

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
Thickness of sapwood:	from to cm
Floats:	yes
Durability in forest :	Low (must be treated)
	Colour: Creamy white
	Sapwood: Not demarcated
	Texture: Coarse
	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	
Biological hazard class*:	1 - not in ground contact, under cover (no dampness)	
Note:	Prone to blue stain.	

COUNTRIES - 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

		Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Drying rate:	Rapid				
Risk of distortion:	High risk				
Risk of casehardening:	No				
Risk of checking:	High 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.

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 in nailing.

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).

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
