

DURABILITY data

DURABILITY CLASS	level of durability	expected service life	SPECIES	which means	typical uses
Class 1	very durable	25+ years	n/a for any native UK species	has inherent durability due to chemical content or density and can tolerate raised moisture levels or submersion for long periods of time.	decking, wharves, coastal and waterway structures
Class 2	durable	15 - 25 years	Oak, Chestnut, Cedar of Lebanon, Yew	has inherent durability due to chemical content or density and can tolerate raised moisture levels or submersion.	exterior joinery, exterior cladding, furniture, interior joinery, structural use, flooring, interior cladding, decking, coastal & waterway structures
Class 3	moderately durable	10 - 15 years	Walnut, Western Red Cedar, Cherry	has inherent durability due to chemical content or density and can tolerate raised moisture levels over short periods of time	furniture, interior joinery, flooring, interior cladding,
Class 4	slightly durable	5 - 10 years	Elm, Larch (3-4), Douglas Fir (3-4), Scots Pine	has inherent durability due to chemical content or density and can tolerate raised moisture levels over short periods of time	exterior joinery, furniture, interior joinery, flooring, interior cladding, exterior cladding,
Class 5	not durable	0 - 5 years	Ash, Beech, Sycamore, Plane	degrades and persishes over time with exposure to moisture	exterior joinery, furniture, interior joinery, flooring, interior cladding

Natural Durability: The inherent resistance of wood to attack by wood destroying organisms (BS EN 350.1) and in this classification relates to the resistance of the heartwood to attack by wood decaying fungi.

Likely to be the key factor in choice of species for cladding and external joinery work, in addition to decisions made concerning use of preservative, a modified timber or to rely on natural durability of a desired timber species and it's ability to achieve a desired performance.

The standard test applied to determine the durability of timber is to plant a section of the timber heartwood 600mm + deep into the ground and monitor for degradation - fungi, bacteria, rot and insect infestation. The level of deterioration in the normal species qualities is used to assign a durability class.

The application of a durability class is not a suitable indication of how well the timber will last out of the ground, in a ventilated or dry environment, nor with exposure to UV light. It is reasonable to assume - using experience, and evidence, in lieu of scientific data - that the actual service life of most timber species not used as stakes in the ground will be far superior to those statistics given here.

