Technical data sheet

Medium Density Fiberboard Panel

For interior use (type “Dry process board” in accordance with standard EN 622-5).

MDF TECHNICAL CHARACTERISTICS

	Test Method	Unit	Value		
Tolerance on nomical dimensions	EN 324	mm/m	±2; max ±5		
Tolerance on thickness	EN 324	mm	≤6	>6 to 19	>19
			±0,15	±0,2	±0,3
Tolerance of edge straightness	EN 324	mm/m	1,5		
Planarity (both sides melamine faced)	EN 324	mm/m	2		
Moisture Content	EN 322	%	4 – 8		
Tolerance of mean density within same panel	EN 323	%	±7		
Formaldehyde Content (Perforator)	EN ISO 12460		E1, CARB 2, TSCA		

Properties	Measure Unit	Standard	Conditions Nominal Panel Thickness (mm)						
			>2.5 ≤4	>4 ≤6	>6 ≤9	>9 ≤12	>12 ≤19	>19 ≤30	>30 ≤45
Bending Strength	N/mm^2	EN 310	27	27	27	27	25	25	23
Elasticity modulus	N/mm^2	EN 310		2700	2700	2700	2500	2500	2300
Internal Bonding	N/mm^2	EN 319	0,75	0,75	0,7	0,65	0,55	0,55	0,5
Density	Kg/m^3	EN 323	820 – 860	820 – 780	800 – 780	780 – 740	740 – 700	710 – 670	690 – 650

WATER RESISTANT MELAMINE FACED MDF

Same properties as the standard panel, with additional water resistance properties

Properties	Measure Unit	Standard	Conditions Nominal Panel Thickness (mm)				
			>4 ≤6	>6 ≤9	>9 ≤12	>12 ≤19	>19 ≤30
Bending Strength	N/mm^2	EN 310	27	27	27	25	25
Elasticity modulus	N/mm^2	EN 310	2700	2700	2700	2500	2500
Internal Bonding	N/mm^2	EN 319	0,7	0,8	0,75	0,75	0,75
Density	Kg/m^3	EN 323	860 – 820	830 – 790	800 – 760	780 – 740	760 - 730

Properties	Measure Unit	Standard	Conditions Nominal Panel Thickness (mm)				
			>4 ≤6	>6 ≤9	>9 ≤12	>12 ≤19	>19 ≤30
Swelling after immersion in water 24hr	%	EN 317	18	12	10	8	7

FIELD OF APPLICATION

Type MDF raw board is intended for use in interior fitting (including furnitures) for use in dry conditions (relative humidity should not exceed more than 65% for a few weeks per year). The components must allow quick release of any trapped moisture.

Type MDF.H raw board is intended for use under humid conditions (relative humidity should not exceed more than 85% for a few weeks per year). The components must allow quick release of any trapped moisture. Melamine faced boards are available in a wide range of decors and color matched edge banding.

GENERAL GUIDANCE

The boards should be advisably be stored on a flat and dry base in a self-contained building. The atmospheric humidity should not go over 75% for a long period of time. In case of longer storage periods under humid conditions the boards should shrink-wrapped to avoid swelling of the board's edges is advised. A continuous room temperature should be maintained between 10°C and 50°C.

RESISTANCE AGAINST HEAT

The resistance against heat has to be subdivided in long and short terms exposure. For long or continuous terms of heat exposure a maximum temperature of 50°C is allowed. A temperature of max. 90°C is allowed for a time period of not more than 1 hour. Long term temperature application of more that 50oC might damage the surface by cracks. Installations of technical equipment that emit heat require an appropriate distance between heat source and melamine surface to avoid heat accumulation and divert temperature.

STORAGE AND HANDLING

Goods must be stored in a dry and ventilated place (relative air humidity 35%-65%). Do not store with inflammable substances. If exposed to direct sunlight, the laminate may deteriorate. Stacks should be stored correctly, at a manageable height to ensure stability. To avoid warping or damp stains, place the panels on pallets with adequate spaces. When handling the laminates, use suction pads or gloves. Machinery and equipment must be fitted with suitable aspiration systems.

E1: According to the "Regulation on the Prohibition of Chemicals (ChemVerbotsV)" from October 1993 along with the "Regulation on the classification and external supervision of wood-based panels regarding formaldehyde emission (DIBt - Guideline 100)" dated June 1994, unfaced MDF must not exceed a perforator value (photometric) of 8 mg HCHO/100g oven dry board at a moisture content of 6.5 %. The rolling average of EN ISO 12460-5 values over a period of a year is max. 7.0 mg HCHO / 100g panel mass.

CARB 2: According to the California Air Resources Board (CARB) „Final Regulation Order AIRBORNE TOXIC CONTROL MEASURE TO REDUCE FORMALDEHYDE EMISSIONS FROM COMPOSITE WOOD PRODUCTS", California Code of Regulations 93120-93120.12, title 17, Artikel 93120.2 (a) - Phase 2 - using the chamber method according to ASTM E 1333, MDF may not exceed 0.11 ppm and Thin-MDF 0.13 ppm.

TSCA: In line with US EPA 40 CFR Part 770 "Formaldehyde Emission Standards for Composite Wood Products", Title VI to the Toxic Substances Control Act (TSCA) - 'TSCA Title VI', para 40 CFR § 770.10 (b), MDF may not exceed 0.11 ppm and Thin-MDF 0.13 ppm according to ASTM E1333 using the chamber method.