

|                     |   |
|---------------------|---|
| Common name:        | FARO  |
| Family:             | CAESALPINIACEAE   |
| Scientific name(s): | Daniellia klainei<br>Daniellia ogea<br>Daniellia oliveri<br>Daniellia soyauxii<br>Daniellia thurifera |

| LOG DESCRIPTION        |  | WOOD DESCRIPTION   |                         |
|------------------------|--|--------------------|-------------------------|
| Diameter:              | from 70 to 120 cm  | Colour:            | Brown                   |
| Thickness of sapwood:  | from 4 to 12 cm  | Sapwood:           | Not clearly demarcated  |
| Floats:                | no   | Texture:           | Coarse                  |
| Durability in forest : | Low (must be treated)  | Grain:             | Straight or interlocked |
|                        |  | Interlocked grain: | Slight                  |
| Note:                  | Possible presence of brittleheart.<br>Sometimes greenish brown veins in heartwood. |                    |                         |

| 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 *:   | 0.55 g/cm <sup>3</sup> | 0.07               |   |          |                    |
| Monnin hardness*:  | 2.3                    | 0.9                | Crushing strength *:  | 38 MPa   | 7                  |
| Coef of volumetric shrinkage:  | 0.43 %                 | 0.11               | Static bending strength *:                                    | 66 MPa   | 12                 |
| Total tangential shrinkage:  | 6.8 %                  | 1.0                | Modulus of elasticity *:                                      | 9550 MPa | 1787               |
| Total radial shrinkage:  | 3.5 %                  | 0.7                |   |          |                    |
| Fibre saturation point:  | 30 %                   |                    |   |          |                    |
| 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 4-5 poorly to not durable  | * ensured by natural durability (according EN standards). |
| Dry wood borers: | Susceptible; sapwood not or slightly demarcated (risk in all the wood) |   |
| Termites:        | Class S - Susceptible  |   |
| Treatability:    | 2-3 - poorly to moderately permeable                                   |   |
| Use class*:      | 1 - inside (no dampness)   |   |
| Note:            | This species is listed in the European standard NF EN 350-2.           |   |

#### MAIN LOCAL NAMES

| Countries         | Local names  |
|-------------------|--------------|
| Benin             | JATIN        |
| Congo             | SINGA N'DOLA |
| Côte d'Ivoire     | FARO         |
| Dem Rep of Congo  | BOLENGU      |
| Equatorial Guinea | N'SU         |
| Gabon             | LONLAVIOL    |
| Ghana             | OGEA         |
| Ghana             | SHEDUA       |
| Nigeria           | OZIYA        |
| Sierra Leone      | GBESSI       |
| Germany           | DANIELLIA    |
| United Kingdom    | OGEA         |

**REQUIREMENT OF A PRESERVATIVE TREATMENT**

|   |   |
|---|---|
| Against dry wood borer attacks:           | Requires appropriate preservative treatment |
| In case of temporary humidification risk: | Use not recommended                         |
| In case of permanent humidification risk: | Use not recommended                         |

**DRYING**

Possible drying schedule

|                        | Drying rate:                | Rapid | Temperature (°C) |          | Air humidity (%) |          |
|------------------------|-----------------------------|-------|------------------|----------|------------------|----------|
|                        |                             |       | M.C. (%)         | dry-bulb |                  | wet-bulb |
| Risk of distortion:    | Slight risk                 |       |                  |          |                  |          |
| Risk of casehardening: | No                          |       |                  |          |                  |          |
| Risk of checking:      | No risk or very slight risk |       | Green            | 50       | 47               | 84       |
| Risk of collapse:      | Yes                         |       | 40               | 50       | 45               | 75       |
|                        |                             |       | 30               | 55       | 47               | 67       |
|                        |                             |       | 20               | 70       | 55               | 47       |
|                        |                             |       | 15               | 75       | 58               | 44       |

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: Risks of distortion especially on backsawn. Risks of collapse with thick boards.

**SAWING AND MACHINING**

|                       |   |
|-----------------------|---|
| Blunting effect:      | Normal  |
| Sawteeth recommended: | Ordinary or alloy steel   |
| Cutting tools:        | Ordinary  |
| Peeling:              | Good  |
| Slicing:              | Good  |
| Note:                 | Surface often fuzzy. Assembling and gluing sometimes difficult due to warping of dried veneers. |

**ASSEMBLING**

|                     |         |
|---------------------|---------|
| Nailing / Screwing: | Good    |
| Gluing:             | Correct |

**END-USES**

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

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

- Veneer for interior of plywood
- Blockboard
- Boxes and crates
- Sliced veneer
- Interior joinery
- Current furniture or furniture components