

# Yellow Cumarù

Yellow Cumarù is characterized by colors varying from yellow-brown to reddish-brown with clearly visible veins and crow-cuts. Although the name identifies it as Yellow, this does not mean that it must necessarily be yellow. This simply identifies its quality and typology with respect to the Red and Champagne woods.

It is a moderately stable 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>	Dipteryx spp.			
<b>average mass density</b>	1,021 Kg/m <sup>3</sup>			
<b>dimensional stability (UNI 11538-1) average cumulative value</b>	class C			<i>recommended minimum slenderness coefficient 1/6</i>
<b>average Monnin hardness (*) tests carried out with 12% humidity</b>	13.10			
<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	0.09%	< 1% on width	Green
	spring	0.48 mm/m	< 2 mm/m	Green
	twist	1.08 mm/m	< 2 mm/m	Green
<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	0.11%	< 1% on width	Green
	spring	0.60 mm/m	< 2 mm/m	Green
	twist	3.24 mm/m	< 2 mm/m	Red
<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	12.1%	< 18%	Green
	damp climate	13.90%	< 18%	Green
	dry climate	7.90%	< 18%	Green





## mechanical properties

average bending strength	190 MPa
average bending strength after freeze/thaw cycles	166 MPa
average bending strength after freeze-icing cycles	141 MPa
average bending strength after heat-rain and heat-cold cycles	173 MPa
average modulus of elasticity	20,997 MPa
average crushing strength (*)	103 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 (*)	no

## 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	0.72	> 0.40	
		perpendicular	0.81		
	rubber pad dry surface	parallel	0.65		
		perpendicular	0.70		
	leather pad dry surface	parallel	0.38		
		perpendicular	0.47		
UVA exposure (^)	untreated wood photo		photo at 1,000 hours		
					

Data source: Ravaoli 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 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.

