

# AFRORMOSIA



**Family:** FABACEAE (angiosperm)  
**Scientific name(s):** *Pericopsis elata*  
*Afrormosia elata* (synonymous)  
**Commercial restriction:** Species mentioned in Appendix II (see note)

**Note:**  
AFRORMOSIA is listed in CITES (Convention on International Trade in Endangered Species of wild fauna and flora), appendix 2 and in the European Union Regulation, appendix B. Parts of wood and wood-made products which are regulated are defined by a note: logs, sawing woods and veneers. To trade these parts and products, the exporting or re-exporting country must emit a CITES permit or certificate and an importation permit is compulsory to import within the EU.

## WOOD DESCRIPTION

**Color:** yellow brown  
**Sapwood:** clearly demarcated  
**Texture:** fine  
**Grain:** straight or interlocked  
**Interlocked Grain:** slight

**Note:**  
Logs are irregularly shaped. Wood yellow brown with darker veins, turning dark brown on exposure.

## LOG DESCRIPTION

**Diameter:** 31 – 47 inches  
**Thickness of Sapwood:** 0.4 – 0.75 inches  
**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>
<b>Specific Gravity*:</b>	0.74	0.07
<b>Janka Hardness (lbs):</b>	1,570	
<b>Volumetric Shrinkage:</b>	0.50%	0.06%
<b>Total Tangential Shrinkage (TS):</b>	5.9%	0.9%
<b>Total Radial Shrinkage (RS):</b>	3.2%	0.5%
<b>TS/RS Ratio:</b>	1.8	
<b>Fiber Saturation Point:</b>	20%	
<b>Stability:</b> Moderately stable to poorly stable		

## MECHANICAL/ACOUSTIC

	<u>Mean</u>	<u>Std. Dev.</u>
<b>Crushing Strength*:</b>	9,282 psi	290 psi
<b>Static Bending Strength*:</b>	13,488 psi	3,190 psi
<b>Modulus of Elasticity*:</b>	1,905,796 psi	140,106 psi

**Musical Quality Factor:** 127.8 measured at 259 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

<b>Funghi (According to E.N. standards):</b>	class 1-2 - very durable to durable
<b>Dry Wood Borers:</b>	class D - durable (sapwood demarcated, risk limited to sapwood)
<b>Termites (According to E.N. standards):</b>	class D - durable
<b>Treatability (according to E.N. standards):</b>	class 4 - not permeable
<b>Use class ensured by natural durability:</b>	class 4 - in ground or fresh water contact
<b>Species covering the use class 5:</b>	no

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

<b>Against dry wood borer attacks:</b>	does not require any preservative treatment
<b>In case of risk of temporary humidification:</b>	does not require any preservative treatment
<b>In case of risk of permanent humidification:</b>	does not require any preservative treatment

## DRYING

**Drying Rate:** slow  
**Risk of Distortion:** slight risk  
**Risk of Casehardening:** no  
**Risk of Checking:** slight risk  
**Risk of Collapse:** no  
**Possible Drying Schedule:** 4

Temperature (°F)			
M.C. (%)	Dry-Bulb	Wet-Bulb	Air Humidity (%)
Green	107.6	102.2	82
50	118.4	109.4	74
40	118.4	109.4	74
30	118.4	109.4	74
15	129.2	114.8	63

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:** fairly high  
**Sawteeth Recommended:** stellite-tipped  
**Cutting Tools:** tungsten carbide  
**Peeling:** not recommended or without interest  
**Slicing:** good

**Note:**  
 Risks of burning in machining. Slight tendency to tearing in planing (interlocked grain). Sawdust reported to be irritant.

## ASSEMBLING

**Nailing / screwing:** good but pre-boring necessary  
**Gluing:** correct  
**Note:**  
 Gluing must be done carefully: wood may be easily stained.

## END-USES

**Sliced Veneer**  
**Furniture or Furniture Components**  
**Interior Paneling**  
**Flooring**  
**Turned Goods**  
**Exterior Paneling**  
**Cabinetwork (High Class Furniture)**  
**Interior Joinery**  
**Stairs (Interior)**  
**Boat Building (Planking and Deck)**  
**Exterior Joinery**

**Note:**  
 Excellent substitute for teak.

## MAIN LOCAL NAMES

<u>Country</u>	<u>Local Name</u>
<b>Cameroon</b>	Obang
<b>Ivory Coast</b>	Assamela
<b>Ghana</b>	Kokrudua, Afrormosia
<b>Dem. Rep. of the Congo</b>	Bohala, Mohole, Bohele, Ole
<b>France</b>	Assamela, Oleo Pardo
<b>Congo</b>	Obang
<b>Central African Republic</b>	Obang