

**LAMBOO<sup>®</sup> STRUCTURE™ COMPONENTS**

**MECHANICAL PROPERTIES**

**COMPRESSION:**

- ◆ PARALLEL TO GRAIN: 930 BAR (ASTM 3501-86 A)
- ◆ PERPENDICULAR TO GRAIN: 209 BAR (ASTM 3501-86 A)

**TENSILE STRENGTH:**

- ◆ PARALLEL TO GRAIN: 1,480—3,840 BAR (ASTM 3500-90)
- ◆ PERPENDICULAR TO GRAIN: 38 BAR (ASTM 3500-90)

**FLEXURAL STRENGTH:**

- ◆ 883 BAR PSI (ASTM D3043)

**SHEAR STRENGTH:**

- ◆ 200 BAR (ASTM D3048)

**MODULUS OF ELASTICITY:**

- ◆ 199,948 BAR (ASTM D 1037)

**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>.

**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)

**MOISTURE CONTENT**

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

**HARDNESS**

- ◆ (JANKA BALL TEST): 1,270 KGF (AVG)

**FRICTION**

- ◆ STATIC COEFFICIENT - 0.562      DYNAMIC COEFFICIENT - 0.497      (ASTM D2394)

**FLAMMABILITY:**

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

**SMOKE DENSITY:**

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