

Ekki (*Lophira alata* BANKS ex GAERTN.f.)



Growth area: Tropical Western-Africa.

Trees: The trunks are about 25 to 30 meter long with a diameter on average of 120 cm.

Description: The heartwood is reddish brown and discolours to chocolate brown, sometimes violet- to darkred-brown. Ekki has notable white till yellow deposits in the heartwood vessels. At unseasoned ekki a 8 – 12 cm wide ring of lighter coloured intermediate wood between the sapwood and heartwood is present. The 3-5cm sapwood is clearly lighter in colour.



Texture/Figure: Course texture. Mostly interlocked grain.

Smell/Taste: No specific smell or taste.

Machining: Although ekki is very hard it can be machined well. Due to the interlocked grain a slight angle is needed while planing to get a smooth surface. Machining blunts the saw-blades.

Gluing: Average.

Drying: A slow drying scheme is advisable. The ends need to be protected against cracking. In general ekki is applied unseasoned.

Fixation: Keeps nails and screws well. Pre-drilling is necessary.

Durability: Class I.

Density: Unseasoned: 1100 - 1300 kg / m³; Moisture content 12%: 940 -1000 kg / m³

Shrinkage: Radial: 7,2%; Tangential: 10,2% (till oven-dry, in general less than this)

Bending strength: 157 N/mm² (Moisture content 12-15%, measurement till rupture)

Modulus of elasticity: 18600 N/mm² (Moisture content 12-15%)

Applications: Constructions in marine works, lock gates, fender constructions, pontoons, bridges, sheet pilings, garden timber, sleepers, navy mats.