Family: MORACEAE (angiosperm)
Scientific name(s): Maquira coriacea
Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: creamy white
Sapwood: not demarcated
Texture: medium
Grain: interlocked
Interlocked grain: slight

Log durability: low (must be treated)
Note: Wood cream white to light yellow. Unpleasant odour when green.

LOG DESCRIPTION

Diameter: from 60 to 100 cm
Thickness of sapwood:
Floats: no
Log durability: low (must be treated)

PHYSICAL PROPERTIES

Specific gravity *: 0.47 ± 0.04
Monnin hardness *: 1.3 ± 0.3
Coeff. of volumetric shrinkage: 0.46 % ± 0.05 %
Total tangential shrinkage (TS): 7.0 % ± 0.9 %
Total radial shrinkage (RS): 3.8 % ± 1.0 %
TS/RS ratio: 1.8
Fiber saturation point: 26 %

Mean
Std dev.

Crushing strength *: 39 MPa ± 4 MPa
Static bending strength *: 58 MPa ± 12 MPa
Modulus of elasticity *: 10070 MPa ± 1006 MPa
Musical quality factor: 115,5 measured at 2861 Hz

MECHANICAL AND ACOUSTIC PROPERTIES

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

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 5 - not durable
Dry wood borers: susceptible - sapwood not or slightly demarcated (risk in all the wood)
Termites (according to E.N. standards): class 5 - 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: 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: rapid  
Risk of distortion: slight risk  
Risk of casehardening: no  
Risk of checking: slight risk  
Risk of collapse: no  
Note: Prone to blue stain.

Possible drying schedule:  

<table>
<thead>
<tr>
<th>M.C. (%)</th>
<th>Temperature (°C)</th>
<th>Air humidity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>dry-bulb</td>
<td>wet-bulb</td>
</tr>
<tr>
<td>Green</td>
<td>60</td>
<td>56</td>
</tr>
<tr>
<td>30</td>
<td>68</td>
<td>58</td>
</tr>
<tr>
<td>20</td>
<td>74</td>
<td>60</td>
</tr>
<tr>
<td>15</td>
<td>80</td>
<td>61</td>
</tr>
</tbody>
</table>

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: high  
Sawteeth recommended: stellite-tipped  
Cutting tools: tungsten carbide  
Peeling: good  
Slicing: nod  
Note: Fuzzy surface. Very high silica content.

ASSEMBLING

Nailing / screwing: poor  
Gluing: 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

- Veneer for interior of plywood  
- Formwork  
- Interior joinery  
- Moulding  
- Sliced veneer  
- Veneer for back or face of plywood  
- Boxes and crates  
- Interior panelling  
- Current furniture or furniture components  
- Wood-ware
<table>
<thead>
<tr>
<th>Country</th>
<th>Local name</th>
<th>Country</th>
<th>Local name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil (Amazon)</td>
<td>CAPINURI</td>
<td>Brazil (Amazon)</td>
<td>MUIRATINGA</td>
</tr>
</tbody>
</table>
### Properties of Muiratinga

<table>
<thead>
<tr>
<th>Property</th>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific gravity</td>
<td>0.2 - 1.2</td>
<td>Very light - Very heavy</td>
</tr>
<tr>
<td>Morrin hardness</td>
<td>2 - 20</td>
<td>Very soft - Very hard</td>
</tr>
<tr>
<td>Coefficient of volumetric shrinkage (%)</td>
<td>0.3 - 0.8</td>
<td>Low - High</td>
</tr>
<tr>
<td>Total tangential shrinkage (%)</td>
<td>4 - 12</td>
<td>Low - High</td>
</tr>
<tr>
<td>Total radial shrinkage (%)</td>
<td>2 - 10</td>
<td>Low - High</td>
</tr>
<tr>
<td>Crushing strength (MPa)</td>
<td>10 - 110</td>
<td>Low - High</td>
</tr>
<tr>
<td>Static bending strength (MPa)</td>
<td>25 - 200</td>
<td>Low - High</td>
</tr>
<tr>
<td>Modulus of elasticity (&lt;1000 MPa)</td>
<td>6 - 32</td>
<td>Low - High</td>
</tr>
</tbody>
</table>

### Resistance to Fungi
- Not durable
- Poorly durable
- Moderately durable
- Durable
- Very durable

### Resistance to Dry Wood Insects and 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
- 15% Low
- 25% Medium
- 35% High
- 45%