

Janka Hardness Test:

The Janka hardness test measures the force in pound per square inch required to embed a 0.444" steel ball to half its diameter in a 2" x 2" x 6" piece of wood. This test is a good measurement of how a wood product will withstand denting and wear. By the same token, it's also a good indicator of how hard a species is to saw or mill. The table to the right indicates testing results on different hardwood flooring species, including some acrylic impregnated species.

The Janka test is also a good indicator of how hard it would be to saw or nail into a species of wood. The higher the Janka measure, the harder and more resistant it is to denting. For example, Brazilian Teak with a Janka rating of 3540—one of the hardest species available—is almost three times as hard as Red Oak, rated at just 1290.

Wood Comparison

Bamboo flooring is not included on the Janka Hardness Scale. This is due to the fact that the numbers can vary due to the process and chemicals used to produce the optional caramelized or carbonized coloring in some bamboo flooring. Additionally, particular species of bamboo used in the flooring can impact the hardness. As a point of reference, one species is described here. When left with a natural finish, bamboo has a Janka rating of 1380. If carbonized to produce a darker color, bamboo's hardness drops to 1180.

