INSTALLATION INSTRUCTIONS ADJUSTABLE STEEL FRAME

ENTRY DOOR



* Find QR Codes inside for additional information, helpful installation tips and videos.



Contact the local recycling waste management center for waste disposal in the area. Always check local waste requirements and carefully dispose of waste in accordance with Federal and other regulations.



Homes built before 1978 may contain lead paint. All replacement installations must comply with the U.S. EPA's Lead-Based Paint Renovation, Repair, and Painting Program (RRP Rule). Read more about the RRP Rule and lead-safe work practices, on the U.S. EPA's website at: www.epa.gov/lead





GETTING STARTED

TOOLS & MATERIALS YOU WILL NEED

- Measuring Tape
- Pencil
- Level
- Reciprocating Saw
- Hammer or Mallet
- Phillips Head Screwdriver

- Drill & Drill Bits
- (1) box 2" 21/2" Drywall Nails
- High Quality Silicone Caulking in accordance with ASTM C920, Class 25 & Caulking Gun
- Batt Insulation
- Self-Adhering Flashing Tape

REMEMBER: ALWAYS USE THE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.

Read these instructions carefully before starting installation. Product warranty does not cover damages resulting from improper installation.

IMPORTANT NOTES BEFORE YOU BEGIN

- Inspect your package for any visible damages to the product. In addition, double check your paperwork with label on product(s) and verify all information is a match. Open packaging to confirm style, color and that order was shipped complete. Double check size of new unit by comparing it for fit to opening.
- If damages or irregularities are found, please scan the product's packaging QR Code label using your phone's QR Code Scanner to access ProVia's **After Sale Product Support** to enter a request and post pictures/videos to the order, or you can call the Customer Service Team at 1-800-669-4711.
- If you have ordered optional items, verify that they are included in packaging contents. This includes checking for multiple packages (For example, 1 of 2 and 2 of 2).

ADJUSTABLE STEEL FRAME CONTENTS

NOTE: Please refer to information below for the assembly and installation contents.





WOOD STUD & DRYWALL CONSTRUCTION

Recommended Fasteners:

• 1¼" min. (or min. ½" longer than drywall thickness) Coarse Thread Drywall Screws (Included)

OR METAL STUD & DRYWALL CONSTRUCTION

Recommended Fasteners:

• 1¼" min. (or at least ½" longer than drywall) Type "S" Bugle Head Self-Tapping Screws (Not Included)

NOTE: Please refer to local building codes applicable to project. Local building codes vary in placement and number of fasteners required.

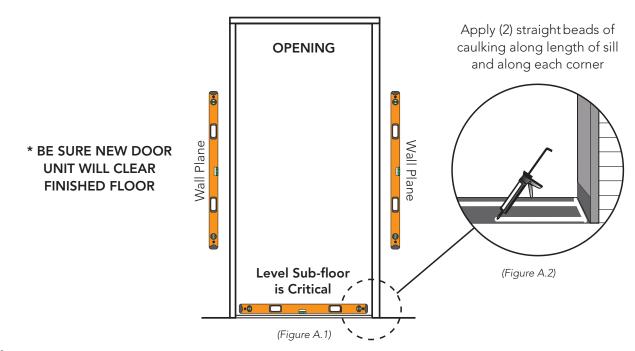
MEASURING GUIDELINES

32" x 80" Nominal Size Single Door = 33" x 81³/₈" Rough Opening

36" x 80" Nominal Size Single Door = 37 x 81³/₈" Rough Opening

NOTE: A larger rough opening will need to be framed for proper fit. A smaller rough opening will cause interference problems.

A. PREPARE



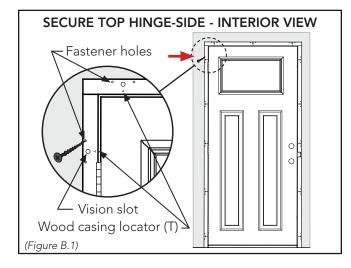
- **For units with a 7" or wider threshold**, the threshold will ship loose. First, remove screws from the small wood shipping blocks attached to frame bottom. Align threshold flush with frame interior and even with bottom edge. Secure with (2) #8 x 1½" wood screws per side (provided and located in hardware box).
 - If applicable, remove existing door slab and jamb to expose rough opening. Check dimensions to ensure new door will properly fit. NOTE: The rough opening will be from jack stud to jack stud, and sub-floor to underside of header. (Figure A.1)

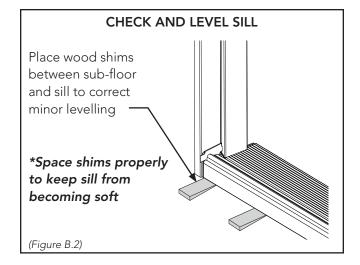


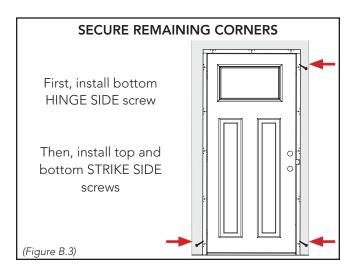
Clean rough opening of all dirt, debris, and obstructions.

- Check for level sub-floor. Measure and check to be sure new door slab will clear carpet, hardwood, rug, etc. Sub-floor may need to be built up for clearance.
- Check if opposing walls are on the same plane. If not, new door will need to be adjusted to plane during installation.
 - Dry fit unit to confirm opening clearances, dust cup clearance, and plane of door. For a new opening installation, mark clearance for strike and deadbolt (re-check prior to actual installation).
 - Remove door unit from opening and make any necessary modifications to the opening.
- Install flashing/pan system to sill area in accordance with local building codes and best practices. Replace drip cap if necessary. (*Figure A.2*)
 - Apply (2) generous beads of premium caulking compound in a STRAIGHT LINE, on top of flashing and along entire length of rough opening sill. Place first bead of caulking to the exterior leading edge of sill. The second bead of caulking should be placed along a composite edge of the threshold, towards interior. Apply caulking along each corner of sill as shown. (*Figure A.2*)

B. INSTALLATION











From the **INTERIOR**, set new door unit, sill FIRST, into opening. Use large vision slots to center within rough opening. (*Figure B.1*)



On **HINGE SIDE**, install (1) #6 x 2¹/₄" screw into the top interior flange pre-punched fastener hole. (*Figure B.1*)

3

Check and align the slab to frame margins. Note, hinge-side margin is factory set. Adjust strike-side accordingly.



Check for level sill. Place wood shims between sub-floor and jamb to correct minor leveling and margin adjustments, ¹/₈" or less. (*Figure B.2*)

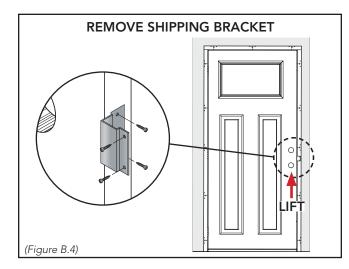


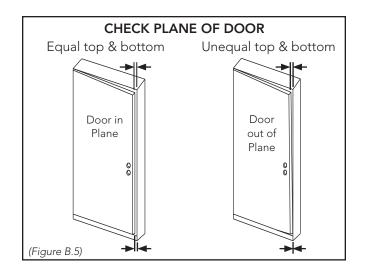
IMPORTANT! A level sill is critical. If sill is not flat, straight and level, it must be shimmed for proper operation of door. Be careful to NOT over shim. Improper shimming may change the margins and jeopardizing operational performance of door.

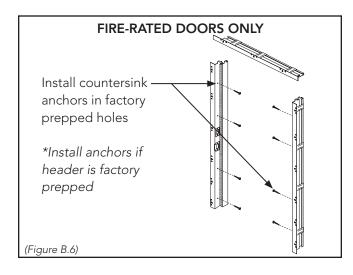
5

With margins set, install (1) #6 x 2¼" screw into the bottom **HINGE SIDE** interior flange pre-punched fastener hole. Then install #6 x 2¼" screws into the top and bottom **STRIKE SIDE** flange. (*Figure B.3*)

B. INSTALLATION (CONTINUED)









Remove jamb screws from shipping bracket. BEFORE opening door slab, lift slab using handle set prepped holes to un-weight and then open. Remove bracket and discard. (*Figure B.4*)



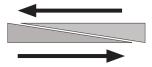
Inspect plane of door by comparing edge of door slab to edge of strike jamb. The edges should be parallel. If door is out of plane (the slab and jamb edge are not parallel), place shims behind interior flange as needed to adjust. (*Figure B.5*)



IMPORTANT! Plane adjustment is critical for door operation and sealing performance. Plane should be continuously monitored through the installation. Confirm all other adjustments made do not compromise plane. Adjustments to plane after complete install may require removal and re-installation.



IMPORTANT! CORRECT shimming application; stack wedge shaped shims contrasting and plane to plane. See diagram below. Be careful to NOT over shim. Improper shimming may change the margins and jeopardize operation of door.



8

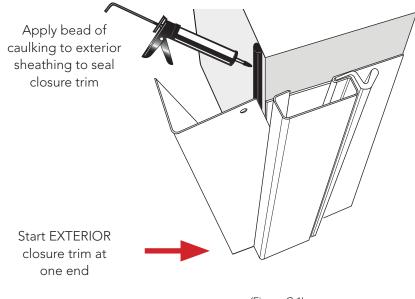
After all margins are set, add a minimum of (2) screws each jamb side and (1) screw in center of header. For fire rated doors, refer to local building codes for the required amount of screws to fully secure.



For FIRE-RATED UNITS ONLY, unit will require countersink anchors. If frame is provided with factory prepped countersinks holes in header, use 1¼" (min.) Type "S" bugle head self-tapping screws. (*Figure B.6*)

C. INSTALL EXTERIOR JAMB CLOSURES

INSTALL EXTERIOR CLOSURE TRIM



(Figure C.1)

From the EXTERIOR, insert batt insulation to fill gap between frame and rough opening.

Around the exterior sheathing, apply a continuous bead of caulking close to opening. (Figure C.1)

Install vertical closure trim into jamb side. Start at either end of closure trim. Guide trim between the frame plate and stop. It may be necessary to apply slight pressure to the outside of the frame, at start point, to allow closure to slide between plate and stop. Repeat opposite side. (*Figure C.1*)

Slide header closure into header using same method. Adjust vertical and header closure trim as required to obtain an even and tight fit in top corners.

5 Adjust and set all closure trim margins.

Use screws to secure the top corners of VERTICAL closure trim at each end of the header trim. Check to be sure trim is square to wall. Then, install (6) additional screws per vertical closure trim and (3) additional screws per header trim.

D. INSTALL DOOR HARDWARE



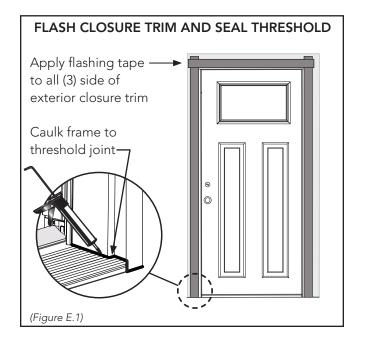
For new door installation, prep wood stud for strike plate and/or deadbolt strike clearance. Check depth and clearance with dust box.

2

Install the lock set and deadbolt per manufacturer's instruction. *Plate is included for unit ordered without deadbolt.*

- Install lock set and deadbolt adjustable strike plates per manufacturer's instruction. Pack is located inside hardware box. Note, the deadbolt strike plate is narrower on one side. Place this edge to interior side of door.
 - Check hardware operation. Adjust strike plates as needed for proper contact.

E. FLASH AND SEAL EXTERIOR





Insulate interior side with batt insulation to fill cavity between frame and opening.

Apply self-adhering flashing tape (not included) to closure flange. Header tape must overlap each vertical tape and extend past in horizontal direction.



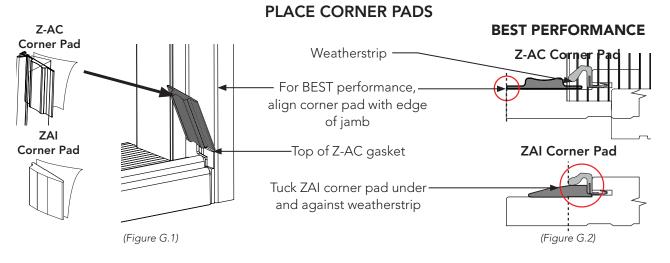
For **Z-AC[™]** and **ZAI[™]** thresholds, caulk along the entire joint where jamb meets the threshold (including exterior closure trim).

Install exterior and interior trim as required per project. Use vision holes as a locator guide.

F. INTERIOR WOOD CASING

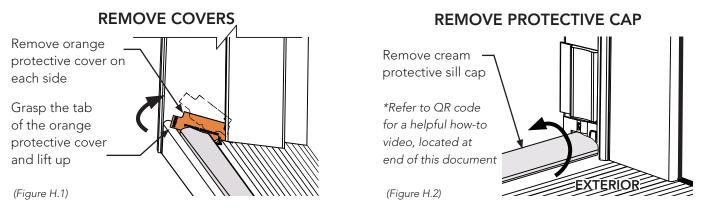
Apply wood casing. Place edge of casing parallel to the "T" locator mark on frame. Locate casing nail approximately $\frac{1}{2}$ " back from top of "T". This will allow nail to pass through large vision slot of frame.

G. APPLY CORNER PADS



- Place corner seal pads. Remove backing from each pad to expose adhesive. Corner pads need to be flush, with no gaps. Attach by pressing tight to jamb. (*Figure G.1*)
 - **Z-AC:** Align corner pad with inside edge of jamb. Ensure the new corner pad contacts the top surface of the Z-AC gasket. (*Figure G.2*)
 - **ZAI:** Place notch of ZAI pad under and against weatherstripping. Ensure the new corner pad contacts the top surface of the ZAI threshold cap. (*Figure G.2*)

H. THRESHOLD: z-AC^m (AUTO-ADJUSTING) THRESHOLD ONLY



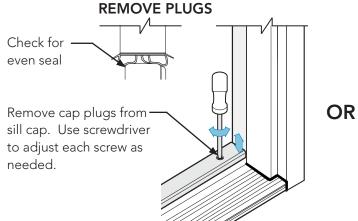
Remove the orange protective covers located at each jamb. Grasp the tab of the orange protective cover, marked 'Pull-Up'. Lift up and away from the sill base (pliers may be required). (Figure H.2)

NOTE: A small portion of the gasket, at the outside edge **ONLY**, will be removed with the protective cover, this is typical. **DO NOT** remove any portion of foam gasket in removal of orange tab.

Remove the cream colored protective sill cap cover. For inswing door units, grasp cover from the exterior side, lift and pull. The cream cover may break, this is typical. (*Figure H.1*)

. THRESHOLD: ZAI (ADJUSTABLE) THRESHOLD ONLY

The ZAI (Adjustable) threshold allows for adjustment of the sill height, thus providing a consistent and even seal. To adjust sill cap height, follow one of the two methods shown below:



(Figure I.1)

REMOVE CAP PLUGS:

- 1 Place tape around the cap plug to protect the finish. Use a flat blade to pry the cap plugs away from cap.
- 2

Use a screwdriver to adjust each screw as needed to achieve necessary height. (*Figure 1.1*)



- Open and close door to check adjustments.
- 4
- Check for an even seal along full length of door sweep. Repeat process until proper seal is achieved. (*Figure 1.1*)
- 5 Re-install the cap plugs. Use a rubber mallet if needed to secure plugs in place. If cap plugs are damaged during adjustment, replace with new plugs.

REMOVE SILL CAP

Using a flat head screwdriver or pry bar, pry up the sill cap, removing from channel

Loosen adjustment screws from underside of sill cap

(Figure I.2)

REMOVE SILL CAP:

- Place a small piece of wood blocking on sill deck to prevent damage. At one end of the sill, use a flat head screwdriver or pry bar to pry the cap upward and away from the sill channel. Continue to work along the full length of threshold until fully removed from channel. (*Figure 1.2*)
- 2

Access adjustment screws from the underside of the sill cap. Using a screwdriver, adjust screws as needed to achieve necessary height. (*Figure 1.2*)



Re-install sill cap by snapping into channel. If needed, use a rubber mallet to tap into place. Leg of the sill cap should touch the threshold deck when properly seated.



Open and close door to check adjustments.



Check for an even seal along full length of door sweep. Repeat above steps until proper seal is achieved.



TROUBLESHOOTING & TIPS

Problem	Cause	SOLUTION
Door slab is not sealing against weatherstrip and/or strike-side, TOP of door slab protrudes past frame.	Door slab is out of plane with frame.	 Shift strike-side, bottom corner of frame towards exterior. Shift hinge-side, top corner of frame towards exterior.
Door slab is not sealing against weatherstrip and/or strike side, BOTTOM of door slab protrudes past frame.	Door slab is out of plane with frame.	 Shift strike-side, top corner of frame towards exterior. Shift hinge-side, bottom corner of frame towards exterior.
Strike-side margin is too small. Door slab hits frame on strike- side.	Over-shimmed.	 Slightly loosen hinge-side shims and pull hinge-side frame towards stud by tightening hinge screws. Loosen strike-side shims and pull strike-side frame towards stud by tightening screws behind weatherstripping. Reduce shims from middle hinge (middle hinge over- shimmed).
Strike-side margin is too large, more than ¾.".	Under-shimmed.	 Increase shim depth behind jamb on hinge-side. Increase shim depth behind jamb on strike-side.
Tapered header margin. Margin is larger on strike-side.	 Not properly shimmed behind hinges. Sill is not level 	 Adjust shims behind top and bottom hinges to correct tension and/or compression. Shim directly under jamb on the hinge-side to raise door slab within the frame, ½" max.
Tapered header margin. Margin is smaller on strike-side.	 Not properly shimmed behind hinges. Sill is not level 	 Adjust shims behind top and bottom hinges to correct tension and/or compression. Shim directly under jamb on the strike-side to raise the jamb to create proper margin, ¹/₈" max.
Tapered margin above top hinge. Margin is larger at the hinge.	Under shimmed at middle and top hinge.	Increase shims behind top and/or middle hinge.
Tapered margin above top hinge. Margin is smaller at the hinge.	Over shimmed at middle or top hinge.	Decrease shims behind top and/or middle hinge.
Tapered margin below bottom hinge. Margin is larger at the hinge.	Under shimmed at middle and bottom hinge.	Increase shims behind bottom and/or middle hinge.
Tapered margin below bottom hinge. Margin is smaller at the hinge.	Over shimmed at middle or bottom hinge.	Decrease shims behind bottom and/or middle hinge.
Middle strike-side margin is too small or too large above or below latch area.	Wood frame is bowed.	Secure additional shims behind weatherstripping at affected area.



TROUBLESHOOTING & TIPS (CONT.)

Problem	Cause	SOLUTION
Door slab is not sealing tight against weatherstrip. (Door is in plane)	Adjustable strike plate has moved.	Remove strike plate cover. Shift adjustable strike plate to proper position and secure in place with (2) small brad nails. Reinstall strike plate cover.
Door knob is loose.	Screws have loosened from use.	1. Thread locker. 2. Install a small lock washer behind each screw.
Bottom door sweep is dragging.	 Top margin is larger on strike- side. (See Solution 1 & 2) Bow (upward) in sill/threshold. (See Solution 3) 	 Tighten top hinge screw to pull door slab up and towards frame. If margin is ¼" or greater, door unit needs reset. Shim under sill and reset door. Remove sill cap from threshold. Install screws through sill cap channel to pull threshold and sill downward. If this does not correct bow in threshold, removal of subfloor material will be required to level, then reset door.
Bottom door sweep is not sealing.	 ZAI sill cap is to low. Top margin is smaller on the strike-side. Bow (downward) in sill/ threshold. 	 Raise adjustable sill cap as needed. See page 9. Top hinge is over shimmed. Adjust shims as needed. Door unit needs reset. Shim under sill as needed to raise bow. Reset door.

*Please call Customer Service for additional installation inquiries at 1-800-669-4711.

*For additional information and helpful videos, visit our Homepage for Installers by TAPPING or SCANNING the QR code.



VIDEO: Z-AC[™] Threshold Sill Prep



VIDEO: Z-AC[™] Threshold Replacement



Condensation, Humidity and Dew Point Temperature



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