



## Timber Joinery



Wood is an environmentally friendly material, offering a broad range of textures and shades, and exuding a warm and healthy feel. It is unmatched as a beautiful, adaptable and high performance material for doors and windows. The advances in timber production, machining technology, joinery hardware and decorative coatings have all helped Irish manufacturers produce top of the range windows and doors which match the best of joinery made in the rest of Europe.

### Species Selection

When selecting a species for joinery manufacture it is important to differentiate between heartwood and sapwood. If the heartwood has sufficient natural durability it can be used without preservative treatment. However, where sapwood is present, pre-treatment with an organic solvent or water based wood preservative using a double vacuum, low pressure process is recommended in accordance with BS 8417 and the details shown in Table 1 overleaf should be applied. Preservative protected and naturally durable timbers are the



HEARTWOOD

SAPWOOD

materials used in modern joinery manufacturing. Low pressure impregnated timbers will have the same durability class as naturally durable timbers. It should also be noted that low pressure treated timbers should be subsequently protected with a maintained and appropriate surface coating, when used externally.



### Technology

Advances in technology, including laminated and finger jointed timber, have ensured that superior and more uniform material is being made available for window/door production.

### Style Selection

The range of window and door joinery now available in Ireland is

suitable for all styles from traditional to contemporary. Common styles now include :

- Sliding sash windows
- Casement windows
- Tilt and turn windows
- Reversible / pivot windows
- French doors
- Sliding doors
- Townhouse doors

### Decoration

Softwood timbers finished in light stains can give a bright and clean look to joinery, while darker stains can enhance the richness of the timber and provide maximum UV protection. Hardwood species, such as iroko and sapele, provide a rich coloured base from which light or dark stains can be applied. Joinery is also available in a wide range of pre-finished colours, with RAL, Natural Colour System (NCS) & British Standard selections as the popular ranges available. The use of pigmented, opaque finishes are recommended for the longest lasting finish.

**Table 1 - Preservative Specification for Joinery**

Treatment recommendations for external joinery timbers which require preservative treatment – BS 8417 Table 9				
Desired service life years and treatment process	Permeability class of wood species			
	Permeable		Resistant	
	Penetration	Retention	Penetration	Retention
30 years/Low Pressure	P2*	CV1.25	P2*	CV1.25

\* P2 Penetration Class is a minimum 3mm lateral and 40mm axial/end grain penetration into the sapwood portion of the joinery section.



### Irish Joinery Manufacturers

Using an Irish manufacturer will ensure local expertise and advice. Representatives from the factory can give on-site consultations and measuring services when required and manufacturers will also install their own joinery, cutting out the need for a middleman window installer. The after sales support from a local manufacturer is also vital, for instance, making replacement glass units or new handles easily accessible.

### Maintenance

Modern wood windows are easy to maintain. Fully factory finished windows carry substantial warranties on the paint or stain system. Improvements in paint technology also mean that re-finishing is a low cost exercise, with a rub down and a single coat of the chosen finish, with no need for

sanding down, burning off or chemical stripping. Initial selection of the best surface coatings is vital. A wide range of both water and solvent based coatings are now available and suitable breathable coatings will allow a degree of moisture movement within the timber and at the same time, depending on the shade and opacity of the finish, give maximum UV protection. High build coatings are advised for joinery components, as any movement in the timber will be catered for in the flexibility of the coating. Always follow the application and maintenance instructions of the coatings manufacturer.

### Useful Links

Coford - [www.coford.ie](http://www.coford.ie)

Woodspec - [www.woodspec.ie](http://www.woodspec.ie)

NSAI - [www.n sai.ie](http://www.n sai.ie)

Wood Marketing Federation - [www.wood.ie](http://www.wood.ie)

### Acknowledgments

This document is brought to you by the Wood Marketing Federation – [www.wood.ie](http://www.wood.ie)

Published October 2008