



# Formica® Square Edge Doors & Panels

## Technical Data Sheet

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### Dimensional Tolerance

(Tested to ISO 4586-2)

ATTRIBUTE	MEASUREMENT
Thickness	± 0.6mm
Length and Width	± 0.5mm
Squareness	≤ 2mm (variation in diagonal measurement)
Flatness	1.5mm/m maximum deviation

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### Surface Quality

(Tested to ISO 4586-2)

ATTRIBUTE	MEASUREMENT
Inspection Guidelines	Viewing distance 0.75 to 1.5m from decorative surface Light intensity approximately 800 to 1000 lx at the decorative surface Using normal vision, corrected if necessary. No magnification devices
Dirt, Spots & Similar Surface Defects	The admissible size of defects is based on a maximum contamination area equivalent to 1.0mm <sup>2</sup> /m <sup>2</sup> and is proportional to the sheet size under inspection  The total admissible area of contamination may be concentrated in one spot or dispersed over an unlimited amount of smaller defects
Fibres, Hairs & Scratches	The admissible size of defects is based on a maximum contamination length equivalent to 10mm/m <sup>2</sup> and is proportional to the sheet size under inspection  The total admissible length of contamination may be concentrated in one defect or dispersed over an unlimited amount of smaller defects

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### Surface Performance

(Tested to AS/NZS 4266.2)

ATTRIBUTE	MEASUREMENT	
Resistance to Surface Abrasion	Printed patterns $\geq$ 40 cycles. Solid colours $\geq$ 300 cycles	
Resistance to Scratching	Gloss and Velvet finishes $\geq$ 2 Newton	Pearl and Grain finishes $\geq$ 4 Newton
Porosity	Appearance rating not worse than 3	
Resistance to Steam	Appearance rating not worse than 3 <i>Moderate swelling</i>	
Resistance to Cracking	No visible cracks or micro cracks	
Resistance to Staining	Rating $\leq$ 2 <i>Faint stain left on surface</i>	
Lightfastness ISO 4586-2	Contrast: Grey scale rating $\geq$ 4 <i>When tested in contrast with Blue wool 6 Ref: ISO 105-A02</i>	
Colour Variation ISO 105-A05	Surface material "batch to batch" colour variation of $\Delta E \leq$ 1	
Lightfastness	Contrast: Grey scale rating $\geq$ 4 <i>When tested in contrast with Blue wool 6 Ref: ISO 105-A02</i>	

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### Adhesion Performance

(Tested to AS/NZS 4266.1 & 4266.2)

ATTRIBUTE	MEASUREMENT
Bond Strength	$\geq$ 1.3 MPa

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### Substrate Performance

(Tested to AS/NZS 4266.1)

ATTRIBUTE	UNITS	MEASUREMENT			
		MINIMUM VALUES	TYPICAL VALUES#		
			VELVET & PEARL	GRAIN	GLOSS
Density	Kg/m <sup>3</sup>	0.50	720 ± 20	760 ± 20	805 ± 20
Internal bond	MPa	26	0.65 – 0.85	1.0 – 1.2	0.95 – 1.3
Modulus of Rupture	MPa	2000	34 – 39	42 – 45	44 – 47
Modulus of Elasticity	MPa	0.9	3000 – 3200	3300 – 3500	3300 – 3650
Surface Soundness	MPa	1000	1.1 – 1.3	1.3 – 1.6	1.4 – 1.7
Screw Holding, Face	Force N	900	1100 – 1400	1100 – 1400	1700 – 2000
Screw Holding, Edge	Force N	(Max) 9.0	1000 – 1300	1000 – 1300	1000 – 1300
Thickness Swell (24hr)	%	5.0 – 6.0	5.0 – 6.0	5.0 – 7.0	5.0 – 6.0
Wet Bending Strength (Method A)	MPa	5	5 – 7	6 – 8	6 – 8
Formaldehyde	mg/L		E0 ≤ 0.5	E0 ≤ 0.5	E0 ≤ 0.5

# Table contains representative values only. Performance variation outside stated typical value ranges does not constitute a product failure.

### Specialty Performance

ATTRIBUTE	TESTED TO	TYPICAL VALUES	
Fire Hazard Properties	Cone calorimeter AS/NZS 3837 (In accordance to AS5637.1)	Group Number	3
		Average Specific Extinction Area (ASEA)	18.2 m <sup>2</sup> /Kg

### Emissions & Environmental Performance

ATTRIBUTE	TESTED TO	UNITS	MEASUREMENT
Formaldehyde	AS/NZS 1859.2	mg/L	E0 ≤ 0.5
Volatile Organic Compounds (VOC's)	ASTM D5116	mg/m <sup>2</sup> /h	≤ 0.5

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### Important Information

NOTE	DETAILS															
<b>W</b> ONLY use for internal applications	Claims arising from non-internal applications are not protected under warranty															
<b>W</b> ONLY use for vertical applications	Claims arising from horizontal applications are not protected under warranty															
<b>W</b> CAUTION! - Darker colours will show fingerprints, scratches and superficial wear & tear more readily than lighter colours	Claims arising from fingerprints, scratches or superficial wear & tear directly attributable to the selection of a dark colour, are not covered under warranty															
<b>W</b> DO NOT expose to prolonged direct or indirect UV light	Claims arising from prolonged exposure to UV light (natural or artificial sources) resulting in shrinkage and/or colour changes beyond the tolerances stated in this document, are not protected under warranty															
<b>W</b> Use of different surface materials within a single installation may result in a perceived visual variation	Claims arising from colour, gloss or finish variation between different product groups, including products with different UV or aging stabilities, are not covered under warranty															
<b>W</b> ONLY use recommended hinge quantities	Claims arising from bow, warp or twisting due to too few hinges or inappropriate door sizes or weights, are not covered under warranty															
	<table><thead><tr><th>Door Height (mm)</th><th>Door Weight (Kg)</th><th>No. of Hinges</th></tr></thead><tbody><tr><td>≤ 900 mm</td><td>≤ 9 Kg</td><td>2</td></tr><tr><td>≤ 1600 mm</td><td>≤ 15 Kg</td><td>3</td></tr><tr><td>≤ 2000 mm</td><td>≤ 19 Kg</td><td>4</td></tr><tr><td>≤ 2400 mm</td><td>≤ 23 Kg</td><td>5</td></tr></tbody></table>	Door Height (mm)	Door Weight (Kg)	No. of Hinges	≤ 900 mm	≤ 9 Kg	2	≤ 1600 mm	≤ 15 Kg	3	≤ 2000 mm	≤ 19 Kg	4	≤ 2400 mm	≤ 23 Kg	5
Door Height (mm)	Door Weight (Kg)	No. of Hinges														
≤ 900 mm	≤ 9 Kg	2														
≤ 1600 mm	≤ 15 Kg	3														
≤ 2000 mm	≤ 19 Kg	4														
≤ 2400 mm	≤ 23 Kg	5														
<b>W</b> DO NOT use large door dimensions	Claims arising from bow, warp or twisting of doors greater than 600mm wide, are not covered under warranty  Claims arising from bow, warp or twisting of single piece doors greater than 1800mm high, are not covered under warranty. Pantry doors should use split door construction, where joinery brackets or connecting dowels can be used to join the two doors together															
<b>W</b> DO NOT modify or alter the door or panel	Claims arising from any alteration to the decorative face or panel that results in poor adhesion or general surface failure, are not covered under warranty															
<b>W</b> DO NOT leave edges unsealed	Claims arising from the effect of heat or moisture ingress attributable to exposed edges of panels, are not covered under warranty															
<b>W</b> DO NOT cut down panels	Claims arising from the effect of heat or moisture ingress attributable to exposed edges of cut down panels, are not covered under warranty															
<b>W</b> DO NOT use scribed wall panels with unsealed edges	Claims arising from the effect of heat or moisture ingress attributable to unsealed or poorly sealed scribed wall panel edges, are not covered under warranty															
<b>W</b> DO NOT apply a coating to the surface	Claims arising from surface defects or other failure modes directly attributable to the application of paint or other surface lacquering systems, are not covered under warranty															
<b>W</b> DO NOT use for high impact or high abrasion installations	Claims arising from high impact or high abrasion installations are not protected under warranty															

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### Important Information

NOTE	DETAILS
<b>W</b> DO NOT expose to heat, hot gases or moisture	Claims arising from frequent or excessive exposure to heat or moisture are not covered under warranty Claims arising from damage due to front venting oven installations without a heat deflector shield are not covered under warranty Claims arising from damage due to fugitive heat or moisture leaking from appliance seals are not covered under warranty Claims arising from the use of benchtop hot plates without exhaust fan activation or use of an ineffective extraction, are not covered under warranty Claims arising from damage due to hot objects, such as saucepans or irons, contacting the decorative surface, are not covered under warranty
<b>W</b> DO NOT expose to humidity fluctuations	Claims arising from bow, warp or twisting are not covered under warranty
<b>W</b> ONLY use recommended Care & Maintenance methods	Claims arising from staining or damage attributable to not following Care & Maintenance instructions, are not covered under warranty

**W** Denotes specific warranty conditions apply