Family: CALOPHYLLACEAE (angiosperm)
Scientific name(s): Calophyllum brasiliense
Commercial restriction: no commercial restriction

WOOD DESCRIPTION

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>light brown</td>
</tr>
<tr>
<td>Sapwood</td>
<td>clearly demarcated</td>
</tr>
<tr>
<td>Texture</td>
<td>medium</td>
</tr>
<tr>
<td>Grain</td>
<td>interlocked</td>
</tr>
<tr>
<td>Interlocked grain</td>
<td>marked</td>
</tr>
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</table>

Log description:

- Diameter: from 40 to 100 cm
- Thickness of sapwood: from 5 to 7 cm
- Floats: no
- Log durability: moderate (treatment recommended)

Note: Heartwood pink light brown with thin darker veins. Sometimes, presence of resin.

PHYSICAL PROPERTIES

- Texture: medium
- Grain: interlocked
- Interlocked grain: marked
- Diameter: from 40 to 100 cm
- Thickness of sapwood: from 5 to 7 cm
- Floats: no
- Log durability: moderate (treatment recommended)

MECHANICAL AND ACOUSTIC PROPERTIES

- Specific gravity: 0.65 ± 0.07
- Monnin hardness: 3.0 ± 0.8
- Coeff. of volumetric shrinkage: 0.57 ± 0.04%
- Total tangential shrinkage (TS): 8.1 ± 0.7%
- Total radial shrinkage (RS): 5.5 ± 0.6%
- TS/RS ratio: 1.5
- Fiber saturation point: 28%
- Cracking strength: 58 ± 7 MPa
- Static bending strength: 94 ± 11 MPa
- Modulus of elasticity: 14840 ± 1640 MPa
- Musical quality factor: 137.9 measured at 2728 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

- Fungi (according to E.N. standards): class 2 - durable
- Dry wood borers: durable - sapwood demarcated (risk limited to sapwood)
- Termite (according to E.N. standards): class S - susceptible
- 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: Poorly to moderately resistant to termites. 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
Risk of distortion: high risk
Risk of casehardening: yes
Risk of checking: high risk
Risk of collapse: no

Note: Initial air drying prior to kiln drying and quartersawns are recommended in order to reduce defects.

SAWING AND MACHINING

Blunting effect: normal
Sawteeth recommended: ordinary or alloy steel
Cutting tools: ordinary
Peeling: good
Slicing: good

Note: Some difficulties due to interlocked grain. Resin may clog tools.

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

Sliced veneer
Veneer for back or face of plywood
Ship building (planking and deck)
Bridges (parts not in contact with water or ground)
Interior panelling
Cooperage
Flooring

Veneer for interior of plywood
Current furniture or furniture components
Open boats
Interior joinery
Shingles
Boxes and crates

Note: Filling is recommended in order to obtain a good finish. Some of the listed end-uses require a slightly interlocked grain.
<table>
<thead>
<tr>
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