



IS 14587:2023 - Prelaminated Medium Density Fibre Board — Specification

Prelaminated Medium Density Fibre Board (MDF) is an engineered wood product with a laminate surface applied during manufacturing. It combines the strength of MDF with the aesthetic and protective benefits of lamination, making it ideal for furniture, cabinetry, and interior design. Durable and versatile, it offers a smooth, ready-to-use finish.

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

Key Features of the Standard:

Grades and Types: The standard defines two **grades** of prelaminated MDF: **Grade 1** for humid environments and **Grade 2** for dry environments. Further, each grade is divided into 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.

Environmental and Health Considerations: Formaldehyde emission, a major health concern, is classified into two classes: **E1** (stricter) and **E2**. Choosing **E1** certified products ensures a healthier indoor environment.

Quality and Performance: The standard specifies critical parameters like **density, moisture content, internal bond strength, modulus of rupture, modulus of elasticity**, and **formaldehyde content**. These parameters are crucial for ensuring the **strength, durability, and longevity** of the MDF.

Testing and Certification: Various testing procedures outlined in the standard are, covering aspects like **dimensions, edge straightness, squareness, surface finish, moisture resistance, and abrasion resistance**.

ECO-Mark certification: Products meeting the standard and specific environmental criteria can qualify for **ECO-Mark certification**, assuring consumers of their eco-friendliness.

Manufacturing and Applications: Manufacturing process, involves pressing **MDF with impregnated base paper under heat and pressure**. The **surface finish** varies depending on the plates used in pressing. Prelaminated MDF finds diverse applications, ranging from **flooring, furniture, partitions, false ceilings, and wall paneling**.

Sustainability: IS 14587 aligns with the **United Nations Sustainable Development Goal 9**, promoting sustainable industrialization and innovation, making it a responsible choice for environmentally conscious consumers.