Ekki / Azobe

Scientific Name:	Lophira alata	
Family:	Ochnaceae	
Other Names:	Bongossi, Bakunda (Cameroon), Kaku (Ghana), Escore (Ivory Coast), Aba (Nigeria), Endwi (Sierra Leone)	





<u>The Tree</u>

Grows up to 160 feet in height with a long clear bole of 100 feet. The trunk's diameter ranges from 5-6 feet without buttresses but lower portion of the bole are sometimes swollen.

<u>The Wood</u>

General Characteristics: The heartwood ranges from dark red, chocolate brown or purple brown with conspicuous white vessels. The sapwood up to 2 inches wide, pale pink and well defined. Its texture is coarse, the grain is usually interlocked and luster is low with no particular odour or taste.

Weight: Basic specific gravity (ovendry/green volume) about 0.09; air density 70 pcf.

Drying and Shrinkage: Very difficult to season without excessive degrade, particularly surface and end checking, also dries slowly. Kiln schedule T₂-C₂ is suggested for 4/4 stock and T₂-C₁ for 8/4. Shrinkage green to ovendry: radial 8.4%; Tangential 11.0% volumetric 17.0. Movement in service is rated medium.

Working Properties: It is very difficult to work with hand and machine tools; severe blunting effect is machined when dry. It can be dressed to a smooth finish and gluing properties are usually good.

Mechanical Properties: (2-cm standard)

Moisture Content (%)	Bending Strength (psi)	Modules of Elasticity (1000 psi)	Maximum Crushing Strength (psi)
Green (9) 12%	17,800	2,010	9,920
Green (42) 12%	25,800	2,450	13,120
12%	33,200	3,180	15,200

Janka hardness 2900 lb for green material and 3350 lb for dried. Amsler toughness 625 in-lb 12% moisture content (2cm specimen)

Durability: Heartwood is rated as extremely resistant to preservative treatment and the sapwood is resistant.

Distribution: West Africa and extending into the Congo Basin; occurs in evergreen and moist deciduous forests, in fresh water swamp forests and close riverbanks.

Preservation: The heartwood is rated extremely resistant to preservative treatments and the sapwood is resistant.

Uses: Suited for heavy durable construction work, harbour work, heavy duty flooring, parquet flooring and railroad cross ties.

References

- Chundnoff, Martin (1984), "Tropical Timbers of the World." USDA Forest Service Ag. Handbook No.607.