

Tamarindo* / Groçai-rosa

Family. Leguminosae (Caesalpinaceae)

Botanical Name(s).

Martiodendron elatum

Martiodendron excelsum

Martiodendron parviflorum

Martiodendron p.p.

Continent. Latin America

CITES.

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

Notes. * Tamarindo is the common commercial name of this species, Groçai-rosa is its pilot name in the General Nomenclature of Tropical Timber (ATIBT 2016).

Description of logs

Diameter. From 70 to 90 cm

Thickness of sapwood. From 5 to 10 cm

Floats. No

Log durability. Good

Description of wood

Colour reference. Orange brown

Sapwood. Clearly demarcated

Texture. Medium

Grain. Undulating and sometimes interlocked

Interlocked grain. More or less pronounced depending on the origin

Notes. Pinkish-brown to reddish-brown heartwood, clearly distinct from the whitish sapwood. Visible growth rings.

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	0.90
Monnin hardness ¹	8.0
Coefficient of volumetric shrinkage	0.61 % per %
Total tangential shrinkage (St)	6.4 %
Total radial shrinkage (Sr)	5.8 %
Ratio St/Sr	1.1 %
Fibre saturation point	22
Thermal conductivity (λ)	0.29 W/(m.K)
Lower heating value	
Crushing strength ¹	80 MPa



Flat sawn



Quarter sawn

Static bending strength ¹	135 MPa
Modulus of elasticity ¹	24,000 MPa

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

Natural durability and preservation

Resistance to fungi. Class 1-2 - very durable to durable

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

Resistance to termites. Class D - durable

Treatability. Class 3-4 - poorly or not permeable

Use class ensured by natural durability.

Class 4 - in ground or fresh water contact

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. Slow

Risk of distortion. Slight risk

Risk of casehardening. No known specific risk

Risk of checking. Slight 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)		Arrêt	(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

Assembling

Nailing and screwing. Good but pre-boring necessary

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 structure

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)
- Cladding
- Decking
- Exterior joinery
- Exterior panelling
- Flooring
- Heavy carpentry
- Hydraulic works (fresh water)
- Industrial or heavy flooring
- Turned goods
- Vehicle or container flooring



Decking in Tamarindo - Nieuwegein, The Netherlands (© Wim Achterweust).

Main local names

Country	Local name
Brazil	Cuirapichuna
Brazil	Groçai-rosa
Brazil	Jutahy seca
Brazil	Jutai pororoca
Brazil	Jutaisica
Brazil	Sucupiruna
Brazil	Tamarindo
Colombia	Sapan
Colombia	Sapang
Colombia	Zapan
Guyana	Tatabuballi
Suriname	Basmahonie
Suriname	Dastan
Suriname	Pakeri
Suriname	White pintolocus
Suriname	Witte purperhart