

Longui

Family. Sapotaceae

Botanical Name(s).

Chrysophyllum africanum

Gambeya africana (synonymous)

Chrysophyllum lacourtianum

Gambeya lacourtiana (synonymous)

Chrysophyllum perpulchrum

Chrysophyllum subnudum

Gambeya subnuda (synonymous)

Chrysophyllum p.p.

Continent. Africa

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

Notes. The name LONGHI regroups several species of the genus *Chrysophyllum* whose properties and aspect can greatly vary. Possible confusion with ANINGRE (*Aningeria* spp.).

Description of logs

Diameter. From 60 to 80 cm

Thickness of sapwood. From 3 to 4 cm

Floats. No

Log durability. Moderate (treatment recommended)

Description of wood

Colour reference. Yellow brown

Sapwood. Not clearly demarcated

Texture. Fine

Grain. Straight or interlocked

Interlocked grain. Slight

Notes. Heartwood pinkish brown becoming yellow brown with air.

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	0.75
Monnin hardness ¹	4.9
Coefficient of volumetric shrinkage	0.51 % per %
Total tangential shrinkage (St)	8.2 %
Total radial shrinkage (Sr)	5.2 %
Ratio St/Sr	1.6
Fibre saturation point	31 %
Thermal conductivity (λ)	0.25 W/(m.K)
Lower heating value	



Quarter sawn



Half-quarter sawn

Crushing strength ¹	67 MPa
Static bending strength ¹	122 MPa
Modulus of elasticity ¹	18,490 MPa

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

Natural durability and preservation

Resistance to fungi. Class 4 - poorly durable

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

Resistance to termites. Class M - moderately durable

Treatability. Class 2 - moderately permeable

Use class ensured by natural durability.

Class 1 - inside (no dampness)

Notes. This species is listed in the European standard NF EN 350 (2016). Several species, with different natural durability, are grouped under the name LONGHI. Some species and origins could be used without preservative treatment for end-uses under use class 2. However, commercial lots are usually constituted by blended species. Consequently, it is advisable to use the less durable woods as a point of reference.

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. Normal to slow

Risk of distortion. Slight risk

Risk of casehardening. No known specific risk

Risk of checking. High 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	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. 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

According to French standard NF B 52-001-1 (2018), strength class D40 can be provided by visual grading.

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)
- Current furniture or furniture components
- Flooring
- Glued laminated
- Indoor staircases
- Interior joinery
- Interior panelling
- Light carpentry
- Sculpture
- Seats
- Sliced veneer
- Turned goods
- Veneer for back or face of plywood
- Wood frame house
- Wood-ware

Main local names

Country	Local name
Cameroon	Abam
Congo	Longhi
Côte d'Ivoire	Akatio
Côte d'Ivoire	Anandio
Côte d'Ivoire	Aninguéri rouge
Democratic Republic of the Congo	Bopambu
Gabon	M'bébame
Ghana	Akasa
Nigeria	Ekpiro
Nigeria	Osan