

TECHNICAL DATA SHEET | TERRITORY™

Cemintel Territory™ panels are cement bonded fibrous wood particle cladding products that are pressed with surface texture and prefinished using a durable multi-layer paint process to achieve a range of textures, finishes and designs. The long horizontal edge of the panel is machined with a complementary tongue and groove profile and a compressible sealing strip is bonded onto the tongue which enables the panels to fit neatly together to form a weather resistant joint.

Cemintel Territory panels are manufactured to the Industrial Standard JIS A 5422 (fibre reinforced cement sidings) and are classified as a Type A, Grade 2 (fibre cement) sheet in accordance with ASTM C1186.

APPLICATIONS	
	Result
Applications	Façades & Cladding, Internal Linings
Type of Building Structure	Residential Housing Buildings within the scope of AS4055, Commercial & Other
Wet Areas	No

PANEL – DIMENSIONAL & GEOMETRICAL CHARACTERISTICS			
DIMENSIONAL/ GEOMETRICAL CHARACTERISTIC	SPECIFICATION	MANUFACTURING TOLERANCE	RELEVANT STANDARD
Panel Width	455 mm (effective cover) 470 mm (overall width)	+/- 1 mm	JIS A 5422
Panel Length	3030 mm	+/- 1 mm	JIS A 5422
Panel Thickness	16 mm	+/- 1.2 mm	JIS A 5422
Profile	Tongue & Groove		
Perpendicularity/Squareness of Edges			
Weight (typical)	17.9 - 21.8 kg/m ² Based on dry weight. 24.6 kg to 30 kg per sheet (or 17.9 to 21.8 kg per m ²) depending on sheet design (NB 2 x panels per pack)		
Layout Options	Horizontal, Vertical (NB not all panels have matching preformed vertical corners – check Design and Installation Guide for details)		
Jointing	Concealed		

PANEL – OTHER DURABILITY/WEATHER RESISTANCE INDICATORS			
TEST	RESULT	RELEVANT STANDARD	
Heat Rain	PASSED (25 Cycles)	ASTM C 1186	
Freeze Thaw	PASSED (50 Cycles)	ASTM C 1186	
Warm Water Resistance	PASSED (56 Days)	ASTM C 1186	
Soak Dry	PASSED (50 cycles)	EN 12467	

PANEL STRENGTH & MOISTURE RELATED PROPERTIES

PHYSICAL PROPERTY	RESULT	RELEVANT STANDARD
Modulus of Rupture (Wet)	>7 MPa	ASTM C 1186
Modulus of Elasticity (Wet)	2.2 to 3.35 GPa	EN 12467
Density (Oven Dry)	1191 kg/m ³ (Average)	ASTM C 1186
Water Vapor Diffusion		
Water Tightness (24hrs)	No water droplet	ASTM C 1186
Water Absorption (Saturated – 48hrs)	13.9% (Average)	ASTM C 1186
Moisture Content (EMC)	7-9%	ASTM C 1186
Moisture Movement	0.07% (Average)	ASTM C 1186

NB: The above test results relate to coated panels unless otherwise specified (ie edges are sealed for testing to reflect the characteristic of sheets as delivered & in accordance with installation instructions) In-house testing as per ASTM C 1186.

PANEL – FIRE RESISTANCE, THERMAL & ACOUSTIC PROPERTIES

CHARACTERISTIC	RESULTS	RELEVANT STANDARD
Fire Resistance		
Combustibility	Suitable for use in applications where non-combustible materials are specified by the Deemed to Satisfy Provisions of the 2016 BCA Vol 1 Amendment 1 Clause C1.9 (2015 BCA Vol Clause C1.12)	
Fire Hazard Properties	Group 1 Av Specific Extinction Area <250	AS 5637.1
Classification	1	AS/NZ 3837
Thermal Conductivity		
Thermal Conductivity (λ-Factor)	0.26 W/mk (average)	JIS A 1412
Thermal Expansion Co-efficient		N/A
Acoustic Value		
Sound reduction (depends on construction)	N/A	N/A

SYSTEM SOLUTIONS

CHARACTERISTIC	RESULTS	RELEVANT STANDARD
Within Scope of AS4055?	Yes	
Wind Loading – Residential housing buildings within the scope of AS4055	N1, N2, N3, N4, N5 (horizontal), N6 (horizontal), C1, C2, C3 (horizontal), C4 (horizontal steel frame only)	
Weatherproofing	When installed horizontally - has passed testing at a serviceability wind pressure of +3.72 kPa and -3.72 kPa, and an ultimate wind pressure of +6 kPa and -6 kPa. When installed vertically - has passed testing at a serviceability wind pressure of +1.6 kPa and -2.2 kPa, and an ultimate wind pressure of +2.6 kPa and -3.3 kPa.	AS 4284
Cyclonic Conditions	Horizontal installation/ tested which passed at 4.5 kPa (using long clip) and 2.7 kPa (using short clip).	AS 4040.3
Fire Resistance Limits (FRLs)	Up to 90/90/90	Refer to Gyprock® The Red Book™
Bushfire Construction	BAL 40 (Construction for Bushfire Attack Level 40 for an external wall)	AS 1530.8.1
Acoustic	Acoustic solutions of up to RW/RW+CTR 52/43 are detailed	Refer to Gyprock® The Red Book™
Thermal	Thermal solutions of up to RT(sum)/RT(win) 2.8/3 are detailed	Refer to Gyprock® The Red Book™

PANEL – FINISH CHARACTERISTICS				
CHARACTERISTIC	RESULTS	RELEVANT STANDARD		
Finish	Prefinished			
Coating Type	Nichiguard Coating – applied to all panels with the exception of Savanna Mist and Savanna Shade. Provides an anti-staining, self cleaning function. Silica particles in the coating attract water from the atmosphere to form a thin molecular film, so that airborne contaminants do not reach the panel surface itself. Rain water that runs down the wall washes contaminants away. (Platinum Coating)			
Colour Bodied	No			
Paint Type	Silicon Acrylic Emulsion			
UV Resistance	N/A	N/A		
Formaldehyde Emission Rate	Meets Green Building Council Office Design IEQ-14 Requirements for <0.1 mg/m ² /hr* *Refers to results obtained for Woodlands Teak	ASTM D5116		
VOC Emission Rate	Meets Green Building Council Office Design IEQ-14 Requirements for <0.5 mg/m ² /hr* *Refers to results obtained for Woodlands Teak	ASTM D5116		
SPECTRAL REFLECTIVITY VALUES	SOLAR REFLECTANCE %	SOLAR ABSORPTION %	BASIX COLOUR	RELEVANT STANDARD
WOODLANDS Teak	17.2	82.8 ±0.5	Dark	ASTME 903
WOODLANDS Smoked	8.5	91.5 ±0.3	Dark	ASTME 903
WOODLANDS Limed	51.5	48.5 ±1.5	Light/Medium	ASTME 903
WOODLANDS Ebony	7.7	92.3 ±0.6	Dark	ASTME 903
WOODLANDS Birch	39.5	60.5 ±1.2	Medium	ASTME 903
WOODLANDS Grey Gum	23.0	77.0 ±0.7	Dark	ASTME 903
WOODLANDS Kwilla Slats	8.1	91.9 ±0.2	Dark	ASTME 903
RIDGE Black	5.1	94.9 ±0.2	Dark	ASTME 903
RIDGE White	52.9	47.1 ±1.6	Light/Medium	ASTME 903
QUARRY Urban Grey	36.7	63.3 ±1.9	Medium	ASTME 903
QUARRY Concrete	35.6	64.4 ±1.1	Medium	ASTME 903
BRICK Red Rustic	27.4	72.6 ±0.8	Dark	ASTME 903
BRICK Grey Rustic	17.1	82.9 ±0.5	Dark	ASTME 903
BRICK White Rustic	52.6	47.4 ±1.6	Light/Medium	ASTME 903
BRICK Black Modern	9.5	90.4 ±0.3	Dark	ASTME 903

FIXING

CHARACTERISTIC	RESULTS
Maximum Span (Stud Spacing)	Up to 600mm
Direct Fix	
Nail to Timber Frame	No
Screw to Timber Frame	No
Screw to Steel Frame	No
Cavity Fix	
Timber Frame	Yes
Steel Frame	Yes
Masonry Frame	Yes
Exposed Fasteners	
Screw	Yes (limited)
Rivet	No
Nail	Yes (limited)
Concealed Fasteners	
Clip	Yes
Countersunk Screw/Nail	No
Adhesive, Split Batten, etc.	No
Hidden by Overlapping Panel	No
Flush Jointed (Taped)	No

WARRANTY

10 YEARS