

Teak Asia

Teak Asia comes from plantations in Indonesia and has a color that varies from light yellow to bronze.

This wood species can be used for floors subjected to low to medium levels of foot traffic and for predominantly residential uses.

Its constant dimensional stability, water resistance and beauty render Teak particularly popular on the market. It can be used as a flooring material, as well as for building façades.



physical properties

botanical name	Tectona grandis			
average mass density	590 Kg/m ³			
dimensional stability (UNI 11538-1) (**) <i>average cumulative value</i>				class B <i>recommended minimum slenderness coefficient 1/7</i>
average Monnin hardness (*) <i>tests carried out with 12% humidity</i>				4.20
damp climate deformations	type deformation	values detected	reference values (UNI 11538-1)	out-come
	bow	0.09%	< 1% on width	Green
	spring	0.24 mm/m	< 2 mm/m	Green
	twist	1.36 mm/m	< 2 mm/m	Green
dry climate deformations	type deformation	values detected	reference values (UNI 11538-1)	out-come
	bow	0.20%	< 1% on width	Green
	spring	0.32 mm/m	< 2 mm/m	Green
	twist	2.12 mm/m	< 2 mm/m	Red
moisture	type of climate	values detected	reference values (UNI 11538-1)	out-come
	ambient climate	14.50%	< 18%	Green
	damp climate	17.00%	< 18%	Green
	dry climate	7.40%	< 18%	Green



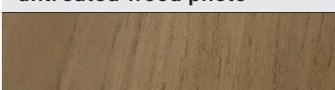
mechanical properties

average bending strength	106 MPa	
average bending strength after freeze/thaw cycles	104 MPa	
average bending strength after freeze-icing cycles	112 MPa	
average bending strength after heat-rain and heat-cold cycles	128 MPa	
average modulus of elasticity	11,930 MPa	
average crushing strength (*)	56 MPa	
stiletto heel impression (UNI 4712)	value	out-come
	- 0.17 mm	

natural durability (UNI EN 335, UNI EN 350)

fungi (*)	very durable - class 1
dry wood borers (*)	durable - class D
termites (*)	moderately durable - class M
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	0.83	> 0.40	
		perpendicular	0.87		
	rubber pad dry surface	parallel	0.64		
		perpendicular	0.70		
	leather pad dry surface	parallel	0.40		
		perpendicular	0.42		
UVA exposure (^)	untreated wood photo		photo at 1,000 hours		
					

Data source: Ravaoli 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 Ravaoli 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.

