



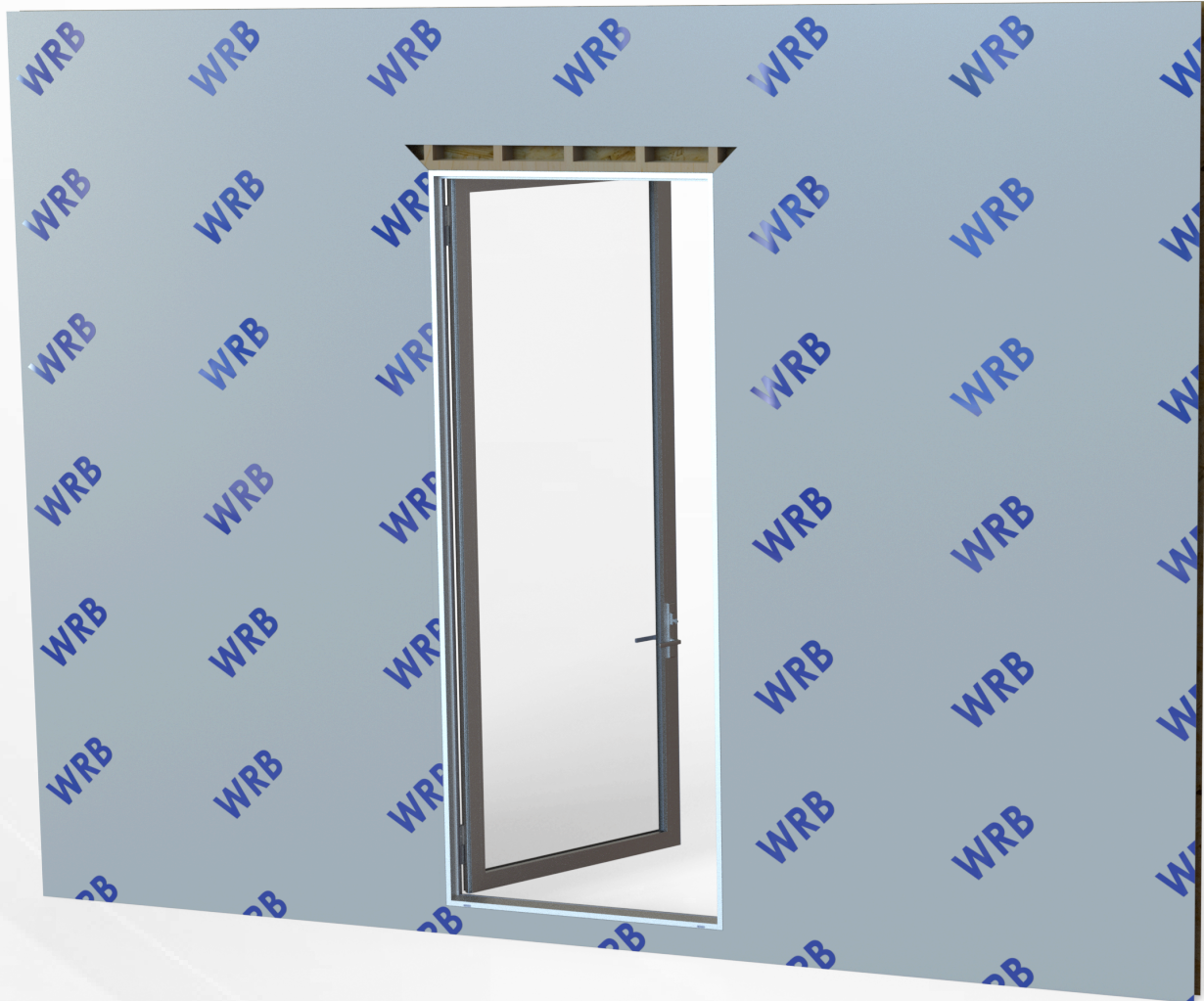
8900 Series Hinged Door Installation Instructions

westernwindowssystems.com



Scan to Play
Video

This guide provides step-by-step instructions for installing the Casement 8670. Sealants used should be compatible with the building envelope's water-proofing membrane. Drip caps should be ordered when the window is ordered.



CAUTION

We recommend all Western Window Systems products be installed by experienced professionals.

Contact Us

2200 E. Riverview Dr., Phoenix, AZ 85034
877-398-9643
www.westernwindowssystems.com

TABLE OF CONTENTS

01	Important Safety Information	04
02	Material and Tool List	08
03	Prepare Rough Opening	10
04	Nail Fin Installation Instructions	12
05	Equal Leg Installation Instructions	16
06	Door Adjustment	19
07	Finishing	25

Note 1: Unless specifically indicated on the Figure as “Interior View”
All Figures in this installation guide are detailed from door **Exterior**.

Important Safety Information



WARNINGS

If warning is not heeded, may cause death or serious injury



CAUTIONS

If precaution isn't taken, may cause minor or moderate injury

NOTE

Additional information that pertains to the installation

Read instructions, front to back, before beginning installation.

Product Storage and Transports

Product should be stored in a dry location protected from the elements. Wet packaging can cause damage to product finishes. If the packaging becomes wet, immediately replace it with dry packaging.

Product should be stored and transported upside down. To avoid damage, do not drop or drag product from the delivery truck.

Removal of Old Fenestration Products

Ensure that old fenestration products are removed and properly disposed. You may be able to recycle or donate removed glass and frames. For more information, check with your local recycling agency, the American Architectural Manufacturers Association, the U.S. Environmental Protection Agency, or the Building Materials Reuse Association to locate a nearby company or organization that accepts used windows and doors. To donate removed products, contact local nonprofits in need of building supplies, such as Habitat for Humanity.

NOTE: Homes and condominiums built before 1978 may have lead-based paint, which can pose serious health hazards during removal. Information and instruction regarding proper management of lead-based paint is available at www.epa.gov/lead.installation.

Important Safety Information

Safety and Handling

Installation of the Product is not a “do-it-yourself” project. The Product should be installed only by experienced, qualified and, where required, licensed installation professionals.

- Read and fully understand ALL manufacturer's instructions prior to beginning the installation. Failure to follow proper installation instructions may affect coverage under the applicable Western Window Systems' express limited warranty.
- This is a finished product that must be protected before, during and after installation to prevent damage to the glass, frame, finish and hardware. All component parts, including door panels, should be stored in a dry location that is protected from the elements.
- Before proceeding with installation, inspect the component parts and confirm that there is no damage that will affect appearance or performance. Damaged or missing parts should be reported to your supplier immediately.
- Use caution when working at elevated heights including but not limited to ladders and scaffolding.
- It is the responsibility of the installation contractor to consult and establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to commencing installation.
- Do not work alone and use safe lifting techniques. Two or more people may be required to lift. Use a reasonable amount of people with enough strength to lift, carry and install to avoid injury and/or damage to the Product.
- Use caution when handling glass. Broken or cracked glass can cause serious injury.
- Wear protective gear (safety glasses, gloves, ear protection, etc...).
- Operate hand and power tools safely and follow the manufacturer's operating instructions.
- Job site and worker protections are recommended and may be required.

Components

The components supplied will vary depending on the configuration you are installing. Before proceeding with the installation, inspect the components to become familiar with them.

Confirm there is no damage that will affect the appearance or performance of the installed product. Damaged or missing parts should be reported to your supplier **within 48 hours** of delivery.

NOTE: Some windows will be shipped knocked down, in this case glass will need to be field glazed.

Installation Preparation

Prior to installation, it is important that you carefully review and understand the installation instructions and any drawings supplied. Western Window Systems' fenestration products should be installed only by experienced and qualified installation professionals. Failure to follow these instructions may result in poor performance, including but not limited to, operation, security, and weatherproofing failures, and may void Western Window Systems expressed limited warranties.

This is a finished product that must be protected before, during, and after installation to prevent damage.



NOTE: The rough opening must be waterproofed in accordance with AAMA Installation Masters standards, as well as flashing and sealant manufacturer instructions, and must meet local building codes.

(E.g. AAMA 2400, AAMA Installation Masters™ ASTM E 2112, FMA/AAMA/WDMA 300-12).

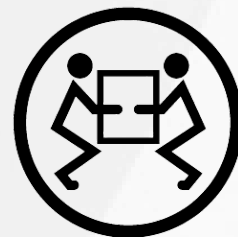
Failure to follow these recommendations, local requirements, and good building practices may result in poor performance including, but not limited to, operation, security and weatherproofing failures and may void coverage under the applicable Western Window Systems' express limited warranty. Provide a copy of these recommendations and the applicable Western Window Systems' express limited warranty to the owner before installing. Western Window Systems does not permit adoption of its installation recommendations into the contracts of others without its prior, written consent.

Please contact Western Window Systems at 1-877-398-9643 for clarification.

Requirements for a successful install:

----- Rough Opening -----

- o Ensure that the sill is flat and level.
- o Ensure that the entire opening is square and plumb.



----- Manpower -----



A minimum of two people must be used to install these systems. Three or more is preferred and larger systems may require more than three.

----- Protection from Wind and Rain -----



Systems should be installed with overhead protection from wind and rain to prevent potential damage from water. We recommend that a professional waterproofing consultant be used to ensure proper steps are taken to reduce the potential for damage.

----- Installing in Existing Structures -----



System installation may disturb surfaces and paint in existing structures. Specific notice and work site precautions may be required. Additional information is available at www.epa.gov/lead. Comply with all applicable federal, state and local requirements.



Special disposal considerations may be necessary for materials used during installation. Materials removed from an existing structure may also have their own disposal or recycling requirements. Comply with all applicable federal, state and local requirements.

----- Warranty Registration -----

Western Window Systems is dedicated to quality and build our windows and patio doors to last. With the Western Window Systems 8900 Series Hinged Door, the original homeowner is covered pursuant to the applicable Lifetime Limited Warranty. Register your warranty at westernwindowssystems.com/register

Material and Tool List:

Materials and tools indicated below are general suggestions. Additional or different items may be required depending on the type of install and regional code requirements.

Materials Required:

- ☐ Non-compressible shims.
- ☐ Fasteners for Wood Frame Installation provided
 - o Type and number as required by code.
 - o At minimum fastener type should be sufficient to properly affix the frame and penetrate opening.
- ☐ Flexible membrane for sill pan flashing system.
- ☐ High quality compatible exterior grade sealant.
- ☐ Seal tape for the weather resistant barrier.
- ☐ Self-adhering flashing
 - o In a width required by code but no less than 4".
 - o AAMA 711 compliant flexible butyl tape flashing or equivalent is recommended.
- ☐ Backer rod.
- ☐ 2" Chip brush for spreading Liquid Applied Flashing.
- ☐ Joint knife, trowel, or spatula for applying Liquid Applied Flashing.
- ☐ Low-expansive, low-pressure foam or batt type insulation.
- ☐ DRILL BIT size required: #7 OR 3/64".

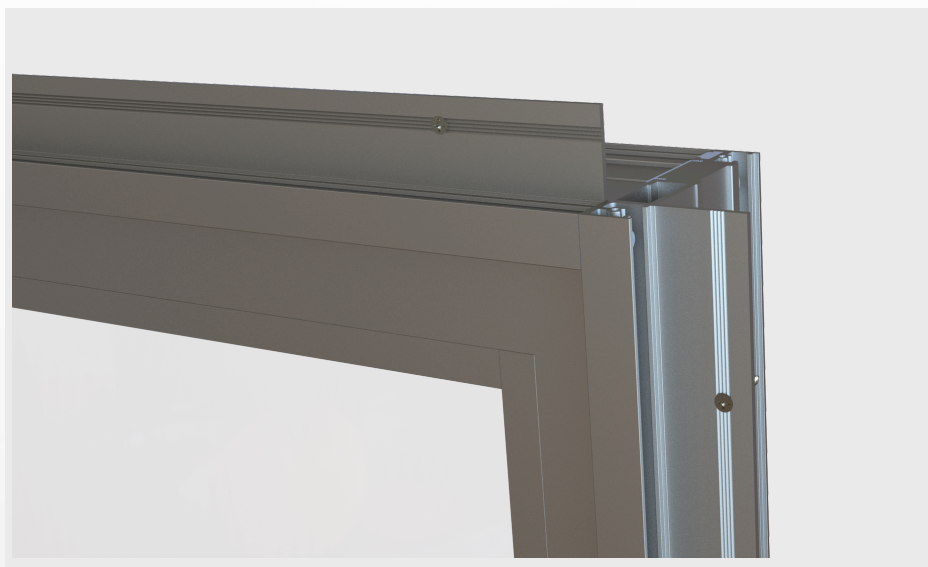
Tool Checklist:



Install Options

Verify the window is the correct size and the rough opening is sized correctly to for the unit(s) to be installed. If you are mulling two or more windows, refer to the mulling instructions found at the end of this instruction manual.

There are two install options for the Casement Window, as seen below. Verify you are using the correct instructions based on your configuration of window.



Nail Fin



Equal Leg

Prepare Rough Opening

Wood Frame Construction

- Width of rough opening should be $\frac{1}{2}$ " more than unit width. Height of rough opening should be $\frac{1}{2}$ " 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 $\frac{1}{8}$ ", 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.

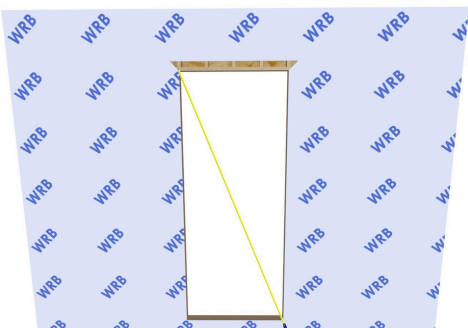
Prepare Rough Opening (continued)

- 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.



Nail Fin Installation Instructions

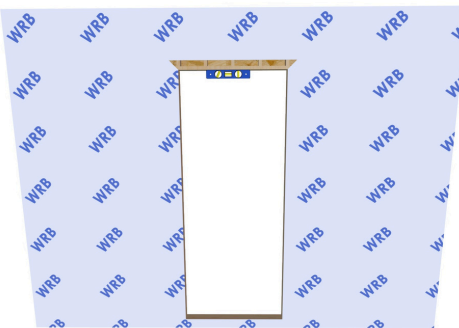
Fig. 1



1. Prepare the Rough Opening.

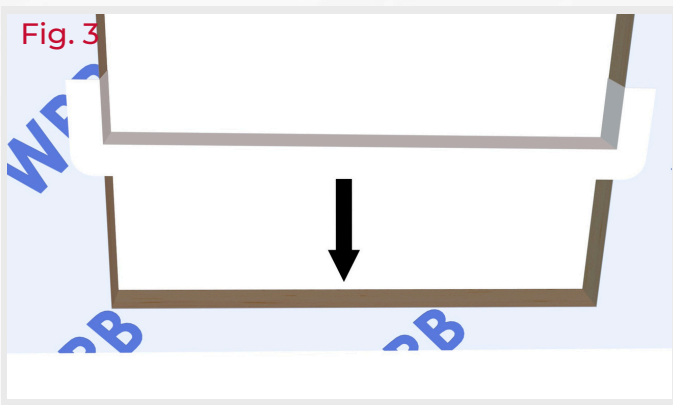
Confirm the opening is square using a tape measure.

Fig. 2



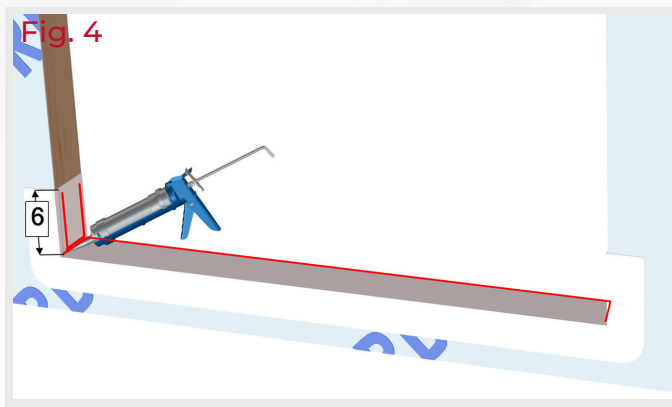
2. Use a level to ensure plumb and level conditions.

Fig. 3



3. Apply sill flashing along the bottom, extending at least 6 inches up each jamb.

Fig. 4



4. Apply sealant at the sill, up the side jambs, and into the corners.



Make sure to apply flashing and appropriate weather resistant barrier material, per AAMA Installation Masters Handbook.

Nail Fin Installation Instructions

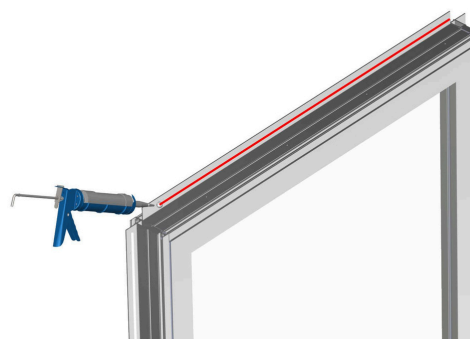
Fig. 5



5. Before mounting the unit, prep the Door Assembly.

You may remove the door assembly by lifting it off the hinges. This makes it easier to handle the frame assembly.

Fig. 6



6. Apply sealant to the back side of all nail fins.

Fig. 7



7. Next, install the Door Assembly. With assistance, tilt the unit into the rough opening. Use shims as needed for a snug fit.

Before anchoring, re-check that the unit is square, plumb, and level. Anchor the Frame.

Fig. 8



8. Pre-drill holes using a 13/64-inch drill bit.

Install the first screw 3 inches from each corner, and space additional screws 12 inches apart. Use the provided #10 x 1 1/2" screws. Seal all screw heads and nail fin edges once anchoring is complete.

Nail Fin Installation Instructions

Fig. 9



Fig. 10



5. Cover all corners with corner gaskets, ensuring full coverage of the nail fins.

6. Apply sealant where the gaskets touch the frame.

Fig. 11

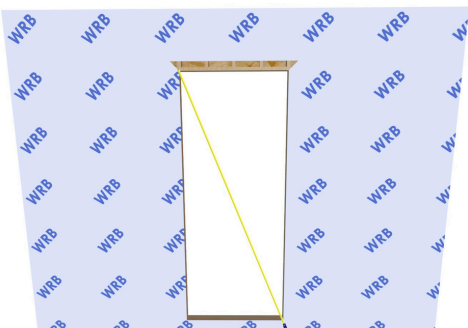


7. Test the door by opening and closing to verify proper function.

The Nail Fin installation is now complete.

Equal Leg Installation Instructions

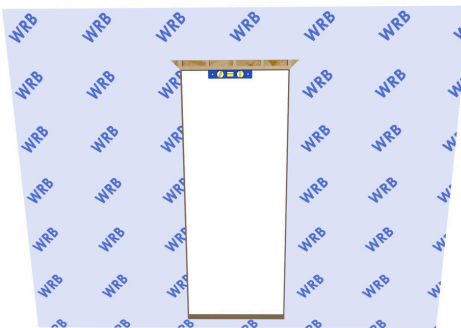
Fig. 1



1. Prepare the Rough Opening.

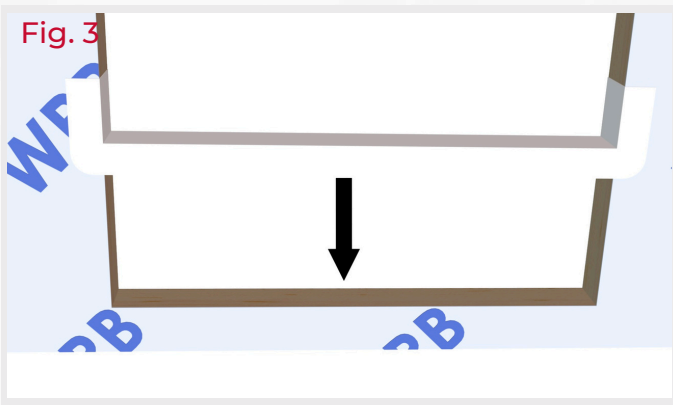
Confirm the opening is square using a tape measure.

Fig. 2



2. Use a level to ensure plumb and level conditions.

Fig. 3

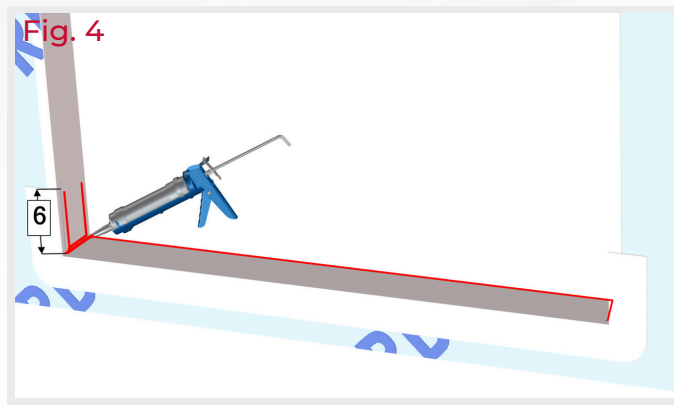


3. Apply sill flashing along the bottom, extending at least 6 inches up each jamb.

Make sure to apply flashing and appropriate weather resistant barrier material, per AAMA Installation Masters Handbook.



Fig. 4



4. Flash the side and head jambs as well.

Apply sealant at the sill, up the side jambs, and into the corners.

Equal Leg Installation Instructions

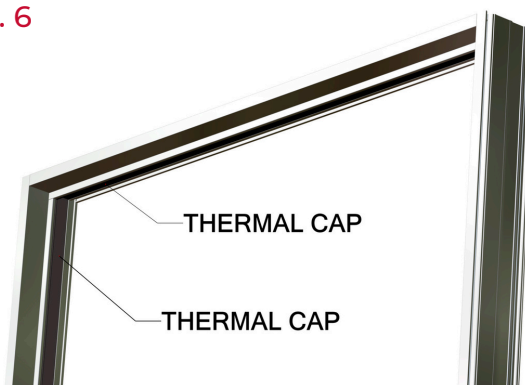
Fig. 5



5. Next, Prep the Door Frame.

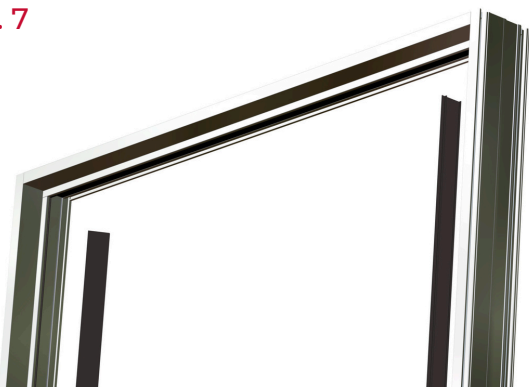
Open the door to access the interior frame.

Fig. 6



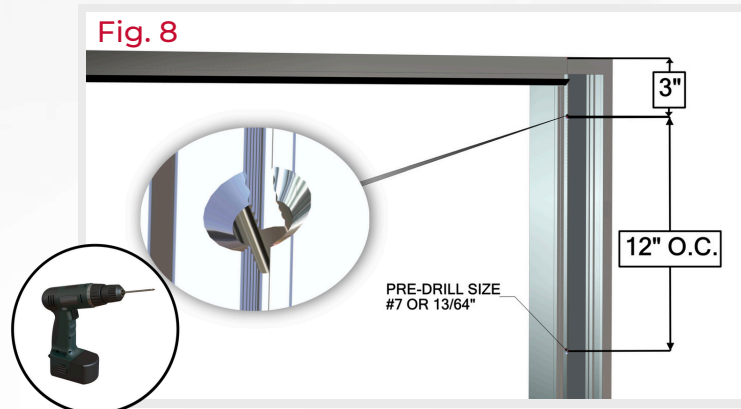
6. Remove the thermal caps on both side jambs and the head jamb (use a PLASTIC pry tool if necessary).

Fig. 7



7. Carefully remove the thermal Caps. Take care not to damage them.

Fig. 8



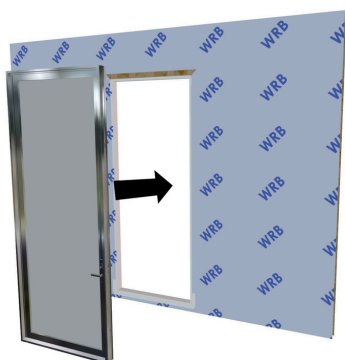
8. Pre-drill holes in the interior frame using a 13/64-inch drill bit.

Place holes 3 inches from each edge, and 12 inches apart between them.

Close the door after prepping is complete.

Equal Leg Installation Instructions

Fig. 9



9. After prepping the door frame, Install the Door Assembly. Tilt the unit into the rough opening.

With assistance, position the unit in the opening. Shim as needed to ensure a proper fit.

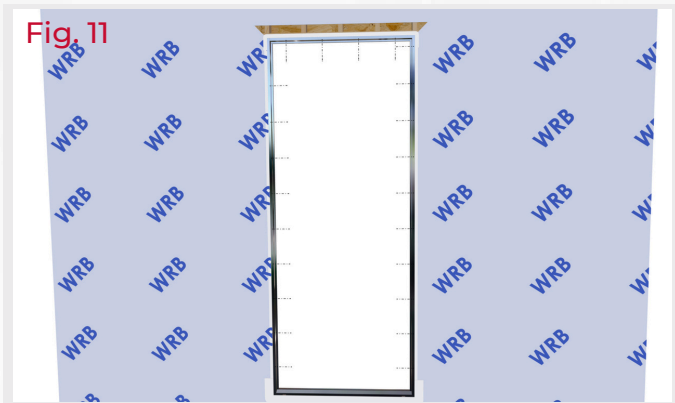
Fig. 10



10. Open the door to access the anchoring holes.

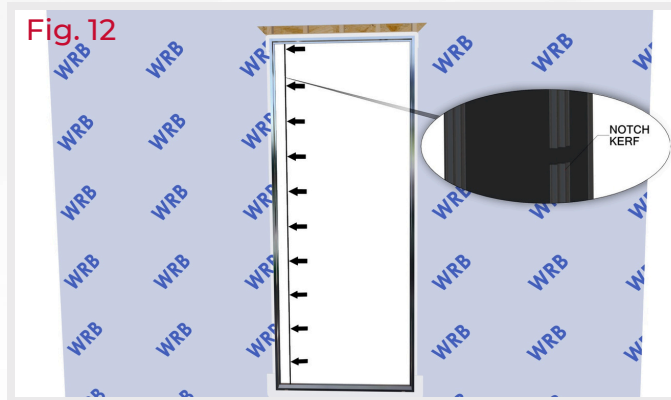
Fasten using number 10 by 2-½-inch screws. Take care not to overtighten.

Fig. 11



11. Seal all screw heads and frame edges once anchoring is complete.

Fig. 12



12. Once all anchors are in place, Reinstall the Thermal Caps.

Notch caps as needed to accommodate screw locations or clearances.

Equal Leg Installation Instructions

Fig. 13



13. Close the door and verify smooth operation.

Fig. 14



14. Finally, Seal the Exterior. Apply backer rod and sealant around the perimeter—vertical sides and head jamb—according to standard procedures.

Equal Leg installation is now complete.

Door Adjustment

Fig. 1



1. You can adjust the door for proper operation using the following steps:

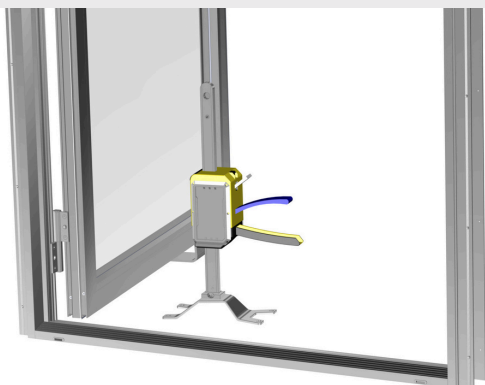
Swing the door open and locate the hinges.

Fig. 2



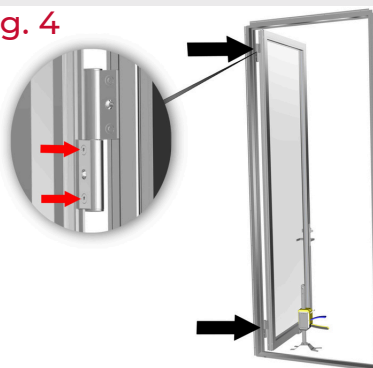
2. You can adjust the hinges by moving them up or down. Only do this step if you need to adjust the position of the hinges.

Fig. 3



3. If you do need to adjust the hinge position, first, place a construction jack underneath the door to hold the door in place.

Fig. 4



4. Then, loosen the hinge screws and move the hinges up or down as needed. Only adjust the hinges if needed or if the doors are large and sluggish.

Door Adjustment

Fig. 5



5. Next, if you wish to adjust the panel up or down, close the door and continue with the following steps.

Fig. 6



6. Locate the hinges, and remove the end caps.

Fig. 7



7. Remove components as needed to expose the adjustment nut.

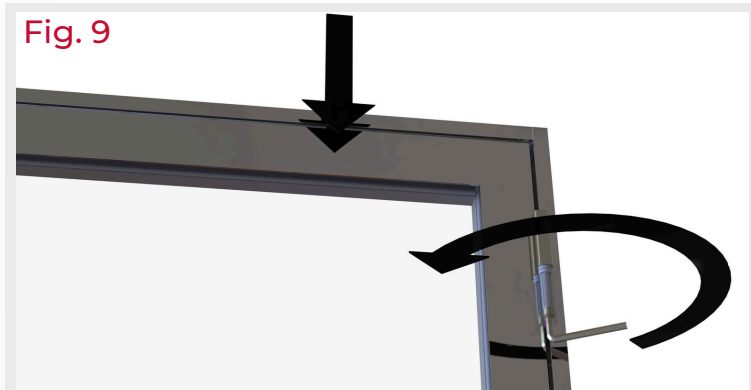
Fig. 8



8. Use an Allen wrench to access the threaded adjustment nut inside.

Door Adjustment

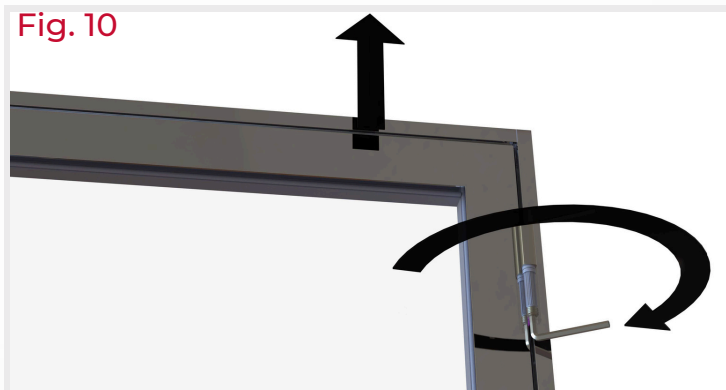
Fig. 9



9. To lower the Panel: Loosen the nut slightly on both hinges.

Lower as needed for a tighter fit.

Fig. 10



10. To raise the Panel: Tighten the nut slightly on both hinges.

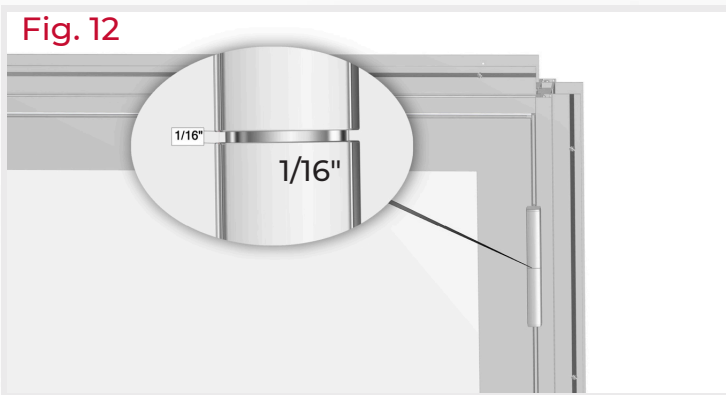
Raise as needed for a tighter fit.

Fig. 11



11. When finished, Re-install all previously removed hinge components .

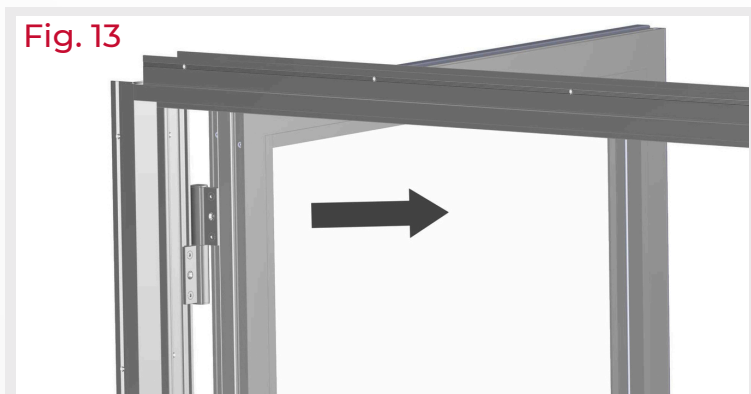
Fig. 12



12. We recommend leaving a one-sixteen inch gap between hinges.

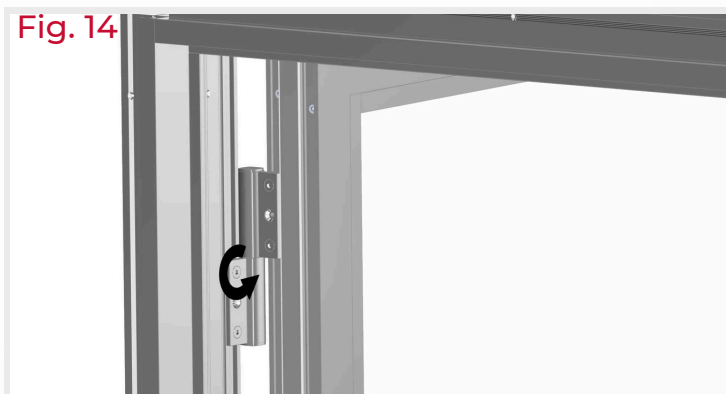
Door Adjustment

Fig. 13



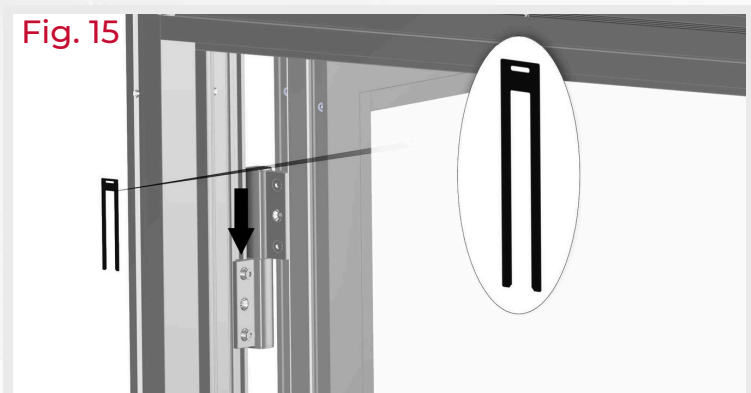
13. For a Horizontal Adjustment (Hinge Spacing), open the door panel.

Fig. 14



14. Next, Loosen the screws on the panel hinge that's attached to the door frame.

Fig. 15



15. Insert the provided shims between the hinge and the frame.

Use as many as necessary to achieve desired spacing.

Fig. 16



16. Fully tighten the screws once shims are in place.

Use caution not to overtighten screws during adjustment.

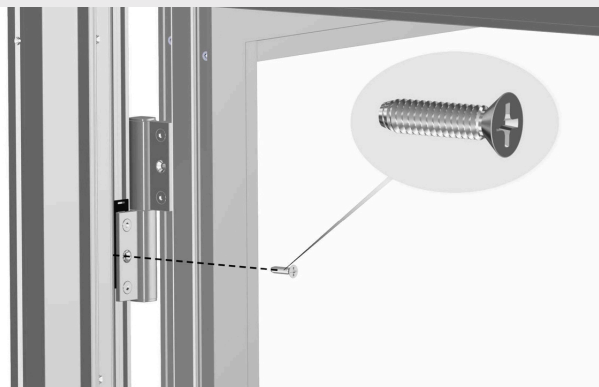
Door Adjustment

Fig. 17



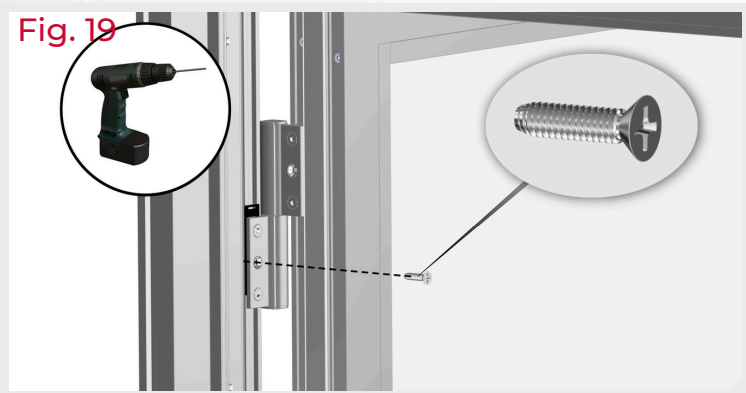
17. Test the door for a smooth operation.

Fig. 18



18. Once the door is properly aligned, secure all hinge fasteners using a one quarter inch by 20 by 1 inch long, Phillips flat head thread-cutting screw for metal.

Fig. 19



19. Before inserting the screw, pre-drill a hole using a drill gun with a number seven or thirteen-sixty-four inch drill bit.

Fig. 20

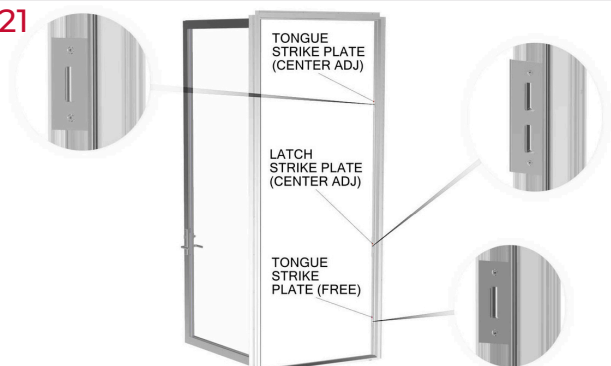


20. Open and close the door several times to confirm smooth operation.

Insert the screw through the center hinge hole, and Anchor as needed.

Door Adjustment

Fig. 21



21. You can further adjust the door by adjusting the Strike Plates.

Fig. 22



22. To adjust the Strike Plates, use two, one eight-inch wrenches, and turn the Allen Nuts located on the bottom and top part of the plates.

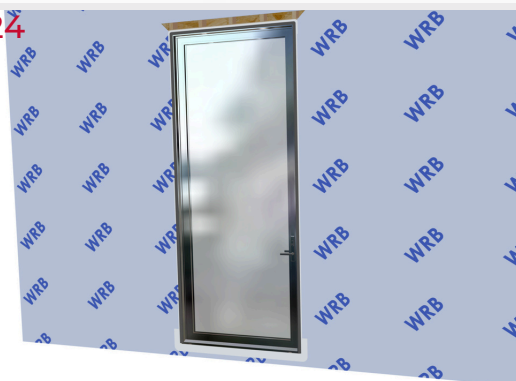
Move the plate to the right or left, as needed.

Fig. 23



23. Open and close the door firmly to ensure it's properly working.

Fig. 24



24. Ensure all fasteners are tight, sealed, and in accordance with the instruction manual.

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

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.

CAUTION

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 Western Window Systems or visit www.westernwindowssystem.com

8900 Series Hinged Door Installation Instructions

Upon completion of installation, ensure all connections are tight and secure in accordance with the installation manual and AAMA Installation Masters standards. For more information, give us a call or visit us online.



We recommend all Western Window Systems products be installed by experienced professionals.



Contact Us

2200 E. Riverview Dr., Phoenix, AZ 85034

877-398-9643

www.westernwindowssystems.com