



USDA Forest Service
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Wood Technology Transfer Fact Sheet

Terminalia superba

Afara

Limba

Family: Combretaceae

Other Common Names: Ofram (Ghana), Frake (Ivory Coast), Afara (Nigeria), Akom (Cameroon), Limba (Zaire, Angola). "Korina" a trade name in the United States.

Distribution: Widely distributed from Sierra Leone to Angola and Zaire; occurs in rain and savanna forests. A favored plantation species in West Africa.

The Tree: Reaches a height of 150 ft; boles straight and clear to 90 ft; trunk diameters 4 to 8 ft above buttresses. Brittleheart present in some logs.

The Wood:

General Characteristics: Heartwood yellow brown, sometimes with nearly black markings producing an attractive figure; sapwood not distinct from heartwood. Texture moderately coarse; grain straight to irregular or interlocked; slightly lustrous; mild odor. Dark colored figured wood is marketed separately as Dark Afara or Dark Limba. Splinters may cause skin inflammation.

Weight: Basic specific gravity (ovendry weight/green volume) 0.45; air-dry density 34 pcf.

Mechanical Properties: (2-cm standard)

Moisture content Bending strength Modulus of elasticity Maximum crushing strength

(%) (Psi) (1,000 psi) (Psi)

12%(9) 12,100 1,530 5,490

12%(29) 13,200 1,430 6,900

Amsler toughness 127 in.-lb at 12% moisture content (2-cm specimen).

Drying and Shrinkage: Seasons rapidly with little or no checking and warp. Kiln schedule T10-D5S is suggested for 4/4 stock and T8-D4S for 8/4. Shrinkage green to oven-dry: radial 4.5%; tangential 6.2%; volumetric 10.8%. Movement in service is rated as small.

Working Properties: Saws easily, works well with hand and machine tools, good veneering properties, good gluing and nailing characteristics, takes a good finish.

Durability: Heartwood is nondurable, not resistant to termites, liable to severe ambrosia beetle and powder-post beetle attack.

Preservation: Heartwood extremely resistant to preservative treatments; sapwood moderately so.

Uses: Plywood, furniture, interior joinery, sliced for decorative veneers.

Additional Reading: (3), (9), (29)

3. Bolza, E., and W. G. Keating. 1972. African timbers-the properties, uses, and characteristics of 700 species. CSIRO. Div. of Build. Res., Melbourne, Australia.

9. Farmer, R. H. 1972. Handbook of hardwoods. H. M. Stationery Office. London.

29. France: Bois For. Trop. 1974. Limba-Frake (Terminalia superba). Bois For. Trop. 158:33-49.

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