Ogea

Half-quarter sawn

Flat sawn

Family. Leguminosae (Caesalpiniaceae)

Botanical Name(s).

Daniellia klainei
Daniellia ogea
Daniellia soyauxii
Daniellia thurifera
Daniellia p.p.

Continent. Africa

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

Description of logs

Diameter. From 70 to 120 cm

Thickness of sapwood. From 4 to 12 cm

Floats. No

Log durability. Low (treatment necessary)

Description of wood

Colour reference. Brown

Sapwood. Not clearly demarcated

Texture. Coarse

Grain. Straight or interlocked

Interlocked grain. Slight

Notes. Possible presence of brittleheart. Sometimes greenish brown veins in heartwood.

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]	0.55
Monnin hardness[1]	2.3
Coefficient of volumetric shrinkage	0.43 % per %
Total tangential shrinkage (St)	6.8 %
Total radial shrinkage (Sr)	3.5 %
Ratio St/Sr	1.9
Fibre saturation point	30 %
Thermal conductivity (λ)	0.19 W/(m.K)
Lower heating value	19,450 kJ/kg
Crushing strength[1]	38 MPa
Static bending strength[1]	66 MPa
Modulus of elasticity[1]	9,550 MPa

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

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Natural durability and preservation

Resistance to fungi. Class 4 à 5 - poorly to not durable

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

Resistance to termites. Class S - susceptible

Treatability. Class 2-3 - poorly to moderately permeable

Use class ensured by natural durability.

Class 1 - inside (no dampness)

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. Use not recommended

In case of permanent humidification. Use not recommended

Drying

Drying rate. Rapid

Risk of distorsion. Slight risk

Risk of casehardening. No known specific risk

Risk of checking. No risk or very slight risk

Risk of collapse. Yes

Notes. Risks of distortion especially on backsawn. Risks of collapse with thick boards.

Suggested drying program.

Phases	Duration (H)	MC (%) probes	T (°C)	Rh (%)	UGL (%)
Prewarm 1		> 50	50	86	16.5
Prewarm 2	3	> 50	52	85	16.0
Drying		> 50	55	82	14.7
		50 - 40	55	80.0	13.8
		40 - 35	55	75.0	12.6
		35 - 30	56	73.0	12.0
		30 - 27	58	67.0	10.5
		27 - 24	60	58.0	8.9
		24 - 21	62	50.0	7.5
		21 - 18	64	45.0	6.8
		18 - 15	65	37.0	5.7
		15 - 12	65	34.0	5.3
		12 - 9	65	28.0	4.5
		9 - 6	65	24.0	4.0
Conditioning	6		58	(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

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Sawteeth recommended. Ordinary or alloy steel

Cutting tools. Ordinary

Peeling. Good

Slicing. Good

Notes. Surface often fuzzy. Assembling and gluing sometimes difficult due to warping of dried veneers.

Assembling

Nailing and screwing. Good

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

According to French standard NF B 52-001-1 (2018), strength class D18 can be provided by visual grading.

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

- Blockboard
- Boxes and crates
- Current furniture or furniture components
- Interior joinery
- Sliced veneer
- Veneer for interior of plywood

Main local names

Country	Local name
Benin	Jatin
Cameroon	Nsou
Congo	Singa n'dola
Côte d'Ivoire	Faro
Democratic Republic of the Congo	Bolengu
Equatorial Guinea	N'su
Gabon	Lonlaviol
Germany (importated tropical timber)	Daniellia
Ghana	Ogea
Ghana	Shedua
Nigeria	Oziya
Sierra Leone	Gbessi

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United Kingdom (importated tropical timber) Ogea

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