



Itauba

Scientific Name(s)

Mezilaurus itauba

Family

Lauraceae (angiosperm)

Commercial Restriction

No commercial restriction

Itauba decking is a high-quality outdoor decking material renowned for its durability, natural beauty, and warm golden-brown colour.

Itauba decking showcases a distinct golden-brown hue with variations in tone, ranging from light to medium brown. The wood's natural colour variations and attractive grain patterns contribute to its visual appeal, creating an inviting and timeless atmosphere. One of the notable qualities of Itauba decking is its exceptional 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.

Itauba 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.

Additionally, Itauba wood is known for its hardness and resistance to scratches, dents, and wear. It is a dense and resilient material that can handle the demands of outdoor use, maintaining its beauty and strength over time.

With its durability, natural beauty, and warm golden-brown colour, Itauba decking is an excellent choice for creating a visually appealing and long-lasting outdoor deck.

Wood Description

Color: yellow brown

Sapwood: not clearly demarcated

Texture: fine

Grain: straight

Interlocked grain: absent

Note: Oily aspect. The colour varies from yellow brown to dark lustrous brown.

Log Description

Diameter: from 40 to 80cm

Thickness of sapwood: from 2 to 5cm

Floats: no

Log durability: good



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

Musical quality factor: 132.8 measured at 2518 Hz

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

	Mean	Std dev.
Specific gravity *:	0,86	0,05
Monnin hardness *:	5	1,5
Coeff. of volumetric shrinkage:	0,60%	0,10%
Total tangential shrinkage (TS):	9,70%	1,80%
Total radial shrinkage (RS):	3,70%	1,20%
TS/RS ratio:	2,6	-
Fiber saturation point:	27%	-
Crushing strength *:	62MPa	10MPa
Static bending strength *:	125MPa	18MPa
Modulus of elasticity *:	21020MPa	6268MPa

Requirement of a Preservative Treatment

Against dry wood borer attacks: requires appropriate preservative treatment (for indoor use)

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

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

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 1

- very durable

Dry wood borers: class D - durable (heartw. durable but sapw. not clearly demarcated)

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

- durable

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

- not permeable

Use class ensured by natural durability: class 4

- in ground or fresh water contact

Species covering the use class 5: yes

Note: This species is listed in the European standard NF EN 350.

The possible presence of few demarcated sapwood in sawnwoods may have an influence on the expected durability.

This species naturally covers the use class 5 (wood permanently or regularly submerged in salt water, sea water or brackish water) due to its high specific gravity and its repulsive extracts content.

According to the European standard NF EN 335, performance length might be modified by the intensity of end-use exposition.

Drying

Drying rate: slow

Risk of distortion: slight risk

Risk of casehardening: no known specific risk

Risk of checking: high risk

Risk of collapse: no known specific risk

Note: Drying must be slow and careful in order to reduce defects.

This drying schedule is given for information only and is applicable to thickness lower or equal to 38 mm. It must be used in compliance with the code of practice. For thickness from 38 to 75 mm, the air relative humidity should be increased by 5 % at each step. For thickness over 75 mm, a 10 % increase should be considered.

M.C. (%)	Temperature (°C)		
	Dry-bulb	Wet-bulb	Air humidity (%)
Green	42	41	94
50	48	43	74
30	54	46	63
30	60	51	62
15	60	51	62

Sawing And Machining

Blunting effect: fairly high

Sawteeth recommended: stellite-tipped

Cutting tools: tungsten carbide

Peeling: not recommended or without interest

Slicing: nood

Note: Some difficulties due to interlocked grain.

Commercial Grading

Appearance grading for sawn timbers:

- According to NHLA grading rules (2015)
- **Possible grading:** FAS, Select, Common 1, Common 2, Common 3

Visual grading for structural applications:

- According to French standard NF B 52-001-1 (2011), strength class D40 can be provided by visual grading.

End-uses

- Hydraulic works (seawater)
- Bridges (parts in contact with water or ground)
- Exterior joinery
- Interior panelling
- Flooring
- Poles
- Cabinetwork (high class furniture)
- Shingles
- Vehicle or container flooring
- Ship building (planking and deck)
- Stairs (inside)
- Wood frame house
- Sleepers
- Bridges (parts not in contact with water or ground)
- Interior joinery
- Exterior panelling
- Sliced veneer
- Current furniture or furniture components
- Seats
- Turned goods
- Ship building (ribs)
- Open boats
- Heavy carpentry

Note: This list presents main known end-uses; they must be implemented according to the code of practice. Important remark: some end-uses are mentioned for information (traditional, regional or ancient end-uses).

Assembling

Nailing / screwing: good but pre-boring necessary

Gluing: correct (for interior only)

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

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	Itauba
French Guiana	Taoub
Suriname	Kaneelhout
Brazil	Louro Itauba
French Guiana	Taoub Jaune