

Common name:	BILINGA
Family:	RUBIACEAE
Scientific name(s):	Nauclea diderrichii Sarcocephalus spp. (synonymous) Nauclea gillettii

LOG DESCRIPTION	WOOD DESCRIPTION
Diameter:	from 60 to 90 cm
Thickness of sapwood:	from 3 to 5 cm
Floats:	no
Durability in forest :	Good
Note:	Heartwood golden yellow or orange yellow slightly moiré. In interior end-uses, the colour remains stable.

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 *:	0.76 g/cm <sup>3</sup>	0.07	Crushing strength *:	63 MPa	7
Monnin hardness*:	5.3	1.3	Static bending strength *:	95 MPa	11
Coef of volumetric shrinkage:	0.55 %	0.05	Modulus of elasticity *:	14660 MPa	1934
Total tangential shrinkage:	7.5 %	0.9			
Total radial shrinkage:	4.5 %	0.7			
Fibre saturation point:	25 %				
Stability:	Moderately stable to stable		(* : at 12 % moisture content ; 1 MPa = 1 N/mm <sup>2</sup> )		

#### 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 1 - very durable	* ensured by natural durability (according EN standards).
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)	
Termites:	Class D - Durable	
Treatability:	2 - moderately permeable	
Biological hazard class*:	4 - in ground or fresh water contact or high dampness	
Note:	This species is listed in the European standard NF EN 350-2. Bilinga naturally covers the biological hazard class 5 (end-uses in marine environment or in brackish water).	

#### COUNTRIES - LOCAL NAMES

Countries	Local names	Countries	Local names
Angola	ENGOLO	Uganda	KILINGI
Benin	OPEPE	Germany	ALOMA
Cameroon	AKONDOC	United Kingdom	OPEPE
Central African Rep	KILU		
Congo	LINZI		
Congo	MOKESSE		
Congo	N'GULU-MAZA		
Côte d'Ivoire	BADI		
Dem Rep of Congo	BONKNGU		
Dem Rep of Congo	N'GULU-MAZA		
Equatorial Guinea	ALOMA		
Gabon	BILINGA		
Ghana	KUSIA		
Nigeria	OPEPE		
Sierra Leone	BUNDUI		

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**BILINGA**

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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:	Does not require any preservative treatment
In case of permanent humidification risk:	Does not require any preservative treatment

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**DRYING**

## Possible drying schedule

Drying rate:	Slow	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:	High risk	30	55	47	67
Risk of collapse:	No	20	70	55	47
		15	75	58	44

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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.

Note: Difficult to dry due to high interlocked grain. Quartersawn recommended in order to avoid defects.

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**SAWING AND MACHINING**

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Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Bad
Slicing:	Good
Note:	Requires power.

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**ASSEMBLING**

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Nailing / Screwing:	Good but pre-boring necessary
Gluing:	Correct
Note:	Slight tendency to split in nailing. Gluing must be done with care: the wood is acid.

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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 mentioned for information (traditional, regional or ancient end-uses).

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Note: Exterior facing must be protected against humidity variation in order to avoid shakes. Filling is necessary.

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Sleepers Resistant to one or several acids

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Heavy carpentry

Posts

Bridges (parts in contact with water or ground)

Hydraulic works (seawater)

Vehicle or container flooring

Industrial or heavy flooring

Flooring

Cabinetwork (high class furniture)

Current furniture or furniture components

Sliced veneer

Ship building (planking and deck)

Exterior panelling

Interior joinery

Interior panelling

Bridges (parts not in contact with water or ground)

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