

Technical Data Sheet for Melamine Laminated MDF Boards

I. Physical Properties of Raw MDF

Properties	Test Method	Unit	Nominal Thickness (mm)			
			> 4-6	> 6-9	> 9-12	> 12-19
Average Density	EN 323	Kg/m ³ (+/-5%)	790	760-790	740-760	710-740
Moisture Content	EN 322	%	4.0-11.0			
Thickness Tolerance	EN 324-1	mm	+/- 0.2			
Length & Width tolerance	EN 324-1	mm	+/-2.0mm/m , Maximum +/-5.0mm			
Squareness Tolerance	EN 324-2	mm	2.0mm/m			
Edge Straightness	EN 324-2	mm	1.5mm/m			
Thickness swelling(24Hrs)	EN 317	%	18	12	10	8
Internal Bond (Dry test)	EN 319	N/mm ²	1.2	1.0	1.0	0.9
Modulus of Rupture	EN 310	N/mm ²	32	30	28	26
Modulus of Elasticity	EN 310	N/mm ²	2800	2800	2500	2500
Surface Absorption	EN 382-1	mm	150mm (Both sides)			

Data: Advance Fiber Co Ltd, Thailand

II. Formaldehyde Release Test - E1 Grade

Test	Test Method	Unit	Result
Formaldehyde release	BS EN 717-1:2004	mg/kg	<0.05 (means Not Detected)
		mg/m ³	<0.005 (means Not Detected)

Data: Independent Laboratory, UAE

III. Tests on Melamine Laminated MDF board surface

Characteristics	Test Method	Unit	Required Specs	Result
Scratch Resistance	EN 438-2:2016 +A1:2018	Rating	> Rating 3	Rating 4
Water vapour Resistance		Rating	> Rating 3	Rating 4
Dry heat Resistance@160°C		Rating	> Rating 3	Rating 4
Impact Resistance by small diameter ball		No	> 25	44
Impact Resistance by larger diameter ball		mm	> 1000	1100
Cracking resistance under stress		Rating	> Rating 4	Rating 5
Color Fastness to Light (48 hours)		Rating	Rating 4-5	Rating 5
Surface wear Resistance		Revolutions	>Initial value 350	844
Stain Resistance – Group 1		Rating	Min. Rating 5	Rating 5
Stain Resistance – Group 2		Rating	Min. Rating 5	Rating 5
Stain Resistance – Group 3		Rating	Min. Rating 4	Rating 5

Data: Independent Laboratory, UAE