

Common name:	CEDRO
Family:	MELIACEAE
Scientific name(s):	Cedrela odorata Cedrela fissilis
Note:	Wood of the Cedrela odorata species, coming from Colombia, Guatemala and Peru, are listed in CITES (Convention on International Trade in Endangered Species of wild fauna and flora), appendix 3 and in the European Union Regulation, appendix C. Parts of wood and wood-made products which are regulated are defined by a note: all parts and products. To trade these parts and products, the exporting or re-exporting country must emit a CITES permit or certificate and an importation notification is compulsory to import within the EU.

LOG DESCRIPTION		WOOD DESCRIPTION	
Diameter:	from 60 to 120 cm	Colour:	Brown
Thickness of sapwood:	from 3 to 5 cm	Sapwood:	Clearly demarcated
Floats:	yes	Texture:	Medium
Durability in forest :	Moderate (treatment recommended)	Grain:	Straight
		Interlocked grain:	Absent
Note:	Distinctive cedar scent. Sporadic or sometimes important resin stains. Colour variable, pink to red brown.		

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 *:	0.46 g/cm ³	0.05			
Monnin hardness*:	1.6	0.4	Crushing strength *:	38 MPa	6
Coef of volumetric shrinkage:	0.38 %	0.05	Static bending strength *:	62 MPa	12
Total tangential shrinkage:	6.0 %	0.6	Modulus of elasticity *:	9210 MPa	1753
Total radial shrinkage:	3.9 %	0.8			
Fibre saturation point:	29 %				
Stability:	stable		(* : at 12 % moisture content ; 1 MPa = 1 N/mm ²)		
Note:	Specific gravity varies according to origins.				

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 2 - durable	* ensured by natural durability (according EN standards).
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)	
Termites:	Class M - Moderately durable	
Treatability:	3-4 - poorly or not permeable	
Use class*:	3 - not in ground contact, outside	
Note:	The specie <i>C. odorata</i> is listed in the European standard NF EN 350-2. Part of the CEDRO commercialized today in the world comes from young plantations often constituted by woods with lower properties than the woods from natural forests. These juvenile woods especially present an incomplete duraminisation which explains their lower natural durability compared to the durability of more mature woods. According to the European standard NF EN 335, performance length might be modified by the intensity of end-use exposition.	

MAIN LOCAL NAMES

Countries	Local names
Brazil	CEDRO
French Guiana	CEDRAT
French Guiana	CEDRO
Honduras	CIGARBOX
Surinam	CEDER

CEDRO

REQUIREMENT OF A PRESERVATIVE TREATMENT

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:	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	50	47	84
Risk of casehardening:	No	40	50	45	75
Risk of checking:	Slight risk	30	55	47	67
Risk of collapse:	Yes	20	70	55	47
		15	75	58	44

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: Light wood must be dried at low temperature in order to avoid risks of collapse.

SAWING AND MACHINING

Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Good
Note:	The presence of resin may cause the clogging of saw blades. Surface sometimes fuzzy.

ASSEMBLING

Nailing / Screwing:	Poor
Gluing:	Correct
Note:	Gluing must be done with care due to resin exudations.

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: Mentionned end-uses depend on the specific gravity and on the importance of resin (especially for furniture and interior joinery).

Veneer for back or face of plywood Seats

Sliced veneer

Interior joinery

Interior panelling

Cigar boxes

Cabinetwork (high class furniture)

Current furniture or furniture components

Light carpentry

Glued laminated

Wood frame house

Exterior joinery

Boxes and crates

Ship building (planking and deck)

Musical instruments

Fiber or particle boards

Shingles

Moulding

Sculpture

Formwork

Wood-ware
