

# STAINING WOOD DOORS

## 1.) MATERIALS REQUIRED

- A high quality oil-based stain and a clear topcoat OR  
- A high quality oil/varnish-based stain-and-sealer combination with a compatible coat. Always follow manufacturer's applications, directions and recommendations. Always use exterior grade materials if you have an exterior door application.

- 3"-4" White China Bristle Brush
  - 1" China Bristle Brush
  - 100% Cotton, Lint-Free Wiping Cloth
  - Tack Cloth
  - 220 Grit Sandpaper and Sanding Block
- Additional sandpaper or steel wool per manufacturer's instructions may be required.

## 2.) PREPARATION & APPLICATION

**1.)** Doors should be allowed to acclimate to the environment where they will be installed. This may take at least two days under average conditions. Avoid finishing immediately after a rain or damp weather and during periods of higher than average humidity. In very dry conditions, the door should be finished right after the wrapping is removed. Ensure adequate air flow around all surfaces of the door when conditioning.

**2.)** The more care taken in preparing the surface before the stain is applied the better the results. Remove all hardware and fill any nail holes and blemishes with wood filler. These fillers MUST NOT contain stearates or waxes and should be stainable or color matched to the wood stain. If you are finishing a French door that has muntin bars (wood grille), it is not necessary to mask the glass lites, since each one is protected with a plastic film.

**3.)** Remove handling masks by sanding lightly with 220 grit sandpaper before applying finish. Surface should be clean and dry, free of all dirt, grease, glue stains and machine marks. Sand again lightly between coats.

**4.)** For staining soft or porous woods use a pre-stain conditioner to help prevent blotching and streaking. Some woods, particularly Pine, have a tendency to absorb stain unevenly. The wood conditioner penetrates the wood, preparing the surface so that the stain is absorbed evenly.

**5.)** Wipe down with a tack cloth to ensure a dust-free finish.

**6.)** Prepare the materials according to the manufacturer's instructions.

**7.)** Apply a thin coat of stain with a 3" -4" brush. Use a wiping cloth to remove excess stain. When wiping stiles and rails, use long strokes to prevent stain from pooling where the horizontal rails and the vertical stiles meet. Only work on one area of the door at a time. For Wood Panel Doors, start with the door panels, then the mullion, then stain the horizontal rails, then the vertical door stiles. For a French Door, start with the muntin bars (grille) and then proceed to the rails and then stiles. It is recommended to finish with the door laying horizontal on a bench or workhorses for best results. For Wood Veneer Doors, finish in the direction of the grain. Remove any excess stain from the corners of the panels or lite grilles by feathering with a dry 1" brush.

**8.)** Stain all four edges last (top, bottom, left and right).

**9.)** With some stains, a second coat will yield a deeper color. Make sure the first coat is completely dry before applying a second coat.

**10.)** Allow door to dry completely for 24 hours or until there is no more odor of the stain. Apply a minimum of two layers of topcoat. Refer to manufacturer's instructions for topcoat compatibility with the stain used in Step 7.

Advantages and disadvantages of solvent-borne clear finishes:

- Brushes well, excellent resistance to: wear, water, and water vapor.

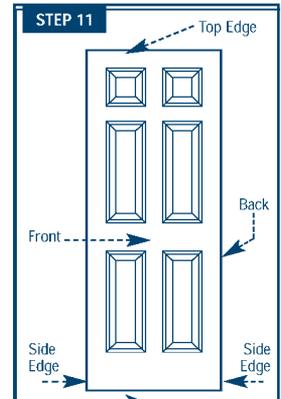
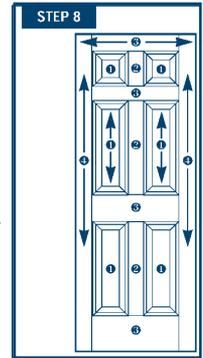
- Subject to UV degradation, slight yellowing.

Advantages and disadvantages of water-borne clear finishes:

- Scuff resistant, easy clean-up, minimal solvent fumes, non-yellowing

- Moderate water resistance, weather-sensitive application, and potential for raised wood-grain. Ensure each coat is dry before applying the next; sand between topcoats as recommended. The entire door must be completely sealed with two coats minimum to restrict moisture absorption. Apply top coats over one area at a time, per Step 7 schematic.

**11.)** After finishing is completed, reinstall all hardware. For French Doors with wood muntin bars, use a sharp blade or utility knife to cut away the protective plastic film leaving clean edges around the lites.



## 3.) STORAGE AND HANDLING:

**1.)** Deliver doors to the building site after the plaster, drywall or concrete is dry. If doors are stored at the job-site for more than a week, top, bottom and side edges MUST be sealed. Care MUST be taken to avoid edge or face damage.

**2.)** Store flat on a level surface in a clean, dry, well ventilated building. Protect from dirt, water and abuse, but allow air circulation. Doors must be sealed with an oil-based sealer or primer if stored for long periods.

**3.)** Doors should not be subjected to abnormal or sudden variations in heat, dryness or humidity and should not be exposed to direct sunlight.

**4.)** Doors should be stored at least 10' away from any heat source. Excessive heat on one area of the door creates uneven drying which results in warping and checking on the faces.

**5.)** Doors should be conditioned to the average prevailing humidity before hanging. In below-zero temperatures, doors should be stored properly in a dry building at normal temperatures for at least three days before hanging.

**6.)** Handle with clean hands or gloves and do not drag doors across one another or across other surfaces.

Publisher is not responsible for errors or omissions in this book. Always check your local building codes for updated information.