

Common name:	LIMBALI
Family:	CAESALPINIACEAE
Scientific name(s):	Gilbertiodendron dewevrei Macrobium dewevrei (synonymous) Gilbertiodendron preussii Gilbertiodendron brachystegioides

LOG DESCRIPTION	WOOD DESCRIPTION
Diameter:	from 60 to 100 cm
Thickness of sapwood:	from 5 to 10 cm
Floats:	no
Durability in forest :	Moderate (treatment recommended)
Note:	Wood red brown with greenish or copper shades. Possible internal stresses.

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 *:	0.81 g/cm <sup>3</sup>	0.05		
Monnin hardness*:	5.1	1.1	Crushing strength *:	72 MPa 5
Coef of volumetric shrinkage:	0.62 %	0.05	Static bending strength *:	137 MPa 13
Total tangential shrinkage:	9.1 %	0.8	Modulus of elasticity *:	18010 MPa 2889
Total radial shrinkage:	4.7 %	0.5		
Fibre saturation point:	28 %			
Stability:	Moderately 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 2 - 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	
Biological hazard class*:	3 - not in ground contact, outside exposed	
Note:	Good resistance to white rot. Moderate resistance to brown cubical rot.	

#### COUNTRIES - LOCAL NAMES

Countries	Local names
Cameroon	EKOBEM
Central African Rep	MOLAPA
Côte d'Ivoire	VAA
Dem Rep of Congo	DITSHIPI
Dem Rep of Congo	LIGUDU
Dem Rep of Congo	LIMBALI
Gabon	ABEUM
Ghana	TETEKON
Liberia	SEHMEH
Nigeria	EKPAGOI EZE

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## LIMBALI

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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:	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	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: Drying must be handled with care to reduce risks of cracks. Air drying under cover recommended.

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### SAWING AND MACHINING

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Blunting effect:	Fairly high
Sawteeth recommended:	Stellite-tipped
Cutting tools:	Tungsten carbide
Peeling:	Bad
Slicing:	Not recommended or without interest
Note:	Requires power. Log turning sawing recommended as soon as possible after felling (risks of splitting).

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### ASSEMBLING

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Nailing / Screwing:	Good but pre-boring necessary
Gluing:	Correct (for interior only)

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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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Heavy carpentry  
Industrial or heavy flooring  
Exterior joinery  
Interior joinery  
Exterior panelling  
Interior panelling  
Ship building (planking and deck)  
Vehicle or container flooring  
Stairs (inside)  
Wood frame house

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