

WHITE OAK

Common Name(s): White oak

Scientific Name: *Quercus alba*

Distribution: Eastern United States

Tree Size: 65-85 ft (20-25 m) tall,
3-4 ft (1-1.2 m) trunk diameter

Average Dried Weight: 47.0 lbs/ft³ (755 kg/m³)

Specific Gravity (Basic, 12% MC): 0.6, 0.75

Janka Hardness: 1,350 lb_f (5,990 N)

Modulus of Rupture: 14,830 lb_f/in² (102.3 MPa)

Elastic Modulus: 1,762,000 lb_f/in² (12.15 GPa)

Crushing Strength: 7,370 lb_f/in² (50.8 MPa)

Shrinkage: Radial: 5.6%, Tangential: 10.5%,

Volumetric: 16.3%, T/R Ratio: 1.9

Color/Appearance: Heartwood is a light to medium brown, commonly with an olive cast. Paler sapwood is not always sharply demarcated from the heartwood. Quartersawn sections display prominent ray fleck patterns. [Red oak \(*Quercus rubra*\)](#) tends to have a slightly redder cast (as opposed to olive), but color alone isn't always a reliable method of [determining the type of oak](#).

Grain/Texture: Grain is straight, with a coarse, uneven texture.



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