

Family: FABACEAE-MIMOSOIDEAE (angiosperm)

Scientific name(s): Albizia ferruginea
Albizia angolensis (synonymous)

Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: red brown
Sapwood: clearly demarcated
Texture: coarse
Grain: interlocked
Interlocked grain: slight

Note: Heartwood yellow brown to dark red brown, with golden glints. Grain sometimes highly interlocked.

LOG DESCRIPTION

Diameter: from 60 to 90 cm
Thickness of sapwood: from 3 to 6 cm
Floats: no
Log durability: moderate (treatment recommended)

PHYSICAL PROPERTIES

Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.

	<u>Mean</u>	<u>Std dev.</u>
Specific gravity *:	0,60	0,05
Monnin hardness *:	3,4	0,8
Coeff. of volumetric shrinkage:	0,43 %	0,03 %
Total tangential shrinkage (TS):	4,9 %	0,3 %
Total radial shrinkage (RS):	2,8 %	0,4 %
TS/RS ratio:	1,8	
Fiber saturation point:	24 %	
Stability:	stable	

MECHANICAL AND ACOUSTIC PROPERTIES

	<u>Mean</u>	<u>Std dev.</u>
Crushing strength *:	50 MPa	5 MPa
Static bending strength *:	81 MPa	14 MPa
Modulus of elasticity *:	13000 MPa	1488 MPa

(*: at 12% moisture content, with 1 MPa = 1 N/mm²)

Musical quality factor: 116,4 measured at 2556 Hz

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.

E.N. = Euro Norm

Funghi (according to E.N. standards): class 2 - durable

Dry wood borers: durable - sapwood demarcated (risk limited to sapwood)

Termites (according to E.N. standards): class D - durable

Treatability (according to E.N. standards): class 3 - poorly permeable

Use class ensured by natural durability: class 3 - not in ground contact, outside

Species covering the use class 5: No

Note: According to the European standard NF EN 335, performance length might be modified by the intensity of end-use exposition.

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: does not require any preservative treatment

In case of risk of temporary humidification: does not require any preservative treatment

In case of risk of permanent humidification: use not recommended

DRYING

Drying rate: slow	Possible drying schedule: 2			
Risk of distortion: slight risk		Temperature (°C)		
Risk of casehardening: no	M.C. (%)	dry-bulb	wet-bulb	Air humidity (%)
Risk of checking: slight risk	Green	50	47	84
Risk of collapse: no	40	50	45	75
Note: Risks of distortion in presence of highly interlocked grain.	30	55	47	67
	20	70	55	47
	15	75	58	44

This schedule is given for information only and is applicable to thickness lower or equal to 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.

SAWING AND MACHINING

Blunting effect: normal
Sawteeth recommended: ordinary or alloy steel
Cutting tools: ordinary
Peeling: good
Slicing: good
Note: Irritant sawdust.

ASSEMBLING

Nailing / screwing: good but pre-boring necessary
Gluing: correct
Note: Tends to split when nailing.

COMMERCIAL GRADING

Appearance grading for sawn timbers: According to SATA grading rules (1996)
For the "General Purpose Market":
Possible grading for square edged timbers: choix I, choix II, choix III, choix IV
Possible grading for short length lumbers: choix I, choix II
Possible grading for short length rafters: choix I, choix II, choix III
For the "Special Market":
Possible grading for strips and small boards (ou battens): choix I, choix II, choix III
Possible grading for rafters: choix I, choix II, choix III

FIRE SAFETY

Conventional French grading: Thickness > 14 mm : M.3 (moderately inflammable)
Thickness < 14 mm : M.4 (easily inflammable)
Euroclasses grading: D s2 d0
Default grading for solid wood, according to requirements of European standard EN 14081-1 annex C (April 2009). It concerns structural graded timber in vertical uses with mean density upper 0.35 and thickness upper 22 mm.

END-USES

Veneer for interior of plywood	Veneer for back or face of plywood
Blockboard	Flooring
Light carpentry	Glued laminated
Interior joinery	Interior panelling
Current furniture or furniture components	Boxes and crates
Turned goods	Exterior joinery
Exterior panelling	Wood frame house
Bridges (parts not in contact with water or ground)	Stairs (inside)
Formwork	Cabinetwork (high class furniture)
Sliced veneer	

Note: Filling is necessary to obtain a good finish.

MAIN LOCAL NAMES

<u>Country</u>	<u>Local name</u>	<u>Country</u>	<u>Local name</u>
Angola	ZANZANGUE	Benin	AGLA NYINFUN
Cameroon	EVOUVOUS	Congo	SIFOU-SIFOU
Ivory Coast	YATANDZA	Ghana	AVIEMFO-SAMINA
Ghana	OKURO	Nigeria	AYINRE-OGO
Uganda	MUGAVU	Uganda	NONGO
Democratic Republic of the Congo	ELONGWAMBA	Democratic Republic of the Congo	OKURU
United Kingdom	WEST AFRICAN ALBIZIA		

