Common name:	MOGNO
Family:	MELIACEAE
Scientific name(s):	Swietenia macrophylla Swietenia humilis
Note:	The three species of Swietenia (S. macrophylla, S. humilis and S. mahagoni) are listed in CITES (Convention on International Trade in Endangered Species of wild fauna and flora), appendix II and in the European Union Regulation, appendix B. Parts of wood and wood-made products which are regulated are defined by notes: S. humilis (all parts and products), S. mahagoni (logs, sawing woods and veneers), S. macrophylla (logs, sawing woods, veneers and plywoods). To trade these parts and products, the exporting or re-exporting country must emit a CITES permit or certificate and an importation permit is compulsory to import within the EU.

LOG DESCRIPTION

Diameter:	from 60 to 130 cm
Thickness of sapwood:	from 2 to 5 cm
Floats:	yes
Durability in forest :	Moderate (treatment recommended)
Note:	Sometimes, internal stresses.

WOOD DESCRIPTION

Colour:	Red brown
Sapwood:	Clearly demarcated
Texture:	Medium
Grain:	Straight or interlocked
Interlocked grain:	Slight

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 *:	0.60 g/cm3	0.07
Monnin hardness*:	3.4	0.8
Coef of volumetric shrinkage:	0.40 %	0.05
Total tangential shrinkage:	3.7 %	0.8
Total radial shrinkage:	2.6 %	0.5
Fibre saturation point:	23 %	
Stability:	stable	

MECHANICAL PROPERTIES

	mean	standard deviation
Crushing strength *:	54 MPa	8
Static bending strength *:	85 MPa	13
Modulus of elasticity *:	10790 MPa	1281

(* : 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 2 - durable
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)
Termites:	Class S - Susceptible
Treatability:	4 - not permeable
Use class*:	2 - inside or 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.

* ensured by natural durability (according EN standards).

MAIN LOCAL NAMES

Countries	Local names
Bolivia	CAOBA
Bolivia	MARA
Brazil	AGUANO
Brazil	ARAPUTANGA
Brazil	MOGNO
Colombia	CAOBA
Cuba	CAOBA
Dominican republic	MAHOGANY
Guatemala	CHACALTE
Haiti	MAHOGANY
Peru	AGUANO
Peru	CAOBA
Venezuela	ORURA

Countries	Local names
France	ACAJOU D'AMERIQUE
Germany	MAHONIA
Italia	MOGANO
Spain	CAOBA
United Kingdom	MAHOGANY

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

Drying rate:	Rapid
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 (%)
Green	50	47	84
40	50	45	75
30	55	47	67
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 mentionned 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