# **Installation Guide**

for Andersen® Architectural Clad Outswing Entry and Patio Doors

# Andersen®

architectural windows and doors

#### **INSTALLER:** Please leave this guide with the building owner to file for future reference.

Congratulations! You have just purchased one of the many fine Andersen® products. Proper assembly, installation and maintenance are essential if the benefits of your Andersen product are to be fully attained. Therefore, please read and follow this instruction guide completely. If your abilities do not match this procedure's requirements, contact an experienced contractor. You may direct any questions about this or other products to your local Andersen dealer, found in the Yellow Pages under "Windows" or call Andersen WindowCare® service center at 1-888-888-7020 Monday through Friday, 7 a.m. to 7 p.m. Central Time and Saturday, 8 a.m. to 4 p.m. Central Time. Thank you for choosing Andersen.

#### Important Safety, Assembly, and Installation Information

Every assembly and installation is different (windloads, structural support, etc.). Andersen strongly recommends consultation with an Andersen supplier or an experienced contractor, architect, or structural engineer prior to the assembly and installation of any Andersen product. Andersen has no responsibility in regard to the post-manufactured assembly and installation of Andersen products.

#### **A** WARNING

Use caution when working at elevated heights and around unit openings. Follow manufacturers' instructions for ladders and/or scaffolding. Failure to do so may result in injury or death.

#### **A WARNING**

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

#### **AWARNING**

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 to avoid injury and/or product damage.

## **AWARNING**

Unless specifically ordered, Andersen windows and doors 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 and doors are available with safety glass that may reduce the likelihood of injury when broken. Information on safety glass is available from your local Andersen dealer.

## **A** CAUTION

- Factory supplied Head Flashing and Installation Flanges **DO NOT** take the place of standard window and door flashing. Unit must be properly flashed and sealed with silicone for protection against water and air infiltration. Use non-reflective flashings.
- Do not apply any type of film to glass. Thermal stress conditions resulting in glass damage could occur.
- Use of movable insulating materials such as window coverings, shutters, and other shading devices may damage glass. In addition, excessive condensation may result causing deterioration of windows and doors.

## **AWARNING**

**DO NOT** carry door unit horizontally, exterior side down. Door panels may swing open causing product damage and/or severe injury.

#### **AWARNING**

Metal fasteners and other hardware components may corrode when exposed to preservative treated and fire-retardant treated lumber. Obtain and use the appropriate metal fasteners and hardware as called out by the installation guide to fasten unit to any rough opening made from pressure treated and fire-retardant treated lumber. Failure to use the appropriate materials for the installation may cause a failure resulting in injury, property or product damage.

## CAUTTON

Follow instructions from foam, sealant and flashing manufacturer regarding material application and compatibility with this product.

#### Parts Included

- (1) Installation Guide
- (1) Care. Finish & Maintenance Guide
- (1) Door Unit
- (1) Interior Sill Trim
- (1) Screw Pack
- (4) Corner Gaskets
- (1) Multi-Point Lock Set (optional)

#### **Tools Needed**

- Safety Glasses
- Tape Measure
- 4' Level
- Pry Bar
- Caulk Gun
- Hammer
- Putty Knife
- Phillips Screwdriver
- Flat Blade Screwdriver
- Drill/Driver
- Staple Gun
- 3/16" Drill Bit

#### **Supplies Needed**

- Formable Self-adhering Sill Flashing
- Flashing
- House Wrap Tape
- Drip Cap (full width)
- Shims (waterproof)
- Foam Backer Rod
- Staples
- Low Expanding Foam
- Sealant
- Fasteners (Stainless Steel, if required)
  - 5/8" Finish Nails
  - 1 3/4" Roofing Nails
  - #10 x 1 1/2" Screws
  - #10 x 2 1/2" Screws

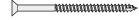
#### **Screw Pack Contains**

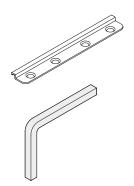
(12-28) #10 × 1 3/4" Stainless Steel Screws

(12-22)  $#10 \times 3$ " Flat Head Screws (Color Matched Screws are for Hinges)

(3-7) Sill Clip

(1) Temporary Lock Handle





#### Glass

## **A WARNING**



Film Seam Suction grips will not hold if placed over seam of film to lift or move unit. Unit will fall causing damage or injury.

- Laminated safety glass is not standard and must be special ordered. Check local building codes.
- Leave protective film in place until after construction is finished. Leave (NFRC) performance label in place until final inspection.
- Argon gas blend not available with high altitude glass.

#### CAUTION



Sealants will damage exterior coating on glass.

#### **Film Removal**

#### **A WARNING**

Static created when removing film can ignite flammable materials or cause a shock.

See warning label on glass.



- Remove protective film from seam or corner using plastic scraper if needed.
- Remove protective film within nine months of installation and when temperature is above 32° F.

## **A WARNING**

Dispose of film immediately after removal. Film may pose suffocation hazard to children.

## **Finishing**

## CAUTION

Finish wood surfaces immediately after installation. Unfinished wood will deteriorate, discolor, and/or may bow and split.

Do not stain or paint weatherstrip, vinyl, glass, or hardware. Product damage may occur.

- Apply interior casing to complete installation.
- · Finish all hidden wood surfaces
- Do not overload brush with stain/paint when finishing. Finish may wick between glass stop/grille on glass.
- Read and follow "Care, Finish, and Maintenance Guide".
- Read and follow finishing product instructions and warnings on finishing materials.

• Film is not a substitute for masking.



## **Cleaning**

#### CAUTION

Acid solutions used for cleaning masonry or concrete will damage glass, fasteners, hardware, and metal flashing. Protect unit and follow cleaning product instructions carefully. If acid contacts unit, wash all surfaces with water immediately.

- Clean glass using liquid glass cleaner.
- Clean exterior frame, sash and insect screens using mild detergent and water with a soft cloth or brush.
- For hard to clean areas use a nonabrasive cleaner, alcohol-and-water or ammonia-and-water.

#### CAUTTON

Abrasive cleaners will damage glass surface.

#### CAUTION



Metal razor blades can damage glass surface and exterior coating.

#### **Maintenance**

- Do not apply any type of film to insulated glass. Thermal stress and glass damage can result. Shading devices (insulated covers, shutters, etc.) may also cause thermal stress and condensation damage.
- For more information contact your local Andersen dealer or visit www.andersenwindows.com.

## 1. Unit Preparation

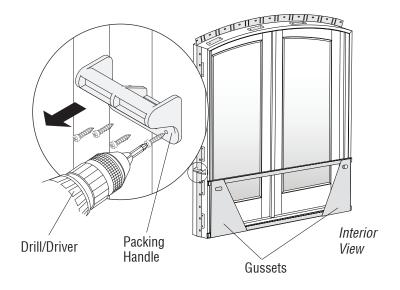
#### **A WARNING**

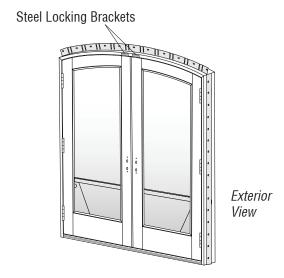
Door panels must be secured in closed position until unit is installed. **DO NOT** remove Steel Locking Brackets until unit is secured in opening. Failure to do so may result in door panel inadvertently opening causing injury, property, and/or product damage.

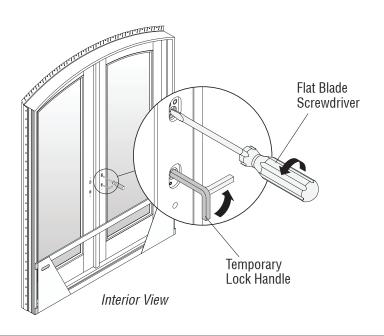
#### CAUTION

Gussets keep door unit square until installed. **DO NOT** remove Gussets until unit is secured in opening. Failure to do so may effect product performance.

- · Remove unit from packaging.
- Remove loose items such as interior trim or drip cap (full width). Extension jambs are factory applied unless ordered loose.
- Remove shipping braces, if needed.
   DO NOT remove Steel Locking Brackets or Gussets until secured in rough opening.
- · Remove packing handles and discard.
- Insert temporary lock handle in lower hole and turn to engage multi point locks. Insert flat blade screwdriver in upper lock hole and turn to lock door.
- Place unit exterior side up on a clean, flat work surface.



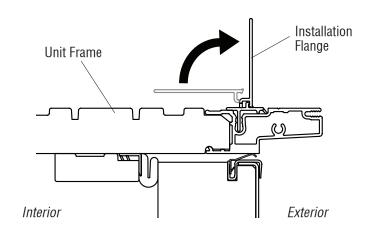


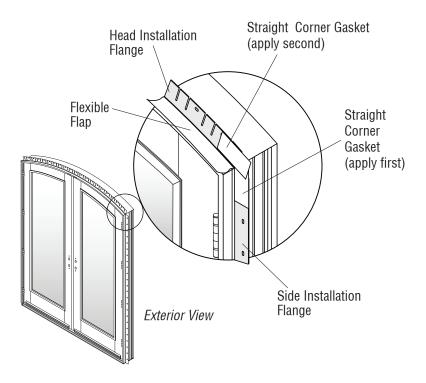


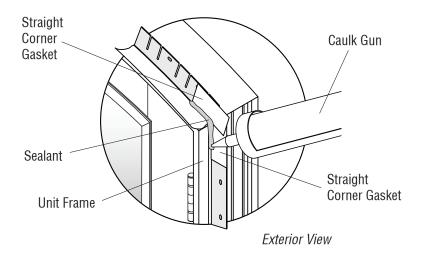
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## 2. Apply Corner Gaskets

- Lift Installation Flanges and snap into position perpendicular to frame. Not required on curved frame section(s).
- Remove backer from straight corner gaskets.
- Adhere first straight corner gasket to Side Jamb Installation Flange extending half the gasket between head and side Installation Flanges from exterior.
- Adhere second straight corner gasket to Head Installation Flange overlapping onto first straight corner gasket from exterior.
- Apply sealant between corner gaskets and unit frame. See drawing.



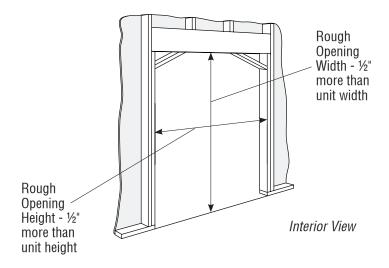


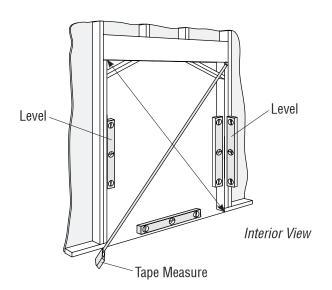


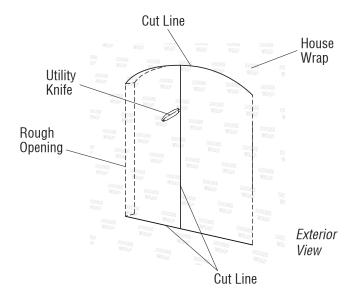
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# 3. Prepare Rough Opening

- Width of rough opening should be ½" more than unit width. Height of rough opening should be ½" more than unit height. Allow for flashing thickness.
- Check sill plate for level. Sill **must** be level. Shim if needed.
- Check rough opening for plumb and level. If rough opening is **not** plumb or level, correct as needed.
- Check rough opening for square by measuring diagonally across, upper left to lower right and upper right to lower left corner. If measurements are within <sup>1</sup>/<sub>8</sub>", opening is square. If rough opening is **not** square, correct as needed.
- Cut house wrap along sill and head of rough opening.
- Cut house wrap vertically in center of rough opening from head to sill.

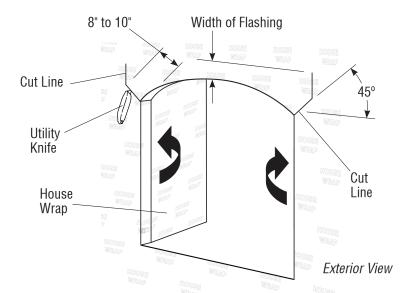




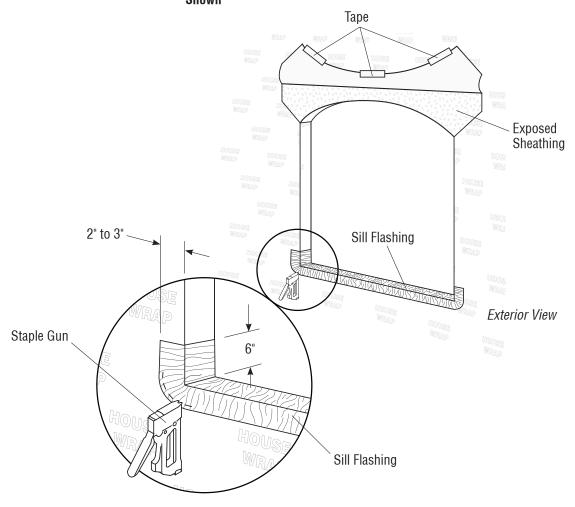


#### 3. Prepare Rough Opening (continued)

- Fold house wrap around to inside, trim excess and staple.
- Cut top corners of house wrap on 45° angles the width of head flashing. For arch top and Springline™ units, cut top corners on 45° angle for 8" to 10" then cut straight up until the cuts equal the width of the head flashing above the unit. See drawing.
- Fold flap up and temporarily tape in position.
- Apply sill flashing to rough opening sill.
   Keep sill flashing 6" above sill at sides and 2" to 3" onto house wrap around exterior.
- Secure corners of sill flashing by stapling, taping or nailing in position. Stapling shown in drawing.



Rough Opening for Arch Unit Shown

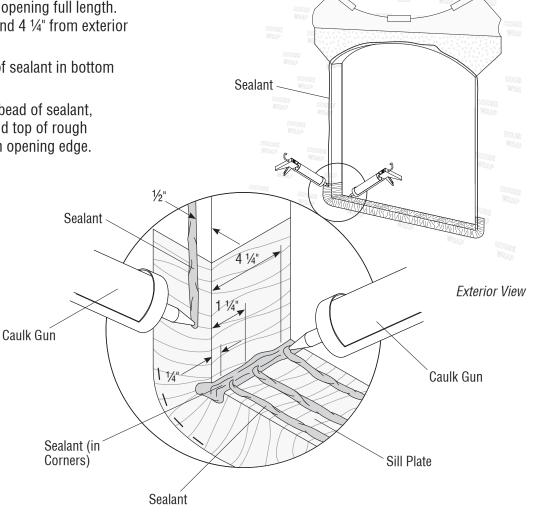


#### 3. Prepare Rough Opening (continued)

Apply three, continuous <sup>3</sup>/<sub>8</sub>" beads of sealant along sill plate of rough opening full length.
 Space beads ½", 1 ½", and 4 ½" from exterior edge.

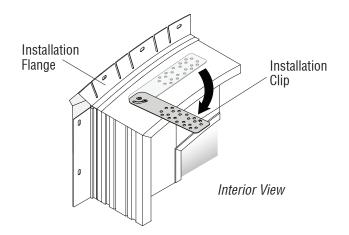
Apply a liberal amount of sealant in bottom corners.

 Apply a continuous <sup>3</sup>/<sub>8</sub>" bead of sealant, around exterior sides and top of rough opening, ½" from rough opening edge.



# 4. Position Installation Clips

- Rotate *Installation Clips* 90° into position around frame, as shown, before placing unit into rough opening.
- For Springline<sup>™</sup> and arch units, relocate *Installation Clips* on radius head jamb for securing to building framing as needed.



#### 5. Install Unit

#### **AWARNING**

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 to avoid injury and/or product damage.

## **A WARNING**

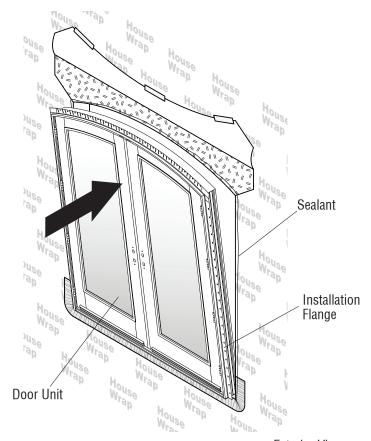
Door panels must be kept secured in closed position. Unsecured door panels may swing open causing injury.

#### **AWARNING**

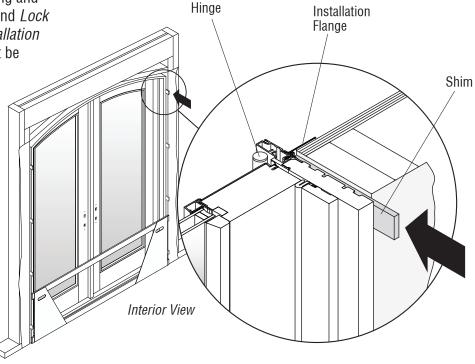
Support unit in rough opening at all times until secured. Failure to do so may result in door falling out causing injury, property, and/or product damage.

- Lift and center unit in rough opening, set sill of unit onto sealant, from the exterior.
- Push top in until *Installation Flange* is firmly pressed into sealant around perimeter of rough opening. *Installation Flange* must be flush with exterior of opening.

 Insert shims between rough opening and door unit, directly behind *Hinges* and *Lock* Strike Plates and beside each *Installation* Clip from the interior. Shims must be tight to *Installation Flange*.







#### **5. Install Unit (continued)**

#### CAUSTION

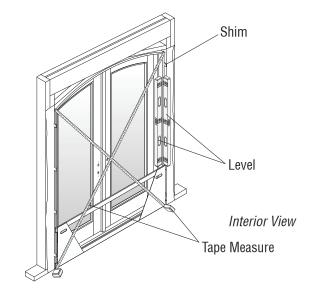
A minimum space of 1/4" is required around exterior perimeter of unit between unit and building framing. Failure to properly space product in opening may result in product and/or property damage.

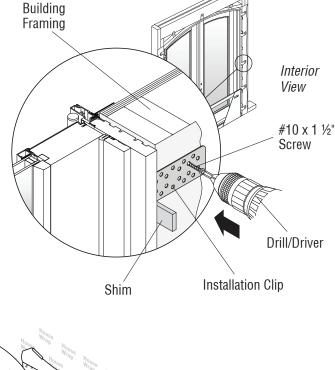
#### **NOTICE**

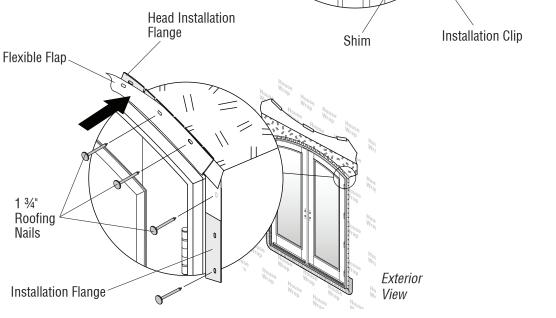
Both Installation Clips and Installation Flanges must be used for installing all units. If both cannot be used, unit must be secured to building structure through frame.

- Unit must be plumb, level, and square. Check unit for square by measuring diagonally, upper left to lower right and upper right to lower left corners. Both measurements must be within 1/8". Adjust shims as needed.
- Bend and fasten *Installation Clips* to building framing using #10 × 1 ½" screws.
- Nail through every other hole around
   Installation Flange using 1 ¾" roofing nails.

   For Springline™ and Arch units, flexible flap
   must be secured tight to Head Installation
   Flange. Extra 1 ¾" roofing nails may be needed to keep flexible flap tight to Head Installation Flange.







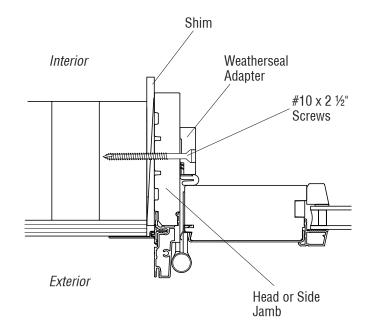
#### **5. Install Unit** (continued)

#### **Securing Units Through Frame**

If not securing through the frame, proceed to next step.

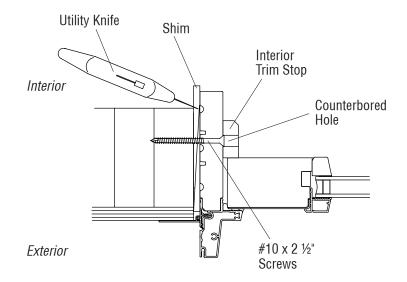
#### **Operating and Fixed Units**

- Drill <sup>3</sup>/<sub>16</sub>" hole and counterbore through weatherseal adaptor around unit head and side jambs, 4" from each corner and every 16" between. See drawing.
- Insert shims between frame and rough opening behind <sup>3</sup>/16" holes.
- Fasten through predrilled holes using #10 x 2 ½" screws.
- Check plumb, level, and square of unit.
   Adjust shims as needed.
- Fill counterbored holes with <sup>3</sup>/<sub>8</sub>" wood plugs.



#### **Units With Sidelights**

- Drill <sup>3</sup>/<sub>16</sub>" holes and counterbore through interior trim stop around head and side jambs, 4" from each corner and every 16" between. See drawing.
- Insert shims between frame and rough opening behind <sup>3</sup>/16" holes.
- Fasten through predrilled holes using #10 x 2 ½" screws.
- Check plumb, level, and square of unit.
   Adjust shims as needed.
- Fill counterbored holes with <sup>3</sup>/<sub>8</sub>" wood plugs.

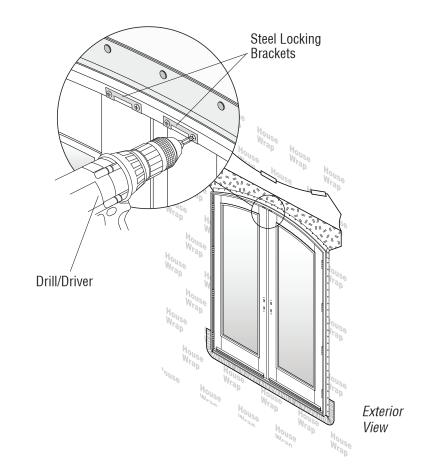


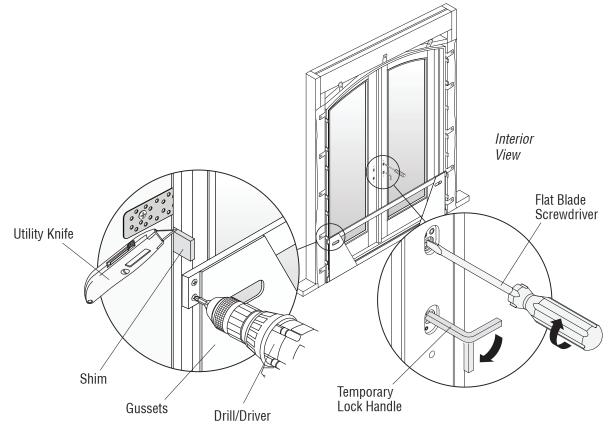
#### **6. Remove Brackets and Gussets**

# CAUTION

Some units may have more than one Steel Locking Bracket. Remove all Steel Locking Brackets from frame before opening doors. Failure to do so may result in product damage.

- Remove *Steel Locking Brackets* and *Gussets* from the door frame.
- Cut shims flush with door frame using a utility knife.
- Insert flat blade screwdriver in upper lock hole and turn to unlock door. Insert temporary lock handle in lower hole and turn to open door.
- Remove *Steel Locking Brackets* from door panels and discard.





#### 7. Install Long Screws

If unit has sidelights and/or transom don't install long screws.

- Secure Hinges by installing supplied (from screw pack) #10 × 3" color matched screws through center holes of Hinges, replacing factory installed screws if present.
- Shim behind head jamb strike plate. Replace factory installed #8  $\times$   $^{3}4^{"}$  screws in head jamb strike plate with supplied (from screw pack) #10  $\times$  3" stainless steel screws.
- Check clearance and operation of door panels. Refer to hardware adjustment guide, if needed.

# Shim Head Jamb Strike Plate #8 × 3/4" #10 x 3" Screws Screws (stainless steel) Interior View Drill/Driver Shim Hinge Drill/Driver #10 x 3" Screws (color matched)

#10 x 3" Screws

(stainless steel)

#### **Single Doors**

Shim behind strike plates.

Remove #8 x ¾" screws from hook bolt

strike plates and center strike plate and replace with supplied (from screw pack)
#10 x 3" stainless steel screws.

#8 x 3/4" Screws

Hook Bolt Strike Plate

#10 x 3" Screws (stainless steel)

Drill/Driver

Shim

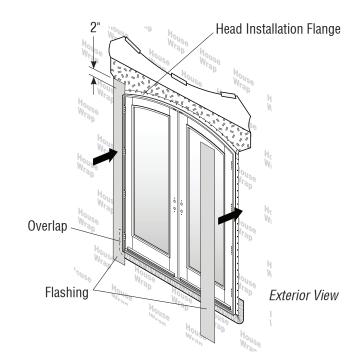
Drill/Driver

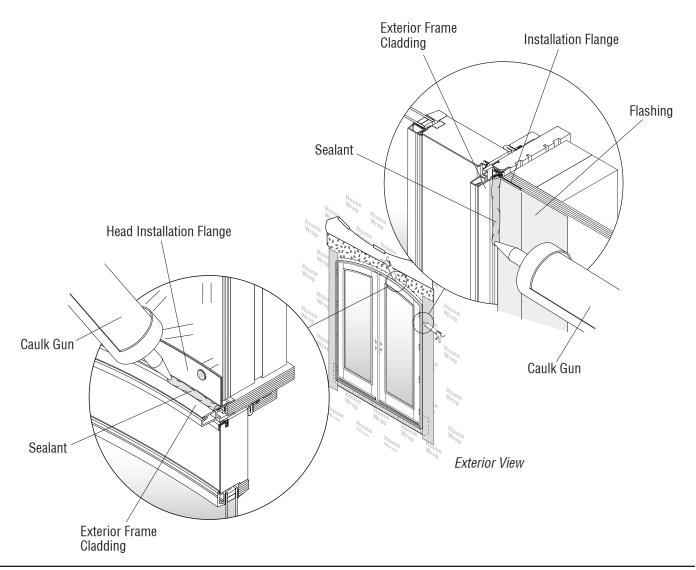
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Center Strike Plate

#### 8. Flash and Seal Unit

- Close and lock door(s) by following instructions from Step 1.
- Apply flashing at sides, overlapping sill flashing and extending 2" above *Head Installation Flange*.
- Apply <sup>3</sup>/<sub>8</sub>" bead of sealant along head and sides sealing *Installation Flanges* to exterior frame cladding.





## 8. Flash and Seal Unit (continued)

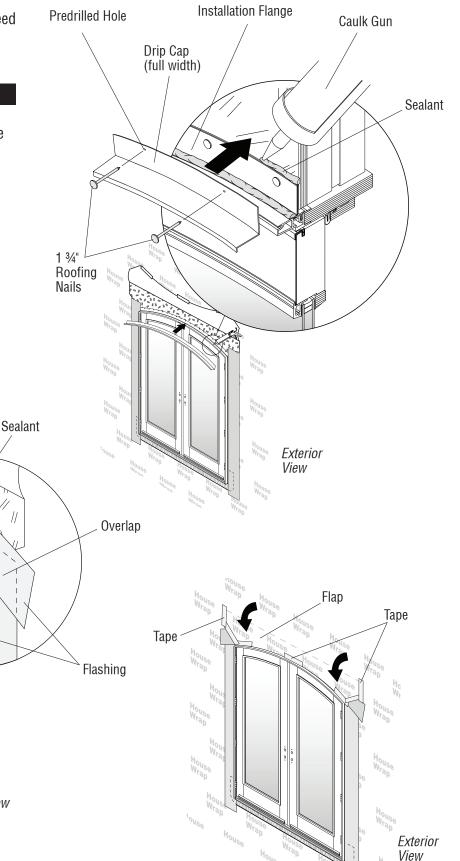
If not installing drip cap (full width), proceed to **Units without Drip Cap (full width)** on **Page 17**.

#### Units with Drip Cap (full width)

- Apply <sup>3</sup>/<sub>8</sub>" bead of sealant along top edge of *Head Installation Flange*.
- Place drip cap (full width) in sealant at head, centered over unit. Secure to building structure using 1 <sup>3</sup>/<sub>4</sub>" roofing nails through the predrilled holes.
- Apply flashing over drip cap (full width) at head, overlapping flashing at sides.
- Apply sealant between flashing and drip cap (full width) along head.
- Fold house wrap flap down and secure with house wrap tape.

Caulk Gun

Drip Cap (full width)



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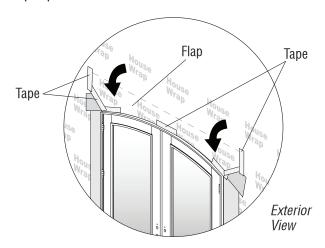
Exterior View

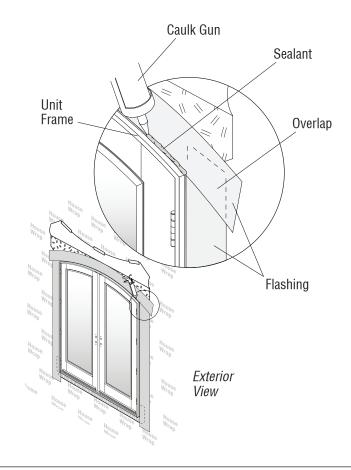
Low Expanding

#### 8. Flash and Seal Unit (continued)

#### Units without Drip Cap (full width)

- Apply flashing over *Installation Flange* at head, overlapping flashing at sides.
- Apply sealant between flashing and unit frame along head.
- Fold house wrap flap down and secure with house wrap tape.





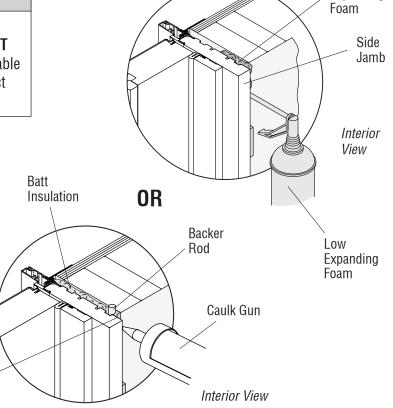
## 9. Insulate Around Unit

# CAUTION

When insulating between unit frame and rough opening, or between units when joining, **DO NOT** overpack batt insulation or overfill with expandable foam. Bowed jambs will result affecting product performance and/or unit operation.

 Insulate between frame and rough opening at sides and head. DO NOT overpack batt insulation or overfill with low expanding foam.

 Seal gap between frame and rough opening from interior along sides and head with backer rod and sealant, if not insulating or insulating with batt insulation.



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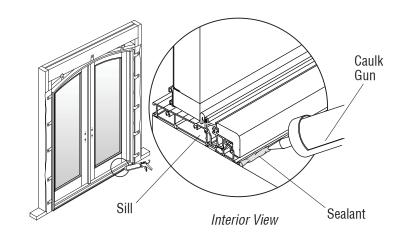
Sealant

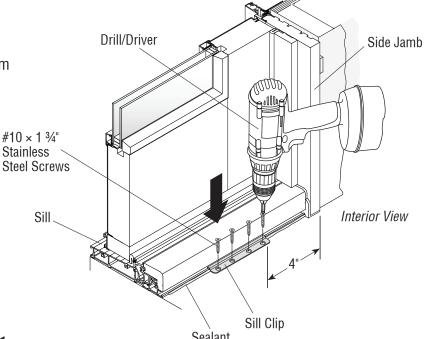
#### 10. Secure Sill

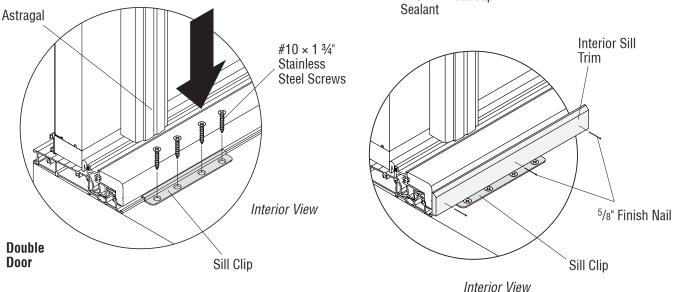
# CAUTION

Ridged sill pan modification may be required for sill clip anchoring and sealing.

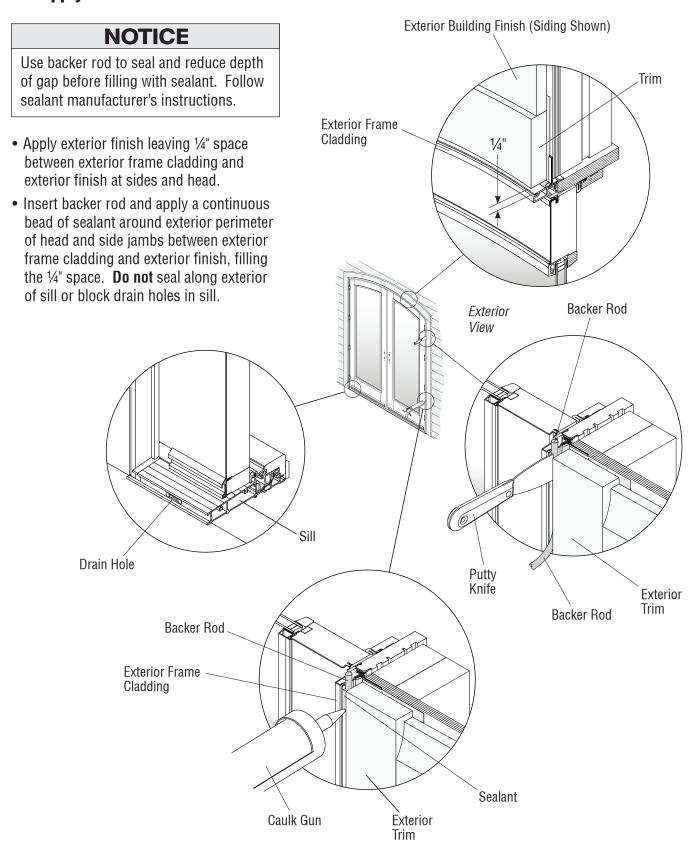
- Apply a ¼" bead of sealant along sill from interior.
- Install sill clips 4" from each side jamb using supplied (from screw pack) #10 x 1 ¾" screws. Secure sill of door unit and side lights if applicable.
- For double doors install a sill clip in center of door unit. Align with astragal.
- Apply interior sill trim to sill using <sup>5</sup>/<sub>8</sub>" finish nails. Keep interior sill trim level resting on sill clip.







#### 11. Apply Exterior Finish and Seal



# **Panel Adjustment**

#### **NOTICE**

A shim is located behind each Hinge and can be removed or more added to adjust door panel clearance within the frame. Use these shims to adjust door panel(s) after door unit is installed and trimmed.

- Open door panel 90°.
- Loosen hinge screws on side of Hinge attached to door panel.
- Remove or add shims behind *Hinge*, from interior, as needed.
- Reinstall hinge screws.
- Close door. Check operation of door and clearance between door panel and frame. If door panel is still out of alignment, repeat as needed.



