

# Itauba

Greasy type of wood whose color varies from yellow-beige to brown.

It has spots on the surface typical of the species, which tend to become less visible following oxidation. The oxidation process takes place in a very short time and the color of the board, which has a yellow-green color as soon as it is planed, will tend to become brown quickly. For this reason, the packaging and storage of Itauba boards must ensure that the wood is protected from sun exposure.

A stable and high-performing wood species that can be used for floors subjected to low-high levels of foot traffic for private, public and commercial uses alike.



## physical properties

<b>botanical name</b>	Mezilaurus itauba			
<b>average mass density</b>	885 Kg/m <sup>3</sup>			
<b>dimensional stability (UNI 11538-1) average cumulative value</b>				class A
	<i>recommended minimum slenderness coefficient 1/7</i>			
<b>average Monnin hardness (*) tests carried out with 12% humidity</b>	5.00			
<b>damp climate deformations</b>	<b>type deformation</b>	<b>values detected</b>	<b>reference values (UNI 11538-1)</b>	<b>out-come</b>
	bow	0.08%	< 1% on width	
	spring	0.28 mm/m	< 2 mm/m	
	twist	1.00 mm/m	< 2 mm/m	
<b>dry climate deformations</b>	<b>type deformation</b>	<b>values detected</b>	<b>reference values (UNI 11538-1)</b>	<b>out-come</b>
	bow	0.16%	< 1% on width	
	spring	0.12 mm/m	< 2 mm/m	
	twist	1.40 mm/m	< 2 mm/m	
<b>moisture</b>	<b>type of climate</b>	<b>values detected</b>	<b>reference values (UNI 11538-1)</b>	<b>out-come</b>
	ambient climate	11%	< 18%	
	damp climate	13.30%	< 18%	
	dry climate	8.00%	< 18%	





## mechanical properties

average bending strength	128 MPa
average bending strength after freeze/thaw cycles	152 MPa
average bending strength after freeze-icing cycles	121 MPa
average bending strength after heat-rain and heat-cold cycles	118 MPa
average modulus of elasticity	15,090 MPa
average crushing strength (*)	62 MPa

## natural durability (UNI EN 335, UNI EN 350)

fungi (*)	very durable - class 1
dry wood borers (*)	durable - class D
termites (*)	durable - class D
treatability (*)	not permeable - class 4
use class (*)	outside in contact with the ground and/or fresh water - class 4
use in marine environments - class 5 (*)	yes

## properties by conditions of use

	conditions	direction	values detected	reference values	out-come
BCRA slipperiness (Min.Decree 236/89, Pres. Decree 503/96)	rubber pad wet surface	parallel	0.65	> 0.40	
		perpendicular	0.72		
	rubber pad dry surface	parallel	0.73		
		perpendicular	0.70		
	leather pad dry surface	parallel	0.36		
		perpendicular	0.41		
UVA exposure (^)	untreated wood photo		photo at 1,000 hours		
					

Data source: Ravaioli Legnami, except for items marked with an asterisk (\*). Values obtained from technical laboratory tests carried out directly on samples.

(\*) Data source: Cirad, a French research centre that responds to international requests in the fields of agricultural and sustainable development (<https://tropix.cirad.fr>). Measurements made in accordance with ISO standards on small samples without a conditioning cycle; the shrinkage relates to the anatomical directions of the wood and not to the geometric directions as required by the EN standard.

Tolerance: the dimensions of the boards indicated by Ravaioli Legnami are nominal, with variations greater than those envisaged by standard UNI 11538-1 only in the case of milling, up to a maximum of 5%.

The quality criteria respect what is being established by the Italian norm UNI 11538-1 on the use of wood for decking.

Color changes and the greying process are natural effects on wood when it is exposed to atmospheric agents: in order to avoid this, a regular maintenance with specific products is recommended.

(^\*) Images provided for illustration purposes only. Prolonged exposure to artificial UVA rays can be demonstrative of how the product will tend to turn grey, but wood oxidation is a natural process influenced by various factors such as exposure to sunlight and atmospheric agents and frequency of maintenance.

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