## **Complete Sewer Systems**



One range. Endless opportunities.



# One range. Endless opportunities.

At Polypipe, our product portfolio includes the UK's largest range of sewer pipes, fittings and chambers for all your Commercial and Residential projects. Whatever the size or scale of your project, we'll help you find the systems you want that deliver the solutions you need. Take a look through this brochure to find out more about the endless opportunities on offer.



Comprehensive

range of pipes

and fittings from

110-3000mm



High quality

systems, lighter

in weight for

easy installation





Chambers are

pre-fabricated

Sewers for Adoption. 7th Edition and Sewers for Scotland off-site ready to install compliant easily and guickly



who can provide local knowledge

We provide robust, sewer gas resistant pipes for new and replacement gravity sewer systems - the widest product range for the best possible solution for your project.



#### Our systems are:

- Adopted by UK water companies under Sewers for Adoption 7 and Sewers for Scotland
- Kitemarked to BS EN 13476, BE EN 1401 and WIS 4-35-01
- BBA Approved
- Pipes manufactured to stiffness classification SN8 (Ridgistorm-XL manufactured using individual stiffness classes to meet your requirements)



# Why choose Polypipe?

### Polypipe is the UK's largest plastic piping systems manufacturer

With over 20,000 product lines, a substantial fleet of over 400 vehicles and employing well over 2,000 people, Polypipe has an enviable reputation among installers, contractors, stockists and specifiers.

#### 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 whilst meeting current and forthcoming Build Standards and Water Company criteria. 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.

# A complete picture of our innovative sewer systems





#### Underground Pipe (MLRC)

A new fully compliant sustainable pipe available in both 110mm and 160mm diameters.



Polypipe Inspection Chamber

A comprehensive range of inspection chambers that gives you options for both adoptable and nonadoptable applications.



Polysewer A PVCu sewer pipe system available in sizes 150-300mm.



Ridgisewer A highly durable and versatile polypropylene sewer pipe system, available in sizes 400-600mm.



Qbase

A pre-moulded inspection chamber, which can be adapted to connect to 150mm and 225mm Polysewer pipes.



**Ridgistorm-XL** 

An engineered, large diameter pipe solution for surface water, foul water and combined sewer applications. Available in sizes 750-3000mm.



Ridgisewer

400-600mm

Ridgistorm-XL 750-3000mm

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#### RIDGISTORMControl Chambers

A range of pre-fabricated chambers with flow control components such as Gate Valves, Flap Valves and Penstocks.



## RIDGISTORMAccess Manholes

Pre-fabricated manholes to provide easy access into a pipeline.



## Sewer piping systems



### Underground Pipe (MLRC)

Our new 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 Sewers for Adoption 7 and Sewers for Scotland regulations
- Certification to stiffness class SN8
- BSI Kitemarked to BS EN 13476-2
- Improved environmental credentials to comply with the latest environmental policy
- Fully compatible with existing underground drainage in the market





#### 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
- BSI Kitemarked and BBA approved
- Adoptable by water companies
- Manufactured to stiffness classification SN8
- Lighter 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
- Saddle connectors are available
- Design life in excess of 100 years





#### Ridgisewer 400-600mm

Ridgisewer is a range of polypropylene structured wall gravity sewer pipes and fittings available in diameters 400-600mm. The complete system includes a range of couplings, seals, bends, junctions, specialist fabrications and saddles. Ridgisewer provides robust, chemical and sewer-gas resistant sewer pipes for new and replacement gravity sewer systems.

#### Key benefits

- Fully compliant with WIS 4-35-01 and BS EN 13476
- BSI Kitemarked and BBA approved
- Adoptable by water companies
- Manufactured to stiffness classification SN8
- Lighter 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
- Saddle connectors are available
- Design life in excess of 100 years







### Ridgistorm-XL 750-3000mm

Ridgistorm-XL is a range of large diameter polyethylene structured walled gravity sewer pipes, fittings and fabrications available in diameters 750-3000mm. The complete system includes a range of pipes, seals, pre-fabricated fittings and component chambers. Ridgistorm-XL provides robust, chemical and sewer-gas resistant sewer pipes for new and replacement gravity sewer systems.

### Key benefits

- Manufactured to meet the material requirements of BS EN 13476
- Sizes 750mm and 900mm compliant with WIS 4-35-01
- WRc approved
- Adoptable by water companies
- Manufactured using individual stiffness classes to meet your requirements
- Pipe lengths available in 1.25-12m
- Integral sockets for quicker installation and greater leak tightness
- Strong, flexible pipe wall withstands ground movement and differential settlement
- Saddle connectors are available
- Design life in excess of 100 years



## Chamber solutions





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## Polypipe Inspection Chambers

Polypipe Inspection Chambers give you complete flexibility to create a solution that meets the specification required. A range of both adoptable and non-adoptable chambers are available to ensure products are fit for purpose and not over specified for your project. Built with quality materials and engineered to last, Polypipe Inspection Chambers are pre-benched and easy to cut to length without the need for special tools and equipment, making them quicker and easier to install.

### Key benefits

- Fully sealed to make them water tight, tamper proof and low maintenance
- Lighter in weight and strong for improved Health and Safety, handling and installation. Kitemarked to BS EN 13598-2 or BS 7158 or BBA approved
- Available in single piece sections for segmented construction for easy installation and reduced product waste
- Highly versatile and compatible with EN 1401 and Polysewer products

#### Obase

The Qbase comprises a pre-moulded inspection chamber base, 600mm Ridgidrain riser shaft and 350mm reduced access cap. The base is manufactured from high density polyethylene (HDPE) and has been designed to receive 150mm and 225mm Polysewer gravity sewer pipes using pipework adaptors. It provides a method of inspecting and maintaining the intersection of multiple pipes in any given pipe run.

#### Key benefits

- 225mm main channel
- 225mm inlets, which can be reduced to 150mm
- For use in stormwater, foul and combined sewer applications
- Designed in accordance to Sewers for Adoption 7
- Complies with the test requirements of BS EN 13598-2
- Suitable for burial depths of up to 3m

### **RIDGISTORMControl Chambers**

**RIDGISTORMControl Chambers incorporate a range** of flow control devices to limit or isolate flows within surface water, sewer and combined sewer systems.

#### Typical control devices include

#### Flap Valves

Flap Valves are non-return hinge valves to prevent backflow upstream. They can also be used for outflow applications such as ponds, ditches, swales and tidal.

#### Penstocks

Penstocks consist of a gate which can isolate or control water flow. The gate can also be used as a flow control device to limit the flow of water passing through the system.

#### Gate Valves

Gate Valves are used to permit or prevent the flow of water and can isolate drainage sections. The valve opens by lifting a wedge out of the path of the flow of water.

RIDGISTORMControl Penstock and Valve Chambers are fabricated from Ridgistorm-XL pipework, which is manufactured to meet the material requirements of BS EN 13476:2007 (Part 1-3).



#### **RIDGISTORMAccess Manholes**

RIDGISTORMAccess Manholes are engineered for use in stormwater, foul and combined sewer applications to enable access to the pipework system for inspection and maintenance. Factory installed, preformed benching and channelling is available to spring line (SHW) or soffit (SFA) depending on the specification required.

RIDGISTORMAccess Manholes can be pre-fabricated with a number of features to reduce the need for direct access into the pipe, such as an offset channel, or maximising step landing width, or to minimise operational Health and Safety risks with the pre-fabrication of Safety Chain Assembly and Guardrail Assembly.









## Case study – Gulls Way capital works scheme, Wirral







### Pre-fabricated Ridgistorm-XL solution chosen for Welsh Water capital works scheme

The Gulls Way capital works scheme in Heswall, Wirral, required combined sewer improvements along a residential street where the existing 450mm concrete sewer had insufficient capacity to cope with high volumes of rainfall, causing the surrounding road and a number of properties to flood during storm events.

Working closely with Welsh Water, consultant engineer AECOM, main contractor Costain and groundworker Mulcair Ltd from an early design stage, we supplied a fully engineered Ridgistorm-XL attenuation system comprising a dual pipe run to provide an additional 360m<sup>3</sup> of storage.

As well as providing Ridgistorm-XL pipes in 900mm diameters, we used our large diameter piping and pre-fabricated structural components to create 1500mm chambers - and unique modular 'H' RIDGISTORMAccess multiple pipe manholes - to sit between the pipe runs. Saving time and costs whilst minimising disruption to residents in the immediate local area was vital, which is why a pre-fabricated system from Polypipe was ideal for the project.

The Ridgistorm-XL system limited the amount of work undertaken in the highway and ensured that work was able to progress much quicker than if more traditional methods had been used.

We were able to deliver the chambers to site with internal benching and step runs incorporated and the lighter-in-weight nature of our plastic systems - combined with Ridgistorm-XL's factory fitted lifting points - meant that the new combined sewer system was able to be installed much guicker and more safely than would have otherwise been possible, minimising the project's impact on road users and local residents.

## Case study – Drainage infrastructure, Nottinghamshire





Polypipe was selected to supply a complete drainage infrastructure solution as part of a far-reaching development on the former site of a famous car manufacturer.

When the decision was made to use a plastic solution over clay and concrete for both sewer and drainage runs, the project's main contractor called upon Polypipe to supply a large-scale integrated system. The 150-acre site is in the process of being renovated for multiple purposes, providing a school, commercial buildings with warehouses, and up to 900 new homes. Polypipe's products have been installed as part of the site's main infrastructure, to provide the services for these multi-purpose plots to link into.

As part of the project, 600m of Polysewer and Ridgisewer were installed for both surface and foul sewer runs for adoption by the local water company under Section 106 and Section 104 agreements.

Connection saddles allowed for the Polysewer and Ridgisewer pipes to be connected to a larger diameter Ridgistorm-XL piping system.

Over 830m of Ridgistorm-XL was installed to aid in the management of surface water to mitigate the risk of flooding at the site and was supplied in a variety of diameters from 750-1050mm. Polypipe intelligently engineered the system to specific stiffness classifications to meet the differing ground conditions throughout the development. Over 80 Ridgigullies were also installed and connected to Ridgidrain surface water drainage piping system to discharge surface water from the site into a local natural watercourse.

In addition to the drainage infrastructure, Polypipe supplied more than 20km of its market leading Ridgiduct cable protection systems in order to safeguard the development's underground cables for power supply, street lights and clean water systems, saving vital time by allowing installation teams to connect to pre-installed networks as construction gets underway.

## Complete Sewer Systems

One range. Endless opportunities.



#### **Civils & Infrastructure**

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