PANELOGUE

Technical Datasheet



MDF Climate

Substrates Collection

MDF Climate is a medium density fibreboard with zero added formaldehyde, developed specifically for use in environmentally sensitive interior applications and contributes to improved indoor air quality. Ideal for museums, hospitals, schools and others.

Thickness Dimensions 3 / 6 / 9 / 12 / 15 / 18 mm 1220 × 2440 mm

Characteristics

Super E0 No Added Formaldehyde

No formaldehyde added during its manufacturing process, it contains less than 1.0mg/100g of formaldehyde.

E₀



H1 Dry Conditions

Suitable for interior spaces that frequently use air conditioning.

Technical Specifications

General Requirements for Medium Density Fibreboard

Properties		Test Method	Requirement
Tolerance on Nominal Thickness Dimensions		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

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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/mm²	22	20	18
Modulus of Elasticity	EN 310	N/mm²	2500	2200	1900
Internal Bond	EN 319	N/mm²	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/m³	> 700	> 700	> 700
Bending Strength	EN 310	N/mm²	32	30	28
Modulus of Elasticity	EN 310	N/mm²	2800	2700	2600
Internal Bond	EN 319	N/mm²	0.8	0.75	0.75
Swelling in thickness	EN 317	%	10	8	7

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MDF Climate 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 Stuctural Applications	
High Moisture and Humidity Resistance	H1
Increased Fire Safety Regulations	
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		
Suitable for use in marine vessels		
Temporary Outdoor Exhibitions		
Packaging Industry		
Signage and Billboards	•	
Warehouse Management (Racking)		

• Recommended

Last Updated: 20 May 2021