

JINDAL MLC PIPES



PRODUCT CATALOGUE

Multi-Layer Composite Pipe and Fittings
www.jindaltubes.com



Quality for Plumbing

JINDALMLCPIPES

QUALITY ATTRACTS QUALITY.



Jindal Group is the largest manufacturer of ERW pipes well diversified in various piping systems such as PE-AL-PE Pipes (also known as Multi-Layer Composite Pipes or Jindal MLC Pipes), HDPE Pipes, PVC Pipes, UPVC Pipes and CPVC Pipes. These pipes are used for various applications such as Hot & Cold Water supply, Drainage, Irrigation water supply, Borewell water supply and Gas Distribution system

Jindal MLC Pipe is an innovative piping system for hot & cold water distribution, Compressed Air and Gas Piping systems that uniquely combines all the benefits of plastic and metal in one pipe. We offer a high quality range of pipes, fittings, tools & accessories tailored to the requirements of the piping system.

Jindal MLC Pipes and fittings are manufactured with the latest german technology at our state of the art facility in Dehradun, Uttarakhand, India



At Jindal MLC Pipes we regularly subject our products to inspection and long-term testing. Our in-house laboratory keeps material specifications and long-term properties under constant scrutiny. This provides the necessary foundation for product enhancements performed within our Research and Development department.

As a result you will always be supplied with the highest possible quality and latest technology in the plumbing and piping system. Our range of plastic fittings is specifically designed for Indian plumbing techniques.

JINDAL MULTI-LAYER COMPOSITE PIPE

Jindal MLC Pipes combine the advantages of metal and plastic pipes and eliminate the disadvantages of both materials at the same time. The aluminium core is absolutely diffusion tight and reliably prevents oxygen or gases from permeating into the pipe. It compensates and reduces snap-back forces and heat expansion with changes in temperature.

Size Range	Inner Dia	Outer Dia
1216	12mm	16mm
1620	16mm	20mm
2025	20mm	25mm
2532	25mm	32mm
3240	32mm	40mm
4050	40mm	50mm

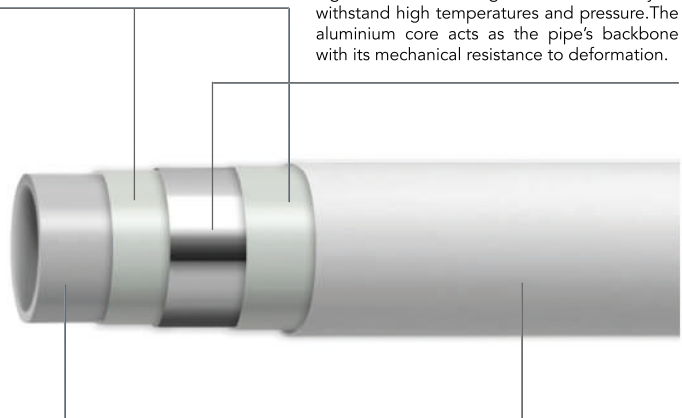


Adhesive Layers

The adhesive layer perfectly bonds the polyethylene and aluminium layers and absorbs the eventual shifting movements between the layers.

Aluminium Core

The aluminium core stays where it lays and has high mechanical strength. It has the ability to withstand high temperatures and pressure. The aluminium core acts as the pipe's backbone with its mechanical resistance to deformation.



Internal & External Polyethylene Layers

The Polyethylene layers are lightweight, flexible and chemically inert. It Provides a smooth surface for better flow and is a food grade material.



PE-AL-PE For cold water distribution | Temp. -20°C to 80°C



PERT-AL-PERT For hot water distribution | Temp. -20°C to 95°C



JOINT-FREE
Piping System



Available in Rolls of 50m, 100m & 200m
(Depending on the Pipe Size)



50 Years of working life



Hygienic, Toxic free, Rust free and no growth of micro-organisms



30% more flow of fluid than in metal pipes



Easily bendable never springs back



Easy installation and wide range of usage



Light in weight, easy to carry and store



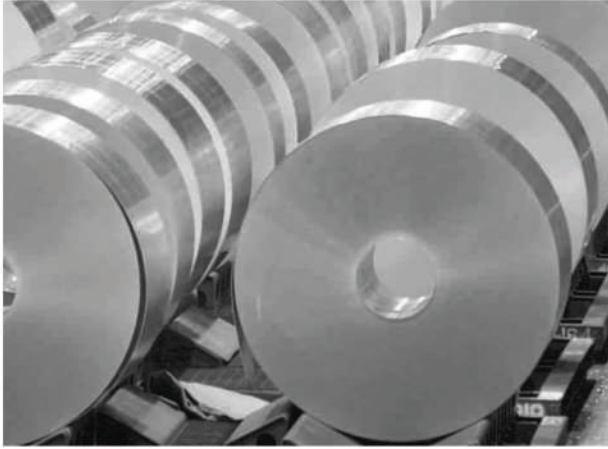
Low expansion and contraction



Quite flow



Fire retardant



Raw Material - ALUMINIUM

Aluminum is a soft, lightweight, non-toxic and malleable metal with appearance ranging from silvery to dull gray depending on surface roughness. Aluminum alloys have yield strengths ranging from 200 mpa to 600 mpa. For Jindal MLC Pipes, a specialized grade of Aluminum is used which is manufactured specifically for these pipes and have the right balance of strength and flexibility as required for bending applications.

1 MPa = 145 psi = 10 bar = 10kg

SPECIFICATION (mm)	BURST PRESSURE (MPa)	PIPE RING STRENGTH (N)	HYDROSTATIC STRENGTH (MPa)	WORKING TEMPERATURE (°C)		WORKING PRESSURE (MPa)
				PIPE UV	PIPE PERT	
1216	6.0	2300	2.7	-20° ~ 80°	-20° ~ 95°	1.0
1620	5.0	2500	2.7			
2025	4.0	2500	2.3			
2532	4.0	2500	2.1			
3240	4.0	2800	2.1			
4050	3.5	3200	2.0			

THERMAL CONDUCTIVITY : 0.45W/m.k. - about 1/100 of steel pipe but not only several times higher than that of insulating materials. No need of insulation with Jindal Hot Water MLC pipes. Jindal MLC Pipes have an extremely low co-efficient of linear expansion 25×10^{-6} m/m.k., Only 1/8th of all polyethylene pipes, almost same as that of aluminum pipes.

Raw Material - POLYETHYLENE

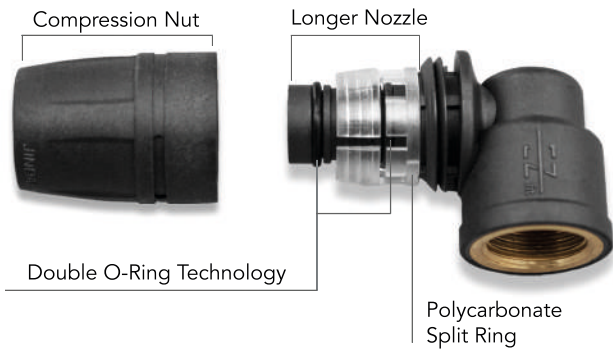
Polyethylene or PE is a polymer consisting of long chains of the monomer ethylene. It is created through the polymerization of ethene and is classified into different types based on Density. High Density Polyethylene or HDPE is used to manufacture Jindal MLC Pipes. It has a low degree of branching and thus stronger inter- molecular forces and tensile strength. The HDPE used in Air Connect Pipes is food grade and hence hygienic.



JINDAL EZ-FIT COMPRESSION FITTINGS

EZ Fittings combine the positive feature of high reliability with a simple installation technique that does not require any special tools. The permanent pipe joint is achieved by compression i.e. tightening the nut against the tapered split ring. The profiles of the two pieces are designed to cause a progressive shrinkage of the split ring and to distribute the compression forces across the contact surface. A seal housing has been designed with a special slip-proof profile called O-Rings that come into direct contact with the pipe





EZ Fittings are made from high quality engineering plastic using advance injection moulding that makes it extremely reliable and reluctant to leakages. The fittings are rigid and lightweight at the same time.

The simplicity and economic aspect of this system is based on the use of spanners, standardised threads, which make it possible to connect with any system.

EZ Fittings come in 3 Categories as listed below:



EZ-FIT

- Full Plastic component
- Developed with advanced injection moulding
- Lightweight & Economical
- Removable and Reusable
- Quick and simple installation



EZ-HYBRID

- Brass Male thread with Plastic Nozzle
- Hybrid Technology
- Strength of Brass combined with the cost effectiveness of plastic
- Removable and Reusable
- Quick and simple installation



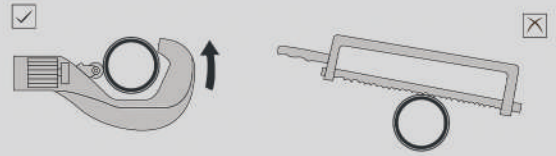
EZ-BRASS

- Full Brass Body
- Plastic Compression Nut and Split ring
- Superior Strength
- Removable and Reusable
- Quick and simple installation

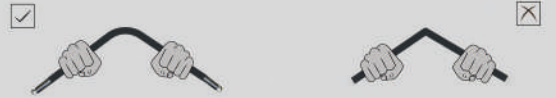


DO's & DON'Ts

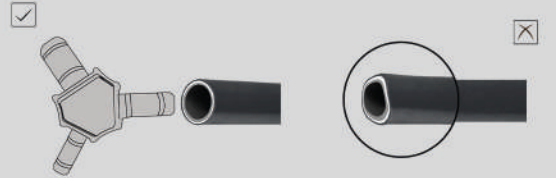
Pipe should not be cut using hacksaw blade cutter.
Only Jindal MLC Pipe Cutter should be used



It is essential to use bending spring for bending of the pipe as it maintains the shape of the pipe.



Pipe Reamer should be used on the pipe before installing the fitting.
It expands and makes the pipe round for proper installation of fitting



While inserting the fitting into the pipe it should be ensured that the pipe reaches the end wall of the fitting and covers both the O-Rings.

