

Family: ERYTHROXYLACEAE (angiosperm)

Scientific name(s): Erythroxylum mannii

Commercial restriction: no commercial restriction

## WOOD DESCRIPTION

Color: light brown  
Sapwood: not clearly demarcated  
Texture: fine  
Grain: interlocked  
Interlocked grain: slight

Note: Wood light brown to light red brown darkening with light. Small dark pith flecks. Alternate light and dark veins.

## LOG DESCRIPTION

Diameter: from 80 to 100 cm  
Thickness of sapwood: from 3 to 6 cm  
Floats: yes  
Log durability: good

## PHYSICAL PROPERTIES

Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.

	<u>Mean</u>	<u>Std dev.</u>
Specific gravity *:	0,66	0,03
Monnin hardness *:	2,6	0,6
Coeff. of volumetric shrinkage:	0,46 %	0,08 %
Total tangential shrinkage (TS):	8,8 %	
Total radial shrinkage (RS):	3,8 %	
TS/RS ratio:	2,3	
Fiber saturation point:	30 %	
Stability: poorly stable		

## MECHANICAL AND ACOUSTIC PROPERTIES

	<u>Mean</u>	<u>Std dev.</u>
Crushing strength *:	53 MPa	3 MPa
Static bending strength *:	91 MPa	8 MPa
Modulus of elasticity *:	14010 MPa	

(\*: at 12% moisture content, with 1 MPa = 1 N/mm<sup>2</sup>)

Musical quality factor: 96,1 measured at 2403 Hz

## 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.

E.N. = Euro Norm

Funghi (according to E.N. standards): class 2 - durable

Dry wood borers: heartwood durable but sapwood not clearly demarcated

Termites (according to E.N. standards): class D - durable

Treatability (according to E.N. standards): class 3 - poorly permeable

Use class ensured by natural durability: class 4 - in ground or fresh water contact

Species covering the use class 5: No

Note: The possible presence of few demarcated sapwood in sawnwoods may have an influence on the expected durability.

According to the European standard NF EN 335, performance length might be modified by the intensity of end-use exposition.

## REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: requires appropriate preservative treatment

In case of risk of temporary humidification: does not require any preservative treatment

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

## DRYING

Drying rate: normal to slow

Risk of distortion: slight risk

Risk of casehardening: no

Risk of checking: slight risk

Risk of collapse: no

Possible drying schedule: 3

M.C. (%)	Temperature (°C)		Air humidity (%)
	dry-bulb	wet-bulb	
Green	60	56	81
30	68	58	61
20	74	60	51
15	80	61	41

This schedule is given for information only and is applicable to thickness lower or equal to 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.

## SAWING AND MACHINING

Blunting effect: normal

Sawteeth recommended: ordinary or alloy steel

Cutting tools: ordinary

Peeling: good

Slicing: good

## ASSEMBLING

Nailing / screwing: good

Gluing: correct

## COMMERCIAL GRADING

Appearance grading for sawn timbers: According to SATA grading rules (1996)

For the "General Purpose Market":

Possible grading for square edged timbers: choix I, choix II, choix III, choix IV

Possible grading for short length lumbers: choix I, choix II

Possible grading for short length rafters: choix I, choix II, choix III

For the "Special Market":

Possible grading for strips and small boards (ou battens): choix I, choix II, choix III

Possible grading for rafters: choix I, choix II, choix III

## FIRE SAFETY

Conventional French grading: Thickness > 14 mm : M.3 (moderately inflammable)

Thickness < 14 mm : M.4 (easily inflammable)

Euroclasses grading: D s2 d0

Default grading for solid wood, according to requirements of European standard EN 14081-1 annex C (April 2009). It concerns structural graded timber in vertical uses with mean density upper 0.35 and thickness upper 22 mm.

## END-USES

Exterior joinery

Interior panelling

Sliced veneer

Flooring

Current furniture or furniture components

Bridges (parts not in contact with water or ground)

Ship building (planking and deck)

Veneer for back or face of plywood

Interior joinery

Exterior panelling

Stairs (inside)

Vehicle or container flooring

Seats

Wood frame house

Veneer for interior of plywood

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**MAIN LOCAL NAMES**

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<u>Country</u>	<u>Local name</u>	<u>Country</u>	<u>Local name</u>
Cameroon	LANDA	Congo	LUKIENZO
Ivory Coast	DABE	Gabon	LANDA
Democratic Republic of the Congo	NKANZA	Sierra Leone	BIMINI

