

Common name:	TORNILLO
Family:	MIMOSACEAE
Scientific name(s):	Cedrelinga catenaeformis

LOG DESCRIPTION	WOOD DESCRIPTION
Diameter: from 70 to 120 cm	Colour: Light brown
Thickness of sapwood: from 5 to 8 cm	Sapwood: Not clearly demarcated
Floats: yes	Texture: Coarse
Durability in forest : Low (must be treated)	Grain: Straight or interlocked
	Interlocked grain: Slight
Note:	Heartwood light brown with pink or orange glints. Grain sometimes oblique.

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 *: 0.51 g/cm ³ 0.08	Crushing strength *: 38 MPa 8
Monnin hardness*: 2.0 1.0	Static bending strength *: 70 MPa 13
Coef of volumetric shrinkage: 0.46 % 0.03	Modulus of elasticity *: 10900 MPa 942
Total tangential shrinkage: 6.9 % 0.9	
Total radial shrinkage: 3.8 % 0.7	
Fibre saturation point: 29 %	
Stability: Moderately stable	(* : at 12 % moisture content ; 1 MPa = 1 N/mm ²)
Note:	TORNILLO properties vary according to the origin.

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:	2-3 - poorly to moderately permeable	
Use class*:	2 - inside or under cover (dampness possible)	
Note:	This species is listed in the European standard NF EN 350-2.	

Countries	Local names
Brazil	CEDRORANA
Colombia	ACHAPO
Colombia	CEDRORANA
Ecuador	CHUNCHO
Ecuador	SEIQUE
Ecuador	SEIQUI
Ecuador	TSAIK
French Guiana	DON CEDE
Peru	CEDRO TORNILLO
Peru	HUAYRA CASPI
Peru	TORNILLO

TORNILLO

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

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

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.

SAWING AND MACHINING

Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Not recommended or without interest
Note:	Fuzzy surface. Sawdust can irritate nose and throat. Filing is recommended in order to obtain a better finish.

ASSEMBLING

Nailing / Screwing:	Poor
Gluing:	Correct
Note:	Nails holding varies according to specific gravity.

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).

Formwork
Moulding
Turned goods
Interior joinery
Veneer for interior of plywood
Blockboard
Current furniture or furniture components
Pulp
Boxes and crates
Fiber or particle boards
Exterior joinery
Exterior panelling
Interior panelling
Glued laminated
Wood frame house
