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.

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

Minimum order: 10 m3 per colour and thickness

2. Colours and thickness

| Colours | Reference | Thickness (mm) | |
		8	19
	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, 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

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	±0,3	±0.012

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. has Responsible Supply Chain Certification, in accordance with the FSC® and PEFC™ certification (FSC® FSC-C101993 and PEFC™ PEFC/13-31-027). Upon request Valchromat can be supplied with one of these 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 natural appearance. The finish may be varnish, wax or oil.

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.

Two-component acrylic varnishes are widely used, as 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, 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.

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 so as 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.

The surfaces should be sanded gradually, increasing the sandpaper grit size 50% with each new step. At least 2 phases with 2 different sandpaper grit sizes are recommended.

Valchromat panels are sanded at the factory with 150 or 180 grit depending on the thickness, so the surface preparation recommendation is to start with 220-240 grit sandpaper and finish with 320-360 grit sandpaper, to obtain a smooth surface with no scratches. Tops should also be treated.

Before applying the finish, the panels must be cleaned with a dry cloth, air blowing or, preferably with a 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	6.8	15.0
	psf	1.39	3.07
Panel weight 2440 x 1220 mm	kg	20.2	44.7
	lb	44.5	98.5
2440 x 1830 mm	kg	30.4	67.0
	lb	67.0	147.7
3660 x 1220 mm	kg	30.4	67.0
	lb	67.0	147.7
3660 x 2440 mm	kg	60.7	134.0
	lb	133.8	295.4

9. Storage
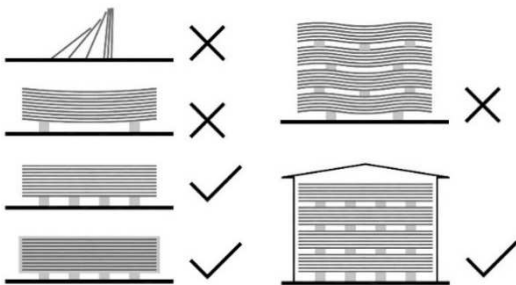
Valchromat panels must be stored in a covered area, protected from sunlight and rain, with a flat and horizontal base. The pallets must be placed on supports with sufficient height (≥8 cm) to allow easy access with a forklift. The maximum distance between supports should not exceed 800 mm.

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

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
	mm	8	19	
	inch	5/16	3/4	
Density	kg/m^3	850	790	EN 323
	lb/ft^3	53.06	49.32	
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 120
Fire reaction		B-s2,d0		EN 13501