

## <u>IS 8931 : 2021 Copper alloy single taps, combination tap assemblies, stop valves and single lever mixers for water services — Specification</u>

The **Indian Standard** IS 8931:2021 outlines the specifications for copper alloy single taps, combination tap assemblies, stop valves, and single lever mixers used in water services. These products are commonly used in **domestic water supplies** for various applications, including sinks, washbasins, baths, and showers.

The standard specifies requirements for materials, construction, and performance for taps and valves operating under pressures from **0.05 to 0.5 MPa** and at a maximum water temperature of **65°C.** It incorporates updates that reflect technological advancements since the previous revision in 1993, such as the inclusion of single lever mixers, new materials like stainless steel and ABS, and the removal of leaded tin bronze due to its high lead content.

Key performance requirements include watertightness and pressure resistance, with tests ensuring durability and operational reliability. The standard prescribes material requirements, such as brass for main components, stainless steel, or ABS for certain parts, and neoprene rubber for O-rings. Dimensional guidelines are provided to accommodate standard installation and connection practices, while features like flow straightening and aerating devices are optional. **Mechanical endurance tests,** water efficiency ratings, and marking requirements ensure compliance, quality, and clear identification of taps for hot and cold applications.

For accessible taps, guidelines emphasize ease of use, such as single lever operation and tactile markings for hot and cold water. Each product must bear clear **markings**, including manufacturer details, size, and water application, and may also carry the **BIS certification mark** for products meeting these standards. The revision aligns IS 8931 with current manufacturing practices and enhances functionality, durability, and accessibility of water fittings used in residential and commercial plumbing systems.