

TERRAIN

World-class solutions for Local Authorities



Working together to deliver added value systems and solutions

Welcome to Polypipe

Polypipe are the UK's largest plastic piping systems manufacturer with over 20,000 product lines. We have the broadest product range available in the UK including innovative solutions for enabling the movement of water, air, power, chemicals and telecoms throughout the built environment.

Polypipe innovate for the construction challenges of our day, recognising the twin challenges of managing water and carbon resources. Our substantial technical knowledge and capability, when engaged early in the project, will deliver the most appropriate and cost-effective solutions within our highly focused market sectors. Polypipe has a long heritage of working with Local Authorities across the UK and continues to deliver added value systems and solutions working in partnership.



Leading the Market

It's not just what we do but also the way that we do it that makes Polypipe number one in the UK for plastic piping systems. Our award winning history of innovation, having all the right approvals, accreditations and awards for quality standards are just the tip of the iceberg.



An award-winning history of innovation and expertise

Polypipe's success has led to many awards and recognitions such as Building manufacturer of the year and approval under the London 2012 Supplier Recognition Scheme, culminating in being awarded Top 100 Business Superbrand in 2013, 2014 and 2015.

Product approvals

Polypipe products are manufactured to the highest quality standards and carry all relevant third party product approvals and accreditations from the major recognised bodies.



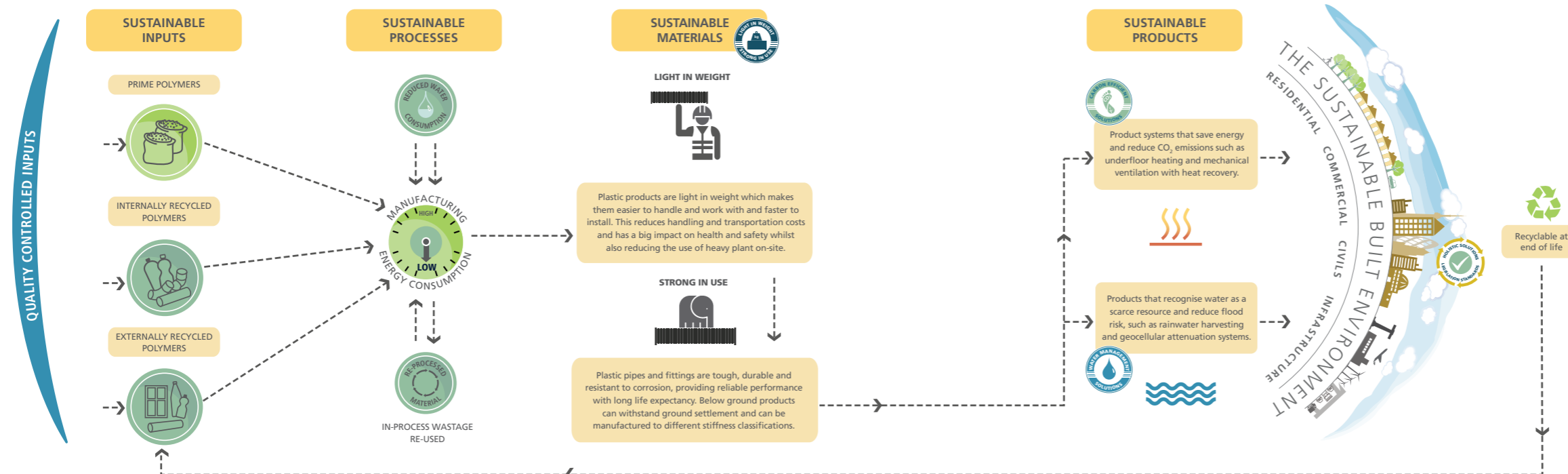
Quality standards

Polypipe operate to the highest quality standards, in particular: ISO 14001, 9001, 18001 and ROSPA Gold 2014 Award.



We are especially proud of our health and safety record.

The Polypipe Sustainable Journey



Drainage Solutions

Polypipe Terrain has been working with a number of Local Authorities to tackle the problem and potential health risks of old and decaying cast iron soil pipes in high-rise accommodation.

Do your cast iron soil pipes look like this?



These are actual cast iron soil stacks removed from a high rise Local Authority building where ongoing system breakdown has caused these kinds of sanitation issues, such as leaking and blocked pipes.

The resulting soil stack replacement programmes offer a proven, effective and long-term solution that, with the use of prefabricated stacks, speeds up the installation work on-site. A high level of fire protection can also be provided where required.



Terrain PVC drainage systems

Terrain Soil and Waste is an exhaustive range of solvent-weld and push-fit PVC drainage products. This market leading system is renowned for quality, dependability and reliability in use.



Terrain Acoustic dB12

Terrain Acoustic dB12 is designed to meet the increasing demand for acoustic drainage, providing a simple method of dramatically reducing sound emitted from soil and waste systems, particularly relevant in multi-occupancy buildings such as flats, student accommodation and hotels.



Terrain Fuze

A high performance drainage system, Terrain Fuze has many advantages over cast iron and other traditional systems. Manufactured from high density polyethylene, Terrain Fuze is lightweight, easy to install and has high impact strength (is almost unbreakable). Terrain Fuze is installed using a fully welded joint, thus providing a lifetime seal.

Terrain Fabrication Service & Live Stack Replacement

The Terrain Fabrication Service is an engineered solution which provides bespoke prefabricated drainage stacks which meet your project's precise requirements. Engineered in our state-of-the-art facility, achieving a level of precision and quality which is difficult to replicate in on-site conditions, the Fabrication Service reduces installation time and waste, saving you time and money. The inherent benefits of prefabrication makes it the perfect solution for scenarios where traditional cast iron soil stacks in local authority housing have deteriorated. With our 'Live Stack Replacement' process, it's quicker and easier to replace old soil stacks with prefabricated Terrain Fuze HDPE or Acoustic dB12 soil stacks. This creates minimal disruption to residents, who can remain in their homes during the refurbishment.



Terrain Fabrication Service

 <p>SIMPLE ON-SITE CONNECTIONS Straightforward installation saves on labour costs</p>	 <p>REDUCES ON-SITE LABOUR COSTS Reduced installation time keeps overall project costs down</p>	 <p>REDUCES ON-SITE INSTALLATION TIME Installation is simple and quicker than assembling loose fittings</p>	 <p>REDUCE ON-SITE WASTE Made to measure, engineered solutions means there is a reduction in wasted materials</p>	 <p>PRE-AIR TESTING AVAILABLE Removes the time and skills required for on-site testing</p>	 <p>WIDEST PORTFOLIO OF BESPOKE SOLUTIONS Providing customised solutions for tricky one-off projects</p>	 <p>40 YEARS TERRAIN HAS OVER 40 YEARS EXPERIENCE OF FABRICATING You can expect quality from a brand you can trust</p>	 <p>BES 6001 ACCREDITATION Our material has been responsibly sourced with full traceability throughout the supply chain</p>
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For more information visit www.polypipe.com/terrainfabricationservice

Terrain Firetrap

Terrain Firetrap offers a simple and effective way to achieve and exceed fire rating for drainage stacks. It features a selection of sleeves and collars offering up to 4 hours fire protection and allows you to create passive protection systems to meet Building Regulations Part B in line with BS 476:20 and BS EN 1366.

Terrain Firetrap Sleeves

- Provide fire stopping for pipe penetrations
- Crush and seal the plastic pipe, closing the penetration
- Ideal partner for Terrain drainage systems
- Quick and easy to install
- Up to 4 hours fire protection



Extensive Fire Testing

Terrain Firetrap is the result of extensive independent testing of our products across numerous applications. Data from this work is detailed in the Terrain Firetrap Product Selector, giving you total confidence that using our products will achieve the necessary rating.

Terrain Firetrap Collars

- Suitable for all Terrain drainage systems
- Can be surface mounted or built in
- Up to 2 hour fire protection



Terrain Firetrap – the best rating available for the drainage stack, all products comply with BS 476 Part 20 and BS EN 1366-3

Residential 'Live Stack Replacement' made possible with Terrain Fabrication Service



Large scale 'live' drainage replacement works were able to take place thanks to a time saving solution from Polypipe.



**Terrain
Acoustic dB12
& Terrain Fuze**



Having worked closely with M&E Contractor IDS and Birmingham City Council on a refurbishment programme since 2009, Polypipe Terrain's fabrication team devised a solution which would enable residents to stay in their homes while essential works were undertaken to replace the original cast iron soil and waste pipes across three separate high rise towers.

Polypipe Terrain manufactured 200 metres of 110mm Terrain dB12 and 75mm Terrain Fuze fabricated soil and waste stacks to exact specifications and delivered them to site in Kings Norton, where sub-contractor Lovell were able to complete installations across 96 properties 40% faster than the average for such works.

Polypipe Terrain's ability to fabricate its drainage products off-site in its UK manufacturing facilities, along with the unique features of the soil and waste solution provided, ensured that the number of joints and cuts were kept to a minimum.

Using fabricated drainage stacks meant that average installation times per property were reduced from five hours to just three.

A vital element of this project was to complete the work with as little intrusion as possible. As a result of the type of works programme put into place it was possible to successfully deliver live stack replacements across 96 individual properties ahead of the timescales set out, with minimum disruption to residents.

The challenges presented on this project, not only with residents in place but also a lack of space for installation teams to work, were easily overcome thanks to Polypipe Terrain's ability to provide a high quality 'one fitting solution'.

CASE STUDY

Project

Loweswater House, Waltham House and Sandhurst House Kings Norton, Birmingham

Client

IDS

Application

Drainage stacks

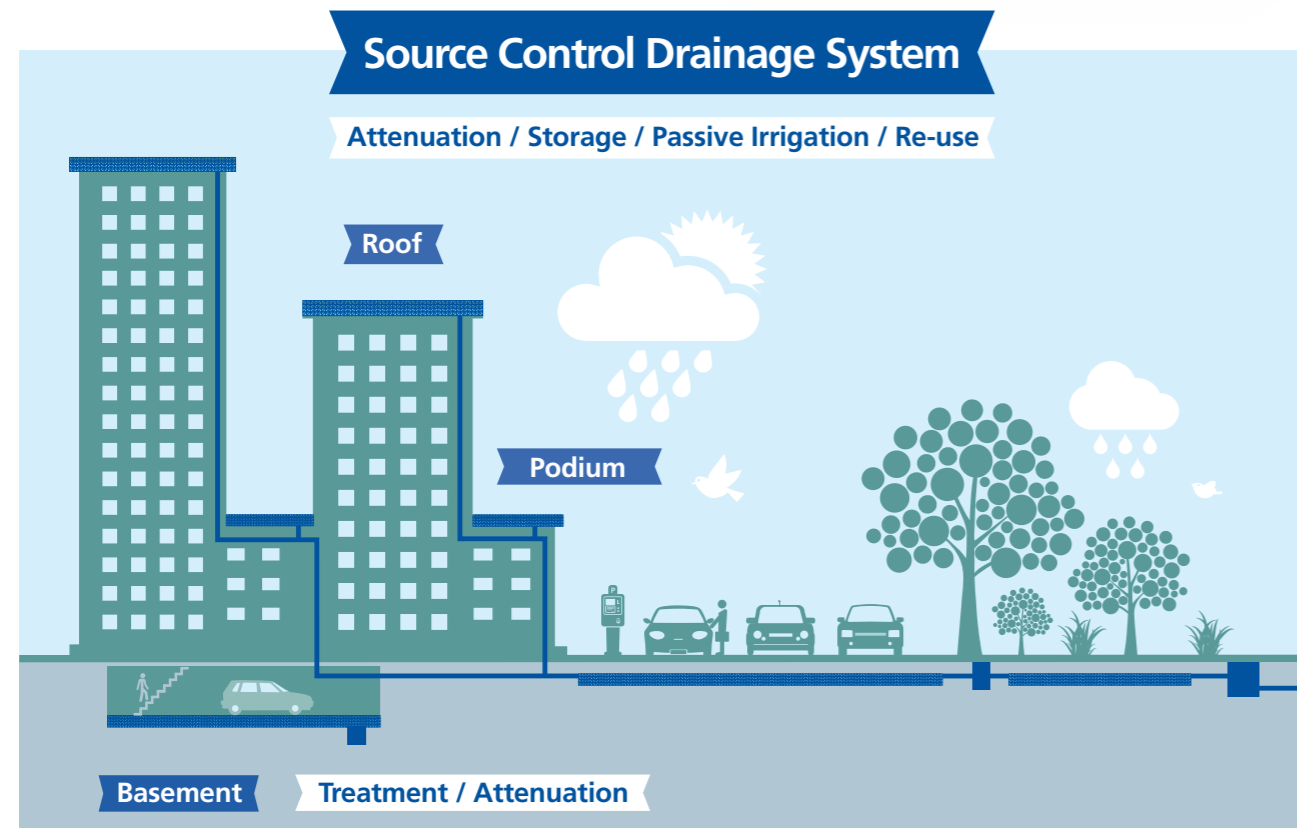
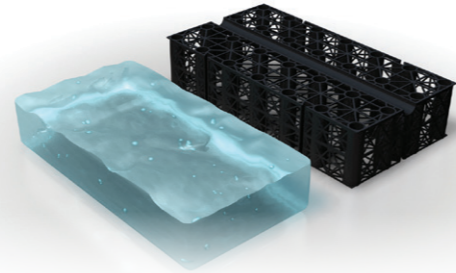
Products

Terrain Acoustic dB12, Terrain Fuze

Water Management Solutions

Permavoid Rainwater Interception System

As space becomes even more limited in the urban environment we need to look to more sustainable ways of managing the flow of rainwater. By using Polypipe water management and source control systems on roofs and podiums in conjunction with the trusted Terrain above ground drainage systems, building service designers can utilise these areas to integrate effective water management at source and control the flow of water at a designated rate into the underground drainage system.



Below Ground Drainage

Informed by our understanding of market sector requirements, Building Regulations and client specifications, Polypipe has delivered a comprehensive range of below ground plastic drainage and sewer pipes, fittings and chambers.

Ridgiform-XL

Approved by the WRc, Ridgiform-XL is an innovative large diameter structured wall pipe system. Available in 750mm to 3000mm, bespoke stiffness pipes can be engineered to suit your project requirements.



Unite Stratford Student Accommodation

Permavoid Podium Deck has been specified for use within a large scale East London student accommodation project with a challenging restricted external ground area.

Working alongside main contractor Westfield Construction and M&E contractor Dimension Data Advanced Infrastructure, Polypipe helped to develop a rainwater attenuation system capable of managing the site's drainage requirements in the event of a '1 in 100' year + 30% storm event.

Although a large buried attenuation structure may have met the drainage needs of the site, a lack of external ground area made this impractical. As such Polypipe worked closely with the Environmental Protection Group (EPG) to provide a practical two-tiered attenuation system at podium level to collect water run-off.

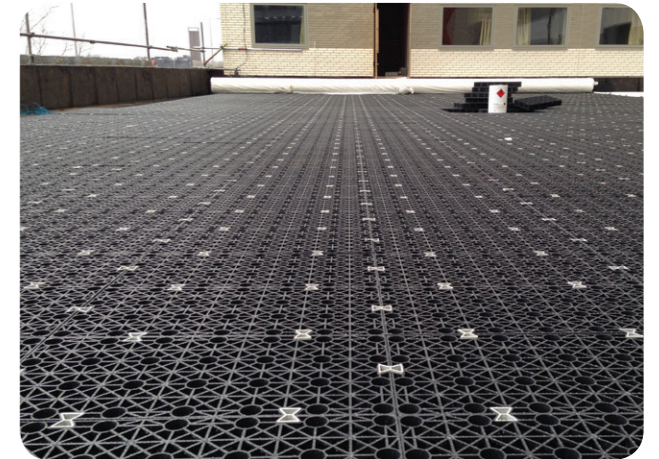
Discharge from the selected Permavoid Podium deck system was conveyed using flow control outlets leading into a small 30m³ buried attenuation tank, which was formed of Polystorm geocellular units. Using Polystorm in this way ensured that a discharge rate of 42 l/s could be maintained.

Permavoid Podium Deck provides ideal first stage rainwater interception and source control that can be easily integrated into an overall SUDS solution.

Having a 95% void ratio, Permavoid can collect and retain three times more water than aggregate sub-bases, making it ideal for projects where depths and loadings are a major consideration such as at Unite Stratford.

Glen Loftus from Dimension Data Advanced Infrastructure said: "Having to reconsider the drainage needs of the project during the build stage could have been an issue, however working with Polypipe and EPG on an appropriate podium level solution minimised disruption and went some way to making the project the success it was."

Work on the Unite Stratford ONE project completed in August 2014, allowing the building to open for its first intake of students in September. The accommodation houses more than 1,000 students across 28 floors.



CASE STUDY

Project

Unite Stratford student accommodation

Client

Westfield Construction

Application

First stage source control

Products

Permavoid Podium Deck

Ventilation

Polypipe Ventilation design and manufacture a range of high quality ventilation systems for domestic applications, improving air quality and homeowner comfort. Keeping buildings airtight to increase carbon efficiency is an important part of Building Regulations meaning advanced ventilation systems are crucial.

Silavent



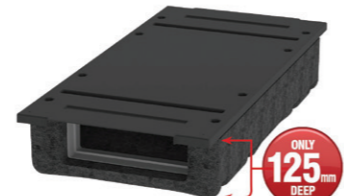
Mechanical Ventilation with Heat Recovery (MVHR)

Efficiently combines supply and extract ventilation into one system, thus reducing household energy consumption and improving the indoor air. Designed to offer superior performance coupled with simple installation and operation, the Silavent Green Line award winning HRX and HRX2 MVHR units offer a heat exchange efficiency up to 95%, thereby lowering a property's Dwelling Emission Rate (DER) and helping to secure additional SAP points.



Energy efficient bathroom and kitchen fans

Designed to comply with Building Regulations and reduce the build up of condensation and mould, our range of Silavent Green Line Sapphire fans offer a Specific Fan Power down to 0.22W/(l/s) and reduce carbon emissions. With models available to suit all applications, our new stylish fan range is the ideal solution for today's modern décor.



Mechanical Extract Ventilation (MEV)

The exceptionally compact Silavent Green Line CMX MEV appliance continuously extracts waste air from a property and offers an extremely low Specific Fan Power down to 0.24W/(l/s), thereby improving a property's SAP rating and lowering its energy usage. At just 125mm in depth, the CMX is one of the most versatile and energy efficient MEV solutions available on the market.

Domus



Air-tight rigid duct systems

The market leading Domus rigid duct range is designed to achieve the highest possible energy efficiency from our ventilation appliances. Available in eight different profiles, Domus rigid duct is manufactured to exacting tolerances which virtually eliminates air leakage and pressure drop. The Domus range also includes sound attenuation and FireBrake fire-stopping products, in addition to high efficiency bends.

These are just a few products from Polypipe's market leading range of ventilation systems. Contact us for full details, go online at www.polypipe.com/ventilation or call 03443 715523.



Duct insulation for rigid duct systems

The LABC accredited, Domus Thermal is a unique, patented duct insulation system which significantly improves the thermal insulation of ducting in domestic properties. Designed to comply with the new NHBC Guidelines that state all duct insulation must have a specific thermal value.

Water Supply Systems

With no specialist soldering skills needed, plastic plumbing systems offer safe, easy, almost instant jointing with no mess and no costly consumables and because the resale value of plastic is nothing like that of copper, are much less likely to be targeted by thieves. All of our Polybutylene systems are Class S rated to BS7291 and our Polyethylene systems is accredited to BS EN 12207.



PolyPlumb is our original grey plumbing system which comes with flexible grey polybutylene pipes in 10, 15, 22 and 28mm diameters. PolyPlumb fittings feature a one-step jointing process and a high performance stainless steel grabring within the fitting, ensuring superb joint integrity.



PolyFit is our hand-demountable white, push-fit plumbing system, offering maximum flexibility and adjustability in 10, 15, 22 and 28mm diameters. PolyFit features a one step jointing operation and, if adjustment is needed during installation, it can be easily demounted by hand or by using our release tool.

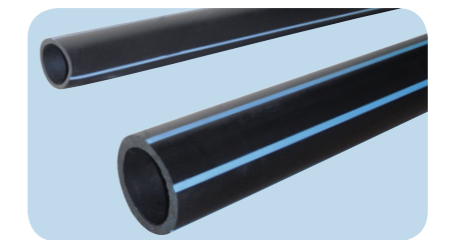


PolySure is our radial press-fit system uniquely available with brass and plastic fittings, available in 10, 15, 22 and 28mm diameters. Featuring secure, tamper-proof jointing technology for a permanent fit, its slim profile fittings are ideal for use in visible installations.

PE100

A high performance polyethylene system, ideal for high pressure water supply. With excellent impact resistance and a butt or electro-fusion welded joint, PE100 is particularly suitable for boosted cold water systems in high rise buildings. Available in diameters:

- 32-1200mm in SDR17 10 Bar
- 20-630mm in SDR11 16 Bar



Boosted water

Low water pressure can be an issue in many high-rise buildings. Polypipe provides solutions for the replacement of existing boosted mains pipework systems or upgrade buildings that previously relied on mains pressure alone. Our manufacturing department can prefabricate the components ready for delivery on-site. All this means your approved installers can install the product in the minimum time frame with minimum disruption to the tenants.

Surestop

Fitting Surestop Remote Stopcocks in your properties allows your residents to turn off their mains water at the flick of a switch and can help protect your properties from the risk of water damage. The Surestop is:

- Powered by water pressure – so needs no batteries or electricity
- Resistant to limescale
- WRAS approved as a stopcock
- An easily affordable solution that can be fitted in less than an hour
- Specified and used daily by over 300 different social landlords
- Proven for reliability in use with over 800,000 having been sold in the UK

For more information visit www.surestop.co.uk



Working together to deliver added
value systems and solutions



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