



The Wood Component Company

## **NATURALLY DURABLE SOFTWOOD SPECIES**

### **Siberian larch (*Larix decidua*)**

This has long been used for cladding in Europe, but until recently, was rarely been used for this purpose in the UK. Although often imported from Scandinavia, a considerable quantity is now available from UK plantations. European larch from Siberia or Alpine areas has the advantage of being very slow grown and is consequently denser, straight grained and less knotty.

It is a very strong robust wood, and good quality timber can be relatively knot free although some knots can be “loose”. It varies considerably in quality and needs careful selection. Better quality wood was traditionally used for boat building and the poorer for fencing. It is referred to as a medium movement wood. It is rated as Class 2/3, moderately durable and if the sapwood is excluded can be used untreated for cladding with a service life of approx 30 years. The wood can be left unfinished, but if sapwood is not excluded the wood requires treatment.

### **Western red cedar (*Thuja plicata*)**

Although the majority of this wood is imported from North America, it is also now available home-grown. The imported wood is available in large sections and long lengths from Canada and the US West Coast. Because of its inherent durability it is the most popular wood for cladding, but is becoming increasingly expensive. It is straight grained and largely free of knots, although small knots are more frequent in home-grown wood. It is a relatively soft, brittle wood that can be easily dented or scraped, so may not be the best choice if used at low level and exposed to the risk of mechanical damage.

It is referred to as a small movement wood. It is rated as Class 2, durable and can therefore be used untreated if the sapwood is excluded. *BS 8417* gives a 60 year service life for the untreated wood if sapwood is excluded. It is resistant to preservative treatment.

It has a high tannin content which can be corrosive to iron, and can itself stain badly as a result of any corrosion. It can be left unfinished and will bleach to a particularly attractive lustrous silver-grey. Because the surface is open-textured it is not advisable to use it unfinished in locations where there is a high level of pollution from traffic or industrial processing.

### **Douglas fir (*Pseudotsuga menziesii*)**

Traditionally imported from North America (sometimes confusingly referred to as Oregon Pine or British Columbian Pine) the wood is now also available home-grown. It is a straight grained strong, robust wood, available in large sections and long lengths. It has a quite high tannin content and is resinous, although home grown is less resinous than imported. It is referred to as a small movement wood. Imported material is rated as Class 3, moderately durable but home-grown wood is less durable and is rated as Class 3–4 moderately–slightly durable).

Imported wood can be used untreated for cladding if sapwood is excluded, but it may be necessary to treat home-grown wood, in which case the sapwood need not be removed, but the wood is somewhat resistant to treatment. The wood can be left unfinished to bleach.

## Durability

The classifications quoted refer to the resistance to fungal decay of the heartwood of the species only. The sapwood of most species is not durable or slightly durable and should not be used in exposed situations without preservative treatment. Five natural durability to wood-destroying fungi classes are recognised in BS EN 350-1 *Guide to the principles of testing and classification of the natural durability of wood*:

	<b>Durability Class</b>	<b>Probable in-ground life expectancy (Years)</b>	<b>Probable above ground life expectancy (Years)</b>
Class 1 very durable	1	>25	>40
Class 2 durable	2	15-25	15-40
Class 3 moderately durable	3	5-15	7-15
Class 4 slightly durable	4	0-5	0-7