



karuun® is a natural product obtained from the trunk of the rattan palm. ***karuun®*** possesses unique properties and is manufactured using an energy-efficient process. Diagonal or free-form cuts expose the coloured or untreated capillary structure, redefining the workpiece as a celebrated design artefact.

Unique striped patterns of any colour can be incorporated into the material using our patented technique. The aesthetic grace achieved through this modification presents entirely new design possibilities. ***karuun®*** block is available in different colours and designs. It is manufactured

using a low-formaldehyde adhesive and is predominantly sold as an A-grade product, guaranteeing uniform colour. ***karuun®*** block can be processed without causing splintering or exposing knots or uneven growth.

Product Specifications



Thickness: 170-185mm (custom sizes on request)
Dimensions: 2550×330-350mm (custom sizes upon request)
Design: natural, black, red, blue stripes and custom stripe colour
Lamination: Thin cellulose nonwoven fabric

400 kg/m³

Density (product)
 +/-

10 %

Moisture content
 at 20°C / 65% relative humidity

0.048 %

Differential shrinkage (V)
 longitudinal
 per % changes of moisture

0.15 %

Differential shrinkage (V)
 radial / tangential
 per % changes of moisture

2.3 N/mm²

Compression (fc,90,k)
 Rectangular to the grain

12 N/mm²

Hardness (fc,0,k)
 In milling direction

All dimensions are approximate. ***karuun®*** is a natural material therefore slight variations in colour cannot be ruled out.

How to use

karuun® block can be processed with any cutting tools; when milled or turned at different angles, its unique properties come into their own.

When glueing the material for the first time, we recommend you perform some tests to find the right balance between pressing time, temperature and pressure. ***karuun®*** stripe is a semi-finished product, therefore its lightfastness partly depends on the composition of the finished product. For optimal results, we recommend testing the product in advance based on the specific purpose and intended use.



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Processing guidelines

Storage: Store *karuun®* block covered in a dry place protected from dust and UV rays.

Suitable adhesives: Common adhesives such as PVAC, PU, UF, MF or adhesive films if necessary.

General tips:

- Avoid crushing the material at individual points
- Over-exposure to heat can lead to discolourations and make the material brittle

Suitable tools:

- Standard woodworking saws and sanding machines CNC milling machines for wood.

Preparation:

- Ideal wood moisture for processing: 8 – 11 % .
- Cut material to size.

Milling:

- Be aware of the direction of the milling head rotation relative to the fibre orientation
- Perform a preliminary milling test
- Very sharp milling tools are required to prevent fibres forming

Sanding:

- Use 180–300 grit sandpaper
- Hand sanding (e.g. with an orbit sander)
- Sanding at an angle to the grain is recommended
- Sand protruding fibres across the grain
 - do not pull off
- To bring out the structure, brush the surface as necessary and sand again
- Blow any residue off the surface with compressed air once sanding is complete

Finishing:

- Surface must be dry, free of dust and grease.
- The finishing process should be performed immediately after sanding.
- Suitable products: varnishes, hard oils and hard waxes
- Environmentally friendly, acrylic resin-based water varnishes recommended
- The product you use shouldn't intensify the material (i.e. cause a yellow tinge)
- The final hardness of the product you use should also bond the fibres
- Order: the first application is the priming coat, after curing comes intermediate sanding (e.g. 240 grit using an orbit sander), blow the surface to remove any residue, 1-2 top coats
- Apply the product as thinly as possible so as to retain the material's structure
- A fine, intermediate sanding after each application is recommended

General instructions:

- Avoid crushing the material at individual points
- Over-exposure to heat can lead to discolourations and cause the material to become brittle

Lightfastness:

- karuun®* block can be varnished using any product or method suitable for treating natural materials. However, of all the products available those with the following characteristics yield the best results:
- High wetting power
 - High yellowing resistance
 - High UV protection



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