

# GARAPA

Garapa is also known as **White Ipe**. It is an exotic wood in an **accessible price range**, combining **durability, elegance, and excellent value** for outdoor structures.

It is naturally durable against weather elements and daily wear, ensuring a **long life without excessive maintenance**. Any **slight green or black stripes** due to mold are only superficial and do not affect durability; a simple treatment with a clear wood preservative and fungicide keeps its appearance bright and well-maintained over time.

The **natural color is light yellow, warm, and bright**, which evolves to **light orange-brown tones with sun exposure**, giving the spaces an elegant and natural charm. Garapa stands out for its **versatile effects**; it is perfect for decking, pergolas, facades, and garden furniture.

## MAIN STRENGTHS:

**Excellent value for money:** elegant like more expensive woods, but more accessible.

**Durability:** resistant to moisture, weather elements, and daily wear.

**Simple maintenance:** easy to protect and maintain over time.

**Origin:** South America, mainly Brazil.

**SLATS WITH A THICKNESS OF 19 mm X WIDTH OF 90 mm**

**SLATS WITH THICKNESS OF 19-21mm X WIDTH OF 140 mm**



## FEATURES:

**Botanical family:** Caesalpiniaceae

**Scientific name:** *Apuleia leiocarpa*

**Texture:** Medium

**Grain:** Alternates between straight and interlocked.

**Average density (at 12% M.C.):** 877 kg/m<sup>3</sup>

**Monnin hardness:** 6.70 MPa

**Shrinkage:** Low to medium.

**Dimensional stability:** Moderate (Class B)

**Natural durability:** Good.

## PHYSICAL PROPERTIES:

### Deformation in Humid Climate

Type of Deformation	Measured Values	Reference Values (UNI 11538-1)
Cupping	0.09%	< 1% across the width
Bowing	0.16 mm/m	< 2 mm/m
Twisting	1.08 mm/m	< 2 mm/m

### Deformation in Dry Climate

Type of Deformation	Measured Values	Reference Values (UNI 11538-1)
Cupping	0.10%	< 1% across the width
Bowing	0.28 mm/m	< 2 mm/m
Twisting	2.44 mm/m	< 2 mm/m

### Moisture Content

Climate Type	Measured Values	Reference Values (UNI 11538-1)
Indoor climate	12%	< 18%
Humid climate	14.90%	< 18%
Dry climate	7.10%	< 18%

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## MECHANICAL PROPERTIES

**Average bending strength:** 161 MPa

**Average bending strength after freeze-thaw cycles:** 171 MPa

**Average bending strength after freeze-salt cycles:** 159 MPa

**Average bending strength after heat-rain and heat-cold cycles:** 119 MPa

**Average modulus of elasticity:** 17,203 MPa

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## NATURAL DURABILITY (UNI EN 335, UNI EN 350)

**Fungi:** Moder

**Insects:** Durable – Class D

**Termites:** Moderately durable – Class M

**Impregnability:** Difficult to impregnate – Class 3

**Use class:** Outdoors in protected environments – Class 2