

ProBalsa®

ProBalsa core is select quality, kiln-dried end-grain balsa wood suitable for structural core material in composite sandwich construction. ProBalsa Plus is surface primed ProBalsa, which will improve installation time and reduce resin absorption.

Average Physical Properties

Grade		LD7 Light Weight	PB Standard ProBalsa	HW Heavy Weight
Nominal Density ASTM C 271	lb./ft ³ kg/m ³	6.5 100	9.5 155	15 240
Compressive Strength ASTM C 365	psi Mpa	1000 6.9	1890 13	3800 26.2
Compressive Modulus ASTM C 365	psi Mpa	322000 2220	580000 3980	1126000 7760
Tensile Strength ASTM C 297	psi Mpa	1150 7.9	1910 13.1	3320 22.9
Shear Strength ASTM C 273	psi Mpa	270 1.8	430 2.9	730 5
Shear Modulus ASTM C 273	psi Mpa	15700 109	23600 163	37500 259
Thermal Conductivity	BTU in/h ft ² °F W/(m °C)	0.35 0.05	0.44 0.063	0.6 0.087

Nominal Moisture Content: 12% - 13%

Coefficient of Linear Expansion:

Longitudinal	2.0 x 10 ⁻⁶ °F	1.1 x 10 ⁻⁶ cm/cm/°C
Radial	8.0 x 10 ⁻⁶ °F	4.6 x 10 ⁻⁶ cm/cm/°C
Tangential	12.0 x 10 ⁻⁶ °F	6.8 x 10 ⁻⁶ cm/cm/°C

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