



Decorated MR Particleboard

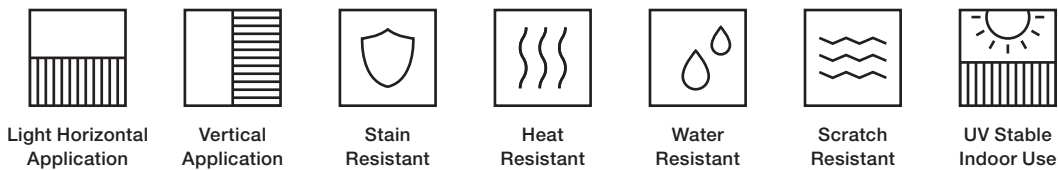
Technical Data Sheet

Formica® Decorated MR E1 Particleboard is bonded on both sides with a hardwearing melamine decorative surface suitable for wet area applications.

APPLICATIONS

- Cabinetry
- Cabinetry - Interiors & Panels
- Cabinetry - Doors & Drawers
- Shelving
- Wardrobes
- Wall Panels
- Desks & Tabletops

FUNCTIONAL BENEFITS



Product Characteristics

ATTRIBUTE	DESCRIPTION
Product Category	Low Pressure Melamine
Substrate Type	Moisture Resistant E1 Particleboard
Sheet Size (nominal)	2400mm x 1200mm Note: Black ONLY also available in: 2400mm x 1800mm, 3600mm x 1200mm & 3600mm x 1800mm
Thickness (nominal)	16mm
Weight (Kg/m2 approx.)	10.2
Finish	Velvet, Pearl
Colour/Pattern	To view the full range, please visit www.formica.com.au

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Dimensional Tolerance

(Tested to AS/NZS 4266.1)

ATTRIBUTE	MEASUREMENT
Thickness	±0.6mm
Length and Width	+5mm / -5mm maximum deviation
Squareness	2mm/m maximum deviation
Flatness	1.5mm/m maximum deviation (measured in horizontal)

Surface Quality

(Tested to AS/NZS 4266.2)

ATTRIBUTE	MEASUREMENT
Inspection Guidelines	Viewing distance 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 ² /m ² 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 ² 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

Surface Performance

(Tested to AS/NZS 4266.2)

ATTRIBUTE	MEASUREMENT
Resistance to Surface Abrasion	Printed patterns ≥ 40 cycles. Solid colours ≥ 300 cycles
Resistance to Scratching	Velvet finish ≥ 2 Newton. Pearl finish ≥ 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 ≤ 2 <i>Faint stain left on surface</i>
Lightfastness ISO 4586-2	Contrast: Grey scale rating ≥ 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 $\Delta E \leq 1$

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Adhesion Performance

(Tested to AS/NZS 4266.2)

ATTRIBUTE	MEASUREMENT
Bond Strength	≥ 1.3 MPa

Substrate Performance

(Tested to AS/NZS 4266.1)

ATTRIBUTE	UNITS	MEASUREMENT	
		MINIMUM VALUES	TYPICAL VALUES#
Density	Kg/m ³	-	640 ± 30
Internal bond	MPa	0.30	0.50 – 0.65
Modulus of Rupture	MPa	12	15 – 18
Modulus of Elasticity	MPa	1800	2700 - 3000
Surface Soundness	MPa	0.9	1.2 - 1.5
Screw Holding, Face	Force N	1000	1000 - 1200
Screw Holding, Edge	Force N	600	600 - 700
Thickness Swell (24hr)	%	(Max) 15.0	7.0 – 10.5
Wet Bending Strength (Method A)	MPa	4.5	4.5 – 5.0
Formaldehyde	mg/L	≤ 1.5	E1 ≤ 1.5

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

Specialty Performance

ATTRIBUTE	TESTED TO:	TYPICAL VALUES	
Fire Hazard Properties	AS/NZS 3837 (In accordance to AS5637.1)	Group Number	3
		Average Specific Extinction Area (ASEA)	19.8 m ² /Kg

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Emissions & Environmental Performance

ATTRIBUTE	TESTED TO:	UNITS	MEASUREMENT
Formaldehyde	AS/NZS 1859.1	mg/L	E1 ≤ 1.5
Volatile Organic Compounds (VOC's)	ASTM D5116	mg/m ³ /h	≤ 0.5

Important Information

NOTE	DETAILS															
W ONLY use for internal applications	Claims arising from non-internal applications are not covered under warranty															
W 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															
W 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															
W 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															
W Use of directional designs or finishes in opposing orientations may result in a perceived visual variation	Claims arising from colour, gloss or finish variation directly attributable to surface directionality, are not covered under warranty															
W ALL material must be inspected prior to commencing any fabrication activity	Claims arising from defects or variation clearly detectable prior to fabrication, will not be covered under warranty for labour costs or penalties															
W 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
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≤ 2000 mm	≤ 19 Kg	4														
≤ 2400 mm	≤ 23 Kg	5														
W 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															
W 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															
W 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															
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
W DO NOT use decorative face as a cutting surface	Claims arising from physical damage of the decorative surface are not covered under warranty
W 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
W 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