BS 8417 Preservation of Wood Code of Practice

This is a very important standard for timber treatment which combines a number of European Standards (BSEN350) which collectively deal with wood durability, species and performance of preservatives.

BS8417 is a code of practice and advises on the choice of timber species and the use and application of wood preservatives depending on the end use.

BS8417 as a code of practice puts the emphasis for the responsibility for achieving the required penetration and retention of the timber preservative treatments with the timber treater.

If specifying particular preservative types or timber species, it is important to note that not all preservatives are appropriate for all Use Classes and that some timber species are not sufficiently permeable to achieve the penetration levels required, at least without additional preparation such as mechanical incising.

When deciding on a timber species and end use the specifier needs to consider.

1. The natural durability of the chosen species
2. How the timber component will be used
3. The relevant treatment required to protect the species from rot and insect attack in that end use
4. The treatability of the chosen species

It should be noted that the treatability of timber varies between species. If a specific wood species is to be specified, care should be taken to ensure that a species chosen is appropriate to the treatment requirements. e.g. European whitewood is slightly durable but cannot be treated to hazard class 4 for use in ground contact.

Treatability. Refers to how easily timbers can be penetrated with vacuum pressure preservative treatments.
The four levels of treatability in BSEN 350-2 are 'easy', 'moderately easy', 'difficult', 'extremely difficult' and any specifier should cross reference their chosen species with this standard.

Brookridge Timber takes great care in only using the correct species which will treat to the required hazard class and the treatment process is fully audited by Koppers the treatment solution provider. Additionally all of the company processes is audited by a 3rd party and Brookridge Timber has achieved ISO 9001 and the treatment process is also covered by this.

Natural Durability of Timber Species (Heartwood Only)

This list is not exhaustive but provides details on some of the more popular species used in the UK

Durability Class	Timber Type	Timber Species
1. Very Durable	Softwoods Hardwoods	None Afromosia Greenheart Opepe Iroko Teak
2. Durable	Softwoods Hardwoods	Canadian Western Red Cedar Ekki Sweet Chestnut American White Oak European Oak American Mahogany
3. Moderately Durable	Softwoods Hardwoods	UK Western Red Cedar Douglas Fir Siberian Larch European Larch Malaysian Keruing African Mahogany
4. Slightly Durable	Softwoods Hardwoods	Scots Pine Corsican Pine Parana Pine Radiata Pine Silver Fir European Redwood American Hem Fir Canadian Hem Fir European Spruce Canadian Spruce Pine Fir English Elm American Red Oak
5. Not Durable	Softwoods Hardwoods	None Alder Silver Birch European Horse Chestnut Sycamore

Treatment User Class Required in End Use Situation

User Class	End Use Situation	Biological Threat
User Class 1	Internal with no risk of wetting	Insects
User Class 2	Internal with risk of wetting	Fungi/Insects
User Class 3	External above the damp proof course	Fungi
User Class 4	In permanent ground contact	Fungi
User Class 5	In permanent contact with water	Marine Borers/Fungi

This is only a guide to the various considerations all specifiers must make when specifying timber in a particular end use and a more detailed look at the various standards is recommended.