

Common name:	ZINGANA
Family:	CAESALPINIACEAE
Scientific name(s):	Microberlinia brazzavillensis Microberlinia bisulcata

LOG DESCRIPTION		WOOD DESCRIPTION	
Diameter:	from 60 to 100 cm	Colour:	Light brown
Thickness of sapwood:	from 6 to 10 cm	Sapwood:	Clearly demarcated
Floats:	no	Texture:	Coarse
Durability in forest :	Moderate (treatment recommended)	Grain:	Interlocked
Note:	Wood yellow brown to light brown, with dark brown veins. Sometimes highly interlocked grain.		

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 *:	0.79 g/cm <sup>3</sup>	0.03	Crushing strength *:	62 MPa	11
Monnin hardness*:	5.0	0.9	Static bending strength *:	110 MPa	37
Coef of volumetric shrinkage:	0.56 %	0.07	Modulus of elasticity *:	17520 MPa	
Total tangential shrinkage:	11.0 %				
Total radial shrinkage:	8.8 %				
Fibre saturation point:	30 %				
Stability:	Moderately stable		(* : at 12 % moisture content ; 1 MPa = 1 N/mm <sup>2</sup> )		

#### 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:	3 - poorly permeable	
Biological hazard class*:	2 - not in ground contact, under cover (dampness possible)	

#### COUNTRIES - LOCAL NAMES

Countries	Local names
Cameroon	ALLEN ELE
Gabon	ZINGANA
Germany	ZEBRANO
United Kingdom	ZEBRANO
United Kingdom	ZEBRAWOOD

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## ZINGANA

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### REQUIREMENT OF A PRESERVATIVE TREATMENT

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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

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### 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				
Risk of collapse:	No	30	42	41	94
		25	42	39	82
		20	48	43	74
		15	48	43	74

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This shedule 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: Sawnwoods must be properly stacked, dried slowly and preferably on quartersawn in order to reduce distortions.

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### SAWING AND MACHINING

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Blunting effect:	Normal
Sawteeth recommended:	Ordinary or alloy steel
Cutting tools:	Tungsten carbide
Peeling:	Not recommended or without interest
Slicing:	Good
Note:	Risk of tearing in presence of highly interlocked grain.

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### ASSEMBLING

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Nailing / Screwing:	Good but pre-boring necessary
Gluing:	Correct

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### 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).

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Sliced veneer  
Cabinetwork (high class furniture)  
Current furniture or furniture components  
Interior panelling  
Turned goods  
Wood-ware  
Tool handles (resilient woods)  
Wood frame house

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