

IPE'

The Ipè is considered the hardest and thickest wood compared to teak and represents the most commonly used essence in the field of decking.

This wood, once laid, can last for more than 25 years. It is practically immune to humidity, weather agents, pests, fungi, and stress. Its fire resistance is comparable to that of concrete, and it has been listed among Class A fireproof materials.

Colour: It varies from olive brown to reddish brown, with light and dark stripes.

Origin: Southern states of Brazil, Paraguay, southern Bolivia, and northern Argentina.

Features of the trunks: The tree reaches 25-30 meters high with a diameter at breast height of 50-70 cm, and the trunk is mostly irregular in shape.

Uses: Load-bearing structures, fixtures, flooring, heavy carpentry, furniture, vehicle bodies and walls, turnery, docks, etc.



SLATS WITH THICKNESS 19 mm X WIDTH 90mm

SLATS WITH THICKNESS 19-21mm x WIDTH 140 mm



FEATURES:

Botanical name: *Tabebuia*

Family: *Bignoniaceae (angiosperms)*

Texture: Fine

Fibering: Variable, often intertwined

Bulk density: From 850 Kg/m³ to 1150 Kg/m³

Shrinkage: From Low to Medium

Dimensional Stability: Average/Good

Durability: Excellent

Hardness: High

Average Monnin hardness: 14.60

Impact resistance: Excellent

Axial compressive breaking load: 85N / mm²

Static bending breaking load: 160N / mm²

Bending modulus of elasticity: 16000N / mm²

PHYSICAL PROPERTIES

	type of deformation	measured values	reference values (UNI 11538-1)
Deformations in humid climate	warping	0,14%	< 1% on the width
	falconry	0,08 mm/m < 2 mm/m	
	twisting	1,6 mm/m < 2 mm/m	
Deformations in dry climate	deformation typology	measured values	reference values (UNI 11538-1)
	warping	0,30%	< 1% on the width
	falconry	0,36 mm/m < 2 mm/m	
	twisting	2,96 mm/m < 2 mm/m	
Humidity	type of climate	measured values	reference values (UNI 11538-1)
	Environmental climate	13,90%	< 18%
	humid climate	15,80%	< 18%
	dry climate	8,40%	< 18%

MECHANICAL PROPERTIES

Average flexural strength		191 MPa
Average flexural strength after freeze-thaw cycles	raw wood	
	oiled wood	184 MPa
Average flexural strength after freeze-salt cycles	raw wood	205 MPa
	oiled wood	217 MPa
Average flexural strength after heat-rain and heat-cold cycles	raw wood	182 MPa
	oiled wood	194 MPa
Average elastic modulus		21.114 MPa
Average breaking strength		95 MPa

Natural durability (UNI EN 335, UNI EN 350)

Fungi	very durable – class 1
Wood insects	durable – class D
Termites	durable – class D
Impregnability	non-impregnable – class 4
Usage class	outside in contact with the ground and/or with fresh water – class 4
Use in marine environment – class 5	YES