

Common name:	SAPELI
Family:	MELIACEAE
Scientific name(s):	Entandrophragma cylindricum

LOG DESCRIPTION		WOOD DESCRIPTION	
Diameter:	from 70 to 120 cm	Colour:	Red brown
Thickness of sapwood:	from 4 to 8 cm	Sapwood:	Clearly demarcated
Floats:	yes	Texture:	Fine
Durability in forest :	Moderate (treatment recommended)	Grain:	Interlocked
Note:	Some logs are not floatable. Wood pinkish brown to copper red brown. Possible presence of ring shakes and blister grains (longitudinal fissure in the shape of barley grain on the curved surface of round timber, generally concealed by the bark and linked to a disfunction in tree growth). Cedar like scent.		

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 *:	0.69 g/cm ³	0.04	Crushing strength *:	62 MPa	7
Monnin hardness*:	4.2	1.0	Static bending strength *:	102 MPa	11
Coef of volumetric shrinkage:	0.47 %	0.06	Modulus of elasticity *:	13960 MPa	2403
Total tangential shrinkage:	7.2 %	0.9			
Total radial shrinkage:	5.0 %	0.6			
Fibre saturation point:	29 %				
Stability:	Moderately 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 3 - moderately durable	* ensured by natural durability (according EN standards).
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)	
Termites:	Class M - Moderately durable	
Treatability:	3 - poorly permeable	
Biological hazard class*:	2 - not in ground contact, under cover (dampness possible)	
Note:	This species is listed in the European standard NF EN 350-2.	

COUNTRIES - LOCAL NAMES

Countries	Local names
Angola	UNDIANUNO
Cameroon	ASSIE
Cameroon	SAPPELLI
Central African Rep	M'BOYO
Congo	UNDIANUNO
Côte d'Ivoire	ABOUDIKRO
Dem Rep of Congo	LIFAKI
Gabon	UNDIANUNO
Ghana	PENKWA
Ghana	SAPLEWOOD
Nigeria	SAPLE
Uganda	MUYOVU
Germany	SAPPELLI-MAHOGANY
United Kingdom	SAPLE

SAPELLI

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

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

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: Quartersawn drying is slower.

SAWING AND MACHINING

Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Good
Note:	Log turning sawing recommended (internal stresses). Tendency to tearing in planing (interlocked grain). Sanding requires care.

ASSEMBLING

Nailing / Screwing:	Good
Gluing:	Correct
Note:	Gluing must be done with care: it may stain wood.

END-USES

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

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

Note: Light and regular interlocked grain: appreciated for slicing. Highly interlocked grain: troublesome for some end-uses.

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