

Manufactured Wood

Manufactured board includes Plywood, MDF, Chipboard, Hardboard and Veneer. All manufactured boards are man made by using solid timber fibres, strands, particles and veneers being glued together.

Wood veneer is a thin covering of timber glued onto manufactured board to improve its appearance.

Advantages:

- Much cheaper to buy a veneer than a thick plank
- Little waste created in the cutting of veneers
- Less natural timber resources used
- Less movement in a thin veneer
- Patterns and designs can be produced (marquetry)
- Easy application by adhesive
- Aesthetically pleasing
- Most timber veneers available
- Creates a solid timber effect
- Available in iron-on form

Disadvantages:

- Can be difficult to cut
- Can be as thin as 0.6mm so must be treated with care
- Veneer can lift, crack or bubble after time
- Can sand through to the manufactured board

Name	Facts	Fact	Strength	Weaknesses	Types and uses
Plywood	<i>Softwood ply manufactured from softwood such as pine and spruce. But hardwood ply is made from more durable hardwood such as birch ply and veneers.</i>	<p><i>Different types of plywood are available specifically for different uses such as:</i></p> <p><i>Marine Ply rot resistant, steam resistant... used in boat construction.</i></p> <p><i>Flexi Ply made with perpendicular grains/layers to allow movement within the board, prone to rot and is expensive.</i></p>	<p><i>Relatively strong due to the veneer grain layered in opposite directions.</i></p> <p><i>Light weight.</i></p> <p><i>Reasonably priced.</i></p>	<p><i>Prone to rot.</i></p> <p><i>Internal use only.</i></p> <p><i>Can chip when sawing.</i></p>	<i>Indoor Building material, flooring.</i>
MDF	<i>No grain, speckled brown sandy colours.</i>	<p><i>No surface grain as MDF is made up of fibres.</i></p> <p><i>Other varieties of MDF are fire retardant and moisture resistant.</i></p>	<p><i>Good density.</i></p> <p><i>No knots or imperfections drilled very easily.</i></p> <p><i>Glues well with</i></p>	<i>Adhesive Urea Formaldehyde is used to combine the particles which irritate eyes and causes breathing problems.</i>	<i>Model making, doors, shelving.</i>

			<p>PVA.</p> <p>Finishes well with paint when sealed.</p>	<p>Extraction to control dust when cutting.</p>	
Chipboard	<p>No grain but large visible chips layered on top of each other, light in colour.</p>	<p>Fashionable low priced furniture stores such as IKEA rely on cheaper materials such as chipboard.</p>	<p>Cheap.</p> <p>Durable when laminated.</p> <p>Very lightweight.</p>	<p>Expands when in contact with moisture.</p> <p>Not suitable for external use.</p> <p>Weakest manufactured board.</p>	<p>Fire doors, kitchen worktops (with a laminate)...</p>
Hardboard	<p>Common hardboard has a uniform brown speckled pattern with the top surface being glossy and smooth, the underside is matt and rough.</p>	<p>Different types of hardboard are available:</p> <p>Oil-temper hardboard is more durable and is prone to moisture, marks or scratch.</p> <p>Smooth both sides.</p> <p>Perforated holes also known as pegboard used to</p>	<p>Will not split or crack.</p> <p>Durable.</p> <p>Cheap.</p>	<p>Not suitable for outside use.</p> <p>Expands when in contact with moisture.</p>	<p>Paint boards, furniture production.</p>

		<p><i>hang tools.</i></p> <p><i>Commonly, Formica is added as a decorative and protective surface furniture manufacture.</i></p>			
Veneer	<p><i>Resembles the timber from Oak to Cedar.</i></p>	<p><i>Can be bought in sheets. Commonly used on Plywood as a decorative surface.</i></p>	<p><i>Cheap way to achieve a timber effect.</i></p> <p><i>Less precious timber used.</i></p> <p><i>Much cheaper.</i></p>	<p><i>Sheets are thin and delicate.</i></p> <p><i>Thin so when used on plywood can sand through.</i></p>	<p><i>Decorative furniture; improve appearance of manufactured board, car interiors...</i></p>