

Common name:	ACAJOU D'AFRIQUE
Family:	MELIACEAE
Scientific name(s):	Khaya anthotheca Khaya ivorensis Khaya grandifoliola

LOG DESCRIPTION	WOOD DESCRIPTION		
Diameter:	from 80 to 120 cm	Colour:	Red brown
Thickness of sapwood:	from 3 to 8 cm	Sapwood:	Clearly demarcated
Floats:	yes	Texture:	Medium
Durability in forest :	Moderate (treatment recommended)	Grain:	Interlocked
Note:	Sometimes, presence of tension wood and brittleheart. Wood pink brown to deep red with copper reflection.	Interlocked grain:	Slight

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	
Density *:	0.57 g/cm <sup>3</sup>	0.08	
Monnin hardness*:	2.5	0.4	Crushing strength *:
Coef of volumetric shrinkage:	0.39 %	0.03	46 MPa
Total tangential shrinkage:	5.5 %	0.5	Static bending strength *:
Total radial shrinkage:	3.7 %	0.8	77 MPa
Fibre saturation point:	28 %		Modulus of elasticity *:
Stability:	Moderately stable		11820 MPa
Note:	K. grandifoliola is fairly hard. Physical and mechanical properties of K. ivorensis are lower than other species.		

**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 3 moderately durable	* ensured by natural durability (according EN standards).
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)	
Termites:	Class S - Susceptible	
Treatability:	4 - not permeable	
Use class*:	2 - inside or under cover (dampness possible)	
Note:	This species is listed in the European standard NF EN 350-2. The AFRICAN MAHOGANY cannot be used without appropriate preservative treatment for end-uses under use class 3, except for some parts of a work such as windows, less exposed than others (entrance doors, shutters ...).	

MAIN LOCAL NAMES			
Countries	Local names	Countries	Local names
Angola	N'DOLA	Nigeria	OGWANGO
Angola	UNDIA NUNU	Uganda	ERI KIRE
Benin	KAJU	Uganda	MUNYAMA
Cameroon	MANGONA	France	ACAJOU BASSAM
Cameroon	N'GOLLON	France	ACAJOU BLANC
Congo	N'DOLA	Germany	KHAYA MAHOGANI
Côte d'Ivoire	ACAJOU BASSAM	United Kingdom	AFRICAN MAHOGANY
Côte d'Ivoire	ACAJOU BLANC	United Kingdom	HEAVY AFRICAN MAHOGANY
Côte d'Ivoire	KRALA		
Equatorial Guinea	CAOBA DEL GALON		
Equatorial Guinea	ZAMANGUILA		
Gabon	ZAMINGUILA		
Ghana	AFRICAN MAHOGANY		
Ghana	AHAFO		
Ghana	TAKORADI MAHOGANY		
Nigeria	AKUK		

**REQUIREMENT OF A PRESERVATIVE TREATMENT**

Against dry wood borer attacks:	Does not require any 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:	Rapid	Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Risk of distortion:	Slight risk	Green	50	47	84
Risk of casehardening:	No	40	50	45	75
Risk of checking:	Slight 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 distortion may increase in presence of tension wood or interlocked grain occasionally high.

**SAWING AND MACHINING**

Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Good
Note:	Tendency to woolliness (tension wood) in sawing. Risks of tearing (interlocked grain) in planing. Ribbon like aspect on quartersawn.

**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: Pores sometimes filled with black deposits. Sawdust may cause irritation. Filling is recommended to obtain a better finish.

- Cabinetwork (high class furniture)
- Current furniture or furniture components
- Sliced veneer
- Interior panelling
- Ship building (planking and deck)
- Open boats
- Veneer for back or face of plywood
- Exterior joinery
- Interior joinery
- Exterior panelling
- Light carpentry