

PANEL DESCRIPTION / COMPOSITION

## Cladding Sheet

### APPLICATIONS

	Result
Applications	Façades & Cladding, Eaves & Soffits
Type of Building Structure	Residential Housing Buildings within the scope of AS4055
Wet Areas	No

### PANEL - DIMENSIONAL & GEOMETRICAL CHARACTERISTICS

Dimensional/Geometrical Characteristic	Specification	Manufacturing Tolerance	Relevant Standard
Panel Dimensions	900mmW x 2400mmL x 6mmD 1200mmW x 1800mmL x 6mmD 1200mmW x 2400mmL x 6mmD 1200mm W x 2700mmL x 6mmD 1200mm W x 3000mmL x 6mmD 900mmW x 1800mmL x 4.5mmD 900mmW x 2400mmL x 4.5mmD 900mmW x 2700mmL x 4.5mmD 900mmW x 3000mmL x 4.5mmD 1200mmW x 1800mmL x 4.5mmD 1200mmW x 2400mmL x 4.5mmD 1200mmW x 2700mmL x 4.5mmD 1200mmW x 3000mmL x 4.5mmD	Width +0 -3 mm Length +0 -4 mm Thickness +0.5 -0 mm	
Profile	Square Edge		
Perpendicularity/squareness of edges	2mm/linear meter		

Weight (typical)	6mm = 10kg/m <sup>2</sup> , 4.5mm = 7.3kg/m <sup>2</sup>
Layout Options	Vertical
Jointing	Cover Strip

#### PANEL - STRENGTH & MOISTURE RELATED PROPERTIES

Physical Property	Result	Relevant Standard
Modulus of Rupture (Wet)	> 9 MPa	AS2908.2
Modulus of Elasticity (Wet)	3-5 GPa	AS2908.2
Density (Oven Dry)	1350 kg/m <sup>3</sup>	AS2908.2
Water Vapor Diffusion	Not Required	Not Required
Water Tightness (24hrs)	No water droplet	AS2908.2
Water Absorption (Saturated – 48hrs)	30 wt%	ASTM C 1186
Moisture Content (EMC)	7 Wt %	ASTM C 1186
Moisture Movement	0.06%	ASTM C 1186

#### PANEL - OTHER DURABILITY/WEATHER RESISTANCE INDICATORS

Test	Result	Relevant Standard
Heat Rain	PASSED (25 Cycles)	AS2908.2
Freeze Thaw	PASSED (50 Cycles)	AS2908.2
Warm Water Resistance	PASSED (56 days)	AS2908.2
Soak Dry	PASSED (25 Cycles)	AS2908.2

#### PANEL - FINISH CHARACTERISTICS

Characteristic	Result	Relevant Standard
Finish	Unprimed	
Coating Type		
Colour Bodied	No	
Paint Type		
UV Resistance	N/A	N/A
Formaldehyde Emission Rate	N/A	N/A
VOC Emission Rate	N/A	N/A

Spectral Reflectivity Values	Solar Reflectance %	Solar Absorption %	Basix Colour	Relevant Standard
Cladding Sheet				N/A

## PANEL - FIRE RESISTANCE, THERMAL & ACOUSTIC PROPERTIES

Characteristic	Result	Relevant Standard
<b>FIRE RESISTANCE</b>		
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/NZ 3837
Classification	1	AS/NZ 3837
Surface Burning Characteristics	Ignitability =0, Flame Propagation =0, Heat Release =0, Smoke Release=1	AS1530.3
<b>THERMAL CONDUCTIVITY</b>		
Thermal Conductivity ( $\lambda$ -Factor)	$\approx 0.2704$ W/m.K	
Thermal Expansion Co-efficient	0.005-0.01mm/mK	N/A
<b>ACOUSTIC VALUE</b>		
Sound reduction (depends on construction)	N/A	N/A

## SYSTEM SOLUTIONS

Characteristic	Result	Relevant Standard
Within Scope of AS4055?	Yes	
Wind Loading - Residential housing buildings within the scope of AS4055	N1, N2, N3, C1, C2, C3	
Weatherproofing	Suitable for all building classes as set out in the BCA (ie 1&10, 2-9)	N/A
Cyclonic Conditions	N/A	N/A

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) , BAL 40 (Eaves only)	AS 3959-8
Acoustic	Acoustic solution of up to RW/RW+CTR 53/44 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

Maximum Span (Stud Spacing)	Up to 600mm
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### DIRECT FIX

Nail to Timber Frame	Yes
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Screw to Timber Frame	Option for ceilings/eaves
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Screw to Steel Frame	No
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### INDIRECT FIX

Timber Frame	Yes
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Steel Frame	No
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Masonry Frame	No
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### EXPOSED FASTENERS

Screw	No
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Rivet	No
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Nail	No
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### CONCEALED FASTENERS

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