

Common name:	MOABI
Family:	SAPOTACEAE
Scientific name(s):	Baillonella toxisperma Mimusops djave (synonymous)

LOG DESCRIPTION	WOOD DESCRIPTION
Diameter:	from 60 to 100 cm
Thickness of sapwood:	from 4 to 6 cm
Floats:	no
Durability in forest :	Good
Note:	Wood pink brown to red brown more or less dark and finely veined. Satin like aspect on quartersawn.
	Colour: Red brown
	Sapwood: Clearly demarcated
	Texture: Fine
	Grain: Straight or interlocked
	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		mean	standard deviation
Density *:	0.87 g/cm ³	0.07	Crushing strength *:	74 MPa	10
Monnin hardness*:	6.8	1.1	Static bending strength *:	143 MPa	19
Coef of volumetric shrinkage:	0.64 %	0.01	Modulus of elasticity *:	21040 MPa	2630
Total tangential shrinkage:	8.7 %				
Total radial shrinkage:	6.5 %				
Fibre saturation point:	23 %				
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 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:	3-4 - poorly or not permeable	
Use class*:	4 - in ground or fresh water contact	
Note:	This species is listed in the European standard NF EN 350-2. It naturally covers the use class 5 (end-uses in marine environment or in brackish water) due to its high specific gravity and a high silica content. According to the European standard NF EN 335, performance length might be modified by the intensity of end-use exposition.	

MAIN LOCAL NAMES

Countries	Local names
Angola	MOABI
Cameroon	ADJAP
Cameroon	AYAP
Congo	DIMPAMPI
Congo	MOABI
Dem Rep of Congo	MUAMBA JAUNE
Equatorial Guinea	ADJAP
Equatorial Guinea	AYAP
Gabon	ADZA
Gabon	M'FOI
United Kingdom	AFRICAN PEARWOOD

MOABI

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:	Slight 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: Surface drying under cover. Kiln drying must be handled with care. It is recommended to dry until a low moisture content (10. 12 %) because of its shrinkage.

SAWING AND MACHINING

Blunting effect:	High
Sawteeth recommended:	Stellite-tipped
Cutting tools:	Tungsten carbide
Peeling:	Good
Slicing:	Good
Note:	Requires power. Blunting effect fairly high to high (silica). Sawdust can irritate mucous membranes.

ASSEMBLING

Nailing / Screwing:	Good but pre-boring necessary
Gluing:	Correct
Note:	Tends to split when nailing. Gluing requires care (dense wood).

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 MAKORE (*Tieghemella* spp.).

Exterior joinery
Rolling shutters
Interior joinery
Interior panelling
Flooring
Stairs (inside)
Current furniture or furniture components
Sliced veneer
Cabinetwork (high class furniture)
Veneer for interior of plywood
Veneer for back or face of plywood
Sleepers
Turned goods
Arched goods
Sculpture
Industrial or heavy flooring
Heavy carpentry
Bridges (parts not in contact with water or ground)
