Summary

Polyethylene Pipes for Water Supply - Specification

IS 4984: 2016

Polyethylene (PE) pipes are extensively used in water supply systems due to their flexibility, durability, and corrosion resistance. Available in various grades, such as PE 80 and PE 100, these pipes offer varying levels of pressure-bearing capacity and strength. With excellent chemical resistance and a smooth inner surface that reduces friction and enhances flow efficiency, PE pipes are ideal for both urban and rural water distribution networks. They also provide a long service life and require minimal maintenance, making them a cost-effective solution for water supply infrastructure.

IS 4984 is the Indian Standard that specifies the requirements for high-density polyethylene (HDPE) pipes intended for water supply. This standard covers essential aspects, including material specifications, dimensions, and mechanical properties, ensuring these pipes are durable, safe, and suitable for potable water distribution.

IS 4984 outlines guidelines for different pressure ratings and grades primarily PE 63, PE 80, and PE 100 which define the pipes' pressure-bearing capacities. The standard also details testing procedures to verify pipe quality, covering parameters such as tensile strength, elongation, and internal pressure resistance. HDPE pipes conforming to IS 4984 are widely used in water supply and irrigation, valued for their flexibility, corrosion resistance, and reliable performance over an extended lifespan.