

Woods

Hardwoods:

Oak:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Strong• Works well• Durable	<ul style="list-style-type: none">• Expensive• Heavy• Prone to splitting• Can be physically hard

Uses: Garden furniture, construction, High quality furniture

Mahogany:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Easy to work• Durable• Finishes well• Very few knots	<ul style="list-style-type: none">• Grain can be variable• Prone to warping• Physical hardness varies

Uses: Furniture, Veneers, Floorboards

Beech:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Physically hard• Tough• Polishes well	<ul style="list-style-type: none">• Can be prone to warping• Not suitable for outside applications• Can be difficult to work

Uses: Workshop benches, School desks, Furniture

Jelutong:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Straight grain• Easy to work (low density)• Little tendency to warp or split• Durable	<ul style="list-style-type: none">• Can be easily stained• Sap blunts tools• Relatively expensive• Suspect to biological corrosion

Uses: Carving, model making, patternmaking

Balsa:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Lightweight• Easy to work• Grows very quick (sustainable)	<ul style="list-style-type: none">• Can be expensive• Not very durable• Not waterproof

Uses: String instruments, model making

Softwoods:

Pine:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Straight grain• Easy to work• Affordable	<ul style="list-style-type: none">• Prone to knotting• Not very durable• Rots/corrodes easily

Uses: Roof joists, Floorboards, Construction, Furniture

Cedar:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Doesn't warp easily• Easy to work• Naturally resistant to wear and decay	<ul style="list-style-type: none">• Prone to knotting• Susceptible to biological corrosion• Highly flammable unless treated

Uses: Garden sheds, Decking, Floorboards

Larch:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Aesthetically pleasing• Easy to work• Good availability	<ul style="list-style-type: none">• Natural resins can damage tools• Prone to knotting/warping• Difficult to treat

Uses: Furniture, Cladding, Boatbuilding, Veneers

Redwood:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Aesthetically pleasing• Very durable• Doesn't warp	<ul style="list-style-type: none">• Easily dented• Expensive• Can have irregular grain

Uses: Furniture, Construction, Exterior furniture, Veneers

Manufactured boards:

Plywood:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Widely available• Cheap• Uniform strength• Easy to work with• Can be finished easily with varnishes etc	<ul style="list-style-type: none">• Only comes in certain thicknesses• Edges can splinter• Doesn't do well with moisture• Not as durable as natural timber

Uses: Beams, Interior structures, shipping crates

Medium Density Fibreboard (MDF):

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Widely available• Cheap• Doesn't warp due to lack of grain structure• No knots• Comes in any size/thickness	<ul style="list-style-type: none">• Not as durable as natural timber• Doesn't take nails/screws well• Doesn't do well with moisture• Poor surface finish without veneer

Uses: Roofing, Tables, Cabinets

Particle board:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Cost-effective/cheap• Lightweight• Easy to laminate• Made from recycled material	<ul style="list-style-type: none">• Poor strength• Prone to expansion in moisture• Resin in particle board is toxic

Uses: Flat-pack furniture, Flooring, Wall panelling

Blockboard:

<i>Advantages</i>	<i>Disadvantages</i>
<ul style="list-style-type: none">• Good stability• Inexpensive.• Can take varnish, paint, and laminate coat• Good for screwing and nailing• Doesn't twist/warp• Lightweight• Doesn't degrade tools quickly	<ul style="list-style-type: none">• Weaker than natural timber• Swelling can occur with moisture• Prone to biological attack• Short lifespan/poor durability

Uses: Shelving, furniture, Wall panels