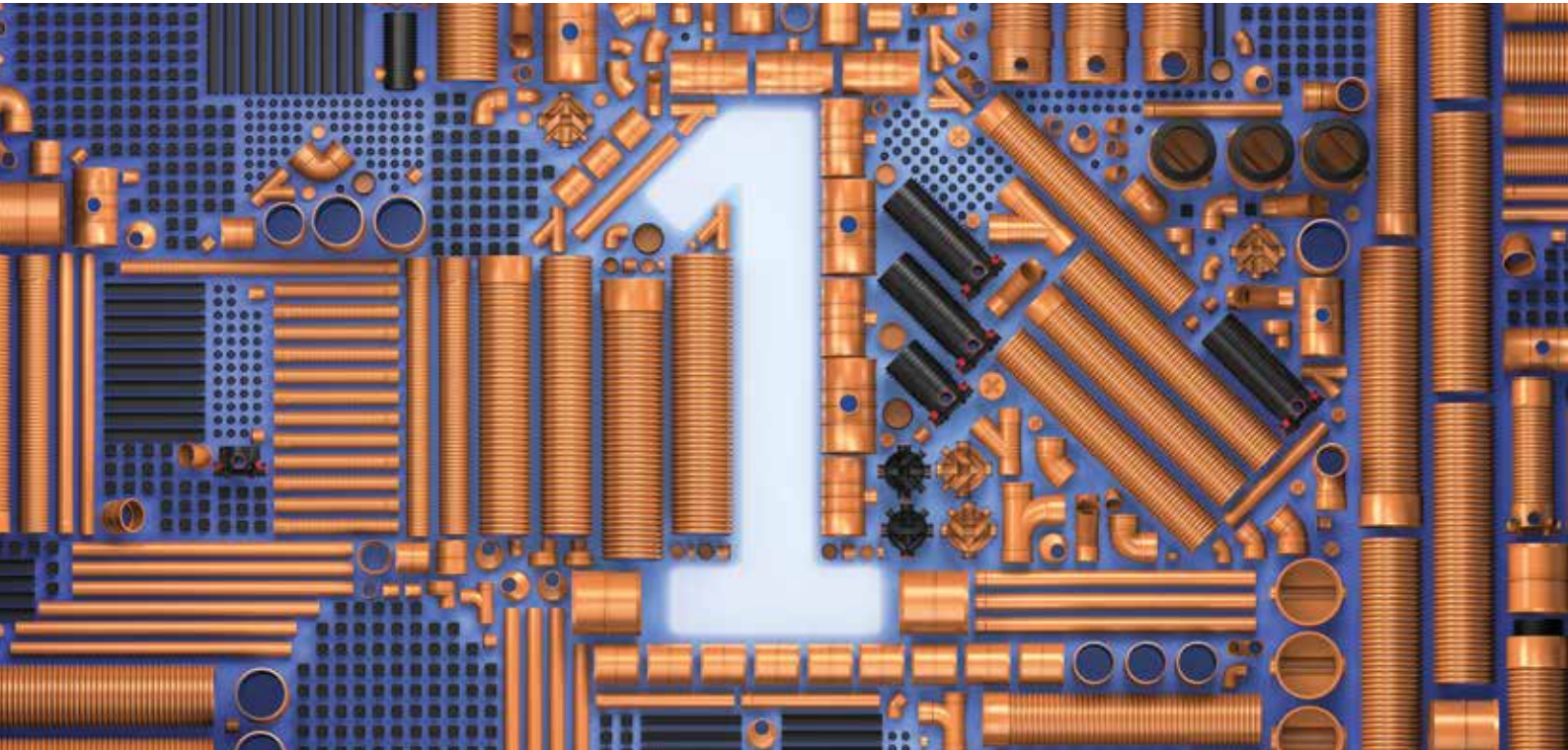


# Below ground systems



One range. Endless opportunities.

# One range. Endless opportunities.

At Polypipe Building Products, we hold the UK's largest range of drainage pipes, fittings, chambers and sewer systems for all your Residential projects. Whatever the size or scale of your project, we'll help design and develop intelligent systems to suit your scheme. Innovative, strong and durable enough to meet today's construction challenges, the Polysewer, Chambers and Underground pipes range from Polypipe Building Products, is the only one you need.



**Comprehensive range of pipes and fittings**



**High quality systems, light in weight for easy installation**



**Compliant with Sewerage Sector Guidance for England, Sewers for Scotland and The Welsh Minister Standards for Sewers**



**Chambers are fabricated off-site ready to install easily and quickly**



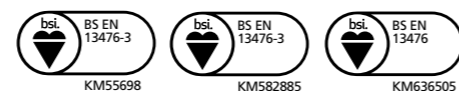
**A national team who can provide local knowledge**



All of our sewer pipes are designed to the highest standards. And because they're made from robust, durable and recyclable materials, they provide the best possible solutions for new and replacement gravity sewer systems.

## Our systems are:

- Adopted by UK water companies under Sewerage Sector Guidance for England, Sewers for Scotland and The Welsh Minister Standards for Sewers
- Kitemarked to BS EN 13476, BE EN 1401 and WIS 4-35-01
- BBA Approved



# Why Polypipe?

Polypipe is one of Europe's largest manufacturers of engineered drainage, water management solutions, underfloor heating, cable management, plastic plumbing and energy-efficient ventilation – developing and manufacturing products that enable solutions for a sustainable and resilient built environment. So, with the scale, innovation support and guidance of the UK's largest plastic piping manufacturer, Polypipe Building Products has the capability to help you succeed.

## The broadest product range available in the UK

With over 100 product systems, Polypipe's unrivalled portfolio offers dependable, innovative solutions for pressure and non-pressure applications, enabling the movement of water, air, power, chemicals and telecoms throughout the built environment.

## Market-sector focused

Polypipe operates through sector-focused businesses, ensuring that our sales and technical teams are equipped to meet the specific needs of Residential, Civils and Infrastructure, Commercial and Industrial projects

## Polypipe's intelligent engineering

Our substantial technical knowledge and capability is best utilised when we get involved early in the project. Engaging with the project team, we work closely to deliver the most appropriate and cost-effective solutions, supporting them from design through to installation.

## On top of legislation for today's construction challenges

Our in-house research and development facility is one of the most advanced of its kind and includes our UKAS accredited Laboratory. This gives us the knowledge and expertise to be the industry leader for legislation – producing the most advanced range of products and solutions that are always up to date with the very latest regulations and standards.

## Keeping your project on track and above board

We understand that detailed planning and design of your system is crucial to ensure successful approval from the local water authority. Our expert team is experienced in the 'adoption of sewers' process and can help secure a Section 104 agreement. Involve us early to help with your submission – and reduce the risk of a late completion.

## Choose innovative plastic solutions

Using engineered plastics rather than traditional materials such as concrete or clay can lead to innovative project solutions that offer transportation, installation and cost-saving benefits.

## Plastic pipe key benefits

- Lighter than traditional materials, lowering transport and installation costs
- Higher toughness means flexibility and reduced risk of breakage
- Strong and lighter in weight providing excellent Health and Safety benefits including integral sockets
- Reduced leakage due to longer pipe lengths and high-integrity joint systems
- Can be manufactured from recycled materials where standards allow
- Proven second life - 100% recyclable
- Ability to use off-site construction techniques to minimise cost and time on-site
- Non-corrosive
- Life expectancy in excess of 100 years



# Sewer piping systems

Available in a range of sizes, our adoptable sewer systems have been engineered to meet the requirements of small and large residential developments. Our Polysewer PVCu range has been developed to provide chemical, impact and abrasion resistance and is robust, durable and resistant to sulphate attack and corrosion from sewer gas. Light in weight, the system is easy to handle and install.



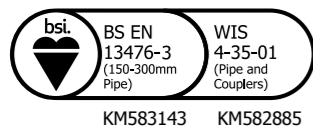
## Polysewer 150-300mm

Polysewer is a range of PVCu structured wall pipes and fittings available in diameters 150-300mm. The complete system includes a range of couplings, seals, bends, junctions and accessories. Polysewer provides robust, sewer gas-resistant pipes for new and replacement gravity sewer systems.



### Key benefits

- Fully compliant with WIS 4-35-01 and BS EN 13476-3
- Compliant to meet Sewerage Sector Guidance for England, Sewers for Scotland and The Welsh Minister Standards for Sewers
- BSI Kitemarked and BBA approved
- Adoptable by water companies
- Manufactured to stiffness classification SN8
- Light in weight for increased Health and Safety benefits
- Integral sockets for quicker installation and greater leak tightness
- Strong, flexible pipe wall withstands ground movement and differential settlement
- Design life in excess of 100 years



KM583143 KM582885



## Sewerdrain gravity sewer system

The Polypipe Sewerdrain Gravity Sewer System is a complete range in 200, 250 & 315mm solid wall PVCu Kitemarked to BS EN 1401-1, to provide strength, durability and ease of installation, while our secure seal allows push fit joints throughout to get the job done quickly. Sewerdrain is suitable for all foul and surface water sewer applications and is fully compatible with 110 & 160mm BS EN 1401 drainage pipe & fittings.



### Key benefits

- Polypipe Sewerdrain is supplied complete with an integral seal for faster, problem free installation
- Light in weight and easy to handle for quicker installation
- Smooth external wall and bore pipe is available in both 3m and 6m lengths for reduced risk of blockage and improved flow
- Full range of fittings and adaptors to other sizes and materials
- Solid wall gives improved resistance to damage from cleaning and maintenance
- Compliant to meet Sewerage Sector Guidance for England, Sewers for Scotland and The Welsh Minister Standards for Sewers
- Carries the British Standard Kitemark to BS EN 1401-1

# Chamber solutions

Our range of inspection chambers can be used in both adoptable and none adoptable scenarios and are fully compliant with Sewerage Sector Guidance for England, Sewers for Scotland and The Welsh Minister Standards for Sewers. Adoptable drainage installations are no longer restricted to traditional concrete chambers. However, plastic inspection chambers must comply with EN 13598. All of Polypipe's adoptable chambers meet the required standards.



SFA210, SFA238, UDC200    SFA430    SFA530    SFA440    SFA670    SFA671    Pipe riser chambers

## Adoptable applications

We offer a range of adoptable chambers, covers and frames in diameters from 200mm – 600mm.

Like all Polypipe products, our range of inspection chambers have been built with quality materials engineered to last. What's more, all of our chambers are pre-benched and easy to cut to length without the need for special tools and equipment making the chambers quicker and easier to install.

Our SFA inspection chambers are pre-benched and in segmented sections, so you only pay for the size you need.

It also allows site workers to construct a chamber to the required invert to cover levels rather than spending time cutting the product to size on the site. This level of flexibility can amount to significant time and cost savings.

Our SFA Pipe Riser Inspection Chambers are available with inlets for 110mm, 150mm and 160mm pipe and come supplied with a riser seal. The riser is a high strength (SNA8) single piece 450mm piece of Ridgisewer which can be cut to length to achieve a maximum desired invert up to 3 metres.

## None adoptable

A range of none adoptable chambers are available giving you complete flexibility, ensuring your project is specified exactly as required.

Our range of none adoptable chambers are available in diameters from 320mm – 460mm.



BBA approved chambers    ICDB chambers



Polypipe inspection chambers to BBA approvals or BS 7158 in 320mm and 460mm diameters can be used in applications, for both shallow access and non-man entry installations.



## IC600 range

The Polypipe IC600 range of inspection chambers is a safe and cost-effective solution for all residential applications. Designed for adoptable and non-adoptable domestic drainage systems, the range is manufactured from high quality polypropylene and is engineered to last whilst being light in weight for ease of handling and installation.

The unique adaptor range simplifies choice allowing multiple configuration options for connection to Polysewer, Smoothwall PVCu and 150mm Vitrified Clay pipe.

## Key benefits

- Choice of IC600 bases with straight through flow or cross tee configuration
- For use with 150/160mm, 225/250mm or 300/315mm pipe
- Choice of adaptors for pipe connection to Polysewer, Smoothwall PVCu products
- Certified to EN 13598-2 and compliant with Sewerage Sector Guidance for England, Sewers for Scotland and The Welsh Minister Standards for Sewers
- Double skinned base for additional groundwater resistance
- Fully sealed for a watertight, tamper proof and low maintenance installation
- Light in weight and strong for improved health and safety and easy handling
- Corrosion resistant
- High strength single piece 600mm diameter Ridgisewer SN8 riser
- Riser cap which can be adapted for reduced access for chamber depths of greater than 1.2m by using the UG514 restricted access reducer with Polypipe ductile iron covers and frames
- Riser cap directly compatible with the UG510 Polypropylene square cover and frame



# Covers and Frames

As the only manufacturer to provide separate solutions for both non-adoptable and adoptable applications, we have the most comprehensive range of covers and frames to complete your project. All Polypipe plastic and ductile iron covers and frames are available in a range of sizes for use with our access boxes and pole boxes.

## Ductile Iron Covers and Frames

The Polypipe range of Ductile Iron Inspection Chamber Covers has been designed to combine high strength with light weight and includes additional features such as the unique, slip-resistant Polypipe cover tread pattern.



UG419

UG520

UDC700

UDC750

## Key benefits

- All covers and frames are fully compliant with BS EN 124:2015 and carry the BSI Kitemark
- Suitable for intensity of traffic in either Class A15 or B125 applications
- Manufactured in the United Kingdom from quality-assured and highly durable ductile iron
- Unique, slip-resistant Polypipe cover tread pattern
- Ease of removal with slide-out design
- Engineered keyways for long life access
- Range of frame depths including 70mm square (UG520) ideally suited for installation in block paved locations



UG513

## Plastic covers and frames

With continued investment, research and working closely with our customers, we've developed and improved our range of plastic covers and frames. Polypipe plastic covers and frames deliver the performance you need, in a strong, light-in-weight, slip-resistant material.

## Key benefits UG501 & UG502

- Cast iron effect tread pattern – fits in with UG510 aesthetic
- Increased height tread pattern – improved grip
- Drain holes in frame to reduce water build up
- Location lugs to ensure riser is located centrally
- Holes in bore to allow for fixing to riser using self-tapping screws
- Locating feature to allow cover to be easily replaced if removed. (UG501 only)
- Self-tapping Torx screw for enhanced security
- Increased depth to allow for use with block paving. (UG502 only)



New UG501 vs Old UG501



New UG502 vs Old UG502

## Key benefits UG510

- Made from hard-wearing, weather resistant black polypropylene, light-in-weight design for easy handling
- Deeper 65mm frame for installation in block paving, cover with anti-slip tread pattern and cast iron effect
- Rated at 15kN/1.5T (A15) for use in lightly loaded areas such as domestic gardens and footpaths
- Can withstand loading of 35kN/3.5T for use in domestic driveways when surrounded by a full concrete surround
- For use with the Polypipe 460mm underground inspection chamber, non-man entry deep inspection chamber and 'Sewerage Sector Guidance for England, Sewers for Scotland and The Welsh Minister Standards for Sewers' inspection chamber ranges
- Anti-rock with four removable locking screws
- Single seal with integrated removable 350mm restrictor ring for chambers deeper than 1.2m. Optional frame to riser gasket
- Sewerage Sector Guidance for England, Sewers for Scotland and The Welsh Minister Standards for Sewers compliant



UG515 Finned Gasket



UG510 Cover & Frame



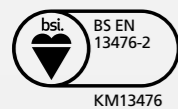
UG510 fitted with UG515 Finned Gasket

# Drainage systems

Through continued investment over the last 40 years, we've discovered and developed new solutions, helping move the construction industry forward with enhanced products and systems – whilst constantly innovating to help you meet the challenges ahead. Our below ground drainage product portfolio includes the UK's largest range of sewer pipes, fittings and chambers for all your Domestic and Residential below ground drainage projects. Whatever the size or scale of your project, we'll help you find the below ground drainage systems you want that deliver the solutions you need.

## Underground pipe (MLRC)

Our Underground Multilayer Recycled Core Pipe (MLRC) is available in both 110mm and 160mm diameters. A fully adoptable solution, this sustainable product allows customers to comply with environmental policy and reduce their carbon footprint.



### Key benefits

- Compliant to meet Sewerage Sector Guidance for England, Sewers for Scotland and The Welsh Minister Standards for Sewers
- Certification to stiffness class SN8
- BSI Kitemarked to BS EN 13476-2
- Improved environmental credentials to comply with the latest environmental policy
- Fully compliant with existing underground drainage



## Drain couplings & universal adaptors

The Polypipe Flexicon range of drain couplings and universal adaptors provide an easy solution to connect drainage pipes quickly and securely. Moulded EPDM sleeves provide a joint that's flexible, whilst stainless steel torsion bands ensure a connection you can trust.



### Key benefits Flexicon shear band and drain couplings

- Connecting plain-ended pipes, including clay, PVCu and cast iron
- Repairing existing pipe sections
- Connecting short and cut lengths of pipe
- Lower cost solution where a shear band coupling is not required
- Quick and easy installation giving an air-tight and water-tight installation for efficient testing

### Key benefits Flexicon universal adaptors

- Connecting different sized plain ended pipes, including clay, PVCu, and cast iron
- Connecting Polysewer Structured Wall Pipe to existing pipes
- Lower cost solution where a shear resistance is not required
- Quick and easy installation giving an air-tight and water-tight installation for efficient testing



# Surface water solutions



## Domestic drainage channel

Polypipe domestic drainage channel is a tough, durable and sleek product that captures surface water run-off before directing it into a domestic drain. It is suitable for both pedestrian and light vehicular use on driveways, patios and paths and can be used with multiple surfaces. And the channel and grate have been independently load-tested and gained an A15 load rating in accordance with BS EN 1433:2002. (Ceram certificate number SW036.07). Leaf Traps and Junction Units are also available to complete the system.

### Key benefits

- Discreet, flush-fitting design
- Engineered polypropylene for strength and durability
- Light in weight and maintenance-free
- Simple slot construction for fast installation
- Multiple exit rainwater points
- Fits to a standard 4" underground plastic drainage pipe
- Clip-down grate



## Linear slot drain channel

Polypipe linear slot drain channel is an innovative, discreet water management product that removes surface water run-off. Once installed, the only visible part of the drain is a 20mm wide slot. It is ideally suited to block paving coverings up to 50mm depth, but can also be used with surface finishes in areas such as patios, driveways, paths and is especially well suited to part M building regulation thresholds. Other components are available to complete the system such as the linear slot drain channel junction unit and an accessory pack containing a leaf trap and endcaps.

### Key benefits

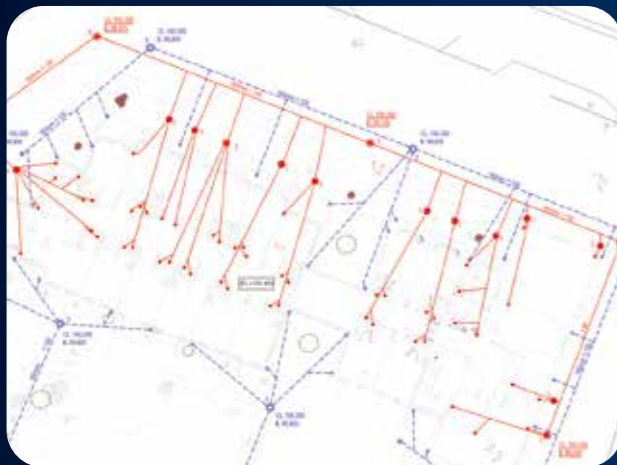
- Discreet, slim design
- Engineered polypropylene for strength and durability
- Light in weight
- Simple slot construction for fast installation
- Multiple exit rainwater points

# Service and support

The Polypipe Drainage Technical Team can offer you a range of services to support your project from inception to build. A team of experts are on hand to deal with all requests, ranging from technical support, to in-depth and detailed plans for drainage solutions.

For more information, email [polypipe.drainage@polypipe.com](mailto:polypipe.drainage@polypipe.com) or call (01709) 770000

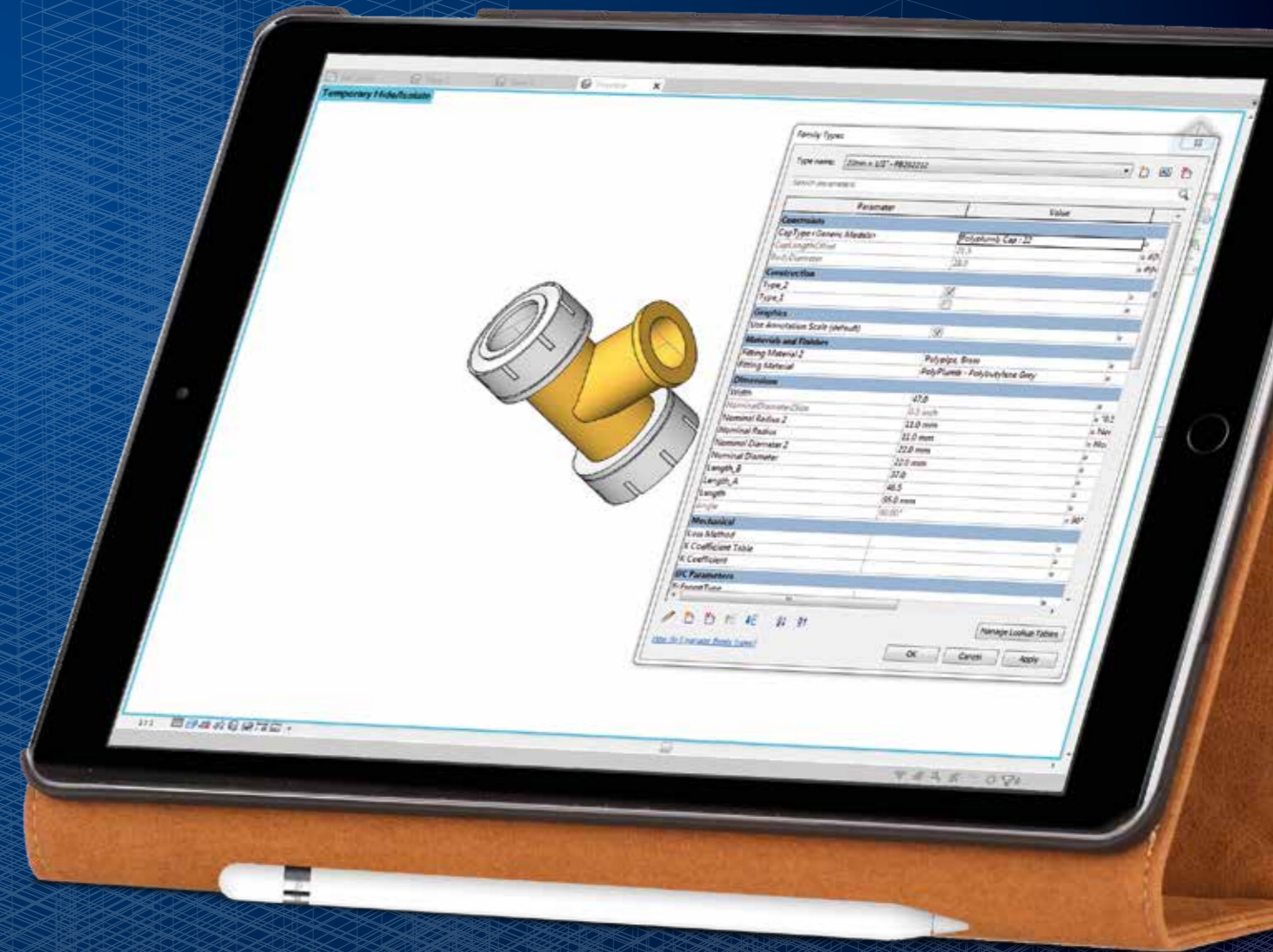
## Plot drainage design



## Underground take off

DESCRIPTION	CODE	QUANTITY	TOTAL	LIST PRICE EACH	TOTAL LIST PRICE
110MM RIB PILE U/GROUND PIPE 1/20	UG480	0	0	29.85	0.00
110mm Sewer/Man (BS EN 14476-2) - PIPE FITTINGS					
DESCRIPTION <th>CODE</th> <th>QUANTITY</th> <th>TOTAL</th> <th>LIST PRICE EACH</th> <th>TOTAL LIST PRICE</th>	CODE	QUANTITY	TOTAL	LIST PRICE EACH	TOTAL LIST PRICE
110MM COUPLER (SHT) 90/90 1/20	UG421	14	14	13.20	1,848.00
110MM 87.5 DEG S/S LONG RAD BEND	UG411	2	2	25.80	51.60
110MM 87.5 DEG S/S WST BEND 1/20	UG405	80	80	28.55	2,284.00
110MM 90 S/S SHORT RAD BEND 1/20	UG404	14	14	18.82	263.48
110MM 90 S/S SHORT RAD BEND 1/20	UG408	14	14	19.86	278.04
110MM 90 S/S 90° RAD BEND 1/20	UG410	14	14	19.86	278.04
110MM 90 S/S 90° RAD BEND 1/20	UG406	13	13	21.86	284.18
110MM 45 DEG S/S 90° JUNCTION 1/20	UG405	21	21	42.65	895.65
RAINWATER TO ORGAN CONN. 40-110MM 1	UG154	0	0	9.87	0.00
110mm Sewer/Man (BS EN 14476-2) - PIPE					
DESCRIPTION <th>CODE</th> <th>QUANTITY</th> <th>TOTAL</th> <th>LIST PRICE EACH</th> <th>TOTAL LIST PRICE</th>	CODE	QUANTITY	TOTAL	LIST PRICE EACH	TOTAL LIST PRICE
110MM RIB PILE U/GROUND PIPE 1/20	UG480	17	17	375.96	6,391.32
110mm Sewer/Man (BS EN 14476-2) - PIPE FITTINGS					
DESCRIPTION <th>CODE</th> <th>QUANTITY</th> <th>TOTAL</th> <th>LIST PRICE EACH</th> <th>TOTAL LIST PRICE</th>	CODE	QUANTITY	TOTAL	LIST PRICE EACH	TOTAL LIST PRICE
110MM COUPLER (SHT) 90/90 1/20	UG421	25	25	29.40	735.00
110MM 90 DEG S/S SHORT RAD BEND 1/20	UG404	1	1	22.22	22.22
110MM 90 DEG S/S BEND 1/20	UG408	1	1	22.22	22.22
110MM 90 DEG S/S SHORT RAD BEND 1/20	UG410	1	1	22.22	22.22
110MM 87.5 DEG S/S SHORT RAD BEND 1/20	UG411	8	8	29.98	239.84
110MM 90 DEG S/S BEND 1/20	UG407	1	1	82.33	82.33
110MM 45 DEG S/S 90° JUNCTION 1/20	UG405	3	3	148.27	444.81
110mm Sewer/Man (BS EN 14476-2) - PIPE	UG480	1	1	125.85	125.85

## BIM Library



## Rainwater calculations

Approved Document H of the Building Regulations, Section 8, Clause 1.3

Approved Document H of the Building Regulations, Section 8, Table 2

80 EV 3.2016 3.2010 Paragraph 4.2

$Q = A \cdot C \cdot E \cdot S$

TYPE 1 OUTLETS: Outlet Central to Run

TYPE 2 OUTLETS: Outlet at End of Run

TYPE 3 OUTLETS: Central Outlet 45° from Angle

TYPE 4 OUTLETS: Central Outlet 45° from Angle

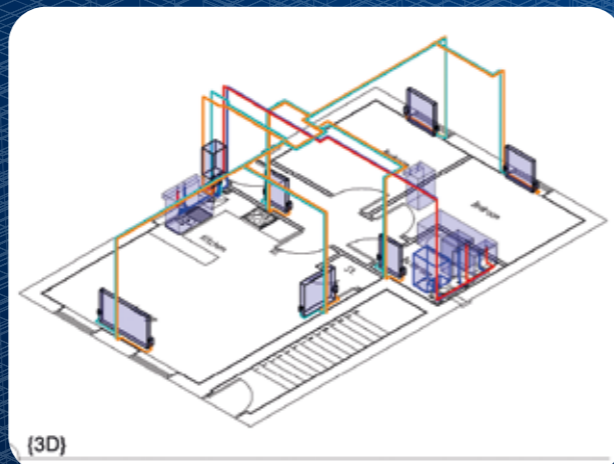
TYPE 5 OUTLETS: End Outlet 45° from Angle

TYPE 6 OUTLETS: End Outlet 45° from Angle

TYPE 7 OUTLETS: Discharge straight to Downpipe

Outlet Type	Factor
TYPE 1	0.75
TYPE 2	0.75
TYPE 3	0.75
TYPE 4	0.75
TYPE 5	0.75
TYPE 6	0.75
TYPE 7	1.00

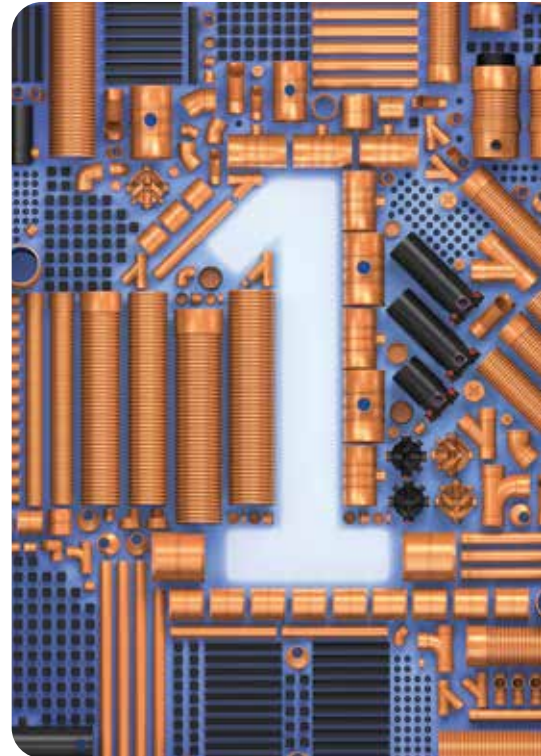
## Hot & cold take off





## Below ground systems

One range. Endless opportunities.



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