ILOMBA Page 1 of 4

Family: MYRISTICACEAE (angiosperm)

Scientific name(s): Pycnanthus angolensis

Pycnanthus kombo (synonymous)

Commercial restriction: no commercial restriction

WOOD DESCRIPTION

LOG DESCRIPTION

Color: pinkish brown Diameter: from 60 to 80 cm

Sapwood: not demarcated Thickness of sapwood:

Texture: coarse Floats: yes

Grain: straight Log durability: low (must be treated)

Interlocked grain: absent

Note: Possible presence of brittleheart. Strong tendency to shakes.

Wood pinkish brown to light brown.

PHYSICAL PROPERTIES

MECHANICAL AND ACOUSTIC PROPERTIES

Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions.

	<u>Mean</u>	Std dev.		Mean	Std dev.
Specific gravity *:	0,49	0,08	Crushing strength *:	38 MPa	8 MPa
Monnin hardness *:	1,4	0,5	Static bending strength *:	63 MPa	13 MPa
Coeff. of volumetric shrinkage:	0,39 %	0,12 %	Modulus of elasticity *:	10130 MPa	2021 MPa
Total tangential shrinkage (TS):	8,6 %	1,3 %			
Total radial shrinkage (RS):	4,6 %	0,7 %	(*: at 12% moisture con	itent, with 1 M	$Pa = 1 N/mm^2$
TS/RS ratio:	1,9				
Fiber saturation point:	33 %		Musical quality factor:	75,8 measured	at 2926 Hz
Stability: poorly stable					

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.

E.N. = Euro Norm

Funghi (according to E.N. standards): class 5 - not durable

Dry wood borers: susceptible - sapwood not or slightly demarcated (risk in all the wood)

Termites (according to E.N. standards): class S - susceptible

Treatability (according to E.N. standards): class 1 - easily permeable

Use class ensured by natural durability: class 1 - inside (no dampness)

Species covering the use class 5: No

Note: This species is listed in the European standard NF EN 350-2

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: requires appropriate preservative treatment In case of risk of temporary humidification: requires appropriate preservative treatment

In case of risk of permanent humidification: use not recommended

ILOMBA Page 2/4

DRYING

Drying rate: normal Possible drying schedule: 4 Risk of distortion: high risk Temperature (°C) Risk of casehardening: no M.C. (%) dry-bulb wet-bulb Air humidity (%) Risk of checking: high risk Green 42 39 82 50 48 43 74 Risk of collapse: yes 48 74 40 43 Note: Drying is difficult for thickness > 54 mm. Steaming 30 48 43 74 strongly recommended before kiln drying (T = 95°C, Humidity = 100 %) during 48 hours. 15 54 46 63

This schedule is given for information only and is applicable to thickness lower or equal to 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: not recommended or without interest

Note: Quartersawn recommended in order to reduce the risks of distortion during drying.

ASSEMBLING

Nailing / screwing: poor Gluing: correct

Note: Tends to split when nailing

COMMERCIAL GRADING

Appearance grading for sawn timbers: According to SATA grading rules (1996)

For the "General Purpose Market":

Possible grading for square edged timbers: choix I, choix II, choix IV

Possible grading for short length lumbers: choix I, choix II
Possible grading for short length rafters: choix I, choix II, choix III

For the "Special Market":

Possible grading for strips and small boards (ou battens): choix I, choix II, choix III

Possible grading for rafters: choix I, choix II, choix III

FIRE SAFETY

Conventional French grading: Thickness > 14 mm : M.3 (moderately inflammable)

Thickness < 14 mm : M.4 (easily inflammable)

Euroclasses grading: D s2 d0

Default grading for solid wood, according to requirements of European standard EN 14081-1 annex C (April 2009). It concerns structural graded timber in vertical uses with mean density upper 0.35 and thickness upper

22 mm.

END-USES

Veneer for interior of plywood

Blockboard
Interior panelling
Boxes and crates

Current furniture or furniture components

Pencils

Veneer for back or face of plywood

Moulding Exterior panelling Interior joinery Rolling shutters ILOMBA Page 3/4

MAIN LOCAL NAMES

Country Local name Country Local name Angola ILOMBA Benin JAJA Cameroon ILOMBA ETENG Congo Ivory Coast WALELE Gabon **ETENG** Ghana OTIE **Equatorial Guinea** CALABO Nigeria AKOMU Central African Republic GELE Democratic Republic of the Congo ILOMBA Democratic Republic of the Congo LIFONDO Democratic Republic of the Congo LOLAKO Sierra Leone **KPOYEI PYCNANTUS** United Kingdom



