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Ridgistorm-XL Low Flow Channel



For surface water and foul drainage applications



Ridgistorm-XL Low Flow Channel from Polypipe



Unpredictable weather patterns & how they affect water drainage

The changes to our climate are resulting in longer dry spells and more frequent flooding. Water and sewerage, which should be kept moving through surface water and foul drainage pipes, can become stagnant during prolonged dry spells, or block flow during heavy rainfall. In response to these conditions, water companies now require a Low Flow Channel to be incorporated into any adoptable scheme.

Keeping water moving with the Ridgistorm-XL Low Flow Channel

Polypipe's new Ridgistorm-XL Low Flow Channel keeps water and solids moving, even during prolonged dry spells and can be used with any stiffness class Ridgistorm-XL pipe. It is also the only Low Flow Channel to be custom fitted in a quality-controlled factory setting, rather than installed on-site, increasing the speed of installation.

Ridgistorm-XL Low Flow Channel



Preventing contamination with innovation

The new Ridgistorm-XL Low Flow Channel is ideally suited to large capacity surface water sewers or foul sewers, where a selfcleansing velocity is required.

Water entering a large diameter pipe without a Low Flow Channel will dissipate and have limited flow volume and velocity. The Ridgistorm-XL Low Flow Channel concentrates the flow into a narrower channel, increasing flow velocity and limiting pooling of water or solids and ultimately reducing the risk of contamination. During high levels of rainfall, when attenuation is required, an open channel is used to enable overflow.

Sewers for Adoption legislation states that a self-cleansing regime be achieved in foul gravity sewers by ensuring the minimum flow velocity is at 0.75m/second at one third design flow.



The Ridgistorm-XL Low Flow Channel comes with all the benefits you'd expect of Polypipe's large diameter plastic pipes including:

- Bespoke profiling and unique pipe stiffness providing flexible and variable loading specifications
- Exceptional leak tightness due to the reduced number of pipes
- Excellent load bearing capabilities
- Advanced jointing system
- 100% leak tightness with Polypipe's unique, patented electro-fusion jointing

Key dimensions

The benching formed by the Ridgistorm-XL Low Flow Channel shoulders is designed to encourage any solids suspended during full flow towards the low flow channel during drain down of the system. Due to the nature of the design the shoulders offer a different angle depending on the channel width. The minimum angle of benching occurs in the 150mm channel where an angle of 9° occurs (equivalent to a 1:6 slope). The benching angle has been designed to ensure that under a 6% ring deformation (see below) the benching angle will not decrease to the point of running the risk of flat spots or areas where water could pool. The nominal angle on the benching will be 6° when the pipe is subjected to 6% deformation (equivalent to a 1:10 slope).





Example

Key Dimensions of 1500mm Ridgistorm-XL Low Flow Channel

SPECIFICATIONS

The Ridgistorm-XL 1500mm diameter Low Flow Channel, which is made from Polyethylene, is available as follows:

LENGTHS: 1.25m - 6m as standard (longer lengths available on request)

WIDTHS: 150mm, 225mm & 300mm



Low Flow Channel End View

225mm Ridgistorm-XL Low Flow Channel End View



300mm Ridgistorm-XL Low Flow Channel End View

Key Benefits:

- Prevents water stagnation and eliminates blockages
- Can be used with any stiffness classification Ridgistorm-XL pipe
- Factory fitted conditions, ensuring quality and increasing the speed of installation on-site
- Ability to take the weight of a person walking on the shoulders
- Chemical resistant
- Smooth, anti-stick shoulders for hydraulic performance and prevention of material sticking to top surface and turning septic
- Ability to withstand ground movement, and to move with the pipe without failure of welds and fixing points
- Puncture resistant

Associated Products

Polypipe water management solutions offers the widest range of products and solutions for sustainable drainage applications and are best placed to provide standalone or bespoke integrated solutions for any project.

Rainwater Harvesting

Rainwater Harvesting helps reduce the demand on mains supplies by providing non-potable water for washing clothes, cleaning vehicles, flushing toilets and watering gardens. Rainwater Harvesting can also help new domestic developments meet the Code for Sustainable Homes standards for management of surface water by reducing rates and volumes of run-off from greenfield and brownfield sites.

Attenuation & soakaway

A range of products available for both attenuation and soakaway applications.

Surface Water Drainage

Ridgidrain pipes have been installed for highway, rail and airport infrastructure projects as a direct alternative to concrete and clayware pipes.

Sewerage Systems

The largest range of pipes and fittings for use in gravity sewers.



RIDGISTORM-XL

The most advanced large diameter plastic pipe solution for attenuation, foul sewer, pipeline and surface water drainage applications.



POLYSTORM XTRA

Modular cell solutions designed for use in deeper burial depths, for heavily trafficked and heavy loaded applications.



POLYSTORM Modular cell solutions designed for use in light

CHARCON PERMAVOID

Shallow modular cell solution for use in place of a traditional sub-base.

RAINSTREAM Highly effective solutions for the storage, filtration and re-use of rainwater in both residential and commercial applications.



MANHOLES & CATCHPITS

Manufactured to standard designs or to bespoke customer specifications at our specialist fabrications unit.



Allows precise control of site discharge rates and when combined with Polypipe water storage systems provides an industry recognised flow attenuation system.





POLYSTORM LITE Modular cell solutions for

use in landscaped pedestrian or other non-loaded applications.

PERMAVOID **PODIUM DECK**

A lightweight modular solution for the provision of storm water on multi-use roof decks.

STORM-X4 Stormwater treatment system for roof and surface water run-off.

ADVANCED SILT TRAPS

Bespoke design and fabrication to prevent the ingress of silt and debris into the attenuation or soakaway solution.

RIDGIDRAIN PLUS

For use in highway, rail and airport infrastructure projects as a direct alternative to concrete and clayware pipes.

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Ridgistorm-XL Low Flow Channel



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