

## Technical Sheet /

ALPIlignum /	16.02
Collection Wood	Wood+
Product	ALPI Radiant Natural
Texture	Quartered
Size	2500x320 mm
ALPIkord /	
Size	
Wax	NA
Groove	NA
Light Gloss	NA
Bright Gloss	NA
ALPIrobur /	
Size	
Soft	NA
Matt	NA
Pore	NA
Brushed	NA



# ALPIlignum Technical Features /

## ALPIlignum /

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

### Standard dimensions a

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

Please note that special dimensions can be manufactured on request

## Nominal thickness available /

from 0,42 mm to 2.8 mm Thickness

Not all producs are available in all the above thicknesses.

## Dimensional Manufactoring Tolerances /

Width	-o / +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 in compliance with standard ISO 9427) depending on the structure of each product.



## **ALPIlignum**

## Technical Features /

## ALPIlignum /

#### Formaldehyde Emission /

In compliance with E1 (analyzed according to EN 717-1).

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 - ALPllignum without added formaldehyde.

It is impossible to guarantee a complete absence of traces of formaldehyde as this naturally occurs in wood.

#### Light Fastness /

ALPIlignum is not a finished product and, therefore its resistance to light in part depends on the cycle and chemical nature of the finish. Upon request ALPI is able to supply an Alpilignum version that, if finished with the correct finishing cycle can reach higher values than 3 on the grey scale (EN 438-2/27). 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 /

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 Grain /

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 /

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 /

Avoid - even temporarly- 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**

## User Recommendation /

## ALPIlignum /

#### Veneering /

### 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/m² 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/m².

#### 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/m² 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 /

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 /

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 destinated 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.

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## **ALPIlignum Sushi**

## Technical Features /

## ALPIlignum Sushi /

Alpilignum Sushi is a wood venner with metallic effect powders.

#### Formaldehyde Emission /

ALPIlignum Sushi is without added formaldehyde. It is impossible to guarantee a complete absence of traces of formaldehyde as this naturally occurs in wood.

#### Light Fastness /

ALPIlignum Sushi is not a finished product and, therefore its resistance to light in part depends on the cycle and chemical nature of the finish. Upon request ALPI is able to supply an Alpilignum version that, if finished with the correct finishing cycle can reach higher values than 3 on the grey scale (EN 438-2/27). 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 /

The mechanical characteristics of ALPIlignum Sushi 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 Grain /

Being a natural wood product, ALPIlignum Sushi 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, as the structure may vary from sheet to sheet.

#### Storage /

ALPIlignum Sushi 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 /

Avoid - even temporarly- 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 Sushi**

## User Recommendation /

## ALPIlignum Sushi /

#### Veneering /

## Glueing With Urea Glues

ALPIlignum Sushi 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/m² 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/m².

#### Glueing With Vinyl Glues

ALPIlignum Sushi 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/m² 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 Sushi 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 /

After the veneering process ALPIlignum Sushi 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 /

Like all other types of wood, the varnishing process for ALPIlignum Sushi 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.).

ALPIlignum Sushi can be varnished with any product or method recommended for wood treatments.

However, for this specific structure the best results are obtained by applying a first coat of two-pack water-based primer with a 70-90 gr/m2, then the other products indicated by the desired finishing cycle can be applied. Amongst the various classes of products, we recommend 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 destinated 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.

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We reccomend the user to check the product suitability based on the finally application.



# ALPIlignum Radiant Technical Features /

## ALPIlignum Radiant /

ALPIlignum Radiant is a wood veneer with plastic interlayers.

## Standar Dimensions /

Poplar based Wood	length 2500 mm width 300 mm - 420 mm
Ayous based Wood	length 2500 mm width 300 mm - 420 mm
Bass based Wood	length 2500 mm width 300 mm - 420 mm
Veneer Nominal Thickness	o.6 - o.8 mm
Board Nominal Thickness	min 3 mm - max 300 mm
ALPIlignum pattern	Quartered



## **ALPIlignum Radiant**

## Technical Features /

## ALPIlignum Radiant /

#### Formaldehyde Emission /

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

On request ALPI can supply ALPIlignum Radiant with two lev- els of formaldehyde emissions below the E1 standard: BE - ALPIlignum Radiant with a formaldehyde emission level equal to a fraction of the E1 standard.

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

## Light Fastness /

ALPIlignum Radiant is not a finished product and therefore its resistance to light in part depends on the cycle and chemical nature of the finish. On demand, ALPI can supply a version of ALPIlignum Radiant which, if varnished with an appropriate varnishing cycle, can achieve values of > 3 on the grey scale(EN438-2/27). The buyer is advised that discoloring may occur. It is recommended that the buyer perform advance tests depending upon the particular purpose and intended use in order to optimize results.

### Mechanical Specifications /

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

#### Colour and Grain /

Being a natural wood product, the reference color of ALPIlignum Radiant may vary. It is recommended that before use the buyer check both the color and the grain of the delivered product against the product ordered.

#### Storage /

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

## Warnings /

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



## **ALPIlignum Radiant**

## Recommendation User /

## ALPIlignum Radiant /

#### Backing /

ALPIlignum Radiant may be applied to the following backing: Polymethyl methacrylate (PMMA), Polycarbonate, Co-Polyester (PETG), Polyvinylchloride, (PVC), Polyester (PET) and Glass. Greater attention is required if the rear of the panel has a aesthetical function: in such cases, it is advisable to use opal, smoked, coloured or textured backing. The product may be applied on other types of backing. We suggest anyway to carry out some previous test.

## Cutting /

ALPIlignum Radiant may be trimmed using a professional cutter machine with a simple bevelling blade to ensure a cut that is orthogonal to the plane. Another option is to cut using a high-powered laser to guarantee accurate rectilinear results. A further alternative is to cut using the assistance of a hand blade with metal reference squaring. In any event, it is advisable to undertake the cut along the centre line of the wooden section in order to minimize processing tolerances.

#### Splicing Multiple Sheets /

The seaming process may be undertaken manually with the assistance of masking tape, which should always be applied on the face-up side, and then subsequently be removed after the plating process. Automatic seaming systems may be used as an alternative.

#### Veneering /

ALPIlingnum Radiant may be glued to plastic backing using hot melt polyurethane glue. For aesthetically-optimal gluing, it is advisable that after calendering ALPIlignum Radiant to the backing, the sheet be placed under a cold press to ensure that the glue is spread as evenly as possible. Glueing with solvent based acrylic glues and double-sided foam tape are advisable only if the back of the sheet is not exposed. For glueing on glass, it is advisable to adopt a vacuum glueing process using EVA-based glue. Different types of gluing and backing must be tested in advance on a case-by-case basis.

## Sanding /

ALPIlignum is a composite material and the sanding step has to be operated to avoid excessive development of heat, on the decorative surface. To optimize the process, it is advisable to reduce 20% - 30% the speed of Sand-Paper Belt and selecting an appropriate Sand-Paper Grit Index (150-180 grit).

#### Varnishing /

ALPIlignum Radiant may be varnished using two-pack acrylic cycles of various glosses, or two-pack polyurethane cycles of various glosses, and ultra-violet drying acrylic cycles of various glosses. It may also be varnished using water-based cycles of various glosses. Different types of varnishing must be tested on a case-by-case basis.

#### Practical Advice /

To avoid possible alignment anomalies, during seaming it is possible to insert a section of ALPIlignum between the two portions of ALPIlignum Radiant to be seamed in order to make the coupling gap less visible. When assembling the ALPIlignum Radiant panels, it is possible to use sections of wood as a joint between the panels, or alternative materials such as aluminium. Heat generated by sources of backlighting may be detrimental to the atness of ALPIlignum Radiant panels; it is advisable to use LED based lighting. Appropriate ventilation is recommended for heat dissipation.

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# ALPIlignum Silver Rail Technical Features /

## ALPIlignum Silver Rail /

ALPIlignum Silver Rail is a reconstituted wood veneer with aluminium interlayers

## Standard Dimensions and Structure /

Poplar based Wood	length 2500 mm width 300 mm - 600mm (only for Wavy option)
Ayous based Wood	length 2500 mm width 300 mm - 600mm (only for Wavy option)
Bass based Wood	length 2500 mm width 300 mm - 600mm (only for Wavy option)
Veneer Nominal Thickness	0.6 - 0.8 mm
Board Nominal Thickness	min 3 mm - max 300 mm
ALPIlignum pattern	Quartered



## **ALPIlignum Silver Rail**

## Technical Features /

## ALPIlignum Silver Rail /

## Formaldehyde Emission /

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

On request ALPI can supply ALPIIignum Silver Rail with two levels of formaldehyde emissions below the E1 standard: BE - ALPIIignum Silver Rail with a formaldehyde emission lev- el equal to a fraction of the E1 standard. ZeroF - ALPIIignum Silver Rail without added formaldehyde. It is in any event impossible to guarantee a complete absence of formaldehyde in as formaldehyde is a naturally occurring substance in wood.

## Light Fastness /

ALPIlignum Silver Rail is not a finished product and therefore its resistance to light in part depends on the cycle and chemical nature of the finish. On demand, ALPI can supply a version of ALPIlignum Silver Rail which, if nished with an appropriate varnishing cycle, can achieve values of > 3 on the grey scale (EN438-2/27). The buyer is advised that discoloring may occur. It is recommended that the buyer perform advance tests depending upon the particular purpose and intended use in order to optimize results.

### Mechanical Specifications /

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

#### Colour and Grain /

Being a natural wood product, the reference color of ALPIlignum Silver Rail may vary. It is recommended that before use the buyer check both the color and the grain of the delivered product against the product ordered.

#### Storage /

ALPIlignum Silver Rail 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 a range of between 40% and 70% (RH) and a reference ambient temperature of 20°C.

## Warnings /

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



## ALPIlignum Silver Rail

## Recommendation User /

## ALPIlignum Silver Rail /

#### Veneering /

### Glueing With Urea Glues

ALPIlignum Silver Rail veneer can be glued on all wood back- ing using 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/m² 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 blended 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 veneered on panels, using urea glue with an application of at least 120/140g/m².

#### Glueing With Vinyl Glues

ALPIlignum Silver Rail veneer can be glued on all wood backing using vinyl glues. Different kinds of backing need to be 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 which would prove difficult to eliminate through sanding. It is generally advisable to use between 80 and 100g/m² 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. It is advisable to undertake a gluing test in advance.

## Sanding /

After the veneering process ALPIlignum Silver Rail must be sanded in order to free the surface from traces of handling and glue. 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.

### Varnishing /

Like all other types of wood, the varnishing process for ALPIlignum Silver Rail must be performed with a suitable product that is 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 (scraping, dents, etc.). ALPIlignum Silver Rail can be varnished with any product or method recommended for wood treatments (not water-based varnishes). However, the best results are achieved by selecting from the various classes of products that have the following characteristics:

- Wetting power
- Yellowing retardation power
- UV protection

ALPIlignum Silver Rail may be varnished using two-pack acrylic cycles of various glosses, two-pack polyurethane cycles of various glosses, and ultra-violet drying acrylic cycles of various glosses. It is always sound practice strictly to follow the instructions provided by paint manufacturers and to carry out advance tests before proceeding to varnishing.

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## **ALPIdecos**

## Technical Features /

## **ALPIdecos**

## Edgeband /

To complete the range of all the decorative of ALPI's surfaces, the ALPIdecos edgeband are the ideal solution for consumers requiring a full range of high-quality products to obtain a maximum focus on their production details.

ALPIdecos-ABS it is a wooden edgeband, backed by an ABS support, coordinated in the same color as the wood surface. It is supplied matching ALPIkord products in terms of colors and finishes.

ALPIdecos-FBK it is a wooden edgeband backed by non-woven fabric, suitable for soft-forming and finishing of curved surfaces. It may be coordinated with the products of the ALPIlignum range.

Available in different options as raw and pre-varnished finishes.

ALPIdecos-STR it is an edgeband made with multiple wooden layers.

It fits perfectly for those who require a product of greater thickness matching with the products of the ALPIlignum range. Available in different options as raw and pre-varnished finishes.