

CEMINTEL[®]

BARESTONE

NEW ZEALAND TECHNICAL DATA SHEET

PANEL DESCRIPTION / COMPOSITION

CEMINTEL BARESTONE™ PANELS ARE PREFINISHED, SQUARE EDGED, COMPRESSED FIBRE CEMENT PANELS (CFC) CONSISTING PRIMARILY OF PORTLAND CEMENT, CELLULOSE FIBRE, AIR AND WATER. THEY FEATURE CEMINSEAL WATER-BLOCKING TECHNOLOGY AND ARE FACTORY SANDED, READY FOR INSTALLATION WITH THE NV9 OMEGA RAIL SYSTEM.

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Cemintel Barestone panels are compressed to produce a dense 9mm thick panel that offers superior performance in terms of strength and durability, making Barestone an excellent choice for commercial applications subject to higher wind loads.

APPLICATIONS

	Result
Applications	Facades & Cladding, Internal Linings
Type of Building Structure	Residential Housing Buildings within the scope of NZS 3604, Commercial & Other to maximum ULS Wind Pressures of ± 7.0 kPa.
Wet Areas	No

PANEL – DIMENSIONAL & GEOMETRIC CHARACTERISTICS

Dimensions/Geometric Characteristic	Specification	Manufacturing Tolerance	Relevant Standard
Panel Width	1200mm	± 2.0 mm	
Panel Length	3000mm	± 2.0 mm	
Panel Thickness	9mm	$\pm 10\%$	
Profile	Square Edge		
Perpendicularity/Squareness of edges		1mm/m	
Weight (typical)	17.8 kg/m ² Based on dry weight		
Layout Options	Horizontal, Vertical, Angled, Curved (refer to State of Clad for custom solutions)		
Jointing	Expressed		

PANEL – STRENGTH & MOISTURE RELATED PROPERTIES

Physical Property	Result	Relevant Standard
Modulus of Rupture (Wet)	>18 Mpa	AS 2908.2
Modulus of Elasticity (Wet)	9-13 Gpa	AS 2908.2
Density (Oven Dry)	1625 kg/m ³ (typical value)	AS 2908.2
Water Vapor Diffusion	Not Required	
Water Tightness (24hrs)	No water droplet	AS 2908.2
Water absorption (Saturated – 48hrs)	18%	ASTM C 1186
Moisture Content (EMC)	7%	ASTM C 1186
Moisture Movement	0.04%	ASTM C 1186

Note: 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).

PANEL – OTHER DURABILITY/WEATHER RESISTANCE INDICATORS

Test	Result	Relevant Standard
Heat Rain	PASSED (25 Cycles)	AS 2908.2
Freeze Thaw	PASSED (50 Cycles)	AS 2908.2
Warm Water Resistance	PASSED (56 Days)	AS 2908.2
Soak Dry	PASSED (25 Cycles)	AS 2908.2

PANEL –FINISH CHARACTERISTICS

Characteristic	Result	Relevant Standard
Finish	Pre-finished	
Coating Type	Silane (Water Repellent)	
Colour Bodied	No – Barestone Original Yes – Barestone Colours	
Paint Type	N/A	
UV Resistance	N/A	
Formaldehyde Emission Rate	N/A	
VOC Emission Rate	N/A	

PANEL –SPECTRAL REFLECTIVITY VALUES

Panel Colour	Solar Reflectance %	Solar Absorption %	Relevant Standard
Barestone Original	39.8	60.2	ASTM E903-12
Barestone Ash	23.0	76.0	ASTM E903-12
Barestone Lunar	14.3	85.7	ASTM E903-12
Barestone Graphite	8.7	91.3	ASTM E903-12

PANEL –FIRE RESISTANCE, THERMAL & ACCOUSTIC PROPERTIES

Characteristic	Result	Relevant Standard
FIRE RESISTANCE		
Combustibility	Non-Combustible Type A Classification tested in accordance with Appendix C 7.1 of C/AS2. (Table C1.3 of C/AS2)	ISO 5660
Group Number Classification	1S	ISO 5660
THERMAL CONDUCTIVITY		
Thermal Conductivity (λ -Factor)	≈ 0.4108 W/mK	N/A
Thermal Expansion Co-efficient	0.005-0.01 mm/mK	N/A
ACOUSTIC VALUE		
Sound reduction (Depends on construction)	N/A	

SYSTEM SOLUTIONS

Characteristic	Result	Relevant Standard
Within Scope of NZS 3604?	YES	
Suitable for use in NZS 3604 Wind Zones	Low, Medium, High, Very High, Extra High (Also suitable for Specific Engineering Design areas subject to maximum wind pressures).	E2/VM1 and AS/NZS 4284
Weatherproofing	Has Passed testing at a serviceability wind pressure of ± 2.5 kPa and an ultimate wind pressure of ± 7.0 kPa	AS/NZS 4284
Fire Resistance Limits (FRLs)	Up to 180/180/180	Refer to Gib Fire Rated Wall Systems book (GBUW 30a, 30b, 60, 90, 120 or 180)

FIXING

Characteristic	Specification
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
Rivet	YES
Nail	NO
CONCEALED FASTENERS	
Clip	NO
Countersunk Screw/Nail	NO
Adhesive, Split Batten Etc	YES – Internal Installation Only
Hidden by Overlapping Panel	NO
Flush Jointed (Taped)	NO

WARRANTY**15 YEARS**

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