

PRODUCT INFORMATION

LOURO ITAUBA

Source

FSC Louro itauba is available in the forest of Precious Woods, located in the Amazon region of Brazil. The large thin trees attain a height of about 40 m and a diameter up to 80 cm. The trunk is straight and cylindrical. Due to the small diameters it is only possible to produce limited dimensions.

Appearance

The color of the heartwood varies from (gold) yellow/beige to (black) brown, darkening after exposure. Darker spots or parts can be found in the wood. The sapwood is easy to distinguish. There is no specific smell or lustre. The grain is mostly straight, but sometimes irregular. The texture is fine. The wood surface has a greasy touch due to oils and resins in the wood structure.

Processing properties

Louro itauba is easy to machine, with a smooth result. The use of hard metal tools is advised due to the presence of silica. Pre-drilling is recommended. Finishing is reported to be good and there is good experience with the gluing for interior uses. The GluGreen[®] Technology could succesfully be applied to green sawn timber. The wood dries slowly, thicker than 33 mm is very difficult to dry.

Application

Louro itauba is a well-known and popular timber for several applications. The low shrinkage and swelling behaviour and the stability in use are often reasons for choosing this species. It is used for outside constructions, cladding, sound barriers, posts, decking, children's playground equipment and park benches.

Green density	1.000 – 1.200 kg/m ³
Density (at 12%)	850 kg/m ³
Shrinkage green – oven dry	2,9% radial; 7,2% tangential
Shrinkage green – 65% RH (abt. 12% EMC)	1,0% radial; 2,5% tangential
Swelling between 50-90% RH	1,3% radial; 2,8% tangential
Equilibrium Moisture Content (EMC)	12,4% (at 65% RH water adsorption)
	13,6% (at 65% RH water desorption)
	17,4% (at 95% RH water adsorption)
Fibre Saturation Point (FSP)	27%
Durability according to EN 113 (without soil	Heartwood class 1
contact)	
Durability according to ENV 807 (with soil contact)	Heartwood class 2
Durability according to EN 350:2016	Heartwood class 1
Bending strength, MOR (defect free samples)	125 N/mm ²
Modulus of elasticity, MOE (defect free samples)	18.725 N/mm ²
Shear strength (defect free samples)	10,1 N/mm ²
Janka hardness	6.500 N (transversal); 5.700 N (parallel)
Strength class (EN 338)	D40 *)
Fire resistance flooring (EN 13501-1)	Cfl-s1
Chemical composition	Cellulose: 46%; Hemicellulose: 20,1%; Lignine: 33,9%

Technical properties

The figures in this table are mainly indicative, unless a specific standard is mentioned, which provides exact figures. *) This value is determined by testing of a limited number of full scale samples. A higher value is expected by testing more samples.



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References

This information is based on research (mainly independent) and experience of Precious Woods, (semi-) scientific literature and the (Dutch) Houtvademecum (10th edition 2010).

