

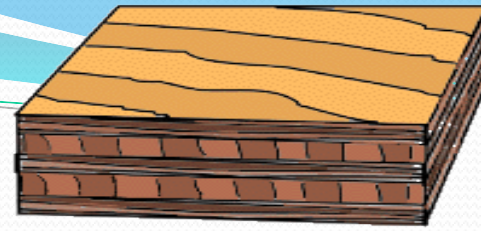
# Manufactured Boards

# What are Manufactured boards?

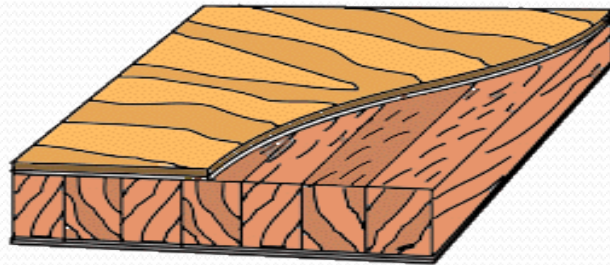
- Manufactured boards are “**man-made**” boards
- They do not grow naturally.
- Manufactured board are simply **strips or pieces** of wood (chips/dust) glued together and pressed with a heat process to form larger boards or sheets.



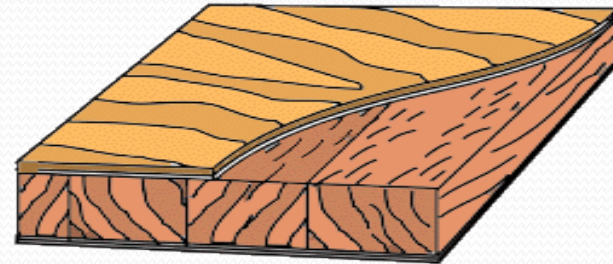
# Types of Manufactured Boards



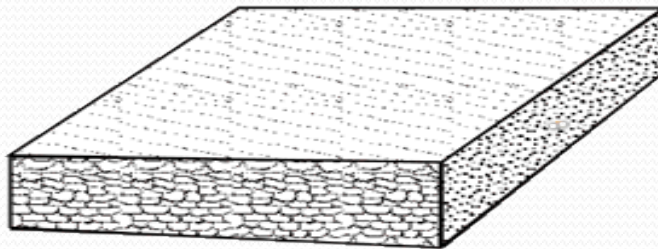
**plywood**



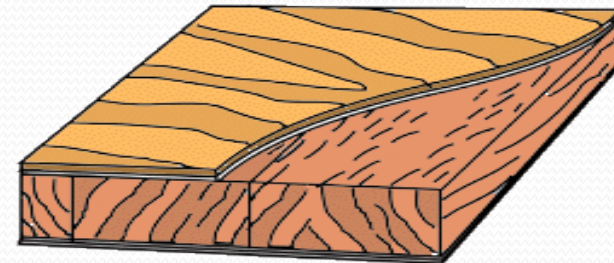
**laminboard**



**blockboard**



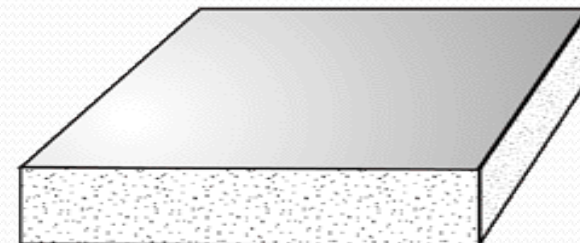
**chipboard**



**battenboard**



**hardboard**



**fibreboard**

# Advantages of Manufactured boards over natural timbers

- Cheaper to buy
- Can produce larger projects
- Can be covered in veneers from expensive timber – which reduces the use of tropical hardwoods

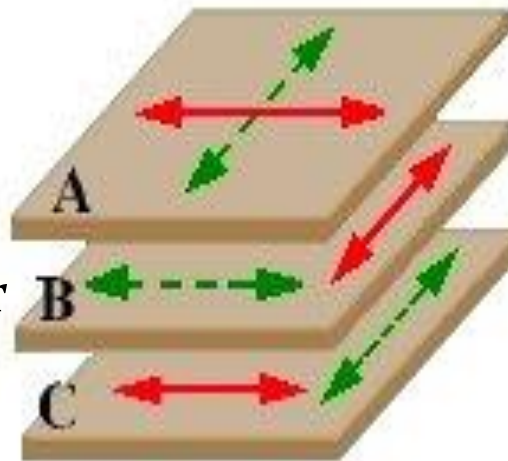
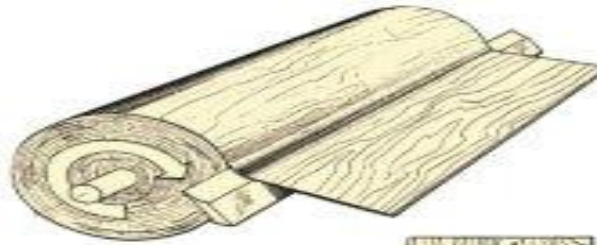




# Types of Manufactured Boards

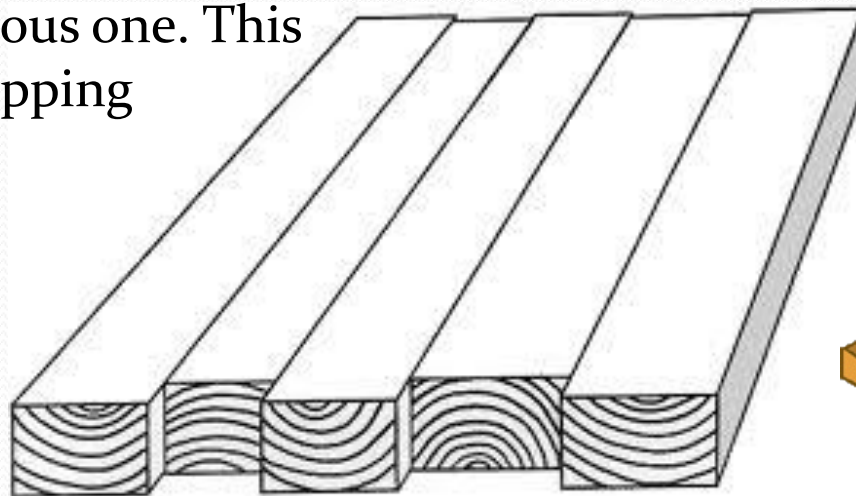
## (a) Plywood

- Veneers are cut from logs using the rotary cutting method shown
- Layers are glued together in alternative (opposite) directions to give strength
- Different types of plywood.
  1. Marine (boats)
  2. **WBP** (water boil proof) for outside.

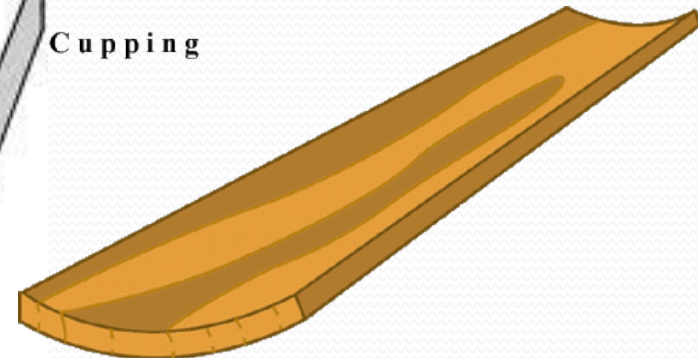


## (b) Pineboard

- Strips of pine (Red Deal) are glued together to form large sheet.
- Available in different thicknesses.
- Every second boards end grain is turned in the opposite direction of the previous one. This prevents cupping

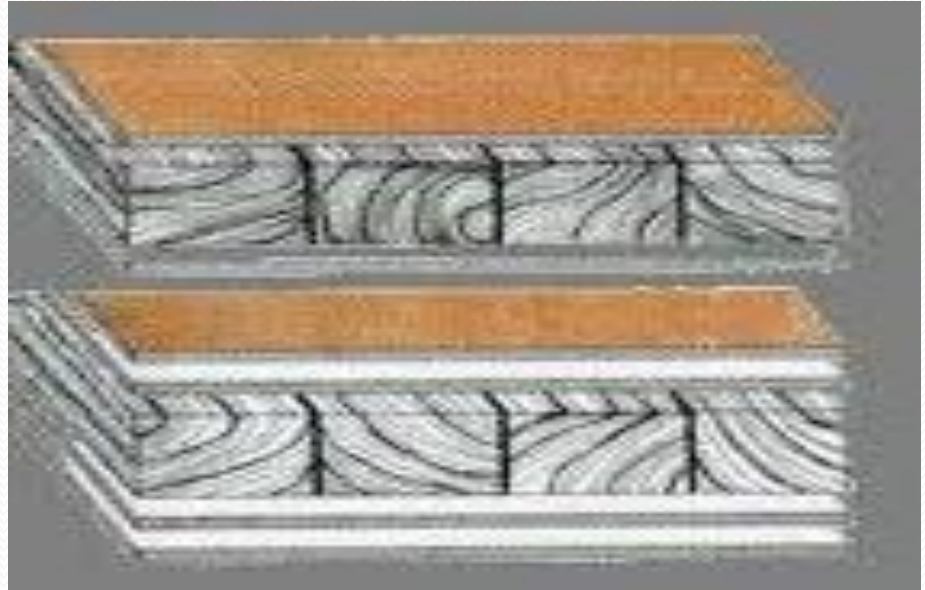


Cupping



## (c) Block board

- Like Pineboard but covered in veneer (3mm) to improve strength.
- Used in cheaper furniture and desks.



## (d) Melamine

- Melamine is a hard thermosetting plastic.
- This is used to coat over chipboard or other manufactured boards to make them stronger.
- Often used on kitchens and worktops





# Types of Particle Board

## (a) OSB - Oriented Strand Board

- Made by pressing wood chips with resin and wax
- Wax makes it waterproof
- Often used outdoors for flooring and sheds



Watch is been made below

- <http://www.youtube.com/watch?v=awxhgAMnyTs>



## (b) Chipboard

- Most common sight in all homes and usually covered by expensive veneers
- Manufactured by gluing and compressing wood particles.
- Very weak when wet
- Good for environment

Watch it been made below

<http://www.youtube.com/watch?v=qitenYvpSx4>



# Manufacture of Chipboard

1. Wood is processed into particles
2. Particles are mixed with adhesive (glue)
3. The mixture is spread out and pressed into sheets with heat press.
4. Boards are sanded and cut to size



# 3 Fibreboard

**Fibreboards:** these are made by compressing extremely small wood particles with resin glues.

(N.B) Cutting them creates a lot of dust!!





# Types of fibreboard

## (a) MDF- Medium Density Fibreboard

- Made by compressing extremely small wood particles with resin glue.
- Creates a lot of dust when cutting so you need to wear face mask at all times.
- Weak when wet so veneers are often used to cover them.



# Edges of Manufactured Boards

- Router design
- Edging- banding
- Edge- Moulding

