

# Jatoba



## Scientific Name(s)

*Hymenaea courbaril*  
*Hymenaea intermedia*  
*Hymenaea martiana*  
*Hymenaea oblongifolia*  
*Hymenaea parvifolia*

## Family

FABACEAE-CAESALPINIOIDEAE  
(angiosperm)

## Commercial Restriction

No commercial restriction

Jatoba decking, also known as Brazilian Cherry decking, is a premium outdoor decking material valued for its exceptional durability, natural beauty, and rich reddish-brown colour.

Jatoba decking features a deep reddish-brown colour with occasional darker streaks, creating a warm and inviting atmosphere in outdoor spaces. The wood's natural colour variations and attractive grain patterns add visual interest and elegance to the deck.

One of the standout characteristics of Jatoba decking is its remarkable durability. The wood is highly resistant to rot, decay, insects, and weathering, making it well-suited for outdoor use and ensuring its longevity. It can withstand heavy foot traffic, furniture, and various weather conditions without compromising its structural integrity.

Jatoba decking also offers excellent dimensional stability, meaning it resists warping, cupping, and twisting caused by changes in temperature and humidity. This stability ensures a level and even deck surface, providing long-term structural integrity and visual consistency.

With its durability, natural beauty, and rich reddish-brown colour, Jatoba decking is a popular choice for creating a luxurious and long-lasting outdoor deck. Its resistance to various elements, dimensional stability, and low maintenance requirements makes it an excellent investment for those seeking a high-quality and visually appealing outdoor living space.

## Wood Description

**Color:** red brown  
**Sapwood:** clearly demarcated  
**Texture:** medium  
**Grain:** straight or interlocked  
**Interlocked grain:** slight

**Note:** Slight internal stresses. The colour can vary from purple brown or orangey brown to red brown slightly veine.

## Log Description

**Diameter:** from 50 to 80cm  
**Thickness of sapwood:** from 3 to 12cm  
**Floats:** no  
**Log durability:** moderate (treatment recommended)



## Physical, Mechanical and Acoustic Properties

Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.

**Stability:** moderately stable to stable

**Musical quality factor:** 148,5 measured at 2888 Hz

(\*: at 12% moisture content, with 1 MPa = 1 N/mm<sup>2</sup>)

**Note:** H. intermedia and H. parvifolia are heavier and more resistant.

	Mean	Std dev.
Specific gravity *:	0,94	0,13
Monnin hardness *:	10,5	2,6
Coeff. of volumetric shrinkage:	0,59%	0,11%
Total tangential shrinkage (TS):	7,50%	1,20%
Total radial shrinkage (RS):	3,90%	1,40%
TS/RS ratio:	1,9	-
Fiber saturation point:	23%	-
Crushing strength *:	97MPa	15MPa
Static bending strength *:	160MPa	31MPa
Modulus of elasticity *:	23460MPa	6002MPa

## Requirement of a Preservative Treatment

**Against dry wood borer attacks:** does not require any preservative treatment

**In case of risk of temporary humidification:** does not require any preservative treatment

**In case of risk of permanent humidification:** use not recommended.

## Natural Durability and Treatability

Fungi and termite resistance refers to end-uses under temperate climate. Except for special comments on sapwood, natural durability is based on mature heartwood. Sapwood must always be considered as non-durable against wood degrading agents.

**E.N.** = Euro Norm

**Funghi (according to E.N. standards):** class 2-3

- durable to moderately durable

**Dry wood borers:** durable - sapwood demarcated (risk limited to sapwood)

**Termites (according to E.N. standards):** class M

- moderately durable

**Treatability (according to E.N. standards):** class 4

- not permeable

**Use class ensured by natural durability:** class 3

- not in ground contact, outside

**Species covering the use class 5:** no

**Note:** Resistance to fungi and to termites is variable according to the species. According to the European standard NF EN 335, performance length might be modified by the intensity of end-use exposition.

## Drying

**Drying rate:** normal

**Risk of distortion:** slight risk

**Risk of casehardening:** no

**Risk of checking:** slight risk

**Risk of collapse:** no

**Possible drying schedule:** 5

**Note:** Initial air drying under cover prior to kiln drying is recommended. Risks of cracks more or less important according to specific gravity.

M.C. (%)	Temperature (°C)		
	Dry-bulb	Wet-bulb	Air humidity (%)
Green	42	39	82
50	48	43	74
40	48	43	74
30	48	43	74
15	54	46	63

## Sawing And Machining

**Blunting effect:** fairly high

**Sawteeth recommended:** stellite-tipped

**Cutting tools:** tungsten carbide

**Peeling:** not recommended or without interest

**Slicing:** nood

**Note:** Due to hardness, the use of stellite is recommended for industrial production.

## Commercial Grading

### Appearance grading for sawn timbers:

- According to NHLA grading rules (January 2007)

- **Possible grading:** FAS, Select, Common 1, Common 2, Common 4

- In French Guiana, the local name of this species is "COURBARIL". Grading is done according to local rules "Bois guyanais classés".

- **Possible grading:** Choix 1, choix 2, choix 3, choix 4

## End-uses

- Cabinetwork (high class furniture)
- Sliced veneer
- Flooring
- Wood frame house
- Exterior panelling
- Tool handles (resilient woods)
- Ship building (ribs)
- Musical instruments
- Wood-ware
- Moulding
- Current furniture or furniture components
- Industrial or heavy flooring
- Stairs (inside)
- Exterior joinery
- Interior panelling
- Turned goods
- Vehicle or container flooring
- Arched goods
- Sculpture
- Cooperage

**Note:** End-uses under permanent humidification (contact with water or with ground) are possible with the species presenting a very good durability.

## Assembling

**Nailing / screwing:** good but pre-boring necessary

**Gluing:** correct (for interior only)

**Note:** Gluing must be done with care (very dense wood).

## Fire Safety

### Conventional French grading:

- **Thickness > 14 mm :** M.3 (moderately inflammable)

- **Thickness < 14 mm :** M.4 (easily inflammable)

**Euroclasses grading:** D s2 d0

Default grading for solid wood, according to requirements of European standard EN 14081-1 annex C (April 2009). It concerns structural graded timber in vertical uses with mean density upper 0.35 and thickness upper 22 mm.

## Main Local Names

Country	Local Name
Brazil	Jatai
Brazil	Jutai
Brazil	Jutai Roxo
Guyana	Locust
Peru	Azucar-Huayo
Venezuela	Algarrobo
United Kingdom	Locust
Brazil	Jatoba
Brazil	Jutai Açú
Colombia	Algarrobo
French Guiana	Courbaril
Suriname	Rode Lokus
France	Courbaril