karuun® stripe
Info Sheet

***karuun®* is a natural product obtained from the rattan palm whose modification consumes very little energy. *karuun® stripe* has unique properties. Its typical linear fibre structure means that no visible joints are left from the processing stage, unlike conventional veneer.**

Thanks to a patented technique it's possible to incorporate a unique striped pattern in the material according to colour preferences. Its aesthetic grace presents completely new design possibilities. To avoid cracks developing during processing, the *karuun® stripe* is applied with a thin, but strong cellulose nonwoven fabric.

karuun® stripe is available in different colours and designs and is produced with a formaldehyde-free adhesive (E0 standard). *karuun® stripe* is mainly sold in A-sorting (regular in colour), has no knotholes and can be processed with minimal waste and offcuts.

How to use

Individual pieces of *karuun® stripe* are usually joined to form wide sheets which are then glued on double-sided to substrates (e.g. chipboard, multiplex or MDF). The optional lamination is a cellulose nonwoven fabric. The cellulose nonwoven fabric can briefly tolerate temperatures exceeding 220°C, e.g. during joining.

We recommend you perform a test when first gluing the stripe material in order to find the right balance between pressing time, temperature and pressure.

The standard thickness of *karuun® stripe* is 0.6 / 0.8 mm *karuun®* and 0.1 mm laminating material. If the material is polished, the minimum final thickness should be no less than 0.4 mm (excluding lamination).

Product Specifications

Thickness: 0.6 / 0.8 mm (with nonwoven backing, prepolished)
Dimensions: 2530 × 330 mm (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
Compression (fc,0,k)
Face grain direction

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

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Processing guidelines (rolled goods)

Storage: Store *karuun*® materials covered in a dry place protected from dust and UV rays.
Suitable adhesives: Common adhesives such as PVAC, PU, UF, MF or adhesive films

General tips:

- The fibres are oriented longitudinally, which means the material is not as tough across the grain.
- Avoid crushing the material at individual points.
- Over-exposure to heat can lead to discolourations and make the material brittle.

Suitable tools:
- Scissors, Stanley knife, veneer cutting machine, veneer saw
- Common veneer joining machines
- Common veneer presses or membrane presses
- Common grinding machines
- Compressed air devices

Preparation:
- The ideal moisture content to process *karuun*® materials is 8–11 %.
- Cut rolled material to size and join if necessary.
- Fix the front sides with tape as required.
- Offset the joining seams on long pieces with adequate gaps.
- Most common panel materials are suitable for use as a substrate.
- It is recommend you use the same material for the backing material.

Pressing:
- Adhesive required: 100–200 g/m²
- Open time: depends on adhesive (see manufacturer's guidelines)
- Pressing temperature: 15–130 °C depending on the adhesive and pressing process (discolouration may occur at higher temperatures and longer pressing times)
- Leave panels to air on both sides after pressing.
- Pressing time: depends on adhesive (see manufacturer's guidelines) and pressing process (from 5 seconds)
- Pressing pressure: 3–8 kg/cm² depending on application
- Include cooling time in the calculation if necessary.

Sanding:
- Use 180–300 grit sandpaper
- Hand sanding (e.g. with an orbit sander)
- Machine sanding (with wide belt sander, preferably with an air platen)
- Maximum removable thickness during sanding: 0.15 mm (for a 0.6 mm panel)
- We recommend sanding at an angle to the fibre.
- Sand protruding fibres across the grain rather than peeling them off.
- To intensify the structure, brush the surface as required then re-sand.
- 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 choose shouldn't intensify the material (i.e. cause a yellow tinge).
- The final hardness of the product you use shouldn't further fix the fibres.
- Order: the first application is the priming coat, after curing comes intermediate sanding (e.g. 240 grit – orbit sander), blast surface with air, 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.

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