

# Marvin Window

## Full Frame Tear Out Installation Instructions



**Abstract:** The following instruction is for installers who intend to completely remove existing windows from a building and replace them with a Marvin window (full frame tear- out and replacement) without removing the exterior cladding/siding. A full frame tear- out and replacement installation should only be done if there is an effective water management system in place that diverts water past the exterior of the weather resistive barrier or to the exterior of the cladding/siding AND the installer can integrate the new window with that water management system.

**Installation shown not typical.** The procedures and illustrations included in this instruction are only one example of a full frame tear- out and replacement installation, conditions and installation scenarios may vary.

*NOTE: Replacement Casement shown for illustrative purposes.*

## BEFORE YOU BEGIN

**IMPORTANT:** Read these instructions thoroughly before beginning to install your Marvin Replacement Casement. Failure to install as recommended may void any warranty, written or implied. Regional applications and standards may vary; therefore Marvin is not responsible for interpretations of local codes and/or ordinances. Installation of Marvin products is the sole responsibility of the installer. For additional information, consult your local Marvin dealer.

**CAUTION:** When specifying or considering the structural load requirements for windows, it is important to consider the method of fastening the unit(s) into the opening. The methods contained herein may not be appropriate for all performance requirements. Selection of the appropriate fastening method is the sole responsibility of the certified installer or authorized contractor.

**IMPORTANT:** All windows must have properly installed flashing systems and sealant at unit perimeter in accordance with accepted and proven construction methods.

**CAUTION:** Nonabrasive household cleaners are recommended for regular cleaning and maintenance. Caution should be used with solvents and chemicals.

**WARNING!** Practice safety! Wear safety glasses or goggles and appropriate hearing protection when installing or performing adjustments to an Marvin product.

*NOTE: Numbers listed in parentheses() are metric equivalents in millimeters rounded to the nearest whole number.*

**ATTENTION:** Specifications and technical data are subject to change without notice.

### YOU WILL NEED TO SUPPLY

Safety glasses	Hearing protection
Level	Square
Hammer	Wood shims
Tape measure	Fiberglass insulation
2" roofing nails	Utility knife
Shop vac	Hand brush
Air barrier material	Drip cap
Seam seal tape (air barrier applications)	
Power drill/driver with screw driver bit.	
Backing material (foam backing rod)	
Self sealing adhesive flashing	
Grade NS Class 25 sealant per ASTM C920- <i>sealant must be compatible with building exterior and window surface.</i>	

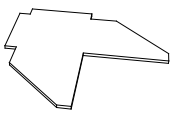

### REPLACEMENT PARTS

Should it be necessary to order replacement parts for your Marvin unit, refer to the Parts Manual and contact your Marvin representative for details.

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### PARTS INCLUDED WITH URCA INSTALLATION PACKAGES

ILLUSTRATIONS (not to scale)	DESCRIPTION AND COLOR	PART/PROFILE NUMBER
	Nailing fin corner gasket Package of 4	Shipped Loose
	Installation Screws #8 x 3" or supplied screw	Shipped Loose

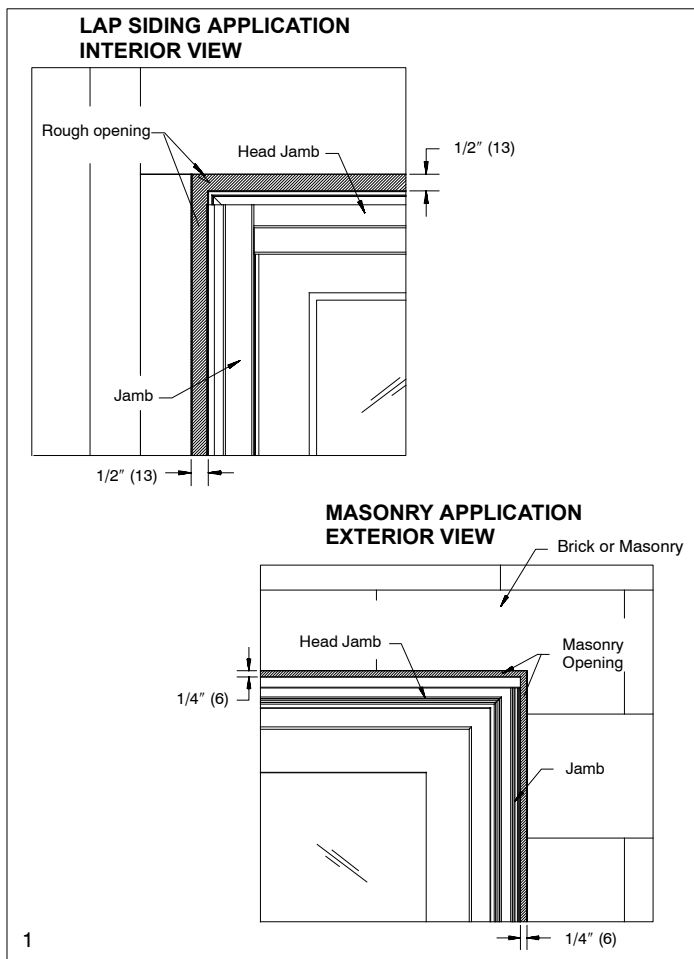
### Installation Preparation

**NOTE FOR EXISTING CONSTRUCTION:**

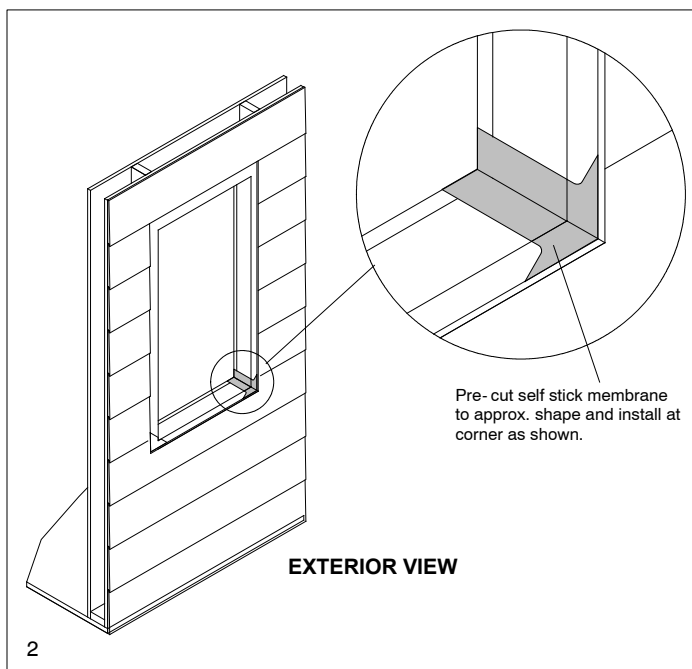
- Remove the existing window including frame, sash, exterior casing, jamb extension and interior casing. Removal of these window components will result in a clean rough opening
- Use care when removing interior casing as this may be reused
- If the window has a rope and pulley system, remove the rope and pulley pocket down to the rough opening frame

## Rough Opening Preparation- Existing Construction

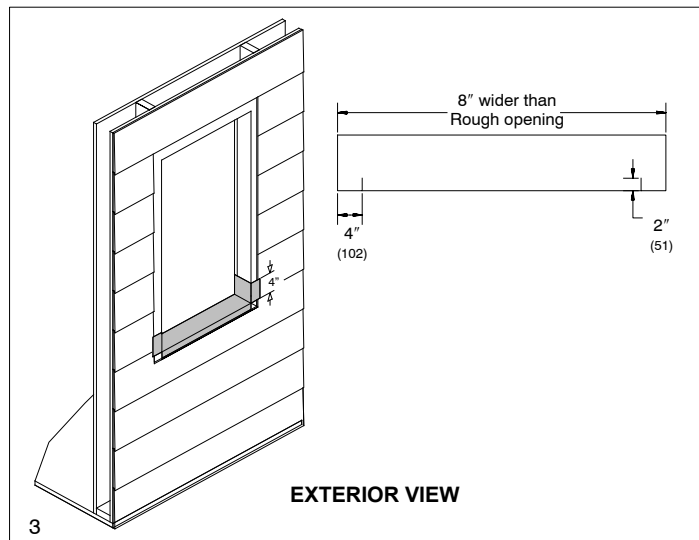
1. Rough opening (RO) should be 1" (25) wider and 1/2" (13) higher than outside measurement of frame. See illustration 1. Masonry opening (MO) should be 1/2" wider and 1/4" (6) higher than outside measurement of the frame.



2. Apply self sealing adhesive backed membrane to sill corners of rough opening as shown in illustration 2.

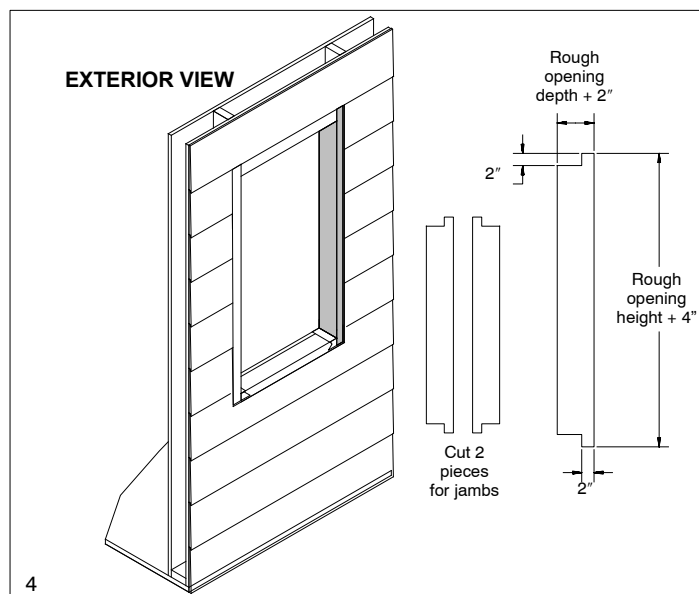


3. Cut a piece of 9" self sealing adhesive backed membrane 8" (203) longer than the rough opening width. Make a 2" cut in the membrane, 4" from the ends. See illustration 3. Remove backing from membrane and install so 4" of the membrane rides up onto the rough opening jamb and folds out over the face of the exterior. The remaining 2" at the sill folds down and sticks over the sill exterior. If the existing siding is less than 2" from the rough opening, tuck the adhesive membrane behind or trim flush with siding. If the home has a continuous air barrier system or building paper under the siding, make sure the membrane is to the exterior.



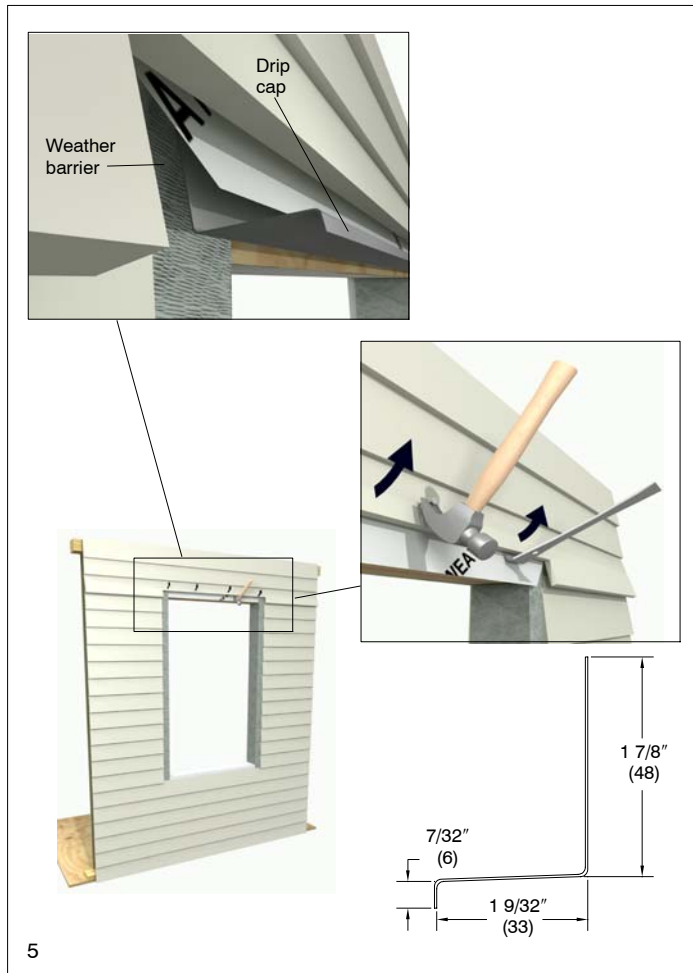
**NOTE:** If metal or PVC pan sill flashing is to be used, install now.

4. Cut two pieces of air barrier material or self sealing adhesive membrane, approximately 2" wider than the depth of the rough opening and 4" longer than the height. Make cuts in the material as shown in illustration 4. Fold and install side flashing to cover the rough opening jamb and fold out onto the exterior. If using air barrier, staple in place. If existing siding is less than 2" from the rough opening, tuck the material behind the siding, or trim flush with the siding. If the home has a continuous air barrier system or building paper, under the siding, make sure the membrane is applied to the exterior of either. **If your unit does not have brick mould casing (BMC), skip to section on Installing the Unit..**

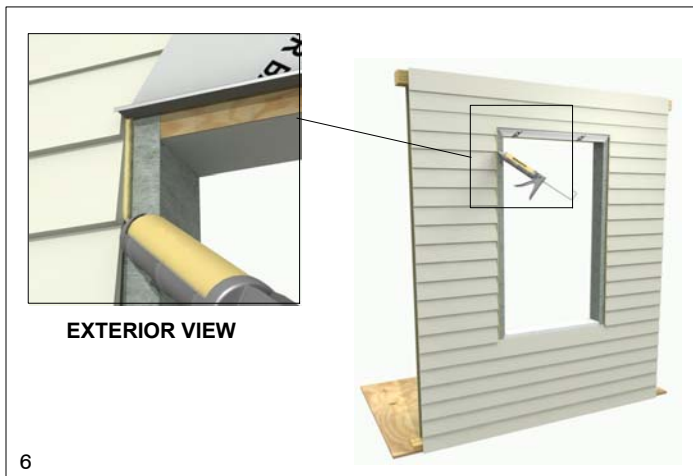


## Existing Construction with Exterior Casing Option

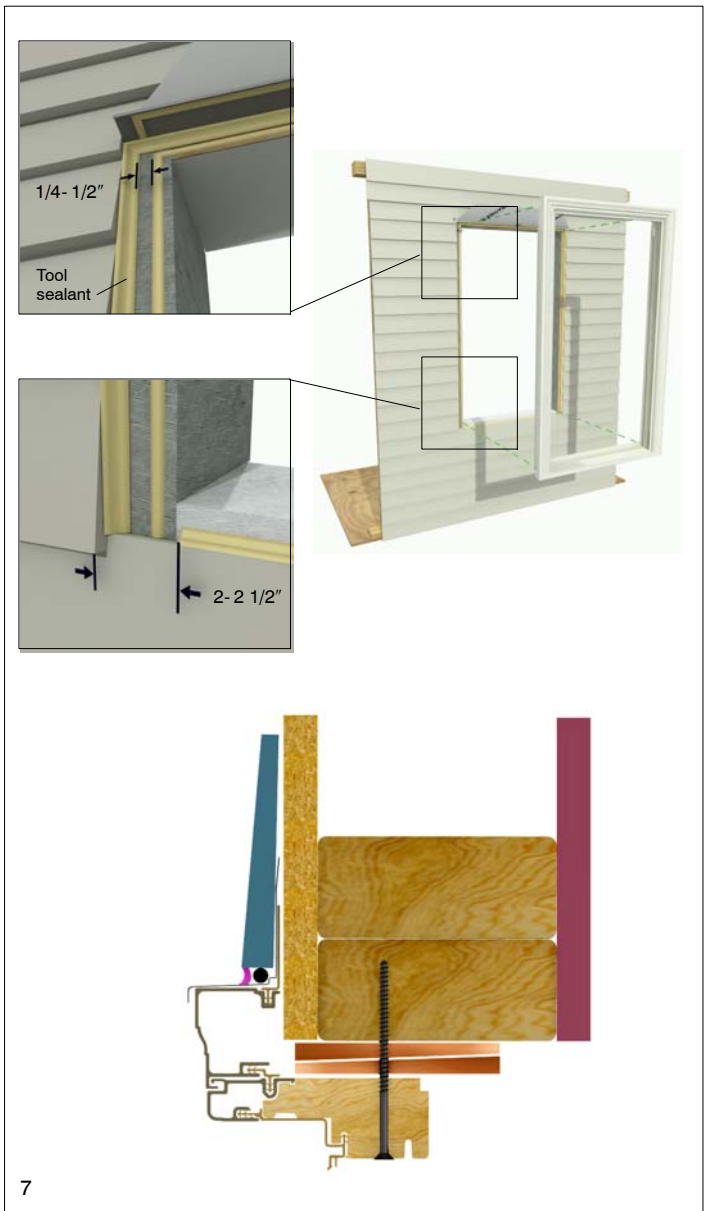
- Use hammer to pull out siding above the header. Measure and cut drip cap to length. Slide drip cap up under existing siding and weather barrier. See illustration 5.



- Apply a 1/2" wide 1/4" thick continuous bead of sealant along weather barrier and siding at each jamb. See illustration 6.



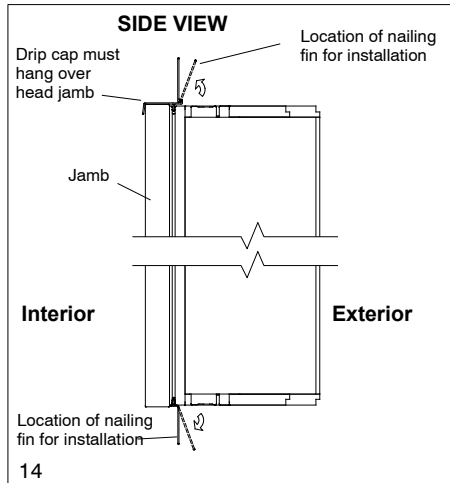
- Tool sealant ensuring siding gaps are sealed. Apply a bead of sealant across the ends and length of the drip cap. Apply a continuous bead of sealant (see recommended sealant on page 1) across the top and sides of the window opening. Apply sealant to rough opening bottom leaving a 2" gap at each corner. See illustration 7. Proceed to Installing the Unit section.



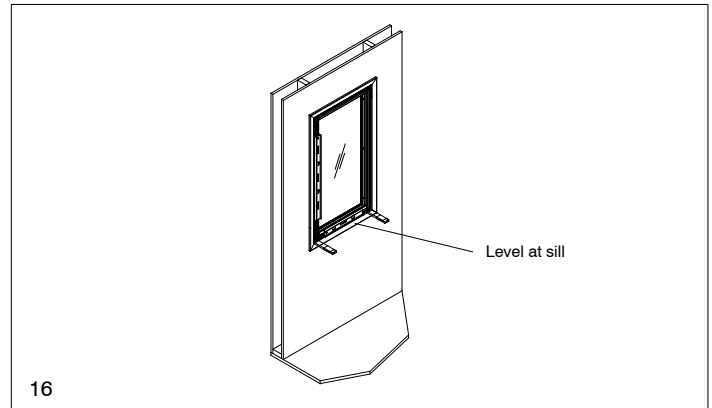
## Installing the Unit

8. Remove protective packaging from the window and properly dispose of packing.
9. Inspect unit and report any damage immediately to your Marvin representative. Provide the unit order and line number from the label on exterior of jamb.
10. Remove screen from unit prior to installation. See index, Removing and Installing the Screen.

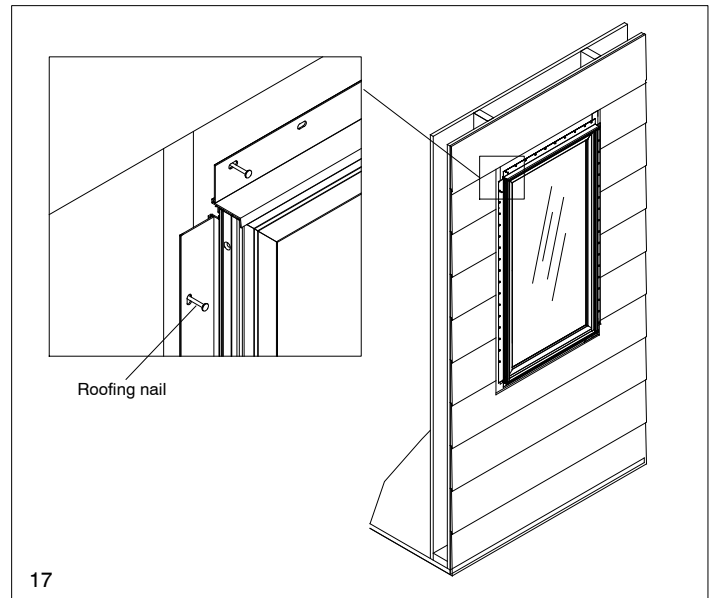
11. Position the field applied nailing fin in the upright position for installation as shown in illustration 14. It is important the drip cap lip hangs over the head jamb exterior. **DO NOT APPLY NAILING FIN CORNER GASKETS AT THIS TIME.**



13. Center the unit or assembly into the rough opening. Check the unit for level and plumb. If required, place shims along the sill to level. See illustration 16.



14. When sill is level in opening, tack both bottom corners of the jamb nailing fin to the sheathing. **DO NOT** drive the nails all the way in at this time. See illustration 17. Be sure to plumb vertically (interior to exterior) at side jambs, then tack top corners as well.

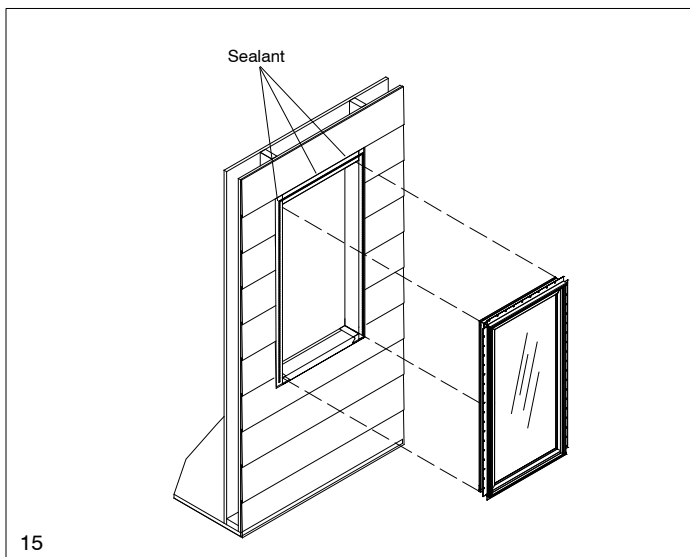


**NOTE:** It may be necessary to trim nailing fin to fit within existing openings.

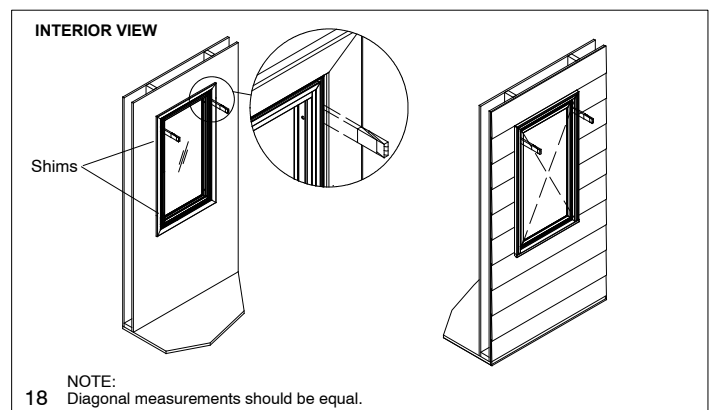
**NOTE:** For masonry applications, remove nailing fin and install with jamb screws only.

**NOTE:** For BMC applications with nail fin, install nail fin now.

12. Apply a continuous bead of sealant (see recommended sealant on page 1) 3/4" from the top and sides of the window opening. Do not apply sealant to rough opening bottom. See illustration 15.

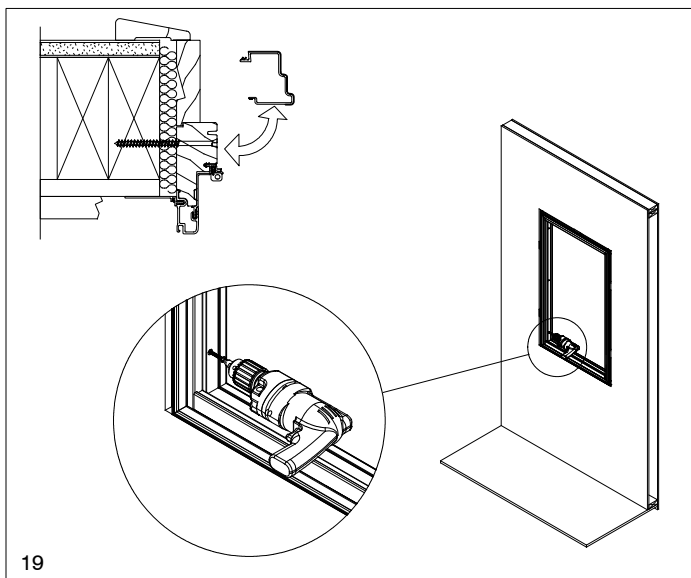


15. Check diagonal measurements to ensure frame is square. If square, place shims between rough opening and frame just behind the top and bottom of all pre-drilled screw holes in jambs. See illustration 18.



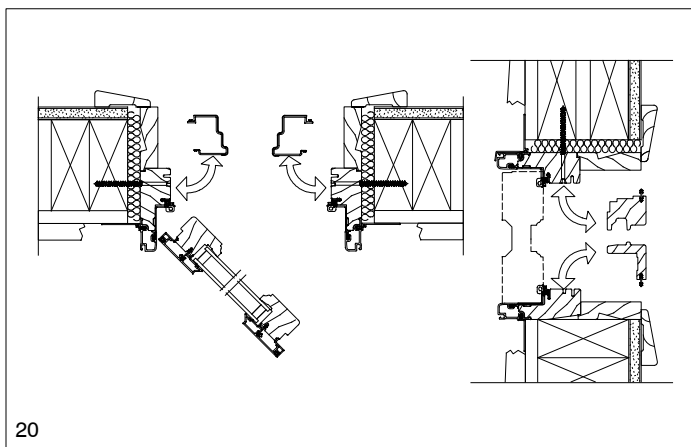
**NOTE:** Proper shimming is extremely important. Over or under shimming will result in bowed jambs and/or head jamb. Be careful not to bow the jambs.

16. Additional shims must be installed every 16 - 18" (406- 457) between those previously installed. When shimming is complete, check again to be sure that the unit is square and plumb. Also, check sash for smooth operation.
17. Check that shims are placed behind every screw location to avoid bowing of frame. Using a power drill, drive #8x3" screws provided through the pre-drilled screw holes in the jamb and into the RO wood framing member. Do not over-tighten screws. See illustration 19. Check diagonal measurements for square and adjust screws as necessary.



**NOTE:** Jamb cover removal instructions are packaged with the installation screws.

18. Once the frame is square and all adjustments have been made reinstall jamb covers. See illustration 20.



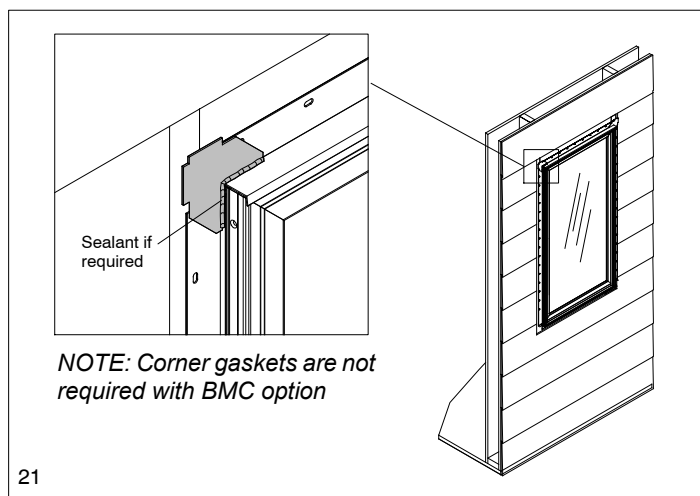
19. Once the unit is flush, square and plumb in opening and sash works properly, cut shims off flush with interior jamb using a sharp utility knife. Loosely fill the gaps between the window frame and RO with fiberglass insulation. Do not pack tightly.

**NOTE:** As required by some building codes, foam type insulation may be used to form an infiltration seal. Important, a low expansion type foam should be used in combination with fiberglass insulation. Apply from interior against casing/nailling fin back side 1"-2" (51-102) thick (or as required by code). Follow all instructions and warnings from foam manufacturer.

**CAUTION:** When using expanding foam insulation it is very important not to bow the head jamb and/or side jambs of the unit.

## Sealing the Installation

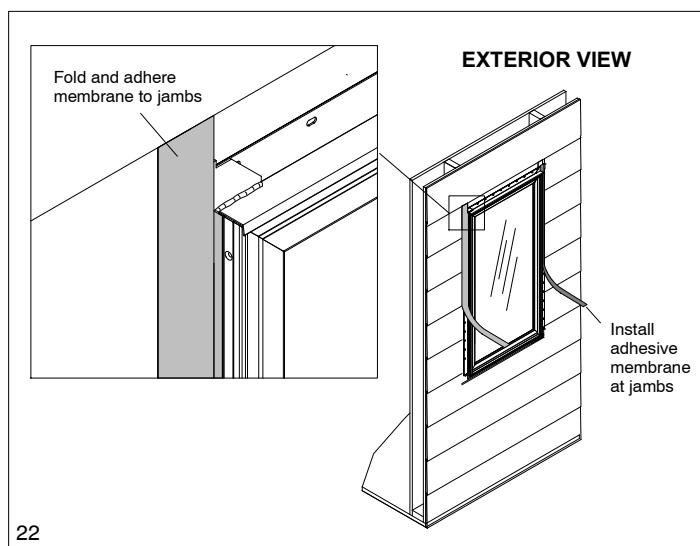
20. If applicable, apply nailing fin corner gaskets to each corner of the nailing fin. Apply sealant along each nailing fin corner gasket as shown in illustration 21. Complete the nailing fin installation by adding nails every 12" - 16".



**NOTE:** Corner gaskets are not required with BMC option

**IMPORTANT:** Marvin nailing fin is not designed to be a waterproof flashing.

21. Lap vertical strips of self sealing adhesive membrane onto unit jambs and over the RO flashing previously installed. Make small cuts at head jamb to allow membrane to fold back onto exterior. See illustration 22.

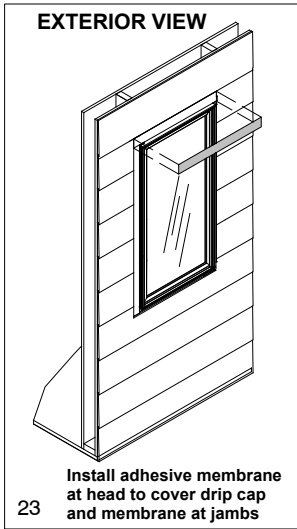


**EXTERIOR VIEW**

Fold and adhere membrane to jambs

Install adhesive membrane at jambs

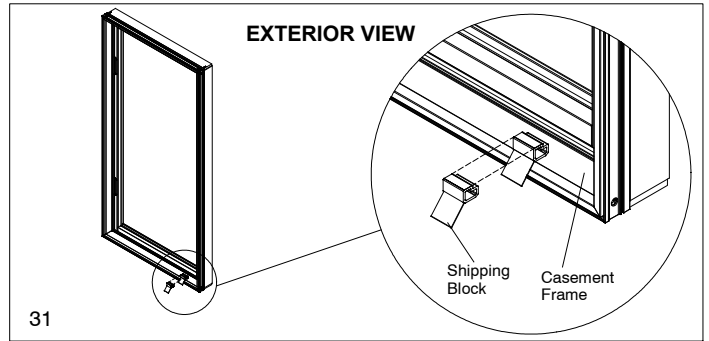
22. Install another layer of adhesive membrane lapping onto head jamb of unit and over nailing fin (if used) and exterior sheathing. Membrane flashing at head jamb should extend and cover flashing membrane previously installed at jambs. See illustration 23. If existing siding is less than 2" from the rough opening, tuck the material behind the siding, or trim flush with the siding. If the home has a continuous air barrier system or building paper under the siding, make sure the membrane is applied to the exterior of either.



23. Finish exterior as desired.

## FINAL INSTALLATION PROCEDURES

24. **IMPORTANT:** Marvin operating casements are supplied with a sash shipping block that must be removed after installation has been completed. Unlock sequential lock, open sash, to remove shipping block. See illustration 31.

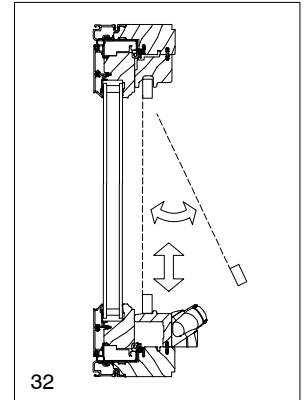


25. Crank should operate smoothly and sash should be square and snug to frame. If unit operates smoothly, and adjustments are not necessary, interior trim or casing can be installed at this time.

## REMOVING AND INSTALLING SCREEN

26. To remove casement/awning screen, grasp screen lift. Lift upward and draw screen towards you, removing screen from channel. See illustration 32.

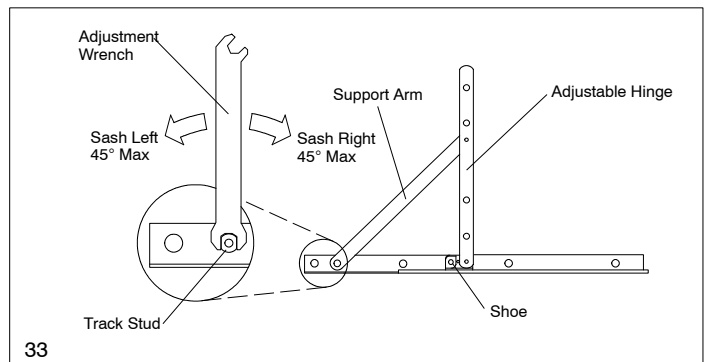
27. To install casement/awning screen, place screen into the upper screen channel. Lift upward and push screen tight against frame. Release screen lift to seat screen into place. See illustration 32.



## HINGE ADJUSTMENT PROCEDURES

**NOTE:** The casement hinge track hardware has been designed with an adjustability feature that allows sash to be re-aligned in an out of square frame. Available on Ultimate Replacement Casement and French Casemaster Units only.

28. To adjust the hinge without detaching the support arms it is necessary to use a hinge adjustment wrench as found in the parts section accessories page. See illustration 33.



**NOTE:** Do not rotate track stud more than 45° from perpendicular in either direction.

### NOTE ON COIL STOCK APPLICATION:

- If applying coil stock, first attach blocks made from pressure treated lumber of the appropriate dimension to the unit perimeter. Fasten with treated lumber approved fasteners.
- If the nailing fin/drip cap has been applied and sealed at head jamb, use a utility knife to remove the clear lip from the head jamb drip cap. This will allow clearance to the accessory kerf for application of coil stock. See illustration 24 below.

