Common name:	IPE
Family:	BIGNONIACEAE
Scientific name(s):	Tabebuia spp.
Note:	Some species of the Tabebuia genus (such as T. pallida) have a limited commercial interest.

LOG DESCRIPTION

Diameter:	from 60 to 100 cm
Thickness of sapwood:	from 3 to 9 cm
Floats:	no
Durability in forest :	Good
Note:	Somes species have a medium texture. Heartwood is yellowish brown to dark olive brown, sometimes with thin veins. Cànals contain a greenish yellow deposit (lapachol).

WOOD DESCRIPTION

Colour:	Brown
Sapwood:	Clearly demarcated
Texture:	Fine
Grain:	Interlocked
Interlocked grain:	Marked

PHYSICAL 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 *:	1.04 g/cm3	0.09
Monnin hardness*:	14.6	3.1
Coef of volumetric shrinkage:	0.68 %	0.09
Total tangential shrinkage:	6.4 %	0.9
Total radial shrinkage:	5.1 %	0.5
Fibre saturation point:	20 %	
Stability:	Moderately stable	

MECHANICAL PROPERTIES

	mean	standard deviation
Crushing strength *:	95 MPa	10
Static bending strength *:	166 MPa	28
Modulus of elasticity *:	22760 MPa	2244

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

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
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)
Termites:	Class D - Durable
Treatability:	4 - not permeable
Biological hazard class*:	4 - in ground or fresh water contact or hight dampness
Note:	Due to its high specific gravity and hardness, this species naturally covers the biological hazard class 5 (end-uses in marine environment or in brackish water).

* ensured by natural durability (according EN standards).

COUNTRIES - LOCAL NAMES

Countries	Local names
Argentina	LAPACHO
Bolivia	IPE
Bolivia	LAPACHO
Bolivia	TAJIBO
Brazil	IPE
Brazil	IPE ROXO
Brazil	PAU D'ARCO
Colombia	CANAGUATE
Colombia	POLVILLO
Colombia	ROBLE MORADO
French Guiana	EBENE VERTE
Guyana	HAKIA
Guyana	IRONWOOD
Paraguay	LAPACHO NEGRO
Peru	EBANO VERDE
Peru	TAHUARI
Surinam	GROENHART
Trinidad and Tobago	PUY
Trinidad and Tobago	YELLOW POUI
Venezuela	ACAPRO
Venezuela	ARAGUANEY
Venezuela	PUY

IPE

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:	Does not require any preservative treatment

DRYING

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

Possible drying schedule

M.C. (%)	Temperature (°C) dry-bulb	wet-bulb	Air humidity (%)
30	42	41	94
25	42	39	82
20	48	43	74
15	48	43	74

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: A slow kiln drying is recommended in order to reduce defects, especially with thick boards.

SAWING AND MACHINING

Blunting effect:	Fairly high
Sawteeth recommended:	Stellite-tipped
Cutting tools:	Tungsten carbide
Peeling:	Not recommended or without interest
Slicing:	Good
Note:	Sawdust may cause dermatosis. Some difficulties due to interlocked grain.

ASSEMBLING

Nailing / Screwing:	Good but pre-boring necessary
Gluing:	Correct (for interior only)
Note:	Gluing must be done with care (very dense wood).

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: Filling is recommended to obtain a good finish.

Cabinetwork (high class furniture)
Sliced veneer
Current furniture or furniture components
Sleepers
Bridges (parts in contact with water or ground)
Industrial or heavy flooring
Ship building (planking and deck)
Posts
Stakes
Hydraulic works (fresh water)
Moulding
Bridges (parts not in contact with water or ground)
Stairs (inside)
Heavy carpentry
Turned goods
Musical instruments
Tool handles (resilient woods)
Vehicle or container flooring

Hydraulic works (seawater)