










WINDOW REPLACEMENT INSTRUCTIONS FOR CASEMENT, DOUBLE-HUNG AND CLAD FRAME WINDOWS INTO EXISTING DOUBLE-HUNG FRAME USING FRAME SCREWS

These instructions were tested and developed for replacing windows in wood-frame wall construction systems designed to manage moisture. **This method of installation involves removing the sash only of the existing window. The original window frame will remain in place and only the existing sash, exterior stops and frame hardware must be removed.** Installation recommendations for other types of wall construction, wall systems or conditions may be obtained from Pella Corporation or a local Pella retailer. Building designs, construction methods, building materials, and site conditions unique to your project may require an installation method different from these instructions and additional care on your part. Determining the appropriate installation method is the responsibility of you, your architect, or other construction professional.

YOU WILL NEED TO SUPPLY:

- Cedar or Impervious shims/spacers (12 to 20) 
- Closed cell foam backer rod/sealant backer (12 to 30 ft.) 
- Pella® SmartFlash™ foil backed butyl window and door flashing tape or equivalent 
- High quality exterior grade polyurethane or silicone sealant (1 tube per window) 
- Great Stuff™ Window and Door Insulating Foam Sealant by the Dow Chemical Company or equivalent low pressure polyurethane window and door foam - DO NOT use high pressure or latex foams. 
- #8 x 3-1/4" Finish head screws (6 to 10 per window) 
- Pella replacement window sill adapter 

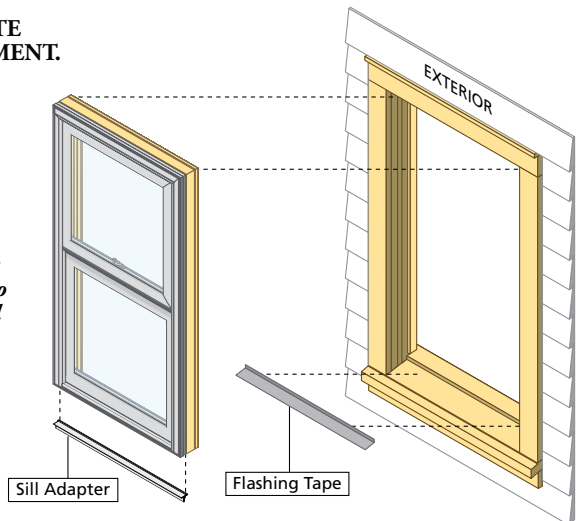
Installation will require two or more persons for safety reasons.

TOOLS REQUIRED:

- Tape measure 
- Level 
- Sealant gun 
- Prybar 
- Utility knife 
- Putty knife 
- Hammer 
- Screwdrivers (Flat & Phillips) 
- Adjustable pliers 
- Side Cuts 
- Roto-tool, reciprocating saw 
- Wood chisel 
- 1/8" drill bit 
- Drill 

REMEMBER TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.

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



Always read the Pella® Limited Warranty before purchasing or installing Pella products. By installing this product, you are acknowledging that this Limited Warranty is part of the terms of the sale. Failure to comply with all Pella installation and maintenance instructions may void your Pella product warranty. See Limited Warranty for complete details at <http://warranty.pella.com>.

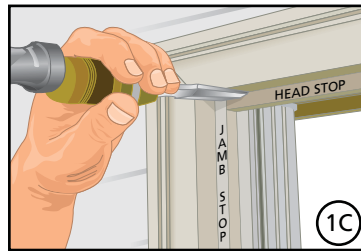
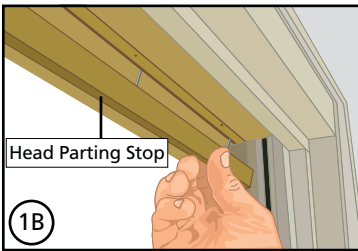
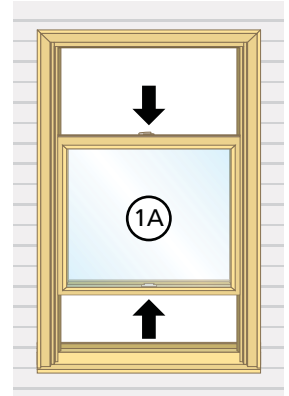
1 REMOVE THE EXISTING SASH

Note: Remove the new window from its packaging. Inspect and measure the new window to ensure it will fit into the opening prior to removing the existing window. The window needs to be 3/4" smaller in both width and height than the pocket frame.

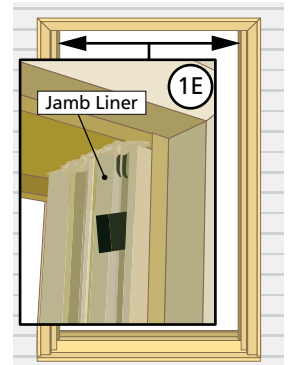
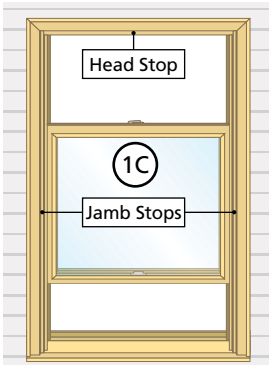
- A. **Unlock the window.** Raise the lower sash and lower the upper sash so both are in the approximate middle of the frame.

Note: Most of the following steps may be completed from the exterior of the house.

- B. **Remove the head parting stop.** Remove any head parting stop by pulling the stop down from the frame. In some cases, the stops are nailed on and can simply be pulled off. In other situations the stops may need to be pried or cut out of the frame.



- C. **Remove the exterior jamb and head stops.** This can be accomplished with a wood chisel, circular saw, reciprocating saw, roto-tool, or equivalent. Ensure the stop is removed flush with the existing window jamb.



- D. **Remove the upper and lower sash.** This will vary per manufacturer of existing windows. Some will simply pull out, while others may need to be cut to be removed. Grasp the sash and pull out of the frame. The jamb liner material may come out of the frame when pulling the sash out.

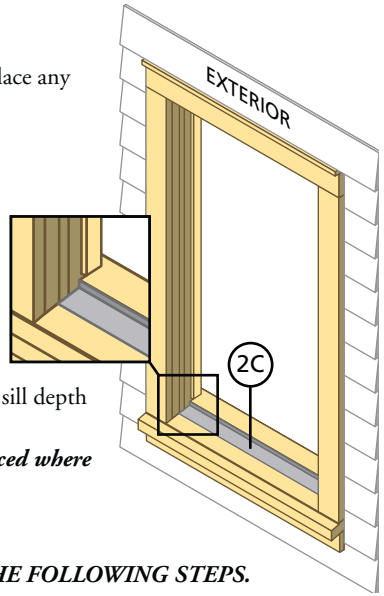
- E. **Remove any and all jamb liner material.** Some liners may have frame attachment fasteners that will need to be removed before the liners can be removed.

Caution: Spring loaded balances can cause injury; use care when removing balances from existing windows.

2 OPENING PREPARATION

- A. **Inspect the existing window frame** and repair or replace any defective or rotted wood parts.
- B. **Clean the opening** of any dirt, debris, or excess old paint before proceeding.
- C. **Apply one piece of sill flashing tape to the sill** of the existing window. Cut the tape the same length as the width of the existing window sill. Place one side of the tape against the vertical leg of the stool, and work the tape into the corner before applying to the sill. Press down firmly. The tape will not cover the sill depth completely under the new window.

Note: If needed, blocking/shims may need to be placed where the existing balances were located.



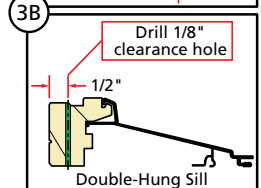
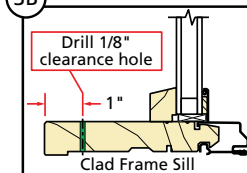
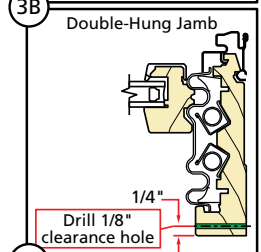
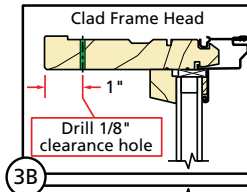
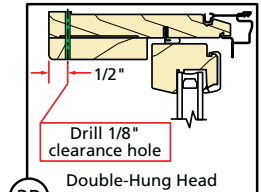
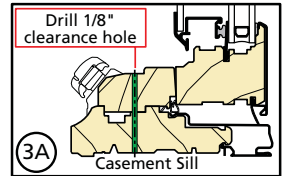
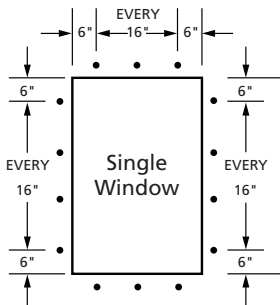
TWO OR MORE PEOPLE ARE REQUIRED FOR THE FOLLOWING STEPS.

3 WINDOW PREPARATION

Note: If installing Architect Series® Double-hung windows, proceed to Step C. For Designer Series® or ProLine® Double-hung, proceed to Step B.

- A. **Casement:** On the room side of the window, drill 1/8" diameter clearance holes through the head, jambs and sill of the frame. Space the holes a maximum of 6" from each end and a maximum of 16" on center.

Note: On vent casements, place the holes so that they do not interfere with the roto operator and the latch points on the lock side of the window.

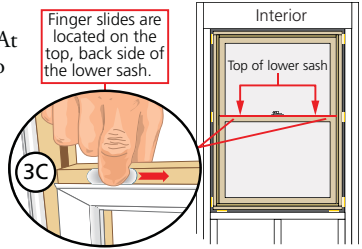


- B. **Designer Series® and ProLine® Double-Hung and Clad Frame:** On the room side of the window, drill 1/8" diameter clearance holes through the frame at the locations shown. Space the holes a maximum of 6" from each end and a maximum of 16" on center.

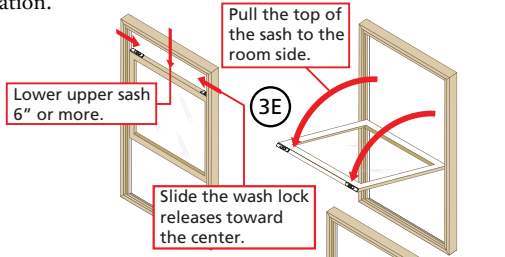
Note: The lower sash must be raised to drill the holes in the sill of the double-hung window.

Note: Steps C thru I apply to the Architect Series® Double-Hung only.

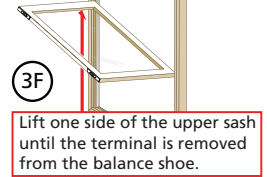
- C. **Remove the lower sash.** Raise the sash 6" or more and locate the two finger slides on the lower sash check rail. At the same time, slide each toward the center of the sash to disengage the wash lock stops and pull the sash towards the room side. The sash will tilt from the bottom.



- D. **With the sash parallel to the floor, lift one side of the lower sash** until the terminal is removed from the balance shoe. Continue to lift the sash up until the terminal is released from the opposite side of the sash and can be removed from the shoe. Lift the sash up and out of the window frame. Set the sash in a safe location.



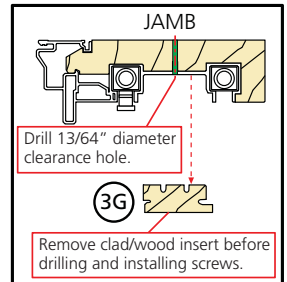
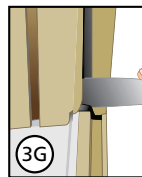
- E. **Remove the upper sash.** Lower the upper sash 6" or more and locate the two wash lock releases on the top of the sash. Slide each toward the center of the sash and pull the top of the sash to the room side.



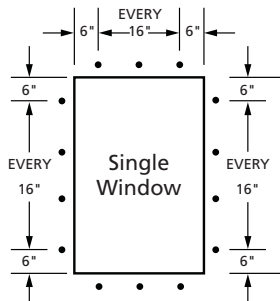
- F. **With the sash parallel to the floor, lift one side of the upper sash** until the terminal is removed from the balance shoe. Continue to lift the sash up until the terminal is released from the opposite side of the sash and can be removed from the shoe. Lift the sash up and out of the window frame. Set the sash in a safe location.

- G. **Remove the clad/wood insert.** Place a stiff putty knife under the weather-strip between the clad/wood insert and the vinyl on the interior side and gently pry the insert out of the jamb liner.

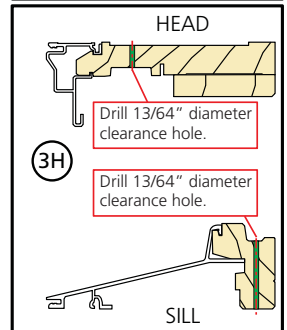
Note: On taller units, continue to pry up the length of the unit, if needed. Take care not to rip the weather-strip. The top of the insert is behind the head stop; use care in pulling it down from behind the stop so as not to dent the wood.



- H. **From the room side of the window, drill 13/64" diameter clearance holes** through the head, jamba and sill of the frame. Space the holes as shown.

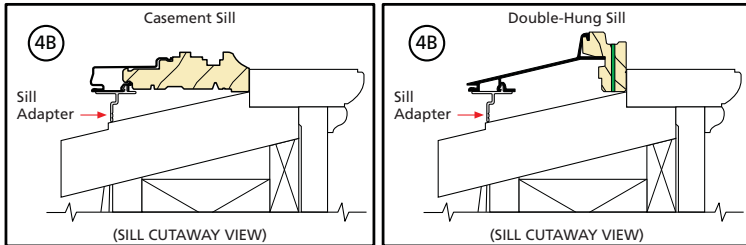


- I. **Reinstall the clad/wood insert and sashes** after the frame screws have been installed.

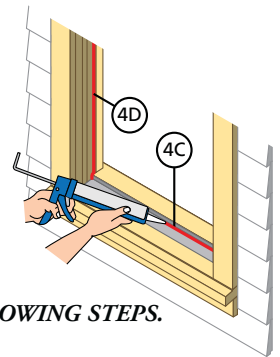


4 SETTING AND FASTENING THE WINDOW

- A. **If the existing double-hung has a sloped sill** the sill of the new window will need to be supported by using the Pella replacement sill adapter accessory or by using wood blocking as needed.
- B. **If using the Pella replacement sill adapter accessory** the sill adapter will need to be cut to the same length as the sill of the window and slid into the sill fin groove. This adapter may be adjusted to accommodate different sill angles by breaking off the grooved leg at the desired dimension. Dry fit the window to ensure the window will fit in the opening and that the sill adapter is trimmed properly.



- C. **Apply a 3/8" bead of sealant at the point where the existing stool meets the existing window sill.** Additionally, place sealant at the ends of the flashing tape, making sure to connect with the stool sealant.
- D. **Apply a continuous 3/8" diameter bead of sealant at the exterior surface of the interior head and jamb stops.** Connect this bead of sealant to the sealant line on the stool.



TWO OR MORE PERSONS ARE REQUIRED FOR THE FOLLOWING STEPS.

- E. **Insert the replacement window** in the opening. Check to make sure the window rests against the interior blind stops and is making contact with the sealant.
- F. **From the exterior, place shims near the top of one jamb**, in line with the top pre-drilled hole in the window frame. Partially insert one 3-1/4" finish wood screw. Repeat the process for the other jamb.
- Note: Position shims to ensure they allow at least 3/4" from the exterior surface of the window to allow for placement of backer rod and sealant.*
- G. **Continue placing shims at each pre-drilled hole as needed** to plumb and square the window. Check window for squareness by making sure the diagonal measurement from corner to corner of the replacement window is within 1/8" in both directions. Insert a 3-1/4" finish wood screw into each pre-drilled hole in the frame. Finish inserting the top screw in each jamb.

Note: DO NOT shim above the window. DO NOT over shim!

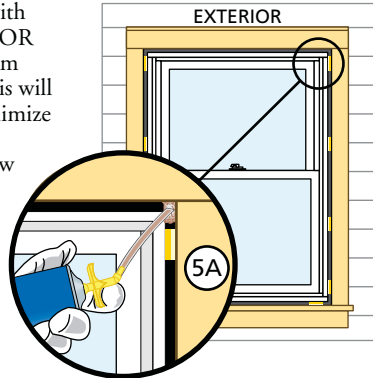
- H. **Architect Series® Double-hung only:** Re-install the clad/wood inserts and the upper and lower sash.
- I. **Check operation** before applying the insulating foam sealant in case adjustments need to be made.

5 INTERIOR SEAL

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. **Insulate between new frame** and the existing frame with low expansion insulating foam. FROM THE EXTERIOR insert the nozzle of the applicator approximately 1" from the interior stop and apply a 1" deep bead of foam. This will allow room for the expansion of the foam and will minimize squeeze out. If using insulating foam other than Great Stuff™ Window and Door Insulating Foam by the Dow Chemical company, allow the foam to cure completely (usually 8 to 24 hours) before proceeding to the next step.

Note: Masking between the window and the existing interior stop will help alleviate possible squeeze out of the expandable foam to the interior.



- B. **Check the window operation** by opening and closing the window. If bowed, remove foam with a serrated knife, then check operation. If still bowed, adjust shims as needed, then insulate as instructed in previous step.
- C. **Inspect the interior and carefully trim all excess foam sealant** if needed.

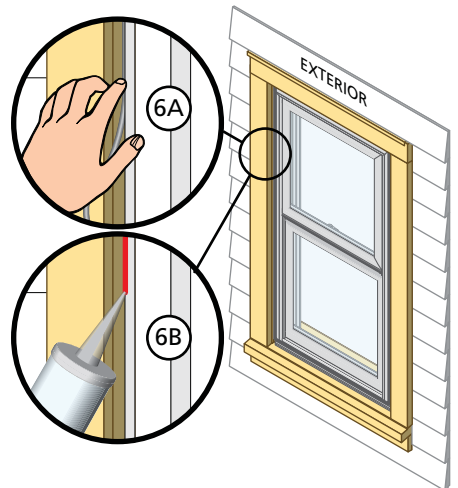
6 EXTERIOR SEAL

- A. **Insert backer rod** into the space around the window at the head and jambs. This should provide at least 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. **Place a bead of sealant** at the jambs and head between the existing window frame and the replacement window frame.

Caution: DO NOT seal the bottom exterior to allow for incidental water to weep.



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

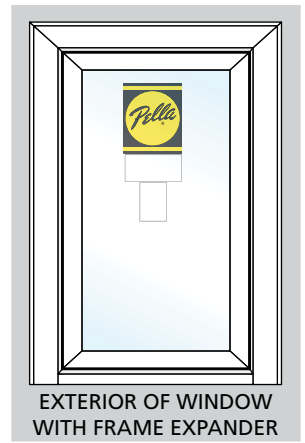
Note: This method creates a more flexible sealant line capable of expanding and contracting.

EXTERIOR FINISH OF EXISTING FRAME

The exposed wood on the exterior stop needs to be covered/protected. There are many ways to accomplish this, and each case can be unique. A few possibilities include:

- a) Covering the existing trim with aluminum coil wrap/frame expander.
- b) Sanding, priming and painting to match existing trim.
- c) Covering the exposed wood with a high quality exterior grade sealant.

Note: *The contractor/installer will determine how to finish the exterior.*



EXTERIOR OF WINDOW
WITH FRAME EXPANDER

EXTERIOR FINISH OF ALUMINUM CLAD WINDOWS

The exterior frame and sash are protected by aluminum cladding with our tough EnduraClad® or EnduraClad Plus baked-on factory finish that requires no painting. Clean this surface with mild soap and water. Stubborn stains and deposits may be removed with mineral spirits. DO NOT use abrasives. DO NOT scrape or use tools that might damage the surface.

Use of inappropriate solvents, brickwash or cleaning chemicals will cause adverse reactions with window and door materials and voids the Limited Warranty.

INTERIOR FINISH

If products cannot be finished immediately, cover with clear plastic to protect from dirt, damage 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.

Pella products must be finished per the below instructions; failure to follow these instructions voids the Limited Warranty.

- On casement and awnings, it is optional to paint, stain or finish the vertical and horizontal sash edges.
- On single-hungs and double-hungs, 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.
- On patio doors, it is optional to paint, stain or finish the vertical and horizontal panel edges.

Note: *To maintain proper product performance do not paint, finish or remove the weather-stripping, mohair dust pads, gaskets or vinyl parts. Air and water leakage will result if these parts are removed. After finishing, allow venting windows and doors to dry completely before closing them.*

Pella Corporation is not responsible for interior paint and stain finish imperfections for any product that is not factory-applied by Pella Corporation. Use of inappropriate finishes, solvents, brickwash, or cleaning chemicals will cause adverse reactions with window and door materials and voids the Limited Warranty.

For additional information on finishing see the Pella Owner's Manual or go to www.pella.com.

CARE AND MAINTENANCE

Care and maintenance information is available by contacting your local Pella retailer. This information is also available at www.pella.com.

IMPORTANT NOTICE

Because all construction must anticipate some water infiltration, it is important that the wall system be designed and constructed to properly manage moisture. Pella Corporation is not responsible for claims or damages caused by anticipated and unanticipated water infiltration; deficiencies in building design, construction and maintenance; failure to install Pella® products in accordance with Pella installation instructions; or the use of Pella products in wall systems which do not allow for proper management of moisture within the wall systems. The determination of the suitability of all building components, including the use of Pella products, as well as the design and installation of flashing and sealing systems are the responsibility of the Buyer or User, the architect, contractor, installer, or other construction professional and are not the responsibility of Pella.

Pella products should not be used in barrier wall systems which do not allow for proper management of moisture within the wall systems, such as barrier Exterior Insulation and Finish Systems, (EIFS) (also known as synthetic stucco) or other non-water managed systems. Except in the states of California, New Mexico, Arizona, Nevada, Utah, and Colorado, **Pella makes no warranty of any kind and assumes no responsibility for Pella windows and doors installed in barrier wall systems. In the states listed above, the installation of Pella products in barrier wall or similar systems must be in accordance with Pella installation instructions.**

Product modifications that not approved by Pella Corporation will void the Limited Warranty.

INSTALLING ROTO COVER AND CRANK

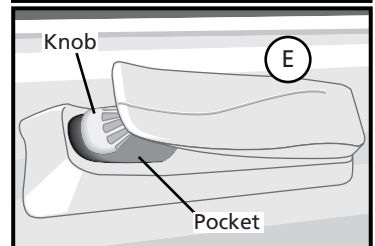
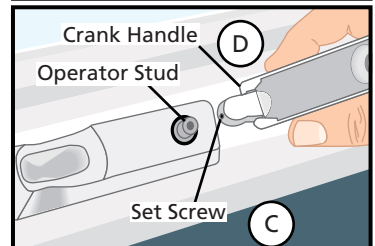
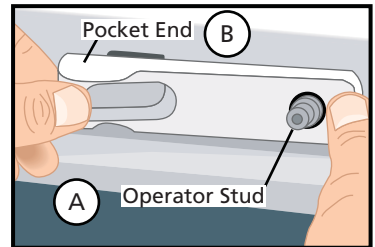
Note: Finish the interior of the window and allow the window to dry before proceeding with these instructions. (To open the window for finishing, partially insert the lock handle into the jamb, unlock the unit, temporarily attach the crank handle and turn to open.)

- 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 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

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.

