

European Oak - our specialist area

Botanical Name	<i>Quercus Robur</i>
Family:	Fagaceae
Dry Weight:	720 Kg per m ³
Durability:	Durable

Quercus Robur is probably one of the oldest most versatile of all temperate hardwoods. It can be used internally as well as externally (with the exclusion of the sapwood externally if left untreated) from shipbuilders to cabinetmakers including Joinery Doors & Windows.

The Tree

Reaches heights of 18m to 30m (60 – 100Ft) varying according to soil and locality, diameter of bole about 1.2m to 1.8m (4-6Ft), occasionally more. Forms a straight clear bole, sometimes up to 15m (50ft) in length, when grown under forest conditions, but carries lower branches when grown in the open. Occurs in pure stands and in mixed woods, where it is often the dominant species.

The Timber

Colour

Yellowish Brown. A Yellow stain (golden Oak) caused by a harmless surface mould is sometimes noticeable during drying, but is not permanent.

Sapwood

Light in colour, usually 25 to 50mm (1 – 2 inches) wide, distinct from heartwood.

Grain

Generally straight, but varying with the growing conditions. The characteristic ornamental silver grain, due to the broad rays, is seen in quarter-sawn material, this is often known as medullary ray (and is a form of food storage cell). Structure and quality are both affected by growth conditions. Typical material has alternating zones of large pored early wood and dense late wood, but in slow grown timber the late wood zones may almost be eliminated, the timber being consequently soft and light in weight. Oak from Central Europe is often of slow growth, uniform in colour and straight grain, while that from northern countries is characteristically harder and tougher. Homegrown Oak is very variable in quality, but timber from well-grown trees compares favourably with that grown on the continent.

Corrosive Properties

A somewhat acidic timber, which tends to promote corrosion of metals, especially iron and steel, in contact with it under damp conditions. Metals exposed to vapours from undried Oak may also be attacked. Corrosion of lead under these conditions can be very severe. Metals, which are not corrosion resistant, should be painted, galvanised or use stainless steel.

Chemical Staining

Blue-black stains, formed by the reaction of iron with the tannin in Oak, are liable to appear on the timber when it is in contact with iron or iron compounds in the presence of moisture. This will fade with exposure to ultra violet light.



