

**\*\*Summary of Fabricated PVC-U Fittings for Potable Water Supplies – IS 10124: Part 2: 2009 (Specific Requirements for Sockets)\*\***

Fabricated PVC-U (Unplasticized Polyvinyl Chloride) fittings, including sockets, are essential components in water supply systems, particularly for potable water. These fittings are made from rigid PVC-U material, which is known for its strength, durability, and resistance to corrosion, making it ideal for water distribution systems. Sockets are used to connect two pipes of similar or different sizes, ensuring a secure, leak-proof joint in the plumbing network. They are fabricated through molding or socket fusion processes and are commonly used in both domestic and industrial potable water applications.

Consumers expect high-quality PVC-U sockets to meet several key performance parameters. These include the ability to withstand high internal pressures without failure, strong resistance to cracking, impact, and chemical degradation, as well as excellent durability over time. A critical parameter is the ability of the socket to form a tight, leak-proof seal when joined with pipes, ensuring no water leakage, which could compromise water quality and system integrity. Additionally, consumers expect these fittings to be resistant to UV degradation and environmental factors, ensuring they remain functional and safe throughout their service life.

Indian Standard IS 10124: Part 2: 2009 specifically addresses these quality expectations by setting out detailed specifications for the materials, design, and testing of PVC-U sockets used in potable water supplies. The standard defines the requirements for socket dimensions, pressure ratings, and the quality of the PVC-U material used, ensuring it meets mechanical strength and durability standards. It also includes guidelines for testing the fittings' resistance to pressure, impact, and temperature variations. By adhering to IS 10124: Part 2: 2009, manufacturers can ensure that their fabricated PVC-U sockets meet the high-quality standards required for the safe and efficient transport of potable water.