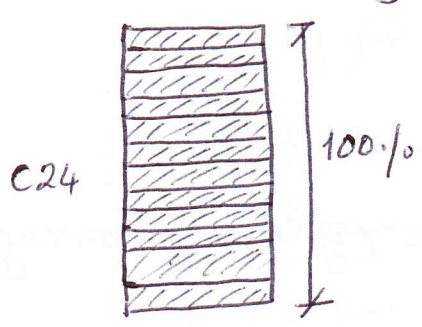
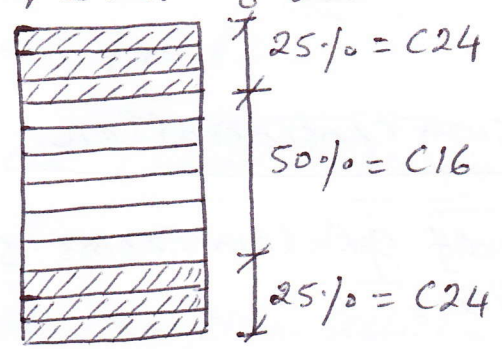


# Timber Beam Design (Glued laminated Beam)

- timber laminations of single or mixed grade glued together
- Grain is in the longitudinal direction.
- For mixed grade, at least 25% of the depth for both top & bottom portion be provided with higher grade material to resist higher bending stresses at top & bottom fibres.

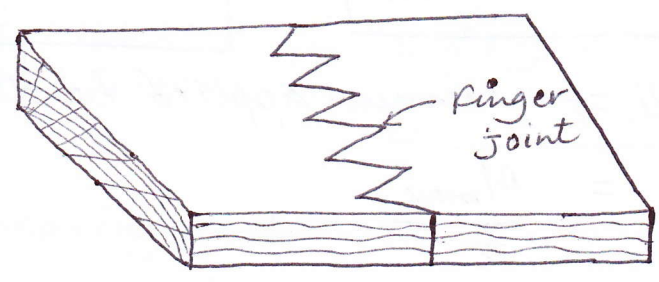


Single-grade



Mixed grade

- Unlike solid timber, they can have larger depths and lengths.
- The adhesive used to glue together the laminations is very strong and durable.
- For larger lengths, individual lamination planks are cut at their ends as 'finger joint' and pressed together after applying adhesive.



## Vertically laminated Beams

When applied load is parallel to the lamination joints as in the case of laminated columns

## Horizontally laminated Beams