

IS 14587 - Prelaminated Medium Density Fibre Board — Specification

(Summary)

Scope — This standard covers the requirement of prelaminated medium density fibre board for general purposes and also for special applications.

Key Points

a) Grades and Types:

- 1) Grades** — There are two grades
 - i) Grade 1** — Suitable for humid environments.
 - ii) Grade 2** — For dry environments.

2) Types — Each grade has four types based on surface abrasion resistance (Type 1 for flooring, Type 2 for counters and table tops, Type 3 for regular furniture, and Type 4 for vertical applications like panels).

- b) Formaldehyde Content** — Formaldehyde emission is categorized under two classes, E1 (more stringent) and E2. This is crucial for environmental and health concerns.
- c) Physical and Mechanical Requirements** — The document specifies various parameters like density, moisture content, internal bond strength, modulus of rupture, modulus of elasticity, and formaldehyde content. These vary according to the thickness of the boards and their application.
- d) Testing** — Includes tests for dimensions, Edge straightness, Squareness, Surface finish, Moisture resistance, Abrasion resistance, and environmental impact. Detailed procedures for these tests are provided.
- e) ECO-Mark Certification** — Products can qualify for eco-friendly certification (ECO-Mark) if they meet specific environmental standards and carry the BIS standard mark.
- f) Manufacturing Process** — Boards are made by pressing MDF with impregnated base paper under heat and pressure. The surface finish depends on the type of plates used in the pressing process.
- g) Applications** — From flooring and furniture to vertical applications like partitions, false ceilings, and wall paneling.
- h) Sustainable Development Contribution** — The standard aligns with United Nations Sustainable Development Goal 9, promoting sustainable industrialization and innovation.