Vêne

Flat sawn

Quarter sawn

Family. Fabaceae

Botanical Name(s).
Pterocarpus erinaceus
Pterocarpus africanus (synonymous)

Continent. Africa

CITES.
Like all African species in the genus *Pterocarpus*, Vêne is listed in Appendix II of CITES (Washington Convention 2023). The products concerned are logs, sawn wood, veneer, plywood and engineered wood.

Notes. VENE is available in Sudano-Guinean dry forests.

Description of logs

Diameter. From 30 to 60 cm

Thickness of sapwood. From 2 to 5 cm

Floats. No

Log durability. Moderate (treatment recommended)

Description of wood

Colour reference. Yellow brown

Sapwood. Clearly demarcated

Texture. Medium

Grain. Straight or interlocked

Interlocked grain. Slight

Notes. Bark is marked with red streaks and exudes reddish resin. Heartwood brown yellowish with purple-brown stripes.

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]	9.5
Coefficient of volumetric shrinkage	0.34 % per %
Total tangential shrinkage (St)	5.9 %
Total radial shrinkage (Sr)	3.2 %
Ratio St/Sr	1.8 %
Fibre saturation point	21
Thermal conductivity (λ)	0.29 W/(m.K)
Lower heating value	19,940 kJ/kg
Crushing strength[1]	76 MPa
Static bending strength[1]	130 MPa
Modulus of elasticity[1]	15,670 MPa

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

Natural durability and preservation

Resistance to fungi. Class 1 - very durable

Resistance to dry wood borers. Class D - durable (sapwood demarcated, risk limited to sapwood)

Resistance to termites. Class D - durable

Treatability. Class 4 - not permeable

Use class ensured by natural durability.

Class 4 - in ground or fresh water contact

Notes. This species is listed in the European standard NF EN 350 (2016). 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. Does not require any 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. Slow

Risk of distorsion. No risk or very slight risk

Risk of casehardening. No known specific risk

Risk of checking. No risk or very slight risk

Risk of collapse. No known specific risk

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
Prewarm 1		> 50	40	86	17.0
Prewarm 2	4	> 50	43	85	16.5
Drying		> 50	45	83	15.7
		50 - 40	45	80.0	14.6
		40 - 35	45	77.0	13.8
		35 - 30	45	74.0	12.9
		30 - 27	47	69.0	11.5
		27 - 24	49	61.0	9.9
		24 - 21	50	52.0	8.4
		21 - 18	53	48.0	7.7
		18 - 15	56	41.0	6.6
		15 - 12	59	36.0	5.9
		12 - 9	61	30.0	5.0
		9 - 6	65	29.0	4.7
Conditioning	8		58	(3)	(2)
Cooling	(1)		Arrêt	(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. Fairly high

Sawteeth recommended. Stellite-tipped

Cutting tools. Tungsten carbide

Peeling. Not recommended or without interest

Slicing. Good

Assembling

Nailing and screwing. Good but pre-boring necessary

Notes. High specific gravity and extracts: 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 structure.

Fire safety

Conventional French grading.

Thickness > 14 mm: M3 (moderately inflammable)

Thickness < 14 mm: M4 (easily inflammable)

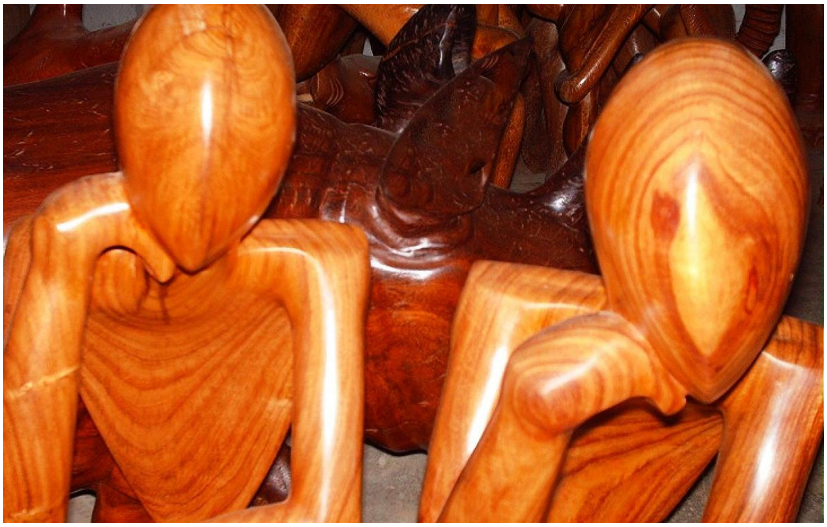
Euroclasses grading. D-s2, d0

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

- Cabinetwork (high class furniture)
- Flooring
- Heavy carpentry
- Interior joinery
- Sculpture
- Seats
- Ship building (planking and deck)
- Ship building (ribs)
- Sliced veneer
- Stairs (inside)
- Turned goods



Traditional statues, Lomé - Togo (© Kossi Segla, Université de Lomé)

Main local names

Country	Local name
Burkina Faso	Goni
Burkina Faso	Guenin
Equatorial Guinea	Pau sangue
Guinea	Ven
Guinea-Bissau	Pau sangue
Mali	Goni
Mali	Ven
Mali	Vêne
Nigeria	Vene
Senegal	Ven
Senegal	Vène