

Care & Handling Instructions

To maintain the USA Wood Door Warranty, follow these care and handling instructions.

Below is an excerpt from the Window and Door Manufacturers Association (ANSI/WDMA I.S. 1A for flush doors and ANSI/WDMA I.S. 6A for Stile and Rail Doors), as well as the Architectural Woodwork Standards 2nd Edition (AWS).

Job Site Information for Architectural Wood Doors

To preserve the fine qualities of wood doors and ensure a lifetime of superior service, proper storage, handling, finishing and installation are very important. This section is not intended to “Scope” the proper storage, handling, or field finishing of doors received on the job site. The responsibility of properly preserving the quality of the architectural wood doors once shipped from the factory is the sole responsibility of the general contractor. The following guidance is provided to assist the general contractor in avoiding damage that may occur to an architectural wood door due to improper storage, handling or field finishing. Contractors or subcontractors responsible for field finishing wood architectural interior doors should consult the architect for the proper finish selection, color and sheen desired. Any damage as a result of improper storage, handling and finishing is not the responsibility of the manufacturer.

Dimensional Changes in Architectural Millwork

Wood has served as a successful material for structural and architectural millwork for centuries. When correctly designed and manufactured, wood products have demonstrated long-lasting aesthetics and product integrity throughout the lifecycle of a building or structure. Most issues regarding dimensional problems in architectural wood are directly related to uncontrolled relative humidity. Wood is hygroscopic in nature and under normal use and conditions contains some moisture. The relative humidity in the atmosphere affects the gain or loss of moisture in wood. In high humidity, wood will absorb molecular moisture and swell, which will cause warping or dimensional increases of the components. In low humidity, wood will release molecular moisture and contract, which causes contraction of the wood fiber, resulting in cracking or checking of the components.

Architectural wood doors are manufactured and designed using kiln-dried wood components to an appropriate average moisture content. Subsequent dimensional changes in these wood components are, and always have been, an inherent natural property of wood. Improper storage or handling of the doors once they are shipped from the manufacturing facility, resulting in these types of dimensional changes, will not be considered product defects and are not the responsibility of the manufacturer. Not adhering to or deviating from the following guidelines could result in voiding the manufacturer's warranty.

It is the responsibility of the contractor to review and comply with the manufacturer's warranty regarding proper storage, handling and installation of architectural wood doors. Doors should be acclimated to the site conditions as prescribed in this document for a minimum of 72 hours.

The following guidelines will help to maintain the high quality products supplied by wood door manufacturers.

Site Conditions

HVAC systems should be installed and operable prior to the storage or installation of architectural doors. Do not subject interior doors to extremes of heat and/or humidity. Prolonged exposure may cause damage. Buildings should maintain a relative humidity level of 25% to 55% and a temperature between 50° F and 90° F. It is recommended that site storage, staging and installation areas be monitored for temperature and humidity from delivery to substantial completion to verify warranty compliance. Once doors are installed, it is the responsibility of the building owner to maintain the relative humidity and temperature necessary to minimize the dimensional changes in the doors. Do not install doors in buildings that have wet plaster or cement.

Handling Doors

Handle USA Wood Door doors with clean canvas gloves. Bare hands leave finger marks and soil stains. Never drag one door across another. Carts and other equipment used to handle doors must be padded.

Inspecting Doors

THE INSTALLER MUST INSPECT ALL DOORS THOROUGHLY BEFORE INSTALLATION. USA Wood Door does not warrant doors installed with obvious defects. On receipt and before forwarding, all doors should be inspected for freight damage. Any observed damage must be noted on the delivery receipt and USA Wood Door must be notified immediately. Failure to follow this procedure may lead to claim denial by the shipper and/or carrier.

Storing Doors

USA Wood Door shipping packaging is not intended for storage.

Stack doors flat on carefully leveled supports. We recommend a support of three 2 x 4's placed the full width of the doors (one in the center and one 12" from each end for regular sized doors) and covered with a sheet of plywood or heavy cardboard to protect the bottom door. The top door should be covered similarly.

Keep doors clean and avoid discoloration by covering them with an opaque material that does not permit light to penetrate. Covering must allow for air circulation. (Certain species, including Cherry, Walnut and Mahogany are extremely sensitive to light and require extra protection.)

Field Finishing

The contractor or subcontractor has the sole responsibility to achieve an appearance acceptable to the owner for field finished doors.

Wood Veneer Finishes

Door orders typically specify only species, grade and cut of veneer. Unless specified, no attempt is made to manufacture doors with flitches of similar color and grain appearance. Natural variations in the wood veneer can be highlighted after the stain and finish are applied to the surface. To produce the best, most durable results, use good quality finishing materials according to the product manufacturer's direction.

When handling the doors, use clean canvas gloves. Bare hands leave finger marks and soil stains.

When doors need to be field finished, thorough sanding is required. This must be done prior to proceeding with finishing operations. USA Wood Door does not warrant the appearance of field finished doors. For more information, refer to WDMA I.S. 1A, Industry Standard for Architectural Wood Flush Doors.

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It is the responsibility of the field finisher to determine the proper grit sandpaper required and the duration of face preparation necessary to make the appearance of the doors acceptable to the owner. It is recommended by USA Wood Door to start with applying a solution of solvent and sanding sealer to raise the wood grain uniformly. After allowing the door to dry, begin sanding the door surfaces using a medium course sandpaper such as P150 grit and then progress through finer sanding grits P180, P220, and finer (if needed) to the desired surface smoothness of the face. It is important to sand out the scratches of the previous sandpaper grit and to perform the sanding operation while the door is in a horizontal position. If a dark stain is to be applied to light wood, thorough initial sanding is even more important to prevent blotching and to reduce a "barber pole" effect.

Fillers and wiping stains are most successfully applied when the door is still in the horizontal position after sanding, prior to hanging the door. This permits easier handling of the materials and prevents the solvents from evaporating too rapidly. Rapid solvent evaporation can cause the fillers to streak. It can also cause the wiping stains to "cure" before cleanup can be completed. With the door in a horizontal position, this premature drying is slowed down. All openings and hardware edges should be double sealed with a good quality sealer. The painting and decorating contractor should putty nail holes with colored putty that approximates the color of the finished wood.

Primed or Paint Grade Finishes

For paint grade surfaces such as MDO and Hardboard (HDF), take the same precautions for handling.

Preparation of these face materials and visible surfaces should be based on the recommendations of the finish coatings supplier to achieve the desired characteristics.

Field Finishing Disclaimer

USA Wood Door provides the above for informational purposes only. While we strive to provide accurate and reliable information, we do not guarantee or assume responsibility for the outcomes of field finishing, appearance, or durability of doors once they leave our manufacturing facilities. All recommendations related to door finishing, sanding, and handling are based on industry standards and best practices; however, the contractor or subcontractor remains solely responsible for ensuring the final appearance and quality of the field-finished doors.

USA Wood Door does not warrant the final appearance of field-finished doors. Please refer to the USA Wood Door Warranty.

Fitting + Installing Fire-Rated Doors

All fire-rated doors must be installed in accordance with NFPA-80 and must be pre-fit and machined by USA Wood Door or other licensed machinists. While it is best not to cut doors for openings smaller than those for which they are manufactured, licensed machinists may bevel the stiles at the rate of 1/8" in 2" so proper clearance can be maintained.

Doors with veneer or decorative laminate edgeband will require re-banding after trimming.

The standard location for an Intertek or Underwriters Laboratories (UL) fire-rated door label is on the hinge stile of the door. It identifies the door as fire-rated. Do not remove, cover up, or paint over the metal fire label.

Do not trim the door lock stile with concealed or exposed intumescence. Do not remove any surface applied intumescent material. Doors may be

undercut a maximum of 3/4" from the bottom as long as clearances are maintained per NFPA-80.

Door Frames

Must use listed frames for fire-rated construction. Install door frames per manufacturer's instructions. Do not install doors unless the jamb is plumb, level and square.

Lite + Louver Openings

Lite and louver openings in fire-rated doors must be machined at the factory or by an approved licensed machinist.

Metal Edge + Astragal

Concealed intumescent stile fire-rated doors do not require metal edges or a metal edge and astragal.

Locks

Install locks per manufacturer's instructions.

Fitting Non-Rated Doors

While it is best not to cut doors to fit smaller openings than for which they are manufactured, the following guidelines should be followed: Trim equally from both sides. Do not trim more than 3/8" off each edge. Doors with veneer or decorative laminate edgeband will require re-banding after trimming. If the total height is reduced more than 3/4", trim equally from the top and bottom, but never more than 3/4" from either end.

Door Frames

Install door frames per manufacturer's instructions. Do not install doors unless the jamb is plumb, level and square. Standard margins are 1/8" at each side and at the top.

Hardware Installation:

Surface-Mounted Hardware

Surface-mounted hardware used on doors with inner blocking should be anchored in that blocking using a no. 12 screw which penetrates the door a minimum of 1-1/4". Pilot holes of 9/64" must be drilled the depth of the screw. See drawing at the end of this document for blocking details.

Hinges

Mortise hinges should be attached with No. 12 x 1-1/4" steel threaded-to-the-head wood screws (see ANSI Standard - B 18.6.4), into 9/64" pilot holes. Surface hinges must be secured with steel.

Fasteners and Torque Settings

Fasteners must not be over-torqued during installation. Failure to torque mounting screws to recommended settings will result in a denial of any claims for cracked stiles, stripped or missing fasteners and subsequent claims for defective manufacturing.

Torque Limitations:

Fire-resistant composite stiles: 30 in-LB (2.5 ft-LB)

SCL/LSL stiles: 30 in-LB (2.5 ft-LB)

Hardwood stiles: 30 in-LB (2.5 ft-LB)

Door face torque limitations: 25 in-LB. (2.1 ft-LB)

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Closers

Install closers per manufacturer's instructions. A surface-type closer requires no wood removal except for fasteners.

All surface-mounted hardware used on doors should be anchored using a #12 thread-to-the-head wood screw that penetrates the door a minimum of 1-1/4".

Backer plates are recommended on decorative laminate doors and mineral core doors when through bolts are used. Attach backer plates with No. 8 3/4" threaded-to-the-head wood screws. A pre-drilled 3/32" pilot hole is necessary.

To prevent stile failure, provide a properly located door stop to limit the door swing.

USA Wood Door will not provide a warranty for doors when using parallel arm closers without the use of adequate top rail blocking – wide enough for screw placement or through-bolts due to the lack of, or omission of, properly located wall and floor stops. Blocking must be specified to be included in the construction. See drawing at the end of this document for blocking details.

Fasteners must not be over-torqued during installation. Failure to torque mounting screws to the recommended settings will result in a denial of any claims for stripped or missing fasteners and subsequent claims for defective manufacturing.

Kick Plates

Kick plates are mechanically attached to the door face. The plate used must be an approved material (metal, stainless steel, acrylic, vinyl, bronze, aluminum or high pressure laminate). Kick plate height is not to exceed 48" from the bottom of the door for fire-rated doors.

Special Hardware Applications

Metal End Caps: Doors ordered and supplied with corner mortised flush bolts must be installed with metal end caps which are supplied with the doors to prevent flaring of the remaining portion of the door. If the doors with mortised flush bolts are ordered with metal edgeguards, the metal end caps are not required. Doors with certain concealed vertical rods (CVR's) must also be installed with metal end caps. Consult manufacturer for applicable CVR devices.

General Notes:

Exterior Use

USA Wood Door interior doors are not recommended nor warranted for exterior use.

Door Tolerances

Please refer to the USA Wood Door Warranty.

Maintenance

To ensure proper door function, periodically inspect and adjust door hardware as needed.

Door Markings

USA Wood Door doors are marked for easy identification. Door opening numbers are marked on the door label. Endmatched numbers are marked on the top end rail of the door and the bottom end of the transom.

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Blocking Reference Guide:

