

American White Oak

Botanical Name: *Quercus* spp
Other Names: USA Oak, White Oak
Origin: North America

General

Seasoning: Seasons fairly slowly with a tendency to check and split.

Working Qualities: Considering its density, the timber can be worked fairly readily, taking a smooth finish. The timber can be glued, stained and polished and takes nails and screws well. In common with other species of Oak, White Oak corrodes metals, particularly iron, steel and lead. Blue-black discolorations from the tannic acid in the wood are liable to develop when it is in contact with iron or iron compounds under damp conditions and PVA glues. Use of non-ferrous metals for fastening and fittings is recommended.

Uses: Because of its good all-round strength and resistance to decay, White Oak is used for a wide range of constructional work, including ship and boat building. It is traditional for high-grade furniture, interior woodwork and flooring. Because of its impermeability, the timber is suitable for vats and casks for holding liquids such as wine and spirits.

Price (I-10): 4



Availability

Availability: Available ex-stock in Random Widths in 25, 40 and 50mm thicknesses.

Stocked: Yes

Grade Description: Prime A North American grade for a board to provide 83.3% (10/12ths) clear cuttings of either 3" x 7' or 4" x 5'. This means that defects such as knots, splits and wane are permitted, but in small quantities. Suitable for furniture and joinery. Superior A North American grading rule higher than Prime, does not allow as many defects. The highest grade available. Comsels A Grade lower than Prime that allows more defects, only 66.7% of the boards needs to provide clear cuttings of 3" x 2'. Suitable for carcass work. #2 Comsels The lowest grade, allows for 50% clear cuttings. Suitable only when knots or a rustic look are required.

Basic Info

Durability Above Ground: Moderately Durable

Density Air Dry: 750 kg/m³

Shrinkage Radial: 5 %

Shrinkage Tangential: 8 %

Stability Kiln Dry: Stable

Stability Green: Prone to shrinkage

Mechanical Properties

Janka Hardness: 6.0 kN

Modulus of Rupture: 105 MPa

Modulus of Elasticity: 12 GPa

Max Crush Strength: 51 MPa

Strength Group unseasoned: S6

Strength Group Seasoned: SD6

Fire

ASTM Flame Spread: 100

ASTM Smoke Developed: 100