

Moisture-resistant wood fiber board.

IS IT:

☒ *Product*

☐ *Technology*

☐ *Equipment*

APPLICABLE FOR:

☐ *Restoration*

☒ *Rehabilitation*

☒ *New Construction*

APPLICABLE ON:

☐ *1. Foundations and underground structures*

☐ *5. Façade and building envelope*

☐ *2. Vertical structures*

☐ *6. Finishes and completion elements*

☐ *3. Horizontal structures and vertical connections*

☐ *7. Integrated services*

☐ *4. Roof and terraces*

☒ *8. General strategies for building recovery*

Related companies: Moisture resistant mdf.

DESCRIPTION

MDF MR are boards for load-bearing use in dry and humid conditions. MDF MR are manufactured in compliance with EN 622-5 as MDF.

WHY TO USE

Structural components for use in humid conditions for instantaneous or short-term periods of load only. Boards are particularly suitable for construction applications that require panels with high load bearing capacity and moisture resistance and for a wide range of interior applications. The product is suitable for further processing and painting. Boards are produced with green-colored fiber as standard.

HOW TO USE AND APPLY

- Furniture components
- Partitions
- Areas that require protection from moisture
- Cladding
- Packaging
- Retail and commercial applications
- Skirting boards / architrave
- Window boards / sills
- Exhibitions (display stands, kiosks)

Technical procedures:

MDF is suitable for interior decoration, industrial processing, and furniture production. The board can be lacquered or finished with paper, foil, melamine, veneer, or high-pressure laminate. MDF can also be used for load-bearing applications in humid conditions. The board can be applied in service class 2 (restrictions in temperature and ambient humidity) and can be used in biological hazard classes 1 and 2 of EN 335- 3. During and especially after installation the boards must, wherever possible, be optimally protected from any direct contact with water. They must be stacked flat on a pallet or using a sufficient number of cross members. Boards should not be stored vertically unless ground contact can be avoided. The board will expand/shrink under variable humidity conditions, albeit to a lesser extent than MDF S-Lux, meaning that an expansion space must be provided for at all times.

Use suitable sawing, milling, and drilling tools. MDF 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., galvanized steel. Nails or screws should be kept at least 8 mm away from the edge of the board.

TECHNICAL CHARACTERISTICS

Extremely moisture resistant MDP that can be used in humid environments.

Swelling within 24 hours after immersion in H₂O, up to 10%. After testing at KTU Institute of Architecture and Construction, swelling of 8 samples within 24 hours - 2.71% (when OSB / 3 - 15%).

Extremely strong, stable, screw resistant.

Denser than OSB, making it much stronger.

Humidity and expansion of the slab have minimal effect on the structure or air humidity.

The multifunctional MDP is easy to use.

Strong base and extremely hard, smooth surface.

The structure of the fibers is much finer and extremely fine on the surface, which means that the MDP would not bring the fibers to the surface even after receiving moisture, as can happen with OSB.

Suitable for short-term concreting (max. 2 days).

MDP is designed for floors, walls, roofs, stairs, etc.

Low formaldehyde emissions. Class E1 according to EN120.

RECOMMENDATIONS AND OTHER INFORMATION

The light and smooth surface of our moisture resistant MDF sheets make it easy to mark up for cutting or sanding down, and it can be cut to various shapes and forms with ease using an electric saw, router, or handsaw. Please note that when cutting MDF, appropriate protection must be worn due to the dust particles MDF can create.

- Fine surface
- Good mechanical performance
- Homogeneous characteristics
- Moisture resistant

- Perfect for painting laminating, veneering, and foiling

EXAMPLES

MDF MR is resistant to moisture and is used in extremely humid environments. These panels can be pressed with HPL film, veneered, varnished, painted. Perfect for bathroom furniture, exterior doors. Moisture-resistant MDF board is perfect for the production of bathroom, kitchen furniture, exterior doors.

<https://www.youtube.com/watch?v=9qwy62KCKCM>

REFERENCES / SOURCES AND LITERATURE

Moisture Resistant MDF - Moisture Resistant MDF - Fiberboard - Kronobuild - Products - Kronospan - Leading manufacturer of wood-based panels (kronospan-express.com)

https://timberireland.ie/wp-content/uploads/2020/08/mr_mdf.pdf

<https://www.cutmyplastic.co.uk/wood-sheets/mdf/moisture-resistant/>

WEBSITE OF THE COMPANY

<https://lt.kronospan-express.com/en>

<https://timberireland.ie/>

IMAGES AND CAPTIONS



Fig.1: Moisture-resistant wood fiber board.

© https://bg.kronospan-express.com/en_BG/products/view/kronobuild/fiberboard/moisture-resistant-mdf/moisture-resistant-mdf-704