

Family: LAURACEAE (angiosperm)

Scientific name(s): Ocotea porosa

Phoebe porosa (synonymous)

Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: yellow brown
Sapwood: clearly demarcated
Texture: fine
Grain: straight or interlocked
Interlocked grain: slight

Note: Heartwood yellow brown to dark brown with irregular thin darker veins. Pleasant scent.

LOG DESCRIPTION

Diameter: from 80 to 120 cm
Thickness of sapwood: from 3 to 6 cm
Floats: yes
Log durability: moderate (treatment recommended)

PHYSICAL PROPERTIES

Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.

	<u>Mean</u>	<u>Std dev.</u>
Specific gravity *:	0,71	0,08
Monnin hardness *:	4,9	1,2
Coeff. of volumetric shrinkage:	0,45 %	0,06 %
Total tangential shrinkage (TS):	6,8 %	0,9 %
Total radial shrinkage (RS):	3,3 %	0,6 %
TS/RS ratio:	2,1	
Fiber saturation point:	25 %	
Stability: stable		

MECHANICAL AND ACOUSTIC PROPERTIES

	<u>Mean</u>	<u>Std dev.</u>
Crushing strength *:	49 MPa	5 MPa
Static bending strength *:	84 MPa	11 MPa
Modulus of elasticity *:	9260 MPa	145 MPa

(*: at 12% moisture content, with 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.

E.N. = Euro Norm

Funghi (according to E.N. standards): class 3 - moderately durable

Dry wood borers: durable - sapwood demarcated (risk limited to sapwood)

Termites (according to E.N. standards): class M - moderately durable

Treatability (according to E.N. standards): class 2 - moderately permeable

Use class ensured by natural durability: class 2 - inside or under cover (dampness possible)

Species covering the use class 5: No

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: does not require any preservative treatment

In case of risk of temporary humidification: requires appropriate preservative treatment

In case of risk of permanent humidification: use not recommended

DRYING

Drying rate: slow

Risk of distortion: slight risk

Risk of casehardening: no

Risk of checking: slight risk

Risk of collapse: yes

Note: Slow drying recommended

Possible drying schedule: 3

M.C. (%)	Temperature (°C)		Air humidity (%)
	dry-bulb	wet-bulb	
Green	60	56	81
30	68	58	61
20	74	60	51
15	80	61	41

This schedule is given for information only and is applicable to thickness lower or equal to 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: good

Note: Sawdust may cause dermatosis.

ASSEMBLING

Nailing / screwing: good

Gluing: correct

COMMERCIAL GRADING

Appearance grading for sawn timbers: According to NHLA grading rules (January 2007)

Possible grading: FAS, Select, Common 1, Common 2, Common 3

FIRE SAFETY

Conventional French grading: Thickness > 14 mm : M.3 (moderately inflammable)

Thickness < 14 mm : M.4 (easily inflammable)

Euroclasses grading: D s2 d0

Default grading for solid wood, according to requirements of European standard EN 14081-1 annex C (April 2009). It concerns structural graded timber in vertical uses with mean density upper 0.35 and thickness upper 22 mm.

END-USES

Sliced veneer

Cabinetwork (high class furniture)

Flooring

Veneer for back or face of plywood

Light carpentry

Turned goods

Ship building (planking and deck)

Exterior panelling

Current furniture or furniture components

Interior panelling

Interior joinery

Moulding

Wood frame house

Stairs (inside)

Exterior joinery

Note: Used as a substitute for the European WALNUT (*Juglans regia*). Recommended for high class end-uses.

MAIN LOCAL NAMES

CountryLocal name

Brazil (South)

CANELA IMBUIA

Brazil (South)

IMBUIA

United States of America

BRAZILIAN WALNUT

CountryLocal name

Brazil (South)

EMBUIA

United Kingdom

BRAZILIAN WALNUT

