

## Eveuss

Family. Irvingiaceae

Botanical Name(s).

*Klainedoxa gabonensis*

*Klainedoxa trillesii*

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. Good

### Description of wood

Colour reference. Brown

Sapwood. Not clearly demarcated

Texture. Fine

Grain. Straight or interlocked

Interlocked grain. Marked

Notes. Sapwood very important and not durable. Grain sometimes wavy. Presence of light thin veins and sometimes black veining.

### 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 <sup>1</sup>	1.06
Monnin hardness <sup>1</sup>	12.2
Coefficient of volumetric shrinkage	0.77 % per %
Total tangential shrinkage (St)	9.5 %
Total radial shrinkage (Sr)	7.7 %
Ratio St/Sr	1.2
Fibre saturation point	25 %
Thermal conductivity (λ)	0.34 W/(m.K)
Lower heating value	
Crushing strength <sup>1</sup>	92 MPa
Static bending strength <sup>1</sup>	168 MPa
Modulus of elasticity <sup>1</sup>	25,620 MPa

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



Half-quarter sawn



Flat sawn

### Natural durability and preservation

Resistance to fungi. Class 1 - very durable

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. This species is listed in the European standard NF EN 350 (2016). The possible presence of few demarcated sapwood in sawnwood 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. 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. Drying is very difficult.

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
<b>Prewarm 1</b>		> 50	40	86	17.0
<b>Prewarm 2</b>	4	> 50	43	85	16.5
<b>Drying</b>		> 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
<b>Conditioning</b>	8		58	(3)	(2)
<b>Cooling</b>	(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.** Fairly high

**Sawteeth recommended.** Stellite-tipped

**Cutting tools.** Tungsten carbide

**Peeling.** Not recommended or without interest

**Slicing.** Not recommended or without interest

**Notes.** Blunting effect due to hardness. No silica. Requires power.

## Assembling

**Nailing and screwing.** Good but pre-boring necessary

**Notes.** Very 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

- Bridges (parts in contact with water or ground)
- Bridges (parts not in contact with water or ground)
- Decking
- Heavy carpentry
- Hydraulic works (fresh water)
- Industrial or heavy flooring
- Poles
- Sleepers
- Vehicle or container flooring

## Main local names

Country	Local name
Cameroon	Ngon
Central African Republic	Oboro
Congo	Kuma-kuma
Côte d'Ivoire	Kroma
Democratic Republic of the Congo	Ikélé
Democratic Republic of the Congo	Kuma-kuma
Equatorial Guinea	Eves
Equatorial Guinea	Eveuss

Gabon

Gabon

Ghana

Nigeria

Évès

Éveuss

Kruma

Odudu