

Common name:	ANGELIM
Family:	FABACEAE
Scientific name(s):	Hymenolobium spp.

LOG DESCRIPTION		WOOD DESCRIPTION	
Diameter:	from 70 to 120 cm	Colour:	Orange - yellow
Thickness of sapwood:	from 3 to 5 cm	Sapwood:	Not clearly demarcated
Floats:	no	Texture:	Coarse
Durability in forest :	Moderate (treatment recommended)	Grain:	Interlocked
		Interlocked grain:	Slight
Note:	Heartwood yellow brown becoming pinkish brown on exposure. Fairly important waxen patches more or less frequent.		

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 *:	0.80 g/cm <sup>3</sup>	0.07			
Monnin hardness*:	6.3	1.7	Crushing strength *:	67 MPa	7
Coef of volumetric shrinkage:	0.67 %	0.09	Static bending strength *:	119 MPa	15
Total tangential shrinkage:	8.3 %	1.5	Modulus of elasticity *:	20870 MPa	3828
Total radial shrinkage:	4.9 %	0.8			
Fibre saturation point:	25 %				
Stability:	Moderately stable to poorly stable ( * : at 12 % moisture content ; 1 MPa = 1 N/mm <sup>2</sup> )				

#### 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 3 moderately 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:	2 - moderately permeable	
Use class*:	2 - inside or under cover (dampness possible)	
Note:	Resistance to decay moderate to good according to the species.	

#### MAIN LOCAL NAMES

Countries	Local names
Brazil	ANGELIM AMARELO
Brazil	ANGELIM ROSA
Brazil	MIRARENA
Brazil (Amazon)	ANGELIM DA MATA
Brazil (Amazon)	ANGELIM PEDRA
Brazil (Amazon)	SAPUPIRA AMARELLA
French Guiana	SAINT MARTIN GRIS
French Guiana	SAINT MARTIN JAUNE
Guyana	KORAROBALLI
Surinam	MAKKAKABES
Surinam	SAANDOE

**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 to normal				
Risk of distortion:	Slight risk				
Risk of casehardening:	No				
Risk of checking:	Slight risk	Green	60	56	81
Risk of collapse:	No	30	68	58	61
		20	74	60	51
		15	80	61	41

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: A slower drying speed can avoid defects.

**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.

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

- Interior joinery
- Interior panelling
- Exterior joinery
- Exterior panelling
- Current furniture or furniture components
- Moulding
- Stairs (inside)
- Heavy carpentry
- Industrial or heavy flooring
- Flooring
- Sliced veneer