

Common name:	KOTO
Family:	STERCULIACEAE
Scientific name(s):	Pterygota bequaertii Pterygota macrocarpa

LOG DESCRIPTION	WOOD DESCRIPTION
Diameter:	from 80 to 90 cm
Thickness of sapwood:	from to cm
Floats:	yes
Durability in forest :	Low (must be treated)
	Colour: Creamy white
	Sapwood: Not demarcated
	Texture: Medium
	Grain: Straight or interlocked
	Interlocked grain: Slight
Note:	The tree has sometimes large buttresses. Some logs are not floatable. Wood cream white to light yellow, attractive flecked aspect on quartersawn. Unpleasant odour when green.

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 *:	0.59 g/cm ³	0.06			
Monnin hardness*:	2.5	0.6	Crushing strength *:	54 MPa	7
Coef of volumetric shrinkage:	0.57 %	0.06	Static bending strength *:	96 MPa	16
Total tangential shrinkage:	9.6 %		Modulus of elasticity *:	13140 MPa	1400
Total radial shrinkage:	4.5 %				
Fibre saturation point:	25 %				
Stability:	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 5 - not durable	* ensured by natural durability (according EN standards).
Dry wood borers:	Susceptible; sapwood not or slightly demarcated (risk in all the wood)	
Termites:	Class S - Susceptible	
Treatability:	1 - easily permeable	
Use class*:	1 - inside (no dampness)	
Note:	This species is listed in the European standard NF EN 350-2. Prone to blue stain.	

MAIN LOCAL NAMES

Countries	Local names
Benin	OFETE
Central African Rep	KAKENDE
Côte d'Ivoire	KOTO
Dem Rep of Congo	IKAME
Gabon	AKE
Ghana	AWARI
Ghana	KYERE
Nigeria	KEFE
Nigeria	POROPOSO
Germany	ANATOLIA
United Kingdom	AFRICAN PTERYGOTA
United Kingdom	PTERYGOTA

KOTO

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks:	Requires appropriate preservative treatment
In case of temporary humidification risk:	Requires appropriate preservative treatment
In case of permanent humidification risk:	Use not recommended

DRYING

Possible drying schedule

Drying rate:	Normal	Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Risk of distortion:	High risk	Green	50	47	84
Risk of casehardening:	No	40	50	45	75
Risk of checking:	High risk	30	55	47	67
Risk of collapse:	No	20	70	55	47
		15	75	58	44

This schedule 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: Risks of discoloration (oxydation) and blue stain during drying.

SAWING AND MACHINING

Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Good
Note:	Tendency to woolliness in machining. Good finish with filling.

ASSEMBLING

Nailing / Screwing:	Good
Gluing:	Correct

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: Steaming may colour KOTO veneers.

Sliced veneer

Veneer for back or face of plywood

Interior joinery

Interior panelling

Current furniture or furniture components

Moulding

Blockboard

Fiber or particle boards

Wood frame house

Glued laminated

Light carpentry

Wood-ware

Seats

Boxes and crates
