

## Afri-kulu

Afri-kulu is the trade name of FelixWood® the scientific name of the tree is *Autranella congolensis*. This tree species is native to the tropical rainforests of West-Africa, mostly Congo, Zaïre and Cameroon. The tree reaches a height of 40 meters without any branches up to 25m high. The diameter can reach up to 200cm. The timber has a red color and is very durable & sustainable. Afri-kulu is great for outdoor usage even when it comes directly in contact with the ground or water.

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. FSC® -certified Afri-kulu is available in small quantities.

## Technical info

|                                 |                          |                                 |                       |
|---------------------------------|--------------------------|---------------------------------|-----------------------|
| <b>Density (12% mc)</b>         | 950kg/m <sup>3</sup>     | <b>Durability class</b>         | 1                     |
| <b>Shrinkage &amp; Swelling</b> | 8,0% tangential          | <b>Shrinkage &amp; Swelling</b> | 7,1% radial           |
| <b>Modulus of Elasticity</b>    | 17.060 N/mm <sup>2</sup> | <b>Shear strength</b>           | 11 N/mm <sup>2</sup>  |
| <b>Compressive strength</b>     | 83 N/mm <sup>2</sup>     | <b>Flexural-strength</b>        | 150 N/mm <sup>2</sup> |
| <b>Janka Hardness</b>           | >8.000 N                 | <b>Grain</b>                    | straight              |
| <b>Timber surface</b>           | Smooth to medium coarse  |                                 |                       |

## Application

When installing Afri-kulu 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 Afri-kulu in the façade 20cm distance 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.

Afri-kulu 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.