

White Oak (American)

Specification sheet



WHITE OAK

<u>Other Name(s):</u>	Chestnut Oak
<u>Scientific Name:</u>	Quercus spp.
<u>Distribution:</u>	USA
<u>Average Dried Weight:</u>	735 kg/M3
<u>Durability:</u>	Durable
<u>Janka Hardness:</u>	5.98 (kN)
<u>Modulus of Rupture/Bending Strength</u>	(102.3 MPa)
<u>Modulus of Elasticity/ stiffness:</u>	(12.15 GPa)
<u>Strength:</u>	8+ (on scale 1-10)

Seasoning:

- The timber seasons fairly slowly with a tendency to check and split.

Characteristics:

- American White Oak resembles European Oak, being a mixture of species. However it is more variable in colour, pale yellowish-brown to mid-brown. It varies also in quality according to the locality; thus Oak from Canada and the Northern USA is generally harder and heavier than that from the Southern States.
- The characteristic silver grain figure, due to the broad rays, is shown to advantage on quarter cut material.
- The grain is generally straight and the texture varies from coarse to medium coarse.

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 discolourations 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.

Product Attributes:

- Pale cream to yellowish brown sometimes with a pink tinge.
- Distinctive grain feature.
- Takes stain and polish well.
- Grain is generally straight with a medium to coarse texture.
- Machines and turns well.