SMSD
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KOLBE®

WINDOWS & DOORS

STACKING MULTI-SLIDE DOOR SYSTEM

INSTALLATION INSTRUCTIONS

READ THESE INSTRUCTIONS COMPLETELY BEFORE STARTING ANY INSTALLATION

⚠ CAUTION

Lead-based paint may be present in older homes, and the removal of windows & doors may cause this paint to be disturbed. In order to minimize exposure to lead-based paint dust, please consult www.epa.gov/lead for more information.

www.kolbewindows.com

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KOLBE WINDOWS & DOORS

STACKING MULTI-SLIDE DOOR SYSTEM INSTALLATION INSTRUCTIONS

NOTICE

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.

⚠WARNING

Proper Eye and Hearing Protection must always be worn when installing, removing or performing adjustments to Kolbe window and door products.

⚠CAUTION

Some codes require the use of pressure treated lumber to line rough openings. Corrosion resistant materials, such as stainless steel or hot-dip galvanized steel, must be used for fasteners and anchors having direct contact with pressure treated lumber.

NOTICE

Before applying sealant or adhesive pads, make sure the area to be sealed is clean, dry, and frost-free. Use color-matching or transparent sealant. Photos show contrasting sealant for clarity and demonstration only. Use a dab of sealant behind any exterior-facing screws or nails.

NOTICE

It is highly recommended that Multi-Slide systems are installed in areas with sufficient overhangs as required to prevent water or air infiltration. The suggested overhang of the structure should match the height of the unit being installed. Failure to do so may result in structural damage to the surrounding area, finishes and/or systems.

ITEMS REQUIRED BY INSTALLER

- Hearing protection device
- Level
- Phillips head screwdriver/bit
- Fiberglass insulation
- Sill Pan
- Safety glasses/goggles
- Square
- Tape measure
- Putty knife
- Closed cell foam backer rod in 1/2" (13mm) and 1" (25mm) diameter
- Sealant (clear or color matching)
- Hammer
- Flat head screwdriver
- Power drill with 7/64" (3mm) and 3/16" (5mm) bits
- Caulk gun
- Shims
- Flashing tape

ITEMS PROVIDED BY KOLBE

- Unit Rough Opening & Elevation Drawings
- Frame - Head, Side Jambs and sill (to be assembled in field)
- Stationary Panel(s) (quantity will depend on unit configuration ordered)
- Active Panels (quantity will depend on unit configuration ordered)
- “Frame Assembly” screw package
- “Sill Install” screw package for wood sub-floor application (If masonry application, Tapcon screws supplied by other)
- “Head Jamb Install” screw package
- “Astragal” screw package
- “Handle Stop” package (handle stops & screws)
- Head Track Caps (quantity will depend on unit configuration ordered)
- Side Jamb Track Caps (quantity will depend on unit configuration ordered)
- Sill Track Caps (quantity will depend on unit configuration ordered)
- Nailing Fin (4 pcs - 1 for each side of frame)
- Foam corner seals for nail fin (one for each corner at the top of the unit)
- Frame Nosing corner seals (one for each frame nosing corner at the head of the unit)
- Handle set
- Strike - shipped loose or temporarily attached w/ slotted holes only (final screws drilled & installed after installation & wheel adjustment)
- Panel adjustment caps (quantity depends on # of panels) (used on holes for roller adjustments and hole for securing stationary panel to frame)
- Foam Head Blocks (quantity depends on number of panels)
- Reticulated Foam for Weeps (quantity depends on length of sill)
- Astragal (Bi-parting units or 90° units only)
- 90° corner unit instruction sheet (supplemental sheet if needed)

UNIT PREPARATION

Before installing your Kolbe Multi-sliding Door System, unpack all components; check each against the packing slip and place back into packaging near the appropriate opening until ready to install. If there is any damage or missing parts, please let your distributor know immediately.

Often shop drawings are revised so system dimensions may change during the order and design phase. Before you begin make sure you have the final approved shop drawings verified to be correct before the installer arrives. Construct opening per drawings.

OPENING INSPECTION

Inspect the rough opening prior to installation for proper size requirements and ensure that it is plumb, square and level. Typically, the rough opening should be 1" (26mm) wider and 1/2" (13mm) higher than the outside measurement of the door frame. Masonry openings should be 1" (26mm) wider and 1/2" (13mm) higher than the nosing/exterior casing.

Verify Header Support

Confirm that the roof over the system is stacked and take into consideration the amount of weight of any materials at this location that may cause deflection of the header. No more than 1/8" deflection is allowable for proper system operation. The material/lumber quality and the fasteners must be structurally adequate for design load requirements. **(Fig. 1)**

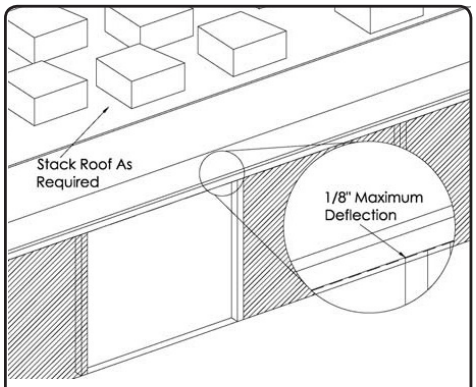

Fig. 1

Verify that the concrete or sub-floor of the rough opening is level. The frame system may be shimmed to compensate for an uneven floor, but this may adjust the relationship of the system sill to the finished floor and may increase the overall height of the system in the opening. Any serious deflection in the concrete or sub-floor where the system is to be installed must be corrected prior to installation. **(Fig. 2)**

⚠WARNING
Sill sagging and/or humping will affect unit operation.

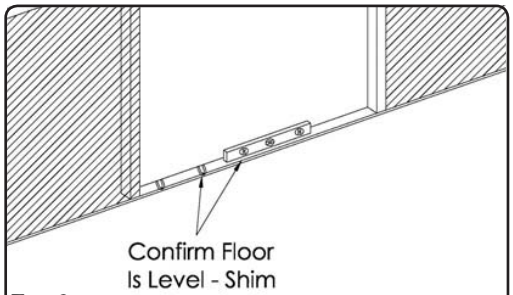

Fig. 2

Assure that all opening measurements match those noted on the drawings that are provided with the system. **(Fig. 3)**

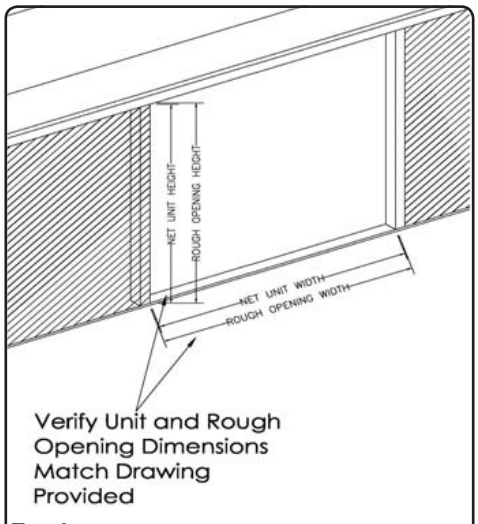

Fig. 3

OPENING PREPARATION

Make sure the opening is clean and free of debris and/or installation materials. It is critical the sill is level for proper system operation. No crowns or valleys on the sub floor.

FLASHING REQUIREMENTS

Kolbe recommends following ASTM E 2112 guidelines for sealing and flashing exterior doors. Maintain a gap of at least 1/2" (6mm) between the door frame and the rough opening structure. Create a proper seal between the door and the building exterior. For more details, see our pamphlets *Sealant Information and Flashing Information*. These publications are available from your Kolbe window & door supplier or visit www.kolbewindows.com to download a copy.

SILL PAN FLASHING

A sill pan is **REQUIRED** for installation of a Multi-slide door system. Follow ASTM E 2112 standards when making and installing the sill pan.

- Make sill pan to rough opening dimensions and dry fit it in the opening. The rear leg is required to be a minimum of 3/4" high. **(Fig. 4)**
- Install and attach sill pan to rough opening per ASTM E 2112 standards, making sure that the sill pan is level once installed.

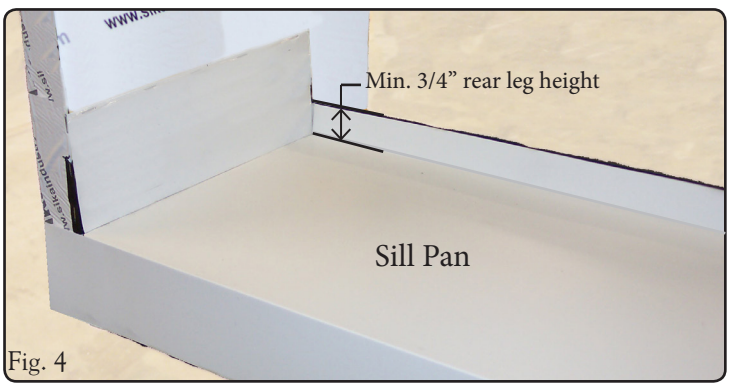

Fig. 4

FRAME ASSEMBLY

NOTE: For 90° Corner Units, the head and sill frame corners at the 90° intersection will be attached upon installation into the opening.

- Make sure you have a clean flat surface to help protect the frame when assembling. Lay frame head, sill, and side jamb(s) on the clean flat surface with the exterior side up.
- Slide nailing fin into each jamb nosing where needed (Fig. 6).
- Apply the frame nosing corner seals to the top corner (45° angle) each side jamb. **(Fig. 5)**
- Attach the side jamb(s) to the head using the screws supplied in the "Frame Assembly" screw package. Make sure the screws pass through the side jambs and into the screw bosses in the head. **(Fig. 6)**
- Attach the side jamb(s) to the sill using the screws supplied in the "Frame Assembly" screw package. Make sure the screws pass through the side jambs and into the screw bosses in the sill nosing. **(Fig. 6)**
- Attach the side jamb frame nosing to the head jamb frame nosing using the screws provided in the "Frame Assembly" screw package.

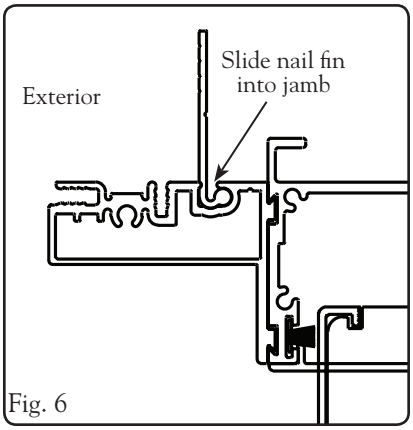

Fig. 6

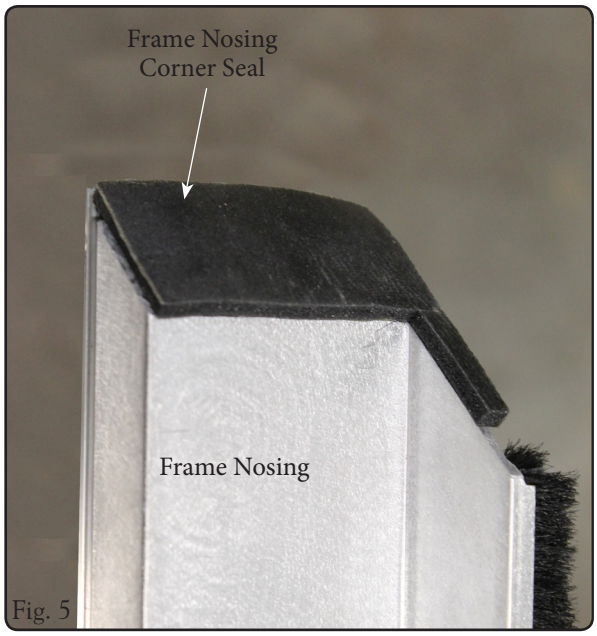

Fig. 5

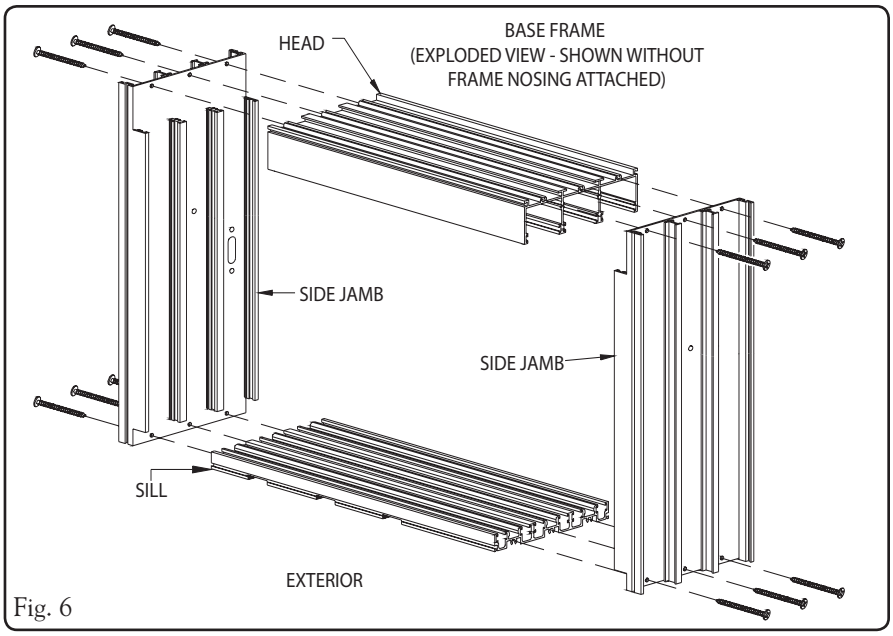

Fig. 6

FRAME PREPARATION

- Seal the end of the open cavities at the head and sill of the side jambs with sealant. **(Fig. 7)**
- On each end of the sill, fill the small gap between the sill nosing and the interior wood trim on the interior of the side jamb with sealant. **(Fig. 8)**

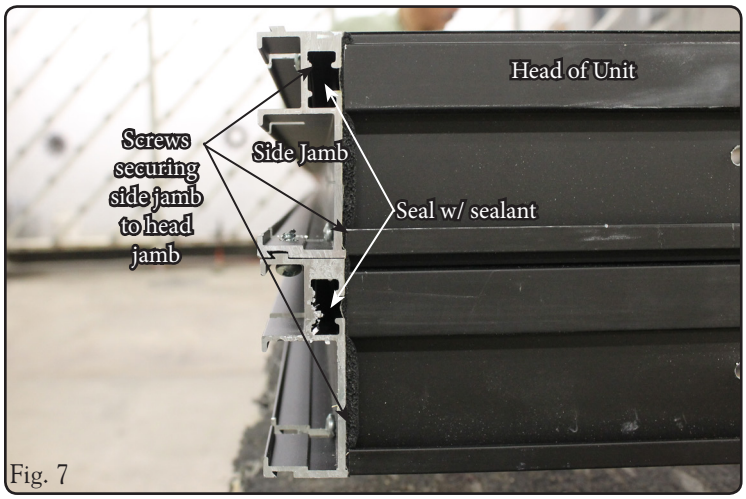

Fig. 7

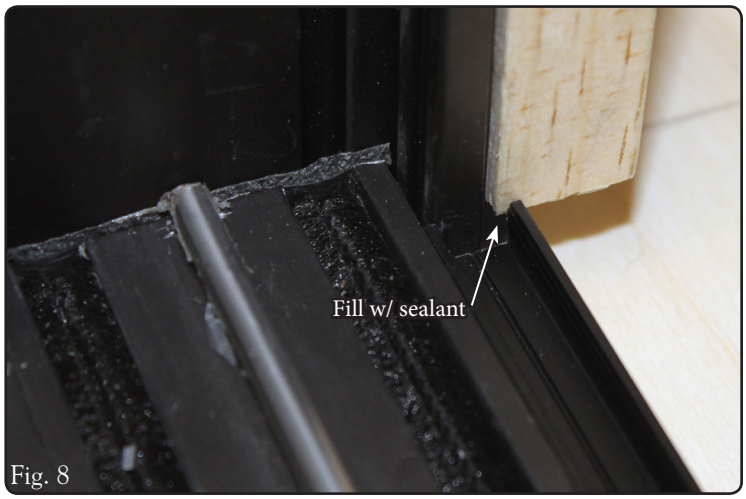

Fig. 8

- Place a piece of reticulated foam into each weep slot on the sill nosing at the exterior. **(Fig. 9)**
- Apply the foam corner seal to the nailing fin on each corner at the head of the unit. **(Fig.10)**
- Run two 3/16" beads of sealant on the backside of the nail fin on the head and sides as shown in **Fig. 10.**

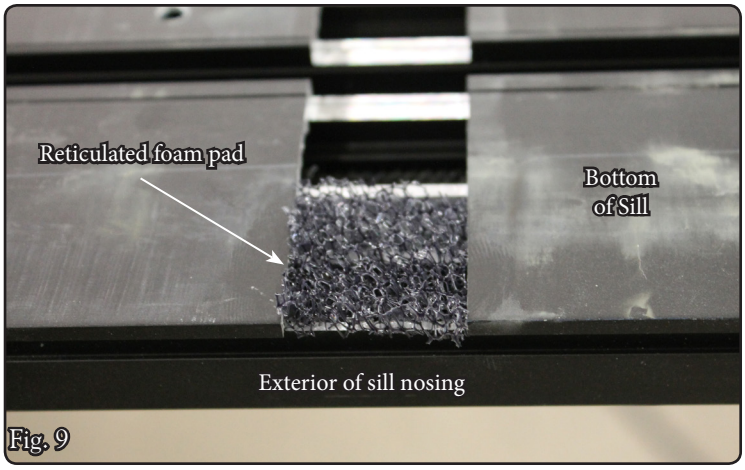

Fig. 9

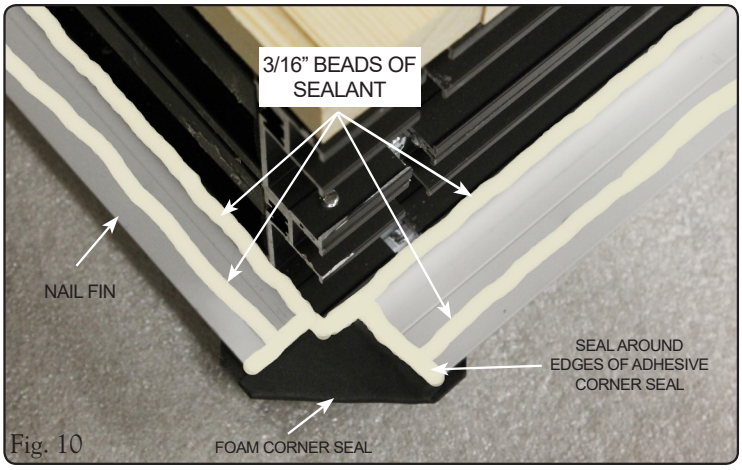

Fig. 10

- On the bottom (underside) of the sill, apply a dab of sealant on each pre-drilled hole. **(Fig. 11)**
- Apply a 3/16" bead of sealant on the rear upturned leg of the sill pan where the back of the sill will contact the sill pan. **(Fig. 12)**

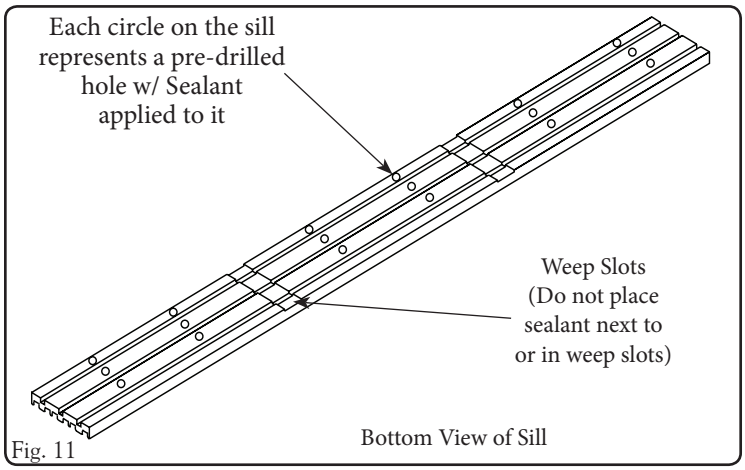

Fig. 11

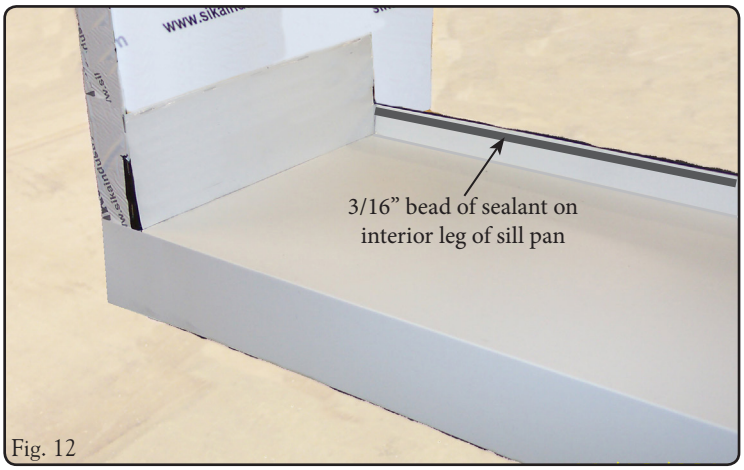

Fig. 12

FRAME INSTALLATION

- Place assembled frame in rough opening. If it is a 90° unit the corner keys will need to be inserted into the head nosing and head track(s) at this time. See supplemental instruction for 90° corner units.
- Drill wood sub-floor through the factory pre-drilled holes located in the sill. Using a straight edge or level, verify that the sill is level and flat. Use shims as needed to flatten the sill. Apply sealant in each pre-drilled hole in the sill. Attach using fasteners located in the "Sill Install" screw package. For 90° units make sure the sill pieces are properly aligned prior to fastening the sill to the sub-floor. There are no corner keys for the sill tracks. ***(For masonry application, Tapcon screws are required and are supplied by others.)***
- Prior to attaching the head, square the frame to within the allowable tolerances. Using a straight edge and/or level, verify that the top track/head is level and flat. Use shims as needed to level and flatten the head. Attach the head through the pre-drilled holes using the screws located in the "Head Jamb Install" screw package.
- Using a straight edge and/or level, verify that the side jambs are level and flat. Use shims as needed to level and flatted the jambs. Attach the side jambs through the factory pre-drilled holes using the screws located in the "Head Jamb install" screw package. There will be 2 screws with rubber bumpers applied in the accessory kit per jamb cavity that accepts a door in the open position. These screws need to be applied to the top and bottom holes of each cavity.

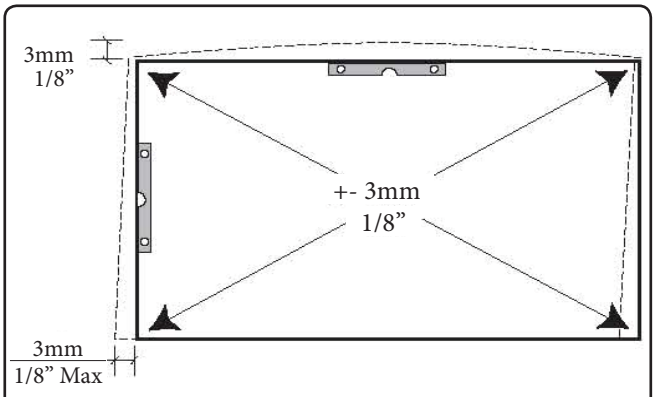

Fig.13

- Cross measure the frame to confirm there is no variance larger than 1/8" per measurement and that the frame is square to within 1/8" horizontally and vertically. **(Fig. 13)**
- Make sure sill weep slots are not blocked or clogged.

PANEL INSTALLATION (Panels are installed from the exterior of the unit)

- Beginning with panel marked #1, holding the panel at an angle toward the head track, insert the top of the panel into the inner most head track and swing the bottom of the panel inward until it is parallel with the top and sits with the wheels on the corresponding sill track. **(Fig. 14)**
- Repeat steps for all remaining panels in sequential order. **(Fig. 14)**
- Lock the stationary panel in place by inserting a larger flat head screwdriver into the hole on the interior of the panel and turning it to the locked position. Once the hardware is locked into the side jamb, plug the hole with the provided panel adjustment cap. **(Fig. 15)**

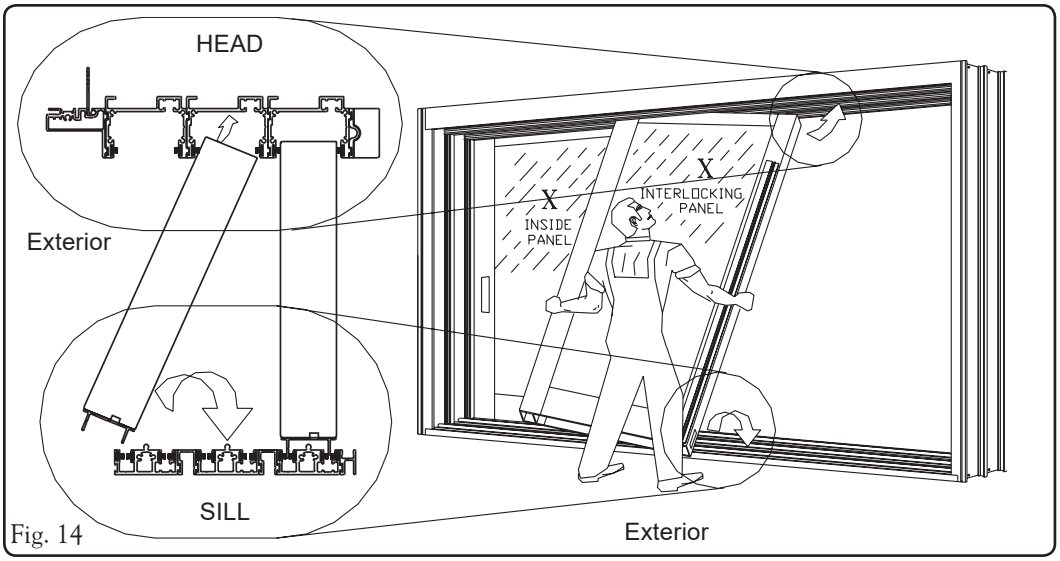

Fig. 14

Fig. 15

ASTRAGAL INSTALLATION

For Bi-parting doors - Trim the interior astragal cover to fit over the sill nosing extentions. The amoung that needs to be trimmed is determined by the number of sill nosing extensions x 1/2" (see inset of Fig. 16). Attach the astragal to the meeting panel without locking hardware on it. Line up the pre-drilled holes on the panel and astragal and secure the astragal in place using the supplied screws from the "Astragal" screw package. **(Fig. 16)**

For 90° units - See supplemental instruction for 90° corner units.

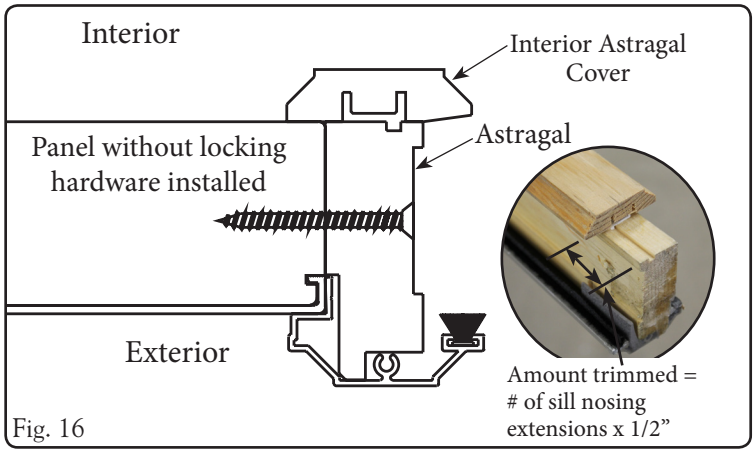

Fig. 16

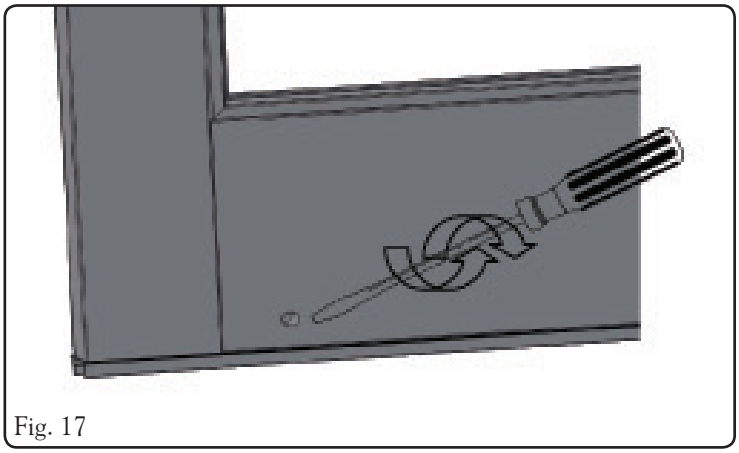
Fig. 17

PANEL ADJUSTMENT

The panel rollers may need to be adjusted for the unit to function properly. Slide the active panel open slightly, just enough to see the weatherstrip and side stop. Check for a consistent margin. To adjust the margin, remove the panel adjustment caps on the bottom panel rail. Insert a flat head screwdriver into the hole and turn. This will raise or lower one corner of the panel. When done with adjustments, plug the holes in the active panel with the panel adjustment caps. **(Fig. 17) Do not use a power driver!**

INTERIOR SILL NOSING EXTENSION APPLICATION

If required, add the correct amount of interior sill nosing extensions to the interior of the unit so your unit will meet the required performance standard. Run sealant on the interior sill nosing and sill nosing extensions as shown in **Fig. 18**. Also, make sure to completely seal the ends of the sill nosing extensions.

(Fig. 19 shows the sill nosing extensions and track cap filler correctly installed on the sill nosing.)

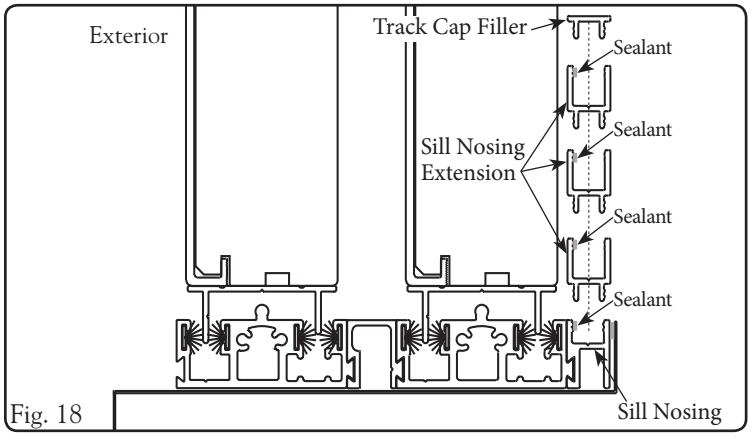

Fig. 18

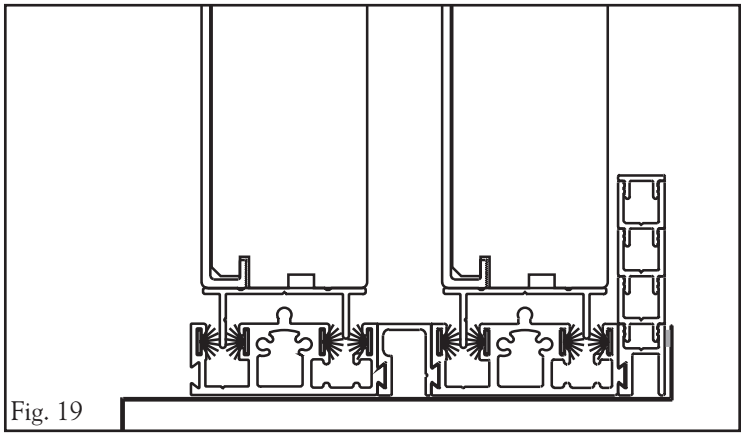
Fig. 19

FOAM BLOCK AIR BARRIER INSTALLATION

The foam head block is shown in white for demonstrative purposes. The foam head blocks being installed on your unit will be black.

- Each foam head block needs to be placed in each track where the head track cap ends. Temporarily locate the head track cap in the head track to determine placement of foam head block. **(Fig. 20 & 21).** The foam head block needs to stick out 1/16" to 1/8" past the end of the head track cap **(Fig. 21)**.
- Once you have correctly placed the foam head block, run sealant on the back side of the foam block, up each side and along the top as shown in Fig. 22.

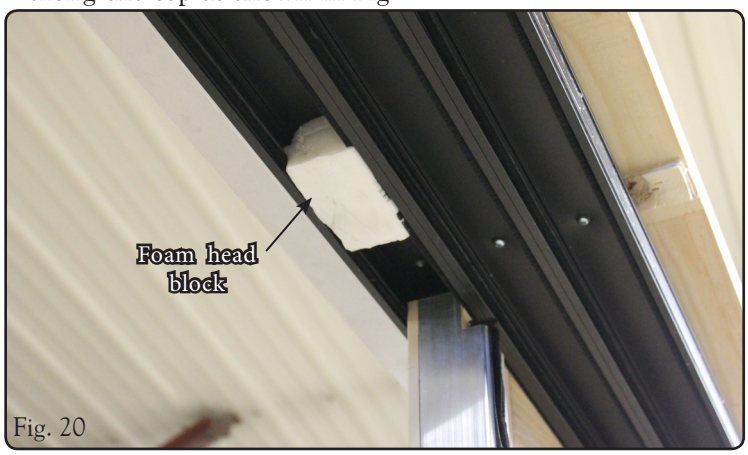

Fig. 20

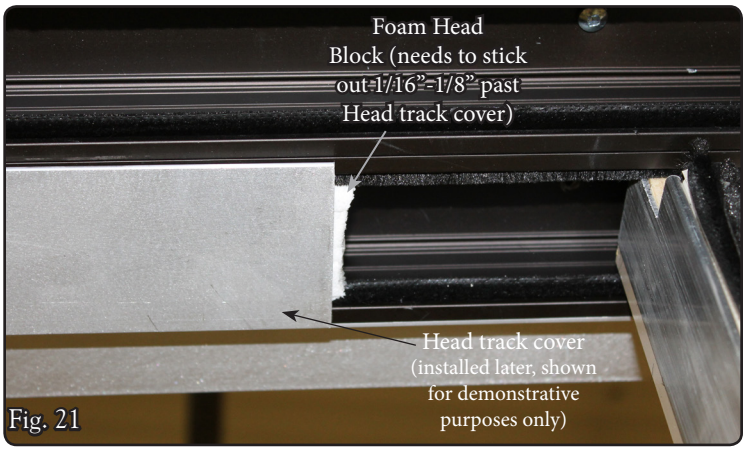

Fig. 21

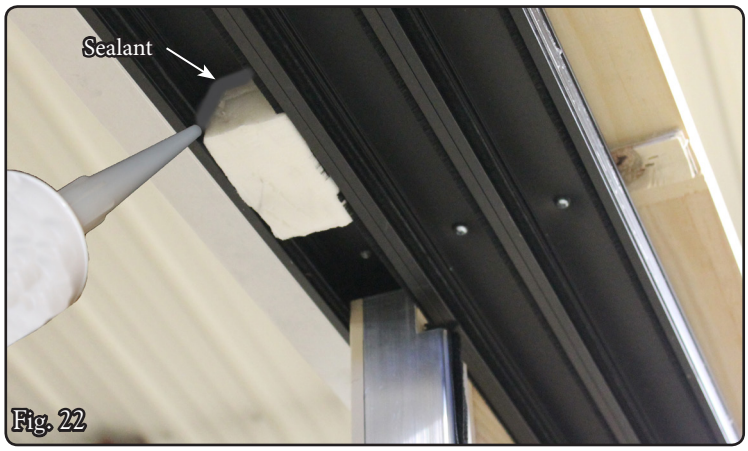

Fig. 22

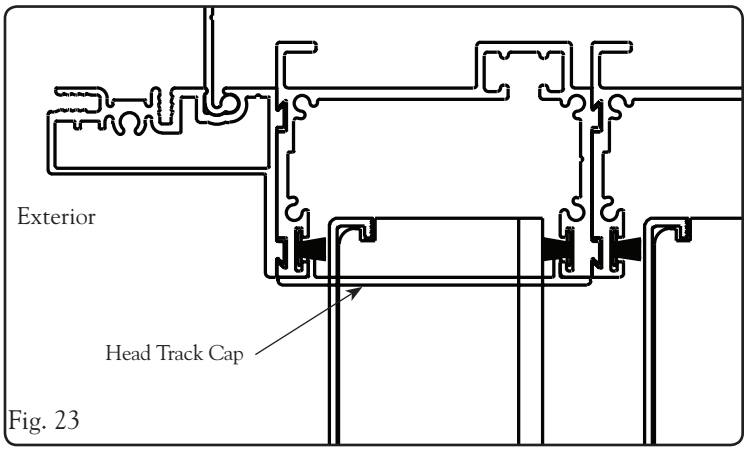

Fig. 23

TRACK CAP INSTALLATION

Install the head track caps on the exterior facing tracks. Determine what track each cap goes into based on its overall length before installing. Make sure the track cap is tight against the side jamb and gently insert it in place. **(Fig. 23, previous page)**

Install the side jamb track caps on the exterior of the locking side jamb by fitting it to the head jamb and gently insert it in place. **(Fig. 24)**

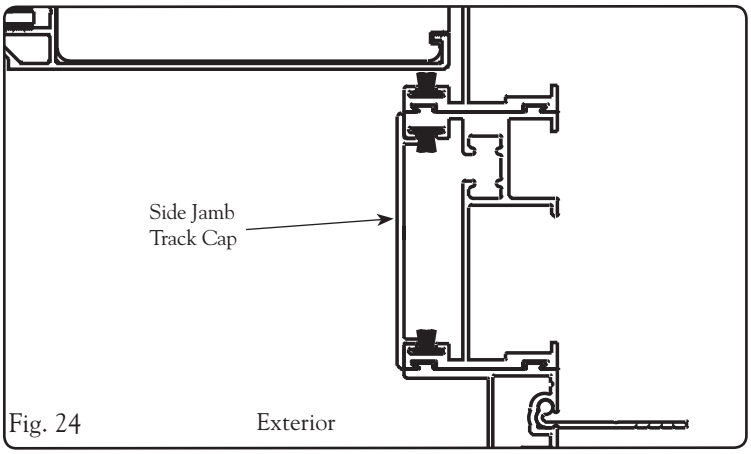

Fig. 24

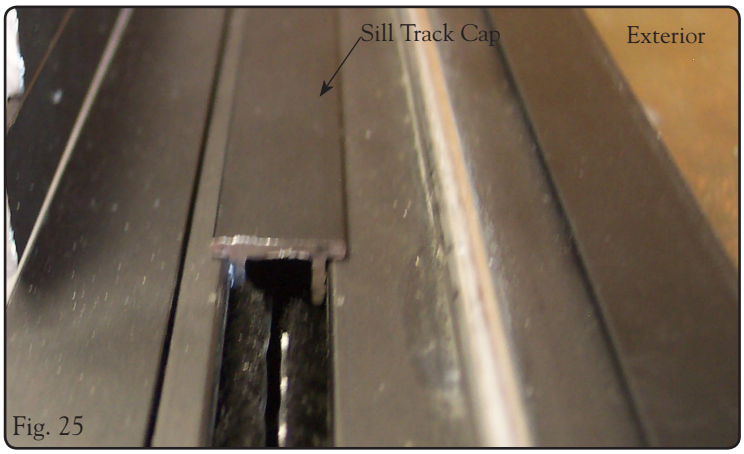

Fig. 25

SILL TRACK CAP INSTALLATION

Install the sill track caps on the exterior sill tracks. Determine what track each cap goes into based on its overall length. Make sure the track cap is tight against the side jamb and gently insert it in place. **(Fig. 25)**

HARDWARE

Install the supplied handle set(s) according to the supplied manufacturers instructions.

RECYCLING

Care must be taken to properly recycle or dispose of old materials. Any recyclable materials should be separated from non-recyclable or hazardous materials. Please consult with local or state authorities regarding proper disposal of non-recyclable or hazardous materials.

Contact your Kolbe window and door supplier or visit us at www.kolbewindows.com for further information.

THANK YOU FOR PURCHASING KOLBE PRODUCTS.

Kolbe & Kolbe Millwork Co., Inc. reserves the right to change specifications without notice.