

# Polyethylene Pipe Systems

Polyethylene (PE) pipe manufacture commenced in Australia in the 1950's where small diameter pipes were used for rural, irrigation and industrial applications.

Since then PE use has grown enormously, due to the advantages it offers over iron, steel and cement systems. It is free from corrosion in all ground conditions and its flexibility allows it to withstand ground movements. No protective layers or finishes are required.

PE's resistance to ground instability means that PE gas and water systems were the only systems to survive the major earthquakes in Kobe, Japan in 1995. PE systems can be fusion welded so there is no risk of leaking from joint distortion. Costly anchorage is not required at junctions and bends. Root penetration is not a problem. PE's low friction bore is not subject to scale buildup

PE's flexibility allows cost savings during installation, and PE can be coiled to be supplied in long lengths, reducing the cost required for joints and fittings. Cost saving installation techniques take advantage of its flexibility and low weight, reducing disturbance to the public and environment. Trenchless technology can use PE by pulling long lengths through holes below ground bored by mechanical moles, avoiding the need for open trenches. PE is often used in renovation of old pipelines as it can be readily inserted as a lining into an old leading pipeline.

PE fittings complete the PE pipe system which has a high track record of reliability over a long period. A commitment to using only the highest standard of raw materials and the latest manufacturing technology has established Vinidex with a reputation as a quality supplier of Polyethylene Pipes in sizes ranging from 16mm to 1000mm in diameter.

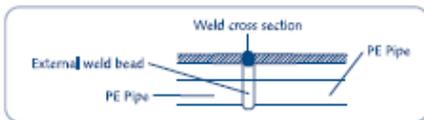
There are a range of grades offered in PE products for different applications:

**Low density PE** - has high flexibility and retention of properties at low temperatures. The main applications of LDPE are in micro irrigation, low pressure drip irrigation, rural irrigation and stock watering applications.

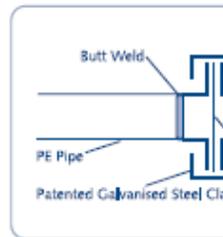
**Medium density PE or PE80B** has been mostly superseded by PE100 but it is still available in some sizes and diameters used for gas reticulation.



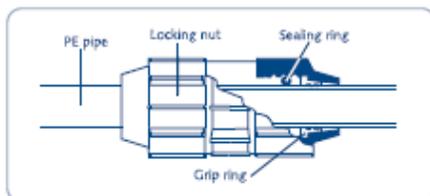
## Joining



**Butt Welding**



**Poly C**



**Mechanical Compression Joints**

