



TIMBORANA

Source

FSC Timborana is available in the forests of Precious Woods, located in the Amazon region of Brazil. The straight and cylindrical trunks get a diameter of about 40 – 100 cm. The sapwood is a few cm wide. The large diameters make it possible to produce also larger dimensions.

Appearance

The heartwood is yellow brown to reddish brown and is easily to demarcate from the sapwood. Also lighter colored zones can be seen in the heartwood. After exposure, these zones darken to warm brown. The timber has a nice pattern. The grain is mainly straight, sometimes irregular or interlocked and the texture is fine. Grey parts can occur in the timber, but further investigation showed that it has no influence on the durability. The heartwood has a tendency to bleed.

Processing properties

Machining goes well, resulting in a smooth surface. Gluing is reported to be good, also for laminated beams. There is little experience available regarding the finishing. Drying goes rather difficult, with a tension to checking.

Application

This hard and durable species can be used for structural use, like beams and decking. Furthermore, it is also used for park benches.

Technical properties

Green density	1.100 kg/m ³
Density (at 12%)	800 kg/m ³
Shrinkage green – oven dry	3,8% radial; 5,8% tangential
Shrinkage green – 65% RH (abt. 12% EMC)	1,7% radial; 2,7% tangential
Equilibrium Moisture Content (EMC)	8,6% (at 65% RH water adsorption) 13,0% (at 65% RH water desorption)
Fibre Saturation Point (FSP)	23%
Durability according to EN 113 (without soil contact)	Heartwood class 1
Durability according to ENV 807 (with soil contact)	Heartwood class 2
Durability according to literature	Heartwood class 2-3
Bending strength, MOR (defect free samples)	122 N/mm ²
Modulus of elasticity, MOE (defect free samples)	19.122 N/mm ²
Janka hardness	7.850 N (transversal); 7.330 N (parallel)
Strength class (EN 338)	D40 *)
<i>The figures in this table are mainly indicative, unless a specific standard is mentioned, which provides exact figures.</i>	
*) This value is determined by testing of a limited number of full scale samples. A higher value is expected by testing more samples.	

References

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