

Family: FABACEAE-MIMOSOIDEAE (angiosperm)

Scientific name(s): Enterolobium schomburgkii

Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: brown
 Sapwood: clearly demarcated
 Texture: medium
 Grain: straight or interlocked
 Interlocked grain: slight
 Note: Logs are often clearly curved.
 Grain sometimes wavy.

LOG DESCRIPTION

Diameter: from 50 to 80 cm
 Thickness of sapwood: from 3 to 5 cm
 Floats: no
 Log durability: good

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 *:	0,83	0,08
Monnin hardness *:	5,5	2,0
Coeff. of volumetric shrinkage:	0,61 %	0,06 %
Total tangential shrinkage (TS):	9,0 %	1,2 %
Total radial shrinkage (RS):	4,1 %	0,9 %
TS/RS ratio:	2,2	
Fiber saturation point:	26 %	
Stability:	moderately stable to poorly stable	

MECHANICAL AND ACOUSTIC PROPERTIES

	<u>Mean</u>	<u>Std dev.</u>
Crushing strength *:	66 MPa	9 MPa
Static bending strength *:	115 MPa	22 MPa
Modulus of elasticity *:	17090 MPa	4600 MPa
(*: at 12% moisture content, with 1 MPa = 1 N/mm ²)		
Musical quality factor:	113,5 measured at 2926 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 1 - very 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 4 - in ground or fresh water contact

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: does not require any preservative treatment

DRYING

Drying rate: normal to slow

Possible drying schedule: 4

Risk of distortion: high risk

Risk of casehardening: yes

Risk of checking: high risk

Risk of collapse: no

Note: In order to reduce the risks of casehardening, air drying must be done under cover; during kiln drying, keep a high humidity.

M.C. (%)	Temperature (°C)		Air humidity (%)
	dry-bulb	wet-bulb	
Green	42	39	82
50	48	43	74
40	48	43	74
30	48	43	74
15	54	46	63

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: not recommended or without interest

Slicing: nood

Note: Requires power. Raised grain occurs when planing in presence of interlocked grain. Sawdust sometimes irritant.

ASSEMBLING

Nailing / screwing: good

Gluing: correct (for interior only)

COMMERCIAL GRADING

Appearance grading for sawn timbers: According to NHLA grading rules (January 2007)

Possible grading: FAS, Select, Common 1, Common 2, Common 3

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

Interior panelling

Current furniture or furniture components

Wood frame house

Sliced veneer

Hydraulic works (fresh water)

Tool handles (resilient woods)

Turned goods

Bridges (parts not in contact with water or ground)

Interior joinery

Flooring

Cabinetwork (high class furniture)

Heavy carpentry

Sleepers

Exterior joinery

Bridges (parts in contact with water or ground)

Stairs (inside)

MAIN LOCAL NAMES

<u>Country</u>	<u>Local name</u>	<u>Country</u>	<u>Local name</u>
Brazil	BATIBATRA	Brazil (Amazon)	FAVA DE ROSCA
Brazil (Amazon)	FAVA ORELHA DE MACACO	Brazil (Amazon)	FAVA ORELHA DE NEGRO
Brazil (Amazon)	TIMBAUBA	Brazil (Amazon)	TIMBORANA
French Guiana	ACACIA FRANC	French Guiana	BOUGOU BATI BATRA
Suriname	TAMAREN PROKONI		

