

Family: APOCYNACEAE (angiosperm)

Scientific name(s): *Aspidosperma* spp.

Commercial restriction: no commercial restriction

Note: The genus *Aspidosperma* is also associated to other woods (PEROBA ROSA, QUEBRACHO BLANCO, CARRETO, PIQUIA MARFIM). The species ARACACANGA presents a great variability. This data sheet describes ARACACANGA species with a high specific gravity.

WOOD DESCRIPTION

Color: light brown
Sapwood: clearly demarcated
Texture: medium
Grain: straight or interlocked
Interlocked grain: slight
Note: Heartwood orange light brown sometimes with large pink veins.

LOG DESCRIPTION

Diameter: from 60 to 80 cm
Thickness of sapwood: from 3 to 8 cm
Floats: no
Log durability: good

PHYSICAL 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>	<u>Std dev.</u>
Specific gravity *:	0,94	0,08
Monnin hardness *:	8,3	3,2
Coeff. of volumetric shrinkage:	0,75 %	0,09 %
Total tangential shrinkage (TS):	9,8 %	1,3 %
Total radial shrinkage (RS):	6,3 %	1,1 %
TS/RS ratio:	1,6	
Fiber saturation point:	26 %	
Stability: poorly stable		

MECHANICAL AND ACOUSTIC PROPERTIES

	<u>Mean</u>	<u>Std dev.</u>
Crushing strength *:	89 MPa	11 MPa
Static bending strength *:	153 MPa	23 MPa
Modulus of elasticity *:	26140 MPa	5518 MPa

(*: at 12% moisture content, with 1 MPa = 1 N/mm²)

Musical quality factor: 122,7 measured at 2976 Hz

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 1 - very durable

Dry wood borers: durable - sapwood demarcated (risk limited to sapwood)

Termites (according to E.N. standards): class M - moderately durable

Treatability (according to E.N. standards): class 3 - poorly permeable

Use class ensured by natural durability: class 4 - in ground or fresh water contact

Species covering the use class 5: No

Note: According to the European standard NF EN 335, performance length might be modified by the intensity of end-use exposition.

REQUIREMENT OF A PRESERVATIVE TREATMENT

Against dry wood borer attacks: does not require any preservative treatment

In case of risk of temporary humidification: does not require any preservative treatment

In case of risk of permanent humidification: does not require any preservative treatment

DRYING

Drying rate: normal to slow

Risk of distortion: high risk

Risk of casehardening: no

Risk of checking: high risk

Risk of collapse: yes

Possible drying schedule: 4

M.C. (%)	Temperature (°C)		Air humidity (%)
	dry-bulb	wet-bulb	
Green	42	39	82
50	48	43	74
40	48	43	74
30	48	43	74
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: fairly high

Sawteeth recommended: stellite-tipped

Cutting tools: tungsten carbide

Peeling: not recommended or without interest

Slicing: nood

Note: Requires power.

ASSEMBLING

Nailing / screwing: good but pre-boring necessary

Gluing: correct (for interior only)

COMMERCIAL GRADING

Appearance grading for sawn timbers: According to NHLA grading rules (January 2007)

Possible grading: FAS, Select, Common 1, Common 2, Common 4

In French Guiana, the local name of this species is "KOUAMANTI OUDOU". Grading is done according to local rules "Bois guyanais classés".

Possible grading: Choix 1, choix 2, choix 3, choix 4

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

Vehicle or container flooring

Ship building (planking and deck)

Industrial or heavy flooring

Heavy carpentry

Current furniture or furniture components

Sculpture

Exterior panelling

Poles

Note: *Aspidosperma album* is recommended for high class end-uses.

Ship building (ribs)

Sleepers

Hydraulic works (fresh water)

Bridges (parts in contact with water or ground)

Sliced veneer

Cabinetwork (high class furniture)

Flooring

Bridges (parts not in contact with water or ground)

MAIN LOCAL NAMES

<u>Country</u>	<u>Local name</u>	<u>Country</u>	<u>Local name</u>
Belize	MY LADY	Bolivia	GAVETILLO
Brazil	ARARACANGA	Brazil	ARARAUBA
Brazil	JACAMIN	Colombia	COPACHI
Colombia	QUILLO CASPI	Guatemala	CHICHICA
Guyana	SHIBADAN	French Guiana	KIANTIOUTIOU
French Guiana	KOUMANTI OUDOU	Honduras	CHAPEL
Honduras	CHAPERNA	Mexico	VOLADOR
Panama	ALCARRETO	Peru	PUMAQUIRO
Suriname	KROMANTI KOPI	Venezuela	NIELILLO NEGRO

