

# TECHNICAL SPECIFICATIONS BEECH (FAGUS SYLVATICA)



## Tree Size

Tree height is 30-40 m

Trunk diameter is 100-150 cm

## Strength Properties

Density 46-52 lbs/cu. Ft

Mor/Bending strength = medium

Density (dry weight) = 38-45 lbs/cu. ft.

Max. crushing strength = medium

Shearing strength (parallel to grain) = Medium - Large

Modulus of Elasticity (stiffness) = Low - Large

Hardness (side grain) = Soft – Very High

Shrinkage, Tangential = moderate

Shrinkage, Radial = very small, Low, High

## NUMERIC DATA

Item	Green	Dry	Metric
Bending Strength	661	1114	kg/cm <sup>2</sup>
Density		721	kg/m <sup>3</sup>
Hardness		659	kg
Impact Strength	88	111	cm
Maximum Crushing Strength	300	533	kg/cm <sup>2</sup>
Shearing Strength		146	kg/cm <sup>2</sup>
Stiffness	111	135	1000 kg/cm <sup>2</sup>
Work to Maximum Load	0.91	1.19	cm-kg/cm <sup>3</sup>
Specific Gravity		0.65	
Weight	689	673	kg/m <sup>3</sup>
Radial Shrinkage	4		%