



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 low emission adhesive.

Lightfastness: **karuun® stripe** is not a finished product, therefore its resistance to light also depends on the cycle and chemical nature of the finish. For optimal results, we recommend testing the product for your specific purpose and intended use.

Product Specifications



Thickness: 0.6/0.8 mm (with nonwoven backing, prepolished)
Dimensions: 2530 x 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.

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).



**GERMAN
DESIGN
AWARD
GOLD
2016**



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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.

Lightfastness:

- karuun*® *stripe* can be varnished using any product or method which is 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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