



OKAN

Source

FSC Okan is available in the forests of Precious Woods, located in the Congo Basin of Gabon. The tree attains heights up to 40 – 50 m and diameters of approximately 150 cm (max 300 cm). The trunks are straight and cylindrical.

Appearance

Freshly sawn Okan has a yellow to golden yellow color, with (dark) green/olive green shade. After exposure, the wood darkens to red brown, often with a coppery glow. As a result of the dark colored edges, the growth rings can be clearly seen on the crosscut surface. The 50-75 mm thick sapwood is light pink and is easy to distinguish. The unpleasant smell of Okan disappears after drying. The wood structure is interlocked and the texture is medium coarse.

Processing properties

The machining of Okan can not be done so easily, because of the high density. Furthermore, the wood causes a blunting effect of the tools. Pre-drilling is necessary. The gluing is difficult and finishing is possible. It dries very slowly, with risks of cracking.

Application

Thanks to its durability, Okan is used in all kind of hydraulic constructions, like bridges, decking's, sheet pilings, jetties, sound barriers, stables and piles.

Technical properties

Green density	1.000-1.200 kg/m ³
Density (at 12%)	850-960 kg/m ³
Shrinkage green – oven dry	4,0% radial; 7,3% tangential
Shrinkage green – 65% RH (abt. 12% EMC)	3,0% radial; 3,5% tangential
Fibre Saturation Point (FSP)	25%
Durability according to EN 350:2016	Heartwood class 1 (in-ground tested)
Bending strength, MOR (defect free samples)	133 N/mm ²
Modulus of elasticity, MOE (defect free samples)	17.200 N/mm ²
Shear strength (defect free samples)	20,0 N/mm ²
Janka hardness	12.300 N (parallel)
Strength class (EN 338)	D40 (grading: NEN 5493 C3 STH; valid for Congo Braz and Cameroon)

The figures in this table are mainly indicative, unless a specific standard is mentioned, which provides exact figures.

References

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