Idigbo

Quarter sawn

Flat sawn

Family. Combretaceae

Botanical Name(s).

Terminalia ivorensis

Continent. Africa

CITES. This species is not listed in the CITES Appendices (Washington Convention 2023).

Description of logs

Diameter. From 65 to 85 cm

Thickness of sapwood. From 2 to 5 cm

Floats. Yes

Log durability. Moderate (treatment recommended)

Description of wood

Colour reference. Yellow

Sapwood. Not clearly demarcated

Texture. Medium

Grain. Straight or interlocked

Interlocked grain. Slight

Notes. Brittleheart and possible wind shakes. Wood yellow more or less light, sometimes with greenish shades. Ribbon like aspect due to interlocked grain.

Physics and mechanics

The properties indicated are for mature wood. These properties may vary significantly depending on the origin and growing conditions of the wood.

Property	Average value
Specific gravity[1]	0.50
Monnin hardness[1]	1.9
Coefficient of volumetric shrinkage	0.37 % per %
Total tangential shrinkage (St)	5.2 %
Total radial shrinkage (Sr)	3.6 %
Ratio St/Sr	1.4
Fibre saturation point	27 %
Thermal conductivity (λ)	0.18 W/(m.K)
Lower heating value	19,900 kJ/kg
Crushing strength[1]	44 MPa
Static bending strength[1]	71 MPa
Modulus of elasticity[1]	11,350 MPa

[1] At 12 % moisture content, with 1 MPa = 1 N/mm

Natural durability and preservation

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Resistance to fungi. Class 2 to 3 - durable to moderately durable

Resistance to dry wood borers. Class S - susceptible (risk in all the wood)

Resistance to termites. Class S - susceptible

Treatability. Class 4 - not permeable

Use class ensured by natural durability.

Class 2 - inside or under cover (dampness possible)

Notes. This species is listed in the European standard NF EN 350 (2016).

Requirement of a preservative treatment

Against dry wood borer. Requires appropriate preservative treatment

In case of temporary humidification. Requires appropriate preservative treatment

In case of permanent humidification. Use not recommended

Drying

Drying rate. Rapid

Risk of distorsion. No risk or very slight risk

Risk of casehardening. No known specific risk

Risk of checking. No risk or very slight risk

Risk of collapse. No known specific risk

Notes.

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
Prewarm 1		> 50	55	84	15.5
Prewarm 2	3	> 50	57	83	15.0
Drying		> 50	60	76	12.5
		50 - 40	60	73.0	11.6
		40 - 35	60	69.0	10.7
		35 - 30	60	62.0	9.5
		30 - 27	63	55.0	8.2
		27 - 24	64	50.0	7.5
		24 - 21	65	46.0	6.9
		21 - 18	65	39.0	6.0
		18 - 15	68	32.0	5.0
		15 - 12	70	29.0	4.5
		12 - 9	70	25.0	4.0
		9 - 6	70	24.0	3.9
Conditioning	6		63	(3)	(2)
Cooling	(1)		Stop	(3)	(2)

(1)) Cooling: until the temperature inside the kiln no longer exceeds external temperature by more than 30 °C.

(2) UGL = final H% x 0,8 to 0,9.

(3) Subtract RH from the UGL determined in (2) and temperature, using the Hailwood-Horrobin equation.

Sawing and machining

Blunting effect. Normal

Sawteeth recommended. Ordinary or alloy steel

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Cutting tools. Ordinary

Peeling. Good

Slicing. Good

Notes. In machining, risk of tearing due to interlocked grain. Sawdust may cause irritations. Filling is necessary to obtain a good finish.

Assembling

Nailing and screwing. Good

Notes. Wood fairly acid: to be taken into account when gluing (tend to stain).

Commercial grading

Appearance grading for sawn timbers.

According to the ATIBT grading rules (2017), the main choices are: FAS (First And Second), n°1 Common and select, n°2 Common (see details of these rules on the ATIBT website).

Visual grading for structural applications

No visual grading for structural applications

Fire safety

Conventional French grading.

Thickness > 14 mm: M3 (moderately inflammable)
Thickness < 14 mm: M4 (easily inflammable)

Euroclasses grading. D-s2, d0

Default grading for solid wood, according to requirements of European standard EN 14081-1+A1 (August 2019). It concerns structural graded timber in vertical uses and ceiling with mean density upper 0.35 and thickness upper 22 mm.

End-uses

- Current furniture or furniture components
- Exterior joinery
- Exterior panelling
- Flooring
- Glued laminated
- Indoor staircases
- Interior joinery
- Interior panelling
- Light carpentry
- Moulding
- Rolling shutters
- Seats
- Sliced veneer
- Turned goods
- Veneer for back or face of plywood
- Veneer for interior of plywood

Notes. FRAMIRE contains yellow tannins that may stain with humidity. For external end-uses, paint is preferable to varnish.

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Linear cupboard door - Teyran (France)
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Main local names

Country	Local name
Benin	Idigbo
Cameroon	Lidia
Côte d'Ivoire	Framiré
Ghana	Emeri
Liberia	Bajii
Nigeria	Black afara
Nigeria	Idigbo
Sierra Leone	Bajii
United Kingdom (importated tropical timber)	Idigbo