

Common name:	NIANGON
Family:	STERCULIACEAE
Scientific name(s):	Tarrietia densiflora Heritiera densiflora (synonymous) Tarrietia utilis Heritiera utilis (synonymous)
Note:	Genera Tarrietia and Heritiera are synonymous.

LOG DESCRIPTION		WOOD DESCRIPTION	
Diameter:	from 70 to 90 cm	Colour:	Red brown
Thickness of sapwood:	from 3 to 4 cm	Sapwood:	Clearly demarcated
Floats:	no	Texture:	Medium
Durability in forest :	Moderate (treatment recommended)	Grain:	Interlocked
		Interlocked grain:	Slight
Note:	Wood pink brown to purplish red brown, becoming bronze with age. Large and visible silver figure. Oily to the touch.		

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 *:	0.70 g/cm ³	0.08			
Monnin hardness*:	3.8	0.8	Crushing strength *:	55 MPa	7
Coef of volumetric shrinkage:	0.45 %	0.09	Static bending strength *:	103 MPa	14
Total tangential shrinkage:	8.8 %	1.3	Modulus of elasticity *:	14430 MPa	1667
Total radial shrinkage:	4.2 %	0.9			
Fibre saturation point:	32 %				
Stability:	Moderately stable		(* : at 12 % moisture content ; 1 MPa = 1 N/mm ²)		
Note:	T. utilis has properties slightly lower than T. densiflora which presents sometimes an irregular grain.				

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 3 moderately durable	* ensured by natural durability (according EN standards).
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)	
Termites:	Class M - Moderately durable	
Treatability:	4 - not permeable	
Use class*:	2 - inside or under cover (dampness possible)	
Note:	This species is listed in the European standard NF EN 350-2. The NIANGON cannot be used without appropriate preservative treatment for end-uses under use class 3, except for some parts of a work such as windows, less exposed than others (entrance doors, shutters ...).	

MAIN LOCAL NAMES

Countries	Local names
Côte d'Ivoire	NIANGON
Gabon	OGOUE
Ghana	NIANGON
Ghana	NYANKOM
Liberia	WHISMORE
Sierra Leone	YAMI

NIANGON

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks:	Does not require any preservative treatment
In case of temporary humidification risk:	Requires appropriate preservative treatment
In case of permanent humidification risk:	Use not recommended

DRYING

Possible drying schedule

Drying rate:	Rapid to normal	Temperature (°C)			Air humidity (%)
		M.C. (%)	dry-bulb	wet-bulb	
Risk of distortion:	High 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.

Note: High risk of distortion for thin sections with highly interlocked grain; initial surface drying prior to kiln drying is then recommended.

SAWING AND MACHINING

Blunting effect:	Fairly high
Sawteeth recommended:	Stellite-tipped
Cutting tools:	Tungsten carbide
Peeling:	Good
Slicing:	Good
Note:	Risk of clogging and overheating of blades and tools. Risk of tearing in machining. Peeling is not recommended: irregular logs.

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).

Note: The decorative veneer is sliced. Filling is recommended in order to obtain a good finish.

Exterior joinery
Exterior panelling
Interior joinery
Interior panelling
Current furniture or furniture components
Sliced veneer
Veneer for back or face of plywood
Stairs (inside)
Flooring
Moulding
Shingles
Cabinetwork (high class furniture)
Ship building (planking and deck)
Light carpentry
Resistant to one or several acids
