



# ALPIlignum Technical features /

# ALPIIignum /

ALPIlignum is a decorative multilaminar wood veneer. In line with the sustainable approach at ALPI and the company's constant striving for excellence in the use of natural resources, ALPI veneer is made with wood from responsibly managed forests certified by FSC<sup>®</sup> (FSC-C084497).



# 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

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/m<sup>3</sup> (measured according to ISO 9427). Density depends on each product.

# ALPIIignum /

### 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 finish 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 finished. Customers must be aware that exposure to light can make the veneer fade or change color. ALPI suggests making precautionary tests based on the planned use in order to optimize performance.

## Mechanical characteristics /

The mechanical characteristics of ALPIlignum depend on the chemical composition of the finish and the type of substrate used. ALPI suggests making precautionary tests based on the planned use in order to optimize performance.

## Color and grain /

Being a natural wood product, the color of ALPIIignum may vary slightly from the reference color. ALPI suggests verifying the color and grain of the veneer before use.

#### Storing /

The moisture content of ALPIIignum 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 centimeters 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 meter 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 meter is advised, combined with pressure between 1.5 and 5 bar. Veneering temperatures are between 85° and 120° Celsius. Glue may be mixed with the proper extenders to modify the viscosity. This can 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 color similar to the veneer is advisable. ALPIlignum made of basswood must be glued with at least 120-140 grams of urea adhesive per square meter.

## **Gluing with PVA adhesives**

ALPIlignum veneer can be glued with PVA 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 substrate it is affixed to, and the type of press in order to avoid bleed-through that is difficult to eliminate by sanding. In general, use between 80 grams and 100 grams of glue per square meter, with pressure between 1.5 and 3.5 bar. Veneering temperatures are between 30° and 70° Celsius. Adding pigment to the glue in a color 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 substrate, ALPIIignum 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.

## Finishing /

Like all other wood, ALPIlignum requires specific finish 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 finished using all methods and types of product that are recommended for wood. Special attention is needed when using water-based finish, because of 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 finish 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 finish 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. This advice does not constitute a warranty, either express or implied, and it does not modify our standard warranty for any product.

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