



Doors & Windows

## Door care and maintenance

### Care of Timber Doors on Site

Internal and external doors and doorsets may be supplied 'in the white', with a primer or stain base coat applied or as fully finished components. Each type needs careful handling and protection although the actual requirements vary. After delivery it is vital that doors are correctly treated to ensure that the moisture content is appropriate for the situation and that they are not physically damaged in unloading, storage and installation. Good practice avoids damage, maintains quality and saves money.

### Delivery and Storage

Check doors at the time of delivery. All components should be checked at the time of delivery to ensure that they are in accordance with the order schedule, the delivery is complete and that the components, including any protective packaging, are not damaged.

Doors manufactured in accordance with BS1186: Parts 1 and 2: 'Quality of timber and workmanship in joinery' are made from timber with a moisture content between 10% and 19% depending upon their type and location. For long term performance of the door and finish, it is important that the appropriate moisture content is maintained during storage on site and during the construction process.

Wherever possible the sequence of deliveries should be coordinated to site requirements in order that doors are not kept on site unfixed for longer than necessary.

### Handle Doors Carefully

Doors and doorsets should be handled carefully to avoid physical damage (do not lift by glazing bars) and to keep them clean. When door leaves are protected by shrink-wrapping or other packaging this should be kept in place as long as possible.

- **Doors delivered in the white should be sealed or knotted and primed on all faces and edges immediately after delivery.**
- **Never hang a door before applying a protective coating.**
- **Store doors under cover in a dry ventilated building.**
- **Doors should be stored flat (never on edge or on end) on a level surface and kept clear of the floor on at least three level bearers. The bearers should be longer than the width of the doors.**
- **Doors should be protected from dirt and damage but without restricting air circulation.**
- **Natural finish doors should be stacked so that they are not partly exposed to daylight and opaque wrappings must not be torn.**
- **Exposure to ultra violet light can cause fading or discolouration of timber veneers.**
- **Whenever possible store doors and doorsets in the sequence they will be needed with codes or identifying marks visible to avoid double handling. Avoid dragging them across each other in the stack.**
- **Doors which have projecting sills or have the hardware fitted must have spacers between them in the stack to avoid damage.**
- **Protect doors during site operations.**

- **Ensure that the moisture content of the wood is kept close to the level at which it was when the door was manufactured.**
- **Internal doors must be conditioned to the service conditions before fixing. They must be protected from abnormal heat, extreme dryness, humid conditions or sudden changes of temperature or humidity.**
- **Doors should not be stored or fitted in the building until the wet trades are finished and dried out.**
- **Treat doors like a piece of furniture.**
- **Factory finished door frames or door linings should ideally be fitted into preformed openings and not built in to masonry walls.**
- **Prefinished doors should retain their protective packaging until the latest possible time, ideally until after internal decorations have been completed.**
- **If it is necessary to separate the doors from doorsets, each door and frame should be given an identification mark so that the correct door is returned to the frame.**

## Installation

Doors should be fitted square, true and plumb and fixed in accordance with the manufacturer's instructions or the project specification.

Three hinges should be fitted to all external doors, doors weighing more than 20 kilograms and internal doors where large differences of temperature or humidity on opposing faces can be expected (e.g. bathrooms and airing cupboards).

Mortices for locks must not be cut through joints in the door framing as this will impair performance of the rail joint.

If any part of an external door or door frame is cut or drilled, swab the newly exposed timber with suitable preservative material and recoat with primer or stain.

Fire resisting doors should not be altered on site. Cutting of glazing apertures on site must not be carried out without the approval of the door manufacturer and the local Fire Officer. Ideally, the door frame should be set well back from the outer face of the wall or else be protected by a canopy. If not, the head of the frame should be provided with a projecting head drip. External doors opening outwards should be particularly well protected.

Glazed panels in doors must satisfy the requirements in respect of safety glass. Bead glazing must be correctly fitted using compound or glazing tapes to both sides of the glass.

## Finishing

External doors and frames with factory applied primer or base coat stain should have at least one of the finishing coats applied as soon as possible after delivery or installation. The back of external frames should be coated before installation. Use good glazing practice. Glazing rebates and backs of beads should be sealed with an appropriate sealant.

Ensure surfaces and edges are in good condition before applying finishing coats. If the primer or base coat stain has deteriorated it should be recoated before further finishing coats are applied.

Finishing of external doors and frames should be carried out in dry weather using good exterior quality materials in accordance with the manufacturer's instructions.

On external doors, the finish should be an exterior quality paint or a 'high build' stain. ('Low build' types of stain should not be used on external doors.)

It should be noted that the use of dark coloured paint or stain finishes on external doors, particularly if located on the south or south west elevations of buildings, will result in high surface temperatures on the door and can increase the risk of distortion and of resin exudation through the finish.

## Ensure all Surfaces and Edges are Finished

It is important that all surfaces of doors are painted. For external doors or other doors subject to wetting or take up of moisture it is especially important that the full finishing system is applied to the top and bottom edges of the door leaf. The bottom edge should be coated before fitting the door.

Factory finished doors should be checked and any small areas made good in accordance with the manufacturer's recommendations. The door manufacturer may disclaim responsibility for any defect or failure that may subsequently occur which is attributable to non-compliance either wholly or in part with the advice given in this copy.

In addition to the recommendations of the British Wood Working Federation given above, the following points regarding achieving a long lasting finish to doors should be noted.

## Getting the Best Finish

The secret to a smooth finish is a series of sanding stages (either work by hand or use an electric sander). Always work with the grain and progressively change to a finer sandpaper. Make sure that sharp edges are slightly rounded, especially on doors designed to endure weather conditions, as these areas are where breakdown of any coating usually begins.

Note: Recommendations from the manufacturers of wood stain and preservatives differ, for example some recommend a different base coat preservative. It is essential that the manufacturers instructions are followed closely. Below is a guide to ensuring the finished door is fully protected and sealed. However, our recommended number of treatments is the minimum required, irrespective of manufacturers recommendations.

**We do not recommend using varnish or any oils ie (Danish Oil) on exterior doors.**

	Recommended number of coats of preservative	Recommended number of coats of wood stain
Exterior Hardwood	2	3
Interior Hardwood	1	3

## Preparing and Cleaning

Ensure all carpentry enabling the door to be fitted is completed, remove any hinges or door furniture. Remove all dust and grease, by wiping all surfaces with either white spirit or cellulose thinner, (check the recommendations from the manufacturer of your preservative, stain or wood stain). A vacuum cleaner with a small brush or nozzle will help you get into all areas. Remember to wipe down again after rubbing down.

## Preserving Untreated surfaces

Use TWO coats of a clear preservative for all exterior woodwork, one coat for any interior woodwork that requires preserving. Follow the manufacturers recommendations regarding application closely.

## Applying Wood Stains

Most wood stain is toxic and or flammable - Follow the manufacturers instructions closely and consider the ventilation aspects of the location where you will be working.

Choose the type of product you wish to use carefully. Consider the product you will be applying the wood stain to. Do not use an interior wood stain on an exterior door.

## Important

Always treat the end grain and ensure that a good treatment is applied to all surfaces. Pay close attention to top and bottom edges, cut areas for lock and hinge housings and holes for letter plates.

## Coat All Areas

Always apply the correct number of coats of wood stain at the right time intervals as recommended by the manufacturers of the wood stain. Always sand the door lightly between applying coats, and remember to re-clean all surfaces.

## Staining or Dyeing the Surface

A number of differing treatments are available to change the colour of the wood. If possible, save any off cuts to test the colour on, if this is not possible, always test a less conspicuous small area before applying the full covering. Follow the manufacturer's recommendations regarding application and ensure that the requisite amount of recommended coats is applied. Remember the final colour is dependent on the type of wood being treated.

## Maintaining the Door

Inspect the condition of all external joinery, especially the decorative and glazing systems, at maximum intervals of one year and carry out remedial work as required. Care should be taken to also follow the recommendations on maintenance inspection from the manufacturers of the stain or paint. Always follow the inspection regime that has the shortest interval of inspection.

Internal Doors when finished can be cleaned with a dry non lint cloth to remove dust and surface marks. For heavy marks or blemishes clean with a non abrasive multi surface cleaner or polish. Natural Veneers should be kept out of direct sunlight where possible as being a natural product the veneers will lighten. As a natural product timbers will change colour over time and this is normal and part of the beauty of a natural product. Any scratches or deep damage can be repaired with coloured furniture wax or French polish.

Any ironmongery supplied on the doorsets can be lubricated when necessary to ensure smooth operation but any lubricant must be removed from the doors or staining will occur.

The most harm that may come to a timber product will be caused by moisture in any form. Do not clean products with water or damp cloths and do not allow water near any edges of the product.

## Overall

The golden rules in achieving a fine long-lasting surface for your door, are, ensure you have enough time to do the job; consider where you will be working, the weather conditions (if applicable) and be fully aware of the manufacturers instructions before starting work.