STAIN & CLEAR FINISH

The top coats should be a solvent-borne (oil-base, alkyd resin base, polyurethane resin-base) or a water-borne (latex resin-base) clear finish. The advantages of a solvent-borne clear finish is they are faster drying, harder, and more water resistance. The advantages of a water-borne clear finish is they are very flexible, ultraviolent resistance, and have good exterior durability. Note: Lacquer-base toners or finishes should not be used on exterior doors.

1. Depending on the type of stain being applied, the door may need to be prepped with a wood conditioner or sanding sealer prior to applying stain. Verify with the stain and top coat manufacturer's instructions.
2. Doors should be sealed with at least three coats of a good quality exterior solvent-borne or water-borne clear finish.
3. Sand lightly between top coats, making sure that all surfaces and edges are covered every time a coat is applied. Clean door of dust before applying the next coat.
4. To minimize moisture penetration where wood parts or glass and wood come together, be sure enough top coat is applied to form a bridged film across any voids. Make sure that the finish does not prevent movement of the floating panels.
5. You can make sure all coatings in the finish system are compatible by using products from the same manufacturer. Finish manufacturers will be able to tell you which of their products may be successfully applied in combination with each other. Finishes should be applied in accordance with the manufacturer's instructions.
6. Dark colored stains should not be used on doors exposed to sunlight, as expansion and contraction of door components may occur.
7. A substantial overhang and protection from the elements will minimize component movement inherent in exterior wood doors.

PAINT FINISH

Oil-base or latex resin-base exterior grade primer and paints may be used on wood doors. Oil-base primer and paints offer more resistance to moisture penetration, and latex resin-base primer and paints will offer better durability and color retention.

1. Doors should be sealed with a good quality exterior primer followed by at least two topcoats of either an oil-base or latex resin-base exterior paint.
2. Sand lightly between coats, making sure that all surfaces and edges are covered every time a coat is applied. Clean door of dust before applying the next coat.

3. To minimize moisture penetration where wood parts or glass and wood come together, be sure enough paint is applied to form a bridged film across any voids. Make sure that the finish does not prevent movement of the floating panels.
4. You can make sure all coatings in the finish system are compatible by using products from the same manufacturer. Finish manufacturers will be able to tell you which of their products may be successfully applied in combination with each other. Finishes should be applied in accordance with the manufacturer's instructions.
5. Dark colored paints should not be used on doors exposed to sunlight, as expansion and contraction of door components may occur.
6. A substantial overhang and protection from the elements will minimize component movement inherent in exterior wood doors.

HIGH EXPOSURE FINISHING

1. Use silicone caulking around the perimeter of each glass pane. This will seal the putty and prevent any moisture from penetrating the door.
2. Use silicone caulking around the perimeter of each panel. This will seal the panel joint and help prevent moisture from penetrating the door.
3. Allow any finish to flow onto the glass area at least 1/16 inch.
4. Storm door may be required to completely eliminate moisture problems. If storm door is used, it must be ventilated to eliminate heat build-up.

MAINTENANCE

Your wooden exterior door will need some periodic maintenance to help insure that it has adequate protection against the elements. Some of the following signs are indicators that it is time to re-finish your door: chalkiness in finish, flaking of finish, hairline cracks in the finish, and changes in the color of the finish.