# ALPI

# ALPIIignum /

Product Code 16.01

Type ALPI Radiant Black

Collection Wood

Wood+

Texture

Quartered

Dimensions
2500x300mm



## ALPIIignum Radiant Technical features /

## ALPIIignum Radiant /

ALPIlignum Radiant is a multilaminar wood veneer with decorative pinstripes in clear polycarbonate. 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 2500 mm width 300 mm - 420 mm
Ayous based veneer	length 2500 mm width 300 mm - 420 mm
Basswood based veneer	length 2500 mm width 300 mm - 420 mm
Veneer nominal thickness	0.6 - 0.8 mm

## ALPIIignum Radiant /

## Formaldehyde emissions /

The formaldehyde emission of ALPIIignum Radiant is category E1 according to the test requirements UNI EN 717-1:2004. Upon request, ALPI supplies two types of ALPIIignum Radiant with formaldehyde emissions that are lower than the E1 standard. NBE – ALPIIignum Radiant emits a fraction of the formaldehyde emissions allowed by the E1 standard. ZeroF – ALPIIignum Radiant 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 Radiant 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 Radiant 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 Radiant depend on the chemical composition of the finish used and the type of substrate the veneer is affixed to. ALPI suggests making precautionary tests based on the planned use in order to optimize performance.

## Colour and grain /

Being a natural wood product, the color of ALPIIignum Radiant 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 Radiant 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 Radiant must be stored flat, at least 20 centimeters from the ground, and protected from direct and indirect light.

## ALPIIignum Radiant /

## Backing /

ALPIlignum Radiant can be affixed to polymethyl methacrylate (PMMA), polycarbonate, copolyester (PETG), polyvinyl chloride (PVC), polyester (PET) and glass. Increased attention is due if the rear of the panel is visible. Using opaline, fumé, colored or textured surfaces can help. The veneer can be affixed to other materials, which must be tested and evaluated beforehand.

## Cutting /

ALPIlignum Radiant can be trimmed with a professional veneer guillotine with a single bevelled blade that cuts downward orthogonally to produce a clean cut. High-power laser cutting is another option for straight, crisp results. Alternatively, the veneer can be cut using a hand-held blade and a metal set square. When cutting lengthwise along the grain, ALPI recommends slicing down the centre of a wood section to obviate any deviation or divergence of the polycarbonate stripes.

## Joining veneer sheets /

Edges can be spliced together manually with tape to form a wider piece. Tape is applied to the outward facing side, and removed after the veneering process. Alternatively, automatic seaming systems can be used.

## Veneering /

ALPIlignum Radiant can be affixed to the above-mentioned plastics using polyurethane hot-melt adhesive. For optimal aesthetic results, once the veneer is affixed to the substrate, the panel is placed under a cold press to improve even spreading of the glue. Solvent-based acrylic glue or double-sided tape are recommended only if the rear of the panel will not be visible. When gluing to glass, the use of EVA (ethylene vinyl acetate) glue under vacuum press is advised. Other types of adhesive and other types of substrates must be tested before use.

### Sanding /

ALPIlignum Radiant being a composite material made of wood and plastic, the sanding process must use the proper type of belt and the proper speed. This will avoid overheating the plastic stripes, causing them to become wavy, and prevent too much wood being worn away. ALPI recommends reducing the speed of the sanding belt by 20% to 30% compared to the standard sanding speed for all-wood veneer. Abrasive paper with grit size 150–180 is appropriate.

### Finishing /

ALPIlignum Radiant can be coated with two-component acrylic finish, two-component polyurethane finish, ultraviolet-cured acrylic finish, and water-based finish– all in various degrees of shine. ALPI recommends testing other types of finish before proceeding.

## Helpful tips /

To avoid alignment defects, it is possible in the joining phase to insert a section of ALPIlignum between two sections of ALPIlignum Radiant. This makes misalignment of the parallel stripes less visible. When installing the panels of ALPIlignum Radiant, it is possible to use profiles of wood, aluminium or other materials as connectors between the panels for pleasing aesthetic results. Heat generated by back-lighting could cause panels of ALPIlignum Radiant to warp. Light-emitting diodes are recommended, as is ventilation that allows heat to dissipate.

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 is 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.

# ALPI

# ALPIIignum /

Product Code 16.13

Type ALPI Silver Rail Wavy-Black

Collection Wood **Wood+** 

Texture

Quartered

Dimensions
2500x620mm



# ALPI

## ALPIIignum Silver Rail Technical features /

# ALPIIignum Silver Rail /

ALPIlignum Silver Rail is a decorative multilaminar wood veneer with decorative aluminium pinstripes. 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 2500 mm width 300 mm - 600 mm (only for Wavy option)
Ayous based veneer	length 2500 mm width 300 mm - 600 mm (only for Wavy option)
Basswood based veneer	length 2500 mm width 300 mm - 600 mm (only for Wavy option)
Veneer nominal thickness	0.6 - 0.8 mm

## ALPIIignum Silver Rail /

## Formaldehyde emissions /

The formaldehyde emission of ALPIIignum Silver Rail is category E1 according to the test requirements UNI EN 717-1:2004. Upon request, ALPI supplies two types of ALPIIignum Silver Rail with formaldehyde emissions that are lower than the E1 standard. NBE – ALPIIignum Silver Rail emits a fraction of the formaldehyde emissions allowed by the E1 standard. ZeroF – ALPIIignum Silver Rail 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 Silver Rail 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 Silver Rail 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 Silver Rail depend on the chemical composition of the finish used and the type of substrate the veneer is affixed to. 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 Silver Rail may vary slightly from the reference color. ALPI suggests verifying the color and grain of the veneer before use.

### Storing /

The moisture content of ALPIlignum Silver Rail 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 Silver Rail must be stored flat, at least 20 centimeters from the ground, and protected from direct and indirect light.

## ALPIIignum Silver Rail /

## Veneering /

### Gluing with urea adhesives

ALPIlignum Silver Rail 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 Silver Rail made of basswood must be glued with at least 120-140 grams of urea adhesive per square meter.

### Glueing with vinyl adhesives

ALPIlignum Silver Rail 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 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 color similar to the veneer is advisable. ALPI suggests making tests before use.

## Sanding /

After gluing it to the desired substrate, ALPIIignum Silver Rail 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 Silver Rail 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 Silver Rail can be finished using methods and types of product that are recommended for wood, but ALPI recommends avoiding the use of water-based finish. ALPI suggests using products with high coating capacity, yellowing resistance, and good protection from ultraviolet rays.

ALPIlignum Silver Rail can be coated with two-component acrylic finish, two-component polyurethane finish, and UV-dried acrylic finish – all in various degrees of shine. 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.