AVODIRE

Family: MELIACEAE (angiosperm)
Scientific name(s): *Turraeanthus africanus*
Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: light yellow
Sapwood: not demarcated
Texture: fine
Grain: straight or interlocked
Interlocked Grain: slight
Note:
Wood cream white or light yellow, lustrous aspect, turns to golden yellow with light. Moiré or ribbon like aspect on quartersawn

LOG DESCRIPTION

Diameter: 20 – 28 inches
Floats: yes
Log Durability: low (must be treated)

PHYSICAL PROPERTIES

MECHANICAL/ACOUSTIC

Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.

	Mean	Std. Dev.
Specific Gravity*:	0.58	0.06
Janka Hardness (lbs):	1,170	
Volumetric Shrinkage:	0.36%	0.11%
Total Tangential Shrinkage (TS):	6.6%	1.1%
Total Radial Shrinkage (RS):	3.8%	0.6%
TS/RS Ratio:	1.7	
Fiber Saturation Point:	39%	

Stability: stable

	Mean	Std. Dev.
Crushing Strength*:	7541 psi	1015 psi
Static Bending Strength*:	13,633 psi	2175 psi
Modulus of Elasticity*:	1826025 psi	224808 psi

Musical Quality Factor: 128.8 measured at 2754 Hz

**At 12% moisture content.*

NATURAL DURABILITY AND TREATABILITY

Fungi and termite resistance refers to end-uses under temperate climate. Except for special comments on sapwood, natural durability is based on mature heartwood. Sapwood must always be considered as non-durable against wood degrading agents. E.N. = Euro Norm

Funghi (According to E.N. standards): class 4 - poorly durable
Dry Wood Borers: class S - susceptible (risk in all the wood)
Termites (According to E.N. standards): class S - susceptible
Treatability (according to E.N. standards): class 4 - not permeable
Use class ensured by natural durability: class 2 - inside or under cover (dampness possible)
Species covering the use class 5: no
Note:
This species is listed in the European standard NF EN 350-2.
Prone to blue stain.

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: requires appropriate preservative treatment
In case of risk of temporary humidification: use not recommended
In case of risk of permanent humidification: use not recommended

AVODIRE

DRYING

Drying Rate: rapid to normal
Risk of Distortion: high risk
Risk of Casehardening: no
Risk of Checking: slight risk
Risk of Collapse: no
Possible Drying Schedule: 2

Temperature (°F)

M.C. (%)	Dry-Bulb	Wet-Bulb	Air Humidity (%)
Green	107.6	116.6	82
50	118.4	113	74
40	118.4	116.6	74
30	118.4	131	74
15	129.2	136.4	63

This schedule is given for information only and is applicable to thickness lower or equal to 1.5 in. It must be used in compliance with the code of practice. For thickness from 1.5 to 3 in, the air relative humidity should be increased by 5% at each step. For thickness over 3 in, a 10% increase should be considered.

SAWING AND MACHINING

Blunting Effect: normal
Sawteeth Recommended: ordinary or alloy steel
Cutting Tools: ordinary
Peeling: bad
Slicing: good
Note:
Poor aptitude for peeling (irregular logs). Very irritant sawdust; good ventilation required. Sometimes tearing in planing.

ASSEMBLING

Nailing / screwing: good but pre-boring necessary
Gluing: correct
Note:
Gluing must be done carefully: wood may be easily stained.

END-USES

Cabinetwork (high class furniture)
Sliced Veneer
Interior Joinery
Interior Panelling
Current Furniture Or Furniture Components
Musical instruments
Moulding

Note:
Substitute for Sycomore (Acer spp.) for furnitures.

MAIN LOCAL NAMES

Country	Local Name
Cameroon	Asama
Ivory Coast	Avodire,
Ghana	Apapaya, Avodire
Dem. Rep. of the Congo	Lusamba, M'fube
Belgium	Lusamba
Liberia	Blima-Pu
Nigeria	Apaya