# Laminex<sup>®</sup> PureGrain<sup>®</sup> MR E0 MDF Technical Data Sheet

#### Summary

Laminex PureGrain® decorated MDF features a true-to-life painted woodgrain look through leading plate technology. The decorative surface comprises melamine resin technology suitable for vertical applications and is manufactured on a durable Moisture Resistant (MR) E0 Medium Density Fibreboard (MDF).

# Applications

- Doors
- Wall linings
- DrawersPanels
- Functional Benefits



Vertical

Application





Heat

Resistant



Tactile

Water

Resistant



UV Stable

Indoor Use



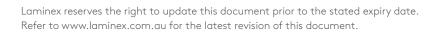


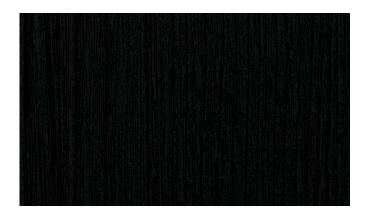
# **Product Characteristics**

Stain

Resistant

Attribute	Description			
Product Characteristics	Low Pressure Melamine	Low Pressure Melamine		
Substrate Type	Moisture Resistant E0 MDF			
Sheet Size (nominal)	2400mm x 1200mm			
Thickness (nominal)	16mm 18mm			
Weight (Kg/m2 approx.)	13.3 15.0			
Finish	PureGrain			
Colour/Pattern	To view the full range, please visit www.laminex.com.au			





#### **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 1.0mm²/m² 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		

#### **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	Gloss finish ≥ 2 Newton.	
Porosity	Appearance rating not worse than 3	
Resistance to Steam Appearance rating not worse than 3   Moderate swelling		
Resistance to Cracking	sistance to Cracking No visible cracks or micro cracks	
Resistance to Staining	Rating ≤ 2 Faint stain left on surface	
Lightfastness ISO 4586-2	Contrast: Grey scale rating ≥ 4 When tested in contrast with Blue wool 6 Ref: ISO 105-A02	
Colour Variation ISO 105-A05	Surface material "batch to batch" colour variation of $\Delta E \le 1$	

# Surface Adhesion Performance

(Tested to AS/NZS 4266.2)

Attribute	Measurement	
Bond Strength	≥ 1.3MPa	

Laminex reserves the right to update this document prior to the stated expiry date. Refer to www.laminex.com.au for the latest revision of this document.

#### Substrate Performance

(Tested to AS/NZS 4266.1)

Attribute		Measurement		
	Units	16mm & 18mm		
		Minimum Values	Typical Values#	
Density	Kg/m <sup>3</sup>	-	830 ± 20	
Internal bond	MPa	0.50	1.4 - 1.6	
Modulus of Rapture	MPa	26	42 - 48	
Modulus of Elasticity MPa 2000		2000	3500 - 3900	
Surface Soundness	MPa	0.9	1.3 – 1.9	
Screw Holding, Face	Force N	1500	1100 - 1400	
Screw Holding, Edge	Force N	900	1000 – 1300	
Thickness Swell (24hr)	kness Swell (24hr) % (Max) 9.0 4 - 5		4 - 5	
Wet Bending Strength (Method A)	MPa	5	8 - 11	
Formaldehyde	mg/L	≤ 0.5	E0 ≤ 0.5	

#### 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)	18.2 m²/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/m²/h	≤ 0.5

### Important Information

Not	3	Details			
W	ONLY use for internal applications	Claims arising from non-internal applications are not covered under warranty			
W	ONLY use for vertical applications	Claims arising from horizontal applications are not protected 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 be covered under warranty			
W	DO NOT allow the protective film to remain on the laminate surface for more than 9 months	Claims arising from film removal difficulties or residual glue on the surface of the laminate, directly attributable to the age of the protective film, are not covered under warranty			
		Claims arising from bow covered under warranty	, warp or twisting of doors grea	ter than 600mm wide, are not	
		Door Height (mm)	Door Weight (Kg)	No. of Hinges	
w	ONLY use recommended hinge quantities	≤ 900 mm	≤ 9 Kg	2	
	oner die recommended ninge quantities	≤ 1600 mm	≤ 15 Kg	3	
		≤ 2000 mm	≤ 19 Kg	4	
		≤ 2400 mm	≤ 23 Kg	5	
		Claims arising from the effect of heat or moisture ingress attributable to exposed edges of panels, are not covered under warranty			
W	DO NOT use large door dimensions	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 the 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 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			
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			
W	DO NOT use for high impact or high traffic installations	Claims arising from high impact or high traffic installations are not protected 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			
W	DO NOT expose to humidity fluctuations	Claims arising from bow, warp or twisting 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