

PANEL DESCRIPTION / COMPOSITION

Commercial ExpressPanel®

APPLICATIONS

	Result
Applications	Façades & Cladding
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 Dimensions	900mmW x 1800mmL x 9mmD 900mmW x 2400mmL x 9mmD 900mmW x 3000mmL x 9mmD 1200mmW x 1800mmL x 9mmD 1200mmW x 2100mmL x 9mmD 1200mmW x 2400mmL x 9mmD 1200mmW x 2700mmL x 9mmD 1200mmW x 3000mmL x 9mmD	Width +0 -2 mm Length +0 -2 mm Thickness +0.45 -0 mm	
Profile	Square Edge		
Perpendicularity/squareness of edges	1mm/linear meter		
Weight (typical)	17.8kg/m ²		
Layout Options	Horizontal, Vertical, Diagonal/Al, Curved		
Jointing	Expressed		

PANEL - STRENGTH & MOISTURE RELATED PROPERTIES

Physical Property	Result	Relevant Standard
Modulus of Rupture (Wet)	>18MPa	AS2908.2
Modulus of Elasticity (Wet)	9-13GPa	AS2908.2
Density (Oven Dry)	1625 kg/m ³	AS2908.2
Water Vapor Diffusion	Not Required	Not Required
Water Tightness (24hrs)	No water droplet	AS2908.2
Water Absorption (Saturated – 48hrs)	18 wt%	ASTM C 1186
Moisture Content (EMC)	7 Wt %	ASTM C 1186
Moisture Movement	0.04%	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	Preprimed	
Coating Type	Sealer Type: Pigmented Sealer On Face	
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
Commercial ExpressPanel®				N/A

PANEL - FIRE RESISTANCE, THERMAL & ACOUSTIC 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/NZ 3837
Classification	1	AS/NZ 3837
Surface Burning Characteristics	Ignitability =0, Flame Propagation =0, Heat Release =0, Smoke Release=1	AS1530.3
THERMAL CONDUCTIVITY		
Thermal Conductivity (λ -Factor)	$\approx 0.4108 \text{ W/m.K.}$	
Thermal Expansion Co-efficient	0.005-0.01mm/mK	N/A
ACOUSTIC VALUE		
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, N4, N5, N6, C1, C2, C3, C4	
Weatherproofing	Passed weathertesting at serviceability pressure of 3kpa (ultimate 4.5kpa)	AS 4284
Cyclonic Conditions	Assessed to pass cyclonic testing at 6.4kpa (ultimate 7kpa)	AS 4040.3
Fire Resistance Limits (FRLs)	Up to 120/120/120 & -/180/180	Refer to Gyprock® The Red Book™
Bushfire Construction	BAL 40 (Construction for Bushfire Attack Level 40 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		
Maximum Span (Stud Spacing)		Up to 600mm
DIRECT FIX		
Nail to Timber Frame		No
Screw to Timber Frame		No
Screw to Steel Frame		No
INDIRECT FIX		
Timber Frame		Yes
Steel Frame		Yes
Masonry Frame		Yes
EXPOSED FASTENERS		
Screw		Yes
Rivet		Pending
Nail		No
CONCEALED FASTENERS		
Clip		No
Countersunk Screw/Nail		Yes
Adhesive, Split Batten, etc.		No
Hidden by Overlapping Panel		No
Flush Jointed (Taped)		No

WARRANTY	10 YEARS
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