

Common name:	PIN DE PARANA
Family:	ARAUCARIACEAE
Scientific name(s):	Araucaria angustifolia

LOG DESCRIPTION		WOOD DESCRIPTION	
Diameter:	from 80 to 120 cm	Colour:	Light yellow
Thickness of sapwood:	from to cm	Sapwood:	Not clearly demarcated
Floats:	yes	Texture:	Fine
Durability in forest :	Low (must be treated)	Grain:	Straight
		Interlocked grain:	Absent
Note:	Frequent purplish pink veins in heartwood.		

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 *:	0.54 g/cm <sup>3</sup>	0.05			
Monnin hardness*:	2.5	0.7	Crushing strength *:	54 MPa	8
Coef of volumetric shrinkage:	0.48 %	0.05	Static bending strength *:	89 MPa	14
Total tangential shrinkage:	7.4 %	1.5	Modulus of elasticity *:	12980 MPa	2510
Total radial shrinkage:	3.8 %	1.2			
Fibre saturation point:	27 %				
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 4-5 poorly to not 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	
Biological hazard class*:	1 - not in ground contact, under cover (no dampness)	
Note:	This species is listed in the European standard NF EN 350-2. Sapwood often very important; end-uses under biological hazard class 4 possible with an adequate preservative treatment. Prone to blue stain.	

#### COUNTRIES - LOCAL NAMES

Countries	Local names
Argentina	CURIY
Argentina	PINO PARANA
Brazil (South)	PINHEIRO
Brazil (South)	PINHEIRO DE PARANA
Brazil (South)	PINHEIRO DO BRASIL
Brazil (South)	PINHO BRASILEIRO
Chile	ARAUCARIA
Paraguay	PINHEIRO DO BRASIL
Paraguay	PINO BLANCO
France	PIN PARANA
United Kingdom	ARAUCARIA
United Kingdom	CHILEAN PINE
United Kingdom	PARANA PINE

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:	Requires appropriate preservative treatment

DRYING

Possible drying schedule

		Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Drying rate:	Normal to slow				
Risk of distortion:	Slight risk				
Risk of casehardening:	No				
Risk of checking:	Slight risk	Green	42	39	82
Risk of collapse:	No	50	48	43	74
		40	48	43	74
		30	48	43	74
		15	54	46	63

This shedule 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: Darker colored wood dries slowly with a strong tendency to cracks and distortions.

SAWING AND MACHINING

Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Good
Note:	Internal stresses in the wood may cause distortion in machining.

ASSEMBLING

Nailing / Screwing:	Good
Gluing:	Correct

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).

- Interior joinery
- Interior panelling
- Light carpentry
- Posts
- Moulding
- Flooring
- Boxes and crates
- Veneer for back or face of plywood
- Veneer for interior of plywood
- Current furniture or furniture components
- Pulp
- Blockboard
- Fiber or particle boards
- Matches
- Cooperage
- Cabinetwork (high class furniture)
- Sliced veneer