



**IS 3087: 2005 Particle Boards of Wood and Other Lignocellulosic Materials
(Medium Density) for General Purposes – Specification
(Second Revision)**

Particle board is an engineered **panel product** manufactured by particles of **wood or other lignocellulosic materials**, for example flakes, granules, shavings, slivers, splinters, agglomerated, formed and pressed together by use of an organic binders under heat and pressure. Known for its use in **furniture, cabinetry**, and general construction applications like **panelling and partitioning**, particle board provides a smooth, consistent surface that is ideal for laminating or veneering.

This standard specifies the requirements for **medium-density particle boards** with densities ranging from 0.5 to 0.9 g/cm³, excluding high- and low-density variants, veneered boards, and those with impregnated surfaces (prelaminated boards), which are addressed under other standards. The standard lays down quality requirements for the product, including dimensions, water absorption, bending strength, tensile strength, thickness swelling and screw withdrawal resistance, which are essential for product performance.

In addition, the standard provides guidelines on manufacturing practices, including the use of preservative treatments to enhance durability and recommendations for raw material selection, ensuring that the finished particle board meets the prescribed quality requirements consistently. The standard also covers requirements of marking on the product.

Considering, the safety of the building occupants and others coming in the proximity of these boards and their products, the standard also prescribes limits of **formaldehyde content and emission**.