

# MFC (Melamine Faced Chipboard)

## Specification For Substrates (16mm HMR Grade)

Property	Test Method	Unit	Specification
			Thickness (mm)
			16
Bending Strength	EN 310	N/mm <sup>2</sup>	11.0
Modulus of Elasticity in Bending	EN 310	N/mm <sup>2</sup>	1,600
Internal Bond	EN 319	N/mm <sup>2</sup>	0.35
Surface Soundness	EN 311	N/mm <sup>2</sup>	0.8
Swelling in Thickness, 24h	EN 317	%	≤14
Formaldehyde Content: Class (E1)	EN 120	mg/100g	≤ 8

Standard dimensions: Length & Width: 1830mm x 2440mm. For other thickness, consider as special request subject to lead time and MOQ

Test	Test Method	Specification
Scratch Resistant	Applying successively load to diamond scratching point of defined geometry and examine the marks produced	Minimum load 2.5N
Abrasion Resistant	A 500g taber abraser paper applied at 100 r.p.m. on surface	Insignificant reduction of sample weight of not more than 0.1%
Crack Resistant	Sample placed in oven and baked at 70°C for 24 hours	Minimum level 3 <b>Remarks</b> Level 5 Without cracks Level 4 Isolated hairline cracks Level 3 Hairline cracks randomly distributed over the total surface Level 2 In addition to stage 3, 1 to 2 small cracks <25mm have appeared on the surface which are still visible at an observation distance of 400mm Level 1 More cracks spread over the total surface area
Dry Heat Resistant	Aluminum container containing heated oil of 180°C placed on sample for 20 minutes	Minimum level 3 <b>Remarks</b> Level 5 No visible change Level 4 Slight change of gloss and/or color, only visible at certain view angles Level 3 Moderate change of gloss and/or color Level 2 Marked change of gloss and/or color Level 1 Surface damage and/or blistering
Cigarette Burn Resistant	Lighted cigarette placed on surface of test sample at the specified burning length	Minimum level 3 <b>Remarks</b> Level 5 No visible change Level 4 Slight change of gloss only visible at certain viewing angles and /or slight brown stain Level 3 Moderate change of gloss and/or moderate brown stain Level 2 Severe brown mark but no destruction of the surface Level 1 Blistering and/or crack
Steam Resistant	Test sample placed on top of beaker of boiling water for 1 hour	Minimum level 3 <b>Remarks</b> Level 5 No visible change Level 4 Slight change of gloss and/or color, only visible at certain view angles Level 3 Moderate change of gloss and/or color Level 2 Marked change of gloss and/or color Level 1 Surface damage and/or delamination
Staining Resistant	Test samples are left in contact with a series of staining agents for a period varies from 10 minutes to 16 hours and will be observed within 24 hours	Minimum level 3 <b>Remarks</b> Level 5 No visible change Level 4 Slight change of gloss and/or color, only visible at certain view angles Level 3 Moderate change of gloss and/or color Level 2 Marked change of gloss and/or color Level 1 Surface distortion and/or blistering