

Hardness Rankings – (Janka test, the higher the better).

Species	Hardness (janka)	Eco-friendly?
Bamboo Compressed (hot pressed)	15.30 *	Yes
Bamboo Compressed (cold pressed)	14.00 *	Yes
Ironwood	10.50 *	x
Blackbutt/Eucalyptus	9.10 *	x
Jarrah	8.50 *	x
Kwila (Merbau)	8.20 *	x
Hard Maple	6.60 *	x
Bamboo, Vertical	6.50 *	Yes
Tawa	4.50 *	x
NZ Silver Beech	4.50 *	x
Victorian Ash/Tasmanian Oak	6.00 *	x
Teak	4.40 *	x
Rimu	3.62 *	x
Kauri	2.80 *	x
Matai	2.70 *	x
Western Red Cedar	1.60 *	x

* = Commonly used for flooring in New Zealand.

Janka hardness is measured in kilonewtons (kN).

Stability Rankings

The higher the stability ranking the more resistant a species is to warping, swelling and gaps appearing after installation.

Species	Dimensional Change Coefficient
Bamboo	0.00129
Mesquite	0.00129
Australian Cypress	0.00162
Teak	0.00186
Wenge	0.00201
Mahogany, Santos	0.00238
Douglas Fir	0.00267
White Ash	0.00274
Brazilian Cherry	0.00300
Hard Maple	0.00353
White Oak	0.00365
Red Oak	0.00369
Jarrah	0.00396

Conclusion: Bamboo has a good combination of both hardness and stability. Other hardwood species generally do not excel in both areas. For example, Jarrah and Brazilian Cherry are very hard, however they are not very stable, and therefore more likely to suffer from deformation after installation.