JEQUITIBA

Family: LECYTHIDACEAE (angiosperm)

Scientific name(s): Cariniana brasiliensis (synonymous)
Cariniana estrellensis
Cariniana integrifolia (synonymous)
Cariniana legalis
Allantoma integrifolia

Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: light brown

Sapwood: not clearly demarcated

Texture: fine

Grain: straight

Interlocked grain: absent

Note: Heartwood light brown to pinkish brown. Possible presence of lined up traumatic canals.

LOG DESCRIPTION

Diameter: from 70 to 90 cm

Thickness of sapwood: from 1 to 3 cm

Floats: yes

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.

	Mean	Std dev.
Specific gravity *:	0,64	0,05
Monnin hardness *:	3,6	0,8
Coeff. of volumetric shrinkage:	0,43 %	0,02 %
Total tangential shrinkage (TS):	5,3 %	0,8 %
Total radial shrinkage (RS):	5,0 %	0,3 %
TS/RS ratio:	1,1	
Fiber saturation point:	24 %	
Stability:	stable	

MECHANICAL AND ACOUSTIC PROPERTIES

	Mean	Std dev.
Crushing strength *:	46 MPa	5 MPa
Static bending strength *:	84 MPa	9 MPa
Modulus of elasticity *:	15330 MPa	755 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 3 - moderately durable

Dry wood borers: susceptible - sapwood not or slightly demarcated (risk in all the wood)

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 2 - inside or under cover (dampness possible)

Species covering the use class 5: No

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: requires appropriate 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: normal to slow
Risk of distortion: slight risk
Risk of casehardening: no
Risk of checking: slight risk
Risk of collapse: no
Note: Drying requires care in order to reduce defects.

Possible drying schedule: 3

M.C. (%)	Temperature (°C) dry-bulb	wet-bulb	Air humidity (%)
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: fairly high
Sawteeth recommended: stellite-tipped
Cutting tools: tungsten carbide
Peeling: good
Slicing: nood
Note: Blunting effect normal or quite high due to silica content. Tendency to woolliness.

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 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)

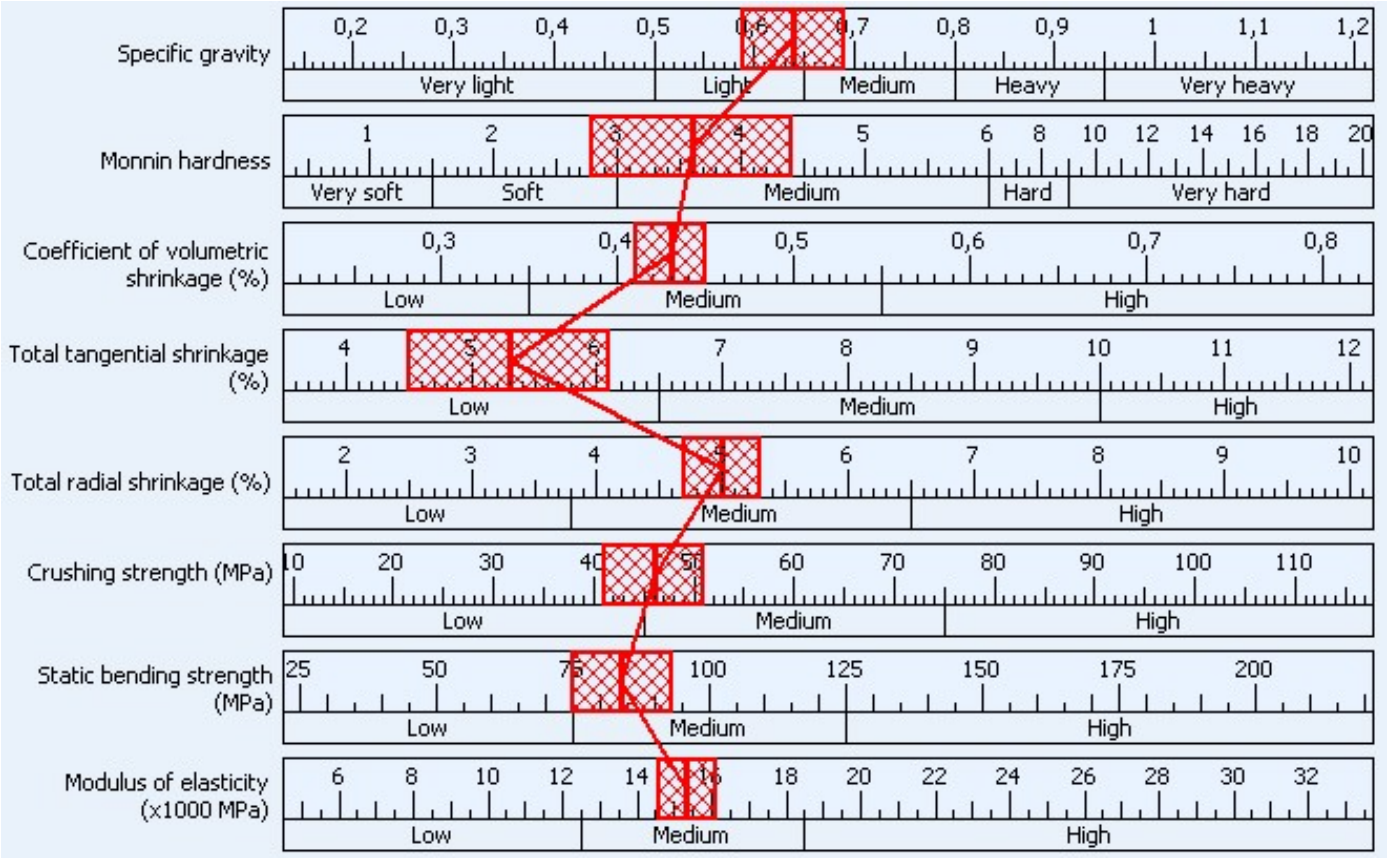
Euroclasses grading: D s2 d0
Default grading for solid wood, according to requirements of European standard EN 14081-1 annex C (April 2009). It concerns structural graded timber in vertical uses with mean density upper 0.35 and thickness upper 22 mm.

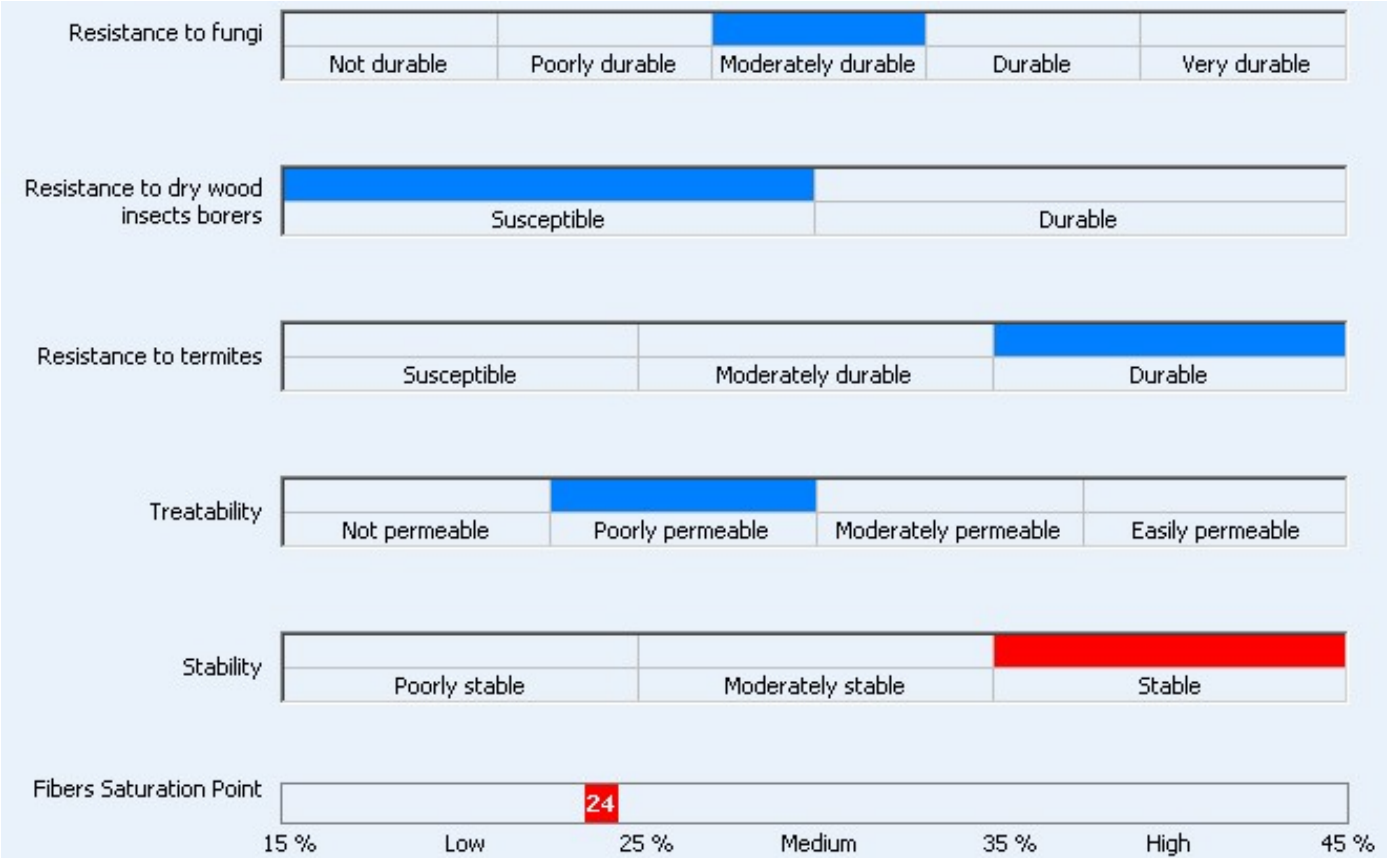
END-USES

Veneer for interior of plywood
Glued laminated
Cabinetwork (high class furniture)
Interior joinery
Formwork
Moulding
Sliced veneer
Veneer for back or face of plywood
Current furniture or furniture components
Exterior joinery
Flooring
Interior panelling
Turned goods

MAIN LOCAL NAMES

Country	Local name	Country	Local name
Bolivia	YESQUERO	Brazil	ESTOPEIRO
Brazil	JEQUITIBA	Brazil	JEQUITIBA BRANCO
Brazil	JEQUITIBA ROSA	Brazil	JEQUITIBA VERMELHO


Specific gravity
0,2 0,3 0,4 0,5 0,6 0,7 0,8 0,9 1 1,1 1,2
Very light
Light
Medium
Heavy
Very heavy
Monnin hardness
1 2 3 4 5 6 8 10 12 14 16 18 20
Very soft
Soft
Medium
Hard
Very hard
Coefficient of volumetric shrinkage (%)
0,3 0,4 0,5 0,6 0,7 0,8
Low
Medium
High
Total tangential shrinkage (%)
4 5 6 7 8 9 10 11 12
Low
Medium
High
Total radial shrinkage (%)
2 3 4 5 6 7 8 9 10
Low
Medium
High
Crushing strength (MPa)
10 20 30 40 50 60 70 80 90 100 110
Low
Medium
High
Static bending strength (MPa)
25 50 75 100 125 150 175 200
Low
Medium
High
Modulus of elasticity (x1000 MPa)
6 8 10 12 14 16 18 20 22 24 26 28 30 32
Low
Medium
High


Resistance to fungi
Not durable
Poorly durable
Moderately durable
Durable
Very durable
Resistance to dry wood insects borers
Susceptible
Durable
Resistance to termites
Susceptible
Moderately durable
Durable
Treatability
Not permeable
Poorly permeable
Moderately permeable
Easily permeable
Stability
Poorly stable
Moderately stable
Stable
Fibers Saturation Point
24
15 %
Low
25 %
Medium
35 %
High
45 %