Surround™

PANEL DESCRIPTION / COMPOSITION

CEMINTEL SURROUND™ PANELS ARE PREFINISHED FIBRE CEMENT PANELS THAT ARE COLOURED THROUGHOUT WITH A TRANSPARENT COATING (MARL) OR OPAQUE COATING (BASE, STRING, LEATHER, METAL) WHICH RESULTS IN A MORE NATURAL APPEARANCE AND DEPTH OF COLOUR THAN CAN BE ACHIEVED WITH A STANDARD SURFACE PAINTED FINISH.

Consisting primarily of Portland Cement, wood pulp, reinforcement fibres, air and water, panels have undergone a longer, natural air curing process and offer superior performance in terms of strength, density and durability. Available in a range of colours, textures & finishes, these square edged panels are manufactured in Europe under EN 12467 (fibre cement flat sheets) and are classified as Category A (for weather resistance), Class 4 (mechanical properties).

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	1200mm	+/- 1.5mm	
Panel Length	3000mm	+/- 1.5mm	
Panel Thickness	8mm	+/- 0.8mm	
Profile	Square Edge		
Perpendicularity/squareness of edges		<1mm/m	
Weight (typical)	15.7kg/m2 Based on dry weight		
Layout Options	Horizontal, Vertical, Curved (refer to Designlink for custom solution)		
Jointing	Expressed		

Trimmed & Sealed. Lengths up to 3050mm are available as special orders.

PANEL - STRENGTH & MOISTURE RELATED PROPERTIES

Physical Property	Result	Relevant Standard
Modulus of Rupture (Wet)	> 18 Mpa	EN 12467
Modulus of Elasticity (Wet)	13 Gpa	EN 12467

Physical Property	Result	Relevant Standard
Density (Oven Dry)	1750Kg/m3 (typical value)	EN 12467
Water Vapor Diffusion	400	EN 12572
Water Tightness (24hrs)	No water droplet	EN 12467
Water Absorption (Saturated – 48hrs)	< 15% (typical value)	ASTM C 1186
Moisture Content (EMC)	< 8%	EN 12467
Moisture Movement	< 0.15%	EN 12467

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).

PANEL - OTHER DURABILITY/WEATHER RESISTANCE INDICATORS

Test	Result	Relevant Standard
Heat Rain	PASSED (50 Cycles)	EN 12467
Freeze Thaw	PASSED (100 Cycles)	EN 12467
Warm Water Resistance	PASSED (56 days)	EN12467
Soak Dry	PASSED (50 Cycles)	EN 12467

PANEL - FINISH CHARACTERISTICS

Characteristic	Result	Relevant Standard
Finish	Prefinished	
Coating Type	Polyacrylic	
Colour Bodied	Yes	
Paint Type		
UV Resistance	Colour Constancy to remain within 8.0 Delta E units compared to agreed prototype over 10 year warranty period	N/A
Formaldehyde Emission Rate		
VOC Emission Rate		

Spectral Reflectivity Values	Solar Reflectance %	Solar Absorption %	Basix Colour	Relevant Standard
Whiteish Whiteish Base	67.9	32.1 (+/-2.0)	Light	ASTM E903-12
Whiteish Whiteish String	67.9	32.1 (+/-2.0)	Light	ASTM E903-12
Whiteish Whiteish Leather	67.9	32.1 (+/-2.0)	Light	ASTM E903-12
Whiteish Whiteish Metal (Special Order*)				
Whiteish Whiteish Marl (Special Order*)				
Greyish Greyish Base	31.9	64.1 (+/-1.1)	Medium	ASTM E903-12

Greyish Greyish String	31.9	64.1 (+/- 1.1)	Medium	ASTM E903-12
Greyish Greyish Leather	31.9	64.1 (+/- 1.1)	Medium	ASTM E903-12
Greyish Greyish Metal (Special Order*)				
Greyish Greyish Marl (Special Order*)				
Greenish Greenish Base	19.6	80.4 (+/- 0.6)	Dark	ASTM E903-12
Greenish Greenish String	19.6	80.4 (+/- 0.6)	Dark	ASTM E903-12
Greenish Greenish Leather	19.6	80.4 (+/- 0.6)	Dark	ASTM E903-12
Greenish Greenish Metal (Special Order*)				
Greenish Greenish Marl (Special Order*)				
Blueish Blueish Base	21.5	78.5 (+/- 0.6)	Dark	ASTM E903-12
Blueish Blueish String	21.5	78.5 (+/- 0.6)	Dark	ASTM E903-12
Blueish Blueish Leather	21.5	78.5 (+/- 0.6)	Dark	ASTM E903-12
Blueish Blueish Metal (Special Order*)				
Blueish Blueish Marl (Special Order*)				
Blackish Blackish Base	16.1	83.9 (+/-0.5)	Dark	ASTM E903-12
Blackish Blackish String	16.1	83.9 (+/- 0.5)	Dark	ASTM E903-12
Blackish Blackish Leather	16.1	83.9 (+/- 0.5)	Dark	ASTM E903-12
Blackish Blackish Metal (Special Order*)				
Blackish Blackish Marl (Special Order*)				
Secondary Palette Mainland (Special Order*)	38.4	61.6 (+/- 1.2)	Medium	ASTM E903-12
Secondary Palette Volta (Special Order*)	45.6	54.4 (+/- 1.4)	Medium	ASTM E903-12
Secondary Palette Mete (Special Order*)	46.8	53.2 (+/- 1.4)	Medium	ASTM E903-12
Secondary Palette Husk (Special Order*)	41.5	58.5 (+/- 1.2)	Medium	ASTM E903-12
Secondary Palette Maya (Special Order*)	52.3	47.7 (+/- 1.6)	Light/Medium	ASTM E903-12
Secondary Palette Garb (Special Order*)	11.2	88.8 (+/- 0.6)	Dark	ASTM E903-12
Secondary Palette Greenback (Special Order*)	33.7	66.3 (+/- 1.0)	Medium	ASTM E903-12
Secondary Palette Truss Grey (Special Order*)	10.7	89.3 (+/- 0.6)	Dark	ASTM E903-12
Secondary Palette Gauze (Special Order*)	24.3	75.7 (+/- 0.7)	Dark	ASTM E903-12
Secondary Palette Whiteout (Special Order*)	72.1	27.9 (+/- 2.2)	Light	ASTM E903-12
Secondary Palette Hover (Special Order*)	7.8	92.2 (+/- 0.6)	Dark	ASTM E903-12
Secondary Palette Strike (Special Order*)	49.3	50.7 (+/- 1.5)	Medium	ASTM E903-12
Secondary Palette Aero (Special Order*)	33.0	67.0 (+/- 1.0)	Medium	ASTM E903-12
Secondary Palette Quinta (Special Order*)	42.0	58.0 (+/- 1.3)	Medium	ASTM E903-12
Secondary Palette Blackout (Special Order*)	6.6	93.4 (+/- 0.6)	Dark	ASTM E903-12

Secondary Palette Woodlot (Special Order*)	11.2	88.8 (+/- 0.6)	Dark	ASTM E903-12

PANEL - FIRE RESISTANCE, THERMAL & ACCOUSTIC PROPERTIES

Characteristic	Result	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)	≈ 0.5 – 1.0 W/mK	N/A
Thermal Expansion Co-efficient	0.01mm/mK	N/A
ACOUSTIC VALUE		
Sound reduction (depends on construction)	≈ 3 – 5 dB	EN 12467

SYSTEM SOLUTIONS

Characteristic	Result	Relevant Standard
Within Scope of AS4055?	Yes	
Wind Loading - Residential housing buildings within the scope of AS4055	N1, N2, N3, N4, N5, N6, C1, C2, C3, C4	
Weatherproofing	Has passed testing at a serviceability wind pressure of +2.5kPa and -2.7kPa and an ultimate wind pressure of +7kPa and -7kPa	AS 4284
Cyclonic Conditions	Has passed testing at 7kpa	AS 4040.3
Fire Resistance Limits (FRLs)	Up to 120/120/120 & -/180/180	Refer to Gyprock® The Red Book™
Bushfire Construction	BAL 29 (Construction for Bushfire Attack Level 29 for an external wall)	AS 3959-8
Acoustic	Acoustic solutions of up to RW/RW+CTR 56/47 are detailed	Refer to Gyprock® The Red Book™
Thermal	Thermal solutions of up to RT(sum)/RT(win) 3.5/3.8 are detailed	Refer to Gyprock® The Red Book™

FIXING

Characteristic

Characteristic	
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	No
Rivet	Yes
Nail	No
CONCEALED FASTENERS	
Clip	No
Countersunk Screw/Nail	No
Adhesive, Split Batten, etc.	No
Hidden by Overlapping Panel	No
Flush Jointed (Taped)	No

WARRANTY

10 YEARS

August 29, 2023