

Landa

Family. Erythroxylaceae

Botanical Name(s).

Erythroxylum mannii

Continent. Africa

CITES. This species is not listed in the CITES Appendices (Washington Convention 2023).

Description of logs

Diameter. From 80 to 100 cm

Thickness of sapwood. From 3 to 6 cm

Floats. Yes

Log durability. Good

Description of wood

Colour reference. Light brown

Sapwood. Not clearly demarcated

Texture. Fine

Grain. Interlocked

Interlocked grain. Slight

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

Physics and mechanics

The properties indicated are for mature wood. These properties may vary significantly depending on the origin and growing conditions of the wood.

Property	Average value
Specific gravity ¹	0.66
Monnin hardness ¹	2.6
Coefficient of volumetric shrinkage	0.46 % per %
Total tangential shrinkage (St)	8.8 %
Total radial shrinkage (Sr)	3.8 %
Ratio St/Sr	2.3
Fibre saturation point	30 %
Thermal conductivity (λ)	0.22 W/(m.K)
Lower heating value	19,420 kJ/kg
Crushing strength ¹	53 MPa
Static bending strength ¹	91 MPa
Modulus of elasticity ¹	14,010 MPa

¹ At 12 % moisture content, with 1 MPa = 1 N/mm

Natural durability and preservation

Resistance to fungi. Class 2 - durable



Quarter sawn



Half-quarter sawn

Resistance to dry wood borers. Class D - durable (heartw. durable but sapw. not clearly demarcated)

Resistance to termites. Class D - durable

Treatability. Class 3 - poorly permeable

Use class ensured by natural durability.

Class 4 - in ground or fresh water contact

Notes. 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 (2013), performance length might be modified by the intensity of end-use exposition.

Requirement of a preservative treatment

Against dry wood borer. Requires appropriate preservative treatment

In case of temporary humidification. Does not require any preservative treatment

In case of permanent humidification. Does not require any preservative treatment

Drying

Drying rate. Normal to slow

Risk of distorsion. Slight risk

Risk of casehardening. No known specific risk

Risk of checking. Slight risk

Risk of collapse. No known specific risk

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
Prewarm 1		> 50	50	87	17.0
Prewarm 2	4	> 50	50	86	16.5
Drying		> 50	53	83	15.2
		50 - 40	53	80.0	14.1
		40 - 35	54	80.0	13.9
		35 - 30	55	75.0	12.5
		30 - 27	57	70.0	11.0
		27 - 24	58	61.0	9.4
		24 - 21	59	51.0	7.9
		21 - 18	60	47.0	7.3
		18 - 15	61	39.0	6.1
		15 - 12	62	35.0	5.6
		12 - 9	62	30.0	5.0
		9 - 6	62	26.0	4.4
Conditioning	8		55	(3)	(2)
Cooling	(1)		Stop	(3)	(2)

(1)) Cooling: until the temperature inside the kiln no longer exceeds external temperature by more than 30 °C.

(2) UGL = final H% x 0,8 to 0,9.

(3) Subtract RH from the UGL determined in (2) and temperature, using the Hailwood-Horrobin equation.

Sawing and machining

Blunting effect. Normal

Sawteeth recommended. Ordinary or alloy steel

Cutting tools. Ordinary

Peeling. Good

Slicing. Good

Assembling

Nailing and screwing. Good

Commercial grading

Appearance grading for sawn timbers.

According to the ATIBT grading rules (2017), the main choices are: FAS (First And Second), n°1 Common and select, n°2 Common (see details of these rules on the ATIBT website).

Visual grading for structural applications

No visual grading for structural applications

Fire safety

Conventional French grading.

Thickness > 14 mm: M3 (moderately inflammable)

Thickness < 14 mm: M4 (easily inflammable)

Euroclasses grading. D-s2, d0

Default grading for solid wood, according to requirements of European standard EN 14081-1+A1 (August 2019). It concerns structural graded timber in vertical uses and ceiling with mean density upper 0.35 and thickness upper 22 mm.

End-uses

- Bridges (parts not in contact with water or ground)
- Current furniture or furniture components
- Decking
- Exterior joinery
- Exterior panelling
- Flooring
- Indoor staircases
- Interior joinery
- Interior panelling
- Seats
- Ship building (planking and deck)
- Sliced veneer
- Vehicle or container flooring
- Veneer for back or face of plywood
- Veneer for interior of plywood
- Wood frame house

Main local names

Country	Local name
Cameroon	Landa
Congo	Lukienzo
Côte d'Ivoire	Dabé
Democratic Republic of the Congo	Nkanza
Gabon	Landa
Sierra Leone	Bimini