Wood Hardness

By Species

Species (Kiln-Dried)	Pressure to Mar (In Pounds)	KD Weight per BF/LB
Alder	590	2.288
Ash	1200	3.274
Aspen	350	2.211
Basswood	410	2.031
Beech	1300	3.597
Black Walnut	1010	3.159
Buckeye, Ohio (Yellow)	350	2.039
Butternut	490	2.191
Catalpa	550	2.305
Cedar (Eastern Red)	900	2.620
Cedar, Spanish	600	2.500
Cherry	950	2.881
Cottonwood	430	2.308
Elm, Gray (American)	830	2.881
Elm, Red (Slippery)	860	2.986
Gum	850	2.887
Hackberry	880	3.060
Hard Maple	1450	3.523
Hickory, Pecan	1820	4.135
Locust, Black	1700	3.982
Locust, Honey	1580	3.650
Mahogany, African	830	3.583
Mahogany, Genuine	800	3.417
Osage Orange	2360	4.290
Pine, Eastern White	380	2.020
Pine, Sugar	380	2.012
Red Oak	1290	3.494
Sassafras	630	2.583
Soft Maple	950	3.030
Sapele	1510	3.583
Sycamore	770	2.836
Tree of Heaven	1731	2.833
White Oak	1360	3.825
Yellow Birch	1260	3.520
Yellow Poplar	540	2.475

By Pressure

Species (Kiln-Dried)	Pressure to Mar (In Pounds)
Aspen	350
Buckeye, Ohio (Yellow)	350
Pine, Eastern White	380
Pine, Sugar	380
Basswood	410
Cottonwood	430
Butternut	490
Yellow Poplar	540
Catalpa	550
Alder	590
Cedar, Spanish	600
Sassafras	630
Sycamore	770
Mahogany, Genuine	800
Elm, Gray (American)	830
Mahogany, African	830
Gum	850
Elm, Red (Slippery)	860
Hackberry	880
Cedar (Eastern Red)	900
Cherry	950
Soft Maple	950
Black Walnut	1010
Ash	1200
Yellow Birch	1260
Red Oak	1290
Beech	1300
White Oak	1360
Hard Maple	1450
Sapele	1510
Locust, Honey	1580
Locust, Black	1700
Tree of Heaven	1731
Hickory, Pecan	1820
Osage Orange	2360

Janka Hardness Test: A measure of the hardness of wood, produced by a variation of the Brinell Hardness Test. The test measures the force required to push a steel ball with a diameter of 11.28 millimeters (0.444 inches) into the wood to a depth of half the ball's diameter (the diameter was chosen to produce a circle with an area of 100 square millimeters).