Ultimate Corner Window

Installation Instruction



ABSTRACT: Please read these instructions in their entirety before beginning to install your Marvin window product. These installation instructions demonstrate the installation of a Marvin aluminum clad corner window in new wood frame construction using an industry approved water management system. For installation using other construction methods, such as remodeling, replacement, and recessed openings refer to "ASTM E2112-01, Standard Practice for Installation of Exterior Windows, Doors and Skylights," for installation suggestions. Information for ASTM E2112 can be found on the ASTM website, www.astm.org.

For product specific issues, service instructions and other field service guides, refer to the Marvin Service Manual, visit our website at www.marvin.com, or contact your Marvin representative.

Regional standard practices, environmental conditions, and codes may vary and supersede the procedures contained within. The responsibility for compliance is yours: the installer, inspector, and owner(s).

For measuring information, refer to the Clad Corner Window Measuring Instruction.



Installer and Builder Information

- Always provide a copy of these instructions for the current or future building owner.
- Plan sizing of rough opening and clearance from exterior finishing systems to allow for normal materials shrinkage or shifting (e.g. wood structure with brick veneer; allow adequate clearance at sill).
 Failure to do so can void the Marvin warranty coverage.
- It is the responsibility of the builder, installer and subcontractors to protect the interior and exterior of windows or doors from contact with harsh chemical washes, construction material contamination and moisture. Damage to glazing, hardware, weather strip and cladding/wood can occur. Protect with painters tape and/or protective sheathing as required. Follow all guidelines regarding material use, preparation, personal safety and disposal.
- Contact your Marvin supplier if you have any questions regarding product and materials used in manufacturing or questions on replacement parts.

After Market Products

Alterations to Marvin products including window films, insulating or reflective interior window treatments or additional glazings can cause excessive heat buildup and/or condensation. They may lead to premature failures not covered under warranty by Marvin Windows and Doors.

Before purchasing or applying any product that may affect the installation or performance of Marvin windows contact the manufacturer of after market product/glazings that are not supplied by Marvin and request written product use, associated warranties and damage coverage. Provide this information and warranties to the end user and/or building owner for future reference.

IMPORTANT

Please consult with local authorities to properly dispose and/or recycle all packaging, materials, and waste.



WARNING

Older homes may contain lead-based paint, which may be disturbed when replacing windows or performing renovations. Consult state or local authorities for safe handling, disposal, or abatement requirements. For more information, go to www.epa.gov/lead.

You Will Need to Supply

Safety glasses Hearing protection

Level Square

Hammer Composite shims
Insulation Tape measure
Perimeter sealant 2" (51) Roofing nails

Sill pan flashing

Backing material (foam backing rod)

Flashing materials
Weather resistive barrier

Standard Parts Shipped

Units are sent with hardware and four (4) nailing fin corner gaskets. Follow installation instructions included with part if applicable.

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



WARNING

Always practice safety! Wear the appropriate eye, ear and hand protection, especially when working with power tools.

Prepping and Installing

- Remove the protective packaging from the unit and dispose/recycle properly. Inspect unit for any hidden damage and report immediately to your Marvin representative.
- 2. Apply jamb extension before installing the window in the rough or masonry opening if necessary.

3. Apply air barrier. Trim air barrier across entire top of head jamb. See figure 1.

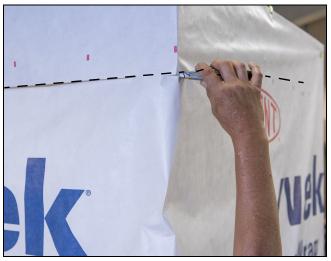


Figure 1

4. Make one cut at center, cut 6" (152). See figure 2.



Figure 2

5. From the horizontal cut at the head jamb, make two 45 degree cuts toward the center. Cut vertically from the head jamb to where the two 45 degree cuts meet. See figure 3.

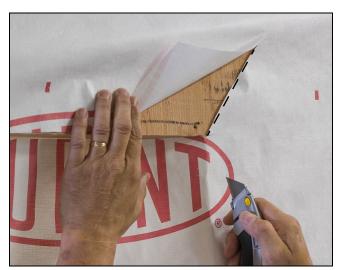


Figure 3

6. Flip top flaps up and tack in place temporarily. Fold sill portion to the interior and tack in place. The side flaps should be loose until panning is installed. See figure 4.

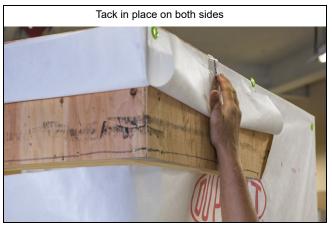


Figure 4

7. Cut air barrier across the sill. See figure 5.

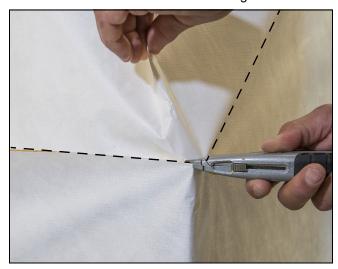


Figure 5

8. Cut air barrier 6" (152) from each jamb of the corner unit. See figure 6.

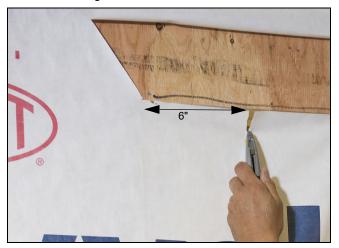


Figure 6

9. At the sill trim up from the bottom corners about 2" (51) and then make an additional horizontal cut about 3 1/2" (89) wide on each side. See figure 7.

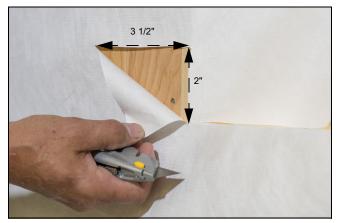


Figure 7

10. Tack side jamb air barrier temporarily. See figure 8.



Figure 8

11. Check rough opening for level, plumb, and square. See figure 9.



Figure 9

12. Cut one 18" (457) strip of Type III Flexible Pan Flash. See figure 10.



Figure 10

13. Fold material in half to crease. See figure 11.



Figure 11

14. Fold material at seam on the 3" (76) crease. See figure 12.



Figure 12

15. Remove the adhesive backing from the 3" (76) section crease. See figure 13.



Figure 13

16. Center material on the corner and adhere. See figure 14.

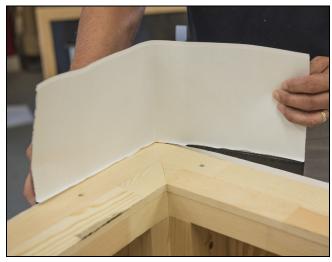


Figure 14

17. Cut at center. See figure 15.



Figure 15

18. Remove backing from top section of one side and adhere to opening. Repeat on opposite side. See figure 16.





Figure 16

19. Cut another strip of Type III Flexible Pan Flash to the size of one leg of the Rough Opening. Make same folds as steps 13 and 14. See figure 17.



Figure 17

20. Apply at 6" (152) mark and lap up side of jamb. Repeat on opposite side. See figure 18.

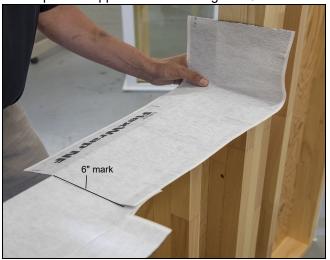


Figure 18

21. Apply a bead of sealant and tool at the 6" (152) mark by the corner. See figure 19.



Figure 19

22. Flash both corners with fold, smooth with speed square. See figure 20.



Figure 20

23. Cover each flex wrapped corner with tape. See figure 21.

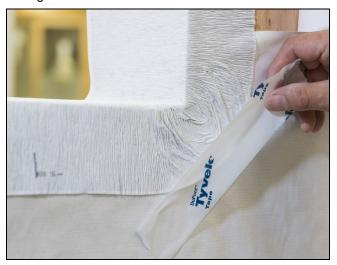


Figure 21

24. Cut excessive air barrier paper from each jamb. Tape air barrier to jamb. See figure 22.

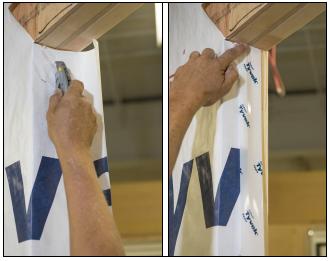


Figure 22

25. Apply a dollop of sealant and composite shims to corner of sill. See figure 23.



Figure 23

26. Apply dollop of sealant and composite shims every 15" (381) and at the end of each jamb. Check opening for level. See figure 24.



Figure 24

27. Starting 3/4" (19) from the side, apply 1/4"(6) to 3/8"(10) bead of sealant across the top of the RO stopping 3/4" (19) in from the end. Apply sealant down all sides of the window opening in the same manner. Do not apply sealant across the RO bottom. See figure 25.

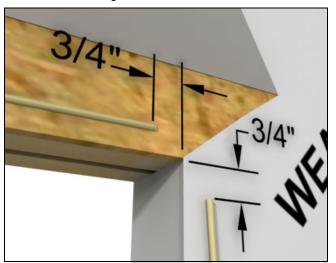


Figure 25



Seek Assistance

Some large windows and/or assemblies are very heavy. Avoid injury by getting help to lift and position the window into the rough opening.

28. Center the window in the opening. Level at the sill and plumb the frame (interior/exterior). Adjust shims under the jambs to bring to level if necessary. See figure 26.



Figure 26

29. Once level, tack the jamb nailing fin with 2" (51) roofing nails within 4" (102) from the bottom jamb. See figure 28.



Figure 27



CAUTION

Proper shimming is extremely important. Undershimming or over-shimming will result in bowed jambs and or head jamb. Both conditions can contribute to improper window operation.

30. Now tack the top corners of the nailing fin and recheck for square. If necessary remove the nails and adjust shims until the unit is square. See figure 28.



Figure 28

- 31. From the interior, square the frame in the opening by installing shims between the jambs and framing 4"-6" (102-152) from the head jamb and sill. Measure the diagonals and adjust shims until the unit is square in the opening. If square install additional shims at 15"(381) intervals on center and at each contact point.
- 32. Apply a dollop of sealant at top corner under the nailing fin. See figure 29.



Figure 29

33. Adhere a 3" (76) high x 8" (203) wide piece of Type III Flexible Pan Flash over the top corner of nailing fin. See figure 30.



Figure 30

34. Complete fastening of the nailing fin around the perimeter of the unit with 2"(51) roofing nails 2"(51) from each corner and spaced every 6"-8" (152-203) on center.

35. Apply nailing fin corner gaskets to each corner of the nailing fin. See figure 31.



Figure 31

NOTE: If a drip cap or rigid head flashing is not already installed on the head jamb or head jamb casing of the window, do so now. The drip cap should extend about 1/8" (3) beyond the edge of the window on each side. Be sure to apply a bead of sealant along the back sides of both vertical and horizontal surfaces of the cap that come in contact with the window, window casing, and sheathing.

36. Install a "Skirt." Use flashing material or a strip of Weather Resistive Barrier and attach to the sill of the window with seam seal tape or flashing tape. See figure 32.



Figure 32

37. Lap vertical strips of self sealing adhesive membrane onto the unit or casing and out over the air barrier. Make small cuts at the head jamb to allow the membrane to fold back onto the exterior. See figure 33.

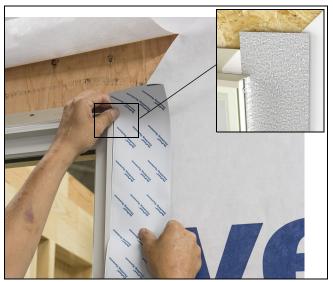


Figure 33

38. Install another layer of adhesive membrane lapping onto head jamb of unit and over sheathing. Membrane flashing at head jamb should extend and cover flashing membrane previously installed at jambs. See figure 34.



Figure 34

39. Tape the top edge of the head jamb flashing with seam seal tape.

40. Fold head jamb air barrier down over the head jamb flashing. Apply seam seal tape over the diagonal cut in air barrier. Make sure the tape laps onto the unit or casing. Tape and seal any seams and fasteners directly above the unit. See figure 35.

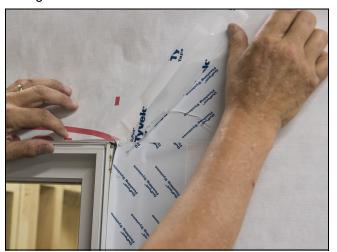


Figure 35

41. Tape and seal at top corner. See figure 36.



Figure 36

42. Apply #8 x 3" through jamb screws, 4" (102) from corners and 15" (381) on center. See figure 37.

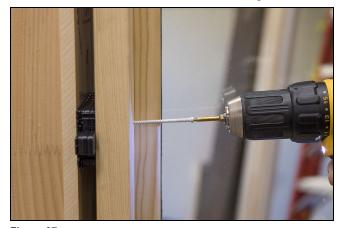


Figure 37

43. **Interior and mullion trim:** Install mullion trim after interior trim or casing is applied.

IMPORTANT

Nailing fin is not designed to be a weatherproof flashing.

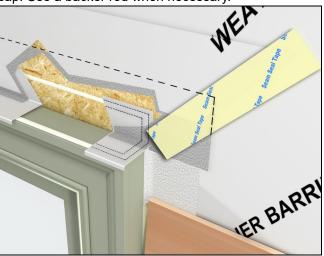
Insulating and Sealing the Installation

We recommend two possible ways of insulating the RO cavity. Both follow the principle that stopping air intrusion will aid in managing water intrusion into the RO. The first method uses a combination of one bead of low expansion/low compression/closed cell foam at the exterior plane of the RO in conjunction with loose fill fiberglass insulation. The second method uses two beads of low expansion foam (one at the exterior plane of the RO and another at the interior plane of the RO). For more information on insulating and sealing, refer to the <u>Window Rough Opening Prep and Flashing Instruction</u>.



Final Installation Procedures

For ALL applications: Once the exterior finish such as siding or brick veneer is installed, apply bead of sealant between the finish and the frame exterior or casing along the sides. Apply additional beads approximately 1"-2" (25-51) at the ends on top of the drip cap. Use a backer rod when necessary.





CAUTION

Perimeter sealant must be Grade NS Class 25 per ASTM C920 and compatible with the window product and the finished exterior(s) of the building. Using improper sealant could result in sealant failure causing air and water infiltration.