

Family: DIPTEROCARPACEAE (angiosperm)

Scientific name(s): Parashorea lucida

Parashorea parvifolia

Parashorea smythiesii

Parashorea stellata

Parashorea densiflora

Commercial restriction: no commercial restriction

Note: It is recommended to use the name "WHITE MERANTI" for the species of the genus Shorea, sub-genus Anthoshorea.

WOOD DESCRIPTION

Color: light brown
Sapwood: not clearly demarcated
Texture: coarse
Grain: interlocked
Interlocked grain: slight

Note: Wood darkens with light. Presence of solidified white resin canals.

LOG DESCRIPTION

Diameter: from 80 to 130 cm
Thickness of sapwood: from 6 to 8 cm
Floats: no
Log durability: moderate (treatment recommended)

PHYSICAL PROPERTIES

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

	<u>Mean</u>	<u>Std dev.</u>
Specific gravity *:	0,68	
Monnin hardness *:	3,4	
Coeff. of volumetric shrinkage:	0,53 %	
Total tangential shrinkage (TS):	8,0 %	
Total radial shrinkage (RS):	3,8 %	
TS/RS ratio:	2,1	
Fiber saturation point:	26 %	
Stability: moderately stable to stable		
Note: Specific gravity varies from 0,60 to 0,80.		

MECHANICAL AND ACOUSTIC PROPERTIES

	<u>Mean</u>	<u>Std dev.</u>
Crushing strength *:	58 MPa	
Static bending strength *:	91 MPa	
Modulus of elasticity *:	14710 MPa	
(*: at 12% moisture content, with 1 MPa = 1 N/mm ²)		
Musical quality factor:	123,8	measured at 2953 Hz

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

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: requires appropriate 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: slow

Risk of distortion: slight risk

Risk of casehardening: no

Risk of checking: slight risk

Risk of collapse: no

Note: Risks of checks, especially for thick boards.

SAWING AND MACHINING

Blunting effect: normal

Sawteeth recommended: ordinary or alloy steel

Cutting tools: ordinary

Peeling: good

Slicing: good

Note: Risks of tearing. Keep sharp tools to obtain a good surface.

ASSEMBLING

Nailing / screwing: good

Gluings: 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

Light carpentry

Interior panelling

Arched goods

Sliced veneer

Veneer for interior of plywood

Boxes and crates

Interior joinery

Flooring

Current furniture or furniture components

Vehicle or container flooring

Veneer for back or face of plywood

MAIN LOCAL NAMES

<u>Country</u>	<u>Local name</u>	<u>Country</u>	<u>Local name</u>
India	TAVOY WOOD	Indonesia	WHITE MERANTI *
Laos	MAI HAO	Peninsular Malaysia	HEAVY WHITE SERAYA
Peninsular Malaysia	MERUYUN	Peninsular Malaysia	URAT MATA BATU
Peninsular Malaysia	URAT MATA BUKIT	Peninsular Malaysia	URAT MATA DAUN KECHIL
Malaysia (islands)	GERUTU	Malaysia (islands)	GERUTU PASIR
Malaysia (islands)	MERANTI GERUTU	Thailand	KHAI KHIEO

