

Common name:	MORA
Family:	CAESALPINIACEAE
Scientific name(s):	Mora excelsa Mora gonggrijpii Mora megistosperma Mora paraensis

LOG DESCRIPTION		WOOD DESCRIPTION	
Diameter:	from 60 to 150 cm	Colour:	Red brown
Thickness of sapwood:	from 5 to 15 cm	Sapwood:	Clearly demarcated
Floats:	no	Texture:	Medium
Durability in forest :	Good	Grain:	Interlocked
		Interlocked grain:	Marked
Note:	Heartwood pinkish brown to red brown with sometimes thin darker veins.		

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 *:	1.03 g/cm ³	0.03			
Monnin hardness*:	8.6	2.1	Crushing strength *:	80 MPa	6
Coef of volumetric shrinkage:	0.68 %	0.04	Static bending strength *:	141 MPa	13
Total tangential shrinkage:	10.0 %	1.5	Modulus of elasticity *:	18940 MPa	2356
Total radial shrinkage:	6.5 %	1.1			
Fibre saturation point:	26 %				
Stability:	Moderately stable to poorly 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 1 - very durable	* ensured by natural durability (according EN standards).
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)	
Termites:	Class D - Durable	
Treatability:	3 - poorly permeable	
Use class*:	4 - in ground or fresh water contact	
Note:	According to the European standard NF EN 335, performance length might be modified by the intensity of end-use exposition.	

MAIN LOCAL NAMES

Countries	Local names
Brazil	PRACUUBA
Brazil	PRACUUBA BRANCA
Brazil	PRACUUBA VERMELHA
Colombia	NATO
Colombia	NATO ROJO
Ecuador	NATO
French Guiana	MORA
Guyana	MORA
Guyana	MORABUKEA
Panama	ALCORNOQUE
Surinam	MORA
Surinam	MORABOEKEA
Trinidad and Tobago	MORA
Venezuela	MORA

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

Possible drying schedule

	Drying rate:	Slow	Temperature (°C)		Air humidity (%)	
			M.C. (%)	dry-bulb		wet-bulb
Risk of distortion:	High risk					
Risk of casehardening:	No					
Risk of checking:	High risk		Green	40	37	82
Risk of collapse:	Yes		40	44	38	68
			30	44	36	59
			20	46	36	52
			15	49	37	46

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.

Note: Slow and careful drying recommended to reduce defects.

SAWING AND MACHINING

Blunting effect:	Fairly high
Sawteeth recommended:	Stellite-tipped
Cutting tools:	Tungsten carbide
Peeling:	Not recommended or without interest
Slicing:	Not recommended or without interest
Note:	Hard to saw due to hardness and interlocked grain.

ASSEMBLING

Nailing / Screwing:	Good but pre-boring necessary
Gluing:	Correct (for interior only)
Note:	Gluing requires 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: Excellent to produce charcoal.

Sleepers

Heavy carpentry

Hydraulic works (fresh water)

Bridges (parts in contact with water or ground)

Industrial or heavy flooring

Posts

Bridges (parts not in contact with water or ground)

Turned goods

Tool handles (resilient woods)