

Technical Data Sheet

Melamine Faced Particleboard MF PB



Document	KC/QUAL/DOC/0006
Updated by: G Vladila	Date : 09/08/2024
Approved by: C Emery	Printed: 15/08/2024
Version Num: 6	Page: 1 of 3

Quality Management ISO 9001:2015

Description

Supporting substrate is three-layer particleboard (PB) P2 manufactured from specially selected wood chips and high quality synthetic resin. Particleboard, sanded on both sides, is covered with a decorative paper impregnated with melamine resin, and available in various finishes, including gloss, matt, lightly textured and wood grain. The boards are manufactured according to the EN 14322 standard, which specifies requirements for boards for interior use (especially for interior fittings, including furniture). The boards are intended to be used mainly for the furniture industry and for interior finishing for use in dry conditions. 'Dry conditions' is characterised by a moisture content in the material corresponding to a temperature of 20°C and a relative humidity of the surrounding air only exceeding 65% for a few weeks per year. The boards are not suitable for use in humid conditions. MF PB comes in four collections - Color, Standard, Contempo and Harmony. They feature a wide range of designs and a variety of thicknesses and surface textures.

Boards are available in thickness range **12 mm - 38 mm**.

Technical Data

Production specification related to core particleboard EN 312, type P2							
Property	Test Method	Unit	>6 to 13	>13 to 20	>20 to 25	>25 to 32	>32 to 40
Bending strength	EN 310	N/mm ²	11	11	10.5	9.5	8.5
Modulus of elasticity in bending	EN 310	N/mm ²	1800	1600	1500	1350	1200
Internal bond	EN 319	N/mm ²	0.4	0.35	0.3	0.25	0.2
Surface soundness	EN 311	N/mm ²			0,8		
Density tolerance	EN 323	kg/m			+10		
Moisture content	EN 322	%			2-12%		

Production specification related to decorative melamine surface

Property	Test Method	Requirement	
Length & Width	EN 14323, EN 324-1	Standard delivered sizes	+5mm
		Pre-cuts panels	+2.5mm
Single Free Cut Length	N/A	mm	Specified Length +5 -0 Falling Length < -15
Double Cut Length	N/A	mm	Specified Length +5 -0 Falling Length < -25
Thickness (at any point on the board) *2	EN 14323	mm	+0.3
Flatness (double sided) *3	EN 14323	mm/m	< 2 (b)
Edge damage	EN 14323	Standard delivered sizes	< 10
		Pre-cuts panels	3
Surface defects (b)	EN 14323	Points (sum up size of defects)	< 2 mm ² /m ² (c)
		Length (sum up length)	20 mm ² /m ² (c)
Squareness	EN 324	mm/m	2
Edge Straightness (a)	EN 324	mm/m	1.5
Resistance to scratching *1	EN 14323	N	>1.5
	EN 14323	Rating	>3
Resistance to cracking	EN 14324	Rating	> 3 at 70° C and 24 hours
Recycled wood content	N/A	%	> 80%
Surface Spread of flame	BS 476-7	Class	2
Gloss Value	EN 14323	Rating	Same or similar to test piece
Steam test	EN14323	Rating	Visual
Resistance to abrasion (d)	EN14323 EN 438-2.10	IP, number of revolutions	Class 1: < 50 Class 2: *50 Class 3A: a 150 Class 3B: a 250 Class 4: a 350

*1) Scratch resistance: Not including decors with pearl effect.

*2) Tolerances total thickness: The total thickness is defined as the substrate thickness including the coatings on both sides of the boards.

*3) Flatness: Valid for equally balanced weight of decorative papers on both sides.

Exceptions only after technical feasibility check and approval from the respective production plant.

a) Numerous factors, including changes in temperature and relative humidity in storage and fabrication areas at building sites, may cause panels to bow and Mist irreversibly. This requirement is therefore only applicable at the time of delivery.

b) It is related to standard delivered sizes as whole. Surface defects are larger than 0.8 mm² and those that can be identified when the surface texture is viewed from a distance 0.7 m and at an angle about of 45°.

c) For standard panel size 2800mm x 2070mm the permissible total errors are calculated as follows: 2,8 x 2,07x 2mm/m² = 11,6 mm² (points) and 116mm (length). These defects are permitted: 1x 11,6mm or 2x 5,8mm or 3x 3,8mm² etc. Similarly length errors are permitted: 1x 116mm or 2x 58mm or 3x 3,8mm² etc.

d) Depending on the number and type of surface layers used, different classes can be achieved. Unless otherwise stated, Class 1 applies.

Technical properties of MF PB P2EN16516

Property	Test Method	Value
Reaction to fire	EN13501-1	Class D,s2-d0
Formaldehyde emissions	EN ISO 12460- 3	Class E1 (<3,5 mg/m ² .h)
	EN 16516	< 0,1 ppm (0,124 mg/m ³)
	EN 717-1	< 0,05 ppm (0,062 mg/m ³)

Colour matching and surface texture

Slight colour deviations in the same product are possible due to tolerances in the primary materials used. Components that are used next to each other should therefore be checked for colour uniformity. Therefore, it is recommended that for the final products or elements to be subsequently used side by side, it is preferable to use MF PB boards originating from one production batch. The compatibility of MF PB boards with the reference sample should be agreed in colour and structure before processing. A slight deviation in colour and surface between the Kronospan master sample and the customer's test piece is permissible in accordance with EN 14322.

Due to the production that differs by product, colour and surface differences can also occur between different products (e.g. faced board, laminate, edging) with the same decor-texture combination. For an accurate representation of the colour, order a sample in the relevant product.

Formaldehyde emission classes

The Formaldehyde emission classes depend on the used substrate. Information in regards to the Formaldehyde emission of your preferred substrate can be found in the technical data sheets of our substrates. Please ask the sales/marketing team for further information.

Resistance against heat

The resistance against heat of Kronospan materials differs between long and short periods of heat exposure. For long and continuous periods of heat exposure, a maximum temperature of 50°C (122°F) is applicable. We kindly advise that continuous exposure in temperatures of over 50°C (122°F) may result in surface defects such as cracks.

Antimicrobial property

The surface of our melamine inhibit the growth or proliferation of bacteria, it prevents their reproduction and bacteria age and die. The antibacterial effect is maintained during the useful life of the product. The product does not contain a known substance that is intended to prevent, destroy, repel or mitigate a pest, and our product is not intended to trap, destroy, repel or mitigate any pests.

Instruction for transport and storage

Transport

By road trucks. Canvas covers are used to protect the goods against climatic influence and fixing device (courting) are used to disable the movement and consequent damage of the goods inside the truck.

Storage

MF PB boards should advisably be stored on a flat and dry base in a closed building. The panels must be stored in a frost-protected surrounding, preferred within temperature of 20°C (68°F) and 65% relative humidity. For storage in divergent conditions, we recommend additional packaging of the materials such as shrink-wrapping to ensure stable quality. We recommend conditioning the final products according to the expected in-room climate prior to installation.

Instruction for handling and processing

When loading and unloading the pallets/boards must not be moved one after the other for reason of possible damaging of MF PB surfaces or edges.

Removing individual boards from packing is only possible vertically by lifting the board. Any moving or pulling of single boards across each other (over the edges etc.) must be avoided.

Special attention must be paid to cleanness of board surfaces during board transfer. Any mechanical particles between boards can lead to irreversible damage of board surfaces.

General instruction for assembly and installation of furniture made of MF PB boards

It is assumed that the furniture elements made from MF PB boards will have during time of use the moisture content 7-10% by common interior temperature. Furniture and other interior fitments made of MF PB P2EN16516 boards must not be installed in damp new houses and other building where relative humidity is higher than 70%.

Protective equipment

Protective means fitting to the processing method and technical equipment of the processing company (protective goggles, respirators, gloves, safety shoes).

Disposal of waste generated during MF PB processing

Disposal should be done in an approved area in compliance with applicable laws. Do not dump. Any residues of wood-based materials should primarily be recycled. If this is not possible, they must be sent for energy recovery instead of landfilling.

The country-specific laws and regulations on disposal must be observed. EU Waste class: 170201/030105

Cleaning

Use clean warm water, clean rags or cloths, a soft sponge or a soft brush (e.g. a nylon brush). Usual cleaning agents without abrasive ingredients are suitable. Spilled liquids should always be cleaned up immediately, because longer exposure times of certain substances may affect the gloss level of the surfaces.

KRONOSPAN MELAMINE FACED PARTICLEBOARD SIZES:

Thickness	Size
15, 18 mm	2440 x 2070
12, 15, 16, 18, 22, 25, 30, 38 mm	2800 x 2070
18 mm	5250 x 2070
18 mm	5600 x 2070

The data sheet is updated regularly to meet new technological standards. This version replaces all previous versions as well as those which are undated.

This version takes effect upon creation. Version 08/2024