

# How to Stain

## Fiberglass Entry Systems



### Important

Please read all instructions thoroughly before beginning. This is a guideline for painting and finishing exterior and interior doors. Masonite cannot evaluate all available paints, stains, or application requirements. Consult a paint professional or a local paint department/store for coatings best suited to the project. Select top quality finishes and follow all manufacturers' instructions. Failure to finish the door slab as instructed may result in the denial of warranty claims for operational or performance problems.

## 1 HOW TO START

Doors can be stained either hanging in the opening or removed from the frame (recommended). Should you remove the door, take care to protect it from damage. Sidelites will need to be finished vertically. To remove the door from the frame, use a pin punch and hammer. Strike the hinge pin from the bottom until it pops up (for outswing units - hinge leaf must be removed from the door). Drive the hinge pin as far as possible with the punch. Using a pair of pliers, grasp the hinge pin and, while twisting, pull the pin out. Remove all door hardware.

Store flat on a level surface in a clean, dry, and well ventilated building. Protect from dirt, water and abuse. Allow air circulation. Handle the door wearing proper personal protective equipment (PPE) to avoid any fingerprints / oil marks / etc. and do not drag doors across one another or across surfaces to avoid scratches hard to repair.

## 2 PREPARING THE DOOR SURFACE

**Important:** Dust, debris and other surface contaminants can accumulate on the surface of the door. Therefore, to achieve best results and maximum coating adhesion, wipe/clean all surfaces of the door panel(s) and sidelite(s) thoroughly with mineral spirits or acetone. Make sure enough time is provided for the solvent to evaporate before proceeding to the next step.

Mask (tape) off all surfaces that will not be stained. Make sure to clean the edges, recesses and corners as much as possible. This will help to remove the residual contaminants which directly helps to get a better finish with no defects in the future.

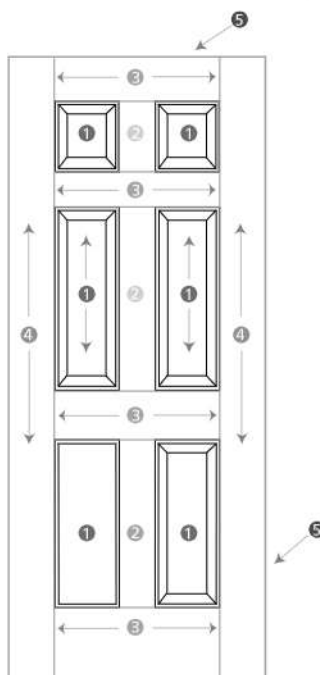
## 3 STAINING THE DOOR

Before starting, and occasionally throughout the project, stir the stain until the texture is creamy. We recommend that before starting, you try staining a small, inconspicuous area of the door to achieve the desired color. (Follow Manufacturers' Instructions)

One coat of stain is required with the recommended (per manufacturer's instructions) dry time needed between sides. The stain should be applied in the following order working on one small section of the door at a time.

### Finishing Order and Grain Direction

1. Panels and sticking (moulding profiles)
2. Vertical center areas (mullions)
3. Horizontal areas (rails)
4. Outside vertical areas (stiles)
5. Edge of door or stiles



### Optimal Conditions

Find a well-lit staining location that is dust-free, well ventilated and within the climate conditions recommended by the stain/top-coat manufacturer.

High humidity or a dry environment can drastically affect the drying of stain and top-coat which may alter the time for drying and application between/after the coats (follow manufacturers recommendation).

### Materials Needed

#### Coatings and Accessories:

- Mineral spirits or acetone
- Lint-free rags or cheese cloth (recommended)
- 2" wide foam brush
- Paper Towels
- 220 grit sandpaper and sanding block
- Scotch-bright for scuff sanding
- Safety razor blades
- One pair of rubber gloves
- Stir sticks
- Masking tape
- Stain
  - High-quality, opaque (non-transparent), heavily pigmented, oil-based stain (recommended)
  - Gel stains can also be used
  - Semi-transparent stains are not recommended
- High-quality, exterior grade, uv stabilized polyurethane sealant (satin or low gloss)
- 2-1/2" wide china bristle brush

### Tools

- Hammer
- Pin punch
- Safety glasses
- Phillips screwdriver
- Pliers

**BARRINGTON.**  
ULTIMATE STYLE & DURABILITY

**BELLEVILLE.**  
DISTINCT ARCHITECTURAL DETAILS

**OAKCRAFT.**  
WOOD GRAIN TEXTURED

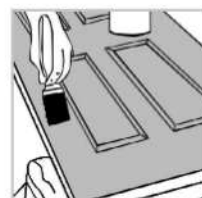
## Staining

1. Put on gloves and prepare your materials.
2. Stir stain thoroughly using smooth strokes, avoid creating bubbles and do not shake the stain container.
3. Working in the specified order and individual section, dip the foam brush into the stain then use the rim of the container to release any excess. Use the foam brush to apply the stain onto the section. Using a cloth, rub the stain into the embossed woodgrain ensuring complete and even coverage. Cleaning with solvent in-between finishing can create adverse effect of combining different solvents present in the stain. Clean edges will help define the individual components of the door. If preferred, the subtle color variation found in wood can be replicated by selective removal of the stain. Using a rag or cheese cloth, gently rub the surface removing very small amounts of stain. Apply varying levels of pressure and work in the direction of the grain. Excessive pressure will remove too much stain.
4. Once the door has been completely stained, check for any drips. While the stain is still wet, lightly brush the entire surface of the door with a china bristle brush. Use long strokes and work in the direction of the grain to even out color and achieve consistency.
5. Let the first stained surface dry, per the stain manufacturer's recommended drying time, before proceeding to the second side.
6. If you prefer a darker appearance, repeat staining steps one through five only after first coat is completely dry. Do not sand between staining coats.

## 4 SEALING OR APPLYING THE TOP-COAT

The top-coat or sealant for your door is very important and required for weatherability. It protects the stained door from the elements and makes the door surface washable. Be sure that the stain coating is completely dry and then apply a high-quality, UV stabilized, clear exterior polyurethane coating (satin or low gloss).

1. Stir top coat thoroughly using smooth strokes, avoid creating bubbles and do not shake the top coat container.
2. Do not overload the brush. Dip the end of the brush into the coating and gently slide the flat side of the brush against the edge of the container to remove the excess.  
Note: We recommend that all 6 sides (front and back faces plus all four edges) be sealed to eliminate moisture absorption. The bottom of your door panel(s) may contain a factory installed weatherstripping (sweep) which is sealed prior to installation. Failure to observe this recommendation may void the warranty.
3. Apply with even, gentle strokes. Press hard enough to flex the bristles just a little and then pull the brush gently along the door's surface.
4. As you apply the sealant, pull the brush quickly along the area two or three times lightly to even out the brush strokes.
5. Allow the first coat to dry completely (follow manufacturer's recommendations) and apply at least one more coat using the same steps as above. A minimum of two coats is required for complete protection and the door should be resealed annually to ensure lasting protection of the finish. Scuff sanding or light sanding may be needed in between the coats based on manufacturers recommendation. Do not sand the final topcoat.
6. After both sides of the door have been top-coated (twice) and are completely dry, remove the paper and tape from the glass and protected surfaces.
7. Clean the glass with window cleaner and remove any finishing materials from the glass with a safety razor.
8. Place door back into frame.



# How to Paint

## Steel and Fiberglass Entry Systems



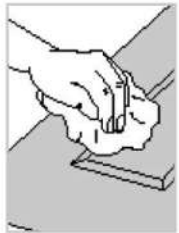
### Important

Please read all instructions thoroughly before beginning. This is a guideline for painting and finishing exterior and interior doors. Masonite cannot evaluate all available paints, stains, or application requirements. Consult a paint professional or a local paint department/store for coatings best suited to the project. Select top quality finishes and follow all manufacturers' instructions. Failure to finish the door slab as instructed may result in the denial of warranty claims for operational or performance problems.

These painting instructions apply to the following Masonite products: Belleville, Smooth, VistaGrande Smooth, Heritage Smooth, Masonite, HD Steel, Sta-Tru, HD Steel and Barrington.

**Note:** Painting instructions specifically refer to the door and sidelite panels. Oil-based paint should not be used on wood frame components (frames & brickmold).

## 1 HOW TO START



Doors can be stained either hanging in the opening or removed from the frame (recommended). Should you remove the door, take care to protect it from damage. Sidelites will need to be finished vertically. To remove the door from the frame, use a pin punch and hammer. Strike the hinge pin from the bottom until it pops up (for outswing units - hinge leaf must be removed from the door). Drive the hinge pin as far as possible with the punch. Using a pair of pliers, grasp the hinge pin and, while twisting, pull the pin out. Remove all door hardware.

### Precautions and Safety Before Starting the Finishing

- Never mix cleaners or solvents. This may be dangerous as well as ineffective.
- If using commercial cleaning or finishing products or solvents, carefully read and follow safety instructions, warnings, cautions and disposal instructions on manufacturer's labels. Wear appropriate safety gear (e.g. clothing, goggles, gloves) and provide plenty of ventilation.
- Immediately clean spills.
- Most solvents are flammable and/or toxic and must be handled with extreme care. Do not use near open flame, sparks, or electrical motors.

## 2 PREPARING THE DOOR SURFACE

**Important:** For adequate paint adhesion, the door surface must be free of dust, debris and other surface contaminants.

Steel doors should be wiped clean with a solvent such as mineral spirits or acetone. Make sure to clean the edges, recesses and corners as much as possible. This will help to remove the residual contaminants which directly helps to get a better finish with no defects in the future. Allow the cleaning solvent to dry completely - until there is no residual odor. Once wiped clean, the door must be lightly sanded with a 220-grit sandpaper. After sanding, the door must be washed with a mild detergent in warm soapy water, rinsed and then dried.

Fiberglass doors should be wiped clean with a solvent such as mineral spirits or acetone. Allow the cleaning solvent to dry completely - until there is no residual odor. Next, the door must be washed with a mild detergent in warm soapy water, rinsed and then dried. Mask (tape) off all surfaces that will not be painted, including all glass.

## 3 PAINTING THE DOOR

Use paint manufacturer recommended exterior grade 100% Acrylic, water based latex or solvent based product for finishing. Do not use lacquer paints. Be sure to follow the paint and top-coat manufacturer's detailed application instructions on the product label.

### Optimal Conditions

Find a well-lit painting location that is dust-free, well-ventilated and within the climate conditions recommended by the coating manufacturer. Recommended temperature should be between 50°F-90°F (10°C-32°C).

### Materials Needed

#### Coatings and Accessories:

- Mineral spirits or acetone
- One pair of rubber gloves
- Mild detergent in warm water
- Stir sticks
- Masking tape
- Safety razor blades
- Paint
  - Use paint manufacturer recommended exterior grade 100% Acrylic, water based latex or solvent based product for finishing. Do not use lacquer paints. Be sure to follow the paint and top-coat manufacturer's detailed application instructions on the product label.
  - Do not use lacquer paints
  - Semi-transparent stains are not recommended
- 2-1/2" wide brush appropriate for type of paint (a natural bristle brush should be used with oil-based paint and a synthetic bristle brush should be used with latex paint.)
- 200 grit sandpaper

### Tools

- Hammer
- Pin punch
- Safety glasses
- Phillips screwdriver
- Pliers
- Air-less sprayer (optional)

**BARRINGTON.**  
ULTIMATE STYLE & DURABILITY

**BELLEVILLE.**  
DISTINCT ARCHITECTURAL DETAILS

**OAKCRAFT.**  
WOOD GRAIN TEXTURED

**MASONITE HD STEEL.**  
HIGH-DEFINITION STEEL ENTRY DOORS

## Painting

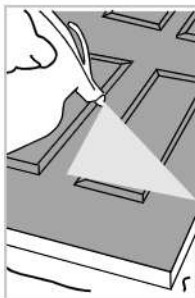
Put on gloves, safety glasses and prepare your materials. Before starting, and occasionally throughout the project, stir the paint using smooth strokes until the texture is creamy – avoid creating bubbles.



### Finishing with Brush Application

Dip the brush into the paint, then use the rim of the container to release any excess paint. Apply paint as evenly as possible while still wet.

Brush strokes should follow the grain direction of the selected area. Start working on the panels and sticking (moulding profiles), then the vertical center mullion, next the horizontal rails, then the vertical stiles, and finally, the outside edges (stiles and top rail, see figure 1 for details). Doors that are outswing or have adjustable surface mounted sweeps will need to have the sweep removed and the bottom rail painted.



### Finishing with Spray Applicator

Follow the manufacturer's instructions for thinning the paint; (i.e. thin latex paint with water or oil-based with solvent for better atomization and spraying results). Strain paint before filling the spray pot.

The door can be painted in horizontal (recommended) or vertical position; however, the paint should be applied in continuous strokes extending six inches past the edges of the door. This will ensure uniformity across the entire surface of the door. Multiple light coats are better than one heavy coat.

Avoid runs as a result of over-spraying.

## Drying

**Important:** Let the paint dry completely, following the manufacturer's recommended drying time before handling the painted surface or applying a second coat. Scuff sanding or light sanding may be needed in between the coats based on manufacturers recommendation. Do not sand the final topcoat. If possible, allow the door to dry in a horizontal position to minimize paint runs. High humidity and/or low temperatures may extend your drying time.

**Warning:** Doors painted with dark colors or doors with attached non-vented storm doors may become very hot to the touch in direct sunlight and may void the warranty.

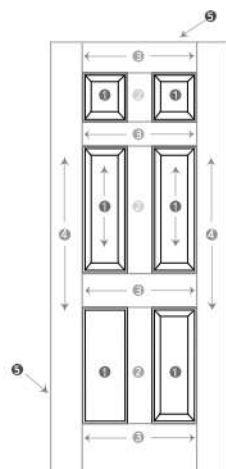
Do not paint the weather strip and do not close door until paint is dry (see paint manufacturer's specifications on minimum drying time).

To maintain product warranty: Paint the door, frame, header and brickmold within 45 days of installation. Repainting every 1 to 7 years will be required, depending upon weather exposure

Do not use glass cleaning products (such as Windex), acetone, gasoline, benzene, lacquer thinner, chlorinated solvents, gritty abrasive scouring compounds, or alkaline cleaners to clean the acrylic inserts as damage to the insert will occur.

Do not use squeegee, scraper, or synthetic rags that may scratch.

Never scrub the acrylic. Gently wipe surface with a soft, scratch-free cloth.



### Finishing Order and Grain Direction

For textured door finishing with brush.

1. Panels and sticking (moulding profiles)
2. Vertical center areas (mullions)
3. Horizontal areas (rails)
4. Outside vertical areas (stiles)
5. Edge of door (includes both sides & top of door)

Note: To maintain the product warranty, paint all exposed surfaces.

**BARRINGTON.**  
ULTIMATE STYLE & DURABILITY

**BELLEVILLE.**  
DISTINCT ARCHITECTURAL DETAILS

**OAKCRAFT.**  
WOOD GRAIN TEXTURED

**MASONITE HD STEEL.**  
HIGH-DEFINITION STEEL ENTRY DOORS