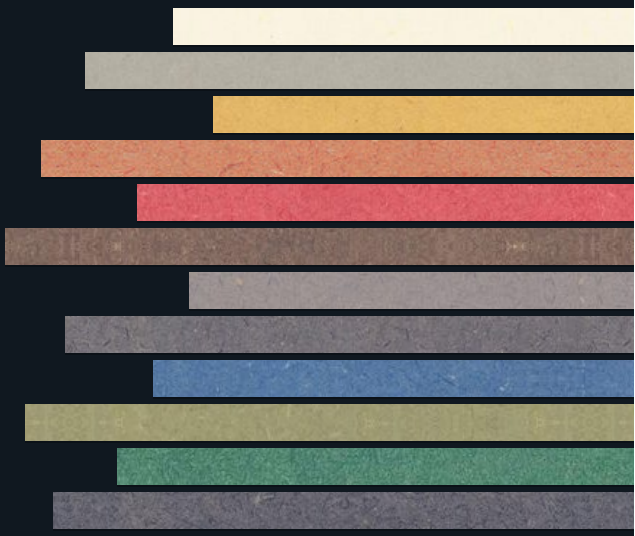
PROGRESSIVE MATERIALS

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 E05

1. Description

Valchromat E05 is a panel made of wood fibres coloured in the production process with very low formaldehyde emission (Formaldehyde ≤ 0.05 ppm).
The fibres are impregnated with organic colouring agents and chemically bound to one another by a special resin which lends Valchromat unique physicochemical features. Valchromat is an MDF.HLS, in compliance with the EN 622-5 standard. Valchromat panels, thanks to the use of organic colouring agents and the natural variation of the wood colour, come in different shades. This variation may be seen on the same surface, between the two faces of the same panel, or between the different production batches or thicknesses. To minimize this effect, the supply must be from a single production. Valchromat is a moisture resistant panel, supplied with no finish, and therefore a layer of varnish, wax or oil is recommended.

2. Colour range available



WP – White Pearl | WG – White Grey | LG – Ligth Grey | CZ - Grey | LB - Black | CB - Chocolate



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

3. Applications

Interior design, furniture, linings, flooring, doors, bathrooms and kitchens, restaurants, exhibition stands, shopfitting, decorative panels, acoustic panels, among others.
Whenever the panels are used in moist zones, such as bathrooms or kitchens, they should be protected with a specific varnish finish and the tops must be properly sealed. The Valchromat panels should not be applied in places where they will come into direct contact with water, such as kitchen worktops and bathroom showers.

4. Dimensions

Units	Dimensions			
mm	2440 x 1220	2440 x 1830	3660 x 1220	3660 x 2440
inch	96 x 48	96 x 72	144 x 48	144 x 96

5.Thickness

Units	Thickness				
mm inch	8 5/16	12 1/2	16 5/8	19 3/4	30 1 3/16

6. Thickness and cutting tolerances

Characteristics	Thickness				
	8mm 5/16”	12mm 1/2”	16mm 5/8”	19mm 3/4”	30mm 1 3/16”
Thickness tolerance	±0,2 mm ±0,008”				±0,3 mm ±0,012”
Cutting tolerance	± 2 mm/m; maximum of 5 mm 0.2 %; maximum of 0.2”				

7. Finishes

A finish should be applied to the Valchromat panel to protect its surface and maintain its natural appearance. The finish may be varnish, wax or oil.

Surface preparation

- Given that there will be a difference in shades of the panels from the same batch, before installing them, the panels should be laid out side by side and ordered to minimize these differences in adjacent panels.
- In general, any finish, be it varnish, wax or oil, needs the surface to be prepared beforehand. This preparation involves sanding the surfaces before applying the finish.
- Depending on the type of finish the panel will receive, different types of sandpaper grains may be recommended. It is common to prepare the surface with 150/180 grit sandpaper.
- If a finer sandpaper is required, the process should be gradual, increasing the sandpaper grain by 50% at each new step. Edges should be treated equally.
- Valchromat panels are factory-sanded to 150 grits for 19 and 30 mm thicknesses, and 180 grit for 8, 12 and 16 mm thicknesses.
- Before applying the finish, the panels must be cleaned with a dry cloth, air blowing or, preferably with a vacuum cleaner to be free of any type of dust, which will damage the finish.

Varnish

- Of the three kinds of finishes described, the varnishes are the most complex and at times the most difficult to choose given the broad range available on the market. Any wood varnish can be applied to Valchromat.
- Varnishes manufactured with acrylic resins and aliphatic polyurethane are widely used, since they do not yellow over time. The water-based varnishes change the natural colour of the panel less.
- When a varnish finish is applied, the first coat applied is a primer. After the primer has dried, the panel should be sanded with fine sandpaper with grit size 320-360, to remove the granules that may result from peeling.
- Next, a varnish finish is applied in one or two coats, in line with the manufacturer’s instructions. Between each layer the panel should be sanded using fine sandpaper with grit size 320-360.
- Different varnishes have different appearances, from matt to gloss.
- Primer and the varnish from the same manufacturer should be used to avoid incompatibility between them.

Cera ou Óleo

- Waxes or oils are applied in the coats recommended by the manufacturers on previously prepared surfaces.
- Some types of waxes and oils, such as beeswax and linseed oil, can stain the panel, so these products are not recommended. Acrylic waxes and mineral oils are widely used.
- These types of finish should not be applied to panels that will be installed in humid environments, such as kitchens and bathrooms.

8. Certifications

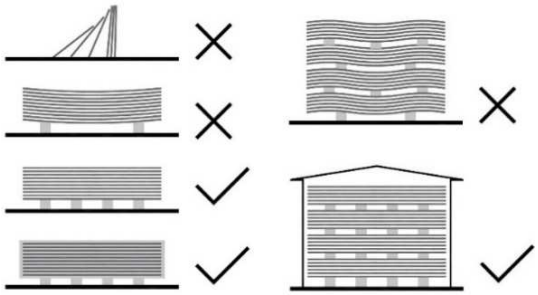
Valbopan S.A. complies with the requirements of EN ISO 9001.
Valchromat has a CE 1328-CPR-0062 certificate of conformity, meeting the requirements of EN 13986.
Valbopan S.A. holds Chain of Custody (CoC) and Chain of Responsibility (CdR) certification in accordance with the applicable standards. On request, the Valchromat panel can be supplied with one of the FSC® C101993 or PEFC/13-31-027 certifications.
On request, Valchromat E05 can be supplied with CARB Phase 2 or US EPA-TSCA Title VI certification.

9. Panel weight

Thickness	8 5/16	12 1/2	16 5/8	19 3/4	30 1 3/16	mm inch
Weight per sqm	6.6 1.36	9.6 1.97	12.5 2.56	14.6 3.00	21.6 4.42	Kg/m2 psf
Panel weight						
2440 x 1220 96 x 48	19.8 43.3	28.6 63.0	37.2 81.9	43.6 96.0	64.3 141.8	Kg Lb
2440 x 1830 96 x 72	29.6 65.4	42.9 94.5	55.7 122.9	65.3 144.0	96.4 212.6	Kg Lb
3660 x 1220 144 x 48	29.6 65.4	42.9 94.5	55.7 122.9	65.3 144.0	96.4 212.6	Kg Lb
3660 x 2440 144 x 96	59.3 130.7	85.7 189.0	111.5 245.7	130.7 288.0	192.9 425.3	Kg Lb

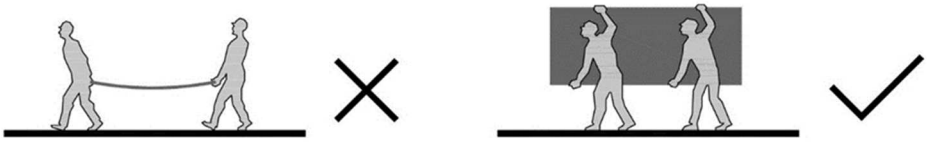
10. Storage

Valchromat panels must be stored in a closed area, protected from sunlight, with controlled temperature and humidity, supported on a flat and horizontal base. The pallets must be placed on supports with sufficient height to allow easy access with a forklift. The maximum distance between supports should not exceed 800 mm.
If the pallets are piled on top of each other, all the support bases must be aligned to prevent deformation.



11. Handling

Whenever possible, the handling of the panels should be performed using appropriate equipment, such as forklifts or plate lifts. When the panels must be moved manually, they must be moved one by one, in the vertical position, to remain flat and without deforming. their movement should not be performed without sufficient people being present. Good manual handling practices should be followed, using the appropriate personal protective equipment and following the rules of European Health and Safety legislation

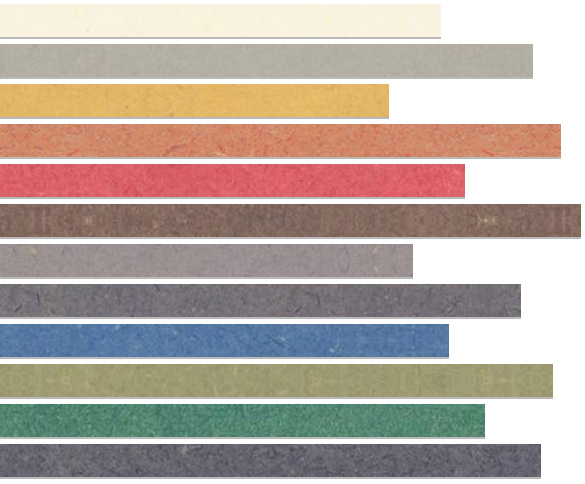


12. Properties

Characteristics	Units	Thickness					Norma
	mm inch	8 5/16	12 1/2	16 5/8	19 3/4	30 1 3/16	
Density	Kg/m3 Lb/ft3	830 51.8	800 49.9	780 48.7	770 48.1	720 44.9	EN 323
Bending strength	N/mm2 psi	42 6100	40 5800	38 5500	38 5500	36 5200	EN 310
Modulus of elasticity in bending	N/mm2 psi	3400 493.000	3200 464.000	3100 449.600	3100 449.600	3000 435.000	EN 310
Internal bond	N/mm2 psi	0.80 116	0.80 116	0.75 109	0.75 109	0.75 109	EN 319
Swellingf in thickness 24h	%	12	10	8	8	7	EN 317
Internal bond after cyclic test	N/mm2 psi	0.30 44	0.25 36	0.20 29	0.20 29	0.15 22	EN 321
Swelling in thickness after cyclic test	%	19	16	15	15	15	EN 321
Formaldehyde content	-	≤ 0.05 ppm					EN 717-1
Fire Reaction	-	F	D-s2,d0				EN 13501

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

PROGRESSIVE MATERIALS

PHONE
08 9445 8300

EMAIL
info@progressivematerials.com.au

WEB
progressivematerials.com.au

ADDRESS
6 Distinction Road
Wangara WA 6065