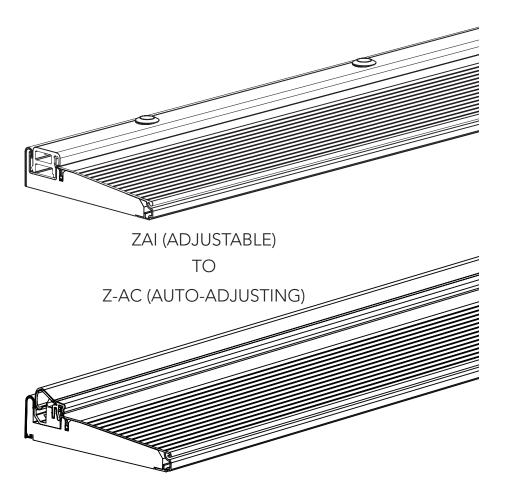


# SERVICE INSTRUCTION ZAI (ADJUSTABLE) TO THE Z-AC™ (AUTO-ADJUSTING) SILL CAP REPLACEMENT





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
- Flathead Screwdriver or Flat Pry Bar
- Small Wood Block

- Chop or Miter Saw
- ½" Staples or Brad Nails
- Drill and 5/16" Drill Bit (French Doors)



THIS INSTRUCTION APPLIES TO ALL SINGLE ENTRY DOORS, FRENCH ENTRY DOORS, AND COMBINATION UNITS.



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 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).

### Z-AC™ SILL CAP PART IDENTIFICATION

NOTE: Please refer to list below for the sill cap replacement parts required to convert from ZAI to Z-AC.

### **Z-AC SINGLE DOOR PARTS:**

Note: \*\* indicates part size



(1) Z-AC Articulating Cap Part #: P-TH-EZAC-\*\*



(2) Z-AC Simple Solution Corner Pad

Part #: P-TH-ACC-100



(1) Mullion Gasket/Stiffener (1) Mullion Gasket/Stiffener Right Hand

Part #: P-TH-ACC-86



Left Hand

Part #: P-TH-ACC-87



(1) Fiberglass Z-AC Kerf Sweep Part #: P-SW-NFC\*\*-1201



(1) Steel Full-Kerf Z-AC Sweep Part #: P-SW-NSC\*\*-1301



(1) Z-AC Flush Mount Sweep Part #: P-SW-NSC\*\*-1201

### **Z-AC FRENCH DOOR PARTS:**

Note: \*\* indicates part size



(1) Z-AC Double Door Cap Part #: P-TH-DZAC-\*\*



(1) Mullion Gasket/Stiffener (1) Mullion Gasket/Stiffener Right Hand

Part #: P-TH-ACC-86



Left Hand

Part #: P-TH-ACC-87



(2) Z-AC Simple Solution Corner Pad Part #: P-TH-ACC-100



(1) Black Astragal Corner Pad

Part #: P-WS-ACC-17



(1) Astragal Reinforcement Block (w/ screws)

Part #: P-TH-ACC-110



(1 set) Fiberglass Z-AC Kerf Sweep Double Door Active Part #: P-SW-NFC\*\*-1201 Inactive Part #: P-SW-DDC\*\*-1201

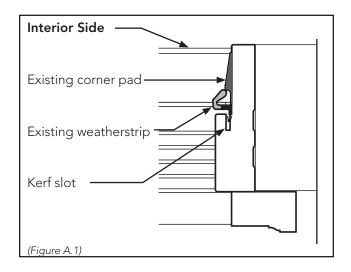
OR

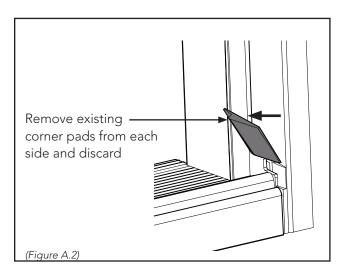


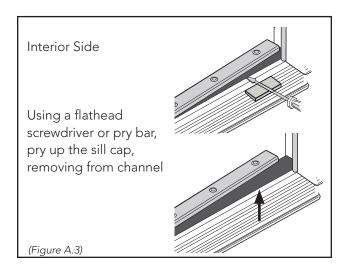
(1 set) Steel Full-Kerf Z-AC Sweep Double Door Active Part #: P-SW-NSC\*\*-1301

Inactive Part #: P-SW-DDC\*\*-1301

# A. REMOVE EXISTING ZAI CAP AND COMPONENTS







Remove the existing weatherstrip. Pull from kerf slot on each side. (Figure A.1)

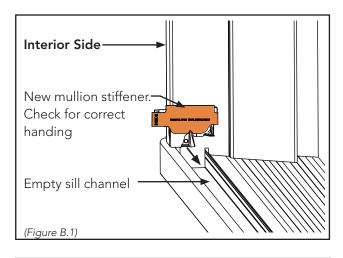
Remove existing corner pads from each side and discard. Corner pads are NOT to be reused. (Figure A.2)

**NOTE:** Existing corner pads are of a different profile and material, thus not allowing a proper fit and operation with new Z-AC $^{\text{TM}}$  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 A.3)

Clean and remove any debris and/or dirt from the sill channel and away from jambs.

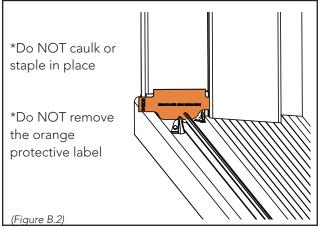
### **B.** INSTALL MULLION STIFFENERS





Install new mullion stiffeners with gaskets into each side of the channel against the jambs. The back of the mullion stiffener will be flush with face of jamb. (Figure B.1 & B.2)

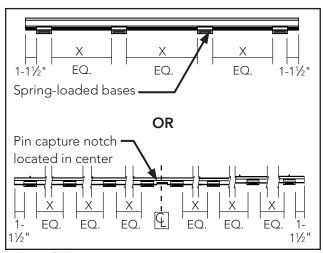
**NOTE:** No adhesive or fastener required. Mullion stiffeners are held in place by compression.





**DO NOT** remove the orange protective gasket label until new Z-AC<sup>TM</sup> cap is fully installed. (Figure B.2)

# C. ADJUST SPRING-LOADED CAP BASES



(Figure C.1)

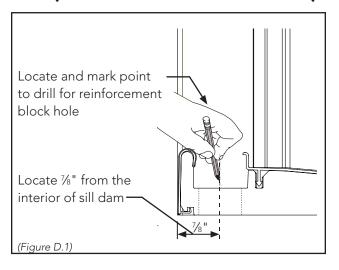
1

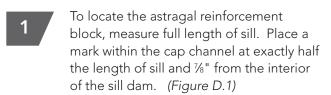
For single, sidelite, and hinged patio doors, ensure all (4) spring-loaded bases are properly positioned. The spring-loaded bases located at each end should be located 1" to 1½" from the cap's edge. The (2) center spring-loaded bases should be evenly spaced between the end bases.

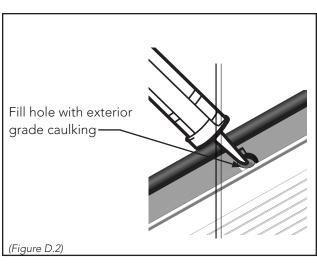
### OR

For French doors, ensure all (8) spring-loaded bases are properly positioned. The spring-loaded bases located at each end should be located 1" to 1½" from the cap's edge. The (2) spring-loaded bases in the center of cap should be installed on either side of the pin capture notch. The (4) remaining spring-loaded bases should be evenly spaced.

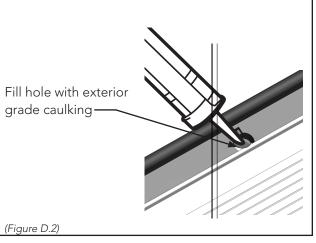
# D. INSTALL ASTRAGAL REINFORCEMENT BLOCK (FRENCH DOORS ONLY)



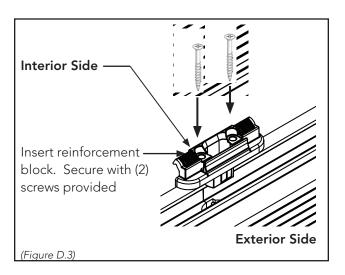




Drill a %" diameter hole through the sill substrate. (Figure D.1)



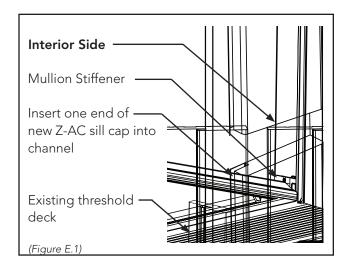
Use exterior grade caulking to fill the bottom of the hole drilled within cap channel. (Figure D.2)

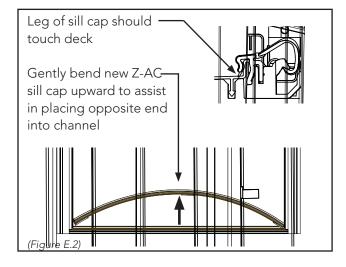


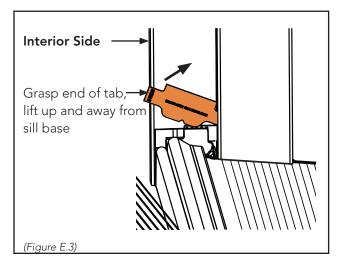
Insert astragal reinforcement block into hole by gently tapping into place with a rubber mallet. (Figure D.3)

Install (2) screws (provided) into mounting holes of reinforcement block. (Figure D.3)

# E. INSTALL NEW Z-AC™ SILL CAP







Insert one end of the Z-AC sill cap into the sill channel and against the mullion stiffener. (Figure E.1)

Gently bend the Z-AC sill cap slightly upward in the center, pressing the opposite end into the channel and against the opposite mullion stiffener. Apply pressure to the cap to fully seat cap into place and along entire sill. If needed, use a rubber mallet to tap into place. (Figure E.2)

**NOTE:** Front leg of the sill cap should touch the threshold deck when properly seated.

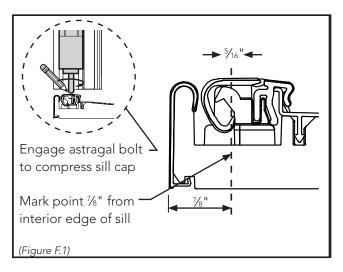
Remove the orange protective covers located at each jamb. Grasp the tab of the orange protective cover, marked 'Pull-Up'. Lift up and away from the sill base (pliers may be required). (Figure E.3)

**NOTE:** A small portion of the gasket will be removed with the protective cover, this is typical.

With sill cap fully installed, re-insert weatherstripping by installing the weatherstrip leg into the frame's kerf slot. Be sure the weatherstripping does **NOT** touch the threshold base.

# F. DRILL CAP FOR ASTRAGAL BOLT (FRENCH DOORS)

NOTE: This Section is for use if sill does not arrive factory drilled.





Close the inactive door until door is flush with frame. Engage the astragal bolt to contact and compress the Z-AC $^{\text{TM}}$  cap. Mark location for drilling. The center of the mark should be %" from interior edge of sill.

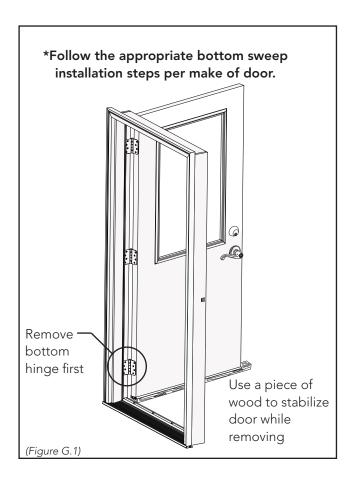


Depress the cap. Use a 5/16" drill bit to drill hole in cap.



STOP drilling once you drill through cap.

# G. DOOR BOTTOM SWEEP REPLACEMENT





The type of bottom door sweep to be applied is dependent on the existing door make and/or model. Refer to the appropriate steps listed in this section for the correct application.

- Fiberglass = Notched Kerf Sweep
- •20 Gauge Steel = Full Kerf Sweep
- 24 Gauge Steel and Fire rated doors = Flush Mount Sweep
- 1

Open door all the way. Place a piece of wood under door for stability. (Figure G.1)

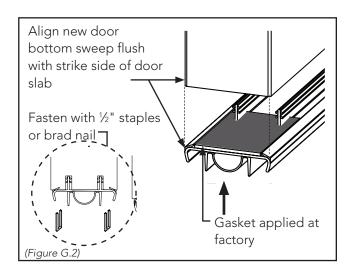
2

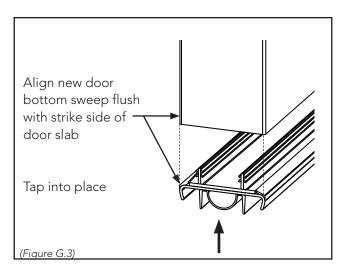
Remove door from jamb by first removing the bottom hinge, followed by middle and top hinge. (Figure G.1)

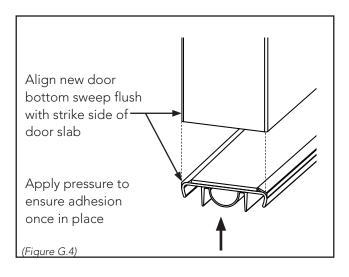
3

Lay door on a clean flat surface. Remove existing bottom sweep.

# G. DOOR BOTTOM SWEEP REPLACEMENT (CONTINUED)







### For Fiberglass Doors:



Align new door bottom sweep flush with the strike side of door slab. Insert kerf legs into slots of door, gently tap into place by hand. (Figure H.2)



**DO NOT** use a hammer or rubber mallet to tap sweep into place. This will result in damage to the rigid ramps of sweep.



Fasten to door bottom with (2) ½" staples or brad nails at each end of door panel, between the rigid ramp and flex fins. Skip to Step 9. (Figure G.2)



If gaskets are not present, apply a bead of caulk to each end of sweep. Fasten as directed above.

### For 20 Gauge Steel Doors:



Align new door bottom sweep flush with the strike side of door slab. Kerf legs may need trimmed to allow for proper alignment. Insert kerf legs into slots of door, gently tap into place by hand. No adhesive, caulking, or staples required. Skip to Step 9. (Figure G.3)



**DO NOT** use a hammer or rubber mallet to tap sweep into place. This will result in damage to the rigid ramps of sweep.

### For 24 Gauge Steel Doors & Fire Rated Doors:



Remove and clean any remaining tape or adhesive residue left by old sweep.

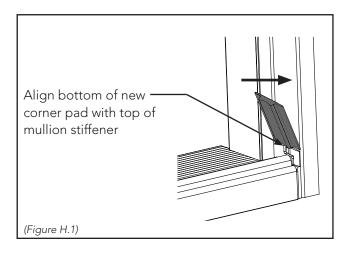


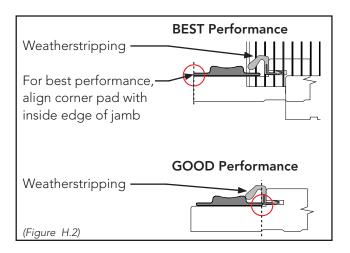
Remove backing to expose adhesive. Align new door bottom sweep in the center and flush with the strike side of door slab. Apply pressure to ensure adhesion. (Figure G.4)



Return door to upright position and place back onto wood block for stability. Align hinges and reinstall hinge screws.

# **H.** INSTALL NEW Z-AC™ SIMPLE SOLUTION CORNER PADS







To apply new Z-AC Simple Solution corner pads, remove backing from each pad to expose adhesive.

**NOTE:** Corner pads will have a full adhesive backing.

2

Align corner pads with the top of the gasket and inside edge of jamb. Corner pads need to be flush, with no gaps. Ensure the new corner pad contacts the top surface of the gasket and attach by pressing tight to the jamb. (Figure H.1 & H.2)



**DO NOT** re-apply old or used corner pads.

## . FINAL OPERATION CHECKLIST

Close and open the door several times. Be sure the door:

- Opens and closes smoothly.
- Auto-adjusting sill cap operates properly, up and down as the door opens and closes.
- The full length of the door bottom sweep is in contact with the sill cap when the door is closed.
- The edge of the door slab is in contact with corner pad and mullion stiffener at each jamb location.



# NOTES

