MERANTI LIGHT RED

Family: DIPTEROCARPACEAE (angiosperm)

Scientific name(s): Shorea parvifolia* (voir note)
Shorea macroptera* (voir note)
Shorea spp.* (voir note)

Commercial restriction: no commercial restriction

Note: * Shorea sub-genus Rubroshorea with a specific gravity between 0,38 and 0,58.

WOOD DESCRIPTION

Color: light red
Sapwood: clearly demarcated
Texture: medium
Grain: interlocked
Interlocked grain: marked

Note: Frequent brittleheart and black holes.
Wood pink to light red or pink brown. Presence of white resin streaks. Ribbon like aspect. Lustrous surface.

LOG DESCRIPTION

Diameter: from 70 to 150 cm
Thickness of sapwood: from 5 to 8 cm
Floats: yes
Log durability: moderate (treatment recommended)

PHYSICAL PROPERTIES

MECHANICAL AND ACOUSTIC PROPERTIES

Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.

	Mean	Std dev.
Specific gravity *:	0,50	
Monnin hardness *:	2,4	
Coeff. of volumetric shrinkage:	0,48 %	
Total tangential shrinkage (TS):	7,1 %	
Total radial shrinkage (RS):	3,6 %	
TS/RS ratio:	2,0	
Fiber saturation point:	29 %	

	Mean	Std dev.
Crushing strength *:	42 MPa	
Static bending strength *:	86 MPa	
Modulus of elasticity *:	13620 MPa	

(*: at 12% moisture content, with 1 MPa = 1 N/mm²)

Musical quality factor: 113 measured at 2865 Hz

Stability: moderately stable to stable

Note: Specific gravity varies from 0,38 to 0,58 (> 0,58 : DARK RED MERANTI).

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.
E.N. = Euro Norm

Funghi (according to E.N. standards): class 3-4 - moderately to poorly durable
Dry wood borers: durable - sapwood demarcated (risk limited to sapwood)
Termites (according to E.N. standards): class S - susceptible
Treatability (according to E.N. standards): class 4 - not permeable
Use class ensured by natural durability: class 2 - inside or under cover (dampness possible)
Species covering the use class 5: No

Note: This species is listed in the European standard NF EN 350-2.
Frequent black holes. Variable treatability.

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: does not require any preservative treatment
In case of risk of temporary humidification: requires appropriate preservative treatment
In case of risk of permanent humidification: use not recommended

DRYING

Drying rate: normal
Risk of distortion: slight risk
Risk of casehardening: no
Risk of checking: slight risk
Risk of collapse: no
Note: Thin sawnwoods must be stacked carefully with the appropriate number of spacer sticks in order to avoid any risk of distortion.

Possible drying schedule: 2

M.C. (%)	Temperature (°C) dry-bulb	wet-bulb	Air humidity (%)
Green	50	47	84
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 lower or equal to 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: normal
Sawteeth recommended: ordinary or alloy steel
Cutting tools: ordinary
Peeling: good
Slicing: nood
Note: Tendency to woolliness. Keep sharp tools.

ASSEMBLING

Nailing / screwing: good
Gluing: correct

COMMERCIAL GRADING

Appearance grading for sawn timbers: According to MGR grading rules (2009)
Possible grading: Prime, Select, Standard, Serviceable, Utility

FIRE SAFETY

Conventional French grading: Thickness > 14 mm : M.3 (moderately inflammable)
Thickness < 14 mm : M.4 (easily inflammable)

Euroclasses grading: D s2 d0
Default grading for solid wood, according to requirements of European standard EN 14081-1 annex C (April 2009). It concerns structural graded timber in vertical uses with mean density upper 0.35 and thickness upper 22 mm.

END-USES

Interior joinery
Exterior joinery
Veneer for interior of plywood
Boxes and crates
Light carpentry
Interior panelling
Exterior panelling
Veneer for back or face of plywood
Sliced veneer

Note: Filling recommended. The presence of white streaks can be troublesome for some end-uses. Specific gravity > 0,45 for joinery.

MAIN LOCAL NAMES

Country	Local name	Country	Local name
Indonesia	MERANTI BUNGA	Indonesia	MERANTI MERAH MUDA
Indonesia	RED MERANTI	Peninsular Malaysia	ENGKABANG
Peninsular Malaysia	KAWANG	Peninsular Malaysia	LIGHT RED MERANTI
Peninsular Malaysia	LIGHT RED SERAYA	Peninsular Malaysia	SERAYA BATU
Peninsular Malaysia	SERAYA BUNGA	Peninsular Malaysia	SERAYA PUNAI
Malaysia (islands)	DAMAR SIPUT	Malaysia (islands)	LIGHT RED MERANTI
Malaysia (islands)	MERANTI HANTU	Malaysia (islands)	MERANTI KEPONG
Malaysia (islands)	MERANTI LANGGANG	Malaysia (islands)	MERANTI MELANTHI
Malaysia (islands)	MERANTI PAYA	Malaysia (islands)	MERANTI RAMBAI
Malaysia (islands)	MERANTI SANGKAWANG	Malaysia (islands)	MERANTI TEMBAGA
Malaysia (islands)	MERANTI TENGKAWANG	Thailand	CHAN HOI
Thailand	SAYA KHAO	Thailand	SAYA LUEANG

MERANTI LIGHT RED