QUAKER RESIDENTIAL WINDOWS & DOORS
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QUAKER WINDOWS & DOORS

QUAKER COMMERCIAL WINDOWS AND DOORS
www.quakercommercialwindows.com

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Installation Guidelines
For **ALUMINUM M-SERIES 3 PANEL SLIDING DOOR**

Installer:

- Read these instructions completely before starting any installation. Failure to install and maintain our product according to these instructions may void any warranty, written or implied.
- These instructions are consistent with AAMA IPC-08 "Standard Practice for Installation of Windows and Doors in Commercial Buildings" into common wall constructions. Contact your architect or construction professional for installation into other building designs or constructions methods.
- 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, or performing adjustments to Quaker window and door products.
- Use power tools properly! To avoid personal injury, always follow manufacturers' instructions for safe operation.
- If broken, glass can fragment causing injury. All Quaker products are available with safety glass. In many areas, local building codes require safety glass in certain locations and/or applications. Unless Quaker's stipulations dictate safety, glass or safety glass is specifically ordered, Quaker windows are not provided with safety glass. Before ordering, Quaker recommends consulting local building codes for more definitive information.

Caution:

- Lead-based paint may be present in older homes, and the removal of windows may cause this paint to be disturbed. To minimize exposure to lead-based paint dust, please consult www.epa.gov/lead.
- 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.
- 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.

Important:

- Quaker reserves the right to change the information contained in these guidelines without notice.
- Maintain a minimum of ¼" between the exterior window frame and any trim, siding or masonry to allow for expansion.
- Nailing flanges and drip caps (integral or applied) do not take the place of window flashing. All windows and doors must be properly flashed and sealed around the perimeter.
- Do not drill through window sill to install alarm wires.
- If using muriatic acid or brick wash cleaning solutions, please follow the manufacturer's instructions found on the product label or on the manufacturer's website.

Handling and Storage:

- Do not store units outside, or in a hot environment. When carrying window, always keep it in a vertical position. Do not carry flat, doing so could result in damage to the unit.
- Stack units as straight as possible to avoid bowing. Do not lay flat!

These instructions are for installing Quaker's M300 & M600 sliding patio door with nail fin into a wood or concrete/masonry wall. The rough opening must be lined with a 1 ½" thick wood buck. Contact your Quaker window and door supplier for more information on installing units in other wall conditions. Please visit our website at www.quakerwindows.com or call at 1-800-347-0438 for additional literature and information.

Tools required by installer:

- Safety glasses 
- Utility knife 
- Drill / screwdriver 
- Caulk gun 
- Level 
- Tape measure 

Materials required by installer:

Insulation
- Fiberglass or similar strips
- Minimally expanding low pressure polyurethane window and door spray foam. (Must be compliant with AAMA 812-04)

Backer Rod
- 1/4" to 1/2" diameter closed cell foam

Shims
- Made of cedar or synthetic material

Fasteners
- Fastener size may vary per wall/framing needs.
- Fasteners must be corrosion resistant and compatible with materials contacted and/or penetrated.

Silicone Sealant
- 100% silicone (**ASTM C920 compliant**)
- Neutral cure (modified oxime) only
- Some substrates may need to be primed before sealing. Consult the sealant supplier.
- **Always clean all area where sealant will be applied**.

Flashing
- Self-adhesive flexible flashing that complies with ASTM-D779.

Cleaning solvent for end dams
- Denatured rubbing alcohol

Step A: Inspect the window or door unit before installation

1. Remove all packaging material (blocks, pads, protectors, stretch wrap) and dispose/recycle properly.
2. Inspect unit for any damage or defects, and make sure the unit operates properly.
3. Verify that the window or door unit is the correct size and configuration.
4. Contact the nearest Quaker distributor if there is a problem. Provide the sales order number on the warranty sticker (see http://quakerwindows.com/wp-content/uploads/2013/04/Warranty-sticker-locations01-30-2015.pdf for sticker locations).

Step B: Frame assembly

1. Assemble jambs to head and sill assembly with the 12 fasteners provided (MH8-18X11/2 LP).
    - Make sure to use the two head and sill gaskets provided. (Fig. 1)
2. Seal around screw heads and all outside corners with sealant. (Fig. 2)
3. Peel backing off the corner gaskets and apply them to the exterior side of the nail fin at each corner. (Fig. 3)
4. Apply silicone sealant along the edge where the gaskets meets the window frame. (Fig. 4)

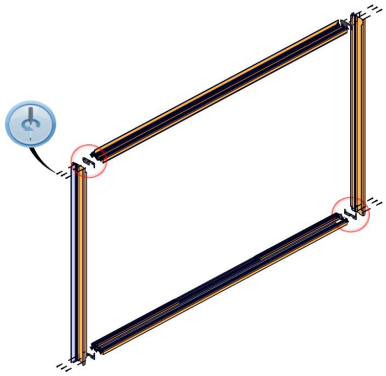


Fig. 1a

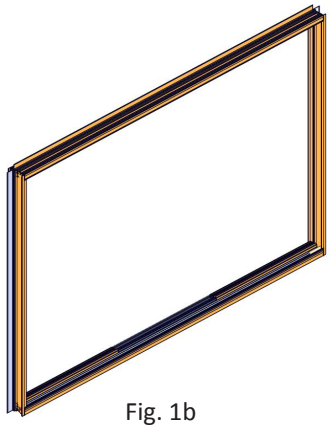


Fig. 1b

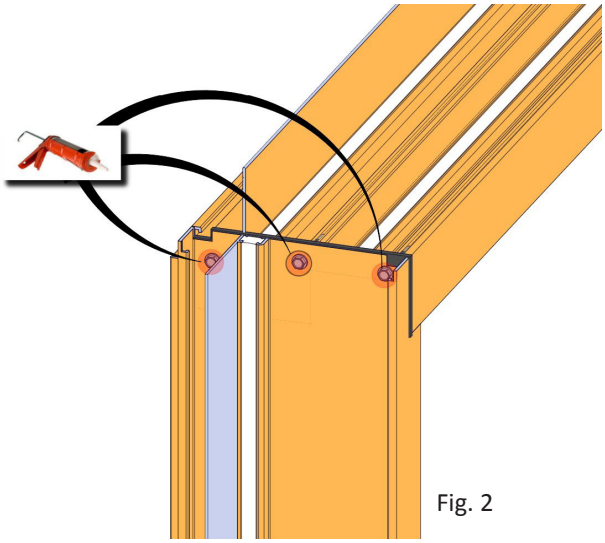


Fig. 2

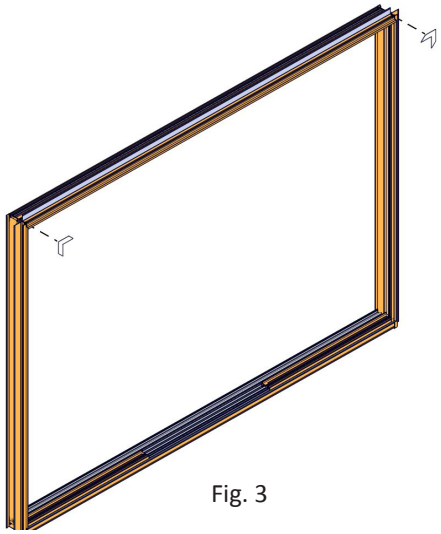


Fig. 3

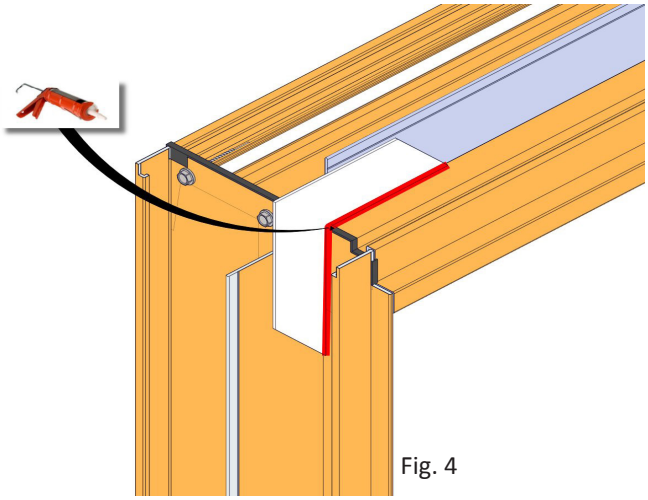


Fig. 4

Step C: Prepare rough opening

1. The material/lumber quality and fasteners must be structurally adequate for design load requirements.
2. Measure and verify the size of the rough opening. The rough opening should be a minimum ½" (but not to exceed 1") wider and taller than your unit. The masonry opening should be sized ½" wider and 9/16" higher than the units exterior frame.
3. Verify the rough opening is flat, plumb, level, and square. (Fig. 5)
    - Take diagonal measurements to check for square.
    - The sill plate beneath the unit **must** be level for proper unit operation.
4. Cut the weather-resistant barrier (WRB) in a "I" pattern. (Fig. 6)
    - Fold back the WRB sides and sill toward the interior and staple into place. (Fig. 7)
5. Cut the top corners of the WRB at 135° and 9" long. (Fig. 6)
    - Fold flap up and temporarily tape in place. (Fig. 7)

CAUTION

- When installing into a wall with exterior rigid foam insulation panels, place solid blocking material behind the nail fin to provide proper support when fastening the unit.

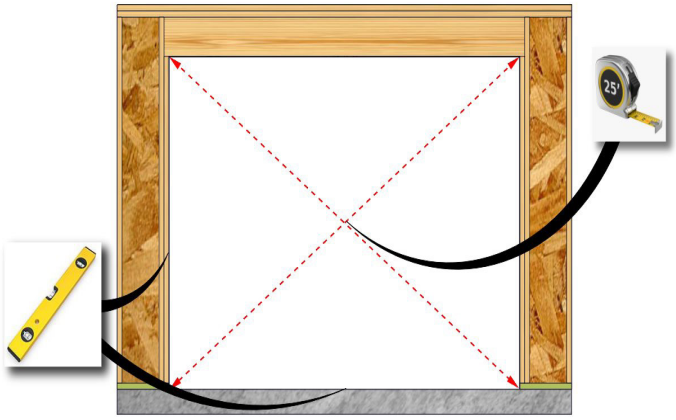


Fig. 5

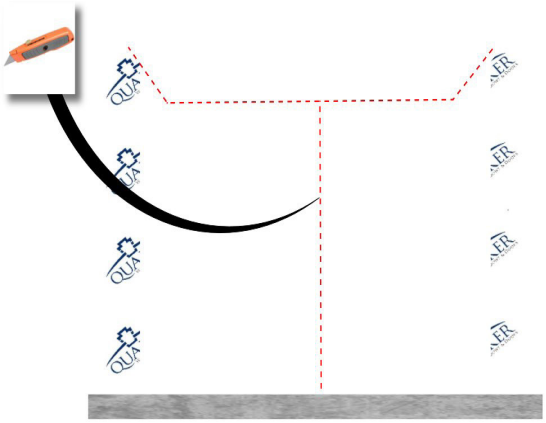


Fig. 6

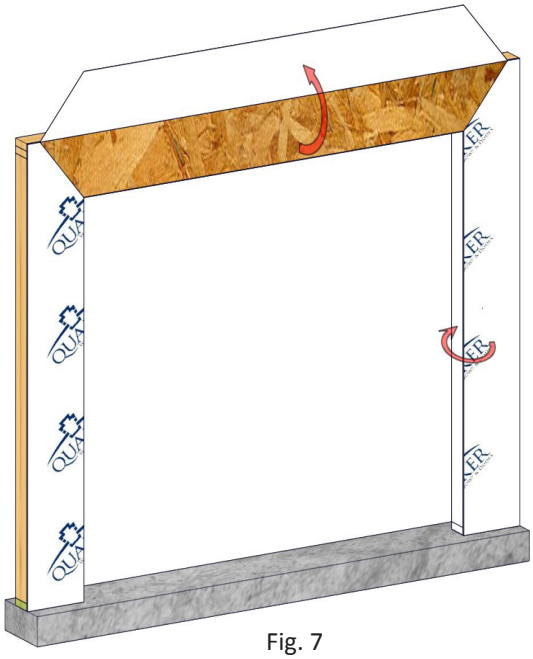


Fig. 7

Step D: Sill preparation

1. Apply three ¼" continuous beads of silicone across the entire width of the rough opening sill, and a ¼" continuous bead of silicone ½" from each side of the rough opening. The bead will run the entire depth of the sub-sill anchor plate starting at the face of the wall. (Fig. 8)
2. Install the sub-sill anchor plate using fasteners by others.
    - Keep the exterior edge of sub-sill anchor plate in line with exterior of wall framing. (Fig. 9)
    - Drill and install fasteners thru the sub-sill anchor plate into sill condition. (Fig. 10)
    - Always follow the fastener/anchor manufacturer's guidelines for proper edge distance, load capacity and installation techniques.

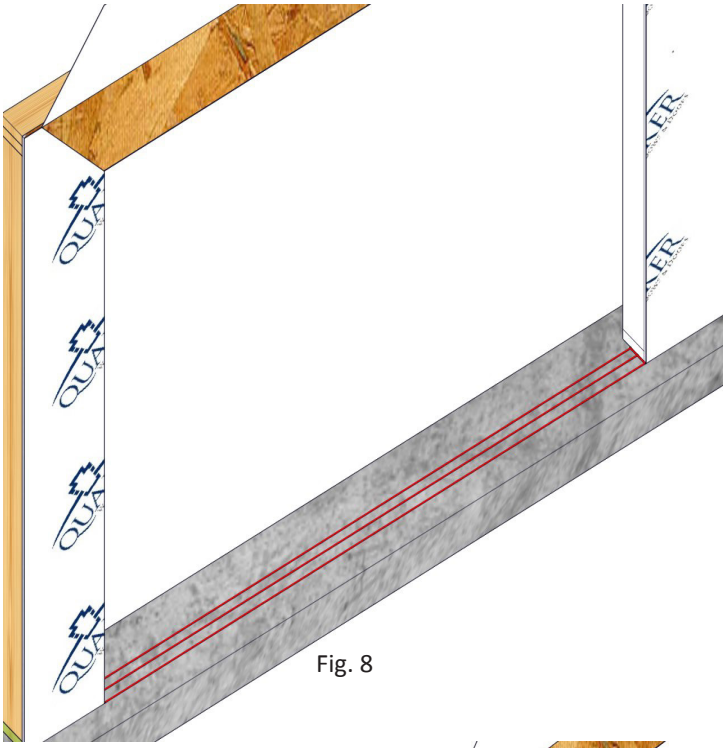


Fig. 8

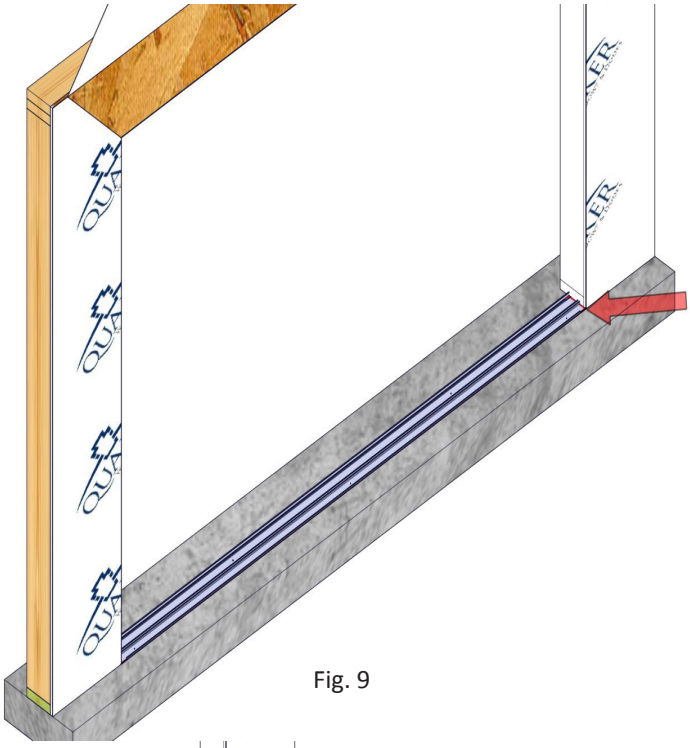


Fig. 9

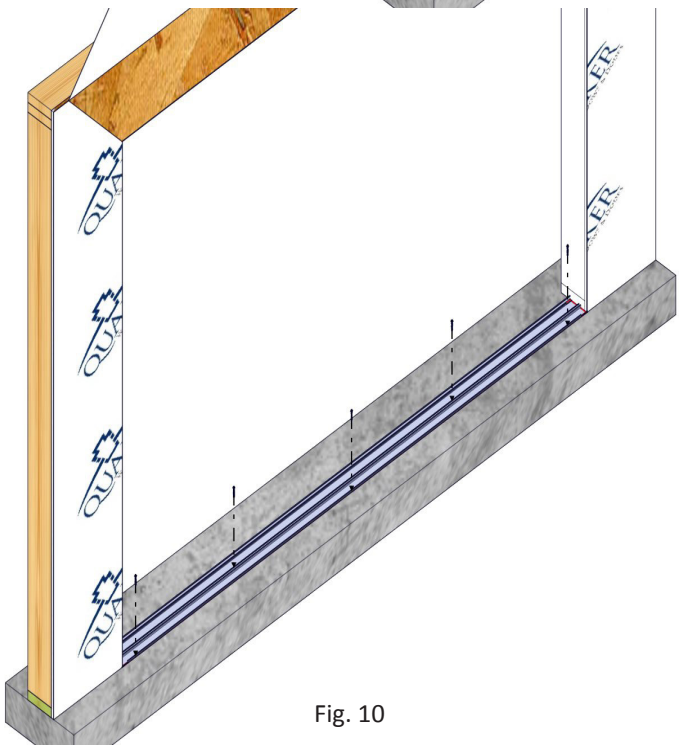


Fig. 10

Step E: Door Frame Installation

1. Apply a ¼" diameter bead of 100% neutral cure silicone sealant along the backside of the nailing flange.
    - Bead must run continuously around both sides and across the head, in line with and completely covering the nailing flange holes. (Fig. 11)
2. Center and set the door frame into the rough opening, making sure there are equal gaps on both sides of the door.
3. Angle the door frame with the top tilted out, and set the exterior sill frame inside the exterior leg of the sub-sill anchor plate. (Fig. 12a)
4. Push the frame in against the framing locking the sill into the sub-sill anchor plate. (Fig. 12b)
5. Temporarily tack the door into place using 2" galvanized roofing nails through the pre-punched hole on one top corner of nailing flange. Do not drive the nail in fully. (Fig.13)
6. Install wedge gasket in sub-sill anchor plate against interior leg of door. (Fig. 14)

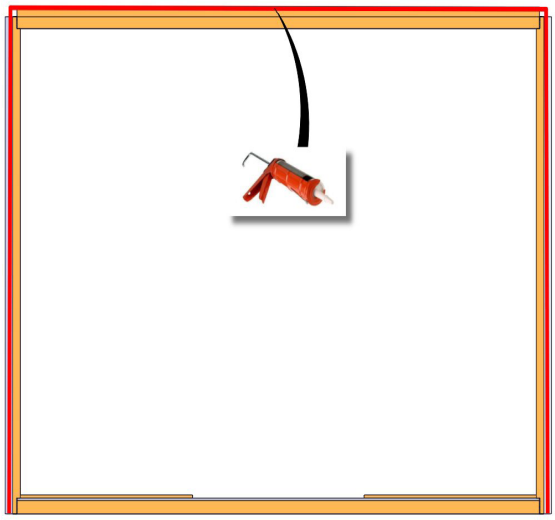


Fig. 11

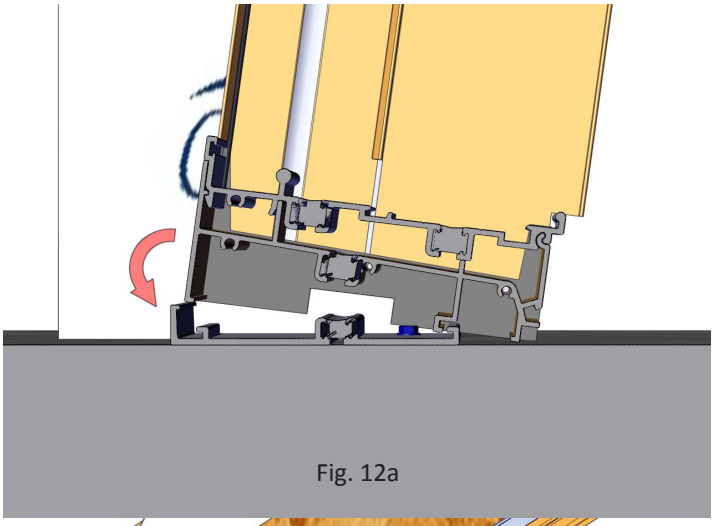


Fig. 12a

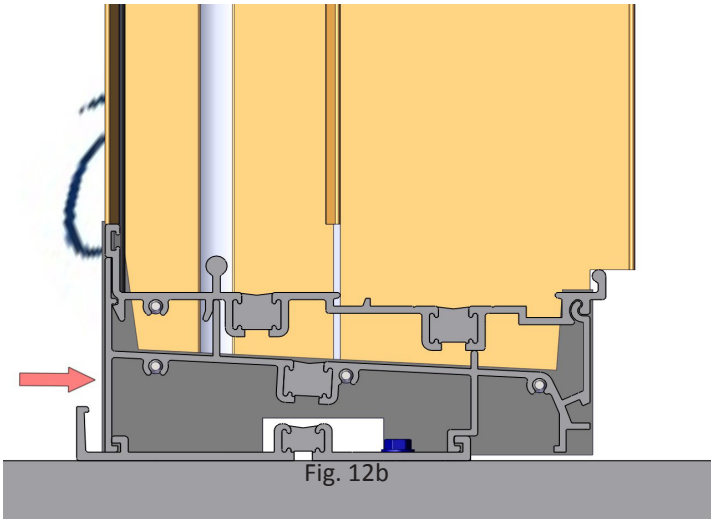


Fig. 12b

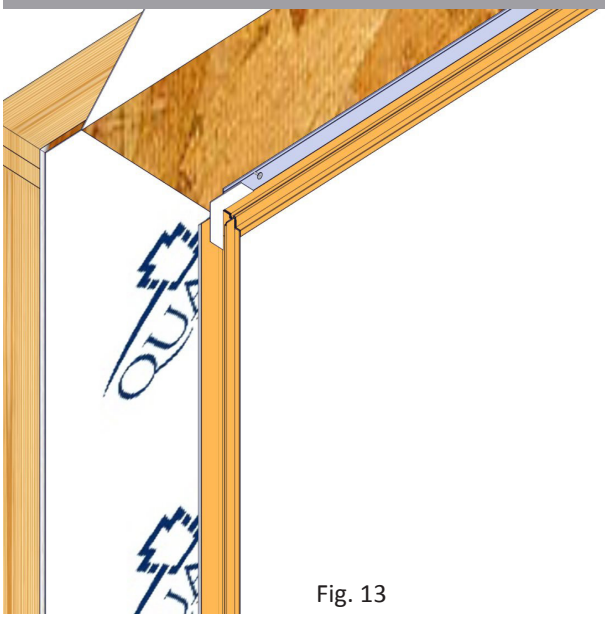


Fig. 13

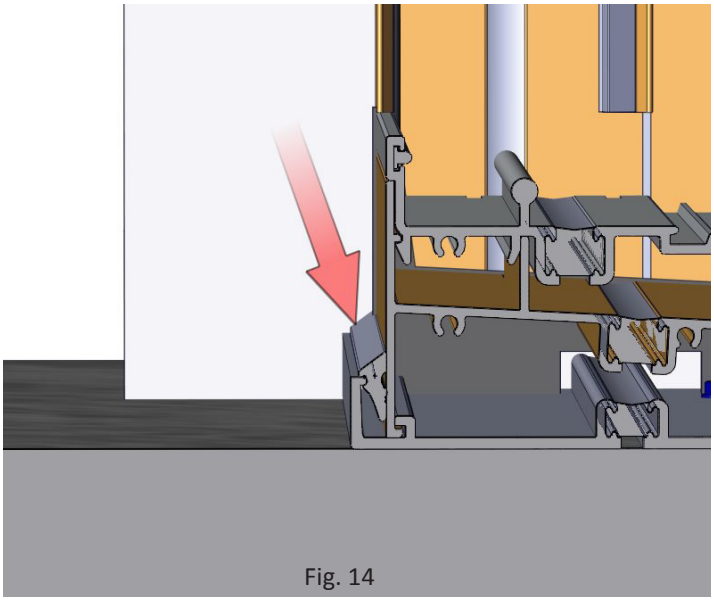


Fig. 14

Step E-1: Door Frame Installation (continued)

1. Level at the sill and plumb the frame. Shim under the frame to bring to level in necessary. (Fig. 15)
2. From the interior, square the frame in the opening by installing shims between the jambs and framing 4" from the head, and sill. Measure the diagonals and adjust shims until the unit is square in the opening. (Fig. 15)
3. Now tack the lower corners of the nailing fin and recheck for square. If necessary remove the nails and adjust shims until the unit is square.
4. Once square install additional shims at 16" intervals on center and at each lock point. (Fig. 16)
5. Measure at head jamb, center of unit, and sill to make sure all dimensions are equal. If they are not, you will need to adjust the shims accordingly. (Fig. 17)
6. Complete fastening of the nailing fin around the perimeter of the unit with 2" roofing nails 2" from each corner and spaced every 6"-8" on center. **Do not nail each hole.**

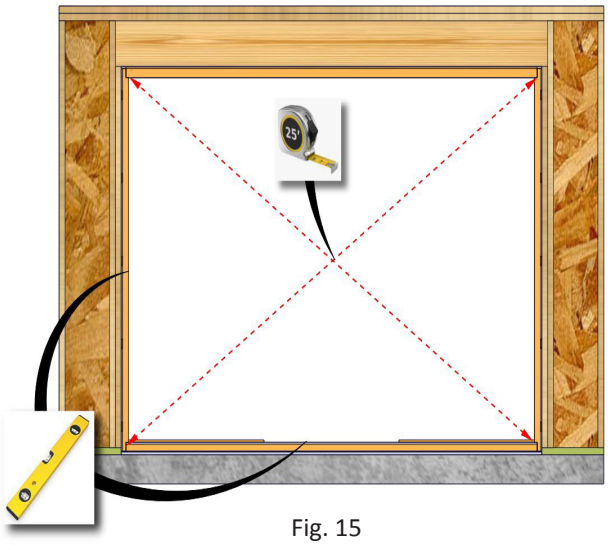


Fig. 15

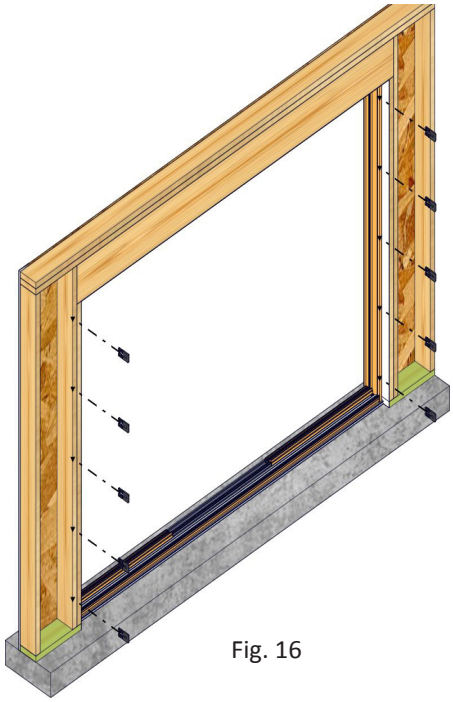


Fig. 16

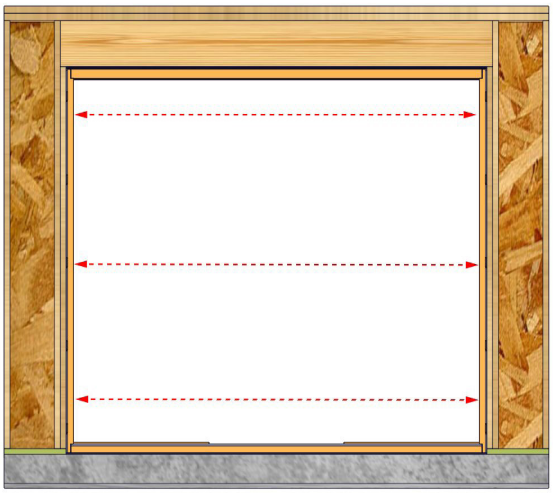


Fig. 17

Step F: Exterior flashing

1. Cut two pieces of flashing tape for jamb flashing extending 1” above door head flange. Remove release paper and press tightly alongside of window frame. (Fig. 18)
2. Cut a piece of flashing tape for the head flashing, which extends beyond outer edges of jamb flashings. Remove release paper and install completely covering mounting flange and adhering to exposed sheathing or framing members. (Fig. 19)
3. Flip down upper flap of WRB so it lays flat across head flashing, then **trim 1”-2” above the door opening**.
4. Tape along all cuts in WRB and across head of the door with flashing tape. (Fig. 20)
5. Seal the inside edges at the head and sill where the fixed panel will set in the frame. (Fig. 21)

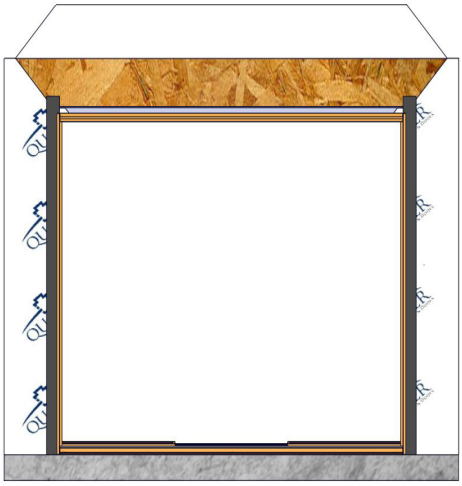


Fig. 18

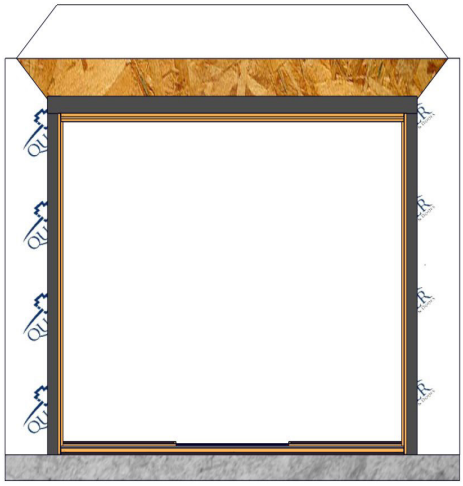


Fig. 19

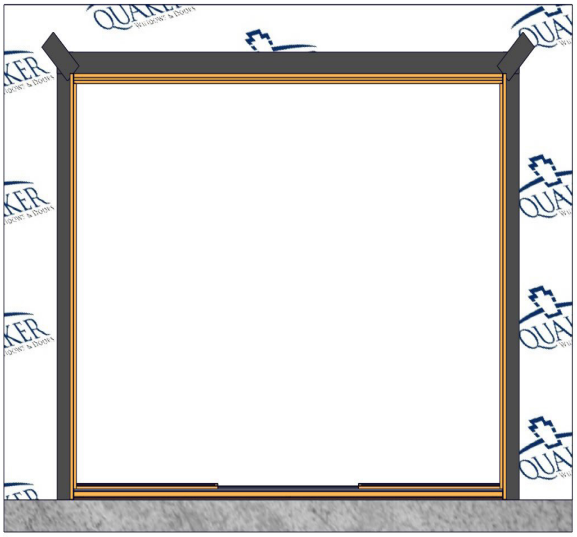


Fig. 20

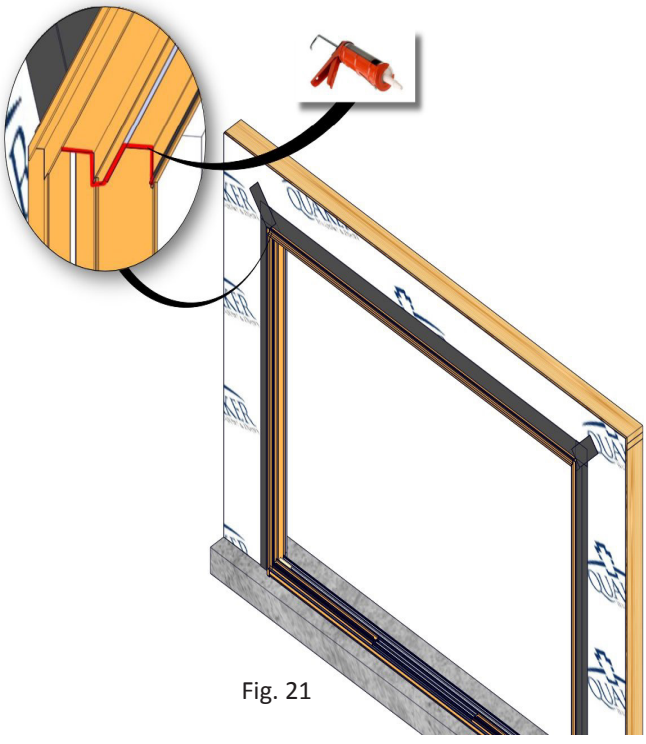


Fig. 21

Step G: Stationary panel installation

1. Angle the fixed panel with the top inserted into the head track, and then lift and set the bottom of the panel on the fixed panel extrusion in the sill. (Fig. 22)
2. Slide the panel tight against the frame keeping the panel flush with the fixed panel extrusion in the sill (Fig. 23)
3. Install wedge gasket in the sill, head, and jamb around the interior of the frame and panel to secure the panel in place. (Fig. 24a)
4. Repeat steps 1 thru 3 for the other stationary panel. (Fig. 24b)

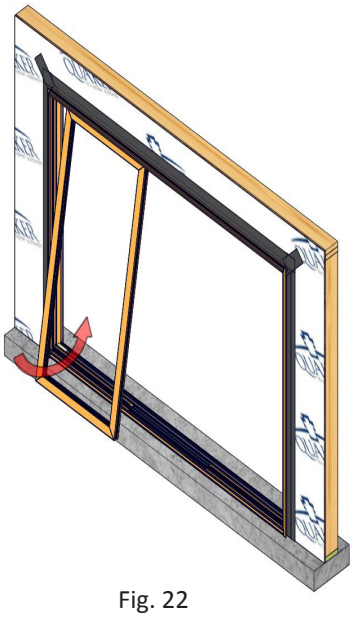


Fig. 22

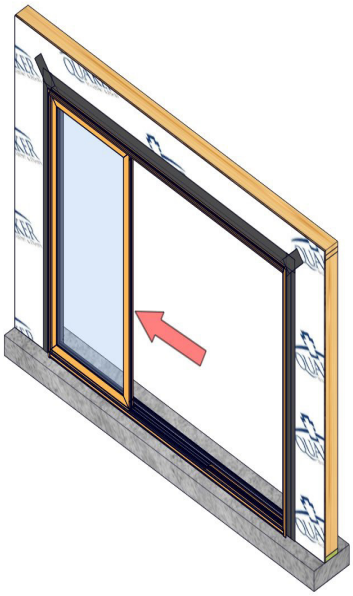


Fig. 23

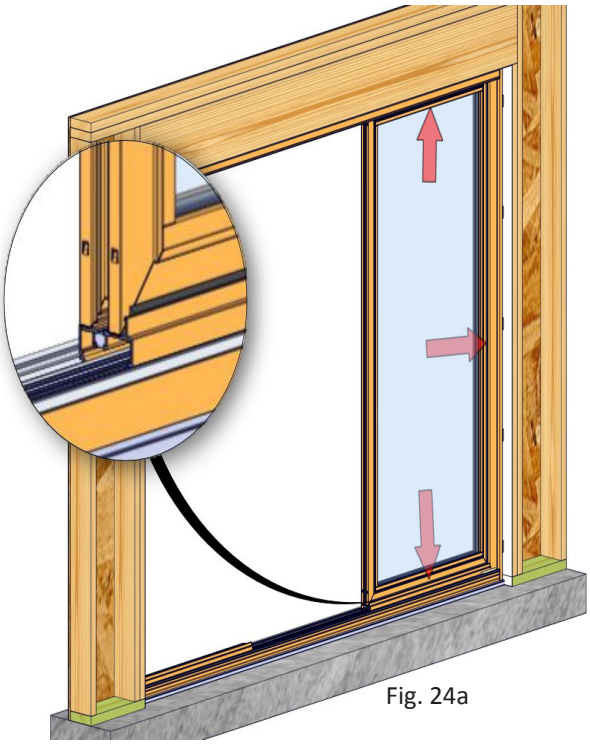


Fig. 24a

Fig. 24b

Step H: Meeting rail installation

1. Slide the pre-assembled meeting rail against the fixed panel and install using supplied (MH8-18X1/2 TK2) screws in the head and sill L-angle brackets. (Fig. 25a)
2. Repeat step one for the lock rail on the other stationary panel.
3. Seal around L-angle brackets at the head and sill covering all screw heads also. (Fig. 25b)
4. Install threshold on the exterior side of frame covering the bottom L-angle bracket. (Fig. 26a)
5. Seal around the two ends of the threshold against the frame. (Fig. 26b)

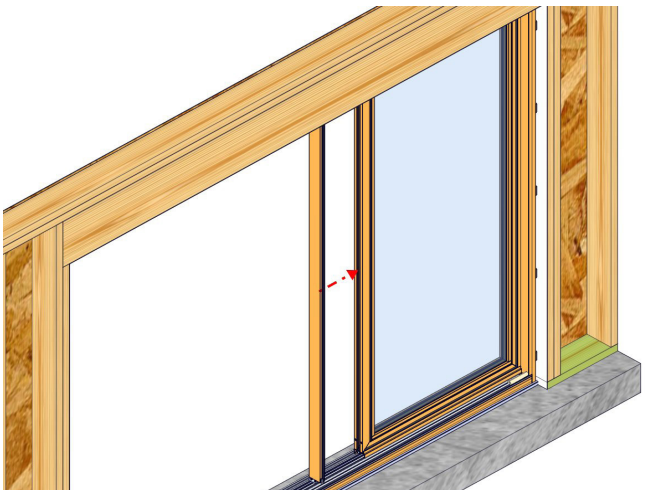
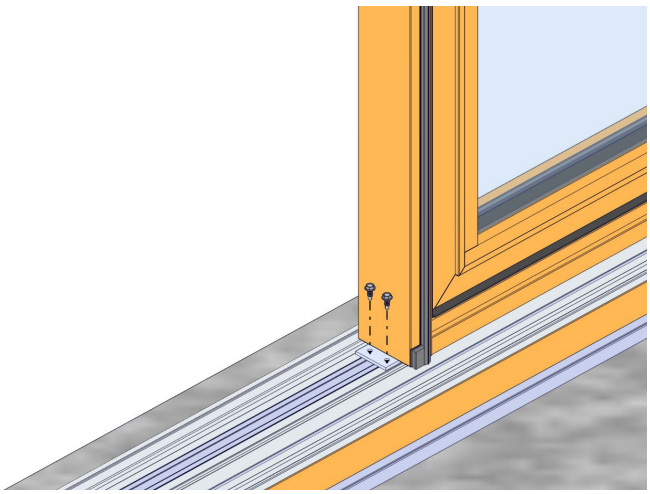
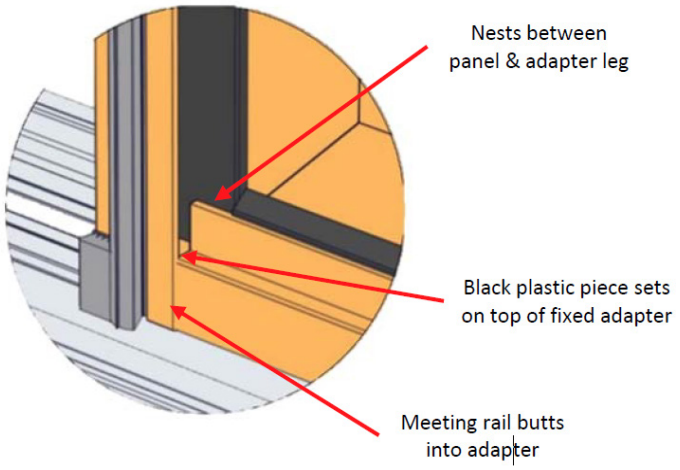


Fig. 25a





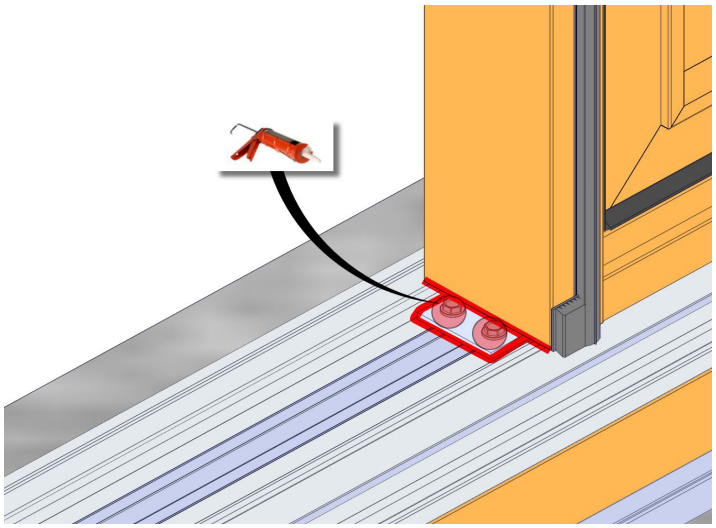


Fig. 25b

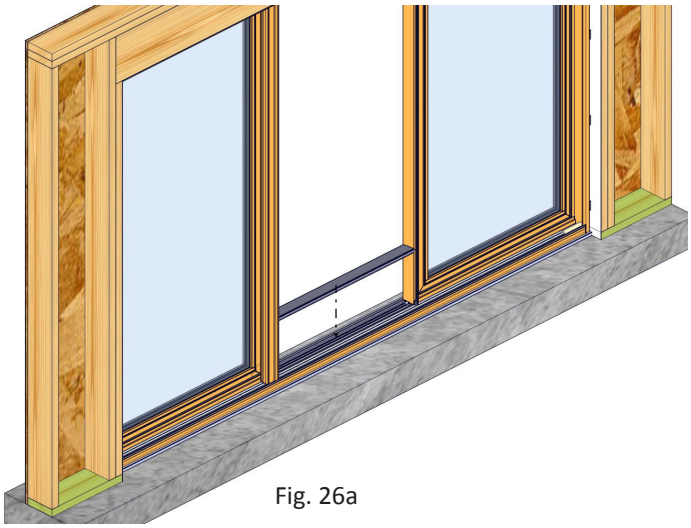


Fig. 26a

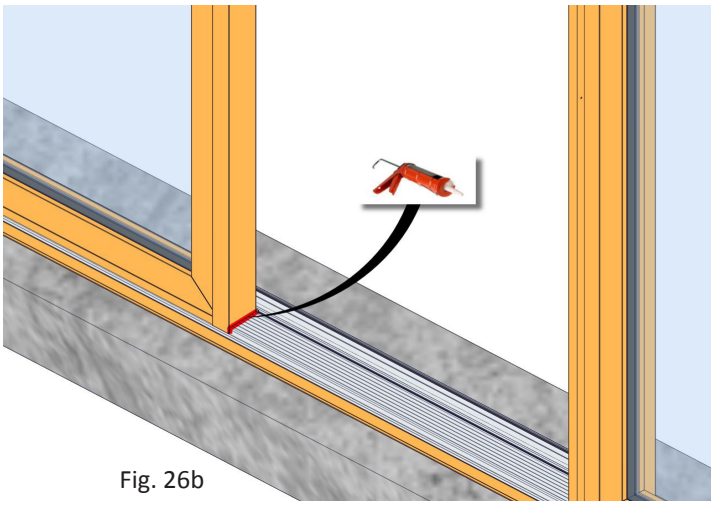


Fig. 26b

Step I: Install active panel

1. Angle the active panel with the top inserted into the head track, and then lift and set the bottom rollers on roller track. (Fig. 27)
2. Adjust rollers as needed to insure the panel is level, square, and slides smoothly. (Fig. 28)

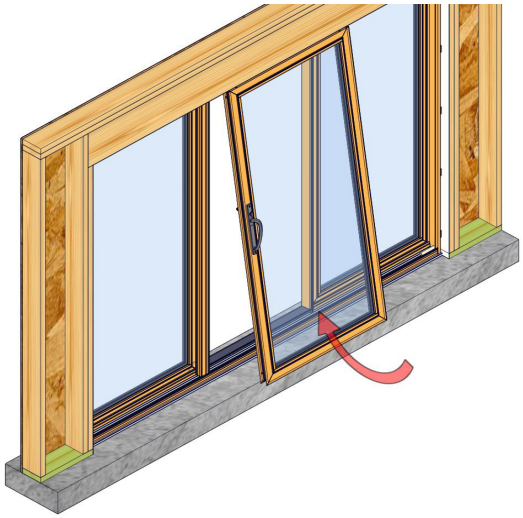


Fig. 27

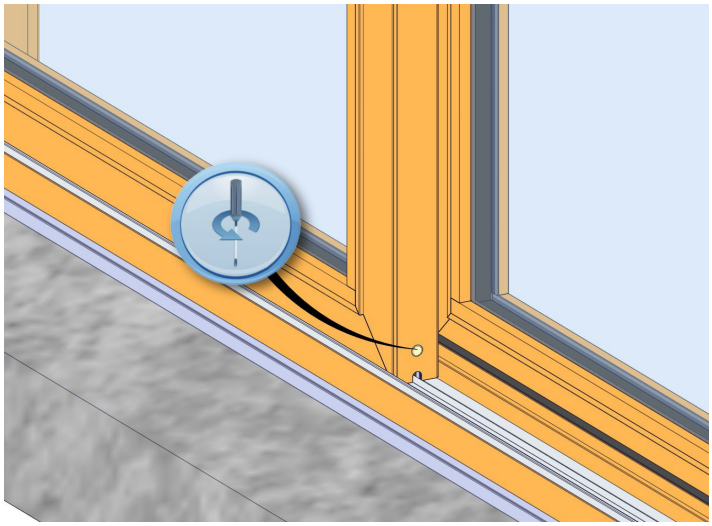


Fig. 28

Step J: Hardware installation

1. Install handle set using provided screw and caps. (Fig. 29)
2. Install jamb lock keepers for the active panel and the screen door.
    - Use pre-punched holes in jamb to align with the slotted holes in keepers. (Fig. 30)

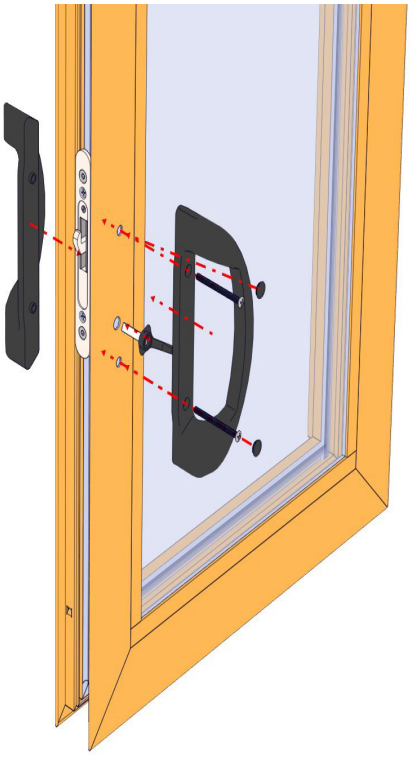


Fig. 29

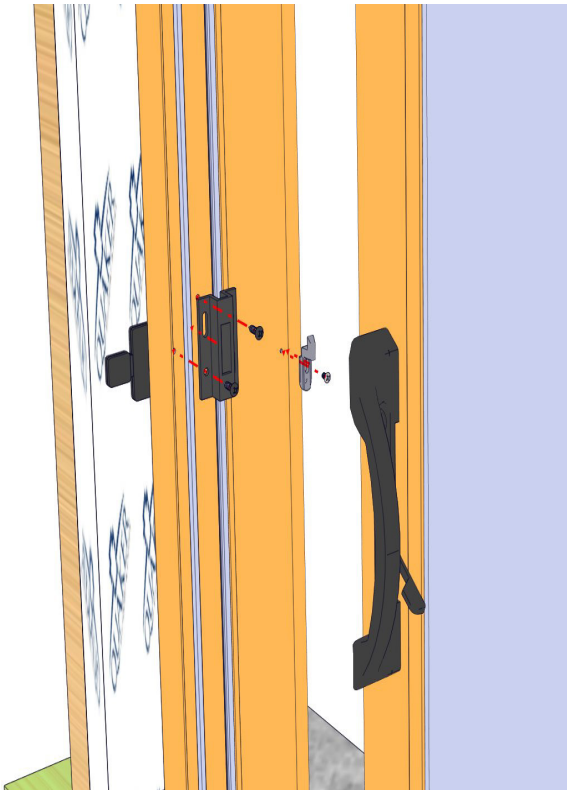
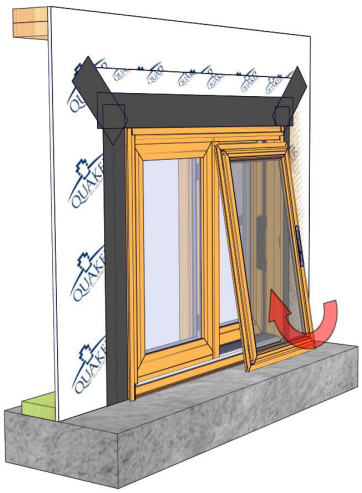


Fig. 30

Step K: Screen installation

1. Angle the screen panel with the top inserted into the head track, and then lift and set the bottom rollers on roller track. (Fig. 31)
2. Adjust rollers as needed to insure the panel is level, square, and slides smoothly.



Step L: Sealing the exterior

1. **Warning:** Maintain a minimum of ¼" between the door frame, trim, siding, or masonry. Failure to do so will forfeit all warranties (written or implied).
2. After siding or wall exterior is complete, apply backer rod and sealant between the door frame and exterior finish material on all four sides of unit. Make sure to clean all surfaces before applying 100% neutral cure silicone sealant.
3. Insulated between the door frame and the rough opening using loose fiberglass insulation or minimally expanding window and door spray foam insulation that is compliant with AAMA 812-04. Read and follow the manufacturers' recommendations for application and use.
4. Operate door unit to ensure proper operation. Panel will not operate correctly if door is out of square, over-shimmed or over-insulated.
5. Allow foam to fully cure before installing interior trim.