

## Timbauba

Family. Fabaceae-Mimosoideae

Botanical Name(s).

*Enterolobium schomburgkii*

Continent. Latin America

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

### Description of logs

Diameter. From 50 to 80 cm

Thickness of sapwood. From 3 to 5 cm

Floats. No

Log durability. Good

### Description of wood

Colour reference. Brown

Sapwood. Clearly demarcated

Texture. Medium

Grain. Straight or interlocked

Interlocked grain. Slight

Notes. Logs are often clearly curved. Grain sometimes wavy.



Quarter sawn

Flat sawn



### 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>	0.83
Monnin hardness <sup>1</sup>	5.5
Coefficient of volumetric shrinkage	0.61 % per %
Total tangential shrinkage (St)	9.0 %
Total radial shrinkage (Sr)	4.1 %
Ratio St/Sr	2.2
Fibre saturation point	26 %
Thermal conductivity (λ)	0.27 W/(m.K)
Lower heating value	19,570 kJ/kg
Crushing strength <sup>1</sup>	66 MPa
Static bending strength <sup>1</sup>	115 MPa
Modulus of elasticity <sup>1</sup>	17,090 MPa

<sup>1</sup> 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 3 - poorly permeable

Use class ensured by natural durability.

Class 4 - in ground or fresh water contact

Notes. 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. Normal to slow

Risk of distorsion. High risk

Risk of casehardening. Yes

Risk of checking. High risk

Risk of collapse. No known specific risk

Notes. In order to reduce the risks of casehardening, air drying must be done under cover; during kiln drying, keep a high humidity.

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. Normal

Sawteeth recommended. Ordinary or alloy steel

Cutting tools. Ordinary

Peeling. Not recommended or without interest

Slicing. Good

Notes. Requires power. Raised grain occurs when planing in presence of interlocked grain. Sawdust sometimes irritant.

## Assembling

Nailing and screwing. Good

Notes. High specific gravity: gluing must be especially performed in compliance with the code of practice.

## 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

- Bridges (parts in contact with water or ground)
- Bridges (parts not in contact with water or ground)
- Cabinetwork (high class furniture)
- Current furniture or furniture components
- Decking
- Exterior joinery
- Flooring
- Heavy carpentry
- Hydraulic works (fresh water)
- Indoor staircases
- Interior joinery
- Interior panelling
- Sleepers
- Sliced veneer
- Tool handles (resilient woods)
- Turned goods
- Wood frame house



Parquet element - Manufactured by Olliwood (Brazil).

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### Main local names

Country	Local name
Brazil	Batibatra
Brazil	Fava de rosca
Brazil	Fava orelha de macaco
Brazil	Fava orelha de negro
Brazil	Timbauba
Brazil	Timborana
French Guiana	Acacia franc
French Guiana	Bougou bati batra
Suriname	Tamaren prokoni