



***Celtis* spp.**

Family: Ulmaceae

African Celtis

Other Common Names: Esa (Ghana), Ba (Ivory Coast), Akasinsa (Uganda), Ita, Ohia (Nigeria), Mrinde, Mrunde (Tanzania).

Distribution: Trees are found in western, central, and parts of eastern Africa; locally frequent in the drier high forests.

The Tree: Up to 130 ft in height with a clear straight bole to 80 ft; trunk diameters to 3 ft over short to long buttresses.

The Wood:

General Characteristics: Heartwood and sapwood not clearly demarcated, whitish or light yellow, becoming grayish white on exposure often with dark irregular markings. Texture rather fine to coarse; grain straight to irregular, wavy, or interlocked; lustrous; has an apple-like scent in *C. africana*

Weight: Basic specific gravity (ovendry weight/green volume) variable with species 0.52 to 0.65; air-dry density 40 to 50 pcf.

Mechanical Properties: (First and third sets of data based on the 2-in. standard; second on the 2-in. standard.)

Moisture content (%)	Bending strength (Psi)	Modulus of elasticity (1,000 psi)	Maximum crushing strength (Psi)
Green (40)	13,050	1,850	6,500
12%	20,900	2,300	10,550
12% (24)	14,700	1,620	—
12% (20)	11,500	1,700	6,150

Janka side hardness 1,390 lb for green material and 1,670 lb for dry.

Drying and Shrinkage: Dries fairly rapidly with little degrade, some end-checkin and warp may occur. Kiln schedule T10-D4S is suggested for 4/4 stock and T8-D3S for 8/4. Shrinkage green to ovendry: radial 5.6%; tangential 10.4%; volumetric 15.4%. Movement in service is rated as medium.

Working Properties: Generally reported easy to work in machining operations but rather difficult with hand tools; tearing of interlocked grain in planning, poor surfaces in shaping; nails and glues easily; moderate steam-bending qualities.

Durability: Highly susceptible to attack by decay and staining fungi as well as insect damage, including powder-post beetle attack.

Preservation: Heartwood rated as moderately resistant to preservative treatment, sapwood is permeable.

Uses: Flooring, tool handles, plywood, general construction, decorative veneer.

Additional Reading: (3), (5), (9), (40), (44)

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41. Nigeria: Dep. For. Res. 1966. *Brachystegia kennedyi* (Okwen). For. Prod. Res. Rep. Dep. For. Res. Nigeria No. FPRL/7

From: *Chudnoff, Martin. 1984. Tropical Timbers of the World. USDA Forest Service. Ag. Handbook No. 607.*