

Installation Guide

for Andersen® 400 Series Tilt-Wash Double-Hung Windows with Stormwatch® Protection (High-Performance Impact Resistant, Monolithic Impact Resistant or Design Pressure Upgrade)



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

Impact Resistant Glass used by Andersen is not hurricane proof or shatter proof, and may not offer a high level of security. Proper installation of window and door units with impact resistant glass is as important to product performance as the glass. Every assembly and installation is different (windloads, structural support, etc.), and 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.

⚠ WARNING

Use caution when working at elevated heights and around unit openings. Follow manufacturer's instructions for safe use of ladder and/or scaffolding. Failure to do so may result in injury or death.

⚠ WARNING

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

⚠ 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 to avoid injury and/or product damage.

⚠ 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 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.

⚠ WARNING

DO NOT install air conditioning unit in window. Unit could tip or fall causing severe injury and/or product damage.

⚠ WARNING

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.

CAUTION

DO NOT attach objects to unit other than Andersen® products specifically designed for unit. Product damage could occur.

NOTICE

- **DO NOT** remove banding tape until unit is installed.
- Support or Impact Resistant Joining Kit must be used when joining multiple units. Please check for availability
- **DO NOT** apply Extension Jambes prior to unit installation.

Parts Included

- (1) Installation Pack
(Instruction Guide, Jamb Clips and Screws)

Tools and Supplies

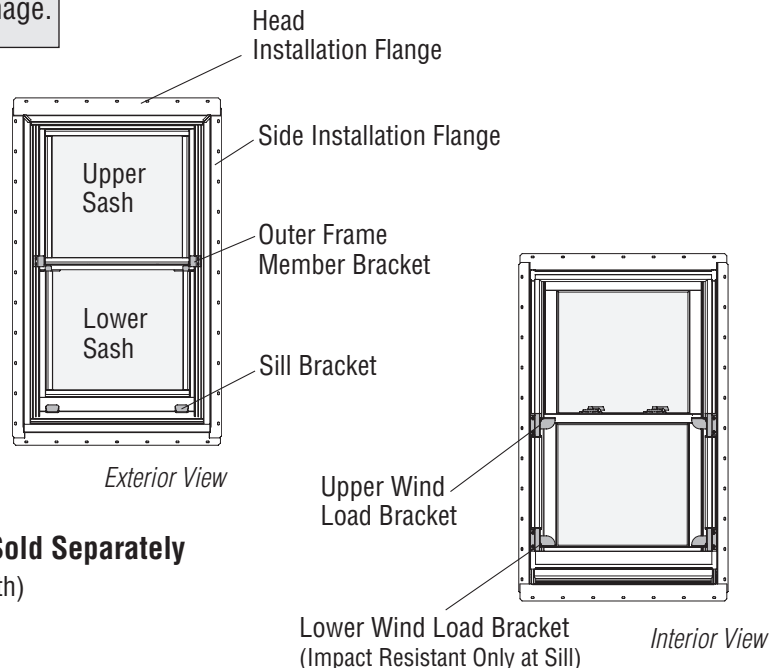
- Safety Glasses
- Tape Measure
- Hammer
- Level
- Shims
- Caulk Gun
- Utility Knife
- Sealant
- 1-3/4" Roofing Nails
- 1-1/4" (3d) Finish Nails
- Wood Block
- Insulation
- Power Drill
- 1-1/4" Screws (minimum)
- Backer Rod

Options and Accessories

- Extension Jambes
- Grilles
- Insect Screens

Additional Parts Sold Separately

- Drip Cap (full width)

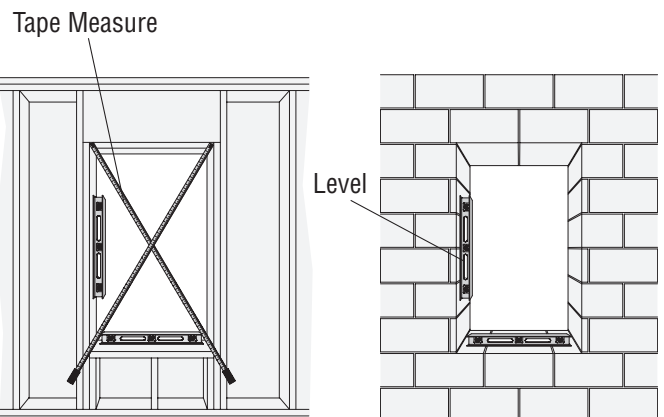


1. Prepare Rough Opening

- Check sill plate for level. Sill **must** be level. Shim sill plate if necessary.
- Check rough opening for plumb and level. If rough opening is **not** plumb or level, correct as necessary.
- Check opening for square by measuring diagonally, upper left to lower right and upper right to lower left corner. Measurements must be within 1/8". If rough opening is **not** square, correct as necessary.

NOTICE

For masonry installations using wood bucks follow procedure for wood frame construction.



Wood Frame/ Buck Construction

Masonry Construction

Interior Views

2. Prepare Unit

- Remove unit from packaging. Place unit interior side up on a clean, flat work surface.

NOTICE

DO NOT remove banding tape until unit is installed.

- Remove wood/foam packaging blocks and staples.
- Close and lock sash to keep unit rigid and square during installation.

NOTICE

Installation Flanges are factory applied to fit 4-9/16" wall thickness. Installation Flanges may be reversed to fit 4-1/8" wall thicknesses.

4-9/16" Wood Frame/Buck Construction

- For 4-9/16" wall thickness, proceed to **Step 3**.

4-1/8" Wood Frame/Buck Construction

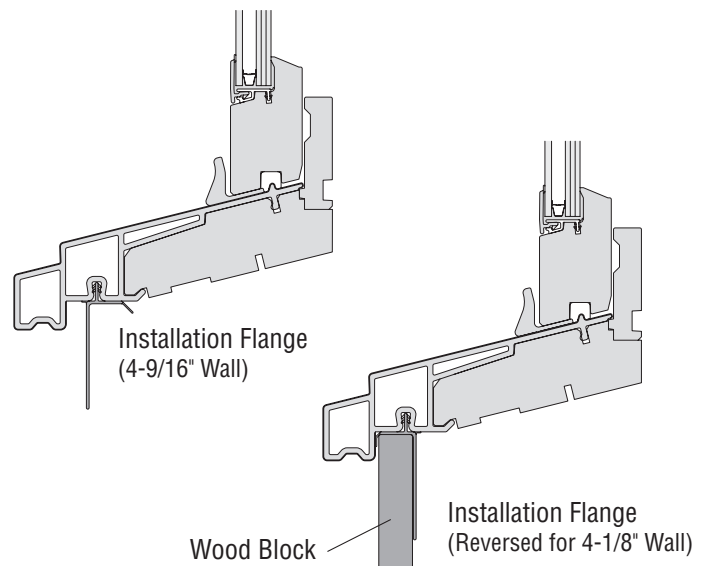
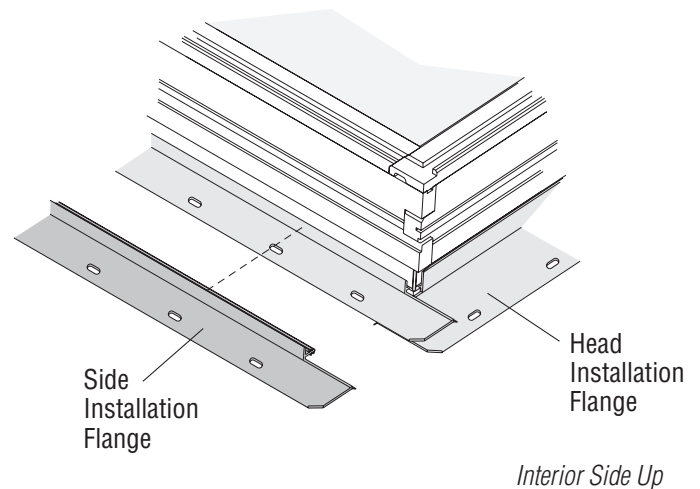
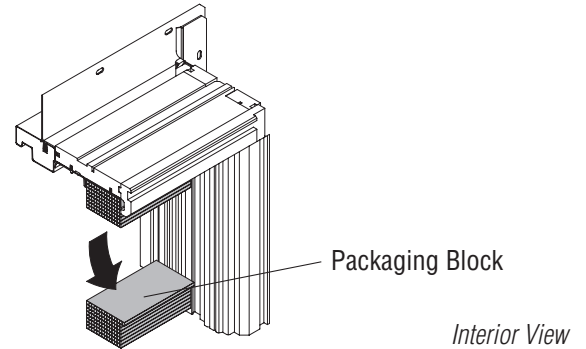
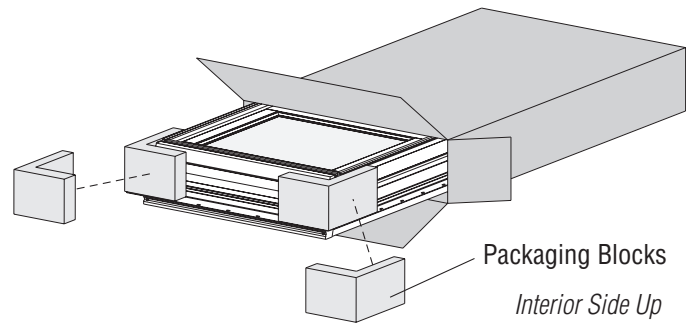
- Remove *Installation Flanges* by pulling outward and reverse end for end.
- Replace *Sill Installation Flange* in kerf centering along sill. Tap in place until fully seated using a wood block and hammer.
- Repeat for *Side Installation Flanges* positioning flush with bottom of unit and overlapping *Sill Installation Flange* equally to the exterior.
- Repeat for *Head Installation Flange*, centering along head and overlapping *Side Installation Flanges* equally to the exterior.

Masonry Construction/Replacement Installations (may require removal of Installation Flanges)

NOTICE

Removal of Installation Flange may be necessary for some masonry installations, replacement installations, and/or where exterior finish (siding, brick veneer, stucco) is already applied.

- Remove *Installation Flanges* by pulling outward.

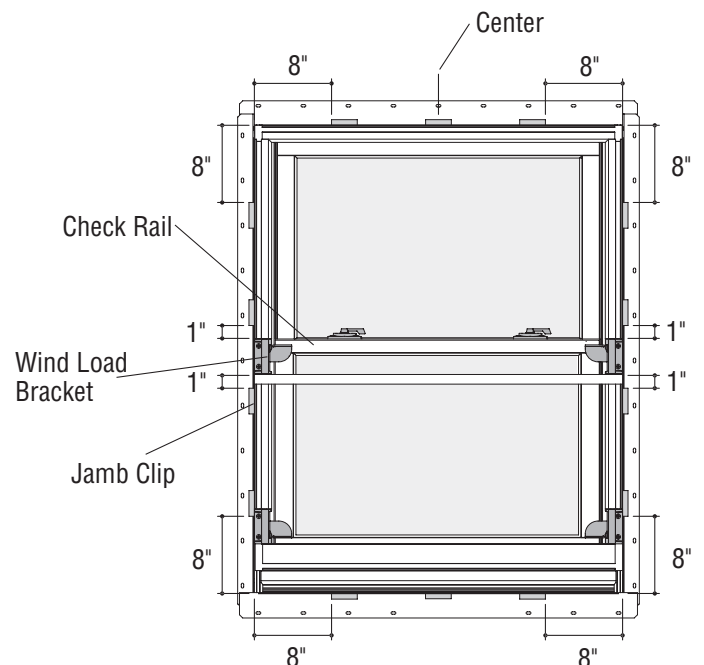
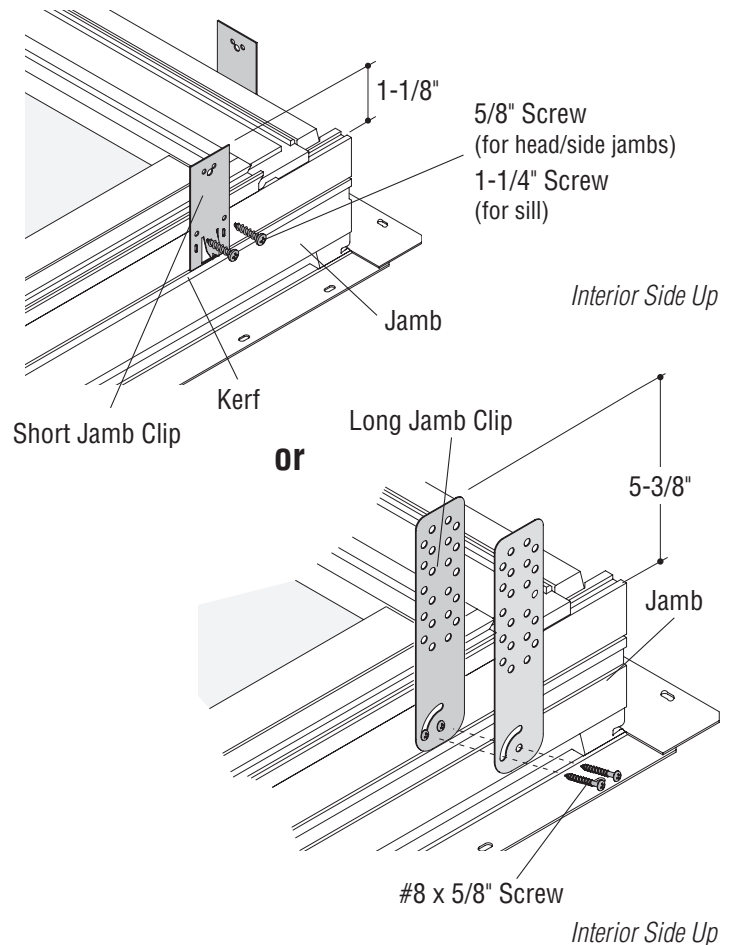


3. Apply Jamb Clips

IMPORTANT

- Number of Jamb Clips and/or Screws is based on maximum unit performance design pressure (DP) rating. Use correct number of Jamb Clips and Screws listed.
- If structure is rated at a design pressure (DP) below maximum listed (DP), altering number of Jamb Clips and/or Screws may be approved by consulting an architect or structural engineer.

- Position *Jamb Clips* as shown; place short jamb clips in kerf on back side of jambs, long leg to interior and extending 1-1/8" above jambs. Position long clips 5-3/8" above jambs, as shown.
- Locate three *Jamb Clips* on head jamb 8" from each side and one at center. For units less than 30" wide, center clip is not necessary.
- Locate four *Jamb Clips* on side jambs, 8" from top, 8" bottom, and remaining two clips 1" above and 1" below *Wind Load Bracket* at *Check Rail*.
- Fasten *Jamb Clips* to head and side jambs using two (2) 5/8" screws.
- Locate three *Jamb Clips* on sill 8" from each side and one at center.
- Fasten *Jamb Clips* to sill using two (2) 1-1/4" screws.



Interior View

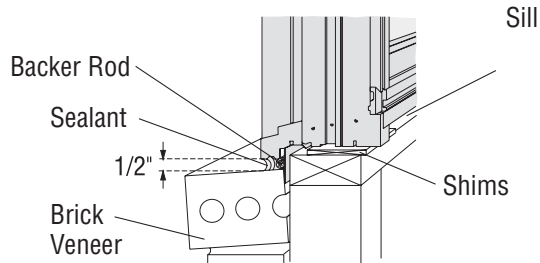
4. Install Unit

⚠ WARNING

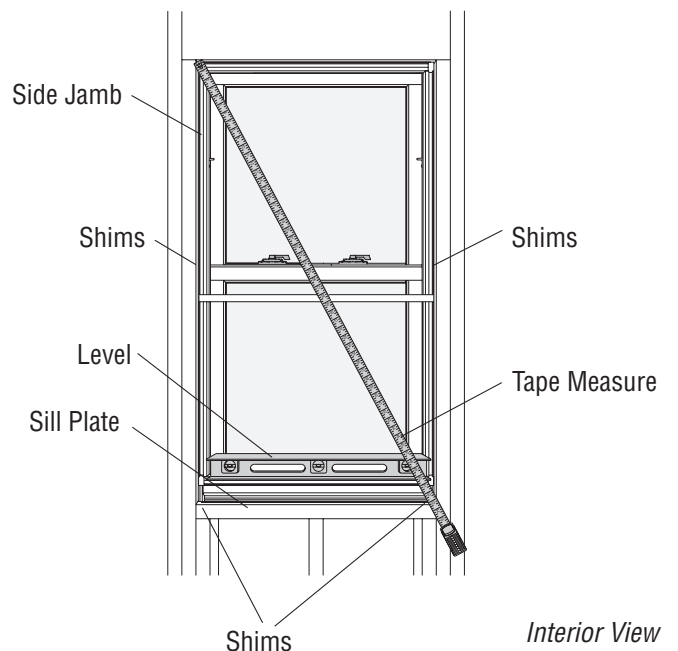
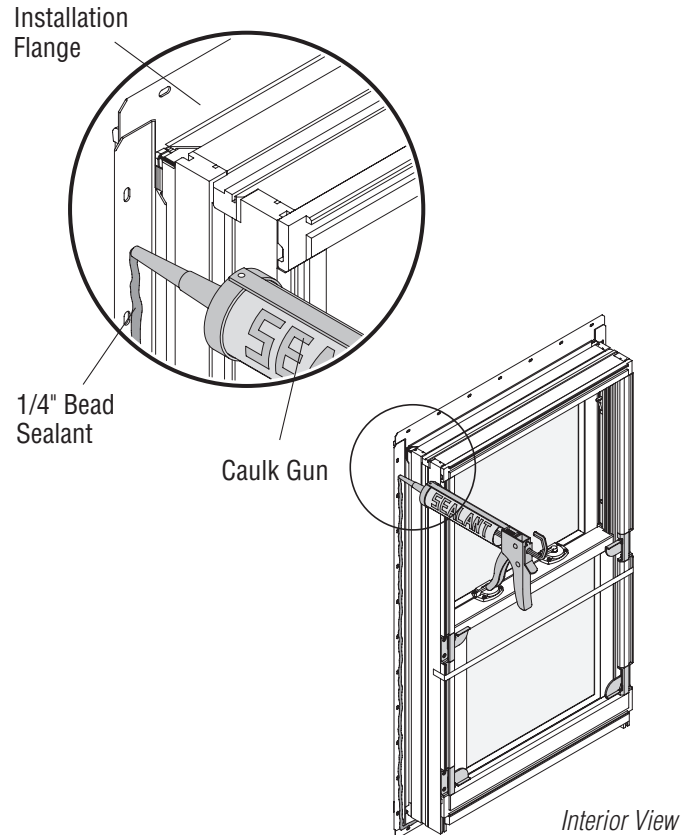
Windows and doors can be heavy. Use safe lifting techniques and a reasonable number of people with enough strength to lift, carry and install window and door products to avoid injury and/or product damage.

CAUTION

- **DO NOT** set window unit directly on sill plate. Elevate unit on shims at side jambs. Sill plate may bow and interfere with window operation.
- Unit must be properly shimmed. Failure to do so could result in product damage.
- Provide a minimum clearance of 1/2" from top of brick/masonry to the bottom of any portion of sill. Failure to do so could result in product damage.

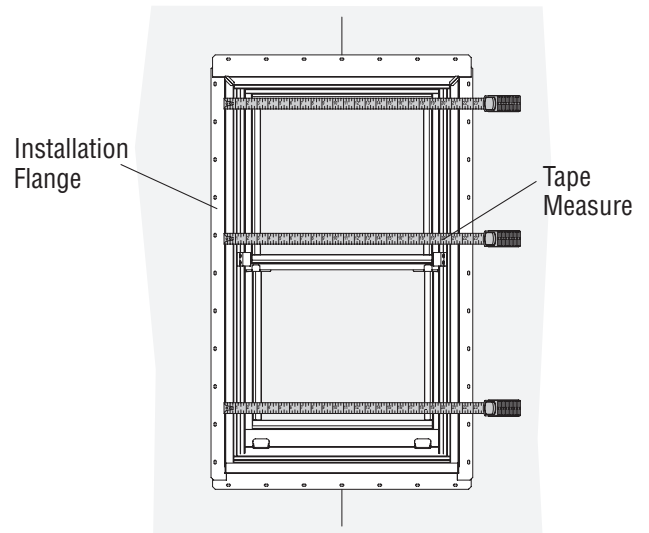


- Apply 1/4" sealant bead, full perimeter, to back side of *Installation Flange* or around perimeter of rough opening 1/2" from edge as shown.
- Lift unit into rough opening and center side-to-side. For **Wood Frame/Buck Construction**, from the exterior, fasten one upper corner of unit using a 1-3/4" roofing nail through *Installation Flange*.
- Check level of unit from the interior. Shim only at corners of sill under *Side Jambs* to level unit, if needed. For joined units, shim must be placed under joining post(s) at sill.
- Measure diagonally across unit, upper left to lower right and upper right to lower left corners. If measurements are within 1/8", unit is square. If unit is not square, adjust by inserting shims between *Side Jambs* and rough opening (full depth) near unit corners.

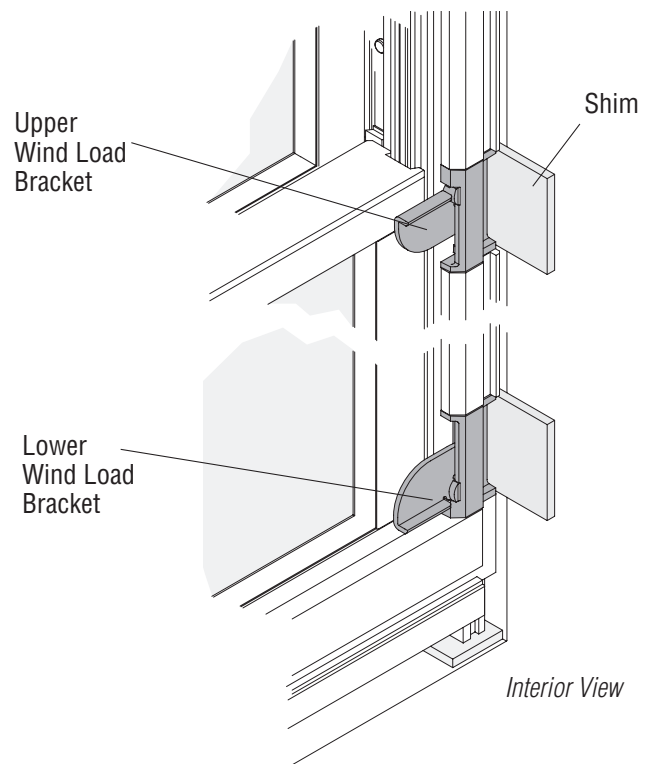


4. Install Window Unit (Continued)

- Measure across head, center, and sill of unit from exterior. Center dimensions should match head and sill dimensions. Shim to straighten *Side Jamb*s if needed.
- Shim from interior between unit frame and rough opening (full depth) at *Wind Load Brackets* using flat, not tapered, shims.



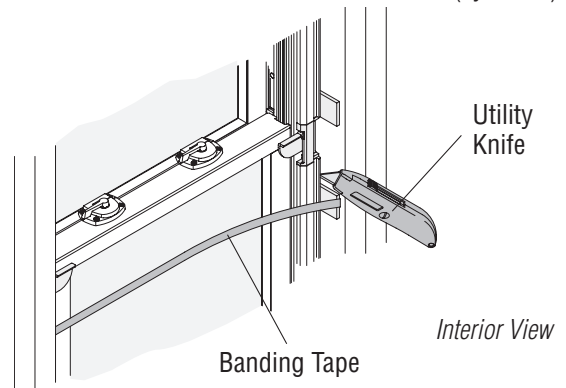
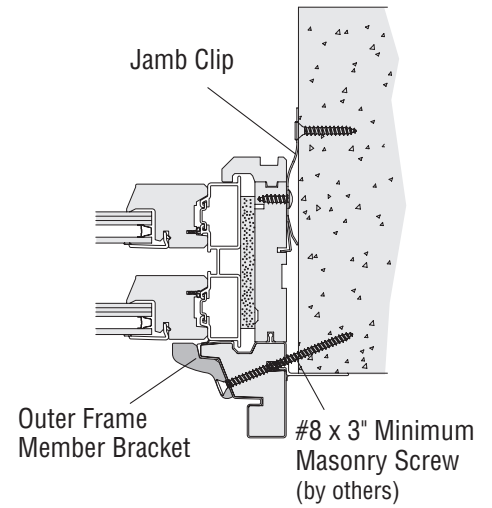
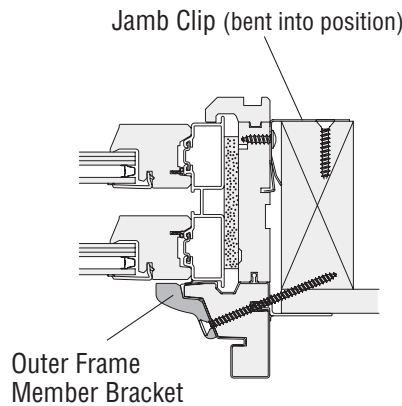
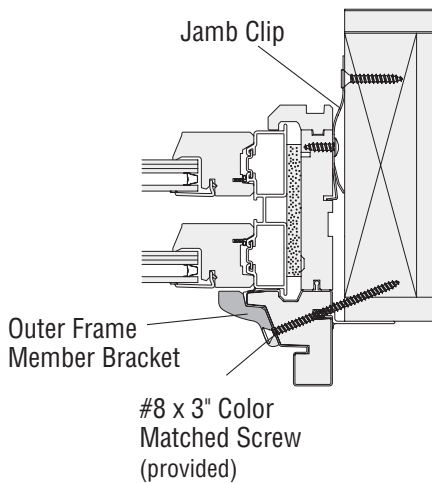
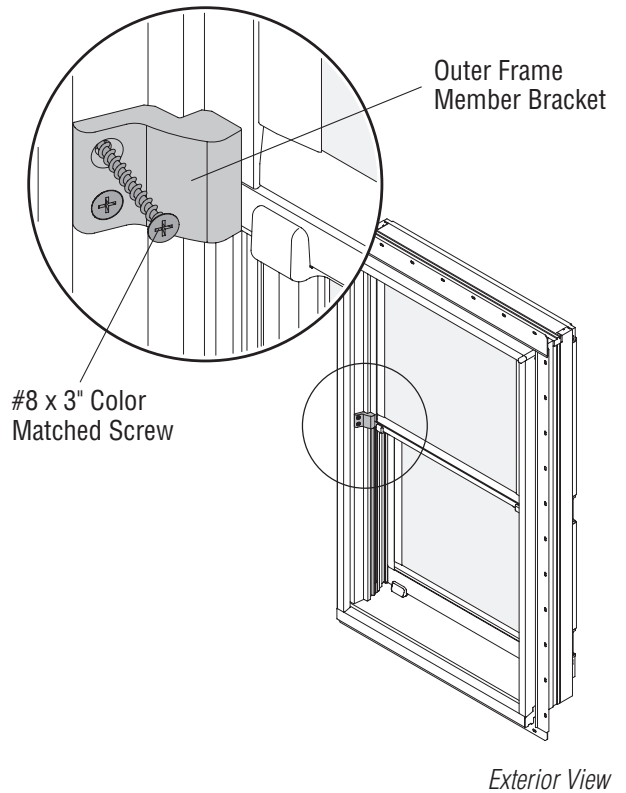
Exterior View



Interior View

4. Install Window Unit (Continued)

- For **Wood Frame/Buck Construction**, fasten unit to wood frame rough opening using two (2) 1-1/4" screws through each *Jamb Clip*. Secure *Outer Frame Member Brackets* to rough opening using #8 x 3" *Color Matched Screws*.
- For **Masonry Construction**, fasten unit to masonry rough opening using two (2) 1-1/4" (minimum) masonry anchors through each *Jamb Clip*. Remove existing 3" *Color Matched Screw* and secure *Outer Frame Member Bracket* to rough opening using 3" (minimum) masonry anchor.
- Remove banding tape.



5. Apply Flashing Tape

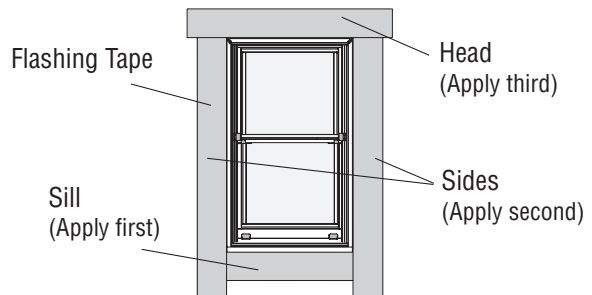
CAUTION

Unit must be properly flashed and sealed 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.

NOTICE

- This instruction step depicts one of many options for proper flashing.
- Moisture infiltration problems in any type of building can be reduced by properly flashing and/or sealing around all building openings, including windows and doors. Proper flashing under and around window and door openings can reduce moisture problems, but the performance of any building system depends upon the design and construction of the building system in its entirety, which should address local environment, climate, building codes and product and material limitations. The design and installation of flashing and sealing systems are the responsibility of the architect, contractor, installer, and/or the manufacturer of the building exterior specified for the project.

- Apply flashing tape over *Installation Flange* at sill.
- Apply flashing tape over *Installation Flange* at sides, overlapping flashing tape at sill.
- Apply flashing tape over *Installation Flange* at head, overlapping flashing tape at sides.



6. Insulate and Seal Unit

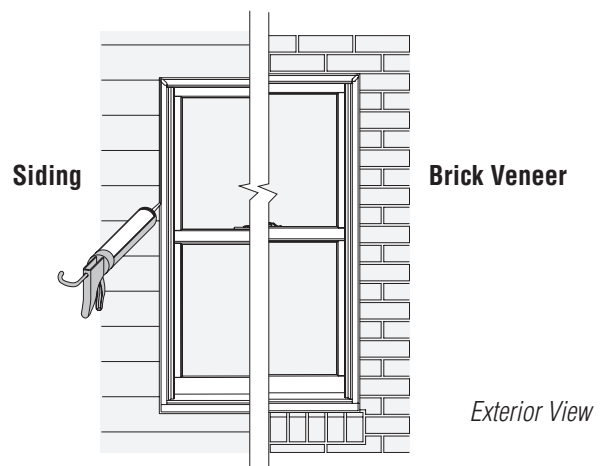
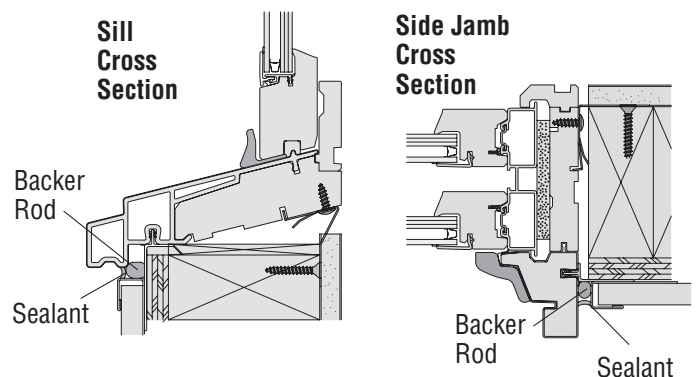
CAUTION

When insulating between 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 proper operation of unit.

NOTICE

A minimum space of 1/4" is required around exterior perimeter of unit between frame and siding. Masonry/Brick Veneer installations require a minimum 1/2" space along sill and 1/4" space around the remaining perimeter.

- Insulate between frame, extension jambs, and rough opening on all sides from the interior. **DO NOT** overpack or overfill with insulation; bowed jambs may result. **DO NOT** apply foam behind wind load bracket areas. Insulation may expand and affect proper operation.
- Apply backer rod and sealant around exterior perimeter of window after siding (or other finish) is applied.



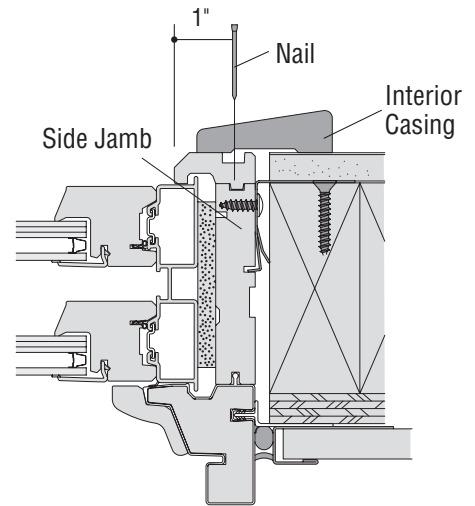
7. Attach Interior Casing (supplied by others)

- If optional *Sill Stop*, *Stool* or *Sill Extension Jambs* are to be used, refer to their specific instruction guides available at your Andersen Dealer or at www.andersenwindows.com. Install on unit before *Interior Casing* is applied.

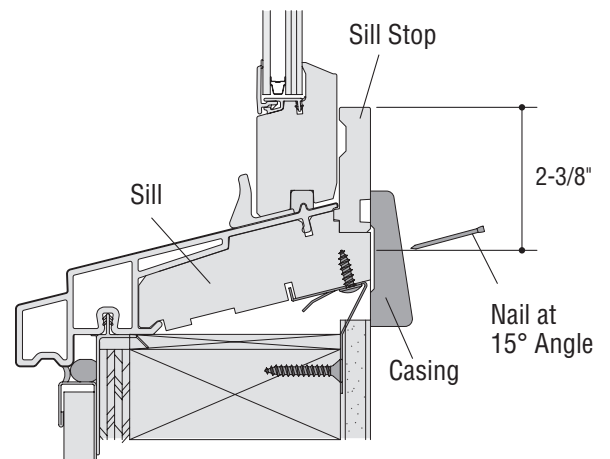
CAUTION

When applying *Interior Casing*, carefully read and follow directions and illustrations. Failure to do so may result in damage to *Sill* and *Jamb Liners*.

- Fasten *Interior Casing* to sill using 3d (1-1/4") finish nails. Nail 2-3/8" below top of *Sill Stop*.
- Fasten *Interior Casing* to side jambs and head using 3d (1-1/4") finish nails. Nail 1" in from outside of *Head* and *Side Stop*.
- Set all nails to approximately 1/16" deep below wood surface. Apply wood filler to nail hole.



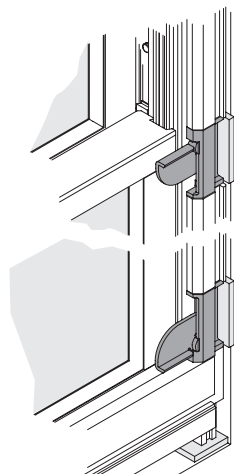
Side Jamb Cross Section



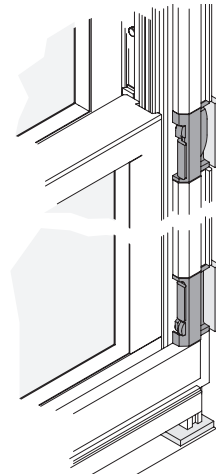
Sill Cross Section

⚠ WARNING

All 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

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 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.

CAUTION

DO NOT stain, varnish, or paint over wind load brackets. This will affect proper operation of the components.

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.



Steps for Tilting & Cleaning

- 





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


Impact Resistant **DP Upgrade**
- 



Open window 4-5 inches.
- 


WARNING
Window is heavy. Use two people to tilt and wash. Failure to do so could result in personal injury and/or product damage.
- 






Flip brackets into window frame.

Impact Resistant **DP Upgrade**
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Slide wash assists from top corners down between window and vinyl until they snap. Pull and tilt window.
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Hold window until supported on a chair or object at a 90° angle from wall. Slide assists back up to top of window.
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Slide upper window down. Depress vinyl channel. Pull window out one corner at a time.
- 

After washing, lift window rail at center point & lift back into jamb liner. Repeat for lower window.
- 




Flip out brackets. If brackets are not flipped out window could blow in resulting in potential injury and/or product damage.

Impact Resistant **DP Upgrade**