Common name:	CEDRO
Family:	MELIACEAE
Scientific name(s):	Cedrela spp.

LOG DESCRIPTION

Diameter:	from 60 to 120 cm
Thickness of sapwood:	from 3 to 5 cm
Floats:	yes
Durability in forest :	Moderate (treatment recommended)
Note:	Distinctive cedar scent. Sporadic or sometimes important resin stains. Colour variable, pink to red brown.

WOOD DESCRIPTION

Colour:	Brown
Sapwood:	Clearly demarcated
Texture:	Medium
Grain:	Straight
Interlocked grain:	Absent

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
Density *:	0.46 g/cm3	0.05
Monnin hardness*:	1.6	0.4
Coef of volumetric shrinkage:	0.38 %	0.05
Total tangential shrinkage:	6.0 %	0.6
Total radial shrinkage:	3.9 %	0.8
Fibre saturation point:	29 %	

	mean	standard deviation
Crushing strength *:	38 MPa	6
Static bending strength *:	62 MPa	12
Modulus of elasticity *:	9210 MPa	1753

Stability: stable

(* : at 12 % moisture content ; 1 MPa = 1 N/mm2)

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
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)
Termites:	Class S - Susceptible
Treatability:	3-4 - poorly or not permeable
Biological hazard class*:	3 - not in ground contact, outside exposed
Note:	This species 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. Poorly to moderately resistant to termites.

* ensured by natural durability (according EN standards).

COUNTRIES - LOCAL NAMES

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

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

Drying rate:	Rapid
Risk of distortion:	Slight risk
Risk of casehardening:	No
Risk of checking:	Slight risk
Risk of collapse:	Yes

Possible drying schedule

M.C. (%)	Temperature (°C) dry-bulb	wet-bulb	Air humidity (%)
Green	50	47	84
40	50	45	75
30	55	47	67
20	70	55	47
15	75	58	44

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: 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
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
Seats