

Common name:	OKAN
Family:	MIMOSACEAE
Scientific name(s):	Cylicodiscus gabunensis

LOG DESCRIPTION		WOOD DESCRIPTION	
Diameter:	from 90 to 150 cm	Colour:	Red brown
Thickness of sapwood:	from 5 to 8 cm	Sapwood:	Clearly demarcated
Floats:	no	Texture:	Medium
Durability in forest :	Good	Grain:	Interlocked
		Interlocked grain:	Marked
Note:	Unpleasant odour when green. Heartwood yellow brown becomes red brown with air.		

PHYSICAL PROPERTIES			MECHANICAL PROPERTIES		
Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.					
	mean	standard deviation		mean	standard deviation
Density *:	0.91 g/cm ³	0.10			
Monnin hardness*:	10.3	3.4	Crushing strength *:	82 MPa	12
Coef of volumetric shrinkage:	0.61 %	0.10	Static bending strength *:	134 MPa	23
Total tangential shrinkage:	7.9 %	1.0	Modulus of elasticity *:	22260 MPa	3348
Total radial shrinkage:	5.8 %	0.6			
Fibre saturation point:	25 %				
Stability:	Moderately stable to poorly stable (* : at 12 % moisture content ; 1 MPa = 1 N/mm ²)				

NATURAL DURABILITY AND TREATABILITY

Fungi and termite resistance refers to end-uses under temperate climate.

Except for special comments on sapwood, natural durability is based on mature heartwood.

Sapwood must always be considered as non-durable against wood degrading agents.

Fungi:	Class 1 - very durable	* ensured by natural durability (according EN standards).
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)	
Termites:	Class D - Durable	
Treatability:	4 - not permeable	
Biological hazard class*:	4 - in ground or fresh water contact or high dampness	
Note:	This species is listed in the European standard NF EN 350-2. Due to its high specific gravity and hardness, this species naturally covers the biological hazard class 5 (end-uses in marine environment or in brackish water).	

COUNTRIES - LOCAL NAMES

Countries	Local names
Cameroon	ADOUM
Cameroon	AFRICAN GREENHEART
Cameroon	BOKOKA
Congo	N'DUMA
Côte d'Ivoire	BOUEMON
Gabon	EDOUM
Gabon	ODUMA
Ghana	ADADUA
Ghana	BENYA
Ghana	DENYA
Nigeria	OKAN

OKAN

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: Does not require any preservative treatment
In case of temporary humidification risk: Does not require any preservative treatment
In case of permanent humidification risk: Does not require any preservative treatment

DRYING

Possible drying schedule

Drying rate:	Slow	Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Risk of distortion:	High risk	Green	40	37	82
Risk of casehardening:	No	40	44	38	68
Risk of checking:	High risk	30	44	36	59
Risk of collapse:	No	20	46	36	52
		15	49	37	46

This shedule is given for information only and is applicable to thickness < 38 mm.

It must be used in compliance with the code of practice.

For thickness from 38 to 75 mm , the air relative humidity should be increased by 5 % at each step.

For thickness over 75 mm , a 10 % increase should be considered.

Note: Kiln drying must be handled carefully.

SAWING AND MACHINING

Blunting effect: Fairly high
Sawteeth recommended: Stellite-tipped
Cutting tools: Tungsten carbide
Peeling: Not recommended or without interest
Slicing: Not recommended or without interest
Note: Requires power. It is sometimes difficult to obtain a good finish because of highly interlocked grain. Tendency to tear on quartersawn.

ASSEMBLING

Nailing / Screwing: Good but pre-boring necessary
Gluing: Correct (for interior only)

END-USES

Main known end-uses; they must to be implemented according to the code of practice.

Important remark: some end-uses are mentionned for information (traditional, regional or ancient end-uses).

Note: Substitute for AZOBE (*Lophira alata*) and GREENHEART (*Ocotea rodiaei*).

Hydraulic works (seawater)

Posts

Sleepers

Industrial or heavy flooring

Heavy carpentry

Vehicle or container flooring

Sculpture

Turned goods

Bridges (parts in contact with water or ground)

Bridges (parts not in contact with water or ground)

Flooring
