



COMPOSITION

Medium density fiberboard (MDF) core covered with decorative paper on both sides and lacquered with UV treatment on its front side. When supplied as finished components, PUR glue and ABS, PP or PMMA edges are used to cover the edges.

RECOMMENDED APPLICATIONS

Components for furniture and interior decoration.

CORE FEATURES

Dimensional Tolerances

	Property	Tolerance	Standard
	Length & width	± 2 mm/m	EN 324-1
	Thickness	± 0.3 mm	EN 324-1
	Square	± 2 mm/m	EN 324-2

Physio-mechanical Properties

	Property	Thickness (mm)			Standard
		10-12	16-18	19-25	
	Density (Kg/m ³)	800 $\pm$ 50	780 $\pm$ 50	740 $\pm$ 50	EN 323
	Traction Resistance (N/mm ²) - min.	1.05	1.00	1.00	EN 319
	Swelling 24h (%) - min.	15	12	10	EN 317
	Warp Resistance (N/mm ²) - min.	22	20	18	EN 310
	Elasticity (N/mm ²) - min.	2500	2200	2100	EN 310
	Residual Humidity (%) - range		4 - 11		EN 322
	Silica Contents (%) - max.		0.05		ISO 3340
	Emissions Classification, Formaldehyde Standard		E05 / CARB2		EN 717-1
	Fire Rating		D-s2, d0		EN 13501-1

FINISH CHARACTERISTICS

Physio-mechanical Properties

Property	LUXE	Standard
 Stain Resistance	Class 5	EN 14323: 17
 Resistance to Cold Liquids	Class 5	EN 12720:09
 Resistance to Scoring / Cuts	Grade 2	ISO 2409 : 13
 Crack Resistance	Class 5	EN 14323: 17
 Cold check (40 cycles : 1h 60 °C, 1h -20 °C and 15 min. at room temp.	No change	AIDIMME
 Color Fastness	Blue scale: >6 Grey scale: 5	EN 14323: 17
 Resistance to Dry Heat	Class 5	EN 12722:09
 Resistance to Damp Heat	Class 5	EN 12721:09
 Scratch Resistance (hard-metal tip, radius 0.75 mm)	7.5 ± 2 N	ISO 1518-1
 Abrasion Resistance	Class 4	EN 14323: 17
 Resistance to Steam	Class 4	EN 14323: 17
 Ball Drop	110 cm	EN 14323: 17
 Dimensional Tolerance (Finished Components)	± 0.5 mm	ALVIC
 Antibacterial Efficacy (24 hours)	100%	ASTM E2180:07 JIS Z2801:06
 Warp Tolerance	2 mm / 1 m	ALVIC
 Max Color Variance between batches	$\Delta E \leq 0.70$	CIELab D65/10°
 Reflection (at 60°)	90 ± 5 GU	ISO 2813

Evaluation of Surface Defects

Defects greater than 1 mm² that are visible under the following conditions will be considered unacceptable defects:

1. Observation distance: 70 cm (about 2 feet).
2. Observation position: vertical (typical use position).
3. Lighting conditions: diffused light from fluorescent lamps.
4. Observation time: 20 seconds maximum.

Quality Standard

The standards of quality for the product are as follows:

1. 70% panels without defects / 30% with a maximum of 3 defects.
2. Boards with defects are marked for identification.
3. Any defect on the perimeter of the board, up to one centimeter inside of it, will not be considered in defect counts because it is in an area that needs to be cut/trimmed when processing.

RECOMMENDATIONS

Storage

Please process panels expediently upon receipt and communicate any issues regarding them.

Exposure of the product to sunlight (UV light) and other heat sources should be avoided. Product should be kept in a ventilated place. It is important to use a FIFO stock management system to avoid mixing products with very different production dates, which, together with the intrinsic evolution of the coatings, could cause visual differences between them.

Recommended ranges for environmental conditions of storage:

Temperature: 10 °C - 40 °C / 50 °F - 104 °F

Humidity: 30% - 70%

Panels/components should be used within 12 months of delivery to prevent residue.

Stacking

The panels should not be placed directly on the ground. Wherever possible, the storage supports supplied with each package should be maintained and placed all in the same position to maintain a uniform height, to ensure flatness, and thus, to prevent warping of the boards. For the length of 2750 mm (108 in), a minimum of 4 supports, evenly distributed, are recommended.

If several packages are stacked, (up to a recommended maximum of four) the supports of the different packages must be aligned vertically to transfer the weight to the lower levels without deforming the boards. To protect the surface of the boards, it is necessary to use lower and upper protection boards.

Vertical Storage

Although it should be avoided whenever possible, vertical storage can be accomplished with a reduced number of boards. To do this, racks with a support surface for the boards must be used to prevent them from warping, and with a minimum incline of 10°.

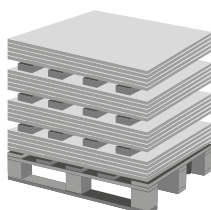
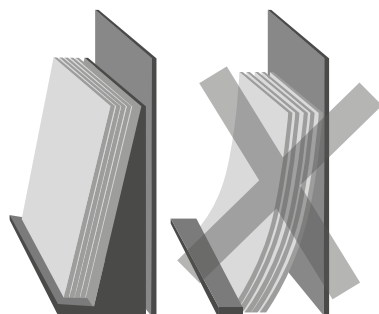
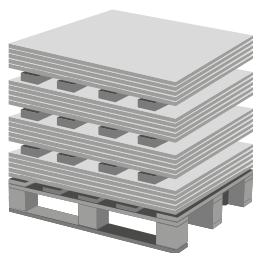
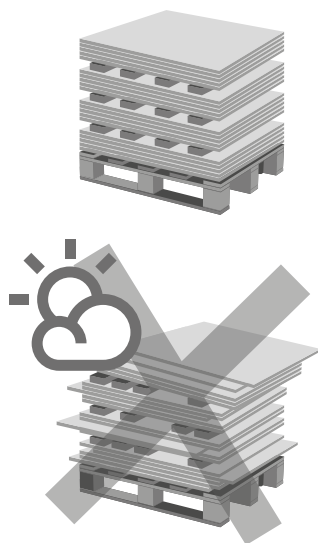
Handling & Transportation

The negative impact of humidity on the panels must be avoided at all times. To do this, they must be kept with their shrink film (peel) coating on until used/installed. If in any of the loading, transportation, unloading operations, etc. said film deteriorates, it is advisable to shrink wrap the package again as soon as possible. In the same way, the cut pieces must also be protected from humidity until they are edged to maintain the maximum quality of the finish.

When manually handling the panels, the use of protective gloves and safety shoes is mandatory to avoid injuries. During the machining of the board, appropriate aspiration systems and, if necessary, protective masks must be used to prevent aspiration of the dust generated by the MDF.

The boards should not be dragged over any surface that could cause deterioration of any of the face or back.

During all handling and machining operations it is essential to prevent particles, remains of machined materials, wrinkled protective film, or any other type of dirt from being trapped between the pieces, since, with the accumulated weight of several units, visible marks could be produced on the lacquered surface. This precaution is especially critical for the LUXE high gloss finish.



RECOMMENDATIONS



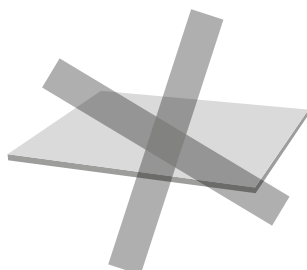
Cleaning

The protective film on the boards must be removed once their installation has been completed and, at most, 6 months after delivery in order to ensure that no adhesive residue remains on the surface. After removing the protective film, it is advisable not to clean the surface for 24 hours. For cleaning, it is recommended to use a non-abrasive cloth moistened with soap and water, and to dry immediately afterwards. In no case should aggressive chemicals such as solvents, alcohol, ammonia, etc. be used.



Applications

The characteristics of the product enable it to be used as a non-worktop surface (vertical surface). The information contained in this document does not exempt the buyer, transformer, assembler and/or user from their obligation to check the compatibility of the material with the intended use and assembly.



Recommendations for Machining

The panel can be cut with any normal blade as long as it is in properly sharpened condition. It is advisable to use discs with a cutting angle that is not very aggressive to avoid splintering. For example, suitable discs would be Freud LU3F with teeth set back -3°.

As a guide, for squaring saws you can use the LU3F model with disc diameter = 300 mm, plate width = 3.2 mm, body width = 2.2, axle = 30 mm and number of teeth = 96.

To profile on an edge, it is advisable to use cutters with diamond plates and the more teeth they have, the better results will be obtained. For Homag banders, two valid options would be the following:

- Leuco brand shredders Model Leucodia Power-Tec CM 250x14x80 Z = 18+18 (good results).
- Leuco brand shredders Model Leucodia Power-Tec S 250x14x80 Z = 24+12+6 (optimal results).

The choice of one or the other can be based on the durability that the user obtains from each of them.

It is essential to clean up at least one centimeter around the entire perimeter of the board.



Amendments

This document may be edited at any time by the company without express commitment to send said updated edition to all initial recipients. To check that you have the latest edition available, it is advisable to contact ALVIC's customer service department.