



## PHYSICAL PROPERTIES & CHARACTERISTICS

**Type of Wood:** Sugar maple / hard

**Specific Gravity:** .56 - .63

**Modulus of Rapture (p.s.i.):** 9400 - 15800

**Modulus of Elasticity (million p.s.i.):** 1.65 - 1.88

**Work to Maximum Load (inch -lb / cu. in.):** 13.3 - 16.5

**Impact Bending — height of drop causing complete failure (in.):** 40 - 39

**Compression Parallel to Grain — maximum crushing strength (p.s.i.):** 4020 - 7830

**Compression Perpendicular to Grain — fiber stress at proportional limit (p.s.i.):**  
640 - 1479

**Shear Parallel to Grain — maximum shearing strength (p.s.i.):** 1460 - 2330

**Side Hardness —load perpendicular to grain (lb.):** 970 - 1450

**Relative Hardness (ranked by the Janka hardness rating):** 1450  
12% harder than Northern Red Oak.

**Relative Stability (ranked by dimensional change coefficient):** .00353  
4% more stable than Northern Red Oak.

**Color:** Heartwood is creamy white to light reddish brown; sapwood is pale to creamy white.

**Durability:** Dense, strong, tough, stiff, excellent shock resistance, markedly wear resistant.

**Workability:** Density makes it very difficult to saw; sands satisfactorily. Nailing: fair resistance to splitting; good holding ability. Finishing: takes neutral finish well; does not stain uniformly.

**Flame Spread Index (ASTM E-4):** 104

**Smoke Developed Index (S.D.I.):** 157

If you have additional questions, please contact MFMA's Technical Director at 847-480-9138.

Rev. February 2005  
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