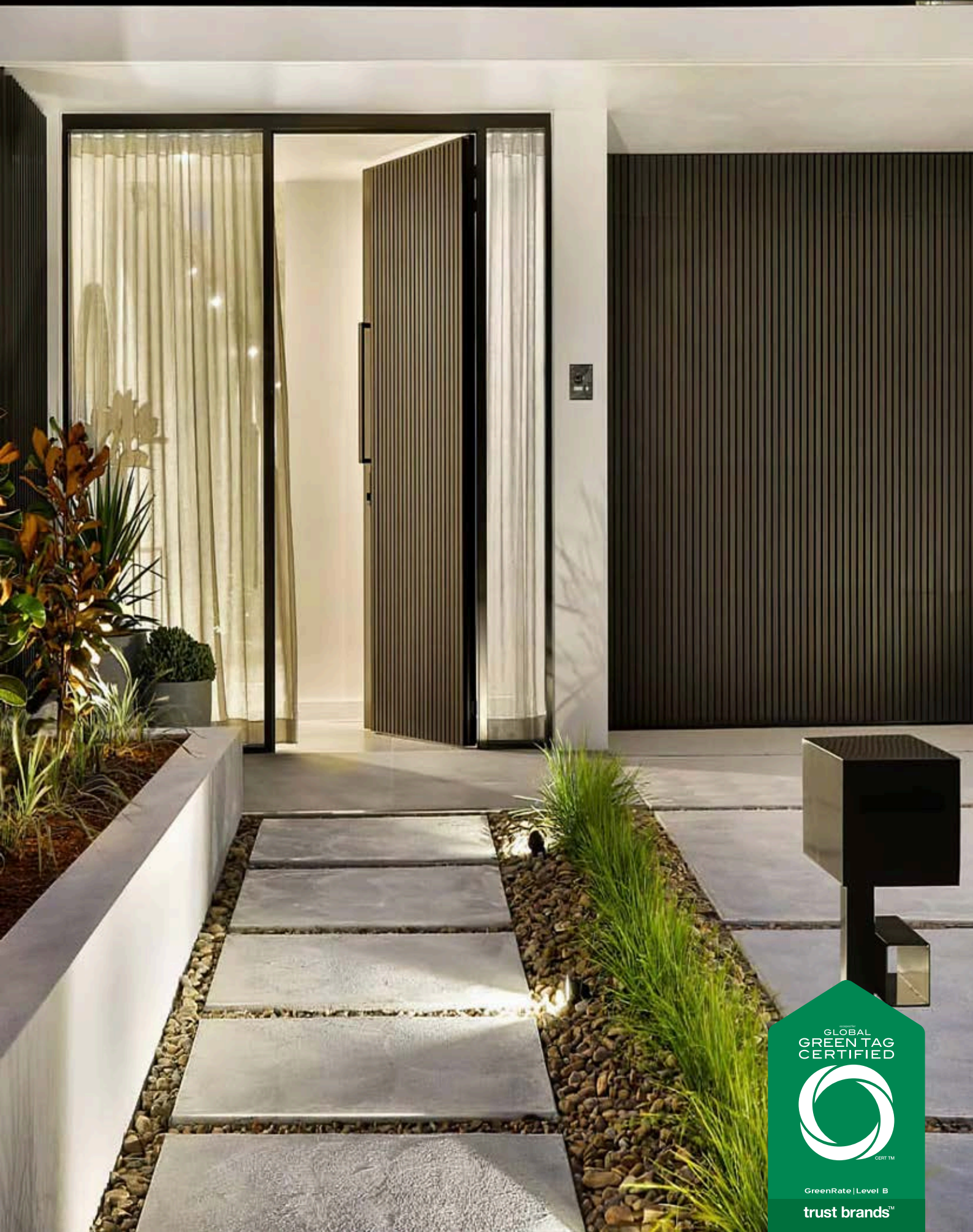
Biowood
Sustainably Reconstituted Timber

Castellated Profiles

PROPERTIES OUTLINE



Biowood is an architectural cladding, soffit, sectional or tilt garage and pivot door application that retains the natural look and feel of timber. It is low maintenance, Global Green Tag Certified, and time-tested in Australian & New Zealand conditions. Biowood is a great alternative for traditional timber or aluminum.

Features and Benefits:

- Biowood retains the natural architectural look and feel of timber.
- Biowood has a very low volatile compound emission rating – E1.
- Time-tested in Australia and New Zealand for both residential and commercial applications.
- Biowood is fully recyclable.
- Global Green Tag Certified – Level B.

Labour Efficient:

- Easy installation with concealed fixings.
- Lightweight construction for easy installation.
- Negative detailing to achieve a seamless finish.
- Long set lengths.

Durable:

- Biowood uses Baltic pine which is sourced from Germany and has a density of 0.85.
- Water, flame, mould, mildew, fungal, and termite resistant.
- Biowood will not splinter or crack and has less than 0.05% water absorption. Biowood is temperature-driven, not moisture-driven.
- Suitable for use near marine, chlorinated pools, intertidal, and salt spray environments.
- UV stable under normal environmental conditions, even in full sun – when coated with Bioseal water-based coating.

Low Maintenance:

- When coated with our recommended Bioseal UV Seal, Biowood will last 3 times longer than normal UV sealed woods (with a 6 to 12-month upkeep).
- Biowood is expected to have a 5% colour reduction within 3 to 5 years of northern exposure.
- Biowood can be rejuvenated by resanding and recoating when required. Biowood's colour and timber textures are homogenous.

15 Year Warranty:

- Serviceable 15 years limited warranty – Biowood will perform for the serviceable life of the building when installed in accordance to Biowood specifications.

Accelerated aging resistance test colour stability: Colour stability has been tested in compliance with accelerated weathering tests by AWTA Nata certified Test Laboratory (ISO 105/A02); the result of the test is expressed by assigning a numerical value to colour variation according to the international greyscale, which is a useful method to measure colors differences. PURPOSE OF THE TEST: Resistance to accelerated aging on Biowood profiles according to AWTA Nata certified (ISO 105/A02)

Test method: The equipment used is Standard for Accelerated Exposure of Automotive Exterior Materials Using a Controlled Irradiance Xenon-Arc Apparatus.

Profiles

Biowood Castellated Board – WPO18035
180 x 35 x 5850 mm – 180mm actual cover
Weight: 10.20 kg/m^2

Biowood Castellated Board – WPO18025A
180 x 25 x 5850 mm – 180mm actual cover
Weight: 9.00 kg/m^2

Biowood Castellated Board – WPO25028
250 x 28 x 5850 mm – 250mm actual cover
Weight 6.01 kg/m^2

Biowood Castellated Board – WPO30060
300 x 50 x 5850 mm – 300mm actual cover
Weight: 14.81 kg/m^2

These values shown are indicative and not binding. Nata Certified test reports available upon request. The product is protected by a warranty in line with legal requirements. For more information visit www.grmaustralia.com.au

Material Features

Density (kg/m^3), average	ASTM D2395:2007a	1178 kg/m^3
Shore D Hardness, median	ASTM D2240:2000	68
Water Absorption after 2 hours Water Absorption after 24 hours	ASTM D1037:2006a, Section 23, Method A	+ 0.08% + 0.47%
Nail Pull Resistance (N), average	ASTM D1037:2006a, Section 14	276 N
Maximum Tensile Strength (MPa), average Modulus of Elasticity (MPa), average Elongation at Break (%), average	ASTM D638:2003	6.1 MPa 1110 MPa 1.2
Flexural Strength (MPa), average Modulus of Elasticity (MPa), average	ASTM D6109:2005	23.6 2251
Maximum Compressive Strength (MPa), average	ASTM D695:2002a	193
Coefficient of Thermal Expansion – α1 (40 to 70°C), µm/m°C Coefficient of Thermal Expansion – α1 (95 to 105°C), µm/m°C	ASTM E831:2000	53.7 81.4
Vicat Softening Temperature °C	ASTM D1525:2009	84
Linear Coefficient of Thermal Expansion µm/m°C	ASTM D6341:2016	27.7
Static Water Penetration NCC 2019 Amendment 1 FV1.1c)i)B) NCC 2019 Amendment 1V2.2.1 c)i)C) Vipac Engineers & Scientists Limited	Test Pressure FP1.4 & 4284 +455pa	Complies
Cyclic Water Penetration NCC 2019 Amendment 1 FV1.1c)i)B) NCC 2019 Amendment 1V2.2.1 c)i)C) Vipac Engineers & Scientists Limited	Test Pressure FP1.4 & 4284 208a-455Pa, 303Pa – 606Pa 455Pa-910Pa	Complies
Biowood Classique Group Rating	AS/NZS 3837:1998 In accordance with Specification C1.10 Section 4 of the BCA	Group 3
Average specific extinction area	AS/NZS 3837:1998 In accordance with Specification C1.10 Section 4 of the BCA	231 m^3/kg
Biowood Premium Range BAL-29 Rated	25-kWm/^{2} irradiance in accordance with with AS/NZS 3837:1998	Up to BAL-29 condition as specified in AS 3959:2009 Construction of Buildings in bushfire-prone area Appendix F.
TUV Fire Test	BS 476: Part 6:1997	10.7
Ignitability, flame propagation, and smoke release	AS/NZS 1530.3:1999	Ignitability (0-20) = 13 heart release Spread of Flame (0-10) = 0 Heat Evolved (0-10) = 1 Smoke Developed (0-10) = 7
Anti-Fungus Test	ASTM Designation: G21-15	0 (No growth)
Asbestos Test	TUV (NIOSH) 9002 Asbestos (bulk) by Polarized Light Microscopy	No Asbestos fibers
Formaldehyde Emission	EN 717-2:1994 Determination of Formaldehyde Release – Part 2	0.03 mg/m^2/hour (Formaldehyde)
Formaldehyde Emission	ASTM D5116	<0.01 mg/m^2/hour (VOC)
AWTA Accelerated Weather Report	18-002698 ISO 105-A02 Where 5 = No Change 1 = Severe Change @ 1000 hours	4-5

Castellated Colours & Finishes

Brushed UV Sealed (Indoor & Outdoor Application)

Classique Range: Profile WPO18035, WPO18025A, WPO25028 & WPO30060

Spotted Gum – Bioseal UV Seal Brown

Natural Oak – Bioseal UV Seal Clear

Weatherwood – Bioseal UV Seal Clear

Black Japan – Bioseal UV Seal Black

Western Red Cedar – Bioseal UV Seal Clear

American Walnut – Bioseal UV Seal Clear

Premium Range: Profile WPO18035, WPO18025A, WPO25028 & WPO30060

Charred Wood – Bioseal UV Seal Monument

Deep Walnut – Bioseal UV Seal Brown

Lexicon White – Bioseal UV Seal

Two Tone (Black/White Rebates) Prime Range: Profile WPO18035 & WPO30060

Spotted Gum with Black Rebate – Bioseal UV Brown – WPO18035

Natural Oak with White Rebate Bioseal UV Seal Clear – WPO18035

Natural Oak with Black Rebate – Bioseal UV Seal Clear – WPO30060

Colors and textures shown are purely indicative. Please check our real samples for approval. Biowood is classified as natural product. Considering the presence of natural wood fibers, colors and grain variation is to be expected from batch to batch.

Biowood
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