



INFORMATION SHEET

Product overview

LIGNIA® delivers beauty and high-performance in one product. It starts out life as a softwood from FSC®-certified plantations and LIGNIA Wood Company uses its unique modification process to deliver LIGNIA, a wood whose greatly improved properties and appearance match or exceed tropical species. LIGNIA comes with a 50-year warranty against rot and fungal decay in above-ground uses and is suitable for decking, flooring, interior wall paneling, cladding and general millwork including doors and windows.

LIGNIA is supplied as rough sawn random grain four-sides clear, and is available in the following dimensions:

Thickness	Widths	Lengths
7/8" [22mm]	3" [75mm]	6'11"-19'8"
4/4 [25mm]	4" [100mm]	[2.1m-6m]
5/4 [32mm]	5" [125mm]	
6/4 [38mm*]	6" [150mm]	
8/4 [50mm*]	8" [200mm]	
10/4 [63mm*]		
12/4 [75mm*]		
Quartersawn Deckboards		
4/4 [25mm]	4" [100mm]	6'11"-15'7"
	5" [125mm]	[2.1m-4.8m]
	6" [150mm]	

*Available in second half of 2020.

Machining

Using machine settings for medium density hardwoods such as Teak and Red Oak, an excellent finish can be achieved through planing. The quality of finish means no further sanding is necessary prior to coating. LIGNIA is PH neutral and, as a result, does not react with coatings, giving good coatings performance as tested by leading brands.

Any stick indentation and underlying stick marks can usually be removed through planing off the surface.

LIGNIA properties

Durability: Against decay fungi - European Durability Class 1 Very Durable (EN 113)

Durability against termites: Tested using AWPA E1-17. On a rating of 0-10 where 10 is not attacked, LIGNIA scored 9.5.

Summary of ASTM D143 test results:

Janka Hardness - 1574lbf

MOR (psi) - Bending Strength 12,152 psi

MOE (psi) - Bending Stiffness 1,746,840 psi

Average density: 650kg/m³ (41 lbs./ft³ similar to Teak or Red Oak)

Dimensionally stable: Small movement (BRE Digest No34 method). Average tangential change in dimension of 1.22% and average radial change of 0.8% when first conditioned at 90%RH at 20°C followed by conditioning at 60%RH at 20°C.

VISUAL GRADE

The following may be present:

Small knots

5mm or less (no limit on numbers).

Resin pockets

10mm wide, 50mm long totally encased within timber (less than 50mm board thickness) and 10mm wide, 100mm long totally encased within timber (board thickness greater than 50mm).

Intergrown knot

Tight and totally encased maximum 15mm (in board thickness greater than 50mm only).

Resin streaks

Three, maximum width 7mm, 100mm in length.

Surface checking

At the time of delivery, surface checking may be evident at certain times of the year.

End splits

Not to exceed 150mm in length.

Distortion

See the distortion tables in our 'Visual Grade Specification 2019' brochure.

Wane

Up to 1/4 of board length, 8mm x 8mm for 25mm-50mm thick boards, up to 1/2 of board length, 10mm x 10mm for boards greater than 50mm in thickness.

LIGNIA is supplied FSC® certified, kiln-dried, with minimal visual defects, random grained (flat sawn).

LIGNIA[®]FIRE

Wood tested to endure

Product overview

LIGNIA Fire has all the attributes of standard LIGNIA, with the added benefit and safety of a built-in treatment that meets the flame spread requirement for building codes that require USA ASTM E 84 Flame Spread Rating of Class A. LIGNIA Fire is manufactured under a tightly controlled and monitored Factory Production Control Process. LIGNIA Wood Company operate an independently accredited ISO 9001 Quality Management System.

Like standard LIGNIA, LIGNIA Fire is also sourced from responsibly managed FSC-certified plantation forests, and is available in the following dimensions:

Thickness	Widths	Lengths
7/8" [22mm]	4" [100mm]	6'11"-19'8" [2.1m-6.0m]
	6" [150mm]	
	8" [200mm]	
4/4 [25mm]	4" [100mm]	
	5" [125mm]	
	6" [150mm]	
	8" [200mm]	

Applications

LIGNIA Fire can be used for internal and external application (subject to local building control).

- Decking
- Siding
- Windows and doors
- Interior flooring
- Interior wall paneling
- Facia
- Soffits
- Millwork

LIGNIA Fire meets Class A Flame Spread Rating as defined by ASTM E84-19:

- ASTM E84-19, Standard Test Method for Surface Burning Characteristics of Building Materials (NFPA 255, ANSI/UL 723 AND UBC 8-1).
- Material ID: LIGNIA Fire
- Flame Spread Index (FSI): 15
- Smoke Developed Index (SDI): 10

Test criteria

Classification	Flame Spread Index	Smoke Development Index
A	0-25	0-450
B	26-75	0-450
C	76-200	0-450