

1. Description

Valchromat® A Forest of Colour



Valchromat is a panel made of wood fibres coloured in the production process. 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.

Fire Reaction: B-s2,d0.

2. Colours and thickness

Colours	Reference	Thickness (mm)	
		8	19
	WG-White Grey	•	•
	LG-Light Grey	•	•
	CZ-Grey	•	•
	BL-Black	•	•
	CB-Chocolate	•	•
	SC-Red	•	•
	YW-Yellow	•	•
	OR-Orange	•	•
	RB-Blue	•	•
	GM-Green Mint	•	•
	CQ-Caqui	•	•

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, it should be protected with a varnish and the edges 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

Unit	Dimension of the panels			
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 and dimension tolerances

Thickness		Tolerance	
mm	inch	mm	Inch
8	5/16	±0,2	±0.008
19	3/4	±0,2	±0.008

Dimension tolerance: ± 2 mm/m (0.2%); maximum of 5 mm (0.2")

6. Certifications

Valbopan S.A. complies with the requirements of the EN ISO 9001 Standard.

Valchromat is certified through CE 1328-CPR-0062, complying with the requirements of the EN 13986 standard.

Valbopan S.A. holds the Chain of Custody Certification, in accordance with the applicable normative references.

Upon request, the Valchromat panel can be supplied with one of the FSC® C101993 or PEFC/13-31-027 certifications.

Upon request Valchromat can be supplied with CARB Phase 2 or US EPA-TSCS Title VI certification.

7. Finishes

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

Varnish

Of the three types of finishes described, varnishes are the most complex and sometimes difficult to choose, due to the wide variety of options available. Any varnish that is suitable for wood can be applied over Valchromat. Varnishes made with acrylic or aliphatic polyurethane resins are widely used, as they do not yellow over time. Water-based finishes are not recommended as they can react with the fire retardant used in the manufacture of the panel.

When finishing with varnish, the first coat to be applied is a primer. According to the manufacturer's prescription, it may be necessary to apply a second coat of primer. After drying and between coats, the surfaces are sanded with fine 320-360 grit sandpaper, to remove any roughness and grain size that may appear.

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.

Wax or Oil Finish

The waxes or oils are usually applied with a single coat on the pre-prepared surfaces.

These kinds of finishes should not be applied on panels for installation in moist environments, such as kitchens and bathrooms.

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 minimise 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. Tops should be treated equally.

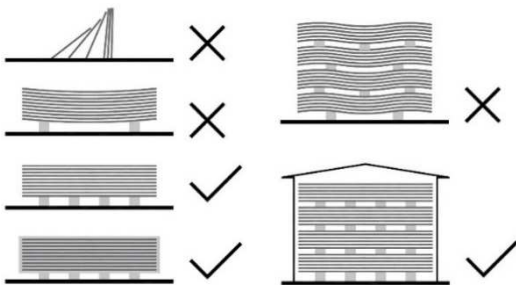
Valchromat panels are factory-sanded to 150 grits for 19 and 30 mm thicknesses, and 180 grit for 8, 12 and 16 mm thicknesses.

Before applying the finish, the panels must be cleaned with a dry cloth, air blowing or, preferably with a vacuum cleaner in order to be free of any type of dust, which will damage the finish.

8. Panel weight

Thickness	mm	8	19
	inch	5/16	3/4
Weight per sqm	kg/m ²	6.6	14.6
	psf	1.36	3.00
Panel weight 2440 x 1220 mm	kg	19.8	43.6
	lb	43.3	96.0
2440 x 1830 mm	kg	29.6	65.3
	lb	65.4	144.0
3660 x 1220 mm	kg	29.6	65.3
	lb	65.4	144.0
3660 x 2440 mm	kg	59.3	130.7
	lb	130.7	288.0

9. 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 (31.5").

If the pallets are piled on top of each other, all the support bases must be aligned to prevent deformation.

10. Handling



Whenever possible, the handling of the panels should be performed using appropriate equipment, such as forklifts or plate lifts.

When the panels have to be moved manually, they must be moved one by one, in the vertical position, in order 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.

11. Properties

Characteristics	Units	Thickness		Standard
		8	19	
	mm			
	inch	5/16	3/4	
Density	kg/m ³	830	770	EN 323
	lb/ft ³	51.8	48.1	
Bending strength	N/mm ²	42	38	EN 310
	psi	6100	5500	
Modulus of elasticity in bending	N/mm ²	3400	3100	EN 310
	psi	493000	449600	
Internal bond	N/mm ²	0.80	0.75	EN 319
	psi	116	109	
Swelling in thickness 24h	%	12	8	EN 317
Internal bond after cyclic test	N/mm ²	0.30	0.20	EN 321
	psi	44	29	
Swelling in thickness after cyclic test	%	19	15	EN 321
Formaldehyde content		≤ 8mg/100g, Class E1		EN ISO 12460-5
Fire reaction		B-s2,d0		EN 13501