Fire Performance of Cemintel Surround™



C F M I N T E L

COMPLIANCE FOR NON-COMBUSTIBLE MATERIALS

SURROUND™ - AUGUST 2019

Cemintel® is an Australian company and part of the iconic CSR Building Products Pty Ltd, manufacturing and supplying cement panels and building systems used for external facades, internal linings, ceilings and flooring in commercial and residential applications.

The following information is provided in regards to Cemintel Surround™ and its non-combustible attributes:

- Cemintel Surround is made from cement, wood pulp, reinforced fibres, air and water.
- · Cemintel Surround is naturally air cured.
- Cemintel Surround is manufactured in Europe to EN12467 (Fibre-cement flat sheets) and has been tested in accordance with the standard characteristic type tests required by AS 2908.2 (Fibre-cement flat sheets) for Type A Category 5 classification
- Cemintel Surround may be used where non-combustible materials are required by the Building Code of Australia (BCA) and according to the National Construction Code (NCC) Volume 1 Section C1.9 and Volume 2 Section 3.7.1.2.
- · Cemintel fibre cement products have been assessed by Exova (WFRA 45759) in accordance with AS/NZS 3837 ('Method test for heat and smoke release for materials and products using an oxygen consumption calorimeter') and have been classified to conform to Group 1 (high and best result possible) with an average specific extinction area far lower than the permissible 250m²/kg, as referenced in specification C1.10 of the BCA.

For further information on Cemintel Surround, please refer to Compliance Certificate and Certificate of Physical Properties attached.

COMPLIANCE CERTIFICATE

SURROUND™ - AUGUST 2019

Surround panels are manufactured in Europe and have been tested to the following characteristic type tests in accordance with the standard:

- Bending Strength
- Water Permeability
- Frost Resistance (Freeze Thaw test)
- Warm Water
- Heat Rain

- Soak Dry
- Dimensional and Geometrical

Characteristics

Apparent Density

Detailed Technical Specifications for Surround panels can be downloaded at www.cemintel.com.au/technical/technical-data-sheets/

CERTIFICATE OF PHYSICAL PROPERTIES

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PANEL - STRENGTH & MOISTURE RELATED PROPERTIES			
Physical Property	Result	Relevant Standard	
Modulus of Rupture (Wet)	> 18 Mpa	EN12467	
Modulus of Elasticity (Wet)	9-13 Gpa	EN12467	
Density (Oven Dry)	1750 Kg/m³	EN12467	
Water Vapor Diffusion	Not required	Not required	
Water Tightness (24hrs)	No water droplet	EN12467	
Water Absorption (Saturated - 48hrs)	18 Wt%	ASTM C 1186	
Moisture Content (EMC)	7 Wt%	ASTM C 1186	
Moisture Movement	0.04%	ASTM C 1186	

CERTIFICATE OF PHYSICAL PROPERTIES

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PANEL - OTHER DURABILITY/WEATHER RESISTANCE INDICATORS			
Test	Result	Relevant Standard	
Heat Rain	PASSED (25 Cycles)	EN12467	
Freeze Thaw	PASSED (50 Cycles)	EN12467	
Warm Water Resistance	PASSED (56 days)	EN12467	
Soak Dry	PASSED (25 Cycles)	EN12467	

PANEL - FIRE RESISTANCE, THERMAL & ACOUSTIC PROPERTIES				
Characteristic	Result	Relevant Standard		
FIRE RESISTANCE				
Combustibility	Assessed as suitable for use in applications where non-combustible materials are specified by the Deemed to Satisfy Provisions.			
Group Number	1	AS/NZ 3837		
Average Specific Extinction Area	<250	AS/NZ 3837		
E.F.H.I	Ignitability index = 0 Flame spread index = 0 Heat evolved index = 0 Smoke developed = 2-3	AS/NZS 1530.3		
THERMAL CONDUCTIVITY				
Thermal Conductivity (λ-Factor)	0.5 - 1.0W/mK			
Thermal Expansion Co-efficient	0.01mm/mK	N/A		

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