



Cedar/Bossé

Guarea cedrata Pellegr., *Guarea laurentii* De Wild.

Commercial names:

English:	Guarea, White guarea, Scented guarea (<i>G. cedrata</i>), Diambi (<i>G. laurentii</i>).
Spanish:	Bossé (<i>G. cedrata</i>), Diambi (<i>G. laurentii</i>), Guarea.
French:	Bossé, Bossé blanc (<i>G. cedrata</i>), Diambi (<i>G. laurentii</i>).
Italian:	Bossé bianco (<i>G. cedrata</i>), Diambi (<i>G. laurentii</i>).
German:	Bossé (<i>G. cedrata</i>), Diambi (<i>G. laurentii</i>).

Common names:

Ivory Coast:	Bosse.
Ghana:	Kwabohoro.
Nigeria:	Obobo Nofua.
Zaire:	Bosasa.

Physical properties:

Density:	570-580-630 kg/m ³	
Shrinkage:	Moderately unstable	
Shrinkage values:	Total	Unitary
Volumetric:	-	(0.42-0.45)
Tangential:	6.8%	(0.22-0.27)
Radial:	4.1%	(0.12-0.20)
Hardness:	3.2-4.2	Semi-hard

Mechanical properties (Wood free of defects)

Static bending:	88-140 N/mm ²
Modulus of elasticity:	10,000-12,000 N/mm ²
Compression parallel to grain:	48-61 N/mm ²
Compression perpendicular to grain:	-
Shear:	9.5 N/mm ²
Toughness:	-

Origin and availability:

This wood is found in western and central Africa. The forested area, production and exportation are stable.

Wood description:

The wood is a pinkish-brown with a lighter tone in the sapwood. The color of the heartwood darkens with the passage of time. The sapwood is clearly differentiated. The grain can be either straight or slightly interlocked, and the grain texture is fine to medium. Certain persons are allergic to the dust produced by this wood. Occasionally resin stains appear, which can be easily sanded. The wood has a high silica content.

Drying:

The drying rate varies from fast to normal. There is a slight risk of warping and checking. During kiln drying resin may be exuded. The recommended drying schedules are number 4 from the CTBA, schedule E from the PRL and T6-D2 (4/4) and T3-D1 (8/4) from the FPLM.

Natural durability and ease of penetration:

The wood is graded as durable with respect to the action of fungi, but there is a great diversity of reaction; resistant to lyctids and susceptible to termites. The heartwood is not penetrable and the sapwood is moderately penetrable.

Technological properties:

The wood is easy to saw. Saws dull very quickly and the use of stellite saws is recommended.

The wood displays good qualities for obtaining rotary-cut and sliced veneer. Machining presents difficulties due to raised grain. Tools become dull at a fast rate and the use of tungsten carbide equipment is recommended. Resin can blunt tools, especially if the wood is hot.

Gluing, nailing and screwing offer no problems. Before applying finishes the wood should be treated with filler. Exuded resin originating in heated wood can cause problems in finishing operations.

Applications:

Plywood./ High quality interior carpentry./ Decorative veneers./ Exterior carpentry./ Interior carpentry: floors./ Naval construction./ Cabinetwork and furniture./ Cigar boxes./ Turnery./ In some applications it can substitute cedar (*Cedro odorata*) for example, in cigar boxes and utile in exterior carpentry (windows).