Finishing Your Kolbe Windows and Doors

Failure to follow these recommendations may void your product warranty. Please refer to our separate Express Limited Warranty on Window and Door Products. Kolbe does not warrant the appearance or applications of field-applied finishes.

There are numerous ways to finish your windows and doors. Often, the type of wood will dictate different required procedures. Be sure to follow the finish manufacturer's recommendations before applying primers, topcoats, or stains to your window or door.

The timeliness of the painting and finishing of wood is very important. After a unit is installed and has been exposed to the weather and/or interior humidity which is commonly associated with the construction process of a home, it can be difficult to dry the wood sufficiently for good finish adhesion or damage to the wood may have already taken place. Depending upon your site conditions, unfinished wood surfaces can discolor, attract mildew, swell, and may bow and split causing your units to not function properly.

Moisture is the enemy of wood. The primary purpose of finishing, in addition to aesthetics, is to protect the wood from moisture. During installation of the products there may be a penetration of the wood by nails or other installation fasteners. It's very important to seal these, or any other penetrations, to reduce moisture invasion. This protection must also be reviewed as a continuous maintenance item.

When purchasing and installing a door unit with wood exterior door panels, it is very important to realize that lack of weather protection is often a cause of warpage, cracking, or splitting of exterior panel components. Recessed openings, porches, vestibules, and overhangs materially reduce weather exposure and minimize the tendency for environmental damage to occur. Kolbe prescribes to the following common practice of adequate protection to meet our warranty for these units by following the overhang rule of having a protection feature projecting a distance from the structure equal to one half the distance between the bottom of the door and the bottom of the overhang. *See Figure 1.*

If you have a new full wood exterior Kolbe window or door and did not order it with our optional exterior topcoat paint, please see below for necessary finish requirements. Additionally, if you ordered full wood exterior, clad exterior, or wood interior Forgent® Series products without our optional interior stain or topcoat finishes, your windows and doors must be finished within the below listed time frames. These requirements must be fulfilled to maintain your Kolbe warranties.

To keep your windows and doors operating properly, exposed exterior wood must be primed and top coated with a minimum of two (2) coats of a high-quality topcoat finish (3mils minimum) within sixty (60) days of delivery. An exterior acrylic water-based topcoat system is recommended. This includes all edges of a window sash or door panel. Additionally, any interior unprimed or primed components must be top coated with a high-quality finish within ninety (90) days.

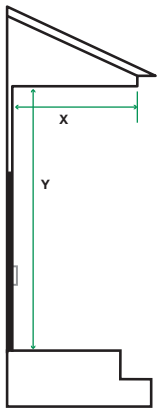

Figure 1: *Where X is the length of the overhang required and Y is the distance from the bottom of the door to the base of the overhang*

Adequate overhang depends on typical weather conditions of the area where the door is installed, but at the minimum, means the above guidelines are required.

All pieces of wood are unique. Some pieces of wood will have more pronounced grain patterns than others. When a topcoat or stain finish is applied the differences may be more pronounced. These are not defects in the wood or the finish. Additionally, stain color inconsistencies due to natural wood properties are not wood defects and can be controlled with proper finishing techniques.

Be sure to follow the finish manufacturer's recommendations for finishing before applying to your window or door as well as read and follow the manufacturer's safety recommendations and warnings on each container. When caring for your windows and doors, always make sure to wear adequate hand, eye, and ventilation protection.

FINISHING THE EXTERIOR OF WOOD WINDOWS OR DOORS

1. Kolbe requires that exterior bare wood be primed and top coated with a minimum of one (1) primer coat and two (2) coats of a high-quality exterior topcoat finish (3mils topcoat minimum) no more than sixty (60) days after delivery. However, if at all possible, for the long-term performance of your product we recommend that your units be finished before product installation. This includes all edges of a window sash or door panel. Do not apply a finish to any vinyl, plastic, metal, or non-wood components such as hardware or locks. Read and review the finish manufacturer's information before beginning the finishing process. The surface and the wood substrate must be thoroughly dry and clean as primers and paints do not adhere to moisture laden surfaces. Fill exterior nail holes with an exterior grade wood filler, sand smooth, and re-prime.

2. Because of the exterior wood preservative treatment Kolbe applies to the exterior facing wood components of their windows and doors, if any of these components have been planed, moulded, ripped, or modified in the field they must be retreated with a zinc naphthenate wood preservative (minimum 2% zinc) with two saturating brush coats of preservative at the time of installation and prior to the application of primer and topcoat paints.

3. If possible, remove the window or door sash or lay product flat for priming and topcoat application. Do not close or reinstall sash or unit until it is thoroughly dry. Use only high-grade finishing materials in accordance with the manufacturer's recommendations. Finish materials from one source normally assures coating compatibility. When using an unfamiliar finish system, experiment on scrap wood or on a concealed location to verify results.

4. Before beginning the finish process, apply masking tape around the glass perimeter leaving a 1/16" gap between the tape and the wood. This will allow you to lap the finish coat onto the glass for a proper seal. This applies even when your products come supplied with a glass protective film applied. Additionally, mask or remove any other trim or weatherstripping to protect it before sanding, priming, or topcoat application.

5. Remove handling marks, debris or other conditions that may affect the final finish appearance, sand the wood surface with an appropriate grit sandpaper and thoroughly clean the wood surface of dust with a tack cloth before applying your choice of finish. Be careful to avoid touching the glass with the sandpaper.

6. Proceed with the finishing process using only high-quality primers and paints in accordance with the paint manufacturer's recommendations. An exterior acrylic water-based topcoat system is recommended. To provide good adhesion of the topcoat paint, a compatible prime coat must be applied. If you prime the product, or your product came with a Kolbe factory-applied primer, sand the primer to create a smooth surface, eliminate raised grain, and promote adhesion for the topcoat paint. It may be necessary to re-prime areas where you have sanded through the original primer. It is extremely important to note that a primer is not considered a finish and its primary function is to maximize adhesion between the wood and the paint. Primers themselves have little protective qualities.

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7. Apply a minimum of one (1) primer coat and two (2) coats of a high-quality topcoat finish (3mils topcoat minimum) within sixty (60) days of delivery. This includes all edges of a window sash or door panel. Seal/finish the borehole of the door panel where the lock handle set is applied into. The interior of the bore hole should be sealed/finished to prevent splitting, water infiltration, and delamination. If your unit is supplied with a multi-point lock do not allow your sealer or your finish to come in contact with the applied hardware. Failure to seal all areas will void the warranty of the product.

8. Protect the finished surface until the finish has thoroughly dried before applying additional paint or placing unit in service.

9. All exterior door wood sills need to be finished upon delivery of the unit. In some geographical areas, refinishing may be necessary every three months. Kolbe cannot be responsible for wood sills that are not maintained properly. Adhere to finish requirements as stated herein. On our aluminum sills there may be an oak threshold. The oak threshold should be finished in the same manner as the wood sills are finished.

FINISHING THE INTERIOR OF WOOD WINDOWS OR DOORS

1. Interior bare wood should be finished before product installation, but no more than ninety (90) days after installation. Read and review this information and the finish manufacturer's information. The surface and the wood substrate must be thoroughly dry and clean. Do not apply a finish to any vinyl, plastic, metal, or non-wood components such as hardware or locks. Some materials, especially vinyl parts and weatherstripping, may not function correctly if they are painted over.

2. Before beginning the finish process, apply masking tape around the glass perimeter leaving a 1/16" gap between the tape and the wood. This will allow you to lap the finish coat onto the glass for a proper seal. This applies even when your products come supplied with a glass protective film applied. Additionally, mask or remove any other trim or weatherstripping to protect it before sanding, painting, or staining.

3. To remove handling marks, debris or other conditions that may affect the final finish appearance, sand the wood surface with an appropriate grit sandpaper and thoroughly clean the wood surface of dust with a tack cloth before applying your choice of finish. Be careful to avoid touching the glass with the sandpaper.

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4. If staining your products, absorption of stain can vary considerably even within the same piece of wood. It may be advisable to apply a wood conditioner or pre-sealer to the bare wood first following the manufacturer's instructions. Because stain usually has less body than paint, be extra careful, for aesthetic purposes, to not allow it to flow behind the interior glazing components. Finishes allowed to leak or flow behind the interior glazing bead are not considered a warrantable item. Continue with the next steps of applying stain according to manufacturer's recommendations. After the stain is thoroughly dry, apply a minimum of two (2) coats of sealer such as exterior rated varnish or polyurethane. When using an unfamiliar finish system, experiment on scrap wood or on a concealed location to verify results.

5. If painting, proceed with this process using only high-quality primers and paints. Low quality primers have less body and depending upon application may flow behind interior glazing components resulting in a less than aesthetically pleasing appearance. This is especially important for situations where the technique of spraying the interior of a product is used. Finishes allowed to leak or flow behind the interior glazing bead are not considered a warrantable item. To provide good adhesion of the topcoat paint a compatible prime coat must be applied. If you prime the product, or your product came with a Kolbe factory-applied primer, sand the primer to create a smooth surface, eliminate raised grain, and promote adhesion for the topcoat paint. It may be necessary to re-prime areas where you have sanded through the original primer. It is extremely important to note that a primer is not considered a finish and its primary function is to maximize adhesion between the wood and the paint. Primers themselves have little protective qualities.

6. Apply a minimum of two (2) coats of a high-quality topcoat finish (3mils minimum) within ninety (90) days of delivery. An exterior acrylic water-based topcoat system is recommended. This includes all edges of a window sash or door panel. If possible, remove the window or door and lay flat for sealing and finishing. Do not close or reinstall sash or unit until it is thoroughly dry. Use only high-grade finishing materials in accordance with the manufacturer's recommendations. Finish materials from one source normally assures coating compatibility. When using an unfamiliar finish system, experiment on scrap wood or on a concealed location to verify results.

7. Protect the finished surface until the finish has thoroughly dried before applying additional paint, sealant, or placing unit in service.

8. To finish your wood removable grilles, if applied to the unit, remove them from the window or door. Sand lightly with an appropriate grit finishing sandpaper and finish similar to the steps listed above.

9. Please note that the sides of the operational sash of the Heritage Series traditional double hung window (which has compression jambliners) should not be primed or painted. Similarly, the top and bottom sides of the Heritage Series traditional sliding window sash (where the sash slides directly on vinyl components) should not be primed or painted. Instead, you may opt to protect these bare surfaces by applying a coat of carnauba-based floor wax, such as TREWAX® clear paste wax for floors. This coating may also have the desired effect of easing the operation of the sash.

MAINTAINING YOUR PAINTED FINISH

We recommend cleaning and inspecting your Kolbe products two to three times a year or more as needed based on the environmental conditions you have installed the product within, and the finish repaired as needed. If the finish has signs of blistering, peeling, or cracking, the unit should immediately be repaired to protect the wood. Please refer to other available information on the maintenance of your Kolbe products. There are also additional recommendations when your products are in the vicinity of coastal areas and/or high salt concentration environments. Proper maintenance is a very important part of the continued performance of your product. Since wood naturally expands and contracts, the need for product review and maintenance will be required.

If your product came with one of Kolbe's factory-applied interior finishes, we recommend protecting the units during the construction process as the debris often accumulates on the units and will scratch and damage the surface of the finish. In the cleaning process avoid getting glass cleaner or other cleaning or chemical solutions on the wood as you clean your glass surfaces. Cleaning solutions may discolor the stain or paint finishes. To clean marks off the wood, use a moistened soft cloth. Rub gently to remove the mark. Dry the area afterwards with a clean, soft dry cloth. If additional removal is required, use a small amount of non-abrasive detergent mixed with water. Clean gently with a soft, clean cloth followed by drying the area as described above.

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