

INSTALLATION INSTRUCTIONS FOR ULTRA 1-15/16" (49mm) BRICKMOULD AND SILLS

For Field Application to Windows

Read and follow the Installation Instructions enclosed with your window. Follow all cautions and warranty requirements. The window must be installed with the exterior facing not applied yet. Generic application is shown; your conditions may vary.

**PLEASE READ THESE INSTRUCTIONS COMPLETELY
BEFORE STARTING INSTALLATION.**

Failure to install and maintain our product according to these instructions will void any warranty, written or implied.

The installer is responsible for consulting the contractor, structural engineer, architect, or consumer, for proper installation according to local codes and/or ordinances.

⚠ Recognize this symbol. When this symbol appears, be aware of possible injury or product damage.

⚠ **WARNING: *REMEMBER SAFETY FIRST***
Proper Eye and Hearing Protection must always be worn when installing, removing or performing adjustments to Kolbe window and door products.

ITEMS REQUIRED BY INSTALLER

- Safety glasses/goggles
- Rubber mallet
- Power drill
- 11/64" (4mm) and 17/64" (7mm) drill bits
- #6 x 1-1/2" (38mm) phillips flat head stainless steel screws
- Closed cell foam backer rod in 1/2" (13mm) and/or 1" (25mm) diameter
- Hearing protection device
- Phillips head screwdriver
- Sealant and caulk gun

For the traditional sill nosing and the sill drip:

- #8 x 5/8" (16mm) phillips pan head stainless steel screws

For the 1-5/8" (41mm) projected sill nosing and the 2-1/8" (54mm) projected sill nosing:

- #6 x 1-1/2" (38mm) phillips pan head stainless steel screws

For the historic nosing:

- #8 x 2-1/2" (64mm) phillips pan head stainless steel screws

For lineal footage trim:

- Tape measure
- Miter saw
- Rotary grinder

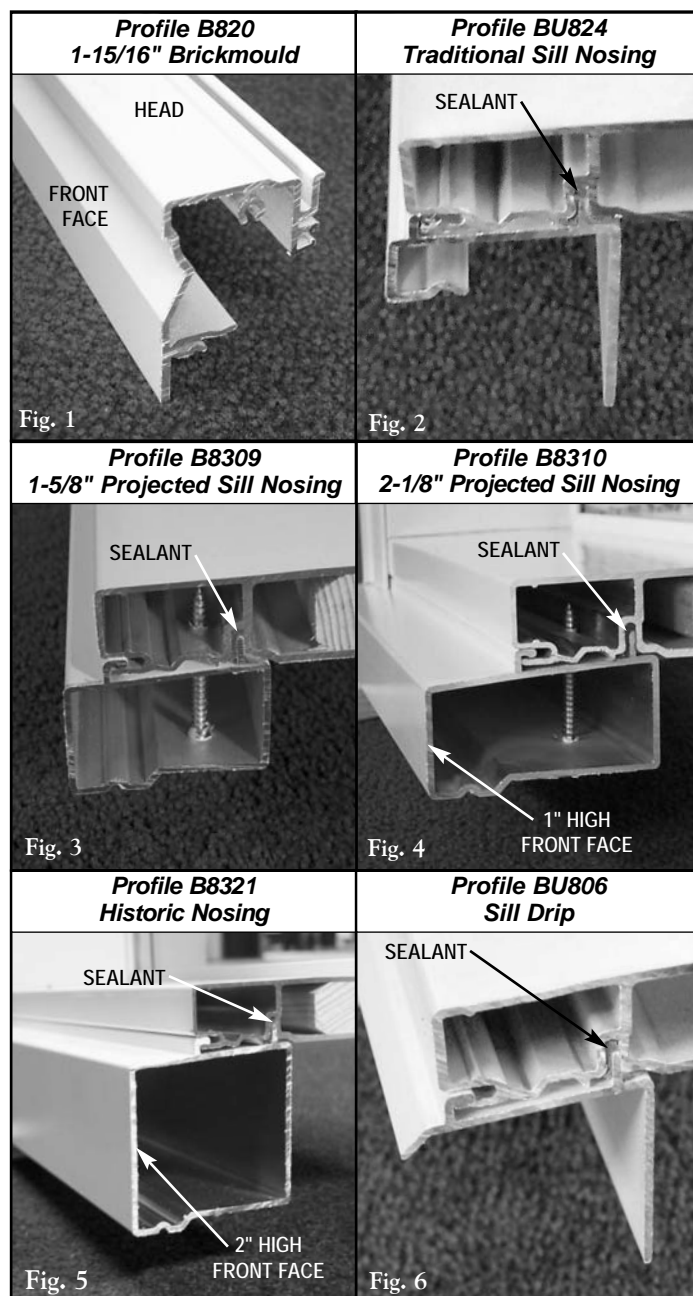
⚠ **CAUTION:** The window must be installed and sealed around the entire perimeter at the wall. The Ultra trim pieces shown are not designed to be water tight on the exterior.

When applying sealant, make sure the area to be sealed is clean and free of debris. Use transparent or color-matching sealant; photos show contrasting sealant for clarity and demonstration only.

INTRODUCTION

See Figs. 1 to 6. A number of sill profiles have been designed to be used with Kolbe's standard 1-15/16" (49mm) brickmould, profile B820. Any of the following can be used:

- the traditional sill nosing, profile BU824
- the 1-5/8" (41mm) projected sill nosing, profile B8309,
- the 2-1/8" (54mm) projected sill nosing, profile B8310,
- the historic nosing, profile B8321,
- or the sill drip, profile BU806.



STEP #1: PRELIMINARY PREPARATION

Remove the shipping cover from the accessory groove. Trim the nailing fin, if required. Lineal trim must be cut to size. Measure along the outside edge.

SKIP TO STEP #6 IF THE BRICKMOULD AND SILL NOSING ARE PRE-CUT.

STEP #2: CUT SILL PIECES

Follow the appropriate formula for your sill profile. Use a miter saw to cut the ends at a 90° angle.

For the traditional sill nosing and the sill drip:

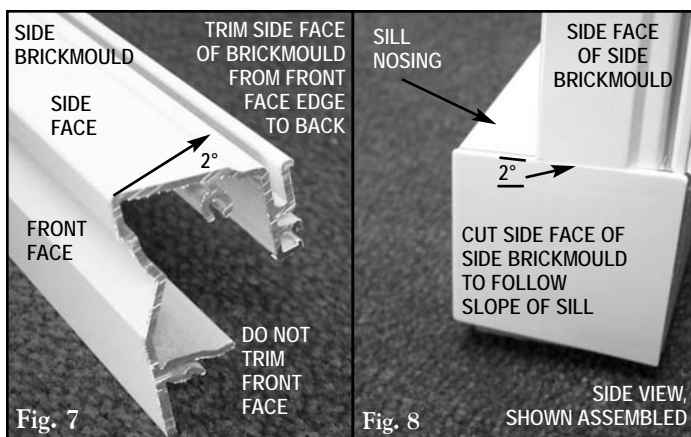
$$\text{Sill Length} = \text{Frame Width} + 2\text{-}5/8" (67\text{mm})$$

For the 1-5/8" (41mm) projected sill nosing, the 2-1/8" (54mm) projected sill nosing, and the historic nosing:

$$\text{Sill Length} = \text{Frame Width} + 2\text{-}1/2" (64\text{mm})$$

STEP #3: CUT HEAD AND SIDE PIECES

See Figs. 7 and 8. Follow the appropriate formula for your window. A left side piece and a right side piece are required. Using a miter saw, 45° miter cut the top corners of the head and side brickmould, with the angle sloping down toward the center of the window. On the side brickmould, the bottom of the side face must follow the slope of the sill nosing. Cut a 2° angle from the outside corner of the front face, with the angle sloping up, toward the interior of the unit.



For the Ultra awning, casement, casement picture, French casement, casement transom, and double hung transom with flat sill:

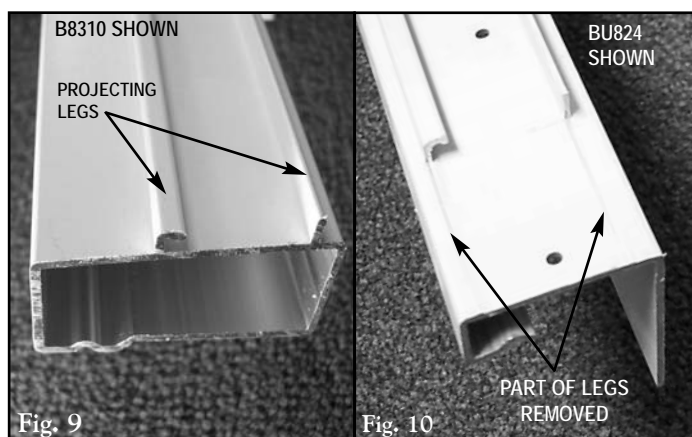
$$\text{Side Height} = \text{Frame Height} + 1\text{-}13/32" (36\text{mm})$$

$$\text{Head Width} = \text{Frame Width} + 2\text{-}5/8" (67\text{mm})$$

For the Ultra double hung, double hung studio, double hung transom with beveled sill, single hung, slider, slider studio, and triple slider:

$$\text{Side Height} = \text{Frame Height} + 1\text{-}7/16" (37\text{mm})$$

$$\text{Head Width} = \text{Frame Width} + 2\text{-}5/8" (67\text{mm})$$



STEP #4: SILL NOSING OR DRIP PREPARATION

See Figs. 9 and 10. The sill nosings and sill drip are attached to the frame nosing by using projecting legs. A short portion of these legs must be removed from both ends of the sill nosing or drip before installation, to avoid interfering with the side brickmould. Take measurements from the side edge of the sill nosing or drip. Use a rotary grinder to remove the leg portion, then file flush.

For the traditional sill nosing and the sill drip:

$$\text{Length to Remove} = 1\text{-}1/2" (38\text{mm}) \text{ Each Side}$$

For the 1-5/8" (41mm) projected sill nosing, the 2-1/8" (54mm) projected sill nosing, and the historic nosing:

$$\text{Length to Remove} = 1\text{-}7/16" (37\text{mm}) \text{ Each Side}$$

STEP #5: PRE-DRILL SCREW HOLES

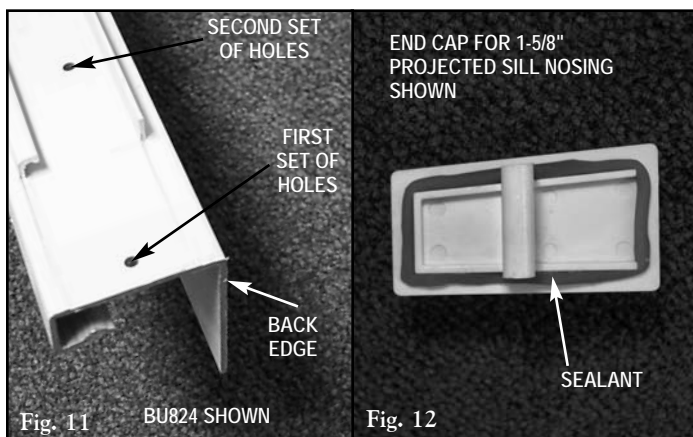
See Fig. 11. Pre-drill two sets of holes using a 11/64" (4mm) drill bit. The first set is used to attach the sill nosing to the side brickmould. The second set is used to anchor the sill nosing to the window sill.

For the traditional sill nosing and the sill drip:

The traditional sill nosing or sill drip must be facing up when measuring from the back edge; measuring from underneath will not locate the holes correctly. Locate the first set of holes 1/4" (6mm) from the side edges, toward the center, and 11/16" (17mm) from the back edge, toward the front of the unit.

For the 1-5/8" (41mm) projected sill nosing:

There are two shallow locator grooves on the underside of the sill nosing. Use the shallow locator groove nearest the front of the unit to locate the first set of holes or measure 15/16" (24mm) from the front edge, toward the back, and 3/16" (5mm) from the side edges, toward the center of the unit.



For the 2-1/8" (54mm) projected sill nosing and the historic nosing:

On the bottom, locate the first set of holes 3/16" (5mm) from the side edges, toward the center of the unit, and 11/16" (17mm) from the back edge, toward the front. On the underside of the historic nosing, there are four shallow locator grooves. Use the second locator groove from the front or these measurements for positioning.

For all the sill nosings and the sill drip:

Locate the second set of holes 5-1/4" (133mm) from the side edges. On some of the sill nosings, there are shallow locator grooves. Use the locator groove nearest the back, or measure 9/16" (14mm) from the back edge. If the unit width is between 32" (813mm) and 59" (1499mm), drill one additional hole at the center of the sill nosing. For larger units, drill additional holes 27" (686mm) on center.

For the 1-15/16" (49mm) standard brickmould:

Pre-drill holes in the top of the head only; do not drill holes in the side brickmould pieces. Locate the holes 1/4" (6mm) from the side edges, toward the center of the unit, and 11/16" (17mm) from the front edge, toward the building interior. Use a 11/64" (4mm) diameter drill bit and countersink with a 17/64" (7mm) diameter bit.

STEP #6: ATTACH SILL NOSING OR DRIP

The side trim is designed to slightly overlap the extruded legs of the sill nosing or drip. As a result, the sill nosing or drip must be installed first. See Figs. 2 to 6. Apply sealant into the kerf on the underside of the window sill. Do not apply sealant to the kerf in the front face of the sill. Insert the sill nosing or drip front leg into the kerf on the front of the sill frame, then swing the nosing or drip up and press the back leg into place. Center the nosing or drip, leaving an equal amount of overhang on each side. If necessary, use a rubber mallet to tap into place, protecting the surface with a piece of scrap board.

⚠ CAUTION: To prevent a galvanic reaction between the trim and fasteners, use only galvanized or aluminum nails and stainless steel screws.

For the traditional sill nosing and the sill drip:

A unit between 32" (813mm) and 59" (1499mm) wide requires one additional screw in the center of the nosing, 9/16" (14mm) from the back. Larger units need additional screws 27" (686mm) on center. If holes for these screws are not already drilled, use a 11/64" (4mm) drill bit. Fasten the nosing or drip using #8 x 5/8" (16mm) phillips pan head stainless steel screws. Secure the long back leg using 1-1/2" (38mm) aluminum or galvanized nails.

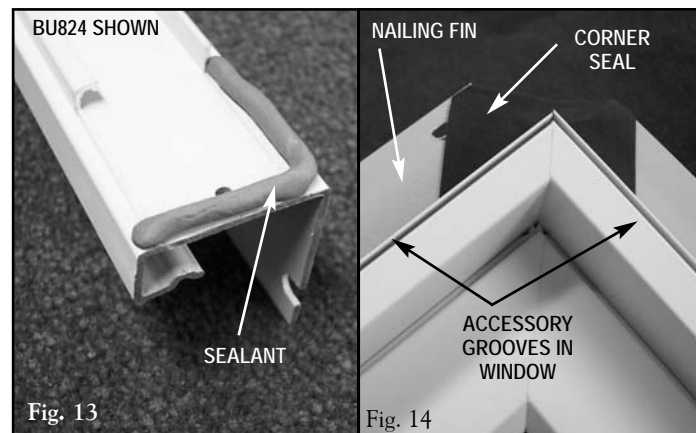
For the 1-5/8" (41mm) projected sill nosing, the 2-1/8" (54mm) projected sill nosing, and the historic nosing:

See Fig. 12. These sill nosings require right and left end caps. The end caps for both the 2-1/8" (54mm) projected sill nosing and the historic nosing have a reinforcing wooden block applied to the interior. Apply sealant around the interior perimeter of each end cap, then press into place on the nosing. Wipe off any excess sealant.

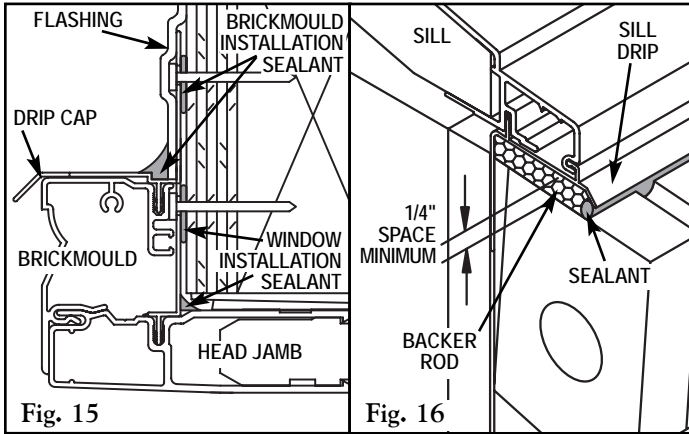
A unit between 32" (813mm) and 59" (1499mm) wide requires one additional screw in the center of the nosing, 9/16" (14mm) from the back. Larger units need additional screws 27" (686mm) on center. If the holes are not already drilled, use a 11/64" (4mm) drill bit. Use the shallow locator groove nearest the back for positioning. Fasten the 1-5/8" (41mm) and 2-1/8" (54mm) projected sill nosings using #6 x 1-1/2" (38mm) phillips pan head stainless steel screws. For the historic nosing, use #8 x 2-1/2" (64) phillips pan head stainless steel screws.

STEP #7: ATTACH THE BRICKMOULD

See Fig. 13. Before installing the side brickmould, apply a 3/16" (5mm) diameter bead of sealant to the top of the sill, along the back edge and the outermost side edge. Do not apply sealant to the front edge of the sill, to allow moisture to weep out. It is not necessary to seal the upper corners of the head-to-side joints.



See Fig. 14. Press the shorter projecting leg of each side brickmould into the accessory groove on the frame. If necessary, use a rubber mallet to tap into place tightly, protecting the surface with scrap board. Press the head brickmould into place. Insert #6 x 1-1/2" (38mm) phillips flat head stainless steel screws into the pre-drilled holes.



STEP #8: COMPLETE THE EXTERIOR

Protect the building structure from moisture penetration. Install a drip cap to direct water away from the window and lessen the chance of water seepage. See Fig. 15. Seal the side edges of the drip cap to the window. Seal around the entire perimeter between the brickmould and the exterior sheathing or water barrier.

⚠ CAUTION: See Fig. 16. A 1/4" (6mm) minimum gap between the sill nosing or drip and the exterior facing is required when using brick, stone, marble or concrete as an exterior facing. This allows for movement or settling of the structure, which could effect unit operation. Span the gap with an appropriate sealant joint, using backer rod the length of the sill, if necessary.

Contact your Kolbe Window and Door supplier or visit us on the internet at www.kolbe-kolbe.com for further information. Installation instructions for other Kolbe products can be downloaded from our website.

THANK YOU
FOR PURCHASING KOLBE PRODUCTS.

NOTES