

Family: FABACEAE-MIMOSOIDEAE (angiosperm)

Scientific name(s): Enterolobium contortisiliquum

Enterolobium cyclocarpum

Enterolobium maximum

Commercial restriction: no commercial restriction

WOOD DESCRIPTION

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

Note: Heartwood light brown to brown. Possible presence of tension wood in E. cyclocarpum.

LOG DESCRIPTION

Diameter: from 60 to 100 cm
Thickness of sapwood: from 3 to 6 cm
Floats: yes
Log durability: low (must be treated)

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 *:	0,49	0,05
Monnin hardness *:	2,1	0,6
Coeff. of volumetric shrinkage:	0,35 %	0,05 %
Total tangential shrinkage (TS):	4,5 %	0,8 %
Total radial shrinkage (RS):	2,3 %	0,4 %
TS/RS ratio:	2,0	
Fiber saturation point:	24 %	
Stability: moderately stable to stable		

MECHANICAL AND ACOUSTIC PROPERTIES

	<u>Mean</u>	<u>Std dev.</u>
Crushing strength *:	40 MPa	7 MPa
Static bending strength *:	63 MPa	9 MPa
Modulus of elasticity *:	9650 MPa	1230 MPa

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

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 5 - not durable

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

Termites (according to E.N. standards): class S - susceptible

Treatability (according to E.N. standards): class 1 - easily permeable

Use class ensured by natural durability: class 1 - inside (no dampness)

Species covering the use class 5: No

REQUIREMENT OF A PRESERVATIVE TREATMENT

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

In case of risk of temporary humidification: requires appropriate preservative treatment

In case of risk of permanent humidification: use not recommended

DRYING

Drying rate: rapid

Risk of distortion: no risk or very slight risk

Risk of casehardening: no

Risk of checking: no risk or very slight risk

Risk of collapse: no

Possible drying schedule: 3

M.C. (%)	Temperature (°C)		Air humidity (%)
	dry-bulb	wet-bulb	
Green	60	56	81
30	68	58	61
20	74	60	51
15	80	61	41

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: Sometimes fuzzy surface and irritant sawdust for the species *E. cyclocarpum*.

ASSEMBLING

Nailing / screwing: good

Gluings: correct

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

Sliced veneer

Interior panelling

Light carpentry

Veneer for back or face of plywood

Exterior panelling

Open boats

Interior joinery

Current furniture or furniture components

Boxes and crates

Blockboard

Matches

MAIN LOCAL NAMES

<u>Country</u>	<u>Local name</u>	<u>Country</u>	<u>Local name</u>
Argentina	CAMBA-CAMBY	Argentina	OREJA DE NEGRO
Argentina	PARA	Argentina	TIMBO
Argentina	TIMBO COLORADO	Brazil	TAMBORIL
Brazil	TIMBAUVA	Brazil	TIMBO
Colombia	CARITO	Colombia	OREJERO
Paraguay	TIMBO	Paraguay	TIMBO COLORADO
Venezuela	CARO-CARO		

