

Ash

The Tree

Ash trees are often found in moist ground, where they grow best. The prominent tree can be identified by its pinnate leaves and black leaf buds. The fruits are long and flat and occur in bundles. Ash trees have always been important in folklore, being regarded as a mystical tree that defends evil and cures diseases. Regrettably, ash-dieback has taken its toll on UK trees, and many trees stand dead or dying, especially in the South of the country.

Typical diameters 1-2 m

Height up to 35 m

Age up to 300 years

12% of UK broadleaved forest

Typical yield class 7

European Ash *Fraxinus excelsior*



Ash

Picture by Notafly, Wikimedia Commons

The Timber

Ash produces a flexible and shock-resistant wood that has traditionally been used in tool handles, and in the UK has been important throughout history in carpentry, wheels, poles, barrels and other applications. The attractive timber looks and feels similar to oak wood and is used in high-end furniture, flooring and sports equipment. Ash from Germany can be visually graded to strength class D40.



Ash tangential section



Ash endgrain

Wood light brown to olive

Black streaks and blackheart occur

Growth rings visible

Medium-coarse texture

Ring-porous with large earlywood pores

Tylosis common

Rays barely visible

Parenchyma banded

Parenchyma around pores vasicentric, aliform and confluent

What do we know about home-grown ash?

Strength	High compared to other UK hardwoods, comparable to beech
Stiffness	
Density (at 12% mc)	600 kg/m ³
Hardness	High compared to other UK hardwoods
Machinability	Easy Good for turning
Durability	Slightly durable

Why is this information so vague?

Little is known about the properties of home-grown hardwoods. Some research was carried out by Lavers, starting in the 1950s and carrying on until 2002, but a limited number of trees was used in this research. Also, the testing was done on small clear specimens, and data for full-sized specimen with defects is rarely available. Nonetheless, we can use this data to compare between species, between timbers from the UK and Europe (or other countries) and between new data and historic results.

References & Further Reading

[The Wood Database](#)

[European Atlas of Forest Tree Species, Ash](#)

[Woodland Trust, Ash](#)

Lavers, 2002, The Strength Properties of Timber