

Technical File



Guariuba

Scientific Name(s)

Family

Commercial Restriction

Clarisia racemosa

MORACEAE (angiosperm)

No commercial restriction

Guariuba decking is a hardwood decking material derived from the Oiticica Amarela tree, scientifically known as Clarisia racemose. While it may not be as widely recognized as other decking options, it possesses unique qualities that make it suitable for outdoor applications.

Guariuba decking is characterized by its striking golden to yellowish-brown colour, adding warmth and vibrancy to outdoor spaces. The wood often exhibits a distinct grain pattern, which can vary from straight to interlocked, further enhancing its visual appeal. In terms of durability, Guariuba decking is known for its resilience against rot, decay, and insect damage. It is a dense and sturdy hardwood, offering good strength and resistance to wear, making it suitable for areas with high foot traffic.

Proper maintenance is essential to maximize the lifespan and appearance of Guariuba decking. Regular cleaning and the application of protective finishes or sealants can help protect the wood from UV rays and maintain its colour over time.

Wood Description

Color: brown Sapwood: clearly demarcated Texture: medium Grain: straight or interlocked Interlocked grain: marked but not frequent

Note: Yellow wood becoming lustrous brown with light. Ribbon like aspect on quartersawn.

Log Description

Diameter: from 50 to 80cm Thickness of sapwood: from 2 to 5cm 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

(*: at 12% moisture content, with 1 MPa = 1 N/mm²)

	Mean	Std dev.
Specific gravity *:	0,69	0,05
Monnin hardness *:	4,6	0,7
Coeff. of volumetric shrinkage:	0,52%	0,06%
Total tangential shrinkage (TS):	6,50%	1,50%
Total radial shrinkage (RS):	3,10%	0,80%
TS/RS ratio:	2,1	-
Fiber saturation point:	22%	-
Crushing strength *:	68MPa	7MPa
Static bending strength *:	105MPa	14MPa
Modulus of elasticity *:	17060MPa	2889MPa

Requirement of a Preservative Treatment

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

In case of risk of temporary humidification: requires appropriate preservative treatment In case of risk of permanent humidification: use not

recommended

Sawing And Machining

Blunting effect: high Sawteeth recommended: stellite-tipped Cutting tools: tungsten carbide Peeling: good Slicing: good

Note: It is sometimes difficult to obtain a smooth surface due to interlocked grain. Keep sharp tools.

Commercial Grading

Appearance grading for sawn timbers:

- According to NHLA grading rules (January 2007)

- **Possible grading:** FAS, Select, Common 1, Common 2, Common 3

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 3 moderately durable

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

Termites (according to E.N. standards): class D - durable

Treatability (according to E.N. standards): class 3 - poorly permeable

Use class ensured by natural durability: class 2 - inside or under cover (dampness possible) Species covering the use class 5: no

Drying

Drying rate: normal Risk of distortion: slight risk Risk of casehardening: yes Risk of checking: risk Risk of collapse: no Possible drying schedule: 2

Note: Risks of end checking on quartersawn during kiln drying.

Assembling

Nailing / screwing: good Gluing: correct

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.

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End-uses

Main Local Names

- Exterior joinery
- Heavy carpentry
- Current furniture or furniture components
- Interior panelling
- Moulding
- Veneer for back or face of plywood
- Stairs (inside)
- Vehicle or container flooring
- Open boats
- Exterior panelling
- Cabinetwork (high class furniture)
- Wood frame house
- Interior joinery
- Flooring
- Sliced veneer
- Glued laminated
- Tool handles (resilient woods)
- Bridges (parts not in contact with water or ground)

Note: Can be used as substitute for MAPLE (Acer spp.), BIRCH (Betula spp.) or BOXWOOD (Buxus spp.).

Local Name	
Murure	
Oiticica Amarela	
Aji	
Mata Palo	
Pituca	
Guariuba	
Turupay	
Guariuba	
Oiticica da Mata	
Guariuba	
Moral Bobo	
Capinuri	
Murere	

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