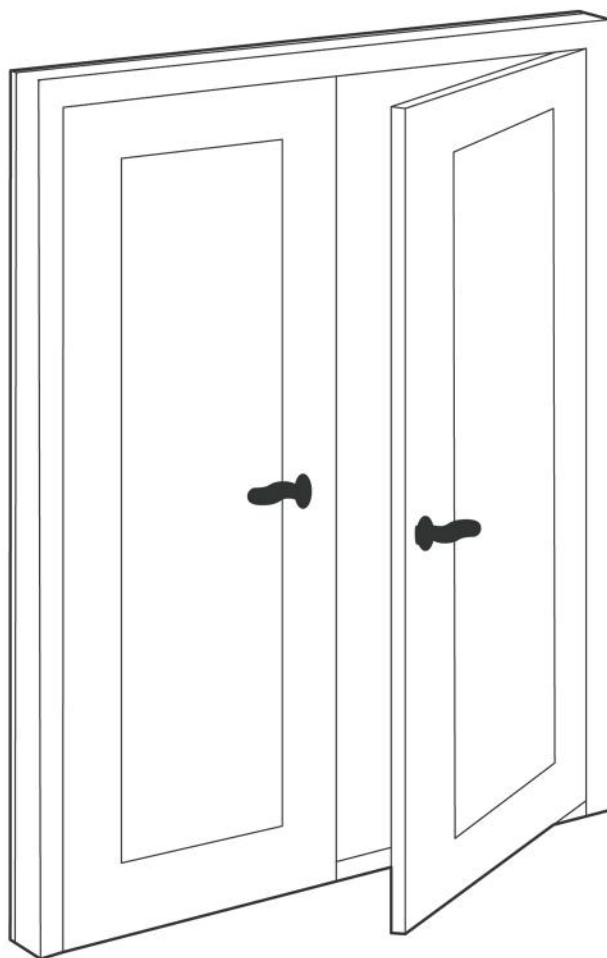


S3100 & S4100 Swing Doors

Installation Instructions



IMPORTANT NOTICE

Read these instructions thoroughly before beginning to install your RAM window or door product. Follow all guidelines regarding material use, preparation, personal safety and disposal. Failure to follow RAM's installation instructions and any other specific warnings, procedures for use, safety recommendations and standard construction practices can result in personal injury, poor product performance, and premature failure. Contact your RAM supplier if you have any questions regarding product and materials used in manufacturing. It is the responsibility of the builder, installer and subcontractors to protect the interior and exterior of RAM windows and doors from excessive contact with harsh chemical washes, construction material contamination and moisture.

Care and Maintenance

Every RAM window and door product has been designed and tested to meet or exceed industry performance and engineering standards. The key to preserving this performance is the proper installation, care, and maintenance of these products. Failure to perform regular maintenance will cause degradation of your window or door product and will void the manufacturer's warranty. Detailed care and maintenance instructions can be found on our website at ramwindows.com.

Cleaning Instructions

In addition to proper care and maintenance, all RAM window and door products should be cleaned using approved chemicals and solvents that prevent product degradation. A more detailed listing of cleaning methods and warnings can be found on our website at ramwindows.com. General cleaning instructions are as follows:

FRAMES: As with any building product, aluminum requires reasonable care during the installation process as well as periodic cleaning and maintenance after installation. Although both painted and anodized aluminum has excellent corrosion resistance properties, its natural beauty can be marred by harsh chemicals, abrasive materials or neglect. Such conditions usually affect only the surface appearance and do not reduce the service life of the product, however, the marks resulting from such mistreatment may be permanent.

During and immediately after installation:

- Protect all surfaces. It is especially important to not allow stucco or other concrete materials to set on the anodized or painted finish. These building materials are caustic and will permanently damage the finish.
- Clean metal surfaces with mild soapy water, using a sponge or soft cloth.
- Rinse thoroughly by lightly spraying with clean water and repeat as needed.
- Wipe dry with a soft cloth.
- Make sure all weep holes, drain holes and tracks are unclogged.

GLASS: To preserve the visual and energy performance of your window or door, the glass units require reasonable care and attention. The glass surface, especially tempered glass, can be easily scratched or permanently damaged by improper cleaning.

NOTE: Please reference Cardinal Glass Industries for proper handling of glass. More information can be found at cardinalcorp.com.

During and immediately after installation:

- Protect all surfaces. It is especially important to not allow stucco or other concrete materials to set on the glass surface. These building materials are caustic and will permanently damage the glass surface.
- Clean glass surfaces with mild soapy water, using a sponge or soft cloth.
- Rinse thoroughly by lightly spraying with clean water and repeat as needed.
- Wipe dry with a soft cloth.
- Make sure all weep holes, drain holes and tracks are unclogged.

HELPFUL TIP: WINDOW AND DOOR STICKERS CAN BE MORE EASILY REMOVED IF SOAKED BY WATER FOR FIVE MINUTES PRIOR ATTEMPTED REMOVAL.

COMPONENTS: The internal and external components of your product are essential to the proper function and overall performance of your window or door. While these components have been designed for rugged durability, they still require regular inspection and maintenance to ensure proper operation.

During and immediately after installation:

- Vacuum out and clean any dirt or debris from the sill, roller assembly and track areas.
- Lubricate the hardware components, roller assembly and track with a wet silicone spray using a straw applicator.
- Inspect the weather-stripping to make sure it is clean and not torn or brittle.
- Inspect the window or door locks to make sure they function properly. Contact the manufacturer to adjust the locks if needed.

SUPPLIES REQUIRED:

- Anchors (included)
- Moisture Resistant Shims
- Closed Cell Foam Backer Rod
- Window & Door Butyl Flashing Tape
- Installation Sealant
- Sill Pan (recommended, but not required unless specified by code)

TOOLS REQUIRED:

- Hex Keys
- Tape Measure
- Utility Knife
- Impact Driver
- Phillips Head Screwdriver
- Flat Head Screwdriver
- Level
- Square
- Plumb Bob
- Drill

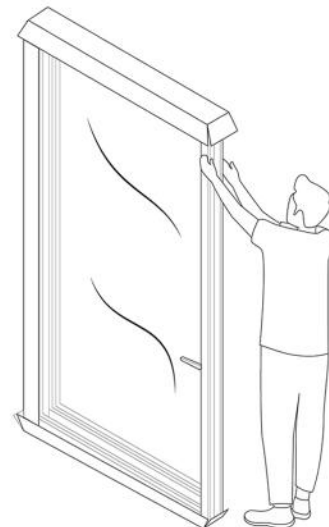
Other construction materials may be required. Read the instructions and inspect the wall conditions before you begin.

Store doors in upright position, out of direct sunlight.

TWO OR MORE PEOPLE WILL BE REQUIRED FOR THE DOOR INSTALLATION.

1 PREPARE FOR INSTALLATION

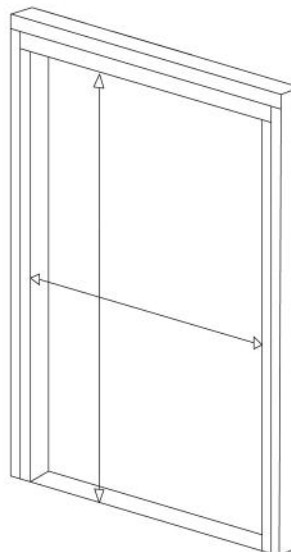
- Remove plastic wrap and cardboard packaging from the door.**
- Inspect the product for any damage** such as cracks, dents or scratches. DO NOT install damaged doors.
- Remove dirt and debris** from all surfaces.
- Read the entire installation instructions before proceeding.**



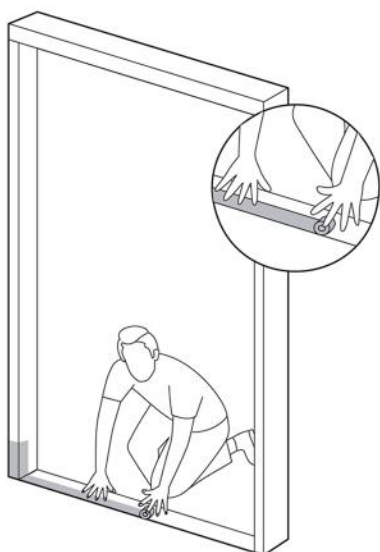
2 PREPARE THE ROUGH OPENING

- A. **Plumb, square, and level the rough opening.**
The opening should not be more than 1/4" out of square, level, and plumb.
- B. **Seal the rough opening with butyl flashing tape** in accordance with local building codes.
Note: If a sill pan is required by code, install the sill pan onto the rough opening at this step. Seal underneath the entire sill and 3-6" up the jambs.
- C. **Apply a 1/4" minimum bead of sealant to the sill.**
Make sure the sealant is compatible with the moisture barrier to ensure a long-lasting robust seal. Do not to block any weep holes on the sill.

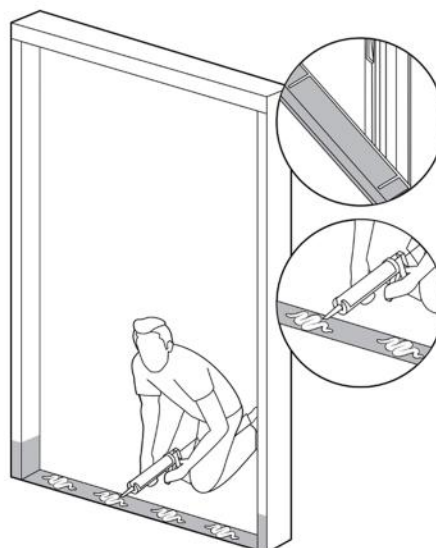
2A



2B



2C



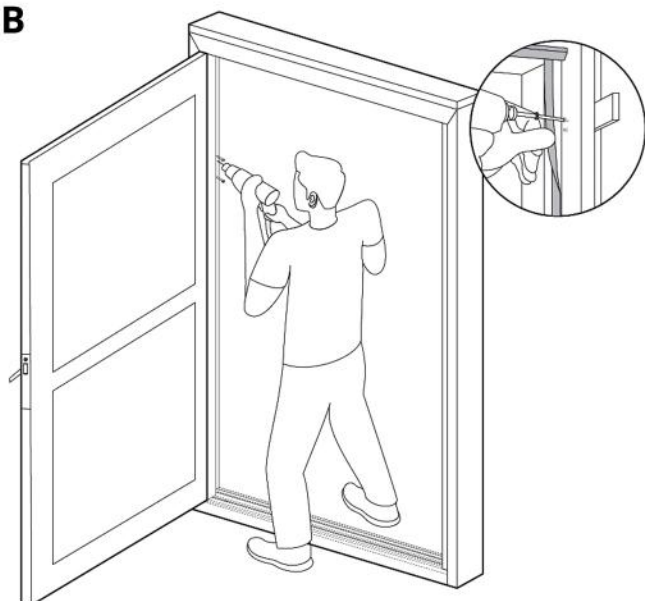
3 PLACE THE DOOR

- A. **Set your frame in the rough opening.** Open the door 90 degrees. Place shims under the door to help plumb frame.
Note: Make sure the head is level, plumb, and square before proceeding.
- B. **Place a loose anchor (included) through each jamb** to hold the door in place.
Note: The holes might be hidden underneath the weatherstrip.
Note: Ensure the door swing direction is correct before placing anchors.
- C. **Level, plumb, and square the door** in the opening with shims.

3A



3B



4 SECURE THE ANCHORS

- A. **Use supplied anchors to anchor the unit** to the rough opening.

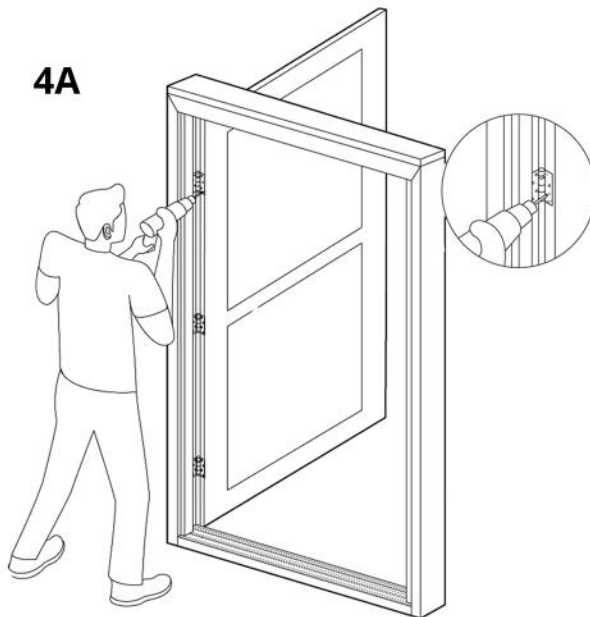
Note: There should be a shim behind every anchor.

Note: For double doors or larger units, the panel(s) may be shipped loose. At this step, install the panels into the frame using the supplied hinge anchors.

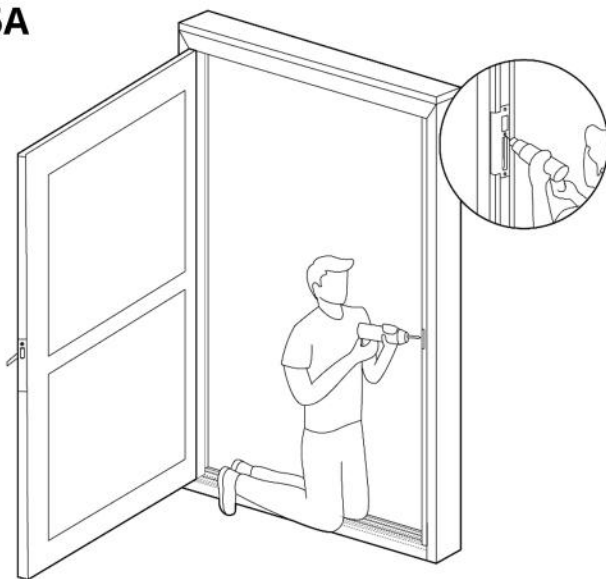
Note: If you purchased a fixed panel, see Page 9.

- B. **Level, plumb, and square the door** again. Door should be no more than 1/4" inch out of square, level, and plumb.

4A



5A



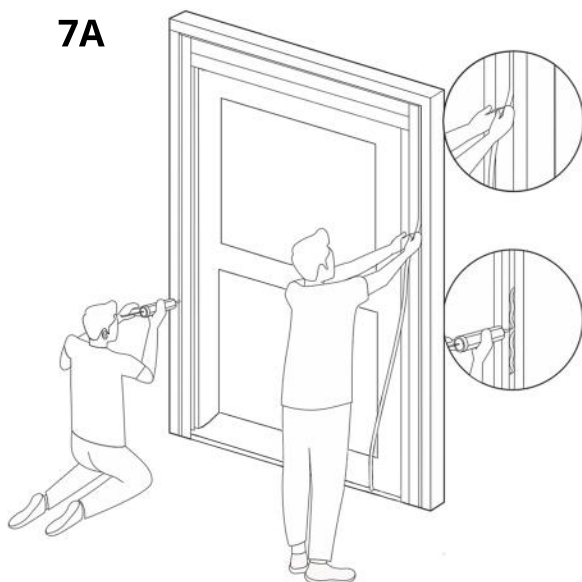
5 CHECK THE ANCHORS

- A. **Each hinge should have an anchor placed through it** and into the structure.
- B. **The middle anchor on the strike should also be anchored** into the structure.

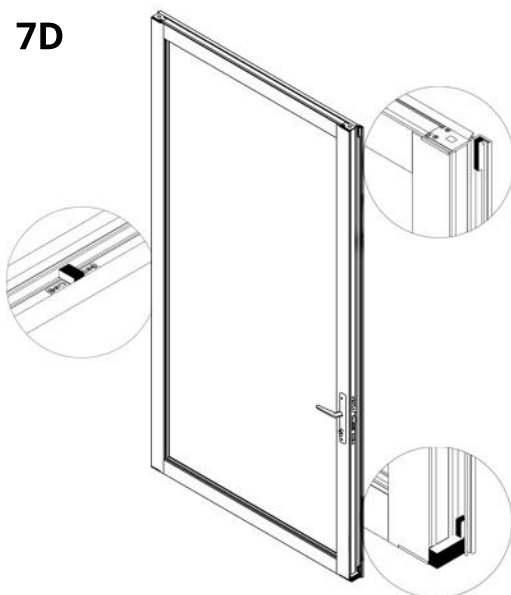
6 ADJUST DOOR REVEAL

- A. **Check the door reveal, operation, and lock mechanism** in the closed position.
- B. **Adjust the door reveal with hex keys if needed.**
The top and bottom hinges offer horizontal adjustment, and the middle hinge(s) offer vertical adjustment.

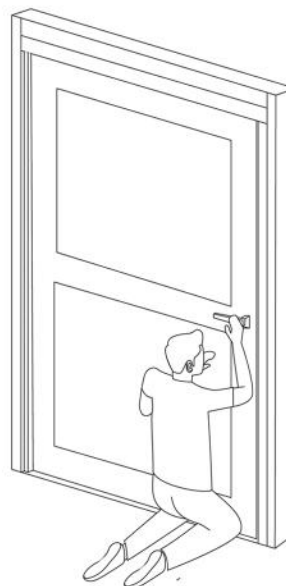
7A



7D



6A



7 SEAL THE DOOR

- A. **Fill any voids between the frame perimeter and the opening** with closed cell foam backer rod.
Note: DO NOT use expansion foam.
Note: Make sure the backer rod is double the size of the opening it's meant to fill.
- B. **Use a compatible sealant** to seal on top of the backer rod around the perimeter of the door.
- C. **Ensure the sealant creates a watertight and weatherproof seal** around the door.
- D. **Install the supplied hinge gaskets** on the panel over the hinges to ensure the door properly seals when closed.
Note: Additional seals will be supplied for pair door configurations.
Astragal dust plug (0.40W x 2.00L): Install along interior side of the astragal flange; (1) top, (1) bottom.
Lockstile dust plug (1.00W x 2.00L): Install along the bottom edge of each lockstile; (1) active, (1) in-active.
Strike dust plug (1.00W x 1.50L): Install between each set of strike plates; (1) head, (1) sill.

SUPPLIES INCLUDED:

- One panel shim (should be shipped loose)
- Two sheet metal parts (confirm that the strikes are installed on the head and sill)
- Two anchors
- Insulated glass unit for the fixed panel
- Glazing shims
- Glazing stops
- Glazing weatherstrip
- Glazing sealant

NOTE: Ensure the fixed panel was shipped open (no glass).

NOTE: Ensure that the top and bottom rail have clearance slots near where the rails meet the lead stile (see illustration).

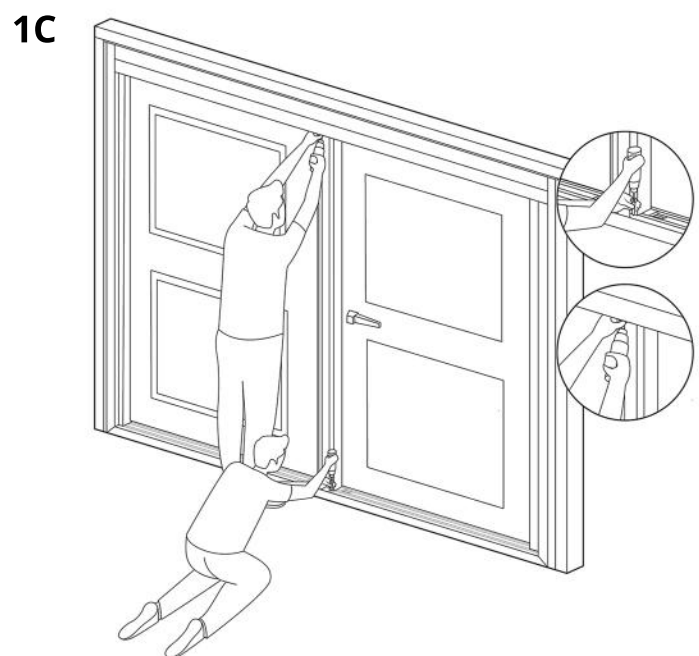
NOTE: Ensure the aluminum glazing stops have weather strips running the full length.

THESE INSTRUCTIONS ARE ONLY FOR SWING DOORS WITH ONE FIXED PANEL.

1 INSTALL THE PANEL

NOTE: If the open panel is already installed into the frame, skip to 1B.

- A. **Bring the fixed panel to the installed frame.** Use the provided fasteners to secure the hinges to the frame, and hang the panel.
- B. **Once the panel is hung, slide the panel shim** under the bottom rail clearance slot.
- C. **Predrill the sheet metal strikes** installed on the head and sill for an anchor.
- D. **Ensure the panel is flush with the outside of the frame.** Place one anchor through the bottom rail, panel shim, and into the sill through the sheet metal strike.
- E. **Place another anchor through the top rail and into the head,** through the sheet metal strike.
- F. **Ensure the fixed panel is still flush** with the outside of the frame.

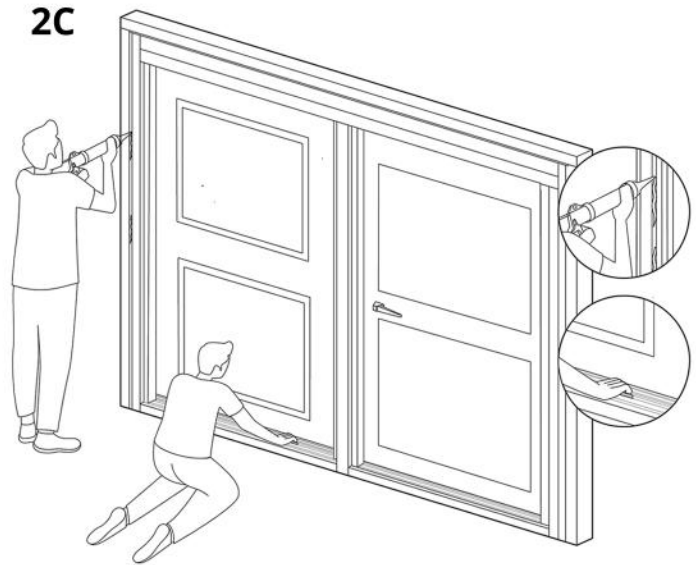


**FIELD GLAZING SHOULD BE DONE BY A PROFESSIONAL.
ANY DAMAGE WILL BE NOT COVERED UNDER WARRANTY.**

2 FIELD GLAZING

- A. **Locate the insulated glass unit** that should have been shipped loose for this panel.
- B. **Ensure the glazing face of the panel and glass** is clear of dust and debris.
- C. **Lay a ¼" bead of sealant around the perimeter of the panel** on the surface noted, and place two glazing shims on the bottom rail surface (see illustration).
- D. **With the correct side facing out (see label on glass), bring the insulated glass (IG) unit over and glaze it** into the open panel, ensuring that sealant is contacting around the entire perimeter of the IG.
- E. **Place glazing shims around the IG** between the profiles to ensure no edge of the glass is able to touch metal.
- F. **Install aluminum stops** on the top and bottom rails first.
- G. **Install the verticle glazing stops.**
- H. **Clean up** any excess sealant or squeeze out.
NOTE: Let excess sealant cure before removing.

2C



2E

