

Common name:	BOMANGA
Family:	CAESALPINIACEAE
Scientific name(s):	Brachystegia laurentii Brachystegia mildbraedii Brachystegia zenkeri

LOG DESCRIPTION	WOOD DESCRIPTION
Diameter:	from 80 to 120 cm
Thickness of sapwood:	from 10 to 15 cm
Floats:	no
Durability in forest :	Moderate (treatment recommended)
Note:	Sapwood very wide and easily attacked by insects. Wood light brown, with copper brown veins. Possibility of wind shakes.

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 *:	0.56 g/cm <sup>3</sup>	0.05			
Monnin hardness*:	2.9	0.7	Crushing strength *:	49 MPa	4
Coef of volumetric shrinkage:	0.40 %	0.07	Static bending strength *:	85 MPa	11
Total tangential shrinkage:	6.0 %	0.6	Modulus of elasticity *:	12400 MPa	1820
Total radial shrinkage:	3.7 %	0.5			
Fibre saturation point:	28 %				
Stability:	stable		(* : at 12 % moisture content ; 1 MPa = 1 N/mm <sup>2</sup> )		
Note:	Hardness varies from soft to fairly 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 3 moderately durable	* ensured by natural durability (according EN standards).
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)	
Termites:	Class M - Moderately durable	
Treatability:	3 - poorly permeable	
Use class*:	2 - inside or under cover (dampness possible)	
Note:	A preservative treatment is recommended as sawnwoods often contain sapwood.	

#### MAIN LOCAL NAMES

Countries	Local names
Cameroon	EKOP-LEKE
Cameroon	EKOP-EVENE
Congo	BOMANGA
Dem Rep of Congo	BOMANGA
Gabon	NZANG
Gabon	YEGNA
France	ARIELLA
United Kingdom	ARIELLA

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## BOMANGA

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### REQUIREMENT OF A PRESERVATIVE TREATMENT

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

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### DRYING

#### Possible drying schedule

Drying rate:	Slow	Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Risk of distortion:	High risk	Green	42	41	94
Risk of casehardening:	No	50	48	43	74
Risk of checking:	High risk	30	54	46	63
Risk of collapse:	Yes	20	60	51	62
		15	60	51	62

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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.

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### SAWING AND MACHINING

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Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Good

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### ASSEMBLING

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Nailing / Screwing:	Good
Gluing:	Correct

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### 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).

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Veneer for interior of plywood  
Veneer for back or face of plywood  
Interior joinery  
Interior panelling  
Sliced veneer  
Current furniture or furniture components  
Light carpentry  
Glued laminated  
Wood frame house  
Blockboard  
Fiber or particle boards  
Boxes and crates  
Flooring  
Cooperage  
Stairs (inside)  
Cabinetwork (high class furniture)

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