



HANDOUT 5

What is Engineered Timber?

Engineered timber is a structural timber product composed of several layers of dimensioned timber glued together.

By laminating several smaller pieces of wood, a single large, strong, structural member can be manufactured from smaller timber, thus making it more environmentally friendly than standard softwood.

This product is also known as Glulam (GLT) or Cross Laminated Timber (CLT) and is not to be confused with laminated flooring.

Advantages of Engineered Timber over traditional timber?

- It is free from excessive shrinking and setting.
- Allows immediate trimming or other decoration, while traditional timber requires 1 - 2 years for final settling.
- Unlike traditional timber, engineered timber is free from dry-cracks and twisting, i.e. the windows stay as beautiful and as air tight as they were at the beginning and there is no need to seal and caulk cracks.
- Engineered timber is stronger, longer lasting and better looking than whole timber because the defects are removed.
- Engineered timber technology can produce large cross sections from ordinary timber. There is no need to use thick aged trees that are rare and expensive. That is often why the laminated timber of large cross sections appear to be less expensive than a whole one.
- Members can be made up of the same strength grade of timber throughout, or may incorporate higher grade material in the upper and lower layers where the stress concentrations are higher.
- Virtually unlimited in depth, width, and length.
- Can be manufactured in a wide range of shapes.
- Provides higher design strengths than sawn timber.
- Provides better utilisation of the available timber resource.
- Technological advances in laminating over the past four decades have further increased the suitability and performance of wood for modern timber window applications.

