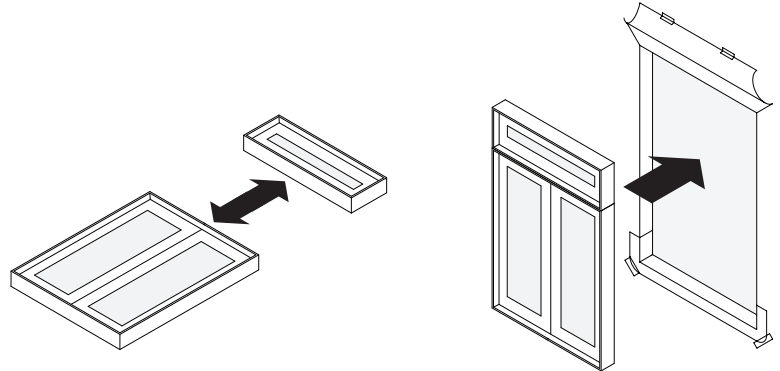


- **Product Series** - A-Series, 400 Series, and 200 Series
- **Product Type** - Patio Doors, Patio Door Transoms, and Patio Door Sidelights

Read these instructions before starting procedure. For additional information visit [www.andersenwindows.com](http://www.andersenwindows.com). For questions call 1-888-888-7020.  
Para obtener una versión en español de esta guía, visite el sitio [www.andersenwindows.com/joining\\_guides](http://www.andersenwindows.com/joining_guides)

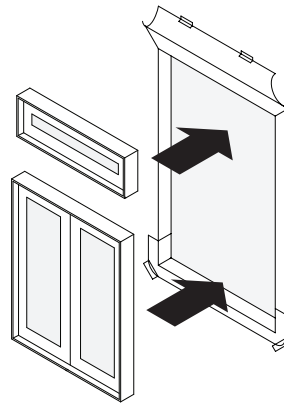
## Horizontal Join - Join Outside Opening

- Horizontal joining of individual units can be done outside of the rough opening and then installed.
- Horizontal joining outside the opening begins on page 8.



## Horizontal Join - Join In Opening (Easy Connect Joining)

- Horizontal joining of individual units can be done inside the rough opening.
- Horizontal joining inside the opening begins on page 15.

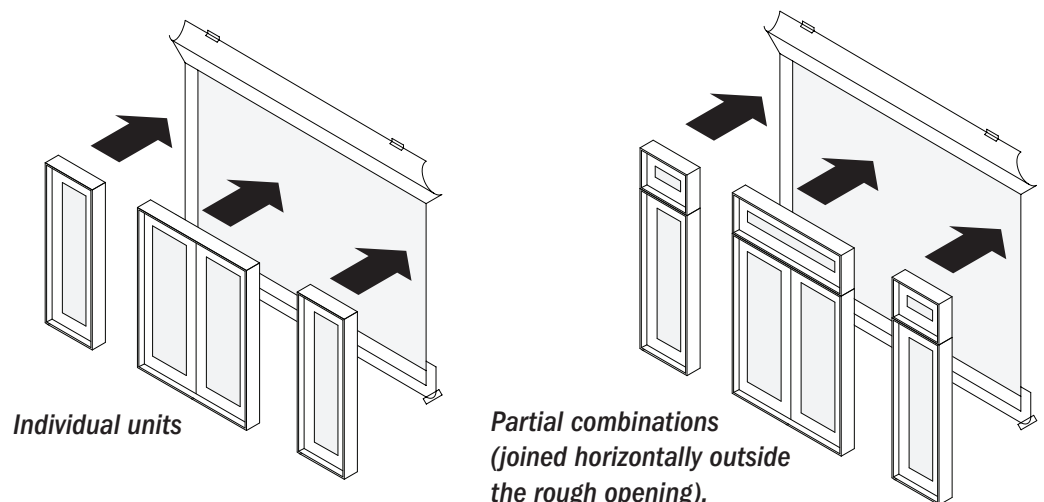


## Vertical Join - Join In Opening (Easy Connect Joining)

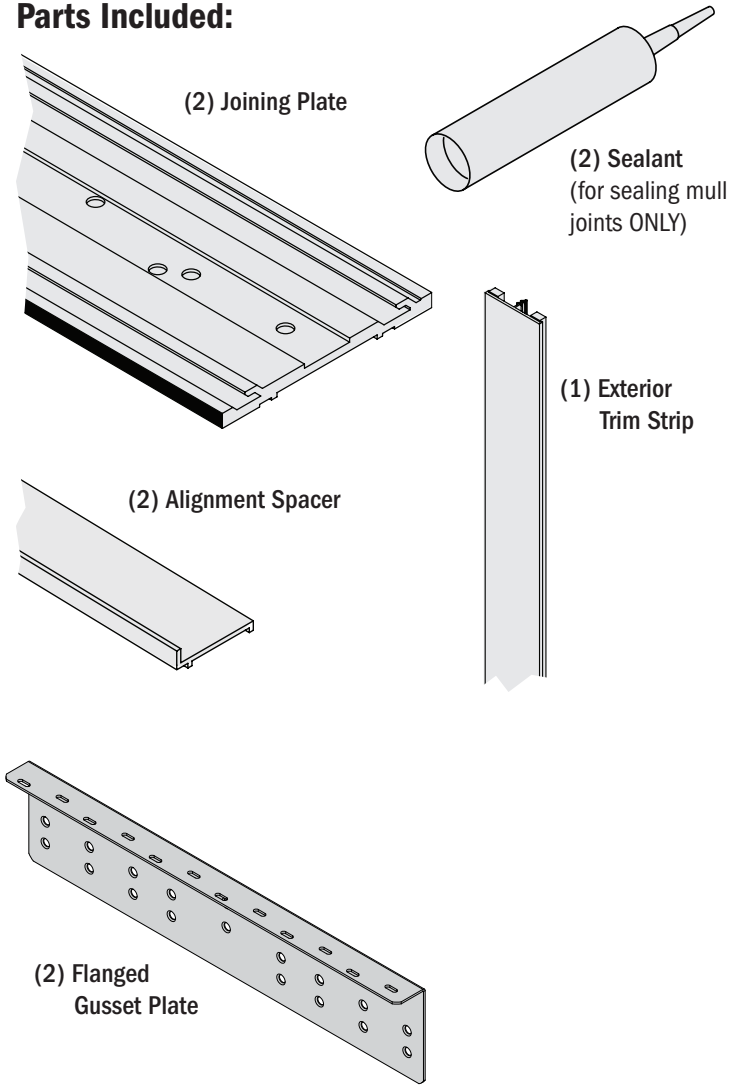
- Vertical joining of individual units or partial combinations must be done inside the rough opening.
- Vertical joining inside the opening begins on page 25.

### CAUTION

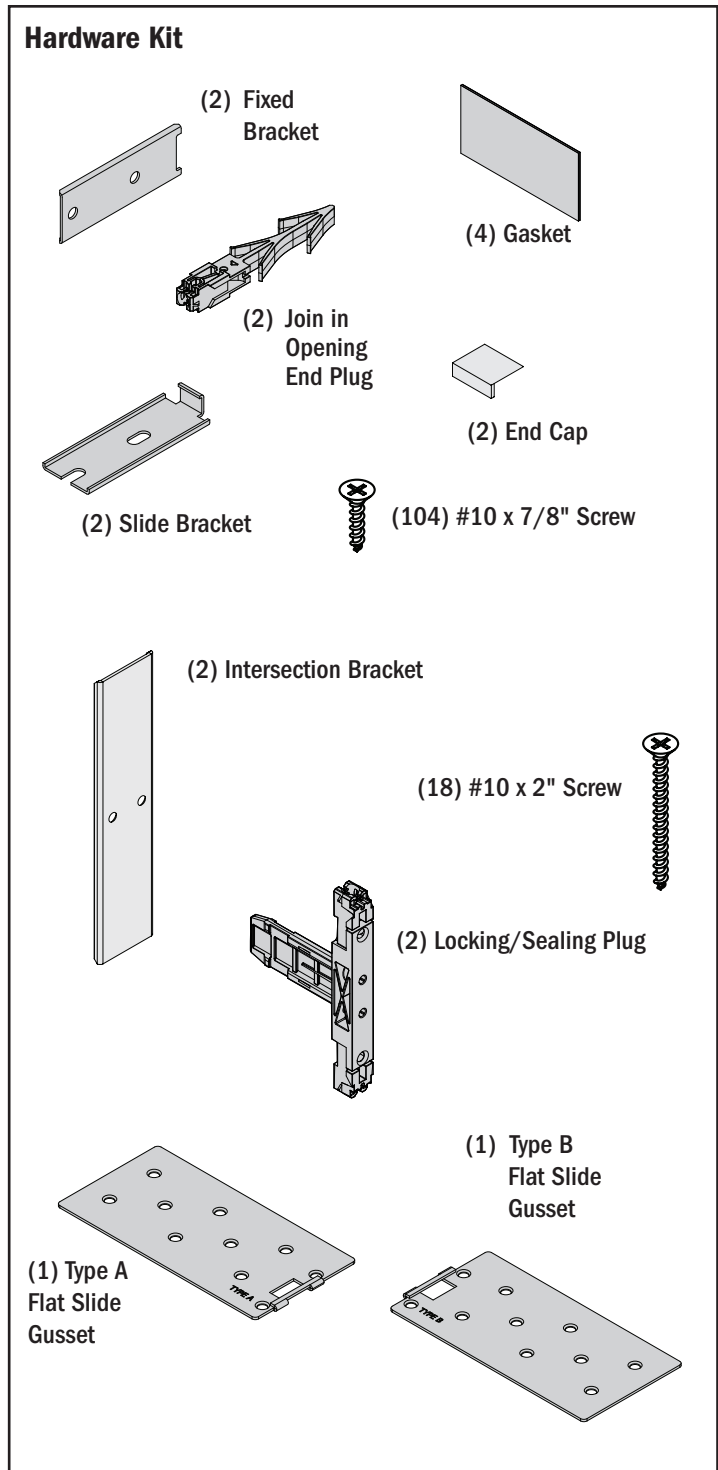
ALL vertical joins of individual or partial combinations must be assembled in the rough opening. Failure to do so could result in injury, product or property damage.



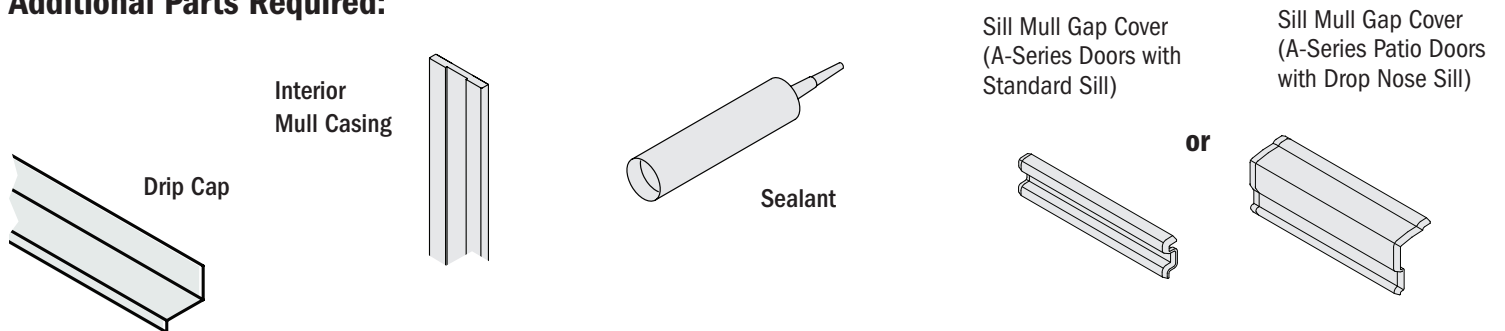
**Parts Included:**



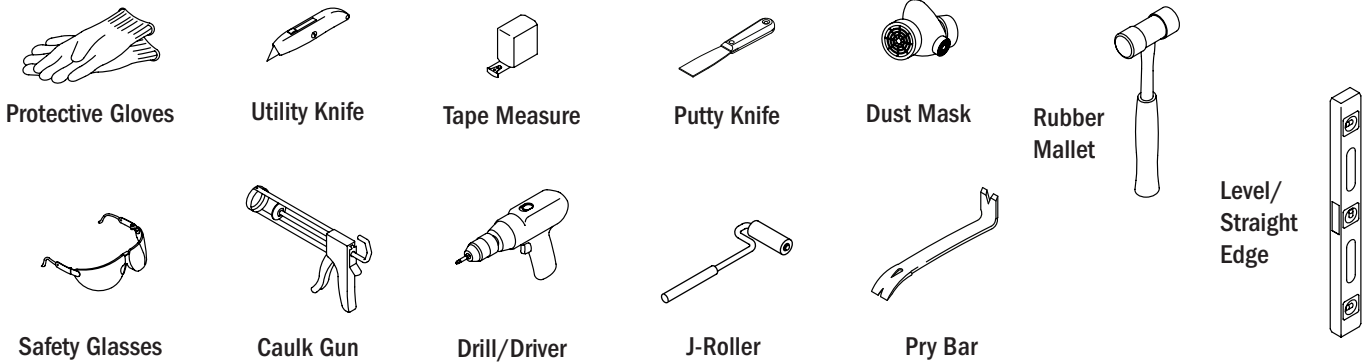
**Hardware Kit**



**Additional Parts Required:**



## Typical Tools Needed:



## FASTENER CHART

### INSTALLATION THROUGH THE JAMB ANCHORING REQUIREMENTS (select one)

Fastener	Substrate	Minimum Head	Minimum Shank	Minimum Embedment to Structural Framing	Steel Type/Coating	Spacing
Wood Screw	Wood	5/16"	#10	1-1/2"	Galvanized, Zinc Chromate, *Stainless Steel, *Ceramic Coated	Every Hole
Self-Tapping Metal Screw	Metal	5/16"	#8	3 Full Threads		
**Concrete Screw	Masonry	5/16"	3/16"	1-1/4"		

### INSTALLATION CLIP ANCHORING REQUIREMENTS (select one)

Fastener	Substrate	Minimum Head	Minimum Shank	Minimum Embedment to Structural Framing	Steel Type/Coating	Spacing
Wood Screw	Wood	5/16"	#8	1-1/2"	Galvanized, Zinc Chromate, *Stainless Steel, *Ceramic Coated	2 per Clip
Wood Screw	Wood	5/16"	#12			1 per Clip
Self-Tapping Metal Screw	Metal	5/16"	#8	3 Full Threads		2 per Clip
**Concrete Screw	Masonry	5/16"	3/16"	1-1/4"	n/a	1 per Clip

### INSTALLATION GUSSET PLATE ANCHORING REQUIREMENTS (select one)

Fastener	Substrate	Minimum Head	Minimum Shank	Minimum Embedment to Structural Framing	Steel Type/Coating	Spacing
Wood Screw	Wood	5/16"	#10	1-1/2"	Galvanized, Zinc Chromate, *Stainless Steel, *Ceramic Coated	<b>Flanged Gusset</b> - Every Outer Row Hole
Self-Tapping Metal Screw	Metal	5/16"	#12	3 Full Threads		
**Concrete Screw	Masonry	5/16"	3/16"	1-1/4"		n/a

Use the correct fastener driver based on the selected fastener's head type.

Size pilot and clearance holes based on the selected fastener's shank diameter as needed.

\*Use 300 series stainless steel or ceramic coated fasteners when fastening to treated lumber.

\*\*Follow fastener manufacturer's anchoring recommendations (i.e. spacing, edge distance, hole depth, etc.)



# Important Safety and Product Information

## for Andersen® Windows and Doors



This is the Safety Alert Symbol used to alert you to potential injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### Signal Word and Consequence

<b>COULD</b> Result in:	 <b>WARNING</b> Major Injury/Death	<b>COULD</b> Result in:	 <b>CAUTION</b> Minor Injury
<b>COULD</b> Result in:	<b>NOTICE</b> Product or Property Damage		<b>IMPORTANT</b> Procedure and Product Information

**Read this Important Safety and Product Information completely before starting.**

### Safety and Product Information Index

■ Tools	■ Glass
■ Handling	■ Protective Film
■ Installation	■ Cleaning
■ Sealing	■ Use/Operation
■ Fastening	■ Joining
■ Finishing	■ Product Information

- Leave this installation instruction with the home/building owner
- For additional support or help please go to: [help.andersenwindows.com](http://help.andersenwindows.com)
- To configure installation instructions go to: [andersenwindows.com/installation](http://andersenwindows.com/installation)

## Tools

### **WARNING**

- Follow manufacturers' instructions for hand and power tools. Always wear safety glasses. Failure to do so could result in injury, product or property damage.

## Handling

### **WARNING**

- Windows and doors can be heavy. Use safe lifting techniques and a reasonable number of people with enough strength to lift, carry, and install window and door products. Heavier windows and doors will require mechanical assistance. Failure to do so could result in injury, product or property damage.
- **DO NOT** lift or carry window or door by the exterior trim or extension jambs. Doing so could result in injury, product or property damage.
- Windows, doors, and installation components can have sharp edges. Wear protective equipment when handling. Failure to do so could result in injury.
- **DO NOT** drag, rock, cartwheel, or walk windows, doors, sash, or panels across the floor. Doing so could result in product or property damage.

## Installation

### **WARNING**

- Use caution when working at elevated heights and around window and door openings. Follow the manufacturers' instructions for ladders and scaffolding. Failure to do so could result in injury or death.
- Support window or door in opening at all times until fully fastened. Failure to do so could result in window or door falling out causing injury, property or product damage.
- Windows and doors have small parts (e.g. hole plugs, operator spline caps, fasteners, etc.). Small parts if swallowed could pose a choking hazard to young children. Dispose of unused, loose, or easily removed small parts. Failure to do so could result in injury.



## Installation (Continued)

### NOTICE

- Andersen head flashing and installation flanges **DO NOT** take the place of window and door flashing tape or liquid flashing. Window or door must be properly flashed and sealed with a material compatible sealant for protection against water and air infiltration. Failure to do so could result in product or property damage.
- **DO NOT** set window or door directly on installation flange. Doing so could affect product performance, and could result in product or property damage.
- **DO NOT** set window directly on sill plate. Elevate window with shims under the side jambs. Failure to do so could affect operation and product performance, and could result in product damage.
- Window or door must be properly shimmed. Failure to do so could affect operation and product performance, and could result in product damage.
- A continuous full perimeter interior seal between window or door frame and opening is required. Failure to do so will affect product performance, and could result in product or property damage.
- Protect window and door sills during installation and throughout construction. Failure to do so could result in product damage.
- **DO NOT** remove window or door packaging material until instructed to do so. Doing so could result in product damage.

## Sealing

### CAUTION

- Follow instructions of foam, sealant, and flashing manufacturers regarding safety, material application, compatibility, and periodic maintenance for continued weather resistance of their products. Failure to do so could result in injury, product or property damage.

### NOTICE

- Clean and prepare surfaces receiving sealant following sealant manufacturer's instructions. Failure to do so could result in water infiltration causing product or property damage.

## Fastening

### WARNING

- Metal fasteners and components could corrode when exposed to preservative-treated or fire-retardant treated lumber. Use approved fasteners and components to fasten window or door. Failure to do so could cause a failure resulting in injury, product or property damage.
- Fastener must attach to a structural framing member with a 1-1/2" minimum fastener embedment. Failure to do so could result in injury, product or property damage.
- **DO NOT** remove screws that attach installation clips or gusset plates to window or door frames. Doing so could result in injury, product or property damage.

### NOTICE

- Use masonry screws when fastening directly into masonry or through a buck into masonry. Failure to do so could affect product performance, and could result in product or property damage.
- **DO NOT** over drive screws or nails. Doing so could result in product damage.
- Fasteners must be attached to a structural framing member. Failure to do so will reduce the structural performance to less than published values and could affect product performance, and could result in product or property damage.

## Finishing

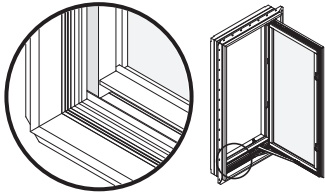
### NOTICE

- **DO NOT** stain or paint weatherstrip, vinyl, glass, or hardware. Doing so could result in product damage.
- Read and follow finish manufacturer's instructions and safety information. Failure to do so could result in product damage.
- **DO NOT** over load brush with stain or paint when finishing. Doing so could allow finish to wick between glass stop or grille, and glass.

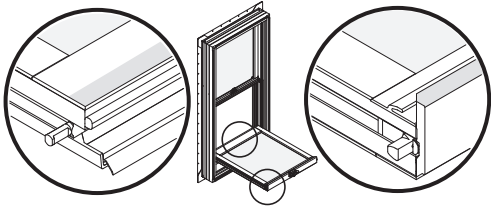
## Finishing (Continued)

### NOTICE

- Finish all wood surfaces immediately after installation. Unfinished wood will deteriorate, discolor, and could bow or split. Some surfaces are hidden from view.



- Some products are shipped unassembled, and it may be more convenient to finish wood surfaces for these products prior to assembly and installation.



## Glass

### WARNING

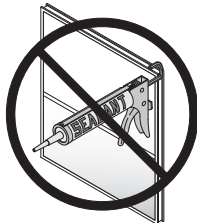
- Unless specifically ordered, Andersen windows are not equipped with safety glass, and if broken, could fragment causing injury. Many laws and building codes require safety glass in locations adjacent to or near doors. Andersen windows are available with safety glass that could reduce the likelihood of injury when broken. Information on safety glass is available from your local Andersen dealer.

- Tempered or laminated safety glass is not standard for windows and must be special ordered. Check local building codes for required locations. Failure to do so could result in injury, product or property damage.

### NOTICE

- **DO NOT** apply any type of film to insulating glass. Doing so could cause thermal stress conditions and result in glass damage. Shading devices (e.g. insulated coverings, shutters, etc.) could also cause thermal stress and condensation causing deterioration of windows or doors.

- **DO NOT** use sealants on exterior or interior glass surface.



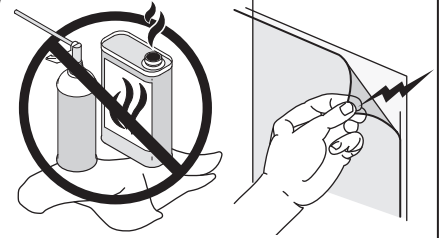
## Protective Film

### WARNING

- **DO NOT** place suction grips over film seams on glass. Suction grips will not hold if placed over film seam to lift or move window or door. Window or door will fall and could result in injury, product or property damage.



- **DO NOT** remove any protective film near flammable materials. Static charge created when removing film can ignite flammable materials or cause a shock. Doing so could result in injury, product or property damage. See warning label on glass.



- Dispose of protective film immediately after removing. Failure to do so could pose a suffocation hazard to children.

### NOTICE

- **DO NOT** remove protective film from glass until after construction is completed. Doing so could allow glass to be damaged.

- Remove protective film from non-glass components immediately after installation. Failure to do so could result in product damage.

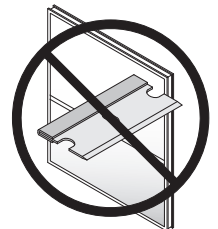
## Cleaning

### NOTICE

- Acid solutions used for cleaning masonry or concrete will damage all components of window or doors. Protect window or door and follow cleaning product manufacturer's instructions. If acid contacts window or door, wash all surfaces immediately with clean water.

- **DO NOT** use or apply solvents, abrasives, harsh chemicals or cleaners to window or door components. Doing so will result in product damage. For a list of recommended cleaners go to: [andersenwindows.com](http://andersenwindows.com)

- **DO NOT** use metal razor blades to clean glass surface. Glass damage could result.



## Use/Operation

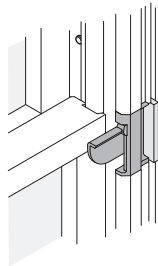
### **WARNING**

- **DO NOT** stand in front of or near windows or doors during a storm. Doing so could result in injury. Accessories such as grilles, art glass, and insect screens could dislodge and become airborne if window or door is impacted by wind-borne debris from severe storms or hurricane strength winds. In the event of a storm, remove all accessories from windows or doors and move to a safe location.

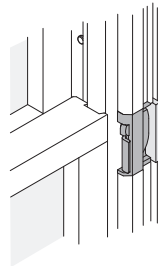
- **DO NOT** install air conditioner in window. Doing so could result in injury, product or property damage.



- Wind load brackets must be flipped out when not tilting or cleaning. If wind load brackets are not flipped out, window could blow in resulting in potential injury and/or product damage.



Flipped Out



Flipped In

### **CAUTION**

- **DO NOT** attach objects or accessories to window or door except Andersen® products specifically designed for the window or door. Doing so could result in injury, product or property damage.

## Joining

### **WARNING**

- **DO NOT** join any window or door, horizontally or vertically, to any window or door not designed for joining. Doing so could result in injury, product or property damage.

- Joined windows or doors must be individually supported in the opening. Failure to do so could affect operation and product performance, and could result in product or property damage.

## Product and General Information

### **IMPORTANT**

- Buildings constructed prior to 1978 could contain lead paint which could be disturbed during window or door replacement. For more information on proper management of lead paint, go to: [www.epa.gov/lead](http://www.epa.gov/lead)

- Instructions may not be right for all installations due to building design, construction materials, or methods used and/or building or site conditions. Consult a contractor or architect for recommendations.

- Installation flanges may need to be removed for some installations. (e.g. masonry, replacement), or where exterior finish is already applied (e.g. siding, brick veneer, stucco).

- Installation flange on the window or door alone will not properly flash and seal the window or door.

- **DO NOT** remove band, plastic ties, or packing clips from window or door until instructed.

- **DO NOT** remove performance (NFRC) label until after final inspection. Doing so could delay final inspection and sign-off by the code official.

- Check with your local building code official to identify and confirm compliance with local building code requirements.

- Contact local authorities or waste management company for proper recycling and disposal instructions for removed window or door.

- For cleaning instructions for window and door components go to: [andersenwindows.com](http://andersenwindows.com).

- During construction protect products from construction debris, harsh chemical such as brick wash, roof runoff, and cement/masonry which can cause damage to window and door products.

- Protective film is not present on all windows or doors. Protective film is not a substitute for masking.

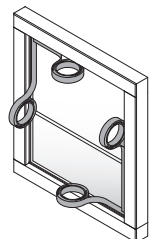
- Remove protective film from glass within six (6) months of installation and when temperature is above 32° F.

- Remove protective film by peeling from seam or corner. Use a plastic scraper to start if needed.

- Extension jambs can be factory applied on some windows or field applied prior to installation. **DO NOT** apply extension jambs prior to window or door installation that will be fastened with installation clips. Doing so could prevent access to installation clips for fastening.

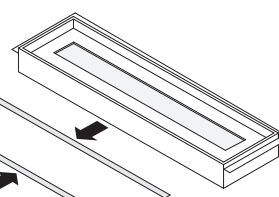
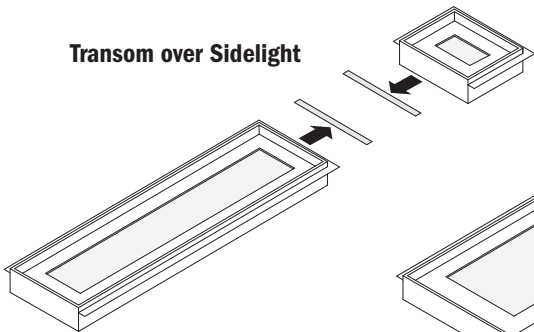
- For extension jamb application refer to instructions included with part(s) or go to: [andersenwindows.com](http://andersenwindows.com)

- Use painters masking tape for protecting products during construction. Avoid using duct or packaging tapes.



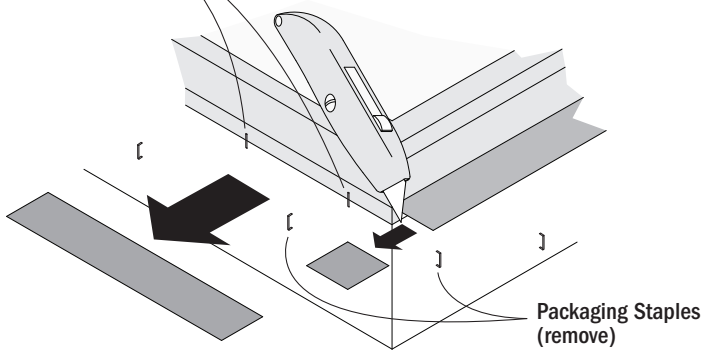
1

Transom over Sidelight



Transom over Two-Panel Patio Door  
(shown in the following steps)

Outer Frame Member Staples  
(do not remove)

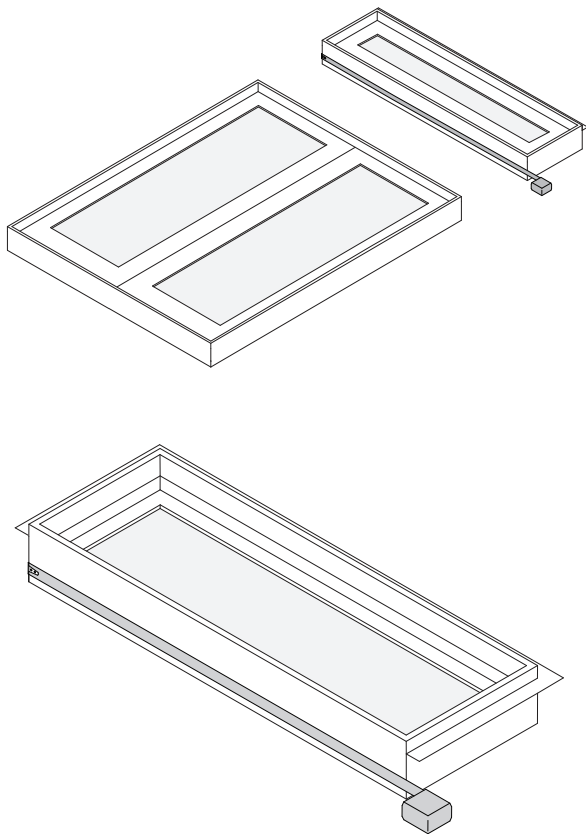


**NOTICE**

Frames must be free of packaging staples. Check that outer frame member and frame staples and fasteners are fully seated. Failure to do so could result in product or property damage.

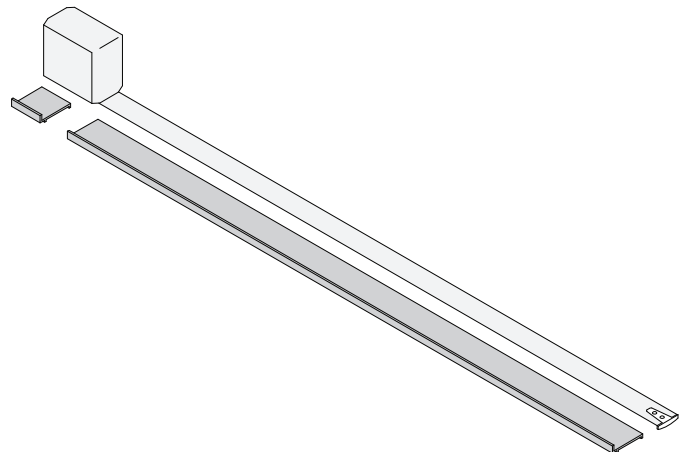
Arrange units, exterior side up, for the joined combination that will be assembled. Remove the installation flanges and orange protective film (if present) from the sides to be joined. Cut remaining installation flange(s) flush with frame. Remove packaging staples and check that outer frame member staples and fasteners are fully seated.

2



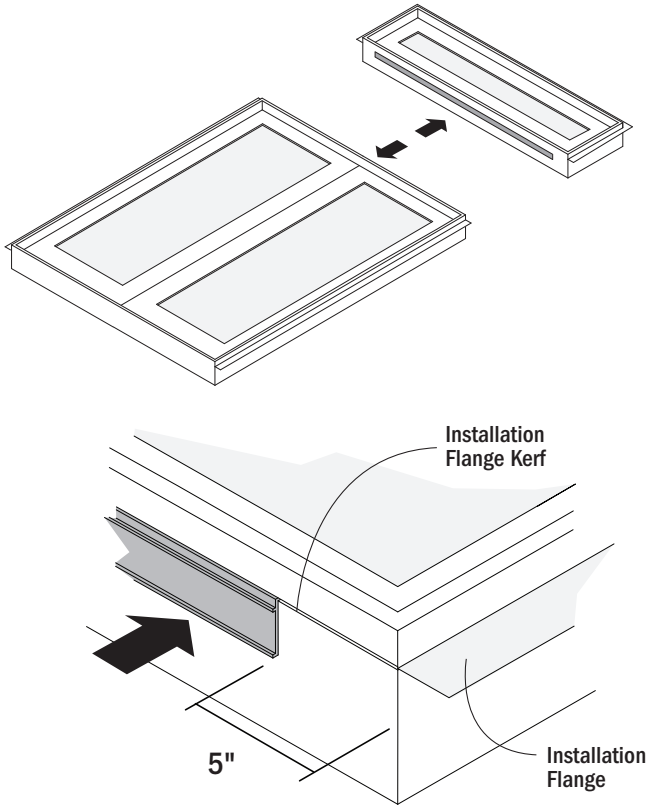
Measure the frame on the sides to be joined.

3



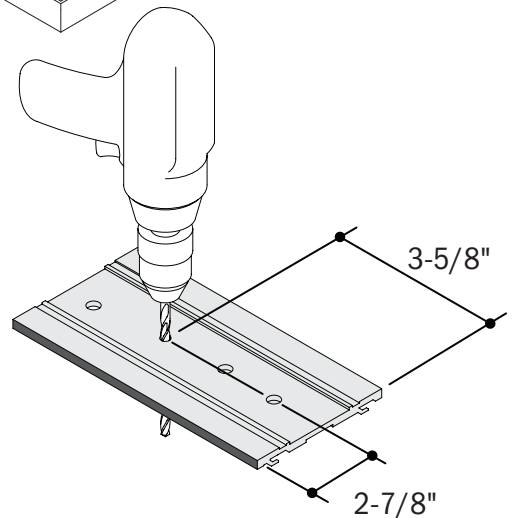
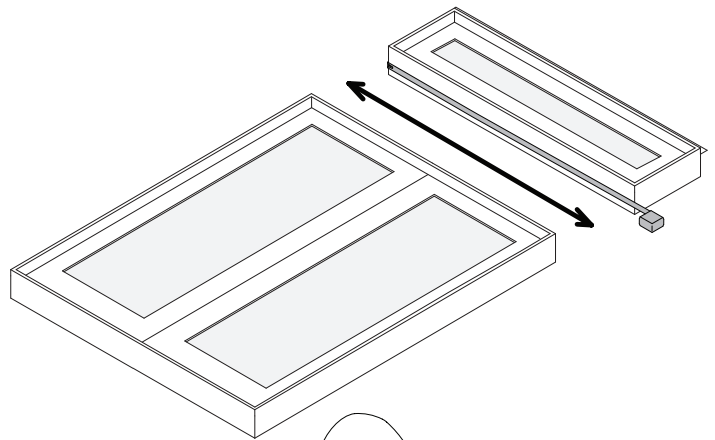
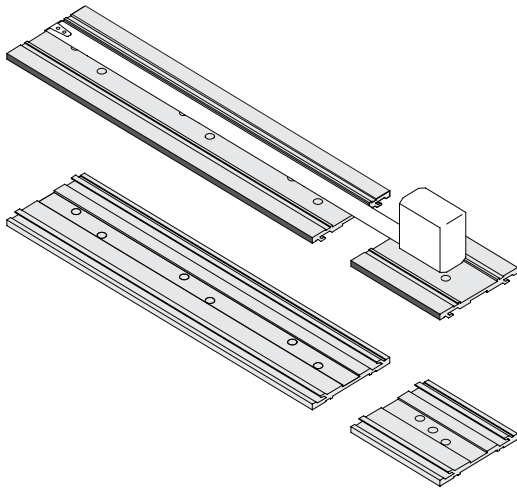
Measure alignment spacers and check that they are 10" less than the frame measurements. If not, cut to length.

4



Center the joining plate alignment spacers 5" from each end on the sides to be joined. Press into installation flange kerf as shown.

5



**CAUTION**

**DO NOT** inhale fiberglass dust. Use respiratory protection, safety glasses, and protective gloves and clothing. Failure to do so could result in nose, throat, skin, or eye irritation.

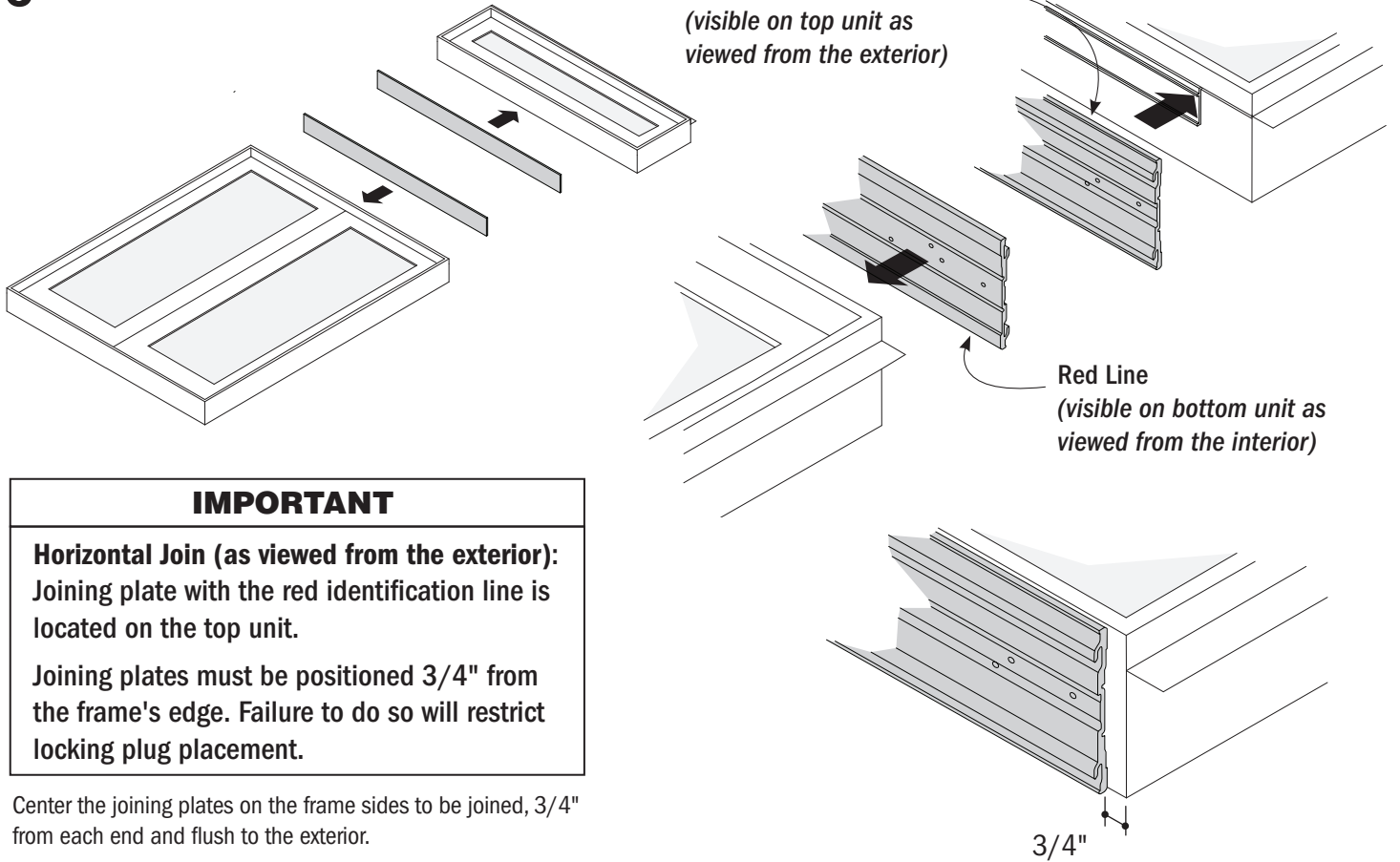
**IMPORTANT**

Screw hole location is important. Incorrect screw hole location will not allow proper insertion of locking/sealing plug.

Measure joining plates and check that they are 1-1/2" less than the frame measurement. If not, cut to length. Drill a 1/4" hole, 3-5/8" from each end and 2-7/8" from the exterior edge of the profile.



6



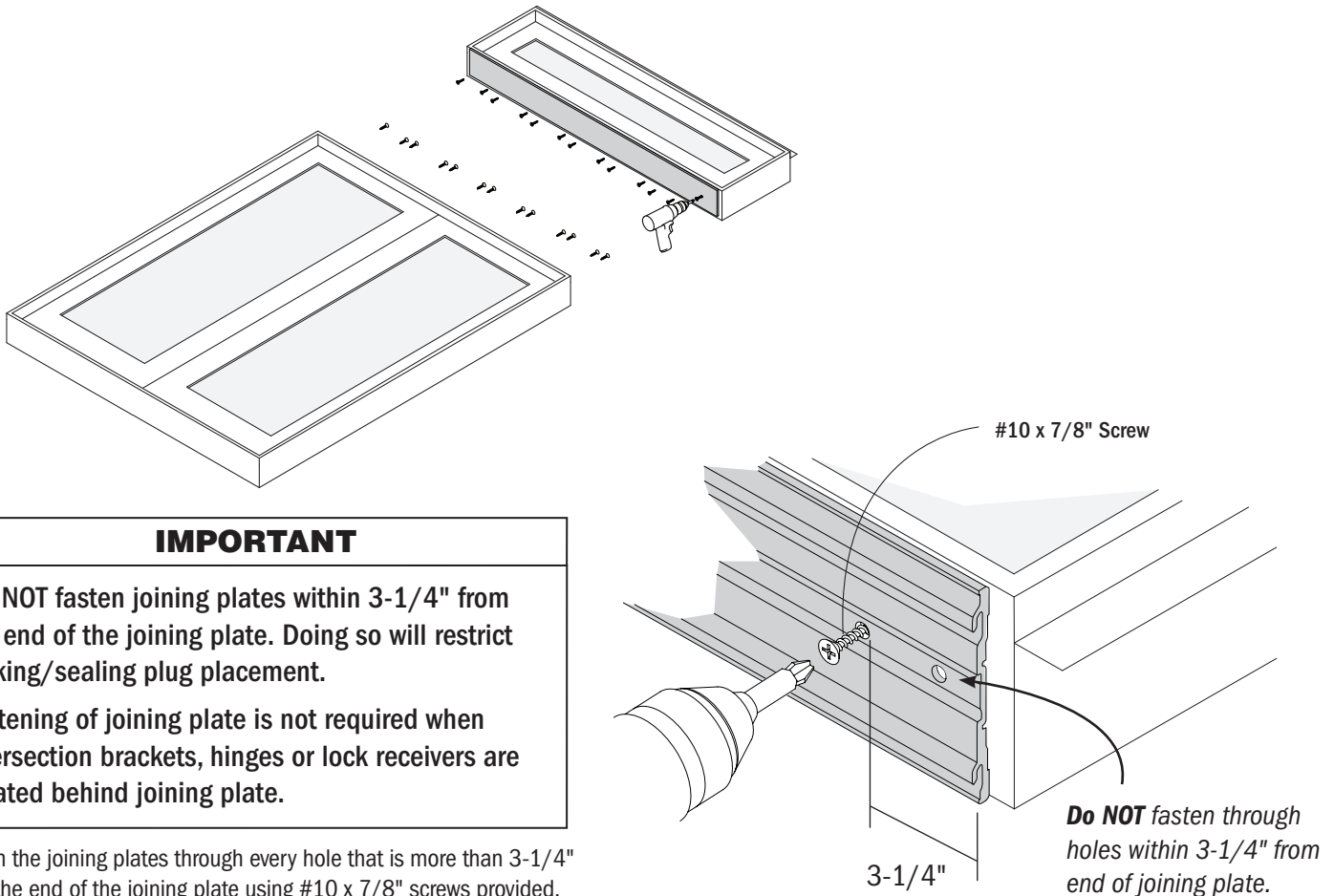
**IMPORTANT**

**Horizontal Join (as viewed from the exterior):**  
 Joining plate with the red identification line is located on the top unit.

Joining plates must be positioned 3/4" from the frame's edge. Failure to do so will restrict locking plug placement.

Center the joining plates on the frame sides to be joined, 3/4" from each end and flush to the exterior.

7



**IMPORTANT**

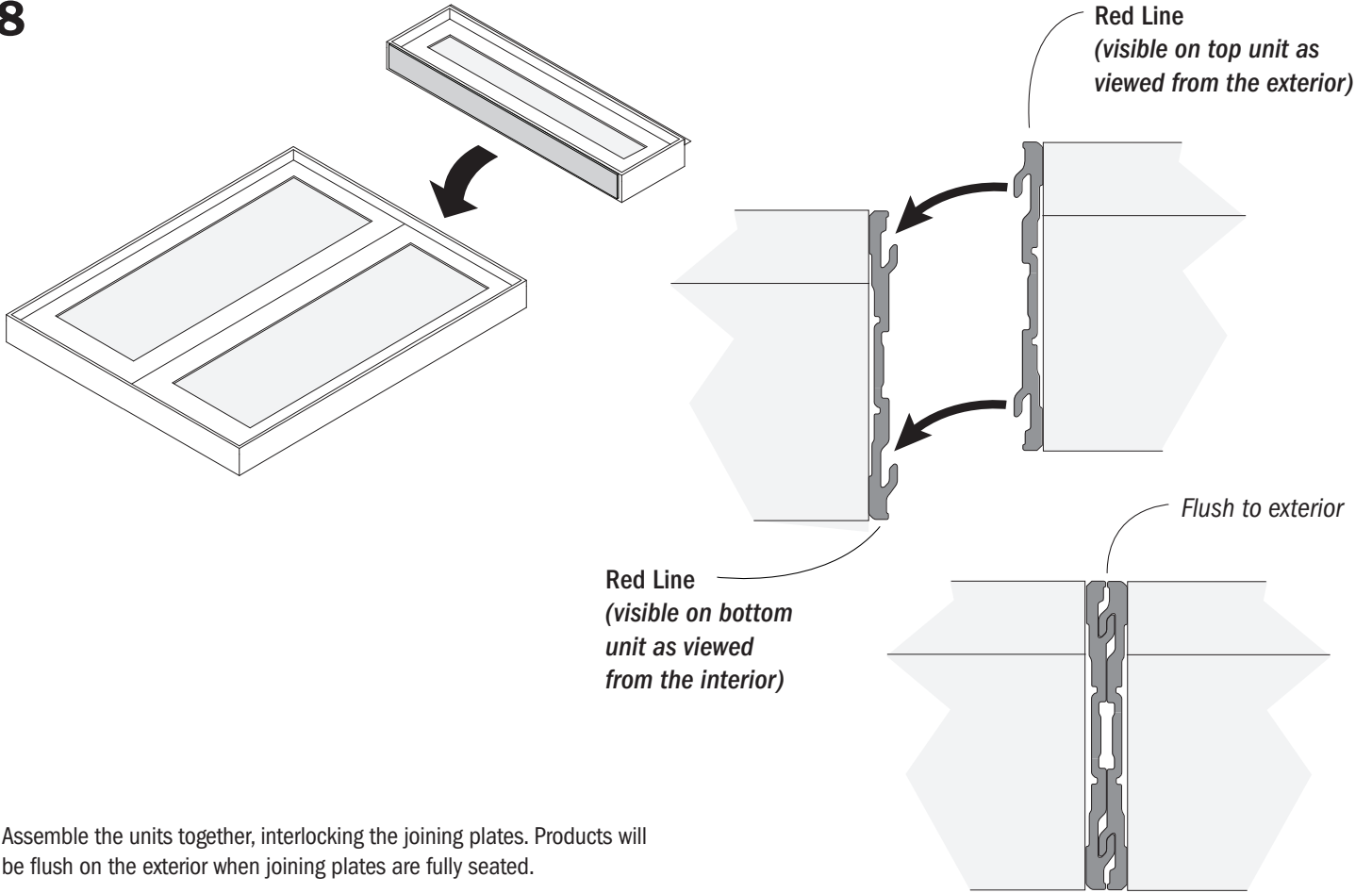
**DO NOT** fasten joining plates within 3-1/4" from the end of the joining plate. Doing so will restrict locking/sealing plug placement.

Fastening of joining plate is not required when intersection brackets, hinges or lock receivers are located behind joining plate.

Fasten the joining plates through every hole that is more than 3-1/4" from the end of the joining plate using #10 x 7/8" screws provided.

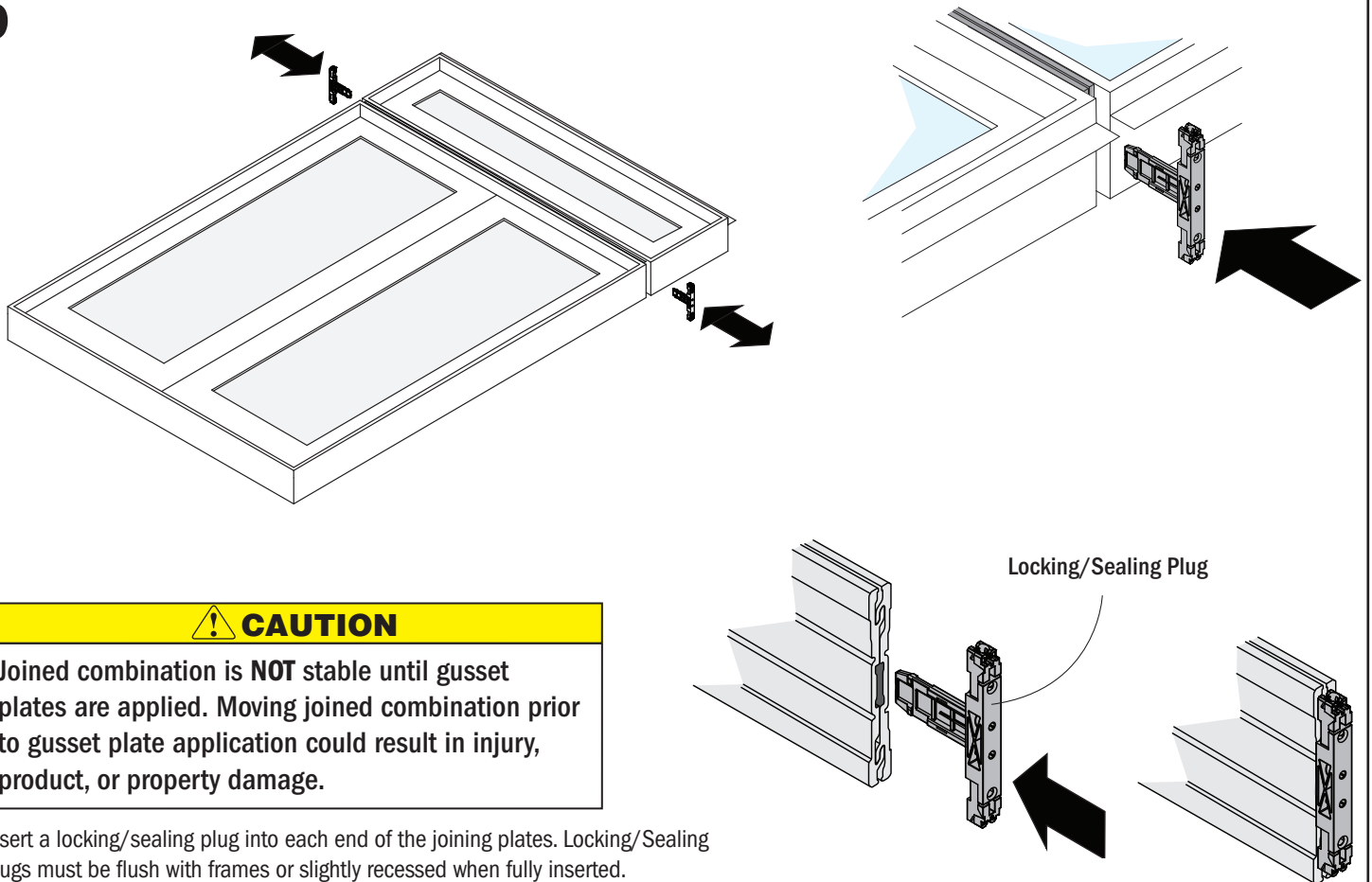
**Do NOT** fasten through holes within 3-1/4" from end of joining plate.

8



Assemble the units together, interlocking the joining plates. Products will be flush on the exterior when joining plates are fully seated.

9

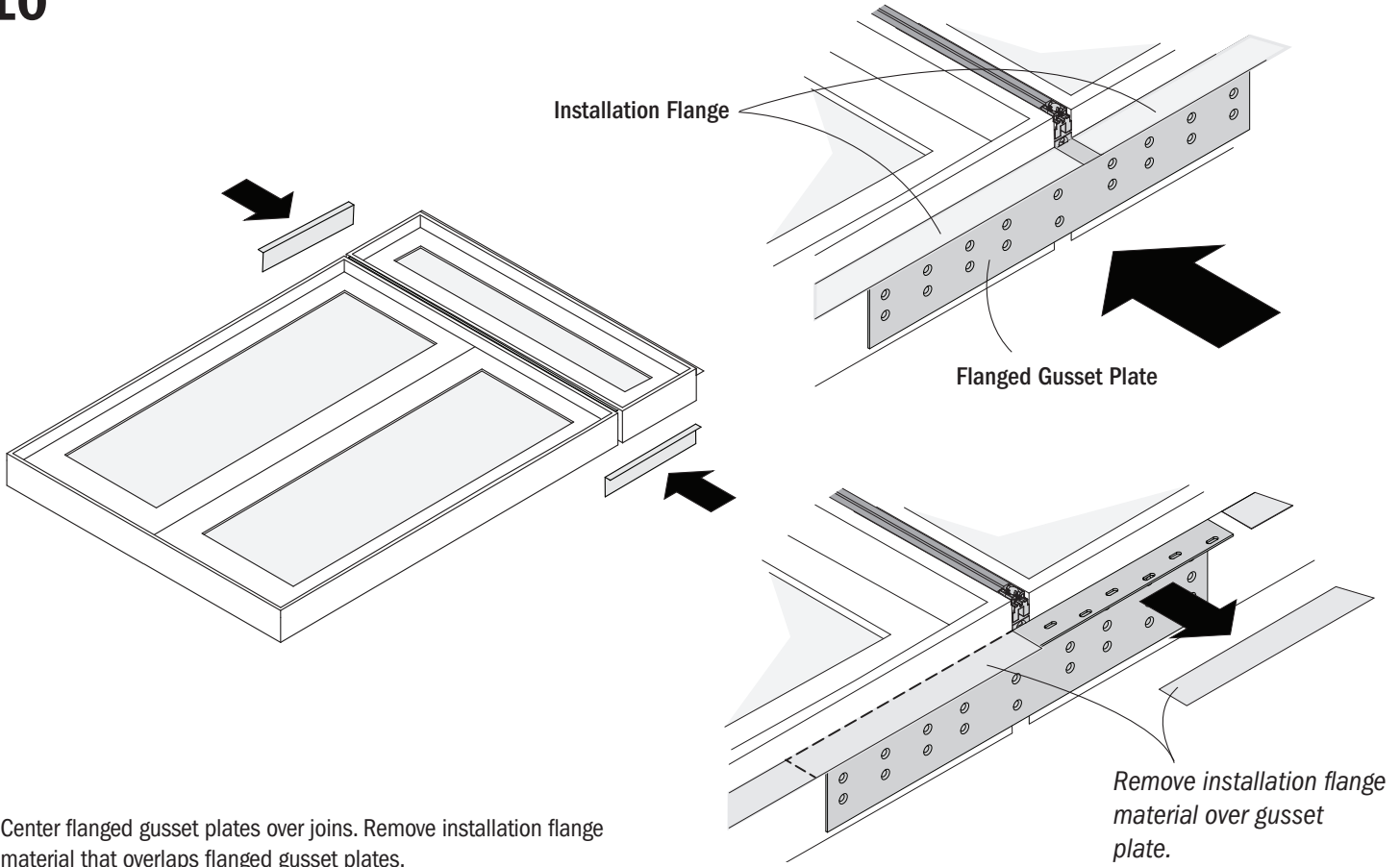


**CAUTION**  
 Joined combination is **NOT** stable until gusset plates are applied. Moving joined combination prior to gusset plate application could result in injury, product, or property damage.

Insert a locking/sealing plug into each end of the joining plates. Locking/Sealing Plugs must be flush with frames or slightly recessed when fully inserted.



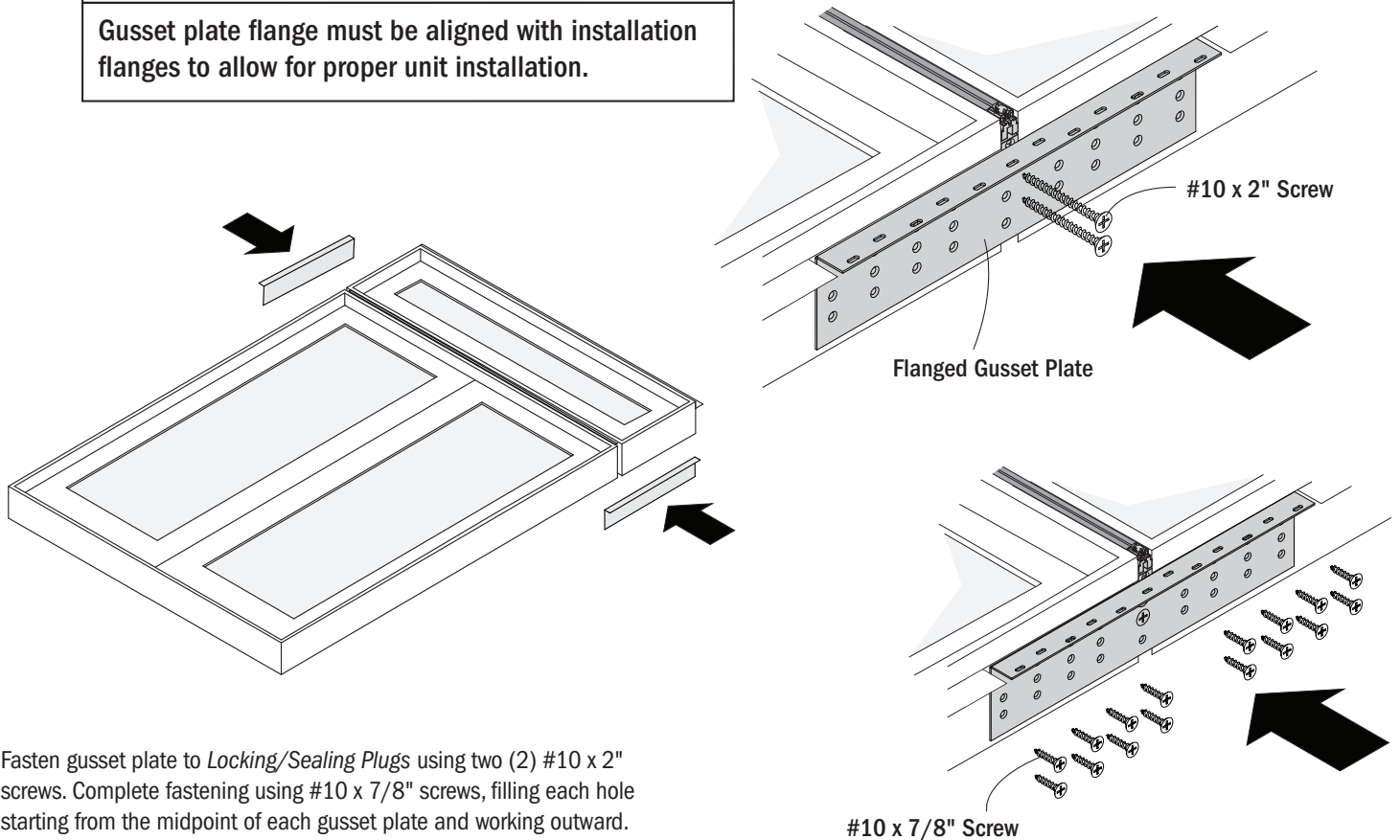
10



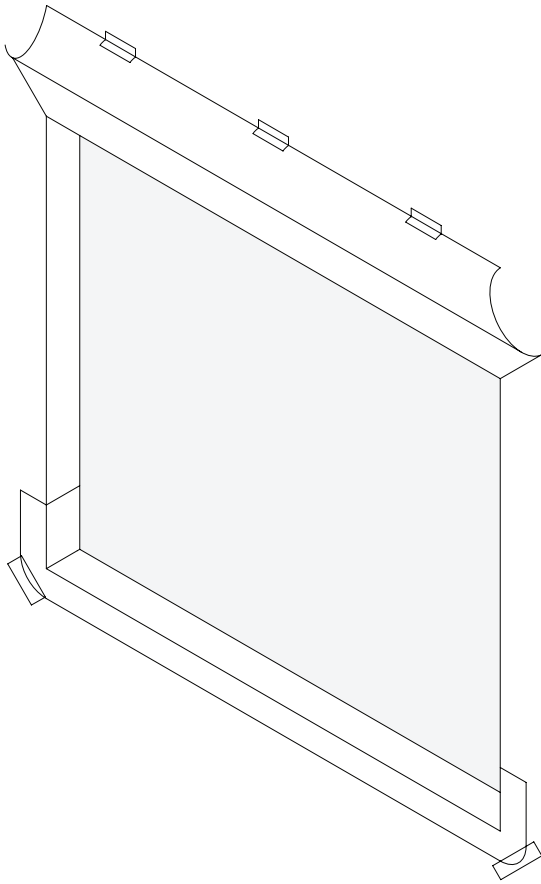
11

**IMPORTANT**

Gusset plate flange must be aligned with installation flanges to allow for proper unit installation.



12



**IMPORTANT**

Check that opening is sized correctly. Allow additional space for flashing thickness, installation clips, joining components, and their fasteners.

**NOTICE**

Read and follow these joining and installation instructions along with the window or door's individual installation instructions for additional specific opening preparation, shimming, fastening, flashing, and sealing requirements. Failure to do so could result in product or property damage and could affect operation and product performance.

Check opening for level. See window or door individual installation instructions for specific opening preparation.

13

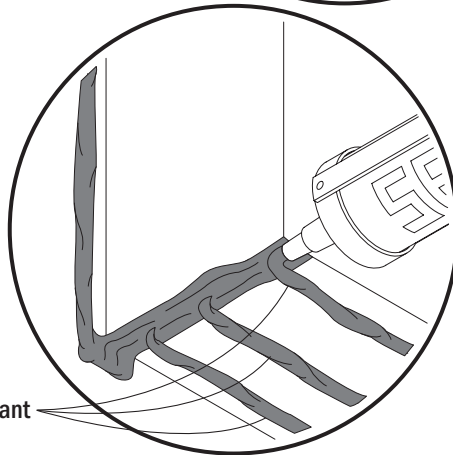
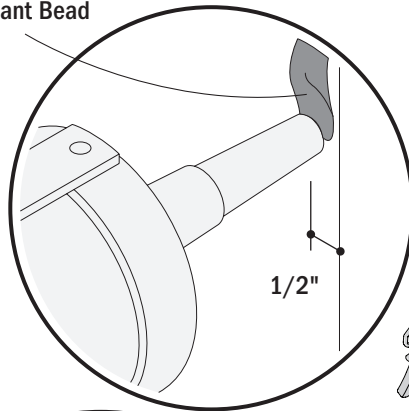
3/8" Sealant Bead

**NOTICE**

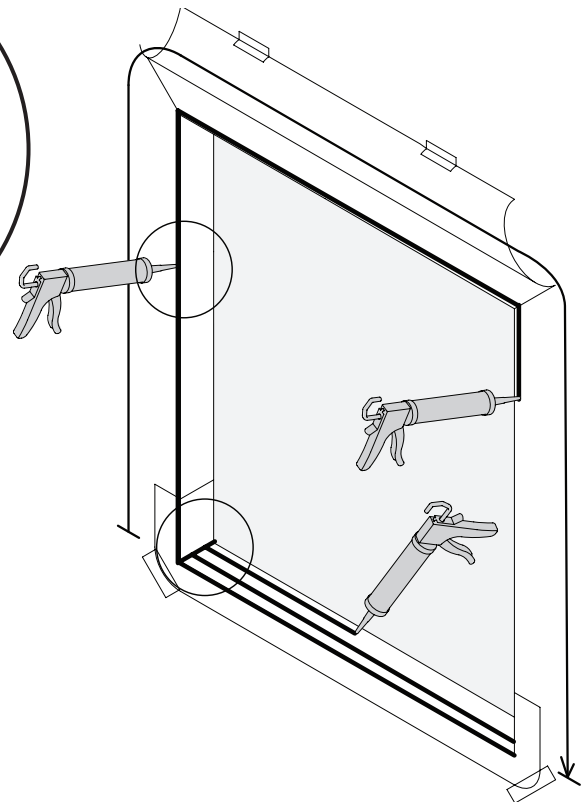
All sealant surfaces must be clean, free of debris, and have sealant applied as indicated. All units must be placed in the opening while sealant is wet. Failure to do so could result in product or property damage.

**IMPORTANT**

Sealant for installation to the rough opening is not provided. Sealant provided in the joining kit is for sealing mull joints, plugs, and exterior trim strips.

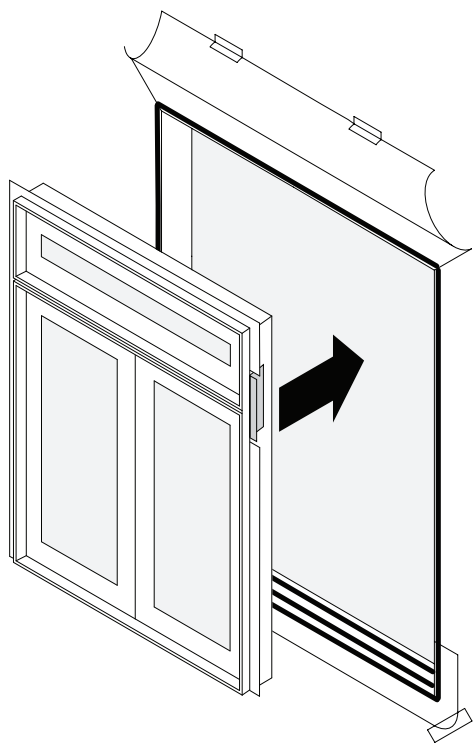


3/8" Sealant Beads



Apply sealant at top, sides, and sill. See window or door individual installation instructions for specific sealing requirements.

14

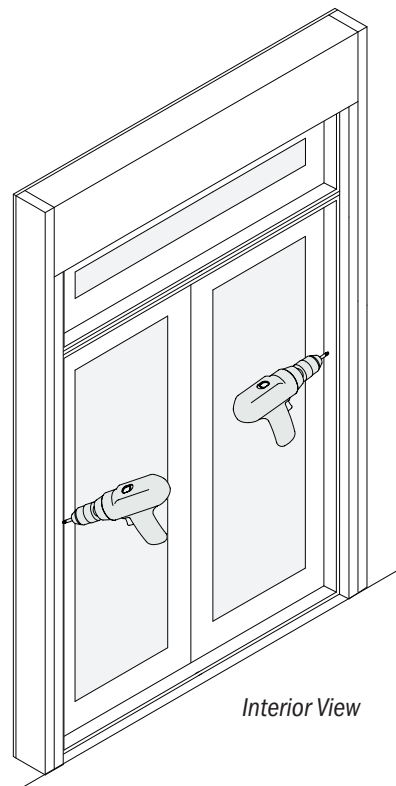


Place joined combination in the opening.

15

**IMPORTANT**

Keep installation flange tight to face of rough opening while fastening unit to rough opening.

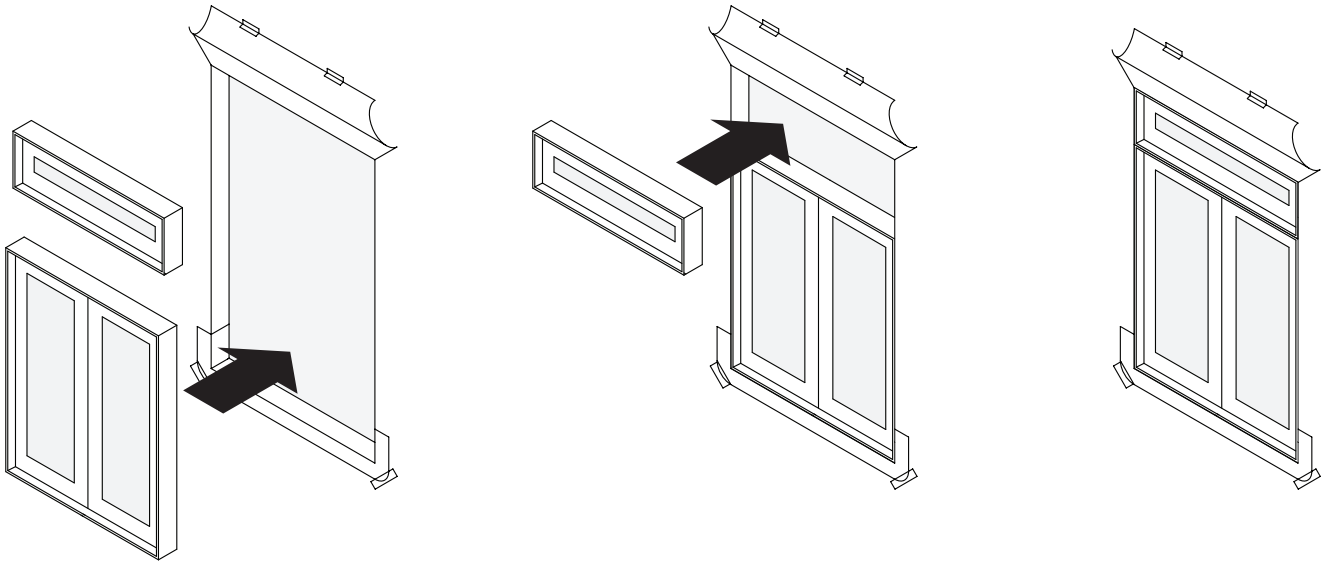


*Interior View*

Joined combination must be temporarily fastened to rough opening. Install one (1) #10 x 3" screw in each side jamb through installation screw holes to help plumb and align unit. **Do not** fully tighten screws.

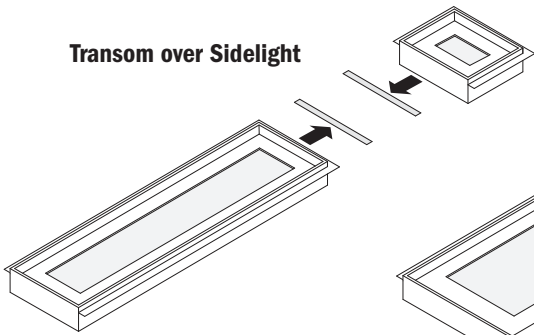
► Proceed to page 44, step 33, to continue installation.

## Horizontal Join - Join In Opening (Easy Connect Joining)

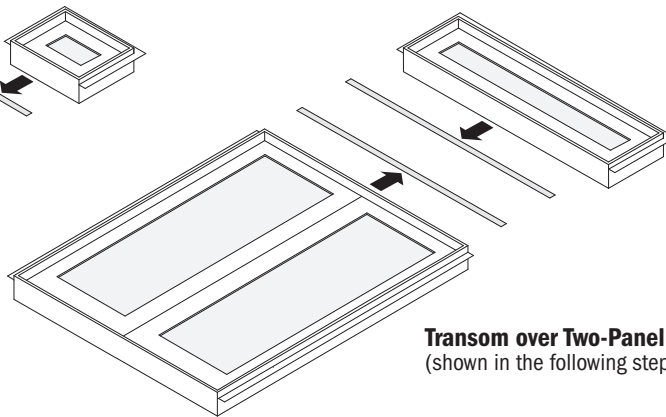


**1**

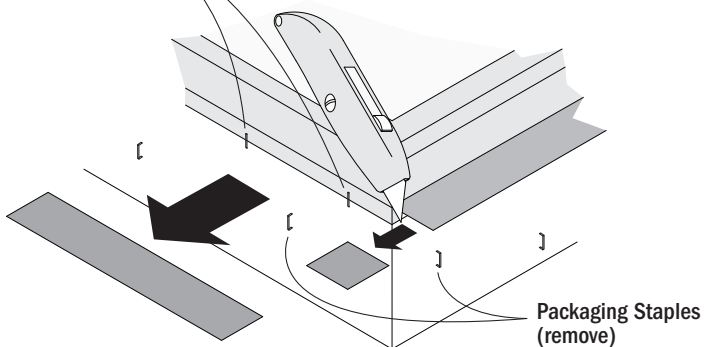
**Transom over Sidelight**



**Transom over Two-Panel Patio Door**  
(shown in the following steps)



Outer Frame Member Staples  
(do not remove)

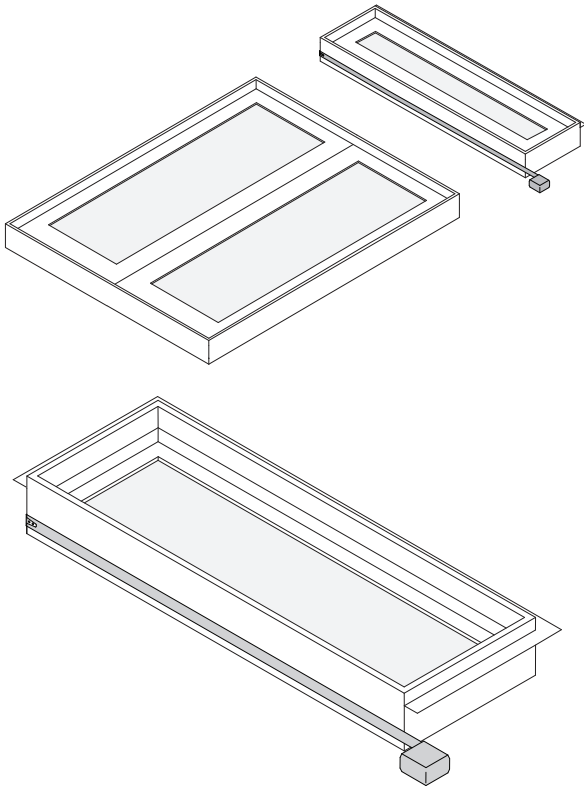


### **NOTICE**

Frames must be free of packaging staples. Check that outer frame member and frame staples and fasteners are fully seated. Failure to do so could result in product or property damage.

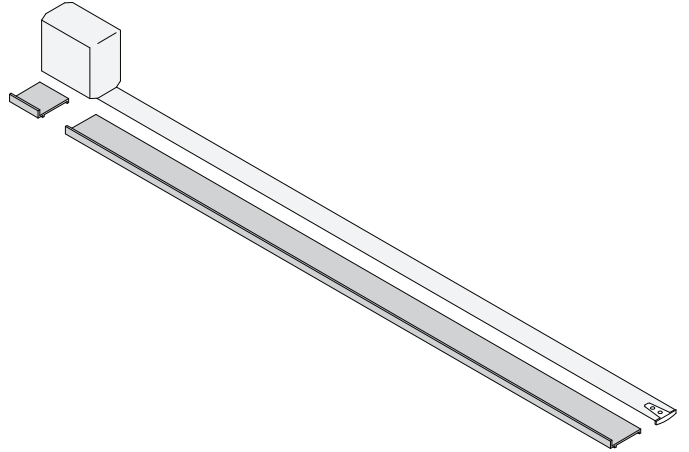
Arrange units, exterior side up, for the joined combination that will be assembled. Remove the installation flanges and orange protective film (if present) from the sides to be joined. Cut remaining installation flange(s) flush with frame. Remove packaging staples and check that outer frame member staples and fasteners are fully seated.

**2**



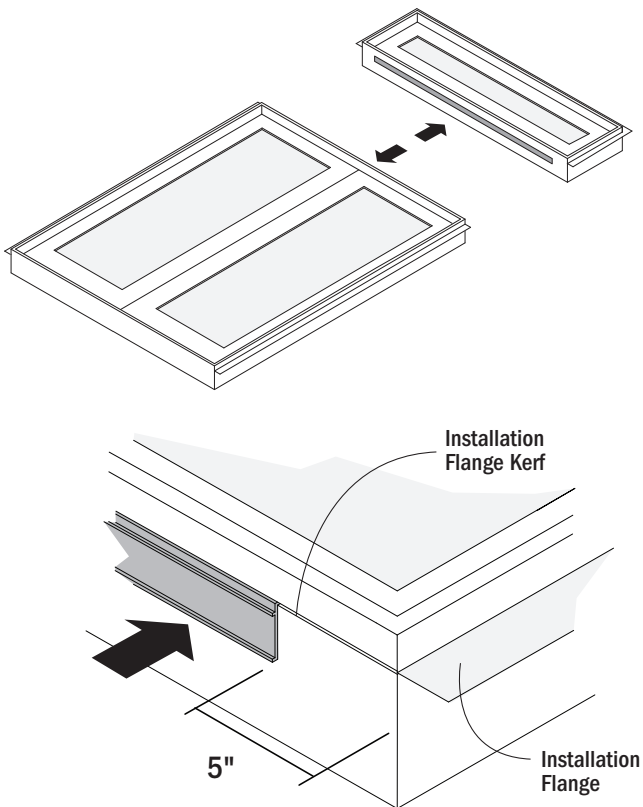
Measure the frame on the sides to be joined.

**3**



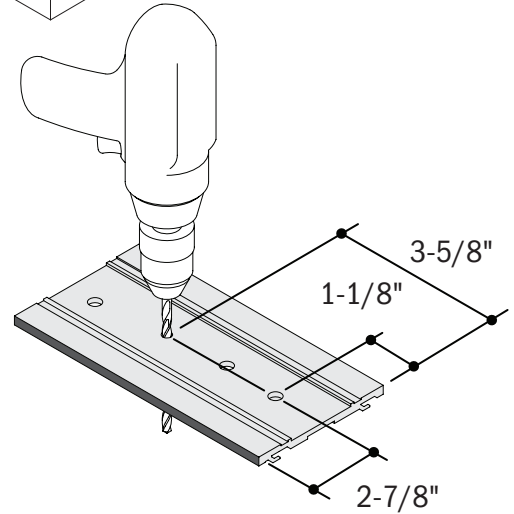
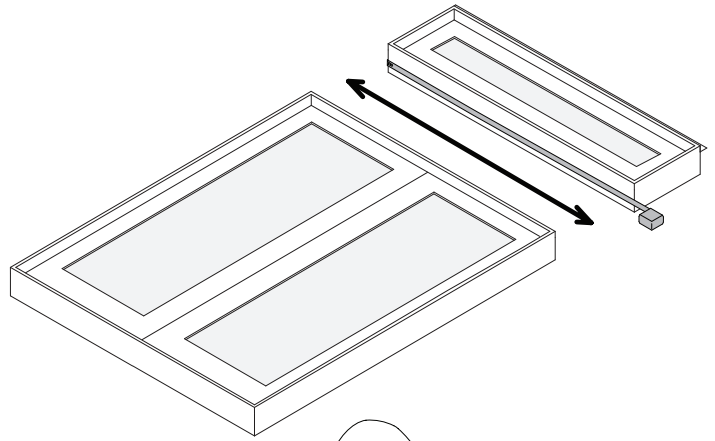
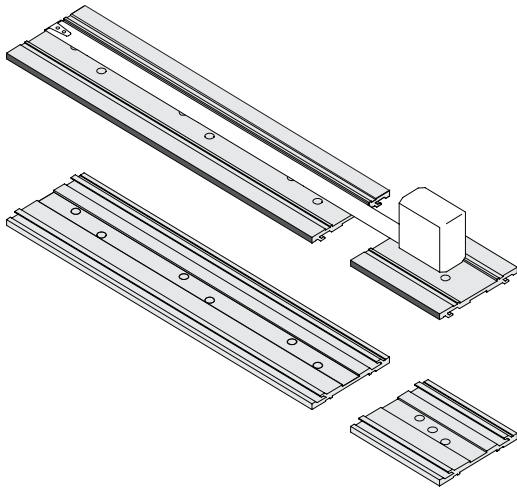
Measure alignment spacers and check that they are 10" less than the frame measurements. If not, cut to length.

**4**



Center the joining plate alignment spacers 5" from each end on the sides to be joined. Press into installation flange kerf as shown.

5



**CAUTION**

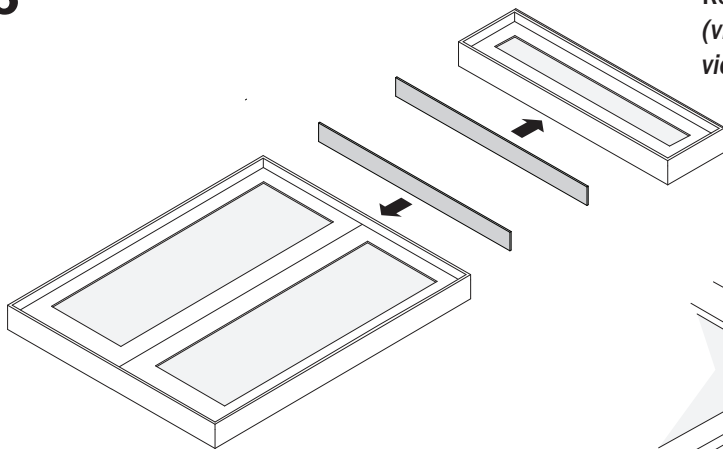
**DO NOT** inhale fiberglass dust. Use respiratory protection, safety glasses, and protective gloves and clothing. Failure to do so could result in nose, throat, skin, or eye irritation.

**IMPORTANT**

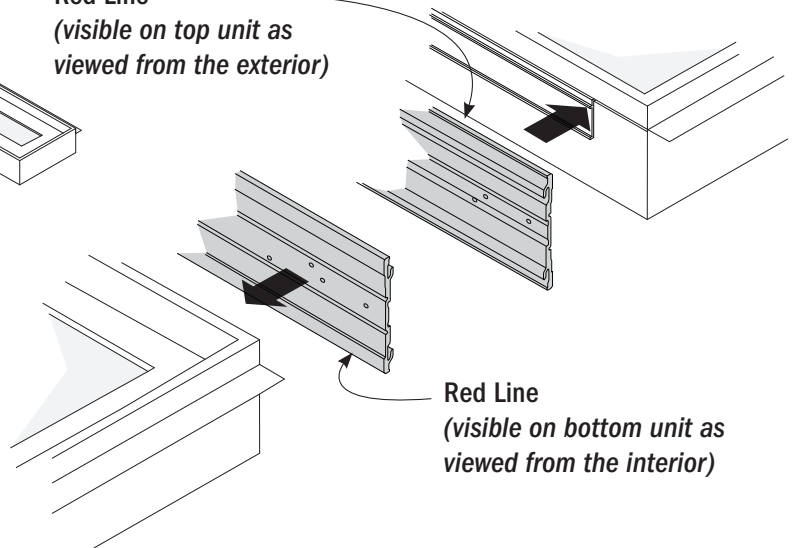
Screw hole location is important. Incorrect screw hole location will not allow proper insertion of locking/sealing plug.

Measure joining plates and check that they are 1-1/2" less than the frame measurement. If not, cut to length. Drill 1/4" holes, 1-1/8" and 3-5/8" from each end, 2-7/8" from the exterior edge of the profile.

6



Red Line  
(visible on top unit as viewed from the exterior)



Red Line  
(visible on bottom unit as viewed from the interior)

**IMPORTANT**

**Horizontal Join (as viewed from the exterior):** Joining plate with the red identification line is located on the top unit.

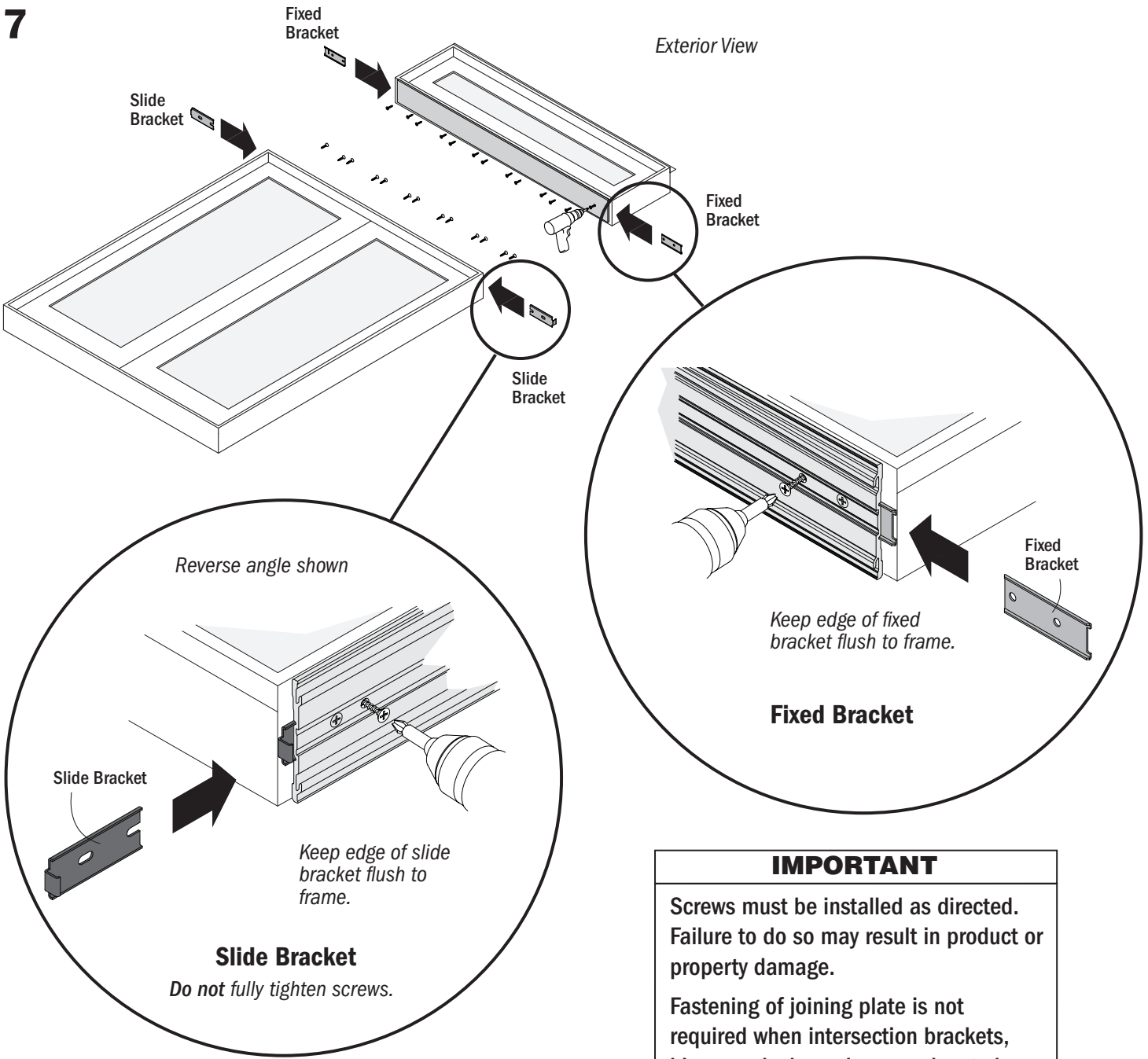
Joining plates must be positioned 3/4" from the frame's edge. Failure to do so will restrict locking plug placement.

Center the joining plates on the frame sides to be joined, 3/4" from each end and flush to the exterior.

3/4"

7

Exterior View



**IMPORTANT**

Screws must be installed as directed. Failure to do so may result in product or property damage.

Fastening of joining plate is not required when intersection brackets, hinges or lock receivers are located behind joining plate.

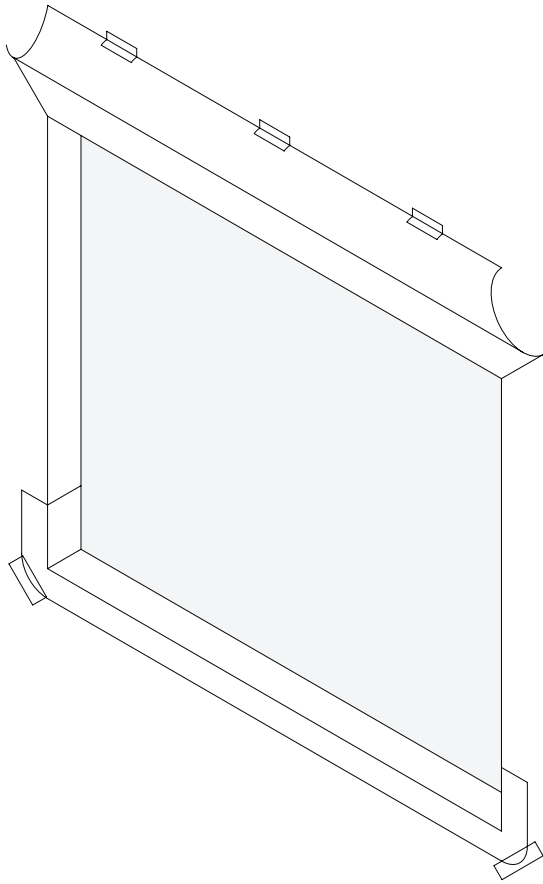
Insert slide brackets between joining plate and frame at the top of the lower unit (as viewed from the exterior). Fasten slide brackets using two (2) #10 x 7/8" screws. **Do Not** fully tighten screws. Screws should be close to fully seated, but still allow bracket to slide.

Insert fixed brackets between joining plate and frame at the bottom of the transom unit (as viewed from the exterior). Fully tighten fixed brackets using two (2) #10 x 7/8" screws.

Fasten joining plates through all remaining holes using #10 x 7/8" screws.



8



### **IMPORTANT**

Check that opening is sized correctly. Allow additional space for flashing thickness, installation clips, joining components, and their fasteners.

### **NOTICE**

Read and follow these joining and installation instructions along with the window or door's individual installation instructions for additional specific opening preparation, shimming, fastening, flashing, and sealing requirements. Failure to do so could result in product or property damage and could affect operation and product performance.

Check opening for level. See window or door individual installation instructions for specific opening preparation.

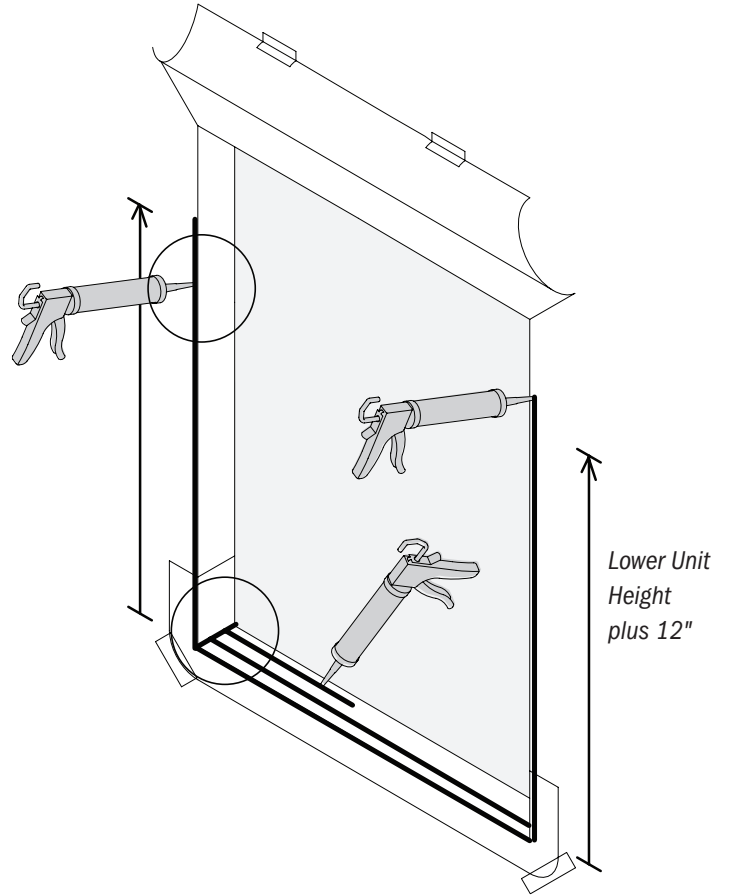
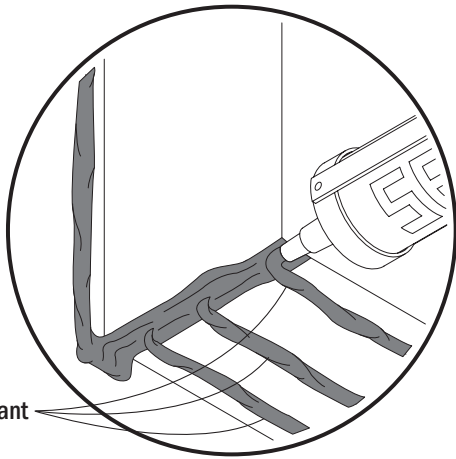
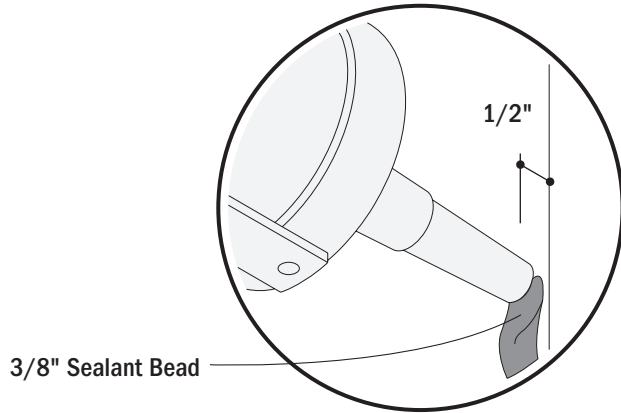
9

**NOTICE**

All sealant surfaces must be clean, free of debris, and have sealant applied as indicated. All units and partial combinations must be assembled in the opening while sealant is wet. Failure to do so could result in product or property damage.

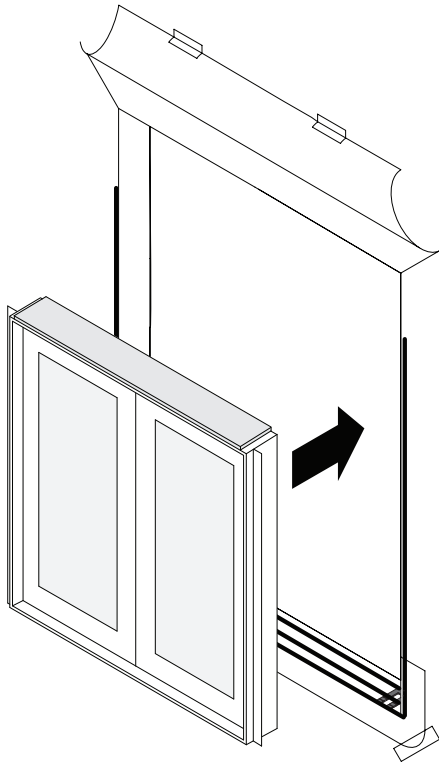
**IMPORTANT**

Sealant for installation to the rough opening is not provided. Sealant provided in the joining kit is for sealing mull joints, plugs, and exterior trim strips.



Apply sealant at the sill and sides of opening. Make beads at the sides the height of the lower unit plus 12". See below for sill sealing requirements. See window or door individual installation instructions for specific sealing requirements.

10

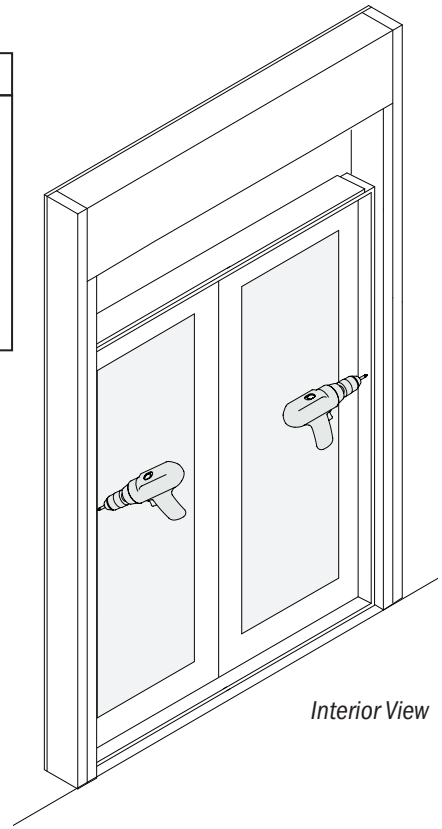


Place lower unit in the opening.

11

**IMPORTANT**

Keep installation flange tight to face of rough opening while fastening unit to rough opening.

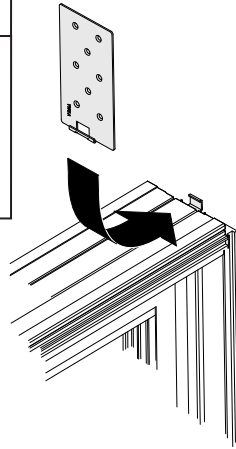


*Interior View*

Unit must be temporarily fastened to rough opening. Install one (1) #10 x 3" screw in each side jamb through installation screw holes to help plumb and align unit. **Do not** fully tighten screws

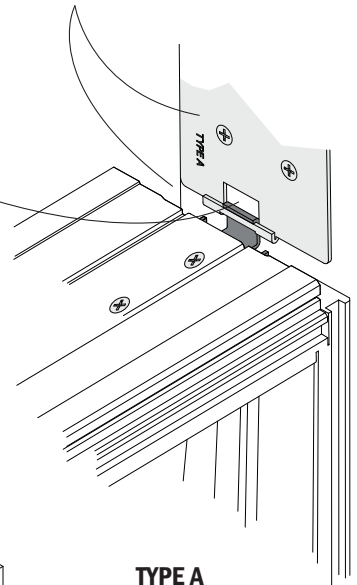
**IMPORTANT**

*Flat Slide Gusset* placement with *Slide Bracket* is important. Improper placement will not allow movement and centering of joined combination in opening.

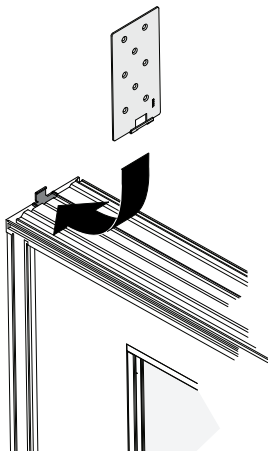


**Flat Slide Gusset**  
Flush with exterior face of rough opening.

Maintain 3/8" gap, as shown, and align slide bracket square to rough opening when fastening.

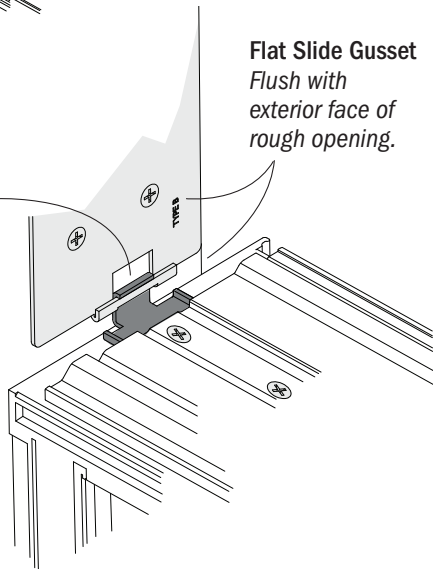


**TYPE A**  
Flat Slide Gusset

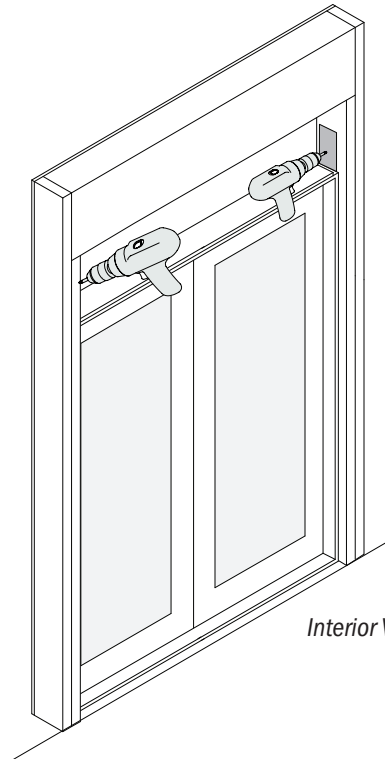


**Flat Slide Gusset**  
Flush with exterior face of rough opening.

Maintain 3/8" gap, as shown, and align slide bracket square to rough opening when fastening.



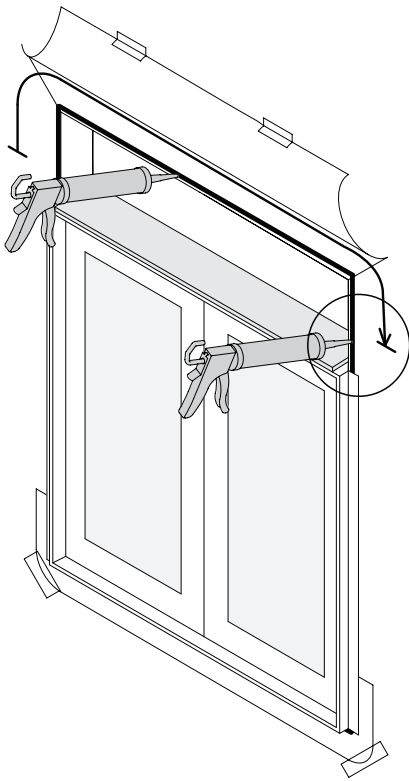
**TYPE B**  
Flat Slide Gusset



Interior View

Position *Flat Slide Gusset* over *Slide Bracket* as shown and fasten. See fastener chart for approved fasteners. Use *Type A Flat Slide Gusset* on the left side, as viewed from the exterior, and *Type B Flat Slide Gusset* on the right side, as viewed from the exterior. Make sure unit is in alignment with the edge of the rough opening before fastening. Tighten slide bracket screws after flat slide gussets are installed.

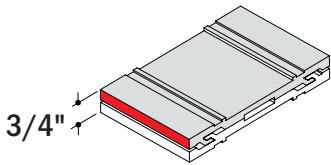
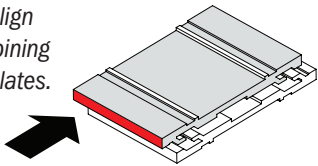
13



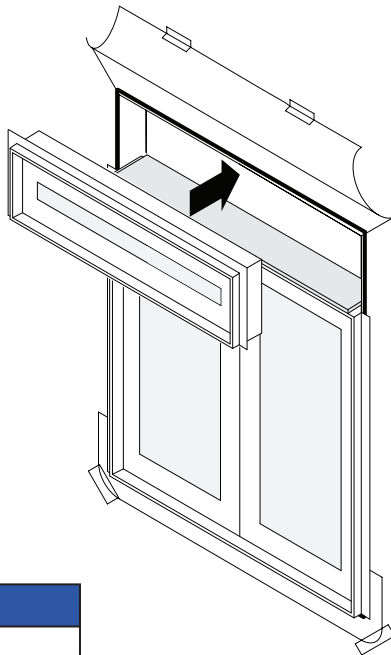
Apply sealant at sides and top connecting to previously applied sealant.

14

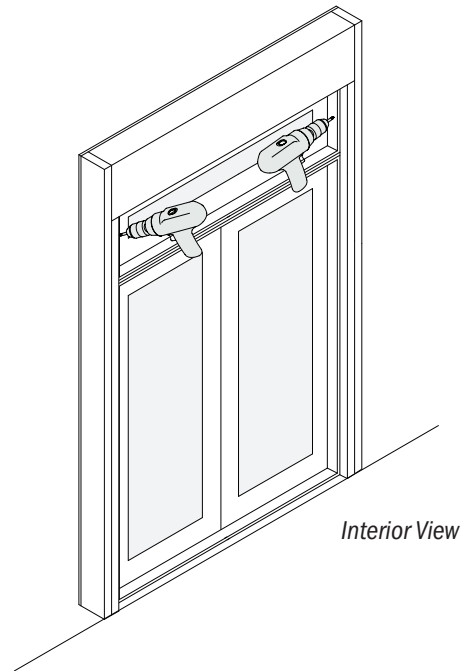
Align joining plates.



Joining plates fully engaged.



Exterior View



Interior View

**NOTICE**

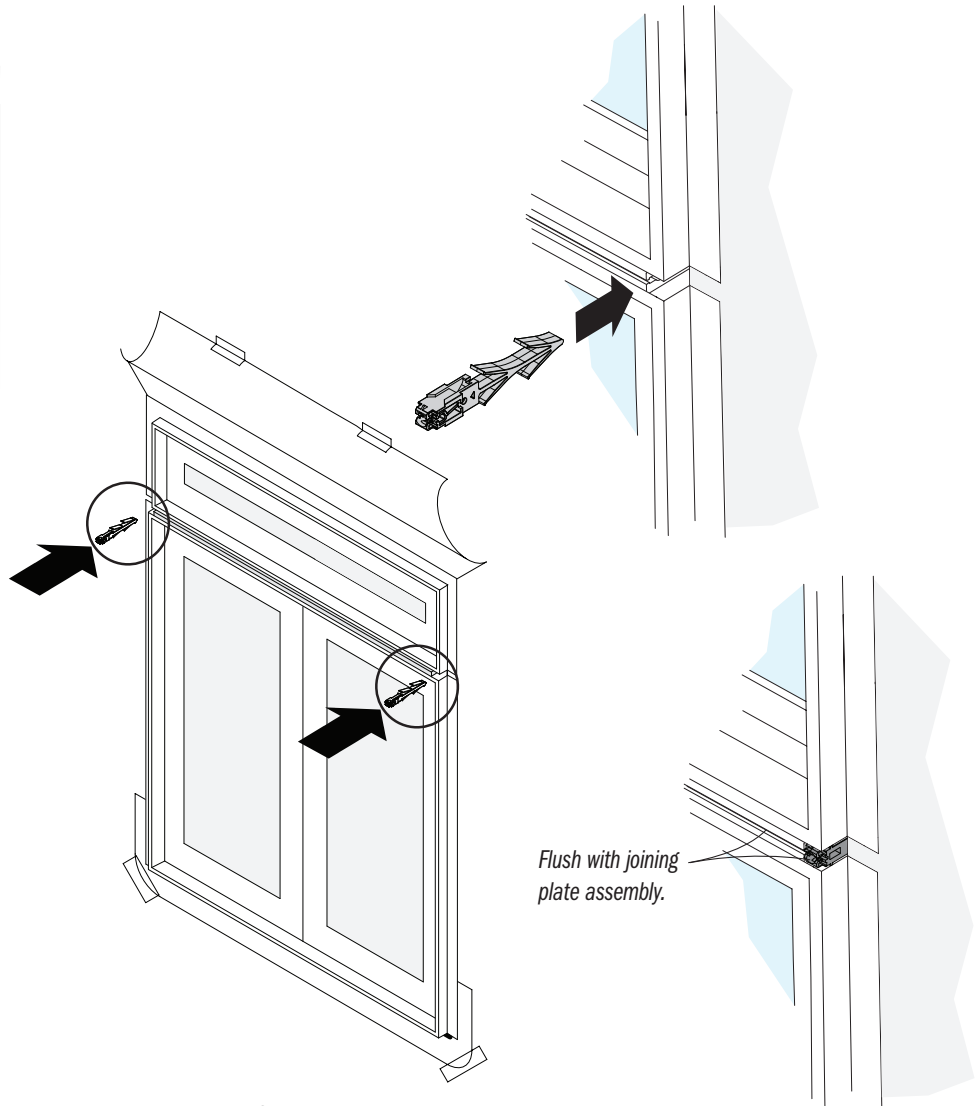
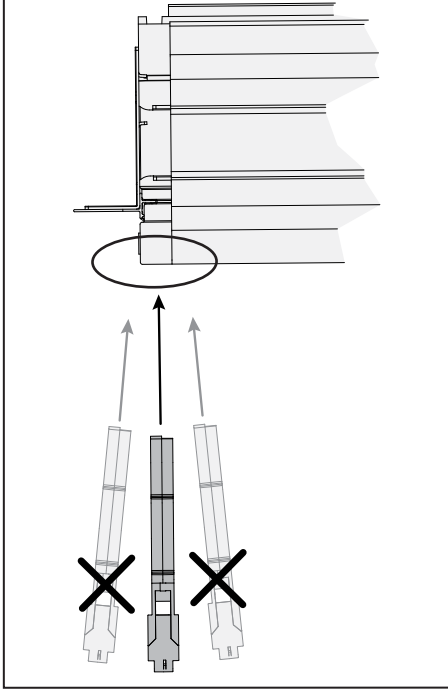
Make sure joining plate legs are fully engaged. Joining plates will be flush when fully seated and width of the joining plate assembly will be 3/4". Failure to do so could result in product or property damage.

Position top unit, align joining plates, and slide unit until joining plate legs are fully engaged. Unit must be temporarily fastened to rough opening. Fasten one (1) #10 x 2" screws through each side jamb and one (1) #10 x 3" screw in the head jamb through installation holes to help plumb and align unit. **Do not** fully tighten screws.

# 15

## NOTICE

Insert *Join in Opening End Plugs* straight, as shown, until plugs sit flush with exterior face of joining plate. Failure to do so could result in product or property damage.

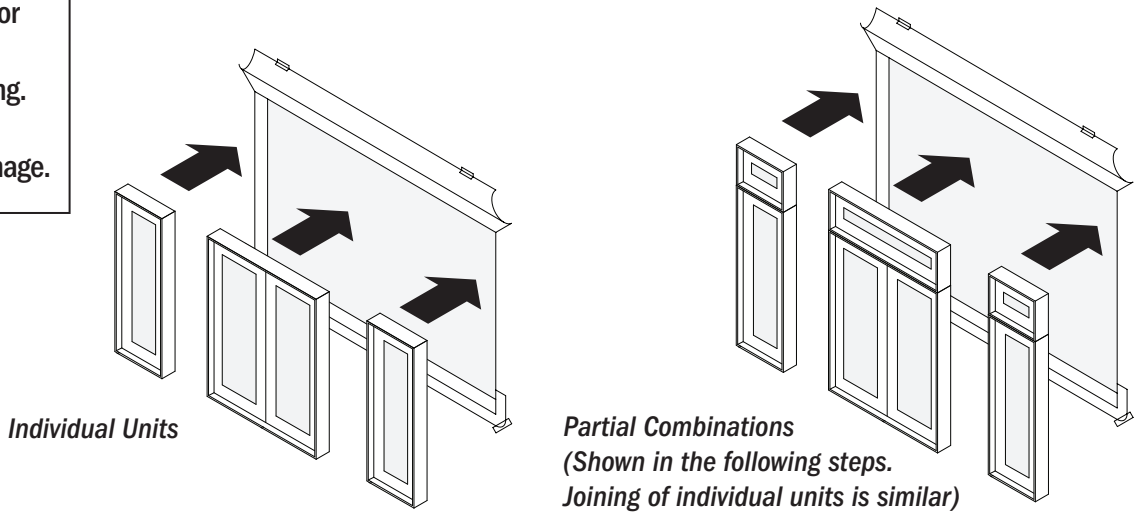


Insert *Join in Opening End Plugs* at ends of continuous joins. Plugs will sit flush with joining plate assembly.

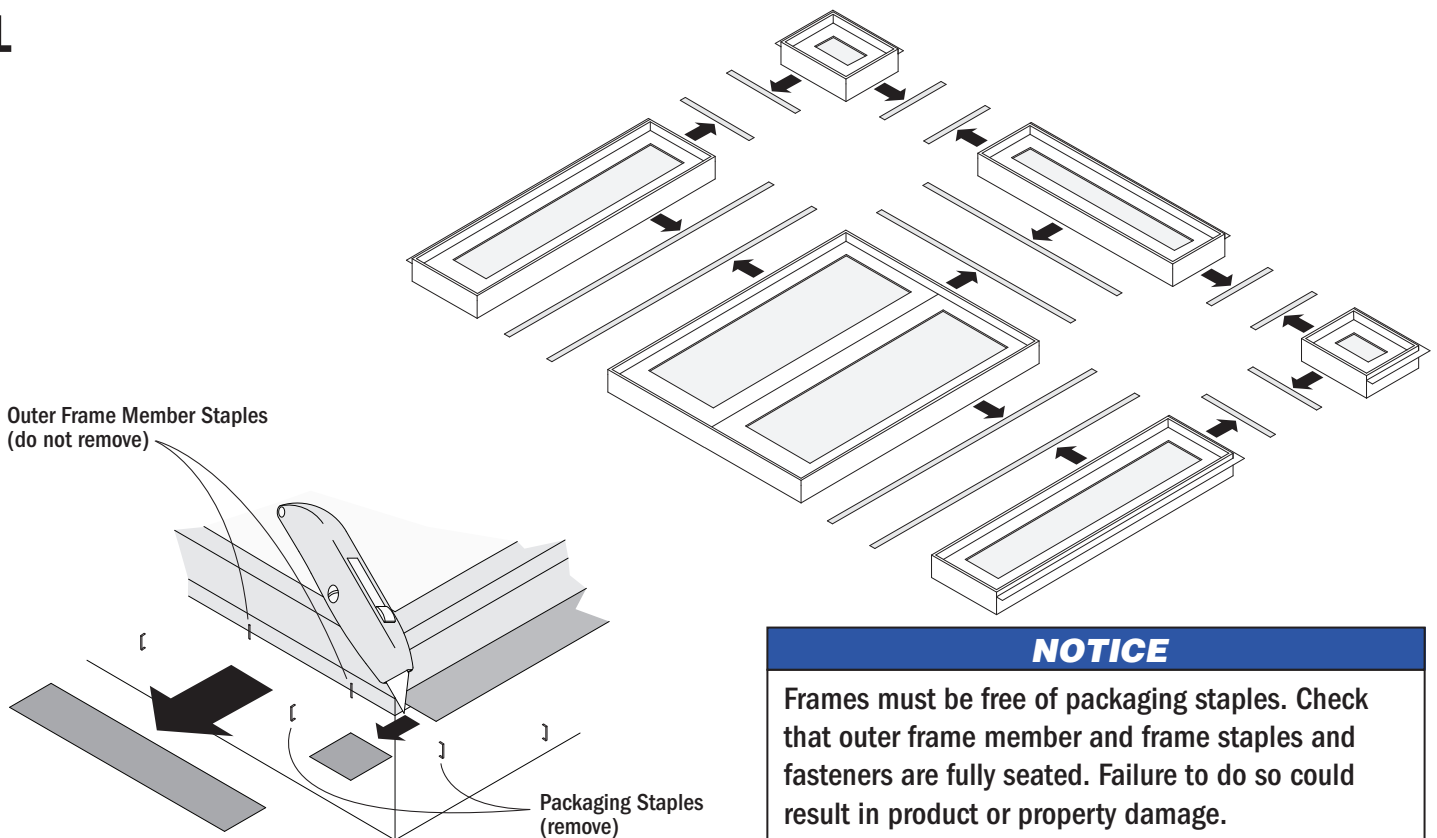
- ▶ Proceed to page 44, step 33 to continue installation.

**CAUTION**

ALL vertical joins of individual or partial combinations must be assembled in the rough opening. Failure to do so could result in injury, product or property damage.



**1**



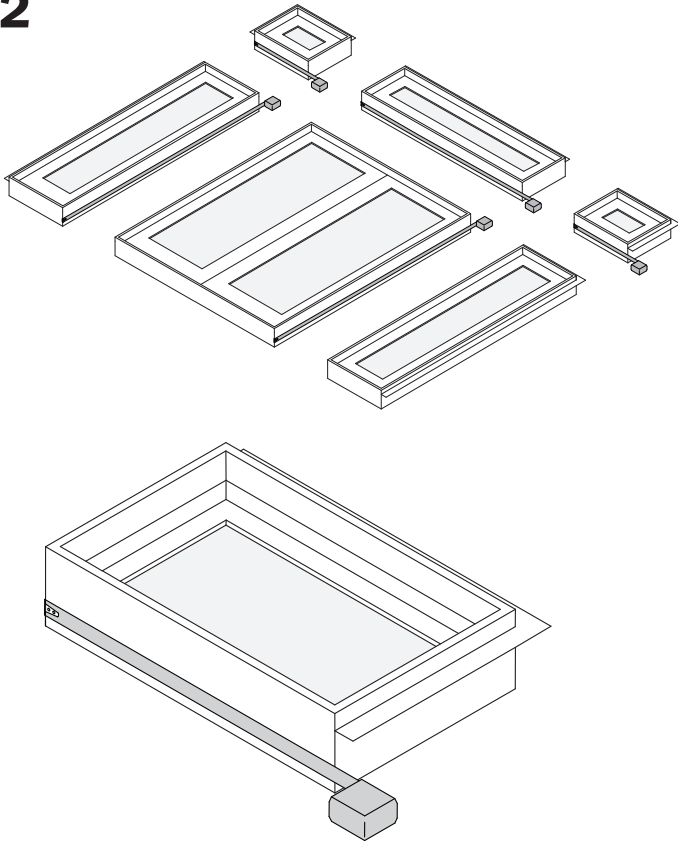
**NOTICE**

Frames must be free of packaging staples. Check that outer frame member and frame staples and fasteners are fully seated. Failure to do so could result in product or property damage.

Arrange units, exterior side up, for the joined combination that will be assembled. Remove the installation flanges and orange protective film (if present) from the sides to be joined. Cut remaining installation flange(s) flush with frame. Remove packaging staples and check that outer frame member staples and fasteners are fully seated.

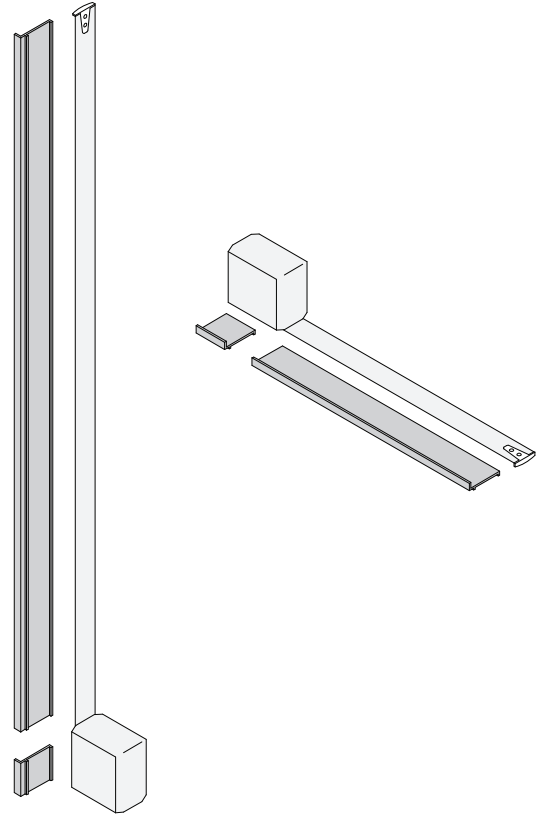


2



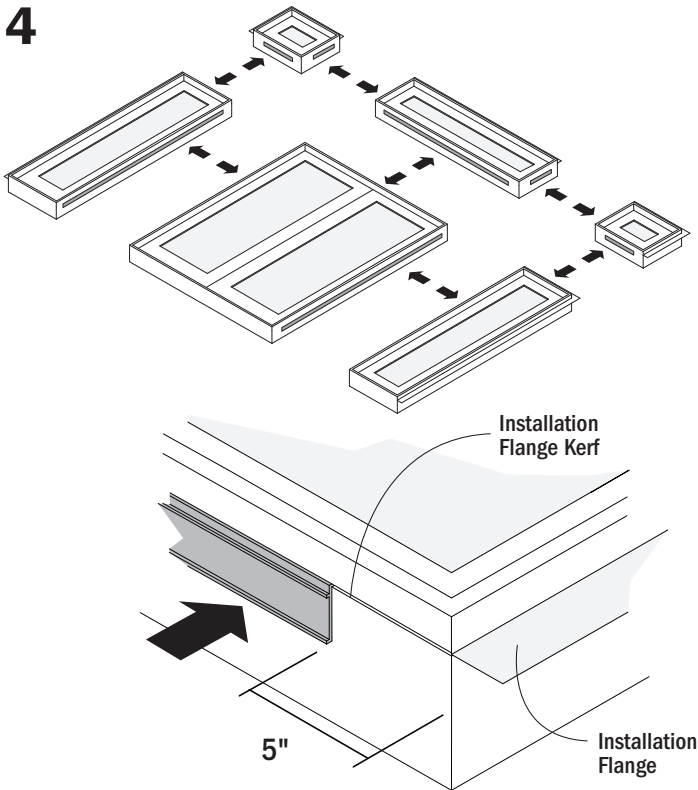
Measure the frame on the sides to be joined.

3



Measure alignment spacers and check that they are 10" less than the frame measurements. If not, cut to length.

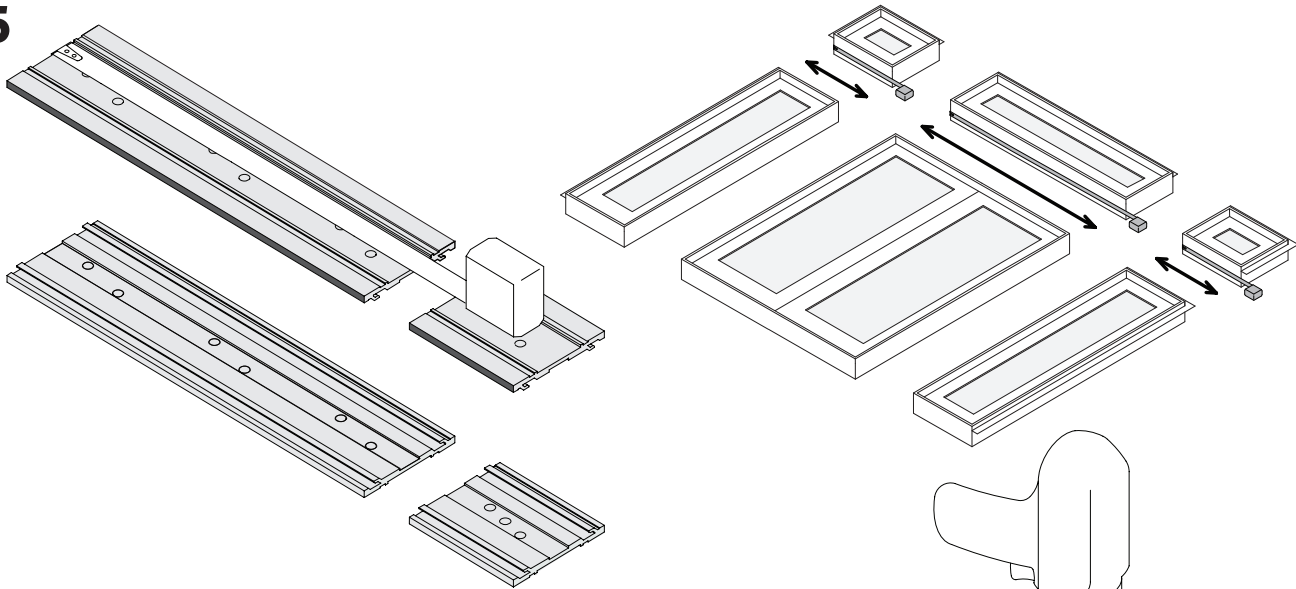
4



Center the joining plate alignment spacers 5" from each end on the sides to be joined. Press into installation flange kerf as shown.

- ▶ If installing individual units only (not partial combinations), proceed to step 13.

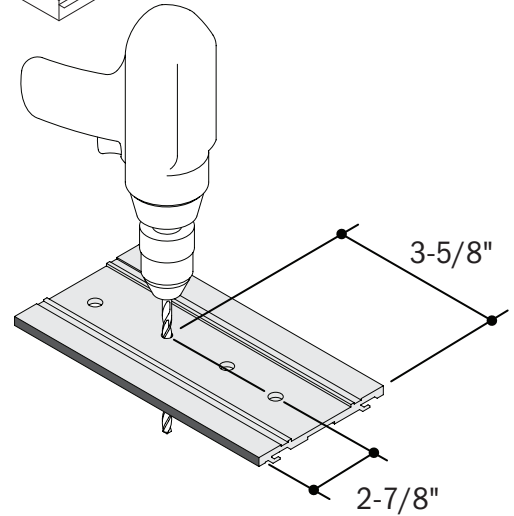
5



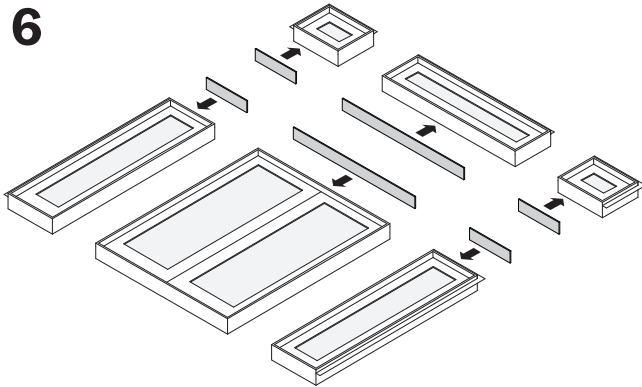
**IMPORTANT**

Screw hole location is important. Incorrect screw hole location will not allow proper insertion of locking/sealing plug.

Measure joining plates (for horizontal joins) and check that they are 1-1/2" less than the frame measurement. If not, cut to length. Drill a 1/4" hole, 3-5/8" from each end and 2-7/8" from the exterior edge of the profile.



6



**IMPORTANT**

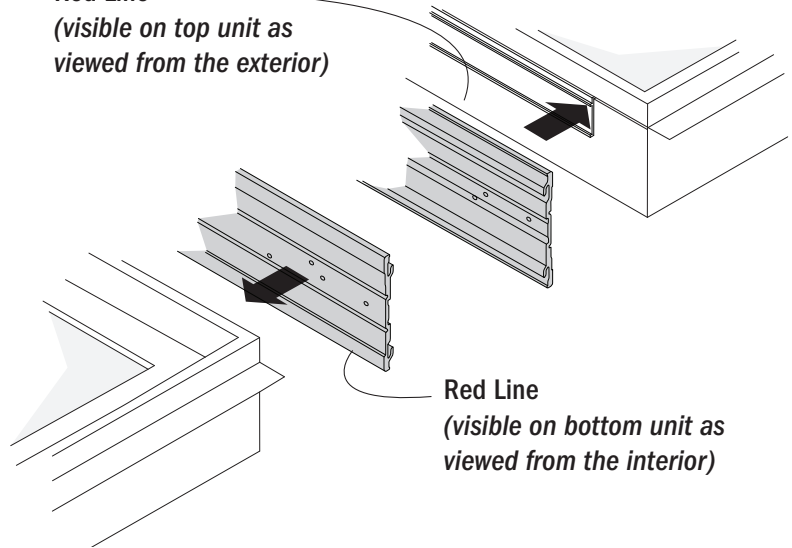
**Horizontal Join (as viewed from the exterior):**  
Joining plate with the red identification line is located on the top unit.

**Vertical Join (as viewed from the exterior):**  
Joining plate with the red identification line is located on the right unit.

Joining plates must be positioned 3/4" from the frame's edge. Failure to do so will restrict locking/sealing plug placement.

Center the joining plates on the frame sides to be joined, 3/4" from each end and flush to the exterior.

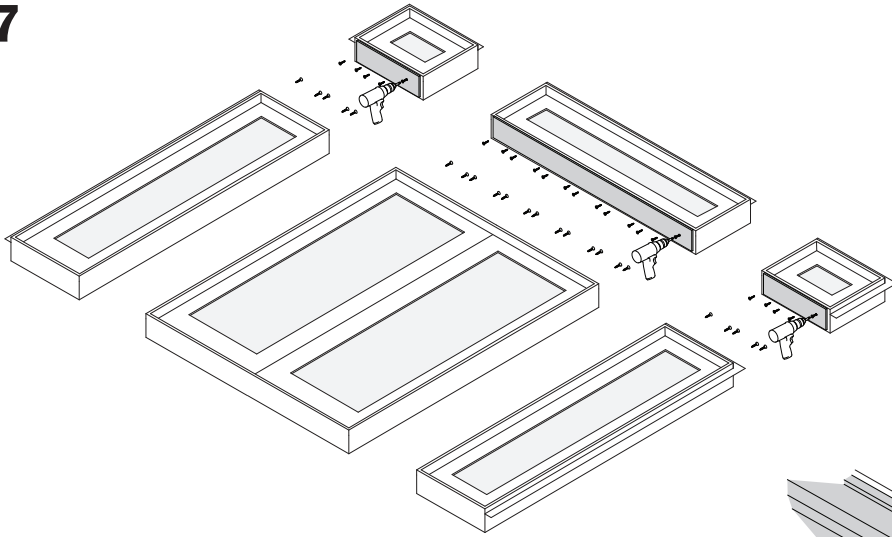
Red Line  
(visible on top unit as viewed from the exterior)



Red Line  
(visible on bottom unit as viewed from the interior)

3/4"

7

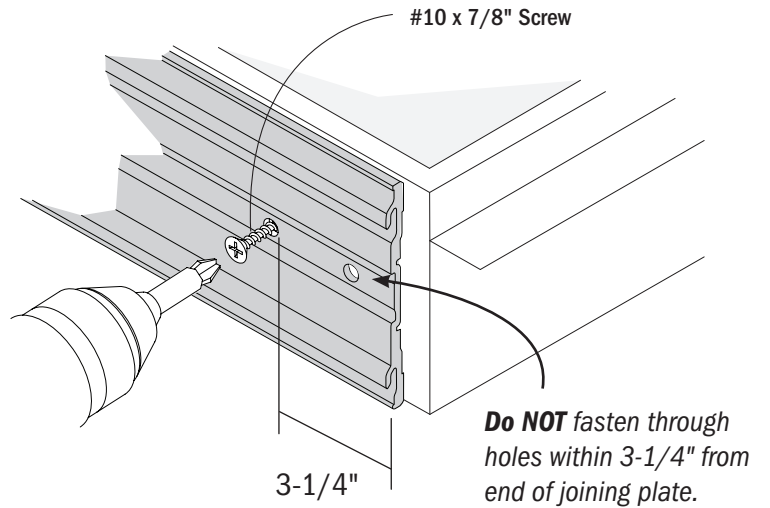


**IMPORTANT**

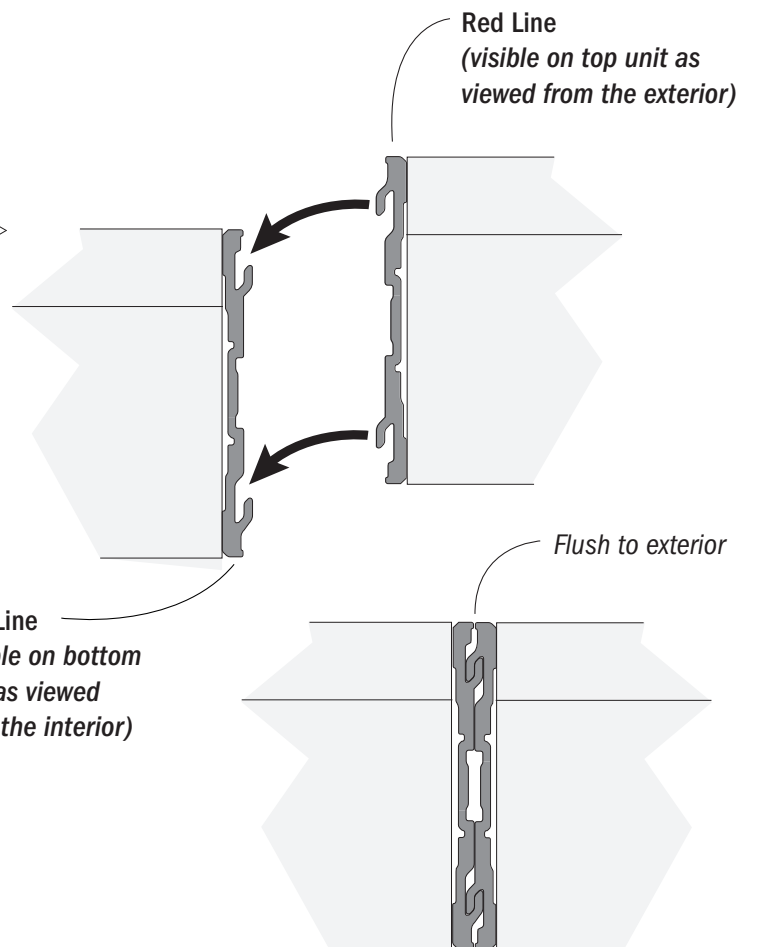
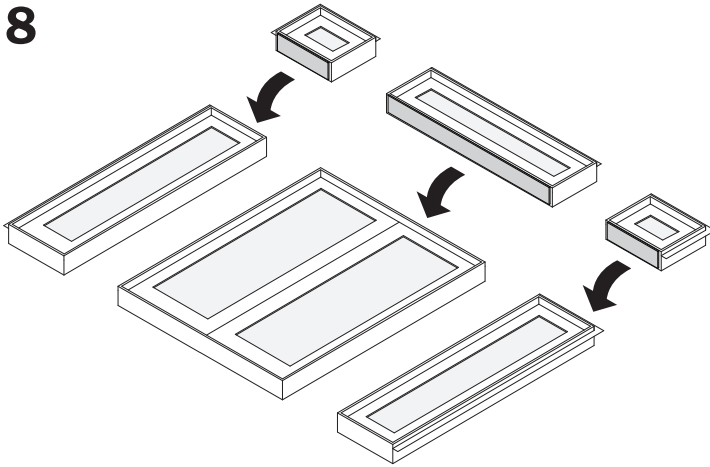
**DO NOT** fasten joining plates within 3-1/4" from the end of the joining plate. Doing so will restrict locking/sealing plug placement.

Fastening of joining plate is not required when intersection brackets, hinges or lock receivers are located behind joining plate.

Fasten the joining plates through every hole that is more than 3-1/4" from the end of the joining plate using #10 x 7/8" screws provided.

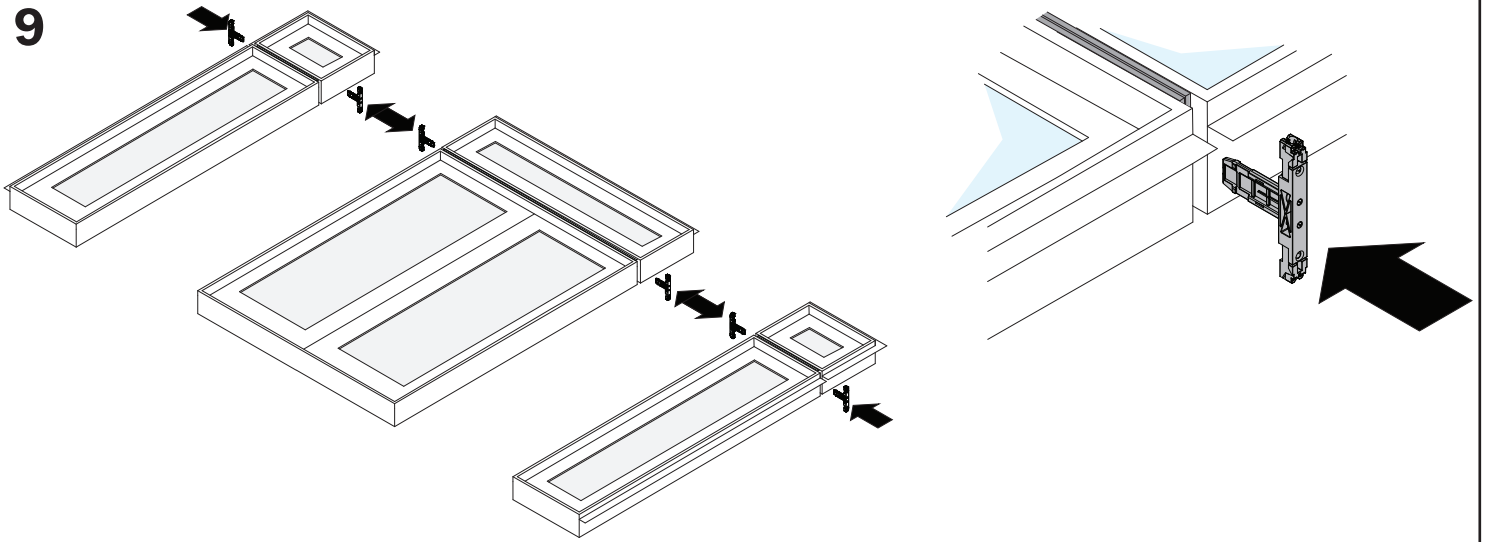


8



Assemble the units together, interlocking the joining plates. Products will be flush on the exterior when joining plates are fully seated.

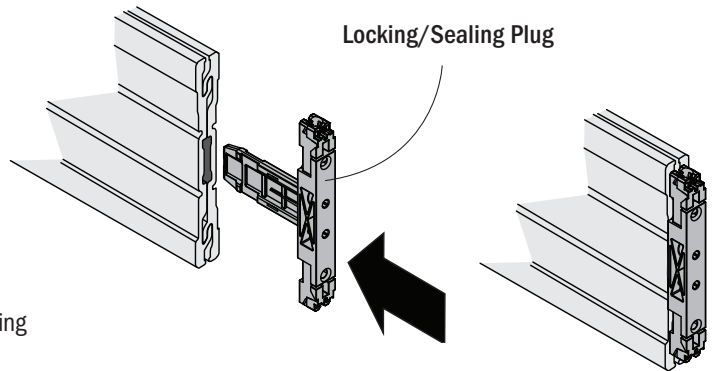
9



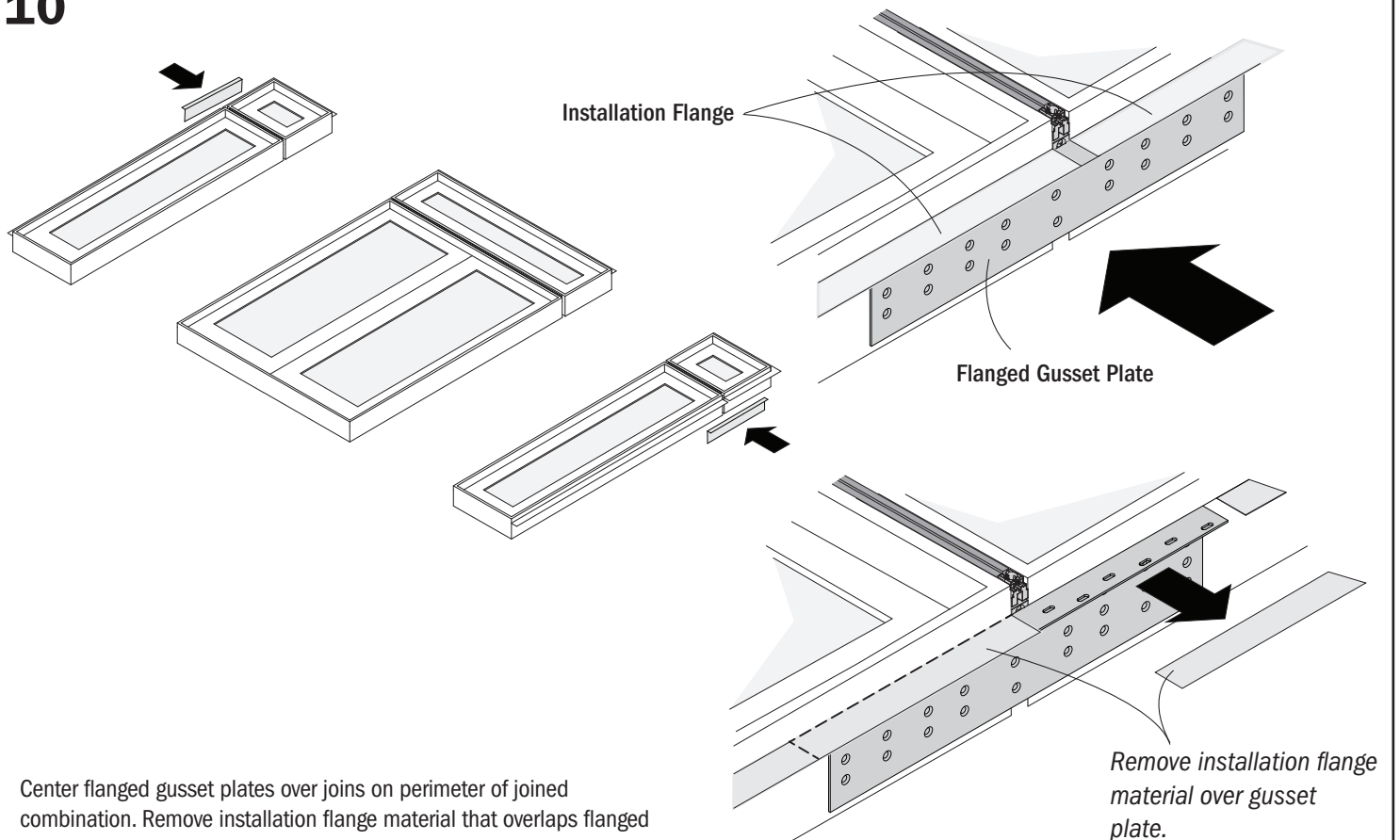
**CAUTION**

Joined combination is **NOT** stable until gusset plates and intersection brackets are applied. Moving joined combination prior to gusset plate and intersection bracket application could result in injury, product, or property damage.

Insert a locking/sealing plug into each end of the joining plates. Locking/Sealing Plugs must be flush with frames or slightly recessed when fully inserted.



10



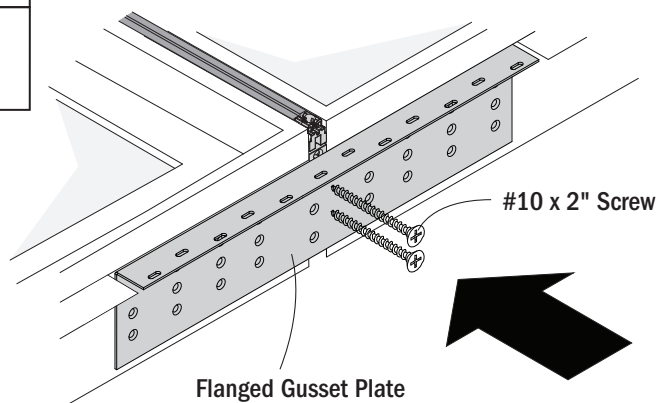
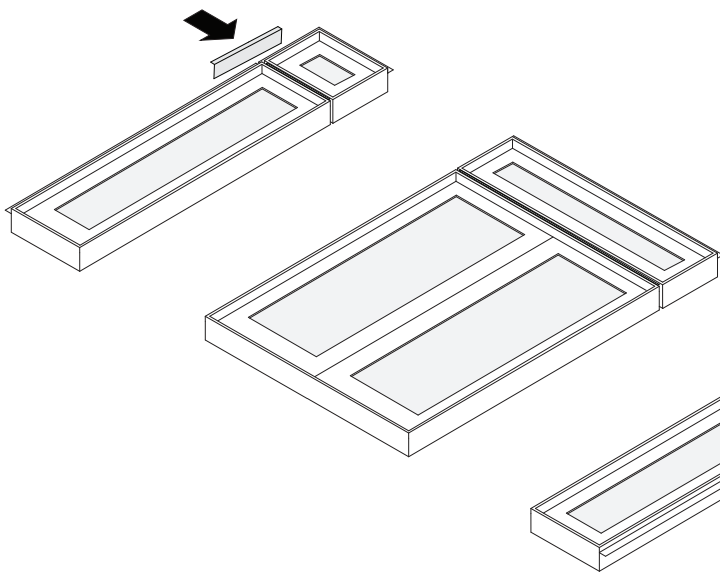
Center flanged gusset plates over joins on perimeter of joined combination. Remove installation flange material that overlaps flanged gusset plates.

*Remove installation flange material over gusset plate.*

11

**IMPORTANT**

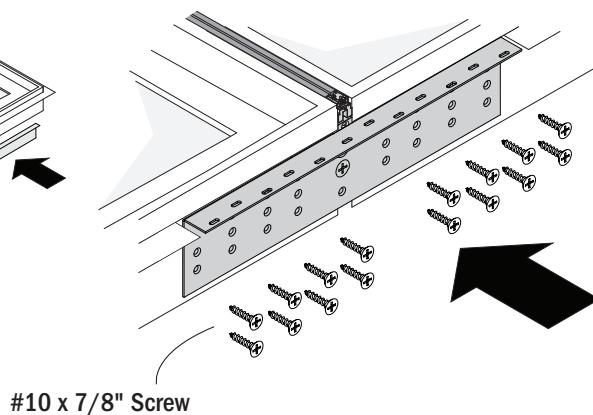
Gusset plate flange must be aligned with installation flanges to allow for proper unit installation.



Flanged Gusset Plate

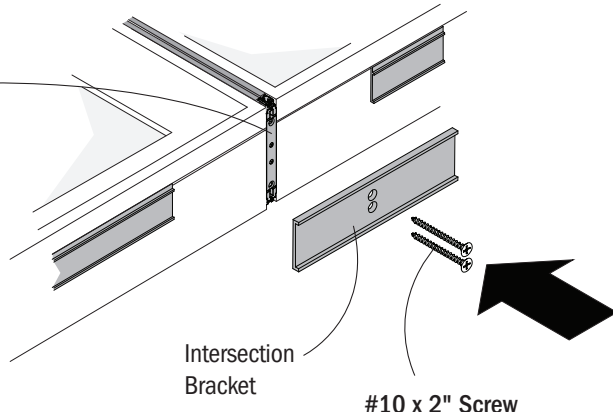
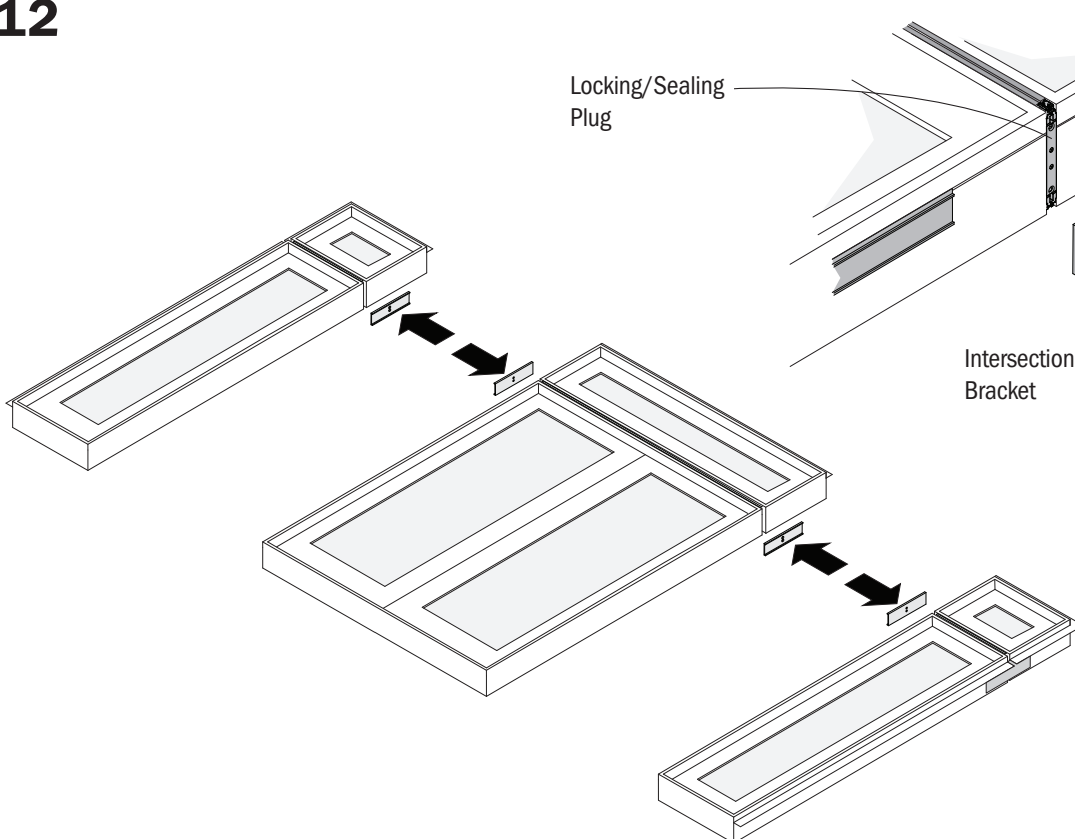
#10 x 2" Screw

Fasten gusset plate to Locking/Sealing Plugs using two (2) #10 x 2" screws. Complete fastening using #10 x 7/8" screws, filling each hole starting from the midpoint of each gusset plate and working outward.



#10 x 7/8" Screw

12



Locking/Sealing Plug

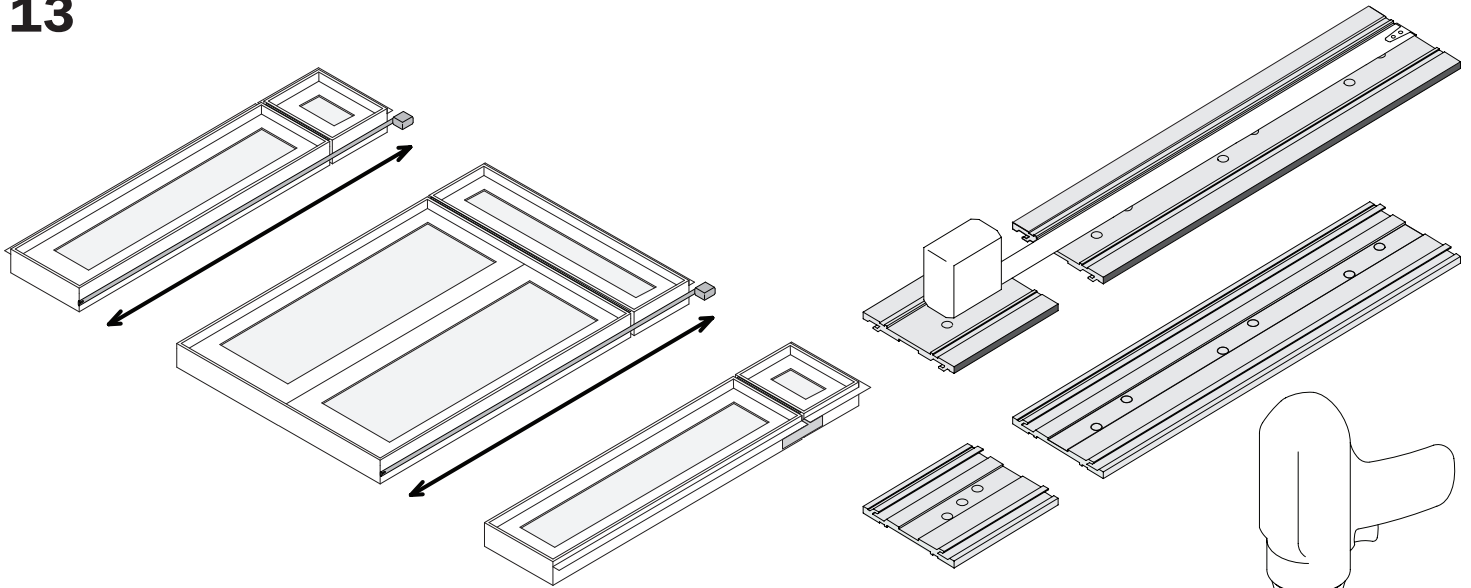
Intersection Bracket

#10 x 2" Screw

Center intersection brackets over joins on the interior of the joined combination. Fasten intersection brackets to locking/sealing plugs using two (2) #10 x 2" screws.



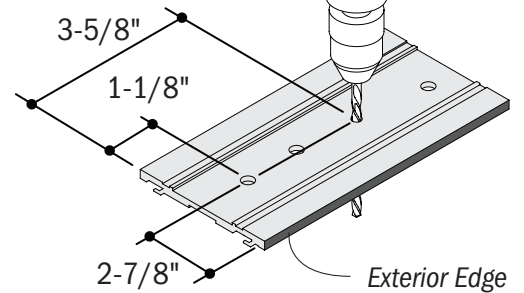
# 13



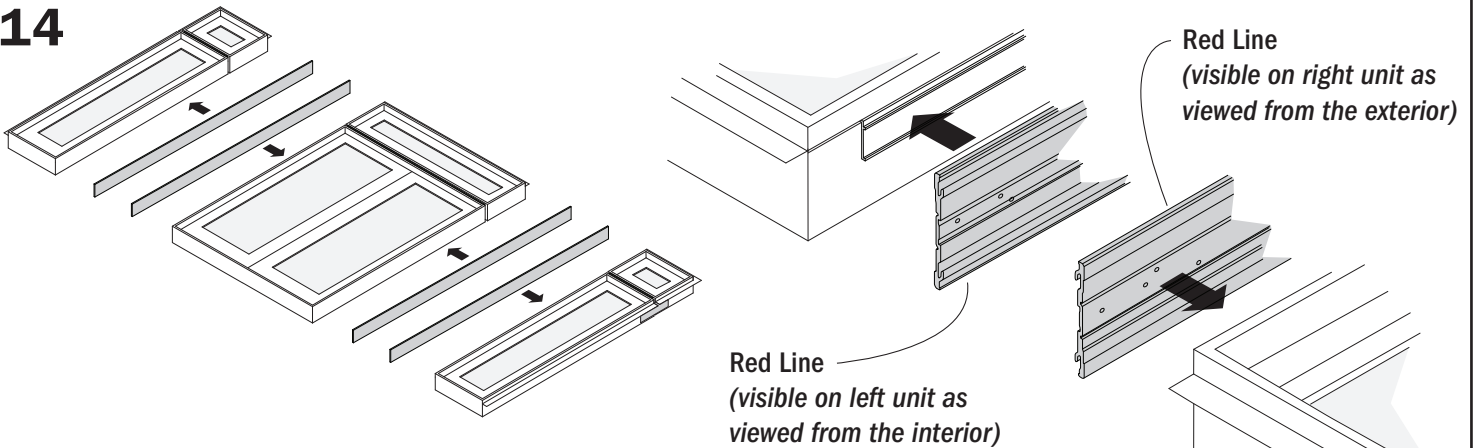
## IMPORTANT

Screw hole location is important. Incorrect screw hole location will not allow proper attachment of brackets.

Measure joining plates (for vertical joins) and check that they are 1-1/2" less than the overall join length. If not, cut to length. Drill 1/4" holes, 1-1/8" and 3-5/8" from each end, 2-7/8" from the exterior edge of the profile.



# 14



## IMPORTANT

**Horizontal Join (as viewed from the exterior):** Joining plate with the red identification line is located on the top unit.

**Vertical Join (as viewed from the exterior):** Joining plate with the red identification line is located on the right unit.

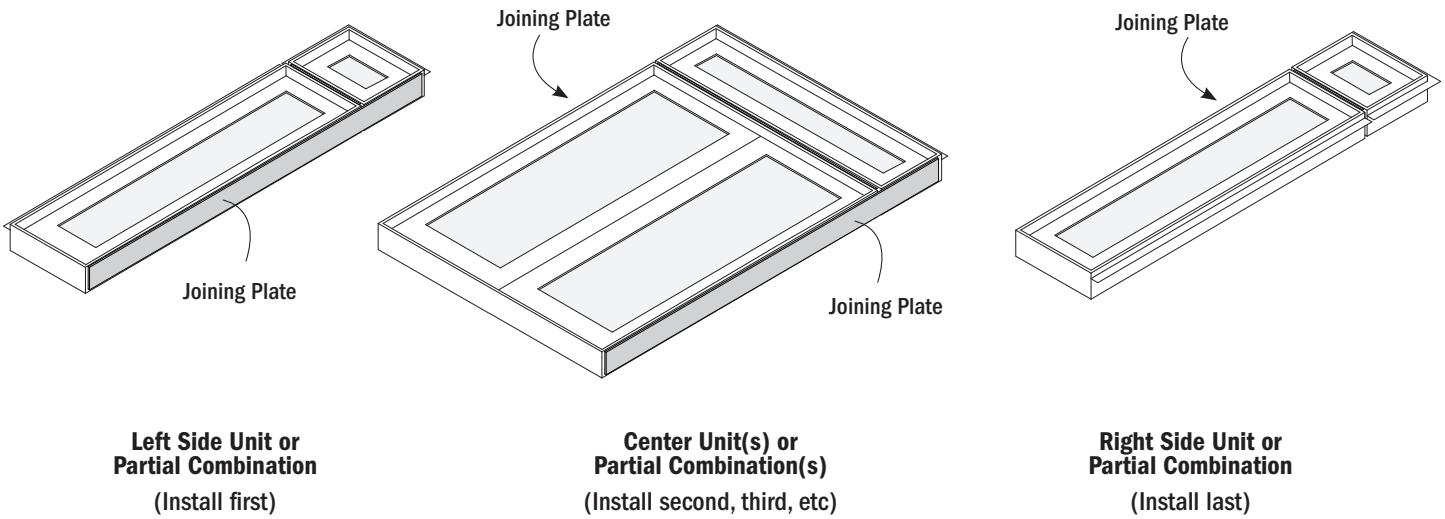
Joining plates must be positioned 3/4" from the frame's edge. Failure to do so will restrict locking plug placement.

Center the joining plates on the frame sides to be joined, 3/4" from each end and flush to the exterior.

3/4"

## IMPORTANT

Attachment of brackets in the following step is specific to the partial combinations and the order in which the partial combinations are installed. Installation will begin on the left side of the rough opening as viewed from the exterior.

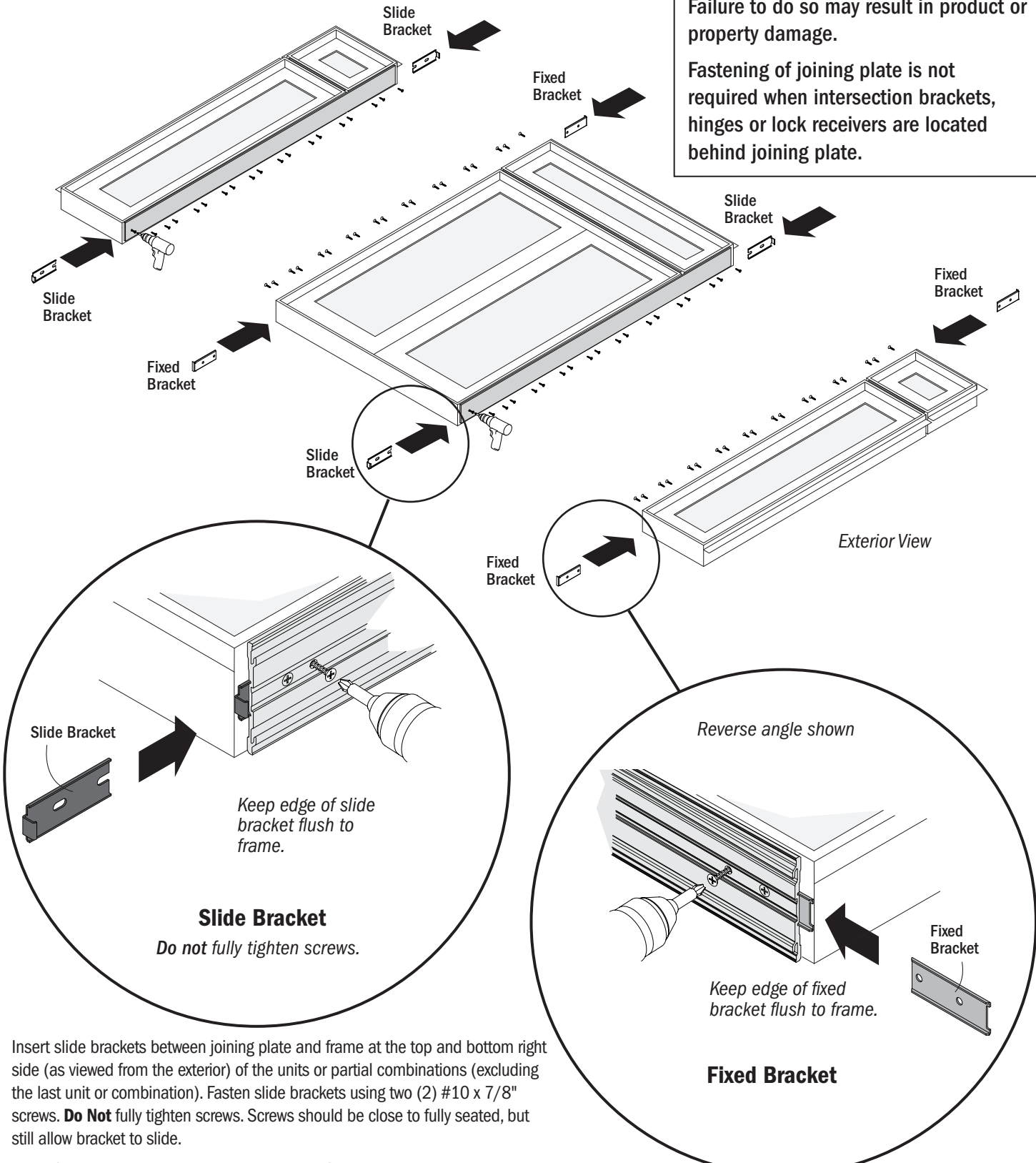




**IMPORTANT**

Screws must be installed as directed. Failure to do so may result in product or property damage.

Fastening of joining plate is not required when intersection brackets, hinges or lock receivers are located behind joining plate.



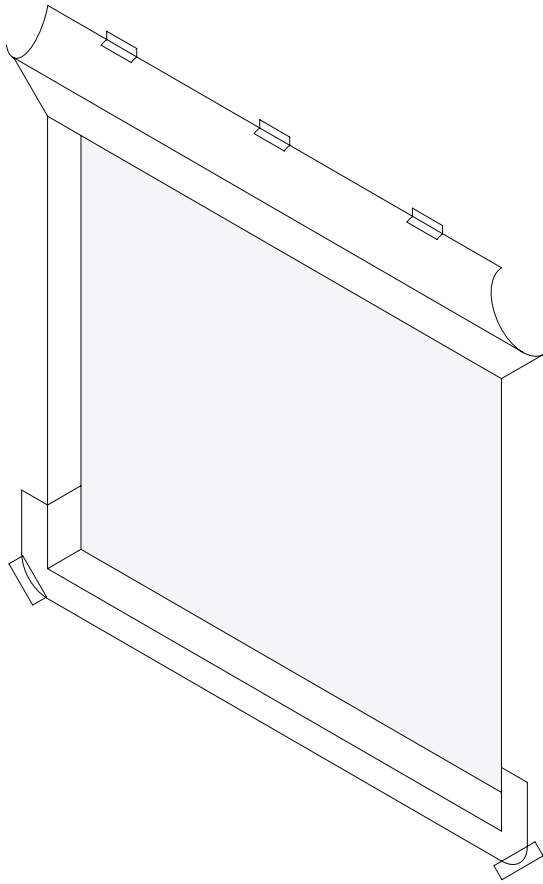
Insert slide brackets between joining plate and frame at the top and bottom right side (as viewed from the exterior) of the units or partial combinations (excluding the last unit or combination). Fasten slide brackets using two (2) #10 x 7/8" screws. **Do Not** fully tighten screws. Screws should be close to fully seated, but still allow bracket to slide.

Insert fixed brackets between joining plate and frame at the top and bottom left side (as viewed from the exterior) of the unit(s) or partial combination(s) excluding the first unit or combination). Fully tighten fixed brackets using two (2) #10 x 7/8" screws.

Fasten joining plates through all remaining holes using #10 x 7/8" screws.

► Preparation of units/partial combinations is complete. Units/partial combinations are ready to be assembled in the rough opening.

16



**IMPORTANT**

Check that opening is sized correctly. Allow additional space for flashing thickness, installation clips, joining components, and their fasteners.

**NOTICE**

Read and follow these joining and installation instructions along with the window or door's individual installation instructions for additional specific opening preparation, shimming, fastening, flashing, and sealing requirements. Failure to do so could result in product or property damage and could affect operation and product performance.

Check opening for level. See window or door individual installation instructions for specific opening preparation.

17

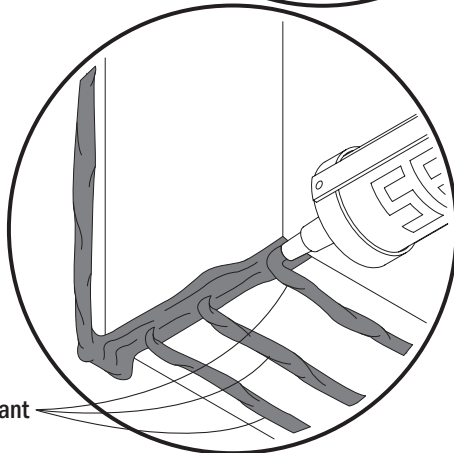
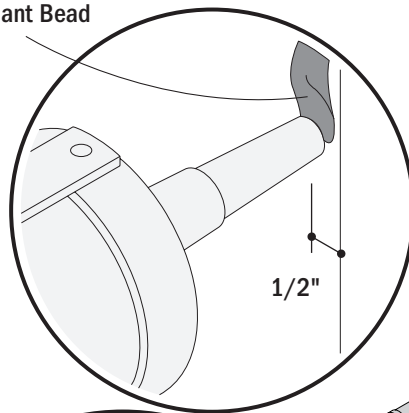
3/8" Sealant Bead

**NOTICE**

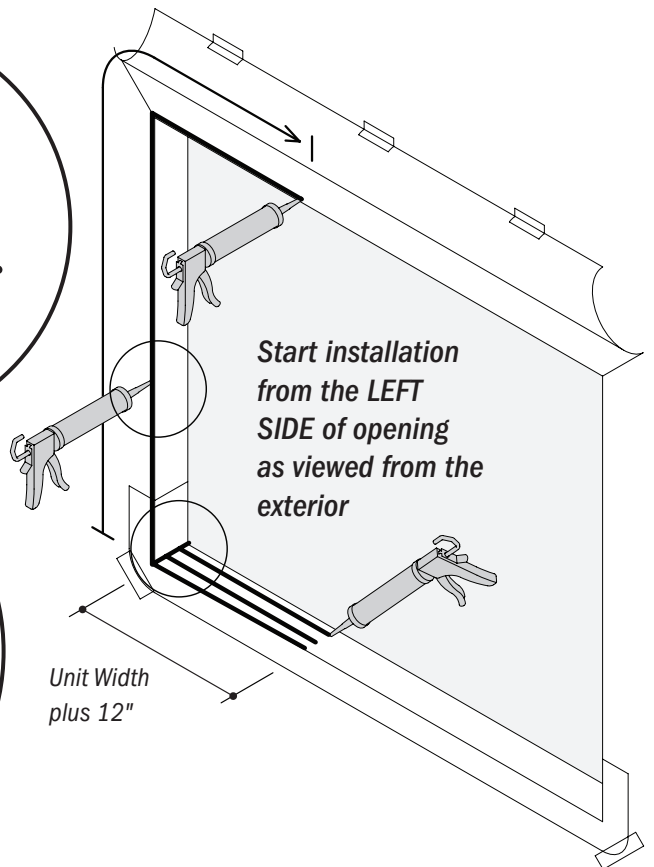
All sealant surfaces must be clean, free of debris, and have sealant applied as indicated. All units and partial combinations must be assembled in the opening while sealant is wet. Failure to do so could result in product or property damage.

**IMPORTANT**

Sealant for installation to the rough opening is not provided. Sealant provided in the joining kit is for sealing mull joints, plugs, and exterior trim strips.

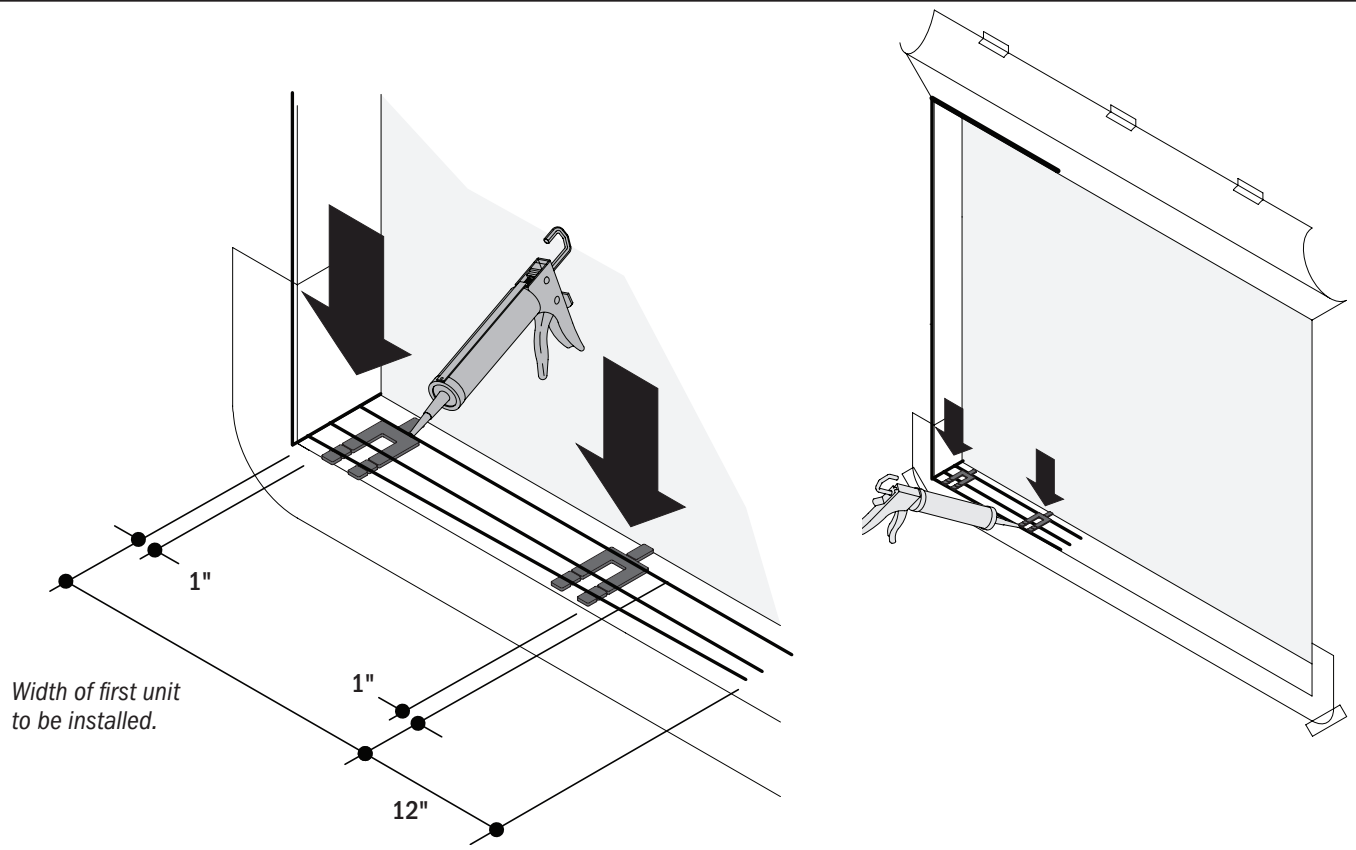


3/8" Sealant Beads



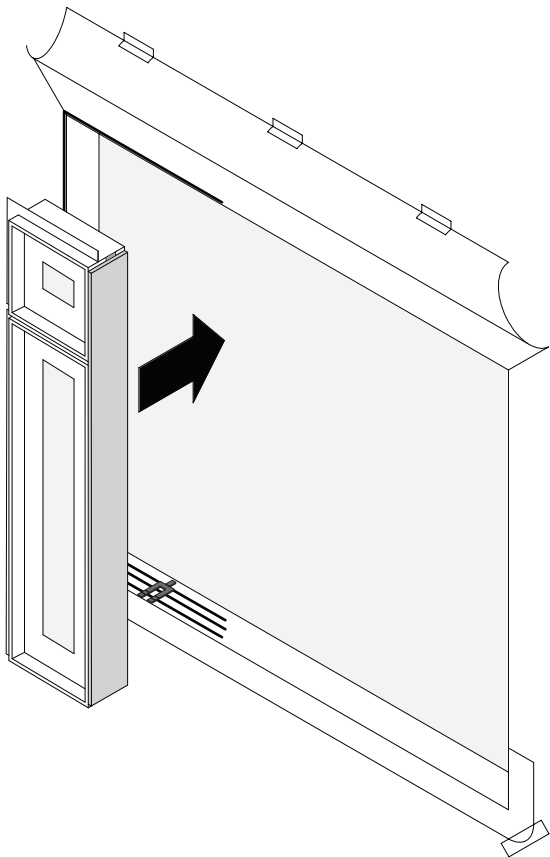
Apply sealant at the sill and to the left side and top of opening. Make beads at the sill and top the width of the first unit or partial combination plus 12". See window or door individual installation instructions for specific sealing requirements.

18



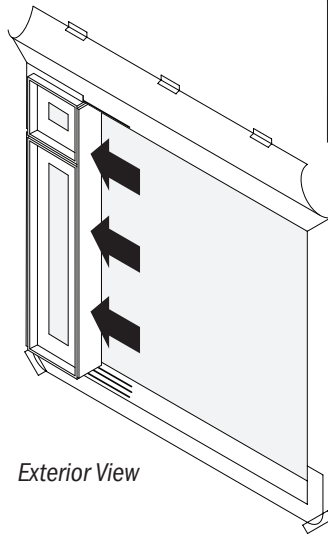
Place two (2) 1/16" shims in sealant on sill 1" from each corner of the unit or partial combination to be installed. Apply sealant over shims aligned with sealant beads below the shim.

19

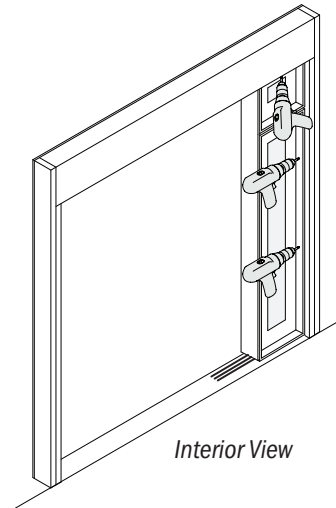


Place the first unit or partial combination in the opening.

20



**IMPORTANT**  
Keep installation flange tight to face of rough opening while fastening unit to rough opening.



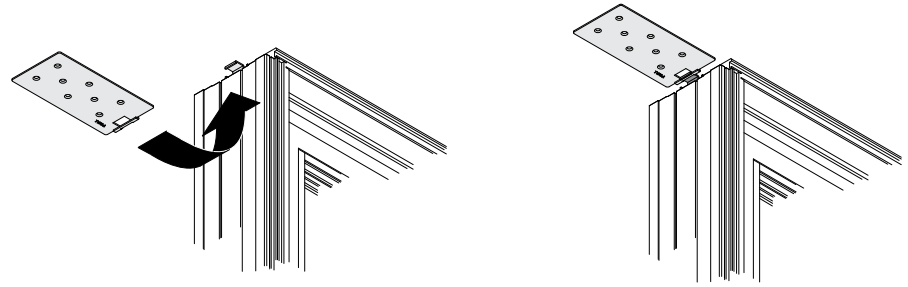
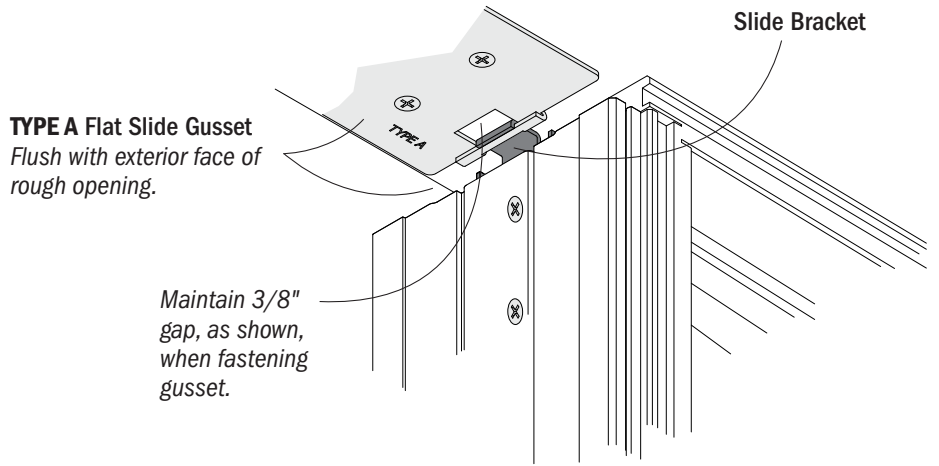
Slide unit or partial combination to left side of rough opening (as viewed from the exterior) until tight to the rough opening. **Do not** shim side at this time. Unit must be temporarily fastened to rough opening. Install two (2) #10 x 3" screws in the side jamb and one (1) #10 x 3" screw in the head jamb through installation screw holes to help plumb and align unit. **Do not** fully tighten screws

## IMPORTANT

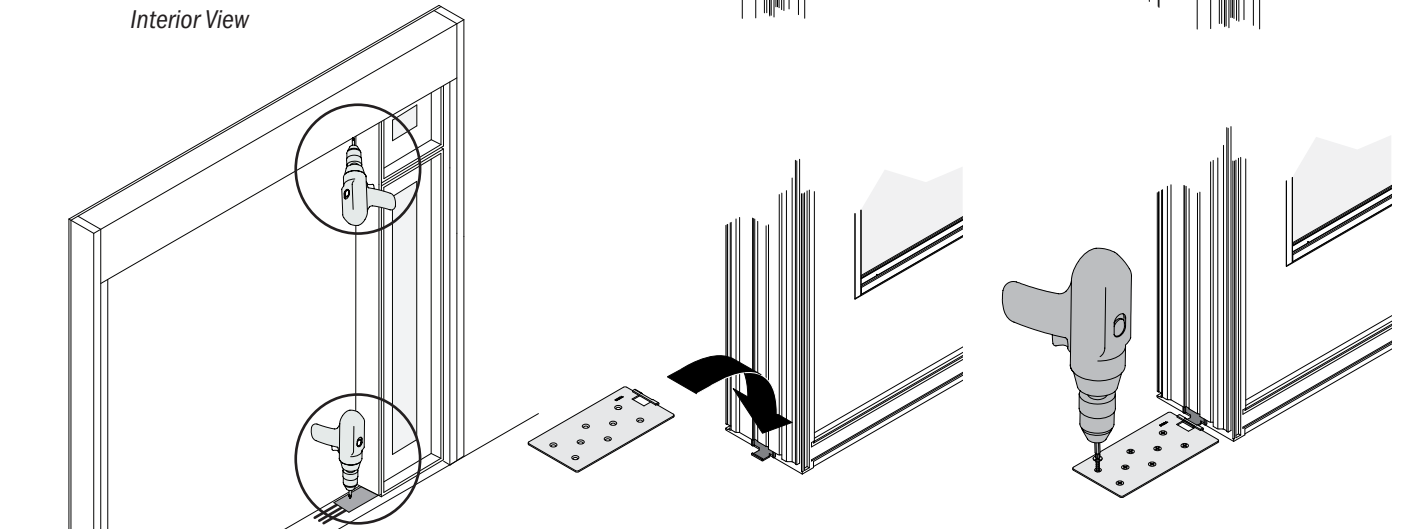
Flat Slide Gusset placement with Slide Bracket is important. Improper placement will not allow movement and centering of joined combination in opening.

## IMPORTANT

If Sill Remodel Bracket is used (A-Series Patio Doors Only), subtract an additional 8 1/2" from length of Sill Remodel Bracket when cutting to account for the flat slide gusset.

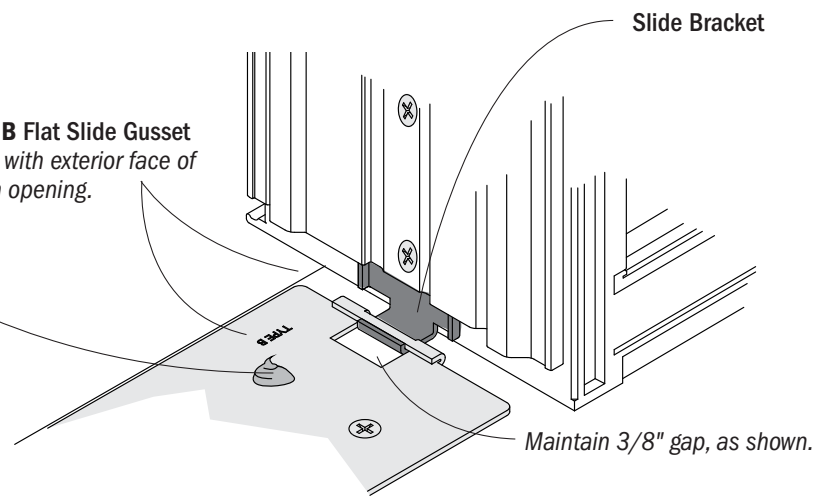


Interior View



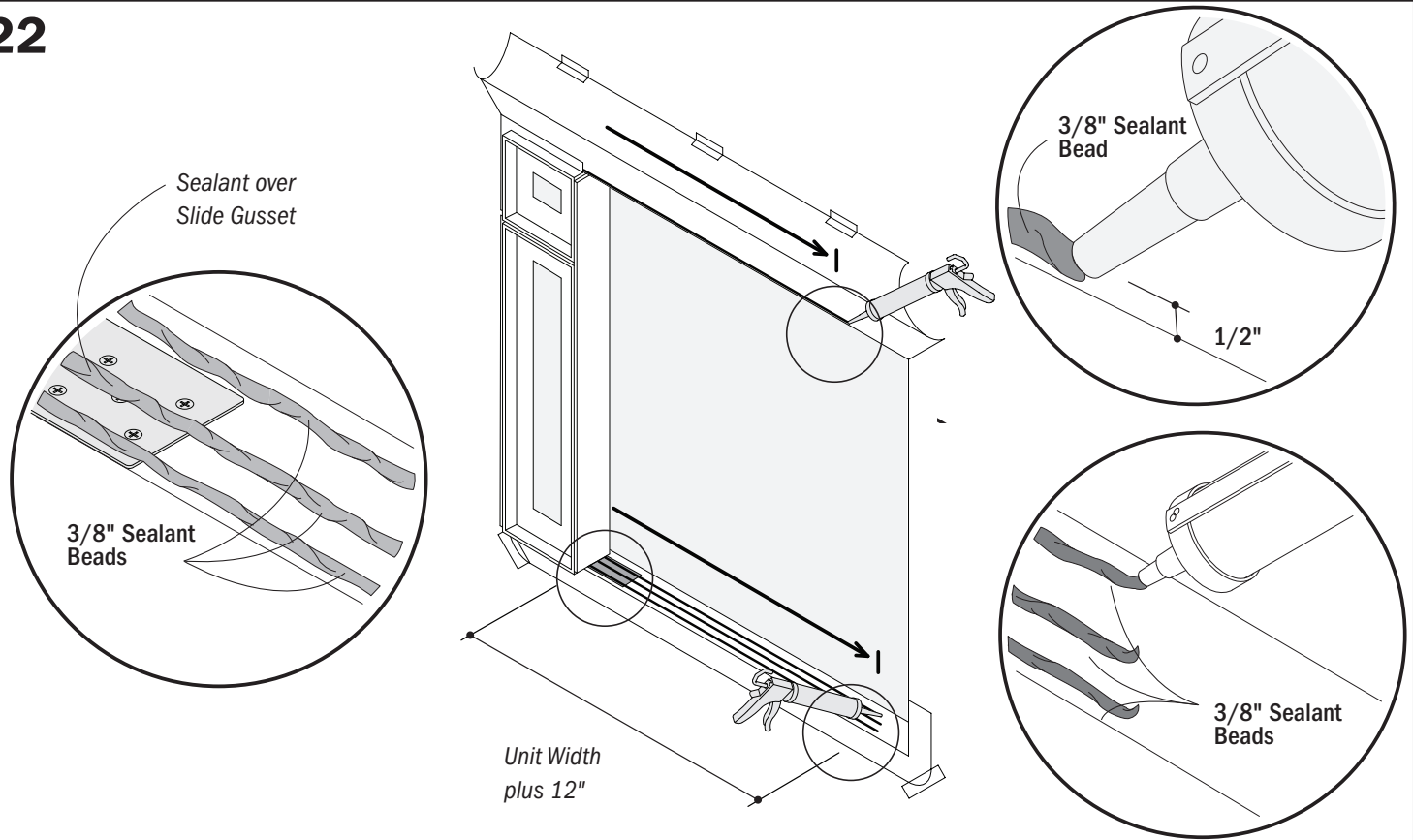
**TYPE B Flat Slide Gusset**  
Flush with exterior face of rough opening.

Apply sealant to holes in flat slide gusset at sill **before** fastening.



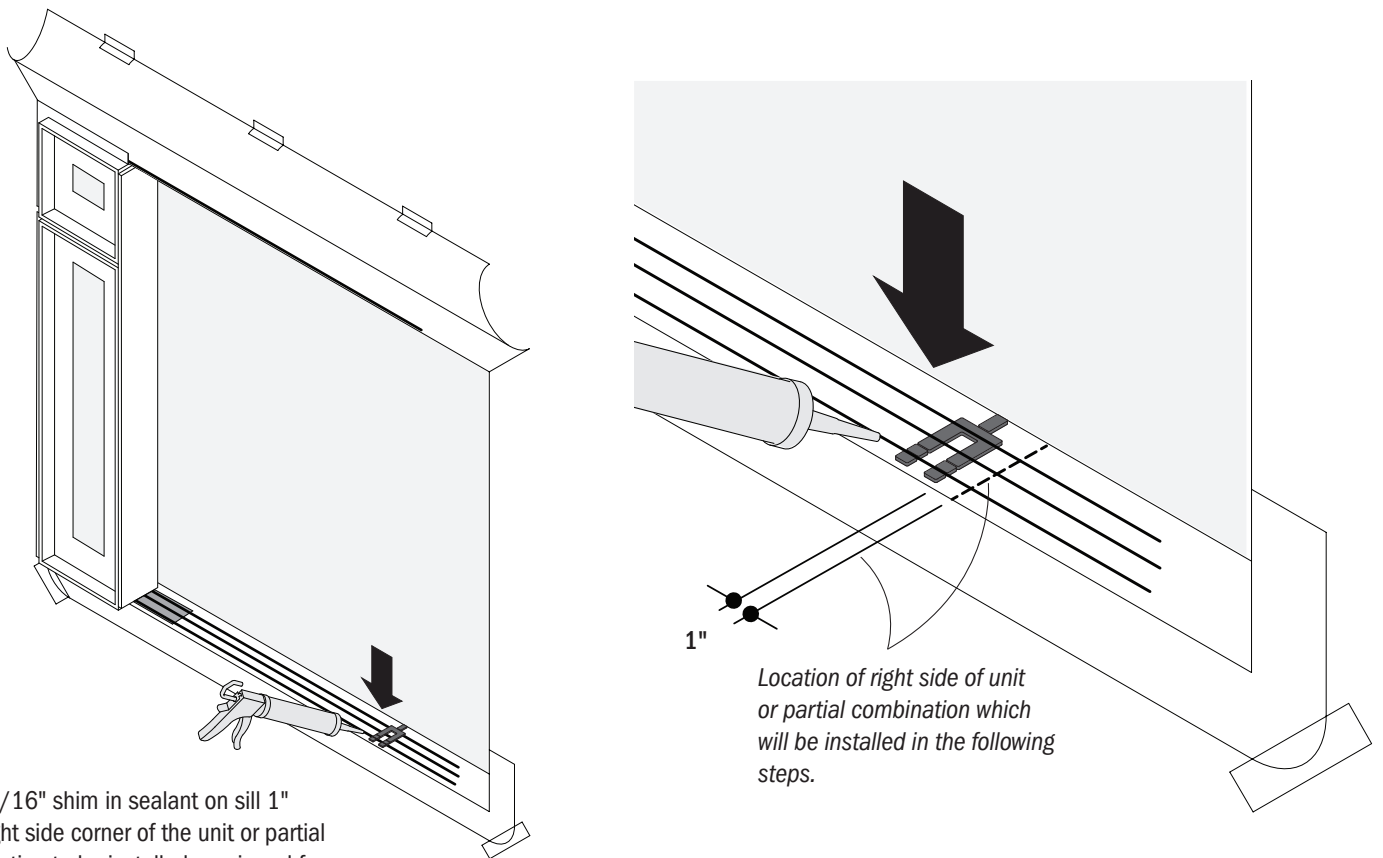
Position Flat Slide Gusset over Slide Bracket as shown and fasten. See fastener chart for approved fasteners. Use Type A Flat Slide Gusset at top and Type B Flat Slide Gusset at bottom. Apply sealant to flat slide gusset holes at sill before fastening. Make sure unit is in alignment before fastening.

22



Apply sealant at top of sill the width of the next unit or partial combination plus 12". Start beads of sealant at sill on top of *Flat Slide Gusset*. See window or door individual installation instructions for specific sealing requirements.

23

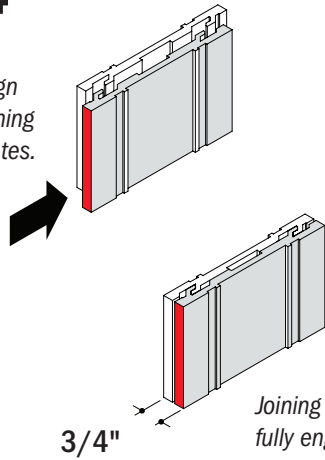


Place 1/16" shim in sealant on sill 1" from right side corner of the unit or partial combination to be installed, as viewed from the exterior. Apply sealant over shims aligned with sealant beads below the shim.

Location of right side of unit or partial combination which will be installed in the following steps.

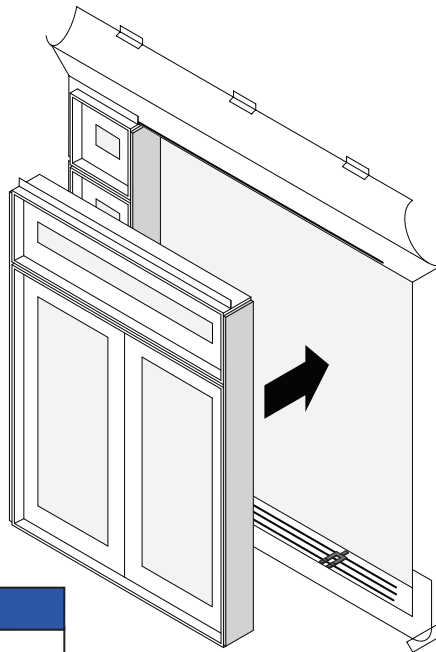
24

Align  
joining  
plates.

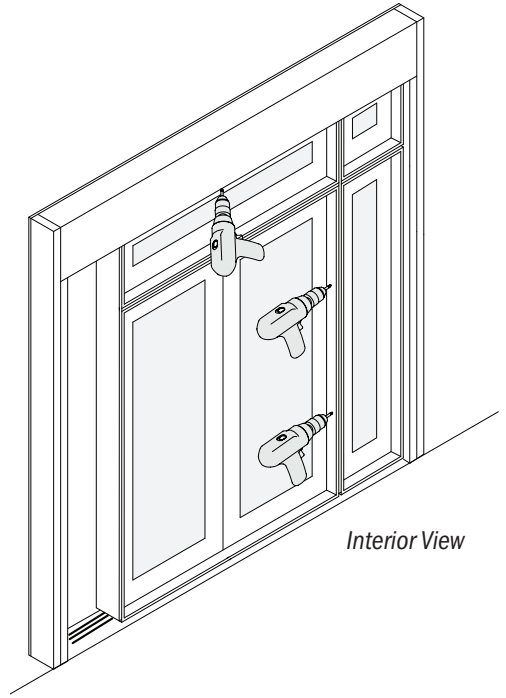


3/4"

Joining plates  
fully engaged.



Exterior View



Interior View

**NOTICE**

Make sure joining plate legs are fully engaged. Joining plates will be flush when fully seated and width of the joining plate assembly will be 3/4". Failure to do so could result in product or property damage.

Position the next unit or partial combination, align joining plates and slide unit or partial combination until joining plate legs are fully engaged. Unit must be temporarily fastened to rough opening. Fasten two (2) #10 x 2" screws through the joined side jamb and one (1) #10 x 3" screw in the head jamb through installation holes to help plumb and align unit. **Do not** fully tighten screw into head jamb.

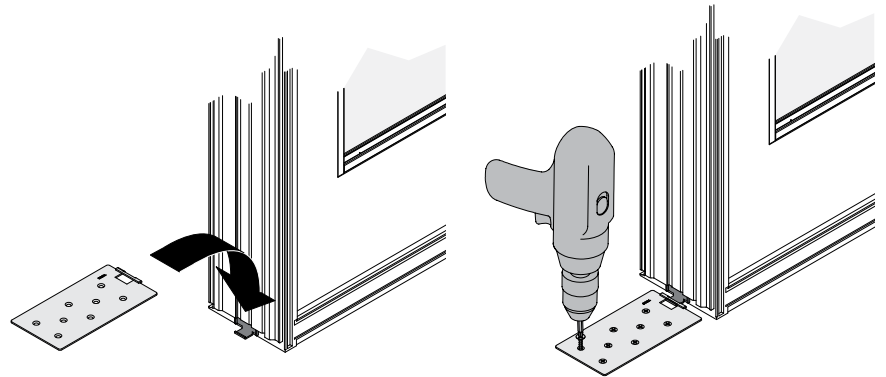
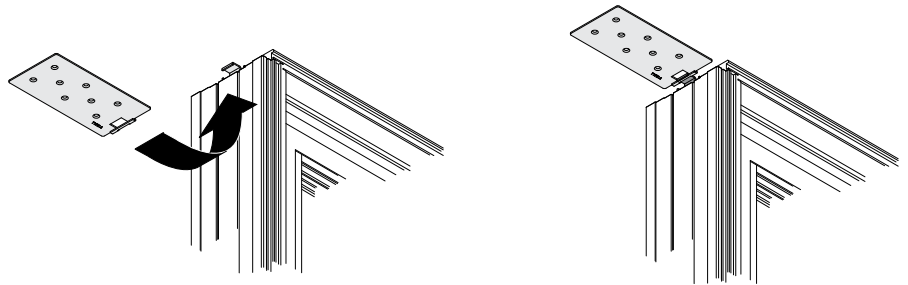
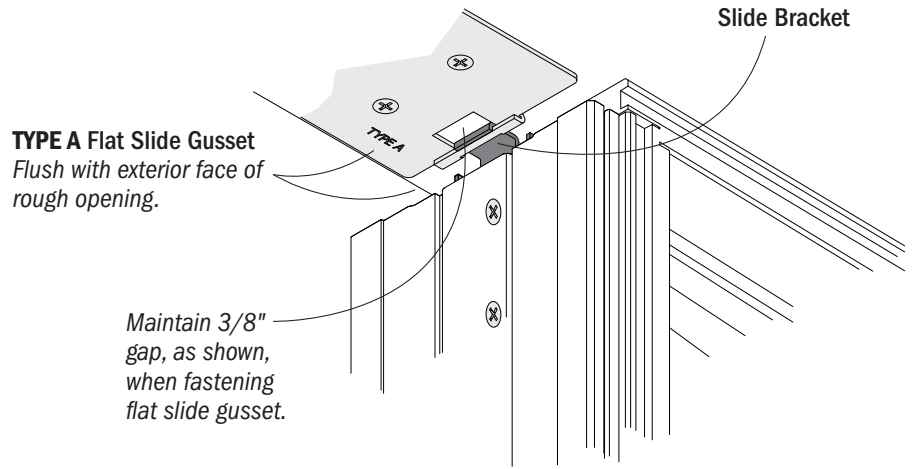
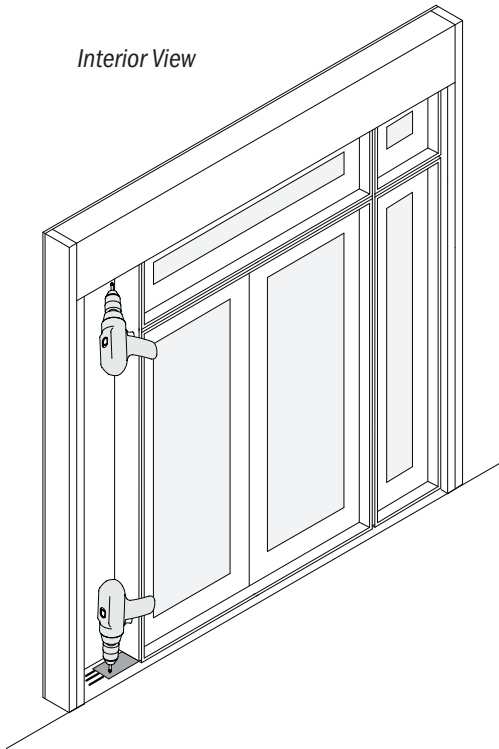
**IMPORTANT**

*Flat Slide Gusset placement with Slide Bracket is important. Improper placement will not allow movement and centering of joined combination in opening.*

**IMPORTANT**

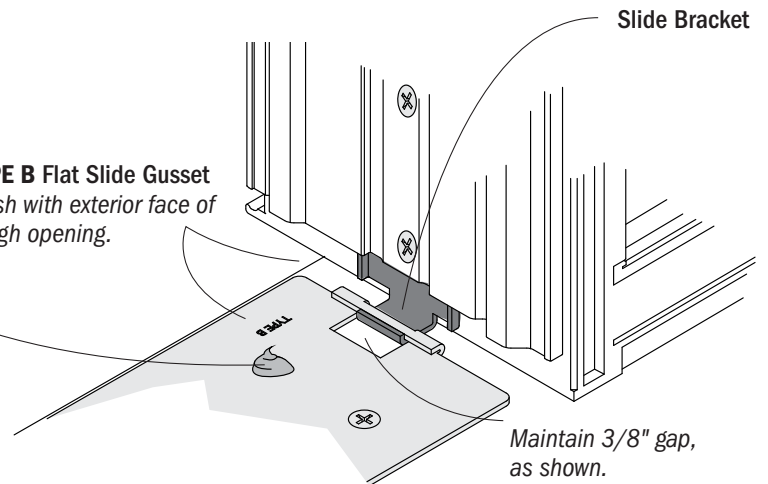
If Sill Remodel Bracket is used (A-Series Patio Doors Only), subtract an additional 8 1/2" from length of Sill Remodel Bracket when cutting to account for the flat slide gusset.

*Interior View*



*Apply sealant to holes in flat slide gusset at sill **before** fastening.*

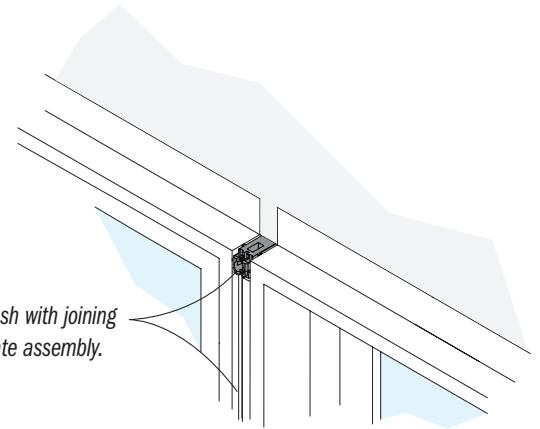
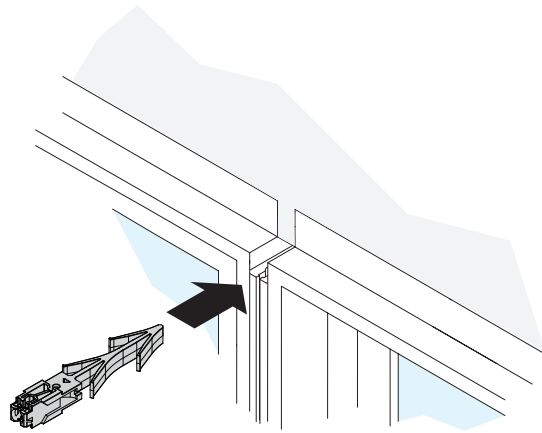
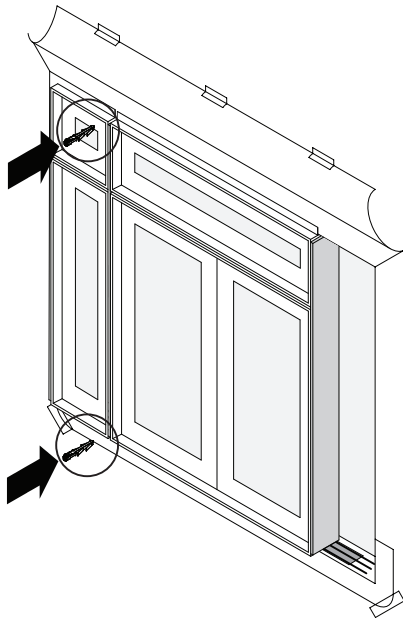
**TYPE B Flat Slide Gusset**  
Flush with exterior face of rough opening.



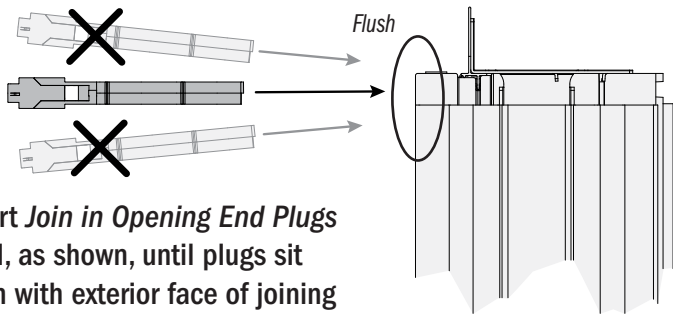
Position Flat Side Gusset over Slide Bracket as shown and fasten. See fastener chart for approved fasteners. Use Type A Flat Slide Gusset at top and Type B Flat Slide Gusset at bottom. Apply sealant to slide gusset holes at sill before fastening. Make sure unit is in alignment opening before fastening.



26



**NOTICE**



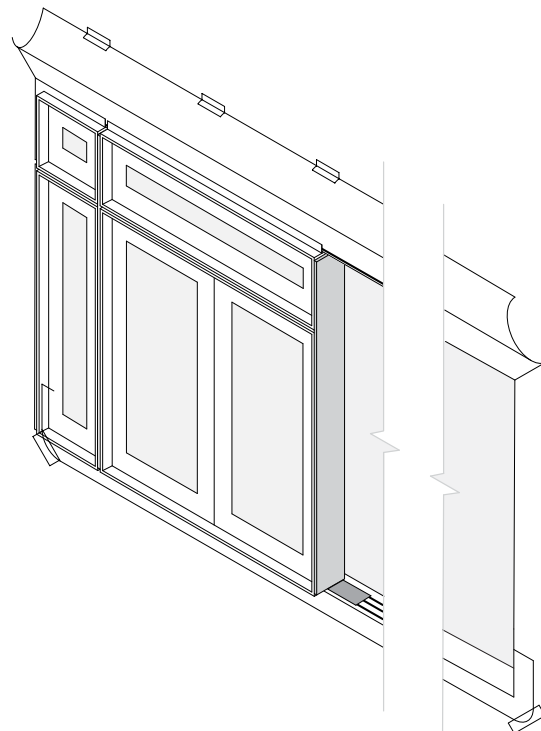
Insert *Join in Opening End Plugs* level, as shown, until plugs sit flush with exterior face of joining plate. Failure to do so could result in product or property damage.

Flush with joining plate assembly.

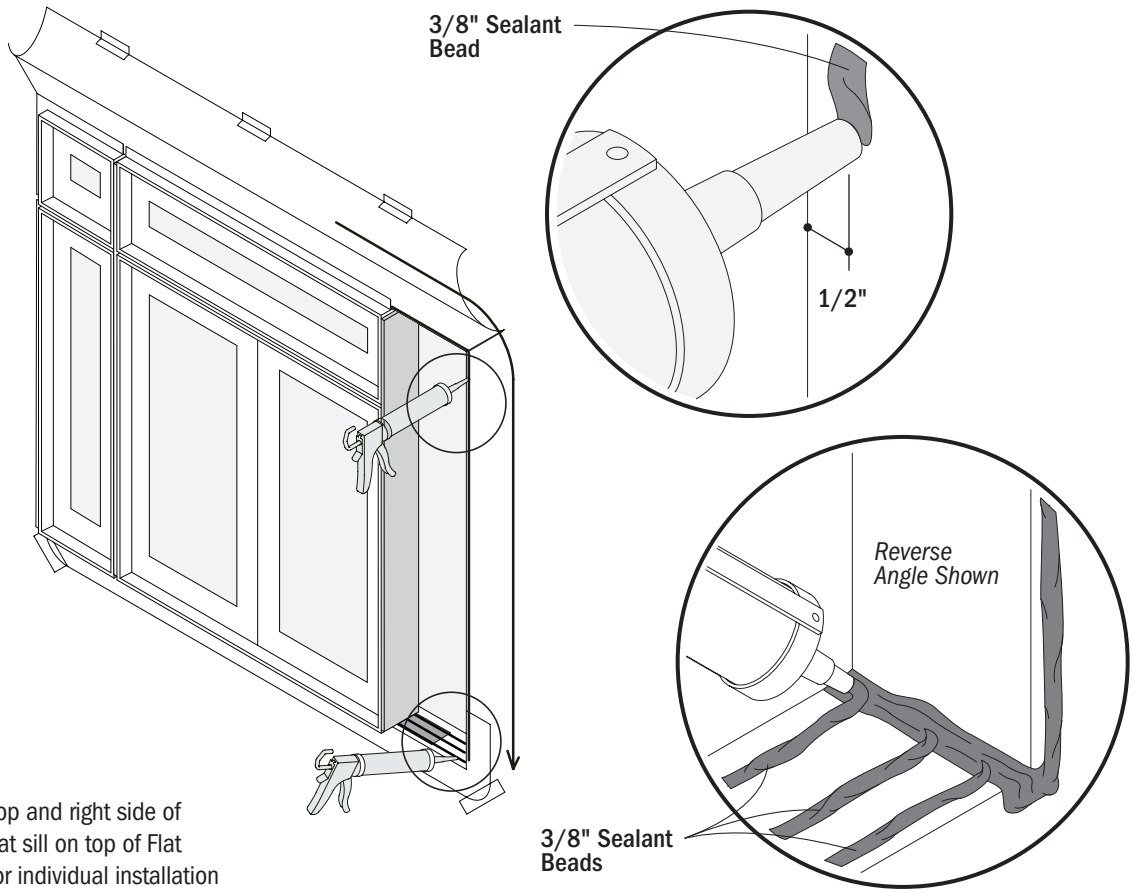
Insert *Join in Opening End Plugs* at ends of continuous joins. Plugs will sit flush with joining plate assembly.

27

Repeat steps 21-26 for remaining unit(s) or partial combination(s) that are located between outer left and right units or partial combinations.

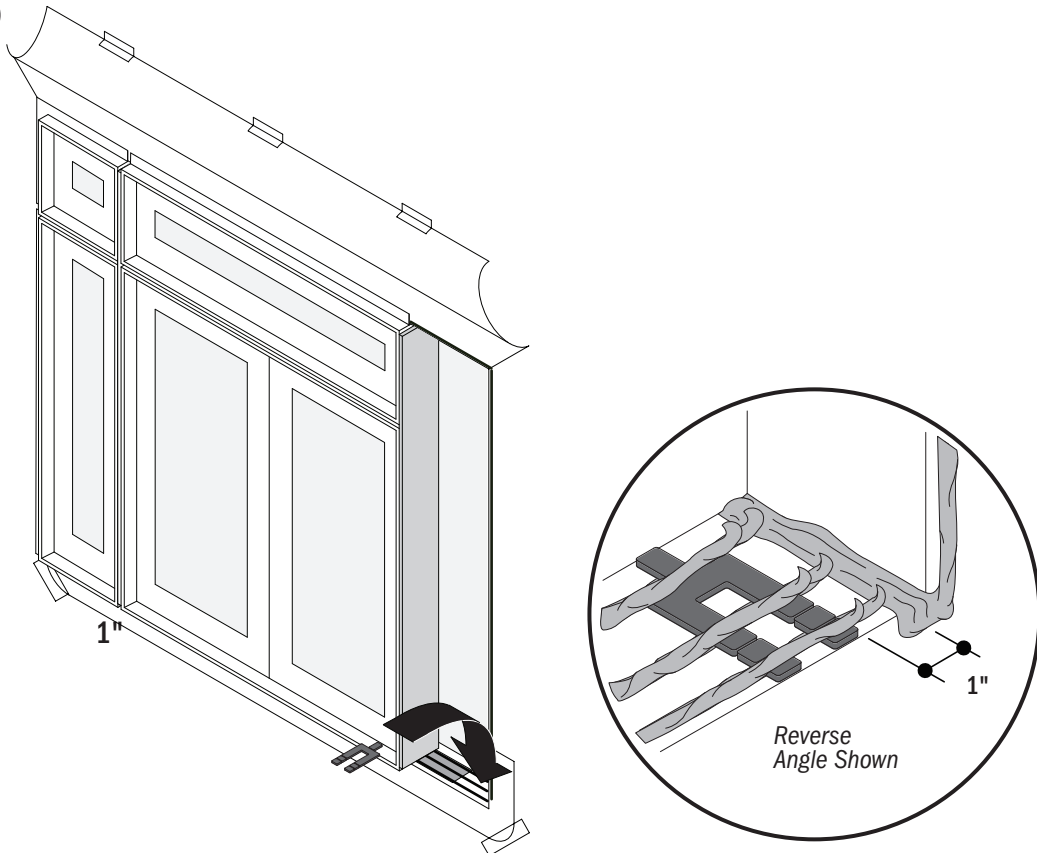


28



Apply sealant at sill and to the top and right side of opening. Start beads of sealant at sill on top of Flat Slide Gusset. See window or door individual installation instructions for specific sealing requirements.

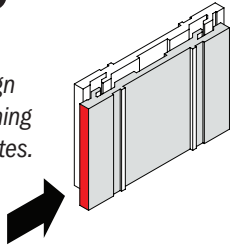
29



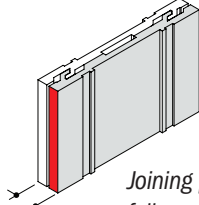
Place 1/16" shim in sealant on sill 1" from right side corner of the unit to be installed, as viewed from the exterior. Apply sealant over shims aligned with sealant beads below the shim.

30

Align  
joining  
plates.



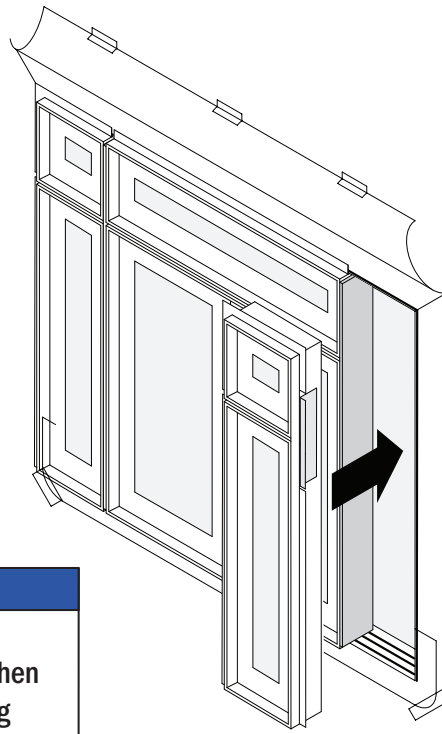
3/4"



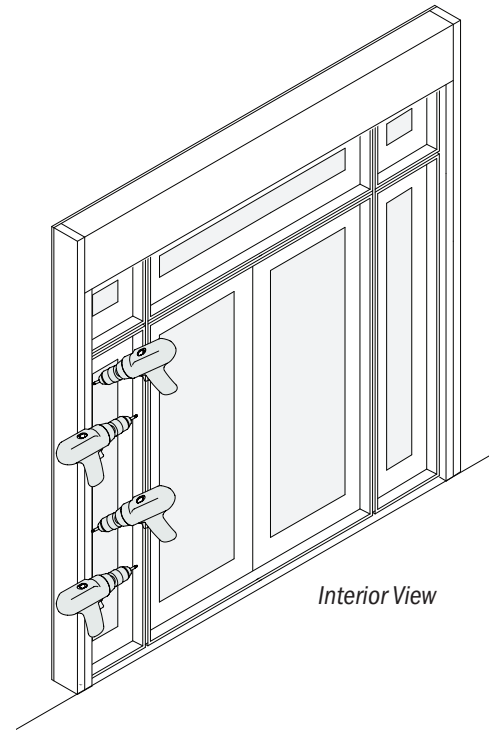
Joining plates  
fully engaged.

**NOTICE**

Make sure joining plate legs are fully engaged. Joining plates will be flush when fully seated and the width of the joining plate assembly will be 3/4". Failure to do so could result in product or property damage.



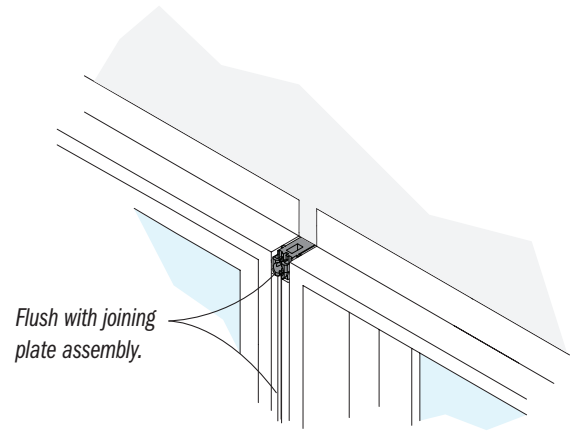
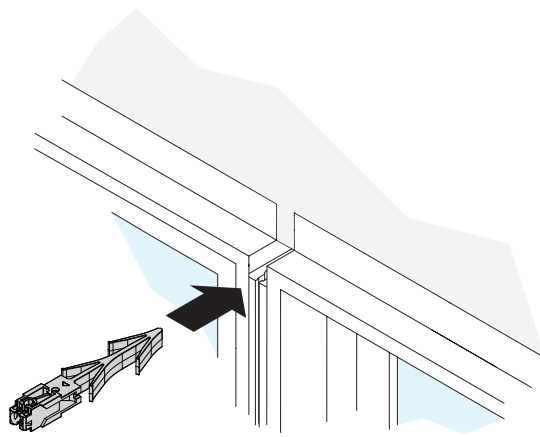
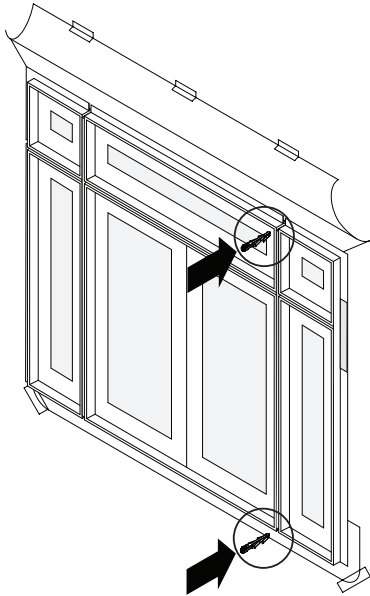
Exterior View



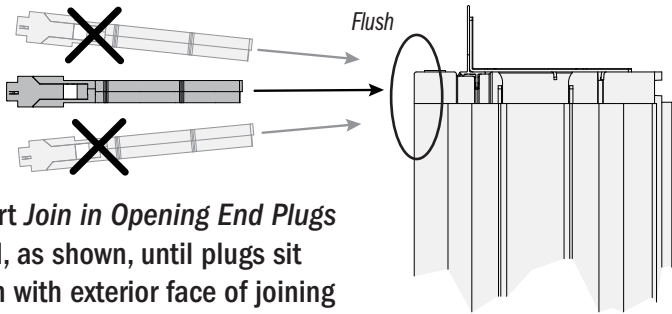
Interior View

Position the last unit or partial combination, align joining plates and slide unit or partial combination until joining plate legs are fully engaged. Unit must be temporarily fastened to rough opening. Fasten two (2) #10 x 2" screws through joined side jamb installation holes and two (2) #10 x 3" screws through opposite side jamb installation holes into rough opening to help plumb and align unit. **Do not** fully tighten screws into the rough opening.

31



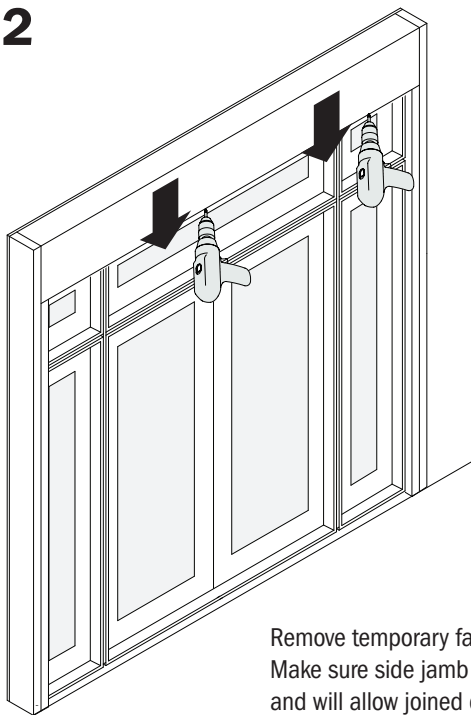
**NOTICE**



Insert *Join in Opening End Plugs* level, as shown, until plugs sit flush with exterior face of joining plate. Failure to do so could result in product or property damage.

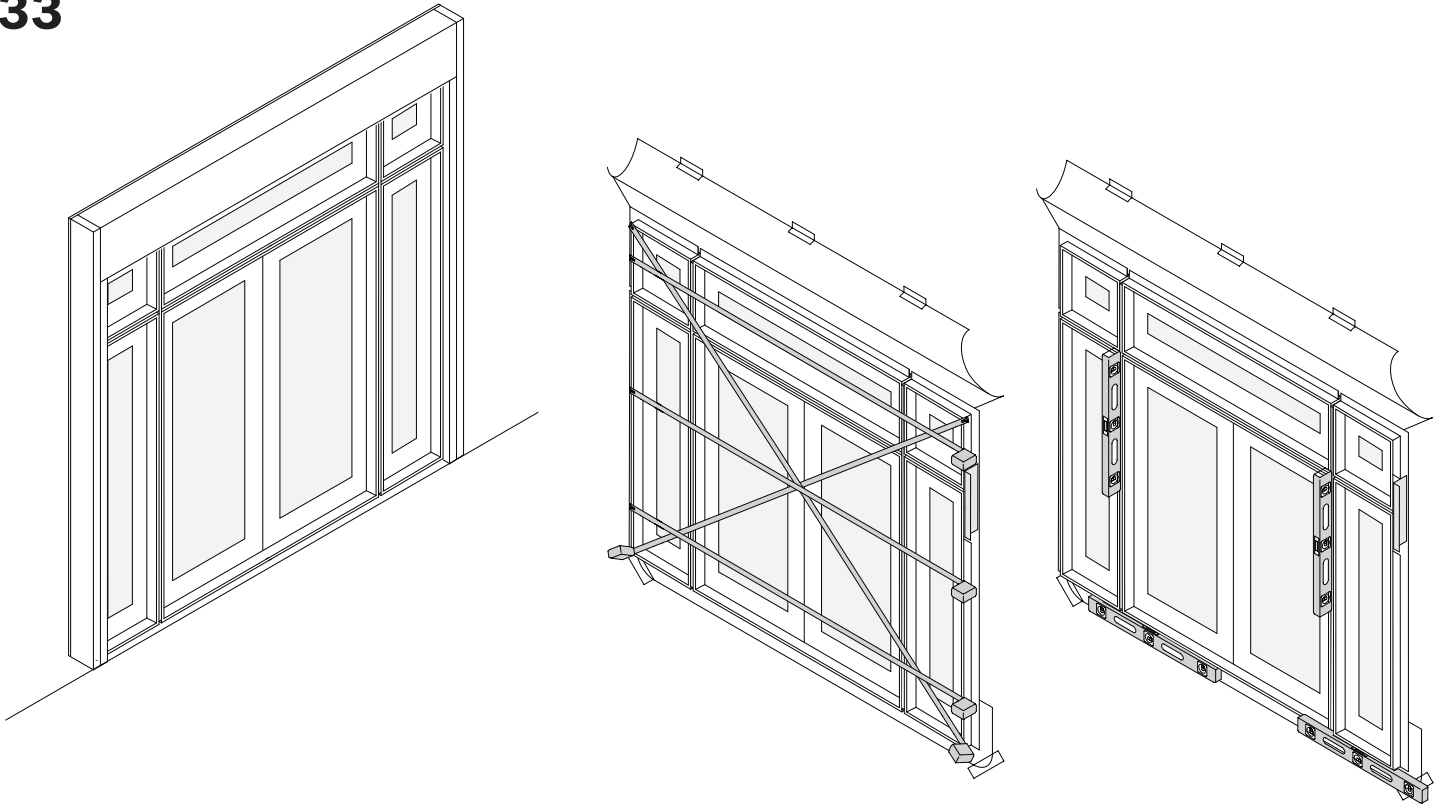
Insert *Join in Opening End Plugs* at ends of continuous joins. Plugs will sit flush with joining plate assembly.

32



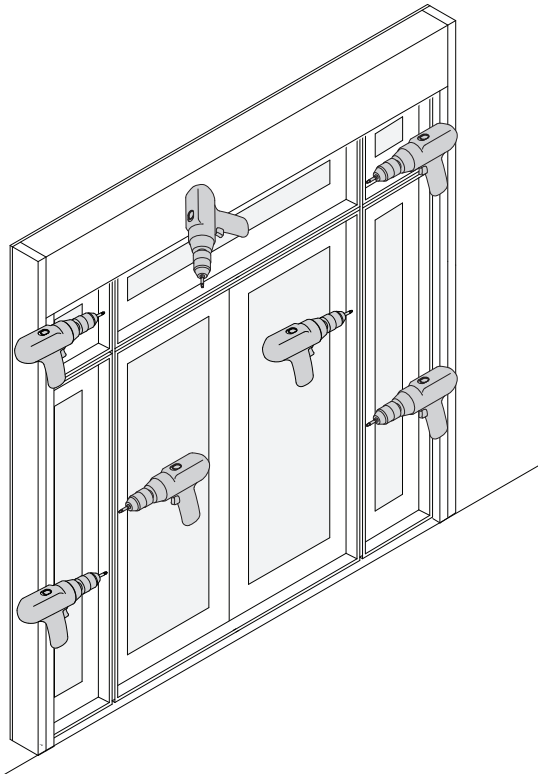
Remove temporary fasteners in head jamb. Make sure side jamb fasteners are loose and will allow joined combination to slide up to 3/8"

33



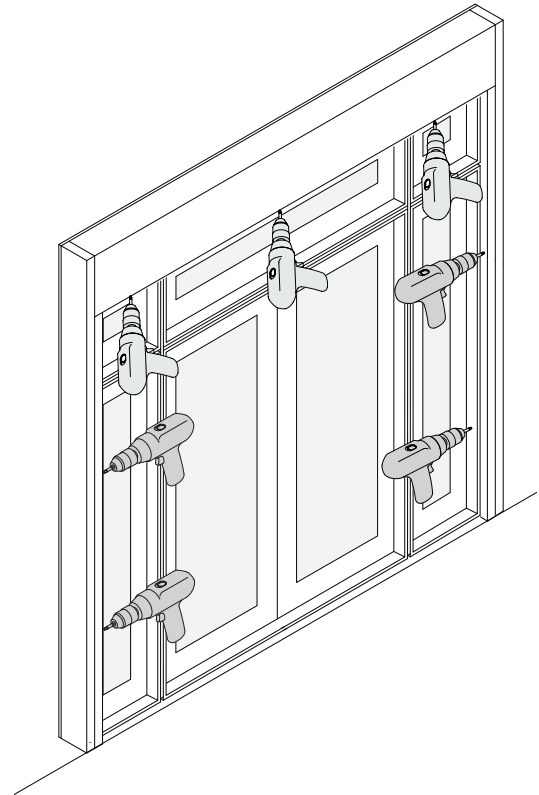
Move and center joined combination in opening and shim sides behind each fastener hole. Check plumb, level, and square. Adjust shims until diagonal measurements are within 1/8". Check joining plates to make sure exterior and interior trim components will fit properly. **Do not** shim at top.

34



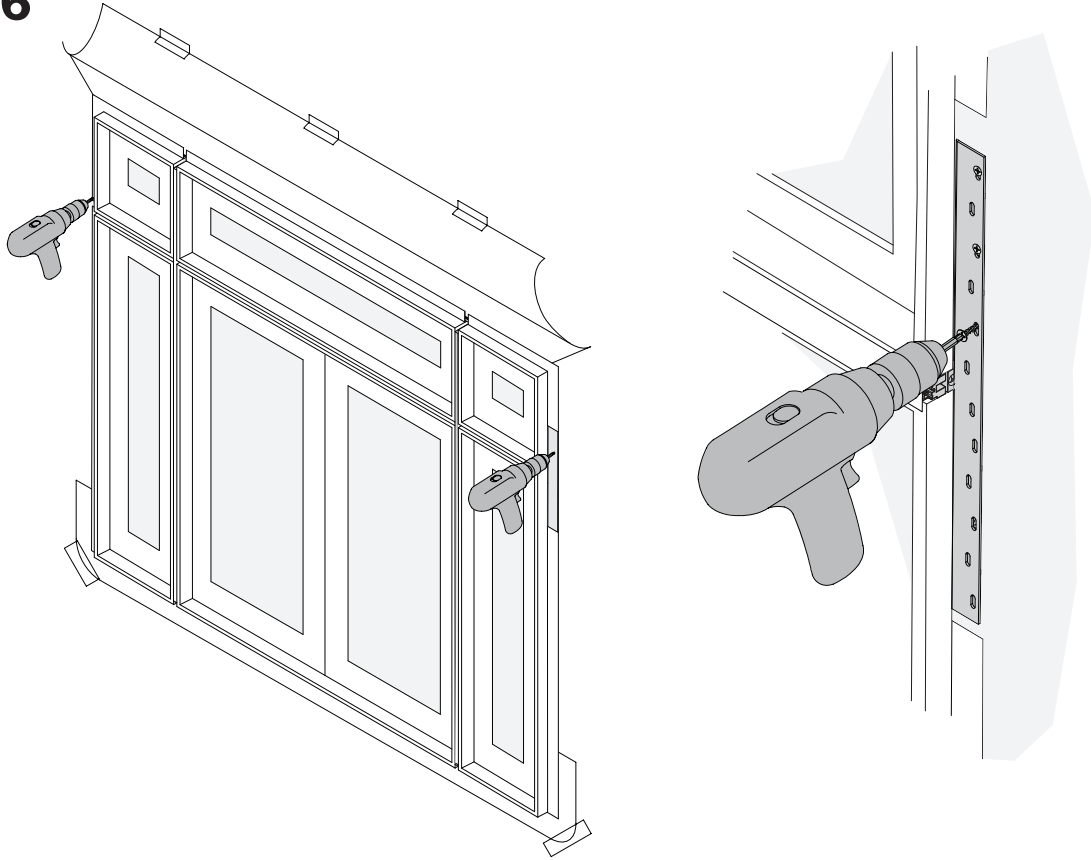
Fasten unit/joined combinations together **at joints** using #10 x 2" screws. Do not fasten to rough opening at this step. See window or door individual installation instructions for specific fastening requirements.

35



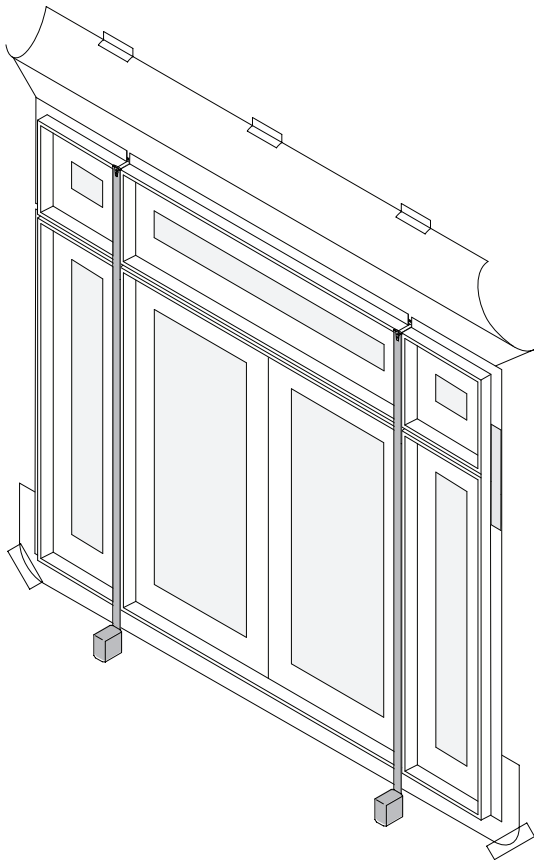
Fasten unit/joined combinations **to rough opening** through installation holes at head and sides using #10 x 3" screws. See window or door individual installation instructions for specific fastening requirements.

**36**



Fasten flanged gusset plates, if present, to rough opening using #10 x 2" screws. See fastener chart for specific fastener requirements.

**37**



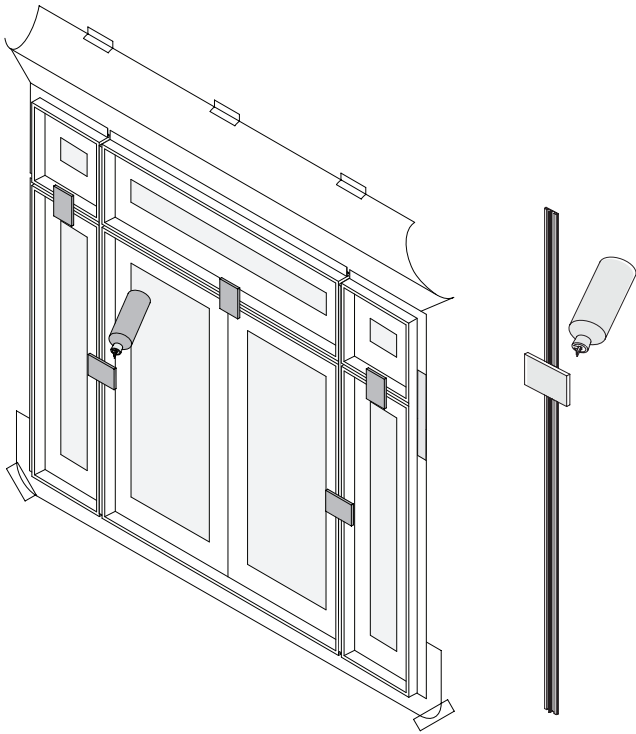
Measure the continuous join length(s).

**38**



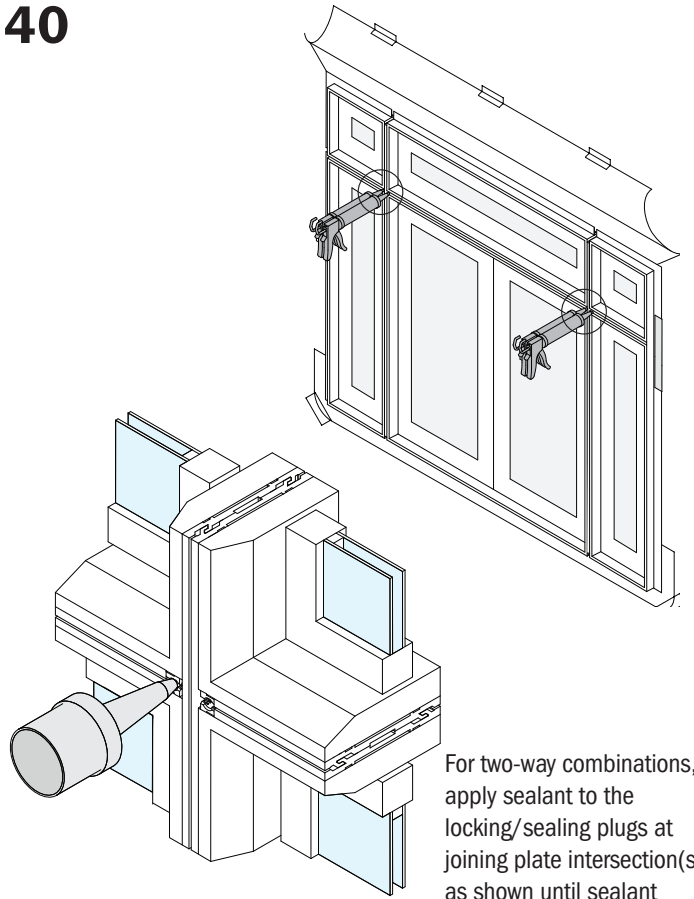
Measure the vertical exterior trim strip(s) and verify that it is 1/4" less than the continuous join length(s). If not, cut to length.  
For horizontal joins only, measure the exterior trim strip and verify that it is 1/4" less than that join length. If not, cut to length.

**39**



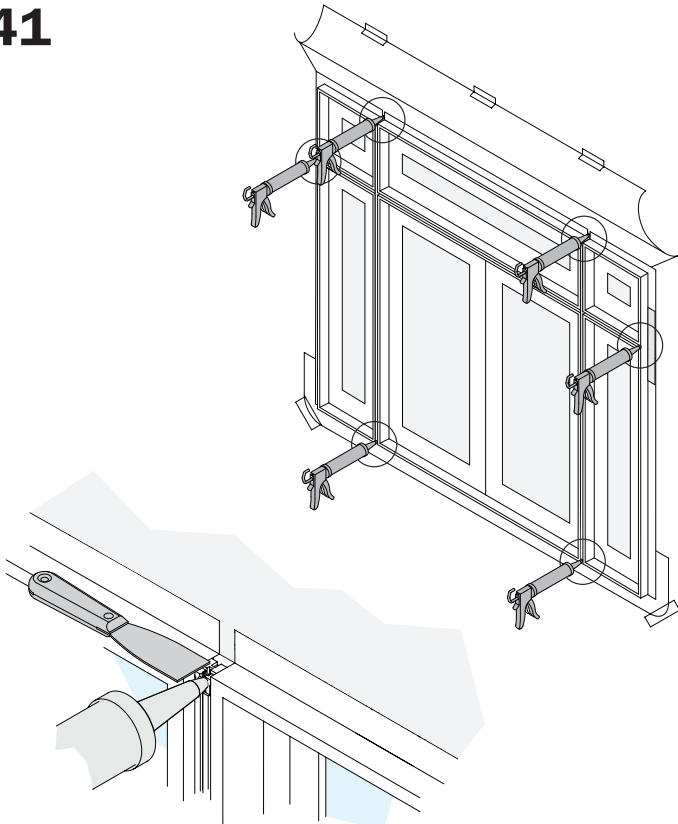
Clean the interior face of the exterior trim strip(s), the exterior face of units or combination, and joining area with non-abrasive cleaner as shown.

**40**



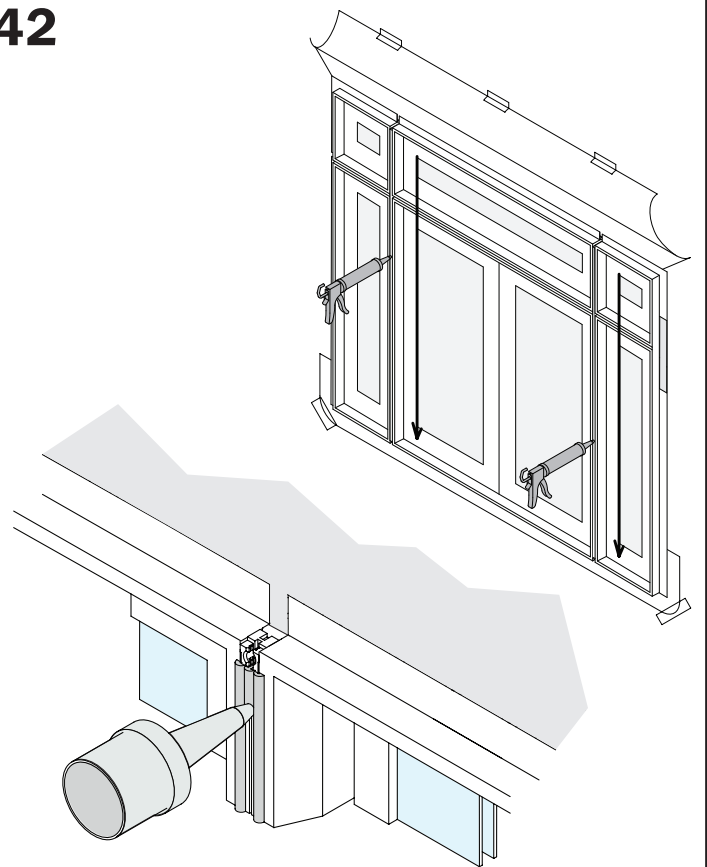
For two-way combinations, apply sealant to the locking/sealing plugs at joining plate intersection(s) as shown until sealant squeeze-out is visible.

**41**



Apply sealant to end plugs and locking/sealing plugs at perimeter ends of joining plate(s) as shown until sealant squeeze-out is visible. Use putty knife to minimize squeeze-out.

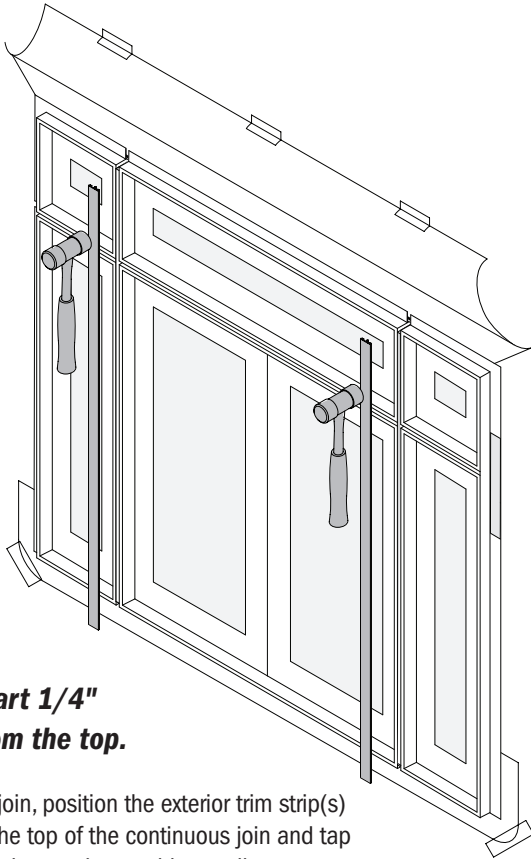
**42**



Apply three full length 1/4" diameter sealant beads to the continuous join(s) as shown.



**43**

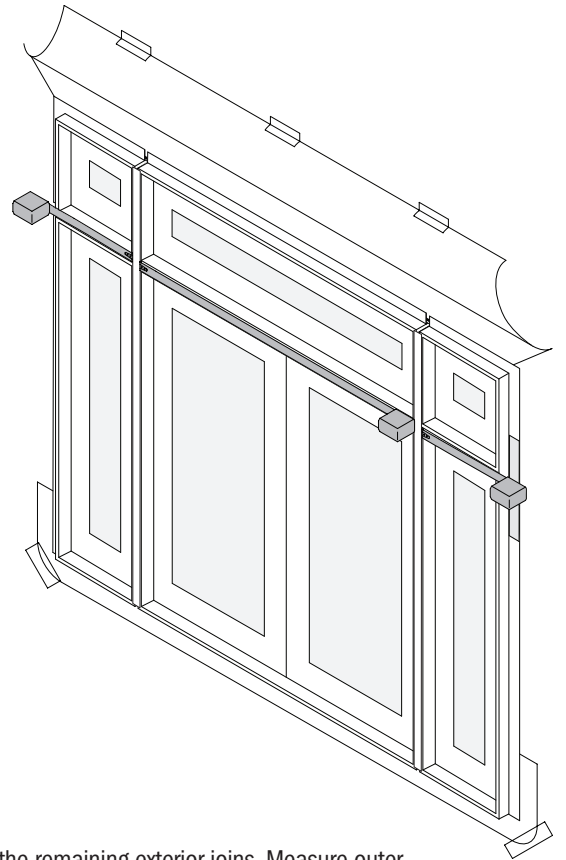


**Start 1/4"  
from the top.**

For vertical join, position the exterior trim strip(s) 1/4" from the top of the continuous join and tap into joining plates using a rubber mallet.

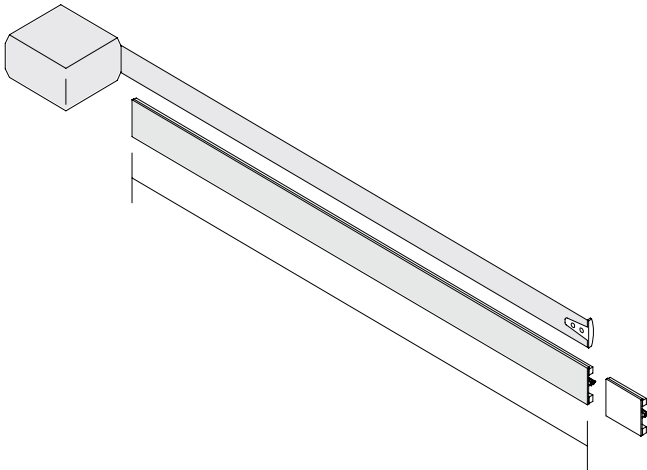
For horizontal join, center the exterior trim strip on the horizontal join.

**44**



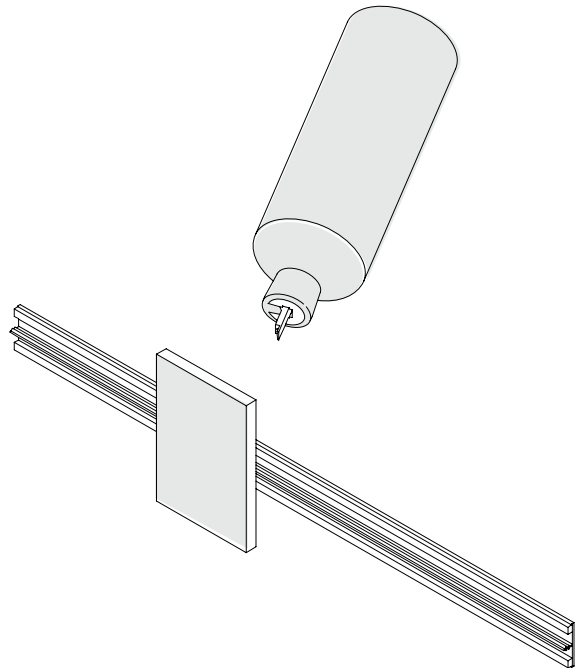
Measure the remaining exterior joints. Measure outer joints from continuous join exterior trim strip to outside edge of frame(s).

**45**



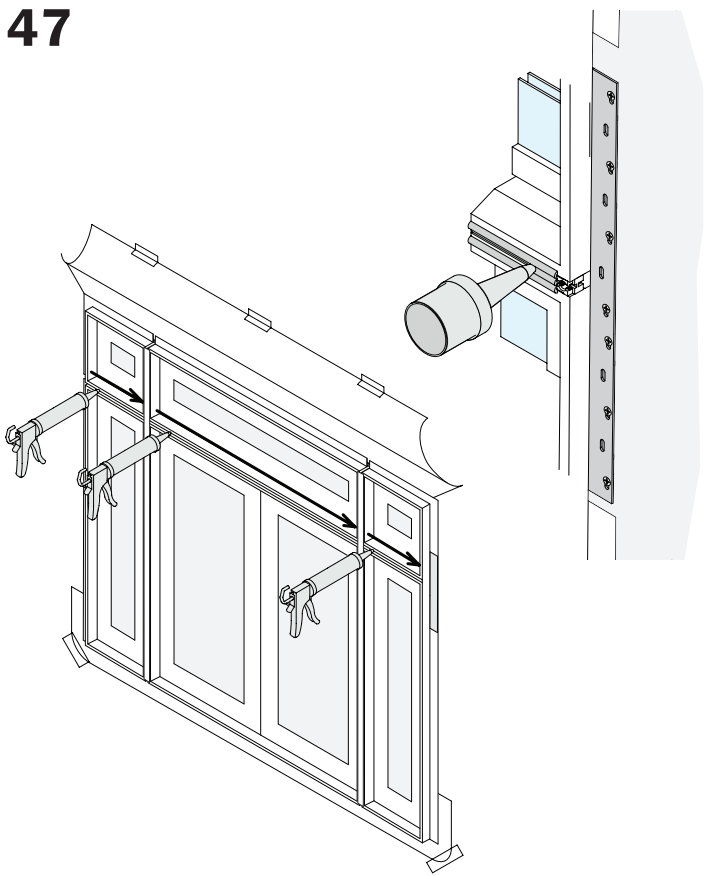
Measure the remaining exterior trim strips and check that they match the remaining join lengths. Outer joints are 1/4" less than the measurement from the continuous exterior trim strip edge to the outside edge of frame. Remaining exterior trim strips should equal the distance between continuous exterior trim strips.

**46**



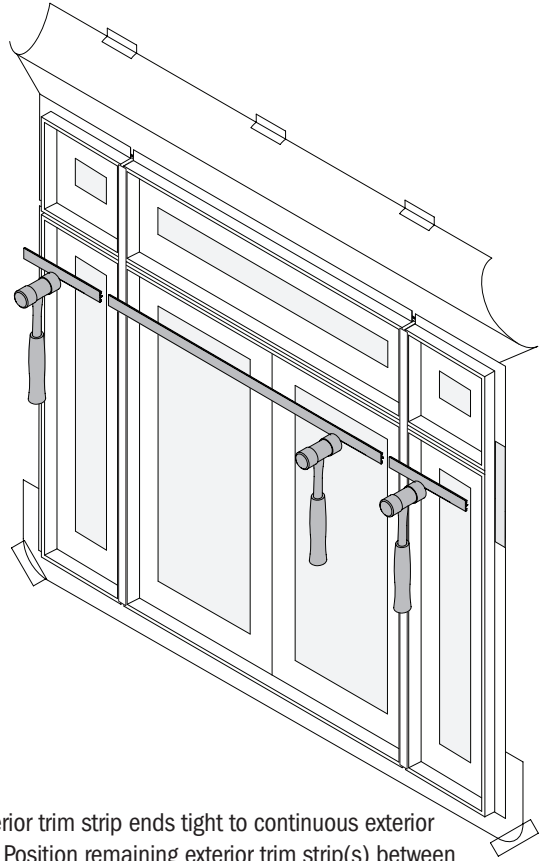
Clean the interior face of the exterior trim strip with a non-abrasive cleaner.

47



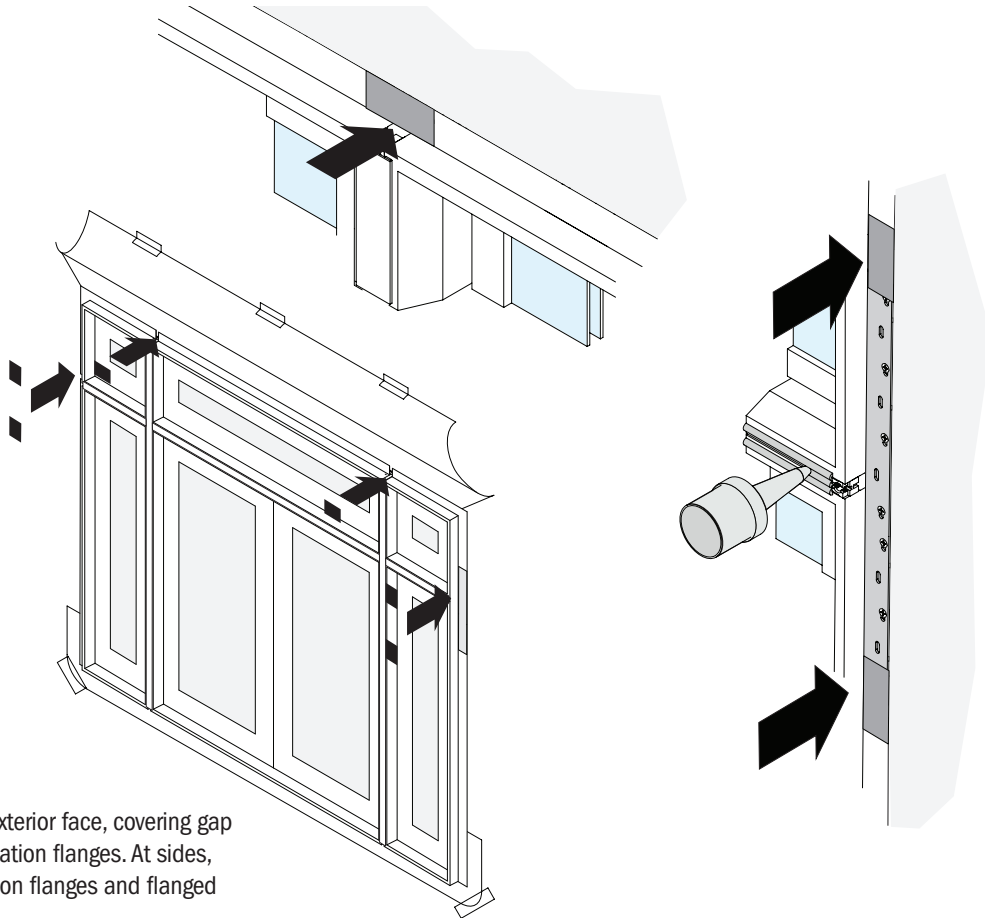
Apply three full length 1/4" diameter sealant beads to each remaining joint as shown.

48



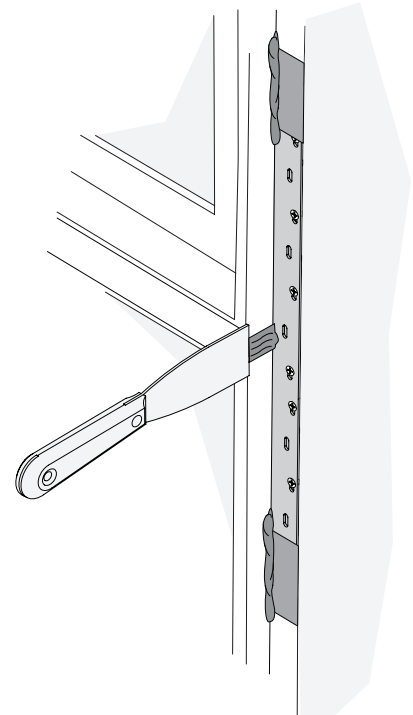
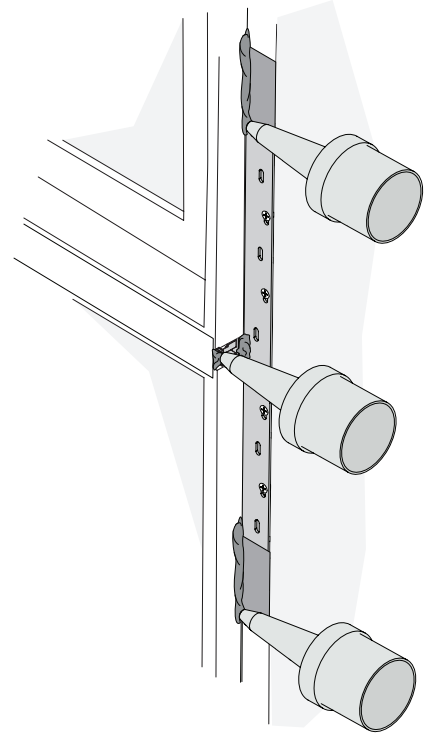
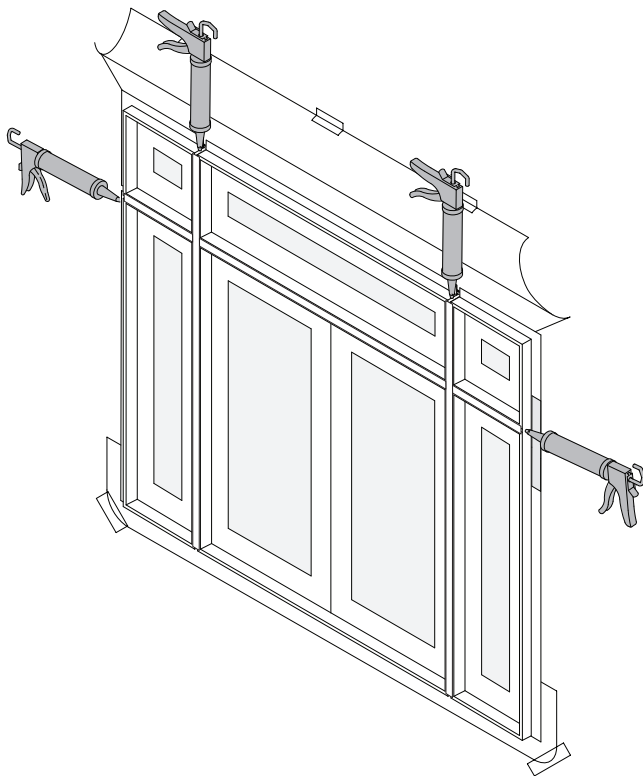
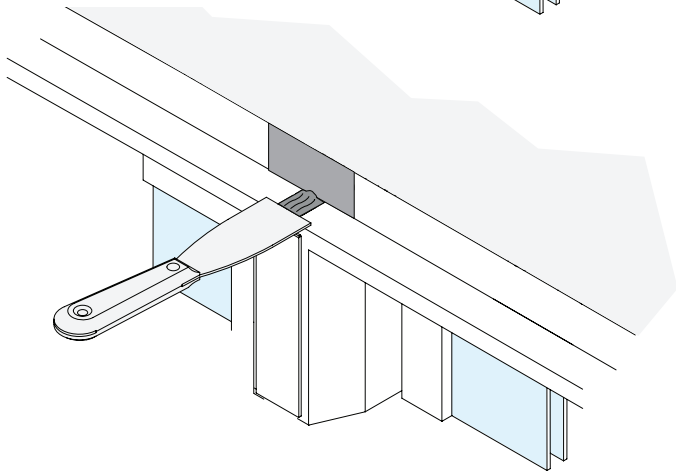
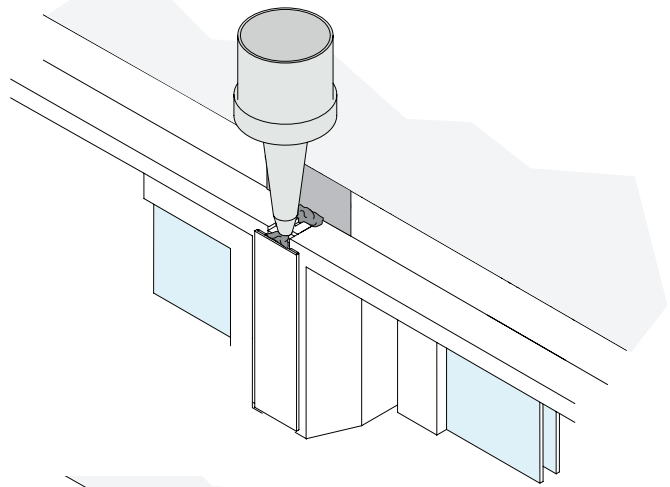
Position exterior trim strip ends tight to continuous exterior trim strip(s). Position remaining exterior trim strip(s) between continuous exterior trim strips and seat into joining plates using a rubber mallet.

49



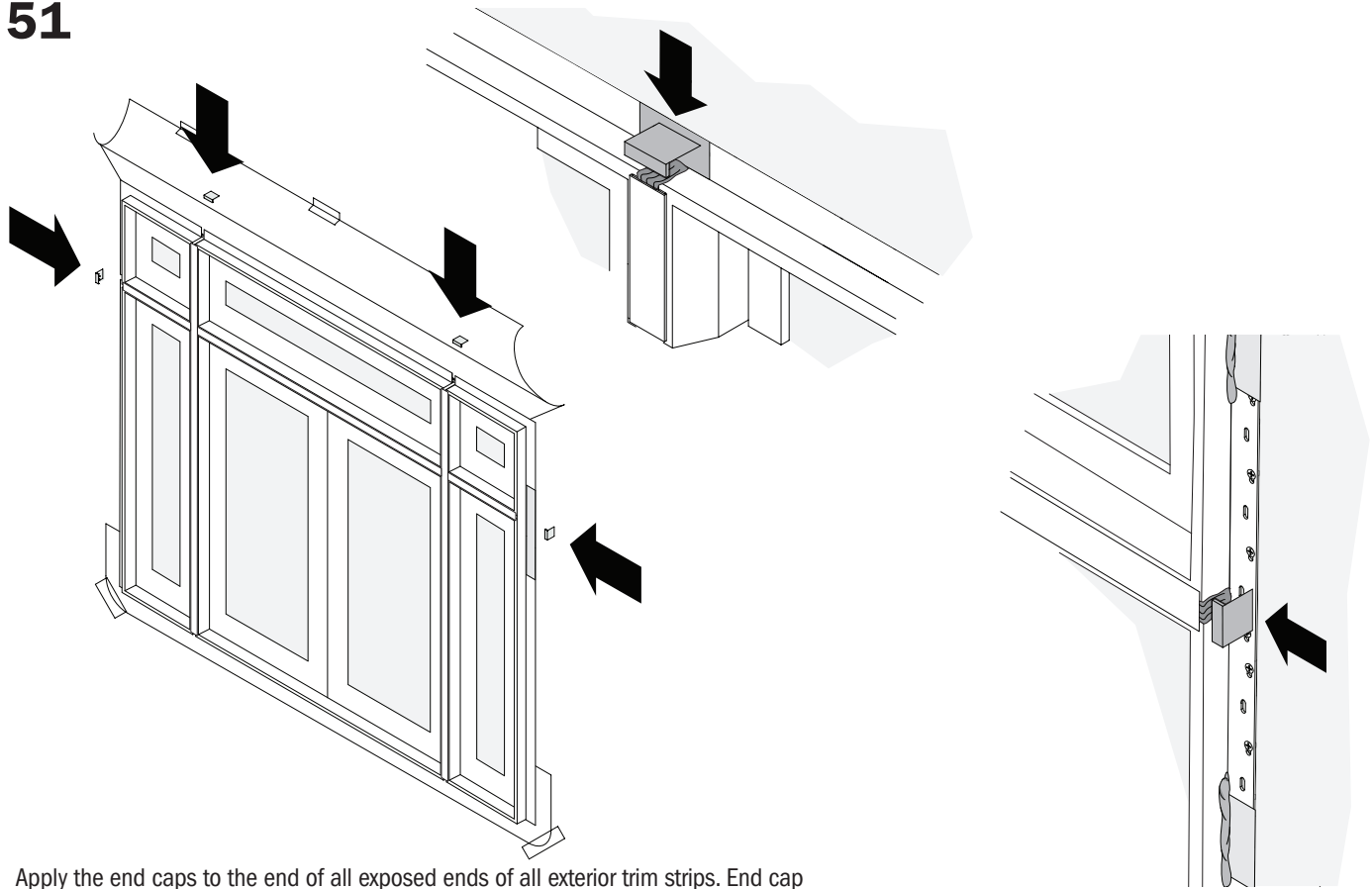
At top, place gasket on the exterior face, covering gap between adjacent unit installation flanges. At sides, cover gaps between installation flanges and flanged gusset plate(s).

50



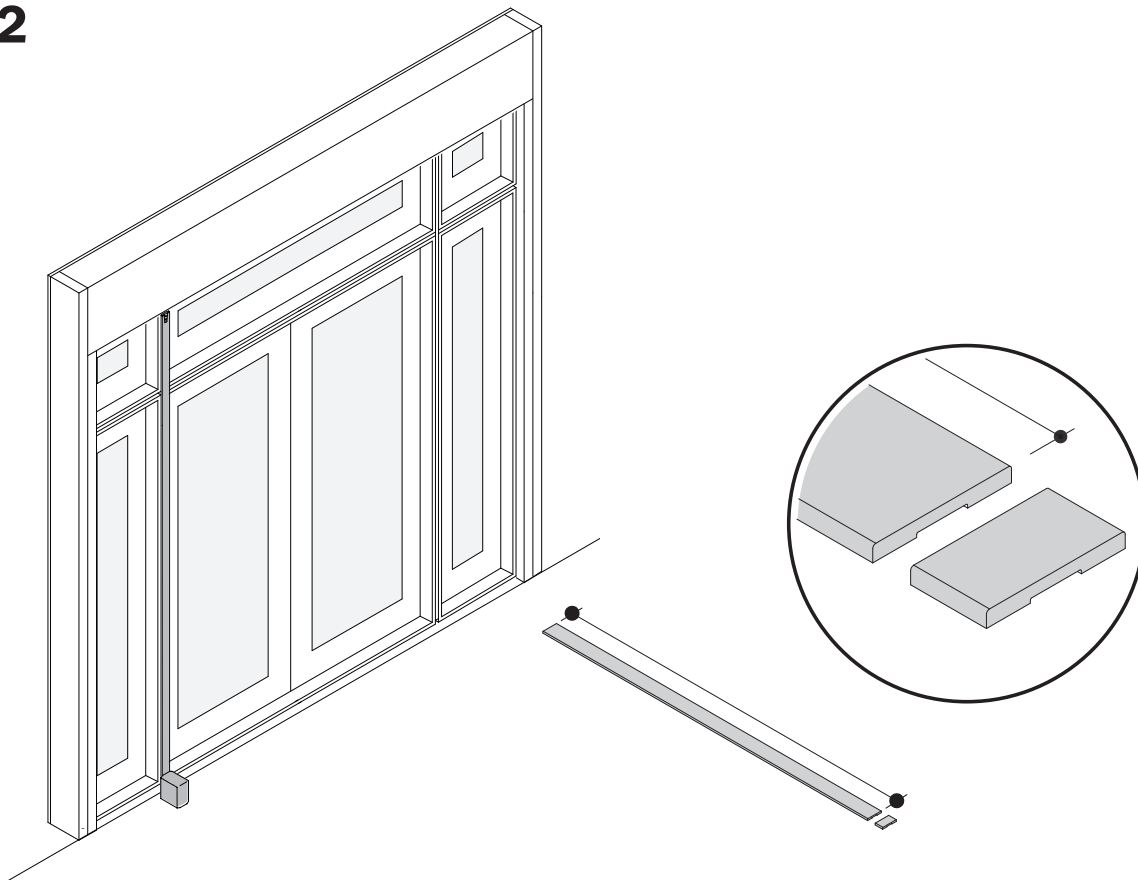
At the perimeter of joined combination, apply sealant over *join in opening* end plugs and locking/sealing plugs and smooth out sealant with a putty knife. Apply sealant at sides where gaskets meet the frame.

**51**



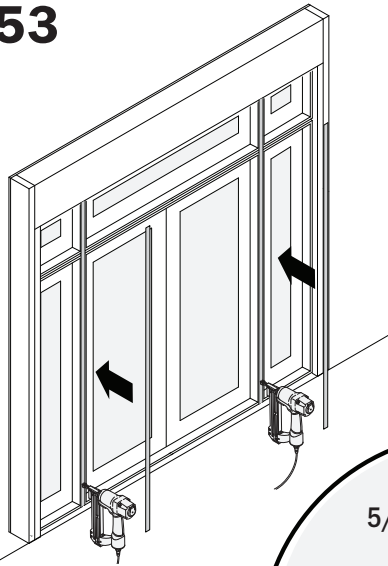
Apply the end caps to the end of all exposed ends of all exterior trim strips. End cap legs insert into the *join in opening end plugs* and/or *locking/sealing plugs*.

**52**

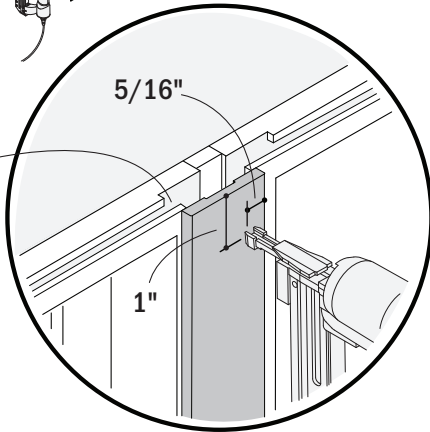


Measure and cut interior mull casing to length.

53

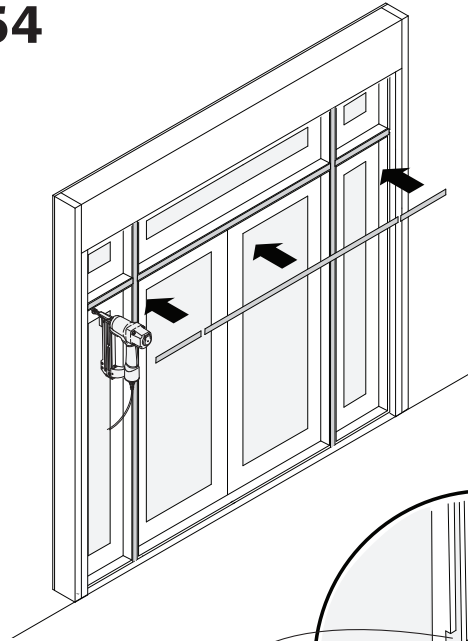


Position interior mull casing flush with extension jamb dado.

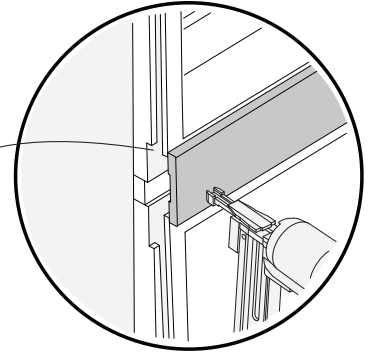


Apply and fasten interior mull casing along continuous join using 1" finish nails 1" from each end and 5/16" from edge.

54

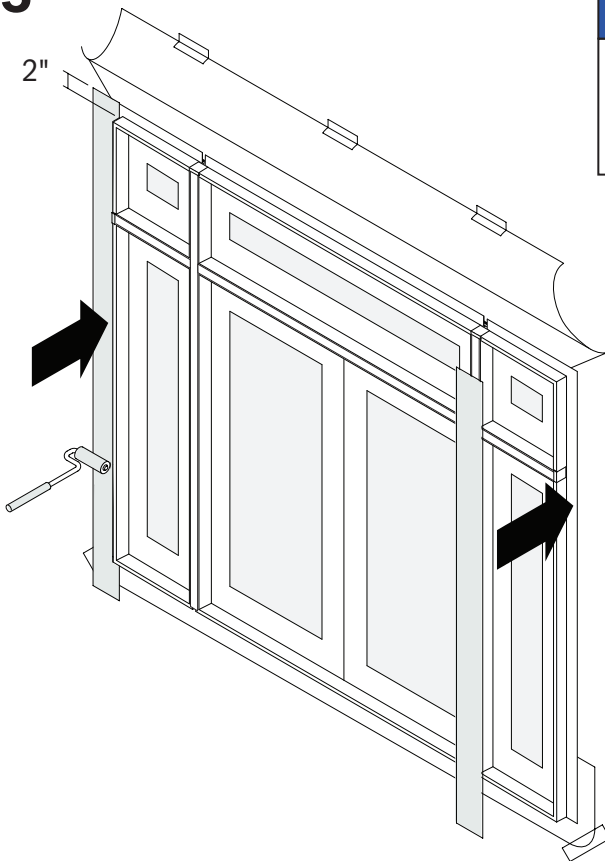


Position interior mull casing flush with extension jamb dado.



Measure, cut, and apply remaining interior mull casing. Fasten interior mull casing using 1" finish nails 1" from each end and 5/16" from edge.

55

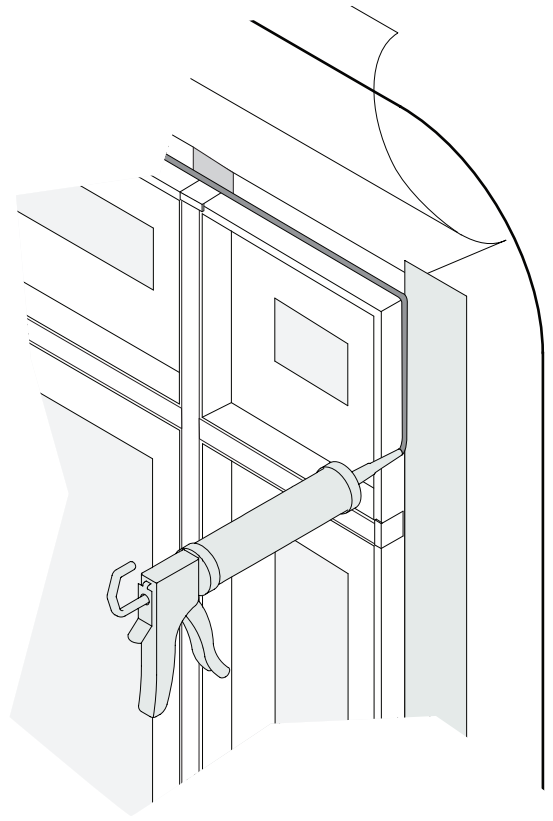
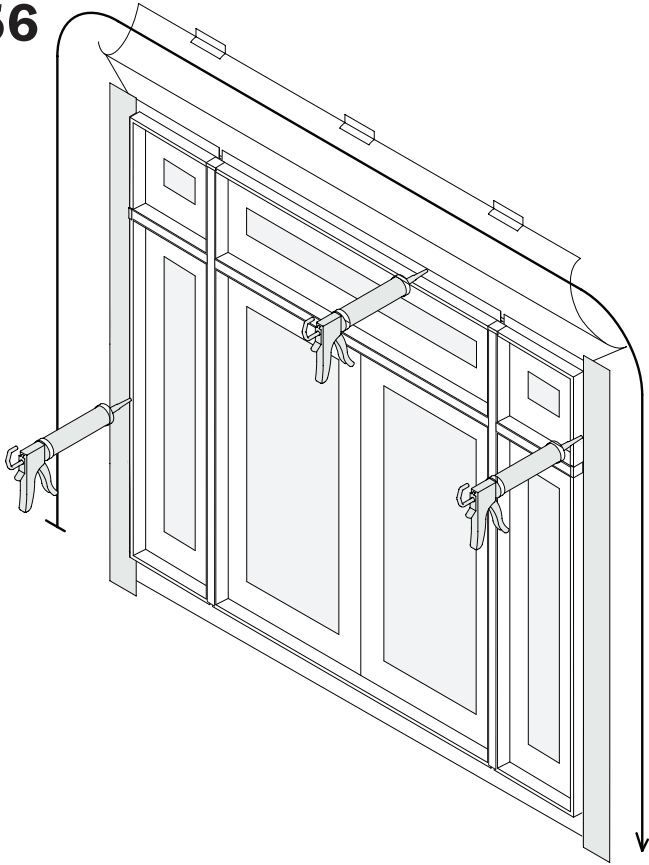


Apply flashing at sides overlapping sill flashing.

**NOTICE**

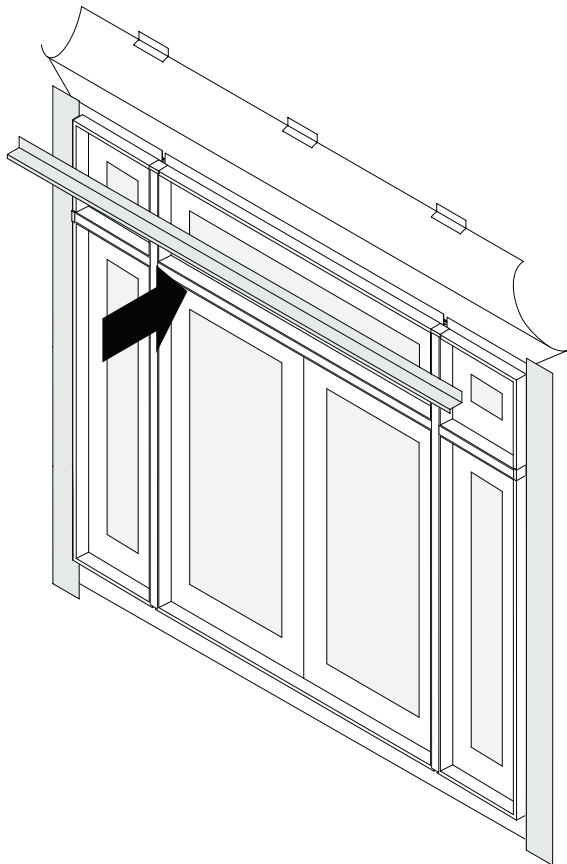
Make sure there are no wrinkles or voids in flashing during application and overlapping. Failure to do so could result in product or property damage.

56



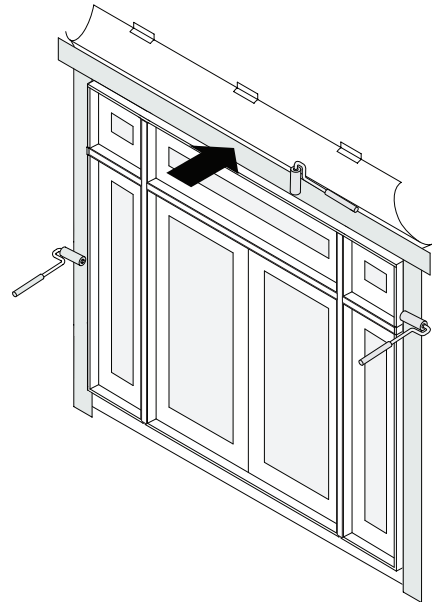
Apply a 1/4" sealant bead at sides and head as shown. Quickly go to next step.

57



Place the drip cap (full width) in the sealant as shown.

58

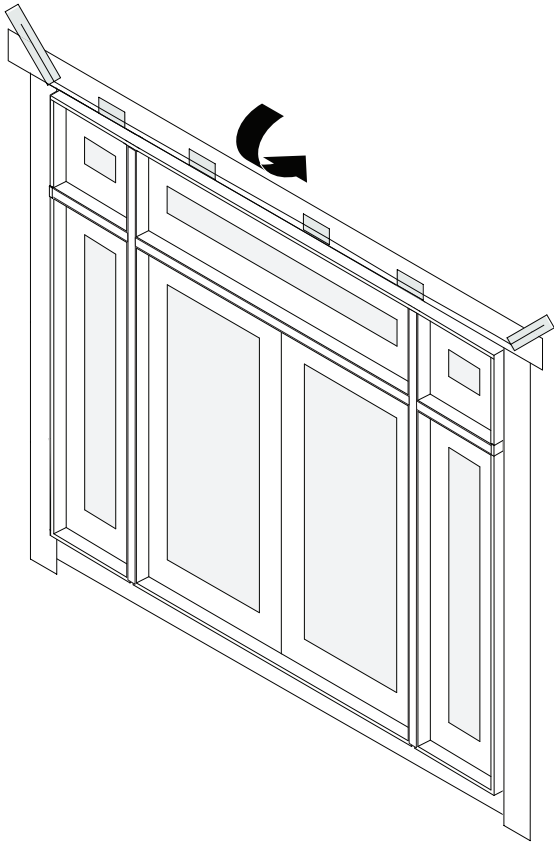


**NOTICE**

Make sure there are no wrinkles or voids in flashing during application and overlapping. Failure to do so could result in product or property damage. Side flashing cannot extend above top flashing. Doing so could result in product or property damage.

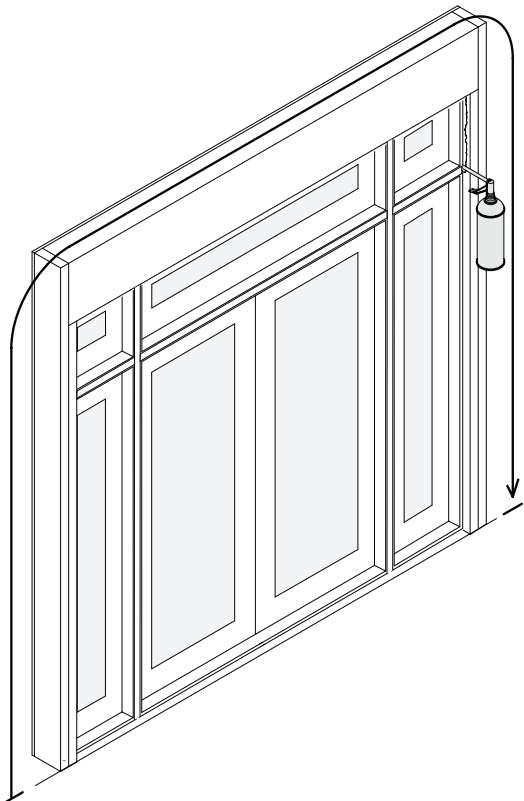
Apply flashing over the drip cap leg, overlapping the side flashing as shown. Smooth using a J-roller.

59



Unfold the house wrap top flap and tape the seams using house wrap tape as shown.

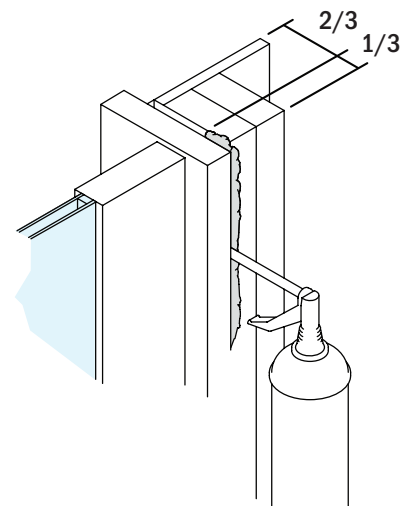
60



From the interior, apply sealant continuously to full perimeter of opening, filling interior 1/3 of cavity as shown using low expanding foam or backer rod and sealant.

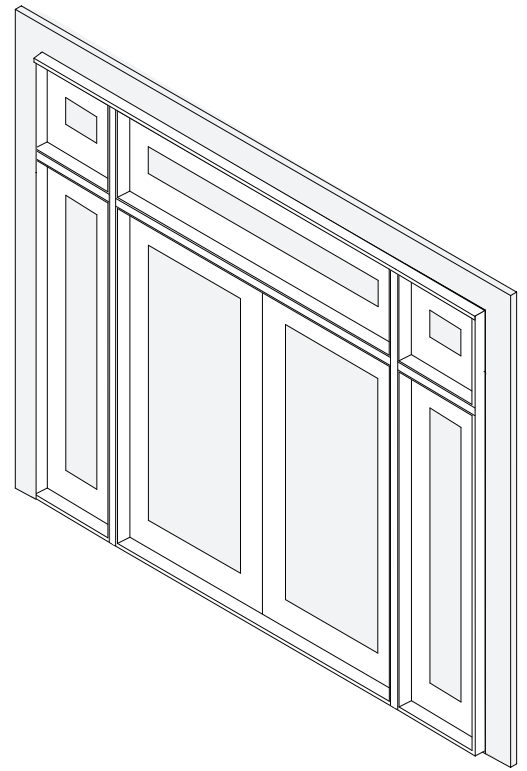
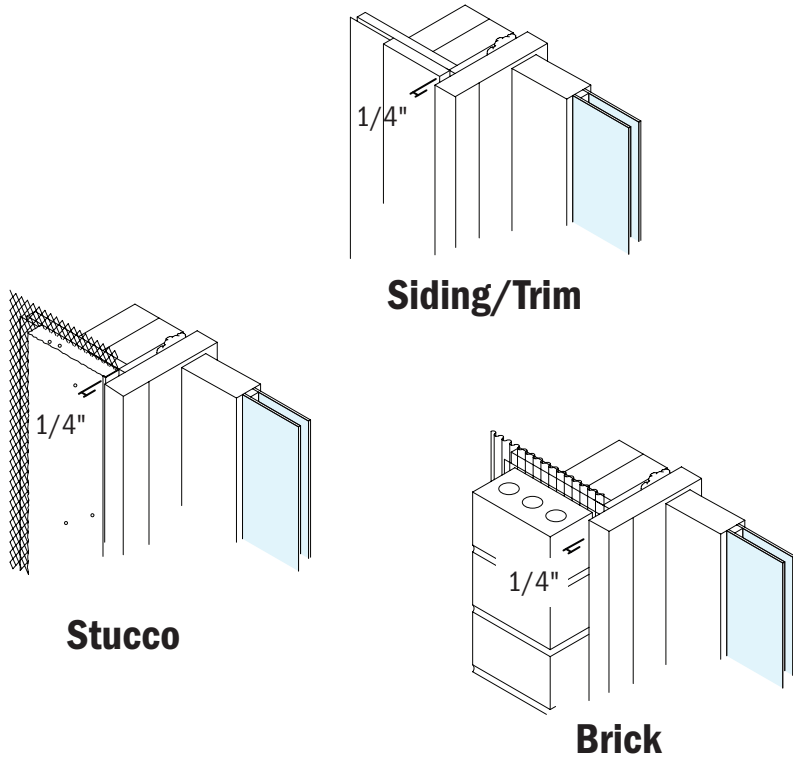
**NOTICE**

**DO NOT** overfill with low expanding foam or overpack with backer rod between the frame and opening or between joined windows or doors. Doing so will bow window or door jambs and could result in poor operation and product performance.



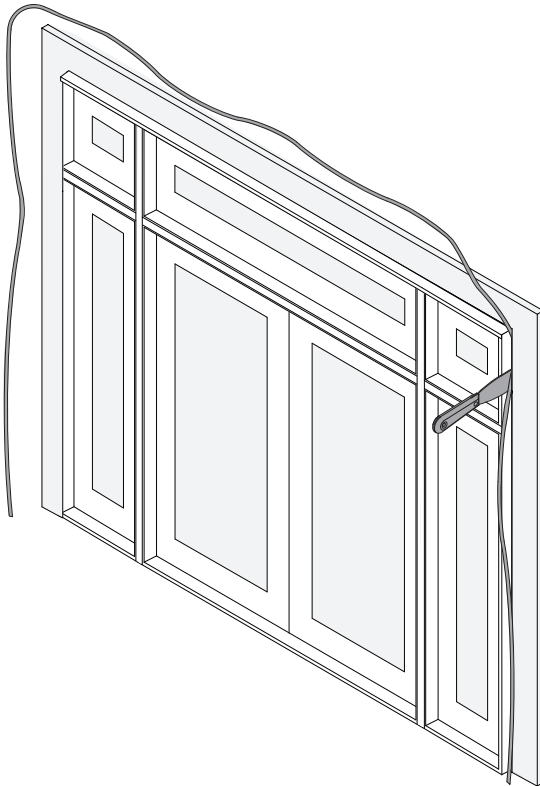


**61**



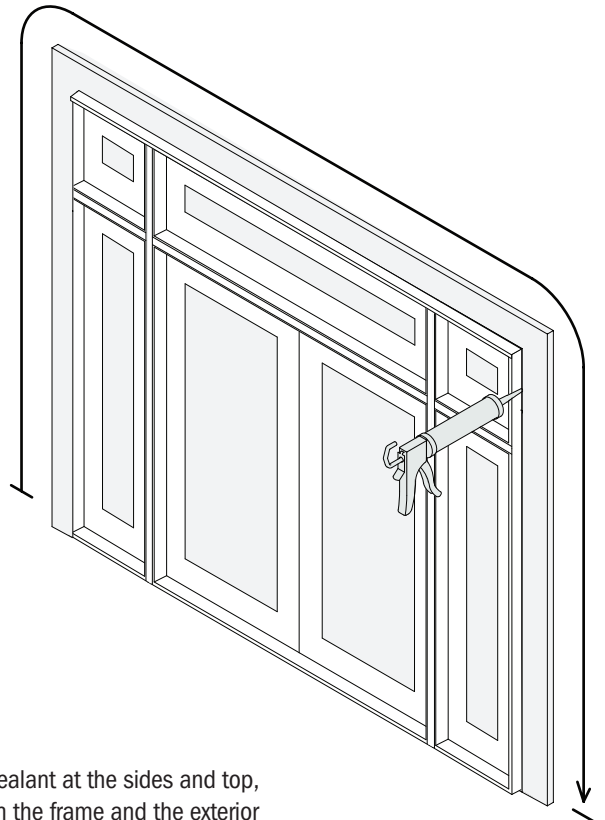
Leave a sealant gap between the exterior cladding/trim and the window or door frame as shown.

**62**



Insert backer rod at the sides and top, between the frame and the exterior cladding/trim.

**63**



Apply sealant at the sides and top, between the frame and the exterior cladding/trim.

**Joining and installation is complete.**

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