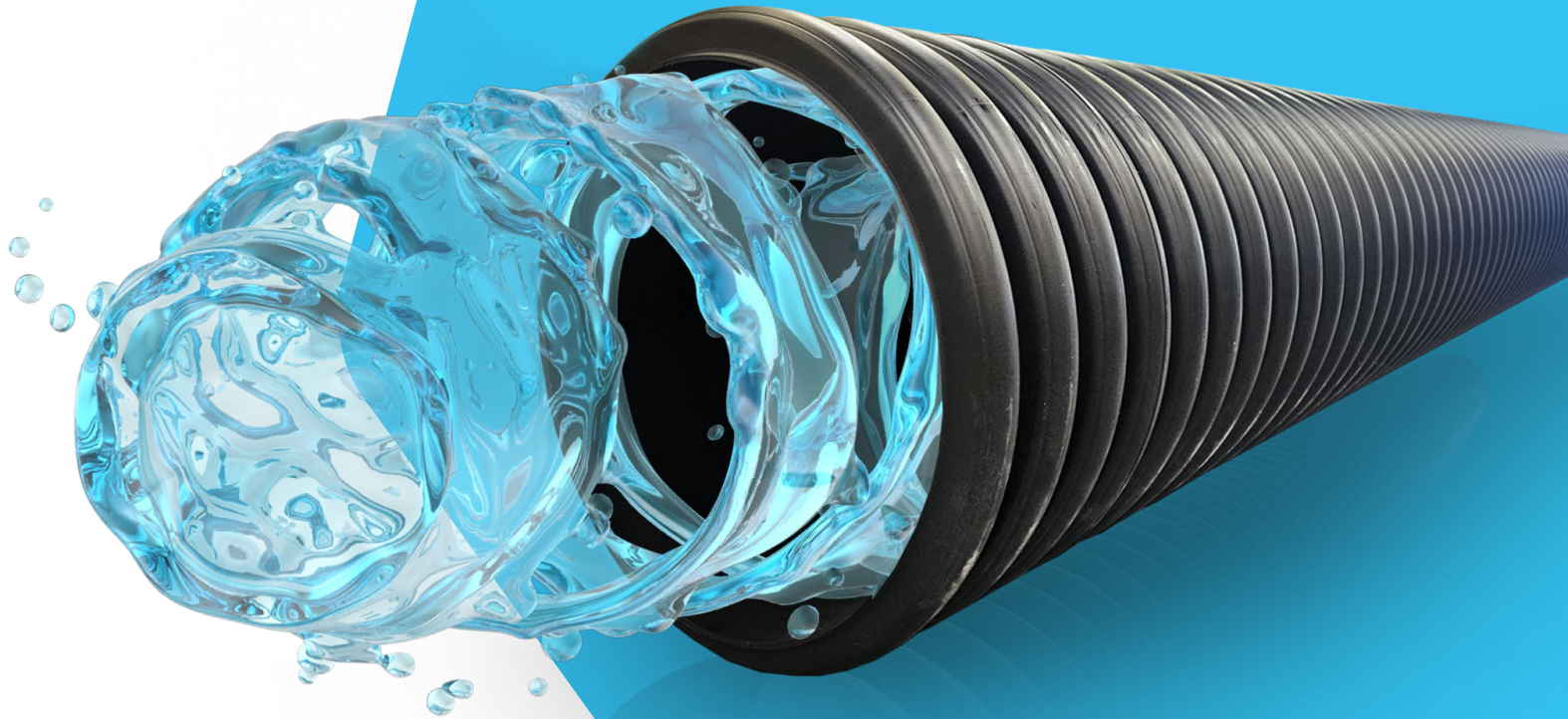


POLY **FLOW**

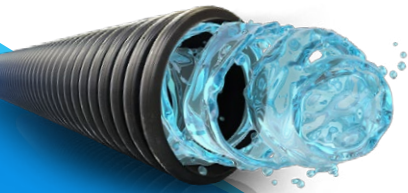


**Long lasting,
adaptable,
& better than
concrete.**

Storm Water Pipes & Culverts

PolyFlow Pipes and Culverts deliver a versatile and highly efficient solution for storm water management. With unparalleled adaptability and strength, PolyFlow outperforms traditional materials like concrete, providing superior water flow and long-term durability in any environment.

POLYFLOW



Engineered for High Water Flow.

Corrugated design enhances water flow while maintaining structural integrity under heavy loads.



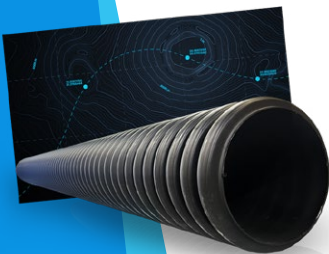
Outperforming Concrete in Every Way.

Resistant to chemical degradation, outlasting concrete and ensuring long-term durability in the harshest conditions.



Minimise Downtime with HDPE.

Flexible, durable, for large-scale operations with long-term reliability.



Adaptable to Varying Terrain.

Simplifying installations and ensuring a reliable, long-term drainage solution.



Lighter, Easier, Safer Installation.

Lightweight design allows for quicker, simpler installation, saving time and reducing labour costs compared to heavier alternatives.



Unparalleled Durability and Cost Efficiency.

PolyFlow leads the way in offering exceptional drainage solutions. Our polypropylene pipes are engineered to withstand harsh conditions, ensuring long-lasting performance without succumbing to corrosion.

Features & Benefits.

POLYFLOW

PolyFlow the solution for a range of applications.



Mining Culverts

Specially designed multi-bank culverts for mining applications in flood-prone areas.



Road & Rail Infrastructure

Reviving existing areas with advanced drainage, perfect for redevelopment projects.



Commercial Drainage

Optimised for internal systems in commercial and industrial settings, ensuring dry and safe environments.



Project Integration

Seamlessly integrates into new developments, providing reliable stormwater



Asset Revitalisation

Reviving existing areas with advanced drainage, perfect for redevelopment projects.



Water Transfer

Effective for low head water transfer, supporting various water management needs.



Parking & Public Areas

Ideal for parking lots and outdoor spaces, offering efficient drainage solutions.



Rural Culverts

Catering to the agricultural sector with durable culverts for efficient water management.

- ✓ Pipeline rehabilitation & relining
- ✓ Rural and agricultural
- ✓ Ventilation ducting
- ✓ Low head water transfer
- ✓ Leachate collection
- ✓ Above and below ground
- ✓ Gravity storm water
- ✓ Drainage pipelines
- ✓ Gravity sewer mains
- ✓ Sewer chamber riser
- ✓ Culverts
- ✓ Retention systems

Simplified Connection System

The design incorporates an effective rubber ring joint system that facilitates easy assembly and secure jointing. Designed to meet strict Australian Standards requirements for effective sealing and resistance to root intrusion, the seal simplifies installation.

Eco-friendly materials and manufacturing

Polyflow polyethylene corrugated pipes are 100% recycled and recyclable and a low embodied energy, contributing significantly to its environmental benefits. Choosing materials with lower embodied energy helps reduce the overall carbon footprint of construction projects, aligning with sustainability goals and regulations.

Light weight design


Polyethylene corrugated pipes are lightweight, making them easy to handle, transport, and install. This makes installation faster and more cost-effective.

Long lasting performance


The durability of polyethylene is a key asset, providing it the ability to resist heavy handling and installation stresses without compromising its integrity or performance. This ensures that the product remains effective over long periods, even in demanding conditions.

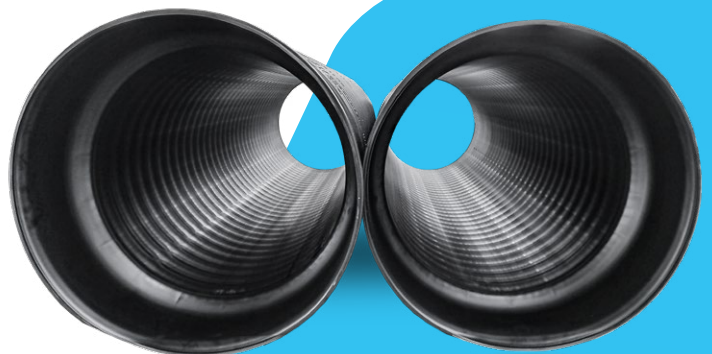
Australian Made

Australian made products guarantee that the products meet strict Australian standards for quality. Reflecting a commitment to supporting local industries and reducing environmental impacts.

 AS/NZ5065 "Polyethylene and polypropylene pipes and fittings for drainage and sewerage applications"

 ApprovalMark Watermark Certification LIC WM75078

 AS1646 "Elastomeric seals for waterworks purposes"



Product Details.



Dimensions

Nominal Diameter (mm)	Minimum Mean Pipe Inside Diameter	Stockcode	Nominal Length (m)	Approximate Pipe Mass (kg/m)	Stiffness (N/m/m)
225	216	PFLOW0225	6	3.0	8,000
300	292	PFLOW0300	6	5.0	8,000
375	361	PFLOW0375	6	8.0	8,000
450	432	PFLOW0450	6	12.0	8,000
525	515	PFLOW0525	6	16.5	8,000
600	584	PFLOW0600	6	21.0	8,000
750	723	PFLOW0750	6	44.0	8,000
900	864	PFLOW0900	6	33.0	8,000
1050	1008	PFLOW1050	6	58.0	8,000

Properties

Property	Units	Value
Density	kg/m ³	960
Circumferential Flexural Modulus (2mm/min)	MPa	>1000
Pipe Ring Bending Stiffness	N/m/m	≥ 8000
Tensile Yield Stress (50mm/min)	MPa	25
Poisson's Ratio		0.40



Diameter Range

Polyflow corrugated structured wall polyethylene pipes are available in diameters ranging from DN225 to DN1050.

Stiffness

The ring stiffness of a flexible pipe measures its strength against various pressures such as soil load, external water pressure, internal vacuum, vehicle weight, and loads during construction. This stiffness is tested in labs and is shown in units of N/m/m, based on standards AS/NZS 2566.1 and AS/NZS 1462.22. Polyflow corrugated structured wall polyethylene pipes exceed 8,000N/m/m (Classified SN8 in AS/NZS5065).

Lengths

Polyflow corrugated structured wall polyethylene pipes are supplied in standard 6m nominal lengths. Pipes can be simply cut to length on site and re-joined for shorter length adjustments or connections.

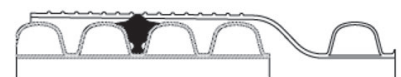
Chemical Resistance

Polyflow corrugated structured wall pipes and fittings are manufactured from polyethylene, ensuring outstanding durability against corrosive conditions in drainage environments. Polyethylene demonstrates high resilience to challenging underground environments.

Joints

Polyflow corrugated structured wall polyethylene pipes incorporate an advanced spigot and socket elastomeric joint, designed to meet the requirements set by AS/NZS5065. Each pipe is supplied with a standard elastomer gasket for simple and effective jointing. Lubrication of the gasket is required for jointing to the spigot witness mark.

The elastomeric gasket is positioned in the second last trough near the spigot end and compresses to create a seal as the spigot is inserted into the socket. This innovative design enables installers to cut the pipe at any point along its length and still effectively form a joint.



Corrugated pipe join diagram

EPDM or SBR gaskets comply with the requirements of AS1646 "Elastomeric seals for waterworks purposes".

Design & Install.



Minimum Cover Heights

AS/NZS2566.1 "Buried flexible pipelines – structural design"

Location	Minimum height of cover (m)
Not subject to vehicular loading	0.30
Subject to vehicular loading	
– Not in roadways	0.45
– In sealed roadways	0.60
– In unsealed roadways	0.75
Pipes in embankment conditions or subject to construction equipment loading	0.75

Minimum pipeline cover shall be specified to:

- ensure surcharge loadings, e.g., traffic and construction equipment, are not concentrated but instead are distributed over an adequate area;
- give sufficient clearance to overlying layers that require heavy mechanical compaction, e.g., road sub-bases; and
- ensure the pipe or side support is appropriate, having regard to the proposed land use and any foreseeable lowering of finished surface levels.

Subject to variation by the relevant asset owner. Under cultivated agricultural land H should not be less than 0.6 m. Railway crossings shall comply with AS 4799.

Testing & Commissioning

Testing and commissioning methods for corrugated structured wall polyethylene pipe system are generally in accordance with AS/NZS2033 "Installation of polyethylene pipe systems" and AS/NZS2566.2 "Buried flexible pipelines – Installation". The standards specify the requirements for the field-testing and commissioning of buried flexible pipelines with structural design in accordance with AS/NZS2566.1 "Buried flexible pipelines – Design".

Technical Support

Polyflow's in-house engineering team combines specialist technical knowledge, creative thinking and on-the-job experience, to offer our clients a range of project planning and consultation services.

From recommendations on product innovations, to crafting complex end-to-end solutions, our collaborative approach bridges the gap between contractors, authorities and suppliers. The only Australian provider able to offer clients the full product suite, Polyflow offers unbiased, strategic insights that always consider the bigger picture.

We work with contractors, asset managers, local councils and government, developers and other pipeline professionals to specify bespoke product solutions. By engaging our team of engineers, you gain access to unparalleled product knowledge and expertise.

Life Expectancy

When installed and operated in accordance with the manufacturers guidelines this pipe system can be expected to perform well in excess of 50 years.

Installation

Installation methods for the Polyflow corrugated structured wall polyethylene pipe system are generally in accordance with AS/NZS2033 "Installation of polyethylene pipe systems" and AS/NZS2566.2 "Buried flexible pipelines – Installation".

The standards specify the requirements for the installation of buried flexible pipelines with structural design in accordance with AS/NZS2566.1 "Buried flexible pipelines – Design".

- The key to ensuring the pipes are installed successfully lies in selecting and properly compacting the embedment material, which is in direct contact with the pipes.

This material should be granular and easy to compact, with crushed rock, aggregate, and graded sand being common choices.

For detailed information on selecting and using various embedment materials, refer to Appendices 'G' and 'H' in the AS/NZS2566.2 "Buried flexible pipelines – Installation" standard.

Installation Training

Polyflow's in-house engineering team provides a range of training, and technical support services.

Polyflow can provide installers with important information relating to the correct handling, installation, testing, maintenance and repair of Polyflow pipe systems and products.



POLYFLOW

Storm Water Pipes & Culverts

- Road & Rail Infrastructure
- Gravity Storm water & Sewer Mains
- Sewer Chamber Riser
- Culverts
- Retention Systems
- Pipeline Rehabilitation & Relining
- Rural & Agricultural
- Ventilation Ducting
- Low Head Water Transfer
- Leachate Collection
- Above & Below Ground

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