



## CORRUGATED PIPE

### DIMENSIONS

### POLYETHYLENE (PE100) CORRUGATED PIPE SIZES

DN	OD	ID	Overall Length	Effective Length	SN	Joining Method	Weight (KG)
100	110	95	6	6	8	Rubber Ring	6
150	160	138	6	6	8	Rubber Ring	10
225	257	223	6.07	5.95	8	Rubber Ring	19
300	339	294	6.06	5.915	8	Rubber Ring	32
375	425	371	6.02	5.84	8	Rubber Ring	50
450	508	438	6.03	5.83	8	Rubber Ring	80
525	595	514	6.03	5.76	8	Rubber Ring	104
600	672	591	6.04	5.75	8	Rubber Ring	126
750	835	731	6.148	5.75	8	Rubber Ring	178
900	995	869	6.01	5.71	8	Rubber Ring	274



### AS/NZS 5065:2005

AS/NZS 5065:2005 Polyethylene and polypropylene pipes and fittings for drainage and sewerage applications.

Part 1: Polyethylene and polypropylene pipes and fittings for drainage and sewerage applications.

AS/NZS 5065:2005 specifies requirements for polyethylene (PE) and polypropylene (PP) pipes and fittings for sewerage and drainage applications, above and below ground, inside and outside of buildings, and is intended to be operating under gravity flow and the operating pressure is low. It includes requirements for both plain and structured wall pipes and fittings.



HDPE (PE100) corrugated pipes are manufactured from the highest quality materials and are the most technological advanced product available to move storm water and waste water.

Storm water management is a critical component to ensure the long-term viability of public and private economic investments. Our corrugated pipe meets the critical demands of engineering design and contractor communities and our pipes are manufactured in accordance with AS/NZS 5065. HDPE (PE100) corrugated pipe is the proven, reliable, cost-effective and safe solution to your long-term drainage needs.

HDPE (PE100) corrugated pipes are manufactured with a co-extruded twin wall. The end product is a smooth bore inner layer and a corrugated outer layer which provides a high stiffness to weight ratio for non-pressure applications.

Corrugated pipe is advantageous as the rubber ring jointed pipes require no further welding or couplings. Our pipe offers high resistance to abrasion and corrosion which is important when considering installing into aggressive soils.



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# CORRUGATED PIPE Advantages

**LONG LIFE HDPE (PE100)** pipes have proven reliability across a range of applications of around 50 years. The Water Services Association of Australia (WSAA) Polyethylene Pipeline Code predicts a life in excess of 100 years before major rehabilitation is required.

**INSTALLATION** The installation time is shorter than other materials as the standard pipe lengths are between 5.5 to 6 meters long. Fewer lifts mean unloading and loading the pipes into position saves even more time. Longer lengths can be shop fabricated on request.

**CHEMICAL CORROSION RESISTANCE** Our corrugated pipes are manufactured from HDPE (PE100) material and have excellent resistance internally and externally to protect against aggressive soils, chemicals and corrosions.

**EFFECTIVE ROUGHNESS** Due to its low roughness, there is almost no accumulation on the pipe bottom, pipes have the ability to self-purify. Low roughness has an important economic advantage as maintenance expenditure is kept to a minimum. Due to the low roughness the hydraulic properties and improved and small diameters are required compared to conventional pipe materials with the same flow rate. Our pipes convey flows up to 17% greater than concrete pipes, and up to

60% greater than corrugated steel pipes.

**PIPE WEIGHT** The low weight pipe allows simpler and faster installation.

**COST EFFECTIVE** Corrugated Pipe is a competitively priced solution compared to alternate systems. Due to its light weight and joining system, this enables a faster installation.

**UV-RESISTANCE** Commonly most natural materials and other plastics are degraded by weathering effects, particularly by the combined impact of short-wave ultraviolet radiation in sunlight and atmospheric oxygen.

Black polyethylene pipes are permanently resistant to atmospheric corrosion and UV radiation, as the polyethylene used contains carbon black which acts as both a pigment and an ultra violet stabiliser. Thus the pipes can be used and stored outside without the pipe material being damaged. Resistance to Micro Organisms

**RESISTANCE TO MICRO ORGANISMS** Polyethylene is not nutrient media for bacteria, fungi and spores, so that the material is resistant to all forms of microbial attack as well as both sulfurous acid and sulphates.



Abrasion curve of various pipe materials according to the Darmstadt procedure

**Polyethylene pipes are among the most abrasion resistant pipes in the world. This has been tested in the Darmstadt procedure and the results are shown in the diagram above and supports the quality of polyethylene pipes.**



## APPLICATIONS

**SUBDIVISION STORM WATER MANAGEMENT** Our corrugated storm water pipe is available in diameters from 100mm up to 900mm which provides outstanding storm water management capacity as well as outperforming other storm water systems. High Density Polyethylene (HDPE) pipes collect storm water runoff through a surface inlet and drain it to an appropriate outlet. Storm water systems can be small and simple, such as that used for a modest housing development, to complex systems used in metropolitan areas serving a combination of residential, commercial, and industrial developments.

**CULVERTS** High Density Polyethylene (HDPE) Culverts are manufactured from 100mm up to 4000mm ID and can be used on any main road network such as access roads to mine sites or river crossings. Our non-corrosive culverts are also suitable for rail networks as they offer a high stiffness to weight ratio making them easy to install.

**SUB DRAINS** A sub-drain system is an underground network of piping used to remove water from areas that collect or retain

surface water or groundwater. The network can be small, such as those used to drain a limited area, or large draining a sizable number of acres

Surface water can be collected into the sub-drain by installing a surface inlet or catch basin. Groundwater is collected by allowing water into the pipe through perforations. Both surface water and groundwater can be discharged to an appropriate outlet.

**LNG, WASTE WATER TREATMENT PLANTS AND MINE SITES** Corrugated pipe can be used for site drainage and underground water storage. The use of corrugated Pipe is advantageous as the rubber ring jointed pipes require no further welding or couplings. Our pipe offers high resistance to abrasion and corrosion which is important when considering installing into aggressive soils.

### **PARKING LOT FOR STORM WATER DRAINAGE**

Incorporating engineered pipe, catch basins, and curb inlets, a sound storm water management system will keep parking lots well drained and prolong the service life of the paved structure.

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