

Bangkirai

Technically speaking Bangkirai (Botanical name: Shorea Leavifolia) isn't a wood species but a collection of closely related timber species from the Yellow Balau group. FelixWood® started importing Bangkirai to the Netherlands over 30 years ago. Bangkirai has since then gained popularity due to the remarkable properties for outdoor use. When complaints regarding the quality of Bangkirai arise this is because substitute timber species, like; Red balau, Punak or Kapur, have been sold. FelixWood® solely imports Bangkirai from Indonesia, without substitute timber species from countries like the Filipins or Malesia. Since quality standards of the industry are below our norm FelixWood® has its own quality standard: FCQ.

FelixWood® imports timber in accordance with the EUTR (EU Timber Regulation, No 995/2010) which provides transparent proof of legality. FelixWood® is also FSC® - certified, look for our certified products.

Technical info

Density (12% mc)	900kg/m ³	Durability class	2
Shrinkage & Swelling	9% tangential	Shrinkage & Swelling	4,5% radial
Modulus of Elasticity	15.900 N/mm ²	Shear strength	13,6 N/mm ²
Compressive strength	71 N/mm ²	Flexural-strength	131 N/mm ²
Janka Hardness	7300 N	Grain	interlocked
Timber surface	Smooth to medium coarse		

Application

When installing Bangkirai it is important to keep the following points in mind to ensure the best result.

1. Ventilation:

Timber absorbs and adsorbs water with the result that the material shrinks and swells. Sufficient space between boards ensures the possibility for ventilation and increases the durability of the timber.

Practical:

- Ensure 2cm distance from surrounding objects like walls, stone, poles, etc
- Ensure at least 4cm distance from the ground, if the ground stays moist for long periods during the year: keep at least 10cm distance. When using Bangkirai in the façade 20cm from the ground is recommended.
- Ensure 6-8mm distance between boards when placing them parallel.
- Ensure 3mm distance between boards when placing them in the longitudinal direction.

2. Stagnation of water

Due to the degenerate impact water has on timber stagnation of water around timber has to be avoided.

Practical:

- When preparing the location for a deck or fence ensure that water can freely flow away from the area.
- When installing a deck ensure that it has a 2% decline in the longitudinal direction towards a location where water can be drained (not toward houses, walls, etc). [READ ME](#) to install a perfect timber deck.

3. Cutting

When cutting of timber ensure the following aspects:

- Use sharp blades.
- Use safety clothes and goggles.
- Apply end grain sealer to reduce cracks.

4. Mounting

Due to the natural strength and the hydroscopic tendency of timber it is important to:

- Pre-drilling, at least 1 to 2cm from the edge of the board. Use the [Cobra Smart Bit](#), for quick and precise pre-drilling.
- Use at least 2 stainless screws per joist/beam.
- Do not place the screws in a groove, too avoid water stagnation.
- Place the screws at the beginning/end of the board between 2-4cm of the edge.
- When placing boards in longitudinal direction align them straight in the middle.

Maintenance

Due to exposure to the elements (sunlight, rain, etc) cracks will appear and the natural color of the timber will fade and turn grey. Regular application of oil, two times per year, is recommended to reduce these effects.

Cleaning of algae in the beginning of spring is recommended, especially regarding decks to avoid a slippery surface.

When cleaning **DO NOT** use steel brushes or high pressure washers.

Particularities

Many timber species react when they come in contact with iron, this results in black spots, not to be confused with mold. Be careful with your tools, only use stainless steel screws, keep lawn fertilizer and cement at a distance.

[READ ME](#) to remove the spots.

Bangkirai can lose oil-like fluids that can be difficult to remove. Applying end grain sealer and oil can reduce the possibility of excretion of fluids.

Preventing cracks is impossible, to reduce cracks apply end grain sealer and oil.

Pinholes, tiny holes (1-3mm) are produced by insects while the tree was still growing. As soon as the tree is cut and begins to dry the insects die.

Knots and resin can, in rarely occasions, be present.