

FORESCOLOR GUIDE | SPECIFICATION DATA SHEET



FORESCOLOR is a wood fiber board colored throughout with special features for all interior use.

An improvement of Medium Density Fiber boards presenting a more compact panel with higher mechanical performance, higher density all the way through and moisture resistant.

FORESCOLOR is an Eco-friendly product with very low emissions (E0) using no toxic materials and organic dyes. Produced with melamine resins which makes the panel more performant and tool friendly.

FORESCOLOR is available in nine colors, in different thicknesses in plain or textured surfaces.

COMPOSITION

FORESCOLOR uses 100% fresh pine fibers, also composed by melamine resins, organic dyes, hardener, paraffin wax and water. The panel contains no toxic materials and exhibits extremely low level of formaldehyde emissions certified E0 and CARB ULEF (Ultra low emissions of formaldehyde).

PROPERTIES

| Attribute Classification | | | Standard Figures | | | | |
|------------------------------------|----------|--------------------|------------------|--------|--------|--------|--------|
| Properties | Standard | Unit | | 8 mm | 12 mm | 16 mm | 19 mm |
| Thickness | EN 324-1 | mm | 5 | 9 | 12 | 16 | 18 |
| Density | EN 323 | Kg/m³ | 860 | 780 | 760 | 740 | 740 |
| Moisture content | EN 322 | % | 7 ± 2.0 | | | | |
| Thick Swelling - 24h | EN 317 | % | 18 | 12 | 10 | 8 | 8 |
| Internal bond | EN 319 | N/ mm ² | 1.00 | 0.80 | 0.80 | 0.80 | 0.75 |
| Bending strength | EN 310 | N/ mm ² | 35 | 35 | 35 | 35 | 30 |
| Modulus of elasticity | EN 310 | N/ mm ² | ≥ 3000 | ≥ 3000 | ≥ 2800 | ≥ 2700 | ≥ 2700 |
| Swelling after cyclic test | EN 321 | % | 25 | 19 | 16 | 15 | 15 |
| Internal bond after cyclic test | EN 321 | N/ mm ² | 0.35 | 0.30 | 0.25 | 0.20 | 0.20 |



APPLICATIONS

Walls | Partitions | Ceilings | Cabinets | Flooring | Stairs | Doors Furniture | Objects | Educational utensils | Toys Architectural Decorative elements | Decorative Panels | Acoustic Solutions

Where?

- Shopfitting and retail.
- Interior design, office and corporative projects.
- Interior wet areas: Kitchens, toilet furniture, and shower rooms.
- Residential use: home furniture, closets
- School furniture, educational utensils and lockers.
- Exhibitions stands, museum displays, plinths and temporary installations.

FORESCOLOR is an interior product. It is not recommended for permanent outside use.

BENEFITS

Coloured Throughout:

The panel presents a consistent colour distribution through the board which enhances its durability and appearance in tough environments where painted and laminated surfaces will easily degrade by showing scratches and chips.

Moisture Resistant:

Due to the special resin used and its compactness, FORESCOLOR is very performant in indoor wet areas. The surface is much less porous which prevents water or moisture penetration. Due to this features FORESCOLOR standard range is already moisture resistant.

Tool Friendly:

All tools for wood-based panels are adequate to use in FORESCOLOR. The board has a greater internal cohesion and higher consistency in composition and density which makes it quite stable in all transformation process. The melamine resin used makes it smoother for the tools which will last longer.

Density Profile:

FORESCOLOR presents a more homogeneous density profile, meaning the density in core is closer to surface than other fibre boards. This feature allows to work the product third dimensionally into a high level of detail without losing mechanical properties. Also, the edges are stronger and require less processing.

Ecological:

FORESCOLOR is an ecological product using no toxic materials and organic dyes. It's certified FSC and presents very low emissions, being classified CARB ULEF and E0. Non added formaldehyde product available up on request.



TECHNIQUES APPLIABLE TO THE PRODUCT

Due to its high density and mechanical performance, FORESCOLOR is suitable for several techniques such as:

- CNC Routing; Laser cutting; Sandblasting; Digital printing.
- Lamination; Veneering
- Wood joinery techniques.

EXECUTION

All tools suitable for wood-based panels are adequate to use in FORESCOLOR for cutting, drilling and routing.

Drill all necessary holes before installation. The holes shall not be closer than 15mm of the edges.

It is recommended to sand the surface before the gluing process. Start by using a 120 grit, then a 180 and move up to a 280 grit.

When processing the panel surface, differences of moisture and expansion rates between the opposite surface may cause bending. Process both sides similarly to prevent it.

For wall cladding, FORESCOLOR can be fixed using screws, nails, or bonding elements to a support structure in metal or wood frame placed at least every 600mm. The support structure can be metal or wood frame.















FINISHING

It is recommended to finish FORESCOLOR boards to protect the surface and increase the colour durability. The panels shall not be left in raw surface due to porosity and consequent stains absorption.

FORESCOLOR comes already coloured throughout, making the finishing process quite simple. The surface is more compact than standard MDF panels which causes less absorption, being much easier and faster to finish.

FORESCOLOR accepts any kind of wood finishing (clear varnishes, oils, wax). It is possible to combine different finishes to achieve an even wider array of aesthetics and tones.

Before finishing, the panel surface shall be homogeneously sanded. The surfaces should be sanded gradually, increasing the sandpaper grit size by 50% each phase. Repeat the process at least twice with two different sandpaper grit sizes. Before applying the finishing, the board must be cleaned with a dry cloth to remove any dust and then air dried.

Clear lacquers and varnishes require a sealant before the final coating. The board shall be sanded between both coats. The type of lacquer used depends on the product application and needed resistance. Polyurethane lacquers may provide a more resistant solution for a higher demanding application while water-based lacquers are suitable for a more ecological result. There are several varnishing solutions with higher UV protection to prevent colour fading in more exposed applications.

Oils and Waxes usually only need to be applied once (one coat). This solution is better for spaces with more moisture in the air.

EM LIVING is able to advise what is the appropriate finish according to the desired look and application.

COLOUR TONALITY

The natural color features of the raw materials may cause slight variations in tonality. To minimize eventual color variations at job site: use boards from a single batch for each job and select the boards before installation.

CLEANING AND MAINTENANCE

The boards should be properly finished. To clean the boards, softly spray with a non abrasive domestic cleaning product. Then wipe down the panel with a soft cloth. Dry the panel using another soft cloth and do not leave residues on the panel. Alternatively use Methylated Spirit on a soft cloth, using a circular cleaning motion and then dry it as mentioned previously.



STORAGE AND HANDLING

Move and store the boards in a dry and sheltered space, away from rain, direct sunlight and from any ignition sources. Avoid storing the boards close to oxidizing agents and drying oils. During storage, the boards must be parallel to the ground and aligned with each other on a flat surface. To load the boards, use 4 or more supports with a height superior to 8 cm, for easier access with a forklift. Supports should be align, when the pallets are stored on top of each other, to prevent deformation.

Packs should be stored fully wrapped in plastic with an identical cover sheet top to bottom. Boards must be carried vertically by at least two people, one by one, or handled with a forklift or other proper equipment.

WARRANTY

FORESCOLOR is warranted to perform according to the declared properties and written instructions.

There is no settled warranty in time because FORESCOLOR is not a finished product.

MANUFACTURER

FORESCOLOR is produced by Foresco Co. Ltd, one of the main producers of MDF in Korea, with activity since 1976.

CERTIFICATES

















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