Sterculia

Quarter sawn

Flat sawn

Family. Malvaceae

Botanical Name(s).

Sterculia pruriens
Sterculia rugosa
Sterculia speciosa
Sterculia p.p.

Continent. Latin America

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

Description of logs

Diameter. From 60 to 90 cm

Thickness of sapwood. From 4 to 6 cm

Floats. No

Log durability. Low (treatment necessary)

Description of wood

Colour reference. Light brown

Sapwood. Not clearly demarcated

Texture. Coarse

Grain. Straight

Interlocked grain. Absent

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]	0.64
Monnin hardness[1]	2.3
Coefficient of volumetric shrinkage	0.58 % per %
Total tangential shrinkage (St)	10.1 %
Total radial shrinkage (Sr)	5.0 %
Ratio St/Sr	2.0
Fibre saturation point	34 %
Thermal conductivity (λ)	0.22 W/(m.K)
Lower heating value	17,690 kJ/kg
Crushing strength[1]	54 MPa
Static bending strength[1]	93 MPa
Modulus of elasticity[1]	15,690 MPa

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

Natural durability and preservation

Last update date: 06/04/2024

Resistance to fungi. Class 5 - not durable

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

Resistance to termites. Class S - susceptible

Treatability. Class 1 - easily permeable

Use class ensured by natural durability.

Class 1 - inside (no dampness)

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

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. A moderate drying speed reduces defects.

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	83	15.2
		50 - 40	53	80.0	14.1
		40 - 35	54	80.0	13.9
		35 - 30	55	75.0	12.5
		30 - 27	57	70.0	11.0
		27 - 24	58	61.0	9.4
		24 - 21	59	51.0	7.9
		21 - 18	60	47.0	7.3
		18 - 15	61	39.0	6.1
		15 - 12	62	35.0	5.6
		12 - 9	62	30.0	5.0
		9 - 6	62	26.0	4.4
Conditioning	8		55	(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

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Peeling. Good

Slicing. Good

Notes. Fuzzy surface. To obtain a good finish, sharp cutters are recommended.

Assembling

Nailing and screwing. Good

Commercial grading

Appearance grading for sawn timbers.

According to ATIBT grading rules, possible grade: FAS (First And Second), n°1 Common and select, n°2 Common

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

- Blockboard
- Boxes and crates
- Current furniture or furniture components
- Fiber or particle boards
- Flooring
- Formwork
- Interior joinery
- Interior panelling
- Light carpentry
- Pulp
- Seats
- Sliced veneer
- Veneer for back or face of plywood
- Veneer for interior of plywood

Notes. Wood also used for the fabrication of coffins.

Main local names

Country	Local name
Bolivia	Mani
Brazil	Achicha
Brazil	Chicha
Brazil	Tacacazeiro
Colombia	Camajura
Cuba	Anacaguita
Ecuador	Cacao de mote
Ecuador	Sapote

Last update date: 06/04/2024

Main local names

Country	Local name
Ecuador	Saput
Ecuador	Zapote
French Guiana	Kobe
Guyana	Maho
Peru	Huarmi-caspi
Peru	Zapote silvestre
Puerto Rico	Anacaguita
Suriname	Jahoballi
Suriname	Kobehe
Suriname	Okro-oedoe
Trinidad and Tobago	Mahoe
Venezuela	Camoruco
Venezuela	Mayagua

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