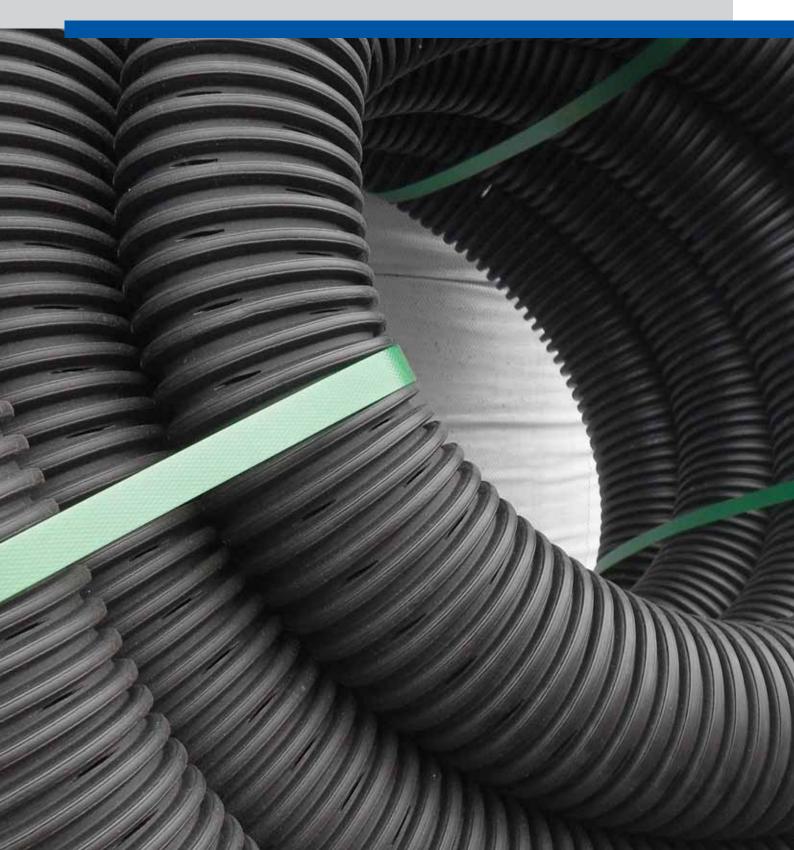


DrainFlex Coils



About Poly Pipe Pty Ltd

Located in the Hunter Valley, NSW, Australia, Poly Pipe Pty Ltd (Poly Pipe) has an ultra modern extrusion, high tech manufacturing facility.

It supplies Polyethylene (PE) pipe and related products that comply with all relevant Australian statutory and regulatory requirements.

In addition, Poly Pipe adheres and advances safe work practices, effective environmental policies and quality practices in everything that it does.

As a member of a worldwide technology group with Australia-wide manufacturing facilities, Poly Pipe was established on the knowledge, experience, and reputation of its associated companies, some of which include Pipemakers[®] and Metroll[®].

Its national and international customers are found in the mining, rural and irrigation, water and civil, telecommunication, sewerage and drainage industries.



Benefits of DrainFlex

- ✓ Long lengths up to 200 m
- ✓ Cost effectiveness
- \checkmark Easy installation
- Flexibility & resilience
- ✓ Corrosion resistance
- \checkmark Easy transportation
- ✓ High flow capacity
- Durability & strength
- Environmentally friendly

Industry Applications Civil Projects

- Roads & highways
- ✓ Landscaping
- ☑ Building foundations
- Mines & quarries

Land Drainage

- Sportsgrounds
- ✓ Racetracks
- ✓ Golf courses
- Parks & gardens

Agricultural Drainage

- ✓ Water table monitoring
- \checkmark Irrigation
- ✓ Salinity control
- ✓ Hill slope drainage

Domestic Drainage

- ✓ Lawns & gardens
- Driveways & paths
- ✓ Home water seepage
- ✓ Foundations

Features

- Material Grade: HDPE
- ✓ Coils: Max pipe diameter 65-160 mm
- ☑ Lengths: Standard length 20-200 m
- ✓ Class 200 & 400: Black
- ✓ Class 1000: Black with white stripe

Pipe Capacity of Poly Pipe Trucks-HDPE

| Pipe Outside Diameter (mm) | No. of Pipes |
|-------------------------------|--------------|
| 65 (100 m length) | 60 |
| 100 (100 m length) | 60 |
| 160 (100 m length) | 60 |

Guide Only: Weight restrictions may apply. Maximum weight for all trailers is 19T. Special trailers may carry more. Contact the Poly Pipe sales office for clarification.

Transport & Storage

Coils of DrainFlex need to be stacked flat and preferably under cover in a cool environment, especially if you intend to store the product for long periods of time. As Poly Pipe uses its own transport, DrainFlex is easily and efficiently delivered to your nominated delivery location.

Product Information

Poly Pipe Pty Ltd manufactures and supplies High Density Polyethylene (HDPE) DrainFlex for subsurface drainage applications, particularly civil projects, land and agricultural applications.

DrainFlex is manufactured 65 mm-160 mm Outside Diameter (OD) in size and to all the relevant stiffness ratings.

The corrugated profile features high strength to resist external loads. Poly Pipe can also supply unslotted DrainFlex.

DrainFlex is manufactured to AS2439.1 2007 from premium quality HDPE material.



Installation

DrainFlex features long coil lengths, is flexible and lightweight, making it easy to install using a backhoe, chain digger or ploughing directly into the ground.

The minimum suggested coverage (not subject to vehicular loadings) is 300 mm. The trench should be as narrow as possible but large enough to allow backfill and compaction of the bedding material. In badly drained areas, more than one trench may be required.

When you intend to use DrainFlex in fine sand and coarse silt soils, a polyester filter sock may need to be used to prevent fine grains from entering the slotted pipe. The filter sock stabilises the soil by connecting the corrugations, supporting the soil around the pipe and preventing deposits from entering the pipe.

Heavy Duty Polyester Roads and Maritime Services NSW (RMS) approved filter socks can be supplied to meet these requirements.

Installation Steps

- Dig a trench as narrow as practicable allowing for approximately 300 mm minimum cover height and 100 mm (both) side clearance, with a fall of 1% or 1:100.
- For agricultural applications, we suggest a minimum 700 mm cover height which should be maintained. This should minimise any potential damage from machinery and equipment.
- Fill the bottom 50 mm of the trench with filter aggregate. This will take out any irregularities in the bed of the trench.
- Install DrainFlex into the middle of trench and ensure that a minimum cover of 180 mm is achieved (on top and sides of the DrainFlex); we suggest that a maximum filter aggregate of 13 mm should be used for the backfill.
- The above two features provide a filter zone.
- Replace the topsoil over the filter material aggregate.

Standard Pipe Colour Chart

| Colour | Common Use |
|--------------|--------------------------|
| Blue | Water |
| Orange | Electrical Conduit |
| Yellow | Gas - PE100 |
| Light Yellow | Gas - PE80 |
| Red | Fire Service Water |
| Green | Imperial Rural/Raw Water |
| Purple | Recycled/Reclaimed Water |
| Grey | SewerFlex |
| Cream | Pressure Sewer |
| White | Communications Conduit |
| Black | DrainFlex |

Poly Pipe aims to meet its commitment to quality through continuous improvement programs, use of latest technology, close co-operation with key suppliers, commitment to staff development and regular customer feedback.

The Poly Pipe manufacturing plant has Quality Assurance Certification to ISO 9001:2008. All Pressure Pipes, including Gas, have the WaterMark and Standards Certification.

External Agencies carry out regular audits to provide third party accreditation to the Poly Pipe Quality Management System and verify its ongoing compliance with this Standard.

DrainFlex has been independently tested by National Association of Testing Authorities (NATA) laboratory and has been deemed to meet these requirements. The filter socks are Roads and Maritime Services NSW (RMS) approved.

Product Range

| Size (mm) | SN | Class | Length (m) | Description | KG/MTR | Total Weight |
|--------------|----|-------|---------------|-----------------------------|--------|--------------|
| 65 | 8 | 400 | 100 | Unslotted | 0.190 | 19.00 |
| 65 | 8 | 400 | 200 | Unslotted | 0.190 | 38.00 |
| 65 | 8 | 400 | 100 | Slotted | 0.190 | 19.00 |
| 65 | 8 | 400 | 200 | Slotted | 0.190 | 38.00 |
| 65 | 8 | 400 | 100 | Slotted with Filtersock | 0.210 | 21.00 |
| 65 | 8 | 400 | 200 | Slotted with Filtersock | 0.210 | 42.00 |
| 100 | 8 | 400 | 20 | Unslotted | 0.460 | 9.20 |
| 100 | 8 | 400 | 100 | Unslotted | 0.460 | 46.00 |
| 100 | 8 | 400 | 20 | Slotted | 0.460 | 9.20 |
| 100 | 8 | 400 | 100 | Slotted | 0.460 | 46.00 |
| 100 | 8 | 400 | 20 | 20 Slotted with Filtersock | | 9.90 |
| 100 | 8 | 400 | 100 | 100 Slotted with Filtersock | | 49.50 |
| 100 | 8 | 400 | 20 | RMS Slotted with Filtersock | 0.495 | 9.90 |
| 100 | 8 | 400 | 100 | RMS Slotted with Filtersock | 0.495 | 49.50 |
| 100 | 20 | 1000 | 20 | Slotted | 0.900 | 18.00 |
| 100 | 20 | 1000 | 100 | Slotted | 0.900 | 90.00 |
| 100 | 20 | 1000 | 20 | RMS Slotted with Filtersock | 0.935 | 18.70 |
| 100 | 20 | 1000 | 100 | RMS Slotted with Filtersock | 0.935 | 93.50 |
| 160 | 4 | 200 | 20 | Unslotted | 0.850 | 17.00 |
| 160 | 4 | 200 | 20 | Slotted | 0.850 | 17.00 |
| 160 | 4 | 200 | 20 | Slotted with Filtersock | 0.850 | 17.00 |

Product Data

DrainFlex is available in sizes 65 mm, 100 mm and 160 mm. Coil lengths range from 20 to 200 m. Unslotted DrainFlex is also available.

| Class | Nominal Diameter (mm) | Outside Diameter (mm) | Inside Diameter (mm) | Slot Size n x l (mm) | No. of Slotted Rows | Water Entrance Area (mm²/mm) | Coil Length (m) | Coil Mass Approx. (kg) |
|-------|-----------------------------|-----------------------------|----------------------------|----------------------------|---------------------------|------------------------------------|-----------------------|------------------------------|
| 200 | 160 | 160 | 138 | 1.25 x 5 | 6 | 1500 min. | 20/60 | 17/53 |
| 400 | 65 | 65 | 55 | 1.25 x 5 | 6 | 1500 min. | 20/200 | 4.6/46 |
| 400 | 100 | 100 | 86 | 1.25 x 7.4 | 6 | 1500 min. | 20/100 | 9.5/48 |
| 1000 | 100 | 100 | 86 | 1.25 x 7.4 | 6 | 1500 min. | 100 | 88 |

Pipe Dimensions

Notes: All classes HDPE.

Pipe Stiffness

Australian Standard AS2439.1 2007 establishes classes of pipe based on stiffness and its ability to withstand force at a stated deflection.

Pipe Stiffness & Industry Applications

| Class | Pipe Stiffness 5% Deflection | (kn/2)*Application10% Deflection | |
|-------|---------------------------------|--|--------------------------------------|
| 200 | 200 | 160 Surface drainage | |
| 400 | 400 | 300 Road or civil engineering heavy traffic lo | |
| 1000 | 1000 | 800 | Works subject to heavy traffic loads |

Average Slot Size

Slot sizes shown are an average based on a manufacturing tolerance as defined in Australian Standards AS2439.1 2007.

Water Entrance

1500 mm²/m clear water opening is the minimum requirement for the Australian Standard AS2439.1 2007.

Minimum Cover Over Pipe

| DrainFlex | Minimum Cover Height |
|---|----------------------|
| Low traffic loading | 300 mm |
| Medium traffic loading | 450 mm |
| Sealed roadways | 600 mm |
| Under unsealed roadways | 750 mm |
| Embankments or for construction equipment loading | 750 mm |
| Agricultural applications with deep & heavy machinery | 650 mm |

Typical Depth & Spacing

| Soil Type | Depth (m) | Spacing (m) | |
|-------------------|-----------|-------------|--|
| Deep light sand | 1.8 - 2.1 | 27 - 40 | |
| Loam | 1.2 | 13 | |
| Clay loams & clay | 0.9 - 1.1 | 7 - 13 | |

New Drainflex Accessories

The lightweight Drainflex accessories incorporate a positive locking system to allow for ease of installation, adjustability and leakage prevention. The locking system can be activated manually without machinery.

Life Span

The Polyethylene pipe accessories provide strength, longevity, durability and are unaffected by the soil surrounds and any chemical elements. As well as providing flexibility in connections, the corrugations offset surface pressure.

Accessories

Tee Piece

Tee Pieces come in 65mm, 100mm and 160mm and are used to connect branches of smaller dimensions by using positive lock, corrugated sockets to prevent leaking.

Y-Piece

Made in 65mm, 100mm and 160mm sizes, these connectors can be used with various reducers to connect pipe branches by using positive lock, corrugated sockets to prevent leaking.

End Cap

Available in 65mm, 100mm and 160mm the end cap is used in the trench to prevent the entry of backfill.

Corner Pieces

Manufactured in 65mm, 100mm and 160mm, the corner pieces are robust connectors for Poly Pipe returns.





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