Techlam Laminated Timber Products

WOODSPAN PLT TECHNICAL DATASHEET

Version 2.0 September 2026

Wood species & strength

- Pinus Radiata (origin New Zealand).
- WS8 and WS10 (upon request)

FSC certification

- PLT panels may be supplied with FSC certification.
- The manufacturing location is certified according to FSC® Single Chain of Custody & Controlled Wood by Preferred by Nature FSC-COO6125.
- Our location is also certified according to the FSC - Chain of Custody, by SGS certificate number SGSHK-COC-510001.

Applications

- Prefabricated roof and floor panels.
- Interior uses.

Product standards & Quality assurance

Attribute	Standard	Quality assurance
Finger-jointing	AS 5068.2006 (R2016) Timber - Finger joints in structural products - Production requirements	Grade Right (NZ) Ltd Manufacturer part of Grade Right (NZ) Ltd EPDM programme.
Glue Lamination	AS/NZS 1328.1:1998 Glued laminated structural timber Part 1: Performance requirements and minimum production requirements	Grade Right (NZ) Ltd Manufacturer part of Grade Right (NZ) Ltd EPDM programme.
Treatment	NZS 3640:2003 Chemical Preservation of Round and Sawn Timber	Grade Right (NZ) Ltd Manufacturer part of Treat Right programme.

Appearance grades

Non-visual, Whole Timber	Strength grade WS8. WS10 is available on request. Wane max 7 mm x 7 mm with an unlimited length. Knots (all types) on panel face unlimited in number, max width equal to lamina width and max lengths as follows, ▪ 105 mm for panel depth of 90 mm, ▪ 135 mm for panel depth of 117mm, and ▪ 165 mm for panel depth of 140 mm. Knots (all types) on panel edge and max width or length as follows, ▪ 75mm (W),105 mm (L) for panel depth of 90 mm, ▪ 90 mm (W),135 mm (L) for panel depth of 117mm, and ▪ 110 mm (W), 165 mm (L) for panel depth of 140 mm. Holes, and loose knots 30 mm max Ø. Unlimited number of checks within knots, bark pockets, resin pockets, checking (max 1 mm x 100 mm), resin streaks and brown stain. Light only resin, blue stain and birds-eye (needle fleck).

This document is uncontrolled in printed form.
See woodspan.co.nz for current version. Copyright © 2026 Woodspan.

35-39 Tiro Tiro Road, Levin 5510 | sales@techlam.co.nz | 0800 832 452 | woodspan.co.nz

WOODSPAN PLT TECHNICAL DATASHEET

Version 2.0 September 2026

Visual, Finger Joint (FJ)	Strength grade WS8. WS10 is available on request. Wane max 3 mm x 3 mm with an unlimited length. Knots (all types) on panel face max lengths as follows, ▪ 30 mm for panel depth of 90 mm, ▪ 37 mm for panel depth of 117mm, and ▪ 40 mm for panel depth of 140 mm. Knots (all types) on panel edge max lengths as follows, ▪ 30 mm for panel depth of 90 mm, ▪ 37 mm for panel depth of 117mm, and ▪ 40 mm for panel depth of 140 mm. Holes, and loose knots 10 mm max Ø, No checks within knots, bark pockets. Checking max of 1 mm x 50 mm per shook. Resin pockets < 50 mm /shook. Unlimited brown stain. Light only resin, resin streaks, blue stain and birds-eye (needle fleck).
Visual, Finger Joint (FJ) Clear	Strength grade WS8. WS10 is available on request. Wane max 3 mm x 3 mm with an unlimited length. No knots (all types) on panel edge or face for all panel depths. No holes or loose knots, checks within knots, bark pockets, blue stain. Checking max of 1 mm x 50 mm per shook. Resin pockets < 30 mm long x 2 mm wide/shook. Unlimited brown stain. Light only resin, resin streaks, and birds-eye (needle fleck). No blue stain.

Physical characteristics

Panel Type	Whole Timber	Finger Jointed
Max panel size	4500mm x 890mm	7200mm × 890mm
Panel depths	90mm, 117mm, and 140mm	
Joint strength	J5	
Panel Mass	WS8 - 90mm PLT = 40.5kg/m^2 WS8 - 117mm PLT = 54kg/m^2 WS8 - 140mm PLT = 63kg/m^2	

Panel weight guide

Panel Length (all panels are 890 mm wide)	WS8-90 mm	WS8 – 117 mm	WS8 – 140 mm
3500 mm	127 kg	169 kg	197 kg
7200 mm	260 kg	346 kg	420 kg

This document is uncontrolled in printed form.
See woodspan.co.nz for current version. Copyright © 2026 Woodspan.

35-39 Tiro Tiro Road, Levin 5510 | sales@techlam.co.nz | 0800 832 452 | woodspan.co.nz

Techlam Laminated Timber Products

WOODSPAN PLT TECHNICAL DATASHEET

Version 2.0 September 2026

Strength grade

Property		WS8 (MPa)	WS10 (MPa)
Modulus of elasticity (average)	MoE	8000	10000
Bending Strength[1, 2]	F'_b	14.0	20.0
Compression parallel[1, 2]	F'_c	18.0	20.0
Compression strength[1] (perp to grain)	F'_p	8.9	8.9
Tension strength[1]	F'_t	6.0	8.0
Shear strength[1]	F'_s	3.8	3.8

[1] Bending, tension, compression and shear strength parallel to grain is to be multiplied by K6 = 1.33 (as per NZS3603) [2] Use Ø = 0.8 Material Strength Reduction Factor

Hazard classes

Hazard class	Description of conditions	Treatment options
H1.2	Protected from the weather, above ground, but with a possibility of exposure to moisture.	LOSP Boron (only be used if the panel was to be covered)
H3.1	Exposed to periodic wetting, not in contact with the ground.	LOSP
H3.2	Exposed to the weather, above ground, or protected from the weather but with a risk of moisture entrapment	Copper Arsenate (CCA) Micronised copper azole (MCA) Protim Micro (LOSP)

Manufacturing

Bonding

- Type I adhesive to AS/NZS 4364 (Timber – Bond performance of structural adhesives) for all service classes
- Purbond clear polyurethane adhesive

Dispatch moisture content

- Target 16 % ± 2.5 %

Density

- For Pinus species average range 450 - 500 kg/m^3 at 12% moisture content

Formaldehyde emission Class

- PUR – super E0

Fire behaviour & resistance

- D-s2, d0, material group 3
- 2.2 kW/m^2 when used as floor covering (MBIE, C/VM2)
- FRR dependent on assembly may achieve 30/30/30 or 60/60/60

Dimensional tolerances

Panel width	± 2mm
Panel depth	± 4 mm/305 mm of depth
Panel length	≤ 6.0 m ± 2mm > 6.0 m ± 2mm/6.0 m or part thereof
Straightness	≤ 6.0 m 1mm/m length > 6.0 m max 9 mm
Squareness of cross-section	± 3mm/305 mm of depth

This document is uncontrolled in printed form.
See woodspan.co.nz for current version. Copyright © 2026 Woodspan.

35-39 Tiro Tiro Road, Levin 5510 | sales@techlam.co.nz | 0800 832 452 | woodspan.co.nz

woodspan by techlam