

|                     |                      |
|---------------------|----------------------|
| Common name:        | WACAPOU              |
| Family:             | CAESALPINIACEAE      |
| Scientific name(s): | Vouacapoua americana |

| LOG DESCRIPTION        | WOOD DESCRIPTION   |
|------------------------|--|
| Diameter:              | from 40 to 100 cm  |
| Thickness of sapwood:  | from 2 to 3 cm   |
| Floats:                | no   |
| Durability in forest : | Good   |
| Note:                  | Wood dark brown, with thin light brown lines, which produce an attractive aspect. Presence of internal stresses. |

| PHYSICAL PROPERTIES  |                        |                    | MECHANICAL PROPERTIES   |           |                    |
|--|------------------------|--------------------|---|-----------|--------------------|
| Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions. |                        |                    |   |           |                    |
|  | mean                   | standard deviation |   | mean      | standard deviation |
| Density *:   | 0.92 g/cm <sup>3</sup> | 0.05               | Crushing strength *:  | 82 MPa    | 5                  |
| Monnin hardness*:  | 6.9                    | 1.5                | Static bending strength *:                                    | 148 MPa   | 12                 |
| Coef of volumetric shrinkage:  | 0.65 %                 | 0.06               | Modulus of elasticity *:                                      | 19780 MPa | 1662               |
| Total tangential shrinkage:  | 6.5 %                  | 0.8                |   |           |                    |
| Total radial shrinkage:  | 4.2 %                  | 0.5                |   |           |                    |
| Fibre saturation point:  | 22 %                   |                    |   |           |                    |
| Stability:   | Moderately stable      |                    | (* : at 12 % moisture content ; 1 MPa = 1 N/mm <sup>2</sup> ) |           |                    |

#### 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.

|                           |   |   |
|---------------------------|---|---|
| Fungi:                    | Class 1 - very durable  | * ensured by natural durability (according EN standards). |
| Dry wood borers:          | Durable; sapwood demarcated (risk limited to sapwood)   |   |
| Termites:                 | Class D - Durable   |   |
| Treatability:             | 3 - poorly permeable  |   |
| Biological hazard class*: | 4 - in ground or fresh water contact or high dampness   |   |
| Note:                     | Due to its high specific gravity and its repulsive extracts content, this species naturally covers the biological hazard class 5 (end-uses in marine environment or in brackish water). |   |

#### COUNTRIES - LOCAL NAMES

| Countries       | Local names   |
|-----------------|---------------|
| Brazil (Amazon) | ACAPU         |
| Brazil (Amazon) | RITANGUEIRA   |
| French Guiana   | BOIS PERDRIX  |
| French Guiana   | BOUNAATI      |
| French Guiana   | EPI DE BLE    |
| French Guiana   | WACAPOU       |
| Guyana          | SARA          |
| Guyana          | SARABEBEBALLI |
| Guyana          | TATBU         |
| Surinam         | BRUINHART     |
| Surinam         | WACAPOE       |
| United Kingdom  | TATBU         |
| U.S.A.          | PARTRIDGEWOOD |

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## WACAPOU

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### REQUIREMENT OF A PRESERVATIVE TREATMENT

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|   |   |
|---|---|
| Against dry wood borer attacks:           | Does not require any preservative treatment |
| In case of temporary humidification risk: | Does not require any preservative treatment |
| In case of permanent humidification risk: | Does not require any preservative treatment |

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### DRYING

#### Possible drying schedule

|                        |                | Temperature (°C) |          |          | Air humidity (%) |
|------------------------|----------------|------------------|----------|----------|------------------|
|                        |                | M.C. (%)         | dry-bulb | wet-bulb |                  |
| Drying rate:           | Normal to slow |                  |          |          |                  |
| Risk of distortion:    | Slight risk    |                  |          |          |                  |
| Risk of casehardening: | No             |                  |          |          |                  |
| Risk of checking:      | Slight risk    |                  |          |          |                  |
| Risk of collapse:      | No             | 30               | 42       | 41       | 94               |
|                        |                | 25               | 42       | 39       | 82               |
|                        |                | 20               | 48       | 43       | 74               |
|                        |                | 15               | 48       | 43       | 74               |

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This schedule is given for information only and is applicable to thickness < 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.

Note: Initial surface drying prior to kiln drying is recommended.

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### SAWING AND MACHINING

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|                       |  |
|-----------------------|--|
| Blunting effect:      | Fairly high                            |
| Sawteeth recommended: | Stellite-tipped                        |
| Cutting tools:        | Tungsten carbide                       |
| Peeling:              | No information available               |
| Slicing:              | Good                                   |
| Note:                 | Requires power. Veneers quite brittle. |

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### ASSEMBLING

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|                     |                               |
|---------------------|-------------------------------|
| Nailing / Screwing: | Good but pre-boring necessary |
| Gluing:             | Correct (for interior only)   |

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### END-USES

Main known end-uses; they must to be implemented according to the code of practice.

Important remark: some end-uses are mentioned for information (traditional, regional or ancient end-uses).

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Note: Due to its beauty and its low availability, this wood should be used for decorative end-uses or in small quantities.

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Cabinetwork (high class furniture)  
Current furniture or furniture components  
Interior panelling  
Interior joinery  
Sliced veneer  
Flooring  
Turned goods  
Stairs (inside)  
Posts  
Bridges (parts in contact with water or ground)  
Hydraulic works (seawater)  
Ship building (planking and deck)  
Heavy carpentry  
Sleepers  
Exterior joinery  
Wood-ware  
Bridges (parts not in contact with water or ground)

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