

Fibralux® MR Prime

High quality moisture-repellent MDF for use in humid environments, particularly for interior decoration and furniture production. Industrially coated on both sides with a white and even primer.

Moisture resistant, high density MDF board with a primed surface. The board is subject to minimal expansion and swelling in conditions of high humidity. Fibralux MR Prime is has low formaldehyde emission (E1 class). Moreover, Fibralux MR Prime meets the requirements set by the California Air Resource Board. According to ASTM E 1333-96, formaldehyde emission is less than 0,11 ppm, which corresponds to CARB, phase 2 as set by the ACTM. This MDF board also meets the requirements of EPA, as set by TSCA Title VI. Fibralux MR Prime is in principle coloured green in the mass. The dye is only used for reasons of recognition. The intensiveness of the green colour might vary between different production batches and thicknesses. Fibralux

Applications

- Interior decoration
- Furniture production

Characteristics



MDF.HLS (EN 622-5)

MR Prime can also be supplied uncoloured.



Structural applications



Moisture resistant



Primer coating





Fibralux® MR Prime

Applications

Fibralux MR Prime allows for an excellent paint finish while saving cost and time. After degreasing and (light) sanding the panel surface may be finished immediately in the desired colour – matt, silk or high gloss – using a solvent-based or water-based coating.

Fibralux MR Prime is suitable for interior decoration and furniture applications and highly popular among IDY enthusiasts.

The two-sided, industrially applied white UV primer offers the following benefits:

- A smoother end result than with a manually applied primer, partly thanks to correct and controlled paint distribution
- The UV primer coating is cured using ultra-violet light, resulting in a more impact- and wear-resistant surface
- Excellent adhesion, even with water-based coatings
- Correct colour rendering of the paint, therefore a perfectly coloured end result
- Cost and time savings: less paint consumption due to lower absorption, and less paint work required
- Easy finishing of joints and screws with fine fillers and intermediate sanding

General preparation of paintworks

Acclimatize the MDF boards prior to applying the finishing coating: place the panels in the area where they will be used and ensure that the level of humidity and the temperature match the circumstances of final use. This will help to prevent cracks and tension on the coated surface that may occur under highly fluctuating temperature or humidity. Repair any damage (e.g. around visible crews in the surface) using materials that are compatible with the subsequent paint system, for instance polyester fillers.

Pre-treatment of panels

Degrease Firabel MR Prime L (e.g. using an ammonia solution or a traditional detergent); next, lightly sand the panel using relatively fine sandpaper (P180 to P320) and remove the sanding dust. Allow the surface to dry if necessary.

Finishing the panels

Finish Fibrabel MR Prime as needed with a brush, roller or spray gun depending on the chosen paint. Make sure to respect the basic rules of paint finishing to avoid overlapping paint marks, droplets, etc. Also make sure to follow the processing instructions provided with the chosen coating system.

Apply at least two final coatings for the best finishing result. Lightly sand in between coatings preferably using sandpaper > P200.

Note: finishing with latex paint
The material allows for finishing with latex paint.
Because latex paint is more demanding in terms
of adhesion, we recommend that you use a highly
moisture-resistant and suitable primer.

Finishing the edges

The edges of Fibrabel MR Prime have a lower density than the surface and therefore will absorb paint more easily. The edges must be sanded thoroughly and filled – several times, if needed – with a suitable filling primer. After applying filling coatings to the edges the fibres may swell under humid conditions. Intermediate sanding is therefore necessary. There is a wide choice of filling primers and polyester fillings for the end grain of wooden sheet material available on the market.

General instructions

The MDF board must be applied in service class 1 (restrictions with regards to temperature and ambient humidity) and may only be used in biological hazard class 1 of EN 335-3. The boards must be protected from any direct contact with water. They must be stacked flat, on a pallet or using a sufficient number of cross members. Any contact with the floor must be avoided. The board will expand or shrink under variable humidity conditions.

Use suitable sawing, milling and drilling tools. Fibralux MR can be used for structural walls, with a restriction in the load duration class. In service class 2, corrosion resistant fittings must be used, e.g., galvanised steel. Nails or screws should be kept at least 8 mm away from the edge of the board.

Fibralux® MR Prime

Technical specifications

Property	Test method	Unit	Ranges of nominal thickness (mm)				
			> 4 to 6	> 6 to 9	> 9 to 12	> 12 to 19	> 19 to 30
Swelling in thickness 24 h	EN 317	%	18	12	10	8	7
Internal bond	EN 319	N/mm²	0,70	0,80	0,80	0,75	0,75
Bending strength	EN 310	N/mm²	34	34	32	30	28
Modulus of elasticity in bending	EN 310	N/mm²	3000	3000	2800	2700	2600
Option 1							
Swelling in thickness after cyclic testing	EN 317	%	25	19	16	15	15
	EN 321						
Internal bond after cyclic testing	EN 319	N/mm²	0,35	0,30	0,25	0,20	0,15
	EN 321						
Option 2							
Internal bond after boil test	EN 319	N/mm²	0,20	0,15	0,15	0,12	0,12
	EN 1087-1						

Available dimensions and thicknesses

Standard thickness: 12 and 18 mm. Standard width: 1220 mm. Standard length: 2440 mm or 3050 mm. Other dimensions or thicknesses (6 to 30 mm) are available upon request. Fibralux MR Prime is also available in a version for application in dry conditions. Contact our sales team or send an e-mail to info.panels@unilin.com for further details.





Certificates

UNILIN Division Panels is actively committed to sustainable forest management. Fibralux MR Prime is available on demand with PEFC and FSC labelling.

