Ipè

The Ipè deck board has a color that ranges from brown to olive green.

It's the most widely used wood in the Decking industry and can be used for small, medium or large floors, subjected to low or high levels of foot traffic, for private, residential, commercial and public uses alike.

physical properties

botanical name				Tabebuia spp.
average mass density				1,092 Kg/m³
dimensional stability (UNI 11538-1) **(**)** *average cumulative value*				class C *recommended minimum slenderness coefficient 1/6*
average Monnin hardness (*) *tests carried out with 12% humidity*				14.60
damp climate deformations	**type deformation**	**values detected**	**reference values** (UNI 11538-1)	**out-come**
	bow	0.14%	< 1% on width	
	spring	0.08 mm/m	< 2 mm/m	
	twist	1.6 mm/m	< 2 mm/m	
dry climate deformations	**type deformation**	**values detected**	**reference values** (UNI 11538-1)	**out-come**
	bow	0.30%	< 1% on width	
	spring	0.36 mm/m	< 2 mm/m	
	twist	2.96 mm/m	< 2 mm/m	
moisture	**type of climate**	**values detected**	**reference values** (UNI 11538-1)	**out-come**
	ambient climate	13.90%	< 18%	
	damp climate	15.80%	< 18%	
	dry climate	8.40%	< 18%	

mechanical properties

average bending strength		191 MPa
average bending strength after freeze/thaw cycles	untreated wood	149 MPa
	oiled wood	184 MPa
average bending strength after freeze-icing cycles	untreated wood	205 MPa
	oiled wood	217 MPa
average bending strength after heat-rain and heat-cold cycles	untreated wood	182 MPa
	oiled wood	194 MPa
average modulus of elasticity		21,114 MPa
average crushing strength (*)		95 MPa

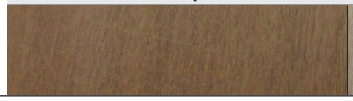
stiletto heel impression (UNI 4712)	**value**	**out-come**
	- 0.04 mm	

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**
			untreated	**oiled**		
BCRA slipperiness (Min.Decree 236/89, Pres. Decree 503/96)	rubber pad wet surface	parallel	0.67	0.69	> 0.40	
		perpendicular	0.78	0.82		
	rubber pad dry surface	parallel	0.73	0.72		
		perpendicular	0.78	0.76		
	leather pad dry surface	parallel	0.42	0.52		
		perpendicular	0.43	0.51		
grade R slipperiness (DIN 51130)						R10
grade A+B+C slipperiness (DIN 51097)						A+B+C
fire reaction (UNI EN ISO 9239, UNI EN ISO 11925-2, UNI EN 13501-1)						Cfl-s1

UVA exposure (▲)	**untreated wood photo**	**photo at 1,000 hours**
		

Data source: Ravaioli Legnami, except for items marked with an asterisk (*) and with a double 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.

(**) Data source: standard UNI 11538-1.

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.