

Timbers Project

Hardwoods

- come from **deciduous** trees
- lose their leaves in winter.
- broad-leaved, bushy, and slow-growing.
- more expensive than other timbers.
- harder to work with due to their **density**.
- less porous, tighter grain structure.
- more **durable** and less prone to rotting.



Types of hardwoods:

Ash, Oak
Mahogany
Beech, Balsa

End uses:

Sporting equipment,
furniture, flooring, frames
for buildings, childrens toys

Properties:

- Tough and flexible
- Strong, hard
- some are lightweight
- easy to work with



Softwoods

- Come from **coniferous** trees. Often christmas-tree-shaped.
- easier to work with and cheaper than other timbers.
- Softwoods grow quickly, making them more **sustainable**.
- They have needle-like leaves and produce cones.
- The wood is more **porous**, meaning it can absorb moisture easily.
- If not protected, softwoods can rot due to their open **grain** structure.



Types of softwoods:

Pine
Larch
Spruce

End uses:

- Fencing, decking furniture,
- window frames, musical instruments
- Construction

Properties:

- Tough and durable.
- Naturally **resistant** to rot and water
- Lightweight and easy to work with.



Manufactured boards

- man-made sheets made from processed natural timber and **adhesives**.
- produced using waste, low-grade, or **recycled** wood fibres.
- designed to be stable, strong, and cost-effective.
- They can be covered with thin slices of high-quality wood (**veneer**) to improve appearance.



Types Manufactured boards & properties:

MDF (Medium Density Fibreboard)
• Easy to cut & shape
Plywood
• Resistant to warping and splitting.
Chipboard
• Cheap but not as strong

End uses:

Furniture,
Kitchen units, toys,
shelving, skateboards
Flooring
low end flat pack furniture



Made into boards and planks using band and circular saws



Trees are **felled** (cut down).

Source



Branches are cut at the **sawmill** and stored.



Environmental impact

- Timber is a naturally grown material that requires no extra energy to produce.
- It is a **renewable** material that can regrow, making it **sustainable**.



- The Forest Stewardship Council ensures forests are managed responsibly.
- Protects wildlife, local communities, and workers' rights through strict environmental and social standards.

Tools

Bench hook



Tenon saw



Coping saw



Disc sander



Steel rule



Try square



Pillar drill



Emergency stop



wear eye protection



wear an apron



No running



No eating

Moving Coat Hook