

Teragren: Janka Comparison Chart

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Bamboo can be as soft as pine or harder than maple depending on the species of bamboo used and when it was harvested. Teragren specifies only Optimum 5.5° Moso bamboo harvested at maturity (5-1/2 to 6 years) to ensure consistent hardness and clarity of color. As a result, Teragren traditional solid bamboo products average 45 percent harder than Red Oak and 29 percent harder than North American Hard Maple while our Teragren Synergy Strand bamboo products average 154% harder than Red Oak and 88% harder than North American Hard Maple. Bamboo harvested sooner than 5-1/2 years may result in flooring as soft as pine or fir (~600 Janka vs. Teragren at 1876 traditional SKUs Janka).

The following chart uses Janka Hardness testing data to illustrate and provide a comparison between the varying degrees of hardness in Teragren bamboo and other hardwoods. Teragren tests all of its products using ASTM certified U.S. based independent laboratories. Accepted industry wide, the Janka test reflects a particular species' ability to withstand denting.

Hardwood Species ¹		Janka Test Lbs of Pressure ²	Conversion to PSI (Pounds per Square Inch)	Comparison between the Janka ratings of Hardwoods and Teragren Bamboo products:	
				Northern Red Oak	North American Hard Maple
				% Harder than above Species	% Harder than above Species
Teragren Synergy Panels and Solid Strip Flooring ³ (12mm and 10mm) and Synergy Wide Plank ⁴ Java	Α	3489	22553	170%	141%
Teragren Synergy Panels and Solid Strip Flooring ³ (12mm and 10mm) and Synergy Wide Plank ⁴ Wheat	Α	3438	22224	167%	137%
Portfolio Floating Floor Product Family Minimum Average - All Styles	Α	3428	22159	166%	136%
Teragren Synergy Panels and Solid Strip Flooring ³ (12mm and 10mm), Synergy Wide Plank ⁴ Chestnut, and Portfolio Floating Floor	Α	3428	22159	166%	136%
Teragren Synergy Panels and Solid Strip Flooring ³ (12mm and 10mm) and Synergy Wide Plank ⁴ Product Family Average	Α	3271	21144	154%	126%
Brazilian Cherry (Jatoba)		2820	18229	119%	94%
Teragren Synergy Panels and Solid Strip Flooring ³ (12mm and 10mm) and Synergy Wide Plank ⁴ Brindle	Α	2731	17654	112%	88%
Teragren Traditional Bamboo Panels and Flooring Flat Grain Natural	В	1984	12825	54%	37%
Teragren Traditional Bamboo Panels and Flooring Vertical Grain Natural	В	1950	12605	51%	34%
Merbau		1925	12443	49%	33%
Teragren Traditional Bamboo Panels and Flooring Craftsman II/Signature/Spectrum/Elements by Teragren Product Family Average	В	1876	12127	45%	29%
Teragren Traditional Panels and Solid Bamboo Flooring Flat Grain Caramelized	В	1825	11797	41%	26%
Hickory, Pecan		1820	11765	41%	26%
Teragren Studio Floating Floor (Wide Plank) Vertical Grain Natural	С	1752	11325	36%	21%
Teragren Traditional Bamboo Panels and Flooring Vertical Grain Caramelized	В	1747	11293	35%	20%
Locust, Black		1700	10989	32%	17%
Wenge (Panga Panga)		1630	10537	26%	12%
Teragren Studio Floating Floor (Wide Plank) Flat Grain Natural	С	1587	10259	23%	9%
Teragren Studio Floating Floor (Wide Plank) Product Family Average	С	1492	9644	16%	3%
African Teak		1480	9567	15%	2%
North American Hard Maple		1450	9373	12%	0%
Teragren Studio Floating Floor (Wide Plank) Flat Grain Caramelized	С	1433	9263	11%	-1%
White Oak		1360	8791	5%	-6%
Beech, American		1300	8403	1%	-10%
Oak, Northern Red Teragren Studio Floating Floor (Wide Plank)		1290	8339	0%	-11%
Vertical Grain Caramelized	С	1193	7712	-8%	-18%
Teak, Thai/Burmese		1078	6968	-16%	-26%
American Black Walnut		1010	6529	-22%	-30%
Black Cherry		950	6141	-26%	-34%
Pine (Shortleaf)		690	4460	-47%	-52%
Grand Fir		490	3167	-62%	-66%

Hardwood Species data obtained from USDA Forest Service Forest Products Laboratory http://www2.fpl.fs.fed.us/. Teragren Janka data obtained through independent testing at Professional Service Industries, Inc. and TECO via ASTM D 1037

² The Janka test reports the amount of force necessary to drive a .444 inch steel ball .222 inch into the material being tested

³Janka measurement represents solid Synergy Strand tested to the ASTM mandated 1" Standard

⁴ Synergy Wide Plank Floating Floor has 4mm Synergy Strand wear layer. Janka measurement represents solid Synergy Strand to the ASTM mandated 1" Standard