

Bodioa

Family. Rhizophoraceae

Botanical Name(s).

Anopyxis klaineana

Anopyxis ealaensis (synonymous)

Continent. Africa

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

Description of logs

Diameter. From 60 to 100 cm

Thickness of sapwood. -

Floats. No

Log durability. Low (treatment necessary)

Description of wood

Colour reference. Light brown

Sapwood. Not clearly demarcated

Texture. Medium

Grain. Straight

Interlocked grain. Absent

Notes. Wood light brown with pink or ochre shades. Grain sometimes wavy.

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	0.89
Monnin hardness ¹	7.0
Coefficient of volumetric shrinkage	0.65 % per %
Total tangential shrinkage (St)	10.3 %
Total radial shrinkage (Sr)	6.2 %
Ratio St/Sr	1.7
Fibre saturation point	30 %
Thermal conductivity (λ)	0.29 W/(m.K)
Lower heating value	17,740 kJ/kg
Crushing strength ¹	75 MPa
Static bending strength ¹	132 MPa
Modulus of elasticity ¹	20,290 MPa

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

Natural durability and preservation



Quarter sawn



Flat sawn

Resistance to fungi. Class 5 - not durable

Resistance to dry wood borers. Class S - susceptible (risk in all the wood)

Resistance to termites. Class D - durable

Treatability. Class 1 - easily permeable

Use class ensured by natural durability.

Class 1 - inside (no dampness)

Notes. Prone to blue stain.

Requirement of a preservative treatment

Against dry wood borer. Requires appropriate preservative treatment

In case of temporary humidification. Requires appropriate preservative treatment

In case of permanent humidification. Use not recommended

Drying

Drying rate. Slow

Risk of distorsion. High risk

Risk of casehardening. No known specific risk

Risk of checking. High risk

Risk of collapse. No known specific risk

Notes.

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	85	15.7
		50 - 40	53	82.0	14.6
		40 - 35	54	78.0	13.4
		35 - 30	55	77.0	12.9
		30 - 27	57	73.0	11.9
		27 - 24	58	68.0	10.7
		24 - 21	60	61.0	9.3
		21 - 18	62	52.0	7.9
		18 - 15	64	43.0	6.6
		15 - 12	65	39.0	6.0
		12 - 9	65	31.0	5.0
		9 - 6	65	28.0	4.5
Conditioning	8		58	(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. Stellite-tipped

Cutting tools. Tungsten carbide

Peeling. Not recommended or without interest

Slicing. Good

Notes. Requires power.

Assembling

Nailing and screwing. Good but pre-boring necessary

Notes. High specific gravity: gluing must be especially performed in compliance with the code of practice.

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

- Exterior joinery
- Heavy carpentry
- Industrial or heavy flooring
- Interior joinery
- Interior panelling
- Sliced veneer
- Turned goods
- Vehicle or container flooring

Main local names

Country	Local name
Cameroon	Noudougou
Central African Republic	Moboma
Congo	Pamiel
Côte d'Ivoire	Bodioa
Democratic Republic of the Congo	Bobenkusu
Gabon	Évam
Ghana	Kokoti
Nigeria	Ekiawa
Nigeria	Otutu
Sierra Leone	Kpomusi