



# Species Technical Guide

Through science and engineering, we have pioneered a process of converting low-value wood fibre into premium hardwoods with the look, feel and properties of 100-year-old trees.

At the heart of our technology is a patented process using a water-based formaldehyde-free “Nano glue” that biomimics the structure of a native tree in just hours.

The 3RT wood blocks feature our unique folding pattern that results in the visual appearance and properties of natural trees. The square shape improves the yield of the timber blocks, offering a dimensionally consistent and stable timber. The 3RT blocks are standardised making it ideal for a variety of both decorative and structural applications.



Ask us for PEFC or FSC®-certified products

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Species	3RT Blackbutt	3RT White Gum	3RT Tasmanian Oak
Density	950kg/m <sup>3</sup>	800kg/m <sup>3</sup>	770kg/m <sup>3</sup>
Modulus of Elasticity (MOE)*	20,680 MPa	16,400 MPa	16,030 MPa
Bending Strength (f'b) (MOR)*	97 MPa	60 MPa	65 MPa
Tension Strength (f't)*	98 MPa	—	—
Shear Strength (f's)	5.1 MPa	5.1 MPa	—
Compression Strength (f'c)*	68 MPa	66 MPa	—
Modulus of Rigidity (G)	1230 MPa	—	—
Bearing strength perpendicular to grain (f'p)*	12.6 MPa	—	—
Janka Hardness (kN)	7.6	5.7	4.4
Stress Group	F27	F17	F22
Strength Group	SD6	—	—
Fire Group Number (AS/NZS 3837)	3	3	3
Average Critical Heat Flux (kW/m <sup>2</sup> ) (AS/ISO 9239.1)	4.4	3.8	—
Char Rate (mm/min)	0.48	0.51	—

\*Characteristic values for design

**Note:** This information has been prepared by 3RT as a guide to assist with the specification of 3RT wood solid products and should not be used as the sole means of research.

## Application Guide

	3RT Blackbutt*	3RT White Gum	3RT White Gum (H3 treated)*	3RT Tasmanian Oak
Cladding/Screening	✓		✓	
Panelling	✓	✓	✓	✓
Decorative panels	✓	✓	✓	✓
Furniture	✓	✓	✓	✓
Stairways	✓	✓	✓	✓
Posts and Beams	✓	✓	✓	
Doors and windows	✓	✓	✓	✓
Flooring	✓	✓		✓

\*Suitable for above ground outdoor use