



TECHNICAL DATA SHEET

TATAJUBA

**Botanical name:**

Bagassa guianensis

Trade names:

Bagaceira, Amaparana, Cow-wood, Bagasse

Location:

The primary forest lies in the mainland of the Amazon. Found throughout Central and South America.

General description of the wood species:

This yellow wood species quickly darkens to brown colour when exposed to light. It often has a striking golden sheen. Tatajuba hardwood resembles Iroko in many ways. When processed, it displays a moderate dulling effect. Pre-drilling is necessary. Tatajuba is sometimes streaked in radial section due to alternating grain twist, or it has diverse texture due to irregular growth. The wood has a low to medium gloss. Tatajuba wood is very rich in tannins. It is also very resistant to fungi.

NATURAL DURABILITY INDEX						
1	2	3	4	5	6	7
1 = VERY HIGH DURABILITY				7 = LOW DURABILITY		

Heartwood has a high resistance to biotic factors.

E.N. = European norm

Durability and resistance

Dry wood Class D – Durable

Fungi Class 1 - Very durable

Termites Class D – Durable

Treatability Class 3 - low permeability

Usability class assured by natural durability: Class 4 - in contact with soil or fresh water

Species covering Usability class 5: Yes

Note: This species naturally covers use class 5 (application in marine or saltwater environments) due to the high silica content.

According to the European standard NF EN 335, the length of performance can be modified by the intensity of exposure in the final application.

TECHNICAL DATA SHEET

Wood properties:

Density (W = 12 %)	800 kg/m ³
Very heavy wood	
Shrinkage in radial direction	3,7 %
Shrinkage in tangential direction	5,2 %
Total volume shrinkage	0,53 %
Fibre saturation point	20 %
Medium dimensional changes, the ratio between tangential and radial shrinkage is 1,4	

Hardness according to JANKA	7700
Class	MPa
Soft	<40
Medium hard	≥40
Hard	≥80
Bending strength (perpendicular to tangential and radial fibres)	109 MPa
Compression strength (in the direction of the fibres)	78 MPa
Elasticity	17090 MPa

(*at 12% humidity, where 1 MPa = 1N/mm²)

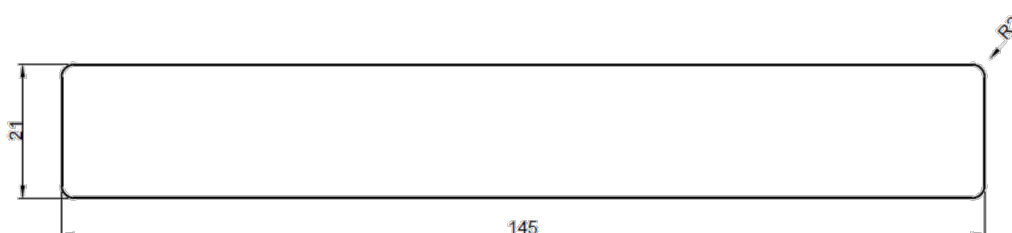
TATAJUBA joists for exotic wood species

DIMENSIONS (mm)	LENGTH (m)	GRADING	DRYING	Front side
21x145	2,1 – 5,7*	A/B	16–18 %	smooth

*stock lengths are multiples of 30 cm = 2.1 m, 2.4 m, 2.7 m, 3 m, 3.3 m, 3.6 m, 3.9 m, 4.2 m, 4.5 m, 4.8 m, 5.1 m, 5.4 m, 5.7 m.



TATAJUBA 21 x 145 mm profile detail





TECHNICAL DATA SHEET

Viewing side:

Each decking board profile has a predefined viewing side to which the grading applies. Using another side as the viewing side is not permitted. The viewing side must be specified when ordering.

21 x 145 mm visible side - smooth

TATAJUBA wood base beams for exotic hardwoods

DIMENSIONS (mm)	LENGTH (m)	GRADING	DRYING
45x70	1,8 – 5,7*	A/B	16–18 %

TATAJUBA 45 x 70 mm – profile detail





TECHNICAL DATA SHEET

Grading:

Tatajuba terrace boards and base beams are supplied in A/B grading in a 60:40 ratio. In practice, this means that sixty percent of the material delivered has no defects on either side at the time of delivery and, in general, the piece can be split into a maximum of two usable pieces during installation. The remaining forty percent of the delivery may show slight surface and edge cracks, but these must not run through the entire thickness of the joist, no more than 1/3 of the length of the joist. Healthy knots occur without limitation, possibility of localised insect holes without limitation (insects have not survived artificial drying and insecticide treatment before shipment). Permitted occurrence of pitch pockets. 5 % of the total quantity delivered may show lower grading.

Drying:

Wood is a hygroscopic material that changes moisture according to its surroundings through adsorption in an attempt to reach a state of moisture equilibrium. This process of changing moisture content in response to surrounding humidity and temperature is reversible, but does not follow the same pattern. For the same relative humidity and air temperature, the moisture content of wood is higher by desorption than by absorption, with a relative humidity range of RH 30% - 90% of 2.5% to 3.5%. The wood will shrink in volume as it dries and will not return to its original size when moisture is reabsorbed. The Tatajuba joists are supplied kiln-dried to 16-18%. Nevertheless, shape changes caused by shrinkage and swelling can never be prevented. As a result of the anisotropic nature of shrinkage and swelling and the simultaneous development of internal forces in the wood, transverse and longitudinal buckling and the formation of drying cracks can occur.

Colours:

Tatajuba terrace boards and base beams are not subject to colour grading. The colour spectrum ranges from light yellow to dark brown. It often has a noticeable golden sheen.

Contained agents:

Exotic Tatajuba wood is very rich in tannins (extractives). These substances can be weathered out of the wood and cause colour stains on the surface of the wood and surrounding structures. During installation, it is necessary to ensure rainwater drainage and structural protection.

Greying of the wood:

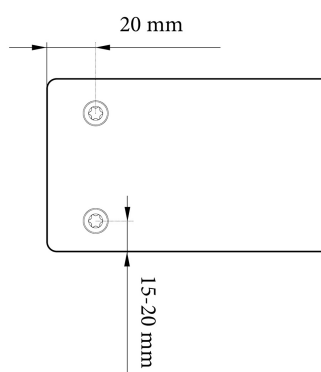
From the moment wood is exposed to the weather, it is degraded by the action of so-called inanimate nature. The interaction of several influences (water, radiation, temperature changes, emissions, etc.) causes the first phase of lignin decomposition by photochemical reactions. This decomposition does not cause any observable darkening of the wood in outdoor conditions, because the disturbed lignin is subsequently washed away by rainwater, giving a lighter shade due to the light colour of the undepleted cellulose. In practice, however, the lighter shade is disturbed by the deposition of dust particles and atmospheric impurities in the porous structure of the wood surface, or by the co-growth of microscopic fungi, resulting in the well-known greying of the wood.

Fasteners recommendation:

Tatajuba terrace boards and base beams are designed to be installed with stainless steel screws. A material that does not cause a chemical reaction with the wood must always be used to prevent it from deterioration. Use a minimum of A4 grade stainless steel for visible screw installations.

Recommended fasteners:

DECKING BOARD	GRADE OF STEEL	DIMENSIONS OF SCREWS
21 mm thickness	A4	5 x 50 mm



Screw Positioning:

Position the screws as close as possible to the edges of the board to minimise the risk of cupping.

The recommended distance is 15–20 mm from the edge of the decking boards.

At butt joints, position the screws at least 20 mm from the end of the board.

Underconstruction:

The minimum axial spacing of the base structure for individual decking thicknesses is governed by the following table:

DECKING BOARD	MAXIMUM AXIAL SPACING OF BASE PRISM
20/21 mm thickness	420 mm

Surface treatment:

Tatajuba terrace boards and base beams do not need to be treated before installation. To reduce the risk of edge cracks, it is recommended that all transverse edges are coated with OSMO 5735 End Grain Sealing Wax.

Note:

The Technical Data Sheet serves as a supplement to the "Real DECK Technical and Warranty Conditions".

Please note that our recommendations for the processing of wood are not compulsory installation guidelines, but recommendations. Each decking is characterised by different parameters and the correct installation method and use of materials is always the responsibility of the installation company.

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