



TECHNICAL DATA SHEET

ALPI

ALPIlignum

ALPIlignum is a decorative multilaminar wood veneer.

Standard dimensions

Poplar based veneer	length 2200-2500 mm; width from 620 to 700 mm
Ayous based veneer	length 2200-2500-2800-3150 mm; width 360 mm, from 620 to 760 mm
Basswood based veneer	length 2500-3150 mm; width 360 mm, from 620 to 700 mm

Special sizes available on request.

Nominal thickness available

Thickness	from 0,42 mm to 2,8 mm
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Not all products are available in all thicknesses.

Variations in size

Width	-0 / +30 mm
Thickness	complies with standard ISO 18775 < 1,5 mm : +/- 0,05 mm; > 1,5 mm : +/- 4%

Wood Density

450-900 kg/m³ (measured according to ISO 9427). Density depends on each product.

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Formaldehyde emissions

The formaldehyde emission of ALPIlignum is category E1 according to the test requirements UNI EN 717-1:2004. Upon request, ALPI supplies two types of ALPIlignum with formaldehyde emissions that are lower than the E1 standard. NBE – ALPIlignum emits a fraction of the formaldehyde emissions allowed by the E1 standard. ZeroF – ALPIlignum is devoid of added formaldehyde. However, it is impossible to guarantee the absolute absence of formaldehyde, because traces of it are naturally present in wood.

Lightfastness

ALPIlignum is an uncoated product whose lightfastness depends on the chemical composition of the final varnish and how it is applied. Upon request, ALPI supplies a type of ALPIlignum that can reach values above 4 in grey scale (UNI EN 15187:2007) if suitably varnished. Customers must be aware that exposure to light can make the veneer fade or change colour. ALPI suggests making precautionary tests based on the planned use in order to optimise performance.

Mechanical characteristics

The mechanical characteristics of ALPIlignum depend on the chemical composition of the varnish used and the type of surface material the veneer is affixed to. ALPI suggests making precautionary tests based on the planned use in order to optimise performance.

Colour and grain

Being a natural wood product, the colour of ALPIlignum may vary slightly from the reference colour. ALPI suggests verifying the colour and veining of the acquired veneer before use.

Storing

Being prevalently made of wood, the humidity content of ALPIlignum varies in accordance with the humidity of the space where it is stored and processed. ALPI suggests maintaining relative humidity levels between 40% and 70%, with a reference ambient temperature of 20° Celsius.

Precautions

Absolutely avoid contact, even temporary contact, with water and other liquids. Absolutely avoid condensation and dripping on the surface of the product. ALPIlignum must be stored flat, at least 20 centimetres from the ground, and protected from direct and indirect light.

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Veneering

Gluing with urea adhesives

ALPIlignum can be glued with urea adhesive to all wood-based surfaces. Other types of surface must be tested and evaluated beforehand. The amount of glue per square metre depends on the material and thickness of the surface, on the structure and thickness of the veneer, and on press pressure. Generally, no more than 150 grams of glue per square metre is advised, combined with pressure between 1.5 and 5 bar. Veneering temperatures are between 85° and 120° Celsius. Glue may be mixed with organic or inorganic additives in order to modify the spread rate to reduce the effect of bleed-through, the occurrence of glue seeping through the pores of the wood and showing up on the face of the panel. Adding pigment to the glue in a colour similar to the veneer is advisable. ALPIlignum made of basswood must be glued with at least 120-140 grams of urea adhesive per square metre.

Gluing with vinyl adhesives

ALPIlignum veneer can be glued with vinyl adhesive to all wood-based surfaces. Other types of surface must be tested and evaluated beforehand. Being thermoplastic, this type of adhesive must be applied in a precise quantity according to the veneer, the type of surface it is affixed to, and the type of press in order to avoid bleed-through that is difficult to eliminate by sanding. In general, between 80 grams and 100 grams of glue per square metre should be used, with pressure between 1.5 and 3.5 bar. Veneering temperatures are between 60° and 90° Celsius. Adding pigment to the glue in a colour similar to the veneer is advisable. ALPI suggests making tests before use.

Gluing with hot-melt adhesives

ALPIlignum can be glued using hot-melt adhesives such as polyolefin, EVA (ethylene vinyl acetate), and reactive polyurethane. Hot-melt adhesive is mainly used on small surfaces such as edges, with the help of automatic systems with a mechanical clamp. Other methods of veneering must be verified by preliminary testing. ALPI recommends following the instructions of the adhesive manufacturer.

Sanding

After gluing it to the desired surface, ALPIlignum must be sanded with abrasive paper to eliminate imperfections and glue that has seeped through the pores. Sandpaper with grit grades 120–150–180 can be used singularly or in sequence, by hand or by electric sander. Grit grades 100 or 220/240 should only be used to obtain special effects.

Varnishing

Like all other wood, ALPIlignum requires specific varnish to protect and preserve it from chemical and physical deterioration given by light and heat, and from mechanical damage such as scratches and dents.

ALPIlignum can be varnished using all methods and types of product that are recommended for wood. Special attention is needed when using water-based varnish, seeing the hygroscopic nature of wood veneer.

ALPI suggests using products with high wetting capacity, yellowing resistance, and high protection from ultraviolet rays.

Any water-based varnish used must remain stable in moderately acid pH (4–6) conditions, such as products specifically formulated for acidic broad-leaved (hardwood) types of wood. ALPI recommends following the instructions of the varnish manufacturer and conducting preliminary tests before proceeding.

For all additional clarifications, please contact the technical support office at ALPI. This data sheet replaces and annuls any older information. The information and recommendations contained in this data sheet are based on current knowledge at ALPI and could be modified in the future in accordance with new findings, evaluations or production systems.

Users should carry out their own assessment of the product to satisfy themselves that it is suitable for their requirements.