

# NEW CONSTRUCTION VINYL WINDOWS INSTALLATION INSTRUCTIONS

Tools & Materials You Will Need:				
Measuring Tape		Hammer		
• Level		• (1) Box Stainless Steel or Galvanized Roofing Nails		
Power Drill & Assorted Drill Bits		• Square		
Putty Knife		• 9" Flashing in acordance with ASTM D-779		
Soft Mallet		Weather-Resistant Barrier Paper		
• 1 doz. ¼" Wood Shims		Staple Gun and Staples		
High Quality Silicone Window Caulking in accordance with ASTM C 920, Class 25		Batt Insulation or AAMA approved Non-Expanding Window Insulation Foam in accordance with ASTM C 1620		
Installation Screwpack Contents:				
(6) %" hole plugs	(6) #8 x 2" Phillips pan head screws	(4) Foam Corner Gaskets (if applicable)	(2) #6 x ½" Phillips pan head nail fin screws	
To cover the installation screw holes	For jamb installation all windows except picture windows	For nail fin or nail fin with J channel application in field.	For nail fin or nail fin with J channel application in field.	

### REMEMBER: ALWAYS USE THE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.



Homes built before 1978 may contain lead paint. All replacement installations must comply with the U.S. EPA's Lead-Based Paint Renovation, Repair, and Painting Program (RRP Rule). Read more about the RRP Rule and lead-safe work practices, on the U.S. EPA's website at: **www.epa.gov/lead** 



Contact your local recycling waste management center for waste disposal in your area. Always check local waste requirements and carefully dispose of waste in accordance with Federal and other regulations.

### Your Window Order Will Be Packaged With The Following:

- Window with New Construction Accessory Attached (3½" Total Frame Depth)
- Installation Screw Pack
- Mullion Kit (If applicable)
- Nail Fin, Stucco Flange or Brickmold Shipped Loose (If applicable)



This installation manual is intended for residential and light commercial applications less than four stories in height. Your installation is subject to all codes and restrictions set by your local governments or municipalities, which may require additional procedures not listed in this installation manual.



### TIPS TO FOLLOW BEFORE YOU BEGIN INSTALLATION:

- Approved sealants for use must meet the requirements of ASTM C920, Class 25.
- Window flashing must be used with all window installations to prevent air and water infiltration. Flash all windows in accordance with the ASTM E2112 standards, including methods A, A1, B, and B1. 9" flashing should be used in all applications or conform to local code.
- All flashing material must be barrier coated reinforced and provide a twenty-four hour minimum protection from water penetration when tested in accordance with ASTM D-779.
- All flashing and weather resistant barrier (house wrap/building paper) materials must be installed in a weatherboard fashion layered and installed starting at the bottom working upward.
- DO NOT INSTALL roofing nails onto nailing fin with an air gun or pneumatic device. Doing so will cause
  distortion or fracture of the nailing fins. All nailing fins must be secured by hand through the pre-punched
  nailing holes.
- Fasteners for securing the flashing must be non-corrosive. Acceptable fasteners: staples applied with a hammer, tacker or stapler. Stapling of self adhesive flashing is recommended to keep it curling in extreme weather conditions.
- Fasteners for securing the nail fin of the window must be non-corrosive galvanized roofing nails at least 1¾" in length and the head of the roofing nail must be wide enough to cover the pre-punched slot of the nailing fin. The roofing nail must be able to penetrate the framing material by at least 1".
- **DO NOT OBSTRUCT WEEPHOLES** with flashing or sealant. The weepholes located at the bottom sill area of a window are necessary in order to prevent water accumulation.
- The plastic applied to UV resistant paint finish windows is for the protection of the paint finish and should remain on the window until the installation is complete.
- Sloped sills are designed to direct water to the outside of the building. Any covering or trim applied to
  the product will need to allow for proper drainage. Failure to do so will create a risk of water infiltration.



### **INSPECT NEW WINDOW**

**Step 1-** Unwrap window and thoroughly inspect new window for any shipping or material damages.



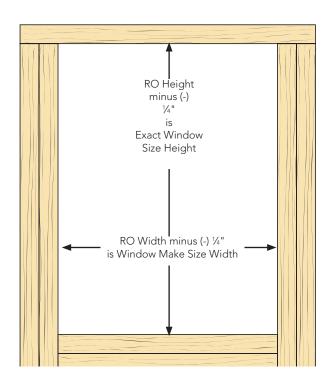
If any component of the main frame is damaged, please contact your dealer for replacements **BEFORE** you begin demolition of the existing window.

Moving parts, locks, balances, glass, rails, etc. can be repaired easily **AFTER** the window is installed.

- **Step 2-** After inspecting the new window, shut and lock it This will allow the seals, locks, interlocks and weatherstripping to engage.
- **Step 3-** Remove screen and lay aside. You will be re-inserting the screen in Procedure 9.



# MEASURE THE NEW WINDOW



Step 1-Measure the width and height of the new window.

The tip-to-tip make size should be big enough to fit the framed rough opening to allow a clearance for shimming and insulation.

See sizing chart on below:

Rough Opening Deductions			
Vinyl Models:	RO Width	RO Height	
Double Hung, Casement Awning, Slider, Picture	RO (-) ¼" width = Exact window size	RO (-) ¼" height = Exact window size	
Shapes & Bay/Bow	RO (-) ½" width = Exact Window Size	RO (-) ½" height = Exact window size	
Exact Sizing			

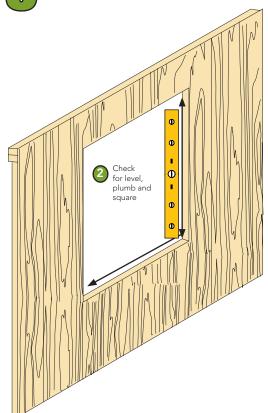
Exact sizes are the actual window tip to tip finished sizes. Allowable factory tolerance is plus or minus 1/16".

Exact Sizes are manufactured on the following increments:

Width	Height	
	1/8", 1/4", 3/8", 1/2", 5/8", 3/4", 7/8", 1"	
5/8", 3/4", 7/8", 1"		



# **CHECK ROUGH OPENING**





Rough opening must be level, square and structurally adequate. The studs should be free of voids, holes, chipping, twisting or other conditions that will not allow for proper installation and sealing.

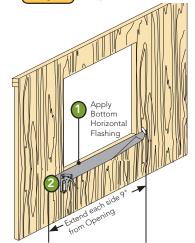
- Step 1-Clean rough opening area of any leftover construction debris.
- Step 2-Check rough opening to make sure it is level plumb, and square.



### **INSTALL FLASHING**



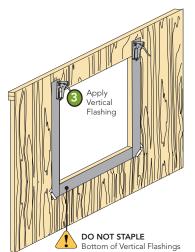
Flashing material must be barrier reinforced and must provide twenty-four hour minimum protection from water in accordance with ASTM D-779. Check your local building codes for any additional requirements in your area.



- **Step 1-** Using 9" wide flashing material, apply a horizontal piece at bottom of sill area making sure the sides are extended 9" on each side (in order for the flashing to meet with vertical pieces).
- **Step 2-** Secure flashing at top corner using a staple gun, making sure location of staple will be covered by nail fin of window.



The bottom and ends may be taped down in order prevent weather damage until weather resistant barrier is installed.



- Step 3- Cut vertical (jamb) flashings so length extends beyond the bottom of window vertically approximately 8%" so that you leave %" short from the bottom of sill flashing and to extend beyond top of window an additional 8%" so head flashing will overlap vertical flashings by %".
- Secure vertical flashings at the outside edges using a staple gun making sure to overlap bottom sill flashing. *Important!* Do not secure bottoms of vertical flashings you will need to install weather resistant barrier in Procedure 7 that will require it to be tucked behind vertical flashings.





If windows need to be field mulled, please go to Page 9 for instructions on field mulling window before placing into opening.

Step 1-

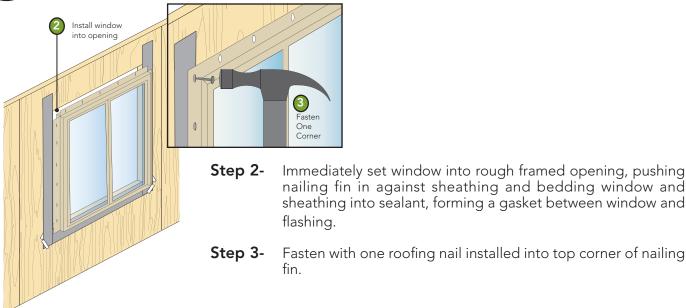
Place a %" continuous bead of sealant around entire perimeter of inside of nailing fin of window, making sure the sealant is aligned and covering the pre-punched holes in the nailing fin. *Important!* DO NOT leave any holes unsealed.



After the sealant is applied, immediately install product before a skin can form on sealant's surface.



## **INSTALL WINDOW**



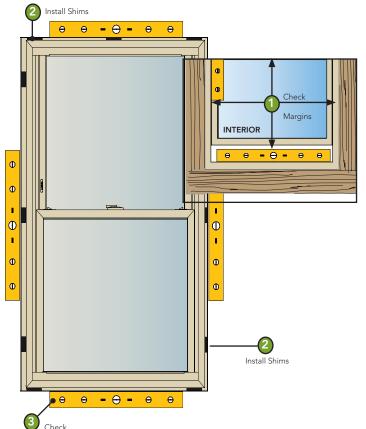


### SHIMMING & SECURING WINDOW



for level

Make sure the sill of the window has a continuous support underneath. If shimming is required, make certain to prevent twisting or binding of the window frame.



- Step 1- From inside home, unlock and raise sash slightly above sill and check margins between bottom of sash and top of sill.

  Adjust by pulling sill up or down.
- **Step 2-** From inside of the home, install shims per locations shown in illustration. Shims should be installed at a minimum of 16" intervals.



### DO NOT FORCE SHIMS INTO PLACE-

doing so will cause window to become out of square and sashes to operate poorly.

Step 3- Check sill with a level and adjust shims to level the sill. Re-adjust side clearance if necessary. Shim both sides of window and adjust shims to make diagonal measurements equal with the window plumb.



### **SHIMMING & SECURING WINDOW**

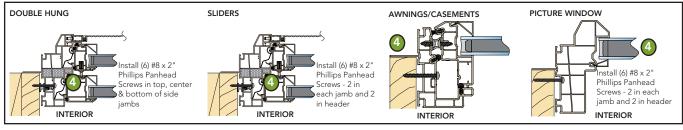
INTERIOR

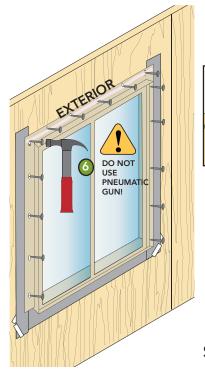
Adjust

Adjuster



**DO NOT INSTALL** roofing nails onto nailing fin with an air gun or pneumatic device. Doing so will cause distortion or fracture of nailing fins. All nailing fins must be secured by hand through pre-punched nailing holes.





**Step 4-** Install jamb installation screws:

For Double Hung, install (6) #8 x 2" Phillips Panhead Screws. Place (1) screw in the factory pre-drilled holes located at the top, center, and bottom of each side jamb. Remove sash stop to expose top pre-drilled hole. Bottom sash will need to be tipped to the inside to expose the center pre-drilled hole.

For Sliders, install (6) #8 x 2" Phillips Panhead Screws. Place (1) screw at the top and bottom of each jamb and (2) in the header.

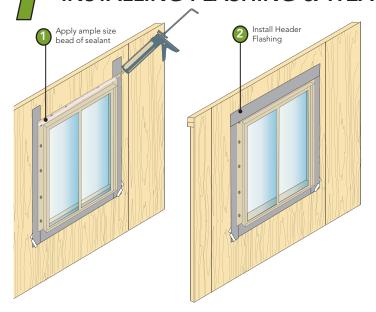
For Picture windows, install: (6) #8 x 2" Phillips Panhead Screws. Place (2) screws in each jamb and (2) screws in header.

Check operation of sash.

**Step 5-** From inside house, adjust single jamb adjuster by snugging it against rough opening. **DO NOT OVERTIGHTEN.** Check operation of sash.

**Step 6-** Using a hammer, (DO NOT USE A PNEUMATIC GUN) and install a 13/4" roofing nail into the pre-punched nail fin holes. Roofing Nails should be installed at a minimum of 8-12" apart all around exterior perimeter of window frame, including head of window.

# INSTALLING FLASHING & WEATHER RESISTANT BARRIER



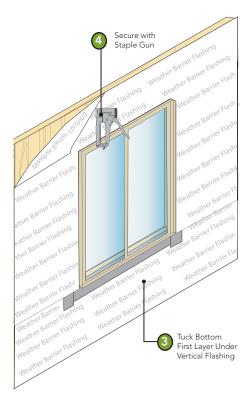
- **Step 1-** Install a 3%" bead of sealant onto exterior top nail fin.
- **Step 2-** Cut header flashing same length as bottom piece and install overlapping vertical pieces.

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### INSTALLING FLASHING & WEATHER RESISTANT BARRIER



All weather resistant barrier must be installed in a weatherboard fashion around entire perimeter of window or window opening (working from bottom first and moving upwards)



- **Step 3-** Starting from bottom and working upwards, install weather-resistant barrier on exterior of rough opening.
- **Step 4-** Using a staple gun, secure weather-resistant barrier with staples.



**Important!** Make sure you tuck barrier behind vertical flashing.



## **APPLY INSULATION**



**Step 1-** To maximize energy efficiency, insulate any gaps between window frame and opening. Using batt insulation and a flat putty knife, insert into cavities between window frame and rough opening.

#### OR



Using an AAMA approved ASTM C 1620 non-expanding foam, fill the cavities between window frame and rough opening.

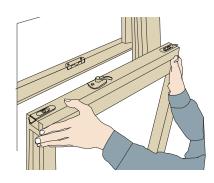


Over use of insulation, or Low-Expanding Foam or use of any non Low-Expanding Foam may cause frame to bow, jeopardizing operational performance of frame.

**Step 2-** Check margins between sash and window frame.



# FINAL ADJUSTMENTS TO WINDOW

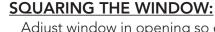


**Step 1-** Check window operation by unlocking and operating both sash and tilt mechanicisms.

**Step 2-** Install hole plugs for jamb installation screws.

**Step 3-** Slide balance cover (located in jamb pocket above bottom sash) up into position at head of window frame.

Step 4- Install screen.



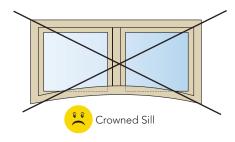


Adjust window in opening so edge of glazing bead is parallel to inside edge of frame. If margins between frame and glazing bead are not parallel, sashes will not operate properly.

Adjust jamb installation screws by loosening or tightening in order to achieve proper margins between sash and window frame.

If necessary, shim window in order to achieve a level and square window.

### SILL IS CROWNED (Sashes Not Operating Properly):



**Step 1-** Open and close the sash. Sash should lock securely and not bind when opened or closed.



Additional 2" screws may be needed for sill as necessary to relieve any crown condition.

**Step 2-** On Casement/Awnings: Place 2" screws approx. 2" from keeper side down through sill. If need be, hinge plate screw can be removed and another 2" screw used to draw sill down.





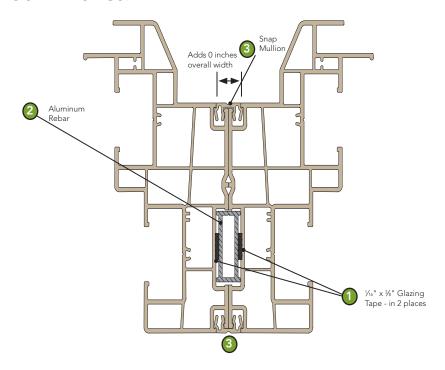
Sealant must be used on any screws secured through the sill.

The keeper located on sash can be adjusted up or down, where applicable, to align with locking mechanism.

### **MULLING WINDOWS IN FIELD**

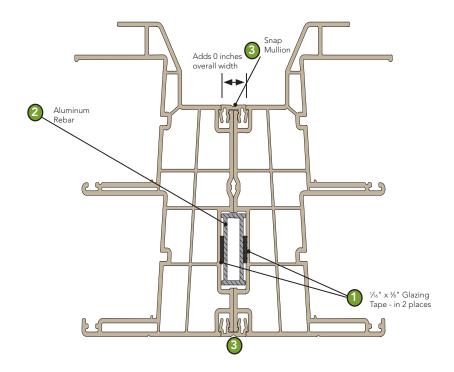
If your window unit has been shipped loose and you need to mull the windows together in the installation field, please follow each step listed that is the appropriate scenario to your application.

#### **MULLING VINYL DOUBLE HUNGS:**



- Step 1- Install 1/16" x 3/8" double sided glazing tape to both sides of aluminum rebar (see illustration).
- Step 2- Install aluminum rebar between window frame channels, making sure that glazing tape is adhering to each window frame.
- **Step 3-** Install snap mullion to both interior and exterior sides of both windows.

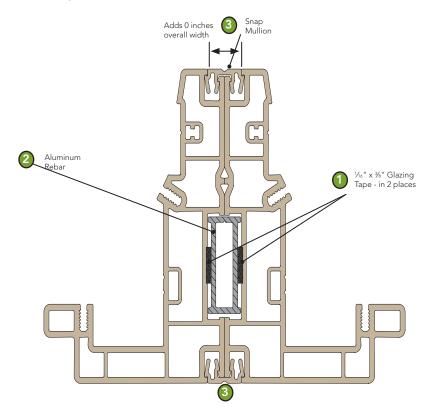
# FIELD MULLING VINYL WINDOWS MULLING VINYL SLIDERS:



- Step 1- Install 1/16" x 3/8" double sided glazing tape to both sides of aluminum rebar (see illustration).
- **Step 2-** Install aluminum rebar between window frame channels, making sure that glazing tape is adhering to each window frame.
- **Step 3-** Install snap mullion to both interior and exterior sides of both windows.

### FIELD MULLING VINYL WINDOWS

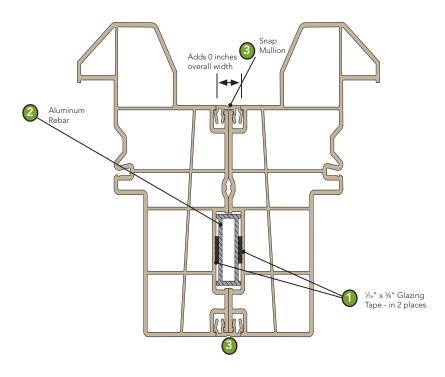
### **MULLING CASEMENTS/AWNINGS:**



- Step 1- Install 1/16" x 3/8" double sided glazing tape to both sides of aluminum rebar(see illustration).
- **Step 2-** Install aluminum rebar between window frame channels, making sure that glazing tape is adhering to each window frame.
- **Step 3-** Install snap mullion to both interior and exterior sides of both windows.

### FIELD MULLING VINYL WINDOWS

### MULLING PICTURE TO PICTURE WINDOW:



- Step 1- Install 1/16" x 3/8" double sided glazing tape to both sides of aluminum rebar(see illustration).
- Step 2- Install aluminum rebar between window frame channels, making sure that glazing tape is adhering to each window frame.
- **Step 3-** Install snap mullion to both interior and exterior sides of both windows.



