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**LAMBOO<sup>®</sup> ELEMENTS<sup>™</sup> COMPONENTS**  
**MECHANICAL PROPERTIES**

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**COMPRESSION:**

- ◆ PARALLEL TO GRAIN: 644 BAR (ASTM 3501-86 A)
- ◆ PERPENDICULAR TO GRAIN: 210 BAR (ASTM 3501-86 A)

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**TENSILE STRENGTH:**

- ◆ PARALLEL TO GRAIN: 1,055 BAR (ASTM 3500-90)
- ◆ PERPENDICULAR TO GRAIN: 61 BAR (ASTM 3500-90)

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**FLEXURAL STRENGTH:**

- ◆ 986 BAR (ASTM D3043)

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**SHEAR STRENGTH:**

- ◆ 55 BAR (ASTM D3048)

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**MODULUS OF ELASTICITY:**

- ◆ 165,474 BAR (AVG.) (ASTM D 1037)

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**THERMAL PROPERTIES:**

- ◆ THERMAL CONDUCTIVITY:  $K = W/(CM \cdot ^\circ C) = 0.0014$
- ◆ THERMAL RESISTIVITY (R) VALUE =  $(CM \cdot ^\circ C)/W = 714.29$
- ◆ SPECIFIC GRAVITY: 0.60
- ◆ DENSITY: 608-673 KG/M<sup>3</sup>.

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**DIMENSIONAL STABILITY COEFFICIENT:**

- ◆ VOLUMETRIC STABILITY FACTOR: 0.00144
- ◆ SOLID LAMBOO DIMENSIONAL STABILITY AT 20% RH - LINEAR EXPANSION:  
PARALLEL -0.04 PERCENT AVERAGE (ASTM D 1037)  
PERPENDICULAR -0.10 PERCENT AVERAGE (ASTM D 1037)
- ◆ THICKNESS SWELL: -0.13 PERCENT AVERAGE (ASTM D 1037)

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**MOISTURE CONTENT**

- ◆ SOLID LAMBOO: 4.9 PERCENT AVERAGE (ASTM D 4442)

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**FLAMMABILITY:**

- ◆ CLASS 1 (ASTM E648 - CRITICAL RADIANT PANEL TEST) - CLASS C (ASTM E 84 SURFACE BURNING)

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**SMOKE DENSITY:**

- ◆ 270 - FLAMING MODE (ASTM E622)
- ◆ 300 - NON-FLAMING MODE (ASTM E622) \* PASSING IS ANY NUMBER BELOW 450