



MELAMINE FACED PARTICLEBOARD

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

- P2 type core according to EN 312 standard, non-load-bearing, for use in dry conditions
- P2 type core according to EN 312 standard, non-load-bearing, for use in dry conditions, faced with flame retardant effect (SAFEFIRE)
- P3 type core according to EN 312 standard, non-load-bearing, for use in humid conditions

P2, P3, SAFEFIRE 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 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 ≥ 3A	
RESISTANCE TO SCRATCHING	EN 14322, EN 14323	≥ 1,5 N	
RESISTANCE TO STAINING	EN 14322, EN 14323	Class ≥ 3	
RES. TO COLOUR CHANGE (XENON ARC)	EN 14322, EN 14323	≥ 4 grey scale	
RESISTANCE TO CRACKING	EN 14322, EN 14323	Class ≥ 3	
SURFACE DEFECTS	EN 14322, EN 14323	Points: ≤ 2 mm ² /m ² , Length: ≤ 20 mm/m ²	
EDGE DAMAGE	EN 14322, EN 14323	≤ 10 mm, ≤ 3 mm for pre-cut panels	
DIMENSIONAL TOLERANCES	THICKNESS	EN 14322, EN 14323	± 0,3 mm ^{**} ; for SAFEFIRE: ± 0,5 mm ^{**}
	LENGTH AND WIDTH	EN 14322, EN 14323	± 5 mm, ± 2,5 mm for pre-cut panels
FLATNESS (Balanced surfaces, thickness ≥15mm)	EN 14322, EN 14323	≤ 2 mm/m	
FORMALDEHYDE RELEASE	EN 13986, EN 14322, EN ISO 12460-3	≤ 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)	
	EPA TSCA Title VI ASTM E1333-96	≤ 0,09 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://www.cleaf.it/it/prodotti/pannelli/>. For the SAFEFIRE product the additional thickness may differ from that of the other panel types, therefore it is communicated on purchase order receipt; it is intended as approximate and non-binding.

TECHNICAL CHARACTERISTICS OF THE WOOD PARTICLEBOARD

COMPOSITION	Chipboard made of virgin mixed wood essences and post-consumer reclaimed wood (wooden packaging)	
DENSITY	EN 323	500 – 700 Kg/m ³
MOISTURE CONTENT	EN 312, EN 322	5 - 13%

NOMINAL VALUES BY THICKNESS GROUP			>8mm ≤13mm	>13mm ≤20mm	>20mm ≤25mm	>25mm ≤32mm	>32mm ≤40mm
MIN BENDING STRENGTH	[N/mm ²]	EN 312, EN 310	11	11	10,5	9,5	8,5
MIN MODULUS OF ELASTICITY	[N/mm ²]	EN 312, EN 310	1800	1600	1500	1350	1200
MIN INTERNAL BOND	[N/mm ²]	EN 312, EN 319	0,40	0,35	0,30	0,25	0,20
MIN SURFACE SOUNDNESS	[N/mm ²]	EN 312, EN 311	0,8	0,8	0,8	0,8	0,8



ON REQUEST

MELAMINE FACED P3 PANEL non-load-bearing, for use in humid conditions ("IDRO")

NOMINAL VALUES BY THICKNESS GROUP			>8mm ≤13mm	>13mm ≤20mm	>20mm ≤25mm	>25mm ≤32mm	>32mm ≤40mm
MIN BENDING STRENGTH	[N/mm ²]	EN 312, EN 310	15	14	12	11	9
MIN MODULUS OF ELASTICITY	[N/mm ²]	EN 312, EN 310	2050	1950	1850	1700	1550
MIN INTERNAL BOND	[N/mm ²]	EN 312, EN 319	0,45	0,45	0,40	0,35	0,30
MAX SWELLING IN THICKNESS, 24h	[%]	EN 312, EN 317	17	14	13	13	12
MAX SWELLING IN THICKNESS AFTER CYCLIC TEST OPT. 1	[%]	EN 312, EN 321	14	13	12	12	11
MIN INTERNAL BOND AFTER CYCLIC TEST OPT. 1	[N/mm ²]	EN 312, EN 321	0,15	0,13	0,12	0,10	0,09

SAFEFIRE

Particleboard faced with melamine decor papers and technical papers with flame retardant effect.

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

Available nominal thickness for the raw particleboard: from 8mm to 40mm. For the melamine faced product, the nominal thickness of SAFEFIRE may be different from the value of the related panel without fire retardant effect.

The colour tone may slightly differ from the corresponding standard version due to the different colour of the flame retardant underlay.

MELAMINE FACED P2, P3 PANEL or SAFEFIRE with claim

FSC® Mix Credit ICILA-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.



CLEANING AND MANTAINANCE

For cleaning, choose household hygiene products. It is recommended to avoid spraying products directly onto the surface, as this may cause halos; 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, strong acids or bases. For more details see the *Melamine cleaning instructions* datasheet.

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.