trade essentials[®] **Ultracraft[™] MDF Panels** for thermoforming **Technical Data Sheet**

Summary

Trade Essentials Ultracraft Medium Density Fibreboard (MDF) Panels provide the high grade surface routing performance required for thermoformed doors & panels, while reducing the need for finishing processes, such as sanding, thereby increasing manufacturing efficiencies.

Applications

- Doors
- Wardrobes
- Panels
- Cabinetry
- Kitchens
- Bathrooms

Functional Benefits





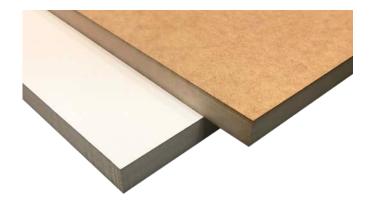


Product Characteristics

Attribute	Description
Product Category	Low Pressure Melamine (single sided)
Substrate Type	Moisture Resistant EO MDF
Sheet Size (nominal)	2400mm x 1200mm, 3600mm x 1200mm
Thickness (nominal)	18mm
Camber	6mm, 12mm
Weight (Kg/m ² approx.)	14.5
Finish	Natural
Colour/Pattern	To view the full range, please visit www.laminex.com.au

Surface Performance (Tested to AS/NZS 1859.3)

Attribute	Minimum Values	
Resistance to Surface Abrasion	Solid colours: Average wear ≥ 300 cycles	
Porosity	Rating ≤ 3	
Steam Resistance	Appearance rating not worse than 3 Moderate swelling	
Cracking Resistance	No visible cracks or micro cracks	
Stain Resistance	Rating ≤ 2 Faint stain left on surface	
Lightfastness (Tested to ISO 4586-2)	Contrast: Grey scale rating ≥ 4 When tested in contrast with Blue wool 6 ref: ISO 105-A02	



Substrate Performance (Tested to AS/NZS 1859.2)

Attribute	Units	Typical Values [#]	
		18mm	
Thickness Tolerance	mm	±0.3	
Density	Kg/m3	805 ± 20	
Internal Bond	MPa	1.25 – 1.4	
Modulus of Rupture	MPa	44.5 - 48	
Modulus of Elasticity	MPa	3300 - 3800	
Surface Soundness	MPa	1.6 - 1.9	
Screw Holding, Face	Force N	1100 - 1400	
Screw Holding, Edge	Force N	1000 - 1300	
Thickness Swell (24hr)	%	4 - 5	
Wet Bending Strength (Method A)	MPa	8 - 10	
Formaldehyde	mg/L	E0 ≤ 0.5	

* 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)	18.2 m²/Kg	

Emissions & Environmental Performance

Attribute	Tested to	Unit	Minimum Values
Formaldehyde	AS/NZS 1859.2	mg/L	EO ≤ 0.5
Volatile Organic Compounds (VOC)	ASTM D5116	mg/m²/h	≤ 0.05

Important Information

Note	Details			
W ONLY use for internal applications	Claims arising from non-internal a	applications are not covered under	warranty	
• ONLY use for vertical applications	Claims arising from horizontal applications are not covered under warranty			
DO NOT expose to prolonged direct or indirect UV light	Claims arising from prolonged exposure to UV light (natural or artificial sources) resulting in colour changes beyond the tolerances stated in this document, are not covered under warranty			
DO NOT use in high impact or high surface durability installations	Claims arising from high impact or high surface durability applications are not covered under warranty			
	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			
DO NOT allow heat, hot gases or moisture to contact doors or panels	Claims arising from damage due covered under warranty	e to fugitive heat or moisture leakin	g from appliance seals are not	
	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			
DO NOT expose to humidity fluctuations	Claims arising from bow, warp or twisting are not covered by warranty			
	Claims arising from surface imperfections attributable to painting or other non-thermoforming applications, are not covered under warranty			
• ONLY use Ultracraft single sided panels for thermoforming	Claims arising from the use of alternative substrate materials for thermoforming applications, are not covered under warranty			
ONLY use storage and stock control methods that protect against	Claims arising from panel bow tolerances outside the manufacturing guidelines of ±3mm, are not covered under warranty			
environmental effects or aging products	Claims arising from the loss of balancing bow due to prolonged flat storage and or environmental conditions, are not covered under warranty			
DO NOT trench rout deeper than 6mm into the panel face	Claims arising from surface imperfections or panel bow attributable to trench rout depths more than 6mm, are not covered by warranty			
DO NOT remove 30% or more of total panel volume	Claims arising from pocket routed door designs of dimensions that result in 30% or more of the total panel volume being removed, are not covered under warranty			
DO NOT use pocket routed door designs with a frame width less than 60mm	Claims arising from surface imperfections or panel bow attributable to frame widths less than 60mm, are not covered by warranty			
	Claims arising from bow, warp or twisting due to too few hinges or inappropriate door sizes or weights, are not covered under warranty			
	Door Height (mm)	Door Weight (Kg)	No. of Hinges	
W ONLY use recommended hinge quantities	≤ 900 mm	≤ 9 Kg	2	
	≤ 1600 mm	≤ 15 Kg	3	
	≤ 2000 mm	≤ 19 Kg	4	
	≤ 2400 mm	≤ 23 Kg	5	
ONLY use large one-piece pocket routed door and panel designs with a central rail or split door configuration	Claims arising from bowing, twisting or warpage due to a lack of structural design integrity or the omission of either a central rail or split door construction, are not covered under warranty			
DO NOT cut door or panel designs counter to the functional direction of the induced bow	Claims arising from bowing, twisting or warpage due to cutting pattern configurations opposed to induced bow directionality, are not covered under warranty			
W DO NOT install converted components with unsealed edges	Claims arising from the effect of heat or moisture ingress attributable to unsealed or poorly sealed edges, are not covered under warranty			

W Denotes specific warranty conditions apply