep- Heavy Duty Ductile Iron Access Covers & Frames

Usage: Group 4 Carriageways & Main Roads for Fast Moving Traffic

JDP offer an in depth range of ductile iron covers suitable for surface water drainage in access 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
- HA104/02 compliant
- 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
0621KD10	600 X 600	100	750 x 750	86
0621KD120*	675 x 675	100	775 x 775	97
0621KD12	675 X 675	100	825 x 825	104
0621KD14	750 X 600	100	900 x 750	120
0621KD15	750 X 750	100	900 x 900	140
0621KD16	900 X 600	100	1050 x 750	156
0621KD17	900 x 900	100	1050 x 1050	220
0621KD190*	1220 x 675	100	1320 x 775	175
0621KD19	1220 x 675	100	1370 x 825	210

* Not HA104/02 compliant, suitable for access & estate roads

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

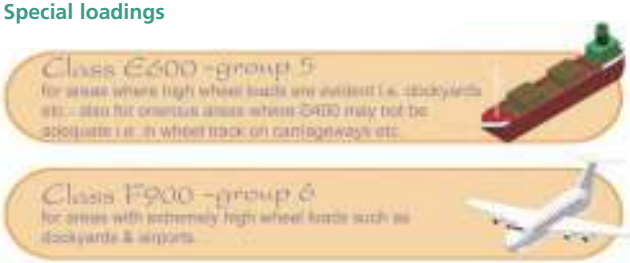
BSI KITEMARKED- BS EN124- B125
BSI KITEMARKED- BS EN124- C250
BSI KITEMARKED- BS EN124- D400
BSI KITEMARKED- BS EN124- E600
BSI KITEMARKED- BS EN124- F900

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

Standard loadings

Special loadings



Covers & Frames / Specialist Steel Access Covers & Frames

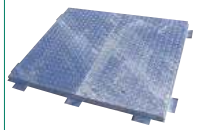
In addition to our range of ductile covers, JDP are able to supply an in depth range of solid top galvanised steel chequer plate access covers & frames for access road applications.

The variety of options available in this range of products is detailed below. Manufactured bespoke to the contractors on site needs the combinations are almost infinite providing an access solution to virtually any application.

Features and benefits

- Chequer plate solid top lids under braced where required to meet stated load ratings
- Massive list of options
- Available up to F.A.C.T.A class FL
- Available with removable beams and frame fixing points
- Kitemarked versions available
- Manufactured under an ISO 9001:2000 Quality System
- Finish: Hot dipped galvanised to BS EN ISO 1461 as standard
- On site ladder fitting service available
- Safety chains and hand rails for manhole access available

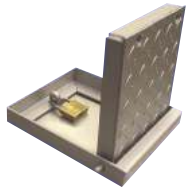
Bespoke Options



Finish
• Galvanised Mild Steel
• Black Coated Mild Steel
• Stainless Steel Grade 304
• Stainless Steel Grade 316
• Aluminium

Loading
• Pedestrian Duty
• Light Duty
• Medium Duty
• Heavy Duty
• Extra Heavy Duty
• Special Loadings

Sealing
• Unsealed
• Single Grease Seal
• Double Grease Seal
• Neoprene Seal
• Double Neoprene Seal



Locking
• Slotted Csk Screw
• Socket Cap Screw
• MOD / Home Office Approved
• Turnbuckle Locking
• Padlock Facility
• Socket Csk Screw

Other
• Hinged
• Assisted Lift
• Safety Grille
• Pressure & Water Tight
• Peep Hole
• Multiples
• Size

Standards

- Manufactured under an ISO 9001:2000 Quality System.
- Galvanised to BS EN ISO 1461 as standard

Steel Access Cover Loadings

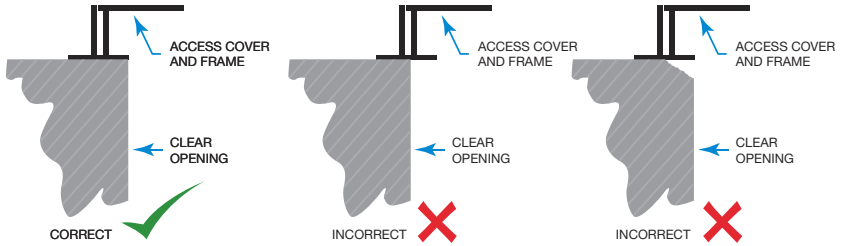
All steel covers are manufactured to FACTA loadings in line with the gross laden vehicle weight (complete vehicle weight) of vehicles that are likely to travel over them i.e. 5 tonne gross laden vehicle weight or 10 tonne gross laden vehicle weight (GLVW). Occasionally loadings are asked for as wheel 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.

Steel Loadings

Installation Guide

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.

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.

Concrete Manhole Rings

DN	Available Depth of Section				Approx Wall Thickness mm	Approx Weight /m Depth kg
	0.25m	0.5m	0.75m	1.0m		
900	•	•	•	•	70	530
1050	•	•	•	•	80	710
1200	•	•	•	•	90	912
1350		•	•	•	95	1080
1500		•	•	•	105	1330
1800		•	•	•	115	1760
2100		•	•	•	125	2140
2400		•	•	•	140	2740
2700		•	•	•	150	3400
3000		•	•	•	165	4140
3660			•	•	185	5300
4000			•	•	200	6360

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 DN	Depth	Overall DN	Standard Access Sizes					Weight (kg) 675² Access
			600x600	675x675	750x750	750x600	1200x675	
900	150	1060	C	C	X	X	X	130
1050	150	1230	E	E	C	To order	X	235
1200	150	1400	E	E	C	E	To order	355
1350 *	150	1560	E	E	To order	E	C	475
1500	150	1730	E	E	To order	E	C	790
1800	175	2050	E	E	To order	E	E	1210
2100	180	2370	E	E	To order	E	E	1745
2400	180	2700	E	E	To order	E	E	2375
2700	205	3020	E	E	To order	E	E	3335
3000	225	3350	E	E	To order	E	E	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.

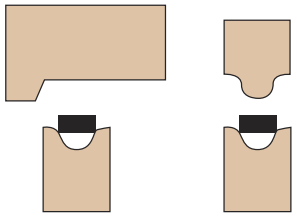
Jointing to pipeline

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



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
18011200500RHHS	1200x750	500	75	390	-
18011200750RHHS	1200x750	750	75	600	-
18011400RHHS	1475x1025	250	100	355	-

Rectangular Cover Slabs

Code	Size (mm)	Access (mm)	Effective Thickness (mm)	Nominal Weight of Units (kg)	Number of Units Per Pallet
18011200RMHCSH	1200x750HD	600x600	144	310	5
18011209060RMHCSH	1200x750HD	900x600	144	235	5
18011200RMHTS	1200x750HD	1200x675	125	230	5
180111475RMHCSH	1475x1025HD	600x600	144	640	-
18011479060RMHCSH	1475X1025HD	900x600	144	580	-
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 192.

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)			Mean compressive strength at 28 days	
		Cement: lime: sand	Masonry cement: sand	Cement: sand with plasticizer	Preliminary (laboratory) tests	Site tests
Increasing strength ↑ / Increasing ability to accommodate movement, e.g. due to settlement, temperature and moisture changes ↓					N/mm²	N/mm²
	(i)	1 : 0 to 1/4 : 3			16.0	11.0
	(ii)	1 : 1/2 : 4 to 4 1/2	1 : 2 1/2 to 3 1/2	1 : 3 to 4	6.5	4.5
	(iii)	1 : 1 : 5 to 6	1 : 4 to 5	1 : 5 to 6	3.6	2.5
	(iv)	1 : 2 : 8 to 9	1 : 5 1/2 to 6 1/2	1 : 7 to 8	1.5	1.0

Direction of change in properties is shown by the arrows

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.

Bollards

Features and 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

Domed Top - Round Base

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

Radius Top - Round Base

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

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

Other Products in the Recycled Range

Waymakers

Signage

Knee Rail Fencing

Seating

Benches

Thermoplastic Pipework Systems

• DYKA PVC-u Pressure Pipelines • ABS Pressure Pipelines

JDP offers a complete range of imperial and metric size PVC-u (unplasticised polyvinylchloride) fittings and valves (both manual and actuated) to satisfy the requirements of installers and specifiers.

JDP's European parent Dyka is a leading manufacturer of plastic pipe systems and has pioneered many of the developments in production technology of PVC-u. This continuing development together with the introduction of the latest techniques and equipment ensures that Dyka products offered by JDP are produced to a high standard in excess of the exacting requirements of many European quality assurance organisations, including the BSI.

The products are divided into main groups incorporating: pipes, fittings, flanges, accessories, which include gaskets and pipe brackets and valves.

This comprehensive range is mirrored in the range of imperial ABS pressure pipe, fittings and valves. This section is dedicated to solvent weld systems, for mechanical jointed PVC-u pipe systems please consult our Civils and Utilities product specifier.

Pipe Length

Imperial dimension pressure pipes are supplied as standard in nominal lengths of 6 metres. All other metric dimension pipes are supplied in standard nominal lengths of 5 metres.

The nominal pipe length is not the working length, as this depends on the jointing method being employed.

Pipe Colour

All Dyka imperial and metric pressure pipes are manufactured in industrial grey (colour reference RAL 7011).

Non Standard Products

Non standard lengths, colours and other specialist PVC-u products can be produced against specific requirements providing the quantity constitutes a reasonable production run including pressure ratings to 16bar and sizes to 630mm. If you have specific requirements please contact you're your local JDP branch.

Pipe Marking Details

The precise marking of Dyka PVC-u pipe is governed by various national and international standards, although to ensure traceability of pipes certain typical information is usually included.

Imperial and metric pipe marking

Description	Example
Manufacturers identification	DYKA
Pipe material:	PVC-u
The British Standard:	BS EN1452
Pressure rating:	12 bar
Size and dimensions:	3"x04.6mm
Production code:	2088 5757

DYKA PVC-u Pressure Pipelines

The use of unplasticised polyvinylchloride (PVC-u) is firmly established as the preferred material for pressure pipelines and water supply installations. It is rigid, versatile, and suitable for both above or below ground installations, over a temperature range of +5°C to +60°C. Its many advantages over traditional materials have resulted in these being progressively substituted by PVC-u pipelines.

PVC-u has excellent chemical resistance which, when combined with smoothness of bore, eliminates build up of scale and gives good flow characteristics. It is odourless and tasteless, and is suitable for conveying potable water and many food or dairy products. PVC-u is suitable for use at temperatures from +5°C to 60°C at a wide range of operating pressures, depending upon the system chosen. It is lightweight and easy to install, using cold solvent welded joints which require no special tools. For mechanical jointed PVC-u pipe systems please consult our Civils and Utilities product specifier.

It is important to note that metric and imperial pipework are two distinct systems, they are not manufactured to compatible dimensions and cannot be interconnected without special adaptors.

JDP supply metric to imperial adaptor couplings for both solvent cement and ring seal jointing.

The following table gives approximate equivalents

Metric pipe outside diameter (mm)	16	20	25	32	40	50	63	75	90	110	140	160	225
Imperial pipe nominal bore (inches)	⅜"	½	¾	1	1¼	1½	2	2½	3	4	5	6	8

Pressure Ratings

Imperial pressure pipe is often referred to by its "Class", whilst fittings often perform to different pressure ratings depending on size. The following table explains the range of pressure ratings available. All pressure ratings given below are at 20°C

Inch System

Product	Size (")	Pressure Rating
PVC-u fittings – solvent cement	⅜" - 6	15 bar
PVC-u fittings – solvent cement	8 – 12	9 bar
PVC-u fittings – threaded	⅜" – 2	12 bar
PVC-u pipe class C	2 – 8	9 bar
PVC-u pipe class 7*	½ - 2	10 bar
PVC-u pipe class D	1¼ - 8	12 bar
PVC-u pipe class E	½ - 6	15 bar

*(suitable for threading)

Metric System

Product	Size (mm)	Pressure Rating
PVC-u fittings	16 – 160	16 bar
PVC-u fittings	200 – 315	10 bar
PVC-u pipe	16 – 160	10 or 16 bar
PVC-u pipe	200 – 315	10 bar

Features and benefits

- Extremely ductile
- Corrosion resistant
- Smooth bore – improved flow and reduced scaling
- Lightweight
- WRAS approved
- +5°C to +60°C temperature range
- Rapid installation

Applications

The Dyka PVC-u pressure pipe system is suitable for the transportation of potable and non potable water for industrial and domestic uses.

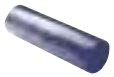
Other major areas of application include:-

- Conveyance of processing fluids within industry
- Sewerage and industrial effluent disposal
- Conveyance of abrasive slurries
- Transportation of acids, alkalis and other corrosive chemicals (for full details, please contact JDP)
- Ground water transportation for land engineering
- Buried fire ringmain
- Swimming pool treatment
- Irrigation systems
- Conduit or duct for cables and fragile piping systems
- Venting systems
- Rigid PVC-u Dyka pipe should not be used at ambient or liquid temperatures in excess of 60°C for pressure systems

For other applications, please refer to your local JDP branch.

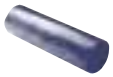
PVC-u Pipe Imperial

PVC-u Pressure Pipe Class C Plain End x 6 metre



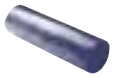
Code	Size (“)
0821200C6PE	2"
0821300C6PE	3"
0821400C6PE	4"
0821500C6PE	5"
0821600C6PE	6"
0821800C6PE	8"
08211000C6PE	10"
08211200C6PE	12"

PVC-u Pressure Pipe Class D Plain End x 6 metre



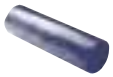
Code	Size (“)
0821125D6PE	1¼"
0821150D6PE	1½"
0821200D6PE	2"
0821300D6PE	3"
0821400D6PE	4"
0821600D6PE	6"

PVC-u Pressure Pipe Class 7 Plain End x 6 metre



Code	Size (“)
082105076PE	½"
082107576PE	¾"
082110076PE	1"
082112576PE	1¼"
082115076PE	1½"
082120076PE	2"

PVC-u Pressure Pipe Class E Plain End x 6 metre



Code	Size (“)
0821050E6PE	½"
0821075E6PE	¾"
0821100E6PE	1"
0821125E6PE	1¼"
0821150E6PE	1½"
0821200E6PE	2"
0821225E6PE	2½"
0821300E6PE	3"
0821400E6PE	4"
0821600E6PE	6"

PVC-u Plain Fittings Imperial

Socket Plain

Code	Size (“)
0812MA40160	⅜"
0812MA40200	½"
0812MA40250	¾"
0812MA40320	1"
0812MA40400	1¼"
0812MA40500	1½"
0812MA40630	2"
0812MA40750	2½"
0812MA40900	3"
0812MA41100	4"
0812MA41400	5"
0812MA41600	6"
0812MA42250	8"
0812MA42800	10"
0812MA43150	12"

Elbow 90º Plain

Code	Size (“)
0812GO40160	⅜"
0812GO40200	½"
0812GO40250	¾"
0812GO40320	1"
0812GO40400	1¼"
0812GO40500	1½"
0812GO40630	2"
0812GO40750	2½"
0812GO40900	3"
0812GO41100	4"
0812GO41400	5"
0812GO41600	6"
0812GO42250	8"
0812GO42800	10"
0812GO43150	12"

Elbow 45º Plain

Code	Size (“)
0812GY40160	⅜"
0812GY40200	½"
0812GY40250	¾"
0812GY40320	1"
0812GY40400	1½"
0812GY40500	1½"
0812GY40630	2"
0812GY40750	2½"
0812GY40900	3"
0812GY41100	4"
0812GY41400	5"
0812GY41600	6"
0812GY42250	8"
0812GY42800	10"
0812GY43150	12"

Bend 90º Plain

Code	Size (“)
0812CU40200	½"
0812CU40250	¾"
0812CU40320	1"
0812CU40400	1¼"
0812CU40500	1½"
0812CU40630	2"
0812CU40750	2½"
0812CU40900	3"
0812CU41100	4"

Tee Plain

Code	Size (“)
0812TI40160	⅜"
0812TI40200	½"
0812TI40250	¾"
0812TI40320	1"
0812TI40400	1¼"
0812TI40500	1½"
0812TI40630	2"
0812TI40750	2½"
0812TI40900	3"
0812TI41100	4"
0812TI41400	5"
0812TI41600	6"
0812TI42250	8"
0812TI42800	10"
0812TI43150	12"

End Cap Plain

Code	Size (“)
0812BO40160	⅜"
0812CA40200	½"
0812CA40250	¾"
0812CA40320	1"
0812CA40400	1¼"
0812CA40500	1½"
0812CA40630	2"
0812CA40750	2½"
0812CA40900	3"
0812CA41100	4"
0812CA41400	5"
0812CA41600	6"
0812CA42250	8"

Union Plain

Code	Size (“)
0812BO40160	⅜"
0812BO40200	½"
0812BO40250	¾"
0812BO40320	1"
0812BO40400	1¼"
0812BO40500	1½"
0812BO40630	2"
0812BO40750	2½"
0812BO40900	3"
0812BO41100	4"

Reducing Bush Plain

Code	Size (“)
0812RC4025B	¾ x ½
0812RC4032B	1 x ½
0812RC4032C	1 x ¾
0812RC4040D	1¼ x 1
0812RC4050C	1½ x ¾
0812RC4050D	1½ x 1
0812RC4050E	1½ x 1¼
0812RC4063D	2 x 1
0812RC4063E	2 x 1¼
0812RC4063F	2 x 1½
0812RC4075G	2½ x 2
0812RC4090F	3 x 1½
0812RC4090G	3 x 2
0812RC4090H	3 x 2½
0812RC4110G	4 x 2
0812RC4110I	4 x 3
0812RC4140L	5 x 4
0812RC4160L	6 x 4
0812RC4225O	8 x 6
0812RC4280R	10 x 8
0812RC4315S	12 x 10

Inch x Metric Socket Plain

Code	Size
0812MA50200	20 x ½
0812MA50250	25 x ¾
0812MA50320	32 x 1
0812MA50400	40 x 1¼
0812MA50500	50 x 1½
0812MA50630	63 x 2
0812MA50900	90 x 3
0812MA51100	110 x 4

PVC-u Plain x Threaded Fittings Imperial

Socket Plain x Threaded

Code	Size (“)
0812MA60200	½"
0812MA60250	¾"
0812MA60320	1"
0812MA60400	1¼"
0812MA60500	1½"
0812MA60630	2"
0812MA60750	2½"
0812MA60900	3"
0812MA61100	4"

Elbow 90º Plain x Threaded

Code	Size (“)
0812GO60200	½"
0812GO60250	¾"
0812GO60320	1"
0812GO60400	1¼"
0812GO60500	1½"
0812GO60630	2"
0812GO60750	2½"
0812GO60900	3"

Tank Connector Plain x Threaded

Code	Size (“)
0812TC60200	½"
0812TC60250	¾"
0812TC60320	1"
0812TC60400	1¼"
0812TC60500	1½"
0812TC60630	2"
0812TC60750	2½"
0812TC60900	3"
0812TC61100	4"

Tee Plain x Threaded

Code	Size (“)
0812TI60200	½"
0812TI60250	¾"
0812TI60320	1"
0812TI60400	1¼"
0812TI60500	1½"
0812TI60630	2"
0812TI60750	2½"
0812TI60900	3"

Union Plain x Threaded

Code	Size (“)
0812BO60200	½"
0812BO60250	¾"
0812BO60320	1"
0812BO60400	1¼"
0812BO60500	1½"
0812BO60630	2"

Adaptor Male Plain x Female Threaded

Code	Size (“)
0812AF60200	½"
0812AF60250	¾"
0812AF60320	1"
0812AF60400	1¼"
0812AF60500	1½"
0812AF60630	2"

Reducing Bush Plain x Threaded

Code	Size (“)
0812RC6020A	½" x ⅜"
0812RC6025B	¾" x ½"
0812RC6032C	1" x ¾"

Barrel Nipple Plain x Threaded

Code	Size (“)
0812BN60160	⅜"
0812BN60200	½"
0812BN60250	¾"
0812BN60320	1"
0812BN60400	1¼"
0812BN60500	1½"
0812BN60630	2"
0812BN60750	2½"
0812BN60900	3"
0812BN61100	4"

PVC-u Threaded Fittings Imperial

Socket Threaded

Code	Size (")
0812MA20160	⅜"
0812MA20200	½"
0812MA20250	¾"
0812MA20320	1"
0812MA20400	1¼"
0812MA20500	1½"
0812MA20630	2"
0812MA20750	2½"
0812MA20900	3"
0812MA21100	4"

Tee Threaded

Code	Size (")
0812TI20160	⅜"
0812TI20200	½"
0812TI20250	¾"
0812TI20320	1"
0812TI20400	1¼"
0812TI20500	1½"
0812TI20630	2"
0812TI20750	2½"
0812TI20900	3"
0812TI21100	4"

Elbow 90ºThreaded

Code	Size (")
0812GO20160	⅜"
0812GO20200	½"
0812GO20250	¾"
0812GO20320	1"
0812GO20400	1¼"
0812GO20500	1½"
0812GO20630	2"
0812GO20750	2½"
0812GO20900	3"
0812GO21100	4"

End Cap Threaded

Code	Size (")
0812CA20160	⅜"
0812CA20200	½"
0812CA20250	¾"
0812CA20320	1"
0812CA20400	1¼"
0812CA20500	1½"
0812CA20630	2"
0812CA20750	2½"
0812CA20900	3"
0812CA21100	4"

Hexagon Nipple Threaded

Code	Size (")
0812NI20160	⅜"
0812NI20200	½"
0812NI20250	¾"
0812NI20320	1"
0812NI20400	1¼"
0812NI20500	1½"
0812NI20630	2"
0812NI20750	2½"
0812NI20900	3"
0812NI21100	4"

Back Nut Threaded

Code	Size (")
0812NU20200	½"
0812NU20250	¾"
0812NU20320	1"
0812NU20400	1¼"
0812NU20500	1½"
0812NU20630	2"
0812NU20750	2½"
0812NU2090N	3"
0812NU2110N	4"

Reducing Nipple Threaded

Code	Size (")
0812NR2020A	½ x ⅜"
0812NR2025B	¾ x ½
0812NR2032C	1 x ¾
0812NR2040D	1¼ x 1
0812NR2050E	1½ x 1¼
0812NR2063F	2 x 1½
0812NR2075G	2½ x 2
0812NR2090H	3 x 2½
0812NR2110I	4 x 3

Plug Threaded

Code	Size (")
0812TA20160	⅜"
0812TA20200	½"
0812TA20250	¾"
0812TA20320	1"
0812TA20400	1¼"
0812TA20500	1½"
0812TA20630	2"
0812TA20750	2½"
0812TA20900	3"
0812TA21100	4"

Union Threaded

Code	Size (")
0812BO20160	⅜"
0812BO20200	½"
0812BO20250	¾"
0812BO20320	1"
0812BO20400	1¼"
0812BO20500	1½"
0812BO20630	2"
0812BO20750	2½"
0812BO20900	3"
0812BO21100	4"

Reducing Piece Male Threaded x Female Threaded

Code	Size (")
0812RI2020A	½ x ⅜
0812RI2025B	¾ x ½
0812RI2032B	1 x ½
0812RI2032C	1 x ¾
0812RI2040B	1¼ x ½
0812RI2040C	1¼ x ¾
0812RI2040D	1¼ x 1
0812RI2050C	1½ x ¾
0812RI2050D	1½ x 1
0812RI2050E	1½ x 1¼
0812RI2063D	2 x 1
0812RI2063E	2 x 1¼
0812RI2063F	2 x 1½
0812RI2075E	2½ x 1¼
0812RI2075F	2½ x 1½
0812RI2075G	2½ x 2
0812RI2090F	3 x 1½
0812RI2090G	3 x 2
0812RI2090H	3 x 2½
0812RI2110G	4 x 2
0812RI2110H	4 x 2½
0812RI2110I	4 x 3

Reducing Piece Female Threaded x Male Threaded

Code	Size (")
0812MG2016B	⅜" x ½
0812MG2020C	¾ x ½
0812MG2025D	¾ x 1
0812MG2032E	1 x 1¼
0812MG2040F	1¼x 1½
0812MG2050G	1½ x 2
0812MG2063H	2½x 2
0812MG2075I	3 x 2½
0812MG2090L	4 x 3

Reducing Piece Female Threaded

Code	Size (")
0812MR2020A	⅜ x ½
0812MR2025B	¾ x ½
0812MR2032C	1 x ¾
0812MR2040D	1¼ x 1
0812MR2050E	1½ x 1¼
0812MR2063F	2 x 1½
0812MR2075G	2½ x 2
0812MR2090H	3 x 2½
0812MR2110I	4 x 3

Barrel Nipple Threaded x Threaded

Code	Size (")
0812BA20160	⅜"
0812BA20200	½"
0812BA20250	¾"
0812BA20320	1"
0812BA20400	1¼"
0812BA20500	1½"
0812BA20630	2"
0812BA20750	2½"
0812BA20900	3"
0812BA21100	4"

Elbow 45° Threaded

Code	Size (")
0812GY20160	⅜"
0812GY20200	½"
0812GY20250	¾"
0812GY20320	1"
0812GY20400	1¼"
0812GY20500	1½"
0812GY20630	2"
0812GY20750	2½"
0812GY20900	3"
0812GY21100	4"

PVC-u Flanges Imperial

Full Face Plain Drilled BS10 Table D & E

Code	Size (")
0812FF40200	½"
0812FF40250	¾"
0812FF40320	1"
0812FF40400	1¼"
0812FF40500	1½"
0812FF40630	2"
0812FF40900	3"
0812FF4110E*	4"
0812FF41100**	4"

Available in * 4 hole Table D or ** 8 hole Table

Full Face Flange PN16

Code	Size (")
0812FFN0200	½"
0812FFN0250	¾"
0812FFN0320	1"
0812FFN0400	1¼"
0812FFN0500	1½"
0812FFN0630	2"
0812FFN0750	2½"
0812FFN0900	3"
0812FFN1100	4"
0812FFN1600	6"

Blank Flange Drilled Table D & E

Code	Size (")
0812FCD0320	1"
0812FCD0500	1½"
0812FCD0630	2"
0812FCD0900	3"
0812FCD110E	4"
0812FCD1100	5"
0812FCD1600	6"
0812FCE2250	8"

Blank Flange Drilled PN16

Code	Size (")
0812FCN0200	½"
0812FCN0250	½"
0812FCN0320	1"
0812FCN0400	1¼"
0812FCN0500	1½"
0812FCN0630	2"
0812FCN0900	3"
0812FCN1100	4"
0812FCN1400	5"
0812FCN1600	6"
0812FCN2250	8"

Blank Flange Undrilled

Code	Size (")
0812FCP0200	½"
0812FCP0630	2"
0812FCP0900	3"
0812FCP1100	4"
0812FCP1600	6"

Stub Flange Serrated Face

Code	Size (")
0812QR40200	½"
0812QR40250	¾"
0812QR40320	1"
0812QR40400	1¼"
0812QR40500	1½"
0812QR40630	2"
0812QR40750	2½"
0812QR40900	3"
0812QR41100	4"
0812QR41400	5"
0812QR41600	6"
0812QR42250	8"
0812QR42800	10"
0812QR43150	12"

Backing Ring Galvanised Mild Steel Drilled PN16

Code	Size (")
0812GBR4020N	½"
0812GBR4025N	¾"
0812GBR4032N	1"
0812GBR4040N	1¼"
0812GBR4050N	1½"
0812GBR4063N	2"
0812GBR4075N	2½"
0812GBR4090N	3"
0812GBR4110N	4"
0812GBR4140N	5"
0812GBR4160N	6"
0812GBR422DN	8"
0812GBR4225N	8"
0812GBR4280N	10"
0812GBR4315N	12"

Backing Ring Galvanised Mild Steel Drilled ASA150

Code	Size (")
0812GBR4020A	½"
0812GBR4025A	¾"
0812GBR4032A	1"
0812GBR4040A	1¼"
0812GBR4050A	1½"
0812GBR4063A	2"
0812GBR4075A	2½"
0812GBR4090A	3"
0812GBR4110A	4"
0812GBR4140A	5"
0812GBR4160A	6"
0812GBR4225A	8"
0812GBR4315A	12"

Backing Ring Galvanised Mild Steel Drilled BS10 Table D

Code	Size (")
0812GBR40200	½"
0812GBR40250	¾"
0812GBR40320	1"
0812GBR40400	1¼"
0812GBR40500	1½"
0812GBR40630	2"
0812GBR40750	2½"
0812GBR40900	3"
0812GBR4110E	4" E
0812GBR41100	4" D
0812GBR41400	5"
0812GBR41600	6"
0812GBR42250	8"
0812GBR42800	10"
0812GBR43150	12"

Gasket - Full Face Drilled BS10 Table D or E

Code	Size (")
0812EGFF0200	½"
0812EGFF0250	¾"
0812EGFF0320	1"
0812EGFF0400	1¼"
0812EGFF0500	1½"
0812EGFF110E	4" E
0812EGFF1100	4" D
0812EGFF0900	3"
0812EGFF110E	4"
0812EGFF1100	4"
0812EGFF1600	6"

Gasket - Full Face Drilled PN16

Code	Size (")
0812GFN0200	½"
0812GFN0250	¾"
0812GFN0320	1"
0812GFN0400	1¼"
0812GFN0500	1½"
0812GFN0630	2"
0812GFN0750	2½"
0812GFN0900	3"
0812GFN1100	4"
0812GFN1400	5"
0812GFN1600	6"

PVC-u Accessories Imperial

Pipe Bracket

Code	Size (")
0812ST40160	⅜"
0812ST40200	½"
0812ST40250	¾"
0812ST40320	1"

Pipe Bracket with Strap

Code	Size (")
0812ST40400	1¼"
0812ST40500	1½"
0812ST40630	2"
0812ST40750	2½"
0812ST40900	3"
0812ST41100	4"

Bend Long Radius 90°

Code	Size (")
0812LU40400	1¼"
0812LU40630	2"
0812LU40900	3"
0812LU41100	4"
0812LU41400	5"
0812LU41600	6"
0812LU42250	8"

Bend Long Radius 45°

Code	Size (")
0812LY40320	1"
0812LY40400	1¼"
0812LY40630	2"
0812LY40900	3"
0812LY41100	4"
0812LY41600	6"

Bend Long Radius 22.5°

Code	Size (")
0812LT40400	1¼"
0812LT40500	1½"
0812LT40750	2½"
0812LT40900	3"
0812LT41100	4"
0812LT41600	6"

PVC-u Valves Industrial - Plain Imperial

Double Union Ball Valve Plain with EPDM Seals

Code	Size (")
08121110200	½"
08121110250	¾"
08121110320	1"
08121110400	1¼"
08121110500	1½"
08121110630	2"

Single Union Ball Valve Plain with EPDM Seals

Code	Size (")
08123070160	⅜"
08123070200	½"
08123070250	¾"
08123070320	1"
08123070400	1¼"
08123070500	1½"
08123070630	2"

Double Union Ball Valve Plain with EPDM Seals

Code	Size (“)
08123110160	⅜"
08123110200	½"
08123110250	¾"
08123110320	1"
08123110400	1¼"
08123110500	1½"
08123110630	2"
08123110750	2½"
08123110900	3"
08123111100	4"

Butterfly Valve EPDM Seals

Code	Size (“)
0812M8000500	1½"
0812M8000630	2"
0812M8000750	2½"
0812M8000900	3"
0812M8001100	4"
0812M8001400	5"
0812M8001600	6"
0812M8002250	8"
0812M8002800	10"
0812M8003150	12"

PVC-u Valves Industrial - Threaded Imperial

Double Union Ball Valve BSP with EPDM Seals

Code	Size (“)
08121120200	½"
08121120250	¾"
08121120320	1"
08121120400	1¼"
08121120500	1½"
08121120630	2"

Double Union Ball Valve Threaded with EPDM Seals

Code	Size (“)
08123120160	⅜"
08123120200	½"
08123120250	¾"
08123120320	1"
08123120400	1¼"
08123120500	1½"
08123120630	2"
08123120750	2½"
08123120900	3"
08123121100	4"

Single Union Ball Valve Threaded with EPDM Seals

Code	Size (“)
08123080160	⅜"
08123080200	½"
08123080250	¾"
08123080320	1"
08123080400	1¼"
08123080500	1½"
08123080630	2"

PVC-u Valves Economy - Plain Imperial

Double Union Ball Valve Plain with EPDM Seals

Code	Size (“)
08123220160	⅜"
08123220200	½"
08123220250	¾"
08123220320	1"
08123220400	1¼"
08123220500	1½"
08123220630	2"
08123220750	2½"
08123220900	3"
08123221100	4"

Single Union Ball Valve Plain with EPDM Seals

Code	Size (“)
08123020160	⅜"
08123020200	½"
08123020250	¾"
08123020320	1"
08123020400	1¼"
08123020500	1½"
08123020630	2"
08123020750	2½"
08123020900	3"
08123021100	4"

PVC-u Valves Economy - Threaded Imperial

Double Union Ball Valve Threaded with EPDM Seals

Code	Size (“)
08123210160	⅜"
08123210200	½"
08123210250	¾"
08123210320	1"
08123210400	1¼"
08123210500	1½"
08123210630	2"
08123210750	2½"
08123210900	3"
08123210110	4"

Single Union Ball Valve Male x Female Threaded with EPDM Seals

Code	Size (“)
08123030160	⅜"
08123030200	½"
08123030250	¾"
08123030320	1"
08123030400	1¼"
08123030500	1½"
08123030630	2"

Single Union Ball Valve Compression to Female Threaded with EPDM Seals

Code	Size (“)
0812305016A	⅜ x 16
0812305020B	½ x 20
0812305025C	¾ x 25
0812305032D	1 x 32
0812305040E	1¼ x 40
0812305050F	1½ x 50
0812305063G	2 x 63

Single Union Ball Valve Threaded with EPDM Seals

Code	Size (“)
08123010160	⅜"
08123010200	½"
08123010250	¾"
08123010320	1"
08123010400	1¼"
08123010500	1½"
08123010630	2"
08123010750	2½"
08123010900	3"
08123011100	4"

PVC-u Non Return Valves Imperial

Double Union Ball Non Return Plain with EPDM Seals

Code	Size (")
081231N0160	⅜"
081231N0200	½"
081231N0250	¾"
081231N0320	1"
081231N0400	1¼"
081231N0500	1½"
081231N0630	2"

Double Union Ball Non Return Threaded with EPDM Seals

Code	Size (")
081232N0160	⅜"
081232N0200	½"
081232N0250	¾"
081232N0320	1"
081232N0400	1¼"
081232N0500	1½"
081232N0630	2"

Wafer Check Valve EPDM Seals

Code	Size (")
0812MCLP0500	1½"
0812MCLP0630	2"
0812MCLP0750	2½"
0812MCLP0900	3"
0812MCLP1100	4"
0812MCLP1400	5"
0812MCLP1600	6"
0812MCLP2250	8"
0812MCLP2800	10"
0812MCLP3150	12"

Spring Check Valve Threaded

Code	Size (")
08122010250	¾"
08122010320	1"
08122010400	1¼"
08122010500	1½"
08122010630	2"
08122010900	3"

Foot Valve Filter Threaded

Code	Size (")
0812FLT0250	¾"
0812FLT0320	1"
0812FLT0400	1¼"
0812FLT0500	1½"
0812FLT0630	2"

Modular Manifold System

Manufactured from PVC-U material allowing up to four outlets from one inlet
Modular components are simply solvent welded together
10 bar pressure rated
Available with solvent weld spigot & BSP threadedends

4 x outlet

3 x outlet

2 x outlet

PVC-u Actuated Valves Imperial

Pneumatically Acutated Ball Valve Spring Return with EPDM Seals

Code	Size (")
0812AAVS0200	½"
0812AAVS0250	¾"
0812AAVS0320	1"
0812AAVS0400	1¼"
0812AAVS0500	1½"
0812AAVS0630	2"

Pneumatically Acutated Butterfly Valve Double Acting with EPDM Seals

Code	Size (")
0812AAFD0750	2½"
0812AAFD0900	3"
0812AAFD1100	4"
0812AAFD1400	5"
0812AAFD1600	6"
0812AAFD2250	8"

Pneumatically Acutated Ball Valve Double Acting with EPDM Seals

Code	Size (")
0812AAVD0200	½"
0812AAVD0250	¾"
0812AAVD0320	1"
0812AAVD0400	1¼"
0812AAVD0500	1½"
0812AAVD0630	2"

Electrically Actuated Ball Valve EPDM Seals 24V DC 110V/220V AC

Code	Size (")
0812AEBV0200	½"
0812AEBV0250	¾"
0812AEBV0320	1"
0812AEBV0400	1¼"
0812AEBV0500	1½"
0812AEBV0630	2"

Pneumatically Acutated Butterfly Valve Spring Return with EPDM Seals

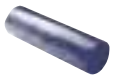
Code	Size (")
0812AAFS0750	2½"
0812AAFS0900	3"
0812AAFS1100	4"
0812AAFS1400	5"
0812AAFS1600	6"
0812AAFS2250	8"

Valve Acutator Brackets

Code	Size (")
0812MKIT0200	½"
0812MKIT0250	¾"
0812MKIT0320	1"
0812MKIT0400	1¼"
0812MKIT0500	1½"
0812MKIT0630	2"

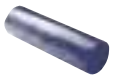
PVC-u Pipe Metric

PVC-u Pressure Pipe 10 bar Plain End x 5 meter



Code	Size (mm)
0823MP02010PE	20
0823MP04010PE	40
0823MP07510PE	75
0823MP11010PE	110
0823MP16010PE	160
0823MP22510PE	225

PVC-u Pressure Pipe 16 bar Plain End x 5 meter



Code	Size (mm)
0823MP01616PE	16
0823MP02016PE	20
0823MP02516PE	25
0823MP03216PE	32
0823MP04016PE	40
0823MP05016PE	50
0823MP06316PE	63
0823MP07516PE	75
0823MP09016PE	90
0823MP11016PE	110
0823MP12516PE	125
0823MP16016PE	160

PVC-u Plain Fittings Metric

Socket Plain

Code	Size (mm)
0812RMA10160	16
0812RMA10200	20
0812RMA10250	25
0812RMA10320	32
0812RMA10400	40
0812RMA10500	50
0812RMA10630	63
0812RMA10750	75
0812RMA10900	90
0812RMA11100	110
0812RMA11250	125
0812RMA11400	140
0812RMA11600	160
0812RMA12000	200
0812RMA12250	225
0812RMA12500	250
0812RMA12800	280
0812RMA13150	315

Tee 90° Plain

Code	Size (mm)
0812RTI10160	16
0812RTI10200	20
0812RTI10250	25
0812RTI10320	32
0812RTI10400	40
0812RTI10500	50
0812RTI10630	63
0812RTI10750	75
0812RTI10900	90
0812RTI11100	110
0812RTI11250	125
0812RTI11400	140
0812RTI11600	160
0812RTI12000	200
0812RTI12250	225
0812RTI12500	250
0812RTI12800	280
0812RTI13150	315

End Cap Plain

Code	Size (mm)
0812RCA10160	16
0812RCA10200	20
0812RCA10250	25
0812RCA10320	32
0812RCA10400	40
0812RCA10500	50
0812RCA10630	63
0812RCA10750	75
0812RCA10900	90
0812RCA11100	110
0812RCA11250	125
0812RCA11400	140
0812RCA11600	160
0812RCA12000	200

Elbow 45° Plain

Code	Size (mm)
0812RGY10160	16
0812RGY10200	20
0812RGY10250	25
0812RGY10320	32
0812RGY10400	40
0812RGY10500	50
0812RGY10630	63
0812RGY10750	75
0812RGY10900	90
0812RGY11100	110
0812RGY11250	125
0812RGY11400	140
0812RGY11600	160
0812RGY12000	200
0812RGY12250	225
0812RGY12500	250
0812RGY12800	280
0812RGY13150	315

Bend 90° Plain

Code	Size (mm)
0812RCU10200	20
0812RCU10250	25
0812RCU10320	32
0812RCU10400	40
0812RCU10500	50
0812RCU10630	63
0812RCU10750	75
0812RCU10900	90
0812RCU11100	110

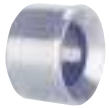
Tee 45° Plain

Code	Size (mm)
0812RTY10320	32
0812RTY10400	40
0812RTY10500	50
0812RTY10630	63

Elbow 90° Plain

Code	Size (mm)
0812RGO10160	16
0812RGO10200	20
0812RGO10250	25
0812RGO10320	32
0812RGO10400	40
0812RGO10500	50
0812RGO10630	63
0812RGO10750	75
0812RGO10900	90
0812RGO11100	110
0812RGO11250	125
0812RGO11400	140
0812RGO11600	160
0812RGO12000	200
0812RGO12250	225
0812RGO12500	250
0812RGO12800	280
0812RGO13150	315

Reducing Bush Plain



Code	Size (mm)
0812RRC1020A	20 x 16
0812RRC1025A	25 x 16
0812RRC1025B	25 x 20
0812RRC1032A	32 x 16
0812RRC1032B	32 x 20
0812RRC1032C	32 x 25
0812RRC1040B	40 x 20
0812RRC1040C	40 x 25
0812RRC1040D	40 x 32
0812RRC1050C	50 x 25
0812RRC1050D	50 x 32
0812RRC1050E	50 x 40
0812RRC1063D	63 x 32
0812RRC1063E	63 x 40
0812RRC1063F	63 x 50
0812RRC1075E	75 x 40
0812RRC1075F	75 x 50
0812RRC1075G	75 x 63
0812RRC1090F	90 x 50
0812RRC1090G	90 x 63
0812RRC1090H	90 x 75
0812RRC1110G	110 x 63
0812RRC1110H	110 x 75
0812RRC1110I	110 x 90
0812RRC1125H	125 x 75
0812RRC1125I	125 x 90
0812RRC1125L	125 x 110
0812RRC1140I	140 x 90
0812RRC1140L	140 x 110
0812RRC1140M	140 x 125
0812RRC1160L	160 x 110
0812RRC1160M	160 x 125
0812RRC1160N	160 x 140
0812RRC1200O	200 x 160
0812RRC1225O	225 X 160
0812RRC1225P	225 x 200
0812RRC1250O	250 x 160

Reducing Bush Plain (contd)

Code	Size (mm)
0812RRC1250P	250 x 200
0812RRC1250Q	250 x 225
0812RRC1280Q	280 x 225
0812RRC1315P	315 x 200
0812RRC1315Q	315 x 225
0812RRC1315R	315 x 250
0812RRC1315S	315 x 280

Union Plain

Code	Size (mm)
0812RBO10160	16
0812RBO10200	20
0812RBO10250	25
0812RBO10320	32
0812RBO10400	40
0812RBO10500	50
0812RBO10630	63
0812RBO10750	75
0812RBO10900	90
0812RBO11100	110

Reducing Tee Plain

Code	Size (mm)
0812RTR1020A	20 x 16
0812RTR1025A	25 x 16
0812RTR1025B	25 x 20
0812RTR1032A	32 x 16
0812RTR1032B	32 x 20
0812RTR1032C	32 x 25
0812RTR1040A	40 x 16
0812RTR1040B	40 x 20
0812RTR1040C	40 x 25
0812RTR1040D	40 x 32
0812RTR1050B	50 x 20
0812RTR1050C	50 x 25
0812RTR1050D	50 x 32
0812RTR1050E	50 x 40
0812RTR1063C	63 x 25
0812RTR1063D	63 x 32
0812RTR1063E	63 x 40
0812RTR1063F	63 x 50
0812RTR1075D	75 x 32
0812RTR1075E	75 x 40
0812RTR1075F	75 x 50
0812RTR1075G	75 x 63
0812RTR1090E	90 x 40
0812RTR1090F	90 x 50
0812RTR1090G	90 x 63
0812RTR1090H	90 x 75
0812RTR1110F	110 x 50
0812RTR1110G	110 x 63
0812RTR1110H	110 x 75
0812RTR1110I	110 x 90
0812RTR1160L	160 x 110

Reducing Piece Male Plain/Female Plain

Code	Size (mm)
0812RRL1140L	140 x 110
0812RRL1160L	160 x 110

Reducing Socket Plain

Code	Size (mm)
0812RMR1020A	20 x 16
0812RMR1025B	25 x 20
0812RMR1032C	32 x 25
0812RMR1040D	40 x 32
0812RMR1050E	50 x 40
0812RMR1063F	63 x 50
0812RMR1075G	75 x 63
0812RMR1090H	90 x 75
0812RMR1110I	110 x 90
0812RMR1125L	125 x 110
0812RMR1140L	140 x 110

Cross Tee Plain

Code	Size (mm)
0812RCR10250	25
0812RCR10320	32
0812RCR10400	40
0812RCR10500	50
0812RCR10630	63

PVC-u Plain x Threaded Fittings Metric

Socket Plain x Threaded

Code	Size
0812RMA3016A	16 x ⅜"
0812RMA3020B	20 x ½"
0812RMA3025C	25 x ¾"
0812RMA3032D	32 x 1"
0812RMA3040E	40 x 1¼"
0812RMA3050F	50 x 1½"
0812RMA3063G	63 x 2"
0812RMA3075H	75 x 2½"
0812RMA3090I	90 x 3"
0812RMA3110L	110 x 4"

Tee 90° Plain x Threaded

Code	Size
0812RTI3016A	16 x ⅜"
0812RTI3020B	20 x ½"
0812RTI3025C	25 x ¾"
0812RTI3032D	32 x 1"
0812RTI3040E	40 x 1¼"
0812RTI3050F	50 x 1½"
0812RTI3063G	63 x 2"
0812RTI3075H	75 x 2½"
0812RTI3090I	90 x 3"
0812RTI3110L	110 x 4"

Elbow 90° Plain x Threaded

Code	Size
0812RGO3016A	16 x ⅜"
0812RGO3020B	20 x ½"
0812RGO3025C	25 x ¾"
0812RGO3032D	32 x 1"
0812RGO3040E	40 x 1¼"
0812RGO3050F	50 x 1½"
0812RGO3063G	63 x 2"
0812RGO3075H	75 x 2½"
0812RGO3090I	90 x 3"
0812RGO3110L	110 x 4"

Union Plain x Threaded

Code	Size
0812RBO3016A	16 x ⅜"
0812RBO3020B	20 x ½"
0812RBO3025C	25 x ¾"
0812RBO3032D	32 x 1"
0812RBO3040E	40 x 1¼"
0812RBO3050F	50 x 1½"
0812RBO3063G	63 x 2"
0812RBO3075H	75 x 2½"
0812RBO3090I	90 x 3"
0812RBO3110L	110 x 4"

Adaptor Plain x Threaded Female

Code	Size
0812RAF3020B	20 x ½
0812RAF3020C	20 x ¾
0812RAF3025B	25 x ½
0812RAF3025C	25 x ¾
0812RAF3025D	25 x 1
0812RAF3032C	32 x ¾
0812RAF3032D	32 x 1
0812RAF3040D	40 x 1
0812RAF3040E	40 x 1¼
0812RAF3050F	50 x 1½
0812RAF3050G	50 x 2
0812RAF3063G	63 x 2
0812RAF3075G	75 x 2
0812RAF3075H	75 x 2½
0812RAF3075I	75 x 3
0812RAF3090H	90 x 2½
0812RAF3090I	90 x 3
0812RAF3090L	90 x 4
0812RAF3110I	110 x 3
0812RAF3110L	110 x 4

Adaptor Plain x Threaded with Metal Reinforcing Ring

Code	Size
0812RMM3016A	16 x ⅜"
0812RMM3020B	20 x ½"
0812RMM3025C	25 x ¾"
0812RMM3032D	32 x 1"
0812RMM3040E	40 x 1¼"
0812RMM3050F	50 x 1½"
0812RMM3063G	63 x 2"

Adaptor Plain Female x Threaded Male Spigot

Code	Size
0812RAM3012A	12 x 16 x ⅜
0812RAM3016A	16 x 20 x ⅜
0812RAM3016B	16 x 20 x ½
0812RAM3020A	20 x 25 x ⅜
0812RAM3020B	20 x 25 x ½
0812RAM3020C	20 x 25 x ¾
0812RAM3025B	25 x 32 x ½
0812RAM3025C	25 x 32 x ¾
0812RAM3025D	25 x 32 x ½
0812RAM3032C	32 x 40 x ¾
0812RAM3032D	32 x 40 x ¾
0812RAM3032E	32 x 40 x ¾
0812RAM3040D	40 x 50 x 1
0812RAM3040E	40 x 50 x 1¼
0812RAM3040F	40 x 50 x 1½
0812RAM3050E	50 x 63 x 1¼
0812RAM3050F	50 x 63 x 1½
0812RAM3050G	50 x 63 x 2
0812RAM3063F	63 x 75 x 1½
0812RAM3063G	63 x 75 x 2
0812RAM3063H	63 x 75 x 2½
0812RAM3075G	75 x 90 x 2
0812RAM3075H	75 x 90 x 2½
0812RAM3075I	75 x 90 x 3
0812RAM3090H	90 x 110 x 2½
0812RAM3090I	90 x 110 x 3
0812RAM3090L	92 x 110 x 4
0812RAM3110I	110 x 125 x 3
0812RAM3110L	110 x 125 x 4

Adaptor Plain x Threaded with Metal Reinforcing Ring

Code	Size
0812RGM3016A	16 x ⅜"
0812RGM3020B	20 x ½"
0812RGM3025C	25 x ¾"
0812RGM3032D	32 x 1"
0812RGM3040E	40 x 1¼"
0812RGM3050F	50 x 1½"
0812RGM3063G	63 x 2"

PVC-u Plain x Threaded Fittings Metric (contd)

Hose Adaptor BSP Threaded x Metric

Code	Size
0812PO3016A	16 x ⅜
0812PO3020B	20 x ½
0812PO3025C	25 x ¾
0812PO3032D	32 x 1
0812PO3040E	40 x 1¼
0812PO3050F	50 x 1½
0812PO3063G	63 x 2

Adaptor Plain/Threaded with Metal Reinforcing Ring

Code	Size
0812RRM3020B	20 x ½"
0812RRM3025B	25 x ½"
0812RRM3025C	25 x ¾"
0812RRM3032C	32 x ¾"
0812RRM3032D	32 x 1"
0812RRM3040D	40 x 1"
0812RRM3040E	40 x 1¼"
0812RRM3050F	50 x 1½"
0812RRM3063G	63 x 2"

PVC-u Flanges Metric

Stub Flange Serrated Face

Code	Size (mm)
0812RQR10200	20
0812RQR10250	25
0812RQR10320	32
0812RQR10400	40
0812RQR10500	50
0812RQR10630	63
0812RQR10750	75
0812RQR10900	90
0812RQR11100	110
0812RQR11250	125
0812RQR11400	140
0812RQR11600	160
0812RQR12000	200
0812RQR12250	225
0812RQR12500	250
0812RQR12800	280
0812RQR13150	315

Blank Flange Drilled BS 4504 NP16

Code	Size (mm)
0812RFC10200	20
0812RFC10250	25
0812RFC10320	32
0812RFC10400	40
0812RFC10500	50
0812RFC10630	63
0812RFC10750	75
0812RFC10900	90
0812RFC11100	110
0812RFC11600	160

Full Face Flange Plain/ Drilled BS 4504 NP 10/16

Code	Size (mm)
0812RFF10200	20
0812RFF10250	25
0812RFF10320	32
0812RFF10400	40
0812RFF10500	50
0812RFF10630	63
0812RFF10750	75
0812RFF10900	90
0812RFF11100	110

Loose Flange Drilled BS 4504 NP16

Code	Size (mm)
0812RFL10200	20
0812RFL10250	25
0812RFL10320	32
0812RFL10400	40
0812RFL10500	50
0812RFL10630	63
0812RFL10750	75
0812RFL10900	90
0812RFL11100	110
0812RFL11250	125
0812RFL11400	140
0812RFL11600	160
0812RFL12000	200
0812RFL12250	225
0812RFL12500	250
0812RFL12800	280
0812RFL13150	315

Backing Ring Galvanised Mild Steel Drilled NP16

Code	Size (mm)
0812GBR10200	20
0812GBR10250	25
0812GBR10320	32
0812GBR10400	40
0812GBR10500	50
0812GBR10630	63
0812GBR10750	75
0812GBR10900	90
0812GBR11100	110
0812GBR11250	125
0812GBR11600	160
0812GBR12000	200
0812GBR12250	225
0812GBR12500	250

Gasket - Stub Flange for QR4 Stubs

Code	Size (mm)
0812GQP0200	20
0812GQP0250	25
0812GQP0320	32
0812GQP0400	40
0812GQP0500	50
0812GQP0630	63
0812GQP0750	75
0812GQP0900	90
0812GQP1100	110
0812GQP1250	125
0812GQP1400	140
0812GQP1600	160
0812GQP2000	200
0812GQP2250	225
0812GQP2500	250
0812GQP2800	280
0812GQP3150	315

PVC-u Accessories Metric

Pipe Bracket

Code	Size (mm)
0812PST10160	16
0812PST10200	20
0812PST10250	25
0812PST10320	32

Pipe Bracket with Strap

Code	Size (mm)
0812PST10400	40
0812PST10500	50
0812PST10630	63
0812PST10750	75
0812PST10900	90
0812PST11100	110

PVC Solvent Cement

Code	Size
0827APS025LTR	¼ Litre
0827PCO0200	½ Litre
0827APSC1LTR	1 Litre

Mek Cleaner

Code	Size
0827ACLR025LTR	¼ Litre
0827CFO0200	½ Litre
0827ACLR1LTR	1 Litre

PVC-u Valves Industrial - Plain Metric

Double Union Ball Valve Plain with EPDM Seals

Code	Size (mm)
0812M1110200	20
0812M1110250	25
0812M1110320	32
0812M1110400	40
0812M1110500	50
0812M1110630	63

Single Union Ball Valve Plain with EPDM Seals

Code	Size (mm)
0812M3070160	16
0812M3070200	20
0812M3070250	25
0812M3070320	32
0812M3070400	40
0812M3070500	50
0812M3070630	63

Double Union Ball Valve Plain with EPDM Seals

Code	Size (mm)
0812M3110160	16
0812M3110200	20
0812M3110250	25
0812M3110320	32
0812M3110400	40
0812M3110500	50
0812M3110630	63
0812M3110750	75
0812M3110900	90
0812M3111100	110

PVC-u Valves Economy - Plain Metric

Single Union Ball Valve Plain with EPDM Seals

Code	Size (mm)
0812M3020160	16
0812M3020200	20
0812M3020250	25
0812M3020320	32
0812M3020400	40
0812M3020500	50
0812M3020630	63
0812M3020750	75
0812M3020900	90
0812M3021100	110

Double Union Ball Valve Plain with EPDM Seals

Code	Size (mm)
0812M3220160	16
0812M3220200	20
0812M3220250	25
0812M3220320	32
0812M3220400	40
0812M3220500	50
0812M3220630	63
0812M3220750	75
0812M3220900	90
0812M3221100	110

PVC-u Non Return Valves Metric

Double Union Ball Non Return Plain with EPDM Seals

Code	Size (mm)
0812M31N0160	16
0812M31N0200	20
0812M31N0250	25
0812M31N0320	32
0812M31N0400	40
0812M31N0500	50
0812M31N0630	63

For more valves see the PVC-u Imperial section on page 210.

Standards

Imperial PVC-u pressure pipe

Dyka produce PVC-u pressure pipe in accordance with all the principal European quality standards.

All Dyka manufacturing facilities are accredited to either ISO 9001 or 9002 (EN 29001/2 1987, BS5750 Parts 1 and 2). This defines the quality management systemunder which the manufacturing and support departments operate. It provides the overall framework within which production of pipes to a particular specification, such as BS EN1452 can take place.

Dyka manufactured PVC-u products are specifically certified against the UK requirements of:

W.R.A.S

B.S.I.

BSI Kitemark

All imperial pressure pipe within the Dyka pipe system is manufactured in accordance with the requirements of BS EN1452 specification for "Plastic Piping Systems for water supply.

Dyka are permitted to affix the British Standards Institute "Kitemark" to these products under B.S.I. Licence numbers 80516.

Dyka have the capability to manufacture to a number of the European standards and in many cases hold quality approvals against these. Details of these and copies of all certificates are available on request.

All quality control testing for conformity with the various production standards is carried out by the Dyka in house laboratory. All laboratory operations are monitored by the British Standards Institute.

Imperial PVC-u pressure fittings

BS 4346 part 1

Threaded fittings

BS21 ISO7 DIN 2199

Blue metric pipe

Where specified Dyka, blue metric pipework is manufactured in accordance with the requirements of the water industry specification WIS 4.31.06.

Standard metric pipe

Unless otherwise specified, all Dyka, standard metric pipework is manufactured to the Dutch water industry standard KIWA 49 (revision 1). Dyka pipe is certified to this standard by the KIWA quality organisation.

Installation Guide

See page 236.

ABS Pressure Pipelines

JDP offers a complete range of imperial size ABS (Acrylonitrile - Butadiene – Styrene) pressure pipe, fittings and valves. ABS is a rigid pressure piping system renowned for its high impact strength and durability, which combine to give exceptional toughness. It is suitable for use over a wide temperature range from -40°C to 70°C at pressures up to 15 bar. ABS is especially useful at sub zero temperatures, where it retains high levels of impact strength.

ABS is resistant to a wide range of abrasive slurries, which can damage steel or other pipe materials. It is non-toxic and taint free, and is in widespread use for food products, soft drinks and high purity water. All material used conforms to the toxicological requirements of the British Plastics Federation/British Industrial Biological Research Association Code of Practice for Food Usage 45/5. It also fulfils the E.E.C. requirements for plastics materials in contact with foodstuffs.

ABS systems are lightweight, rigid, and easy to install. Joints are made using solvent cement, which requires no special tools.

Pressure Ratings

Imperial pressure pipe is often referred to by its "Class", whilst fittings often perform to different pressure ratings depending on size. The following table explains the range of pressure ratings available. All pressure ratings given below are at 20°C

Product	Size (")	Pressure Rating
ABS fittings – solvent cement	½ - 4	15 bar
ABS fittings – solvent cement	6	12 bar
ABS fittings – solvent cement	8	9 bar
ABS pipe class C	1 – 8	9 bar
ABS pipe class T	½ - 2	10 bar
ABS pipe class D	6	12 bar
ABS pipe class E	½ - 4	15 bar

Features and benefits

- Tough and durable
- Corrosion resistant
- Abrasion resistant
- Smooth bore – improved flow and reduced scaling
- Lightweight
- WRAS approved
- Proven use for food stuff
- -40°C to +70°C temperature range
- Rapid installation

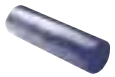
Applications

- Chilled water
- Boosted cooled water
- Potable water
- Low temperature cooling
- De mineralized water
- Swimming pool treatment

For other applications, please refer to your local JDP branch

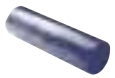
ABS Pipe

ABS Pressure Pipe Class C Plain End x 6 metre



Code	Size (")
0822PAC032A	1"
0822PAC040A	1¼"
0822PAC050A	1½"
0822PAC063A	2"
0822PAC075A	2½"
0822PAC090A	3"
0822PAC110A	4"
0822PAC140A	5"
0822PAC160A	6"
0822PAC225A	8"

ABS Pressure Pipe Class D Plain End x 6 metre



Code	Size (")
0822PAD160A	6"

ABS Pressure Pipe Class E Plain End x 6 metre

Code	Size (")
0822PAE016A	⅜"
0822PAE020A	½"
0822PAE025A	¾"
0822PAE032A	1"
0822PAE040A	1¼"
0822PAE050A	1½"
0822PAE063A	2"
0822PAE090A	3"
0822PAE110A	4"

ABS Pressure Pipe Class T Plain End x 6 metre

Code	Size (")
0822PAT016A	⅜"
0822PAT020A	½"
0822PAT025A	¾"
0822PAT032A	1"
0822PAT040A	1¼"
0822PAT050A	1½"
0822PAT063A	2"

ABS Plain Fittings

Socket Plain

Code	Size (")
0819MA40200	½"
0819MA40250	¾"
0819MA40320	1"
0819MA40400	1¼"
0819MA40500	1½"
0819MA40630	2"
0819MA40750	2½"
0819MA40900	3"
0819MA41100	4"
0819MA41400	5"
0819MA41600	6"
0819MA42250	8"

Elbow 90° Plain

Code	Size (")
0819GO40200	½"
0819GO40250	¾"
0819GO40320	1"
0819GO40400	1¼"
0819GO40500	1½"
0819GO40630	2"
0819GO40750	2½"
0819GO40900	3"
0819GO41100	4"
0819GO41400	5"
0819GO41600	6"
0819GO42250	8"

Elbow 45° Plain

Code	Size (")
0819GY40200	½"
0819GY40250	¾"
0819GY40320	1"
0819GY40400	1¼"
0819GY40500	1½"
0819GY40630	2"
0819GY40750	2½"
0819GY40900	3"
0819GY41100	4"
0819GY41400	5"
0819GY41600	6"
0819GY42250	8"

Bend 90° Plain

Code	Size (")
0819CU40200	½"
0819CU40250	¾"
0819CU40320	1"
0819CU40400	1¼"
0819CU40500	1½"
0819CU40630	2"
0819CU40900	3"
0819CU41100	4"

Tee Plain

Code	Size (")
0819TI40200	½"
0819TI40250	¾"
0819TI40320	1"
0819TI40400	1¼"
0819TI40500	1½"
0819TI40630	2"
0819TI40750	2½"
0819TI40900	3"
0819TI41100	4"
0819TI41400	5"
0819TI41600	6"
0819TI42250	8"

Union Plain

Code	Size (")
0819BO40200	½"
0819BO40250	¾"
0819BO40320	1"
0819BO40400	1¼"
0819BO40500	1½"
0819BO40630	2"
0819BO40750	2½"
0819BO40900	3"
0819BO41100	4"

Cap Plain

Code	Size (")
0819CA40200	½"
0819CA40250	¾"
0819CA40320	1"
0819CA40400	1¼"
0819CA40500	1½"
0819CA40630	2"
0819CA40750	2½"
0819CA40900	3"
0819CA41100	4"
0819CA41400	5"
0819CA41600	6"
0819CA42250	8"

Reducing Bush Plain

Code	Size (")
0819RC4025B	¾ x ½
0819RC4032B	1 x ½
0819RC4032C	1 x ¾
0819RC4040D	1¼ x 1
0819RC4050C	1½ x ¾
0819RC4050D	1½ x 1
0819RC4050E	1½ x 1¼
0819RC4063D	2 x 1
0819RC4063E	2 x 1¼
0819RC4063F	2 x 1½
0819RC4075G	2½ x 2
0819RC4090F	3 x 1½
0819RC4090G	3 x 2
0819RC4090H	3 x 2½
0819RC4110G	4 x 2
0819RC4110I	4 x 3
0819RC4140L	5 x 4
0819RC4160L	6 x 4
0819RC4225O	8 x 6

ABS Plain x Threaded Fittings

Socket Plain x Threaded

Code	Size (")
0819MA60200	½"
0819MA60250	¾"
0819MA60320	1"
0819MA60400	1¼"
0819MA60500	1½"
0819MA60630	2"
0819MA60750	2½"
0819MA60900	3"
0819MA61100	4"

Elbow 90° Plain x Threaded

Code	Size (")
0819GO60200	½"
0819GO60250	¾"
0819GO60320	1"
0819GO60400	1¼"
0819GO60500	1½"
0819GO60630	2"
0819GO60900	3"

Tank Connector Plain x Threaded

Code	Size (")
0819TC60200	½"
0819TC60250	¾"
0819TC60320	1"
0819TC60400	1¼"
0819TC60500	1½"
0819TC60630	2"
0819TC60750	2½"
0819TC60900	3"
0819TC61100	4"

Tee Plain x Threaded

Code	Size (")
0819TI60200	½"
0819TI60250	¾"
0819TI60320	1"
0819TI60400	1¼"
0819TI60500	1½"
0819TI60630	2"
0819TI60750	2½"
0819TI60900	3"

Reducing Bush Plain x Threaded

Code	Size (“)
0819RC6020A	½" x ⅜"
0819RC6025B	¾" x ½"
0819RC6032C	1" x ¾"

Adaptor Female Plain x Male Threaded

Code	Size (“)
0819AM60200	½"
0819AM60250	¾"
0819AM60320	1"
0819AM60400	1¼"
0819AM60500	1½"
0819AM60630	2"
0819AM60900	3"
0819AM61100	4"

Back Nut Threaded

Code	Size (“)
0819NU20200	½"
0819NU20250	¾"
0819NU20320	1"
0819NU20400	1¼"
0819NU20500	1½"
0819NU20630	2"
0819NU20750	2½"
0819NU2090N	3"
0819NU2110N	4"

Adaptor Male Plain x Female Threaded

Code	Size (mm)
0819AF60200	½"
0819AF60250	¾"
0819AF60320	1"
0819AF60400	1¼"
0819AF60500	1½"
0819AF60630	2"

Barrel Nipple Plain x Threaded

Code	Size (mm)
0819BN60160	⅜"
0819BN60200	½"
0819BN60250	¾"
0819BN60320	1"
0819BN60400	1¼"
0819BN60500	1½"
0819BN60630	2"
0819BN60750	2½"
0819BN60900	3"
0819BN61100	4"

ABS Flanges

Full Face Plain Drilled BS10 Table D & E

Code	Size (“)
0819FF40200	½"
0819FF40250	¾"
0819FF40320	1"
0819FF40400	1¼"
0819FF40500	1½"
0819FF40630	2"
0819FF40900	3"
0819FF4110E**	4"
0819FF41100*	4"

Available in * 4 hole Table D or ** 8 hole Table E

Full Face Flange PN16

Code	Size (“)
0819FFN0200	½"
0819FFN0250	¾"
0819FFN0320	1"
0819FFN0400	1¼"
0819FFN0500	1½"
0819FFN0630	2"
0819FFN0750	2½"
0819FFN0900	3"
0819FFN1100	4"

Blank Flange Drilled Table D & E

Code	Size (“)
0819FCD0630	2"
0819FCD0900	3"
0819FCD1100	4" D
0819FCD110E	4" E
0819FCD1600	6"

Blank Flange Undrilled

Code	Size (“)
0819FCP0630	2"
0819FCP0900	3"
0819FCP1100	4"
0819FCP1600	6"

Backing Ring Galvanised Mild Steel Drilled ASA150

Code	Size (“)
0819BR4020A	½"
0819BR4025A	¾"
0819BR4032A	1"
0819BR4040A	1¼"
0819BR4050A	1½"
0819BR4063A	2"
0819BR4075A	2½"
0819BR4090A	3"
0819BR4110A	4"
0819BR4140A	5"
0819BR4160A	6"
0819BR422DA*	8"

*To suit ABS stub only

Blank Flange Drilled PN16

Code	Size (“)
0819FCN0630	2"
0819FCN0900	3"
0819FCN1100	4"
0819FCN1400	5"
0819FCN1600	6"

Stub Flange Serrated Face

Code	Size (“)
0819QR40200	½"
0819QR40250	¾"
0819QR40320	1"
0819QR40400	1¼"
0819QR40500	1½"
0819QR40630	2"
0819QR40750	2½"
0819QR40900	3"
0819QR41100	4"
0819QR41400	5"
0819QR41600	6"
0819QR42250	8"

Backing Ring Galvanised Mild Steel Drilled BS10 Table D

Code	Size (“)
0819BR40200	½"
0819BR40250	¾"
0819BR40320	1"
0819BR40400	1¼"
0819BR40500	1½"
0819BR40630	2"
0819BR40750	2½"
0819BR40900	3"
0819BR4110E	4" D
0819BR41100	4" E
0819BR41400	5"
0819BR41600	6"
0819BR4225D*	8"

*To suit ABS stub only

Backing Ring Galvanised Mild Steel Drilled PN16

Code	Size (")
0819BR4020N	½"
0819BR4025N	¾"
0819BR4032N	1"
0819BR4040N	1¼"
0819BR4050N	1½"
0819BR4063N	2"
0819BR4075N	2½"
0819BR4090N	3"
0819BR4110N	4"
0819BR4140N	5"
0819BR4160N	6"
0819BR422DN	8"

*To suit ABS stub only

Gasket - Full Face Drilled PN16

Code	Size (")
0819GFN0200	½"
0819GFN0250	¾"
0819GFN0320	1"
0819GFN0400	1¼"
0819GFN0500	1½"
0819GFN0630	2"
0819GFN0750	2½"
0819GFN0900	3"
0819GFN1100	4"
0819GFN1400	5"
0819GFN1600	6"

ABS Accessories

Pipe Bracket

Code	Size (")
0819ST40160	⅜"
0819ST40200	½"
0819ST40250	¾"
0819ST40320	1"

Gasket - Full Face Drilled BS10 Table D or E

Code	Size (")
0819GFF0200	½"
0819GFF0250	¾"
0819GFF0320	1"
0819GFF0400	1¼"
0819GFF0500	1½"
0819GFF0630	2"
0819GFF0750	2½"
0819GFF0900	3"
0819GFF110E	4" E
0819GFF1100	4" D
0819GFF1600	6"

Gasket - Stub Flange for QR4 Stubs

Code	Size (mm)
0819GQP0200	½ x 20
0819GQP0250	¾ x 25
0819GQP0320	1 x 32
0819GQP0400	1¼ x 40
0819GQP0500	1½ x 50
0819GQP0630	2 x 63
0819GQP0750	2½ x 75
0819GQP0900	3 x 90
0819GQP1100	4 x 110
0819GQP1250	125
0819GQP1400	5 x 140
0819GQP1600	6 x 160
0819GQP2000	200
0819GQP2250	8 x 225

Pipe Bracket with Strap

Code	Size (")
0819ST40400	1¼"
0819ST40500	1½"
0819ST40630	2"
0819ST40750	2½"
0819ST40900	3"
0819ST41100	4"

Bend Long Radius 90°

Code	Size (")
0819LU40900	3"
0819LU41100	4"
0819LU41600	6"

Bend Long Radius 45°

Code	Size (")
0819LY40500	1½"
0819LY40630	2"
0819LY40900	3"
0819LY41100	4"

Bend Long Radius 22.5°

Code	Size (")
0819LT40500	1½"
0819LT40750	2½"
0819LT40900	3"
0819LT41100	4"
0819LT41600	6"

ABS Solvent Cement

Code	Size
0819CFO0200	½ Litre

Mek Cleaner

Code	Size
0827ACO0200	½ Litre

ABS Valves Industrial - Plain

Double Union Ball Valve Plain with EPDM Seals

Code	Size (")
08193110200	½"
08193110250	¾"
08193110320	1"
08193110400	1¼"
08193110500	1½"
08193110630	2"
08193110900	3"
08193111100	4"

Standards

JDP ABS pipes and fittings are manufactured in accordance with the following standards:

ABS Pipe
BS 5391 Part 1

ABS Fittings
BS 5392 Part 1
ABS fittings are WRAS approved

Installation Guide

The recommended distance between supports for pipes fixed in a horizontal position and filled with water is given in the table below. If the contents have a specific gravity greater than 1, the distance must be decreased by dividing the recommended centre distance by specific gravity.

HORIZONTAL SUPPORT DISTANCE IN METRES

PIPE SIZE	PVC-U/ABS AT 20°C	PVC-U/ABS AT 50°C	ABS AT 70°C
⅜"	0.8	0.5	0.4
½"	0.9	0.6	0.5
¾"	1.0	0.7	0.6
1"	1.1	0.8	0.7
1¼"	1.2	0.9	0.7
1½"	1.3	1.0	0.7
2"	1.4	1.1	0.8
2½"	1.5	1.2	0.8
3"	1.6	1.2	0.9
4"	1.8	1.3	1.0
5"	2.0	1.5	1.1
6"	2.1	1.6	1.2
8"	2.3	1.8	1.5

NB. For vertical pipes, the support centres shown above can be increased by 50%.

Solvent Cement Jointing

It is recommended that only Dyka solvent cements and cleaning fluid be used in the construction of joints with Dykapipe. When solvent cementing PVC-u pipes it is useful to have a theoretical knowledge of the chemicals and the process. Before making any joint inspect all fittings and lengths of pipe for transit damage.

Solvent cementing process

The Dyka cleaning agent does not only clean and degrease the pipe and fittings, it also penetrates the PVC-u surfaces causing them to swell and create a favourable environment for the subsequent bonding. The adhesive itself also penetrates the surfaces to be bonded and this penetration is improved if the adhesive is kept fluid longer and the surfaces have been pre-treated with the cleaning fluid. In cold weather the penetration takes longer than in warm weather.

- Adhesives are formulated according to their usage and the type of PVC-u to be bonded, only the correct adhesive should therefore be used. It is important to check that the adhesive used is still in good condition. Tins that contain lumps or have a heavy surface film should be discarded. Under no circumstances should cleaning fluid be used as a thinner.
- Always use sufficient adhesive, work it in well and keep it fluid. If a less than perfect fit between the two mating surfaces has to be filled, apply several layers of adhesive, do not allow the last layer to dry before applying the next.
- The two surfaces must be mated in one movement while the adhesive is still wet and the PVC-u is still soft.
- Due to the softening power of the adhesive any excess must be removed, immediately the joint is made.
- Mated surfaces should be left undisturbed for 24 hours to allow the bond to cure.

Jointing procedure

To ensure a good joint the following procedure should be adhered to, also refer to the illustrations in figure 15.

- Check that the pipe end is cut square, chamfer the outside edge, deburr the inner and outer edges of the spigot and socket.
- Make sure the fittings are clean and free from moisture by using Dyka cleaning fluid.
- Mark the spigot with a pencil or felt pen line at a distance equivalent to the depth of the socket. Do not score the pipe or mark with a saw.
- Dry fit the pipe into the socket - an INTERFERENCE fit should be reached before the pencil mark is completely home.
- Remove the spigot form the socket and abrade both mating surfaces with heavy grade emery paper or a bastard rasp on diameters larger than 4"/110mm. Degrease both surfaces with Dyka cleaning fluid. Using the correct Dyka solvent cement (see figure 16) apply an even but not excessive coating to the internal surface of the socket and a more generous coat to the marked pipe end. Where the cement dries before completion (on large diameter pipes or in hot and windy conditions) give the spigot a second coat.
- Push the pipe home and hold firmly for thirty seconds.
- Remove all excess solvent cement as quickly as possible to prevent unwanted chemical attack on exposed joints.
- The joint should not be disturbed or strained for 5 minutes after jointing and 24 hours must be allowed before pressure testing.

Fig 15
Solvent Cement Jointing

1. Cut pipe end square, chamfer to a minimum of 15°, deburr and smooth surface.

2. Clean external surface of spigot and internal surface of socket using DYKA Cleaning Fluid.

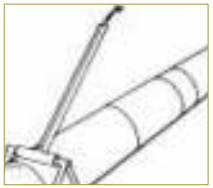
3. Care should be taken to keep both mating surfaces clean.

Extreme conditions

Cold - Under extremely cold conditions, special care must be taken to ensure excess solvent cement is not allowed to enter into the pipeline as this could result in solvent cracking of the pipe.
Hot - In hot weather, particularly when solvent cementing long lengths, the pipe should be well ventilated. In some cases forced ventilation will be necessary.

Fig 16
Cement types & applications

4. Apply correct DYKA Solvent Weld Cement from figure 16 Apply cement axially to pipe surface.



5. Joint pipes, using pipe jack if necessary in a single fluid movement

Nominal size of pipe 16mm	20	25	32	40	40	63	90	110	140	160	200
Nominal size of pipe imperial 3/8"	½"	¾"	1"	1¼"	1½"	2"	3"	4"	5"	6"	8"
Average number joints per 600 litre	350	260	190	140	75	70	60	40	30	25	17

Type of cement	Label	Packing	Application
PVC cement for pressure systems up to 90mm/3" outside diameter	Yellow	Tins 1 litre Tubes 125 gram Tins 1/4 Litre	Small bore pressure systems
PVC cement for pressure systems 4" and above	Brown HD	Tins 1 litre Tins V1/4 Litre	Tropical use. Large diameter systems
PVC cleaning fluid	Grey	Tins 1 litre Tins V1/4 Litre	Degreasing in preparation for bonding

Testing

It is suggested that the following test procedure be followed, after joints have been allowed to dry for the appropriate minimum time (at least 24 hours): the system should be divided conveniently into test sections. Fill the section with cold water making sure that no air pockets remain. Do not pressurise at this stage. Check the system for leaks. If no leaks are apparent check for and remove any remaining air. Increase pressure up to 3 bar. *Do not pressurise further at this stage. Leave the section pressurised for 10 minutes. If the pressure decays, inspect for leaks and rectify as necessary. If the pressure remains constant; slowly increase the hydrostatic pressure to 11⁄2 times the nominal operating pressure. Leave the section pressurised for a period not exceeding 1 hour. During this time the pressure should not change.

Caution

Personnel must stand well clear when pressure testing systems. Similarly, under no circumstances should pressure tests be carried out using pressurised gases. Such a test could be extremely dangerous and does not serve any useful purpose.

***Note:**

If extended times are required to achieve hydrostatic pressure, either leakage has occurred or air remains in the line. Inspect for leakage and if none is apparent, reduce the pressure and check for trapped air, which must be removed before further pressurisation is commenced.
If a leakage source is difficult to establish it is acceptable to pressure the line using air or nitrogen to a maximum pressure of 1.5 bar. Test joints etc. with a soap solution.

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 • Industrial Gas Meter Housings
- Electricity Meter Boxes • Industrial Meters

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 PE80 medium density polyethylene water pipe system suitable for potable (drinking) water distribution.
Yellow PE80 medium density gas pipe system 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.
JDP is also a leader in the distribution of Barrier pipe, a PE80 (MDPE) pipe with a protective aluminium layer for conveying potable water in brownfield / contaminated sites.

Water Service MDPE

JDP supplies in depth stocks of blue potable water, 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 and associated fittings including valves and hydrants 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 application for potable and non potable systems

Water Service MDPE

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

* For larger diameters please see our Civil Engineering & Utilities product specifier

Standards

BS EN12201 Potable Water (BS EN12201 supersedes WIS4-32-17)

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
Couplings	
0911701020	20mm
0911701025	25mm
0911701032	32mm
0911701050	50mm
0911701063	63mm

Code	Description
Reducing Coupling	
0911711025X20	25mm x 20mm
0911711032X20	32mm x 20mm
0911711032X25	32mm x 25mm
0911711050X32	50mm x 32mm
0911711063X50	63mm x 50mm

Plasson Water Service Fittings (contd)

Code	Description
Male Adaptor BSP Thread	
0911702020X1/2	20mm x 1/2"
0911702025X3/4	25mm x 3/4"
0911702032X1	32mm x 1"
091170205011/2	50mm x 1 1/2"
0911702063X2	63mm x 2"

Code	Description
Female Adaptor BSP Thread	
0911703020X1/2	20mm x 1/2"
0911703025X3/4	25mm x 3/4"
0911703032X1	32mm x 1"
091170305011/2	50mm x 1 1/2"
0911703063X2	63mm x 2"

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

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
90° Tee with Female Offtake	
0911714020X1/2	20mm x 1/2"
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 Female 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
90° Reducing Tee	
0911734025X20	25mm x 20mm
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	
0911743615X20	15mm x 20mm
0911743615X25	15mm x 25mm
0911743622X25	22mm x 25mm
0911743628X32	28mm x 32mm
0911743615X20	15mm x 20mm

Code	Description
Compression Stopcock BS5433	
0911340720	20mm
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 Coupling	
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	
0911905020	20mm
0911905025	25mm
0911905032	32mm

Plasson Water Service Fittings (contd)

Code	Description
Plastic Wall Plate Elbow	
0911775020	20mm
0911775025	25mm

Code	Description
Brass Wall Plate Elbow	
091190552012	20mm X $^{1}/_{2}$"
091190552534	25mm X $^{3}/_{4}$"

Code	Description
Bib Tap - Ball Type	
09112100X1/2	$^{1}/_{2}$"
09112100X3/4	$^{3}/_{4}$"

Code	Description
Bib Tap Hose Union with Double Check Valve	
09119056X1/2	$^{1}/_{2}$"
09119056X3/4	$^{3}/_{4}$"

Code	Description
DZR Double Check Valve	
09119057X3/4	$^{3}/_{4}$"
09119057X1	1"

Code	Description
Pipe Shears	
091160125	20/32mm
091160126	20/63mm

Code	Description
Pipe Squeeze Off Tool	
091160123	16/32mm
09116012332/63	32/63mm

Code	Description
Plasson Wrench	
0911799016/40	16/40mm
0911799040/75	40/75mm

Code	Description
Chamfer Tool	
0911796020/63	20/63mm

Code	Description
Universal Strap Wrench	
09117992	20/90mm

A full range of adaptors is also available to provide exceptional adaptability

Standards

WRAS APPROVED PRODUCT

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 property 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
0905BB1	Sealed underground water meter boundary box and stop valve
09113514*	Underground water meter boundary box and stop valve.
0904BB6	Sealed contaminated ground water meter boundary box and stop valve

* Not telescopic

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.

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 multiple meter reading

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 valve 3 / 4 / 6 port
09113530008 /9 /10	Manifold Kit – end feed with 1/4 turn ball valve 3 / 4 / 6 port

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

Code	Description
0908WM112DCON	1 1/2" Class D Concentric Water Meter

Standards

WRAS APPROVED PRODUCT

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
090471021050	25mm Barrier Pipe X 50m
090471031050	32mm Barrier Pipe X 50m
090471061006	63mm Barrier Pipe X 6m
090471061025	63mm Barrier Pipe X 25m
090471061050	63mm Barrier Pipe X 50m

DZR Brass Fittings

Code	Description
Coupling	
090471902500	25mm
090471903500	32mm
090471906500	63mm

Code	Description
Transition Coupling to PE	
090471902525	25mm x 25mm
090471906525	63mm x 63mm

Code	Description
Male Coupling	
090471902570	25mm x 3/4"
090471903570	32mm x 1"
090471906570	63mm x 2"

Code	Description
Transition Coupling to Copper	
090471902515	25mm x 15mm
090471902522	25mm x 22mm

Code	Description
Reducer	
090471903225	32mm x 25mm

Code	Description
Female Coupling	
090471902580	25mm x 3/4"
090471903580	32mm x 1"
090471906580	63mm x 2"

Code	Description
Equal Tee	
090471902700	25mm
090471903700	32mm
090471906700	63mm

Code	Description
Elbow 90°	
090471902590	25mm
090471903590	32mm
090471906590	63mm

Code	Description
Elbow 45°	
090471906595	63mm

Standards

- Type A: WIS 4-32-19: Polyethylene pressure pipe systems with an aluminium barrier layer for potable water supply in contaminated land
- Complies with BS6920 Water Quality Testing
- Approved under regulation 31 of the Water Supply (Water Quality) Regulations 2000

Fitting Installation

1) 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 Pipe = 30mm
32mm Pipe = 34mm
63mm Pipe = 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 239 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 property meter boxes
- Suitable for natural gas and LPG

Yellow Gas Service MDPE 12.5Bar

	20mm	25mm	32mm	50mm	63mm
50m	090320G50	090325G50	090332G50	090350G50	090363G50
100m	090320G100	090325G100	090332G100	090350G100	090363G100

* For larger diameters please see our Civil Engineering & Utilities product specifier

Standards

16 to 630mm PL2 - Part 1

Installation Guide

See page 239.

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
Coupling	
0903G70105020	20mm
0903G70105025	25mm
0903G70105032	32mm
0903G70105063	63mm

Code	Description
Reducing Coupling	
0903G7110502520	25mm x 20mm
0903G7110503220	32mm x 20mm
0903G7110503225	32mm x 25mm

Code	Description
90° Elbow	
0903G70505020	20mm
0903G70505025	25mm
0903G70505032	32mm
0903G70505063	63mm

Code	Description
Plass4 Universal Coupling	
0903G770175025022	25mm x 15-22mm
0903G770175025027	25mm x 20-27mm
0903G770175025035	25mm x 27-35mm
0903G770175032027	32mm x 20-27mm
0903G770175032035	32mm x 27-35mm

Code	Description
Plass4 Universal Elbow	
0903G770575025022	25mm x 15-22mm
0903G770575025027	25mm x 20-27mm
0903G770575025035	25mm x 27-35mm

Code	Description
90° Tee	
0903G70405020	20mm
0903G70405025	25mm
0903G70405032	32mm
0903G70405063	63mm

Code	Description
90° Reducing Tee	
0903G7340502520	25mm x 20mm
0903G7340503225	32mm x 25mm
0903G7340506332	63mm x 32mm

Code	Description
End Cap	
0903G71205020	20mm
0903G71205025	25mm
0903G71205032	32mm
0903G71205063	63mm

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 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
0720MB6	Wh	Gas Meter Box Spare Door
0720MB10	Gr	GRP Riser Tube x 1m
0720MB7	Bl	38mm OD / 32mm ID 90D Gas Bend
0720MB6	Wh	Spare Door (Vented)
0720UB1	Br, Wh	Gas Unibox Brown
0720UBL	Br, Wh	Unibox Spare Door
0720MB100		Spare Meter Box Key (10 Pack)

Bl = 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

Industrial Gas Meter Housings

Meter	Pressure L = Low M = Medium/Intermediate	Housing Dimensions MM			Type of Installation	Model Ref of Housing Required
		Length	Depth	Height		
U16	L	650	400	650	Bolt on	MC2 (GC2)
U16	L & M	730	425	830	Freestanding	MC2FS (GC2FS)
U16MP	M	750	360	850	Bolt on	MC2MP (GC2MP)
U25	L	900	360	850	Bolt on	MC3 (GC3)
U16, U25	L & M	1000	540	960	Freestanding	MC4 (GC4)
U40	L	1000	540	960	Freestanding	MC4 (GC4)
U40	M	1200	750	1200	Freestanding	MC4 PLUS (GC4
U65	L & M	1475	750	1350	Freestanding	MC5 (GC5)
U65, U100, U160 Compact Rigs & Modules	L & M	1600	850	1450	Freestanding	MC6 (GC6)
Compact Rigs & Modules	L & M	1600	850	1595	Freestanding	MC7 (GC7)
Compact Rigs & Modules	L & M	2400	1200	1800	Freestanding	MC8 (GC8)

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 263, and electricity meter boxes are requirements of the contractor. 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

Code	Colour	Description
0720MB1	Wh	Electricity Meter Box Flush
0720SB1	Wh	Electricity Meter Box Surface Mounted
0720MB2	Wh	Spare Door
0720MB3	Bl, Wh	32/38mm Elec Hockey Stick x 1.5m
0720MB100		Spare Meter Box Key (10 Pack)

Bl = 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

Industrial Meters

JDP supply a range of meters for primary and secondary / sub metering for all energy and resource use, including water, gas and oil.

Applications

- Primary metering
- Sub metering of any energy or resource use
- Prove savings and reductions in using energy efficient or energy saving system such as rainwater harvesting systems.

Water

- 50 – 200mm
- Hot (90°C) & Cold (40°C) versions
- Dry dial, multi jet, class B

Gas

- Turbine gas meters 2 – 8" with pulsed output
- Diaphragm gas meters ¾ - 2" with pulsed output

Heating and Cooling

- Thermal energy meter
- Calculate energy used in Heating or Cooling

Remote Controller Unit

- For Gas, Oil, Electricity and Water
- Collects pulses from utility meter to mirror readings
- Ideal for inaccessible / remote meters

Hot & Cold Water Systems

- Hot & Cold Plumbing • Uponor Pre-Insulated Pipe (Ecoflex)
- 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 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, Lead and Polyethelene water supply
- Pipe will not burst even if water freezes
- Silent running
- Reduced thermal heat loss compared to metal pipes
- Available as a point to point system eliminating hidden joints and connections

Applications

- Cold water supply
- Hot water supply
- Radiator central heating connections

For further information please contact your local JDP branch

Uponor Pre-insulated Pipe (Ecoflex)

Ecoflex is a pre insulated pipe system suitable for a wide range of applications in commercial, industrial and public buildings. This flexible, pre–insulated plastic piping system to transport a variety of liquids both inside and outside of buildings is suitable for a variety of applications. The system also comprises a complete range of products for heating and hot and cold water supplies.

Its material properties give long service life and as the pipes are low-weight and highly flexible, they can be installed easily and quickly, even over obstacles and round corners.

Also available are pipe couplings, T-pieces, bends, chambers, wall sleeves etc. – everything you need for a complete Uponor Pre-insulated pipe (Ecoflex) system.

Features and benefits

- Lightweight, easy to handle and transport
- Flexible coils
- Simple installation
- "Endless" pipe lengths from the coil
- Quick and easy to install
- Tailor made length service for rapid installation and minimum waste
- Corrosion proof and no deposit build up
- Maximum cost-efficiency, service and economic life

Applications

- Connecting up individual buildings
- Construction of a supply network
- Urban engineering
- Liquids for industry
- District heating systems
- Potable, hot and cold water
- Foodstuffs and chemicals

Aqua Single

- PEX pipe for potable water, hot water Max. 95°C/10bar
- Approved by the German water and Gas Board
- Carrier Pipe 25, 32, 40, 63 ø mm
- Trace heating cable available on request

Aqua Twin

- PEX pipe for potable water, hot water Max. 95°C/10bar
- Hot water and circulation pipe in one jacket
- Approved by the German water and Gas Board
- Carrier pipe 25/25, 32/25, 40/25 and 50/25 ø mm

Quattro

- For heating water and potable water (warm), Max. 95°C/10bar
- 4 line pipe, combination of Thermo Twin and Aqua Twin
- Suitable for building connection from mains via chamber

Supra

- Single PE-100, Max 20°C/16 bar for potable water, cold water, waste water transport, cooling water
- 25-110 ø mm
- Frost protection cable on request

Thermo Single

- Single PEX pipe with EVOH for heating water. Max. 95°C/6bar
- Carrier pipe 25-110 ø mm
- Trace heating cable available on request

Thermo Twin

- Twin PEX pipe with EVOH for flow and return lines
- 25/25, 32/32, 40/40. 50/50, 63/63 ø mm

Thermo Mini

- Single PEX pipe with EVOH for heating water. Max. 95°C/6bar, with small jacket pipe
- Carrier pipe 25 and 32 ø mm
- Trace heating cable available on request

Standards

Installation Guide

Product must be installed to manufacturer's guidance according to the application

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*.

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*.

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.

* May vary depending on system used

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
	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.

Conduit Pipe To be used when pipe is laid in concrete and masonary

	Code	Description
	092015BLKCON-25C	15mm x 25m
	092015BLKCON-50C	15mm x 50m
	092022BLKCON-25C	22mm x 25m
	092022BLKCON-50C	22mm x 50m

*Also available in Red & Blue

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 MDPE SDR17, manufactured to relevant standards

Installation Guide

Can be installed “slinky” form or loops. Also available as deep drilled return loop system using a smaller footprint.

Ducting Systems

• Coloured Twinwall Ducting • Twinwall Split Duct • General Purpose Twinwall Ducting • ESI-12-24 Power Ducting • Perforated Gas Ducting • uPVC Telecommunications Ducting • uPVC Cable TV - Fibre Optics Ducting • uPVC Type 4660 Duct • General Purpose uPVC Daviduct • uPVC Split Duct and Repair Kits • Draw Cord • Access Chamber Systems • Salmor BT Chambers • Salmor RAD Box Chambers

JDP has a strong reputation for its comprehensive range of duct pipe systems which cater 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	B	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

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
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

ID / OD (mm)	94/110	100/120	125/145	137/160	150/178
Pipe	0707ENTW94X6	0707ENTW100X6	0707ENTW125X6	0707ENTW137X6	0707ENTW150X6
Couplers	0707CRC110	0707CRC120	0707CRC145	0707CRC160	0707CRC178
Seals	0707RCS110	0707RCS120	0707RCS145	0707RCS160	0707RCS178
End Caps	0707RCE110	0707RCE120	0707RCE145	0707RCE160	0707RCE178
11.25° Bends	0707BDRB94X11	0707BDRB100X11	0707BDRB125X11	0707BDRB137X11	0707BDRB150X11
22.5° Bends	0707BDRB94X22	0707BDRB100X22	0707BDRB125X22	0707BDRB137X22	0707BDRB150X22
45° Bends	0707BDRB94X45	0707BDRB100X45	0707BDRB125X45	0707BDRB137X45	0707BDRB150X45
90° Bends	0707BDRB94X90	0707BDRB100X90	0707BDRB125X90	0707BDRB137X90	0707BDRB150X90

* 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

See pages 273.

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
0707ENTWS150X1BE	150/178mm Split Duct x 1m
0707ENTWS94X3BE	94/110mm Split Duct x 3m
0707ENTWS100X3BE	100/120mm Split Duct x 3m
0707ENTWS125X3BE	125/145mm Split Duct x 3m
0707ENTWS150X3BE	150/178mm Split Duct x 3m

Standards

Produced to BS EN 50086-2-4.

Installation Guide

See pages 273.

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

ID / OD (mm)	Length	150/178
	6m	0707TW150X6

* 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

See pages 273.

ESI-12-24 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

MDPE/HDPE Coils

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

Twinwall Lengths

ID/OD (mm)	100/118	125/148	150/178
Pipe* 6m	0707RB100X6	0707RB125X6	0707RB150X6
Couplers	0707CRB100	0707CRB125	0707CRB150
Bends 11.25°	0707BDRB100X11	0707BDRB125X11	0707BDRB150X11
Bends 22.5°	0707BDRB100X22	0707BDRB125X22	0707BDRB150X22
Bends 45°	0707BDRB100X45	0707BDRB125X45	0707BDRB150X45
Bends 90°	0707BDRB100X90	0707BDRB125X90	0707BDRB150X90
Split Duct*	0707RBS100X1	0707RBS125X1	0707RBS150X1

* Also available in 1, 2 & 3m lengths

Standards

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

Installation Guide

See pages 273.

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
25m	-	070268073	070268070
50m	070268075	070268072	070268069
100m	-	070268071	070268068
150m	070268074	-	-

Standards

Manufactured to BS4962.

Installation Guide

See pages 273.

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

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

Standards

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

Installation Guide

See pages 273.

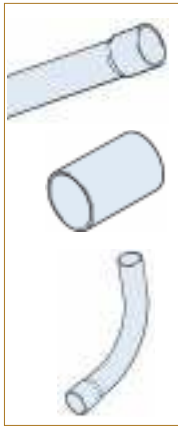
uPVC Cable TV / Fibre Optics Ducting

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



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

Standards

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

uPVC Type 4660 Duct

uPVC Type 4660 Duct is manufactured to the dimensional requirements of BS4660.
This system offers a greater strength than uPVC General Purpose duct systems and is supplied in black / dark grey colour and as a ring sealed system as standard, although unsealed systems are available.

Features and benefits

- Ring sealed system
- Robust uPVC construction

	100/110mm	150/160mm
Pipe 6m SS	07011104660	07011604660
Couplers	01024D20D	01026D20D
Bends 11.25°	0709110DRUM11	0709160DRUM11
Bends 22.5°	0709110DRUM225	0709160DRUM225
Bends 45°	0709110DRUM45	0709160DRUM45
Bends 90°	0709110DRUM90	0709160DRUM90

Standards

Dimensional compliance to BS4460 only.

Installation Guide

See pages 273.

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

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
Couplers	07092DBGP	07093DBGP	07094DBGP	07096DBGP	07098DBGP
End Caps	0709DUCT2AE	0709DUCT3AE	0709DUCT4BE	0709DUCT6BE	0709DUCT8BE
11.25° Bends	07092DBGP1125	07093DBGP1125	07094DBGP1125	07096DBGP1125	07098DBGP1125
22.5° Bends	07092DBGP225	07093DBGP225	07094DBGP225	07096DBGP225	07098DBGP225
45° Bends	07092DBGP45	07093DBGP45	07094DBGP45	07096DBGP45	07098DBGP45
90° Bends	07092DBGP90	07093DBGP90	07094DBGP90	07096DBGP90	07098DBGP90
45° Y Junction	07092JF45YJ	07093JF45YJ	07094JF45YJ	07096JF45YJ	07098JF45YJ
90° T Junction	07092JF90TJ	07093JF90TJ	07094JF90TJ	07096JF90TJ	07098JF90TJ

Standards

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

Installation Guide

See pages 273.

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).

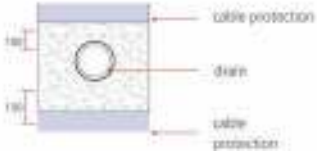
Twinwall duct must be adequately protected against damage from site construction traffic and from agricultural or similar operations.

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)

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 Split Duct and Repair Kits

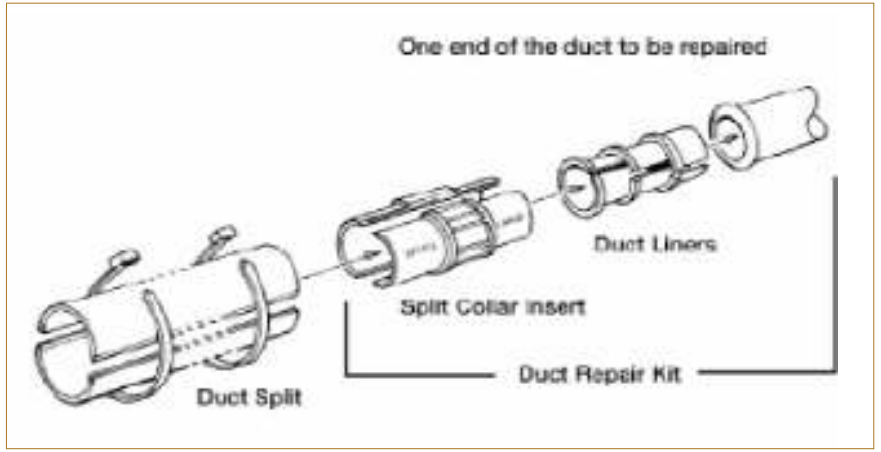
Split Duct and Duct Repair Kits consist of the parts required to allow repair of damaged or jointed duct in the field.

Features and benefits

- Ideal for repairing existing ducting
- Split Duct supplied complete with ties
- Repair Kits supplied complete with collar and liners to connect pipes

Split Duct - Supplied in 3m Lengths.

Repair Kits - Enables the split duct to be connected to the in-situ Duct at both ends of the repair. One Repair Kit comprises - 2 No. Split collar inserts, 6 No. - Duct liners, 4 No. - Cable ties.



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
0711DRAW8X500	500m 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
- 63, 110 & 160mm pipe connections

Access Chamber System

Access Chambers

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

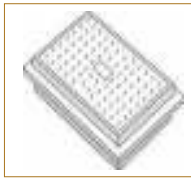
Composite Covers & Frames

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

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



0621KD59C*	300 x 450mm Ductile Iron Cover Class D400
0621KD3240	450 x 450mm Ductile Iron Cover Class B125
0621KD3340	600 x 450mm Ductile Iron Cover Class B125
0621KD3440	600 x 600mm Ductile Iron Cover Class B125

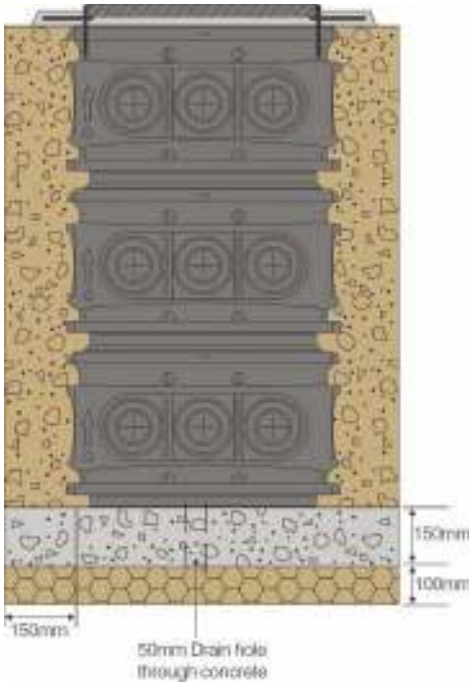
Access Chamber System is not designed for use in carriageways

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.



Salmor 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

The high quality preformed twinwall 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 450x450mm to 2000x2000mm.

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

Standards

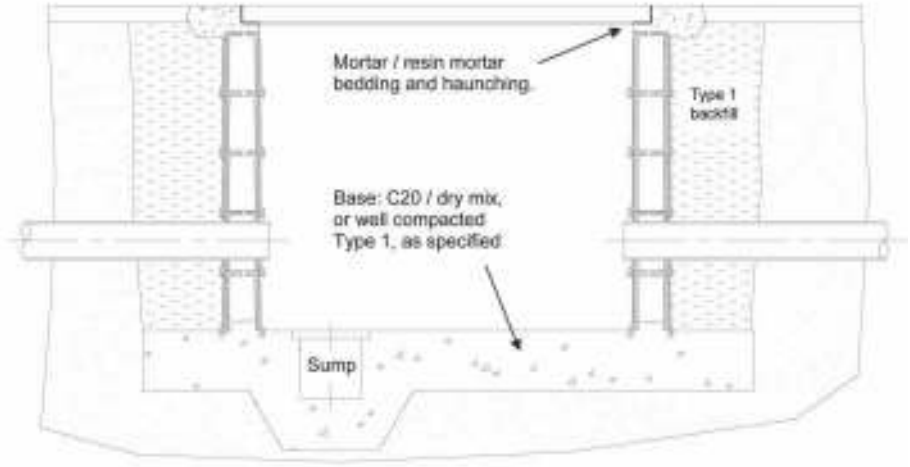
BT has now approved Quadbox for use in its national network; the first and only BT approved modular joint box system.

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.

Duct entry holes can be drilled using a general-purpose hole saw. Fitting a longer pilot drill in the hole saw helps align the holes in the inner and outer skins. Where possible, drill the duct entry holes before installing the chamber.

Salmor RAD Box Chambers

JDP offer a range of Salmor Modular Access Chambers known as the RAD box, this high quality preformed twinwall access chamber is an excellent cost effective modern alternative to brick built chambers. Concrete covers & cover slabs or spring loaded, locking manhole covers to suit these chambers are also available. See the Specialist Steel Access Covers & Frames page 187.

Features and benefits

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

- 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
- De-skilled installation process
- Reduced signing / guarding costs
- Reduced public liability risk
- Ease of cutting duct entries etc
- No site material waste

Radbox Sizes

Due to its unique panel and corner design, Radbox is available in almost any clear opening dimension between 450mm and 4000mm and can be prepared in multi-chamber formats. Panels are available in 150mm and 500mm deep sections.

Furniture

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

Standards

See BT Chambers section page 279.

Installation Guide

See BT Chambers section page 279.

Geotextile & Membrane Technology

- Geotextiles • Fibre Geotextiles • Woven Geotextiles
- Geogrid • Infiltration Geotextiles & Attenuation Membranes
- 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.

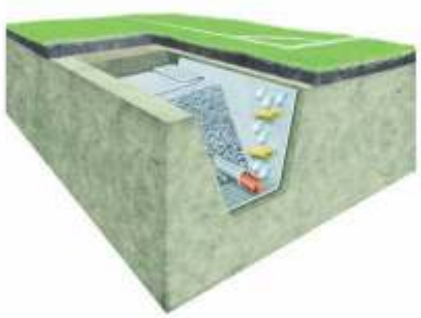
Reinforcement

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 and it's easy to install.

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 non-woven 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. Non-wovens 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.

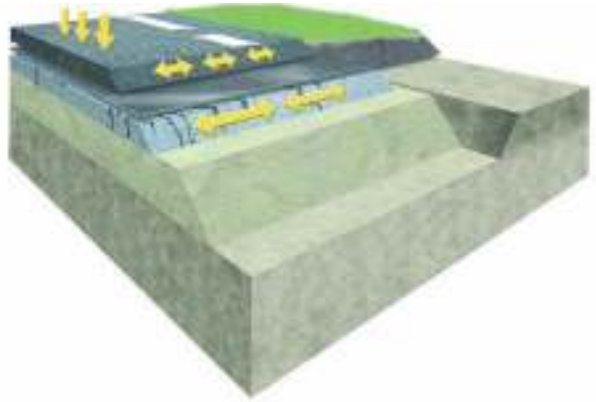
Separation

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

Code	Description	Permeability (l/sec/m²)	CBR Puncture Resistance
1601F20	4.5m Fibre Geotextile x 100m	75	1300
1601F32	5m Fibre Geotextile x 100m	85	2100

*Other strengths available
**Mini packs available

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

Code	Description	Permeability (1/sec/m²)	CBR Puncture Resistance
1601GW8118	4.5m Woven Geotextile x 100m	32	1840
1601GW8123	4.5m Woven Geotextile x 100m	24	2340

*Other strengths available
**Mini packs available

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

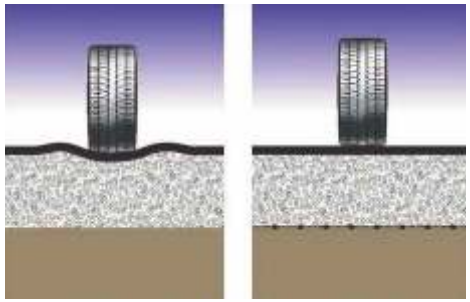
Applications

- 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

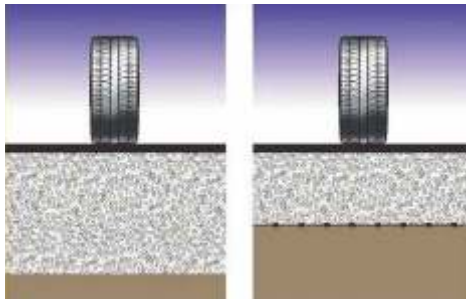
Code	Description	
1601LBO220	4m x 50m Tennax	220 bi-orientated Geogrid
1601LBO330	4m x 50m Tennax	330 bi-orientated Geogrid
1601LBO440	4m x 50m Tennax	440 bi-orientated Geogrid

Mono-orientated Geogrids also available

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.

Infiltration Geotextiles & Attenuation Membranes

For the installation of Infiltration and Attenuation Crates JDP offer a range of permeable geotextiles and non-permeable membranes 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 and benefits

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

Applications

- Wrapping crates for Infiltration / Soakaway applications
- Wrapping crates for Attenuation / Storage applications
- Pond Liners
- Attenuation tank liners
- Reed bed liners
- Chemical storage lagoon liners
- Slurry lagoon liners
- Box welded liners
- Root barriers

Products

Infiltration / Soakaway Applications

For soakaway applications we provide Fibre filter grade, needle punched non-woven geotextiles, such as product 1601F20. This offers high permeability and strength, ideal for infiltration crates.

Attenuation / Storage Applications

Many different types of impermeable liner membrane can be provided to suit specific applications including HDPE, LLDPE, PP and Butyl, in thicknesses ranging from 0.5mm up to 2.5mm.

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 Fibre non-woven geotextile protection fleece, such as 1601F20 to minimise risk of puncture to impermeable membrane from sharps in backfill material.

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.

For open lagoon storage, liners can be prefabricated and seam welded in the factory to customers' required dimensions and shipped to site, or for larger projects the liner can be welded and installed on site.

Standards

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

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 33mt	

Also available in black

Standards

Manufactured in accordance to BBA certification

Installation Guide

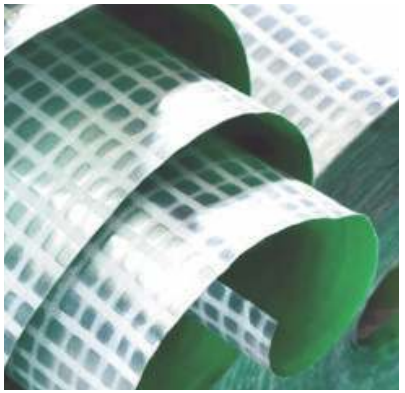
Should be in accordance with the manufacturer's instructions and Clause 11 of CP 102: 1973, the relevant clauses of BS 8000-4: 1989.

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 soil-based 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.

Retaining Walls & Embankments

- Gabions & Mattresses • Redi-Rock Retaining Wall
- Erosion Control products

JDP offers a complete range of products for Retaining Walls and Embankments to prevent downslope movement or erosion and provide support for vertical or sloped grade changes.

These include wire Gabions, stone filled cages or mattresses Redi-Rock concrete dry walling system. Degradable erosion control blankets, non-degradable turf reinforcement mats and soil retention mats designed to handle almost any storm water, drainage or erosion prevention application are also part of our comprehensive range.
These all form a solution to the problem of retaining and protecting slopes from erosion in areas such as river banks.

Gabions & Mattresses

The use of gabions is an effective solution to combat erosion and to stabilise and strengthen embankments, which has been in evidence for many years.

Filled with local stone they blend in with the local surroundings and unlike concrete or other solid structures they allow vegetation to flourish, reducing the visible impact and enhancing the natural landscape.

Features and benefits

- Aesthetically pleasing - straight lines and clean edges can also be blended with natural planting
- Strength and stability - steel wire construction withstands forces of flowing water and retained earth
- Flexibility - ideal for unstable ground
- Corrosion resistant – galvanised to BSEN ISO 10244-2 for 40 year average life
- Cost effective – low maintenance, easy to assemble, minimal foundation preparation

Applications

- Retaining walls
- Rivers, canals and dams
- Erosion control
- Soil conservation
- Marinas and shoreline protection
- Landscaping
- Structure protection
- Flood protection

Standards

Gabions and mattresses are BBA certified for roads & bridges and General Building Regulations.

Redi-Rock Retaining Wall

JDP offer the engineered concrete solution with the look of natural stone – which is much more than a retaining wall.

At the heart of the Redi-Rock product range is an innovative, engineered, interlocking, instant retaining wall system, versatile enough to achieve height without comprising strength. This dry walling system is designed for use in any landscaping project. Ideal in situations where space is limited, fast to construct in all weather conditions and allows flexible programme scheduling.

Features and benefits

Environmentally friendly

- Recyclable / Relocatable
  - Can be moved easily once project life has expired and used elsewhere
- Sustainable
  - Option to specify eco-friendly cement mix with less environmental damage
  - Uses standard concrete, moulded to look like natural stone, instead of using limited natural quarried stone
- Minimal Disruption to local areas
  - Quick to install with minimal labour force
  - Can be manufactured Off Site or On Site to save on delivery
- Compatible with many of the points in the "Modern Methods of Construction & Sustainable Communities" government guidelines, 2005

Lower Project Cost

- Less Labour
  - Very quick to assemble, minimal workforce
  - No form work or shuttering required
  - No vibrating machinery (Pokers) required
  - Dry laid, no mortar required
  - Minimal foundations
- Less associated cost
  - Less "land take" (land acquisition) as no geogrid required
  - Minimal delays, as can be installed in any weather
  - Quick to install, therefore less site time
  - Minimal maintenance
- Low risk of project disruption and extra costs
  - Can be manufactured off site and delivered on day required
  - Can be laid in any weather
  - Quality assured and cured at source
  - Can be moved once laid if project plans change

High Quality Solution

- Engineered strength
- Appearance of natural stone
  - Can be coloured at source to fit in with different local stones
  - Can be brightly coloured, ideal for corporate colours or branding
- Can increase performance for specifc applications by adding cables, rods or other reinforcements
- Can lay in minimal space
- Large variety of block shapes

Applications

- Retaining walls
- Coastal defences
- Floodplain & shoreline defences
- Traffic management
- Security - force protection
- Infrastructure erosion control
- Landscaping projects
- Permanent and temporary projects
- Bridge abutments
- Erosion control

Redi-Rock blocks weigh 1 Tonne each, but just fit together like concrete Lego™.

PolyAgg is an ideal solution fo retaining wall drainage, see section 5 Surface Water Drainage, page 109.

Erosion Control Products

A variety of innovative solutions for erosion control are available from JDP. Many of these products are degradable, allowing vegetation to grow in a stable environment as it becomes established.

Erosion Control Blankets (ECB's)

JDP supply a range of products to control erosion, minimise sediment run off and crucially, encourage growth of vegetation. The Landlok products are also biodegradable, with a life span of one, two or three years. These mats consist of a blend of fibres and straws.

Features and benefits

- Captures 700% more sediment than channels lined with hard armour
- Gives an environmentally friendly solution
- Attractive, natural appearance
- Holds seed and soil in place preventing soil from washing away
- Highly effective protection from the effects of wind and rain
- Improve water quality through vegetation filtering sediment out

Applications

- Channel erosion protection, low to moderate flow slope protection, medium to moderate inclines

Turf Reinforcement Mats (TRM's)

These non-degradable synthetic mats provide twice the erosion protection of vegetation alone and provide immediate erosion protection. Used in lining systems they provide excellent long-term protection and reduce maintenance.

Features and benefits

- Captures 700% more sediment than channels lined with hard armour
- UV stabilised
- Reinforces vegetation by anchoring root structure
- Holds seed and soil in place preventing soil from washing away
- Highly effective protection from the effects of wind and rain
- 33 – 50% cost savings against traditional hard armour systems such as rock ripra

Applications

- Channel erosion protection, high flow
- Slope protection, steep inclines
- Erosion prevention for areas requiring immediate protection
- Open channels
- Drainage ditches
- Detention basins
- Steep slopes

High Performance Turf Reinforcement Mats (HPTRM's)

These non-degradable synthetic mats provide additional performance to standard TRM's for extreme applications.

Features and benefits

- Captures 700% more sediment than channels lined with hard armour
- Three times the UV stabilisation of standard TRM's
- Ten times stronger than standard TRM's
- Reinforces vegetation by anchoring root structure
- Holds seed and soil in place preventing soil from washing away
- Highly effective protection from the effects of wind and rain
- 33 – 50% cost savings against traditional hard armour systems such as rock riprap

Applications

- Channel erosion protection, most demanding flows
- Slope protection, most demanding slopes
- Erosion prevention for areas requiring immediate protection
- Ideal for arid environments or sites where limited vegetation growth is expected
- Storm water runoff for pipe inlets and outlets

Erosion Control Mat

Trinter is one of the latest developments in erosion control. Polypropylene and HDPE nets are heat bonded to form a corrugated structure. This provides a structure for root systems to interlock, stabilising the top layer and allowing a strong, deeper root system to build up. Providing the most effective solution for erosion control.

Features and benefits
- Strength allows for use on slopes of any length and gradient
- Best soil retention properties available
- Flexibility means natural contours are followed enhancing performance
- Prevents drying out by allowing roots to span soil layers

Applications
- Road, motorway and railway cuts and fills
- River banks, channels and irrigation channels
- Reservoir embankments, dams and lagoons
- Grassed spillways
- Culvert inlet and outfalls
- Golf courses, lawns and residential areas

CellWeb

CellWeb™ is a three-dimensional cellular confinement system manufactured from high-density polyethylene (HDPE) strips that are ultrasonically welded together to create a strong, lightweight expandable panel.

It's unique hoop strength and interconnecting cell walls form a durable composite mattress that can be filled with common materials for the most demanding load support and erosion control applications.

Features and benefits
- Save up to 50% on infill materials compared to other load support systems
- Reduces need for excavation
- Reduces sub base thickness
- Simple, speedy installation saving on construction costs
- Environmentally friendly
- Protection for germination on vegetated slopes

Applications
- Retaining walls
- Erosion control and slope stabilisation
- Channel protection
- Tree root protection
- Load support

Landscape Finishing Products

• Innovative Paving Solutions • Block Paving • Flag Paving
• Special Paving • Edging Kerbs • Grass Protection Systems

JDP

With its partner Charcon, JDP offer one of the most comprehensive and innovative ranges which now includes StoneMaster and Urban Surface Protection.

These Block Paving and Flag Paving products are ideal for commercial, public and industrial applications, meeting the needs of architects, contractors and clients alike. Whether it is an access road or a modern civic centre, our natural and aggregate ranges can cope with all applications. With a number of products in the Kerb section (see Access Roads section), as well as the Block Paving and the Flag Paving sections (both within Landscape Finishing Products section), designed to complement each others style and colour, the choice is vast. Added to this are Sustainable and Ecological products such as Infilta and Eco which are already successfully meeting the needs of an increasing number of SUDS and environmentally sustainable projects.

Innovative Paving Solutions

Stonemaster

Working hand-in-hand with several local authorities, StoneMaster was developed to simulate the aesthetic appearance of natural sandstone. With up to 50% reclaimed/recycled content, StoneMaster is the natural choice for any prestigious landscape.

Indigenous sandstone paving (yorkstone) is an aesthetic, hard wearing product used extensively in the UK. The marketplace, however, is limited to those suppliers who have access to sandstone quarries and processing facilities. This limited supply means that prices for this product are high and lead times long. There are few alternative products as both the appearance and the indigenous aspect keep other products at bay.

Chinese and Indian sandstones have had some success in the domestic sector, but concrete alternatives, especially for commercial applications, have proved largely unsuccessful as technologies have not allowed producers to achieve an acceptable visual appearance. Until now.

By incorporating fine sands into a face mix and mixing colours in moulds, Charcon are the first manufacturer to develop a range of flag and block paving in variegated colours that can compete successfully on appearance with yorkstone. Moreover, the new product can be manufactured at a fraction of the cost of yorkstone, meaning budget constraints of natural stone are a thing of the past.

Features & Benefits

Availability

Delivery timetables for a natural product can cause considerable problems. StoneMaster is held in stock, therfore reducing lead times

Price

The cost of StoneMaster is considerably less than Natural Yorkstone, allowing specifiers to achieve the natural look they desire while still meeting tight budgets

Fixed sizes

Random sizes have appeal but with a range of fixed slab sizes it is easier to produce specific patterns and designs

Sustainability

With up to 50% of its content being recycled, StoneMaster achieves the Aggregate Industries sustainable stamp of approval

USP

StoneMaster will have Charcon Urban Surface Protection pre-applied as standard

Urban Surface Protection

One of the biggest problems experienced by specifiers of high quality landscaping materials is to maintain the original appearance over a long period of time. This problem is particularly prevalent in areas subject to heavy pedestrian traffic and is the result of a number of factors.

Urban Surface Protection provides many solutions

Unlike other surface protectors, USP is preapplied to the paving before it is delivered and laid. Whilst an element of cleansing may still be required during the life of the paving, the frequency and severity will be significantly reduced. USP will substantially lower maintenance costs. The sealant gives self cleansing properties, meaning that heavy rainfall can wash away most deposits. Chewing gum will not adhere over a long period so paving will only have small build ups rather than increasing growth.

Problems and solutions

Problem

Day to day, surface contamination presents an ongoing problem to local authorities who face huge cleaning and maintenance costs. Staining is an increasing issue with such problems as fast food litter, up 17% in the last four years. Other contaminants such as bird droppings, moss and chewing gum, which cost the UK in the region of £150 million per annum to remove, are difficult and expensive to treat.

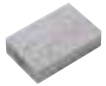
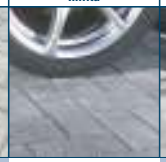
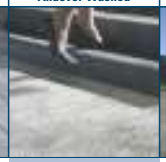
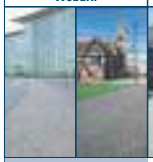
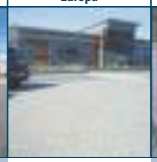
Solution

Charcon Urban Surface Protection (USP) is pre-applied to the paving, preventing the adhesion of contaminants such as chewing gum, bird droppings and moss, as well as eliminating staining.

How it works

Charcon USP is a chemically inert, environmentally friendly water based fluoro polymer. Its mode of action when applied, distributes and binds fluorine molecules to the topography of the treated surface. The fluorine molecules through their chemical composition, give the treated surface non-stick properties.

Block Paving / Application Selector

	Sustainable		Commercial/Domestic			Commercial/Domestic				Natural Stone	
	 Eco	 Infilta	 Andover Washed	 Andover Textured	 Parliament	 Original Rumbled Woburn	 Mechanical lay option Europa	 Countrysetts	 Grassgrid	 Granite setts	 Yorkstone Sandstone Yorkstone & Sandstone setts
Product Identification											
Key applications	• Pedestrian areas • Shopping precincts	• Sustainable drainage systems applications • Footways • Residential roads • Car parking	• Prestige building developments • Prestige pedestrian	• Prestige building developments • Prestige pedestrian	• Shopping precincts • Pedestrian areas	• New pedestrian areas • Established pedestrian areas • Traffic free zones	• Shopping precincts • Pedestrian areas • HGV loading (80 mm only) • Docks and container ports • Access roads • Airports	• Pedestrian rural areas • Pedestrian heritage areas	• Roadside verges • Overspill car parks • Recreational areas	• Prestige shopping precincts and pedestrian areas • Prestige heritage	• Prestige shopping precincts and pedestrian areas • Prestige heritage
Other applications	• n/a	• n/a	• Roadways • Car parks	• Roadways • Car parks	• Car parking (Herringbone pattern recommended)	• Heritage sites • Conservation sites	• n/a	• n/a	• Light aircraft taxiways • Helipads	• Commercial and corporate interiors • Public and civic spaces	• Commercial and corporate interiors • Public and civic spaces
Other features	• Uses secondary and recycled materials, minimising waste	• Provides permeable surface for sustainable drainage systems • Pencil edge option available	• Herringbone pattern suited to vehicular traffic	• Herringbone pattern suited to vehicular traffic	• Use of granite aggregate increases durability	• 80 mm version for trafficking by HGV • Herringbone for extra bonding strength	• Pencil edge option available • Mechanical lay option 'Europa ML' available	• Suitable for vehicle overrun if set in concrete	• Can be used on gradients • Watercourses • Suitable for fire paths	• Wide range of aesthetic options • Hard wearing • Easy-to-lay granite matts available	• Wide range of aesthetic options • Hard wearing
Colours	• Black Fleck	• Brindle • Charcoal • Grey • Red	• Silver Grey • Anthracite Charcoal • Buff	• Cream • Silver Grey • Charcoal	• Charcoal • Grey	• Graphite • Rustic • Autumn (Woburn Rumbled only)	• Autumn • Brindle • Buff • Burnt Oker • Charcoal • Grey • Marigold • Red	• Silver Grey	• Grey	• Contact your local JDP branch for full details of colours available	• Yorkstone Setts: Moorland, Highmoor • Sandstone Setts: Rainbow, Lapis Grey, Sunset, Winter Green, Autumn
Textures	• Textured	• n/a	• Washed	• Textured	• Textured	• n/a	• n/a	• n/a	• n/a	• Flamed • Fine picked	• Flamed • Fine picked

Block Paving

JDP offer a comprehensive range of block paving to meet the various designs required. We also understand that Paving Collections for Commercial, Public and Industrial areas need to be durable, versatile, stylish, and are required in a variety of colours.

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

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 m^3 of excavated material, which, assuming a 200mm dig depth, works out that each 20-25 m^2 of paving will require 1 skip to dispose of spoil. Remember that excavated material bulks up by 20-30%, so each 1m^3 dug out will become 1.3m^3 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.

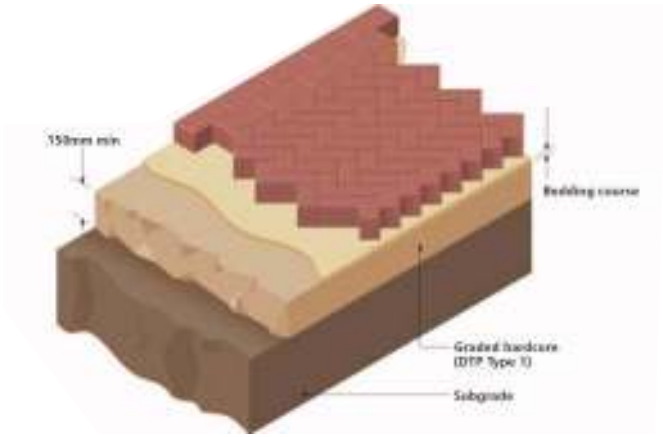
Block laying

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

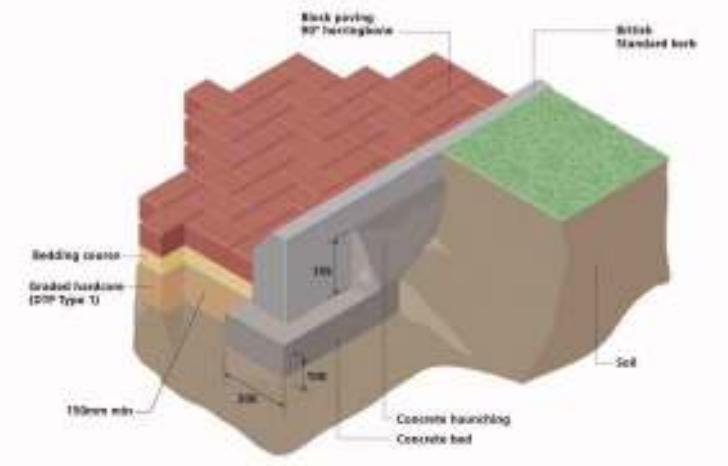
Fix recess trays and gully covers, if necessary. Check paving for compliance and compact the paving with a vibrating plate compactor (wacker plate). Make 4-6 passes over each section of paving, alternating passes at 90° to the previous pass. With clay pavers and some of the more decorative concrete blocks, 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

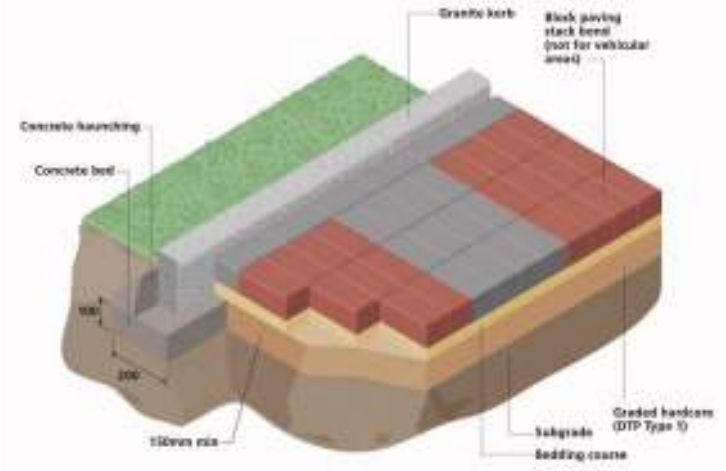


We also recommend that when laying paving, particularly block paving, you use products from three packs at a time, mixing individual blocks to avoid colour patching.

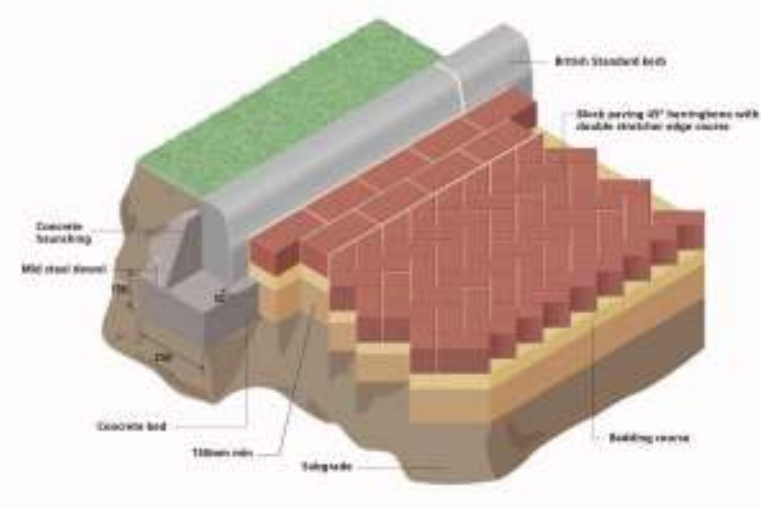
Estate Roadways Paving



Light Vehicle Paving

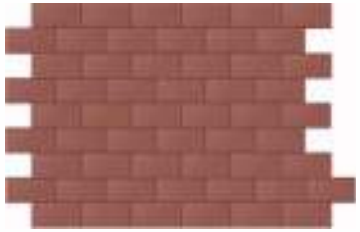


Heavy Traffic Paving



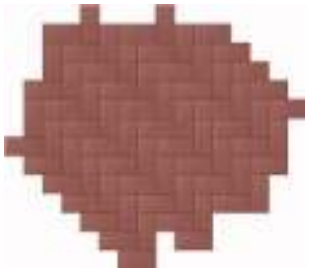
Block Paving Laying Patterns

Stretcher bond

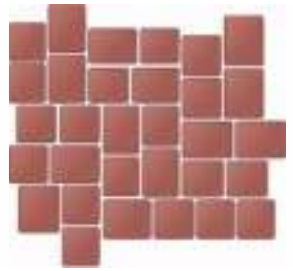


45° herringbone

90° herringbone



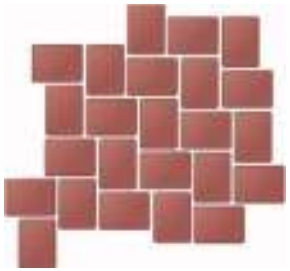
Offset herringbone



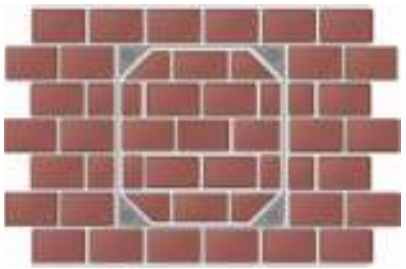
Parquet

Random stretcher bond

Single sized herringbone



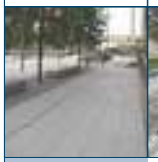
Stretcher bond baroco



Flag Paving / Application Selector

	Ultrapave	Appalachian	Malvern	Moordale	Courtstone
Product Identification					
Key applications	• Urban pavements • Shopping precincts • Footway crossings	• Town centres • Shopping precincts • Plazas	• High-volume pedestrian areas • Shopping precincts	• Urban pavements • Footway crossings • Shopping precincts	• Town centres • Pedestrian areas • Prestigious residential developments
Other applications	• n/a	• Footways • Service areas	• Footways • Service areas • Office developments	• Vehicular overrun areas*	• Environmentally sensitive areas
Features	• Reinforced to prevent cracking caused by vehicle overrun • Economical alternative to natural granite	• Suitable for frequent car and occasional vehicle overrun*	• High tolerance cutting • Suitable for new and established areas • Suitable for frequent car and occasional vehicle overrun	• Cost-effective • Excellent non-slip characteristics	• Replicates Caithness stone • Extremely durable • Available in range of rectangular sizes for natural look
Colours	• Silver Grey • Standard Grey • Dark Grey	• Grey • Charcoal • Buff • Black Fleck	• Andover Silver Grey • Leemoor	• Grey • Buff • French Grey	• Charcoal
Texture	• Standard • Textured	• Ground • Textured	• Ground • Textured	• Ground • Textured	• Riven

*When laid in accordance with BS 7533: Part 4

	BS paving	Granite	Yorkstone	Sandstone	Secusys	EcoPave
Product Identification						
Key applications	• Pedestrian areas • Urban pavements	• Prestige shopping precincts and pedestrian areas • Prestige heritage	• Prestige shopping precincts and pedestrian areas • Prestige heritage	• Designed to withstand occasional bus impact	• Areas where soil and water pollution must be kept to a minimum (e.g. petrol stations)	• Town centres • Pedestrian areas • Shopping precincts
Other applications	• Vehicle overrun*	• Commercial and corporate interiors • Public/civic spaces • Vehicle overrun	• Commercial and corporate interiors • Public/civic spaces • Vehicle overrun	• Commercial and corporate interiors • Public/civic spaces • Vehicle overrun	• Dockside and harbour areas • Garages • Airports	• Footways • Service areas
Features	• British Standard compliant • Small element options available	• Wide range of aesthetic options to create impact • Extremely hard wearing	• Wide range of aesthetic options to create impact • Extremely hard wearing	• Wide range of aesthetic options to create impact • Extremely hard wearing	• An economical solution to impermeable paving • Excellent stability	• Uses secondary and recycled materials, minimising waste • Manufacturing process minimises energy
Colours	• Grey • Buff • Red	• Contact your local JDP branch for full details of colours available	• Highmoor • Moorland	• Rainbow • Lapis Grey • Sunset • Winter Green • Autumn	• Grey	• Black Fleck
Texture	• Standard • Hobnail • Barfaced • Tactile	• Flamed • Fine picked • Fair picked • Other finishes available on request	• Diamond Sawn	• Diamond Sawn • Riven	• Standard • Anti-slip	• Ground • Textured

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
A	600 x 450	50 or 63	✓	✓	✓ 63mm	✗
B	600 x 600	50 or 63	✓	✓	✓ 63mm	✗
C	600 x 750	50 or 63	✓	✓ 63mm	✗	✗
D	600 x 900	50 or 63	✓	✓	✗	✗
E (small element)	450 x 450	50 or 70	✓	✓	✓ 70mm	✓ 70mm
F (small element)	400 x 400	50 or 65	✓	✓	✓ 65mm	✓ 65mm
G (small element)	300 x 300	50 or 60	✓	✓	✓ 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.

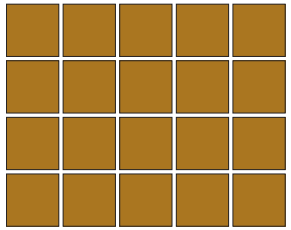
Vehicular 2 - footways where vehicles cross to access house driveways. The preferred laying course is sand.

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.

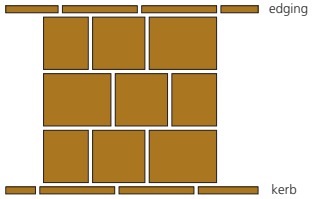
Flag Laying Patterns

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.

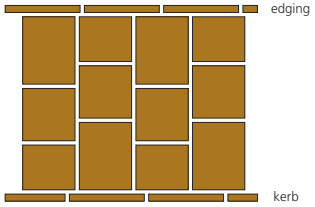
Stack bond



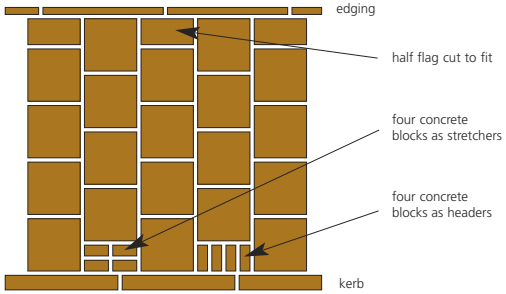
Longitudinal broken bond



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

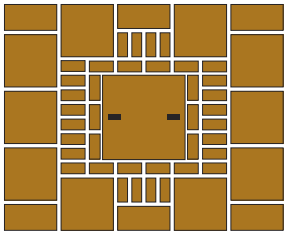
The paved area must be adequately restrained at the edges to prevent movement of the pavement or of individual flags. Edge restraints resist lateral movement and restrict loss of laying course material at the boundaries. They should be suitable for the relevant application and sufficiently robust to 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.

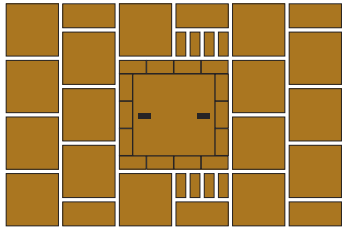
Manhole surrounds

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.

Special 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

Tactile Paving

	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 cycle/pedestrian routes
	65	450x450	*All colours	
Blister Paving 	50	400x400	*All colours	• Identifies the location of a drop kerb and crossing: Uncontrolled crossing (Buff) Controlled crossing (Red)
	65	400x400	*All colours	
	50	450x450	Buff, Red, *Grey	
Guidance Paving 	70	450x450	*All colours	
	50	400x400	Grey, Buff, *Red	• To guide pedestrians through potential hazards • Bars rounded to warn of change in direction
	65	400x400	*All colours	
Cycleway 	50	400x400	Grey, Buff, *Red	• Used to mark shared pedestrian/cycle routes
	65	400x400	*All colours	

*Colour made to order only

Elite Deterrent Range

	Thickness (mm)	Size (mm)	Colours	Key Applications
Format 2 	90-132	298x80	Grey	Pedestrian access deterrent, defining 'no go' zones providing a traffic calming component in speed humps
Format 3 	74	600x600	White	Deterrent paving for all environments in which pedestrian or vehicular traffic needs to be discouraged

Standards

- Manufactured to BS EN 1339
- Complies with BS 7997

*Format 2 complies with BS EN 1338

Installation Guide

See Flag Paving section page 312.

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

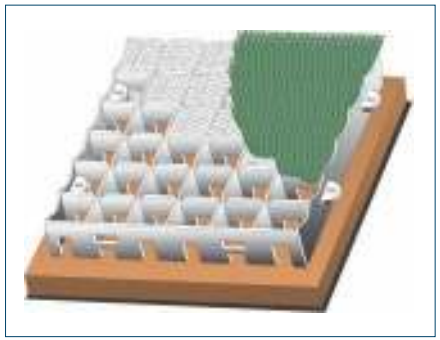
Applications

- 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.

Grass Protection Systems



JDP's range of products incorporates Grass Protection Systems that offer excellent load bearing performance combined with aesthetically pleasing appearance, by using grass or gravel infill. They can also be used as part of a SUDS solution by allowing water to filter through, unlike hard surface areas.

Using DuoBlock 500 installed with geogrids (see page 288) offers impressive results and significant cost reductions as less gravel is required to fill the units.

Features & Benefits

- 90% surface area available for infill
- Reduces surface water runoff
- Increases water filtration
- Use as part of a SUDS solution
- High load performance
- Interlocking

Applications

- Overspill car parking
- Emergency access and service roads
- Verge hardening
- Service roads
- Pedestrian walkways and towpaths
- Helipads

	Duoblock 750	Duoblock 500
Size	500 x 500 x 80mm	500 x 500 x 50mm
Number per m2	4	4
Weight per unit	2.5 kg	2.0 kg
Compressive strength	2400 kn/m2	2200 kn/m2
Colours	Black, Green, Brown, Grey	Black, Green, Brown, Grey
Cell wall thickness	5mm	3mm

Grass Reinforcement Mesh

Heavy duty thick slip resistant extruded plastic grid for protecting and reinforcing grassed areas and capable of supporting heavy loads (frequent car use). The mesh allows the grass to grow through the apertures, thus disappearing from view. Essential for grass overflow car parks, airport taxi-ways, grass paths, disabled access routes and grass verge protection.

Turf Reinforcement Mesh

A strong extruded plastic mesh for protecting and reinforcing turf that is prone to becoming rutted and muddy. Manufactured in two grades, 'Standard' and 'Heavy'. Once fixed in place grass will grow through the mesh and when fully established the mesh will be invisible and the turf will have a normal appearance.

Features & Benefits

- Strong stable surface
- Grass grows through in just a few weeks
- Fast cost effective installation compared with paving grids
- Temporary or permanent use
- Different grades & widths to suit application

Applications

Grass Reinforcement Mesh
Standard Grade
Overflow car parks
Pedestrian grassed areas
Footpaths & wheelchair access routes

Heavy
Grassed car parks
Emergency grass access routes
Grassed verges
Grassed runways & light aircraft taxiways
Golf buggy paths

Turf Reinforcement Mesh
Standard & Heavy Grades
Overflow car parks
Pedestrian grassed areas
Footpaths & wheelchair access routes

Building Materials

• Cement • Aggregates • Reinforcing Mesh • Concrete Blocks
• Lintels • Pad Stones • 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 a "one stop shop" whilst retaining a specialist service and knowledge in the products that we supply.

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 aggregates including: crushed limestone, crushed granite, crushed gritstone, crushed & uncrushed gravel and secondary aggregates.	Can be used in concrete and asphalt production, civil engineering (pipe bedding and surround, filter media) and for decorative uses.
20/32.5mm Coarse Aggregate		
10/20mm Coarse Aggregate		
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		
0/4mm Fine Aggregate (Coarse)	Natural sands and crushed rock fine aggregates in the size range 0-4mm.	Can be used in concrete, asphalt and mortar production. It can also be used decoratively or as bedding for block paving.
0/4mm Fine Aggregate (Medium)		
Bedding Sand		
0/2mm Fine Aggregate (Medium)	Natural sands and crushed rock fine aggregates in the size range 0-2mm.	
0/2mm Fine Aggregate (Fine)		
Building Sand		
Crusher Run	Well graded crushed rock in the size range 0-125mm.	Generally used as bulk fill to stabilize structures and pavements. May also be used for footpaths or as a temporary running surface.
Quarry Scalpings		
6F Capping Materials		
Type 1 Granular Sub-Base		
Walling Stone	Large single-sized crushed rock in the size range 100-500mm.	For use as dry stone walling.
Armour Stone		For use in sea and river defence work.
Railway Track Ballast		For use in bedding under railway tracks.
Gabion 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 applications e.g. driveways and footpaths.
Eversley Gold		

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.

BS Reference	Mesh Size Nominal Pitch of Wires		Wire Sizes		Cross Sectional Area per Metre Width		Nominal Weight per m²	Sheets per tonne (approx)	Sheet Weight (kg)	Sheets per Bundle	Square Metres per tonne
	Main	Cross	Main	Cross	Main	Cross	(kg)				
A393M	200mm	200mm	10mm	10mm	393mm²	393mm²	6.16	23	44.35	26	162.34
A252M	200mm	200mm	8mm	8mm	252mm²	252mm²	3.95	35	28.44	30	253.16
A193M	200mm	200mm	7mm	7mm	193mm²	193mm²	3.02	46	21.74	50	331.31
A142M	200mm	200mm	6mm	6mm	142mm²	142mm²	2.22	63	15.98	50	450.45
B785M	100mm	200mm	10mm	8mm	785mm²	252mm²	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

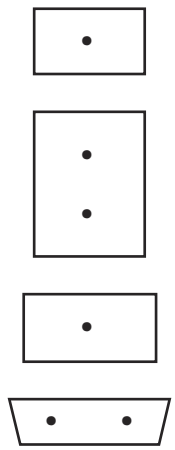
Lintels have low water absorption and as a result of the quality controlled Hi-Spec dense concrete mix used in their manufacture, they can therefore be used underground provided that the ends of the lintels have a minimum 45mm cover of mortar to the ends of the reinforcing strands.

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
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

Load Table (kN/m)

Product Reference		P100	S4	R6	R9	R12	P140	R3	S5	R8	R11	P190	R2	R190	R13	P215	R7	S8	R14	P254
Cross Section Size	Width (mm)	100	100	100	100	100	140	140	140	140	140	190	190	190	190	215	215	215	215	254
	Height(mm)	70	110	145	215	290	70	100	140	215	290	70	145	215	290	70	145	215	290	70
Length (mm)	Clear Span (mm)																			
900	700	17.67	34.27	50.74	78.18	100.05	18.14	49.17	63.32	100.57	128	30.88	81.86	126.49	162.2	32.53	90.15	138.94	178.6	34.85
1100	900	10.89	23.18	40.47	62.44	79.9	11.15	33.04	50.5	80.31	102.2	19.02	60.78	101	129.49	20.02	63.86	110.93	142.58	21.43
1200	1000	8.86	19.04	36.74	56.72	72.57	9.06	27.08	41.89	72.95	98.82	15.48	50.12	91.72	117.6	16.29	52.65	92.25	129.48	17.43
1500	1200	6.18	13.48	26.19	48.57	60.85	6.31	19.11	29.81	62.22	77.58	10.79	35.69	70.66	97.99	11.35	37.48	74.26	107.73	12.13
1800	1500	3.95	8.75	17.14	36.27	49.66	4	12.38	19.49	41.6	63.3	6.88	23.34	46.87	79.77	7.23	24.49	49.23	83.95	7.71
2100	1800	2.72	6.1	12.04	25.78	41.91	2.73	8.62	13.67	29.53	51.38	4.72	16.36	33.22	56.74	4.96	17.15	34.87	59.68	5.27
2400	2100	1.96	4.47	8.89	19.21	31.7	1.96	6.31	10.07	21.97	38.35	3.41	12.03	24.68	42.28	3.57	12.6	25.89	44.45	3.79
2700	2400		3.39	6.8	14.83	24.53		4.79	7.68	16.93	29.64		9.17	18.98	32.63		9.59	19.89	34.28	
3000	2700		2.64	5.34	11.76	19.49		3.74	6.03	13.4	23.53		7.17	14.99	25.85		7.49	15.69	27.14	
3300	3000		2.1	4.29	9.53	15.83		2.98	4.83	10.83	19.09		5.73	12.08	20.92		5.97	12.63	21.94	
3600	3200		1.82	3.75	8.36	13.49		2.59	4.2	9.49	16.25		4.98	10.56	17.77		5.18	11.04	18.62	
Lintel Weight Kg/m		17	26	35	53	69.6	24	34	47	72	97.4	32	66	98	132.2	36	75	111	150	43

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.

Pad Stones

Padstone Range

A comprehensive range of standard padstones is available with others available upon request.
Our Padstone range uses a 50kn/2 grade of concrete to ensure the perfect product for your needs and the high finish.

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

Storage Tanks

- Oil Storage • Spill Containment
- Fuel Storage & Dispensing Systems • AdBlue Storage Tanks
- Bulk Liquid Storage Tanks • Potable Water Tanks

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?
To industrial, commercial and institutional sites, e.g. factories, shops, offices, hotels, schools and public sector buildings in England, which store any type of oil (except waste oil) in a container of more than 200 litres capacity. Private dwellings storing over 3,500 litres are also included, but it should be noted that the Building Regulations reduce this to 2,500 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. JDP's range of bunded range of EcoSafe tanks will meet all your regulatory needs in one easy step.

Q. Can I have ancillary equipment outside an integrally bunded tank?
An isolating valve and filter on an integrally bunded tank is not classed as ancillary equipment to the tank and is permitted. Under these regulations, you cannot fit an external sight gauge to an integrally bunded tank.

N.B. a hose and nozzle cannot be fitted to a bunded tank, a fuel dispensing system must be used.

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.

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.
JDP now provides the most comprehensive range of bunded plastic oil tanks.

Telemetry

The telemetry transmitter offers owners 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 from inside your offices. All oil tanks in this section come with this feature.

Full Stop

All bunded tanks are fitted with the 'FullStop', reducing the risk of spillage during delivery.

Top Outlet

For the additional safe storage tank, bunded tanks can be fitted with a top outlet.

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 also acts 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.

Features & Benefits

- Integrally bunded
- Range of sizes
- Pro-Active fuel monitoring system
- Exceeds all current oil storage regulations
- FullStop overspill device

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
1401ES1225B	Ltr/Gal: 1225/270 Length: 2075mm Width: 1030mm Height: 1560mm

Code	Description
1401ES1300B	Ltr/Gal: 1300/285 Length: 1935mm Width: 1265mm Height: 1310mm

Code	Description
1401ES1800B	Ltr/Gal: 1800/400 Length: 2360mm Width: 1300mm Height: 1345mm

Code	Description
1401ES2500B	Ltr/Gal: 2500/550 Length: 2450mm Width: 1425mm Height: 1465mm

Top outlet also available

Code	Description
1401ES3500	Ltr/Gal: 3500/775 Diameter: 2180mm Height: 2230mm

Code	Description
1401ES5000	Ltr/Gal: 5000/1100 Diameter: 2230mm Height: 2230mm

Code	Description
1401BRMVB7500	Ltr/Gal: 7500/1650 Length: 2550mm Width: 2305mm Height: 3020mm

Code	Description
1401BRMVB10000	Ltr/Gal: 10000/2200 Length: 2755mm Width: 2510mm Height: 3150mm

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
090510OIL	10mm Plastic Oil Pipe
090515OIL	15mm Plastic Oil Pipe
0901T10P	10mm Plastic Coated Copper x 25m
0901T15PW	15mm Plastic Coated Copper x 25m

Code	Description
0905KBB3 KBB Remote Fire Valve 3m*	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. • 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 • 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

Spill Containment

JDP supply a range of workfloor and pallet solutions for spill containment to ensure that commercial and industrial properties comply with the Control of Pollution (Oil Storage) Regulations and site Health and Safety Regulations.

Workfloors

Features & Benefits

- Withstands constant use as a raised floor area
- Link blocks available to create customised work areas
- Suitable for storage of drums up to 210 litres
- Removable desk for easy cleaning

Applications

Storage of drums for:

- Engineering companies
- Factories
- Workshops
- Hospitals
- Industrial sites
- Marinas

Code	Description
1401SS1DWF	Capacity: 55ltrs Length: 758mm Width: 758mm Height: 150mm

Code	Description
1401SS2DWF	Capacity: 112ltrs Length: 1400mm Width: 758mm Height: 150mm

Code	Description
1401SS4DWF	Capacity: 215ltrs Length: 1400mm Width: 1400mm Height: 150mm

Bunded Pallets

Features & Benefits

- Suitable for storage of drums up to 210 litres
- Removable desk for easy cleaning
- Fork lift slots for positioning empty pallets

Applications

Storage of drums for:

- Engineering companies
- Factories
- Workshops
- Hospitals
- Industrial sites
- Marinas

	Code	Description
	1401SS2DBP	Capacity: 240ltrs Length: 1400mm Width: 758mm Height: 385mm

	Code	Description
	1401SS4DBP	Capacity: 250ltrs Length: 1400mm Width: 1400mm Height: 250mm

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.

Fitted with the SpillStop overfill protective system, the bunded 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	Ltr/Gal: 1300/285 Length: 1890mm Width: 1245mm Height: 1785mm

	Code	Description
	1401FM2500GR	Ltr/Gal: 2500/550 Length: 2430mm Width: 1420mm Height: 1855mm

	Code	Description
	1401FM3500GR	Ltr/Gal: 3500/775 Length: 2430mm Width: 1420mm Height: 1855mm

	Code	Description
	1401FM5000GR	Ltr/Gal: 5000/1100 Length: 1890mm Width: 1245mm Height: 1785mm

	Code	Description
	1401FMV5000GR	Ltr/Gal: 5000/1100 Length: 2430mm Width: 1420mm Height: 1855mm

	Code	Description
	1401VB7500SF	Ltr/Gal: 7500/1650 Length: 2430mm Width: 1420mm Height: 1855mm

	Code	Description
	1401VB10000SF	Ltr/Gal: 10000/2200 Length: 1890mm Width: 1245mm Height: 1785mm

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	
1401TM430	Ltr/Gal:	430/95
	Top Length:	1156mm
	Base Length:	980mm
	Width:	842mm
	Height:	860mm

Code	Description	
1401TM900	Ltr/Gal:	900/198
	Top Length:	1400mm
	Base Length:	1100mm
	Width:	1000mm
	Height:	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.

AdBlue Storage Tanks

Meeting the requirements of commercial, industrial and retail outlets, JDP provide a range of fully integrated AdBlue dispensing stations from 500 to 10,000 litre capacity. These fully lockable low maintenance tanks are fully bunded.

JDP are also able to provide forecourt models with remote dispensing and metering up to 62,000 litre capacity.

Adblue requires specialist containment, must be kept within strictly controlled conditions and stored within Adblue resistant containers.

Failure to adhere to these requirements has the potential to destroy the expensive, sophisticated catalytic converters fitted as standard to current generation SCR enabled Euro IV and next generation Euro V commercial vehicles. In the case of an Adblue storage tank serving a fleet of vehicles, an incorrectly specified tank could destroy multiple catalytic converters, invalidate the vehicle manufacturer's warranty and potentially cost £'000s.

What is AdBlue?

AdBlue is a solution of high purity urea in demineralised water and is used as an operating fluid in heavy duty diesel engines (>3.5t, > 85kw). This is a direct result of the European Union issuing strict emission standards (EURO 4 in 2005, EURO 5 in 2008).

On average, AdBlue is consumed at approximately 3-5% by volume of diesel usage.

Customer Features & Benefits

- Saves costs due to lesser fuel consumption
- AdBlue driven trucks gain reduction on taxes/tolls
- Helps protect the environment

Product Features & Benefits

- Range of sizes
- Fully lockable
- Complete with flow meter, bund alarm, level gauge and dispensing hose
- Choice of pump up to 75litres per minute electric or battery powered

	Code	Description
	1401SB500	Ltr/Gal: 500/112 Length: 1200mm Width: 1200mm Height: 1438mm

	Code	Description
	1401BMH1300	Ltr/Gal: 1300/285 Length: 1900mm Width: 1220mm Height: 1780mm

	Code	Description
	1401BMH2500	Ltr/Gal: 2500/550 Length: 2460mm Width: 1430mm Height: 1850mm

	Code	Description
	1401SBV2500	Ltr/Gal: 2500/550 Length: 2100mm Width: 1800mm Height: 2100mm

	Code	Description
	1401BMV3500	Ltr/Gal: 3500/775 Overall Width: 2520mm Diameter: 2150mm Height: 1900mm

	Code	Description
	1401BMV5000	Ltr/Gal: 5000/1100 Overall Width: 2700 mm Diameter: 2230mm Height: 2380mm

	Code	Description
	1401SB7500	Ltr/Gal: 7500/1100 Length: 3115mm Width: 2305mm Height: 3020mm

	Code	Description
	1401SB10000	Ltr/Gal: 10000/2200 Length: 3320mm Width: 2510mm Height: 3150mm

Standards

Compliant with all applicable ISO, CEFIC and DIBT requirements.

Bulk Liquid Storage Tanks

JDP supply Balmoral Bulk Liquid Tanks which are normally supplied to client specification using a variety of fittings and accessories. In some cases, clients prefer to fit their own accessories – this is understood and catered for.

Whether your requirement is a single tank or a full bulk storage system complete with pipework, valving, pumps and control/alarm panels, we offer the highest level of service.

The JDP Balmoral solution offers a fully comprehensive service

- Tank customisation and fitting out
- Transportation and logistics
- Offloading, installation and hook up
- Testing
- Maintenance programmes

Applications

- Agriculture and Farming
- Aviation
- Brewing and Distilling
- Chemical
- Civil Engineering
- Food and Beverage
- Fuel storage and dispensing
- Glass and Ceramics
- Metal Processing/Treatment
- Oil and Petrochemical
- Paint/Pigment/Dyes/Ink
- Pharmaceuticals/Cosmetics/Toiletries
- Plastics and Rubber
- Textiles
- Utilities
- Waste
- Water

Potable Water Storage Tanks

Plastic Water Tanks

JDPs Potable Water Tanks are renowned for their strength and durability providing the best options for emergency human consumption or for general use including animal watering. Potable water tanks are manufactured from one hundred percent virgin black MDPE and approved by WRAS (Water Regulations Advisory Scheme).

Features & Benefits

- Manufactured in high quality recyclable polyethylene
- Suitable for domestic, agricultural and commercial use
- Light weight and easy to handle
- Low maintenance
- UV stabilised
- Corrosion resistant
- Fully vented
- Cost effective

Code	Description
1401V1300W	Ltr/Gal: 500/112 Length: 1200mm Width: 1200mm Height: 1438mm

Code	Description
1401V1800W	Ltr/Gal: 1300/285 Length: 1900mm Width: 1220mm Height: 1780mm

Code	Description
1401V2500W	Ltr/Gal: 1300/285 Length: 1900mm Width: 1220mm Height: 1780mm

Code	Description
1401V3600W	Ltr/Gal: 2500/550 Length: 2460mm Width: 1430mm Height: 1850mm

Code	Description
1401V5000W	Ltr/Gal: 2500/550 Length: 2100mm Width: 1800mm Height: 2100mm

Code	Description
1401V7270W	Ltr/Gal: 3500/775 Overall Width: 2520mm Diameter: 2150mm Height: 1900mm

Code	Description
1401V10000W	Ltr/Gal: 5000/1100 Overall Width: 2700mm Diameter: 2230mm Height: 2380mm

GRP Sectional Water Storage Tanks

With an unrivalled reputation for quality and service JDP offers glass reinforced plastic (GRP) sectional tanks, which can be pre-insulated, ranging from 1- 1000m³ litres capacity and erected to a height of 4m in 1m and 0.5m increments.

These tanks carry WRAS approval for potable water storage and LPCB approval for fixed fire fighting sprinkler systems. All panels are fully tested to resist pressures in excess of six times their working pressure.

Applications

- Hotels
- Hospitals
- Shopping centres
- Sports and community centres
- Stadia
- Distilleries and breweries
- Factories and offices

Features & Benefits

Feature	Benefit
CAD/FEA design	Conforms to BSEN 13280 (2001) standards
Automated manufacturing	Consistent product offering dimensional stability
Automated finishing	Provides high levels of accuracy
High grade materials	Improved resistance to bacterial growth, increased water resistance, reduced risk of osmotic attack. Colour 00-A-05 to BS 5252
UV stabilised materials	Suitable for global climatic conditions
100% opacity	Prevents algae growth
Heavy duty cover	Low maintenance, resists wind and snow loadings. BS 6399 Pt1 (1996)
Integrated insulation	CFC and HCFC free, providing U value of 0.6W/m2K. Suitable for water storage up to 38ºC
Exclusive sealant	WRAS approved, provides optimum performance under varying climatic conditions
Bracing	Designed to BS 6700 to limit structure deformation
WRAS approved	Tanks compliant to WRAS Section 0135, fittings compliant to Water Regulation 16 (Byelaw 30) for tanks to 4m depth
LPCB approved	Tanks approved for fire fighting sprinkler systems

Tank construction

JDP's range of sectional GRP tanks can be specified with either an externally flanged base (EFB) or internally flanged base (IFB). This allows the use of flat continuous foundations, close centre beams, pier walls or bearer beams depending upon the type of base required. An internally built tank (IBT) should be supported as per a standard IFB installation.

The EFB specification is fully self draining allowing ease of maintenance and cleaning.

- Flexibility of structure allows connections to be agreed on site to suit actual tank location
- Modular design provides ease of transport and flexibility of assembly on either a prepared flat and level concrete foundation, support walls or bearer beams
- Panels are rigidly supported by a combination of stainless steel tie rods internally and galvanised box sections externally
- Installation is carried out by fully trained and approved installers

Accessories

A full range of accessories is available including handrails, supports, air vents, stainless steel fasteners and fixings, float valve chambers, manways, internal and external ladders, etc.

Tank replacement service

JDP provides a complete tank replacement service. Acting as main contractors, JDP installation teams work with client health and safety, design and contract management teams and can advise on ACOP L8 and CDM where required.

Turnkey project design and installation service

- Secondary base steel design and installation
- Tank design (ISO 9001) and installation
- Tank removal and responsible disposal
- Establishment of temporary supply
- Pipework re-routing
- Updating/replacement of valve systems
- H&S and CDM experience
- ACOP L8

GRP one-piece tanks

GRP one-piece tanks, in capacities of 230-4550 litres, are manufactured to BS13280:2001 standards. The tanks comply with UK water supply regulations 1999 and have been tested and approved by WRAS.

Steel sectional water tanks

As an alternative to GRP sectional water tanks, steel sectional tanks offer an extremely rugged and highly portable design which is ideal for use in sites with restricted access or seismic concerns, particularly overseas. The tanks are designed for easy shipment into the most inaccessible areas using the most basic means of transport. Assembly is simple and quick, requiring only hand tools and the minimum of skilled labour. Sectional steel tanks with capacities from 1000-8,000,000 litres have been installed for water supply projects, food and process industries, hotels, railways, hospitals and many more. This is a proven technology, providing tanks and supporting towers with an outstanding track record. The development of our EPDM rubber sealing system, combined with the company's standard practice of galvanising all panels to resist corrosion, has made safe storage of this valuable resource even more certain. Tanks can be provided for ground level installation or elevated on steel structures that are specifically designed and fabricated for each project.

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 source. A range of products including marker tapes, tools, safety wear and hoses are therefore available from JDP trader counters. The products include market tapes, tools, safety ware and hoses, please visit our trade counters to see the full 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 and 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
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
2003FIBREECON	Economy Fibre Optic Warning Tape
2003FOULSEWECON	Economy Foul Sewer Warning Tape

Detectable Range 200mm x 100m

Code	Description
2003DETMESHECB	Yellow Electric Dectectamesh
2003DETMESHGPB	Yellow Gas Dectectamesh
2003DETMESHWMB	Blue Water Dectectamesh
2003DETMESHTCB	Green Telephone Dectectamesh
2003DETMESHFO	Green Fibre Optic Dectectamesh
2003DETMESHSPB	Red Sewer Below Dectectamesh

Tape Tile 2.5mm x 40m heavy-duty cable protection

Code	Description
2003UKTO2ELE150	150mm Marker Tile Electric
2003UKTO2ELE200	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 and 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

2 x 30m Contaminated Ground Warning Mesh
2 x 25m Contaminated Ground Warning Mesh & Geotextile
4 x 25m Contaminated Ground Warning Mesh & Geotextile
4.5 x 100m Contaminated Ground Warning Geotextile

Road Safety & Traffic Management

A range of signage, fencing and hazard warning tapes for site construction use 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

Code	Description
2003HAZARD100	Hazard Warning Tape Red/White Str 75mm x 100m
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.

Personal Protective Equipment (PPE)

JDP offer a range of essential health and safety ware for building sites.

Code	Description
2040272000	Muff Ear Lightweight BS 6344 Pt1
2040053305	Waistcoat H/V Yellow EN471/2 2 B/B L
2040049105	Jacket H/V Yellow (300Den) EN471/3 L
2040296800	Knee Pads Economy
2040691120	Respirator JSP Foldflat P1-211 -20
2040094609	Boot Dual Density Black 9SM
2040269700	Glove PVC Knitted Wrist
2040267500	Goggle (CDM) BS EN166 -349B
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 such as CK, the range is designed to suit the needs of the contractor when installing and servicing the many products that JDP supply.

Contractors Tools

Code	Description
20402004045	Axe Economy Felling 41/2lb.
2040200804	Brick Bolster 4" Economy
2040344648	Shaft Broom 48" x 15/16"
20402556	Brush Coco
2040278210	Chisel 10" x 1" Flat Cold
2040201060	Crowbar Straight 5'
20402014025	Hammer Club 2.5lb Hardwood
2040249507	Pick Head 7lb. Chisel &Point
2040343036	Shaft Pick 36"
2040216401	Rake Russell Steel Shaft Tar Flat Tooth

Code	Description
2040261824	Saw Blade Bushman Economy 24"
20405060	Scraper Floor c/w Wood Handle
20405061	Scraper Floor Blade
2040506202	Shovel Russell Taper Mouth T
2040485210	Spirit Level Fisco L8-025 10"
20400550003	Tape Rule Pocket 3M/10Ft
20402632	Trowel Pointing 6" Economy
2040202218	Wrecking Bar 18" x 5/8"

* 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

Code	Description
2099WB	Contractor's Wheelbarrow
2008F066A	Builder's Bucket Black
2008F066B	Builder's Bucket Yellow

Manhole Lifting Keys

Code	Description
200191006	6" Manhole Lifting Keys (Pair)
200191012	12" Manhole Lifting Keys (Pair)
200191020	20" Manhole Lifting Keys (Pair)
200191024	24" Manhole Lifting Keys (Pair)
0620QKEY	Recessed Cover Lifting Keys (Pair)

Pipe Cutter

Code	Description
2001PPC110	110mm Pipe Cutter

Spray Marker Paint

Ideal for site and survey marking, these marker sprays are available in several colours.

Code	Description
2099SMPB	750ml Blue Survey Marker Paint
2099SMPG	750ml Green Survey Marker Paint
2099SMPO	750ml Orange Survey Marker Paint
2099SMPR	750ml Red Survey Marker Paint
2099SMPW	750ml White Survey Marker Paint
2099SMPY	750ml Yellow Survey Marker Paint

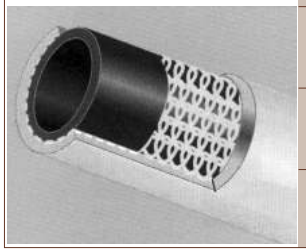
Standpipes

Standpipes ideal for use as temporary water supplies on building sites are available from JDP.

Code	Description
0820SPDCV	Standpipe c/w Double Check Valve & Bib Tap
0820VTKEY1M	Valve Tee Key 1mtr

Hoses

JDP supply reinforced, kink and abrasive resistant hose for building sites, commercial and domestic use.



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

	Description
	A range of submersible pumps for a variety of applications are available from JDP

Protective Sheeting

Code	Description
2040240901	Tarpaulin Reinforced PVC4.5 x 3.5M White
1501TPS4.5KG	4.5KG Clear Temporary Protective Sheeting

Products for Specialist Applications

JDP are dedicated to finding and introducing products that offer solutions. 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 High Capacity Roof Drainage

Products for Sustainable Urban Drainage Solutions (SUDS)

Products for Heat & Chemical Resistance

Products for Sustainable Developments

Products Manufactured from Recycled Materials

Products for Brown Field Sites

JDP would like to thank the following manufacturing partners for their support.

SCOTLAND

1 INVERNESS
The Pipe Yard
22 Seafield Road
Inverness IV1 1SG
Tel: 01463 717818
Fax: 01463 717819

2 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

4 GLASGOW
Dixon Place
College Milton, East Kilbride
Glasgow, G74 5JF
Tel: 01355 235581
Fax: 01355 244167

NORTH

5 LONGTOWN
Townfoot Industrial Estate
Longtown, Carlisle CA6 5LY
Tel: 01228 792391
Fax: 01228 792335

6 BIRTLEY
Penshaw Way
Portobello Industrial Estate
Birtley, Chester-Le-Street
DH3 2SA
Tel: 0191 410 9522
Fax: 0191 410 0966

7 SKIPTON
Sidings Business Park
Sandylands
Skipton
BD23 1TB
Tel: 01756 796180
Fax: 01756 796202

8 KNOTTINGLEY
6-8 Spurriers Ave
Knottingley
West Yorkshure WF11 OER
Tel: 01977 677000
Fax: 01977 675872

9 BOLTON
23 Tonge Bridge Way
Bolton
Lancs BL2 6BD
Tel: 01204 396052/396976
Fax: 01204 532763

10 HEYWOOD
Green Lane, Heywood
Lancs OL10 2EU
Tel: 01706 364115
Fax: 01706 366402

11 LIVERPOOL
Rossmore Industrial Estate
Rossbank Road
Ellesmere Port CH65 3AN
Tel: For details please call
0800 195 1212

MIDLANDS

12 ALFRETON
Cotes Park Lane East
Cotes Industrial Estate
Somercotes, Nr Alfreton
Derbyshire DE55 4NJ
Tel: 01773 835104
Fax: 01773 836078

13 SMETHWICK
Bridge Street North,
Smethwick
West Midlands B66 2BH
Tel: 0121 558 6076
Fax: 0121 558 6077

14 NORTHAMPTON
Ross Road
Weedon Road Industrial Estate
Northampton, NN5 5AX
Tel: 01604 754025
Fax: 01604 758092

SOUTH EAST

15 EYE
Unit 10 Fortress Close
Brome Industrial Estate
Brome
Nr Eye, IP23 7HN
Tel: 01379 873593
Fax: 01379 873473

16 COLCHESTER
3 Moorside
East Gates, Colchester
Essex CO1 2TJ
Tel: 01206 795555
Fax: 01206 795500

17 BERKHAMSTED
Billet Lane
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