

IT'S WHAT BETTER TOMORROWS ARE BUILT ON

## **NeXTimber: It's what better** tomorrows are built on

NeXTimber<sup>®</sup> by Timberlink manufactures Australian made Engineered Wood Products (EWP) and provides mass timber building solutions using Cross Laminated Timber (CLT) panels and Glue Laminated Timber (GLT) members.

Made from sustainably certified local Australian plantation pine that sequesters carbon from the atmosphere, NeXTimber CLT panels and GLT members provide the biophilic and environmental benefits of traditional timber but with the strength to support taller and more comple<u>x structures.</u>

Production of the NeXTimber range is scheduled to begin in 2023. Our locally based technical support team is ready now to help you optimise the use of NeXTimber products in your future projects to achieve maximum cost, time, and environmental efficiencies.

#### A Link from Seed to Structure

NeXTimber is unique in the EWP industry. It is backed by a vertically integrated business model that goes right back to the plantation securing consistent, reliable supply.

The premium CLT panels and GLT members will be produced at a purpose built manufacturing plant being constructed adjacent to Timberlink's world-class timber manufacturing facility in Tarpeena, South Australia. NeXTimber Engineered Wood Products will be manufactured from Timberlink timber, sourced from local certified pine plantations, with the most significant contributor, like Timberlink, under the ownership of funds managed by New Forests.

This connection from seed to structure will give NeXTimber customers a unique level of supply certainty.



- Sustainable real assets investment manager
- More than \$7.7 billion in assets under management globally
- Headquartered in Sydney

# Nexarimber

- One of Australia's leading plantation pine timber
- Over \$200m has been invested since 2013

producers

TIMBERLINK<sup>®</sup>

Australia & New Zealand

 Owned by investment funds managed by New Forests

• Entry into value added,

- Engineered Wood Products market
- Capital investment ~ \$63m
- First combined CLT & GLT manufacturing line in Australia



An Australian mass timber producer – vertically integrated with world-class timber manufacturing and forestry assets.

A significant investment of \$63 million will see the creation of Australia's first combined CLT and GLT manufacturing line. A 14,000sq m site adjacent to Timberlink's state-ofthe-art Tarpeena timber manufacturing facility.

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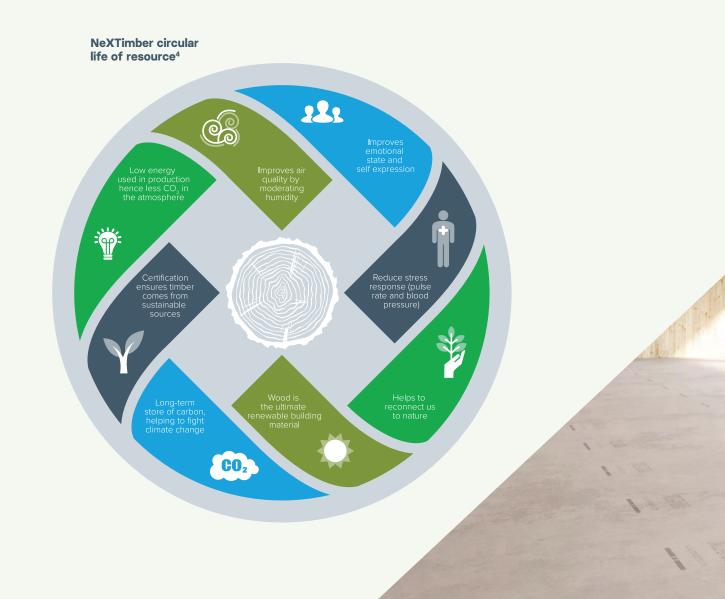
## **Everything we do today matters**

We understand we have a responsibility to look after our people, our environment, and the regional and wider communities in which we operate. We want to provide building solutions that can play a role in healing the planet as well as ourselves.

#### Timber is the Ultimate Renewable.

Research has shown that using timber in the home and workplace improves air quality, and lowers stress levels.<sup>1</sup> Timber also sequesters carbon when it grows. It is estimated every cubic metre of pine used, has removed and locked up 699kg of  $CO_2$  from our atmosphere.<sup>2</sup>

Timber from certified plantations is renewable<sup>3</sup> and by using a locally grown and manufactured building product, you are supporting local, regional manufacturing.



- 1 Lowe, Graham (2020) Wood, Well-being and Performance: The Human and Organizational Benefits of Wood Buildings, April 2, 2020
- 2 Source: Wood Solutions, Environmental Product Declaration Softwood Timber V1.3, Revised 8 December 2017
- 3 Source: https://makeitwood.org/choosing-wood. FWPA, A review of forest certification in Australia (2006)
- 4 Wood Solutions, Environmental Product Declaration Softwood Timber V1.3, Revised 8 December 2017
- Lowe, Graham (2020) Wood, Well-being and Performance: The Human and Organizational Benefits of Wood Buildings, April 2, 2020
- Planet Ark, Wood Nature Inspired Design: An update of the Wood Housing, Health, Humanity Report (2016)
- FWPA, A review of forest certification in Australia (2006) https://makeitwood.org/ choosing-wood/

In 2021, Timberlink was the first timber manufacturer in Australia with verified sciencebased targets to reduce carbon emissions in line with the Paris Climate Agreement.

# Partnering with world class technology

To fit out our state-of-theart combined CLT & GLT plant, we have commissioned industry leaders to supply the manufacturing and processing equipment supported by a fully integrated end-to-end software platform.

#### **Project Integration**

A fully integrated software solution to support project teams through concept and feasibility stages, costing, detailed design, manufacturing, logistics and installation.

An end-to-end platform allows customers to utilise the latest in Building Information Modelling (BIM), Computer Aided Design (CAD) and Computer Aided Manufacturing (CAM) to ensure projects can be managed and delivered with the benefits in efficiency, accuracy and quality that can be realised with NeXTimber products.

Our in-house technical support team brings local and international mass timber project experience to provide an innovative, flexible, and supportive service for any type of project.





1. Model

2. Manufacture



3. Deliver

#### Hundegger

Hans Hundegger AG based in Bavaria, Germany, are among the world leaders in building multi-axis Computer Numerical Control (CNC) machines for solid timber processing.

Hundegger Australasia was chosen to supply their PBA-Industry panel processing machine with the latest CNC panel machining technology and the capacity to cut and machine NeXTimber CLT panels up to 16m long with high efficiency and accuracy.

The new machine is the first Hundegger PBA-Industry CNC line to be delivered to the Southern Hemisphere.

#### **Kallesoe Machinery**

Danish based company Kallesoe Machinery A/S was chosen to supply the CLT and GLT manufacturing line and commission a turnkey solution providing plant design, manufacturing equipment and installation.

Example illustration of a Kallesoe CLT manufacturing line.

## Why NeXTimber?

NeXTimber provides a unique opportunity for the building industry to utilise a secure local supply of sustainable engineered wood products, for a high quality, fast, safe, and quiet construction solution.

#### Benefits of NeXTimber CLT and GLT



#### **Premium Product Performance**

- Made from consistent high grade feedstock, structurally graded with the latest technology to AS/ NZS 1748.1 and verified to AS/NZS 4490 from Timberlink's Tarpeena manufacturing facility.
- CLT panels are edge-glued for improved transverse stiffness, inplane rigidity and overall structural performance.
- NeXTimber CLT & GLT products can achieve superior durability and fire performance with the use of thermoset adhesives for all gluing applications when compared to products manufactured using thermoplastic based adhesives.
- Full scale fire testing in accordance with AS1530.4.
- QA processes from infeed to installation and certified manufactured to ISO 16696-1.
- Surface finish options available.

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#### Secure Local Supply

- All infeed stock comes from local plantations through our vertically integrated supply chain to ensure consistency of quantity and quality.
- One supply point for both CLT and GLT with associated fixings.
- Local Australian supply provides more flexibility in lead times to give design and build teams more opportunities for optimisation.
- Reduced risk to project budgets & timelines from international shipping, import taxes and currency exchange risks.
- Section sizes aren't restricted by shipping container limits which allows for flexibility in design and more efficient installation.
- Locally based technical support throughout a project's lifecycle.



#### The Ultimate Renewable

- NeXTimber feedstock sourced from co-located Timberlink mill with dual certified sustainability credentials.
- Timber is the Ultimate Renewable NeXTimber products provide carbon negative mass timber solutions for building components, providing a prime opportunity to reduce the embodied carbon of a project.
- Utilising timber as a construction material from sustainably managed forests means that carbon is continually captured from the atmosphere as the forests are replanted. This carbon capture (up to 50% of the dry weight of the wood) is stored in the built environment as a 'carbon-sink' for the lifecycle of the buildings.



### **NeXTimber Product Range**

NeXTimber's CLT and GLT product range is produced from certified plantation radiata pine. Our highquality Australian mass timber building solutions offer a renewable, sustainable and low carbon solution for commercial, residential, and public projects; used on their own or in conjunction with traditional building materials. As part of our service we can provide all the necessary fixings and connections, along with temporary lifting systems to suit project-specific requirements.

For further information refer to the NeXTimber Technical Guide.

#### **Connections and Fixings**

NeXTimber can supply the specified third-party structural connection hardware for projects, delivered to site with the mass timber elements as required.

The fixings and connections can be included in the CAD fabrication models to allow for quantity take-offs & precise CNC setting out and machining for connections to be pre-installed in the factory where possible.

- Screws & dowels
- Brackets & plates

#### Lifting Systems

In addition, temporary lifting systems and surface protection for the CLT panels and GLT sections can be preinstalled in line with the construction methods prescribed by the builder.

- Slings
- Sockets and bolts
- Temporary protection

#### **NeXTimber CLT Range**

Roof panels

• Floor panels

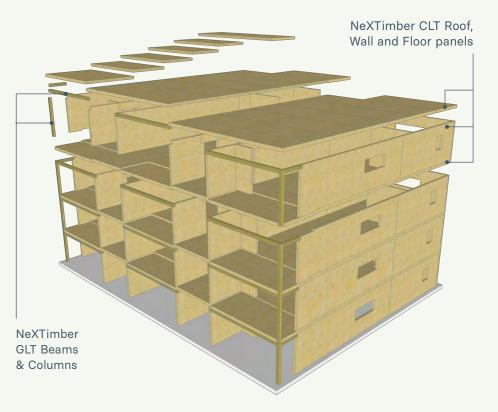
Wall panels

other framing

• Lintels &

#### e NeXTimber GLT Range

- Beams
- Columns
- Frame & truss
  members



## **Technical Specifications**

| Wood species                         | Australian Grown Radiata Pine (Pinus Radiata)<br>Kiln Dried Softwood                     |
|--------------------------------------|--|
| Mechanical grading                   | In accordance with AS/NZS 1748.1 and AS/NZS 4490   |
| Moisture Content ex. factory         | 10-15%   |
| Feedstock Preservative<br>Treatments | Untreated and preservative treated to Hazard<br>Class 3 in accordance with AS/NZS 1604.1 |
| Adhesive – Face and edge             | Melamine Formaldehyde  |
| Adhesive – Finger Joints             | Melamine Formaldehyde  |
| Density                              | 460 to 540 kg/m3   |

| Cross Laminated Timber (CLT) |                         | Glue Laminated Timber (GLT) |                  |  |
|------------------------------|-------------------------|-----------------------------|------------------|--|
| Lamella Stress Grade         | MGP10                   | Stress Grade                | GL13             |  |
| Lamella Thickness            | 20mm, 30mm<br>and 40mm  | Lamella Thickness           | 40mm             |  |
| Joint Group                  | JD5                     | Joint Group                 | JD5              |  |
| Strength Group               | SD6                     | Strength Group              | SD6              |  |
| Maximum Panel<br>Dimensions  | 3.5m wide<br>x 16m long | Stock Lamella<br>Widths*    | 65, 85, 115, 135 |  |
| Panel Thickness              | 60mm to 360mm           | Beam Depths                 | 120mm to 1000mm  |  |
| Laminations                  | 3 to 9                  | Maximum Length              | 12m              |  |

## **Service Tiers**

We offer technical, logistical, and planning support services for project teams utilising NeXTimber products to suit all project designs, procurement and delivery models. The level of support services can be tailored to the client's and project team's requirements.

Our team will work with you to optimise the use of NeXTimber products ensuring cost, time, and environmental efficiencies are maximised.

|   | TIER 1<br>Early Supplier<br>Involvement (ESI) | TIER 2<br>Standard<br>Supply | <b>TIER 3</b><br>Manufacture<br>Only |
|---|---|------------------------------|--------------------------------------|
| Prelim/concept design phase technical DfMA support                            | •   |                              |                                      |
| <b>3D BIM design integration</b> (BIM library & prelim mass timber modelling) | •   |                              |                                      |
| Preliminary estimate  | •   |                              |                                      |
| Technical support through design phases                                       | •   | •                            |                                      |
| Mass timber fabrication model, shop drawings, BOM and costing                 | •   | •                            |                                      |
| Manufacture of mass timber elements   | •   | ٠                            | ٠                                    |
| Fixings/connections & other<br>post-production items                          | •   | •                            | •                                    |
| Sequenced transport and delivery to site                                      | ٠   | •                            | ٠                                    |
| Construction phase technical<br>support services                              | •   | •                            |                                      |
| QA & co-ordination of variations  | •   | ٠                            |                                      |

\*NeXTimber GLT press has the capacity to laminate beams to a maximum dimension of 1000 mm x 300 mm. Section widths greater than the stock lamella widths will be assessed on a project by project basis.

For further information refer to the NeXTimber Technical Guide

It starts with a seed from nature, with soil, water and sunshine added.

It's what a better tomorrow will be built on, built out of, built with.

It's what the craftsmen, the draftsmen, the architect, the engineer – all those who shape tomorrow – should lean on.

If it can be renewable and store carbon, it should, and it can.

And if it can all be done quicker, quieter, smarter, and safer it should.

#### And it can.

You see, if we treat our buildings as living breathing things, then the living breathing things that inhabit them, will have a future to look forward to.

Everything we do today matters, for tomorrow will be where we all reside.

However you use NeXTimber, you won't just be building a building.

You'll be creating a better future.



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CLT and GLT illustrations used throughout are artist impressions



