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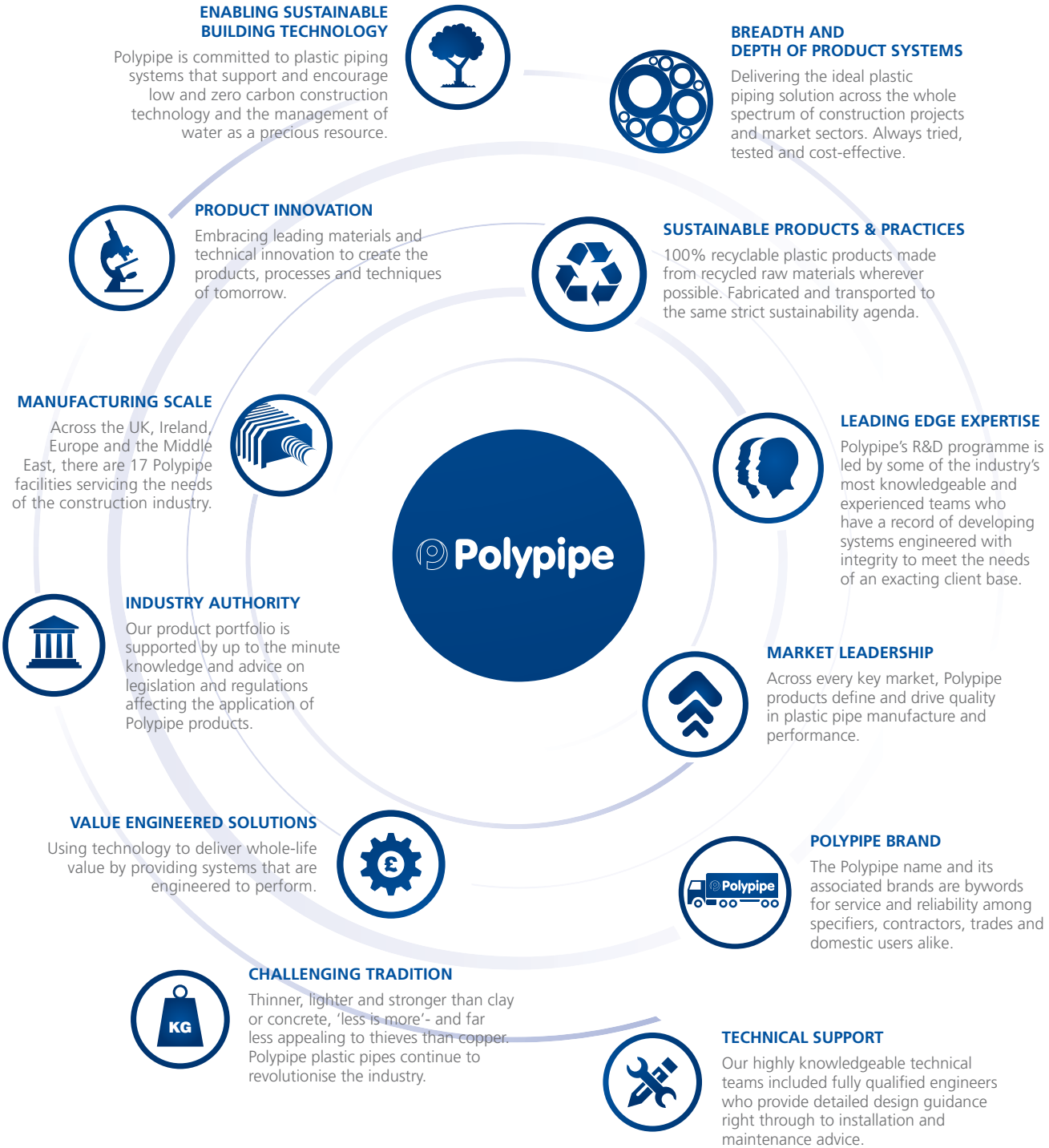
Civils and Infrastructure

Product and Systems Selector

Polypipe

Polypipe

We design, develop and manufacture the widest range of plastic piping products, with over 20,000 product lines available. Our primary focus is on developing and supporting pragmatic product systems through specific knowledge and understanding of the residential, commercial, civils and infrastructure market sectors. We ensure that customers can trust our unrivalled expertise to provide value engineered, fit for purpose piping solutions for the growing diversity and complexity of construction and building technology challenges they face.



ENABLING SUSTAINABLE BUILDING TECHNOLOGY

Polypipe is committed to plastic piping systems that support and encourage low and zero carbon construction technology and the management of water as a precious resource.

BREADTH AND DEPTH OF PRODUCT SYSTEMS

Delivering the ideal plastic piping solution across the whole spectrum of construction projects and market sectors. Always tried, tested and cost-effective.

PRODUCT INNOVATION

Embracing leading materials and technical innovation to create the products, processes and techniques of tomorrow.

SUSTAINABLE PRODUCTS & PRACTICES

100% recyclable plastic products made from recycled raw materials wherever possible. Fabricated and transported to the same strict sustainability agenda.

MANUFACTURING SCALE

Across the UK, Ireland, Europe and the Middle East, there are 17 Polypipe facilities servicing the needs of the construction industry.

LEADING EDGE EXPERTISE

Polypipe's R&D programme is led by some of the industry's most knowledgeable and experienced teams who have a record of developing systems engineered with integrity to meet the needs of an exacting client base.

INDUSTRY AUTHORITY

Our product portfolio is supported by up to the minute knowledge and advice on legislation and regulations affecting the application of Polypipe products.

MARKET LEADERSHIP

Across every key market, Polypipe products define and drive quality in plastic pipe manufacture and performance.

VALUE ENGINEERED SOLUTIONS

Using technology to deliver whole-life value by providing systems that are engineered to perform.

POLYPIPE BRAND

The Polypipe name and its associated brands are bywords for service and reliability among specifiers, contractors, trades and domestic users alike.

CHALLENGING TRADITION

Thinner, lighter and stronger than clay or concrete, 'less is more'- and far less appealing to thieves than copper. Polypipe plastic pipes continue to revolutionise the industry.

TECHNICAL SUPPORT

Our highly knowledgeable technical teams included fully qualified engineers who provide detailed design guidance right through to installation and maintenance advice.

Polypipe civils and infrastructure

Embracing the industry's **widest range of plastic systems** for cable protection, sewerage and water management across the construction, civil engineering, infrastructure, utilities, housing, commercial, sports and leisure markets, Polypipe products offer unrivalled choice and quality. With a commitment to **innovative product solutions** backed up by continued investment in people, plant and product research, our focus is on helping our customers meet and exceed standards for performance and reliability in the UK market.

Whatever your requirements and whatever the project, our **market leading products**, bespoke design and fabrication services, expert advice and first class customer support ensure a quality outcome, time after time.

How to use

This guide has been designed to provide quick, easy access to information on all Polypipe products, including guidelines for compliance under UK and EU building regulations. It has been divided into clear, colour-coded sections with introductions to each, for easy reference, followed by sub-contents sections breaking down products by application and function.

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Overview - Our Company, our people and our products

Polypipe has always challenged convention by exploring new ways to meet the needs of the construction industry. Chief among them has been the development of plastic piping systems to replace traditional concrete and clay materials with solutions that are lighter in weight whilst being tougher and more flexible – making them ultimately more sustainable. Our priority is always to provide the industry with robust solutions that meet the demanding performance criteria of today's Civils and Infrastructure projects.

To achieve this, we invest heavily in research and new production technology that allows us to provide high quality products, more precise performance specifications and even greater reliability. Our products are covered by third party accreditations including BBA, BSI Kitemark and WRc, which ensures we meet specification standards. Supporting our product accreditations, our business systems are regularly assessed by BSI to ensure we maintain our BS EN ISO 9001:2008 and BS EN ISO 14001:2004 certifications. These independent assessments confirm that we conform to regulatory requirements and ensure we provide greener credentials for our products.

UKAS accredited laboratories

Our in-house research and development facility is one of the best of its kind and includes the independent UKAS accredited Berry & Hayward laboratory. This runs 24 hours a day and gives us the body of knowledge and expertise needed to produce the most advanced range of products and solutions.

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Polypipe service and support -

Our product knowledge and service teams provide an unrivalled level of technical support

Every bit as important as our innovative products and solutions are the service support teams, who work closely with our customers to help guide them through current legislation and complex building regulations. This helps to identify the right product range to meet with the project requirements or to work together to develop a more bespoke systems for specific project needs.

Design

From the outset, the Polypipe design team will bring their technical expertise and experience to bear, using state of the art CAD systems to model the optimum design solution, not just for performance but helping to design out cost on-site.

Installation guidance

Providing guidance at the critical installation and testing stage, our specialists will oversee every stage of the operation, co-ordinating deliveries and ensuring the most cost and time efficient pathways to completion.

The caliber of Polypipe people

The caliber of the people within our support team is a reflection of the importance we place on customer service in helping to deliver a successful project outcome. They include not just fully qualified design engineers, who through their experience and in-depth product knowledge can help to provide detailed specification guidance, but also our fabrication and installation specialists.

Across all of the market sectors we operate in, our team are involved with, or Polypipe are members of, influential bodies such as the British Plastics Federation and Construction Products Association. We also work with specialists bodies such as DEFRA, CIRIA and Constructing Excellence, enabling us to have an active involvement and understanding of industry drivers. Combining the calibre of our people with our active involvement within the industry, enables us to provide an unrivalled level of support and guidance at every stage of a project, to deliver the very best and cost effective product solution.

Bespoke fabrication

Polypipe is unique in having its own in-house fabrication unit. In this 30,000 square metre facility, our skilled and highly experienced technicians deliver bespoke drainage and water management systems. These are provided ready-to-install, maximising the benefits of pre-fabrication, for ease of delivery and reduced installation time on-site.

All our experienced welders have successfully completed The Welding Institutes Certification Scheme for Welding and Inspection Personnel.

Polypipe and the environment

Across the whole of Polypipe we take sustainability seriously and are delighted to have become the first plastic piping systems company to be awarded the coveted Carbon Trust Standard. Lean manufacturing techniques and our approach to recycling all manufacturing waste are at the heart of our sustainable manufacturing processes. Indeed plastic itself is the most sustainable of all pipe materials, using less energy and producing fewer emissions during manufacture while reducing carbon footprints across the supply chain because it is up to 94% lower in weight than clay or concrete.

Integrated management system

At Polypipe we run an integrated management system combining ISO 9001 and ISO 14001 ensuring that our procedures for quality and environment work together. This enables us to map core processes within the business, document controls and amendments, monitor environmental aspects and impacts, demonstrating our commitment to achieving legal and regulatory compliance – all of which is independently audited to ensure the system is working the way it is supposed to. This system provides confidence to our customers that we are reducing the environmental impact of our business whilst ensuring we are legally compliant with environmental legislation and maintaining quality levels.

Performance, integrity and sustainability

Wherever performance criteria and standards allow, we will always maximise the sustainability of our products by using post-consumer plastics in their manufacture. Plastic pipe systems are, by their very nature, a more sustainable choice. Lighter in weight and easier to transport they are naturally lower in embedded carbon than traditional materials. So as advances in technology push up the quality of recycled materials and investment in our own production processes results in a more refined finished product, we are committed to integrating more and more post-consumer plastic and our own factory waste into Polypipe products. Plus, of course, plastic is 100% recyclable. So all our products can be reused in the manufacturing process at the end of their useful life.

Energy consumption

Across the business, £15m investment in new manufacturing and processing equipment over the last few years has delivered not just improved efficiency and quality, but a significant reduction in energy consumption. This reduction has been further enhanced by the recent consolidation of two manufacturing sites into one. This has delivered an improvement in the energy efficiency of the business and allows us to maximise the benefits from any further improvements. Extensive energy sub-metering allows us to constantly analyse and focus on areas where improvement can be achieved.

Transport

One of the major advantages of plastic piping over traditional materials is that it is so much lighter and easier to transport from factory to construction site. In fact, 1km of 450mm plastic drainage can be carried in just three trips using standard flat bed vehicles, compared to the 12 trips needed to deliver the same amount of concrete piping. The benefits in terms of reduced fuel consumption and emissions are obvious. But equally important are the reduced risk of accidents associated with heavy vehicle movements on-site and the improved health and safety benefits it brings. The other area that has enabled reduced deliveries is operating from one factory instead of two – this has reduced the number of separate deliveries needed to take certain products to site. Other innovations being shared across the whole company and benefiting the environment include a bio-diesel adapted delivery fleet, low rolling resistance tyres that cut fuel consumption by 5% and vehicle limiters that cap top speeds at 54mph to reduce consumption by another 5%.

Waste

As part of a coordinated programme to control and reduce waste, we administer our own pallet collection scheme, collecting all pallets and strapping used to transport Polypipe products in an easy and hassle free service for our customers. We have also invested heavily in technology that allows us to use an increasingly high percentage of off cuts and waste from previous production runs in our products.

Polypipe in the community

Our relationship with the communities we work in is something we value extremely highly. It's also something we work hard to support and foster: over the years we have sponsored youth sports teams, helped decorate children's hospice gardens and organised one of the largest sailing regattas in the UK to unite the construction industry in raising funds for numerous charities.

Our markets - Commercial, industrial and retail

There are two very demanding reasons for managing water in the commercial, industrial and retail sectors. First, the high demand placed on water supplies. Second, the increase in surface water run-off caused by covering the areas. Polypipe provides the means to tackle both problems with an holistic range of solutions for managing surface water and re-using it as an alternative to mains supplies, as well as drainage and sewerage products there is a wide choice of cable protection products, that form a complete suite of systems for any projects.

Case Study: Turbo Technologies, Huddersfield

Ridgistorm-XL large diameter pipe was used for the first time in a below ground tank supplying a sprinkler system at Turbo Technologies in Huddersfield.
It was chosen by main contractors Shanco Construction for the system's flexibility and for the Polypipe team's ability to pre-fabricate vital inspection points into the design. Manufactured from 135m of 2.1m diameter pipe, the tank incorporated a series of pre-fabricated fittings including two T-junctions and six elbows.
As it was installed on a live site of just 700m², speed of installation was essential to reduce the potential for accidents; with its light weight and pre-fabricated fittings, Ridgistorm-XL helped ensure the project progressed quickly and with minimal disruption. Once on-site, Shanco's team were trained in the use of Polypipe's electro-fusion welding technology, speeding up installation further.

Case Study: Dearne School, Yorkshire

A range of Polypipe products provided an holistic water management solution for a new school building to replace the existing Dearne Secondary School in Barnsley, Yorkshire. The original project specification included concrete chambers, however this was changed to plastic, pre-fabricated manholes and catchpits because they offered a much reduced installation time. In all, 23 bespoke manhole chambers and catchpits, 150m³ of Polystorm modular cells and over 1,700 metres of Ridgidrain drainage pipe were used to manage the flow of surface water back into the existing drainage network. A Stormcheck flow-control chamber was also installed, which helped to prevent localised flooding. The commissioning client on the project was highly impressed with Polypipe's ability to design and deliver a bespoke water management solution incorporating so many products, while making significant savings in time and costs.

Case Study: Poundstretcher, Leicester

A number of water management solutions were required by main contractor Hallam Contracts whilst working on Poundstretcher's new £36 million storage and distribution centre in Kirby Muxloe, Leicestershire.

Working with Hallam Contracts and The Diamond Wood Partnership and being involved at a very early stage of the project enabled Polypipe's water management solutions team to offer design advice and guidance. The designs were supported by Polypipe's specialist manufacturing and fabrication capabilities, to provide systems that were value engineered to make them both cost-effective and more importantly, enabled drain installation to continue prior to having the locations of the lateral drain confirmed. Ridgistorm-XL Saddles were used to connect the drains retrospectively enabling the installation of the main drainage run to continue to schedule.

The project, which involved diverting excess rainwater from the roof of the new distribution centre into a bespoke, oversized attenuation tank via gullies and downpipes used a number of product solutions. 1,400m of Ridgistorm-XL large diameter pipe in various diameters, 124 Ridgistorm-XL Saddles plus Polystorm Modular Cell Units and over 160m of Ridgidrain pipe, provide both drainage and water storage. The new distribution centre will assist the supply of goods to more than 400 Poundstretcher Stores across the UK.

Case Study: Lytham St Anne's

Two stormwater management systems were supplied within 12 months of one another on adjoining sites in Lytham St Anne's - a BMW garage and a Vauxhall Chevrolet and SAAB dealership.

Working closely alongside contractor James West Ltd, and consultant Atkinson Peck, who specified the drainage on-site, several cubic metres of Polystorm cells were used to provide an attenuation unit for absorbing vast quantities of rainwater. The Polystorm cells were also installed on the area surrounding - what was later to become - the new car storage point, as this provided easy access to the large outfall drain and would further reduce the possibility of water logging on-site. 200 metres of Polysewer and 4000 metres of general purpose duct were also supplied alongside 400 metres of 150mm and 375 metres of Ridgidrain pipe.

Other projects include:

- Prologis Industrial units at Peterborough, Daventry and Coventry - Winvic
- Cambridge Leisure Complex - Birse Build
- Asda Blackwood Retail Park - Costain
- St Ambrose College - WH Malcom
- Tesco, Bridgend - Mitie

Our markets - Rail and airport infrastructure

The demands placed on water management, drainage systems and cable protection in rail and airport projects are considerable. Hard surfaces – not just trackside and airside, but on car parks and access roads too – create increased volumes of standing water, while heavy and frequent traffic loads require piping that is strong and flexible enough to cope. Cable protection systems have to be reliable and robust. Polypipe systems are proven in major air and rail projects across the UK, providing highly efficient water capture, storage, re-use or drainage, as well as the largest range of products for the protection of vital cable networks.

Case Study: Train Station, Loughborough

Polystorm modular cells, Ridgidrain pipes and Ridgiduct cable protection products have played a vital role in the redevelopment of Loughborough train station.
Polystorm-R, Polystorm-Xtra and Polystorm Lite cells were used to meet varying load requirements in attenuation and soakaway structures underneath the station and surrounding areas. Due to their inherent modular design, they allowed contractors to accommodate an existing cable, the removal and re-routing of which would have added considerably to project time and expense.
In addition, Polypipe were called on to engineer a bespoke tank inlet consisting of a one piece pipe fitting fabricated from a four metre length of 600mm pipe with 6 x 300mm and 1 x 225mm outlets. Polypipe worked closely with main contractor Ringway on the project, which forms part of a multi-million pound investment by Charnwood Borough Council to re-develop the area.

Case Study: Heathrow Terminal 5

As partnering suppliers on the huge T5 project, Polypipe supplied main contractors AMEC and Laing O'Rourke with Ridgiduct and Ridgidrain products. Polypipe's Technical Design Department produced a one off Ridgiduct design, complete with CAD Drawings, specially for the project. This allowed couplers in the air ducting that serves the air-side road tunnel to be spaced every 12 metres instead of the usual 6. The result was a saving of 50% in coupling costs, along with significant savings in time, materials and labour. On projects such as T5, where even small savings are magnified by the sheer volumes involved, such close interaction between suppliers and contractors can have a huge impact on final costs.

Other projects include:

- Manchester Airport - McAlpine
- Liverpool Airport - Scott Wilson
- Wainey Island Airfield, Barrow - Halcrow Group Limited
- RAF Fairford, Phase 1 - Burkes Green Consulting
- RAF Fairford, Phase 2 - Hyder Consulting
- RAF Mildenhall - Halcrow Group Limited
- RAF Finningley - Hewlett Engineering
- RAF Woodbridge - Jacksons and Skanska

Case Study: Stirling/Alloa Commuter Rail Link

Our Ridgidrain drainage system was installed on a new commuter rail link connecting Stirling and Alloa in Central Scotland to Fife in Eastern Scotland. 150mm, 500mm and 900mm half-perforated Ridgidrain pipe was installed for drainage on either side of the railway track, running into a series of catchpits at various depths and in a number of outlet designs to stop the overflow of rainwater. The catchpits themselves were manufactured at our in-house fabrications facility and delivered ready to install, saving valuable time on-site. Both Ridgidrain pipe and catchpits have been specified and used successfully for a number of railway projects in the past because of their high resistance to ground movement and settlement – one of the main reasons they were chosen again by main contractors Edmund Nuttal for the Stirling/Alloa project.

Case Study: Gatwick Airport

Ridgistorm-XL was used to create a bespoke 750mm diameter pipeline during the construction of a new airside building at Gatwick Airport's North Terminal. The pipeline replaced an existing drain and was installed before the piling work for the new terminal began. Consequently, Polypipe designers specified stiffness to ensure it could cope with the vibration and ground movement involved. Not only did this value-engineered approach guarantee the integrity of the pipe structure; it also saved time, money and materials by avoiding an expensive, over engineered solution. One of the chief reasons Ridgistorm-XL was chosen for the project was its unique electro-fusion jointing, which provides a leak tight seal. At the time the Gatwick Airport pipeline was the only system of its size in the UK to incorporate such technology, proving its suitability in even the largest bespoke assignments.

Other projects include:

- Bramhope Tunnel - Corus Rail Consultancy
- Great Western (GWESPA) - McAlpine
- London to Brighton Mainline - Amec Spie Rail
- West Coast Route Modernisation, Nuneaton remodelling - Owen Williams Rail
- Watford to Bletchley Alliance - Corus Railway Consultancy

Our markets - Utilities

Polypipe's water management solutions range is also complemented by our cable protection systems for power, lighting and communications networks and our comprehensive range of piping for adoptable and mains sewers.

Other projects include:

- Green Spring Meadow Business Park - Cardiff
- Kencoed, Bridgend - Morrison Construction
- Sewer Refurbishment, Thirsk - JN Bentley
- Sale WTW - Gallifords
- Stublach Gas Storage - AE Yates
- Gwynt-y-môr Off Shore Windfarm - Tudor Borne

Both ranges provide inherent strength and flexibility, allowing products to resist cracking even under heavy loads and settlement. Cable protection products are colour coded in line with the National Joint Utilities Group (NJUG) system and comply with electrical supply industry specification ENATS 12-24. Ridgisewer, our range of sewer piping systems is light, easy to handle and quick to install and is unaffected by corrosive sulphates and sewer gases.

Case Study: A19 Thirsk and Severn Trent

On the A19 in Thirsk, the existing concrete pipeline failed due to a sulphate attack. Having considered the alternatives, Ridgisewer was specified to replace the pipeline. This was in part due to its health and safety benefits during installation and its excellent chemical, impact and abrasion resistance, while Ridgisewer also offers immunity from sulphate attack or corrosion due to sewer gases. Approximately 536 metres of 450, 500 and 600mm diameter Ridgisewer pipe was installed on-site. Being 94% lighter than the equivalent size concrete pipe, Ridgisewer's inherent lightweight properties ensured ease of handling, storage and speedy installation. These product benefits therefore ensured minimum disruption was caused to road users enabling a live carriageway installation to take place.

Ridgisewer has a strong yet flexible design which allows the pipeline to withstand some ground movement and differential settlement providing an advantage over alternative materials. It has jointing systems that remain intact even under extreme conditions therefore providing the complete sewer solution.

Ridgisewer is manufactured in high strength polypropylene, offering stiffness well in excess of other plastic products combined with exceptional durability.

Our markets - Roads and highways

Case Study: M27 Portsmouth

Polypipe supplied Ridgidrain drainage products for the widening of the M27 between Junctions 3-4 and 10-11 near Portsmouth. The £78m improvement scheme was being led by Costain on behalf of the Highways Agency. Concrete pipes were considered, but the speed and ease of installation offered by plastic products – critical because the works were taking place on a live highway – convinced specifiers to choose Polypipe. Ridgidrain which includes an integral socket for faster installation, was used on the busiest sections of motorway to allow faster progress and reduce the danger to road crews. Polypipe and Costain have worked together on a number of road projects and Polypipe's design and support teams again proved their ability to fabricate bespoke products and distribute them safely and economically to project timelines.

Case Study: A3 road improvement, Surrey

Four separate soakaway structures were created to manage surface water run-off on the A3 road improvement scheme at Hindhead, Surrey. Polypipe worked closely with main contractors Balfour Beatty to deliver a solution using Polystorm and Polystorm Xtra modular cells. The first two structures were relatively simple to install. The third involved placing Polystorm cells in a circular concrete tank, which was then back-filled with a granular aggregate. Polystorm and Polystorm Xtra were used again in the fourth structure – a 6m x 62m x 4.2m unit incorporating a number of 'wicks' fabricated from gravel-filled 750mm structured wall pipes, to move surface water down to the permeable soil strata some 15m below. Finally, Polypipe provided the products and design work for £200,000 worth of cable protection, including a large bank of sealed ducts within a tunnel section of the project.

Case Study: A34 Chieveley/M4 Junction 13 improvement

Polypipe was appointed to design and deliver a drainage project for the motorway junction upgrade that was easy to handle and quick to install within project timelines. Part of the government's Targeted Programme for Improvement, (TPI) the A34/ M4 upgrade was a major infrastructure project, involving 15,000m² of lime cement stabilisation, 10,100 tonnes of granular sub base and 29,600m² of resurfacing. Working closely with main contractor Costain, Polypipe provided a Ridgidrain structured-wall pipe system in diameters from 150mm to 450mm. Its excellent performance, longer lengths and effective jointing system meant it could be installed quickly and easily to save time and money on-site. Polypipe also provided cable protection ducting for communications, lighting and motorway signage. The long-term benefits of the upgrade can be seen in a marked improvement in carriageway drainage and substantially easier traffic flow.

Other projects include:

- M1 Junction 6a to 10 - Balfour Beatty/Skanska
- M25 Junction 12 to 15 - Balfour Beatty
- M4 Newbury - Costain Civil Engineering
- A1M Dishford - RMG
- Manchester Tram - MPACT
- East Kent Access Road - Volker Fitzpatrick
- M1 Junctions 10-13 Drainage & Ducting - Carillion

Cable Protection Systems

Polypipe's cable protection range of products are independently certified to British and European Standards where required and have been used extensively for highways, housing developments, commercial, retail and industrial infrastructure applications. There is a range of over 1,000 individual products and sizes to choose from, all proven, tried and tested, providing a complete cable protection system for almost any application.

A full range of cable protection systems for almost any application including:

- Power
- Motorway communications
- Lighting
- Utilities
- PVCu Specification
- General Purpose

BBA BRITISH BOARD OF AGRÉMENT CERTIFICATE No. 13/H205

BBA BRITISH BOARD OF AGRÉMENT CERTIFICATE No. 89/2175

Cable Protection Systems

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Please note that Made to Order or specially made products are manufactured to customer orders. Once manufacture has started customer orders can not be cancelled. The customer will be responsible for the total sales cost of the order. All products manufactured should be delivered within 8 weeks. All products outstanding after this 8 week period will be invoiced in total and the product disposed of. Lead times applicable for these products will be dependent on manufacturing capacity and will be quoted at the time of order placement. Care should be taken when obtaining lead times at enquiry stage, as these may be revised on order placement. Price applicable at time of quotation and any variation may require a revision to the prices issued for these products. Made to Order and special products will require customer sign off on the agreed specification. This is essential before manufacturing can begin.

Power

Polypipe is the UK's leading supplier to the power and utilities industry and is the approved product for Power Networks. Our products include cable protection that complies with ENAT 12-24 classes 1,2 and 3, as well as above ground solutions such as cable guards and hockey sticks.

Power - class 1

Ridgiduct Power HV

ENATS (12-24)

Complies with ENATS 12-24 Class 1, 450N at 75°C

Complies with BS EN 61386-24. 750N, normal duty impact.

Key Benefits

- Complies with ENATS 12-24 Class 1 specification
- Complies with BS EN 61386-24
- Suitable for use with high voltage, XLPE sheathed cables
- Available with red inner wall and red or black outer wall for increased identification
- Manufactured from Polypropylene
- Full range of accessories available

Ridgiduct Power HV ENATS 12-24 Class 1 Specification

ID mm	OD mm	Length m	Colour	Code
100	118	2	Red or Black	RBHV100X2 (R* or B)
125	148	2	Red or Black	RBHV125X2 (R* or B)
150	178	2	Red or Black	RBHV150X2 (R* or B)
100	118	3	Red or Black	RBHV100X3 (R* or B)
125	148	3	Red or Black	RBHV125X3 (R* or B)
150	178	3	Red or Black	RBHV150X3 (R* or B)
100	118	6	Red or Black	RBHV100X6 (R* or B)
125	148	6	Red or Black	RBHV125X6 (R* or B)
150	178	6	Red or Black	RBHV150X6 (R* or B)

Available in Red (R) or Black (B). Please specify with order.
*Red (R) is Made to Order

Ridgiduct Power HV Bends

Description	Radius m	Angle	Colour	Code
PVC Double Socket Bend 100mm	3.9	11.25°	Black	RBHVB100X11X3.9B
	3.9	22.5°	Black	RBHVB100X22X3.9B
	1.2	45°	Black	RBHVB100X45X1.2B
	1.2	90°	Black	RBHVB100X90X1.2B
PVC Double Socket Bend 125mm	3.9	11.25°	Black	RBHVB125X11X3.9B
	3.9	22.5°	Black	RBHVB125X22X3.9B
	1.2	45°	Black	RBHVB125X45X1.2B
	1.2	90°	Black	RBHVB125X90X1.2B
PVC Double Socket Bend 150mm	3.9	11.25°	Black	RBHVB150X11X3.9B
	3.9	22.5°	Black	RBHVB150X22X3.9B
	1.2	45°	Black	RBHVB150X45X1.2B
	1.2	90°	Black	RBHVB150X90X1.2B

Available in Red (R) or Black (B). Please specify with order.
Note: All bends are made to order and are subject to lead times.
Complies with manufacturing and test requirements of ENATS 12-24.

All dimensions provided are nominal.

Ridgiduct Power HV Trefoil Accessories

Description	Diameter mm	Colour	Product Code
Trefoil Clip	100	Black	RBTC100
	125	Black	RBTC125
	150	Black	RBTC150

Key Features

- Suitable for use with both Ridgiduct and bends
- Supports duct arrangement during installation and burial
- Ensures consistent spacing of duct lengths and bends

Trefoil clip

PVCu Duct

PVCu Duct

Nominal wall thickness mm	ID mm	Length m	Colour	Code
UNSEALED				
4.1	100	6	Black	SD7110X6BNS ▲
4.4	117	6	Black	SD7125X6BNS ▲
5.2	150	6	Black	SD7160X6BNS ▲
4.1	100	6	Red	SD7110X6RNS ▲
4.4	117	6	Red	SD7125X6RNS ▲
5.2	150	6	Red	SD7160X6RNS ▲
SEALED				
4.1	100	6	Black	SD7110X6BSPE UG402B ▲
5.2	150	6	Black	SD7160X6BSPE UG402B ▲
4.1	100	6	Red	SD7110X6RSPE UG404B ▲
5.2	150	6	Red	SD7160X6RNS UG402B ▲

All sizes are available in PVCu.
Bend radius information required at quote.
▲ Made to order and subject to lead times.

Key Benefits

- Complies with ENATS 12-24 Class 1 specification
- Complies with BS EN 61386-24
- Full range of fittings available
- Used for high voltage applications
- Can also be used in medium and low voltage applications
- 6m lengths as standard (other lengths available on request)
- Standard markings - Electrical Cable Duct (other markings available on request)

Power

Power - class 2

Complies with ENATS 12-24 Class 2, 450N at 50°C.
Complies with BS EN 61386-24 750N, normal duty impact.

Ridgiduct power

Ridgiduct is a twin wall system, specifically engineered to provide a light, yet robust, alternative to conventional cable protection. Ridgiduct is manufactured in HDPE and the resulting stiff, yet flexible, twin wall structure easily outperforms alternative products. Complementing the Ridgiduct range are a selection of twin wall long radius drawn bends, manufactured in HDPE. These are available in most sizes and a range of angles.

ENATS (12-24)

Key Benefits

- Complies with ENATS 12-24 Class 2 specification
- Complies with BS EN 61386-24
- A preferred choice of regional electricity companies
- Integral coupler
- Low weight, flexible, durable and high strength
- Good impact resistance, even at low temperatures
- Available in an alternative twin wall split duct form for easy installation around existing cables with minimal change in strength

Ridgiduct Power ENATS 12-24 (Standard sizes)

ID mm	OD mm	Length m	Code	Pack Qty
100	118	2	RB7100X2	85
100	118	3	RB7100X3	85
100	118	6	RB7100X6	85
125	148	2	RB125X2	46
125	148	3	RB125X3	46
125	148	6	RB125X6	46
150	178	2	RB150X2	36
150	178	3	RB150X3	36
150	178	6	RB150X6	36

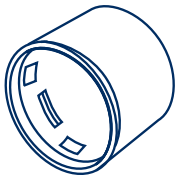
All dimensions provided are nominal.

Ridgiduct Coupling

Description	ID mm	Code	Pack Qty
Black coupling	100	RBC100	10
Black coupling	125	RBC125	10
Black coupling	150	RBC150	10

Note: Ridgiduct as a sealed system. If the system is required to be water tight, then couplers will be required from the Ridgidrain range.

Ridgiduct coupling

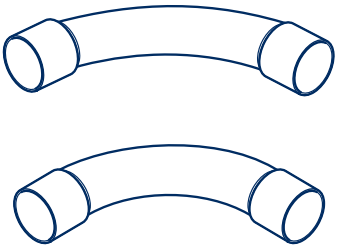


Ridgiduct Bends

Description	Radius m	Angle°	Code	Pack Qty
PVCu Double Socket Bend 100mm	2.4	11.25	RBB100X11X2.4 ▲*	1
	2.4	22.5	RBB100X22X2.4 ▲*	1
	0.45	45	RBB100X45X0.45	1
	0.45	90	RBB100X90X0.45	1
PVCu Double Socket Bend 125mm	2.4	11.25	RBB125X11X2.4 ▲*	1
	2.4	22.5	RBB125X22X2.4 ▲*	1
	0.61	45	RBB125X45X0.61	1
	0.61	90	RBB125X90X0.61	1
PVCu Double Socket Bend 150mm	2.4	11.25	RBB150X11X2.4 ▲*	1
	2.4	22.5	RBB150X22X2.4 ▲*	1
	0.61	45	RBB150X45X0.61	1
	0.61	90	RBB150X90X0.61	1

Sealed Ridgiduct bends are available for 100 & 150mm duct.
▲ Made to order and subject to lead times.
*Compliant with ENATS 12-24

Ridgiduct bends



Power

Power - class 3

Key benefits

- High impact
- Ease of use and transportation
- Flexibility of coiled duct eliminating the need for special bends
- Exceptional durability
- Can be used for trenchless applications
- Complies with BS EN 61386-24
- Complies with ENATS 12-24 Class 3 specification

Complies with ENATS 12-24 Class 3, 450N at 23°C.
Complies with BS EN 61386-24 450N, normal duty impact.

Polyduct power

Polyduct is manufactured in MDPE or HDPE and is a class 3 product which is available in both straight lengths and coils. It can be used for either open trench or trenchless applications.

Polyduct black electric cable duct

ENATS (12-24)

Polyduct Black Electric Cable Duct

OD mm	ID mm	Length m	Code	Pack Qty
37	32	100 coil	PD3237X100BEPE	1
37	32	50 coil	PD3237X50BEPE	1
37	32	25 coil	PD3237X25BEPE	1
44	38	100 coil	PD3844X100BEPE	1
44	38	50 coil	PD3844X50BEPE	1
44	38	25 coil	PD3844X25BEPE	1
60	50	50 coil	PD5060X50BEPE	1
60	50	25 coil	PD5060X25BEPE	1

25m and 50m coils available.

Polyduct Black Couplings

ID mm	OD mm	Code	Pack Qty
32	37	PDC32	1
38	44	PDC38	1
50	60	PDC50	1

Ridgicoil power

Ridgicoil is coiled twin wall cable protection, its flexibility eliminates the need for special bends. Complies with BS EN 61386-24 Type 450N, normal impact resistance

Ridgicoil Power Duct

To suit duct measurements OD mm	ID mm	Length m	Code
40	31	50	RC40X50BE
50	40	50	RC50X50BE
63	50	50	RC63X25BE

Printed Electrical Cable Duct.

All dimensions provided are nominal.

Power - class 3 - non preferred sizes

Ridgiduct Power ENATS 12-24 (Non-standard sizes)

ID mm	OD mm	Length m	Code	Pack Qty
94	110	6	R894X6	95

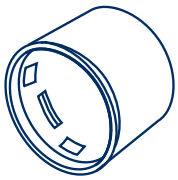
Ridgiduct Power ENATS (Standard sizes)

ID mm	OD mm	Length m	Code	Pack Qty
100	118	2	RB100X2	85
100	118	3	RB100X3	85
100	118	6	RB100X6	85

Ridgiduct Coupling

Description	ID mm	Code	Pack Qty
Black coupling	94	RBC94	10
Black coupling	100	RBC100	10

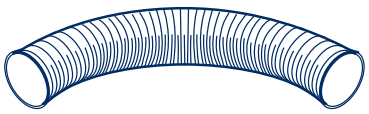
Ridgiduct coupling



Ridgiduct Black Long Radius Drawn Bends

Angle	Radius mm	Code	Pack Qty
94mm			
11.25°	420	RBDB94X11X0.42	10
22.5°	420	RBDB94X22X0.42	10
45°	420	RBDB94X45X0.42	7
90°	420	RBDB94X90X0.42	7
100mm			
11.25°	420	RBDB100X11X0.42	10
22.5°	420	RBDB100X22X0.42	10
45°	420	RBDB100X45X0.42	7
90°	420	RBDB100X90X0.42	7
125mm			
11.25°	600	RBDB125X11X0.6	7
22.5°	600	RBDB125X22X0.6	7
45°	600	RBDB125X45X0.6	4
90°	600	RBDB125X90X0.6	3
150mm			
11.25°	610	RBDB150X11X0.61	5
22.5°	610	RBDB150X22X0.61	5
45°	610	RBDB150X45X0.61	4
90°	610	RBDB150X90X0.61	3

Ridgiduct black long radius drawn bends



Ridgicoil Power Duct

To suit duct measurements OD mm	ID mm	Length m	Code
75	60	50	RC75X50BE
90	71	50	RC90X50BE
110	94	50	RC110X50BE
160	140	25	RC160X25BE

Printed Electrical Cable Duct.

Ridgicoil power duct

All dimensions provided are nominal.

Power - accessories

Ridgiduct power split duct

Ridgiduct Power Split Duct is mainly used for ducting existing cables.

Ridgiduct Power Split Duct

ID mm	Length m	Code	Pack Qty
100	1	RB100X1S ▲	85
125	1	RB125X1S ▲	46
150	1	RB150X1S ▲	36
100	2	RB100X2S ▲	85
125	2	RB125X2S ▲	46
150	2	RB150X2S ▲	36
100	3	RB100X3S ▲	85
125	3	RB125X3S ▲	46
150	3	RB150X3S ▲	36

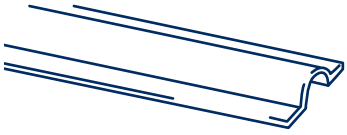
▲ Made to order and subject to lead times.

Ridgiduct Split Duct Fittings

Description	ID mm	Code	Pack Qty
100mm Coupling	100	CRBS100	10
150mm Coupling	150	CRBS150	10

Cable guard

Supplied in 10 foot lengths.

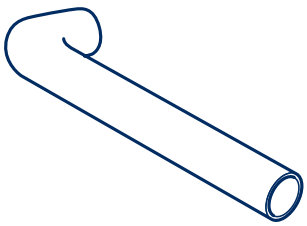


Cable Guard

Dia. inches	Dia. mm	Code	Pack Qty
0.75	18	CG002X10 ▲	25
1.0	25	CG003X10 ▲	25
1.5	38	CG004X10 ▲	10
2.0	50	CG005X10 ▲	10
2.5	64	CG006X10 ▲	10
3.0	80	CG007X10 ▲	5
4.0	100	CG008X10 ▲	5

▲ Made to order and subject to lead times.

Hockey Sticks



Hockey Sticks

Utility provider	Size mm	Colour	Code	Pack Qty
UK Power Networks	39	White	HSPV018WHITE	25
SSE	38	Black	HSPV017SEBBLK	25
SSE	38	White	HSPV01WHITE	25
Western Power Distribution	37	White	HSPV016WHITE	25

All dimensions provided are nominal.

Motorway Comms

Ridgiduct comms

Polypipe is able to offer Ridgiduct Comms 94, 100 and 150mm as a sealed system specifically designed for motorway communications applications. Ridgiduct is fully integrated with Polypipe access boxes (refer to Lighting section). Complies with BS EN 61386-24, certifying 450N normal duty compression performance at 23°C.

Key benefits

- IP47 rated sealed system
- BBA certified as a fully sealed system
- Complies with BS EN 61386-24 : Type 450N, normal duty impact resistance
- Print options available

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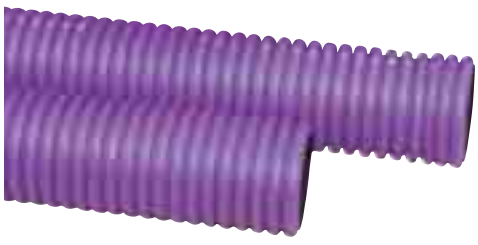
Ridgiduct Motorway Comms			
ID mm	Length m	Code	Pack Qty
94	6	RB94X6PMCPPE	95
100	6	RB100X6PMCPPE	85
150	6	RB150X6PMCPPE ▲	36

▲ Made to order and subject to lead times.

Conforms to Highways Agency Specification for sealed systems.
For Scottish market printed Motorway Comms/Power. Also available in black.
Please contact us for further information. Other print options available.
Please state requirements when ordering.



Couplers & Seals		
ID mm	Coupler Code	Seal Code
94	CRD94	SRD94
100	CRD100	SRD100
150	CRD150	SRD150

1 coupler & 2 seals per joint.

Motorway Comms

Key benefits

- Compliance with BS EN 61386-24: Type 450N,normal duty impact resistance
- Manufactured in polyethylene with excellent impact resistance at low temperatures
- Long coil lengths for reduced jointing
- Factory installed Polypropylene twine and coupling
- Optional sealing rings for sealed system
- Low weight, high strength

Ridgicoil motorway comms

Ridgicoil is coiled twin wall cable protection, its flexibility eliminates the need for special bends and the smooth bore has a low co-efficient of friction for ease of cable installation.

Ridgicoil Motorway Comms			
OD mm	ID mm	Length m	Code
63	50	50	RC63X50PMCP
110	94	50	RC110X50PMCP

All dimensions provided are nominal.

Comtite transit systems

Comtite cable protection plugs, when used in conjunction with the insertable cable grommets, ensures full compliance with the requirements of Series 1530 of the Highways Agency Specification for Highway Works and is the only transit system accredited by the BBA for motorway comms. When used with Ridgiduct it completes a certified sealed system.

Key benefits

- IP47 rated sealed system
- BBA approved
- Allows for rapid fitting, both new and retrofit
- Integral test valve
- Design resists ejection from the cable protection
- All 4 ports can be utilised by the use of an additional draw cord bracket

Comtite		
Description	Code	Pack Qty
94mm plug	DP94 ▲	40
100mm plug	DP100 ▲	40
Blanking grommet with rope attachment point	DPG0 ▲	10
9mm grommet	DPG9 ▲	10
12mm grommet	DPG12 ▲	10
14mm grommet	DPG14 ▲	10
16mm grommet	DPG16 ▲	10
18mm grommet	DPG18 ▲	10
21mm grommet	DPG21 ▲	10
24mm grommet	DPG24 ▲	10
27mm grommet	DPG27 ▲	10
4 x 9mm grommet	DPG9X4 ▲	10
7 x 9mm grommet	DPG9X7 ▲	10

▲ Made to order and subject to lead times.
4 grommets required per plug. In order to achieve a sealed plug, use a blanking grommet where cable grommet is not required.
Patent pending.

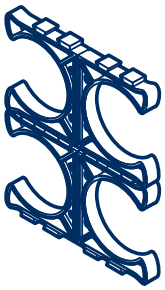
Motorway Comms

Duct Spacers			
Description	Duct ID	Code	Pack Qty
2 way Duct Spacer (to suit 110mm O.D.) ▲	94	RBS110X2	50
4 way Duct Spacer (to suit 110mm O.D.)	94	RBS110X4	25
6 way Duct Spacer (to suit 110mm O.D.) ▲	94	RBS110X6	12
2 way Duct Spacer (to suit 118mm O.D.) ▲	100	RBS118X2	50
4 way Duct Spacer (to suit 118mm O.D.)	100	RBS118X4	25
6 way Duct Spacer (to suit 118mm O.D.) ▲	100	RBS118X6	12

Note: Highways Agency requires 1 per metre.
▲ Made to order and subject to lead times.

Duct spacers

High quality injection moulded spacers are available to secure multiple installations of all 94 and 100mm diameter ducts. The unique modular designs enables multiple configurations to be assembled. Duct spacers comply with the requirements of MCHW 1530.



Draw Cord

Manufactured from high quality polypropylene to a nominal breaking strength of 5kN.

Draw Cord		
Description	Pallet Qty	Code
6mm Dia. x 220m	160	DC220
6mm Dia. x 500m (wooden drum)	72	DC500

SPECIAL NOTE FOR APPLICATIONS SUBJECT TO HIGHWAYS AGENCY REQUIREMENTS
It should be noted that a number of versions of the Manual of Contract Documents for Highway Works are in use and individual contracts can be subject to substantial variation. Suitability should always be checked with the overseeing organisation. Products selected should be BBA approved or meet the requirements of Table 5/2 unless exceptional requirements demand an alternative.
It should also be noted that there are differences between requirements for ducts in Series 500 and 1500 of the Specification for Highway Works.

All dimensions provided are nominal.

Lighting

Ridgiduct lighting

Ridgiduct lighting is a twin wall low weight flexible cable protection system, specially manufactured in orange for use in street lighting and traffic signal applications. A full range of access and junction boxes, bends, reducers and adaptors completes the system.

Key benefits

- Complies with BS EN 61386-24 : Type 450N, normal duty impact resistance
- BBA approved
- Impact resistance, even at low temperatures
- Flexible in application, with a minimal requirement for special bends
- Available with print options for traffic signals and street lighting

Ridgiduct Lighting

Nom. Size	OD mm	Length m	Code	Pack Qty
94	110	6	RB94X6O(SL or TS)	95
100	118	6	RB100X6O(SL or TS) ▲	85
150	178	6	RB150X6O(SL or TS)	36

▲Made to order and subject to lead times.
Available with street lighting (SL) or traffic signal (TS) print. Please specify with order.

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Polyduct lighting

Polyduct lighting is a single wall alternative to twin wall cable protection. Manufactured in orange MDPE or HDPE. It can be used in either open trench or trenchless applications.

Polyduct Lighting

OD mm	ID mm	Wall Thickness	Length m	Code	Pack Qty
60	50	5	6	PD5060X6O(TS or SL)	250
63	56	3.5	6	PD5663X6O(TS or SL)	250
107	100	3.5	6	PD100107X6O(TS or SL)	85
107	97	5	6	PD97107X6O(TS or SL)	85

Available with street lighting (SL) or traffic signal (TS) print. Please specify with order.

Polyduct Lighting Bends

OD mm	Angle	Radius mm	Code	Pack Qty
60	45°	350	PDB60X45O	25
60	90°	225	PDB60X90O	25
63	45°	350	PDB63X45O	25
63	90°	225	PDB63X90O	25
107	45°	450	PDB107X45O	1
107	90°	450	PDB107X90O	1

All dimensions provided are nominal.

Lighting

Key benefits

- Compliance with BS EN 61386-24: Type 450N, normal duty impact resistance
- Long coil lengths for reduced jointing
- Factory installed Polypropylene twine and coupling

Ridgicoil lighting

Ridgicoil's flexibility eliminates the need for special bends and the smooth bore has a low co-efficient of friction for ease of cable installation.

Ridgicoil Lighting			
OD mm	ID mm	Length m	Code
63	50	50	RC63X50O(SL or TS)
110	94	50	RC110X50O(SL or TS)

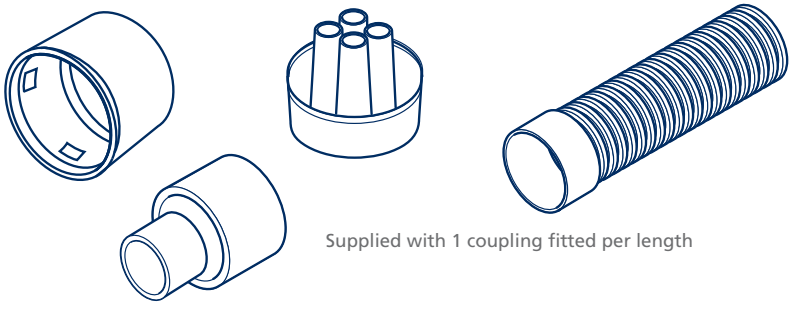
Available with street lighting (SL) or traffic signal (TS) print.
Please specify with order.

Lighting in Scotland

Lighting in Scotland has specific requirements and for this purpose Polypipe manufacture a single wall cable protection range.

Scottish Lighting Purple Cable Protection & Fittings			
Description	Size mm	ID mm	Code
SINGLE WALL CORRUGATED			
100m coil	60	53	SSL60X100P ▲
40m coil	100	90	SSL100X40P ▲
JUNCTION BOXES			
	100		SSLJB100 ▲
CONNECTORS			
	60		SSLC60 ▲
	100		SSLC100 ▲
REDUCERS			
Slotted	100 x 60		SSLR100X60Slot ▲
Unslotted	100 x 60		SSLR100X60 ▲
END CAP			
			SSLEC4PIN

▲ Made to order and subject to lead times.
Purple as standard. Other colours available on request. Minimum order 50 coils.



Supplied with 1 coupling fitted per length

All dimensions provided are nominal.

Access Boxes

Code	Description	Height mm	Opening Width mm	Opening Depth mm	External Width mm	External Depth mm
AC2902751	290 x 275	307	320	310	385	375
AC4503001	450 x 300	305	485	330	550	395
AC4504501	450 x 450	330	475	475	545	545
AC6004501	600 x 450	320	635	485	700	550
AC6006001	600 x 600	320	635	635	700	700

The clear opening for boxes is greater than the clear opening for frames.
See the relevant tables for details of clear opening frames.

Pole boxes

The range of 4 pole boxes is available in 290 x 275mm and 450 x 450mm sizes, incorporating integral housings for 114 and 140mm poles and are manufactured from polyethylene. The pole box provides 450mm depth of cover as standard, extendable if required using modular access boxes as rising sections.

Pole Boxes

Code	Description	Height mm	Opening Width mm	Opening Depth mm	External Width mm	External Depth mm	Pole Box ID
PB2902751	290 x 275 ▲	615	320	305	690	415	114
PB2902752	290 x 275 ▲	615	320	305	690	415	140
PB4504501	450 x 450 ▲	605	465	465	875	600	114
PB4504502	450 x 450 ▲	605	465	465	875	600	140

The clear opening for boxes is greater than the clear opening for frames.
▲ Made to order and subject to lead times.

Key benefits

- Robust, single-piece injection or rotational mouldings
- High strength, structured wall construction
- Manufactured in impact resistant polyethylene for installation in all conditions
- Corrosion free and chemical resistant material
- Ultraviolet light resistant material, suitable for extended storage periods
- Light, easy to handle, transport and install
- Modular construction, allowing access boxes to be used as rising sections as required
- Pre-trepanned points of entry to accommodate 54, 63, 110 and 118mm outside diameter ducting
- Can also be stacked

Lighting

Composite covers

Advanced skid resistance composite covers are available for the range of access, pole and signal boxes. Manufactured in high strength, fibre-reinforced polyester resin and to BS EN 124 Class B 125.

Composite Covers	
Code	Nominal Size mm
CC290275	290 x 275
CC450300	450 x 300
CC450450	450 x 450
CC600450	600 x 450
CC600600	600 x 600

Composite Cover Frames	
Code	Nominal Size mm
CCF290275L	290 x 275
CCF450300L	450 x 300
CCF450450L	450 x 450
CCF600450L	600 x 450
CCF600600L	600 x 600

A locking frame is required and must be ordered separately.

Galvanised steel covers

Galvanised steel covers and frames are manufactured to the FACTA (Fabricated Access Cover Trade Association) Class B specification, equivalent to BS EN 124 Class B 125.

Galvanised Steel Covers & Frames	
Code	Nominal Size mm
GCF290275	290 x 275
GCF450300	450 x 300
GCF450450	450 x 450
GCF600450	600 x 450
GCF600600	600 x 600

Typical places of installation include areas subject to slow moving wheel loads, including footways, pedestrian areas, car parks and verges.

Ductile iron covers and frames

Ductile iron access box covers are manufactured to BS EN 124 Class B125.

Ductile Iron Covers & Frames	
Code	Clear Opening mm
DCF450450 ▲	450 x 450
DCF600450 ▲	600 x 450
DCF600600 ▲	600 x 600

▲ Made to order and subject to lead times.

All dimensions provided are nominal.

Utilities

KEY	Typical Colour Coding and Important Notes	
	Black (B) - Electricity	Yellow (Y)* - Gas
	Orange (O) - Street Lighting	Blue (BL) - Water
	Purple (P) - Motorway Communications	Green (G) - Cable Television
	Purple (P) - Street Lighting (Scotland)	Grey (GR) - Telecommunications

*Please check the requirements of the utility company, who may stipulate a requirement for perforated duct. Alternatively we do provide a single wall perforated gas duct to BS 4962. Fore more information please call our technical department on +44 (0)1509 615100.

Colours and printing may vary from region to region, please check with appropriate authority.

Special colours and prints may be subject to lead times and minimum order quantities. Slow moving products may also be subject to minimum order quantities and lead times. Availability must be checked with Polypipe prior to order placement.

If a specific grade of colour is required this should be stated at the time of enquiry and order placement. Supply may be subject to lead times and minimum order quantities. The colour of standard black PVCu ducting products ranges from grey to black.

Ridgiduct utilities

Available in a range of colours which comply with NJUG classifications.

Complies with BS EN 61386-24, certifiying 450N normal duty impact.

Ridgiduct Utilities

ID mm	OD mm	Length m	Code	Colours	Pack Qty
94	110	6	RB94X6	Y*,BL,O,G,P	95
100	118	6	RB100X6	Y*,BL,O,G,P	85
150	178	6	RB150X6	Y*,BL,O,G,P	36
225	266	6	RB225X6	Y*,BL	14
300	354	6	RB300X6	Y*,BL	9

Note: for colours see key above.
*Please check the requirements of the utility company, who may stipulate a requirement for perforated duct. Alternatively we do provide a single wall perforated gas duct to BS 4962. For more information please call our technical department on +44 (0)1509 615100.

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BBA BRITISH BOARD OF AGRÉMENT CERTIFICATE No. 89/2175

Key benefits

- Low weight, flexible, durable and high strength
- Good impact resistance, even at low temperatures
- Available from stock
- BBA approved
- Complies with BS EN 61386-24

Ridgicoil utilities

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

Ridgicoil

OD mm	ID mm	Length m	Code	Colours
40	31	50	RC40X50	B
50	40	50	RC50X50	B,Y*,BL
63	50	50	RC63X50	Y*,BL,O,G,P
75	60	50	RC75X50	B
90	71	50	RC90X50	B
110	94	50	RC110X50	Y*,BL,O,G,P
160	140	25	RC160X25	B

Note: for colours see key above.
*Please check the requirements of the utility company, who may stipulate a requirement for perforated duct. Alternatively we do provide a single wall perforated gas duct to BS 4962. For more information please call our technical department on +44 (0)1509 615100.

Key benefits

- Compliance with BS EN 61386-24: Type 450N, normal duty impact resistance
- Manufactured in polyethylene with excellent impact resistance at low temperatures
- Factory installed polypropylene twine and couplings
- Colours and printing to suit the end use application (subject to lead times)

All dimensions provided are nominal.

Utilities

Ridgicoil - Couplings		
OD mm	Code	Pack Qty
40	RCC40	10
50	RCC50	10
63	RCC63	10
75	RCC75	10
90	RCC90	10
110	RCC110	10
160	RCC160	10

Ridgicoil - Seals		
OD mm	Code	Pack Qty
40	RCS40	10
50	RCS50	10
63	RCS63	10
75	RCS75	10
90	RCS90	10
110	RCS110	10
160	RCS160	10

Gas ducting

Single wall corrugated ducting for gas pipes. Available in either perforated or unperforated options.

Gas Ducting			
OD mm	Length m	Description	Code
60	150	Perforated	LD60150YGAS
60	150	Unperforated	UD60150YGAS

Please check the requirements of the utility company, who may stipulate a requirement for perforated duct.

Key benefits

- Durable, high quality construction
- Low coefficient of friction for easy cable installation
- A short 54mm branch on swept tees for trouble-free installation in congested footways
- PVCu Telecommunications Ducts include integral sockets and are available in black, grey and green as standard. Other colours are available on request subject to minimum order quantities and lead times

Telecommunications duct

A range of specialist PVCu Telecommunications ducting systems, manufactured in accordance with dimensions and performance requirements tried and tested by the telecommunications industry.

PVCu CABLE TV Duct					
ID mm	OD mm	Length m	Standard	Code	Pack Qty
GREEN DUCT					
49	54	6		TD54X6G	400
90	96.5	6	BSEN50086	TD96X6G	121
GREY DUCT					
49	54	6		TD54X6GR ▲	400
90	96.5	6	BSEN50086	TD96X6GR	121
BLACK DUCT					
90	96.5	6		TD96X6B	121

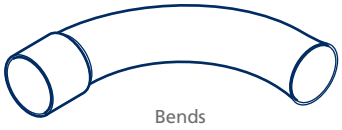
▲ Made to order and subject to lead times.

All dimensions provided are nominal.

Utilities - PVCu cable TV duct

PVCu Cable TV Duct Bends			
Description	Angle	Code	Pack Qty
54mm GREEN BENDS	11.25	TDB54X11G ▲	60
	22.5	TDB54X22G ▲	60
	45	TDB54X45G ▲	60
	90	TDB54X90G ▲	50
96mm GREEN BENDS	11.25	TDB96X11G ▲	15
	22.5	TDB96X22G ▲	15
	45	TDB96X45G ▲	15
	90	TDB96X90G ▲	10
96mm GREY BENDS	11.25	TDB96X11GR ▲	15
	22.5	TDB96X22GR ▲	15
	45	TDB96X45GR ▲	15
	90	TDB96X90GR ▲	10
96mm BLACK BENDS	11.25	TDB96X11B ▲	15
	22.5	TDB96X22B ▲	15
	45	TDB96X45B ▲	15
	90	TDB96X90B ▲	10

▲ Made to order and subject to lead times.



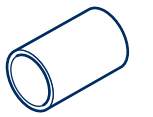
Bends

Couplings		
Description	Code	Pack Qty
54mm	TDC54G ▲	10
54mm Slip Coupling	TDSC54G ▲	10
96mm	TDC96G ▲	50
96mm Slip Coupling	TDSC96G ▲	50

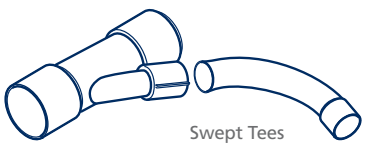
▲ Made to order and subject to lead times.

Swept Tees		
Description	Code	Pack Qty
96 x 54mm	TDJT96X54G ▲	15

▲ Made to order and subject to lead times.



Couplings



Swept Tees

Duct repair kits

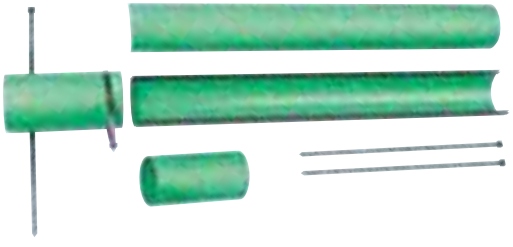
Components for repairing sections of damaged duct.

Duct Repair Kits			
Description	Standard Length m	Code	Pack Qty
96.5mm Duct Repair Kit	0.5	DRK096	1 ▲

▲ Made to order and subject to lead times.

Key benefits

- Supplied in 0.5m lengths
- Easy installation
- Assembly instructions supplied



Utilities - PVCu cable TV duct

Key benefits

- 54 and 96.5mm Utility ducting for electrical cables, water services, telecommunications and gas services
- 110 and 160mm OD Type 4660 ducting in dimensional compliance with BS 4660 available sealed and unsealed

PVCu specification and utility ducts

Polypipe specification and utility ducts are widely and successfully used for the carriage of all types of services in a range of applications including industrial, domestic and commercial. Specification ducts are more robust than General Purpose Duct. PVCu Utility Ducts were the first widely available thermoplastic ducts and are available in a number of different sizes to suit all common specification requirements.

Type 4660 Duct Non-Sealed

ID	OD	Length m	Code	Pack Qty
110	116	6	SD110X6B ▲	95
160	169	6	SD160X6B ▲	46

(dimensions compliant only)
▲ Made to order and subject to lead times.

Bends

ID	Angle°	Code	Pack Qty
110	11.25	SDB110X11 ▲	1
110	22.5	SDB110X22 ▲	1
110	45	SDB110X45 ▲	1
110	90	SDB110X90 ▲	1
160	11.25	SDB110X11 ▲	1
160	22.5	SDB110X22 ▲	1
160	45	SDB110X45 ▲	1
160	90	SDB110X90 ▲	1

▲ Made to order and subject to lead times. Grey to black in colour as standard, other colours available on request.

Couplings

ID	Code	Pack Qty
110	SDC110 ▲	1
160	SDC160 ▲	1

▲ Made to order and subject to lead times. Grey to black in colour as standard, other colours available on request.

BS4660 Type Duct-Sealed

ID	OD	Length m	Code	Pack Qty
110	116	6	SD110X6BPE ▲	95
160	169	6	SD160X6BPE ▲	46

(dimensions compliant only)
▲ Made to order and subject to lead times.

Bends

ID	Angle°	Code	Pack Qty
110	45	SDB110X45PE ▲	1
110	90	SDB110X90PE ▲	1
160	45	SDB160X45PE ▲	1
160	90	SDB160X90PE ▲	1

▲ Made to order and subject to lead times.

Couplings

ID	Code	Pack Qty
110	UG402B ▲	1
160	UG602B ▲	1

▲ Made to order and subject to lead times.

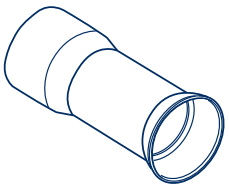
Please note:
Order couplings separately.

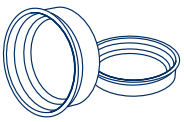
All dimensions provided are nominal.

Ducting - Accessories

Ridgiduct Accessories		
Size mm	Code	Pack Qty
Single Socket Fixed Bellmouth		
94	RBBM94 ▲	1
100	RBBM100 ▲	1
125	RBBM125 ▲	1
150	RBBM150 ▲	1
Plastic End Cap		
94	RBEC94	1
100	EC1059	1
125	EC3051	1
150	EC1778	1

▲ Made to order and subject to lead times.





General Purpose - power (not ENATS compliant)

General purpose ducting

General Purpose PVCu duct and fittings are a cost-effective alternative to higher specification systems for use in light and medium duty applications. The products are manufactured to traditionally accepted dimensions but do not meet the requirements of BS EN 61386-24: 2010. General Purpose Ducting is not suitable for Highways Agency applications and will require a better standard of installation than more robust systems for successful performance. All ducts include an integral socket and accessories include bends, junctions and end caps.

General Purpose Ducting

Dia. inches	Dia. mm	Wall Thickness mm	Length m	Code	Pack Qty
2	54	1.5-1.7	6	GP2X6B	400
3	88.9	1.8-2.2	6	GP3X6B	144
4	114	1.8-2.1	6	GP4X6B	86
6	168	2.2-2.9	6	GP6X6B	36
8	200	3.2-3.6	6	GP8X6B	25

General purpose ducting lengths include integral socket.
Please note this product comes in colour grey to black for both pipe and fittings.

General Purpose Bends

Dia. inches	Dia. mm	Bend Radius	Code	Pack Qty
2	54	225	GPB2X11 ▲	60
2	54	225	GPB2X22 ▲	60
2	54	225	GPB2X45	60
2	54	225	GPB2X90	50
3	89	350	GPB3X11 ▲	25
3	89	350	GPB3X22 ▲	25
3	89	350	GPB3X45	15
3	89	350	GPB3X90	10
4	114	460	GPB4X11 ▲	10
4	114	460	GPB4X22 ▲	10
4	114	460	GPB4X45	10
4	114	460	GPB4X90	7
6	168	610	GPB6X11 ▲	3
6	168	610	GPB6X22 ▲	3
6	168	610	GPB6X45	3
6	168	610	GPB6X90	3
8	200	900	GPB8X11 ▲	1
8	200	900	GPB8X22 ▲	1
8	200	900	GPB8X45	1
8	200	900	GPB8X90	1

▲ Made to order and subject to lead times.
Please note this product comes in colour grey to black for both pipe and fittings.

General Purpose Hockey Sticks, Junctions, End Caps			
Dia (inches)	Dia (mm)	Code	Pack Qty
Hockey Sticks			
2"	54	GPHS2 ▲	25
Connectors			
2"	54	GPC2	10
3"	89	GPC3	60
4"	114	GPC4	40
6"	168	GPC6	15
8"	206	GPC8	1
90° Junctions			
2″	54	GPJY2X90 ▲	1
3″	89	GPJY3X90 ▲	1
4″	114	GPJY4X90 ▲	1
6″	168	GPJY6X90 ▲	1
8″	206	GPJY8X90 ▲	1
45° Junctions			
2″	54	GPJY2X45 ▲	1
3″	89	GPJY3X45 ▲	1
4″	114	GPJY4X45 ▲	1
6″	168	GPJY6X45 ▲	1
8″	206	GPJY8X45 ▲	1
End Caps			
2″	54	GPEC2	10
3″	89	GPEC3	10
4″	114	GPEC4	10
6″	168	GPEC6	10
8″	206	GPEC8	10

▲ Made to order and subject to lead times.

Suretwin

Suretwin is a non-certified twin wall system which provides a cost-effective alternative to conventional systems where a BBA or ENATS duct is not required. The Suretwin system is currently available in 150mm diameter and meets the stiffness and normal duty impact requirements of BS EN 61386-24:Type 450 only.

Suretwin				
ID mm	OD mm	Length m	Code	Pack Qty
150	178	6	GPT150X6B	36

Installation - advice

Installation information

Ridgiduct Twin-Walled High Density Polyethylene cable protection must be installed in accordance with the general requirements and any additional site requirements. The general requirements are to be in accordance with MCHW, Volume 3, as shown below. Cable protection laid in depths of cover other than those specified below must be laid in accordance with the procedures described in the contract with the Highways Agency (HA). Ridgiduct must be adequately protected against damage from site construction traffic and from agricultural or similar operations. When used as cable protection for fibre optic cabling the recommendations in BS 7718 : 1996 should be followed.

Procedure (unsealed)

Joints are made by a simple push-fit of one cable protection length into the coupler attached to the adjacent length, ensuring that the connection is fully made. Inspection points can be made in the conventional manner depending upon the type of services to be installed.

Access and pole box installation advice

Polypipe recommends that the systems be installed in general accordance with the Traffic Control Signals Unit (TCSU) specification. Polypipe access and pole boxes are designed to meet the requirements of the TCSU, making installation easy and trouble-free. Local specifications and requirements may apply.

Covers and frames

Access box covers and frames should meet the requirements of BS EN 124 Class B125. In carriageways or other locations where vehicles may run over access boxes, heavier grades of cover may be required.

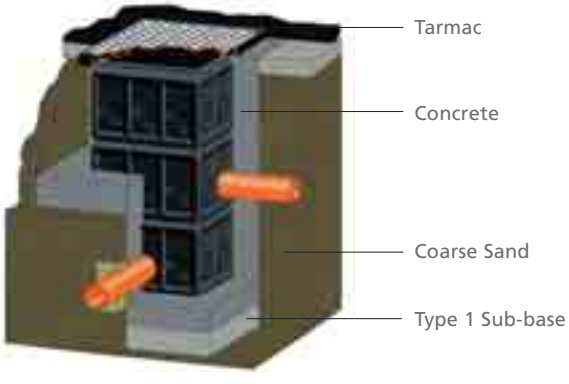
General

In footways cable protection for signal post cables and linking cables must have minimum cover depths of 450mm and 250mm respectively. The minimum depth of cover in carriageways is 600mm. Subject to local cable protection specification, cable protection should be bedded on 100mm of compacted bedding material. Cable protection lengths must be continuous and fully jointed, with the printing placed uppermost when laying. Suitable surround material should also be used to fill any voids between multiple cable protection and should extend to 100mm above the cable protection. Polypropylene draw cords should be provided in each cable protection with no knots or joints and should extend a minimum of 1 metre into each access box.

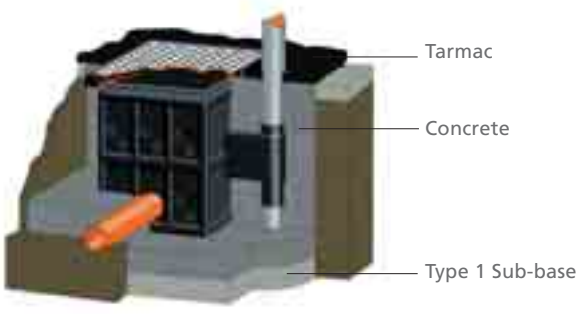
Access and pole boxes

Cable protection are easily connected to the selected entry point. The pre-trepanned section for the size of cable protection to be used can be cut out with a knife or hole saw. The cable protection should be inserted through the opening and cut to length. Boxes that may be subject to traffic loading are typically installed as illustrated.

Typical installation of a 450 x 450mm access box subject to vehicle traffic

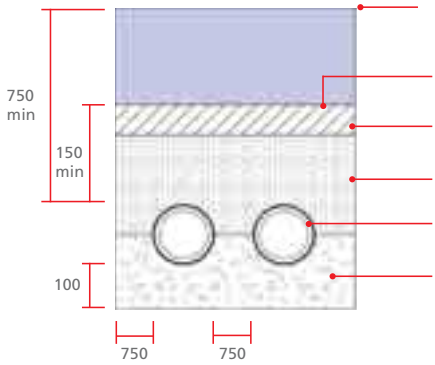


Typical installation of a Polypipe 450 x 450mm pole box



All dimensions provided are nominal.

Typical unsealed standard duct installations Type A shallow ducts (750 to 1200 cover)



Carriageway surface

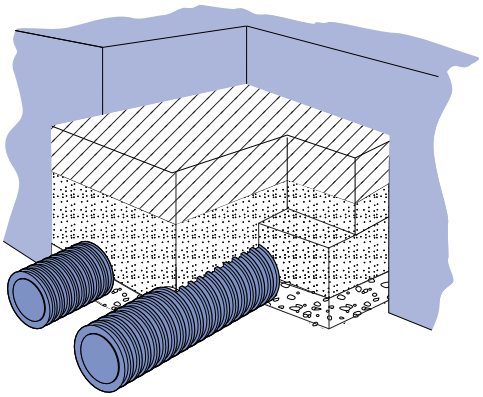
Formation level

Sub-base material or mix ST2 concrete

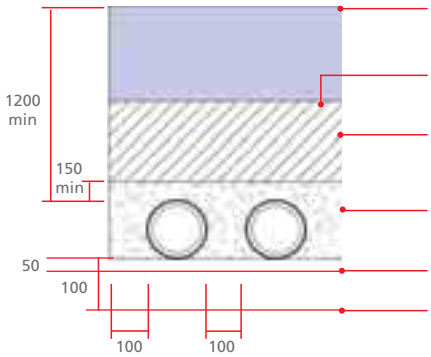
Mix ST2 concrete

Ridgiduct

Pipe bedding material to clause 503 of the SHW



Type B deep cuts (over 1200 cover)



Carriageway surface

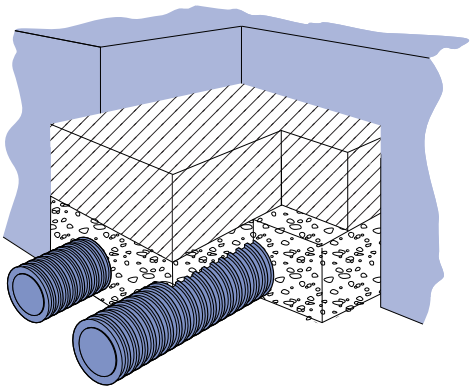
Formation level

Class 8 lower trench fill for capping if ducts laid first

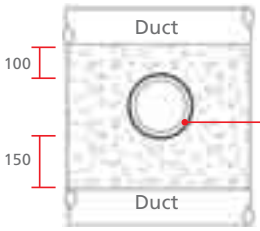
Pipe bedding material to clause 503 of the SHW

Pipe bedding depth for ductile iron ducts

Pipe bedding depth for PVCu ducts



Minimum clearance between duct and drain



Drain

Motorway Comms installations should be in accordance with MCHW series 1500, for installation details regarding multiple duct configurations and sealed systems, please refer to our technical office for specific advice.

[1] Specification for Highway Works

Polypipe enabling sustainable building technology

Polypipe provides plastic piping systems that enable the effective installation and performance of sustainable building technology, meeting the twin global challenges of carbon reduction and water management.

CARBON EFFICIENT SOLUTIONS

'SUSTAINABLE INDOOR ENVIRONMENTS'

Ever stricter building regulations and ever more environmentally conscious customers are driving the demand for greener building products and technologies. Polypipe fulfils that demand with a full range of systems that enable collection, transmission, emission and control in heating, ventilation and cooling systems.

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'ROOF TO RIVER'

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Our product systems respond directly to sector-specific requirements thanks to focused technical and development teams with hands on expertise in the following areas:

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Delivering performance and sustainability, Polypipe's surface water drainage and cable management systems, supported by our in-house fabrications team, offer civils and infrastructure project planners a complete suite of solutions.

RESIDENTIAL

Polypipe offers the broadest range of residential product and service solutions for both new build and RMI applications, as well as innovative solutions in response to legislative and industry targets for more sustainable housing.

COMMERCIAL

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

Civils & Infrastructure
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