TECHNICAL DATA SHEET

TEBOPAINT GARANT

Wall cladding, facades, gables. Constructions in exposed exterior environments. Any exterior end-use where the plywood product is going to receive a paint application.

Multiannual guarantee on the glue line

DESCRIPTION

Base board: throughout Okoume plywood produced from severely selected veneers

Quality grade of the outerlayers: Both sides surfaced with a white paintable melamine film of 170 g/m²

Guarantee: multiannual on the glue line

Average density (IAW EN 323): 500 kg/m³ (+/- 10%)

Bonding (IAW EN 314-2): class 3
Service (IAW EN 636): class 3 exterior conditions

Formaldehyde release classification (IAW EN 13986): E1
Content of Pentachlorophenol (IAW EN 13986): PCP ≈ 0 ppm

SIZES, NUMBER OF PLIES & PACKAGING

Thicknesses (mm)	Number of plies	Sizes (mm)	Packing
10	(5)	2500 x 1220 3100 x 1530	45
12	(5)		37
15	(7)		30
18	(9)		25
22	(11)		20

Other sizes & thicknesses: on request

OPTIONS

Preservative treatments, fungicide & Insecticide, antitermite: optional on request
Cutting & TG processing: optional on request

STORAGE

Flat, on intermediate bearers, in an enclosed dry and ventilated building, clear of the ground. As far as storage on site is concerned, provision should be made to cover the panels with an opaque waterproof sheeting with the underside of the stacks clear of the ground.

FURTHER PROCESSING & INSTALLATION

Compliance with standard practice, with regulations and with health and safety rules should be maintained at all times.
Cutting and machining in the workshop possible except laser technology.

PRODUCTION SITES

Production on Thébault's sites in France

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THEBAULT GROUPE

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TECHNICAL PROPERTIES

Characteristic values (MPA) IAW EN 789 - 1058 for structural calculations IAW Eurocodes

		10	12	15	18	22
Modulus of elasticity (E_m)	//	3597	4136	3464	3240	3828
	_I_	5653	5114	5786	6010	5422
Bending strength (f_m)	//	22,4	22,4	18,7	17,4	19,7
	_I_	42,2	36,5	40,3	39	34,6
Others characteristic values	Available on DOP Strength in: Tension (f_t), Compression (f_c), Panel shear (f_v) and Planar shear(f_r) Modulus of elasticity in: Tension (E_t), Compression (E_c), Panel shear (G_v) and planar shear (G_r)					

Uses

Use in structural applications (IAW EN 13986, EN 636-3, EN 636-2, EN 636-1)	Suitable for use as structural element in exterior conditions (service class 3), humid conditions (service class 2) and interior conditions (service class 1)

Guarantees conditions

The acquisition of TEBOPAINT GARANT plywood implicates for the buyer the full acceptance of the guarantee conditions subscribed by Messrs JEAN THEBAULT SAS near their insurance company. The insurance contract and the related guarantee conditions are available on request.

Nail and screw holding (t = 15 mm)

Nail	Face and edge: 300 N	
Screw	Face	Edge
	1450 N	1150 N

Bending radius (mm)

Epaisseur	10	12	15	18
//	2000	2400	3000	3800
_I_	2000	2400	3000	3800

Sound absorption coefficient

IAW EN 13986 Table N°10	Frequency range	
	250 Hz to 500 Hz	1000 Hz to 2000 Hz
	0,10	0,30

Reaction to fire

End use condition In reference to table 8 of EN 13986 - 2004+A1:2015	Minimum thickness	Class excluding floorings	Class floorings
Without an air gap behind the panel	9 mm	D-s2,d0	D_{fl}-s1
With a closed or an open air gap not more than 22 mm behind the woodbased panel	9 mm	D-s2,d2	-
With a closed air gap behind the wood-based panel	15 mm	D-s2,d1	D_{fl}-s1
With an open air gap behind the wood-based panel	18 mm	D-s2,d0	D_{fl}-s1
Any	3 mm	E	E_{fl}

Thermal conductivity

IAW EN 13986	λ = 0,13

Characteristic density

IAW EN 789	430 kg/m³

Vapour permeability

IAW EN 13986 Table 9	Wet cup	Dry cup
	70 µ	200 µ

Airbone sound absorption

IAW EN 13986 Paragraph 5.10	The sound transmission loss R of a single wood-based panel, measured in dB, is related the mean surface mass m_A en kg/m² according to the following equation (which is only valid for the frequency range of 1 kHz to 3 kHz and at a surface mass > 5 kg/m²): R = 13 x lg (m_A) + 14

TECHNICAL SUITABILITY & CERTIFICATION

CE Structure attestation of conformity 2+	0380 - DOP* - CPR - EN 13986 : 2004 + A1 : 2015 - EN 636-3 S E1 * DOP : Declaration of Performance available on www.groupe-thebault.com

Quality marks (country)		Ecocertification	CE Marking	
NF Extérieur CTB-X (F)	KOMO (NL)	FSC©	CE S (Structural)	Information on the emission level of volatile substances within the indoor air, showing a risk of toxicity in case of inhalation, based on a scale going from A+ (very low emissions) to C (high emissions). Scenarios flooring/ceiling
CERTIFIÉ PAR FCBA NF CONTREPLAQUÉS www.fcba.fr		FSC www.fsc.org FSC® C051251 La marque de la gestion forestière responsable	CE	ÉMISSIONS DANS L'AIR INTÉRIEUR* A+ (A+ A B C)

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TEBOPAINT GARANT

SURFACE CHARACTERISTICS

TEBOPAINT OKOUME is a semi- finished surfaced with a hot pressed white paintable melamine film. The melamine film is open to allow a good adhesion of the finishing coats.

The adhesion performance of the priming coat can exclusively be evaluated in accordance with the following test method: ISO 2409

The melamine film is not a full & final finishing system but only one of its components. This characteristic confers the surface layer some brittleness and tendency to staining / marking but also ensures good adhesion of subsequent finishing layers. The final finishing coats must, as a minimum, be carried out in accordance with the state of the art.

FURTHER PROCESSING & PRECAUTION FOR USE

Handling
TEBOPAINT okoume has a very smooth and flawless surface. It is recommended to avoid all types of friction, shocks and impacts during transport and handling in the workshop and on site.

Preparation of the plywood substrate for the finishing coats.
Visually inspect the face and back sides.
Slight touch - sand the surface to a grit of 180 or finer to remove dirt & marks. After sanding remove the dust.
No cleaning products (thinner or water) are allowed. The use of high-pressure cleaners is prohibited.

Cutting and further processing
cutting and further processing in the workshop are possible except laser cutting.
The woodgrain direction of the face veneer should be identified under the melamine film prior to any further processing operation.
The use of a scoring saw is recommended to prevent damage to the coating.
During cutting and machining operations, e.g. chamfer/ bevel ensure the quality and type of tools in order to prevent surface splinters. A tungsten carbide tipped saw will give best performance.
Inadequate support increases the likelihood of a bad saw cut, so firmly secure the panel during sawing.

Sawing
The panel should be supported as close as possible to the blade of a circular saw and best results will be achieved with:

- A fast material feed speed
- Counter-sawing (panel fed in opposite direction to the saw rotation
- A minimum protrusion of the saw above the panel surface
- Working to a knifed or scored line, the cut being made on the non-visible side.

To minimize the risk of splintering the corners of the panel, it is best if the cuts at right angles to the face grain are made first and parallel to the face grain are made afterwards.

Cutting speeds found to be suitable for TEBOPAINT plywood

	Cutting speed	Feed rate
Circular saw	3000 – 6000 m/mn	31 m/min

Chipping of the prefinished surface can be eliminated by:

- Using an appropriate saw for pre-finished plywood panels
- Keeping a low angle of cut

Band & hand sawing are not recommended.

Routing
TcT cutters are recommended in order to prolong tool life. a High cutter speed and slow material feed speed usually produces best results.

Drilling
To achieve a clean finish, drilling should start from the upper face of the panel. Breaking out on the back of TEBOPAINT plywood can be avoided by drilling into a backing block.

Assembly
Nails and staples are not recommended due to possible damage to the surface of TEBOPAINT plywood. Screws are to be preferred because they have a high tensile strength. Always use stainless steel screws.
Pre - drilling of screw holes in TEBOPAINT plywood with a diameter equal to the shank of the screw. Then use a countersink drill to countersink the screw head.

Prefer dome - headed TOrX screws in combination with a seal washer. These connectors are available in a variety of colours which can match with the selected final finish.

Nailing by hand is not recommended due to possible damage to the surface.

Time lapse until application of the final coats
The time lapse for the application of the final coatings must not exceed 60 days from installation date on the exterior worksite.

Further processing and installation of TEBOPAINT plywood
Proceed in accordance with the state of the art, the national regulations and refer to the THEBAULT Group recommendations available on our website using the following link:
http://www.groupe-thebault.com/IMG/pdf/thebault_fp_gb_bardages.pdf

GUIDELINES FOR APPLICATION OF FINISHING COATINGS

Selection of the finish coats
TEBOPAINT plywood can be finished with conventional oil-based and water-based paints applied by spray, brush or roller.
Water based, acrylic type, finishing coats are compatible after preliminary usual tests have been carried out to verify suitability and compatibility on a sample piece in co-ordination with the paint supplier.

Certain categories of solvents or dilution degree (solvent or water) may disturb the adhesion of the finishing system.

Virtually all paints have a tendency to draw away from a sharp edge or corner. It is therefore recommended that all corners and edges be rounded to a radius of at least 3 mm by machining or light sanding to enhance paint retention. This is particularly important with panels exposed to exterior conditions (Service class 3).

The edges of TEBOPAINT plywood are more porous than its surface. As a result moisture absorption at edges is greater than on the face. Therefore the edges need to be adequately sealed. It is recommended to refer to the sealant manufacturer's literature.

Proceed in accordance with the state of the art and conform to the national regulations and / or standards in place.

Take specific care of not pulling off the film when filling with putty the screw heads or mechanical connectors. This operation should be carried out with caution.

Following rules should be followed at all times:
- Ambient and substrate temperature to range between 5 and 35 °C
- Relative Humidity of the atmosphere (RH) to be inferior to 80 %

TEBOPAINT Plywood, surfaced with a melamine film, may become wet during after an unfavourable climatic period.
It is necessary to wait until the panel has dried before continuing the finishing process.

The moisture content of TEBOPAINT Plywood should not exceed 15% to maximum 18 %. It is recommended to refer to the paint manufacturer's literature.

A regular maintenance program has to be established in accordance with the paint supplier's recommendations in order to ensure an optimal lifetime of the building works.