



HANDOUT 7

Examples of Engineered Timber

Engineered timber is a generic term used to describe a wide range of wood based products that have been engineered to provide enhanced performance characteristics. This improves their suitability for particular end uses, especially in demanding structural situations, but may also be designed to improve other characteristics such as durability. Usually these products are composites that combine wood or wood fibre with adhesives and possibly other materials. Some reasons for engineering solid timber into such composites include:

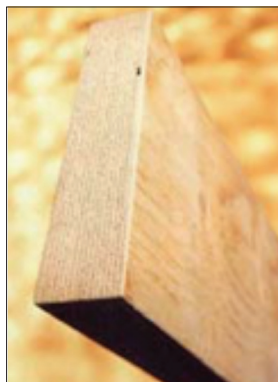
- To overcome the dimensional limitations of sawn timber;
- To improve performance through enhanced structural properties and stability;
- To transform the natural orthotropic product into one with more homogenous properties;
- To optimise the use of a valuable resource and minimise waste.

Engineered timber can take several forms:



Board materials

Board materials such as oriented strand board (OSB), medium density fibreboard (MDF), plywood etc. are available for a wide range of structural, decorative and utility uses.



Structural timber

Structural timber composites produced in large sections for use as beams, columns and other structural components. Products include glued laminated timber (glulam), parallel strand lumber (PSL) and laminated veneered lumber (LVL).



Timber I joists

Timber I joists comprise a timber flange, typically solid timber or LVL (laminated veneer lumber) and a panel product web, usually OSB (oriented strand board). They offer a number of benefits over traditional sawn joists, including low weight, no moisture movement and greatly reduced risk of squeaks.



Engineered wood flooring

Engineered wood flooring provides a durable and stable decorative floor that is less prone to moisture movement than traditional solid timber flooring. It comprises a solid timber walking surface bonded to an engineered timber substrate for strength and stability.