

## PANEL DESCRIPTION / COMPOSITION

## Barestone™ - Internal

## APPLICATIONS

	Result
Applications	Internal Linings
Type of Building Structure	Residential Housing Buildings within the scope of AS4055, Commercial & Other
Wet Areas	No

## PANEL - DIMENSIONAL &amp; GEOMETRICAL CHARACTERISTICS

Dimensional/Geometrical Characteristic	Specification	Manufacturing Tolerance	Relevant Standard
Panel Width	1200mm	+0 -2 mm	
Panel Length	2400mm	+0 -2 mm	
Panel Thickness	9mm	+10% -0 mm	
Profile	Square Edge		
Perpendicularity/squareness of edges		1mm/linear meter	
Weight (typical)	17.8kg/m <sup>2</sup>		
Layout Options	Horizontal, Vertical		
Jointing	Expressed		

## PANEL - STRENGTH &amp; 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 <sup>3</sup>	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	Prefinished	
Coating Type	Coating Type: Silane (Stain Resistant) *Resistant to standard household markings, however must be cleaned off immediately to avoid permanent staining.	
Colour Bodied	No - Barestone Original Yes - Barestone Colours	
Paint Type		
UV Resistance	N/A	N/A
Formaldehyde Emission Rate	Meets Green Building Council Office Design IEQ-14 Requirements for <0.1mg/m2/hr	ASTM D5116
VOC Emission Rate	Meets Green Building Council Office Design IEQ-14 Requirements for <0.5mg/m2/hr	ASTM D5116

Spectral Reflectivity Values	Solar Reflectance %	Solar Absorption %	Basix Colour	Relevant Standard
Internal Original	39.8	60.2 +/- 1.2	Medium	ASTM E903-12
Internal Ash	23.9	76 +/- 0.7	Dark	ASTM E903-12
Internal Graphite	8.7	91.3 +/- 0.3	Dark	ASTM E903-12
Internal Lunar	14.3	85.7 +/- 0.4	Dark	ASTM E903-12

## PANEL - FIRE RESISTANCE, THERMAL & ACCOUSTIC 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 BCA Vol 1 Clause C1.9	
Fire Hazard Properties	Group Number 1 SMOGRARC <100 Standard AS5637.1	AS 5637.1
Classification		
<b>THERMAL CONDUCTIVITY</b>		

Characteristic	Result	Relevant Standard
Thermal Conductivity ( $\lambda$ -Factor)	$\approx 0.4108 \text{ W/m.K.}$	
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	N/A	
Weatherproofing	Assessed for serviceability loads to 2.5kPa	N/A
Cyclonic Conditions	Tested and assessed to 7.0 kPa	N/A
Fire Resistance Limits (FRLs)	N/A	N/A
Bushfire Construction	N/A	N/A
Acoustic	N/A	N/A
Thermal	N/A	N/A

## FIXING

Characteristic	
Maximum Span (Stud Spacing)	Up to 600mm
<b>DIRECT FIX</b>	
Nail to Timber Frame	No
Screw to Timber Frame	Yes
Screw to Steel Frame	Yes
<b>CAVITY FIX</b>	
Timber Frame	Yes
Steel Frame	Yes
Masonry Frame	Yes (refer to Designlink for custom solution)
<b>EXPOSED FASTENERS</b>	
Screw	Yes
Rivet	Yes
Nail	No

Characteristic

CONCEALED FASTENERS

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

WARRANTY 10 YEARS

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