



MDF Fireshield

Substrates Collection

An MDF panel developed specifically for use in situations where a Class 0 or Class 1 flame retardant board is required. Tested by TÜV SÜD PSB Singapore for BS 476 Part 6 and Part 7, MDF Fireshield achieves the certificate of conformity (COC) for Class 0 and Class 1, respectively.

With proper application, MDF Fireshield is made to withstand up to 30 minutes of fire when used in non load-bearing partitions in accordance with BS 476 Part 22.

*BS476 is being superseded by EN 3051-1

Thickness
Dimensions

4 / 6 / 9 / 12 / 15 / 18 mm
1220 × 2440 mm

Characteristics



E1 Low Formaldehyde
Safe for all living and interior applications, especially enclosed spaces.



H1 Dry Conditions
Suitable for interior spaces that frequently use air conditioning.



Class 0/1 Fire Retardant
Meets Class 0 and Class 1 requirements under standards set by the Fire Safety & Shelter Department in the Singapore Civil Defence Force (SCDF).

Technical Specifications

General Requirements for Medium Density Fibreboard

Properties		Test Method	Requirement
Tolerance on Nominal Dimensions	Thickness	EN 324-1	± 0.2 mm
	Length/Width		± 0.3 mm
Squareness Tolerance		EN 324-2	2 mm/m
Tolerance of Density		EN 323	± 10%
Formaldehyde Release		EN 120	Class E1 ≤ 8mg/100g

Requirements for Medium Density Fibreboard for use in Dry Conditions

Properties	Test Method	Unit	Thickness (mm, nominal dimension)		
			> 9 to 12	> 12 to 19	> 19 to 25
Bending Strength	EN 310	N/mm ²	22	20	18
Modulus of Elasticity	EN 310	N/mm ²	2500	2200	1900
Internal Bond	EN 319	N/mm ²	0.6	0.55	0.55
Swelling in thickness	EN 317	%	15	12	10

Requirements for Medium Density Fibreboard for use in Humid Conditions

Properties	Test Method	Unit	Thickness (mm, nominal dimension)		
			> 9 to 12	> 12 to 19	> 19 to 25
Average Density	EN 323	Kg/m ³	> 700	> 700	> 700
Bending Strength	EN 310	N/mm ²	32	30	28
Modulus of Elasticity	EN 310	N/mm ²	2800	2700	2600
Internal Bond	EN 319	N/mm ²	0.8	0.75	0.75
Swelling in thickness	EN 317	%	10	8	7

MDF Fireshield Application Areas

Furniture and Woodworking	
Lamination of Surface Elements (Melamine, Laminates and Foils)	•
Spray Painting	•
Easy processing with woodworking tools	•
Excellent grip of fasteners (Screws, nails and staples)	•
Decorative Surface	
Attractive Edges	
Homogeneous Appearance Throughout	•

Building and Structural Applications	
High Moisture and Humidity Resistance	H1/H2*
Increased Fire Safety Regulations	Class 0 Class 1
Termite Resistance	High resin content naturally increases termite resistance
Climate Sensitive Applications (Ultra Low VOC)	
Horizontal Load-bearing Applications	•
Non Load-bearing Walls, Partitions and Ceilings	•
Formwork	

Other Technical and Industrial Applications	
Door production with increased fire safety regulations	Class 0 Class 1
Suitable for use in marine vessels	
Temporary Outdoor Exhibitions	•
Packaging Industry	
Signage and Billboards	•
Warehouse Management (Racking)	•

• Recommended * Option Available