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

LOG DESCRIPTION

Diameter:	from 60 to 100 cm
Thickness of sapwood:	from 6 to 10 cm
Floats:	no
Durability in forest :	Moderate (treatment recommended)
Note:	Wood yellow brown to light brown, with dark brown veins. Sometimes highly interlocked grain.

WOOD DESCRIPTION

Colour:	Light brown
Sapwood:	Clearly demarcated
Texture:	Coarse
Grain:	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 *:	0.79 g/cm3	0.03
Monnin hardness*:	5.0	0.9
Coef of volumetric shrinkage:	0.56 %	0.07
Total tangential shrinkage:	11.0 %	
Total radial shrinkage:	8.8 %	
Fibre saturation point:	30 %	
Stability:	Moderately stable	

MECHANICAL PROPERTIES

	mean	standard deviation
Crushing strength *:	62 MPa	11
Static bending strength *:	110 MPa	37
Modulus of elasticity *:	17520 MPa	

(* : 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 3 moderately durable
Dry wood borers:	Durable; sapwood demarcated (risk limited to sapwood)
Termites:	Class M - Moderately durable
Treatability:	3 - poorly permeable
Use class*:	2 - inside or under cover (dampness possible)

* ensured by natural durability (according EN standards).

MAIN LOCAL NAMES

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

ZINGANA

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

Drying rate:	Slow
Risk of distortion:	High risk
Risk of casehardening:	No
Risk of checking:	High risk
Risk of collapse:	No

Possible drying schedule

M.C. (%)	Temperature (°C) dry-bulb	wet-bulb	Air humidity (%)
30	42	41	94
25	42	39	82
20	48	43	74
15	48	43	74

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

SAWING AND MACHINING

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.

ASSEMBLING

Nailing / Screwing:	Good but pre-boring necessary
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).

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