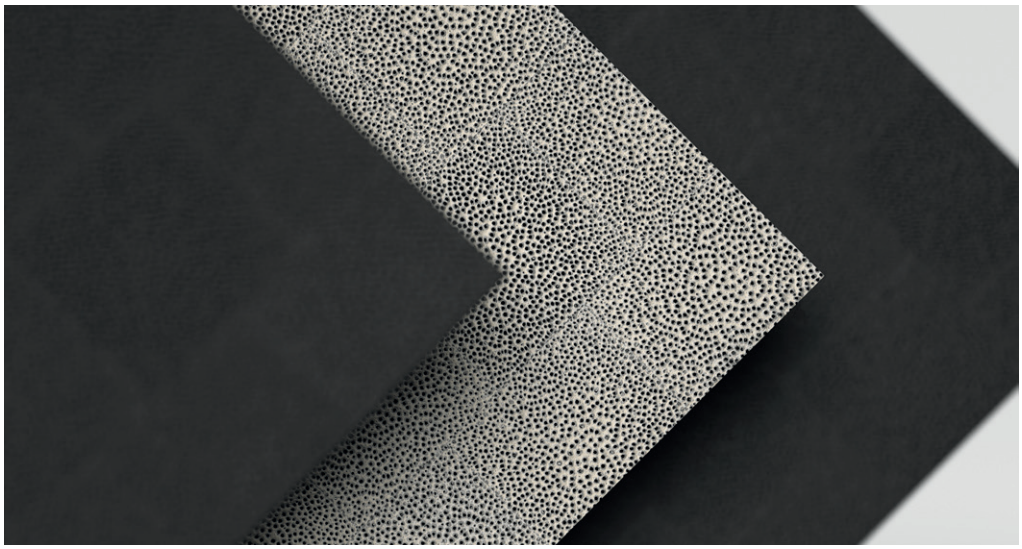
karuun® shine
Info Sheet



***karuun®* is a natural product obtained from the rattan palm which is produced using a highly energy-efficient manufacturing process. When processed, the characteristic dotted structure of *karuun® shine* produces a uniform surface with a subtly tiled pattern.**

The end-grain material is not only translucent but also permeable to both air and light. The natural capillary structure of the material also ensures excellent stability while also being pleasant to the touch. Depending on thickness, the degree of translucency varies when viewed from different angles.

Lightfastness: *karuun® shine* 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.

How to use

karuun® shine is either put together and pressed onto a carrier (e.g. plexiglas, glass, chipboard, multiplex or MDF) or placed into a frame without a carrier.

Contact us directly if you have any queries.

Product Specifications

Thickness: ~2,3 / 4 mm (prepolished)
Dimensions: 800-1200 x 330-350 mm
Design: natural, black, red, blue dots and custom dot colour

400 kg/m³
Density (product)
+/-

10 %
Moisture content
at 20°C / 65% relative humidity

0.15 %
Differential shrinkage (V)
longitudinal / tangential
per % changes of moisture

0.048 %
Differential shrinkage (V)
radial
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.

GERMAN DESIGN AWARD GOLD 2016

interzum Award
Best of the best 2017 & 2019

out for space GmbH
Jägerstrasse 23
88353 Kisslegg / Germany

+49 756 391 384 01 Tel.
+49 756 391 384 02 Fax.
info@outforspace.com

outforspace.com
karuun.com
/outforspace

karuun® shine
Processing guidelines

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 material is very susceptible to humidity and temperature fluctuations.
- The material is fragile, take care when handling.
- Over-exposure to heat can lead to discolourations and make the material brittle.

Suitable tools:
- Scissors, Stanley knife, circular saw
- Special joining machines for veneer (2 mm joints upwards)
- 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 as required.
- If necessary, mask the surface before joining to prevent glue from penetrating the adjacent capillaries.
- 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
- Ensure the adhesive is distributed evenly (be careful that it doesn't bleed through).
- 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
- The material is only slightly malleable in a dry condition.
- By adding heat and/or moisture, the material becomes elastic and malleable (caution: excessive exposure to moisture leads to swelling and will potentially destroy the material).

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)
- Blow any residue off the surface and out of the pores 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: solvent-based varnishes (varnishes should be medium / highly diluted as necessary to prevent the fine pore structure from being worn away)
- Order: the first application is the priming coat (from different angles to wet the pores' inner walls), after curing comes intermediate sanding (e.g. 240 grit – orbit sander), blast / suck surface with air, 1–2 thin 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

GERMAN DESIGN AWARD GOLD 2016

interzum Award
Best of the best 2017 & 2019

out for space GmbH
Jägerstrasse 23
88353 Kisslegg / Germany

+49 756 391 384 01 Tel.
+49 756 391 384 02 Fax.
info@outforspace.com

outforspace.com
karuun.com
/outforspace