

Wood Products - sawn to engineered: a myriad of choices and applications



Forte – Australia's first CLT building constructed by Lend Lease

With such a range of wood products on offer the future for designing and building with wood has never been so exciting.

Wood – an, organic, renewable and naturally beautiful material is valued by all, but prized by designers, builders, craftsmen, and artisans.

Responsibly grown and managed wood is our only large scale renewable building material and arguably the most environmentally friendly.

Wood is valued by designers in a range of fields for its practical properties; versatility, flexibility, workability, its high strength to weight ratio and thermal bridging performance.

Wood also offers healthy living benefits, a warm, tactile nature and an inherent beauty.

Where does our wood come from?

Australia has 124.7 million hectares of forest covering about 16% of the continent. This represents about 3 per cent of the world's forest area on 5 per cent of the world's land area.

Australia's forests are classified nationally into three categories: 'native forest', 'industrial plantations' and 'other forest'.

- Australia's 'native forest' category is dominated by eucalypts (74% of the total forest area); - around 8% is 'multiple-use' forest of which around 1% per year is harvested, and regrown, for timber production generally for sawn structural and appearance products and pulp logs for high quality paper
- About half Australia's 'industrial plantation' area is exotic softwood species (predominantly radiata pine for structural products), the other half is mostly native hardwood species (predominantly eucalypts for pulp and paper)
- The 'other forest' category comprises a small area of mostly non-industrial plantations and planted forests of various types

(Source: Australia's Forest at a Glance 2014, ABARES)

Australia also imports over \$4 billion of wood products annually.

What products are available?

Today there are a wide range of sawn and engineered wood products used in the building and construction sector, these include:

- Sawn softwoods (MGP-grades)
- Sawn hardwoods (F-grades & appearance grades)
- Hardboard - Masonite
- Oriented strand board (OSB)
- Particleboard
- Plywood and Formply
- Glued laminated timber (Glulam)
- Laminated veneer lumber (LVL)
- I-beams
- Plywood box beams
- Cross laminated timber (CLT)

WoodSolutions Facts Sheets contain information about all the above products.

New wood systems – new market opportunities

Traditionally, the residential sector has been the major building market for timber products, particularly sawn timber. However recent global advances in engineered wood products and engineered wood systems have seen an increase in the use of timber in to mid and high rise apartment construction and commercial buildings.

Australia's tallest modern timber building, Lend Lease's Forte apartments in Melbourne, completed in 2012 is ten storeys, 32m high and constructed predominately of CLT.

Mid-rise timber structures up to around 25m high constructed out of CLT or lightweight timber framing combined with fire and sound rated plasterboard are becoming more popular for multi-residential apartment blocks or commercial buildings.

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**For more information visit
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