

INSTALLATION INSTRUCTIONS FOR MATHEWS BROTHERS NOAH MERRILL NEW CONSTRUCTION VERTICAL SLIDE, PROJECTED AND STATIONARY WINDOWS (FRAME WITH NAIL FIN INTO WOOD/STEEL FRAME CONSTRUCTION)

General Instructions:

- Remove or cut ventilation holes in shipping wrap if windows are not installed immediately.
- Do not lift window by top of frame, only by holding both jambs.
- Protect window sill from traffic, construction debris and damage.
- Do not plug weep holes.
- Do not drill into or through the window sill.
- All flashing systems should be installed on clean, dry surfaces.
- Use 7" flexible self-adhesive sill flashing on 2x4 walls, 9" flexible self-adhesive sill flashing on 2x6 walls.
- Do not stretch flexible wrap when installing along sills or jambs.
- Follow manufacturer's instructions for application of flashing systems, including temperature limitations.

Tools Required:

- Razor Blade Knife
- Flexible Self-Adhesive Flashing (for Sill)
- Self-Adhesive Flashing (for Head and Jambs)
- 3' Level
- Wood Shims
- Screwdriver
- Hammer
- Exterior-Grade Clear Silicone (PVC-Compatible)
- Caulking Gun
- Stainless Screws or Galvanized Roofing Nails
- Aluminum Drip Cap

Preparing/Flashing the Opening:

1. Attach weather resistant house wrap to house sheathing according to manufacturer's instructions.
2. Make an "I-Cut" in the house wrap. For an "I-Cut" begin with a horizontal cut across the bottom and the top of the window frame (for round top windows, cut from the center cut straight down to the sill). Cut two 45° slits a minimum of 8" from the corner of the header to create a flap above the rough opening to expose sheathing and to allow head flashing installation. (Figure A)
3. Flip head flap up and temporarily secure with flashing tape. (Figure B)
4. Fold side flaps into rough opening, cut excess flaps, and secure. Note: Side flaps should cover interior facing framing stud. (Figure C)

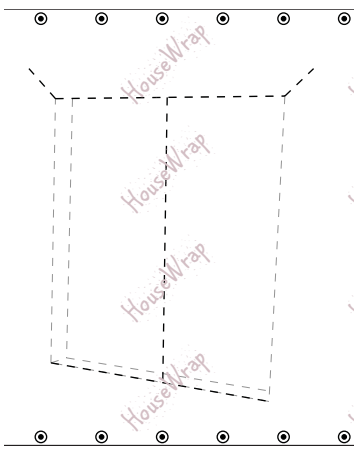


FIGURE A

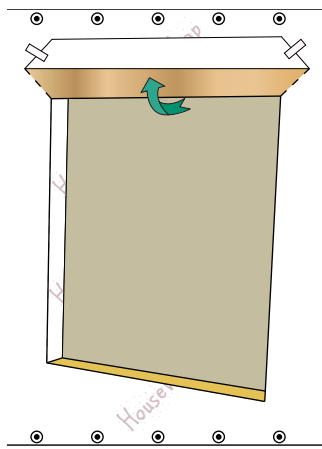


FIGURE B

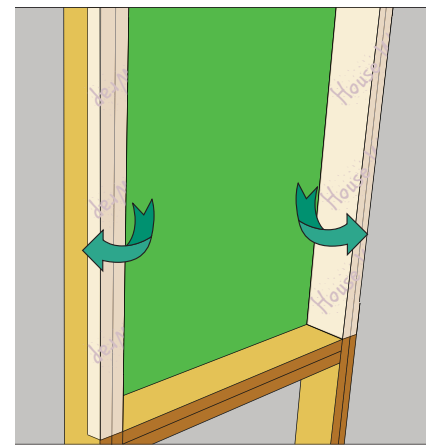


FIGURE C

5. Close and lock the sash in order to keep the window square during installation.
6. Place window unit into opening to assure it will fit properly prior to proceeding to Step 7. The rough opening should be 1/2" wider and 1/2" taller than the master frame of the window. If the window fits properly, proceed to Step 7. If the rough opening is too large or too small, modify as needed.
7. Center unit in opening and shim to ensure window is level, square and plumb. Once this is accomplished, remove shims and place aside for installation.
8. Install exterior sill flashing prior to setting the window in the opening. Cut Self-Adhesive flexible flashing, approved for use on wood and vinyl. Flashing should be 7" wide for 2" x 4" construction, and 9" wide for 2" x 6" construction and at least 12" longer than the width of the rough opening. The flashing must meet a minimum water resistance of 24 hours in accordance with ASTM-D779. (Figure D)
9. Prior to setting the window in the opening, install flexible sill flashing according to manufacturer's recommendations starting first at the sill, extending a minimum of 6" above each bottom corner of the rough opening. Flashing should extend beyond the plane of the sheathing around 3" (Figure E)
10. Remove outer release paper. Apply flexible wrap at bottom corners onto face of wall. When installing, take care to leave no gaps in the corners of the rough opening. Secure edges of flexible wrap with sufficient mechanical fasteners along the bottom edge of the flexible wrap at flexed corners. (Figure F)

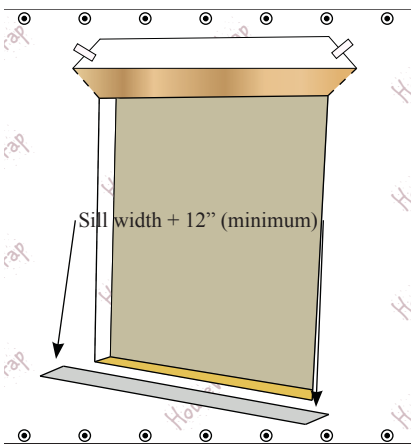


FIGURE D

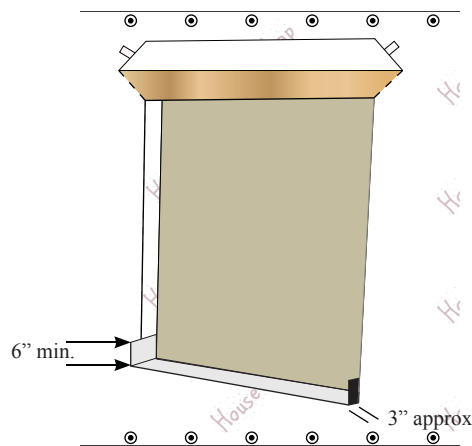


FIGURE E

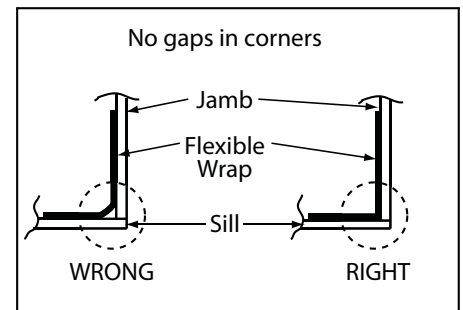


FIGURE F

NOAH MERRILL NEW CONSTRUCTION WITH FIN INSTALLATION INSTRUCTIONS (CONTINUED)

Shimming/Setting the Window:

11. Unfold the nailing fin, first at the sill, then at the jambs so that they overlap the sill fin, then at the head, so that it overlaps the jamb fins (when viewed from the exterior of the window).
12. Locate the self-adhesive gasket pad sheet, which is shipped with the unit. Each sheet contains four (4) pads. (Figure G)
13. Place one self-adhesive corner gasket pad on each window corner, making sure it is butted against the window frame. Press tightly against fin. (Figure H)

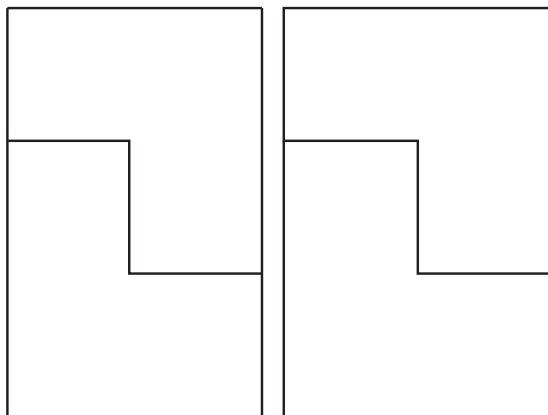


FIGURE G

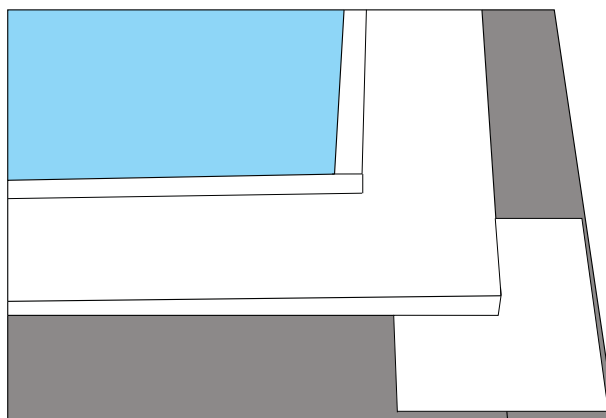


FIGURE H

14. Apply a 3/8" continuous bead of silicone caulking to the interior surface of the nailing fin, covering the holes in the fin, to seal the window's fin to the house wrap. If the rough opening is larger than the window unit by more than 1/2", also apply the caulk to the sheathing or house wrap making sure the bead is no more than 1/4" from the edge of the rough opening, so that it is covered by the nailing fin when the window is installed. (Figure I)
15. The window sill must be supported in a straight and level position, with shims at all locations where the jamb, meeting stiles/rails, and pull stiles/rails meet the sill. Multiple window units should have a shim under each mullion, intermediate jamb and the meeting stiles of horizontal sliders. (Figure J)
16. Set window on the shims and adjust side clearance to center the window in the opening. Shim both sides of window as needed to assure window is plumb and margins are equal. (Figure K)

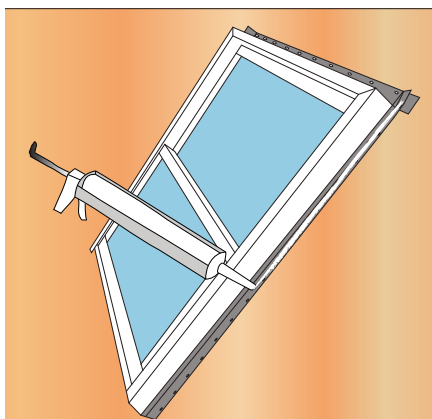


FIGURE I

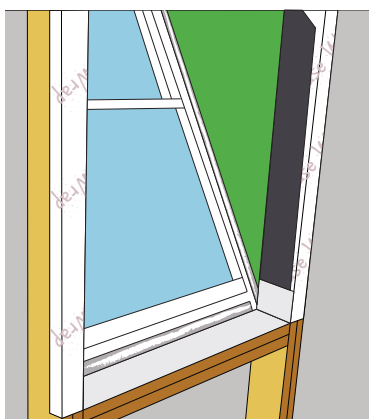


FIGURE J

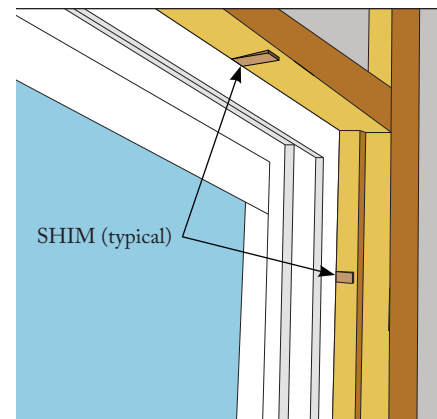


FIGURE K

Securing the Window:

17. Fasten one upper corner of the nailing fin to keep the window in place. Check the sill with a level and adjust the shims as required to assure the sill is level. Do not force shims into place, as this may bow the window frame. (Figure L)
18. Measure window diagonally from bottom left corner to top right corner and from bottom, right corner to top left corner. Both measurements will be equal if the frame is square. If they are not equal, the frame is not square and will need to be reset to ensure it is square. (Figure M)
19. The weatherstripping clearance between the sash and frame should be equal. The meeting stile/rail and lock stile/rail should align evenly, with parallel sight lines. The window locks should engage smoothly.
20. Use stainless or galvanized steel fasteners, such as roofing nails, long enough to penetrate wall studs a minimum of 1".
21. Using **every** installation bracket supplied, and **only** the installation brackets supplied, fasten the entire perimeter of the frame to the studs. Be sure to pull window completely into opening so that the nailing fin is snug against the sheathing. Use stainless or galvanized steel fasteners, such as roofing nails, long enough to penetrate wall studs a minimum of 1". **Do not drill through or attach through the sill.** (Figure N)
22. Using every other hole in the nailing fin, fasten the entire perimeter of the frame to the sheathing. Use stainless or galvanized steel fasteners, such as roofing nails, long enough to penetrate wall studs a minimum of 1". **Do not drill through or attach through the casing. Use only nailing fin supplied.**
23. Fasten the fin snug but do not overdrive the nails. Fasteners should be just tight enough to hold the window but not stop the movement of the framing underneath during expansion and contraction. Make sure the head and sill are NOT crowned up or down, and the jambs are not bowed in or out.
24. Cut aluminum drip cap the same width as the head of the window casing and install above the head casing, using stainless or galvanized steel fasteners.

NOAH MERRILL NEW CONSTRUCTION WITH FIN INSTALLATION INSTRUCTIONS (CONTINUED)

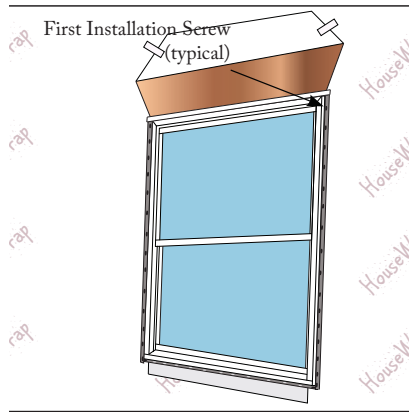


FIGURE L

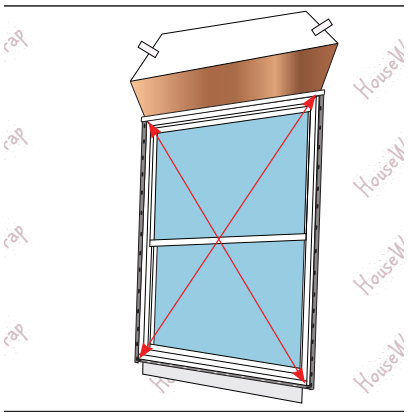


FIGURE M



FIGURE N

Flashing the Window:

18. Use self-adhesive flexible flashing, a minimum of 4" wide, approved for use on vinyl, wood & other substances, such as house wrap. This flashing material must meet a minimum water resistance of 24 hours in accordance with ASTM-D779.
19. Sill flashing should already be applied prior to window installation and extend beyond the sides of the window nailing fin at least 2". (See Figure E)
20. Apply an additional layer of sill flashing over bottom nail fin and existing sill flashing. (Figure O)
21. Now apply jamb flashing over the jamb nailing fin, continuing over and beyond the sill flashing, at least 2". (Figure P)

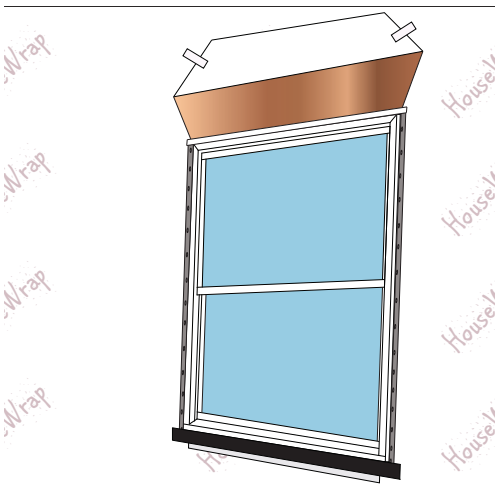


FIGURE O

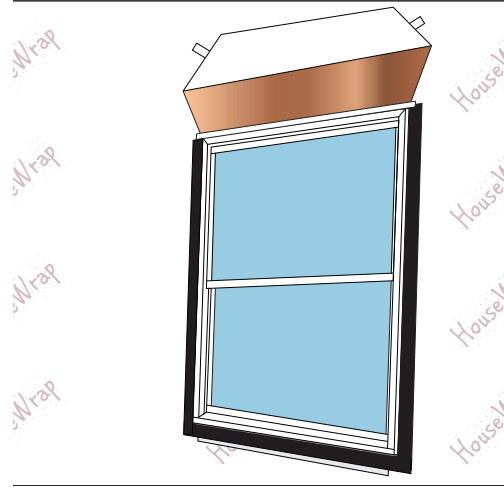


FIGURE P

22. Apply head flashing similarly extending 2" past either side of the jamb flashing, to complete the window flashing detail. (Figure Q)
23. Remove tape from flap previously cut on house wrap, and secure to wall. (Figure R)



FIGURE Q

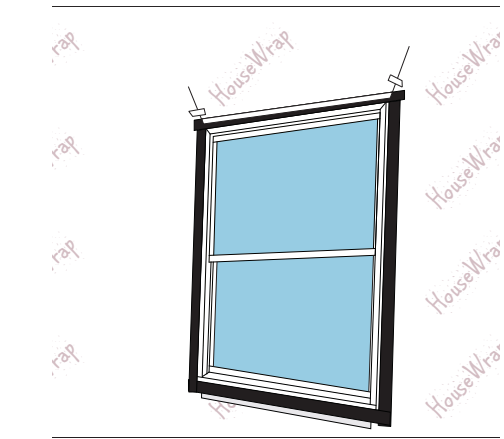


FIGURE R

24. Install batt insulation between the window and rough opening. Do not overfill insulation, as this may bow the frame.
25. If the exterior finish is brick, stone or stucco, make sure to leave a 1/4" gap around the entire window, and fill cavity with backerrod to allow for the expansion of materials. Apply a 1/4" caulk bead to the exterior perimeter of the window.
26. Once installation is complete, exterior wall treatment can be completed.