

Polypipe International



Sustainable water and climate solutions for global applications

Enabling the movement of water, air, power, chemicals and telecoms

An industry approach to business

We are a company proud to be a part of the construction industry. It's grown with us, and us with it.

We understand the challenges today's projects face both from an economic and sustainability basis – having to prove best value, whole life costs and delivery within the project timeframe. Because we work within our specific market sectors, with the many different types of people making up the project delivery team, we understand all the key touchpoints of a project, and we can provide design and product support right from the start through to completion. Whether it's a roof-to-river water management solution, a fully fabricated drainage stack for a high-rise development, low energy living environment cooling, ventilation and heating systems or complete sewer systems; this brochure will help you understand why, how and where we can support you.

Trust. Support. Experience. Innovation.
They're not simply words – they're our philosophy.

At Polypipe, we're proud of our British heritage and it's one we continue to build on, helping our customers in all areas of construction to deliver the best possible project results, from water management to climate management, for both outside and inside buildings, highways and infrastructure. Creating that very first plastic pipe back in 1980 triggered a passion within us – to support the industry at every stage of its growth, its future and to face the challenges together.

For example, bringing in large diameter pipe manufacturing innovations to site completely fabricated and ready to use. Sustainable methods in which to store and reuse rainwater, using recycled materials where appropriate, to help cool inner cities whilst reducing the strain on potable water and sewers – and provide low-energy filtered clean air and heat recovery systems within buildings for a healthier, more comfortable living experience.

We enable solutions for a sustainable and resilient built environment.



We export our products and systems to over 60 countries throughout Europe, India, Africa and the Middle East.

For example, our particular experience in supplying sustainable water management systems, coupled with our Terrain Drainage expertise for tall buildings, has seen the opening of a new training centre in the Middle East – an area of the world that has a problem with too little water (and at times too much) and where tall building designs push the boundaries of internal drainage and ventilation innovation.



Our products and systems really do help meet the construction demands for this region – providing the proof of experience to know that a project planned with Polypipe, is a project planned with confidence.

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The scale to deliver

It's the number and size of our manufacturing plants and the stock levels we hold, together with our own 400-vehicle fleet serving the largest distribution network in the industry, that allows us to deliver the confidence you need to ensure your projects are completed on time and in full.

We operate 18 factories producing 350 million metres of plastic piping and 950,000 ventilation products per year.

We have over 24,000 engineered plastic products providing access to all the options, configurations and fittings you need for your complete system, supported by 3,500 nationwide stockists, making them easily accessible. And with many of our products manufactured in more than one location, we're able to flex production to meet demand – so should our Disaster Recovery Plan ever be required, we have the scale to deliver.

Of course, with quantity comes quality, so all our products are manufactured to comply with the latest performance standards.

Not just bigger... better.

We also have teams that specialise in all areas of your project – whatever that project may be. They all work together with you to design a system that fits your scheme exactly, ensure your project runs smoothly and everything meets the necessary regulations. And because we're well networked with all the necessary trade associations and regulatory bodies, working with us means you'll have access to regular important updates on legislation and new industry developments.

From Account Managers to Business Development Managers, Specification and Field-based Staff, Designers and dedicated technical help, you've a team of over 2,500 experienced individuals supporting you from start to finish, whatever the size of the job. This includes:

- Over 20 Research and Development Technicians
- Over 2,200 Manufacturing and Support Services
- Over 70 Design, Heating and Ventilation Engineers
- Over 120 Dedicated Technical Support Engineers
- Over 200 Sales and Business Development Managers



Exporting around the globe

With exports to over 60 countries and an experienced multilingual team operating in particular throughout Europe, Africa, the Middle East, Asia Pacific and the Indian subcontinent. Polypipe and Terrain products and systems are meeting the needs of our fast developing world.

Commercial

Major commercial projects from car parks and high rise office blocks to hospitals, educational premises and shopping centres have all benefited from Polypipe and Terrain's range of value engineered products and comprehensive support.

Civils & Infrastructure

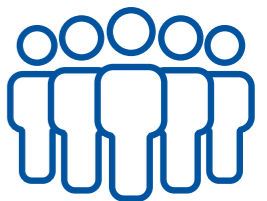
Whether for a road or rail scheme or enabling works for a construction project, Polypipe's surface water drainage and cable management systems offer civils and infrastructure project planners a complete suite of solutions.

Residential

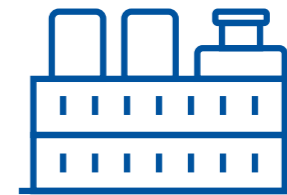
From individual villas to large housing estates and high-rise residential buildings, Polypipe and Terrain offer the broadest range of pressure and non-pressure systems for both new build and refurbishment applications.

Mining

Polypipe provides innovative plastic piping solutions for a number of mining processes, including transport infrastructure, water delivery and distribution, de-watering and storage, processing, water treatment and welfare infrastructure.



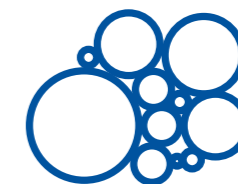
Over 2,500 people



18 factories



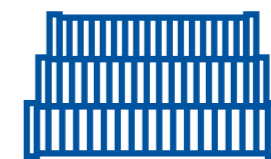
Over 100 third party product approvals



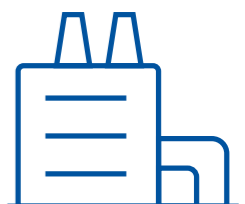
24,000 product lines



Exports to over 60 countries



350 million metres of plastic piping per year



Manufacturing over 950,000 ventilation products each year

Sustaining a better outcome

Working with the material Polypipe has become synonymous with; plastic, we have placed sustainability at the heart of our offering, helping customers to safely manage some of the planet's most precious resources – water and air. It helps us to create systems that help the construction industry move forward – faster and easier.

But with more imaginative thinking, we're able to combine convenience, value and speed with sustainability and positivity to the environment.

Lighter in weight than rigid materials like concrete and clay, plastic piping and products are not only easy and safe to handle and quick to install, but they also help to reduce fuel consumption and carbon emissions during transportation. And where appropriate, our products are manufactured using responsibly sourced recycled materials. In 2017 we processed approximately 44,000 tonnes of recycled plastics, saving the equivalent of 44,000 tonnes of CO₂ compared with disposal at landfill.*



Polymer recycling technology

We have invested heavily in the right technology and people to develop our own polymer recycling and processing plant. It's a technically advanced system which removes the waste from bales of plastic bottles by extracting metals and non-target polymers via washing and density separation, before accumulating good quality, recycled polyethylene which can then be reformulated and compounded for pipe production. This enables us to deliver quality controlled and engineered products faster and more sustainably, providing our customers with the confidence of a stable and secure end-to-end supply process. Control of raw material on this level means we can confidently convert recycled bottles to pipe in just 55 minutes.

Very little goes to waste.

Resource-efficient outlook

We have an environmental commitment – one we don't take lightly. So we don't just recycle all of our in-process material waste; we monitor every process and adjust the smallest thing to make a bigger difference. For example, we reduce power and water consumption by metering usage at machine level. It's all part of resource efficiency where the value of products, materials and resources is maintained within a circular economy for as long as possible. Plastic is a by-product of oil, is fully recyclable at the end of a product's life and therefore helps preserve the integrity of natural resources. We strive to ensure the generation of waste – both of plastic and other materials – is minimised, to help develop a sustainable, low carbon, resource-efficient service.



What we do

Through constant innovation and focused research and development, Polypipe is the name for engineered plastic drainage, plumbing, water management systems, sustainable climate management solutions and cable protection. We are uniquely positioned to offer solutions that help deal with the pressures placed on urban environments and natural resources in the residential, commercial, civils and infrastructure markets, both within the UK and across the globe.

Our focus on the management and movement of water and air has influenced the development of our product systems, enabling us to offer solutions that contribute to a safer, healthier and more sustainable built environment, whilst helping to respond to the trends of global warming and increased urbanisation.



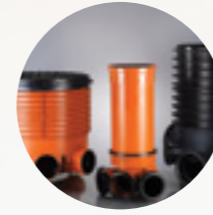
Above Ground Drainage



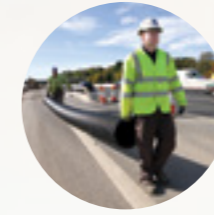
Acoustic Soil and Waste



PVC soil/waste



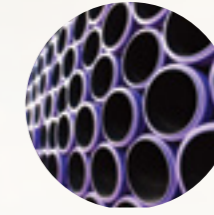
Below Ground Drainage



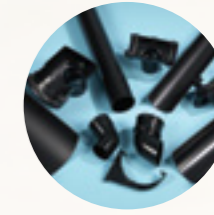
Surface Water Drainage



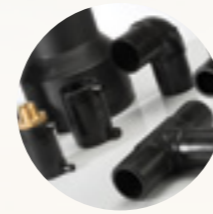
Sewer Systems



Cable Protection



Rainwater



Pressure Systems Pipes and Fittings



Plastic Plumbing



Surestop



Polyfast



Smart Controls



Underfloor Heating



Positive Input Ventilation (PIV)



Pre-fabricated Chambers



Mechanical Ventilation Heat Recovery (MVHR)



Domus Ventilation Ducting and fans



Water Management Solutions



Foul and surface water drainage

We can offer an extensive range of surface water drainage solutions suitable for highways, rail, airport, ports, harbours, commercial and public sector projects. Our solutions are complemented by a complete range of gullies, land drainage solutions, filter drains, flow control devices and access and inspection chambers.

Polypipe has always challenged convention by exploring new ways to meet the needs of the construction industry.

Most important has been the development of plastic piping systems to replace traditional concrete and clay materials with solutions that are lighter in weight, quicker to install whilst being tougher and more flexible - making them ultimately more durable and sustainable.



Below ground drainage

BS EN 1401 range

Providing drainage to meet Building Regulations, our range of BS EN 1401 Kitemarked plastic drainage pipes, fittings and chambers are ideally suited for residential and commercial developments.

The range's major advantage is the simplicity it brings to the whole process: by stipulating BS EN 1401, you are automatically choosing a product that is tried and tested in all conditions.

Our products are:

- Easy to lay and fast to install
- Light weight, but durable and robust
- Flexible; to accommodate normal ground movement
- Adaptable; can connect to Polysewer and Ridgisewer
- Suitable for commercial and residential installations
- Available in 82, 110, 160, 200, 250 and 315mm diameters

Sewerage solutions for large-scale projects

Polysewer and Ridgisewer

Manufactured to BS EN 13476 and/or WIS 4-35-01 for projects requiring Building Regulations.

- Available in 100 to 600mm diameters
- Largest range in the UK
- Comprehensive range, including bends and junctions
- Integral socket or plain-ended
- 8kN/m² stiffness

Flexicon Rubber Couplings & Adaptors

Polypipe manufacture an extensive range of rubber couplings and adaptors to BS EN 295-4 and WIS 4-41-01.

Surface water drainage for highways, rail and commercial applications

Ridgidrain

Manufactured from high strength HDPE to a structured wall design that produces a robust but flexible pipe, Ridgidrain is the complete solution for non-pressurised surface and subsurface drainage applications.

- Available in 100 to 900mm diameters
- 6kN/m² stiffness
- Longer lengths mean fewer joints
- High resistance to traffic loads
- BBA approved

Ridgistorm-XL

Approved by the WRc, Ridgistorm-XL is Polypipe's innovative range of large diameter structured wall pipes. Available in 750 to 3000mm, bespoke stiffness pipes can be engineered to suit your project requirements.

Surface water management for agriculture, sports and leisure

Landcoil

Polypipe offers an unrivalled commitment to the sports, leisure and agricultural sectors with durable and easy to install land drainage systems. A flexible and economical way to drain land and aid increased crop yields, Landcoil is manufactured from hard-wearing PVCu.

- Available in 60, 80, 100, 160 and 200mm diameters
- Durable and easy to install
- Carries the BS 4962 quality Kitemark
- 25, 50 and 100m coil lengths





Soil and waste

Polypipe above ground drainage systems allow removal of foul and waste water from buildings with ease. They system offers the flexibility and strength of a light weight plastic product that's ideal for all applications including villas, highrise, commercial and industrial applications.

Domestic applications

Polypipe is the product of choice for everyday above ground drainage systems for domestic applications.

With an extensive range compliant to the latest performance legislation, Polypipe's soil and waste systems are the first choice for push-fit applications.



Building Services applications

Terrain is the recognised global market leader for high performance above ground drainage systems as demanded by Building Services' M&E contractors and specifiers.

Polypipe's export heritage stretches over 50 years to all corners of the globe. Terrain drainage is recognised as the product of choice for high-rise prestigious projects, such as the Burj Al-Arab in Dubai, the Walkie Talkie and the Gherkin in London, the Fairmont Hotel in Abu Dhabi and the Bahria Icon Tower in Karachi.

Polypipe

Polypipe Push-Fit Soil System

Polypipe's PVC push-fit soil system is the most comprehensive range available to the domestic market, whether for new build or replacement in an existing dwelling.

- Available in 82, 110 and 160mm diameters
- 110mm diameter range available in a cast-iron effect finish
- Standard system also available in solvent weld

Polypipe Waste Systems

Polypipe have a comprehensive range of waste systems in ABS and polypropylene to complement the push-fit soil system.

- ABS system available in both push-fit and solvent-weld
- Polypropylene system available in push-fit
- Universal compression system also available
- Available in 32, 40 and 50mm diameters
- Available in 21.5mm diameters for Overflow

Polypipe Traps and WC Pan Connectors

Polypipe's comprehensive range of over 100 product lines includes telescopic and anti-siphon traps and WC pan connectors with variable degree and offset connections.

TERRAIN

Terrain PVC Soil & Waste

Terrain's PVC solvent weld soil system is fully engineered to take account of flow direction, connections and expansion. It provides a reliable, proven method for creating a neat, permanent joint.

- Available in 82, 110, 160, 200 and 250mm diameters
- Also available in push-fit

Terrain's MuPVC waste system is designed to cope with high temperature discharge and comes in both solvent weld and push-fit.

- Available in 32, 40 and 50mm diameters

Terrain Firetrap

Our fire protection range of high performance sleeves and collars for use with all Polypipe and Terrain soil and waste systems, providing up to 4 hours fire protection.



Terrain FUZE

A high-performance drainage system, Terrain FUZE has many advantages over cast iron and other traditional systems. Manufactured from high density polyethylene (HDPE) Terrain FUZE provides a comprehensive, modern solution to above ground drainage requirement, providing specifiers and installers maximum flexibility in the design process.

Utilising the intrinsic properties of HDPE, Terrain FUZE offers greater benefits above and beyond more traditional materials and performs significantly better when tested for impact and abrasion resistance, chemical corrosion and extreme temperatures. Indeed, when tested with Terrain Firetrap sleeves, Terrain FUZE achieves up to a 4 hour fire rating!

Key benefits

- Light weight and easy to handle
- Fusion welded joints for quick, easy installation
- Corrosion resistant, suitable for chemical drainage
- Fully compatible with Terrain PVC

Terrain dB12

Offering a solution to the problem of noise and vibration in Soil and Waste pipework, Terrain dB12 is an easy to install, triple layer acoustic pipe system. With specially developed co-polymer polypropylene layers and acoustically engineered fittings that effectively dampen both airborne noise and sound transmitted through the building structure, it is especially well suited to large multi-occupancy buildings such as apartment developments, student accommodation and hotels.

Terrain dB12 can be used in new developments and in refurbishment projects and offers flame retardant properties to B1 in compliance with DIN4102. It is highly resistant to impact, even at lower temperatures, and has demonstrated excellent resistance to corrosion across a wide range of chemical agents and temperatures.

Key benefits

- Excellent airborne and soil borne sound insulation
- Internal and External smooth bore
- Working temperatures from 0°C to 95°C

Polypipe Fabrication Service

Polypipe's Fabrication Service has been delivering bespoke solutions and time savings to our customers since 1964. Our 30,000m² state-of-the-art fabrication facility - the only one of its kind in the UK - turns your detailed design specifications into a bespoke solution to meet your precise requirements.



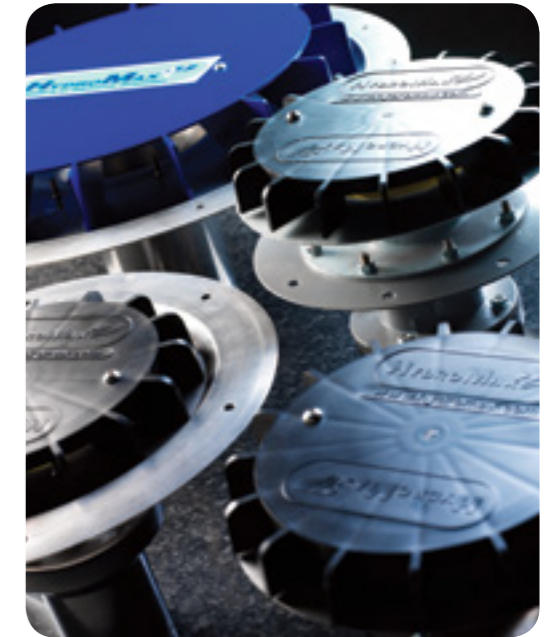
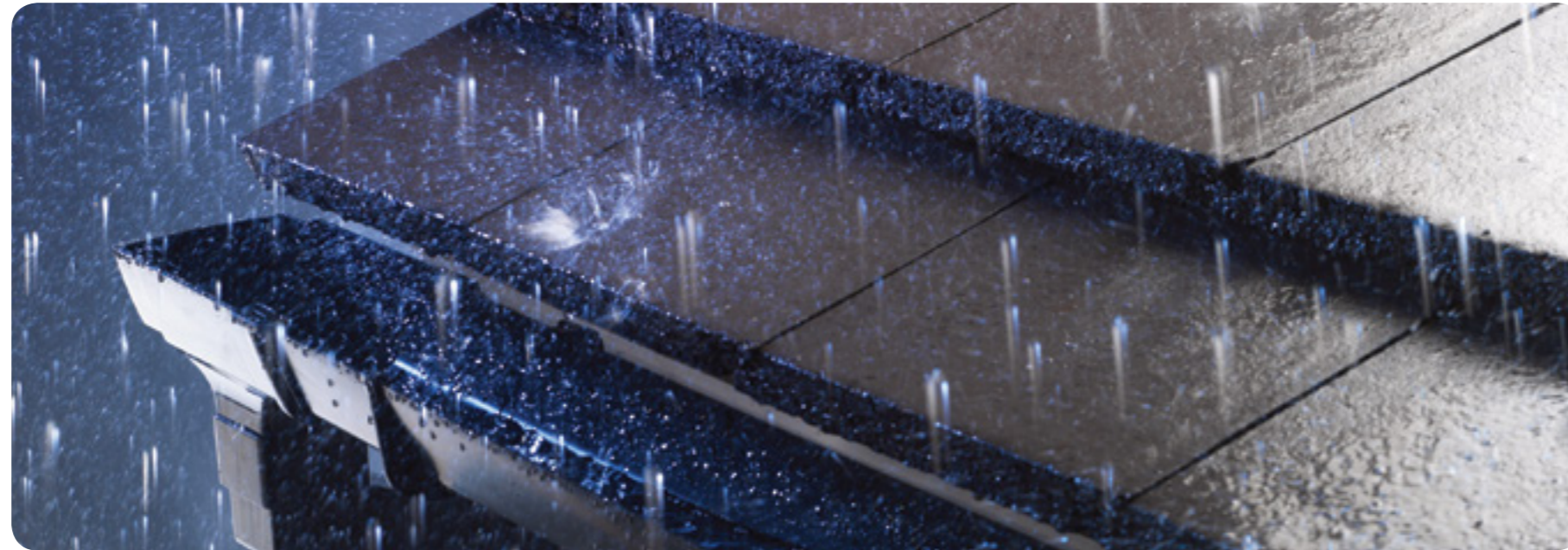
Rainwater collection systems

Polypipe's rainwater management solutions provide a full product portfolio including traditional gutter and downpipe systems to advance syphonic drainage, suitable for all climates.

Gravity Rainwater

A comprehensive range of rainwater systems, offering aesthetically varied shapes and styles in a variety of colours to suit any property.

Our systems include fully integrated gutter and downpipe assemblies together with all the fittings and accessories needed for easy installation, all manufactured in robust PVCu.



Half-round profile

Ideal for houses, smaller commercial buildings and offices. It can drain roof areas up to 122m² with a single downpipe. Capacity per outlet is 2.54 litres/sec.

Square profile

A popular, modern system suiting domestic houses, bungalows and conservatories. It can drain roof areas up to 149m² with a single downpipe. Capacity per outlet is 3.11 litres/sec.

Deep elliptical profile

A high capacity system suiting all styles of property. Ideal for large roof areas or regions with higher than normal rainfall. It can drain roof areas up to 266m² with a single downpipe. Capacity per outlet is 5.53 litres/sec.

Ogee profile

Ideal for the more distinctive house, also suiting bungalows and conservatories. It can drain roof areas up to 242m² with a single downpipe. Capacity per outlet is 5.04 litres/sec.

Elegance

A stylish set of guttering and downpipe products with a decorative effect to match the look of a traditional cast iron system.

Roof and balcony outlets

Outlets available for all flat roof and balcony structures and drain vent systems (For large roof areas use our siphonic system).



Siphonic Rainwater

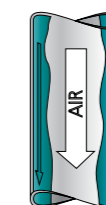
An advanced siphonic drainage system that provides rapid and highly efficient removal of water from roof surfaces. Using the naturally induced siphonic process, Terrain Siphonic Roof Drainage literally 'sucks' water away, creating a flow capacity up to ten times greater than an equivalent gravity-fed system.

Unlike conventional downpipes, HydroMax pipes require no air core at their centre, allowing much larger volumes of water to be dispersed through a smaller pipe diameter.

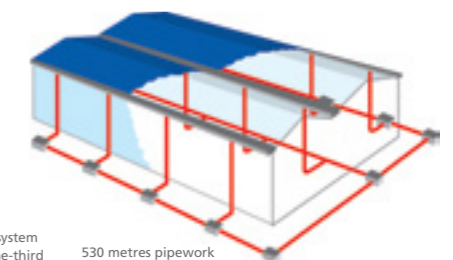
Key Benefits

- Pipes require no fall or slope, increasing design flexibility
- Self-cleaning system
- Fully complies to BS 8490:2007
- Ideal for large roof areas and complex roofing structures
- Reduced material requirements
- Pipes laid horizontally

Traditional gravity system

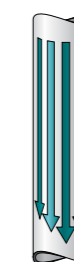


A gravity drainage system limits capacity to one-third water, that adheres to the inner pipe wall, with a large two-thirds air core.

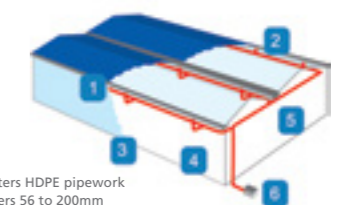


530 metres pipework
Diameters 160 to 450mm

Terrain Siphonic Roof Drainage



In Terrain Siphonic Roof Drainage, air is purged from the pipe so that it runs 100% full of water, enabling smaller diameter pipes to remove higher volumes of rainwater.



360 metres HDPE pipework
Diameters 56 to 200mm

- 1 Small diameter collector pipes installed level without a slope
- 2 High performance Terrain Siphonic Roof Drainage
- 3 Significant reduction in underground drainage, trenching, soil removal, treatment or backfill
- 4 Design team or clients' chosen downpipe locations
- 5 No drainage under building floor slab
- 6 Easy directing of roof rainwater to attenuation or rainwater harvesting



Sustainable Water Management Solutions

Polypipe has been developing new and innovative plumbing and drainage solutions that are sustainably produced. Our geocellular and large diameter pipe systems for surface water retention, attenuation and infiltration, surface water treatment products, flow control devices and rainwater re-use solutions means we can create such amenities as rooftop gardens, parks above underground car parks and greener spaces within cities.

No green without blue

Green Infrastructure and making space for water to create these important green spaces is what we do. Sustainable drainage isn't just for the conveyance of rainwater – it's for repurposing it. Creating places where people want to live, enjoy and feel better by. We design and develop engineered Sustainable Urban Drainage Systems (SuDS) – and the most sustainable schemes are those that use a combination of these systems; for interception, source control, attenuation, infiltration, irrigation, reuse and so on.



Capturing water at site

Polystorm Geocellular System

Polystorm is a sustainable and cost-effective surface water management system. The Polystorm range has structurally robust individual cells manufactured from polypropylene. Having a high void ratio (95%), the system will provide an infiltration drainage solution when wrapped in a permeable geotextile.

The tried and tested Polystorm Soakaway system is designed to provide infiltration at a variety of depths and accommodate a wide range of loadings, from landscaped and pedestrian areas to low and high trafficked areas and HGV parking. Acting also as a storage tank, in addition to soakaways, the modular cells easily interlock and when used with an impervious waterproof membrane facilitate a sealed zone for water storage. The system can be easily sized to accommodate peak rainfall events to avoid flooding. NOTE: Polystorm can also be used as an attenuation or a detention system as both in-line and off-line solutions.

Permavoid

Designed to provide shallow water storage for attenuation, detention or infiltration beneath the surface.



Permavoid Biomat

Designed to intercept and treat potential residual oils that may be present within emulsified surface water.

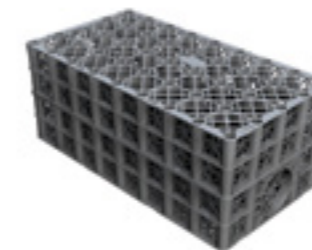


Key Benefits

- Forms interlocking structural raft of exceptionally high compressive and tensile strength – 715 kN/m² vertical and 156 kN/m² lateral
- Designed for attenuation or infiltration at shallower depths
- Provides effective source control and flood mitigation
- Suitable for use beneath porous and non-porous surfaces
- Reduction in excavation depth and cost
- No need for trench supports or plant
- Provides treatment to remove silt and hydrocarbon deposits
- Increased deck area eliminates the need for pipework under deck
- Eliminates the need to construct the deck slab to falls
- Can provide passive 'on-demand' irrigation via capillary hydraulic column system
- Capacity to attenuate extreme storm events - typically up to 100 year + 30% climate change allowance
- Eliminates the need for outlets, through the deck, reducing leak potential
- Provides harvesting facility for re-use such as toilet flushing or soft landscape irrigation

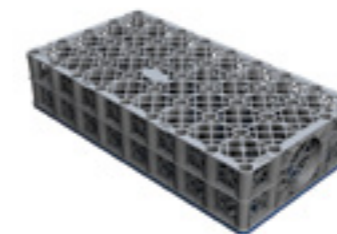
Polystorm

Designed for use in trafficked and loaded applications with a load bearing capacity of **40 tonnes**.



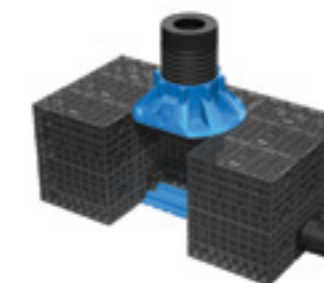
Polystorm Xtra

Designed for use in deeper burial depths and heavily trafficked applications with a load bearing capacity of **80 tonnes**.



Polystorm Inspect

A Polystorm cell, incorporating a large tunnel to provide access along the length of a Polystorm geocellular structure.



Key Benefits

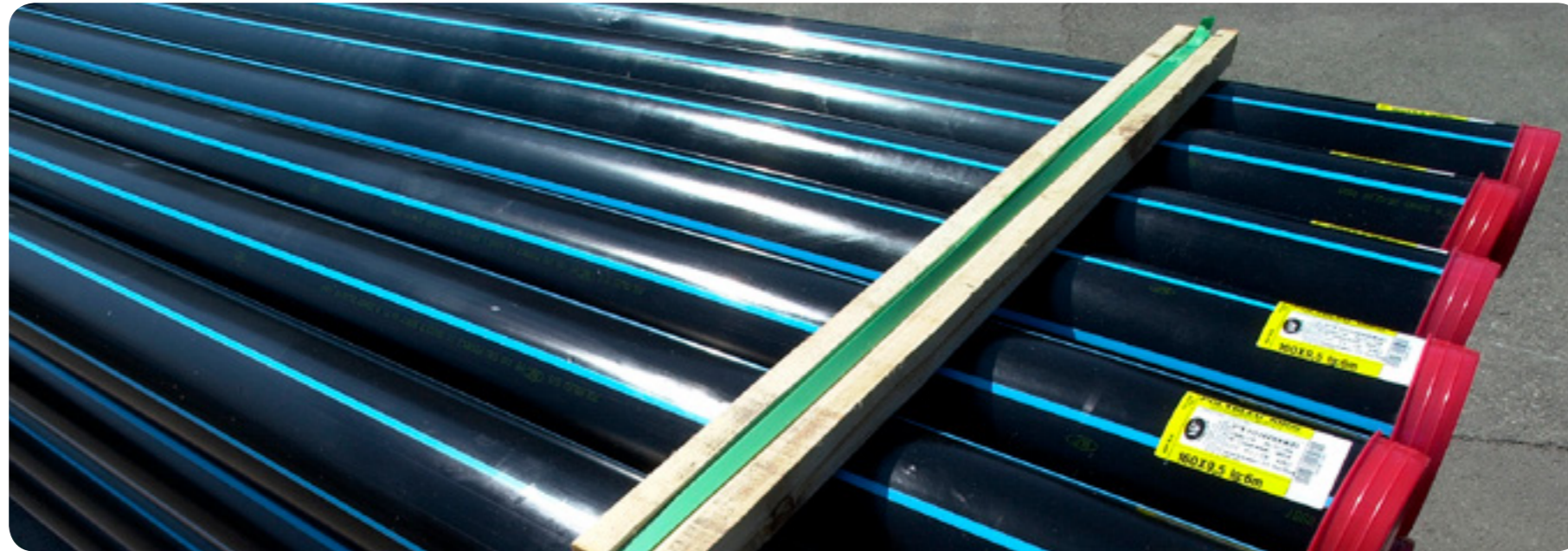
- Can be easily used as an infiltration, attenuation or retention system for stormwater from:
 - Surface water run-off
 - Rainwater and washdown from multi-purpose roofs, plus hard and soft landscaped areas
 - Washdown areas
 - Condensate drainage
- 95% void ratio for greater water storage capacity
- Reduced excavation and disposal costs
- Light weight, yet robust for known structural performance
- Manufactured from virgin polypropylene (Polystorm Lite (20 tonne loading), Polystorm - R (61 tonne loading), manufactured from recycled material)
- Able to withstand loads of up to 80 tonnes
- Up to 60 year design life
- Unique rounded corners for ease of handling and reduced membrane punctures
- 100% recyclable at end of useful life
- 3rd party accreditation



Water and gas supply systems

Supplying water and gas in and around buildings can be challenging Polypipe's range polyethylene pressure pipe systems provide strong flexible solutions for above and below ground water and gas supply and associated distribution.

PE80 & PE100
High performance polyethylene systems, ideal for high pressure water supply. With excellent impact resistance suitable for either butt and electro-fusion welded jointing. PE100 is particularly suitable for boosted cold water systems in high rise buildings. Available from 20 to 630mm, up to 20 bar



Additional ranges suitable for industrial and waste water applications also available and carry specific colour code to indicate application and use.

PE80 and PE100 material sizes 20 to 450mm SDR ratings 9 – 26 provide excellent corrosion resistance with smooth bores for good flow, lighter weight and easy to handle compared to traditional materials.

- PE80 and PE100 material
- Sizes 20mm – 630mm diameter
- SDR rating 9 – 26
- Excellent corrosion resistance
- Smooth bore offers excellent flow
- Light weight compared to traditional alternatives
- Offers clean jointing and easy handling

Polyfast

Manufactured in durable MDPE, Polyfast is suitable for all potable mains water applications. Easy to handle on-site, it offers secure compression fittings for quick installation, plus excellent flow rates and resistance to chemicals and abrasion.

- Available in 20, 25, 32, 40, 50 and 63mm diameters
- Suitable for jointing all types of polyethylene

MDPE

Blue and black polyethylene pipe suitable for potable and non-potable applications.

- Available in 8 and 12 bar pressure
- Available in 20, 25, 32, 40, 50 and 63mm diameters
- Pipe available in coils and straight lengths



Polyguard

This is our pipe and fittings system for potable water supply in contaminated land. A blue polyethylene pressure pipe with an aluminium barrier layer, is ideal

for brownfield sites which may have been previously exposed to contaminants.

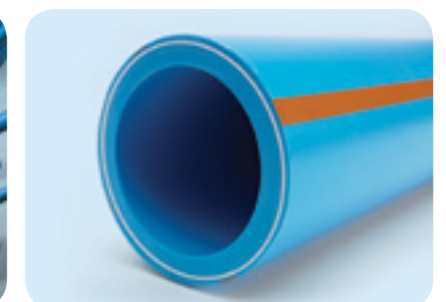
Brown stripes ensure installed pipework is easily identified.

- Available in 25, 32 and 63mm diameters
- Pipe available in coils and straight lengths

Gas Pipe

Polypipe offer a range of yellow gas pipes, manufactured in medium-density polyethylene, is suitable for use in the conveyance of natural gas in pressure distribution networks. It is fully compatible with all major fittings which comply with GIS PL-2 Part 4.

- Available in 20, 25, 32, 63, 75, 90, 110, 125, 160 and 180mm diameters
- Available up to 5.5 bar pressure
- Pipe available in coils and straight lengths





Plastic plumbing systems

In response to changing demands in the market, Polypipe continues to innovate with a range of plastic plumbing systems that integrate flawlessly with our supply systems while satisfying every project specification and budget.

With no specialist welding or 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.

Addressing a broad range of requirements for domestic plumbing and mechanical services, Polypipe has developed four different plumbing systems that mean you'll always be able to specify the right solution for the job.

All of our systems are Class 5 rated to BS7291.



Pipe technology

At the heart of our systems is a commitment to polybutylene pipe. Unlike a number of other plumbing manufacturers, we choose polybutylene to create the most flexible and efficient pipes and plumbing systems available.

Polybutylene pipe is ideal for both hot and cold water plumbing and heating systems, offering exceptional durability and long-term performance, which has seen it become the preferred material choice for today's building projects.



Non-demountable

PolyPlumb

Traditional push-fit plumbing

PolyPlumb is our original grey plumbing system which comes with flexible grey polybutylene pipes. PolyPlumb fittings feature a one-step jointing process and a high performance stainless steel grab ring within the fitting, ensuring superb joint integrity.

- Available in 10, 15, 22 and 28mm diameters



Hand-demountable

PolyFit

Quickfix push-fit plumbing

PolyFit is our hand-demountable white, push-fit plumbing system, offering maximum flexibility and adjustability. 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.

- Available in 10, 15, 22 and 28mm diameters



Tool-demountable

PolyMax

Streamline push-fit plumbing

PolyMax is our newest plumbing fitting range which is easily demounted using our handy release tool. PolyMax fittings are sleek and attractive, making the system the perfect choice for surface mounted installations.

- Available in 10, 15, 22 and 28mm diameters



Press-fit

PolySure

Permanent press-fit plumbing

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

- Available in 10, 15, 22 and 28mm diameters



Surestop

Surestop is the only alternative to the brass stopcock, allowing mains water supply to be turned off with the flick of a switch.

Key Benefits

- Siting of the switch - the switch can be located in an easy to find place, encouraging residents to turn off their water supply if leaving the property vacated
- Ease of access - in high-rise buildings, the switch can be located in the utility areas for ease of access





Underfloor heating solutions

Our underfloor heating range is designed to provide you with a level of comfort in your new build, renovation, office or home extension. Our innovative underfloor heating gives everyone from homeowners to developers and installers a new level of heating freedom.

Advanced underfloor heating systems

Our underfloor heating systems provides a robust, reliable solution that offer the widest available range of underfloor heating systems with a product available for variety of floor types from building renovations to single room projects.

Our solutions meet the very highest design standards and our systems offer an almost unrivalled level of practicality and versatility freeing up walls and operating with an average water temperature of 50°C, compared with 80°C for conventional radiators; a considerable improvement in energy and carbon efficiency.



Geothermal pipe system

Geothermal heating systems exploit the difference between ambient air temperature and the temperature below ground to extract energy for heating homes. This energy is collected by pumping water through a subsurface pipe known as a geothermal 'loop' before being used within a property via a ground source heat pump.

The low temperature emission capabilities of underfloor heating makes it ideal for combining with the latest low energy renewable heat sources such as ground and air source heat pumps.

Solid floor screeded systems

For solid or screeded floors, Polypipe has three options, the first being light weight plastic floor panels which are quick and easy to lay, allowing you to install underfloor heating in a room of any shape or size. Polypipe floor panels enable accurate installation and positioning of the pipe ensuring minimum pipe bending radius is achieved.

The second and third options are rail and staple systems that fit directly onto the floor insulation offering an alternative to plastic floor panels.



On-floor or existing floor systems

For existing solid or timber deck floors - Polypipe's unique Overlay™ underfloor heating range of low profile systems are installed over the existing floor. This makes them ideal for renovation and new build, whole house and single room projects. We offer:

- Overlay
- Overlay Lite
- Overlay Lite 15



Suspended floors

For suspended timber and composite joists, typically found in new build and renovation projects, Polypipe offers a range of unique pre-insulated and pre-configured systems, as well as more traditional suspended underfloor heating options, giving you a solution for every type of suspended floor installation.

Floating floors

The Polypipe floating floor system is designed for use in applications where a solid floor installation is not suitable due to structural weight limitations or where a 'dry build' floor option is required. Suitable for use in either new build or existing properties, the floating floor panels can be installed directly on top of both solid and timber floors.

Control systems

A comprehensive range of room temperature controls are available to complement Polypipe's underfloor heating systems. They allow each room to have its own individual temperature control whilst providing ease of use to occupants and are available in both Wired and Radio Frequency options.

We also cater for extensions being added to houses with our Zonal Regulation Unit. This unit allows single rooms and extensions up to 30m² to be connected to an existing heating system helping installers to easily accommodate renovation work.





Ventilation

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

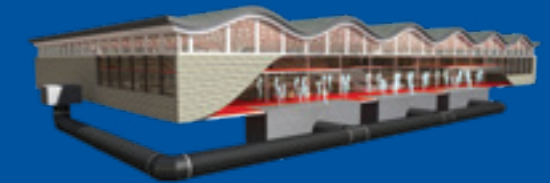
Mechanical Ventilation with Heat Recovery (MVHR)

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



Earth Duct

Ridgistorm-XL is the flexible, sub-surface alternative to suspended ducting for ventilation in commercial building developments. Originally developed for surface water drainage in civils and infrastructure projects, this strong light weight plastic piping system has proven itself as a highly effective air ventilation system for use below a building, capable of moving large volumes of air without disturbing the internal envelope.



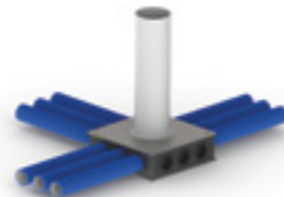
Mechanical Extract Ventilation (MEV)

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 energy usage. At just 125mm in depth, the CMX is one of the most versatile and energy efficient MEV solutions available on the market.



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 fans offer a Specific Fan Power down to 0.22W/(l/s) and can reduce carbon emissions by up to 60%. With models available to suit all applications, our new stylish fan range is the ideal solution for today's modern décor.



Radial systems

Domus Radial is a versatile whole house air distribution system, which offers the flexibility to create hybrid solutions by incorporating semi-rigid and rigid duct. Domus Radial systems include a slim-line manifold for easy installation in tight spaces, in addition to an outlet plenum with optional twin connection for increased air flow and integral flow control device enabling connection to stylish architectural grilles.



Duct insulation for rigid duct systems

Domus Thermal is a unique, patented duct insulation system which significantly improves the thermal insulation of ducting in domestic properties. The system efficiently insulates ducting passing through cold spaces and in the heated area of a property.



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 from exacting tolerances to virtually eliminate air leakage and reduce pressure drop. The range also includes sound attenuators and high efficiency bends.



Fire-stopping connectors for rigid duct systems

As an integral part of the duct system, Domus FireBrake fire-stopping connectors effectively provide up to 2 hours of fire protection.



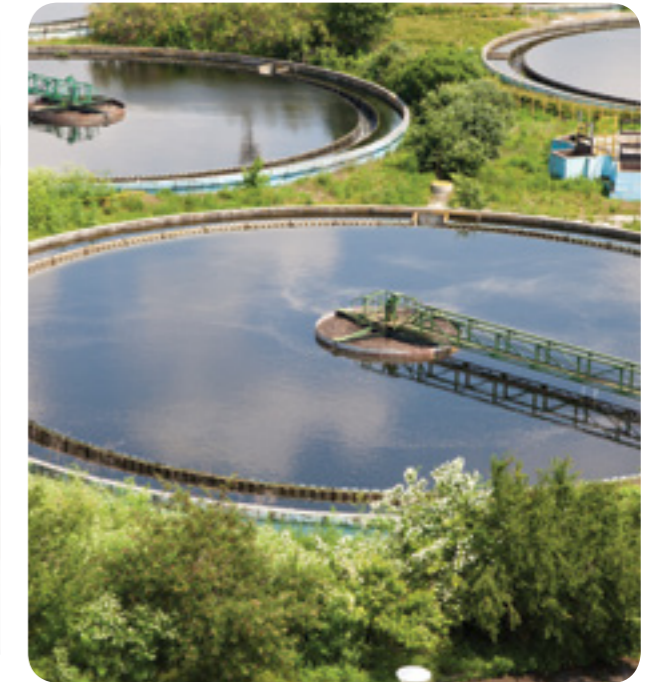
Industrial pressure systems

Effast from Polypipe is a comprehensive range of thermoplastic pipework systems for use in industrial and building services' applications, transporting chemicals, industrial fluids, water and waste safely and effectively.

Effast

Effast pressure systems are suited to a wide range of commercial and industrial applications, with an extensive range of pipes, fittings and valves, easily and permanently assembled using solvent cement, electro-fusion weld or mechanical installation.

- Available in PVCu, ABS, or PE
- WRAS approved for use with potable water
- Valves available electrically or pneumatically actuated if required



Effast PVCu

High chemical resistance and good flow characteristics make PVCu the most widely used plastic material for industrial applications. Effast PVCu's excellent chemical resistance make it especially well suited for use in industrial processing and for water treatment and chemical dosing use, whilst its rigid construction makes it the product of choice for swimming pools and spas.

Key Benefits

- Available in imperial sizes from 3/8" to 8" diameters
- Available in metric sizes from 16 to 315mm diameters
- Operating temperature 0°C to 60°C
- Comprehensive range of ball, diaphragm, butterfly and check valves available
- Installed with solvent cement or mechanical installation



Effast ABS

Low temperature capability make Effast ABS ideal for chilled water and plant room applications, whilst its non-toxic properties ensure it is suitable for food and beverage processing. It is also a light weight solution for water supply and water treatment applications.

Key Benefits

- Available in imperial sizes from 3/8" to 8" diameters
- Operating temperature -40°C to +60°C
- Range of ball and check valves available
- Installed with solvent cement or mechanical installation



Effast PPH

Effast Polypropylene (PPH) piping systems are light in weight but with high impact strength and good abrasion resistance, making them ideal for a wide range of chemical process and dosing systems. PPH is also a good electrical insulator.

Key Benefits

- Available in metric sizes from 20 to 110mm diameters
- Operating temperature -10°C to +90°C (short term to 110°C)
- Range of ball, check and butterfly valves available
- Installed with socket fusion welding



Effast PE100

A robust polyethylene pipe available in two pressure ranges, Effast PE100 offers excellent impact resistance across the performance envelope. It is best suited for use in boosted cold water, chilled water and pressurised waste systems and can be specified as a fusion weld or mechanical installation.

Key Benefits

- Available in SDR 17 (10 bar) from 32 to 1200mm diameters
- Available in SDR 11 (16 bar) from 20 to 630mm diameters
- Operating temperature -40°C to +60°C
- Installed with electrofusion or butt-fusion welding





Cable protection systems

Our range of products serve as efficient, engineered systems for use in projects such as house or grid connections, highways, railways or commercial projects, making them ideal for applications requiring sub-surface cable protection and utility networks.

The widest range available

Polypipe's cable protection range now stands at over 1,000 individual products. A huge capacity designed to meet the needs of every application from highways to housing, retail to industrial.

Our crucial power, lighting and communications ducting is certified to British and European standards where necessary, such as ENATS 1224 and BSEN 61384.

We have over 30 years experience in supplying duct systems, with Polyduct used for either open trench or trenchless applications - and Ridgiduct used in high, medium and low voltage situations.

We don't merely meet the standards. Throughout our history of innovation and development, we have helped to set them.



Power

Ridgiduct Power HV (class 1) and Ridgiduct Power (class 2) both comply with the requirements of the electrical supply industries ENATS 12-24 specification. Available in 2, 3 and 6m lengths, the Ridgiduct range has been the market leading twin wall duct solution to the power industry for over 30 years.

Motorway communications

Ridgiduct Comms 94, 100 and 150mm provides a sealed system specifically designed for motorway communications applications. It can be fully integrated with Polypipe access boxes in accordance with the Specification for Highway Works.

- Available in 94 to 150mm diameters
- BBA certified to the Specification for Highway Works



Lighting

Ridgiduct and Polyduct offer a complete range of robust, single and twin wall systems with a complete set of junction boxes, connectors and reducers. Produced in industry standard colour coding for street lighting and traffic signals.

- Available in 60 to 150mm diameters

Utilities

Products for water, gas and telecommunications cable protection, manufactured to the strictest industry guidelines for performance, colour coding and safety.

- Available in 60 to 150mm diameters
- BBA certified

Rail

Bespoke, pre-fabricated, multi-connection chambers for railtrack crossing, allowing numerous Ridgiduct pipes to be laid in multiple runs. Manufactured from Ridgistorm-XL large diameter pipe, the UTX chambers are manufactured off-site making them quick and easy-to-install.

Ridgicoil

Ridgicoil is a strong yet flexible alternative to conventional ducting for underground utilities. Its flexibility eliminates the need for special bends and the smooth bore has a low co-efficient of friction for ease of cable installation.

- Available in 40 to 160mm diameters
- BS EN 61386-24 compliant
- Available up to 50m in both coiled or straight lengths enabling fewer joints
- Available in all colours to meet requirements

Pre-lubricated coiled systems

The Quattroflex range has been created specifically for underground installations of buried networks. Their double skin is lined with silicone modified polyethylene creating less resistance for feeding cables, therefore saving time and money on installation.

- Available in 63 to 160mm diameters

Flame-retardant conduit piping

The halogen-free and flame retardant Janojet range of conduit pipes are available in different compression and impact resistance configurations. They offer a cost-effective alternative to cable trays and gutters with a rapid installation.

- Available in 40 to 63mm diameters

PVCu utility duct

Used for the carriage of all types of services in a range of applications including industrial, domestic and commercial. PVCu utility ducts were the first widely available thermoplastic ducts and suit all common specification requirements.

- Available in 100 to 160mm diameters

General purpose duct

A cost-effective alternative to higher specification systems, for use in light and medium duty applications. All products are manufactured to traditionally accepted dimensions.

- Available in 54 to 200mm diameters

Quality support and products from start to finish

With our leading-edge design expertise, innovative technology, detailed understanding within our sectors and our own award-winning delivery fleet, we're able to provide the support and service you need to bring whole life value to your projects. And provide systems that are engineered to perform.

Of course we supply your projects with expertly engineered products and systems, but our technical support goes much deeper.

We have expert teams who'll help you at design stage to ensure you receive the maximum performance and value from your system selection. And with such a wide range of engineered solutions, we can help you design-in value from the start of your project – helping you to plan ahead with confidence.

Ahead of legislation

As with all sectors of our business and indeed the industry, legislation is an area that can introduce challenges. We're actively part of The European Plastic Pipes and Fittings Association (TEPPFA), British Plastics Federation (BPF) and a member of the Construction Products Association (CPA), so we're best placed to receive the latest updates on new legislation, regulations and standards. In fact, as industry experts, we help to create many of the British and European Standards that cover our products. And we understand the Balanced Score Card approach for ensuring sustainability, Health & Safety and whole life value can be demonstrated and achieved within a project.

Our Approvals to meet your approval

Our products already have over 100 independent third party quality approvals from accredited industry bodies such as the British Board of Agrément (BBA) and the British Standards Institution (BSI).

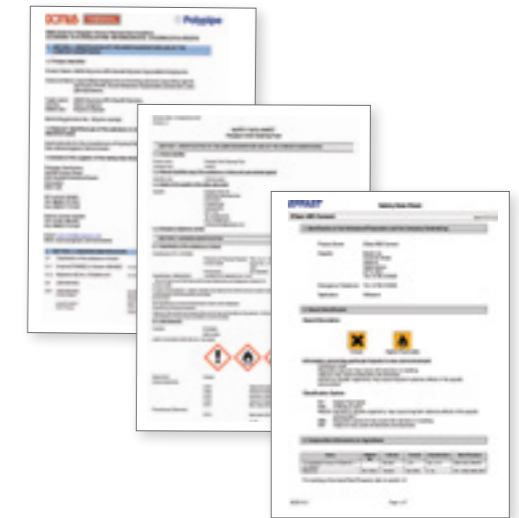
We take our standards seriously and invest in ensuring approvals for all our products where possible – providing peace of mind and the confidence you've come to expect from Polypipe.



Value engineering to save time and money

We work with you to design and develop systems that align to a circular economy; delivering products and systems to add value and where possible, save you time and money.

Using manufacturing processes and materials that stand the test of time and are sustainable; building-in time-saving features and improving product performance specifications, help to reduce installation time and maintenance costs. We have a team of Engineers on-hand to help you whatever stage your project is at. And have the resources to train your workforce helping them with the installation processes such as with our pre-fabricated tanks and chambers.



We invest heavily in marketing, providing all the technical support you need – from **design guides, technical drawings and data sheets** to **BIM Modelling** and everything in between.

Case studies



M25, London, UK

Polypipe provided 100,000m of surface water drainage products including Ridgidrain and the large diameter Ridgistor XL pipe system, gullies and cable protection for street lighting and motorway communications. We also supplied three separate off-line attenuation structures using the Polystorm modular cell system.

- Cable Protection
- Ridgidrain
- Ridgistor XL
- Polystorm



Namoya Mine, Democratic Republic of Congo

Polypipe's Ridgidrain twinwall drainage system, a highly effective solution for sub-soil drainage, is in operation at the tailings management facility of a major gold mining project in the Democratic Republic of Congo. The Namoya site houses a substantial tailings management facility to process the leftover materials and waste water from the extraction of the gold. It also ensures that any harmful particles do not enter the soil or groundwater.

- Ridgidrain



Orlysquare Roofpark, Netherlands

Permavoid geocellular units and geotextile were used for its flexibility and ability to store and reuse water. The system was perfect for passive irrigation for low level planting and mid sized established trees. To help with flooding and pooling, the units capture rainwater run-off at source, then store and reuse it throughout the park. Capillary fibre cones within the geocellular units, stores water which results in optimum plant growth.

- Permavoid



International Financial Centre, Dubai

Our solutions enabled the reduction of risk of localised flooding in this high-frequency urban development. The site's location was challenging – located next to a pedestrian walkway and construction site, in the middle of a busy urban city area – making Polystorm the ideal solution: light, yet robust, flexible and quick to install.

- Polystorm



Sangster International Airport, Jamaica

The ability to recommend the best product for the job, combined with a keen understanding of critical delivery schedules, were the deciding factors when Polypipe was awarded the order to supply cable conduit for an airport refurbishment at Jamaica's Sir Donald Sangster International Airport.

- Ridgiduct



Ipswich Town FC Academy Training Facilities, UK

Polypipe supplied its PVCu Landcoil land drainage solution in 80mm and 100mm diameters. Installed beneath the pitches at the club's Playford Road training ground, Polypipe's Landcoil offers significant improvements to the existing pitches which suffered from waterlogging.

- Landcoil



Shipyard, Lorient, France

Polypipe France supplied 217 metres of Ridgistor XL pipe in 750mm diameter to a shipyard in Lorient to transport sea water to be used for dry docking. Bespoke fittings were fabricated using PN10 flanges and gaskets to form connections between the pumps and the Ridgistor XL pipes.

- Ridgistor XL



Royal Connaught Park (Hogwarts School), UK

The grade II listed buildings that provided the setting for Hogwarts School were transformed into a multi-million pound apartment development. The development now has over one million pounds of Polypipe's underfloor heating installed using our unique overlay system.

- Underfloor heating
- Terrain PVC Soil and Waste

All descriptions and illustrations in this publication are intended for guidance only and shall not constitute a 'sale by description'. All dimensions given are nominal and Polypipe may modify and change the information, products and specifications from time to time for a variety of reasons, without prior notice. The information in this publication is provided 'as is' on October 2015. Updates will not be issued automatically. This information is not intended to have any legal effect, whether by way of advice, representation or warranty (express or implied). We accept no liability whatsoever (to the extent permitted by law) if you place any reliance on this publication you must do so at your own risk. All rights reserved. Copyright in this publication belongs to Polypipe and all such copyright may not be used, sold, copied or reproduced in whole or part in any manner in any media to any person without prior consent. © Polypipe is a registered trademark of Polypipe. All Polypipe products are protected by Design Right under CDPA 1988. Copyright © 2015 Polypipe. All rights reserved.

Mining

Polypipe offer plastic pipe solutions for all stages of mining water management providing tailored and innovative products for water management in mining where water is a precious resource and water management is essential.

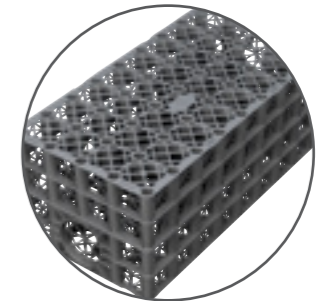
Our plastic pipe and storage solutions can assist you in the smooth running of your mining operation. Through our intelligently engineered products, Polypipe can provide you with innovative solutions for water management in mining, where water is a precious resource.

Visit our website to Harness your H2O
www.international.polypipe.com/harnessyourh2o



PE100

Manufactured from HDPE, a key solution for pressurised water delivery, treatment, distribution, processing and de-watering



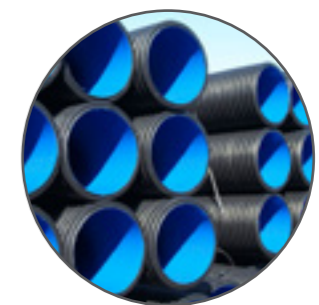
Polystorm

Manufactured from polypropylene, an idea solution for the capture and retention of precious water for re-use



Ridgistorm XL

Manufactured from HDPE, a great choice for larger diameter gravity water management, de-watering, storage and transport infrastructure



Ridgidrain

Manufactured from HDPE, a solution for gravity fed surface and sub-surface tailings water drainage, storage and transport infrastructure

Polypipe International

Plastic piping systems and solutions
for global applications



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