

MELAMINE FACED MDF

MDF (Medium Density Fiberboard) for interior fitments (including furniture) melamine faced on surfaces with melamine decorative papers by a pressing process. The following types are available:

- MDF type core according to EN 622-5 standard, non-load-bearing, for use in dry conditions
- Fire resistant MDF type core according to EN 622-5 standard
- MDF.H type core according to EN 622-5 standard, non-load-bearing, for use in humid conditions

MDF, MDF.H, fire resistant MDF panels have **CE** marking, according to EN 13986, TSCA CARB P2 certification, "E05" formaldehyde emission level and, on request, FSC® Mix Credit claim.

Only for Cheope, Jiometori, Mosaico, Paglia, Riga, Tolda, Traccia, Sbalzo, Doga textures:

As it is customary in the industry, Cleaf melamine faced panels are intended to be used after squaring to compensate for natural panel squareness tolerances.

In the case of textures with distinctly geometric designs, for the best aesthetic result it is recommended to take advantage of the squaring machining step to compensate for any angular deviation between the texture and the long side of the panel, preferably choosing single panel machining, instead of multiple stacks.

Cleaf is committed to keeping this angular deviation within 2 mm/m, since it is inherent in the centring systems normally provided on presses.

TECHNICAL CHARACTERISTICS OF THE MELAMINE FACED PRODUCT *

RESISTANCE TO ABRASION		EN 14322, EN 14323	Prints: Class 1, Solid colours: Class $\geq$ 3A
RESISTANCE TO SCRATCHING		EN 14322, EN 14323	$\geq$ 1,5 N
RESISTANCE TO STAINING		EN 14322, EN 14323	Class $\geq$ 3
RES. TO COLOUR CHANGE (XENON ARC)		EN 14322, EN 14323	$\geq$ 4 grey scale
RESISTANCE TO CRACKING		EN 14322, EN 14323	Class $\geq$ 3
SURFACE DEFECTS		EN 14322, EN 14323	Points: $\leq$ 2 mm ² /m ² , Length: $\leq$ 20 mm/m ²
EDGE DAMAGE		EN 14322, EN 14323	$\leq$ 10 mm, $\leq$ 3 mm for pre-cut panels
DIMENSIONAL TOLERANCES	THICKNESS	EN 14322, EN 14323	$\leq$ 19 mm: $\pm$ 0,2 mm**, >19 mm: $\pm$ 0,3 mm**
	LENGTH AND WIDTH	EN 14322, EN 14323	$\pm$ 5 mm, $\pm$ 2,5 mm for pre-cut panels
FLATNESS (Balanced surfaces, thickness $\geq$ 15mm)		EN 14322, EN 14323	$\leq$ 2 mm/m
FORMALDEHYDE RELEASE		EN 13986, EN 14322, EN ISO 12460-3	$\leq$ 3,5 mg/(m ² h), Class E1 (EN 13986)
		BAnz AT26.11.2018 B2 EN ISO 16516	< 0,1 ppm, Class E1 (BAnz AT26.11.2018 B2 - E05)
		Reg. UE 2023/1464, EN 16516	$\leq$ 0,062 mg/m ³ (E05)
		EPA TSCA Title VI ASTM E1333-96	< 0,11 ppm (CARB P2 – EPA TSCA Title VI)
CLASS OF REACTION TO FIRE		EN 13986 EN13501-1	Details within the DOP document

* Values reported herein are related to a standard product configuration. For customized products please contact our sales office.

** The additional nominal thicknesses due to the textures are listed inside Cleaf website <https://cleaf.it/en/textures/>.

MELAMINE FACED MDF

TECHNICAL CHARACTERISTICS OF MEDIUM DENSITY FIBERBOARD

COMPOSITION	Virgin wood fibers of mixed essences					
DENSITY	EN 323	700 – 850 Kg/m ³				
MOISTURE CONTENT	EN 622-1, EN 322	4 – 11 %				
NOMINAL VALUES BY THICKNESS GROUP		>6mm ≤9mm	>9mm ≤12mm	>12mm ≤19mm	>19mm ≤30mm	>30mm ≤38mm
MIN BENDING STRENGTH [N/mm ²]	EN 622-5, EN 310	23	22	20	18	17
MIN MODULUS OF ELASTICITY [N/mm ²]	EN 622-5, EN 310	2700	2500	2200	2100	1900
MIN INTERNAL BOND [N/mm ²]	EN 622-5, EN 319	0,65	0,60	0,55	0,55	0,50
MAX SWELLING IN THICKNESS, 24h [%]	EN 622-5, EN 317	17	15	12	10	8



ON REQUEST

MELAMINE FACED MDF.H non-load-bearing, for use in humid conditions ("IDRO")

NOMINAL VALUES BY THICKNESS GROUP		>6mm ≤9mm	>9mm ≤12mm	>12mm ≤19mm	>19mm ≤30mm	>30mm ≤38mm
MIN BENDING STRENGTH [N/mm ²]	EN 622-5, EN 310	27	26	24	22	17
MIN MODULUS OF ELASTICITY [N/mm ²]	EN 622-5, EN 310	2700	2500	2400	2300	2200
MIN INTERNAL BOND [N/mm ²]	EN 622-5, EN 319	0,80	0,80	0,75	0,75	0,70
MAX SWELLING IN THICKNESS, 24h [%]	EN 622-5, EN 317	12	10	8	7	7
MAX SWELLING IN THICKNESS AFTER CYCLIC TEST OPT. 1 [%]	EN 622-5, EN 321	19	16	15	15	15
MIN INTERNAL BOND AFTER CYCLIC TEST OPT. 1 [N/mm ²]	EN 622-5, EN 321	0,30	0,25	0,20	0,15	0,10

FIRE RESISTANT MELAMINE FACED MDF

Fire resistant MDF, faced with melamine decor papers (and technical papers).

Class of reaction to fire B-s1, d0 EN 13986 EN13501-1

Available nominal thickness for the raw MDF: from 10mm to 25mm.

MELAMINE FACED MDF, MDF.H or fire resistant MDF with claim

FSC® C047274 Mix Credit CSI-COC-000343.



STORAGE, HANDLING AND PROCESSING

Keep the products in a ventilated and dry environment, not exposed to direct sunlight.

Avoid making excessively high or unstable stacks.

Use vacuum handling systems. Avoid manual handling and the use of pushers on conveyor belts.

Machinery and processing equipment should feature suitable dust extraction systems.

MELAMINE FACED MDF



RECOMMENDATIONS FOR USE

Colour and gloss match

Slight differences in colour and/or gloss may occur in the same product between different production runs due to raw material tolerances. Components used next to each other should therefore be checked for colour and gloss consistency. In some cases, the texture and colour of the laminate may differ from the matching panel and/or edge band due to differences in production technology or presence of overlay. Please request samples for personal evaluation before placing your first order.

Textures with geometric designs

Only for Cheope, Jiometori, Paglia, Riga, Tolda, Traccia, Sbalzo, Doga textures:

In case of textures with distinctly geometric designs, for the best aesthetic result it is recommended to take advantage of the squaring machining step to compensate for any angular deflection between the texture and the long side of the HPL covered panel, preferably choosing single panel machining, instead of multiple stacks. Although this deflection is inherent to the centring systems the presses are normally equipped with, Cleaf is committed to keeping its value within 2 mm/m. When combining laminate and panel aesthetics, for these textures it is recommended to consider a possible difference in the pitch of the designs, as the laminate undergoes a shrinkage during cooling that does not apply to the panel.

There is a family of items (further to the above list) that only *appear* to have a distinctly geometric design. In reality, the intention of the aesthetic effect in these cases is the opposite, i.e. to faithfully and realistically recreate even the irregularities inherent to the materials of natural origin or to the craft processes they simulate. For example, the FD05 decor or Nadir and Penelope textures reproduce the weave of a fabric, Mosaico texture reproduces a woven leather patch. The advantage of the design is precisely that it blends perfectly with the appearance of a fabric, where warp and weft can be tensioned to slightly different degrees from stitch to stitch. The requirement for angular deviation obviously does not apply to this group of items.



CLEANING AND MANTAINANCE

For cleaning, use only soft cloths and normal household hygiene products.

It is recommended not to spray products directly onto the surface, as this can cause halos.

In the case of no-rinse cleaning agents, apply the detergent to a soft cloth and wipe the surface. In the case of cleaning agents to be rinsed off, apply the detergent to a damp soft cloth, clean, rinse with water to remove any residue, then wipe the surface with a soft cloth to avoid possible deposits of limescale from water.

Avoid using abrasive products and sponges, including melamine sponges (magic sponge), bleach or strongly chlorinated products, strong acids or bases. The use of cleaning products or sponges with an abrasive effect can lead to long-term polishing and loss of the products inherent strength characteristics.

For further details see the instruction datasheet *Melamine cleaning Instructions*.

Some faced surfaces are supplied protected with a special film. The film must be removed immediately after processing and, in any case, within 1 year after delivery to ensure the absence of any residue.

This technical data sheet has been drawn up in accordance with the current state of our knowledge and technical characteristics of the materials, however it is for informational purposes only and does not in any case represent a kind of guarantee even regarding the suitability for specific applications or regarding the properties of the products. This sheet is mainly based on the practical experience of our technicians as well as on internally conducted tests and therefore does not constitute an incontrovertible scientific proof. Cleaf SPA therefore assumes no responsibility for any technical and/or application errors, inaccuracy in the application of standards or regulations or even misprints. Finally, we point out that this sheet may be outdated due to technical changes because of the continuous development of Cleaf SPA products, as well as changes in scientific and technical standards or on the base of the introduction of new regulations applicable to the reference industry. In light of the above, the content of the processing instructions cannot act neither as a manual for the use of the products nor for their applications nor as an element of identification of the object of the legally binding contract between the parties.