

## Geombi

**Family.** Leguminosae (Caesalpinaceae)

**Botanical Name(s).**

*Sindoropsis letestui*

*Copaifera letestui* (synonymous)

**Continent.** Africa

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

### Description of logs

**Diameter.** From 70 to 100 cm

**Thickness of sapwood.** From 8 to 10 cm

**Floats.** No

**Log durability.** Moderate (treatment recommended)

### Description of wood

**Colour reference.** Pinkish brown

**Sapwood.** Clearly demarcated

**Texture.** Medium

**Grain.** Straight or interlocked

**Interlocked grain.** Slight

**Notes.** Wood pink brown with copper glints, darkening with light. Possible presence of wind shakes. Resin canals mainly in sapwood.

### 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>	0.72
Monnin hardness <sup>1</sup>	5.4
Coefficient of volumetric shrinkage	0.55 % per %
Total tangential shrinkage (St)	6.8 %
Total radial shrinkage (Sr)	3.7 %
Ratio St/Sr	1.8
Fibre saturation point	22 %
Thermal conductivity (λ)	0.24 W/(m.K)
Lower heating value	
Crushing strength <sup>1</sup>	61 MPa
Static bending strength <sup>1</sup>	115 MPa
Modulus of elasticity <sup>1</sup>	18,640 MPa

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



Quarter sawn



Flat sawn

### Natural durability and preservation

Resistance to fungi. Class 3 - moderately durable

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

Resistance to termites. Class M - moderately durable

Treatability. Class 2 - moderately permeable

Use class ensured by natural durability.

Class 2 - inside or under cover (dampness possible)

### Requirement of a preservative treatment

Against dry wood borer. Does not require any 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. Slight risk

Risk of collapse. No known specific risk

Notes.

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
<b>Prewarm 1</b>		> 50	50	87	17.0
<b>Prewarm 2</b>	4	> 50	50	86	16.5
<b>Drying</b>		> 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
<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. Good

Slicing. Good

**Notes.** Sometimes clogging of sawblades and tools due to resin. Irregular grain may cause a fuzzy surface in planing.

## 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

- Boxes and crates
- Current furniture or furniture components
- Exterior joinery
- Flooring
- Formwork
- Interior joinery
- Light carpentry
- Sliced veneer
- Veneer for back or face of plywood
- Veneer for interior of plywood
- Wood frame house

**Notes.** Low yield due to resin canal and wide sapwood.

## Main local names

Country	Local name
Cameroon	Lumbandjii
Gabon	Ghéombi
Gabon	Ngom