

| | |
|---------------------|-------------|
| Common name: | ANDIRA |
| Family: | FABACEAE |
| Scientific name(s): | Andira spp. |

| LOG DESCRIPTION | | WOOD DESCRIPTION | |
|------------------------|--|--------------------|-------------------------|
| Diameter: | from 60 to 90 cm | Colour: | Red brown |
| Thickness of sapwood: | from 3 to 5 cm | Sapwood: | Clearly demarcated |
| Floats: | no | Texture: | Coarse |
| Durability in forest : | Good | Grain: | Straight or interlocked |
| | | Interlocked grain: | Slight |
| Note: | Pink brown to red brown, bands of light coloured parenchyma tissue give this wood a distinctive figure. Presence of internal stresses and wind shakes. | | |

| 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 *: | 0.86 g/cm ³ | 0.09 | | | |
| Monnin hardness*: | 8.8 | 2.0 | Crushing strength *: | 72 MPa | 12 |
| Coef of volumetric shrinkage: | 0.65 % | 0.10 | Static bending strength *: | 128 MPa | 24 |
| Total tangential shrinkage: | 7.3 % | 0.7 | Modulus of elasticity *: | 20170 MPa | 4724 |
| Total radial shrinkage: | 4.6 % | 0.6 | | | |
| Fibre saturation point: | 23 % | | | | |
| Stability: | Poorly stable | | (* : at 12 % moisture content ; 1 MPa = 1 N/mm ²) | | |

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 2 - 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: | The species <i>Andira coriacea</i> is very resistant to decay (class 1); it covers naturally the biological hazard class 5 (end-uses in marine environment and in brackish water). | |

COUNTRIES - LOCAL NAMES

| Countries | Local names |
|---------------------|--------------------|
| Brazil | ACAPURANA |
| Brazil | ALMENDRO DE RIO |
| Brazil | ANDIRA |
| Brazil | ANDIRA UCHI |
| Brazil | ANGELIM |
| Colombia | CONGO |
| Ecuador | MOTON |
| French Guiana | SAINT MARTIN ROUGE |
| Guyana | BAT SEED |
| Guyana | KORARO |
| Mexico | MAQUILLA |
| Peru | QUINILLO COLORADO |
| Surinam | RODE KABBES |
| Trinidad and Tobago | ANGELIN |
| Venezuela | SARRAPIO MONTANERO |

REQUIREMENT OF A PRESERVATIVE TREATMENT

| | |
|---|---|
| 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 |

DRYING

Possible drying schedule

| | | Temperature (°C) | | | Air humidity (%) |
|------------------------|-----------------|------------------|----------|----------|------------------|
| | | M.C. (%) | dry-bulb | wet-bulb | |
| Drying rate: | Rapid to normal | | | | |
| Risk of distortion: | Slight risk | | | | |
| Risk of casehardening: | No | | | | |
| Risk of checking: | Slight risk | Green | 42 | 39 | 82 |
| Risk of collapse: | No | 50 | 48 | 43 | 74 |
| | | 40 | 48 | 43 | 74 |
| | | 30 | 48 | 43 | 74 |
| | | 15 | 54 | 46 | 63 |

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.

SAWING AND MACHINING

| | |
|-----------------------|--|
| Blunting effect: | Fairly high |
| Sawteeth recommended: | Stellite-tipped |
| Cutting tools: | Tungsten carbide |
| Peeling: | Bad |
| Slicing: | Good |
| Note: | It is difficult to obtain a smooth surface in planing because of the alternate bands of hard and soft wood. Splinters may cause infection. |

ASSEMBLING

| | |
|---------------------|--|
| Nailing / Screwing: | Good but pre-boring necessary |
| Gluing: | Correct (for interior only) |
| Note: | Tends to split in nailing. Gluing must be done with care (dry wood and smooth surfaces). |

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).

Cabinetwork (high class furniture)
 Exterior joinery
 Interior joinery
 Exterior panelling
 Sliced veneer
 Current furniture or furniture components
 Bridges (parts not in contact with water or ground)
 Heavy carpentry
 Wood frame house
 Industrial or heavy flooring
 Turned goods
 Vehicle or container flooring
