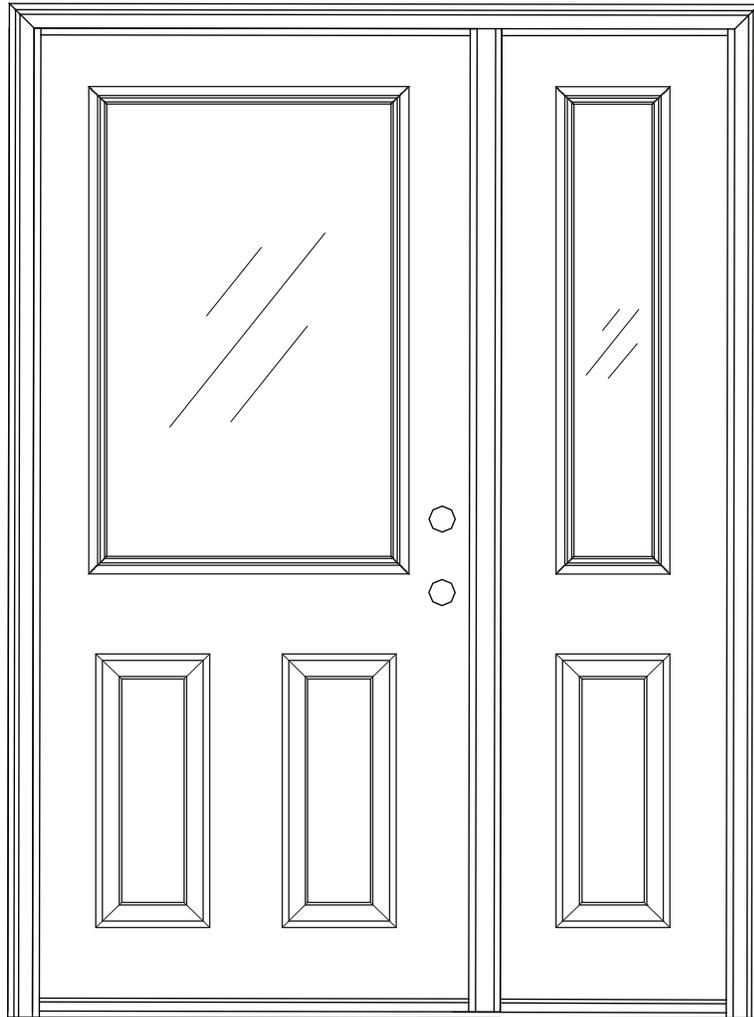




INSTALLATION INSTRUCTIONS

PERMATECH™ WITH SIDELITE(S) 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
- Utility Knife
- Reciprocating Saw
- Carpenter's Square
- Hammer or Mallet
- Level
- Shims
- Drill & Drill Bits
- Stiff Putty Knife
- (1) box 2½" - 3" Exterior Decking Screws
- (1) box 2½" Smooth Shank Screws
- High Quality Silicone Caulking in accordance with ASTM C 920, Class 25 & Caulking Gun.
- AAMA approved Low-Expanding Window Insulation Foam in accordance with ASTM C, 1620.



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 F of this manual for painting recommendations.



Important! DO NOT install a storm door onto the brickmold/jamb area of the composite frame, doing so will void the product warranty.

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 QR Code Scanner App to access ProVia's **After Sale Product Support** to enter a request for assistance or call Customer Service at 1-800-669-4711. Please be sure to provide order # and document with photos and/or videos.
- 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.

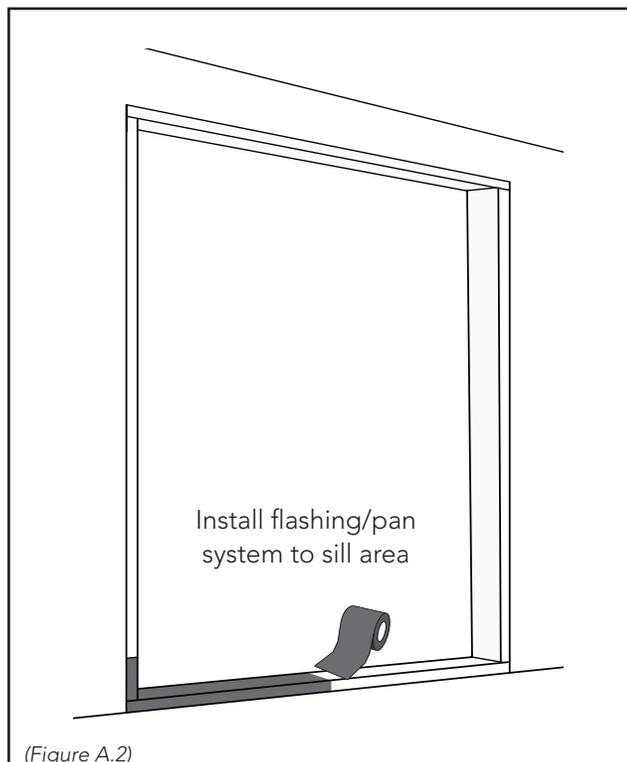
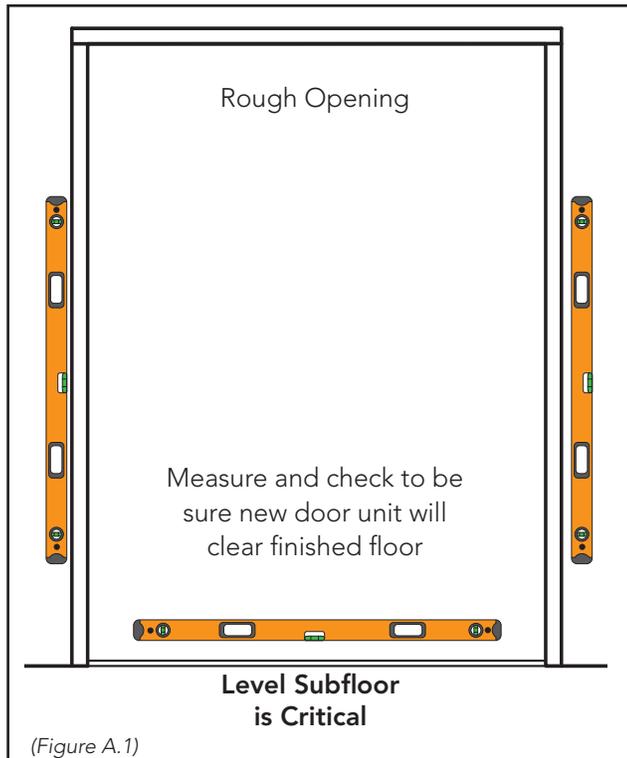
GUIDE



VIDEO



A. INSTALL PREPARATION



1

Opening preparation for replacement applications, remove existing door slab with sidelite(s) and jamb to expose rough opening.

NOTE: The rough opening will be from jack stud to jack stud, and sub-floor to underside of header. (Figure A.1)

2

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

3

Check for level subfloor. Measure and check to be sure new door unit will clear carpet, hardwood, rug, etc. Subfloor may need to be built up for clearance.

4

Check to see if opposing walls are on the same plane. If not, new door unit will need to be adjusted to plane during installation.

5

For units ordered with aluminum cladding, remove all brickmold cladding and sidelite(s) jamb cladding.



IMPORTANT! Remove shipping slats from bottom of threshold before dry fit.

6

Dry fit unit to confirm opening clearances, dust cup clearance (if applicable), plane of door, and support of exterior edge of threshold.

7

Remove door unit from opening and make any necessary modifications to the opening.

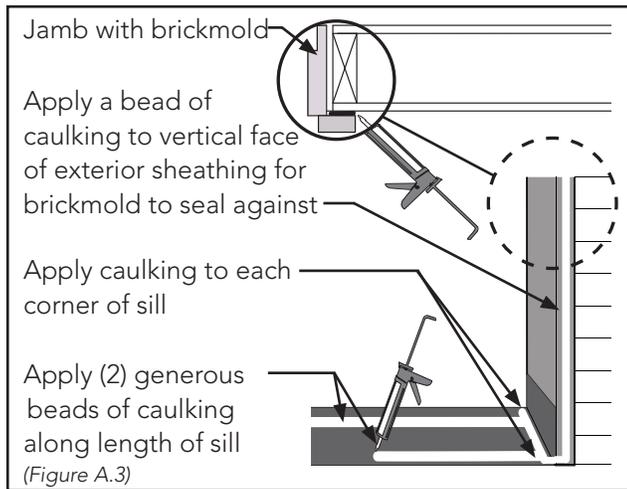
8

Install flashing/pan system to sill area in accordance with local building codes and best practices. Replace drip cap if necessary. (Figure A.2)

9

If exterior edge of threshold requires support, add material to the exterior surface of the structure at the sill.

A. INSTALL PREPARATION (CONTINUED)



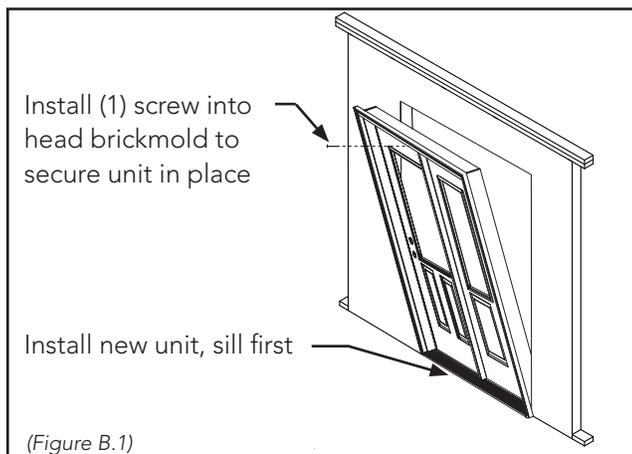
10

Apply (2) generous beads of premium caulk compound in a STRAIGHT LINE, on top of flashing and along entire length of rough opening sill. Place first bead of caulk to the exterior leading edge of sill. The second bead of caulk should be placed along a composite edge of the threshold, towards interior. Apply caulk in each corner of sill. (Figure A.3)

11

Apply a bead of caulk to each vertical and header face of exterior sheathing to seal brickmold. For a complete seal, apply bead of caulk from sill to exterior sheathing, as shown. (Figure A.3)

B. INSTALL NEW DOOR UNIT



1

Set new door unit into opening sill first, as shown in illustration. (Figure B.1)

2

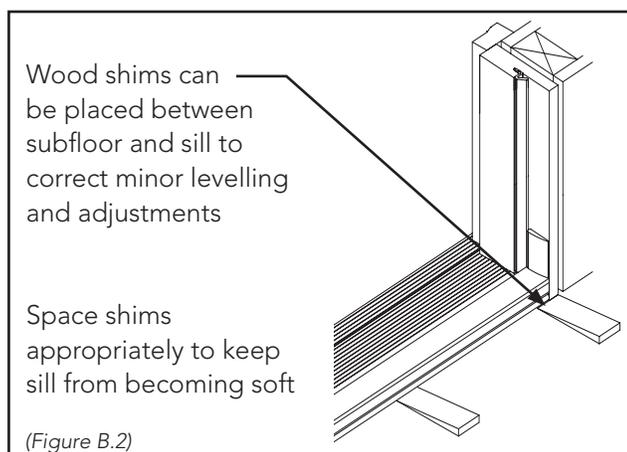
If new unit was ordered with brickmold attached, fasten the head brickmold to exterior sheathing with (1) decking screw. (Figure B.1)

3

From the interior side, center door on existing base board or paint lines.

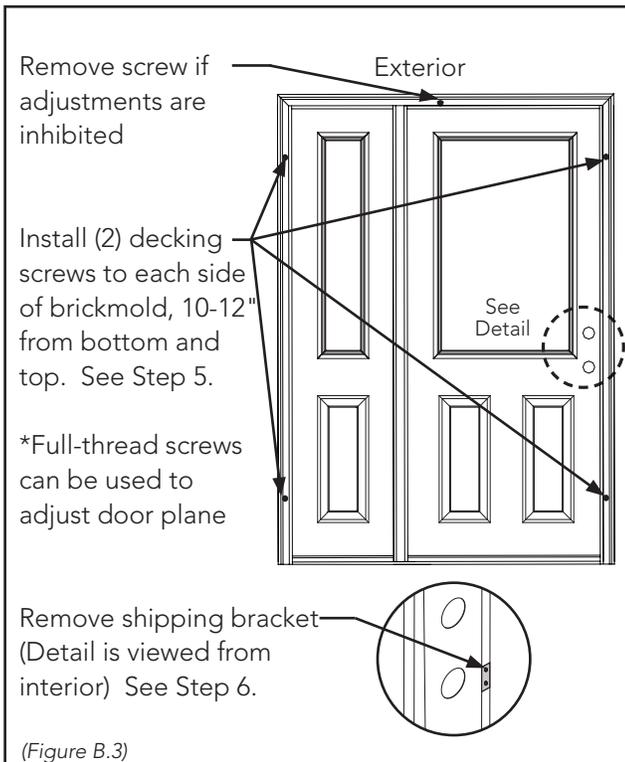
4

Check for level sill. Place wood shims between subfloor and jamb to correct minor leveling and margin adjustments, $\frac{1}{8}$ " 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.

B. INSTALL NEW DOOR UNIT (CONTINUED)



5

Install decking screws on each vertical side of brickmold, 10"-12" from the bottom and 10"-12" from the top. (Figure B.3)

NOTE: Full-thread screws can be used to adjust door plane. Refer to Troubleshooting Section.



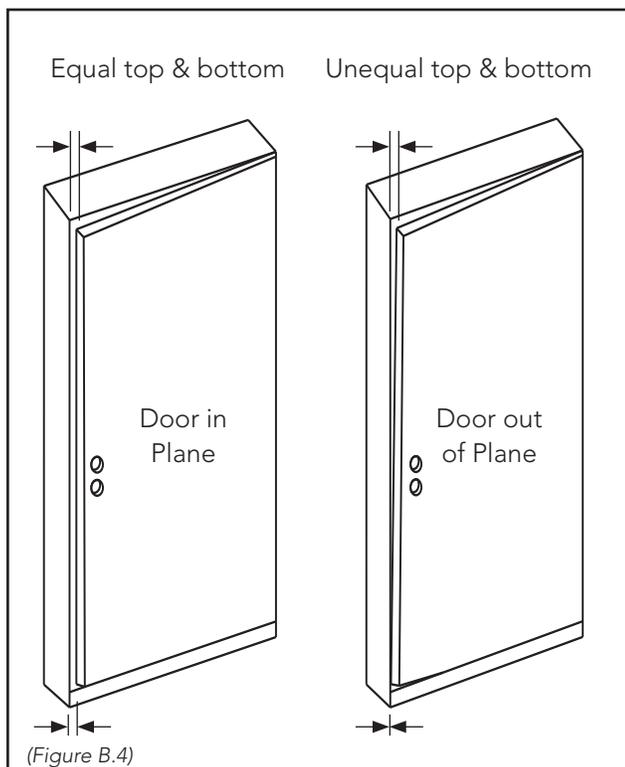
IMPORTANT! Be careful with initial opening of door slab. Shipping brackets WILL DAMAGE JAMB if door slab is opened without lifting to unweight it.

6

Remove jamb screws from shipping bracket. Before opening the door, use handle set prepped holes to lift door slab to unweight and then open. Remove bracket and discard. (Figure B.3)

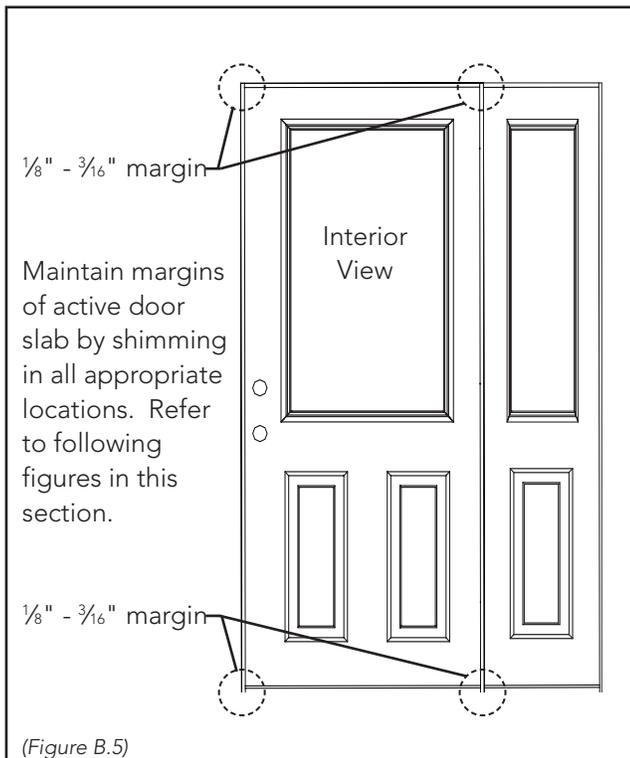
7

Inspect plane of door unit 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), refer to troubleshooting table and adjust accordingly. (Figure B.4)



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

B. INSTALL NEW DOOR UNIT (CONTINUED)



IMPORTANT! Pre-drill for all screws to be installed using a 1/8" drill bit.

8

For ALL door unit combinations, shim and secure to achieve and maintain a 1/8" - 3/16" margin between door unit and jamb at all (4) corners of active door slab. Refer to following steps for specific shimming information per door unit configuration. (Figure B.5)



IMPORTANT! Proper shimming application; stack wedge shaped shims contrasting and plane to plane.



9

For units with a hinge-side sidelite:

a. Install (1) 2 1/2" smooth shank screw (not provided) into top sidelite jamb to draw top of the door slab towards the hinge side jamb. Use screw for adjustments. (Figure B.6)

b. Install shims behind the jamb at the bottom of the sidelite. Use the adjustment screw at top and the shims behind bottom jamb to set a 1/8" - 3/16" margin between door slab and jamb at all (4) corners. (Figure B.6)

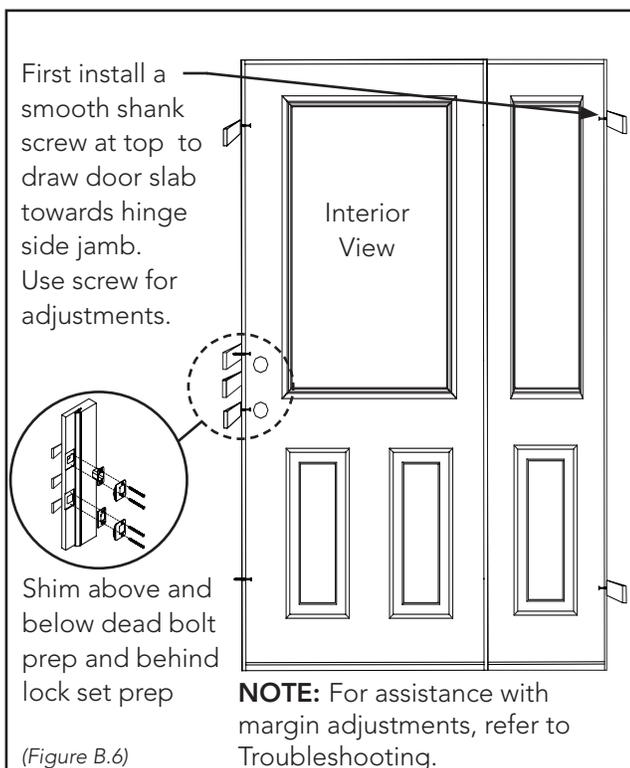
c. Install shims behind the top screw location until tight to the adjuster screw. (Fig. B.6)

d. Shim behind (2) middle sidelite jamb locations and secure with (1) 2 1/2" smooth shank screw. (Figure B.6)

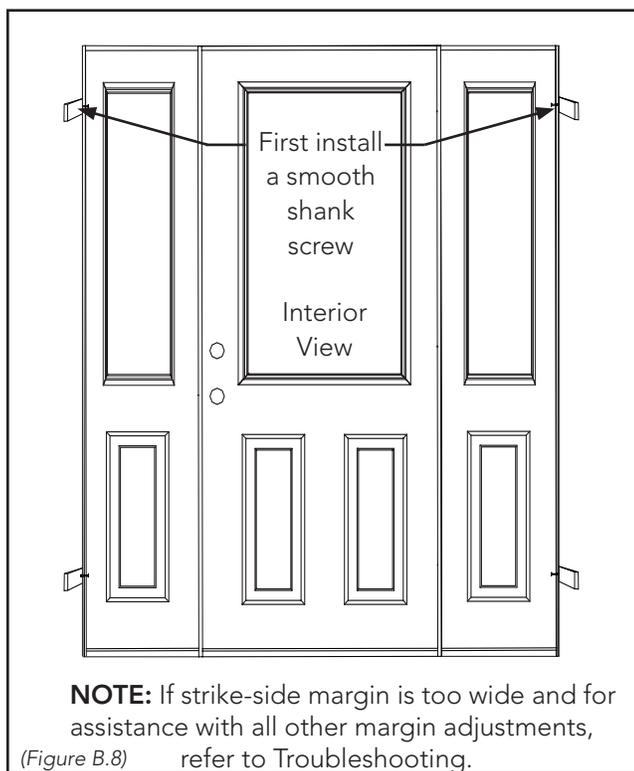
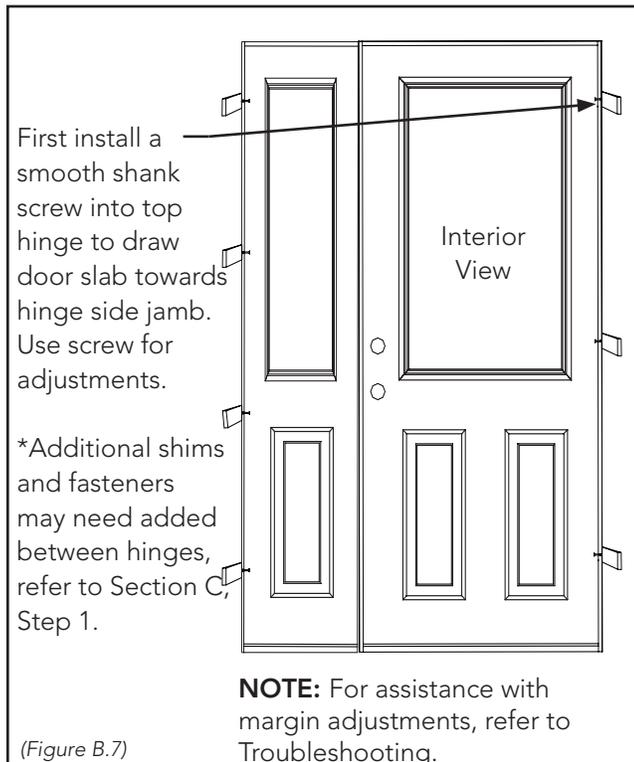
e. Pre-drill and install #8 x 2 1/2" screws to secure the deadbolt and lock set strike plate.

NOTE: (4) #8 x 2 1/2" hardware installation screws will be included in the hardware box or stapled to the side of the jamb.

f. Install shims and secure at the top and bottom of strike-side jamb to maintain a 1/8" - 3/16" margin. (Figure B.6)



B. INSTALL NEW DOOR UNIT (CONTINUED)



10

For units with a strike-side sidelite:

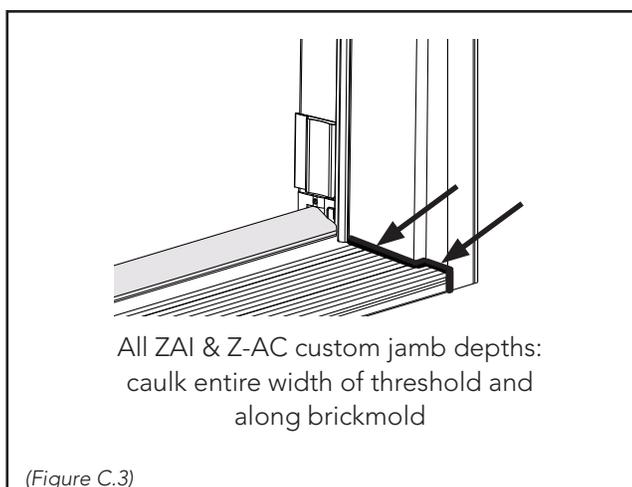
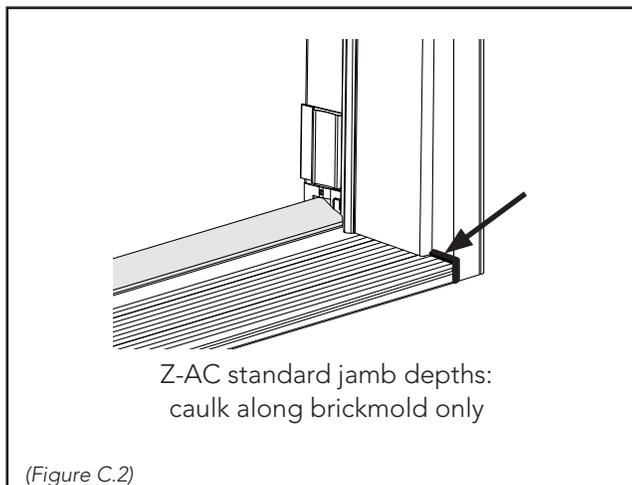
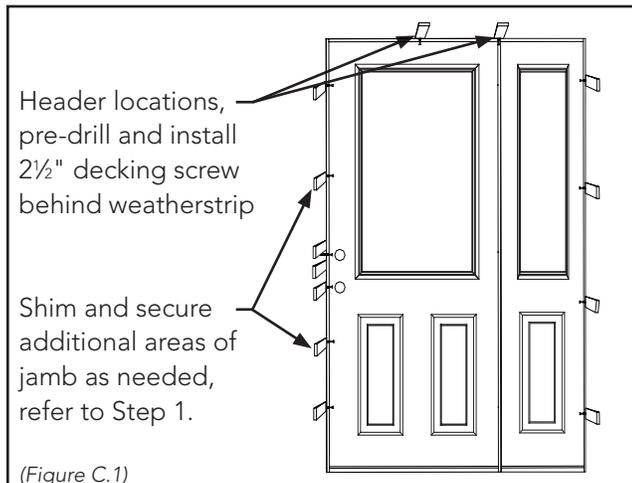
- Install (1) 2½" smooth shank screw (not provided) into top hinge to draw the top of the door slab towards the hinge side jamb. Use screw for adjustments. (Figure B.7)
- Install shims behind the bottom hinge location. Use the adjustment screw in top hinge and the shims behind bottom hinge to set a ⅛" - ⅜" margin between door slab and jamb at all (4) corners. (Figure B.7)
- Install shims behind top hinge until tight to the adjuster screw. Install (1) #10 x 2½" screw (provided) in the remaining hole location of hinge. Then replace the adjustment screw with (1) #10 x 2½" screw. The #10 x 2½" hinge screws will be included in hardware box or stapled to side of jamb. For a 3-HINGE DOOR, (4) screws provided. For a 4-HINGE DOOR, (5) screws provided.
- Shim behind the middle hinge(s) and install (1) #10 x 2½" screw in open hole(s). (Fig. B.7)
- Pre-drill and install #8 x 2½" screws to secure the deadbolt and lock set strike plate.
- Install shims and secure at the top, bottom, and (2) middle locations of sidelite jamb side.

11

For units with a sidelite on each side:

- Install (1) 2½" smooth shank screw (not provided) into each top sidelite jamb to draw top of door slab. Use screw for adjustments. (Figure B.8)
- Install shims behind bottom of each sidelite jamb location. Use the adjustment screws at top and shims behind bottom jamb to set a ⅛" - ⅜" margin between door slab and jamb at all (4) corners. (Figure B.8)
- Install shims behind each top screw location until tight to the adjuster screws.
- Shim behind (2) middle locations of each sidelite jamb and secure each with (1) 2½" smooth shank screw. (Figure B.8)
- Pre-drill and install #8 x 2½" screws to secure the deadbolt and lock set strike plate.

C. FINAL ADJUSTMENTS AND SEAL



1

Final check on all margins. Adjust shims and screws as needed to achieve and maintain a 1/8" - 3/16" margin around the entire door. Refer to Troubleshooting Section.

NOTE: Shim and secure additional areas of the PermaTech™ jamb as needed to achieve and maintain required margins. Additional shims and fasteners may help to prevent possible movement of the composite material. (Figure C.1)

2

Shim at least (2) header locations, centered over door slab and over mull. Pull back weatherstripping, pre-drill and install a decking screw at each shim location. (Figure C.1)

3

Add (3) installation decking screws to each vertical exterior trim piece and head piece to ensure exterior trim is fully secured.

4

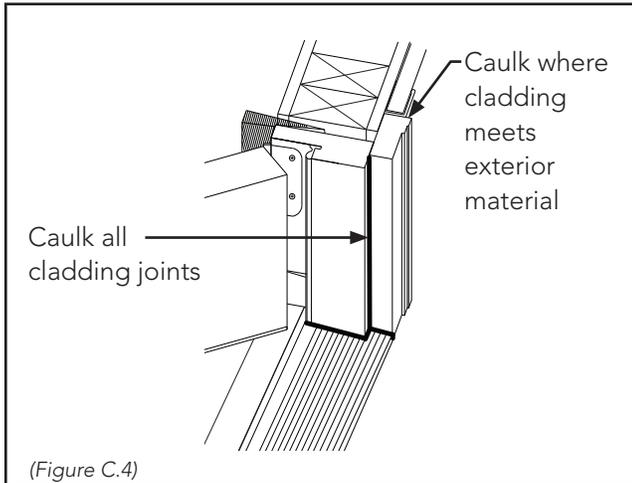
Apply caulk or construction adhesive to all brickmold and sidelite jamb(s). Re-install aluminum brickmold cladding. First install jamb cladding by sliding back edge into the jamb receiver clip and then install all remaining brickmold cladding.

5

Caulk threshold....

- **Z-AC™** thresholds with a 4 1/16" or 6 1/16" jamb depth, only need caulked at the brickmold and threshold intersection. If desired, caulk along entire joint where jamb meets the threshold. (Figure C.2)
- **Z-AC** threshold with custom jamb depth: caulk along entire joint of threshold where the jamb meets the threshold and along the brickmold joint. (Figure C.3)
- **ZAI** threshold: caulk along entire joint where jamb meets the threshold and along the brickmold joint. (Figure C.3)

C. FINAL ADJUSTMENTS AND SEAL (CONTINUE)



6

Caulk around ALL cladding joints. Be sure to apply caulking around perimeter where cladding meets exterior sheathing/material. (Figure C.4)

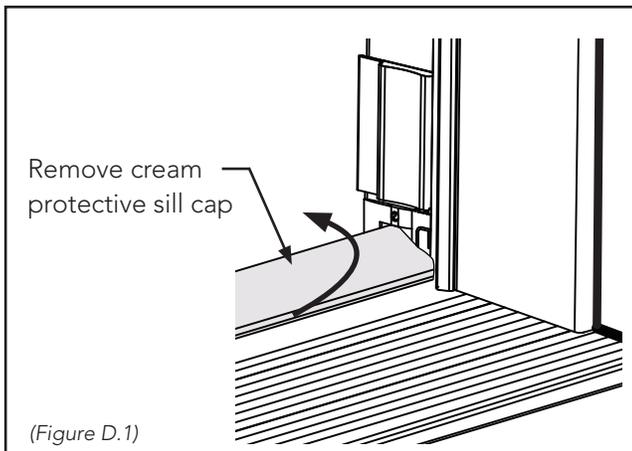
7

Insulate by using an AAMA approved ASTM C 1620 Low-Expanding Foam to fill cavities between frame and opening.



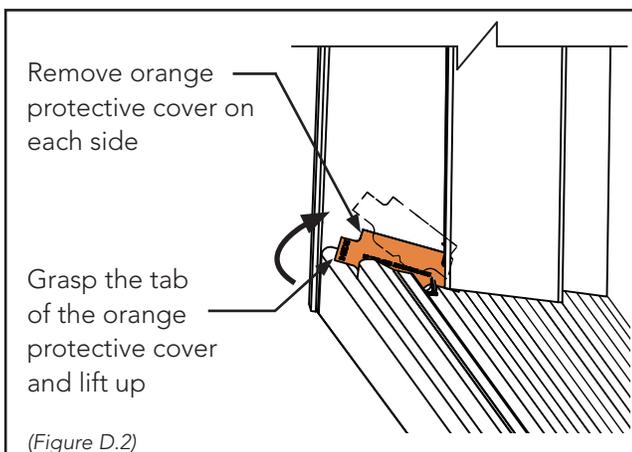
Over use of Low-Expanding Foam or use of any non Low-Expanding Foam may cause frame to bow, jeopardizing operational performance of door.

D. THRESHOLD: Z-AC™ (AUTO-ADJUSTING) THRESHOLD ONLY



1

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 D.1)



2

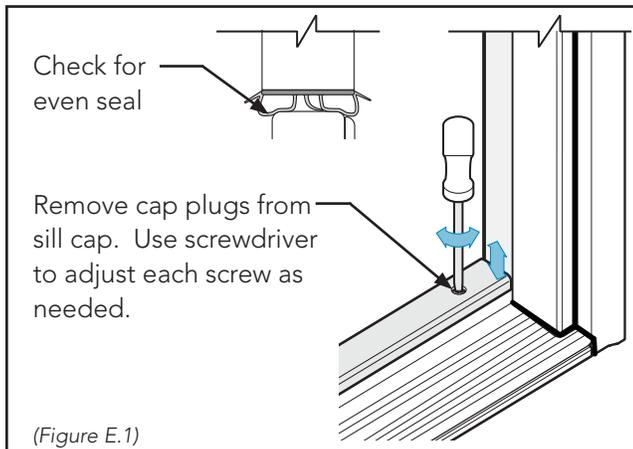
Remove the orange protective covers located at each jamb. Grasp the tab of the orange protective cover, marked 'Pull-Up'. Lift up and away from the sill base (pliers may be required). (Figure D.2)

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.

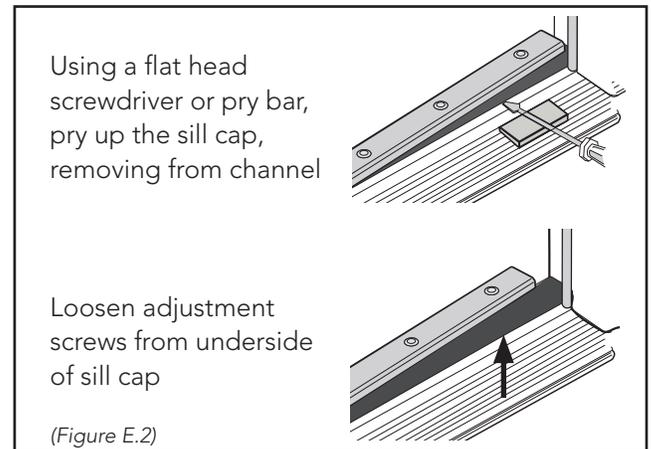
For ZAI threshold instructions, refer to section E, page 9

E. 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:



OR



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 E.1)
- 3 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 E.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:

- 1 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 E.2)
- 2 Access adjustment screws from the underside of the sill cap. Using a screwdriver, adjust screws as needed to achieve necessary height. (Figure E.2)
- 3 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.
- 4 Open and close door to check adjustments.
- 5 Check for an even seal along full length of door sweep. Repeat above steps until proper seal is achieved.

F. PAINTING PERMATECH™ COMPOSITE FRAME (OPTIONAL)

IMPORTANT NOTES BEFORE YOU BEGIN



With use of paints, mineral spirits, or other hazardous materials, always read and follow the manufacturer's instructions. ProVia, Inc. 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 for water-based application: Acrylic-based primer with acrylic latex-based exterior grade paint.

Recommendation of brand of paint for PermaTech Composite Frame: Sherwin-Williams PrepRite® Bonding Primer with compatible acrylic paint for optimal paint adhesion.

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

1

Remove door slab with hinges from frame. Carefully lay frame horizontally on saw horses or table. Mask off areas not to be painted.

2

Use a Scotch Brite Pad or 320-400 grit sandpaper to lightly scuff the surface.

3

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.



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

4

Use a 4" paint brush to apply primer to the PermaTech frame. Follow the manufacturer's instructions for drying time before applying topcoat. Be sure primer is completely dry before applying the topcoat.

5

Use a 4" paint brush to apply the exterior grade paint to the PermaTech frame. If applying a second coat, follow the manufacturer's instructions for drying time between coats. The topcoat must be completely dry before proceeding to the entry door installation.



TROUBLESHOOTING & TIPS

Units with hinge-side sidelite

Problem	Cause	SOLUTION
Strike-side margin is too small. Door slab hits frame on strike-side.	Over-shimmed.	Slightly loosen strike-side shims and pull strike-side frame towards stud by tightening screws behind weatherstripping.
Strike-side margin is too large, more than 3/16".	Under-shimmed.	Increase shim depth behind jamb on strike-side.
Tapered header margin. Margin is larger on strike-side.	1. Sill is not level. 2. Improperly shimmed.	1. Shim directly under threshold in mullion area and under end sidelite jamb to raise door slab within frame, 1/8" max. 2. Decrease shim depth behind top hinge-side sidelite jamb, and/or increase shim depth behind bottom hinge-side sidelite jamb.
Tapered header margin. Margin is smaller on strike-side.	1. Sill is not level. 2. Improperly shimmed.	1. Shim directly under jamb on the strike-side to raise the jamb, creating proper margin, 1/8" max. 2. Increase shim depth behind top hinge-side sidelite jamb and/or decrease shim depth behind bottom hinge-side sidelite jamb.
Door slab is not sealing against weatherstrip and/or strike-side, top of door slab protrudes past frame.	Door unit is out of plane with frame.	1. Shift strike-side, bottom corner of frame towards exterior. 2. Shift sidelite 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 unit is out of plane with frame.	1. Shift strike-side, top corner of frame towards exterior. 2. Shift sidelite side, bottom corner of frame towards 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>

Units with sidelite on strike-side

Problem	Cause	SOLUTION
Tapered header margin. Margin is larger on strike-side.	1. Sill is not level. 2. Improperly shimmed.	1. Shim directly under threshold in mullion area and under end strike-side jamb to raise door slab in frame, 1/8" max. 2. Decrease shim depth behind top hinge-side jamb, and/or increase shim depth behind bottom hinge-side jamb.
Tapered header margin. Margin is smaller on strike-side.	1. Sill is not level. 2. Improperly shimmed.	1. Shim directly under threshold in mullion area and under end strike-side jamb to raise sidelite and door header away from door slab, 1/8" max. 2. Increase shim depth behind top strike-side sidelite jamb and/or decrease shim depth behind bottom strike-side sidelite jamb.
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 screws behind weatherstripping.
Strike-side margin is too large, more than 3/16".	Under-shimmed.	Increase shim depth behind jamb on hinge-side.

Units with sidelite on both sides

Problem	Cause	SOLUTION
Tapered header margin. Margin is larger on strike-side.	1. Sill is not level. 2. Improperly shimmed.	1. Shim directly under hinge-side jamb to raise door slab within frame. 2. Decrease shim depth behind top hinge-side sidelite jamb, and/or increase shim depth behind bottom hinge-side sidelite jamb.
Tapered header margin. Margin is smaller on strike-side.	1. Sill is not level. 2. Improperly shimmed.	1. Shim directly under threshold in mullion area and under end sidelite jamb to raise sidelite and door header away from door slab, 1/8" max. 2. Increase shim depth behind top hinge-side sidelite jamb and/or decrease shim depth behind bottom hinge-side sidelite jamb.
Strike margin is too wide.	Various.	Using a putty knife, cut corrugated fasteners in location of wide margin. Loosen or remove sidelite screw(s) in order to shim as needed in this location to achieve proper margin. Re-install sidelite screws.

All units with Z-AC™ (Auto-Adjusting) Threshold

Problem	Cause	SOLUTION
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.

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

***For additional information and helpful videos, visit our Homepage for Installers**

TAPPING or SCANNING the QR code shown.

