Balsa wood Technical Details

Auszac Eco Balsa Plantation in PNG (Approx. 1 year)

Common Name: Balsa Wood

Scientific Name: Ochroma Pyramidale

Distribution: Tropical regions of the Americas (Native); Papua New Guinea and Indonesia (Introduced Plantations)

Tree Size: 60-90 ft (18-28 m) tall, 45cm trunk diameter

Average Dried Weight: 150 kg/m^3

Specific Gravity (Basic, 12% MC): .12, .15

Janka Hardness: 30.4 kg_f (300 N)

Modulus of Rupture: 1996713 kg_f/m^2 (19.6 MPa)

Elastic Modulus: 3.782507e+8 kg_f/m^2 (3.71 GPa)

Crushing Strength: 1188185.44 kg_f/m^2 (11.6 MPa)

Shrinkage: Radial: 2.3%, Tangential: 6.0%, Volumetric: 8.5%, T/R Ratio: 2.6

Colour/Appearance: Heartwood tends to be a pale reddish-brown colour, though it is not commonly seen in commercial lumber. Most boards/blocks of Balsa are from the sapwood and outer Heartwood, which is a white to off-white or tan colour, sometimes with a pink or yellow hue.

Grain/Texture: Balsa has a straight grain with a medium to coarse texture and low natural lustre.

End grain: Diffuse-porous; large pores in no specific arrangement; solitary and radial multiples of 2-3; growth rings indistinct; rays visible without lens; parenchyma typically not visible with lens. (See image on the next page)

Rot Resistance: Sapwood is rated as perishable, and can also susceptible to insect attack.

Workability: Generally, very easy to work with virtually no dulling effect on cutters; yet because of its extremely low density, fuzzy surfaces can be a problem when using dull cutters. Balsa generally should not be used to hold nails, with glue being the preferred method of joining. Balsa stains and finishes well, though it has a tendency to soak up large quantities of material on the initial coats.

Odour: No characteristic odour.

Allergies/Toxicity: Although severe reactions are quite uncommon due to low Lignum, toxins or tannins, Balsa has been reported to cause skin irritation. See Balsa Wood SDS for more information.

Pricing/Availability: High quality Balsa (that is, Balsa with a very low density) can be more expensive when purchased at hobby stores or other specialty outlets. Balsawood of all shapes and sizes is generally readily available from Balsacentral.com.au located in Adelaide, South Australia.

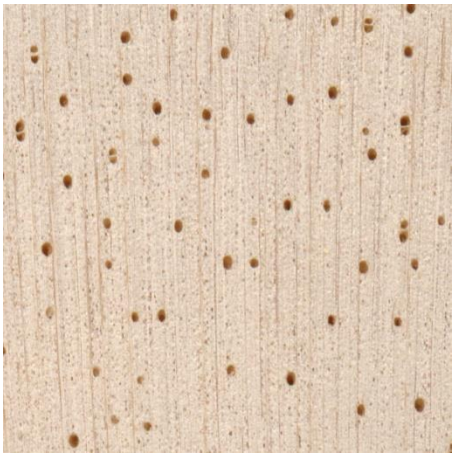
Sustainability: This wood species is **not** listed in the CITES Appendices or on the IUCN Red List of Threatened Species. Balsacentral.com's balsa is sustainably grown in plantations in PNG.

Common Uses: Buoys, rafts, surfboards, model airplanes, musical instruments, packing/transport cases, core stock in sandwich laminations, and fishing lures, architectural models, school projects, art and craft, small boxes / crates etc.

Comments: Balsa is a wood that is famous worldwide. And while its density and mechanical values can vary significantly depending on the growing conditions of any particular tree, it is generally the lightest and softest of all commercial woods, ranging from 128 to 224 kgs per cubic metre (8 to 14 pounds per cubic foot.) Yet despite its softness, Balsa is technically classified as a hardwood, rather than a softwood, since it has broad leaves and is not a conifer.

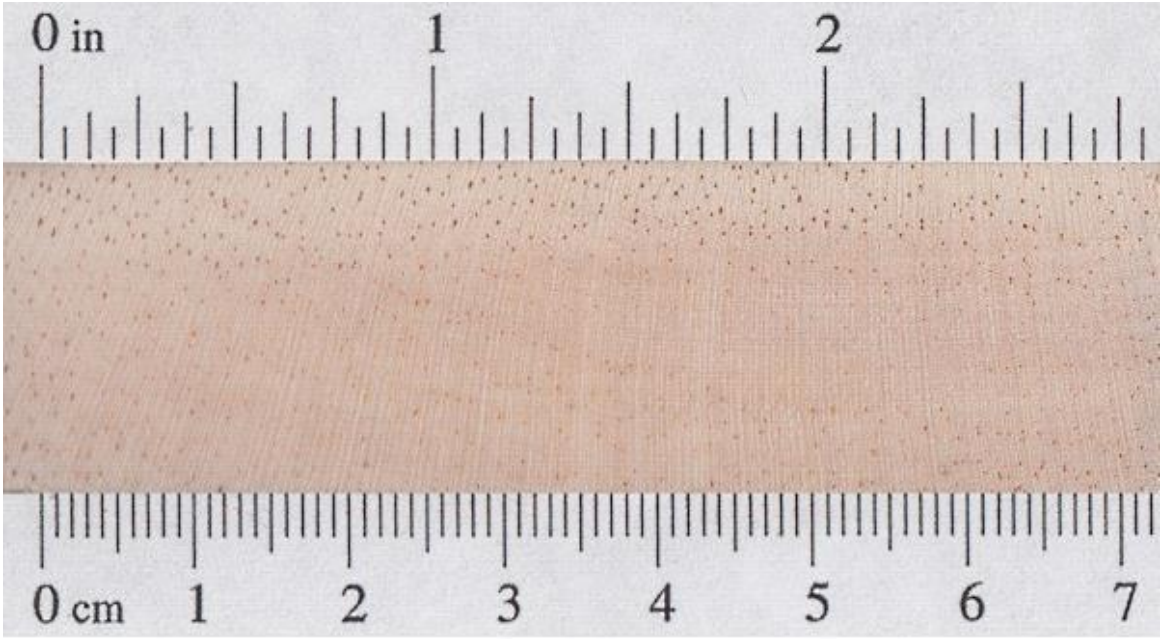
Balsa - Sanded

Balsa - Sealed



Balsa End grain (x10)

Balsa has excellent sound, heat, and vibration insulating properties, and is also incredibly buoyant: in fact, “Balsa” is the Spanish word for “raft.”



Balsa End grain

Here at Balsacentral.com.au we pride ourselves on great customer service and supplying products that are great value for money.

Maturing Auszac Eco Balsa Plantation (approximately 3.5 years)

We manufacture for aeromodellers, artists, crafters, teachers, students and small and large businesses both here in Australia and overseas.

If you're searching for something in particular just drop us a line and we'll do our best to find a solution for your needs.

We look to hearing from you!

All the best

***The staff at** Balsacentral.com.au*

(All details given are averaged and approximate only)