

MASS TIMBER BUILDING SOLUTIONS



CLT

Cross-laminated timber made with structural finger-jointed solid timber from machine-graded pine boards obtained from FSC® certified plantations.

Applications

- Slabs
- Walls
- Roofs

Wood species

Southern yellow pine: loblolly pine (*Pinus taeda*) and slash pine (*Pinus elliottii*) from locally sourced FSC® certified plantations.

Manufacturing

The manufacture and quality control are according to European standard EN 16351:2021 or ANSI/APA PRG 320: 2025.

Sections

| Layers | Thickness (mm) | Board configuration (mm) |
|--------|----------------|----------------------------------|
| 3 | 66 (2,6") | 22-22-22 |
| 3 | 79 (3,1") | 22-35-22 |
| 3 | 92 (3,6") | 35-22-35 |
| 3 | 105 (4,1") | 35-35-35 |
| 3 | 115 (4,5") | 35-45-35 |
| 3 | 125 (4,9") | 45-35-45 |
| 3 | 135 (5,3") | 45-45-45 |
| 5 | 110 (4,3") | 22-22-22-22 |
| 5 | 123 (4,8") | 22-22-35-22-22 |
| 5 | 136 (5,4") | 35-22-22-35 |
| 5 | 149 (5,9") | 35-22-35-22-35 |
| 5 | 162 (6,4") | 35-35-22-35-35 |
| 5 | 175 (6,9") | 35-35-35-35 |
| 5 | 195 (7,7") | 45-35-35-35-45 |
| 5 | 215 (8,5") | 45-45-35-45-45 |
| 7 | 193 (7,6") | 35-22-22-35-22-22-35 |
| 7 | 213 (8,4") | 45-22-22-35-22-22-45 |
| 7 | 232 (9,1") | 35 - 35 - 35 - 22 - 35 - 35 - 35 |
| 7 | 255 (10,0") | 35-35-35-45-35-35-35 |
| 7 | 275 (10,8") | 45-35-35-45-35-35-45 |
| 7 | 295 (11,6") | 45-45-35-45-35-45-45 |
| 7 | 315 (12,4") | 45-45-45-45-45-45 |
| 9 | 335 (13,2") | 45-35-35-35-35-35-35-45 |
| 9 | 355 (14,0") | 45-45-35-35-35-35-45-45 |



Certifications



ICC



ICC-ES Evaluated ESR-5363.



The mark of



Configurations and Layers

The CLT panels are made with the external layer following the main axis of the panel, namely longitudinal (L) or with the external layer perpendicular to the main axis of the panel, namely transversal (T).



CLT panels can be manufactured with 3, 5, 7, or 9 layers*.

*ETA Certificate 24/1202 includes CLT panels with a maximum of 7 layers

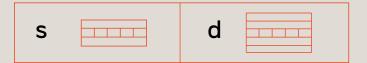
Dimensions

- Thickness (mm): from 66 to 355 (2,6" to 14,0").
- Widths (m): up to 3.4* (11,15 ft).
- Lengths (m): up to 11.9* (39 ft).

*If the panel must be sanded the maximum width is 3,1 m. The maximum dimensions will be determined by transport conditions.

Type

Thickness wise, the panels are symmetrical. Type "s" indicates that the CLT panel is made with standard orthogonal layup. Type "d" indicates that the first and second external layers are in the same direction.



Standards and references

- EN16351:2021 Timber Structures Cross laminated timber Requirements.
- EN15425:2023 Adhesives One component polyurethane (PUR) for load-bearing timber structures Classification and performance requirements.
- EN14081-1:2016+A1:20 Timber structures Strength graded structural timber with rectangular cross section Part 1: General requirements.
- EN14081-3:2022 Timber structures Strength graded structural timber with rectangular cross section Part 3: Machine grading; additional requirements for factory production control.
- EN 338:2016 Structural timber Strength classes.
- ETA- 24/1202 according to EAD -130005-00-0304: Solid wood slab element to be used as structural element in buildings.
- ANSI/APA PRG 320-2025: Standard for performance-rated cross laminated timber. (ESR 5363).
- ANSI 405-2023: Standard for adhesives for use in structural glued laminated timber.

Visual quality

- Non visual (N) Suitable for panels that are typically covered on site. It presents singularities of the wood at sight and without specific aesthetic requirements.
- Visual (V) Suitable for constructions where is necessary to leave the structural wood layer of the panel exposed, accepting the naturalness of the wood with its singularities. The surface is repaired with wood filler and sanded, in case of dead knots with lack of material, missing edges or other superficial aesthetic defects.
- Superior (S) Suitable for constructions where it is required to leave the structural wood layer of the panel exposed and the singularities of the wood are not accepted. The exposed surface is free of knots and other aesthetic defects.

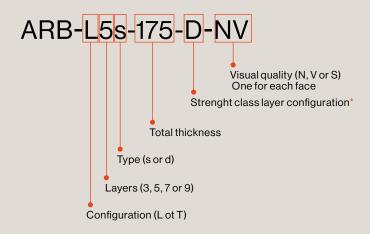
Sizes tolerances

According to European standard EN 16351:2021 or ANSI/APA PRG 320: 2025.

Structural adhesive

- · Single-component PUR cold-curing structural adhesive.
- In accordance with EN 15425 o ANSI 405 | 90 GP 0.3 w.
- Free of organic solvents or formaldehyde.
- · Resistant to water, weak acids and bases, and organic solvents.

Nomenclature



*NOTE: The configuration of strenght classes in the panel is an internal code of Arboreal. Each class corresponds to a configuration, referencing the strenght class of each layer, combining C14, C22 and C24 for each panel. Check ESR 5363 for design values, according ANSI/APA PRG 320.