

# WHITE LIMBA



**Family:** COMBRETACEAE (angiosperm)  
**Scientific name(s):** *Terminalia superba*  
**Commercial restriction:** no commercial restriction

## WOOD DESCRIPTION

**Color:** light yellow  
**Sapwood:** not demarcated  
**Texture:** medium  
**Grain:** straight or interlocked  
**Interlocked Grain:** slight  
**Note:** Sometimes brittle heart. Some logs have a black greyish heartwood, more or less veined, known as Black Limba.

## LOG DESCRIPTION

**Diameter:** 23- 40 inches  
**Floats:** yes  
**Log Durability:** low (must be treated)

## 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>	0.54	0.07
<b>Janka Hardness (lbs):</b>	670	
<b>Volumetric Shrinkage:</b>	0.42%	0.07%
<b>Total Tangential Shrinkage (TS):</b>	6.1%	0.9%
<b>Total Radial Shrinkage (RS):</b>	4.3%	1.1%
<b>TS/RS Ratio:</b>	1.4	
<b>Fiber Saturation Point:</b>	28%	
<b>Stability:</b>	moderately stable	

## MECHANICAL/ACOUSTIC

	<u>Mean</u>
<b>Crushing Strength*:</b>	6,816 lbf
<b>Static Bending Strength*:</b>	11,603 lbf
<b>Modulus of Elasticity*:</b>	1,704,193 lbf
<b>Musical Quality Factor:</b>	115.6 measured at 2740 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 4 – poorly durable
<b>Dry Wood Borers:</b>	susceptible – sapwood not or slightly demarcated (risk in all the wood)
<b>Termites (According to E.N. standards):</b>	class 5 - susceptible
<b>Treatability (according to E.N. standards):</b>	class 2 - moderately permeable
<b>Use class ensured by natural durability:</b>	class 1 – inside (no dampness)
<b>Species covering the use class 5:</b>	no

**Note:**

This species is listed in the European standard NF EN 350-2.  
Preservative treatment is sometimes difficult due to a variable permeability (low to good.)

## REQUIREMENT OF A PRESERVATIVE TREATMENT

<b>Against dry wood borer attacks:</b>	requires appropriate preservative treatment
<b>In case of risk of temporary humidification:</b>	requires appropriate preservative treatment
<b>In case of risk of permanent humidification:</b>	use not recommended

## DRYING

<b>Drying Rate:</b>	rapid to normal
<b>Risk of Distortion:</b>	no risk or very slight risk
<b>Risk of Casehardening:</b>	no
<b>Risk of Checking:</b>	no risk or very slight risk
<b>Risk of Collapse:</b>	no

M.C. (%)	Dry-Bulb	Wet-Bulb	Air Humidity (%)
Green	140	132.8	81
86	154.4	136.4	61
68	165.2	140	51
59	176	141.8	41

### Temperature (°F)

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

<b>Blunting Effect:</b>	normal
<b>Sawteeth Recommended:</b>	ordinary or alloy steel
<b>Cutting Tools:</b>	ordinary
<b>Peeling:</b>	good
<b>Slicing:</b>	good
<b>Note:</b>	Internal stresses in some logs (usually timbers from plantation.) Sometimes blunting effect quite high.

## ASSEMBLING

<b>Nailing/Screwing:</b>	good
<b>Gluing:</b>	correct

## END-USES

Veneer for plywood interior  
Veneer for back or face of plywood  
Current furniture or furniture components  
Interior joinery  
Moulding  
Glued laminate  
Boxes and crates  
Wood-ware  
Blockboard  
Seats  
Interior paneling  
Light carpentry  
Wood frame house  
Fiber or particle boards  
Sliced veneer

**Note:** Sawdust may cause allergic reactions during machining.

## MAIN LOCAL NAMES

<u>Country</u>	<u>Local Name</u>
<b>Benin</b>	Azinii
<b>Congo</b>	Limba
<b>Gabon</b>	Akom
<b>Equatorial Guinea</b>	Akom
<b>Nigeria</b>	Afara
<b>France</b>	Noyer Du Mayombe, Limbo
<b>Cameroon</b>	Akom
<b>Ivory Coast</b>	Frake
<b>Ghana</b>	Ofram
<b>Sierra Leone</b>	Kohagei
<b>United States of America</b>	Limba, Korina

### Works Cited:

CIRAD'S *Biomass, Wood, Energy, Bioproducts Research Unit (BioWooEB)*  
Meier, E. (2015), Wood, United States of America