

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

LOG DESCRIPTION	WOOD 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.
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		mean	standard deviation
Density *:	0.92 g/cm ³	0.12			
Monnin hardness*:	10.2	2.2	Crushing strength *:	76 MPa	10
Coef of volumetric shrinkage:	0.62 %	0.15	Static bending strength *:	137 MPa	38
Total tangential shrinkage:	7.9 %	2.0	Modulus of elasticity *:	20180 MPa	5592
Total radial shrinkage:	5.5 %	1.0			
Fibre saturation point:	24 %				
Stability:	Poorly stable		(* : at 12 % moisture content ; 1 MPa = 1 N/mm ²)		
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	* ensured by natural durability (according EN standards).
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)	
Termites:	Class D - Durable	
Treatability:	4 - not permeable	
Use class*:	4 - in ground or fresh water contact	
Note:	This species is listed in the European standard NF EN 350-2. According to the European standard NF EN 335, performance length might be modified by the intensity of end-use exposition.	

MAIN 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

Possible drying schedule

Drying rate:	Slow	Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Risk of distortion:	High risk	Green	42	39	82
Risk of casehardening:	No	50	48	43	74
Risk of checking:	High risk	40	48	43	74
Risk of collapse:	No	30	48	43	74
		15	54	46	63

This schedule 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
