

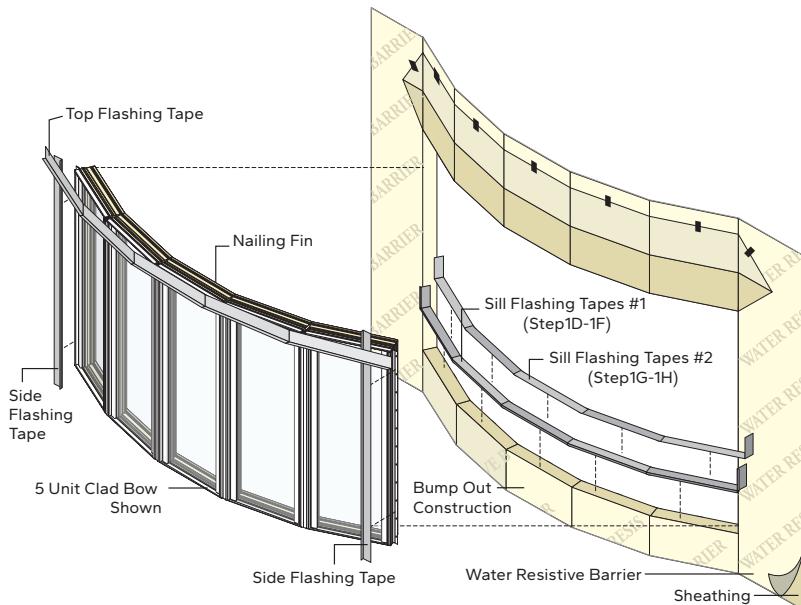
ALUMINUM CLAD BOW WINDOWS WITHOUT HEAD AND SEAT BOARD

INSTALLATION INSTRUCTIONS

Lea las instrucciones en español en el reverso.

Note: These instructions may be used for all Aluminum Clad Wood Bow Windows that do not have a seat board and/or head board.

Read these instructions thoroughly before performing any steps.



WARRANTY: For applicable product warranty and arbitration information, please see product website.

You Will Need to Supply:

- Impervious shims/spacers (12 to 20) 
- 2" galvanized roofing nails (1/4 lb.) 
- Closed cell foam backer rod/sealant backer (20 to 35 ft.) 
- Foil backed butyl window and door flashing tape or equivalent 
- High quality exterior grade polyurethane or silicone sealant (1 tube per window) 
- Low expansion, low pressure polyurethane insulating window and door foam sealant. DO NOT use high pressure or latex foams. 
- Jamb covers (2)
- Interior trim and/or jamb extensions (25 to 40 ft.)

Tools Required:

- Tape measure 
- Level 
- Square 
- Hammer 
- Stapler 
- Sealant gun 
- Scissors or utility knife 

IMPORTANT SAFETY AND PRODUCT INFORMATION

Safety Alert Symbol Reference: These symbols are intended to alert you to potential injury hazards and information. Obey all safety messages.



WARNING To ensure safety and security and help prevent property damage, including possible damage to your window or door, close and lock windows and doors any time they are not being used for venting on a nice day, and particularly during high winds or rain. Ensure all windows and doors are properly fastened to the wall structure according to the product anchor instructions. It is the responsibility of the Buyer or User, the architect, contractor, installer, or other construction professional to ensure the appropriate windows and doors are chosen for the project and the wall construction is designed to resist all loads in accordance with local building code requirements.



CAUTION Many doors in older homes are painted with lead-based paint. Removal of old doors may disturb this paint. Proper precautions must be taken to minimize exposure to dust and debris. Consult state or local authorities and/or go to www.epa.gov/lead for more information.



NOTICE Products must be stored in an upright, level position not exposed to weather. The storage must be ventilated and provide protection from direct sunlight and excessive temperature.



IMPORTANT NOTICE These instructions were developed and tested for use with wall systems designed to manage water. These instructions are not to be used with any other construction methods or window frame types. Installation instructions for use with other construction methods or frame types may be obtained from the product website or your local product seller. Building designs, construction methods, building materials, and site conditions unique to your project may require an installation method different from these instructions and/or additional care. Determining the appropriate installation method is the responsibility of you, your architect, or construction professional. Additional preparation or anchoring may be required to comply with local building code requirements.

CARE AND MAINTENANCE: Refer to the product website or contact your local retailer for more information.

CLEANING INSTRUCTIONS: Refer to the product website or your local retailer for more information.



NOTICE DO NOT apply any other types of film to the glass. Doing so could void product warranty.



NOTICE Do not use solvents such as mineral spirits, toluene, xylene, naphtha or muriatic acid as they can dull the finish, soften the vinyl and/or cause failure of the insulated unit seal.



NOTICE Do not use isopropyl alcohol on laminated surfaces as it will damage the finish. Keep door tracks clear of dirt and debris. Keep weep holes open and clear of obstructions.



NOTICE DO NOT use abrasives. DO NOT scrape or use tools that might damage the surface.



NOTICE DO NOT use inappropriate solvents or brickwash or cleaning chemicals. If you do, permanent damage can result and the product failure, loss or damage would not be covered by the Limited Warranty.

INTERIOR FINISH (WOOD WINDOWS): Paint or finish immediately after installation. If products cannot be finished immediately, cover with clear plastic to protect from dirt, and moisture. Remove any construction residue before finishing. Sand all wood surfaces lightly with 180 grit or finer sandpaper. DO NOT use steel wool. BE CAREFUL NOT TO SCRATCH THE GLASS. Remove sanding dust. Products must be finished according to these instructions; failure to follow these instructions voids the Limited Warranty. Finishing panel edges is optional for Patio Doors.



NOTICE To maintain proper product performance do not paint, finish or remove the weatherstripping, mohair dust pads, gaskets, or vinyl parts. Air and water leakage will result if these parts are removed. After finishing, allow venting doors and doors to dry completely before closing them. If paint, stain or finish gets on the weatherstripping, wipe it off immediately with a damp cloth.

WINDOW CLEANING AND PREP INSTRUCTIONS FOR UNFINISHED OR PRIMED WINDOWS: Dry wipe dust from windows gently. Examine window for possible smudges or fingerprints made from normal handling or construction. To remove smudges, lightly wipe surface with warm water. Scuff sand with light grade sand paper or abrasive pad (220 grit or higher). Rinse surface with warm water. Let window surfaces dry completely before applying finish.

- On casement and awning windows, it is optional to paint, stain or finish the vertical and horizontal sash edges.
- On single-hung and double-hung windows, do not paint, stain or finish the vertical sash edges, any finish on the vertical sash edges may cause the sash to stick; it is optional to paint, stain or finish the horizontal sash edges.

Product warranty WILL NOT cover interior paint and stain finish imperfections for any product that is not factory finished or painted. For additional information on finishing see the product website or owner's manual.

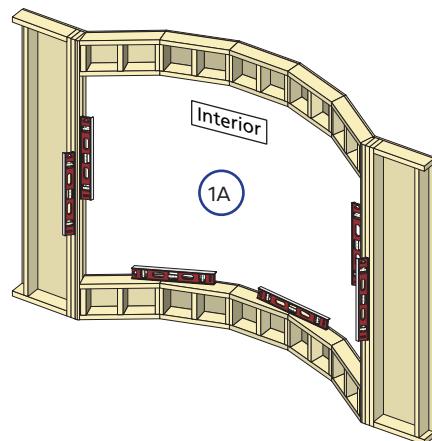


NOTICE The use of unapproved finishes, solvents or cleaning chemicals may cause adverse reactions with door materials. Product warranty does not cover problems caused by the use of unapproved materials. If in doubt, contact your local retailer or representative.

1 Rough Opening Preparation:

A. Confirm the opening is plumb and level.

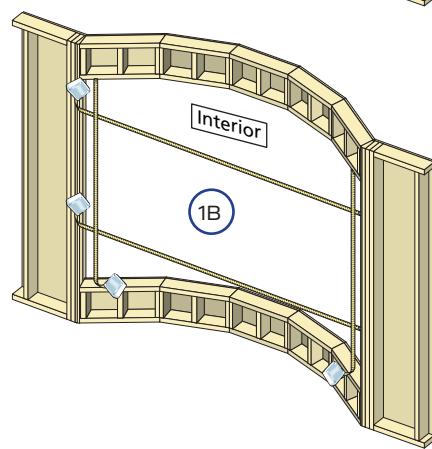
Note: It is critical the bottom is level.



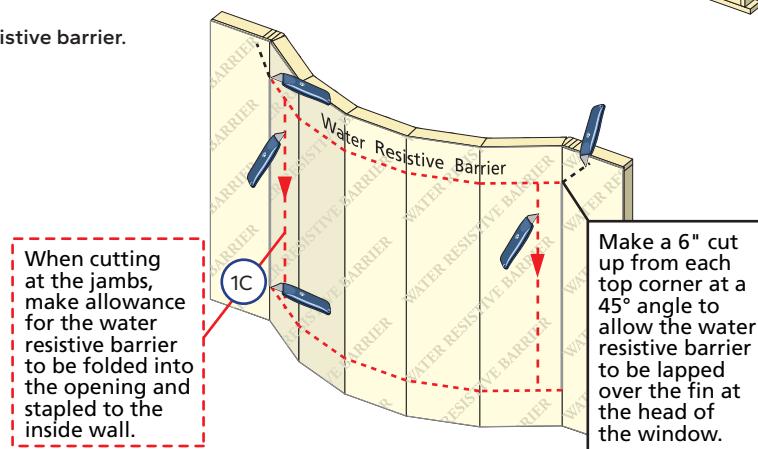
B. Confirm the window will fit the opening.

Measure the opening to make sure it is $3/4"$ larger than the window in both width and height. On larger openings measure the width and height in several places to ensure the header or studs are not bowed.

Note: 1-1/2" or more of solid wood blocking is required around the perimeter of the opening. Fix any problems with the rough opening before proceeding.



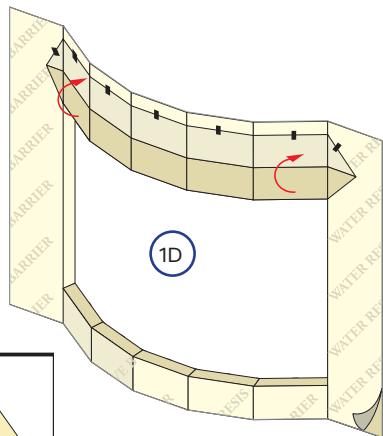
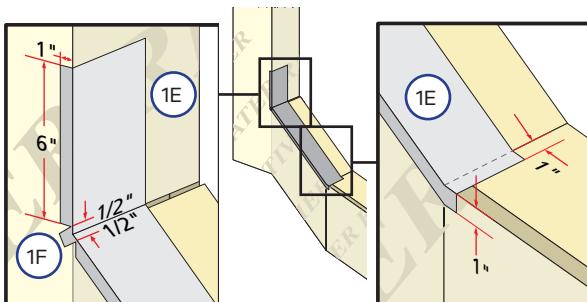
C. Cut the water resistive barrier.



1 Rough Opening Preparation (continued):

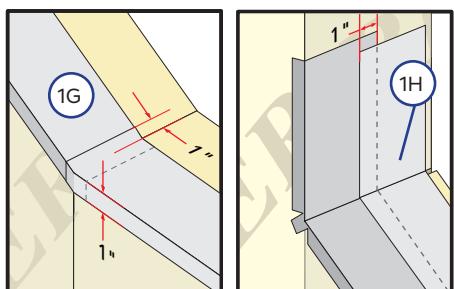
D. **Fold the water resistive barrier.** Fold side flaps into the opening and staple to inside wall. Fold top flap up and temporarily fasten with flashing tape.

E. **Apply sill flashing tapes #1.** Starting with the flashing tape for one sill end, cut a piece 8" longer than the end unit width. Apply at the bottom of the opening so it extends 6" up the side, overhanging 1" to the exterior and laps over approximately 1" onto the sill section for the next unit as shown. Repeat this step for the other sill end.



F. **Tab the sill flashing tape and fold.** Cut 1" wide tabs at each corner (1/2" from each side of corner). Fold tape to the exterior and press firmly to adhere it to the water resistive barrier.

G. **Cut the remaining sill flashing tapes #1.** Cut the flashing tape 2" longer than the sill section for the next unit. Apply at the bottom of the opening so it overhangs 1" to the exterior and laps over approximately 1" onto the sill section for the previous and next unit.



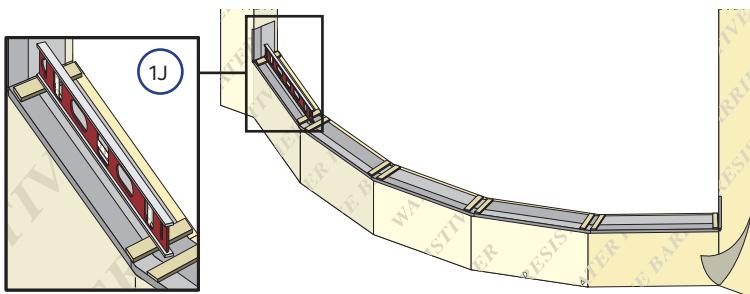
H. **Apply sill flashing tapes #2.** Starting with the flashing tape for one sill end, cut a piece 8" longer than the end unit width. Apply at the bottom of the opening so it extends 6" up the side, overlapping tape #1 by at least 1" and laps over approximately 1" onto the sill section for the next unit as shown. DO NOT allow the tape to extend past the interior face of the framing. Repeat this step for the other sill end.

Note: The flashing tape may not fully cover the framing members.

I. **Cut the remaining sill flashing tapes #2.** Cut the flashing tape 2" longer than the sill section for the next unit. Apply at the bottom, overlapping tape #1 by at least 1" and lapping over approximately 1" onto the sill section for the previous and next unit.

1 Rough Opening Preparation (continued):

J. **Install and level sill spacers.** Place 1" wide by 3/8" thick spacers on the bottom of the opening 1/2" from each side and at each section of the sill where the unit jambs will set. Add shims to ensure the spacers are level. Once level, attach spacers and shims to the opening to prevent movement.



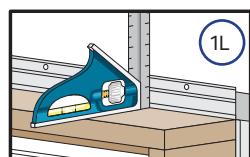
K. **Remove plastic wrap and cardboard packaging from window.** DO NOT remove plastic shipping spacers located between the window sash and frame. The shipping spacers will help keep the window square during installation. DO NOT unlock or open the window until it is shimmed square and plumb in the opening.

Note: If screens, grilles or hardware are removed from the unit at this time, label them and store them in a protected area.

L. **Fold out installation fins at the top and bottom** of the unit to 90°. Be careful not to remove or tear the fin corners.

Note: If the fin is not at 90°, the window will not line up correctly on the interior.

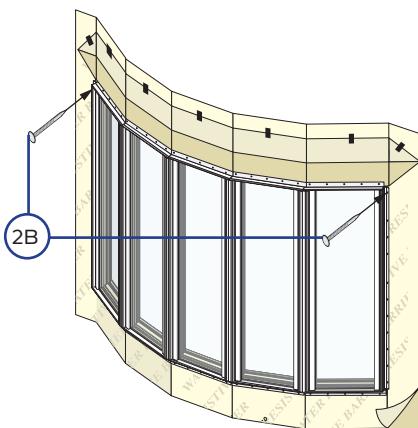
M. **Fold out installation fins at the sides** of the unit to fit the angle.



2 Setting the Window:

TWO OR MORE PEOPLE WILL BE REQUIRED FOR THE FOLLOWING STEPS.

A. **Insert the window from the exterior of the building.** Place the bottom of the window at the bottom of the opening and slide into position. Center the window between the sides of the opening to allow clearance for shimming.

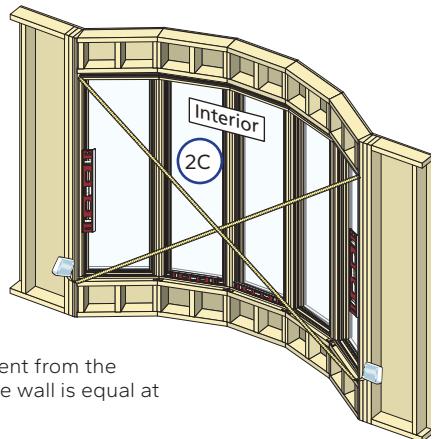


B. **Insert one roofing nail in the first hole from the corner of each end of the top nailing fin of the two outside windows.** These nails are used to hold the window in place while shimming plumb and square.

2 Setting the Window (continued):

C. **Plumb and square window.** Place shims 1" from the bottom and top of the window between the window and the sides of the opening. Adjust the shims as required to plumb and square the window in the opening. Place shims at the midpoint of the window sides

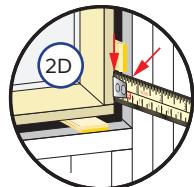
Note: DO NOT shim above the windows or in the space between the spacers at the bottom of the windows.



D. **Check the interior reveal.** Make sure the measurement from the interior face of the window to the interior face of the wall is equal at several points around the window.

Note: If the dimensions are not equal, check to make sure the fins are folded out to the same angle at both jambs.

E. **Check window operation (vent units only).** Unlock the window by lifting the lock handle up. Open the window by rotating the crank handle. Remove the shipping spacers. Open and close the window a few times to check for proper operation. Close and lock the window.



Note: If there are any problems with the operation of the window, recheck shim locations and adjust for plumb and square.

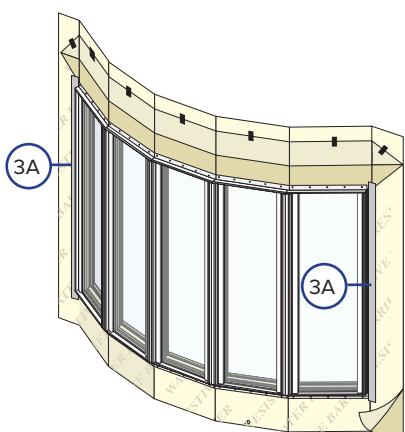
F. **Fasten the window to opening** by driving 2" galvanized roofing nails into each pre-punched hole in the nailing fin.

Note: Make sure the fin corner is lying as flat as possible.

3 Integrating the Window to the Water Resistive Barrier:

Note: The flashing tape must be applied approximately 1/2" onto the frame cladding at the jambs. Pre-folding the tape at 1/2" before removing the paper backing will make it easier to apply the tape correctly. If the siding is less than 1/2" thick, adjust the dimension of the fold so the exterior sealant line will cover the exterior edge of the tape.

A. **Apply side flashing tape.** Cut two pieces of flashing tape 4" longer than the frame height of the window. Apply the tape 1/2" onto the frame cladding, over the nailing fin and onto the water resistive barrier. The tape should extend 2" above the top of the window and 2" below the bottom of the window. Press the tape down firmly while folding down the excess tape at the top and bottom of the window.

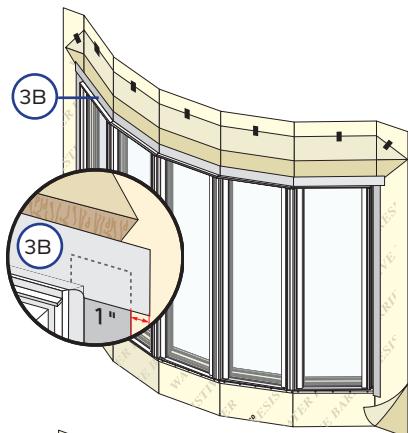


Note: DO NOT tape or seal the bottom nailing fin.

3 Integrating the Window to the Water Resistive Barrier (continued):

B. **Apply top flashing tape.** Cut a piece of flashing tape long enough to go across the top of the window and extend at least 1" past the side flashing tape on both sides. Apply the tape 1/2" onto the frame cladding and over the top nailing fin as shown. Fold the overlapping tape down, and press all tape down firmly.

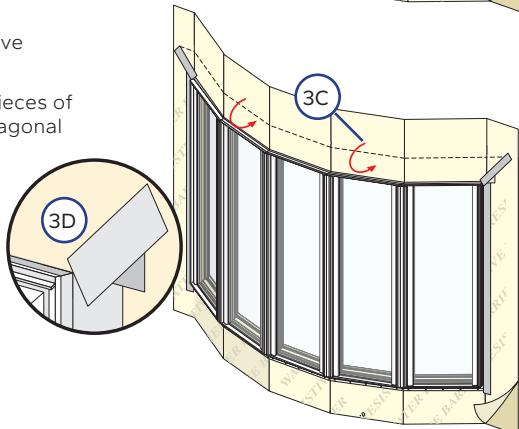
Note: DO NOT tape or seal the bottom nailing fin.



C. **Fold down the top flap** of the water resistive barrier.

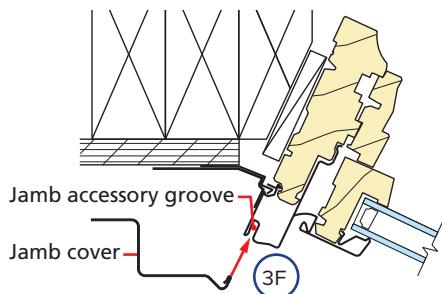
D. **Apply flashing to the diagonal cuts.** Cut pieces of flashing tape at least 1" longer than the diagonal cuts in the water resistive barrier. Apply the tape, covering the entire diagonal cut in the water resistive barrier at both upper corners of the window. Press the tape down firmly.

Note: Be sure to overlap the top corners.



E. **Cut the bow jamb covers** to the length of the window frame height.

F. **Using a wood block with rounded edges**, drive the folded edge of the jamb cover into the jamb accessory groove of the outer two windows.



G. **Using 2" galvanized finish nails**, drive a nail through the flat leg of the jamb cover, 6" from top and bottom and one in the center.

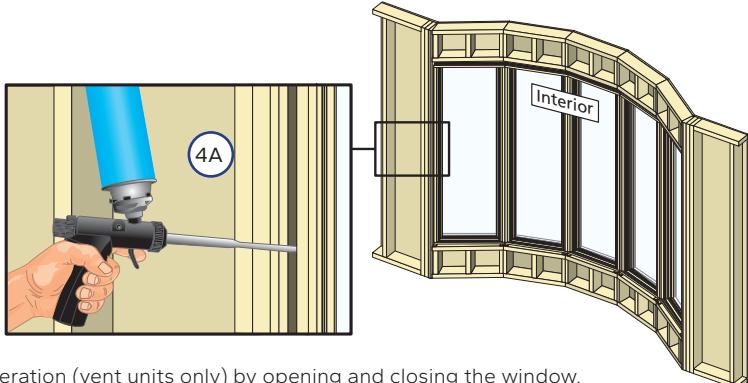
4 Insulating Foam Application:

CAUTION

Ensure use of low pressure polyurethane window and door insulating foams and strictly follow the foam manufacturer's recommendations for application. Use of high pressure foams or improper application of the foam may cause the window frame to bow and hinder operation.

- A. **Apply insulating foam sealant.** From the interior, insert the nozzle of the applicator approximately 1" deep into the space between the window and the rough opening and apply a 1" deep bead of foam. This will allow room for expansion of the foam and will minimize squeeze out. If using foam other than Great Stuff™ Window and Door Insulating Foam Sealant by the Dow Chemical Company, allow the foam to cure completely (usually 8 to 24 hours) before proceeding to the next step.

Note: DO NOT completely fill the space from the back of the fin to the interior face of the opening.

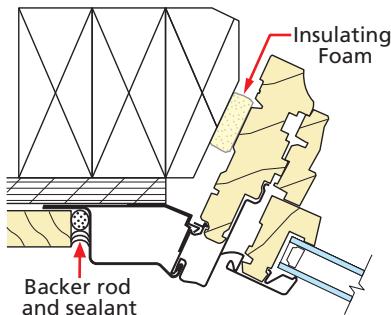


- B. Check window operation (vent units only) by opening and closing the window.

Note: If the window does not operate correctly, check to make sure it is still plumb, level, square and that the sides are not bowed. If adjustments are required, remove the foam with a serrated knife. Adjust the shims, and reapply the insulating foam sealant.

5 Sealing the Bay/Bow Unit to the Exterior Wall Cladding:

When applying siding, brick veneer or other exterior finish material, leave adequate space between the window frame and the material for sealant.

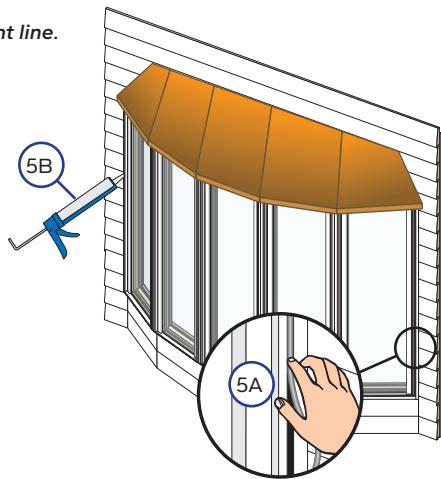


5 Sealing the Bay/Bow Unit to the Exterior Wall Cladding (continued):

A. **Insert backer rod into the space around the window** so there is approximately 3/8" clearance between the backer rod and the exterior face of the window.

Note: Backer rod adds shape and depth for the sealant line.

B. **Apply a bead of high quality exterior grade sealant** to the entire perimeter of the window.



C. **Shape, tool and clean excess sealant.** When finished, the sealant should be the shape of an hourglass.

Note: This method creates a more flexible sealant line capable of expanding and contracting.

D. **Install roofing material** per the manufacturer's instructions.

INSTALLING ROTO COVER AND CRANK

(Venting Casements Only)

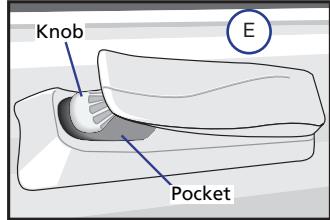
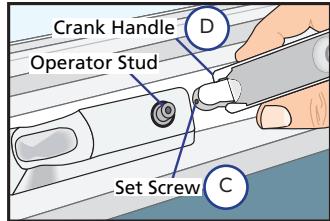
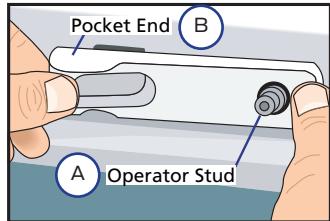
Note: Finish the interior of the window and allow the window to dry before proceeding with these instructions. (To open the window for finishing, partially insert the lock handle into the jamb, unlock the unit, temporarily attach the crank handle and turn to open.)

- A. Place the cover over the operator stud and snap into place.
- B. Apply pressure to the pocket end of the cover and snap into place.
- C. Use a medium size flat-blade screwdriver to loosen the set screw in the crank handle.
- D. Slide the crank handle onto the stud. Unlock, open the window, then close and lock window.
- E. Fold the crank handle down and check alignment of knob with the pocket.

Note: You may need to adjust the crank position on the stud until the correct alignment is achieved.

- F. Open the crank and tighten the set screw.
- G. After the final installation, fold the crank over and snap the knob into the pocket.

Note: Even with the window open the crank can be folded to avoid interfering with the window treatments.



LOCK LEVER REMOVAL AND INSERTION

(Venting Casements Only)

Note: You may want to remove the lock lever prior to finishing the window, or if it needs to be replaced with a lock lever in a different finish.

- A. Unlock and open the window.
- B. Place the lock lever in the locked position.
- C. From the exterior of the window, insert a small flat-blade screwdriver into the slot behind the lock lever.
- D. Pry the cam away from the side of the window by rotating the screwdriver a quarter turn.

Note: This will release the hook in the lever from the cam hook.

- E. Remove the lock lever by pulling it toward the interior of the building.
- F. To install a lock lever, hold it in the lock position and insert it, from the interior, into the slot until it snaps into the cam.

