

INNOWOOD Physical Properties

PROPERTY	ATTRIBUTE/RESULT	STANDARD/REPORT	NOTES/COMMENTS
STRENGTH, MOISTURE and TEMPERATURE RELATED – Standard Formulation as tested to AS15303.3			
Modulus of Rupture (MoR)	30.78 - 32.2 MPa	AS/NZS 4266.5:2004	Ultimate strength at failure
Modulus of Elasticity (MoE)	1.527 - 2.102 GPa	AS/NZS 4266.5:2004	Proof elastic limit
Internal Bond Strength	1.36 MPa	AS/NZS 4266.6:2004	Internal bond strength normal to the face of the sample
Specific Density	825 – 830 kg/m ³	AS/NZS 4266.4:2004	At equilibrium moisture content: (EMC) - 23°C & 50% RH
Moisture Content	1.31%	AS/NZS 4266.3:2004	At equilibrium moisture content: (EMC) - 23°C & 50% RH
Moisture Absorption	0.54 % Mass Change	AS/NZS 4266.14:2004	Moisture absorption mass change is reversible. Mass change of material at 25°C & 85% RH / ~216 hrs.
Moisture Movement	$\delta = 4.4 \times 10^{-6}$ mm/mm/% R.H. Extrapolated Average	AS/NZS 4266.14:2004	Moisture movement is reversible. Final length calculated as follows: $L_f = L_i (1 + \Delta\delta \text{ R.H.})$
Surface Water Absorption	1.0435 g/m ² /hr Extrapolated Average	AS/NZS 4266.12:2003	Observed capillary moisture absorption similar.
Thermal Coefficient of Linear Expansion (α).	$A = \sim 6.0 \times 10^{-5}$ mm/mm/0C Estimated Average	REF AS 4459.8	Thermal linear movement is reversible
Impact Resistance	Mean failure height: 1330mm	ASTM D4495-12	Specimen thickness: 28.0mm Mass of the falling weight: 5Kg Diameter of the falling weight: 63.5mm
	Mean failure energy: 59J		
Static Coefficients of friction	0.57	ASTM D2394-05 (2011) Section 33~37	Specimen: 625*145*28.10mm, Testing Speed: 1.27mm/min
Sliding Coefficients of friction	0.36		Specimen: 625*145*28.10mm, Testing Speed: 51mm/min
Abrasion Resistance	Weight loss: 108mg	ASTM D4060-10	Wheel: CS-10, Load: 1000g/wheel (total 2000g), Cycles: 1000
INNOWOOD is an extruded product and the grain direction of the waste-wood fibres and the polymers are typically along the direction of the product profile. The characteristic flexural strength attributes are tested along the length of the product profiles.			

INNOWOOD Physical Properties

INNOWOOD products can tolerate a temperature range from -20°C to +65°C, if the product is to be used for any temperature outside the mentioned range or within a 1.2m radius of a reflective surface that reflects sunlight onto the board that increases the boards temperature beyond +65°C, then please consult INNOWOOD for special installation requirements.

PROPERTY	ATTRIBUTE/RESULT	STANDARD/REPORT	NOTES/COMMENTS
FIRE RELATED			
Early Fire Hazard Indices <ul style="list-style-type: none"> • Ignitability Index • Spread of Flame Index • Heat Evolved Index • Smoke Developed Index 	11[0 – 20] 0 [0 – 10] 0 [0 – 10] 6 [0 – 10]	AS/NZS 1530.3 CSIRO Report FNE11482	Standard Composition Self-extinguishing with little support for spread of flame or further combustion. Suitable for most applications under BCA classifications – 1, 2, 3, 5, 6, 8 or 9b (Subject to individual application).
Fire Hazard Property	Group 1 (By Request)	AS/NZS 3837 Specification A2.4 of BCA	Performance Composition Average Specific Extinction Area: 231.0 m ² /kg, Specification C1.10 section 4(c) of the BCA. <u>Specified Formulation</u>
Bushfire Attack Level (BAL rating)	Up to BAL-29 (By Request)	AS3959:2009 Construction of Buildings in Bushfire Prone Areas. Appendix F.	Performance Composition Meets the requirements as a bushfire-resisting timber and is deemed to be acceptable to withstand exposure up to BAL-29. <u>Specified Formulation</u>
DURABILITY RELATED – Standard Formulation as tested to AS15303.3			
UV Resistant Coating	UV Stable	ISO 105-A02 AWTA Report 7-5600004-NV	Continuous cyclic QUV test – 1000 hrs UV stable under normal environmental conditions Gloss Loss Nil - Colour change 4
Salt Water Emersion	No adverse effects	CSIRO-CMMT Report No. 228/R2	Suitable for marine intertidal zones and salt spray environments
High Humidity Environment	No adverse effects	CSIRO-CMMT Report No. 228/R2	Suitable for high humidity environments
Termite Resistance	Deemed termite resistant	CSIRO-FFP Report No; 996	Suitable for outside above-ground applications

INNOWOOD

Suite 15, 26-32 Pirrama Road Pyrmont NSW 2009

T + 61 (02) 9630 8388 F + 61 (02) 9630 8088

www.innowood.com



INNOWOOD Physical Properties

PROPERTY	ATTRIBUTE/RESULT	STANDARD/REPORT	NOTES/COMMENTS
ENVIRONMENT RELATED – Standard Formulation as tested to AS15303.3			
Volatile compound emissions	Deemed very low	CETC Report No; CV090305	Suitable for use in indoor environments
MISCELLANEOUS PROPERTIES – Standard Formulation as tested to AS15303.3			
Wet Slip Resistance	Class P5	AS/NZS 4586: 2013	Wet Pendulum Slip Resistance
Fastener Pull Out	91.85 N	AS 1649	Ring-shank nails and screws have an enhanced pull out force