

Common name:	WALLABA
Family:	CAESALPINIACEAE
Scientific name(s):	Eperua falcata Eperua grandiflora Eperua rubiginosa

LOG DESCRIPTION	WOOD DESCRIPTION
Diameter:	from 40 to 70 cm
Thickness of sapwood:	from 4 to 6 cm
Floats:	no
Durability in forest :	Good
	Colour: Red brown
	Sapwood: Clearly demarcated
	Texture: Medium
	Grain: Straight
	Interlocked grain: Absent
Note:	Wood red brown to dark brown, with lighter veins. Very important internal stresses. Presence of resin veins. Unpleasant odour when green.

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 *:	0.88 g/cm <sup>3</sup>	0.06			
Monnin hardness*:	7.0	1.2	Crushing strength *:	72 MPa	7
Coef of volumetric shrinkage:	0.42 %	0.09	Static bending strength *:	120 MPa	11
Total tangential shrinkage:	6.5 %	1.1	Modulus of elasticity *:	18450 MPa	3100
Total radial shrinkage:	2.3 %	0.6			
Fibre saturation point:	29 %				
Stability:	Moderately 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 1 - very durable	* ensured by natural durability (according EN standards).
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)	
Termites:	Class D - Durable	
Treatability:	4 - not permeable	
Use class*:	4 - in ground or fresh water contact	
Note:	This species is listed in the European standard NF EN 350-2. Natural durability class and use class mentioned are those of Eperua falcata. Eperua grandiflora and Eperua rubiginosa have a poorer durability. Eperua falcata naturally covers use class 5 (end-uses in marine environment and in brackish water) due to its high density.	

#### MAIN LOCAL NAMES

Countries	Local names
Brazil (Amazon)	APA
Brazil (Amazon)	APAZEIRO
Brazil (Amazon)	COPAIBARANA
Brazil (Amazon)	ESPADEIRA
French Guiana	BIOUDOU
French Guiana	WAPA
Guyana	ITURI WALLABA
Guyana	WALLABA
Surinam	BIJLHOUT
Surinam	WALABA
Venezuela	UAPA
Venezuela	PALO MACHETE

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**REQUIREMENT OF A PRESERVATIVE TREATMENT**


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Against dry wood borer attacks:	Does not require any preservative treatment
In case of temporary humidification risk:	Does not require any preservative treatment
In case of permanent humidification risk:	Does not require any preservative treatment

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**DRYING**

## Possible drying schedule

		Temperature (°C)		Air humidity (%)	
		M.C. (%)	dry-bulb		wet-bulb
Drying rate:	Slow				
Risk of distortion:	High risk				
Risk of casehardening:	No				
Risk of checking:	High risk				
Risk of collapse:	No				
		Green	42	41	94
		50	48	43	74
		30	54	46	63
		20	60	51	62
		15	60	51	62

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: Initial surface drying is necessary before kiln drying in order to reduce defects.

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**SAWING AND MACHINING**

Blunting effect:	Fairly high
Sawteeth recommended:	Stellite-tipped
Cutting tools:	Tungsten carbide
Peeling:	Not recommended or without interest
Slicing:	Not recommended or without interest
Note:	Requires power. Resin may clog sawteeth and cutters. Resin exudation is not a problem with dry woods.

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**ASSEMBLING**

Nailing / Screwing:	Good but pre-boring necessary
Gluing:	Correct
Note:	Tends to split when nailing.

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**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).

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Note: Internal stresses restrict the uses. Careful sanding and filling are recommended.

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Hydraulic works (fresh water)

Sleepers

Posts

Stakes

Bridges (parts in contact with water or ground)

Bridges (parts not in contact with water or ground)

Exterior panelling

Shingles

Heavy carpentry

Exterior joinery

Current furniture or furniture components

Industrial or heavy flooring

Flooring

Wood frame house

Cooperage

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