Common name:	BUBINGA
Family:	CAESALPINIACEAE
Scientific name(s):	Guibourtia demeusei Guibourtia pellegriniana Guibourtia tessmannii

LOG DESCRIPTION

Diameter:	from 90 to 150 cm
Thickness of sapwood:	from 2 to 8 cm
Floats:	no
Durability in forest :	Moderate (treatment recommended)
Note:	Wood pink or reddish brown, with some fine purplish red veins. Some brown veins. Grain sometimes wavy.

WOOD DESCRIPTION

Colour:	Red brown
Sapwood:	Clearly demarcated
Texture:	Medium
Grain:	Straight or interlocked
Interlocked grain:	Slight

PHYSICAL PROPERTIES

MECHANICAL PROPERTIES

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

	mean	standard deviation
Density *:	0.92 g/cm3	0.12
Monnin hardness*:	10.2	2.2
Coef of volumetric shrinkage:	0.62 %	0.15
Total tangential shrinkage:	7.9 %	2.0
Total radial shrinkage:	5.5 %	1.0
Fibre saturation point:	24 %	

	mean	standard deviation
Crushing strength *:	76 MPa	10
Static bending strength *:	137 MPa	38
Modulus of elasticity *:	20180 MPa	5592

Stability: Poorly stable

(* : at 12 % moisture content ; 1 MPa = 1 N/mm2)

Note: Hardness varies from hard to very hard.

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.

Fungi:	Class 2 - durable
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)
Termites:	Class D - Durable
Treatability:	4 - not permeable
Biological hazard class*:	4 - in ground or fresh water contact or hight dampness
Note:	This species is listed in the European standard NF EN 350-2.

* ensured by natural durability (according EN standards).

COUNTRIES - LOCAL NAMES

Countries	Local names
Cameroon	BUBINGA
Cameroon	ESSINGANG
Dem Rep of Congo	WAKA
Equatorial Guinea	OVENG
Gabon	EBANA
Gabon	KEVAZINGO
U.S.A.	AKUME

BUBINGA

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks:	Does not require any preservative treatment
In case of temporary humidification risk:	Does not require any preservative treatment
In case of permanent humidification risk:	Does not require any preservative treatment

DRYING

Drying rate:	Slow
Risk of distortion:	High risk
Risk of casehardening:	No
Risk of checking:	High risk
Risk of collapse:	No

Possible drying schedule

M.C. (%)	Temperature (°C) dry-bulb	wet-bulb	Air humidity (%)
Green	42	39	82
50	48	43	74
40	48	43	74
30	48	43	74
15	54	46	63

This shedule is given for information only and is applicable to thickness < 38 mm.
It must be used in compliance with the code of practice.
For thickness from 38 to 75 mm , the air relative humidity should be increased by 5 % at each step.
For thickness over 75 mm , a 10 % increase should be considered.

Note: A period of surface drying prior to kiln drying is recommended to avoid defects.

SAWING AND MACHINING

Blunting effect:	Fairly high
Sawteeth recommended:	Stellite-tipped
Cutting tools:	Tungsten carbide
Peeling:	No information available
Slicing:	Good
Note:	Requires power. Care is needed in presence of interlocked grain. Very decorative veneers.

ASSEMBLING

Nailing / Screwing:	Good but pre-boring necessary
Gluing:	Correct (for interior only)
Note:	Gluing must be done with care (dry wood and smooth surface).

END-USES

Main known end-uses; they must to be implemented according to the code of practice.
Important remark: some end-uses are mentionned for information (traditional, regional or ancient end-uses).

Cabinetwork (high class furniture)
Sliced veneer
Interior panelling
Flooring
Stairs (inside)
Turned goods
Current furniture or furniture components
Interior joinery
Seats
Exterior joinery
Sleepers
Heavy carpentry
Vehicle or container flooring