Installation Guide

for Andersen® 400 Series Frenchwood® Hinged Patio Doors or

400 Series Frenchwood® Hinged Patio Doors with Stormwatch™ Protection

(High-Performance™ Impact Resistant Glass)

Andersen®
AW
™
WINDOWS·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. For installation methods not covered in this guide, (i.e. through jamb) please visit the Architect Detail File on the web (www.andersenwindows.com). Andersen has no responsibility in regard to the post-manufactured assembly and installation of Andersen products.

⚠ WARNING

Using ladders and/or scaffolding and working at elevated levels may be hazardous. Follow equipment manufacturer's instructions for safe operation. Use extreme caution when working around window and door openings. Falling from opening may result in personal injury or death.

⚠ WARNING

Improper use of hand/power tools could result in personal injury and/or product damage. Follow manufacturer's instructions for safe operation of equipment. Always wear safety glasses.

⚠ WARNING

Weight of window/door unit(s) and accessories will vary. Use a reasonable number of people with sufficient strength to lift, carry, and install window and door unit(s) and accessories. Always use appropriate lifting techniques.

⚠ WARNING

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 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.

⚠ CAUTION

- Andersen® 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. Highly reflective flashing tapes can raise the surface temperature of the vinyl to the point where vinyl deformation and product damage may occur.

- 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 and/or vinyl. In addition, excessive condensation may result causing deterioration of windows and doors.

Instruction Guide **0004234** Revised 01/27/06

⚠ WARNING

Accessories such as grilles, art glass, and insect screens may dislodge and become airborne if window/ 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/doors and move to a safe location. **DO NOT** stand in front of or near windows/ doors.

⚠ WARNING

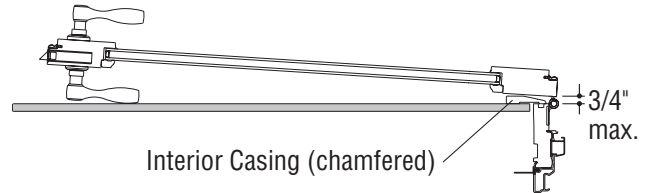Unsecured door may swing open or closed causing injury. Secure door when open.

NOTICE

Lock Operation

• To lock, lift handle to engage upper and lower hook bolts. Turn lock turn-piece to horizontal position.

• To unlock, turn lock turn-piece to vertical position. Open door by bringing handle downward.
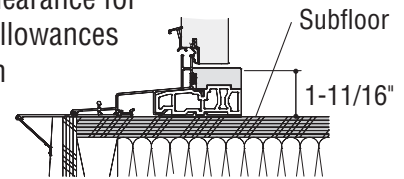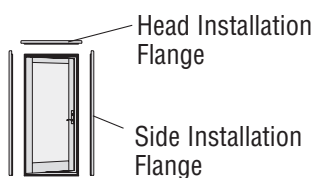

TO LOCK
1. LIFT HANDLE

2. TURN LOCK
or

NOTICE

• For installations where full panel (180°) operation is desired, install unit flush to interior surface and apply interior casing no thicker than 3/4". If thicker Interior Casing is used, chamfer edge to prevent interference with panel, as shown.
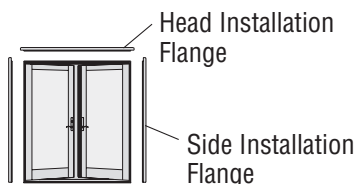

3/4" max.

Interior Casing (chamfered)

• For installations where interior finishing material is higher than 1-11/16" above the subfloor, raise door by placing a wooden spacer under sill to gain sufficient clearance for door to open. Allowances **must** be made in height of rough opening.

Subfloor

1-11/16"

• For **Double Insect Screen Track**, **Exterior Extension Jambs**, and/or **Exterior Sill Extension Kits**, apply kits **before** unit is installed.
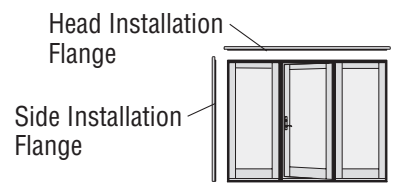
Single/Stationary Panel | **Double Panel Jamb Hinged** | **Double Panel Astragal Hinged*** | **Triple Panel Astragal Hinged***

* **NOT** Available with Stormwatch® Protection

SINGLE	Unit Designation	2168	2768	2968	3168	21611	27611	29611	31611	2180	2780	2980	3180
	Rough Opening Width	2'1"	2'7"	2'9"	3'1"	2'1"	2'7"	2'9"	3'1"	2'1"	2'7"	2'9"	3'1"
	Rough Opening Height	6'8"	6'8"	6'8"	6'8"	6'11"	6'11"	6'11"	6'11"	8'0"	8'0"	8'0"	8'0"
	Approximate Weight (lbs)	100	105	115	125	110	115	125	135	125	135	150	160

DOUBLE	Unit Designation	4168	5068	5468	6068	41611	50611	54611	60611	4180	5080	5480	6080
	Rough Opening Width	4'1"	5'0"	5'4"	6'0"	4'1"	5'0"	5'4"	6'0"	4'1"	5'0"	5'4"	6'0"
	Rough Opening Height	6'8"	6'8"	6'8"	6'8"	6'11"	6'11"	6'11"	6'11"	8'0"	8'0"	8'0"	8'0"
	Approximate Weight (lbs)	150	185	197	215	165	195	205	225	185	230	248	275

TRIPLE	Unit Designation	8068	9068	80611	90611	8080	9080
	Rough Opening Width	8'0"	9'0"	8'0"	9'0"	8'0"	9'0"
	Rough Opening Height	6'8"	6'8"	6'11"	6'11"	8'0"	8'0"
	Approximate Weight (lbs)	280	350	295	360	360	405

⚠ WARNING

Steel will corrode when used with ACQ Pressure Treated Lumber. Obtain and use the appropriate size stainless steel fastener as called out in the installation guide to fasten unit to any rough opening made from ACQ Pressure Treated Lumber. Failure to use stainless steel fasteners may result in injury, property, or product damage.

Parts Included

(1) Instruction Guide
(1) Patio Door Unit
(1) Head Installation Flange
(2) Side Installation Flanges
(1) Screw Pack (standard)
(1 or 2) Specialty Finish
        Hinges Screw Pack(s)
        (included for specialty finish hinges, only)

Tools & Supplies

- Safety Glasses
- Hammer
- Tape Measure
- 4' Level
- Flat Blade Screwdriver
- Phillips Screwdriver
- Small Pry Bar

- Caulk Gun
- Silicone Primer
- Silicone Sealant
- Wood Block
- Shims
- Cement Screws
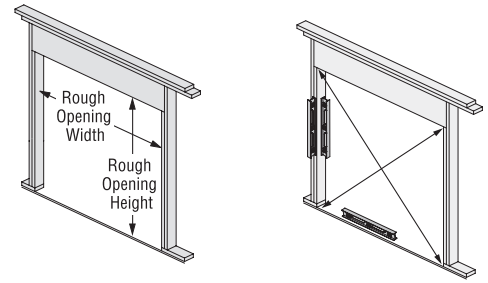 (concrete/masonry installation)

Part No.	Specialty Finish Hinge Screw Packs
2579174	Bright Brass Screw Pack, 3 Hinge
2579179	Bright Brass Screw Pack, 4 Hinge
2579175	Antique Brass Screw Pack, 3 Hinge
2579180	Antique Brass Screw Pack, 4 Hinge
2579176	Satin/Distressed Nickel Screw Pack, 3 Hinge
2579181	Satin/Distressed Nickel Screw Pack, 4 Hinge
2579177	Oil Rubbed/Distressed Bronze Screw Pack, 3 Hinge
2579182	Oil Rubbed/Distressed Bronze Screw Pack, 4 Hinge
2579178	Brushed/Polished Chrome Screw Pack, 3 Hinge
2579183	Brushed/Polished Chrome Screw Pack, 4 Hinge

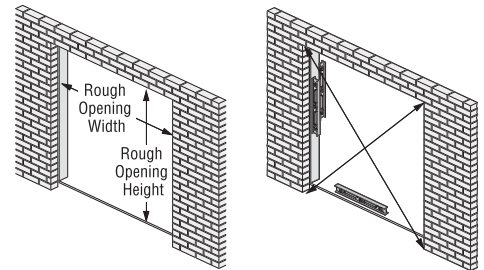# 1. Prepare Rough Opening

CAUTION
DO NOT install unit directly on masonry/concrete surface. Place full length barrier (i.e. treated wood, tar paper, ice/water membrane) between unit sill and masonry/concrete surface. Failure to use barrier and to seal it to unit sill and masonry/concrete surface may result in product and/or property damage. Entire barrier must be sealed to masonry/concrete surface to help prevent water infiltration. Barrier thickness must not exceed 1/4".

- Prepare rough opening based on unit size according to table on **Page 2**.
- Check sill plate for level. Sill **must** be level. Shim if necessary.
- Check rough opening for plumb and level. If rough opening is **not** plumb or level, correct as needed.
- Check opening for square by measuring diagonally, upper left to lower right and upper right to lower left corner. If measurements are within 1/8", opening is square. If rough opening is **not** square, correct as needed.

Standard Construction

Exterior Views

Masonry/Concrete Construction

2. Prepare Unit

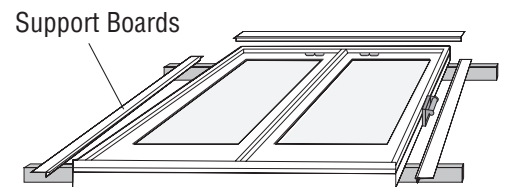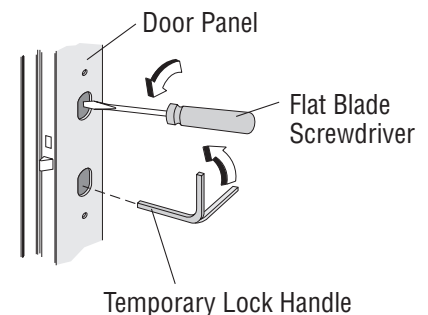| ⚠ WARNING |
|---|
| Weight of Patio Doors will vary. Use a reasonable number of people with sufficient strength to lift, carry, and install door unit(s) and accessories. Always use appropriate lifting techniques. Failure to do so may result in personal injury or product damage. |

⚠ WARNING
Door panels must be in locked position before beginning. Failure to do so may result in panels inadvertently opening causing personal injury, property, and/or product damage.

- Remove unit from carton. Place unit exterior side up on support boards (to protect hinges) over a clean flat work surface.
- Insert *Temporary Lock Handle* into lower lock hole on door panel and turn upwards to lock door. Insert flat blade screwdriver into upper lock hole and turn to lock dead bolt. Door panels **must** be in locked position before beginning.
- Remove packing blocks. Do not remove panel *Spacer Clips* until **Step 10**.

Support Boards

Exterior Side Up

Door Panel

Flat Blade Screwdriver

Temporary Lock Handle

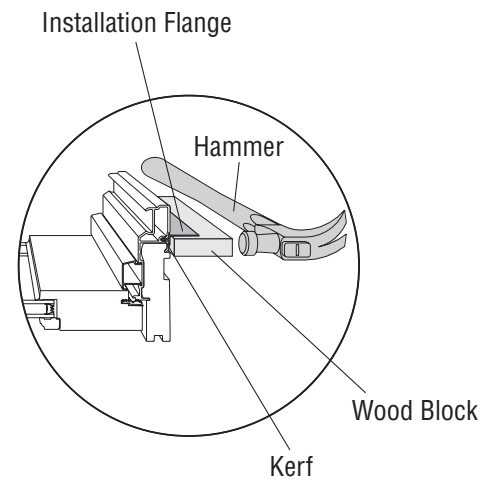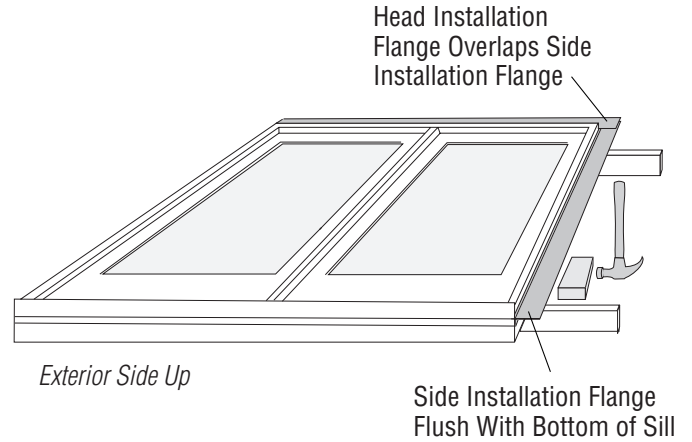# 3. Apply Installation Flanges

CAUTION
Head Installation Flange must overlap Side Installation Flanges to the exterior to help prevent water infiltration.

- Determine if *Installation Flange* is used based on charts below.
- Position *Side Installation Flange* in kerf on frame with short leg facing interior and end flush with bottom of sill. Place wood block against short leg of *Side Installation Flange* and tap until fully seated.
- Repeat for opposite *Side Installation Flange.*
- Repeat for *Head Installation Flange* making sure it overlaps *Side Installation Flanges* to the exterior.

Head Installation Flange Overlaps Side Installation Flange

Exterior Side Up

Side Installation Flange Flush With Bottom of Sill

Installation Flange

Hammer

Wood Block

Kerf

WALL THICKNESS	INSTALLATION FLANGE	SILL EXTENDER
4 1/2"	Yes	No
5 1/4"	Yes	Optional
6 9/16"	No (Backer Rod and Silicone)	Required
7 9/16"	No (Backer Rod and Silicone)	Required

DOUBLE INSECT SCREEN TRACK KIT	INSTALLATION FLANGE	SILL EXTENDER
4 1/2"	Yes	No
5 1/4"	Yes	Optional
6 9/16"	No (Backer Rod and Silicone)	Required
7 9/16"	No (Backer Rod and Silicone)	Required

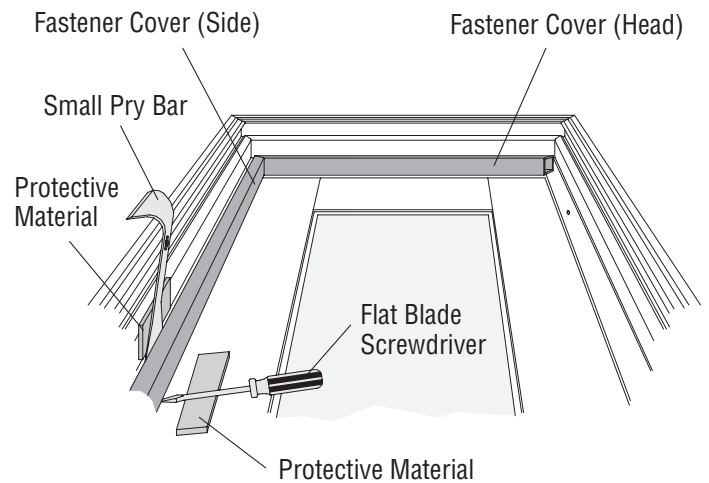| EXTERIOR EXTENSION JAMBS	INSTALLATION FLANGE	SILL EXTENDER
4 1/2"	Yes	No
5 1/4"	Yes	Optional
6 9/16"	Yes	Required
7 9/16"	Yes	Required

4. Remove Fastener Covers

CAUTION
Protect frame and door panel from damage when removing Fastener Covers by inserting protective material between door and prying tools.

- Insert a small pry bar between frame and side *Fastener Cover* at bottom of unit using protective material between frame and tool.
- Insert a flat blade screwdriver under *Fastener Cover* using protective material between panel and tool.
- Push small pry bar outwards and lift up slightly on screwdriver to remove *Fastener Cover*.
- Repeat for opposite side *Fastener Cover* and head *Fastener Cover*.
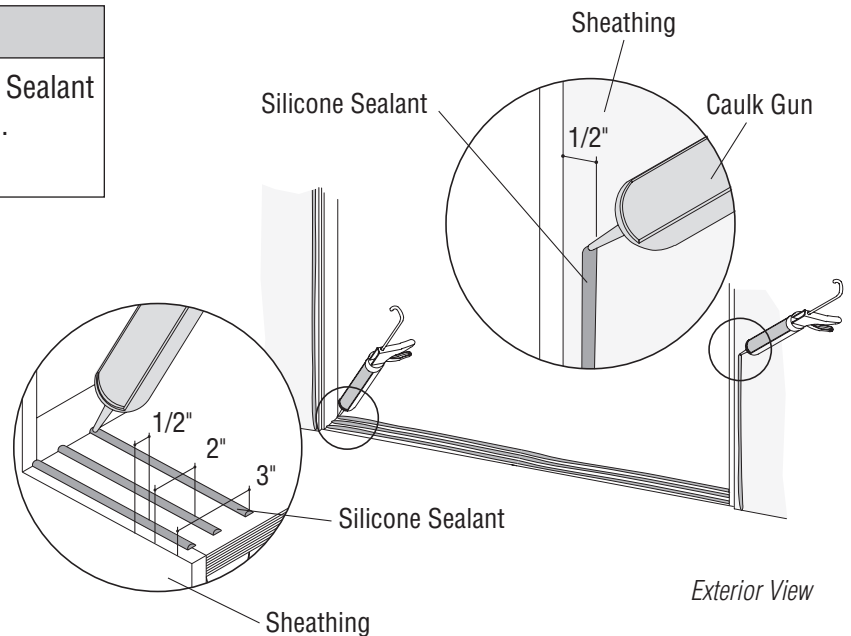
Fastener Cover (Side)   Fastener Cover (Head)

Small Pry Bar

Protective Material

Flat Blade Screwdriver

Protective Material

Exterior Side Up

5. Seal Rough Opening

CAUTION
Clean and prepare surfaces receiving Silicone Sealant following product manufacturer's instructions. Failure to do so may cause water infiltration.

- Apply three, 3/8" beads of silicone sealant to bottom of rough opening full length, as shown.
- Apply 1/4" bead of silicone sealant around full perimeter of rough opening 1/2" from edge.

Sheathing

Silicone Sealant

1/2"

Caulk Gun

1/2"   2"   3"

Silicone Sealant

Sheathing

Exterior View

6. Install Unit

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⚠ **WARNING**

Weight of Patio Doors will vary. Use a reasonable number of people with sufficient strength to lift, carry, and install door unit(s) and accessories. Always use appropriate lifting techniques.
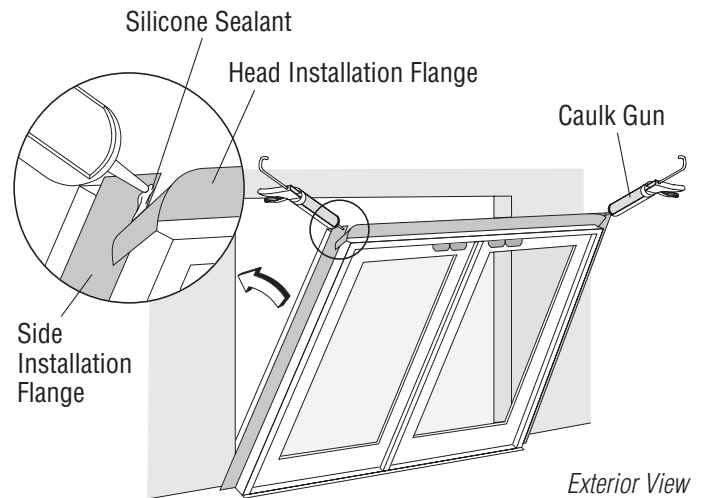
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⚠ **WARNING**

Support unit in rough opening at all times until secured. Failure to support unit could result in unit falling out causing personal injury, property, and/or product damage.

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CAUTION

Installation Flanges are for sealing only. **DO NOT** use for fastening unit. Installation Flanges must be flush with exterior of opening. Correct installation procedure must be followed for unit to perform properly.

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- Apply 1/4" bead of silicone sealant between head and side Installation flanges at corners where flanges intersect at head jamb.
- From the exterior, lift and center unit in rough opening, setting sill of unit onto silicone sealant.
- Press unit firmly into silicone sealant around perimeter of rough opening. Installation flanges must be flush with exterior of opening.
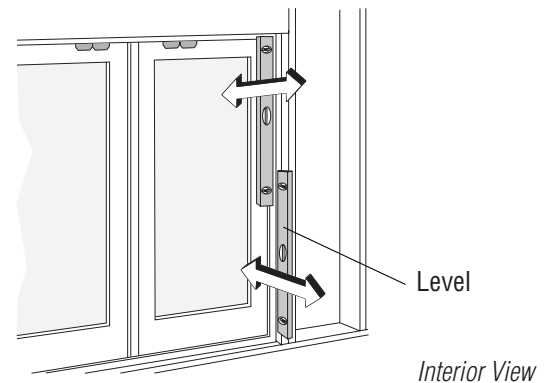

Silicone Sealant
Head Installation Flange
Caulk Gun
Side Installation Flange

Exterior View

7. Plumb and Level Unit

- Adjust door in opening from the interior. Entire 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. Unit **must** be square. Correct if necessary.
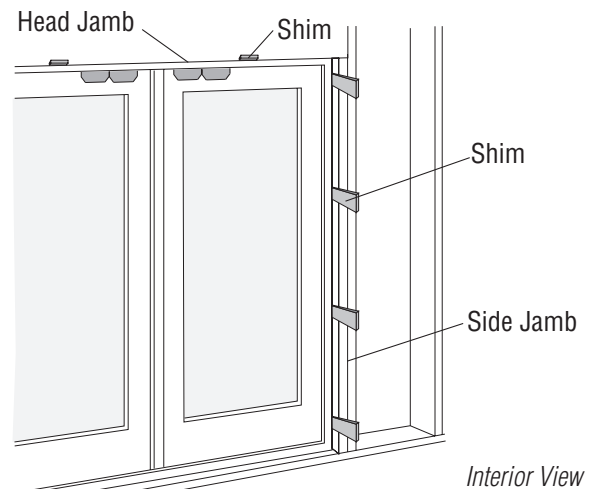

Level

Interior View

8. Shim Unit

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CAUTION

Shims **must** be used between jambs and framing to prevent bowing when frame is secured.

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- Insert shims between rough opening and door unit, directly above and below hinges and near each installation hole in jambs, from the interior. Shims prevent jambs from bowing when unit is secured to rough opening.

Head Jamb
Shim
Shim
Side Jamb

Interior View

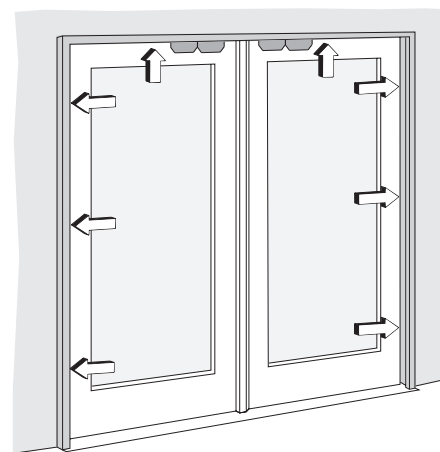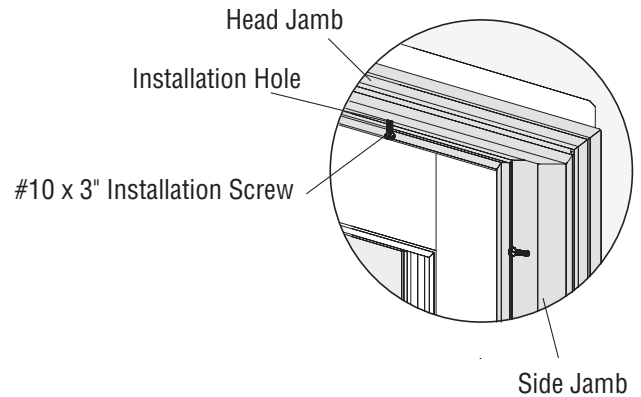## 9. Fasten Unit

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⚠ WARNING
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Steel will corrode when used with ACQ Pressure Treated Lumber. Obtain and use the appropriate size stainless steel fastener as called out in the installation guide to fasten unit to any rough opening made from ACQ Pressure Treated Lumber. Failure to use stainless steel fasteners may result in injury, property, or product damage.

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NOTICE
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Screw and Hinge color must match. Screws used to secure unit through installation holes will be covered by Fastener Covers. Retain color matching Screws to secure Hinges in **Step 11**.

• For units with white Hinges, use brass colored #10 x 3" Screws to secure Side Jambs and white #10 x 3" Screws to secure Hinges.

• For units with brass colored Hinges, use white #10 x 3" Screws to secure Side Jambs and brass colored #10 x 3" Screws to secure Hinges.

• For units with other specialty finish Hinges, use either white or brass colored #10 x 3" Screws to secure Side Jambs and matching finish #10 x 3" Screws to secure Hinges.
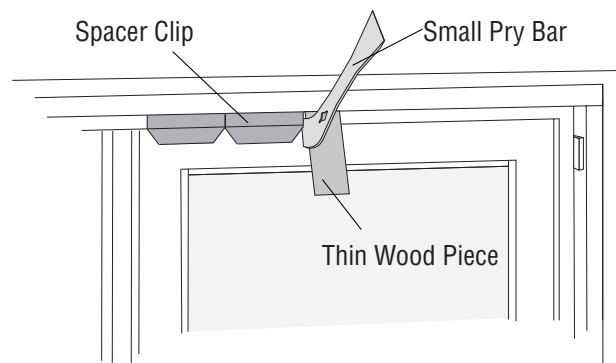
• From the exterior, fasten unit through installation holes in *Head* and *Side Jambs* into rough opening using *#10 x 3" Screws.*   For units with white *Hinges*, use brass colored *#10 x 3" Screws*. For all other units, use white *#10 x 3" Screws*. **DO NOT** tighten screws at this point. Take care **not** to scratch door and/or hinge finish.

Head Jamb

Installation Hole

#10 x 3" Installation Screw

Side Jamb

Exterior View

10. Remove Spacer Clips

• Using protective material between frame and small pry bar, pry up on *Spacer Clips* to remove.

Spacer Clip   Small Pry Bar

Thin Wood Piece

Interior View

11. Secure Hardware

- Insert a flat blade screwdriver into upper lock hole on door panel and turn to unlock dead bolt. Insert *Temporary Lock Handle* into lower lock hole and turn down to open door.

CAUTION

Units may have factory installed screws in hardware locations where #10 X 3" Screws will be fastened. For units with factory installed screws, remove screws shown in illustration and replace with #10 x 3" Screws, provided. Proper screws must be used for unit to perform properly.

- Fasten *Side Jambs* through center holes of all *Hinges* using *#10 x 3" Screws,* as shown. For white *Hinges*, use white *#10 x 3" Screws*. For brass *Hinges*, use brass colored *#10 x 3" Screws*. For specialty finish *Hinges*, use matching finish *#10 x 3" Screws* provided.

⚠ WARNING
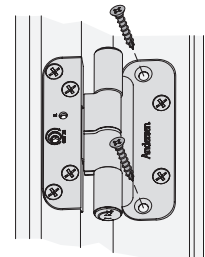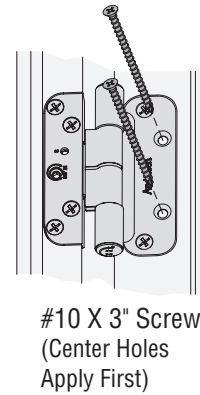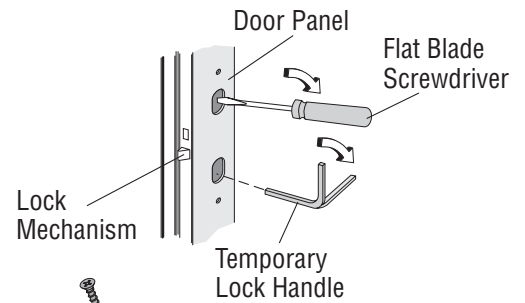
For Specialty Finish Hinges Only
Install matching finish #10 x 3" Screws into two center holes of all Hinges first, before replacing #10 x 1" Screws. Removal of 1" screws before installing 3" screws may result in personal injury and/or product damage.

- For **Units with Specialty Finish *Hinges* Only,** remove factory installed #10 x 1" brass colored screws from top and bottom holes of *Hinge* and replace with matching finish *#10 x 1" Screws* provided. Remove and replace screws in only one hinge at a time.

- For **Door Units with Stormwatch® Protection**, place a 1/2" x 4" x 10" shim block directly above *Head Jamb Lock Receiver*, between header and head jamb.

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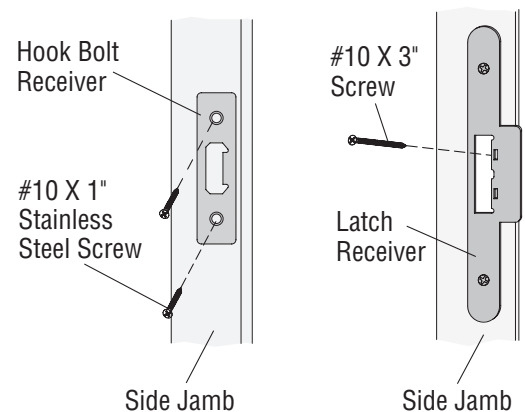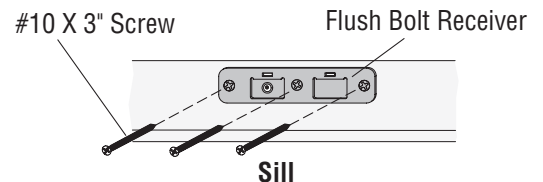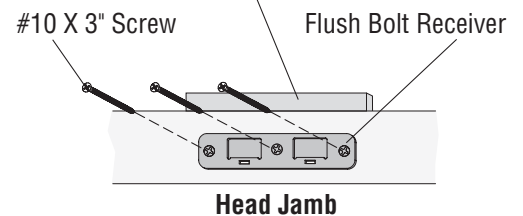

- Remove *Gold Colored #10 x 1" Screws* in *Flush Bolt Receivers* and replace with *#10 x 3" Screws* at *Head Jamb* and *Sill*.

- Remove *Gold Colored #10 x 1" Screws* in *Hook Bolt Receivers* and replace with *Stainless Steel #10 x 1" Screws*.

- Fasten through *Latch Receiver* using *#10 x 3" Screws.*

Door Panel
Flat Blade Screwdriver
Lock Mechanism
Temporary Lock Handle
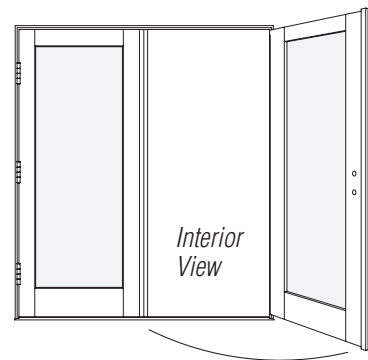
#10 X 3" Screw (Center Holes Apply First)

Specialty Finish Hinges Only
#10 X 1" Screw (Top and Bottom Holes Apply Second)

1/2" x 4" x 10" Shim Block (Door Units with Stormwatch Protection)
#10 X 3" Screw
Flush Bolt Receiver

Head Jamb

#10 X 3" Screw
Flush Bolt Receiver

Sill

Hook Bolt Receiver
#10 X 3" Screw
#10 X 1" Stainless Steel Screw
Latch Receiver
Side Jamb
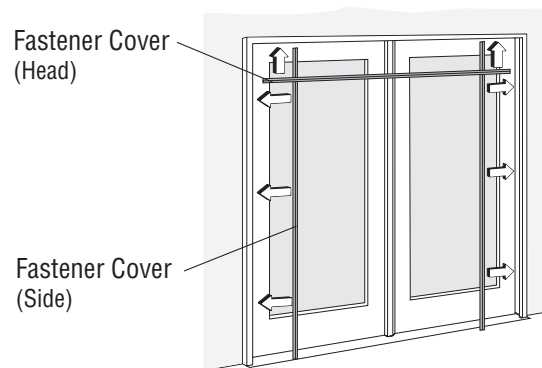Side Jamb

12. Check Clearance and Operation

- Adjust *Latch Blocker* and *Receiver* and *Hook Bolt Receiver* (AP/PA Units) to achieve adequate weatherstrip compression, if required. Refer to hinge and hardware adjustment instruction guide for this product.

- Determine if clearance and operation are correct. *Door Panel* should remain motionless through entire operation range. If clearance and/or operation are **not** correct: First, recheck rough opening for plumb and square. If rough opening is **not** plumb or level, correct as necessary. Second, recheck sill plate for level. Third, refer to hinge and hardware adjustment instruction guide for this product.

Interior View

Door should remain motionless when positioned at any point in the entire operation range.

13. Secure Unit and Apply Fastener Covers

- Tighten installation screws. Door **must** remain plumb while tightening.
- Position head *Fastener Covers* and snap into place by tapping lightly. Repeat for side *Fastener Covers*.
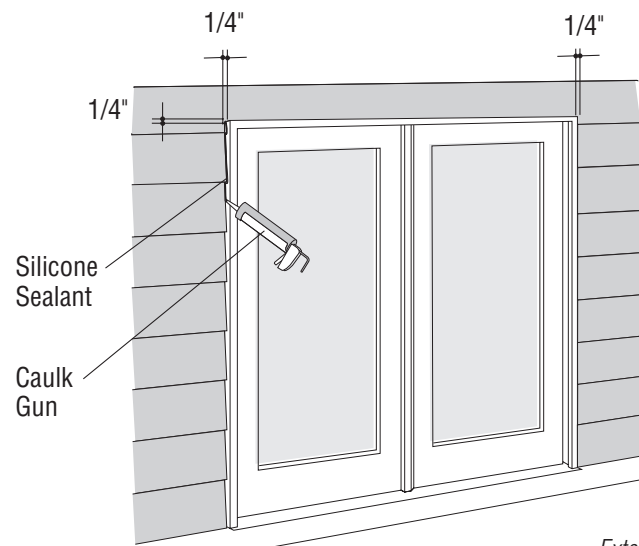

Fastener Cover (Head)

Fastener Cover (Side)

Exterior View

14. Apply Exterior Finish and Seal

NOTICE
For installations not using Installation Flanges, backer rod (not supplied) must be inserted around perimeter of door between frame and exterior finish in place of Installation Flanges.

- Apply exterior finish over *Installation Flanges* leaving 1/4" between door frame and exterior finish.
- Apply backer rod and a continuous bead of silicone sealant around exterior perimeter of door between frame and exterior finish.
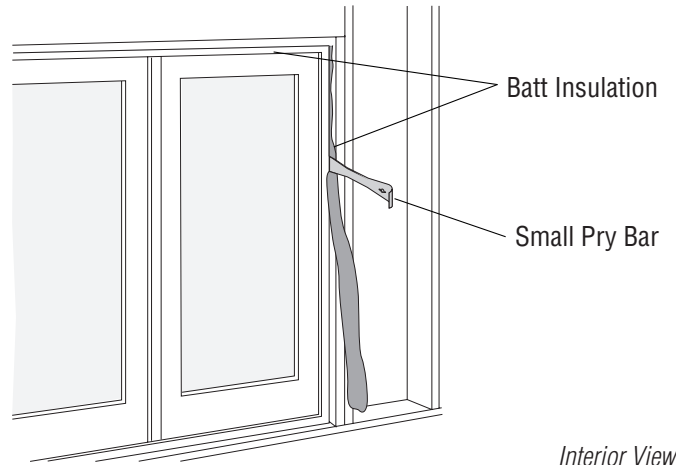

1/4"   1/4"

1/4"

Silicone Sealant

Caulk Gun

Exterior View

15. Insulate Around Unit

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

• Insert insulation between door frame and rough opening from the interior. **DO NOT** overpack batt insulation or overfill with expandable foam.

Batt Insulation

Small Pry Bar

Interior View

Care and Maintenance

General Information

Your Andersen® hardware has been manufactured of high quality, fine metal. Fine metal requires periodic attention to maintain its beauty and characteristics. Climate, location, and exposure to corrosive environments such as industrial areas, pesticides, herbicides, or salts are challenges to your ability to maintain the hardware's beauty and characteristics.

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                    CAUTION
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• **DO NOT** use or apply harsh chemicals, abrasives and/or cleaners. Product damage could occur.
• **DO NOT** refurbish hardware. Contact a professional hardware restorer for refurbishing.

Antique Brass, Satin Nickel, Distressed Nickel, or High-Performance (HP) Bright Brass

• Wash hardware using a mild detergent and a soft cloth. Avoid abrasive cleaners, cloths, or brushes.

White or Stone

• Wash hardware using a mild detergent and a soft cloth. Avoid abrasive cleaners, cloths, or brushes.

Polished Chrome or Brushed Chrome

• Wash hardware using a mild detergent and a soft cloth. Avoid abrasive cleaners, cloths, or brushes.
• Polish chrome finishes using a commercially available chrome polish following manufacturer's instructions.

Oil Rubbed Bronze or Distressed Bronze

• Handling and frequent use create the bronze patina that is the hallmark of the oil-rubbed bronze and distressed bronze finishes. Oil rubbed bronze and distressed bronze are "living finishes" with no protective coating. With use, your hands will polish away the darker material exposing the bronze beneath. The appearance of these finishes will vary depending on usage and environmental conditions.

• Occasionally apply light mechanic oil to deepen the color and sheen of the product. Cover metal parts with oil entirely, allow the oil to stand for a few minutes, then gently rub off excess using a clean cloth.

Finishing, Cleaning, and Maintenance Instructions

CAUTION

- **DO NOT** expose unfinished wood to high moisture conditions, excessive heat or humidity. Finish interior wood surfaces immediately after installation. Unfinished wood surfaces will discolor, deteriorate, and/or may bow and split.

- **DO NOT** stain or paint weatherstrip, silicone beads, vinyl, glass, or hardware.

- Acid solutions used to wash masonry/concrete will damage glass, fasteners, hardware, and metal flashing. Follow the acid solution manufacturer's instructions carefully. Protect and/or cover Andersen products during the cleaning process to prevent acid contact. If acid does come in contact with unit, immediately wash all surfaces with clean water.

INTERIOR FINISHING

Read and follow finishing manufacturer's instructions and warnings on each container of finish material for priming, painting, staining, and varnishing.

CLEANING

Clean exterior frame, sash members, and insect screens using a mild detergent-and-water solution and a soft cloth or brush. **DO NOT** use abrasive cleaners or solutions containing corrosive solvents. For persistent dirt or grime, use a nonabrasive cleanser or a mixture of water and alcohol or ammonia.

MAINTENANCE

Immediately sand and refinish any interior wood that becomes stained or mildewed to prevent further discoloration and/or damage. For further information, contact your local Andersen dealer. Dealers can be found in the Yellow Pages under Windows.