



Tips for Handling and Finishing Interior Wood Doors

To ensure that your doors are handled and finished with care, we offer the following suggestions. Please note that this list includes highlighted information only; read the following pages for more detailed instructions.

1. Doors should not be subjected to abnormal heat, extreme dryness or humid conditions.
2. While in storage, doors should be lying flat on a level surface in a dry, well-ventilated building and kept covered.
3. Doors should be allowed to reach room temperature and stabilize for a period of 24 hours prior to installation.
4. The protective film on French doors may assist in the finishing process. Care should be used when removing the film. The tempered glass, required by law, may become scratched by the use of sharp objects or abrasive cleaners.
5. Before finishing, all doors must be lightly sanded with a fine grit sandpaper (180 or finer). Special attention should be given to handling marks, raised grain, burnishes and other blemishes. Additional sanding may be required for dark stains, high gloss paints and sprayed finishes. Sand “with the grain” to avoid scratches.
6. After sanding, the door should be cleaned with a soft cloth to remove all debris. Do not use any abrasive materials.
7. Prior to staining, apply a thinned coat of sanding sealer or pre-stain to promote a uniform appearance. (Your finish supplier can recommend the correct product.)
8. With every coat, all exposed wood surfaces must be sealed, including the top and bottom rails.
9. Oil-based sealers or primer coats provide the best base coat for finishing. Water-based coating on unfinished wood may highlight joints and raise wood grain, and should be verified for use by your chosen finish supplier.
10. Certain wood species react adversely to particular finishes. Prior to full application, test for stain compatibility in an inconspicuous area. Notify your finish supplier if an undesirable appearance is detected and discontinue the finishing process until a solution is found.
11. Compatible finishes are highly recommended from base to topcoat. If possible, select the same manufacturer for all finishing products and follow the specifications provided.
12. A clear finish is recommended for lighter species, such as maple and birch. Due to the natural characteristics of these wood types, dark finishes may appear blotchy or uneven.
13. After each coat is applied, allow for adequate drying time. Confirm smoothness and color are correct before applying the next coat.



Effects of Moisture

Wood absorbs and loses moisture to balance its moisture content to the humidity and temperature of the air. Because of this, wood tends to expand and contract as the moisture level changes; however it does not contract or swell equally in all directions. The thickness and width of lumber is more prone to the effects of moisture and climate change rather than insignificant changes in length. These effects fluctuate from one species to another.

- The density of the wood can affect the extent of the expansion and contraction. Choose a wood species with a lower dimension change coefficient for homes in high risk areas.
- Severe dryness or excessive moisture will cause problems in panel contraction or expansion, joint separation, veneer checking or cracking, bowing, contraction of expansion of the stile or rail.
- Product failure or product concerns related to exposure to extreme changes in temperature or humidity is not covered under the warranty.
- No matter the locations, products installed into non-air conditioned or humidity controlled homes will expand. Seasonal homes should always be maintained with some type of climate control during off season or non-use.
- Natural expansion and contraction of a wood door can cause noticeable seams. These unavoidable seams are a natural characteristic of an applied paint finish and are not covered under the warranty.
- Finishing a door through the use of stain, sealer and top coat will slow the absorption of moisture, but will not eliminate it. Doors should be completely finished on all faces and sides as soon as possible. Proper humidity levels in the range of 35% to 50% should be maintained throughout site storage, installation and use.

Handling and Finishing Wood Doors

Handling

- Handle doors carefully with clean equipment and caution.
- While in storage, doors should be laid flat on a level surface in a dry, well-ventilated building and kept covered. Doors should not be exposed to excessive humidity, moisture, heat, dryness, or direct sunlight. Doors should be covered and allowed enough air circulation. Make sure not to angle, stack or prop doors. When doors are being moved, be sure to lift and carry; do not drag them.
- The relative humidity should be maintained in the range of 35% to 50% for optimal year round performance. Doors should be allowed to reach room temperature and stabilize for a period of at least 24 hours prior to installation.



Finishing

- **Prior to finishing, all stile & rail doors must be sanded for approximately 15 to 25 minutes with fine grit sandpaper (220 or finer). Special attention should be given to handling marks, raised grain, burnishes and other blemishes. Additional sanding may be required for dark stains, high gloss paints and sprayed finishes. Sand “with the grain” to avoid scratches.**
- **After sanding, clean the door with a soft cloth and remove all debris. Do not use any abrasive materials.**
- **To avoid a blotchy appearance when staining, apply a sanding sealer to help promote a more elegant appearance. Penner Doors & Hardware and its suppliers are not responsible for the final overall appearance of the field-finished doors. Our suppliers can recommend the correct products, and your painting contractor is responsible to make adjustments to meet the desired results.**
- **Doors MUST be sealed on ALL six surfaces. Allow adequate drying time between coats and confirm smoothness and color are correct before applying the next coat. Follow the manufacturer’s recommendations and detailed instructions regarding the number of topcoats. After the door is finished, “floating panels” may move or “breathe” slightly, revealing an unfinished edge. Touch up these areas with stain/sealer or paint to finish the exposed area.**
- **Oil-based sealers or primer provide the best base coat for finishing. Water-based coating on unfinished wood may highlight joints and raise woodgrain. Verify use of water-based coating with your chosen finish supplier.**
- **Compatible finishes are highly recommended for base to topcoat. If possible, select the same manufacturer for all finishing products and thoroughly follow the instructions provided.**
- **Certain wood species react adversely to particular finishes. Prior to full application, test for compatibility in an inconspicuous area. Notify your finish supplier if an undesirable appearance is detected and discontinue the finishing process until a solution is found.**
- **A clear finish is recommended for lighter species such as maple. Due to the natural characteristics of these wood types, dark finishes may appear blotchy or uneven.**
- **Natural expansion and contraction of a wood door can cause noticeable seams. These unavoidable seams are a natural characteristic of an applied paint finish and are not covered under the warranty.**
- **All stile & rail doors are for interior use only. The product warranty does not apply to doors exposed to outside elements or used in non-heated/non-air conditioned spaces such as a garage or sunroom.**
- **Except for specific defects included in the limited warranty, Penner Doors & Hardware and its suppliers are not responsible for the natural variations in color and wood grain that may become highlighted during the finishing process. All questions regarding the proper application of sealers and finishes should be directed to your chosen finish supplier.**
- **The above finishing tips are meant as general guidelines only. The limited warranty does not cover the appearance or application of field-applied finishes. Always use high grade finish products and carefully follow the manufacturer’s instructions.**