ANGELIM PEDRA

Family: FABACEAE (angiosperm)
Scientific name(s): *Hymenolobium spp.*
Commercial restriction: no commercial restriction

WOOD DESCRIPTION

Color: orange - yellow
Sapwood: not clearly demarcated
Texture: coarse
Grain: interlocked
Interlocked Grain: slight
Note: Heartwood is yellow brown becoming pinkish brown on exposure. Fairly important waxen patches more or less frequent

LOG DESCRIPTION

Diameter: 27.6 – 47.2 inches
Thickness of Sapwood: 1.2– 2 inches
Floats: no
Log Durability: moderate (treatment recommended)

PHYSICAL PROPERTIES

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

	Mean	Std. Dev.
Specific Gravity*:	0.80	0.07
Janka Hardness (lbs):	1,720	
Volumetric Shrinkage:	0.67%	0.09%
Total Tangential Shrinkage (TS):	8.3%	1.5%
Total Radial Shrinkage (RS):	4.9%	0.8%
TS/RS Ratio:	1.7	
Fiber Saturation Point:	25%	

Stability: Moderately stable to poorly stable

MECHANICAL/ACOUSTIC

	Mean
Crushing Strength*:	9,717 lbf
Static Bending Strength*:	17,259 lbf
Modulus of Elasticity*:	3,026,937 lbf

Musical Quality Factor: 111.9 measured at 2607 Hz

**At 12% moisture content.*

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 3 – moderately 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 4 - moderately permeable
Use class ensured by natural durability: class 2 – inside or under cover (dampness possible)
Species covering the use class 5: no
Note: Resistance to decay moderate to good according to the species.

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

ANGELIM PEDRA

DRYING

Drying Rate: rapid to normal
Risk of Distortion: slight risk
Risk of Casehardening: no
Risk of Checking: slight risk
Risk of Collapse: no
Note: A slower drying speed can avoid defects

Possible Drying Schedule: 3

Temperature (ºF)			
M.C. (%)	**Dry-Bulb**	**Wet-Bulb**	**Air Humidity (%)**
Green	140	132.8	81
30	154.4	136.4	61
20	165.2	140	51
15	176	141.8	41

This schedule is given for information only and is applicable to thickness lower or equal to 1.5 in. It must be used in compliance with the code of practice. For thickness from 1.5 to 3 in, the air relative humidity should be increased by 5% at each step. For thickness over 3 in, a 10% increase should be considered.

SAWING AND MACHINING

Blunting Effect: normal
Sawteeth Recommended: ordinary or alloy steel
Cutting Tools: ordinary
Peeling: bad
Slicing: good
Note: Possible difficulties if the waxen patches are numerous. These patches remain visible after machining.

ASSEMBLING

Nailing / screwing: good but pre-boring is necessary
Gluing: correct
Note: Tendency to end checks when nailing.

END-USES

Interior joinery
Exterior joinery
Current furniture or furniture components
Stairs (interior)
Industrial or heavy flooring
Sliced veneer
Interior/Exterior paneling
Moulding
Heavy carpentry
Flooring

Note: A careful sanding must be done to obtain a good finish.

MAIN LOCAL NAMES

Country	Local Name
Brazil	Angelim Amarelo, Mirarena Angelim Pedra, Angelim Rosa, Angelim Da Mata, Sapupira Amarella
Guyana	Koraroballi
Suriname	Saandoe, Makkakabes

Works Cited:

Meier, E. (2015), Wood, United States of America