

Family: FABACEAE (angiosperm)

Scientific name(s): Hymenobium spp.

Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: orange - yellow
 Sapwood: not clearly demarcated
 Texture: coarse
 Grain: interlocked
 Interlocked grain: slight

Note: Heartwood yellow brown becoming pinkish brown on exposure. Fairly important waxen patches more or less frequent.

LOG DESCRIPTION

Diameter: from 70 to 120 cm
 Thickness of sapwood: from 3 to 5 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 *:	0,80	0,07
Monnin hardness *:	6,3	1,7
Coeff. of volumetric shrinkage:	0,67 %	0,09 %
Total tangential shrinkage (TS):	8,3 %	1,5 %
Total radial shrinkage (RS):	4,9 %	0,8 %
TS/RS ratio:	1,7	
Fiber saturation point:	25 %	

Stability: moderately stable to poorly stable

MECHANICAL AND ACOUSTIC PROPERTIES

	<u>Mean</u>	<u>Std dev.</u>
Crushing strength *:	67 MPa	7 MPa
Static bending strength *:	119 MPa	15 MPa
Modulus of elasticity *:	20870 MPa	3828 MPa

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

Musical quality factor: 111,9 measured at 2607 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 2 - moderately permeable

Use class ensured by natural durability: class 2 - inside or under cover (dampness possible)

Species covering the use class 5: No

Note: Resistance to decay moderate to good according to the species.

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: rapid to normal
 Risk of distortion: slight risk
 Risk of casehardening: no
 Risk of checking: slight risk
 Risk of collapse: no

Note: A slower drying speed can avoid defects.

Possible drying schedule: 3

M.C. (%)	Temperature (°C)		Air humidity (%)
	dry-bulb	wet-bulb	
Green	60	56	81
30	68	58	61
20	74	60	51
15	80	61	41

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: bad

Slicing: good

Note: Possible difficulties if the waxen patches are numerous. These patches remain visible after machining.

ASSEMBLING

Nailing / screwing: good but pre-boring necessary

Gluing: correct

Note: Tendency to end checks when nailing.

COMMERCIAL GRADING

Appearance grading for sawn timbers: According to NHLA grading rules (January 2007)

Possible grading: FAS, Select, Common 1, Common 2, Common 4

In French Guiana, the local name of this species is "SAINT MARTIN JAUNE". Grading is done according to local rules "Bois guyanais classés".

Possible grading: Choix 1, choix 2, choix 3, choix 4

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

Current furniture or furniture components

Stairs (inside)

Industrial or heavy flooring

Sliced veneer

Interior panelling

Exterior panelling

Moulding

Heavy carpentry

Flooring

Note: A careful sanding must be done to obtain a good finish.

MAIN LOCAL NAMES

<u>Country</u>	<u>Local name</u>	<u>Country</u>	<u>Local name</u>
Brazil	ANGELIM AMARELO	Brazil	ANGELIM ROSA
Brazil	MIRARENA	Brazil (Amazon)	ANGELIM DA MATA
Brazil (Amazon)	ANGELIM PEDRA	Brazil (Amazon)	SAPUPIRA AMARELLA
Guyana	KORAROBALLI	French Guiana	SAINT MARTIN GRIS
French Guiana	SAINT MARTIN JAUNE	Suriname	MAKKAKABES
Suriname	SAANDOE		

