

Common name:	MOGNO
Family:	MELIACEAE
Scientific name(s):	Swietenia macrophylla Swietenia humilis
Note:	In France, Swietenia macrophylla is also called "West Indies Mahogany". It is exploited and used in Martinique. Do not confuse with Swietenia mahogany whose trade is regulated by CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora).

LOG DESCRIPTION		WOOD DESCRIPTION	
Diameter:	from 60 to 130 cm	Colour:	Red brown
Thickness of sapwood:	from 2 to 5 cm	Sapwood:	Clearly demarcated
Floats:	yes	Texture:	Medium
Durability in forest :	Moderate (treatment recommended)	Grain:	Straight or interlocked
Note:	Sometimes, internal stresses.	Interlocked grain:	Slight

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 *:	0.60 g/cm ³	0.07			
Monnin hardness*:	3.4	0.8	Crushing strength *:	54 MPa	8
Coef of volumetric shrinkage:	0.40 %	0.05	Static bending strength *:	85 MPa	13
Total tangential shrinkage:	3.7 %	0.8	Modulus of elasticity *:	10790 MPa	1281
Total radial shrinkage:	2.6 %	0.5			
Fibre saturation point:	23 %				
Stability:	stable		(* : at 12 % moisture content ; 1 MPa = 1 N/mm ²)		

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 S - Susceptible	
Treatability:	4 - not permeable	
Biological hazard class*:	2 - not in ground contact, under cover (dampness possible)	
Note:	Part of the MOGNO 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.	

COUNTRIES - LOCAL NAMES

Countries	Local names	Countries	Local names
Bolivia	CAOBA	Germany	MAHONIA
Bolivia	MARA	Italia	MOGANO
Brazil	AGUANO	Spain	CAOBA
Brazil	ARAPUTANGA	United Kingdom	MAHOGANY
Brazil	MOGNO		
Colombia	CAOBA		
Cuba	CAOBA		
Dominican republic	MAHOGANY		
Guatemala	CHACALTE		
Haiti	MAHOGANY		
Peru	AGUANO		
Peru	CAOBA		
Venezuela	ORURA		
France	ACAJOU D'AMERIQUE		

MOGNO

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	M.C. (%)	Temperature (°C)		Air humidity (%)
			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:	No	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.

SAWING AND MACHINING

Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Ordinary
Peeling:	Good
Slicing:	Good

ASSEMBLING

Nailing / Screwing:	Good
Gluing:	Correct

END-USES

Main known end-uses; they must to be implemented according to the code of practice.

Important remark: some end-uses are mentioned for information (traditional, regional or ancient end-uses).

Cabinetwork (high class furniture)
Current furniture or furniture components
Interior panelling
Ship building (planking and deck)
Sliced veneer
Wood-ware
Veneer for interior of plywood
Veneer for back or face of plywood
Interior joinery
Exterior joinery
Exterior panelling
Turned goods
Arched goods
Musical instruments
Moulding
Light carpentry
