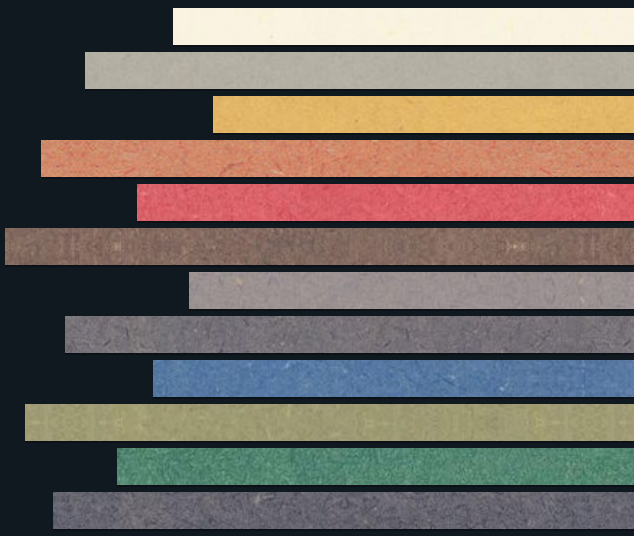
PROGRESSIVE MATERIALS

TECHNICAL DATA SHEET

valchromat

COLOURED MDF PANELS

THROUGH-COLOURED MDF



Colour through the full thickness of the board, for architectural joinery, furniture and interior linings.

EXCLUSIVE DISTRIBUTOR

AUSTRALIA-WIDE

Valchromat is supplied across Australia exclusively through Progressive Materials.

DOCUMENT

Product Technical Data Sheet

REVISION

Rev [—]
[Month Year]

APPLICATIONS

Joinery · Furniture
Wall linings · Retail fit-out

Valchromat Fire Retardant E05

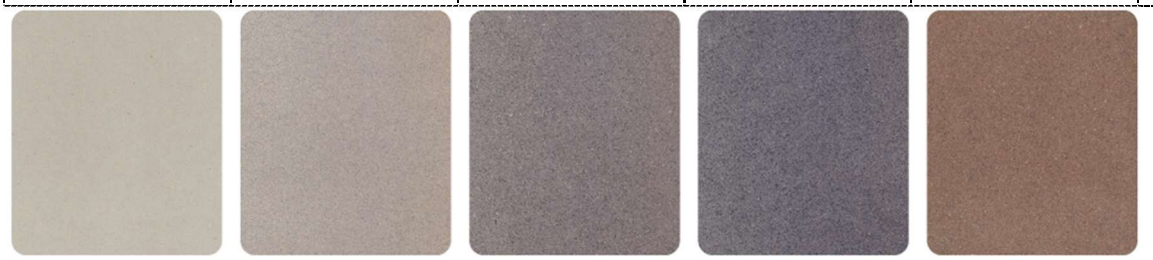
1. Description

Valchromat FR E05 is a coloured-through wood fibre panel with very low formaldehyde emissions (≤ 0.05 ppm) and a fire reaction classification of B-s2,d0, in accordance with EN 13501-1.
The fibres are impregnated with organic dyes and bonded together with a special resin, giving Valchromat FR E05 superior physical and mechanical properties, classified as MDF.HLS according to EN 622-5.
Due to the use of organic dyes and the natural colour variation of wood, differences in colour may occur on the same surface, between surfaces of the same panel, between different thicknesses, or between production batches. To minimise these variations, it is recommended that supply comes from a single production batch.
Valchromat FR E05 is a moisture-resistant panel, supplied unfinished.
For protection and aesthetic enhancement, it is recommended to apply a compatible finish such as varnish, wax, or oil suitable for wood-based substrates.

2. Available Colours



SC - Red	YW - Yellow	OR - Orange	RB - Blue	GM – Green Mint	CQ - Khaki



WG – White Grey	LG – Light Grey	CZ - Grey	LB - Black	CB - Chocolate

3. Applications

Valchromat FR E05 is suitable for a wide range of interior applications, including:
Interior design; Furniture; Wall and ceiling cladding; Flooring; Doors; Bathrooms and kitchens; Hospitality; Exhibition stands; Shopfitting; Decorative panels; Acoustic panels.
When used in humid environments (e.g. bathrooms or kitchens), the panel must be protected with a suitable varnish and the edges properly sealed to maintain dimensional stability and colour integrity.
The panel should not be used in areas with direct or prolonged water contact, such as kitchen countertops, sinks, or shower cabins.

4. Dimensions

2440 x 1220; 2440 x 1830; 3660 x 1220 e 3660 x 2440 [mm]

5. Thicknesses

8 e 9 [mm]

6. Thicknesses and Cutting Tolerances

Thickness	Thickness Tolerance	Cutting Tolerance
8 mm	±0,2 mm	± 2 mm/m; máx 5 mm
19 mm		

7. Finishes

Valchromat FR E05 must always be protected with a surface finish to preserve its natural appearance and increase its durability. Recommended finishes include varnishes, waxes, or oils, depending on the application and environment.
For a perfect finish, the finish should be applied by a professional specialist in wood and wood-based finishes, using spray equipment.

Varnish

Among the three finish types mentioned, varnishes require the most precision in selection and application due to the wide variety available. Any varnish compatible with wood may be used on Valchromat. However:

- Acrylic or aliphatic polyurethane-based varnishes are recommended for their long-term colour stability (non-yellowing).
- Water-based varnishes will have to be tested before being applied, as they can react with the fire retardant additives present in the panel, compromising the final result.

Recommended application process:

- Apply a primer (sealer/filler) as the first coat.
- A second primer coat may be required, depending on the manufacturer's recommendation.
- Once dry, sand with a fine grit (320–360) to remove raised fibres and ensure a smooth surface.
- Apply 1 or 2 coats of finishing varnish, sanding between coats with 320–360 grit paper.
- Varnishes are available in various gloss levels: matte, satin, or gloss.
- It is highly recommended to use primer and varnish from the same manufacturer to ensure compatibility and optimal performance.

Wax or Oils

- Usually applied in a single coat on a well-prepared surface.
- Not suitable for humid environments (e.g. kitchens or bathrooms) due to lower moisture resistance.
- Suitable for decorative use in dry interior settings.

Surface Preparation

Proper surface preparation is essential for a high-quality finish:

- Before application, panels should be laid out side by side to minimise the visual impact of colour variations between panels.
- Panels are factory-calibrated with grit 150/180 sanding.
- Surfaces and edges should be further sanded with fine grit paper appropriate to the selected finish.
- Sand progressively, increasing the grit by approximately 50% with each stage.
- Edges should be treated with the same care as the surfaces.
- Prior to finishing, clean panels with a dry cloth, compressed air, or preferably a vacuum to remove all dust and debris.

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8. Certifications

Valbopan S.A. is certified under EN ISO 9001.
Valchromat is CE certified (1328-CPR-0188) in accordance with EN 13986.
Valbopan S.A. holds Chain of Custody (CoC) certification. Upon request, Valchromat can be supplied with FSC® C101993 or PEFC/13-31-027 certification.
CARB Phase 2 or US EPA-TSCA Title VI certification is also available upon request.

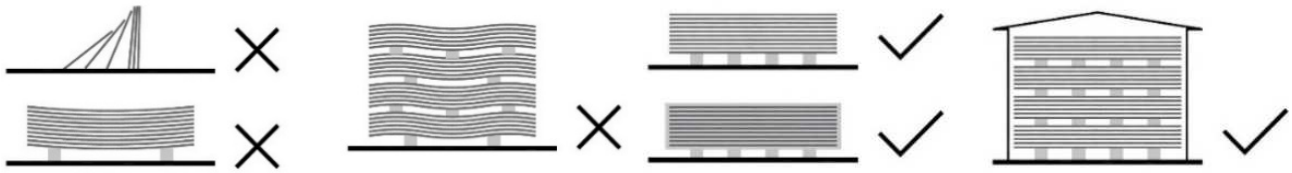
9. Panel Weight

Thickness (mm)	8	19
Weight per sqm (Kg/m^2)	6.6	14.6
Weight of the panels (kg)		
2440 x 1220 mm	19.8	43.6
2440 x 1830 mm	29.6	65.3
3660 x 1220 mm	29.6	65.3
3660 x 2440 mm	59.3	130.7

10. Storage

Valchromat panels must be stored in enclosed areas, protected from direct sunlight, with controlled temperature and humidity conditions.

- Pallets must rest on flat, level bases, supported by spacers high enough to allow forklift access.
- The spacing between supports must not exceed 800 mm (centre to centre).
- If stacking pallets, ensure precise alignment of the support points to avoid deformation of lower panels.



11. Handling

Whenever possible, use mechanical handling equipment (e.g. forklifts or panel lifters) to ensure safe transport and prevent damage.

- For manual handling, move panels one at a time in a vertical position to prevent warping.
- Ensure an adequate number of people are involved to maintain control and stability.
- Follow best practices for manual handling, observe EU Health & Safety standards, and use appropriate personal protective equipment (PPE), such as gloves, safety shoes, and back support belts when necessary.

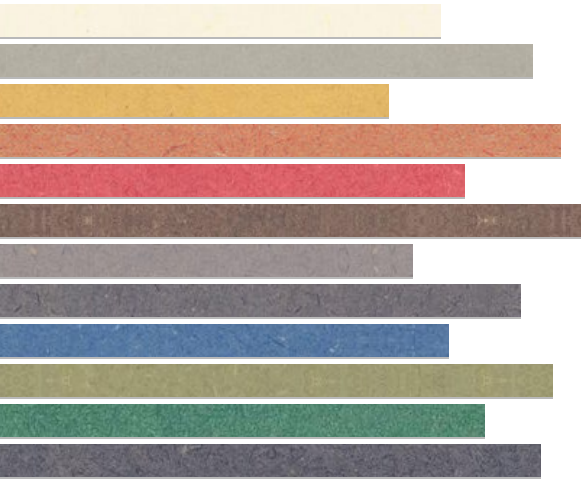


12. Technical Properties

Property	Standard	Unit	Thickness	
			8 mm	19 mm
Density	EN 323	Kg/m^3	830	770
Bending Strength	EN 310	N/mm^2	42	38
Modulus of Elasticity in Bending	EN 310	N/mm^2	3400	3100
Internal Bonf	EN 319	N/mm^2	0.80	0.75
Swelling 24h	EN 317	%	12	8
Internal Bonf after Cyclic Test	EN 321	N/mm^2	0.30	0.20
Swelling after Cyclic Test	EN 321	%	19	15
Formaldehyde Emissions	EN 717-1	ppm	≤ 0.05	
Fire Reaction	EN 13501-1	-	B-s2,d0	

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SUPPLIED AUSTRALIA-WIDE BY PROGRESSIVE MATERIALS

For technical advice, specification support and orders, contact our team.

PROGRESSIVE MATERIALS

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