



Thank you for choosing ClimateGuard windows.

Attached are ClimateGuard's recommended installation instructions for Vinyl windows without a nailing fin (including finless, flush fin, and flange). Read these instructions thoroughly before beginning. Instructions may not be right for all installations due to building design, construction materials or methods used. If changes are needed, they are made at the installer's risk.

Newer construction methods have led to an increase in air and water tightness in buildings. This frequently leads to negative air pressure inside the home, which can draw water through very small opening. Our installation method creates an air seal on the interior, integrating the window with the rough opening.

IMPORTANT INFORMATION

Not all window types may be installed into every wall condition in all areas. Check with your local building code official for applicable building codes and regulations. Local building code requirements supersede any recommended installation instructions.

Note to Installer: Provide a copy of these instructions to the building owner. By installing this product, you acknowledge the terms and conditions of the limited product warranty as part of the terms of the sale.

Please note: Installations where the sill is higher than 35 feet above ground level, or any product installation into a wall condition not specifically addressed in these instructions, must be designed by an architect or structural engineer. Failure to install windows into square, level, and plumb openings could result in denial of warranty claims for operational or performance problems.

GLOSSARY

Backer Rod - A material (e.g. foam rod), placed into a joint primarily to control the depth of the sealant.

Buck - A wood framework attached to the masonry inside a window or patio door rough opening.

Finless Window - A window without a nailing fin commonly referred to as finless, replacement, block frame, box frame, or pocket.

Flush Fin Window - A window without a nailing fin that has a face flang. Flush fin windows may also be known as flange, stucco flange or Florida flange windows.

Installation Clip - A vinyl accessory that snaps into the accessory groove of some fixed windows, used to secure the window to the rough opening.

Precast Sill - A pre-formed concrete block placed in the sill of a masonry/block wall to support a window.

Shiplap - The layering method in which each layer overlaps the layer below it so that the water runs down the outside.

Stop - The trim pieces on the frame that hold the sashes.

SAFETY & HANDLING

- Read ALL instructions before beginning.
- Two or more people are require for installing a window. Use safe lifting techniques.
- Use caution when handling glass. Broken or cracked glass can cause serious injury.
- Wear protective gear (i.e. safety glasses, gloves, etc.).
- Use caution when working at elevated heights.

If injury occurs, seek medical attention immediately!

- Make sure windows are locked prior to installation.
- Handle in vertical position; do not carry flat or drag on floor.
- Do not put stress on joints, corners, or frames.
- Install only into vertical walls and when conditions and sheathing are dry.
- Protect from exposure to direct sunlight during storage.

ROUGH OPENINGS

This installation guide will specifically address flush fin windows into an existing aluminum window frame or masonry wall, finless windows into an existing wood or aluminum frame, and installation of a finless window into a masonry or stud framed wall.

INSTALLATION INTO AN EXISTING WINDOW FRAME

A finless window used to replace a previous window in an existing wood or aluminum window frame after the old window has been removed. The existing frame should be watertight within the structure. Correct any pre-existing water leaks before installation. Any damaged portions of the existing sloped sill must be repaired and sealed to be waterproof. Flus fin windows must be installed onto a surface with at least a 3/8" wide exterior face. This face must be flush with or protrude past the exterior wall surface.

OPEN STUD WALL CONSTRUCTION

The window will be mounted inside of the rough opening. This installation assumes building wrap is properly installed prior to installation.

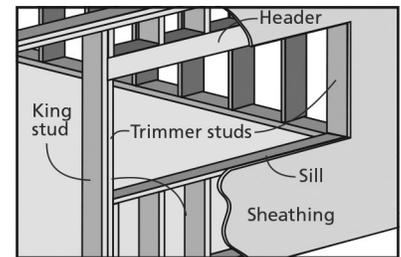
MASONRY WALL CONSTRUCTION

This installation assumes that a framework of studs (often called a buck) has already been properly fastened and sealed to the concrete/masonry wall by a building professional.



FULLY SHEATHED WALL CONSTRUCTION

The wall is covered by sheathing. Windows will be mounted inside of the rough opening. This installation assumes building wrap is properly installed prior to installation.



MATERIALS & TOOLS

INCLUDED MATERIALS

- Double Hung windows have two jamb adjuster screws.
- Dust plugs to cover installation screws.
- Jamb installation clips only provided for Fixed, Stationary Awning/Casement windows.

NEEDED MATERIALS

- Please note:** Follow all material instructions for proper use and compatibility.
- #8 x 1 1/4" corrosion-resistant pan head screws. Screws must penetrate at least 1" into framing (or as required by local code).
 - For securing the sill in masonry applications, 3/16" c 1 1/4" minimum self-tapping concrete screws (gasketed head optional)(or as required by local code).
 - Sealant: For sill fasteners and if left exposed use 100% silicone. If painted we recommend OSI QUAD Max Sealant or equivalent.
 - Backer rod 1/8" larger than the widest portion of the gap (used in conjunction with sealant bead).
 - Non-compressible or non-water degradable shims.
 - Polyurethane low expansion Window and Door foam.
 - 4", 6", or 9" (as required by local code and window configuration) wide self-adhesive flashing.

TOOLS

- J-roller
- Level (4' minimum recommended)
- Tape measure
- Utility Knife
- Hammer
- Screwdriver
- Hacksaw
- Putty knife
- Caulking gun
- Drill with bits

ADDITIONAL MATERIALS

- If installing into an existing window frame:
- Composite or solid wood (cedar or redwood recommended) or exterior grade plywood for continuous support.
 - If installing into an aluminum window, dimensions should be 1/2" shorter than the length of the sill track and 1/4" taller than the depth of the track.
 - If installing into a wood window, dimensions should be 1/4" thick, length of the existing frame sill minus 1" and the width of the new vinyl window side jamb minus 1/4"
- If installing into a masonry wall:
- Liquid applied flashing
 - Composite or solid wood (cedar or redwood recommended) or exterior grade plywood for continuous support.

1 REMOVE PACKAGING & INSPECT WINDOW

Remove all shipping materials, such as corner covers, shipping blocks or pads. If there is a protective film on the glass, do not remove it until installation and construction are complete.

INSPECT WINDOW

Check your new vinyl window for any of the following:

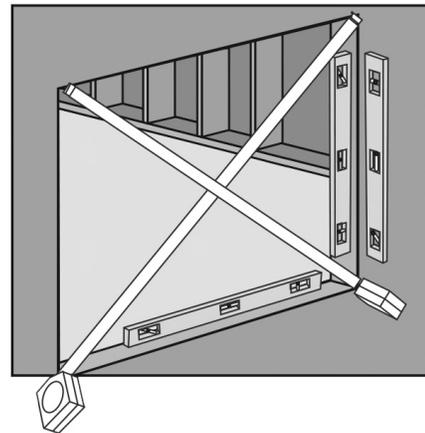
- Cosmetic damage
- Product squareness (diagonal measurements not more than 1/4" different)

- Correct product (size, color, grid pattern, handing, glazing, energy-efficiency requirements, etc.)
- Cracked frame welds

Do not install your window if any of the conditions listed here represent a concern. Contact ClimateGuard for further recommendations.

2 INSPECT ROUGH OPENING

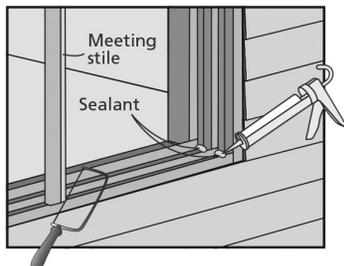
1. Measure all four sides of the opening to make sure it is 1/2" larger than the window in both width and height. On larger openings measure the width and height in several places to ensure the header or studs are not bowed.
2. Confirm the opening is plumb and level. The maximum allowable deviation is 1/8".
3. The sill must not be crowned or sagged, but either level or sloped to the exterior.
4. Verify the exterior face of the rough opening is a single plan with less than 1/8" twist from corner to corner.
5. Correct any deviations before installing the window.



3 PREPARE WINDOW OPENING

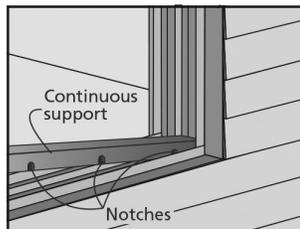
PREPARE EXISTING WINDOW FRAME

1. Remove the sashes and/or glass in the existing window.
2. Remove all hardware and window components not a part of the frame (meeting stile, jamb liners, locking mechanisms or other hardware etc.).



IF INSTALLING INTO AN ALUMINUM WINDOW FRAME

1. Seal all four corners of the window frame as shown.
2. Notch grooves across the bottom of the continuous support (see materials list) to allow for water drainage through the weep holes. Set the continuous support into the exterior sill track, creating a level surface at the sill.



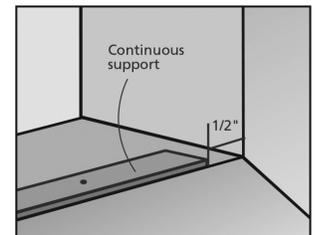
IF INSTALLING INTO A WOOD WINDOW FRAME

Installation from the interior: Remove any trim on the inside face of the wood frame. Do not remove the exterior stops.

Installation from the exterior: Remove any trim on the outside face of the wood frame. Do not remove the interior stops.

Please note: The steps below are not applicable if installing into an existing double-hung with sloped sill.

1. Apply enough sealant to the bottom of the continuous support to cover the entire surface.
2. Center the continuous support on the sill of the existing frame, flush to the exterior edge and leaving a 1/2" gap at the ends. Secure with nails.



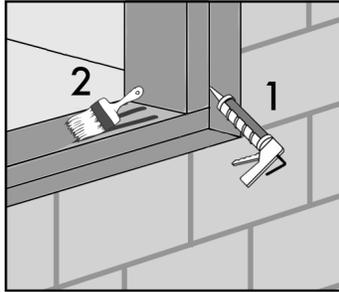
END of Existing Window Frame Instructions, SKIP to section 4, "INSTALL WINDOW"

End of Aluminum Frame Instructions, SKIP to section 4, "INSTALL WINDOW"

3 PREPARE WINDOW OPENING - CONTINUED

PREPARE MASONRY OPENING WITH BUCK

1. Seal any joint larger than 1/16" in the buck and between the buck and the concrete/ masonry with sealant.
2. Cover the buck and the surrounding concrete/ masonry at the head and jambs with liquid applied flashing as shown.
3. If installing into a four-sided buck, seal the sill in a similar manner.
4. Center the continuous support on the sill of the opening, flush to the exterior edge and leaving a 1/2" gap at the ends. Secure in place.

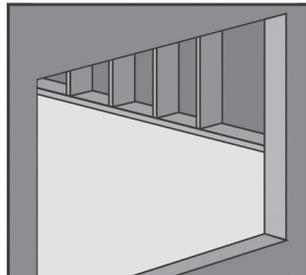


SKIP to section 4, "Install Window".

PREPARE STUD-FRAMED WALL

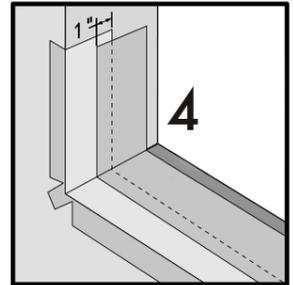
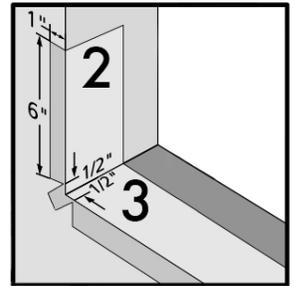
Please note: Verify with the building wrap manufacturer to verify the following steps will not void their product warranty.

Trim building wrap flush with the rough opening.



PREPARE SILL

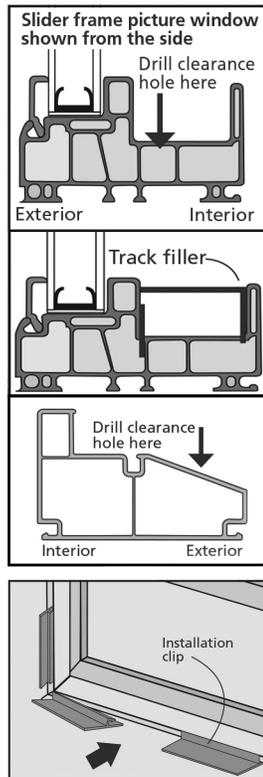
1. Cut 2 pieces of flashing tape 12" longer than the opening width.
2. Apply the first sill flashing tape at the bottom of the opening, extending 1" to the exterior and 6" up each jamb.
3. Cut 1" wide tabs at each corner by tearing the foil 1/2" each way from corner.
4. Apply the second sill flashing tape in the same fashion, overlapping the first flashing tape by 1" minimum. **Press all tape down firmly.**
5. Install and level sill shims: Place 1" wide x 1/4" to 3/8" thick shims 1/2" from interior face of window. place additional shims under each mullion and sliding window interlocker. Add shims so maximum spacing is 18"
6. Attach shims to prevent movement after they are level.



4 INSTALL WINDOW

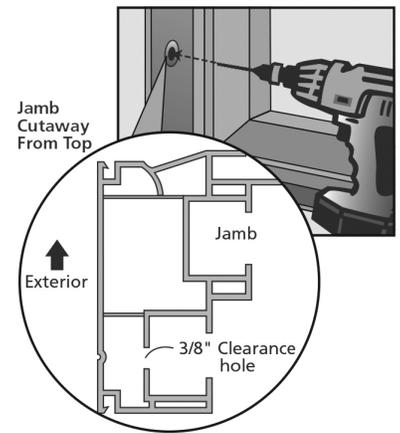
FRAME PREPARATION

- If the window has open tracks (most sliding and hung windows), remove track fillers if present. If installing a sliding window, remove the operating sash and the track for access to the sill pocket. Mark fastener locations within the frame track using the spacing given below in "Fastener Locations", or as required by local code.
- If the window does not have open tracks (awning, casement and fixed without open tracks), these windows can be fastened one of three ways:
 - Use installation clips (excludes windows with pre-applied extension jamb). Snap a clip into the interior accessory groove according to the spacing given below in "Fastener Locations".
 - Through the frame (screws can be covered with dust plugs) using the pattern in "Fastener Locations".
 - Stopped in place (excludes windows with pre-applied extension jamb) with trim or drywall (excludes impact). No fasteners are required through the frame.



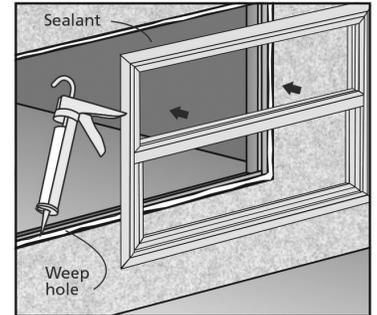
DRILL CLEARANCE HOLES

At each fastener location, drill a 3/8" clearance hole through ONLY the first wall of the frame to allow the screw head to pass through. Do not drill through the outer wall of the window frame.



IF INSTALLING A FLUSH WINDOW

- If using an applied fin, apply a continuous bead of sealant on the interior around the window where the fin meets the frame.
- Apply a 3/8" bead of sealant to the exterior face of the opening, leaving gaps at any weep holes if installing into an existing frame.
- Place window in the opening, make sure the window rests on the shimming support and makes positive contact with the sealant.



Continue with "All Installations".

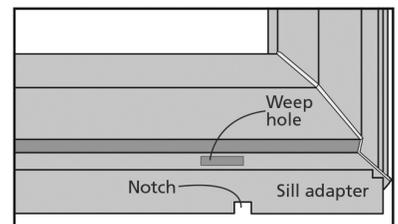
FASTENER LOCATIONS

Products are fastened according to performance rating (some holes may be pre-drilled). Performance rating is located on the purchase paperwork or gold AAMA label fixed somewhere on the frame, generally in the head jamb. Look for something like this example: R-PG20-122X76 (48X30)-HS. If this label is missing, use the PG50 and above fastener pattern.
 PG20 -- 3" – 6" from the corners and every 24" on center.
 PG35 -- 3" – 6" from each corner and every 18" on center.
 PG50 and above -- 3" – 6" from each corner and every 12" on center.

Mull Joints	The first 8" beyond mull joints, on both sides, must be fastened through each nail fin hole.
Continuous Head and Sill above PG35	The first 4" from center, on both sides, must be fastened every 2"

IF INSTALLING A FINLESS WINDOW

- If installing into an Existing Frame with a Sloped Sill:
- If a detached sill adapter is used, cut to length, and snap into accessory groove at the sill.
 - Cut notches in the lower edge of the sill adapter to allow for water drainage; notches should be a minimum of 1/8" square and positioned under each weep hole of the window.
 - If the sill adapter covers weep holes, notch for proper drainage.



4 INSTALL WINDOW - CONTINUED

4. Center the head expander (optional) over the head of the window as shown.
5. From the interior, apply sealant to the inside edge of the outside stop. Set window with a sill adapter fully against the outside stop.

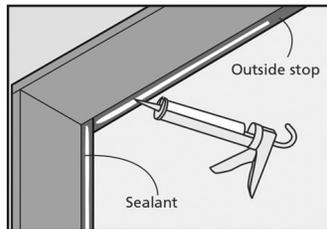
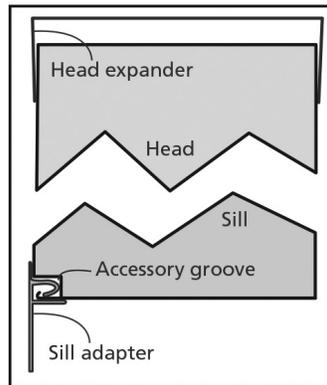
Continue with "All Installations".

If installing into an Existing Frame or Rough Opening with a Flat Sill:

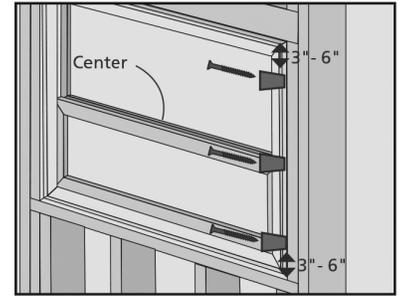
Center the head expander (optional) over the head of the window. Set new window into the existing window frame or rough opening.

Continue with "All Installations".

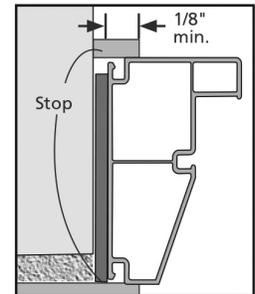
Window Frame and Accessories Shown from the Side



- b. If installing a window with fasteners through the jambs, secure with a #8 screw until fully seated (without deforming vinyl).



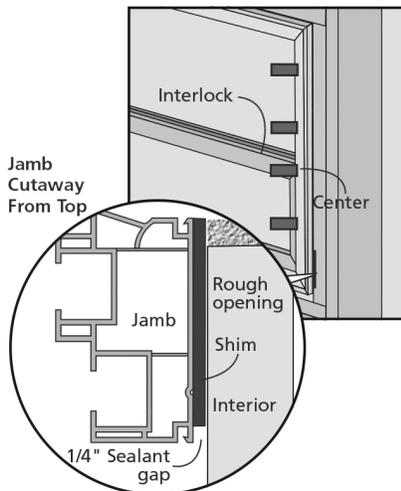
3. If installing a window using the stop in method, this installation assumes installation from the interior with exterior stops applied before window installation. All stops must overhang the window frame by a minimum of 1/8".



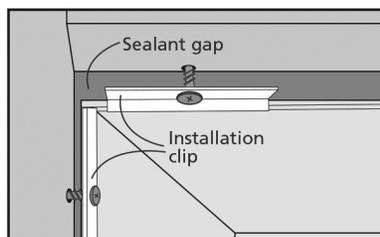
- a. Mill and install exterior stops in the desired location if necessary for the side and head jambs.
- b. Apply sealant to the interior side of the side and head jamb exterior stops and verify it is properly shimmed until square, level, and plumb.
- c. Apply backer rod and sealant or low expansion foam on the interior between the window frame and rough opening on all four sides.
- d. Install interior stops on all four sides.

ALL INSTALLATIONS

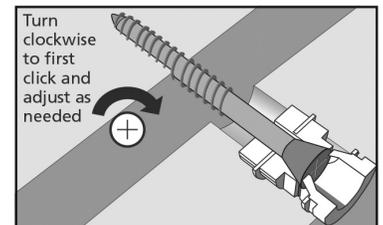
1. Shim the side jambs between the rough opening or existing frame and the new window at each fastener location. Shims must be set 1/4" back from the interior of the window frame. Secure shims with sealant.
2. Secure one upper corner as follows (skip to step 3 if using the stop in method):



- a. If installing a window with Sealant gap installation clips, drive a screw through the clip until the screw head contacts the clip. Do not bend the clip toward the rough opening (applying a shim between clip and rough opening can be helpful to prevent bending the clip).

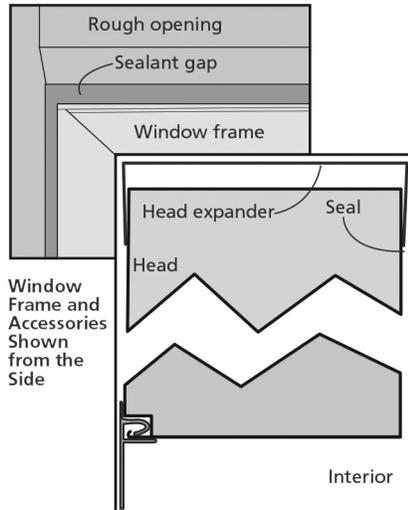
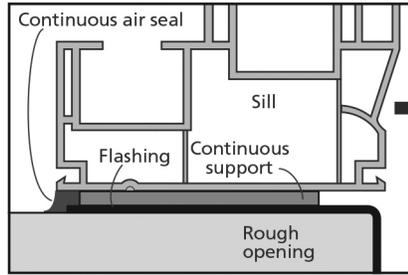


4. Inspect window for square, level and plumb (adjust shims or remove and reinstall if necessary).
5. Fasten window in a similar manner through the remaining corners, and then through the rest of the fastener locations. If installing fasteners in the sill, apply silicone sealant to the screw threads and the head of the screw in the window frame (use more sealant as necessary to completely seal the screw head to the frame), or use a gasketed head screw.
6. Insert plugs into fastener holes not located in any operating track. Seal plugs in the sill with silicone. Replace track fillers if applicable.
7. On some double hung operating units only, jamb adjuster hardware is mounted in the middle installation holes to allow for some jamb adjustment. Install jamb adjuster screws until captured (first 'click'), the screw may then be screwed in or out to adjust the jamb as needed. Replace lower sash.



5 COMPLETE INSTALLATION

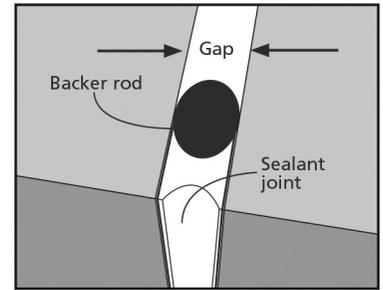
Create a continuous air seal on the interior by integrating the rough opening and the window frame with low expansion polyurethane foam or backer rod and sealant.



Window Frame and Accessories Shown from the Side

FINISH INSTALLATION

1. If installing a head expander, seal between the head expander and the window frame.
2. On the exterior, apply backer rod and sealant between the window frame and the rough opening.
3. If installing a sloped sill adapter, seal the joint between the existing sloped sill and sill adapter, leaving gaps at the weep holes.



AFTER INSTALLATION

- Install exterior wall surface per manufactures' guidelines.
- Leave an expansion/contraction gap of approximately 3/8" between window frame and final exterior wall surface (siding, stucco, etc.). For a finished look and additional protection, seal this gap on the sides with backer rod and sealant. If sealant is applied above the drip cap ensure the sealant bead is discontinuous to allow for drainage.
- Ensure weep holes/channels are clear of debris for proper water drainage; do not seal weep holes/channels if present.
- If applicable, apply desired exterior vinyl trim.
- Protect recently installed units from damage from plaster, paint, etc. by covering the unit with plastic.