

End Grain Balsa



- 1) All values measured at +22°C (+72°F).
 2) Thermal conductivity at +10°C (+50°F).

Nominal Moisture Content: 12%

Coefficient of linear expansion (ASTM D-696):

Longitudinal	3.6 x 10 ⁻⁶ / °C	2.0 x 10 ⁻⁶ / °F
Radial	14.4 x 10 ⁻⁶ / °C	8.0 x 10 ⁻⁶ / °F
Tangential	21.6 x 10 ⁻⁶ / °C	12.0 x 10 ⁻⁶ / °F

Shrinkage and swelling of wood due to moisture changes will overshadow thermal expansion.

Standard Marine Grade Core

End Grain Balsa is the most widely used core material. We offer three grades of marine grade balsa, all available in 2' x 4' sheets of individual small blocks of end grain balsa bonded to a light scrim fabric that holds the blocks together during lamination. Sheets of this core will conform to practically any simple curve and most gradual compound curves. 9.5# density.

This balsa is a high-quality composite core material made from end-grain balsa wood. The end grain, micro-honeycomb structure offers exceptional shear and compressive strength. In addition this balsa offers good fatigue properties, high thermal and sound insulation and low FST properties.

This balsa is best suited for dynamic structures where performance and efficiency are paramount. All balsa materials are particularly easy to work using conventional woodworking tools. They can be drilled, milled, turned and sawn to close tolerances. This balsa can be used in hand lay-up, vacuum bag and infusion applications. It is also suitable for elevated temperature cure pre-preg systems.

Property	Method	Unit	#230, #232
Density	ASTM C 271	Kg/m ³	155
		lb/ft ³	9.7
Compressive Strength ¹⁾	ASTM C 365	MPa	12.7
		psi	1,842
Compressive Modulus ¹⁾	ASTM C 365	MPa	4,100
		ksi	594
Tensile Strength ¹⁾	ASTM C 297	MPa	13.5
		psi	1,958
Shear Strength ²⁾	ASTM C 273	MPa	3.0
		psi	435
Shear Modulus ¹⁾	ASTM C 273	MPa	166
		ksi	24
Thermal Conductivity ²⁾	ASTM C 377	W/m K	0.064
		Btu·in/(ft ² ·h·°F)	0.44
R-value	Based on +10°K factor	12mm / 0.5 in	1.1
		25mm / 1.0 in	2.3
		51mm / 2.0 in	4.5