ABSTRACT: Please read these instructions in their entirety before beginning to install your Elevate or Essential Frame Expander. These installation instructions demonstrate the installation of frame expander for insert window products.

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).

## Installer and Builder Information

Always provide a copy of these instructions for the current or future building owner.

If you have any questions regarding product and materials used in manufacturing or questions on replacement parts, contact your Marvin supplier.

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

NOTE: Frame Expander should be applied to window after the window is completely installed per the instructions. Frame expander is NOT intended to be used as an exterior water seal.

Frame Expander is available on Essential window products and Elevate Insert windows. (Essential Round Tops and Essential Direct Glaze Polygon shapes are excluded.)

Frame Expander kits include cut to length parts to be assembled and applied in the field. (Lineal kits are not cut to length.)

| Supplies Needed: |  |
| :--- | :--- |
| Rubber mallet | Hacksaw |
| Pliers | Pry bar |
| Tape measure | Utility knife |
| Clear sealant grade NS Class 25 per ASTM C920 |  |
| Miter saw with fine tooth blade |  |

## 入 wARNING

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

## Standard Measurement Conversion for Frame Expander

Lineal Kits do not come pre-cut. For cutting lineal kits, please refer to the following diagram for correct conversions. When cutting lineal kits use a fine tooth blade for cutting the fabrication lengths, ensuring the parts stay square and fixed.

| Frame Size | Width | Height |
| :--- | :--- | :--- |
| 1" Head Jamb | $+111 / 16(43)$ |  |
| 1" Jamb |  | $+19 / 32^{\prime \prime}(15)$ |
| 1" Sill | $-17 / 322^{\prime \prime}(13)^{*}$ |  |
| 3" Head Jamb | $+511 / 166^{\prime \prime}(144)$ |  |
| 3" Jamb |  | $+219 / 32 "(66)$ |
| 3" Sill | $-17 / 32 "(13)^{*}$ |  |

NOTE: *Conversion for sill parts is approximate and may result in parts that are slightly long due to assembly tolerance and frame width variation. It is recommended that measurements be taken before cutting sill parts to get a seamless fit.
Conversions in the table above only apply to untrimmed frame expander. For applications where trimming is necessary, use tape measure to measure the head jamb part length, followed by jambs, and finally sill.

## Part Kits

| Part | Kit Type/Quantity |  |
| :--- | :---: | :---: |
|  | 1" Frame <br> Expander | 3" Frame <br> Expander |
| Head Jamb | 1 | 1 |
| Right Hand Jamb | 1 | 1 |
| Left Hand Jamb | 1 | 1 |
| Rough Cut Sill | 1 | 1 |

## Installation

## IMPORTANT

Unit must be completely installed prior to Frame Expander installation.

1. Measure from the outside of the frame to the inside opening on all four sides (see figure 1A). Use this measurement to identify a scoring groove on back side of each piece of frame expander by hooking tape measure on back leg as shown in figure 1B. Trim frame expander along scoring groove with utility knife.


Figure 1
2. If frame expander is to be applied to a mulled unit assembly, prepare the frame expander pieces by removing the legs on the back side of the frame expander at each mull location. Measure to the center of where the notch is to be located, then cut the legs with a utility knife or hacksaw and remove each leg with pliers to the widths specified in the chart below. See figure 2. Exception: Sill pieces for multiple wide ELDHIN mulls do not need to be notched to span across vertical mulls.


Figure 2

| Mulled Product | Notch Width <br> on Center |
| :--- | :---: |
| Essential Window | $1^{\prime \prime}(25)$ |
| Elevate Insert Casement | $1 / 2^{\prime \prime}(13)$ |
| Elevate Insert Double Hung | $11 / 4^{\prime \prime}(32)$ |

3. If jamb pieces were trimmed with utility knife (see step 1), the overall length of the head jamb piece will need to be cut down from the factory length. Cut the head jamb piece to length by making cuts off both ends in order to maintain end routes. See figure 3.


Figure 3
4. Center head jamb piece on head jamb of frame or line up one end against the opening. Use a wood block and rubber mallet to engage the frame expander barb in the frame kerf along the head jamb until it is fully seated. See figure 4.


Figure 4
5. If sill piece was trimmed with utility knife (see step 1), the overall length of the jamb pieces will need to be cut down from the factory length. Cut the jamb pieces to length by making cuts off the routed ends.

NOTE: When using frame expander on Essential sliding window products, some minor trimming may be necessary to create clearance around the drain weeps at the sill corners.
6. Apply the jamb pieces by positioning them tight up against the head jamb piece. Use a wood block and rubber mallet to engage the frame expander barb for about 6" (152) down the jamb kerf. Then use the same method to attach the bottom end of the jamb piece to the frame for about 12" (305). Return to the top of the jamb and continue attaching the frame expander by working your way down the jamb. See figure 5.


Figure 5

## Tip

If gaps begin to appear between the jamb and head jamb pieces as the jamb piece is attached with the rubber mallet and block, switch to the bottom of the jamb and work up. If the jamb piece begins to force its way up and overlap the head jamb piece, switch to working from the top of the jamb down. Using this technique will help reduce sliding of the frame expander as it is applied and help eliminate gaps between pieces.
7. Measure the space between the frame expander jamb pieces. Cut the frame expander sill piece to this length. Fit the sill piece between the jamb pieces and attach using a similar technique as on the jambs. See figure 6.


Figure 6
8. Finish the frame expander installation by placing a bead of sealant around the outside perimeter of the frame expander against the opening. Use a discontinuous bead at the sill to allow for water drainage. See figure 7.


Figure 7

## Frame Expander Removal

1. Cut the silicone bead around the perimeter.
2. Use a pry bar at the interior of the frame expander opening and pry away from unit. Use a protective barrier between the pry bar and unit to protect from denting or damaging frame expander and/or unit. See figure 8. Release one piece of frame expander at a time by working the pry bar along the full length of each piece to release it from the frame kerf.


Figure 8

