

Common name:	BOSSE
Family:	MELIACEAE
Scientific name(s):	Guarea cedrata Guarea thompsonii Guarea laurentii
Note:	G. cedrata and G. laurentii are called light BOSSE; G. thompsonii is called dark BOSSE.

LOG DESCRIPTION	WOOD DESCRIPTION		
Diameter:	from 60 to 100 cm	Colour:	Pinkish brown
Thickness of sapwood:	from 5 to 10 cm	Sapwood:	Clearly demarcated
Floats:	no	Texture:	Fine
Durability in forest :	Moderate (treatment recommended)	Grain:	Interlocked
		Interlocked grain:	Slight
Note:	Irregular or wavy grain. G.thompsonii presents a straighter grain. It is also almost floatable. Wood pinkish brown (G. cedrata) to orangey brown (G. thompsonii). Aspect slightly moiré. G. cedrata has a cedar scent and a tendency to resin exudation.		

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 *:	0.63 g/cm ³	0.03			
Monnin hardness*:	4.2	1.1	Crushing strength *:	55 MPa	8
Coef of volumetric shrinkage:	0.45 %	0.06	Static bending strength *:	95 MPa	14
Total tangential shrinkage:	6.8 %	0.7	Modulus of elasticity *:	12650 MPa	2899
Total radial shrinkage:	4.1 %	1.0			
Fibre saturation point:	31 %				
Stability:	stable		(* : at 12 % moisture content ; 1 MPa = 1 N/mm ²)		

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 S - Susceptible	
Treatability:	4 - not permeable	
Use class*:	3 - not in ground contact, outside	
Note:	This species is listed in the European standard NF EN 350-2. Light Bossé has a moderate resistance to fungi. Dark Bossé is durable. 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	EBANGBEMWA
Côte d'Ivoire	BOSSE
Côte d'Ivoire	MUTIGBANAYE
Dem Rep of Congo	BOSASA
Dem Rep of Congo	DIAMBI
Ghana	GUAREA
Ghana	KWABOHORO
Kenya	BOLON
Nigeria	OBOBO NEKWI
Nigeria	OBOBO NOFUA
Germany	BOSSE
Germany	DIAMBI
United Kingdom	BLACK GUAREA
United Kingdom	SCENTED GUAREA

BOSSE

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:	Use not recommended

DRYING

Possible drying schedule

Drying rate:	Rapid to normal	Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Risk of distortion:	Slight risk	Green	50	47	84
Risk of casehardening:	No	40	50	45	75
Risk of checking:	Slight risk	30	55	47	67
Risk of collapse:	No	20	70	55	47
		15	75	58	44

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: The tendency to resin exudation, especially for *G.cedrata* may have an influence on the aspect of dried timbers.

SAWING AND MACHINING

Blunting effect:	Fairly high
Sawteeth recommended:	Stellite-tipped
Cutting tools:	Tungsten carbide
Peeling:	Good
Slicing:	Good
Note:	The silica content of <i>G.cedrata</i> can be high to very high. Irritant sawdust.

ASSEMBLING

Nailing / Screwing:	Good
Gluing:	Correct
Note:	Pre-boring may be necessary for <i>G.thompsonii</i> due to its hardness. Gluing <i>G. cedrata</i> may be difficult due to resin exudations.

END-USES

Main known end-uses; they must be implemented according to the code of practice.

Important remark: some end-uses are mentioned for information (traditional, regional or ancient end-uses).

Note: Filling is recommended to obtain a better finish. Resin exudations may be an inconvenient for some uses.

Exterior joinery
Interior joinery
Interior panelling
Exterior panelling
Ship building (planking and deck)
Sliced veneer
Cabinetwork (high class furniture)
Current furniture or furniture components
Cigar boxes
Veneer for interior of plywood
Veneer for back or face of plywood
Rolling shutters
Flooring
Light carpentry
