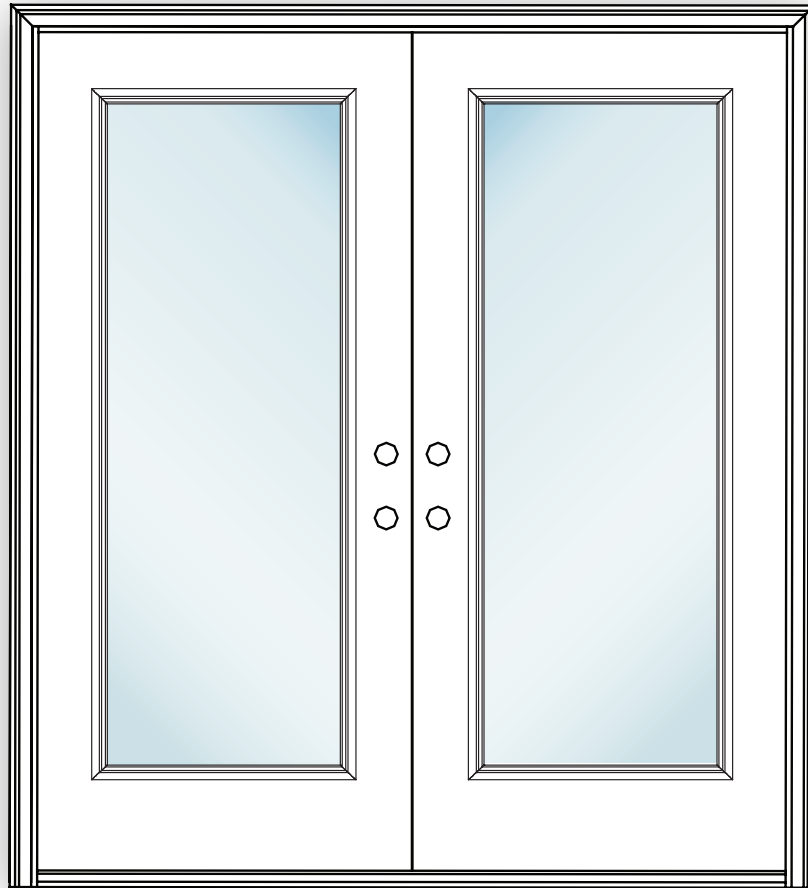




INSTALLATION INSTRUCTION MANUAL

DOUBLE ENTRY DOOR

PERMATECH™



** 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

MATERIALS YOU WILL NEED

- (1) Box 3" Smooth Shank Exterior Screws
- Shims
- High Quality Silicone Caulking in accordance with ASTM C920, Class 25 & Caulking Gun
- AAMA approved Low-Expanding Window Insulation Foam in accordance with ASTM C1620

PROVIA COMPOSITE INSTALLATION KIT AVAILABLE FOR ORDER

Installation Kit for Composite Jambs (P-HW-ACCS00-82)

- | | | |
|--|-------------------------------|---|
| (26) #8 x 3" Galvanized Drywall Screws | (22) Composite Shims | (1) 1" x 3" x 20' Fiberglass Insulation |
| (26) 1/16" Fastcap™ | (1) Silirub® N1 100% Silicone | |



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.



PermaTech™ Composite Frame System: Available in smooth white finish from our factory and can be field painted. Please see Section I of this manual for painting recommendations.



DO NOT INSTALL A STORM DOOR ON A PERMATECH FRAME. DOING SO WILL VOID THE PRODUCT WARRANTY.



INSTALLER: Demonstrate function of double door astragal to Homeowner. Be sure top and bottom astragal pins are correctly seated in designated locations to ensure proper function of unit.



IMPORTANT NOTES BEFORE YOU BEGIN

- Inspect your package(s) for any visible damage 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 damage 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 Support 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).
- For the entry door measuring guide and video, please tap or scan the QR codes shown.

GUIDE



VIDEO



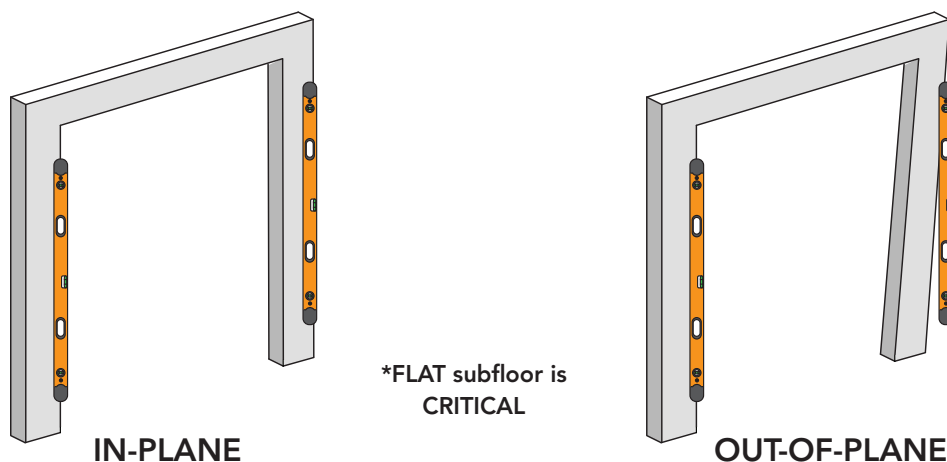


IMPORTANT INFORMATION!

- ProVia® understands there are various methods and conditions affecting the installation of an entry door. We feel the most critical steps are plane adjustment, securing, and shimming as instructed in this document.

A. PREPARATION

CHECK WALL PLANE AND SUBFLOOR

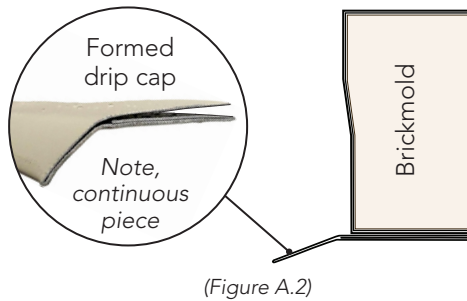


(Figure A.1)

- 1 Confirm unit size with proposed opening.
- 2 Leave protective plastic bag on door slabs.
- 3 For units ordered with attached brickmold and cladding, remove the loose brickmold cladding. If unit was specifically ordered with jamb cladding as 'Ship Cladding Loose on Unit', remove all cladding at this time.
- 4 Remove shipping slats from bottom of threshold.
- 5 For units ordered NO brickmold or brickmold loose, it is recommended to attach temporary cleats (small blocks of wood) to overlap exterior of frame, substituting for brickmold. This will provide plane adjustment points in Section B.
- 6 **For replacement applications**, remove existing door unit to expose rough opening. *Rough opening will be from jack stud to jack stud, and subfloor to underside of header.* Clean opening of all dirt, debris, and obstructions.
- 7 Check if opposing wall framing is on the same plane. If not, new unit will need to be adjusted to plane during installation. Both vertical jambs of the unit must be parallel to each other, even if wall framing is out of plane. (Figure A.1)
- 8 Check subfloor for flat. **NOW IS THE BEST TIME TO MAKE CORRECTIONS TO SUBFLOOR.** Measure and check to be sure new door slabs will clear carpet, hardwood, rug, etc. Subfloor may need to be built up.
- 9 **Dry fit unit to confirm opening clearances and plane of door unit.** Remove unit and make any necessary modifications to opening.

A. PREPARATION (CONTINUED)

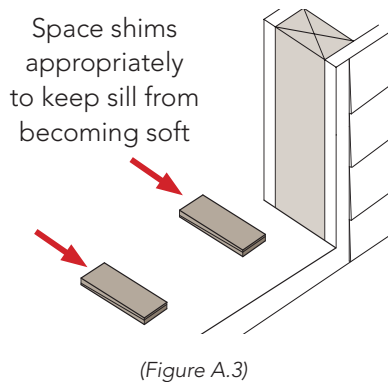
OUTSWING DRIP CAP



- 10 Add or replace the drip cap at the top of the opening. For **outswing doors**, a drip cap is recommended to be installed under the header brickmold as shown. (Figure A.2)

- 11 Check to be sure exterior threshold edge is fully supported. Support as needed.

LEVEL SUBFLOOR

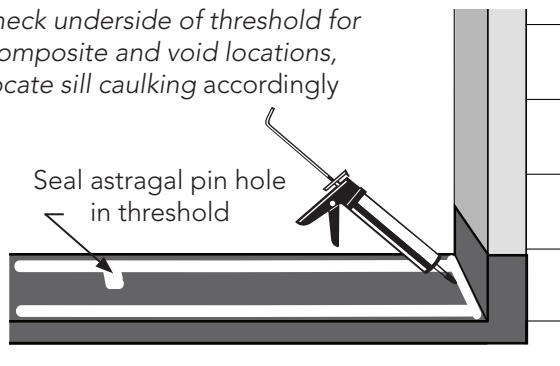


- ! IMPORTANT!** A flat sill is critical. If sill is **NOT** flat and straight, it must be shimmed for proper operation of door. Be careful to **NOT** over shim. Improper shimming may change the margins and jeopardize door operation.

- 12 Re-check sill for flat. If minor leveling adjustments are needed ($\frac{1}{8}$ " or less), place wood shims between subfloor and threshold. (Figure A.3)

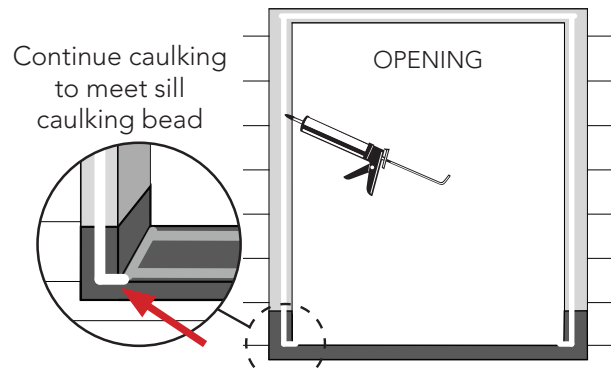
FLASH AND CAULK SILL

*Check underside of threshold for composite and void locations, locate sill caulking accordingly



(Figure A.4)

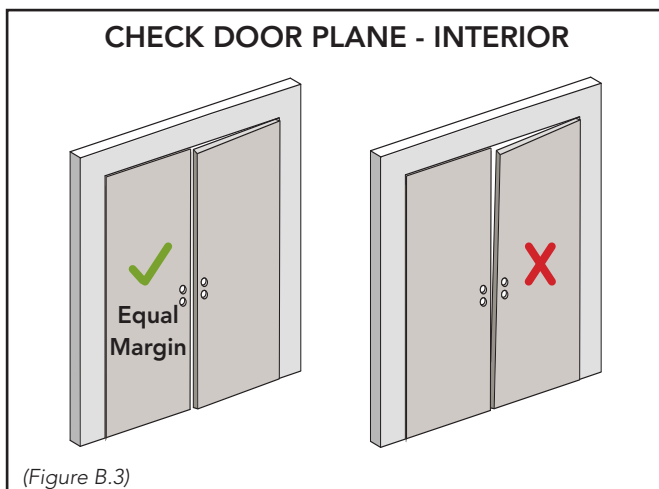
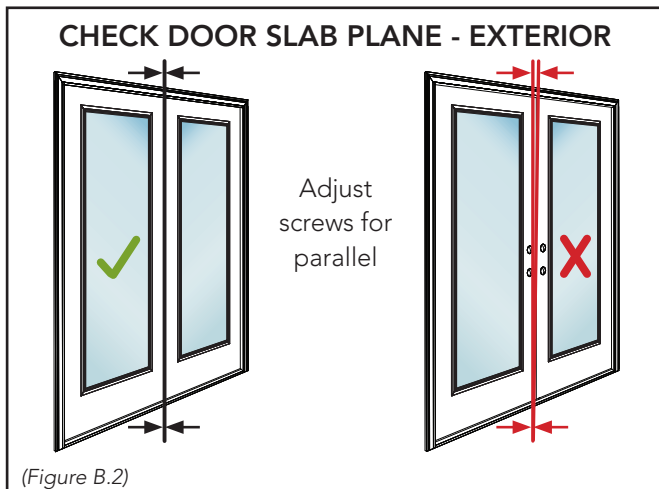
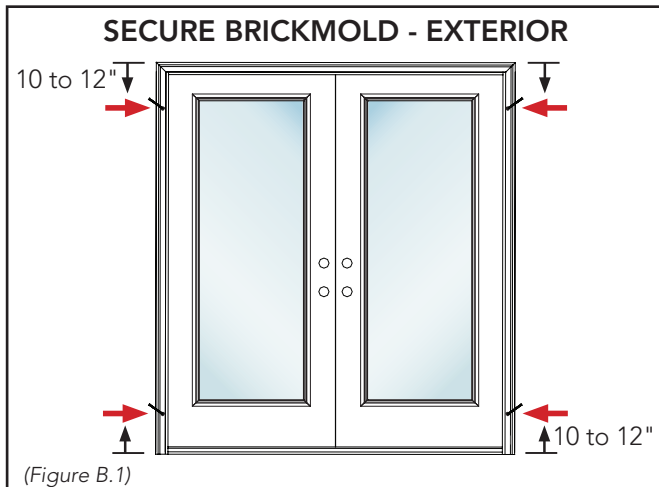
CAULK OPENING



(Figure A.5)

- 13 Apply flashing to sill opening in accordance with local building codes and best practices. (Figure A.4)
- 14 Caulk sill flashing as follows (Figure A.4):
1. Apply (2) generous beads of premium caulk for the full LENGTH of opening. Check underside of threshold to make sure caulk will contact threshold. Some thresholds have voids.
 2. Apply (1) bead of caulk for the WIDTH of sill at each end of the opening.
 3. Apply an extra bead of caulk in the center to seal the threshold hole for the astragal pin.
- 15 On the exterior sheathing or weather resistant barrier, apply a bead of caulking around perimeter of opening to seat brickmold (unit will be set in following section). Continue bottom of each vertical bead to meet sill caulking for a complete seal. Units with brickmold shipped loose, do not apply caulking until ready for brickmold installation. (Figure A.5)

B. INSTALLATION



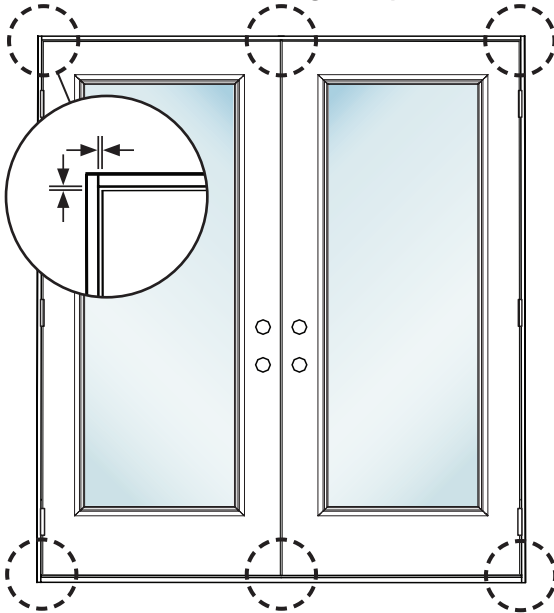
- 1 From the exterior, set unit in opening with sill first. From the interior side, center door on existing base board or paint lines. **Ensure ACTIVE and INACTIVE door slabs are equal in center height.**
- 2 Install smooth shank screws (not included) on each vertical side of brickmold, 10"-12" from top and bottom. *Note, full-thread screws can be used.* (Figure B.1)
- 3 ADJUST PLANE from the EXTERIOR. Check the plane between the closed **ACTIVE** slab and the astragal on **INACTIVE** slab. Use the (4) brickmold screws to adjust the frame to straight and parallel with slabs. (Figure B.2)
- 4 For units WITHOUT hardware, remove the shipping block located over the **ACTIVE** door slab header.
- 5 Remove bag from each door slab. Start at the open end of the bag, remove (4) hinge screws from the slab, (1) hinge at a time to slide off.
- 6 From the INTERIOR, re-check plane. Compare the edge of the **ACTIVE** slab with the edge of the closed and locked **INACTIVE** slab. Edges need to be parallel. If door is out of plane (*the door slabs are not parallel*), use brickmold screws to adjust frame as required. (Figure B.3)
- 7 With **ACTIVE** door in plane, unlock the **INACTIVE** door to make sure hardware operates easily. If top of door moves inward when unlatched or if the flip lever is difficult to operate, the **INACTIVE** door is out of plane and will need adjusted. If the **INACTIVE** door is adjusted, then the **ACTIVE** door may need readjusted. Refer back to the previous step. **Both doors must be in plane before continuing. Plane adjustment steps may need repeated multiple times.**

! IMPORTANT! Plane adjustment is critical for operation and sealing. Plane needs to be monitored throughout installation. Adjustments to plane after completing install may require removal and re-installation.

B. INSTALLATION (CONTINUED)

CHECK SLAB TO FRAME MARGINS - INTERIOR

Achieve and maintain a $\frac{1}{8}$ " to $\frac{3}{16}$ " margin, all corners
* $\frac{3}{16}$ " center margin required

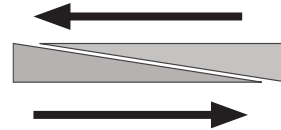


(Figure B.4)

- 8 Throughout installation, continuously monitor the slab to frame margins and center margin. Shims and screws must be installed and adjusted as instructed to achieve a $\frac{1}{8}$ " - $\frac{3}{16}$ " margin at all corners of door unit and center margin. **Note, the strike plates are surface mounted. This will require a $\frac{3}{16}$ " CENTER margin for proper clearance.** (Figure B.4)

IMPORTANT! PRE-DRILL FRAME FOR ALL SCREWS TO BE INSTALLED. Use a $\frac{1}{8}$ " drill bit to protect frame from splitting.

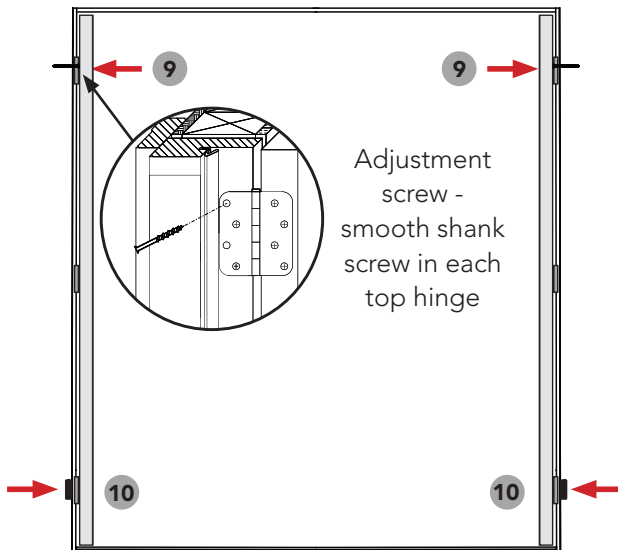
IMPORTANT! CORRECT shimming application; stack wedge shaped shims contrasting and plane to plane. See diagram below. To avoid twisting the frame, **DO NOT** use a single wedge shim.



SECURE AND SHIM JAMBS - INTERIOR

NON-ACTIVE

ACTIVE



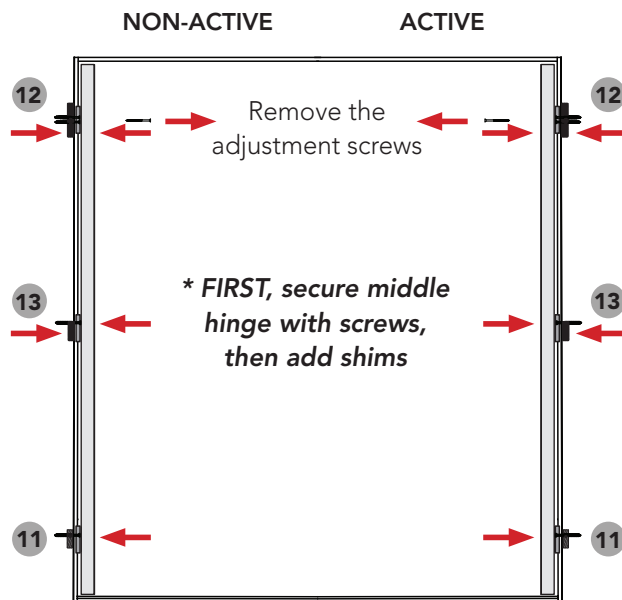
(Figure B.5)

IMPORTANT! For the remainder of the installation, **BOTH** doors need to be adjusted equally and simultaneously to keep the top of door slabs even in the center.

- 9 Install a smooth shank screw (not provided) into each top hinge. Use these screws to draw door slabs upward until margin above each top hinge is similar, the center top margin is correct, and the doors are even. (Figure B.5)
- 10 Install stacked shims behind each bottom hinge to counteract weight of door slab until the margin below each bottom hinge is similar, the bottom center margin is correct, and the doors are even. If needed, repeat Step 9 for minor adjustments after shimming. (Figure B.5)

B. INSTALLATION (CONTINUED)

SECURE AND SHIM JAMBS - INTERIOR



(Figure B.6)



IMPORTANT! Constantly monitor the center margin between door slabs throughout remaining installation.

- 11 At each bottom hinge, install a #10 x 2½" screw in open hole. (Figure B.6)
- 12 Install shims behind top hinge of the **NON-ACTIVE and the ACTIVE** door slabs until tight to the adjuster screws. Install a #10 x 2½" screw (*provided*) in the remaining open hole in each hinge, then install an additional shim tight to each screw. Remove the adjustment screws and replace with #10 x 2½" screws. (Figure B.6)

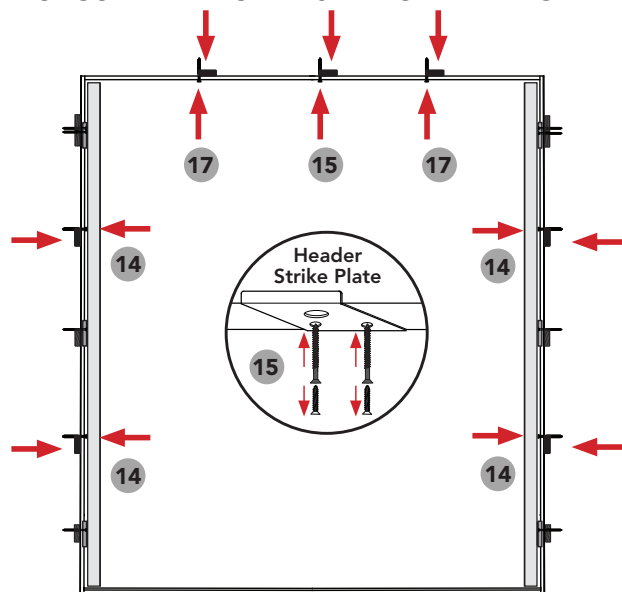
NOTE: The #10 x 2½" hinge screws are included in the hardware box or stapled to the jamb side.

- For a 3-HINGE DOOR, (8) screws provided.
- For a 4-HINGE DOOR, (10) screws provided.

- 13 At each middle hinge(s), install a #10 x 2½" screw in open hole(s). Snug up screws, **DO NOT OVER TIGHTEN**. Shim tight to each screw. (Figure B.6)

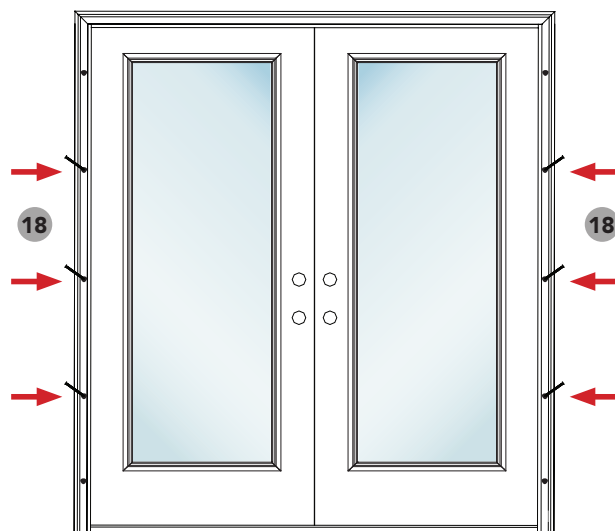
B. INSTALLATION (CONTINUED)

SECURE AND SHIM JAMBS - INTERIOR



(Figure B.7)

SECURE BRICKMOLD - EXTERIOR



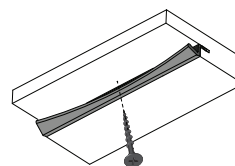
(Figure B.8)

- 14 Final check on ALL margins.** Check corner margins and center slab margin for parallel. Adjust shims and screws to achieve and maintain a $\frac{1}{8}$ " - $\frac{3}{16}$ " margin around the entire door and a $\frac{3}{16}$ " center margin. Shim and secure additional areas of jambs as needed to achieve and maintain margins. Refer to Troubleshooting Section if needed. (Figure B.7)

- 15** Shim above header strike plate (header strike plate is factory installed). Remove (2) #8 x $\frac{3}{4}$ " Phillips flat head screws (factory installed) and replace with (2) #8 x 3" Phillips flat head screws (included in the Astragal Component Pack). (Figure B.7)

- 16** Check for proper operation and alignment of top bolt pin. Close active door and engage bolt pin. Pin must engage within the center hole of the header strike plate.

- ! IMPORTANT!** Locate installation screws behind weather strip for a clean, professional appearance.



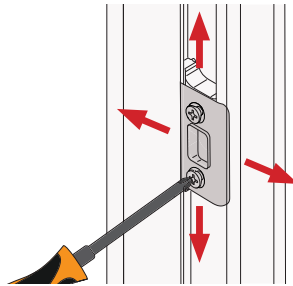
- 17** Shim and secure header. Center stacked shims over each door slab. Pull back weather strip, pre-drill and install a decking screw at shim locations. **Be careful to NOT over shim.** (Figure B.7)

TIP: The frame header's interior edge is not secured to the vertical jambs at either end, therefore the header margin can be slightly adjusted.

- 18** Fully secure by installing (3) smooth shank screws through each vertical brickmold. (Figure B.8)

C. ADJUST STRIKE PLATES

LOCKSET AND DEADBOLT STRIKE PLATES



(Figure C.1)



IMPORTANT! Handle set and deadbolt strike plates are factory installed. Each plate will adjust up and down as well as in and out.

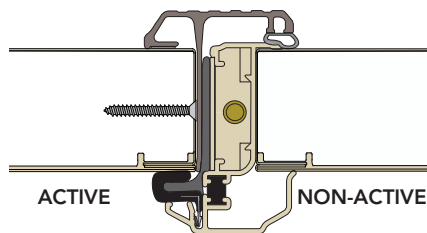
- 1 Install handle set according to manufacturer's instructions included in hardware box.
- 2 Adjust lockset strike plate by loosening screws until plate moves freely. Move plate to desired location and re-tighten screws to a test location. Once the final location is reached, remove (1) short screw and drill a $\frac{1}{8}$ " hole through the strike retainer and astragal body into the slab. Next, install a #8 x $2\frac{1}{2}$ " screw (provided) to set the strike plate. Repeat procedure for the second screw to permanently lock strike plate in place. (Figure C.1)

NOTE: In the unlikely event an up/down adjustment is needed, the trim fin cover can be cut to a shorter length or replaced with a longer piece. Re-order part number P-AS-ACC-94 for white or P-AS-ACC-97 for bronze.

- 3 Adjust the deadbolt strike plate using the same procedure as the lockset. Ensure the deadbolt throws freely when the door is latched. The deadbolt plate can be set with long screws but is not required.

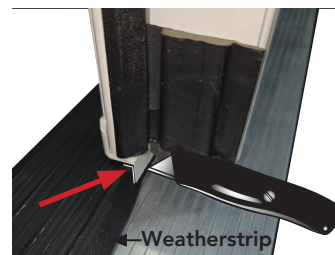
D. OUTSWING DOOR WITH A SECURITY FLANGE

SECURITY FLANGE SECTION VIEW



(Figure D.1)

OUTSWING BUMPER THRESHOLD



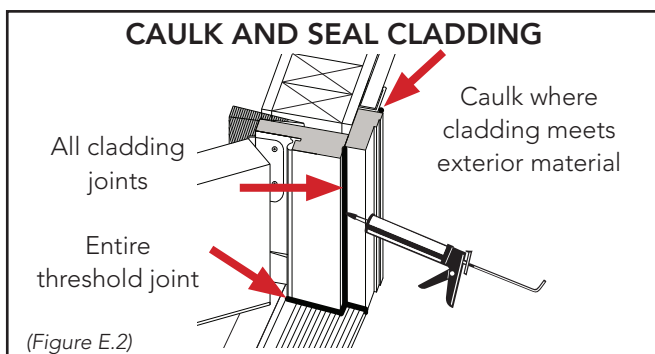
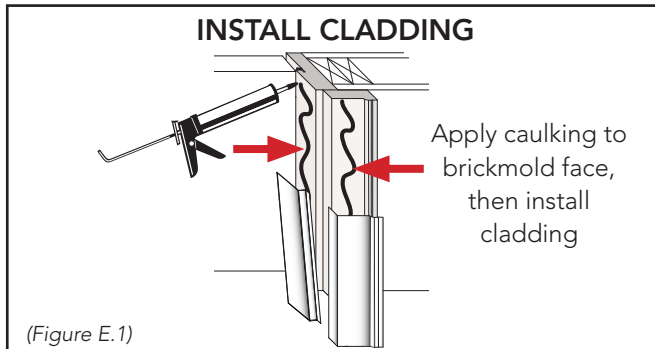
(Figure D.2)



The security flange is factory installed on all outswing doors with the exception of units with multi-point hardware. The flange covers the gap between door slabs to minimize exterior exposure. The security flange will affect the margin between doors.

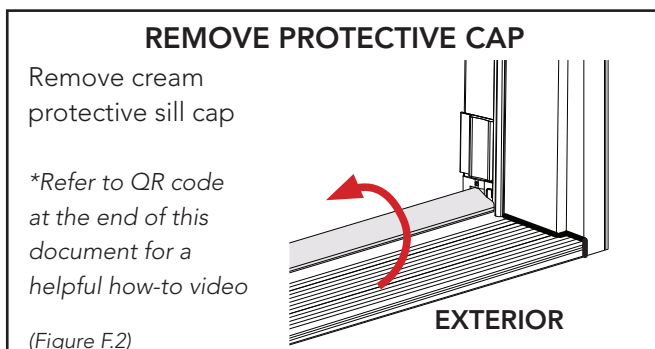
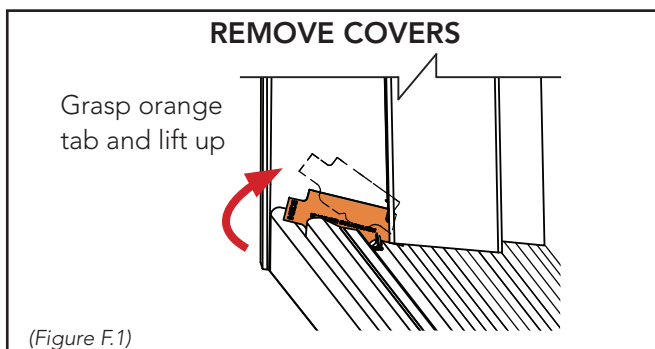
- 1 Adjust and check to be sure security flange sits tight against face of the NON-ACTIVE door. (Figure D.1)
- 2 Basic installation is the same with the exception of the door slab to threshold contact point. Only for units ordered with a BUMPER THRESHOLD, the threshold weatherstrip must be cut along the edge of the astragal's bottom cap (as shown). This will allow the active door slab to properly seal against the threshold weatherstrip and remove any chance of visible daylight. (Figure D.2)

E. INSULATE AND SEAL



- 1 Apply a bead of caulking to the brickmold face in order to adhere cladding. Repeat for the jamb cladding if shipped loose. Then install all cladding. (Figure E.1)
 - 2 Caulk along entire joint of threshold, where the jamb and brickmold meet the threshold. (Figure E.2)
 - 3 Caulk around ALL cladding joints. Be sure to apply caulking around perimeter where cladding meets exterior sheathing/material. (Figure E.2)
- NOTE:** If the decision is made to not use cladding, all joints **MUST** still be fully sealed.
- 4 From the interior, insulate with an AAMA approved ASTM C1620 low-expanding foam to fill cavities between frame and opening. **Over use of low-expanding foam may cause frame to bow, jeopardizing door operation.**

F. THRESHOLD: Z-AC™ (AUTO-ADJUST) THRESHOLD ONLY

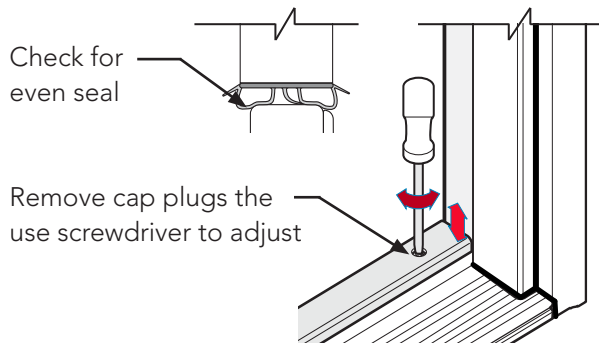


- 1 Remove the orange protective covers located at each jamb. Grasp tab on the orange protective cover, marked 'Pull-Up'. Gently and slowly, lift up and away from the sill base (*pliers may be required*). **DO NOT** remove any portion of foam gasket during removal of the orange tab. *Note, a small portion of the outside gasket edge will be removed with protective cover, this is typical.* (Figure F.1)
- 2 Remove the cream protective sill cap cover. For inswing door units, grasp cover from the exterior side, lift and roll toward the interior. The cap cover may break, this is typical. (Figure F.2)

G. THRESHOLD: ZAI (ADJUSTABLE) THRESHOLD ONLY

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

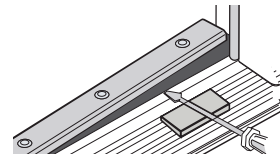
(A) REMOVE THRESHOLD CAP PLUGS



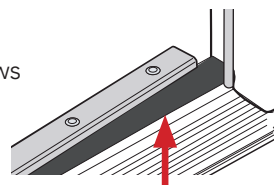
(Figure G.1)

(B) REMOVE THRESHOLD SILL CAP

Pry up the sill cap to remove from channel



Loosen adjustment screws from underside of cap



(Figure G.2)

OR

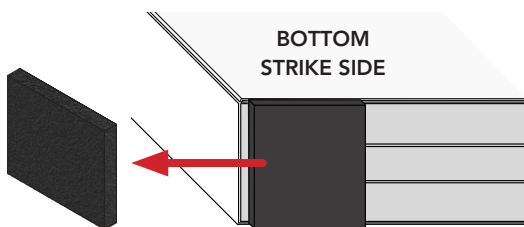
(A) REMOVE CAP PLUGS ONLY (FIGURE G.1):

- A.1** Place tape around the cap plugs to protect finish. Use a flat blade to pry the plugs away from cap.
- A.2** Use a screwdriver to adjust each screw as needed to achieve necessary height.
- A.3** Open and close door to check adjustments.
- A.4** Check for an even seal along full length of door sweep. Repeat process until proper seal is achieved.
- A.5** Re-install cap plugs. Use a rubber mallet to secure plugs in place if needed. If cap plugs are damaged during adjustment, replace with new plugs.

(B) REMOVE SILL CAP ONLY (FIGURE G.2):

- B.1 DO NOT REMOVE CAP PLUGS.** Place a small wood block on sill deck to prevent damage. At one end of the sill, use a flat head screwdriver or pry bar to pry sill cap up and away from the sill channel. Continue to work for the full length until fully removed.
- B.2** Access adjustment screws from underside of the sill cap. Using a screwdriver, adjust screws to achieve height needed.
- B.3** Snap cap into the channel to re-install. Use a rubber mallet to tap in place if needed. Leg of cap should touch the threshold deck when properly seated.
- B.4** Open and close door to check adjustments.
- B.5** Check for an even seal along length of door sweep. Repeat steps above until properly sealed.

H. Z-OB OUTSWING BUMPER THRESHOLD (ONLY)



(Figure H.1)

- 1** Open each door to remove the neoprene foam shipping pad located on the bottom strike side of each door. Peel pad from the doors and discard. *Note, this pad is ONLY found on outswing entry doors with the Z-OB bumper threshold.*

(Figure H.1)

I. PAINTING PERMATECH™ COMPOSITE FRAME (OPTIONAL)

IMPORTANT NOTES BEFORE YOU BEGIN



With use of paints, solvents, or other hazardous materials, always read and follow the manufacturer's instructions. ProVia™ does not make any claims or representation as to proper use of paint products from other manufacturers and does not warranty any product that was painted outside of its factory.



With use of paints or solvents:

- Always make sure your working area is properly ventilated.
- Keep paints and solvents away from heat and flame as these materials can be combustible.
- Paints or solvents may cause skin and eye irritation. Avoid contact with skin and eyes.
- Keep out of reach of children.



Recommendation: Use a high-quality, exterior grade bonding primer designed for PVC materials with a compatible high-quality exterior grade paint.



Recommendation for paint selection: Select paint consisting of a LRV of 57 or higher. Please check paint or with manufacturer of the paint to determine the LRV value.

INSTRUCTION FOR PAINTING



Remove door slab, all hardware, and weatherstrip from the frame. Mask off all areas not to be painted.



Use a scouring pad or 320-400 grit sandpaper to lightly scuff the surface.



Use a lint-free cloth to gently clean frame with acetone, removing all dust and residue from surface. Allow acetone to fully dry. **Note, wear solvent resistant gloves to clean surface.**



IMPORTANT! DO NOT USE hydro-carbon based solvents to clean the surface. The use of such solvents could leave a residue on frame.



Follow the manufacturer's instruction for applying primer and paint. Be sure paint is completely dry before reassembling the unit.



TROUBLESHOOTING & TIPS

PROBLEM	CAUSE	SOLUTION
Center margin is smaller at top than bottom	Over/under shimmed.	Adjust shims behind top and bottom hinges. Increase shims behind bottom hinges and decrease shims behind top hinges.
Center margin is larger at top than bottom	Over/under shimmed.	Adjust shims behind top and bottom hinges. Decrease shims behind bottom hinges and increase shims behind top hinges.
Center margin is wide	Unit is under shimmed.	Increase shims behind inactive and active door slabs.
Header margin is smaller above astragal	Over shimmed at strike plate.	Decrease shims above header strike plate.
Header margin is larger above astragal	Under shimmed at strike plate.	Increase shims above header strike plate.
Top of door slabs are uneven at center margin, active door is above inactive door	Over shimmed on active door side.	Decrease shims behind active door bottom hinge.
Top of door slabs are uneven at center margin, active door is below inactive door	Under shimmed on active door side.	Increase shims behind active door bottom hinge.
Inconsistent margin above top hinge, margin is larger at the hinge	Unit is under shimmed.	Increase shims behind hinges as needed.
Inconsistent margin above top hinge, margin is smaller at the hinge	Unit is over shimmed.	Decrease shims behind hinges as needed.
Inconsistent margin below bottom hinge, margin is larger at the hinge	Unit is under shimmed.	Increase shims behind hinges as needed.
Inconsistent margin below bottom hinge, margin is smaller at the hinge	Unit is over shimmed.	Decrease shims behind hinges as needed.
Top of active door slab protrudes inward, past frame header and away from astragal weather strip	Door out of plane.	One or a combination of the following: 1. Shift bottom of inactive hinge-side door jamb toward the exterior. 2. Shift the top of active hinge-side door jamb toward the exterior.
Bottom of active door slab protrudes inward, past threshold and away from astragal weather strip	Door out of plane.	One or a combination of the following: 1. Shift top of inactive hinge-side door jamb toward the exterior. 2. Shift bottom of active hinge-side door jamb toward the exterior. <i>*Tip: If ordered with brickmold attached, using full-thread screws will allow the frame to be 'held' out from exterior sheathing in order to adjust plane.</i>
Interference of Z-AC cap with door slab	Sill cap may not be fully seated.	Snap front leg of sill cap into place. Leg of the sill cap should touch the threshold deck when properly seated. If needed, use a rubber mallet to tap into place.



TROUBLESHOOTING & TIPS

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

FOR ADDITIONAL INFORMATION AND HELPFUL VIDEOS, SCAN OR TAP ON THE QR CODES:

**INSTALLATION
SUPPORT
HOMEPAGE**
(Access to all our
instructions and
how to videos)



CRITICAL STEPS VIDEO:
Double Entry Door
Installation



VIDEO: ZAC
Threshold Prep



**Condensation,
Humidity, and
Dew Point**



Installation Instruction
Shipped Loose
Brickmold Cladding



**How to Fix a
Squeaky Sweep**
(Slider Slicker)



**VIDEO: How to
Install Double Door**
(Inspect & Prepare,
Part 1)



VIDEO: How to Install
Double Door
(Installation, Part 2)



**VIDEO: How to
Install Double Door**
(Inspect & Operate,
Part 3)



REMINDER TO INSTALLERS:

Demonstrate function of the double (French) door astragal to the Homeowner.

The best way to ensure the astragal pins are correctly seated is to close the door until the interior side of door slab is flush with the interior side of the threshold. Then throw the flip lever. If needed, wiggle the top of slab to engage the top pin. This process will ensure the astragal is properly secured in the designated locations.

