

Technical data sheet

Melamine Faced MDF Panel

For interior use (type “Dry process board” in accordance with standard EN 622). Both sides are covered by a melamine decorative paper through a pressing process.

SURFACE TECHNICAL CHARACTERISTICS

	Test Method	Unit	Value	
THICKNESS VS. NOMINAL VALUE	EN 14323	mm	±0,2 ≤20mm & ±0,3 >20mm	
DIMENSION TOLERANCE	EN 14323	mm/m	± 2.0, max ± 5.0	
SURFACE DEFECTS (LENGTH)	EN 14323	mm/m ²	≤ 20	
SURFACE DEFECTS (SPOTS)	EN 14323	mm ² /m ²	≤ 2	
RESISTANCE TO SCRATCHES	EN 14323	N	≥ 1,5	
RESISTANCE TO STAINS	EN 14323	Level	≥ 3	
RESISTANCE TO CRACKS	EN 14323	Level	≥ 3	
RESISTANCE TO ABRASION	EN 14323		IP	WR
		1	<50	<150
		2	≥50	≥150
		3A	≥150	≥350
		3B	≥250	≥650
RESISTANCE TO WATER STEAM	EN 14323		On request	
RESISTANCE TO DRY HEAT	EN 12722		On request	
RESISTANCE TO LIGHT	EN 14323		On request	

MDF TECHNICAL CHARACTERISTICS

	Test Method	Unit	Value
Tolerance of edge straightness	EN 14323	mm/m	1,5
Planarity (both sides melamine faced)	EN 14323	mm/m	2
Sand content		%	< 0.02
Moisture Content	EN 322	%	4 – 8
Tolerance of mean density within same panel	EN 323	%	±7
Formaldehyde Content (Perforator)	EN 120		E1, CARB 2, TSCA

Properties	Measure Unit	Standard	Conditions							
			Nominal Panel Thickness (mm)							
			≥3 <4	≥4 <6	≥6 ≤13	>13 ≤20	>20 ≤25	>25 ≤32	>32 ≤40	>40
Bending Strength	N/mm ²	EN 310	23	23	23	22	20	18	17	15
Elasticity modulus	N/mm ²	EN 310		2700	≈2600	2200	2500	2100	1900	1700
Internal Bonding	N/mm ²	EN 319	0,65	0,65	0,6	0,55	0,55	0,55	0,5	0,5
Density	Kg/m ³		700 - 730							

WATER REPELLENT MELAMINE FACED MDF

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

Properties	Measure Unit	Standard	Conditions							
			Nominal Panel Thickness (mm)							
			≥3 <4	≥4 <6	≥6 ≤13	>13 ≤20	>20 ≤25	>25 ≤32	>32 ≤40	>40
Bending Strength	N/mm ²	EN 310	27	27	≈26	24	22	22	17	15
Elasticity modulus	N/mm ²	EN 310	2700	2700	≈2600	2400	2300	2300	2200	2000
Internal Bonding	N/mm ²	EN 319	0,7	0,7	0,8	0,75	0,75	0,75	0,7	0,6
Density	Kg/m ³		700 - 730							

Properties	Measure Unit	Standard	Conditions							
			Nominal Panel Thickness (mm)							
			≥3 <4	≥4 <6	≥6 ≤13	>13 ≤20	>20 ≤25	>25 ≤32	>32 ≤40	>40
Swelling after immersion in water 24hr	%	EN 317	18	18	≈11	8	7	7	7	6
Tensile Strength after cooking	N/mm ²	EN 1087	>0,20	>0,20	>0,15	>0,12	>0,12	>0,12	>0,10	>0,10

FIELD OF APPLICATION

Melamine Faced board manufactured with Type P2 raw boards 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.

Melamine Faced board manufactured with Type P3 raw boards 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 no 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.

CLEANING AND MAINTENANCE

The melamine surfaces are the most resistant among those used in the furniture field. For cleaning, it is preferable to choose a detergent for domestic use. It is recommended that you avoid spraying products directly onto the surface, as this may leave stains and marks; instead, it is preferable to apply the detergent product on a soft damp cloth, clean the surface and then rinse it. Avoid using abrasive products, bleach or highly chlorinated products or acids.

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.

Provisional note:

This technical data sheet has been carefully drawn up to the best of our knowledge. We accept no liability for any mistakes, errors in standards or printing errors. In addition, technical modifications can result from the continuous further development, as well as from changes in standards and documents originating from statutory bodies. The contents of this technical leaflet should therefore not be considered as instructions for use or as legally binding.