

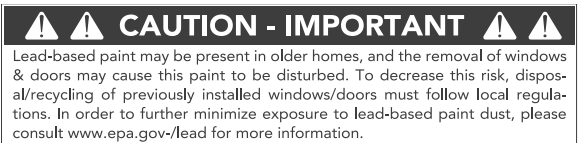
WEATHER SHIELD®

Standard Installation Instructions for Wood Windows & Doors

Structures Have Weather Resistant Barrier Applied Prior to Installation



IMPORTANT: Please read completely before you begin.



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GENERAL INFORMATION

IMPORTANT: Thoroughly read and follow these instructions. Failure to install as recommended will void any warranty, expressed or implied. **Before installation, check building codes for the area in which these windows are being installed to ensure proper compliance.** The installation instructions that follow are based on typical frame construction. Specific applications may differ. The window manufacturer recommends that you consult a qualified installation professional. The window manufacturer is not responsible for installation.

IMPORTANT: A number of jurisdictions have adopted building code design pressure requirements that require window and door products be installed in the same way they were installed for laboratory testing. To comply with these requirements, we are pleased to supplement the installation instructions with **Part No. 1200309 "Standardized Window Installation Instructions For Maintaining Design Pressure Ratings."**

Sealant **must** be applied in all installations. Follow guidelines below and details contained in the following installation instructions for non-rated installation.

- A 3/8" sealant bead must be applied to the rough opening (or the back of the nailing fin so that the sealant aligns with the pre-punched holes. Do not caulk the sill nailing fin or the sill area of the rough opening.
- The nailing fin must contact the sealant continuously along the head and sides of the unit and must fully contact the exterior face of the wall around the window's entire perimeter.
- A shim space is required around all sides of the window to allow for structure movement, seasonal expansion and contraction, and to provide space for insulation. The rough opening must provide a shim space that does not exceed 3/8" on all sides (3/4" total for either width or height) for units with a nailing fin.
- If a shim space greater than listed exists on the interior or exterior of the unit, use solid continuous furring material to fill this space until the maximum shim allowance is achieved.
- Accessories, such as jamb extension, may alter unit width and height. Check rough opening size vs unit size accordingly.
- Furring material must be solid, continuous, and run the full height and/or width of the rough opening. Furring strip depth must be at least equal to window jamb depth.

ADDITIONAL NOTES FOR INSTALLATIONS:

- For any installation that has exposed fasteners, it is recommended to use those made of 300 series stainless steel. Follow your local codes if they specify a different series of stainless steel.
- Certain options, accessories, and warranty considerations require the unit be installed using installation clips. Contact your customer service representative for additional assistance.

SAFETY-ALERT SYMBOLS

This is the Safety-Alert symbol. When you see it be alert to the potential for personal injury or product damage.

DANGER
Falling from window opening may result in serious injury or death. DO NOT leave openings unattended when children are present.

DANGER
CUT HAZARD
"Non-safety Glass."
May cause serious injuries if broken.
Do not install where tempered safety glass is required.

WARNING
Wear appropriate gloves, safety glasses, goggles or eye-shields for all procedures.

WARNING
Weight of window and door unit(s) and accessories will vary. Use a reasonable number of people with sufficient strength to lift, carry and install window or door unit(s) and accessories. Always consider site conditions and use appropriate techniques when installing.

DANGER
Screen will not stop children, anyone or anything from falling out window.
Keep children and objects away from open window.

A Special Note About Masonry

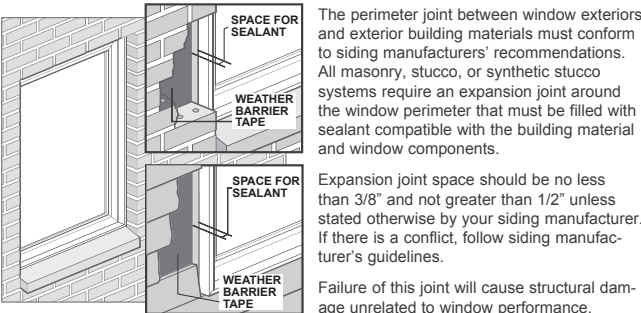


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Measuring Tape, Level, Utility Knife, Rubber Roller, Clear Silicone Sealant, Sealant Gun, and Self-Adhering Weather Barrier Tape (size as required by local code).

Window InstallationPage 6

Measuring Tape, Shims, Hammer, #8 Steel Screws or Roofing Nails (fasteners must be long enough to penetrate framing material by at least 1-1/2"), Electric Drill w/Screwdriver Bit, Pry Bar, Straightedge, Level

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Utility Knife, Scissors, Cloth Tape, Clear Silicone Sealant, Sealant Gun, Rubber Roller

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The window manufacturer reserves the right to change product specifications, installation procedures, materials, prices, and terms of purchase without notice.

Rough Opening Preparation

IMPORTANT: Before starting make sure you have:

- The correct window type (casement, tilt, slider, etc.)

- The correct size window (Width & Height) for your rough opening (FIGURE 1).

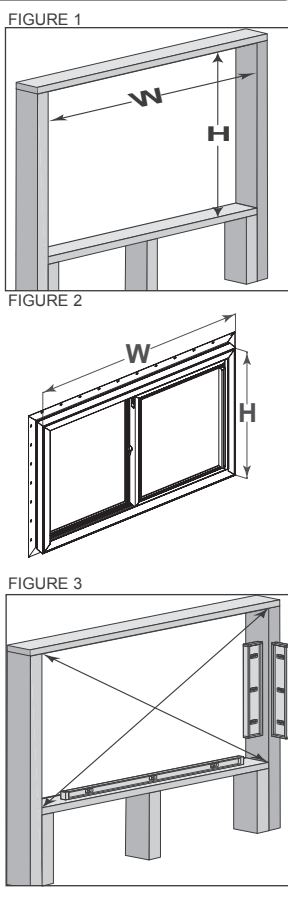
- Accessories, such as jamb extension, may alter unit width and height. Check rough opening size vs unit size accordingly.
- Perform a complete unit inspection checking for shipping damage, broken glass, or other physical damage. Fix whatever is wrong before installation or start appropriate claim procedures.

- When accessories such as jamb extension have been ordered, apply before or after installation according to the directions determined by jamb extension type.

The rough opening must provide a shim space that does not exceed 3/8" on all sides (3/4" total for either width or height) for windows with a nailing fin.

– OR –

1/2" wider on the sides (1" total for width) and 1/4" on the top or bottom (1/2" total for height) for clad units and exterior casing (wood or pvc) units.



Rough Opening Preparation (cont.)

NOTE: Shim space for maintaining DPR ratings cannot exceed 1/4" on all sides (RO total of 1/2" larger than frame width or frame height).

If a shim space greater than listed above exists on the interior or exterior of the unit, use solid continuous furring material to fill this space until the maximum shim allowance is achieved.

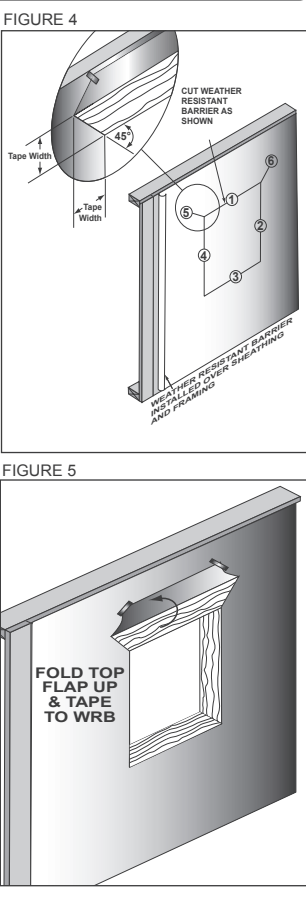
Furring material must be solid, continuous, and run the full height and/or width of the rough opening. Furring material depth must be at least equal to window jamb depth. Furring material must be securely fastened to the rough opening framing.

Step 1

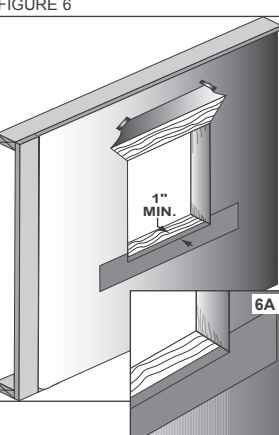
- Measure the rough opening to ensure it meets the guidelines listed above. Check the rough opening dimensions against the unit's actual Frame Height and Frame Width (FIGURES 1, & 2).
- Make sure walls are plumb and not twisted. Check rough opening for square by measuring diagonally from corner to corner in both directions. Diagonal measurements cannot differ from each other by more than 1/4" (FIGURE 3).

IMPORTANT: Fix problems with plumb, level or square before proceeding.

The following instructions are for structures with weather resistant barrier (WRB) applied before the windows are installed.



Rough Opening Preparation (cont.)



WARNING
Improper use of hand and power tools could result in personal injury and/or product damage. Follow equipment manufacturers' instructions for safe operation. Always wear safety glasses.

Step 2

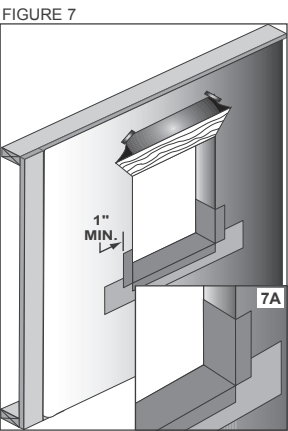
- Cut weather resistant barrier (WRB) in sequence as shown by the circled numerals in (FIGURE 4).
- Cut sill and side jamb WRB flush to the rough opening (FIGURE 5). Lift head WRB up and tape to face of wall (FIGURE 5).

Step 3

- Cut a piece of self-adhering weather barrier tape. Apply to face of exterior wall so 1" extends above the opening and tape extends beyond each side of the opening (based on tape width). (FIGURE 6). Cut along the corners of rough opening and fold down onto the sill (FIGURE 6A). Use a rubber roller to apply.
- Apply a second continuous piece of self-adhering weather barrier tape to the top surface of the rough opening sill (FIGURE 7).
- Cut the second piece of weather barrier tape the thickness of the wall plus at least 1". Make the tape longer than the width of the opening (2X tape width).

Rough Opening Preparation (cont.)

Length Guide for Using Self-Adhering Weather Barrier Tape
Sill flashing = RO Width + (2 x Flashing Width)
Jamb Flashing = RO Height + (2 X Flashing Width) -1"
Head Flashing = RO Width + (2 X Flashing Width) + 2"



Step 3 (cont.)

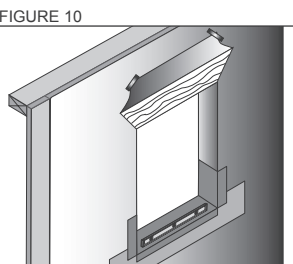
- Align flush with interior of the wall and extend edge of the tape at least 1" past the exterior wall surface (FIGURE 7).
- Start the piece up the side of the rough opening and run it to the bottom of the opening, to the other side of the opening, and up the other side. (FIGURE 7).
- Use a utility knife to cut the sill piece on both corners of the rough opening, and fold along the outside wall (FIGURE 7A).

Sill Pans

Sill pans can be used if these guidelines are followed:

- Commercial pans must follow manufacturer's installation instructions.
- Must be water tight
- Must not be fastened through drainage area.
- Must be caulked prior to installation
- Must drain to the exterior so window sill will not sit in water.
- Must preserve integrity of weather resistant barrier's drainage system.

Rough Opening Preparation (cont.)



Step 4

- Check the rough opening sill for level (FIGURE 10).

NOTE: If level isn't long enough to reach across entire sill use a straightedge under the level. It must be straight & level to ensure smooth operation.

- Measure the opening diagonally from corner-to-corner (FIGURE 11). The measurements should not differ more than 1/4". Fix problems before continuing.

- Apply a continuous 3/8" bead of silicone sealant around the sides and head of the rough opening perimeter. Locate sealant so it does not intrude into the opening, aligns with the pre-punched nailing fin holes, and will also provide a continuous seal between the face of the wall and the nailing fin or exterior casing trim (FIGURE 12).

- Caulk around the head and sides of the rough opening. Do not caulk the sill.

NOTE: If you prefer, caulk can be applied to the back of the nailing fin or (exterior casing) instead of the rough opening.

- When the window is installed the caulk bead must contact the nailing fin or exterior casing continuously so it seals the nailing fin and/or exterior casing against the face of the wall.

Window Installation

IMPORTANT: When accessories such as jamb extension have been ordered, follow guidelines shown below to determine where it should be applied prior to or after window installation.

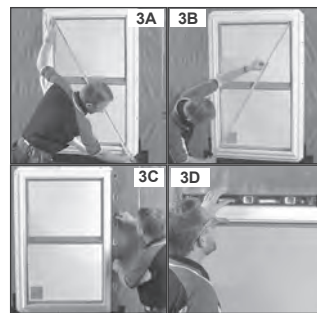
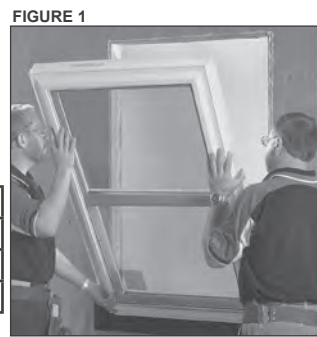
Jb. Ext. Type	When Applied to Unit
Wood (FIG. 1)	Before Installation
PVC (FIG's. 2 & 3)	Before Installation
Vinyl (FIG. 4)	After Installation

Step 1

- Make sure sash is closed and locked, remove all shipping and packing material from the unit, and ensure unit's drainage (weep) holes are at the bottom, and free of obstructions.
- Immediately after applying sealant around rough opening or to back of nailing fin, lift and center window in the opening from the exterior (FIGURE 1).
- Level unit on the interior or exterior across the sill and head.
- Place shims at side jamb locations as necessary to level the unit.

NOTE: To provide sill insulation space, add shims at the sill.

IMPORTANT: If unit is milled, it must be shimmed at the sill under each mull jamb for proper support.



Window Installation (cont.)

Step 1 (cont.)

- Secure one side stop corner with either a rust proof roofing nail or a #8 steel screw. Any fastener must be long enough to penetrate the framing material by at least 1-1/2" (FIGURE 2).

- While holding unit in place, square and plumb jambs. Check both side-to-side and inside-to-outside. Measure unit from corner-to-corner to check for square (FIGURES 3A - 3D).

- To plumb, level and square, use a pry bar to shift unit and shim from the interior as needed.

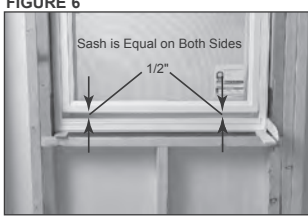
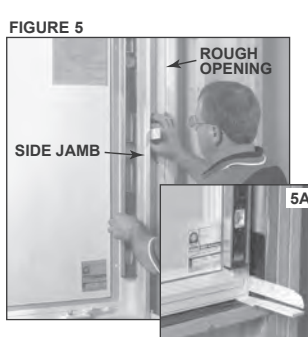
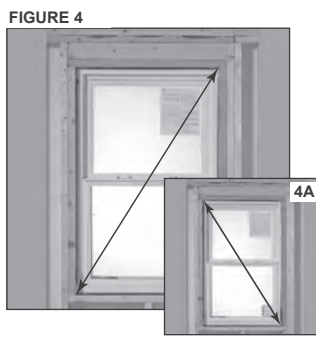
- Secure opposite top corner. Check again for level, plumb and square. Use shims and a straightedge to straighten the side and head jambs.

CAUTION: Ensure the unit is held firmly in place while performing the following steps.

Step 2

- Measure the entire window assembly diagonally in both directions (FIGURES 4 & 4A).

- Shim the top and bottom ends of the side jamb on the left or right (FIGURE 2) to get the diagonal measurements (FIGURES 4 & 4A) of the entire window assembly exactly the same.



Step 2 (cont.)

- Using a level as a straightedge, shim between the frame and the rough opening to straighten the side jambs and sill (FIGURES 5 & 5A).

IMPORTANT: For sliding and hung windows, perform a sash alignment test.

Sash Alignment Test

- Unlock and fully open sash.
- Close sash until it is open about 1/2".
- The gap should be equal on both sides (FIGURE 6).

NOTE: If the gap is unequal the unit requires adjustment. Make adjustments for level and square as outlined in Steps 1, 2, and 3 above and then recheck sash alignment. Make adjustments as necessary to get gap even.

IMPORTANT: Fasteners must not over-compress the nailing fin.

Self-Adhering Weather Barrier Tape Application

Step 1

Preparation

- For the sides, cut two pieces of self-adhering weather barrier tape (see length guide on page 4) (FIGURE 1).

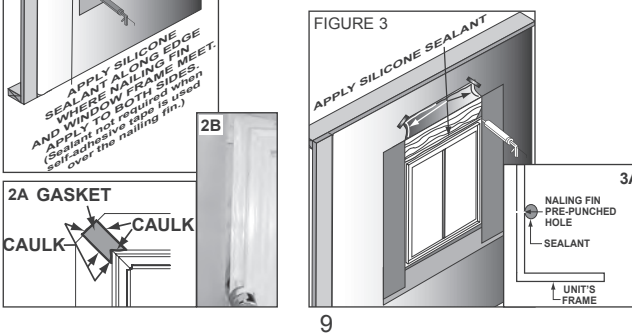
Cut the head piece long enough to span the window and side tapes, plus 2" (FIGURE 1).

NOTE: Sealant along sides not required if self-adhesive tape is used over the nailing fins.

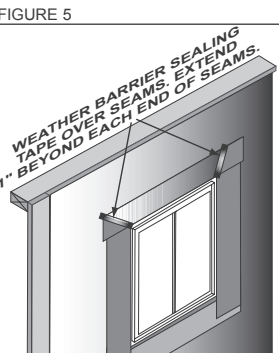
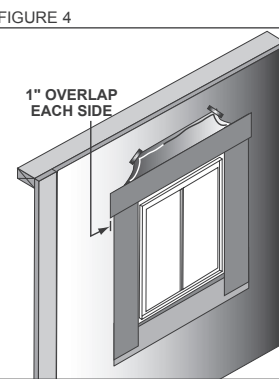
- Apply sealant beads along all sides of all four corner gaskets (FIGURE 2A). Apply a generous, continuous silicone bead on the side nailing fins over the fasteners in the nailing fin. Start above the window and run the bead to bottom of the nailing fin (FIGURES 2, 2B, & 3A). Repeat for the other side frame.

Tape Application – Side Pieces

- Start at the top above the window. Apply tape to the face of the wall above the window frame and work toward the bottom. Tape must cover the entire nailing fin, including the installation holes,



Self-Adhering Weather Barrier Tape Application



the joint between the fin and the building's sheathing and extend out onto the exterior wall. Use a rubber roller to get good contact between the tape and the wall. Tape ends 1/2" above sill tape.

Head Piece Application

- Apply top piece of self-adhering weather barrier tape so one end extends 1" beyond a side piece of tape (FIGURE 4). Apply top piece across the head jamb and over the opposite side piece of tape. Both ends of top piece should overlap side pieces by 1". Use a rubber roller to get good contact with the wall surface.
- Apply silicone sealant along full width of self-adhering weather barrier tape from side to side. (FIGURES 3 & 3A).
- Untape and fold down the top flap of weather resistant barrier over the top piece of the weather barrier tape (FIGURE 5). Use a rubber roller, on top of flap, to smooth and spread sealant applied earlier.
- The diagonal seams in the weather resistant barrier should be sealed by cutting and applying pieces of weather barrier sealing tape. Cut tape 2" longer than diagonal seams. Apply tape over the diagonal seams so that 1" of tape extends beyond the ends of each seam (FIGURE 5).

Self-Adhering Weather Barrier Tape Application (cont.)



Installation is ready for finish and trim.

IMPORTANT: Do not over pack insulation.

Loosely insulate between the window frame and rough opening with fiberglass.

OR

You can use minimal expansion foam products specifically designated and certified as meeting ASTM and AAMA requirements for "door or window use" to fill the shim space between the window frame and the rough opening. Foam manufacturer's installation and curing instructions must be followed.

Products With Synthetic Stucco

Serious concerns have been raised about excessive moisture problems in homes and other buildings that have Exterior Insulation Finish Systems, commonly referred to as EIFS or Synthetic Stucco.

Many experts agree that a certain amount of water or moisture can be expected to enter almost any building exterior system. The building system should allow such water and moisture to escape or "weep" to the exterior, so no damage occurs. However, some EIFS systems may not allow water or moisture that penetrates the wall system to "weep" to the exterior. This can cause excessive moisture to accumulate within the wall system, which can cause serious damage to wall and other building components. It has been reported that so-called "barrier" EIFS systems are particularly prone to this problem.

Moisture problems in any type of building structure can be reduced by proper design and construction with appropriate moisture control considerations, taking into account prevailing climate conditions. Examples of moisture control considerations include flashing and/or sealing of all building exterior penetration points, use of appropriate materials and construction techniques, adherence to applicable building codes, and general attention to proper design and workmanship of the entire building system, including allowances for management of moisture within the wall system.

Determination of proper building design, components and construction, including moisture management, are the responsibility of the design architect, the contractors, and the manufacturer of the exterior wall finish products. Questions and concerns about moisture management issues should be taken up with these professionals. The window manufacturer is not responsible for problems or damages caused by deficiencies in building design, construction or maintenance, failure to install our products properly, or use of our products in systems that do not allow for proper management of moisture within the wall system.

WEATHER SHIELD® LIMITED WARRANTY

WEATHER SHIELD® LIMITED WARRANTY Subject to the conditions, exclusions and limitations that follow, the manufacturer of WEATHER SHIELD products, WEATHER SHIELD Mfg., Inc. ("WEATHER SHIELD") warrants WEATHER SHIELD products (Weather Shield®, HR175™, Weather Shield Aspire Series®, Weather Shield Signature Series®, Weather Shield Premium Series®, Weather Shield Premium Coastal™, Weather Shield Contemporary Collection™, VUE Collection™) to be free from defects in material and workmanship as noted below. All referenced terms are in relation to date of manufacture Warranty effective date: June 1, 2021. Innovations: Wood Shield®, Symmetry Balance System™, TriCore® Frame Technology, EasyCare®, Zo-e-shield™

WARRANTY COVERAGE

Window and Patio Door Product – Twenty Years
WEATHER SHIELD warrants that its products and insulated glass shall be free from defects in material or workmanship for a period of TWENTY (20) YEARS unless specified below. Should any WEATHER SHIELD products or components of products be determined by WEATHER SHIELD in its sole discretion, Replacement is not warranted within the applicable warranty period, WEATHER SHIELD will, at its option, repair the products or components at no charge, or refund the original purchase price of the products containing the defective components. Decisions as to whether to repair, replace or refund shall be made by WEATHER SHIELD in its sole discretion. Replacements will be the closest equivalent current product and may not exactly match the original. Replacements will be delivered to the original point of purchase with no shipping charges. If shipment direct to the consumer is requested, normal shipping and handling charges will apply.

Wood Rot
Wood Shield Clad Wood Products – Thirty Years
Maintained primed/unprimed (unclad) wood products finished pursuant to installation instructions shall be warranted against wood rot for a period of TEN (10) years. Mildew and other discoloration due to condensation is not considered rot and not covered. Products in contact with the ground are not warranted against wood rot.

Wood Shield Wood Exterior Products – Ten Years
Maintained primed/unprimed (unclad) wood products finished pursuant to installation instructions shall be warranted against wood rot for a period of TEN (10) years. Mildew and other discoloration due to condensation is not considered rot and not covered. Products in contact with the ground are not warranted against wood rot.

Laminated and Decorative Glass – Five Years

Laminated and decorative wood products shall be free from defects in material and workmanship for a period of FIVE (5) years.

Butt Glazed Corner Units – Five Years

Corner windows without a post, utilizing butt glazed insulated glass shall be free from defects in material and workmanship for a period of FIVE (5) years after factory glazing.

Insulated Glass Over 70 Square Feet – Ten Years

Warranty coverage for insulated glass over 70 square feet is TEN (10) years unless explicitly stated by Weather Shield on the product quotation.

Retractable Screens – Five Years

Retractable screens shall be free from defects in material and workmanship for a period of FIVE (5) years.

Hardware – Ten Years

Hardware mechanical operation is warranted to be free from defects in material and workmanship for a period of TEN (10) years (excluding non-coastal hardware installed in a coastal environment).

Electronic Hardware – Two Years

Electronic hardware is warranted to be free from defects in material and workmanship for a period of TWO (2) years.

Coastal Hardware – Ten Years

Finish and mechanical operation of stainless steel hardware and hardware with a PVD finish installed in coastal environment are warranted to be free from defects in material and workmanship for a period of TEN (10) years.

Manufacturer Applied Exterior Wood Finishes – Ten Years

Manufacturer applied exterior wood finishes are warranted for TEN (10) years from peeling, flaking, cracking, blistering or delaminating unless unpunctured, marred or caused by joint separation.

Manufacturer Applied Interior Wood Finishes – Five Years

Manufacturer applied interior finish or stain, is warranted against peeling, checking, or cracking for FIVE (5) years. Standard factory-applied primer is not a finish coat, and is not warranted.

Manufacturer Applied Finishes- Aluminum and Fiberglass

WEATHER SHIELD's high-performance finish (meeting AAMA 2605 or 625 requirements) is warranted for TEN (10) years, FIVE (5) years anodizing on aluminum, within one mile of a corrosive environment (seacoast/acid rain), and TWENTY (20) years to include anodizing on aluminum in all other locations to not crack, pit, corrode, peel, blister or flake. Special care and maintenance requirements for corrosive environments apply, please consult the maintenance and care instructions for further information. Exterior finish not meeting AAMA 2605 or 625 requirements installed within one mile of a corrosive environment (seacoast/acid rain) is not warranted, all other locations TWENTY (20) years.

Glass Stress Cracks – One Year

Glass shall be warranted against stress cracks for ONE (1) year.

Transferability – Ten Years

This warranty is transferable to subsequent owners. This transferred warranty is the lesser of TEN (10) years or the period specified from the date of manufacture.

NON COVERAGE

- Normal wear and tear, weathering and natural variations in wood color or texture are considered normal and not a product defect.
- Normal wear and tear of hardware and hardware finishes that can naturally occur (e.g. corrosion, tarnishing) or damage at construction site.
- Products not installed pursuant to our installation instructions attached to each unit.
- Minor scratches, slight glass curvature or glass imperfections are natural variances in glazing and do not impair structural integrity or significantly obscure normal vision.
- Repairs, refinishing or similar activities involved when skilled labor installs or replaces products.
- Condensation and any related water damage (such as mold or wood rot due to water or ice build up), which occur as a result of humidity within the property or changes in the interior/exterior temperatures, do not indicate a defect. Contact a heating/cooling specialist to assist.
- Temporary thermal expansion or bowing caused by significant temperature differentials between interior and exterior temperatures.
- Products installed in a non-vertical position, discoloration of non-visible parts, or failures or operating difficulties due to accident, acts of God, abuse, misuse, alteration, exposure to the elements, improper or insufficient handling, storage, maintenance or service including, but not limited to, obstruction of weep holes. Installation of units must be finished and operated in accordance with our installation instructions attached to each unit.
- Failures or operating difficulties resulting from use of high-expansion foam insulation, incompatible sealant, cleaning agent, or exposure to corrosive, unusual, harmful or aggressive substances, acid rain, fumes or condensates, subject to abnormal stress from localized application of heat, excessive vibration or movement of buildings or foundations or to other abnormal physical stress or use in high humidity areas.
- Products installed in buildings with cladding systems that do not allow for proper management/drainage of moisture (e.g. EIFS or synthetic stucco without an engineered drainage system).
- Vinyl parts or weather strip that has non-factory-applied paint or stain voids the warranty of the affected unit.
- Warpage or air/water infiltration on any hinged door with a call-out height of greater than 6'10" unless WEATHER SHIELD's multi-point lock system is used with the door.
- Insulated True Divided Lite units.
- Slight rattle in airspace movement that does not affect proper alignment.
- Products with wood surfaces that are not covered within thirty (30) days after purchase with a high-quality top coat of paint, sealer or varnish. The top coat should be applied as recommended by the paint manufacturer and it is the customer's responsibility to properly care for and protect the woodwork against moisture or excessive dryness.
- Products with factory-applied primer paint that are not covered with a finish coat within six (6) months of unit installation.

- Products or components not provided by WEATHER SHIELD including but not limited to hardware locksets, strikes, or panning systems.
- WEATHER SHIELD products that are stacked or milled with products manufactured by others.
- Products with modifications (e.g. customer applied paint finishes, tints, films) or security systems without prior approval.

ADDITIONALLY

- Insulated units with capillary tubes will not have inert gas fill.
- ADA-compliant sills are not designed nor are they intended to manage moisture or water infiltration. The determination of proper building design and moisture management (through an overhang or otherwise) is the responsibility of your building designer, architect or contractor.
- Warping of a door shall not be deemed to be