

| | |
|---------------------|--|
| Common name: | GOMBE |
| Family: | CAESALPINIACEAE |
| Scientific name(s): | Didelotia africana Didelotia idae Didelotia letouzeyi Didelotia brevipaniculata |

| LOG DESCRIPTION | | WOOD DESCRIPTION | |
|------------------------|--|--------------------|--------------------|
| Diameter: | from 80 to 100 cm | Colour: | Orange - yellow |
| Thickness of sapwood: | from 5 to 10 cm | Sapwood: | Clearly demarcated |
| Floats: | yes | Texture: | Coarse |
| Durability in forest : | Low (must be treated) | Grain: | Interlocked |
| | | Interlocked grain: | Marked |
| Note: | Heartwood pink orangey with sometimes greenish brown veins. Strong odour when green. | | |

| PHYSICAL PROPERTIES | | | MECHANICAL PROPERTIES | | |
|--|------------------------|--------------------|---|-----------|--------------------|
| Physical and mechanical properties are based on mature heartwood specimens. These properties can vary greatly depending on origin and growth conditions. | | | | | |
| | mean | standard deviation | | mean | standard deviation |
| Density *: | 0.64 g/cm ³ | 0.05 | | | |
| Monnin hardness*: | 2.8 | 0.7 | Crushing strength *: | 54 MPa | 4 |
| Coef of volumetric shrinkage: | 0.50 % | 0.09 | Static bending strength *: | 90 MPa | 12 |
| Total tangential shrinkage: | 8.6 % | 0.9 | Modulus of elasticity *: | 13940 MPa | 2902 |
| Total radial shrinkage: | 4.6 % | 0.9 | | | |
| Fibre saturation point: | 32 % | | | | |
| Stability: | Moderately stable | | (* : at 12 % moisture content ; 1 MPa = 1 N/mm ²) | | |

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.

| | | |
|------------------|---|---|
| Fungi: | Class 4 - poorly durable | * ensured by natural durability (according EN standards). |
| Dry wood borers: | Durable; sapwood demarcated (risk limited to sapwood) | |
| Termites: | Class S - Susceptible | |
| Treatability: | 3 - poorly permeable | |
| Use class*: | 1 - inside (no dampness) | |
| Note: | Low to moderate resistance to decay. | |

MAIN LOCAL NAMES

| Countries | Local names |
|---------------|-------------|
| Cameroon | EKOP-GOMBE |
| Cameroon | GOMBE |
| Côte d'Ivoire | BROUTOU |
| Gabon | ANGOK |
| Liberia | BONDU |
| Sierra Leone | TIMBA |

GOMBE

REQUIREMENT OF A PRESERVATIVE TREATMENT

| | |
|---|---|
| Against dry wood borer attacks: | Does not require any preservative treatment |
| In case of temporary humidification risk: | Requires appropriate preservative treatment |
| In case of permanent humidification risk: | Use not recommended |

DRYING

Possible drying schedule

| Drying rate: | Normal | Temperature (°C) | | | Air humidity (%) |
|------------------------|-------------|------------------|----------|----------|------------------|
| | | M.C. (%) | dry-bulb | wet-bulb | |
| Risk of distortion: | Slight risk | Green | 50 | 47 | 84 |
| Risk of casehardening: | Yes | 40 | 50 | 45 | 75 |
| Risk of checking: | Slight risk | 30 | 55 | 47 | 67 |
| Risk of collapse: | No | 20 | 70 | 55 | 47 |
| | | 15 | 75 | 58 | 44 |

This schedule is given for information only and is applicable to thickness < 38 mm.

It must be used in compliance with the code of practice.

For thickness from 38 to 75 mm , the air relative humidity should be increased by 5 % at each step.

For thickness over 75 mm , a 10 % increase should be considered.

Note: Possible risks of casehardening with thick boards. Avoid quick drying in order to reduce the risks of cracks (high shrinkage).

SAWING AND MACHINING

| | |
|-----------------------|--|
| Blunting effect: | Normal |
| Sawteeth recommended: | Ordinary or alloy steel |
| Cutting tools: | Ordinary |
| Peeling: | Good |
| Slicing: | Good |
| Note: | Keep sharp cutters in order to obtain a good finish in case of interlocked grain. Veneers quality is medium. |

ASSEMBLING

| | |
|---------------------|---------|
| Nailing / Screwing: | Good |
| Gluing: | Correct |

END-USES

Main known end-uses; they must to be implemented according to the code of practice.

Important remark: some end-uses are mentionned for information (traditional, regional or ancient end-uses).

Veneer for interior of plywood
Veneer for back or face of plywood
Sliced veneer
Formwork
Boxes and crates
Interior joinery
Interior panelling
Exterior joinery
Current furniture or furniture components
Seats
Light carpentry
Wood frame house
Vehicle or container flooring
