



IS 651 : 2007 Glazed stoneware pipes and fittings — Specification

The Indian Standard defines **glazed stoneware pipes and fittings** as components intended for use in non-potable water applications.

- 1) These pipes and fittings come in various shapes, including straight and taper pipes, bends, junctions, channels, and traps.
- 2) This standard specifically excludes these products from potable water applications.

These pipes and fittings should have the following properties:

- **Soundness and freedom from defects:** Pipes and fittings should be structurally sound, free from visible defects, and exhibit a clear ringing sound when struck with a hammer.
- **Durable glazing:** The glaze should be free from crazing and cover all surfaces exposed after jointing.
- **Resistance to chemicals:** The pipes and fittings should withstand exposure to acids and alkalis without significant deterioration.
- **Strength:** The products should possess sufficient crushing strength to withstand the pressures encountered in their intended applications.

The standard addresses these expectations by outlining **specific requirements and tests**:

- **Dimensional specifications:** The standard sets forth detailed dimensions for various types and sizes of pipes and fittings.
- **Hydraulic test:** Pipes and fittings must withstand a specified internal hydraulic pressure without leakage or damage.
- **Absorption test:** The standard limits the amount of water absorption allowed, ensuring the material's integrity.
- **Acid and alkali resistance tests:** Specific procedures are outlined to evaluate the resistance of pipes and fittings to acidic and alkaline environments.
- **Crushing strength test:** A standardized test procedure is described to determine the minimum crushing strength for different classes of pipes.

By adhering to these specifications and passing the prescribed tests, manufacturers can ensure that glazed stoneware pipes and fittings meet the quality and performance expectations of consumers.