

Summary of IS 3461:1980 Specification for PVC Floor Tiles (with or without Asbestos)

IS 3461:1980 specifies requirements for smooth-surfaced homogeneous PVC floor tiles, with or without asbestos. These tiles provide dust-free, noise-absorbing, resilient, and decorative flooring options suitable for heavy traffic areas with rigid floors such as concrete and stone. They are unsuitable for surfaces exposed to direct sunlight or rain.

High-quality PVC tiles are characterized by:

- a) **Material Composition:** Made of a thermoplastic binder (vinyl chloride polymer or copolymer), asbestos fiber, fillers, and pigments, ensuring durability and resilience.
- b) **Dimensional Accuracy:** Standard sizes of 200, 250, and 300 mm squares with thicknesses ranging from 1.5 to 3.0 mm. Tolerances are specified to ensure precision.
- c) **Physical Durability:** Resistance to indentation, curling, deflection, and impact. Residual indentation should not exceed 0.15 mm, ensuring performance under load.
- d) **Aesthetic Standards:** Available in plain or mottled designs, with uniform or random color distribution across the tile thickness.
- e) **Resistance:** High resistance to chemicals, fading, and environmental factors as per standard testing protocols.
- f) **Packaging and Marking:** Tiles are packed securely in labeled boxes with batch details, ensuring traceability and compliance.

The standard provides a comprehensive framework to ensure quality and reliability:

- a) **Testing for Quality Assurance:** Detailed tests for squareness, dimensional stability, color-fastness, and impact resistance ensure compliance with stringent benchmarks.
- b) **Sampling and Inspection:** Specific sampling methods ensure batch consistency, reducing defects.
- c) **Consumer-Specific Features:** Options for custom sizes, colors, and designs allow adaptability to diverse consumer preferences.
- d) **Certification:** Tiles marked with the ISI certification symbol meet assured quality standards.

This standard ensures a robust, durable, and aesthetically pleasing flooring solution that aligns with consumer and industry needs.