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|---------------------|--|
| Common name: | HEVEA |
| Family: | EUPHORBIACEAE |
| Scientific name(s): | Hevea spp. |
| Note: | Native from the Amazonian forest, HEVEA was widely planted in South East Asia and later in Africa. RUBBER WOOD is the name used in all South East Asia. |

| LOG DESCRIPTION | | WOOD DESCRIPTION | |
|------------------------|--|--------------------|-------------------------|
| Diameter: | from 30 to 60 cm | Colour: | Creamy white |
| Thickness of sapwood: | from to cm | Sapwood: | Not demarcated |
| Floats: | yes | Texture: | Coarse |
| Durability in forest : | Low (must be treated) | Grain: | Straight or interlocked |
| | | Interlocked grain: | Slight |
| Note: | Logs must be treated, extracted and sawn as soon as possible after felling. Cream white wood becoming light brown. | | |

| 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 *: | 0.65 g/cm ³ | 0.06 | | | |
| Monnin hardness*: | 3.0 | 0.6 | Crushing strength *: | 51 MPa | 7 |
| Coef of volumetric shrinkage: | 0.41 % | 0.05 | Static bending strength *: | 82 MPa | 12 |
| Total tangential shrinkage: | 5.6 % | 0.8 | Modulus of elasticity *: | 11760 MPa | 1803 |
| Total radial shrinkage: | 2.2 % | 0.2 | | | |
| Fibre saturation point: | 24 % | | | | |
| 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 5 - 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: | 1 - easily permeable | |
| Use class*: | 1 - inside (no dampness) | |
| Note: | Prone to blue stain. | |

MAIN LOCAL NAMES

| Countries | Local names |
|---------------------|------------------|
| Brazil | HEVEA |
| Brazil | MAPALAPA |
| Brazil | SERINGA |
| Brazil | SERINGUEIRA |
| Guyana | HATTI |
| Peninsular Malaysia | HEVEA WOOD |
| Peru | JEVE |
| Peru | SHIRENGA |
| Thailand | RUBBER TREE |
| Venezuela | ARBOL DE CAUCHO |
| United Kingdom | PARA RUBBER TREE |
| U.S.A. | RUBBER WOOD |

HEVEA

REQUIREMENT OF A PRESERVATIVE TREATMENT

| | |
|---|---|
| Against dry wood borer attacks: | Requires appropriate preservative treatment |
| In case of temporary humidification risk: | Requires appropriate preservative treatment |
| 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: | High risk | Green | 42 | 39 | 82 |
| Risk of casehardening: | No | 50 | 48 | 43 | 74 |
| Risk of checking: | High risk | 40 | 48 | 43 | 74 |
| Risk of collapse: | No | 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.

Note: Careful piling, top weighting of the stacks and end-coating are recommended to avoid distortions and cracks.

SAWING AND MACHINING

| | |
|-----------------------|--|
| Blunting effect: | Normal |
| Sawteeth recommended: | Ordinary or alloy steel |
| Cutting tools: | Ordinary |
| Peeling: | Good |
| Slicing: | Good |
| Note: | Presence of internal stresses. Sharp edges are recommended to avoid a fuzzy surface. Latex tends to clog sawteeth. |

ASSEMBLING

| | |
|---------------------|-------------------------------|
| Nailing / Screwing: | Good but pre-boring necessary |
| Gluing: | Correct |
| Note: | Tends to split when nailing. |

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).

Note: Stains well.

Current furniture or furniture components

Interior joinery

Interior panelling

Moulding

Flooring

Sliced veneer

Pulp

Stairs (inside)

Boxes and crates

Fiber or particle boards

Veneer for interior of plywood

Blockboard

Light carpentry

Glued laminated
