

**ALPIlignum /**

18.01

Collection Designer

Designer Piero Lissoni

Product

ALPI Xilo 2.0 Striped White

Texture

Quartered

Size

3150x640 mm

**ALPIkord /**

18.01 K

Size

3050x1300 mm

Wax

✓

Groove

✓

Light Gloss

✓

Bright Gloss

✓

**ALPIrobur /**

18.01 R

Size

3050x1300 mm

Soft

✓

Matt

✓

Pore

✓

Brushed

✓



## ALPIlignum /

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ALPIlignum is a decorative multilaminar wood veneer that complies with standard ISO 18775.

### Average Weight Composition /

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Poplar wood and/or Ayous wood, and/or Basswood	70-80%
Resins	16-26%
Dyes	< 1%
Moisture content	min 4% - max 14%

Being a wood product, ALPIlignum's moisture content may vary depending on environmental conditions during transport and storage.

### Possible Dimensions /

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Ayous Veneer	length 2000-2200-2500-2800-3150 mm width 620-680 mm*
Poplar Veneer	length 2000-2200-2300-2500-2600 mm width 620-680 mm*
Basswood Veneer	length 2200-2500-2800-3150 mm width 620-680 mm*

Veneer dimension may be customized upon request and for specific product lines.

\*With the exception of some product lines.

### Thickness /

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0.5-2.5 mm	with the following nominal thickness intervals
Up to 1.5 mm (included)	nominal interval 0.05 mm
Over 1.5 mm	nominal interval 0.10 mm

We can customize veneer dimensions for specific product lines upon request.

### Dimensional Tolerances /

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Length and Width	pursuant to sales agreements
Thickness	complies with standard ISO 18775

### Wood Density /

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450-900 kg/m<sup>3</sup> (measured in compliance with standard IS9427)

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## **ALPIlignum /**

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### **Formaldehyde Emission /**

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In compliance with E1 (analyzed according to EN 717).

On request ALPI can supply ALPIlignum with two levels of formaldehyde emissions below the E1 standard:

BE - ALPIlignum with a formaldehyde emission level equal to a fraction of the E1 standard.

ZeroF - ALPIlignum without added formaldehyde. It is in any event impossible to guarantee a complete absence of formaldehyde in ALPIlignum wood veneers as formaldehyde is a naturally-occurring substance in wood.

### **Light Fastness /**

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ALPIlignum is not a finished product and, therefore its resistance to light in part depends on the cycle and chemical nature of the finish. The buyer is advised that discoloring may occur. It is recommended that the buyer perform prior tests depending upon the particular purpose and intended use in order to optimize results.

### **Mechanical Specifications /**

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The mechanical characteristics of ALPIlignum depend on the cycle and chemical nature of the finish and the type of backing. It is recommended that the buyer perform prior tests depending upon the particular purpose and intended use in order to optimize results.

### **Colour and Structure /**

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Being a natural wood product, ALPIlignum may vary in its reference colour. It is recommended that before use the buyer check both the colour and the grains of the delivered product as against the ordered product.

### **Storage /**

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ALPIlignum is mainly made of wood and its moisture content may therefore be subject to variation depending on the storage and work environment. It is therefore advisable to maintain humidity in the range between 40% and 70% (RH) and a reference ambient temperature of 20°C.

### **Warnings /**

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Avoid - even temporarily- any contact with water and other liquids. Avoid any moisture condensation on product surface. The product must be stored on a flat surface at least 200 mm from the ground. ALPIlignum must be protected from direct and indirect light.

## ALPIlignum /

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### Veneering /

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#### Glueing With Urea Glues

ALPIlignum veneer can be glued on all wood backing using by means of urea glues. Different kinds of backing must be tested and assessed on a case-by-case basis. The quantity of glue to be used per square meter depends on the base type and thickness, on the veneer structure (quartered cut, tangential cut, burl, etc.), on its thickness and on the type of pressing. It is generally advisable not to use more than 150 g/m<sup>2</sup> of glue at pressures ranging from 1.5 to 5 bars. The recommended veneering temperature may range between 85°C and 120°C. The glue may be added with organic or inorganic fillers to modify its rheological properties in order to control bleeding through the veneer layer. The use of pigments with similar shades to the veneer base color is always recommended. Basswood-based products should be laminated on panels, using urea glue with an application of at least 120/140g/m<sup>2</sup>.

#### Glueing With Vinyl Glues

ALPIlignum veneer can be glued on all wood support using vinyl glues. Different kinds of support need to be previously tested. Because of the thermoplastic features of this type of glue, the quantity to be applied must be carefully measured according to the type of veneering in order to avoid undesirable pass-through of the glue which would prove difficult to eliminate through sanding. It is generally advisable to use between 80 and 100g/m<sup>2</sup> of glue at pressures ranging from 1.5 to 3.5 bars. The advisable veneering temperature may vary between 60°C and 90°C. The use of pigments with similar shades to the veneer base color is always recommended.

#### Glueing With Hot Melt Glues

ALPIlignum veneer can be glued on all wood backing using hot melt glues such as polyolefin, EVA and reactive polyurethane. Different kinds of backing need to be tested. This type of glueing is mainly used to bond small surfaces, such as edges, with the help of automatic systems that have a mechanical clamp. The use of other veneering systems must be checked through preliminary testing. In every case, however, it is advisable to follow the instructions provided by the glue supplier.

### Sanding /

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After the veneering process ALPIlignum must be sanded in order to prepare and clean the surface for the varnish application. This process must be carried out with 120-150-180 grit sandpaper in a single step or in sequence using manual or automatic sanding machines. The use of 100 grit or 220/240 grit sandpaper is advised only for special decorative effects. The transversal sanding process with 120-150-180 grit sandpaper must be carried out at low strength and in any case may cause some microgroove traces and superficial rifts mainly on basswood-based ALPIlignum, it is advisable to follow the instructions provided by the glue supplier.

### Varnishing /

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Like all other types of wood, the varnishing process for ALPIlignum must be performed with a suitable product capable of protecting and preserving the wood as much as possible from chemical and physical deterioration (photodegradation, thermal decay, etc.) as well as from mechanical degradation (scratches, dents, etc.). Wood veneer can be stained without any particular problems. ALPIlignum can be varnished with any product or method recommended for wood treatments. However, the best results are achieved by selecting, among the various classes of products, those with the following characteristics:

- High wetting power
- High yellowing retardation power
- High UV protection

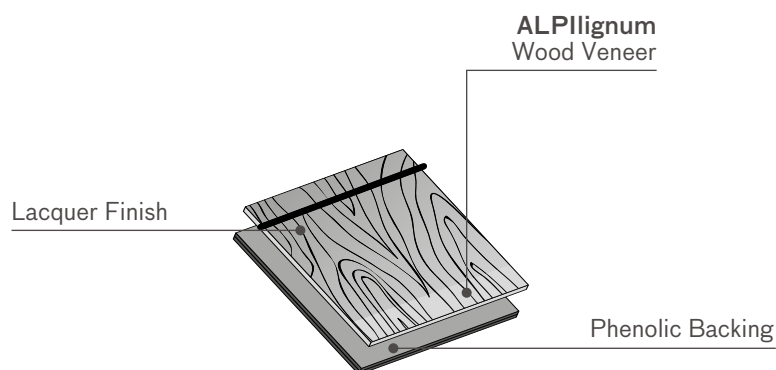
As for water paints, it is advisable to use products that are stable at a moderately acid pH (4-6), such as specific products destined for acid hardwoods. It is common practice to follow the instructions provided by finish manufacturers and to carry out preventive tests before proceeding to varnishing.

Please contact ALPI's technical office for any further clarification. This technical data sheet supersedes and replaces any previous version. The information and recommendations herein have been compiled from the current information held by ALPI and may be our best knowledge updated to perform the higher results of the applications.

ALPIkord /

	Groove /	Light Gloss-Bright Gloss /	Wax /
<b>Nominal Thickness</b>	1.0 mm	1.0 mm	1.0 mm
<b>Grade</b>	Postformable	Postformable	Postformable
<b>Bending Radius*</b>			
Longitudinal	20 mm	20 mm	20 mm
Transversal	20 mm	20 mm	20 mm
<b>Postforming Temperature</b>	145°C (288 F)	145°C (288 F)	145°C (288 F)
<b>Weight Per Sqm</b>	1.1 kg	1.1 kg	1.1 kg
<b>Dimensional Variations</b>			
Longitudinal	0.4 %	0.4 %	0.4 %
Transversal	1.2 %	1.2 %	1.2 %
En 438-2, 17 (2005)			
<b>Abrasion Resistance*</b>	> 80 Taber turns	> 100 Taber turns	> 100 Taber turns
En 438-2, 10 (2005)			
<b>Stain Resistance</b>	No effect	Halo caused by acetone	No effect
En 438-2, 26 (2005)			
<b>Lightfastness (Xenotest)</b>	> 2 Grey scale	> 2 Grey scale	> 2 Grey scale
En 438-2, 27 (2005)			
<b>Formaldehyde Emission</b>	0.2 mg/m <sup>2</sup> h	0.2 mg/m <sup>2</sup> h	0.2 mg/m <sup>2</sup> h
En 717-2			

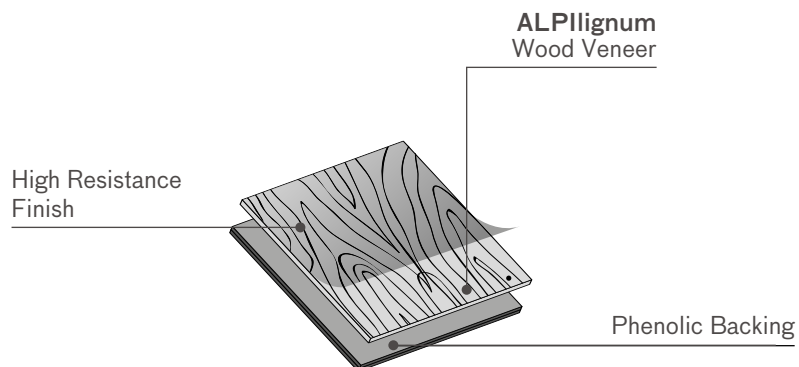
ALPIkord /



ALPIrobur /

	Soft-Matt-Pore-Brushed /	Soft-Matt-Pore-Brushed /  Fireproof IMO MED Certificate /
<b>Nominal Thickness</b>	1.0 mm	1.0 mm
<b>Weight Per Sqm</b>	1.2 kg	1.3 kg
<b>Dimensional Variations</b>		
Longitudinal	0.4 %	0.9 %
Transversal	1.1 %	1.4 %
En 438-2, 17 (2005)		
<b>Abrasion Resistance*</b>	> 350 Taber turns	> 350 Taber turns
En 438-2, 10 (2005)		
<b>Stain Resistance</b>	No effect	No effect
En 438-2, 26 (2005)		
<b>Lightfastness (Xenotest)</b>	> 2 Grey scale	> 2 Grey scale
En 438-2, 27 (2005)		

ALPIrobur /



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**ALPIkord - ALPIrobur /**

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**Application Tips /**

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To ensure appropriate counterbalancing it is advisable to use the same type of product, although the process may also be conducted using HPL matching the characteristics of the face. In any case, specific production tests should be carried out to evaluate the suitability of the product utilized over time (48/72 hours).

**Application with Steel Plate Press /**

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The utmost attention is required when using a steel plate press. It is necessary a perfect cleaning of the plates to avoid dents or damage to the finished surface. Damages to a varnished or melamine surface may be caused by particles left between the metal plates and are difficult to repair. During the application of ALPIkord, the protective film must be perfectly laid out on the surface to avoid thickness-related marks. Veneering glue must be applied in a quantity such as to avoid lateral leakage under pressure and damage to the decorative surface. When using thermo-hardening glues, the press temperature should never exceed 105°/110°C for longer than 1/2 minutes. Application of ALPIkord to supports with a high thermic expansion coefficient (metallic and other surfaces) may result in alterations to its flatness and possible delamination due to rapid changes in temperature and humidity.

**Application with Contact Adhesive /**

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Contact adhesives may be applied by hand or machine, taking care to wait the complete evaporation of solvent. ALPIkord/ALPIrobur sheets must be applied with a firm contact pressure using roller presses or hand rollers.

**Postforming (ALPIkord only) /**

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In the static postforming process, an excessive speed of hot bar in conjunction with a not proper temperature can cause micro and macro fractures on the curved part. The long contact of hot forming bar on the wooden surface may cause a blistering effect on the film of varnish. In the dynamic postforming process, if the panel moves too quick fractures may be caused in the curved part of the pattern. The mould that is being wrapped must be of regular and constant shape along its entire length. Glue applied to the surface must be of appropriate grammage in order to avoid detachment and surface defects. The pressure rollers and bars creating the curve envelope must be kept very clean, accurately regulated along the outline of the curved edge, and be fully wrapped in rubber (between 50 and 80 Shore hardness). Sheets of ALPIkord must be conditioned at temperatures of at least 15°/20°C for a period of 24/48 hours in order to avoid the excessive fragility of patterns when curved. Changes of decorative wooden pattern may need to update the postforming parameters.

**Warnings /**

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As with natural wood, for ALPIkord/ALPIrobur surfaces it is not possible to guarantee absolute colour consistency between different manufacturing lots. Any slight difference in colour between two or more production batches cannot be considered a defect. Just like natural wood, ALPIkord/ALPIrobur react to direct and indirect, solar and artificial light. A gradual change of colour appearance over time, is accelerated by heat and moisture, since it is a natural phenomenon rather than a defect. With its melamine finish, ALPIrobur guarantees high levels of resistance to abrasion, and it is particularly suitable for horizontal surfaces. The colors of an ALPIrobur code cannot be perfectly matching the corresponding ALPIkord code, since this last one is coated with a transparent varnish. In consequence, it is advisable not to place panels with different finishes side by side.

**Cleaning /**

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ALPIkord/ALPIrobur surfaces are easy to clean with a damp natural fibre cloth dipped in distilled water. If necessary add non-abrasive detergent. For more heavy stains, use alcohol, ammonia or other light solvents. Never use acetone or varnish solvent on the ALPIkord Light Gloss and Bright Gloss finish.

**Storage /**

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ALPIkord/ALPIrobur must be stored horizontally, face-to-face, in an environment where the temperature is between 10°C and 30°C and the relative humidity between 40% and 60%; all sheets on a pallet but never be laid directly on the floor. Like all wooden surfaces, to ensure good conservation over time, it should be protected from light with non-transparent and if possible dark coverings. Sheets should always be handled by two people.

Please contact ALPI's technical office for any further clarification. This technical data sheet supersedes and replaces any previous version. The information and recommendations herein have been compiled from the current information held by ALPI and may be our best knowledge updated to perform the higher results of the applications.