INSTALLATION, MAINTENANCE, AND FINISHING OF DOORS

Improper storage, handling, finishing or installation of Jeld Wen doors may result in severe damage to them and may void the warranty. All doors shall be finished of all six sides for a valid warranty. The following guidelines will help maintain the high quality of these doors.

STORING AND HANDLING

- 1. Store doors flat on a level surface in a dry, well-ventilated building. Doors should be kept at least 3 ½ inches off the floor and should have protective coverings under the bottom door and over the top. Covering should protect doors from dirt, water, and abuse, but allow air for air circulation under and around the stack. Avoid exposure to direct sunlight.
- 2. Do not subject interior doors to extremes of heat and/or humidity. Prolonged exposure may cause damage/ buildings where humidity and temperature are controlled provide the best storage facilities (recommended conditions: 30% to 50% Relative Humidity and 30° F to 90° F.)
- 3. Do not install doors in buildings that have wet plaster or cement unless they have been properly finished. Do not store doors in buildings with excessive moisture content --- HVAC systems should be operating and balanced.
- 4. Doors should always be handled with clean hands or while wearing clean gloves.
- 5. Doors should be lifted and carried when being moved, not dragged across one another.

FINISHING PREPARATION

FAILURE TO COMPLY WITH THESE GUIDELINES WILL AFFECT YOUR WARRANTY

- 1. To ensure uniform moisture exposure and dimensional control, all surfaces including the top and bottom must be treated equally.
- 2. Before applying first finishing coat, remove all handling marks, raised grain scuffs, burnishes, and other undesirable blemishes by block sanding all horizontal surfaces in a horizontal position. For wood doors, **Sand entire door lightly with 180-grit sandpaper. To avoid cross-grain scratches sand in the direction of the grain**.
- 3. After sanding, clean entire door with a slightly damp cloth, removing all dust and foreign debris. (Avoid caustic or abrasive materials.)
- 4. If necessary, adjust components before finishing properly. (Wood panels can "float.") Carefully realign with a wood block and hammer.
- 5. Before finishing, hang the door. Then remove to finish properly. Do not finish during or after high-moisture periods. Door must be dry before finishing.
- 6. Avoid dark colored finishes if the door id exposed to direct sunlight. This will reduce the chance of warping and veneer checking.
- 7. Certain species of wood contain chemicals that react unfavorably to some finishes or to foreign materials in the finishing system. Whenever possible, test your finish prior to application and eliminate the use of steel wool on bare wood, avoid rusty containers or any other contaminate.

8. Softwoods like pine, fir, and hemlock take stains differently and may appear uneven or blotchy after staining. If the door is to be stained, a wood conditioned or stain control should be applied prior to staining to promote a uniform appearance and avoid sharp color contrasts or a blotchy appearance. Note: as the sealer allows for even stain application, it also reduces grain contrast and the depth of stain penetration. If grain contrast is desired pre-stain sealer or wood conditioner should hot be used. As with all finishes, test prior to application, talk with a pa9int professional regarding this application.

EXTERIOR FINISHING

- A. STAIN AND CLEAR FINISHING
- 1. Stain the door using a quality oil or alkyd-resin-based stain.
- 2. Finish the door with a quality exterior solvent-borne or water borne polyurethane. Most quality exterior finishes require a minimum of two coats. Refer to finish manufacturer instructions. A marine-grade varnish is recommended on all exterior doors. Note: If a pre-stain sealer was not used, waterborne finishes increase the potential of veneer splits and grain raise.
- 3. All six sides must be finished prior to final installation to comply with warranty.
- 4. Exterior stain-and-clear finishes perform better id protected from sunlight and moisture. Inspect finish once a year and refinish as needed.
- 5. Natural grain and color variations are normal and not considered manufacturer defects.

B. PAINT FINISH

- 1. Seal door with a quality oil-based primer and two top coats of an exterior oil-based or all-acrylic latex paint.
- 2. Exterior door finishes perform better if protected from sunlight and moisture. Inspect finish once a year and refinish as needed.
- 3. All six sides must be finished prior to final installation to comply with warranty.

Caution; JELD-WEN Premium Wood Doors can't evaluate all available paints, strains or application requirements. Consult your paint dealer for systems best suited for your region and exposure. Always use top quality finishes and follow instructions on finish labels.

INTERIOR FINISHING

A. STAIN-AND-CLEAR FINISHING

1. Finish the door with a quality solvent-borne or waterborne polyurethane.

Note: If a pre-stain sealer was not used, waterborne finishes increase the potential of veneer splits, highlighted joints and grain raise.

- 2. All six sides must be finished prior to final installation to comply with warranty.
- 3. Natural grain and color variations are normal and not considered manufacturing defects.

B. PAINT FINISH

- 1. Seal door with a quality oil-based primer and two top coats of an interior oil-based or acrylic latex paint.
- 2. All six sides must be finished prior to final installation to comply with warranty.

INSTALLATION

- 1. The utility or structure strength of the doors must not be impaired in fitting to the opening, in applying hardware, in preparing for lights, louvers, plants-on or other detailing.
- 2. Use a minimum of tow hinges for 1 3/8" doors up to 80" in height, three hinges for all 1 ./4" doors and all doors from 81" to 84" in height, four hinges for all doors over 84" up to 96" in height.
- 3. Clearances between door edges and doorframe should be a minimum of 1/16" on the hinge edge. For latch edge and top rail, the clearance should be 1/8" (+0, -1/16").
- 4. All hardware locations, preparations for hardware and methods of hardware attachments must be appropriate for the specific door construction. Templates for specific hardware preparation are available from hardware manufacturers, NWWDA, National Wood Window and Door Association) or DHI (Door and Hardware Institute).
- 5. Pilot holes must be drilled for all screws that act as hardware attachments. Threaded-to-the-head screws are preferable for fastening hardware to nonrated doors and are required on fire-rated doors.

CLEANING AND TOUCH-UP

- 1. Inspect all wood stile and rail doors prior to hanging them on the job. Repair noticeable marks or defects that may have occurred from improper storage and handling.
- 2. Field touch-up shall include the filling of exposed hail or screw holes, refinishing of raw surfaces resulting from job fitting, repair of job-inflicted scratches and mars, and final cleaning of finished surfaces. Field repairs and touch-up should be the responsibility of the installing contractor.
- 3. When cleaning door surfaces, use a nonabrasive commercial cleaner designed for cleaning wood door or paneling sue faces that does not leave a film residue that would build up or affect the surface gloss of the door finish.

ADJUSTMENT AND MAINTENANCE

- 1. Ensure that all doors swing freely and do not bind in their frame. Adjust the finish hardware for proper alignment, smooth operation and proper latching without unnecessary force or excessive clearance.
- 2. Review with the owner/owner's representative how to periodically inspect all doors for wear, damage, and natural deterioration.
- 3. Review with the owner/owner's representative how to periodically inspect and adjust all hardware to ensure that it continues to function as it was originally intended.