

Z-Articulating Cap Sill Field Replacement Instructions

Required Tools and Materials

1. **Flathead Screw Driver or Stiff Scraper:** To remove old Z-Series sill cap.
2. **Small Wood Block:** To protect aluminum sill deck when prying off sill cap.
3. **Measuring Tape:** For sizing new cap and door bottom before cutting to proper length.
4. **Pen or Pencil:** To mark cap and door bottom.
5. **Cutting Tool:** Chop /Miter Saw recommended to trim cap and door bottom to proper length.
6. **Aluminum Epoxy/Putty:** to repair hole in aluminum Deck from Z-AC 1.0/1.1 Pin Capture
7. **1/2" crown Staples:** To secure door bottom to panel.

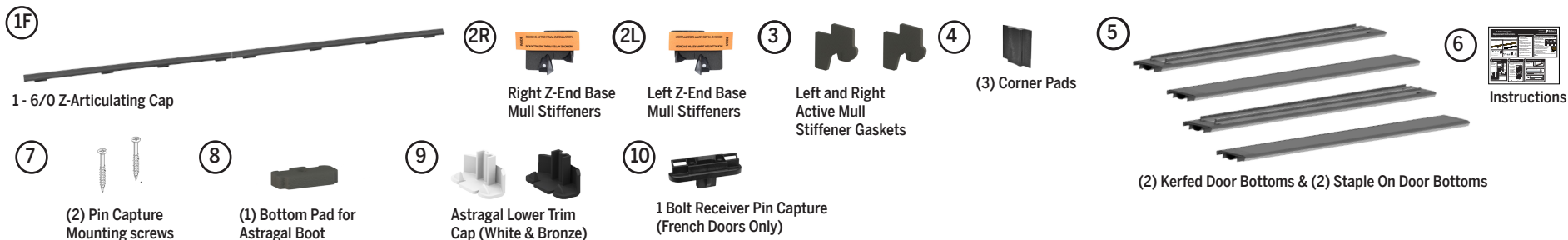
ADDITIONAL TOOLS FOR FRENCH DOORS

1. **7/8" Diameter Drill Bit**
2. **Power Driver:** For anchor screw

Standard Door (Single) Replacement Kit Contents



French (Double Door) Replacement Kit Contents

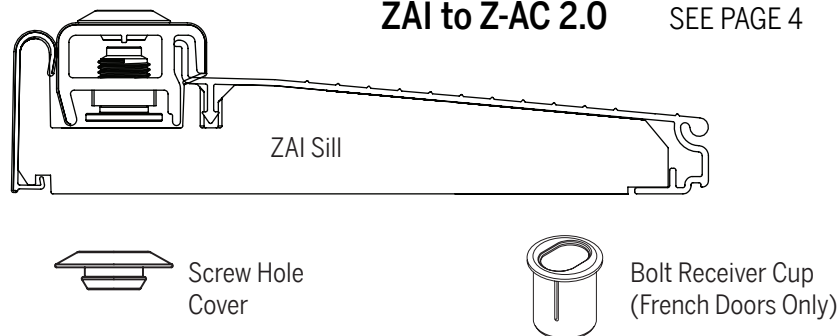


Identifying Your Sill System

Use the boxes below to identify your current sill system. Once your sill system has been properly identified, proceed to the appropriate section.

Z-Series Adjustable Sill (ZAI)

ZAI to Z-AC 2.0 SEE PAGE 4

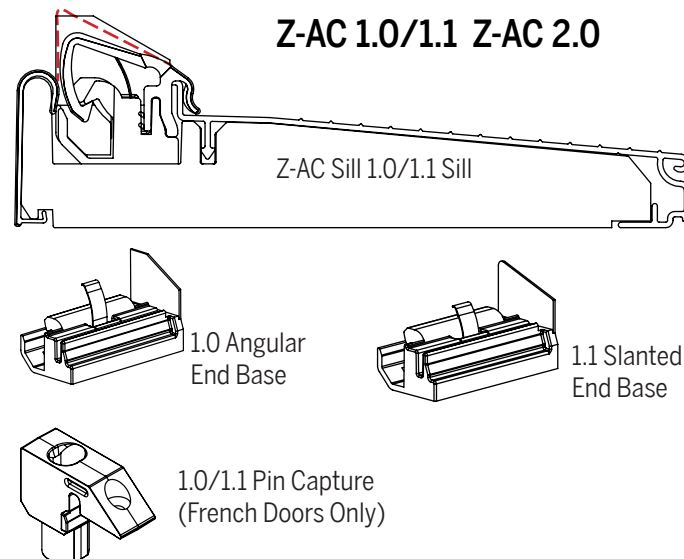


ZAI Features

- Flat Cap
- Screw covers
- Receiver Cup Under Cap

Z-Series Articulating Sill 1.0/1.1 (Z-AC 1.0/1.1)

Z-AC 1.0/1.1 Z-AC 2.0 SEE PAGE 16

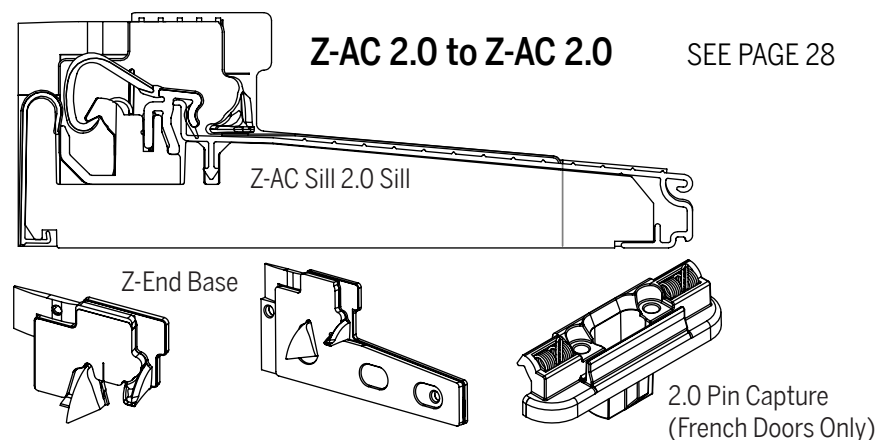


Z-AC 1.0/1.1 Features

- Slanted cap
- End Bases with Angular/Slanted Rigid Wall
- Exposed Pin Capture

Z-Series Articulating Sill 2.0 (Z-AC 2.0)

Z-AC 2.0 to Z-AC 2.0 SEE PAGE 28



Z-AC 2.0 Features

- Slanted Cap
- Z-End Bases with Weatherstrip Locator
- Pin Capture Under Cap

Z-Articulating Cap Sill Field Replacement Instructions

Table of Contents

ZAI to Z-AC 2.0 **PAGE 4**

1. Remove Corner Pads Page 5
2. Remove OLD Adjustable Cap Page 6
3. Install Z-End Base Mull Stiffeners Page 7
4. Cut NEW Z-Articulating Sill Cap to Length Page 8
5. Check Cap Assembly Page 10
6. Install Z-AC 2.0 Pin Capture From An Adjustable Sill Page 11
7. Insert NEW Sill Cap Page 13
8. Drill Cap For Astragal Bolt Page 14
9. Replace Astragal Bottom Sealing Pad and Corner Pad Page 15
10. Replace Door Bottom Sweep Page 16
11. Stapling Door Bottom to Panel Page 17
12. Replace Corner Pads Page 18
13. Check the Operation of the Door Page 18

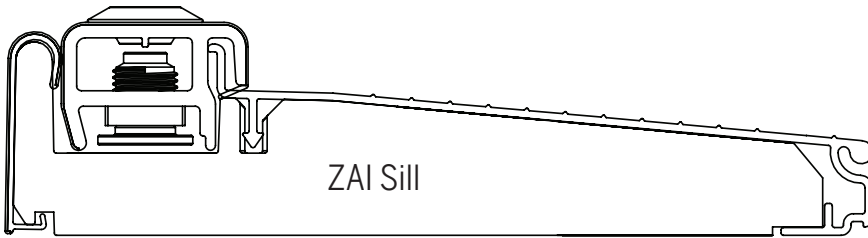
Z-AC 1.0 & 1.1 to Z-AC 2.0 **PAGE 16**

1. Remove Corner Pads Page 17
2. Remove OLD Z-AC 1.0/1.1 Page 18
3. Install Z-End Base Mull Stiffeners Page 18
4. Cut NEW Z-Articulating Sill Cap to Length Page 19
5. Check Cap Assembly Page 20
6. Install Z-AC 2.0 Pin Capture When Converting From ZAC 1.0/1.1 Page 21
7. Insert NEW Sill Cap Page 22
8. Drill Cap For Astragal Bolt Page 23
9. Replace Astragal Bottom Sealing Pad and Corner Pad Page 24
10. Replace Door Bottom Sweep Page 25
11. Stapling Door Bottom to Panel Page 26
12. Replace Corner Pads Page 27
13. Check the Operation of the Door Page 27

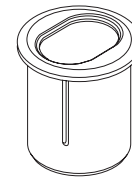
Z-AC 2.0 to Z-AC 2.0 **PAGE 28**

1. Remove Corner Pads Page 29
2. Remove Z-AC 2.0 (Single and French) Page 30
3. Remove Z-AC 2.0 (Sidelite, Hinged Patio and Previously Retrofitted Units) Page 31
4. Cut NEW Z-Articulating Sill Cap to Length Page 32
5. Check Cap Assembly Page 33
6. Install New Z-AC Pin Capture Page 34
7. Insert NEW Sill Cap Page 35
8. Drill Cap For Astragal Bolt Page 36
9. Replace Astragal Bottom Sealing Pad and Corner Pad Page 37
10. Replace Door Bottom Sweep Page 38
11. Stapling Door Bottom to Panel Page 39
12. Replace Corner Pads Page 40
13. Check the Operation of the Door Page 40

Z-Series Adjustable Sill (ZAI)



Screw Hole Cover



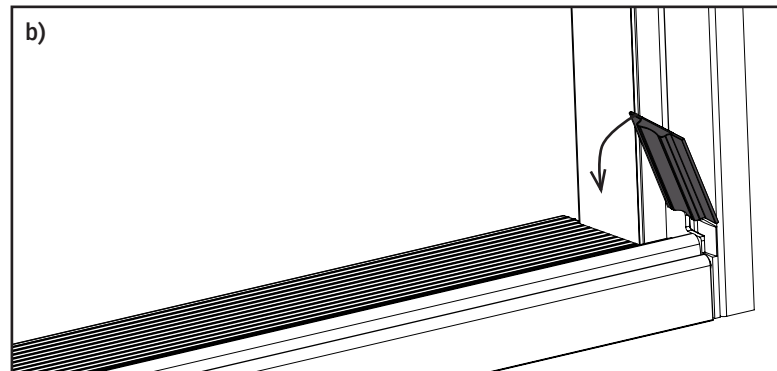
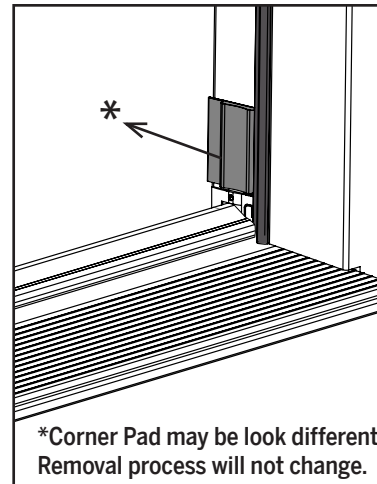
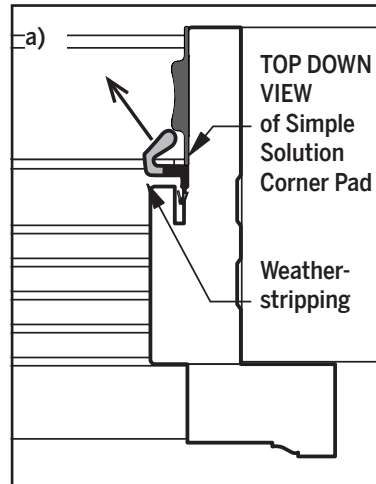
ZAI Receiver Cup
(French Doors Only)

ZAI Features

- Flat Cap
- Screw covers
- Receiver Cup Under Cap

1. Remove Corner Pads (ZAI to Z-AC 2.0)

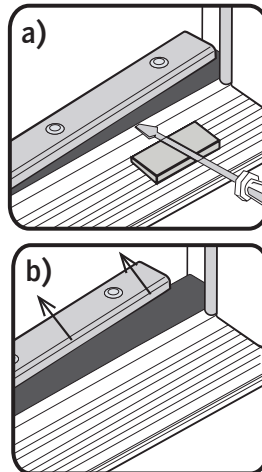
- a) Remove the weatherstrip by pulling it out of the kerf slot
- b) (If Present) Remove Simple Solution Corner Pad from each jamb by peeling it off.
- c) Clean any residual debris and dirt from the jamb.
- d) Proceed to Step 2.



2. Remove OLD Adjustable Cap (ZAI to Z-AC 2.0)

! Protect aluminum sill deck with a small wood block to prevent damage when prying off sill cap.

- Place a flathead screwdriver under front leg of sill cap at one end. Then pry sill cap up with screwdriver, working from one end to the other.
- Pull sill cap out of channel.
- Clean any debris out of sill channel and on the jambs.
- Proceed to step 3.



3. Install Z-End Base Mull Stiffeners (ZAI to Z-AC 2.0)

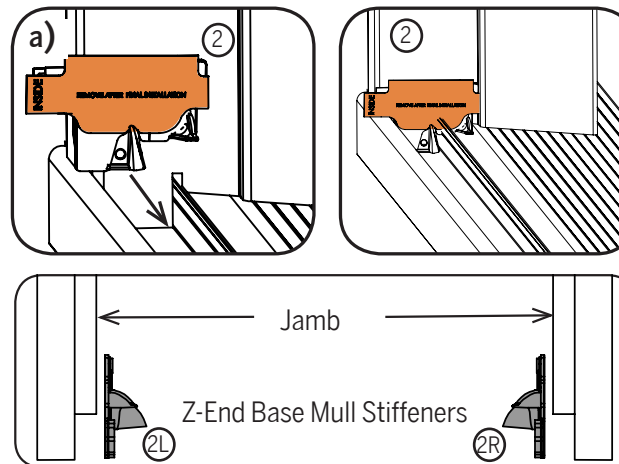
- Insert Z-End Base Mull Stiffeners (2L & 2R) into each side of the channel against the jambs

! **NOTE:** The Z-End Base Mull Stiffeners are handed and can only be inserted one way. The back of the Z-End Base Mull Stiffener should be flush with the face of the jamb.

! **NOTE:** Do not caulk or staple the Z-End Base Mull Stiffeners in place.

! **NOTE:** Do not remove the orange protective gasket label until cap is fully installed into the door unit.

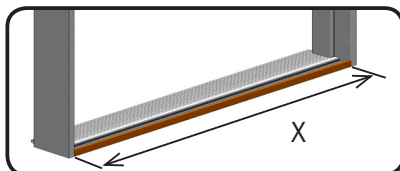
- Proceed to step 4.



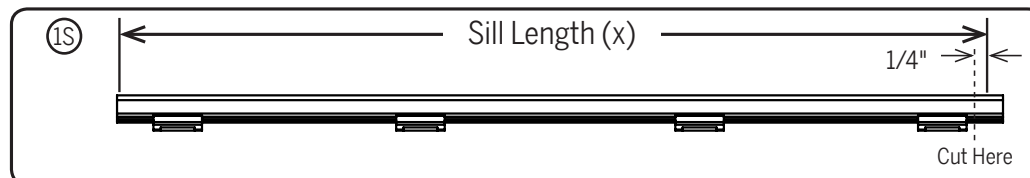
4. Cut NEW Z-Articulating Cap to Length (ZAI to Z-AC 2.0)

FOR SINGLE, SIDELITE AND HINGED PATIO DOOR APPLICATIONS

a) Measure the length of the sill (X).



b) Measure and cut new cap (1S) to match length of the sill minus 1/4".

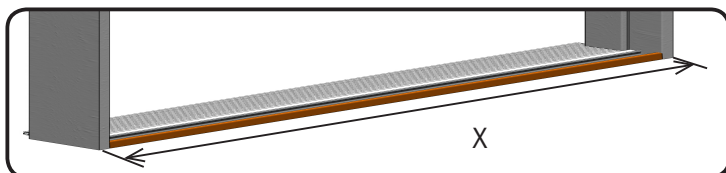


CAUTION: Measure carefully and cut precisely within 1/32" to ensure proper operation. A cap cut too short will not seal correctly.

c) Proceed to step 5

FOR FRENCH (DOUBLE) DOOR APPLICATIONS

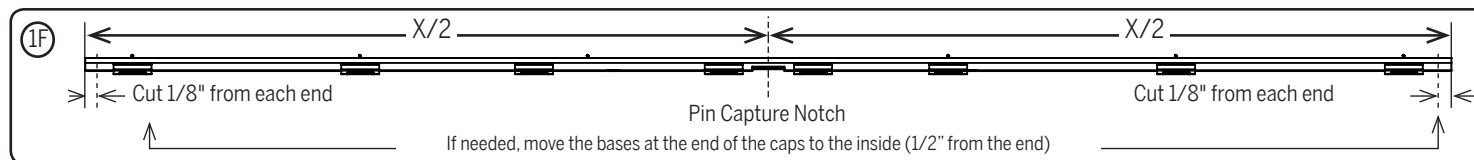
a) Measure the length of the sill (X).



b) Measure and cut new cap (1F) to match length of the sill (x) minus 1/8" on each side.

- Cut on both ends to ensure notch remains in center cap.
- Cap should be the same length on each side of the center of notch - Approximately 1/2 of sill length (X/2) minus 1/8".

CAUTION: Measure carefully and cut precisely within 1/32" to ensure proper operation. A cap cut too short will not seal correctly.

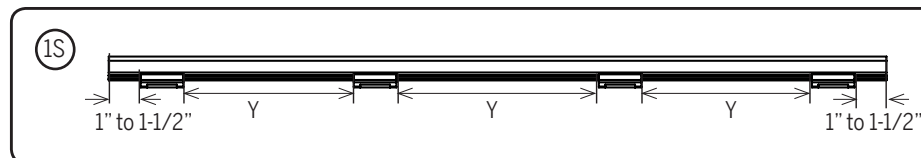


c) Proceed to step 5

5. Apply Spring-Loaded Cap Bases (ZAI to Z-AC 2.0)

SINGLE, SIDELITE AND HINGED PATIO DOORS ONLY

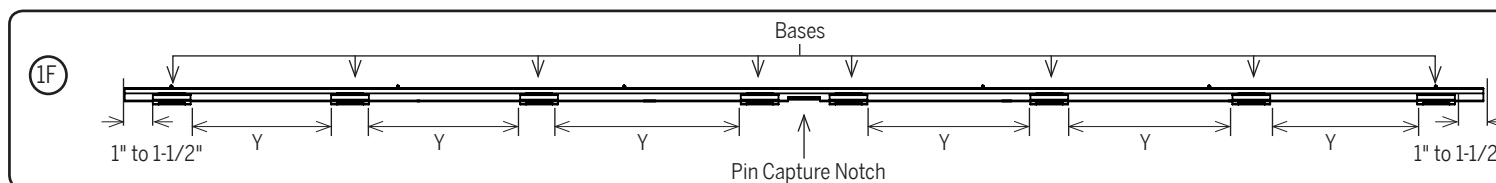
- a) Ensure that all 4 spring-loaded bases are used and properly positioned.
- The spring-loaded bases at the ends of the cap should be 1" to 1-1/2" from the cap's edge.
 - The two spring-loaded center bases should be evenly spaced between the 2 spring-loaded bases at the ends of the cap, approximately 9"-10" inches apart (y).



- b) Proceed to step 6

FRENCH (DOUBLE) OPENING DOORS ONLY

- a) Ensure that all 8 spring-loaded bases are used and properly positioned.
- The spring-loaded bases at the ends of the cap should be 1" to 1-1/2" from the cap's edge.
 - The 4 center spring-loaded bases should be evenly spaced between the 2 spring-loaded bases at the ends of the cap, approximately 10"- 11" inches apart (y).



Note: Bases in the center of the cap should be installed on either side of Pin Capture Notch leaving room for pin capture, which will be installed in the next step

- b) Proceed to step 6

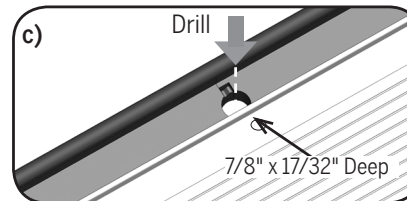
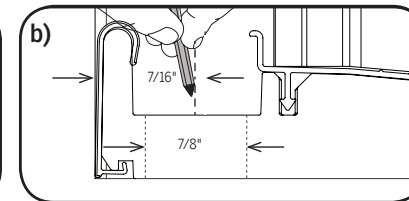
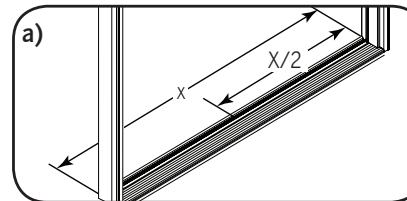
6. Install New Z-AC Pin Capture When Converting From An Adjustable Sill *French Doors Only* (ZAI to Z-AC 2.0)

LOCATE AND DRILL PIN CAPTURE HOLE

NOTE: If hole already exists from previous bolt receiver cup, the old hole can be used, provided it is centered exactly in the sill from end to end. Simply drill a 7/8" diameter hole deep through the sill substrate in its place.

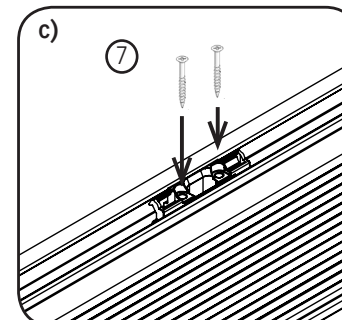
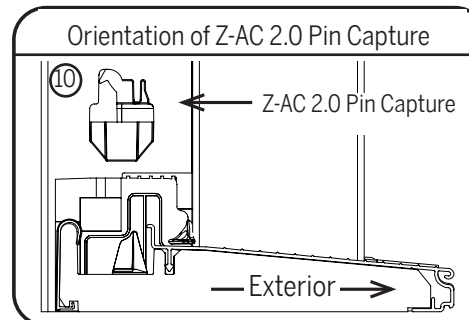
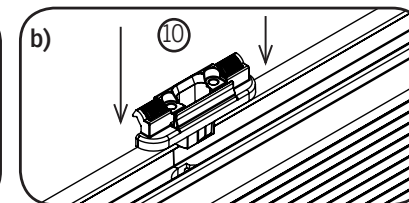
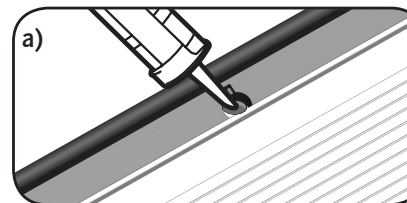
If the hole is not completely centered, Follow the below steps.

- Measure sill length from jamb to jamb (x).
- Mark the cap channel at exactly 1/2 the sill length and 7/16" from the interior of the sill dam.
- Drill 7/8" diameter hole deep through the sill substrate (17/32" deep). This is where the pin capture ⑩ will be inserted.



INSTALL PIN CAPTURE

- Fill bottom of pin capture hole with exterior grade caulking.
- Insert pin capture ⑩ into hole and tap into place with a rubber mallet, if necessary.
- Insert two provided screws ⑦ into mounting holes on pin capture.
- Proceed to step 7



7. Insert NEW Sill Cap (ZAI to Z-AC 2.0)

FOR SINGLE, SIDELITE, HINGED PATIO AND FRENCH DOOR UNITS

- a) Press one end of cap ① into channel and against Z-End Base/ Mull Stiffener ②.
- b) Bend cap ① slightly upward in center then and press opposite end into channel and against Z-End Base/ Z-End Base Mull Stiffener ②.
- c) Apply Pressure to the cap ① to fully seat cap into place along entire length of sill.

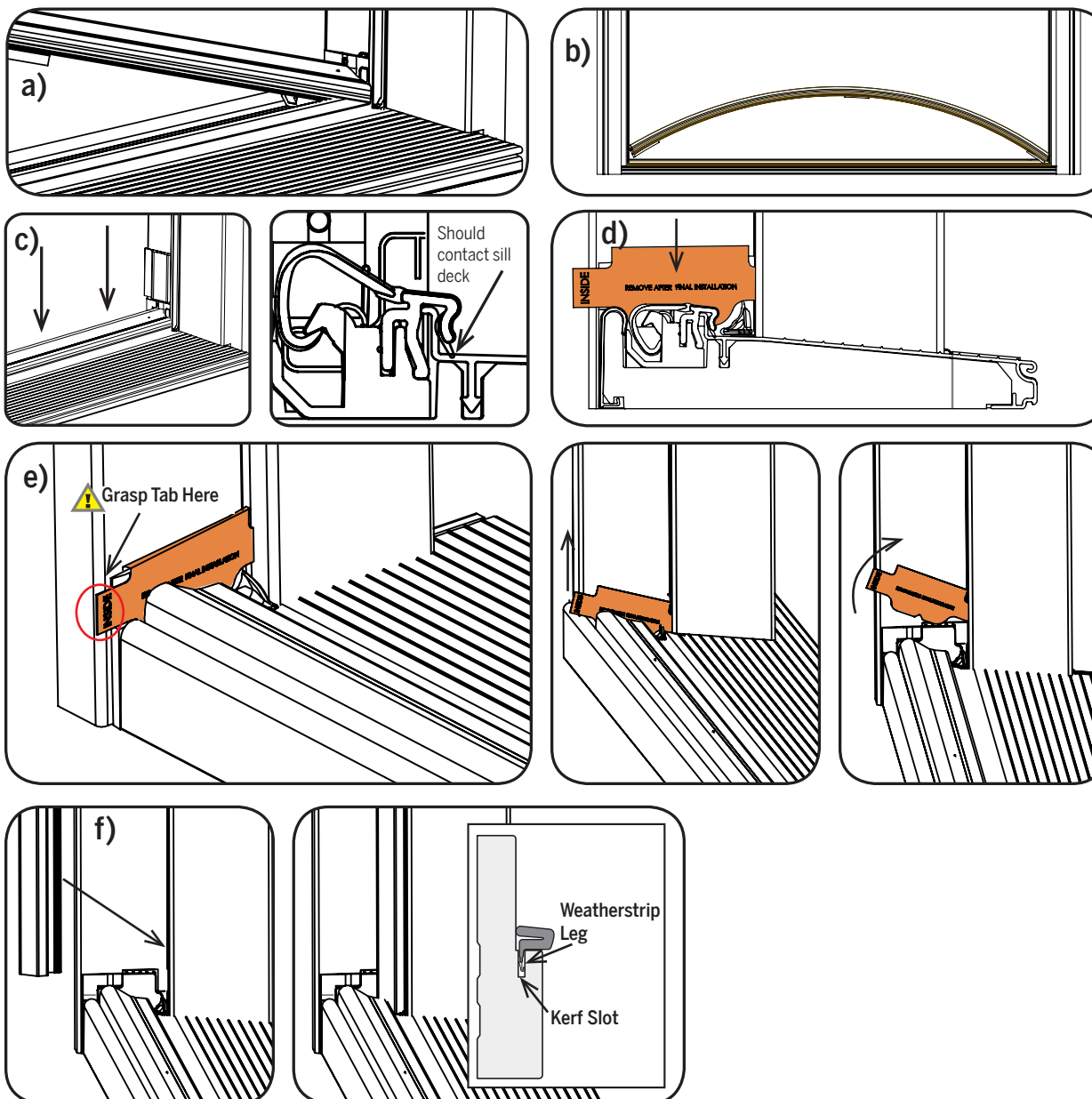
! Front leg of the cap should touch the deck when seated.

- d) Depress the cap ①, to gain access to the orange protective labels on each Z-End base/ Mull Stiffener (If Present).
- e) Grasp the inside tab of the orange protective label on the Z-End base/ Mull Stiffener, shown here (If Present), and lift up and away from the Z-End Base.

! A small portion of the active stiffener will be removed with the label. This is normal.

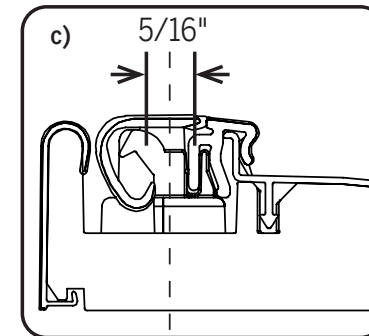
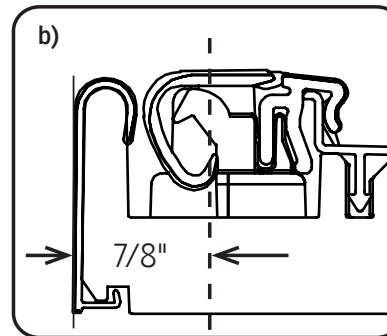
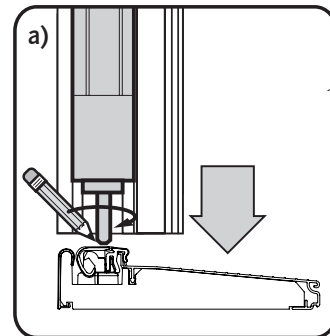
- f) Insert weatherstrip by fully installing/placing leg fully into frame kerf slot. Be sure that the Weatherstrip contacts the Weatherstrip Locator on the Z-End Base/ Mull Stiffener.

- g) Proceed to step 8



8. Drill Cap For Astragal Bolt *French Door Units Only* (ZAI to Z-AC 2.0)**⚠ FOR FRENCH DOOR UNITS**

- a) Close passive door until header weatherstrip is compressed and door is flush with the opening. Engage astragal bolt to contact and compress Z-AC to mark for drilling.
- b) The center of the mark made should be 7/8" from the interior edge of the sill.
- c) Depress the cap, and using a 5/16" drill bit, drill a hole in the cap.

**⚠ Stop drilling once you drill through the cap!**

- d) Proceed to step 9

9. Replace Astragal Bottom Sealing Pad and Corner Pad *French Door Units Only* (ZAI to Z-AC 2.0)

! FOR FRENCH DOOR UNITS

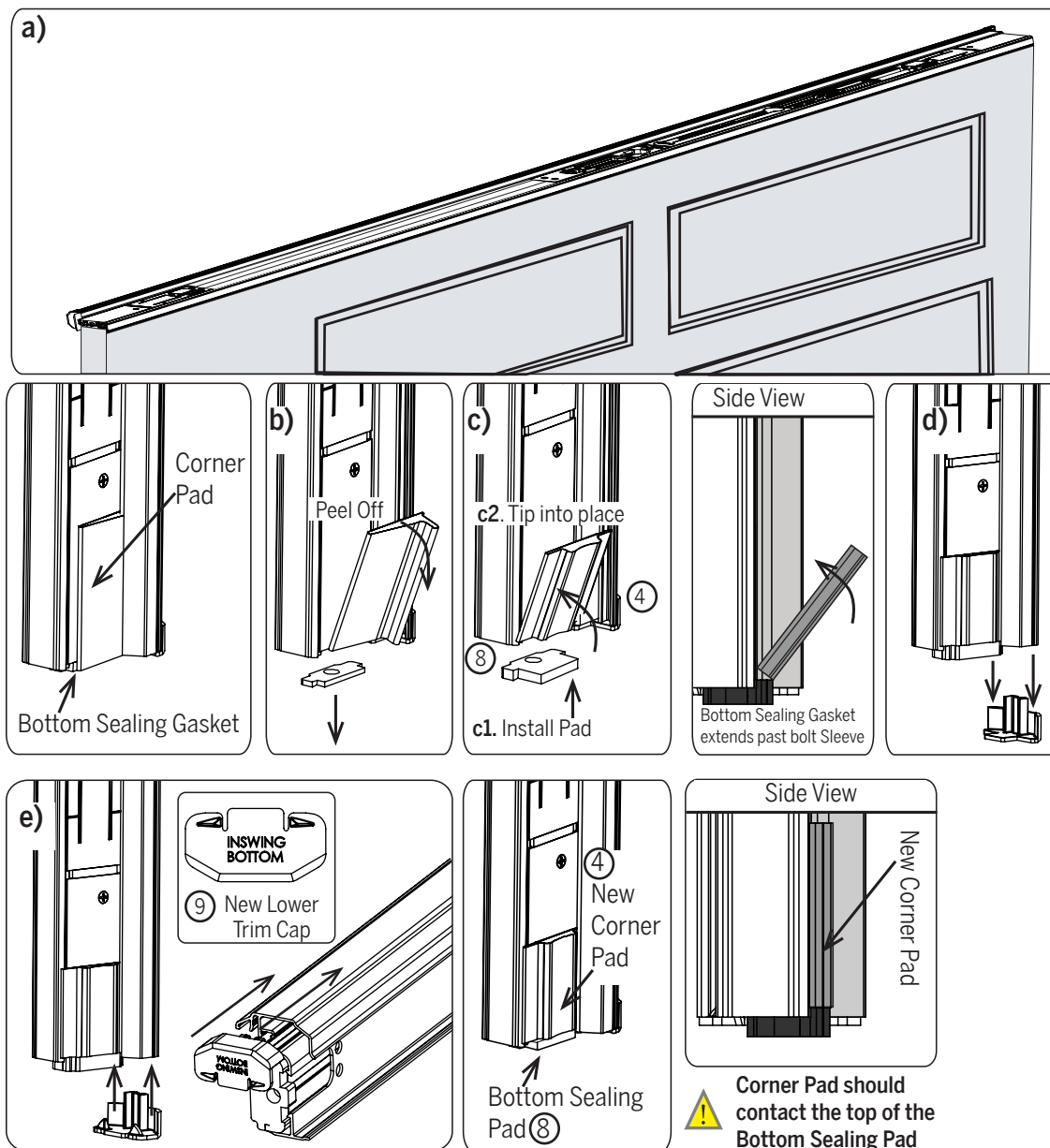
- Remove inactive door panel off its hinges to gain access to the bolt sleeve with corner pad and bottom sealing gasket.
- Remove corner pad and bottom sealing gasket by peeling down and away from the astragal.
- Install new Z-AC Astragal Bottom Sealing Gasket ⑧ by aligning the flush bolt with the hole in the pad c1 then install Simple Solution Corner Pad ④ by tipping into place c2.

! The lip of the Bottom Sealing Gasket should extend out in front of the astragal, and the Simple Solution Corner Pad should be flush with the top of the gasket.

- Remove original Lower Trim Cap by prying it off of the bottom of the astragal.
- Align the new Lower Trim Cap ⑨ with the astragal body, and Insert the Trim cap into the bottom of the astragal.

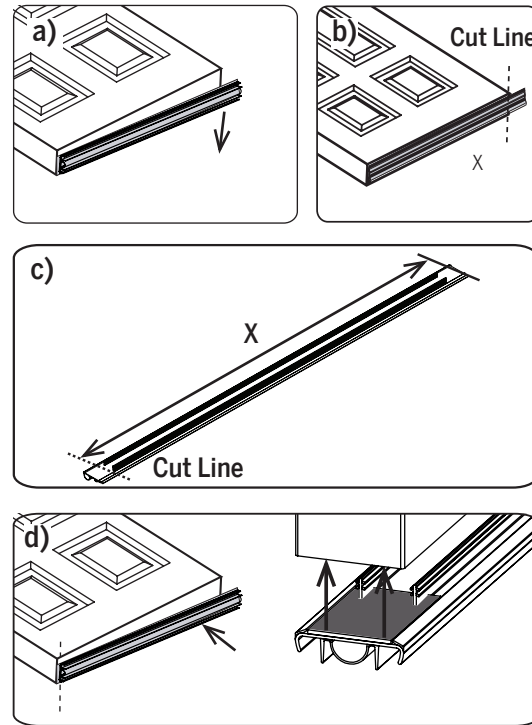
! Use the trim cap that matches astragals body color. Discard the other.

- Proceed to step 10



10. Replace Door Bottom Sweep (ZAI to Z-AC 2.0)**FOR SINGLE, SIDELITE, HINGED PATIO AND FRENCH DOOR UNITS****REMOVE DOOR(S) FROM HINGES**


- a) Remove old door bottom from panel by prying it off with a flathead screwdriver.
*Remove any caulk from the panel and kerf slots using a scraping tool .
- b) Align the Door Bottom ⑤ with the panel and mark cut line within 1/32". Cut line should match length of panel (X).
- c) Cut down the Door Bottom ⑤ to match the length of the panel (X).
- d) Align Door Bottom flush with the **lock side** of the panel and insert kerfs into slots on door (Kerfed Applications Only).
- e) Proceed to step 11.



11. Stapling Door Bottom to Panel (ZAI to Z-AC 2.0)

FOR SINGLE, SIDELITE, HINGED PATIO AND FRENCH DOOR UNITS

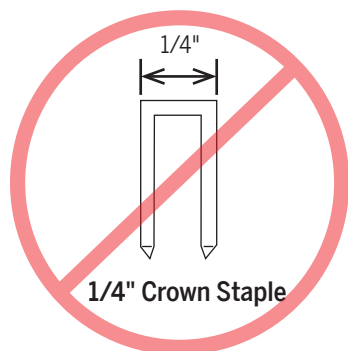
- a) Attach Door Bottom with **two 1/2" crown staples** and **80 PSI of air pressure** at ends between the rigid ramp and flex fins.

 When stapling the Z-AC Door bottom to the panel, staples should be inserted between the **Rigid Ramp** and **Flex Fins**. Staples should be aimed away from the kerf slots in the bottom of the panel to prevent cracking of the door bottom, or damage to the kerfs.

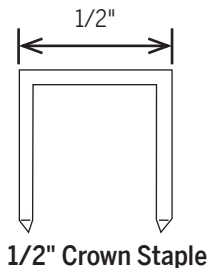
 The insertion of staples at an angle or in the wrong location will result in damage to the door bottom

- b) **STAPLE ON SWEEP**- If using a staple-on door sweep, staple on both sides approximately every 6" along the length of the door.
c) Proceed to step 12

Incorrect Size Staple




Correct Size Staple

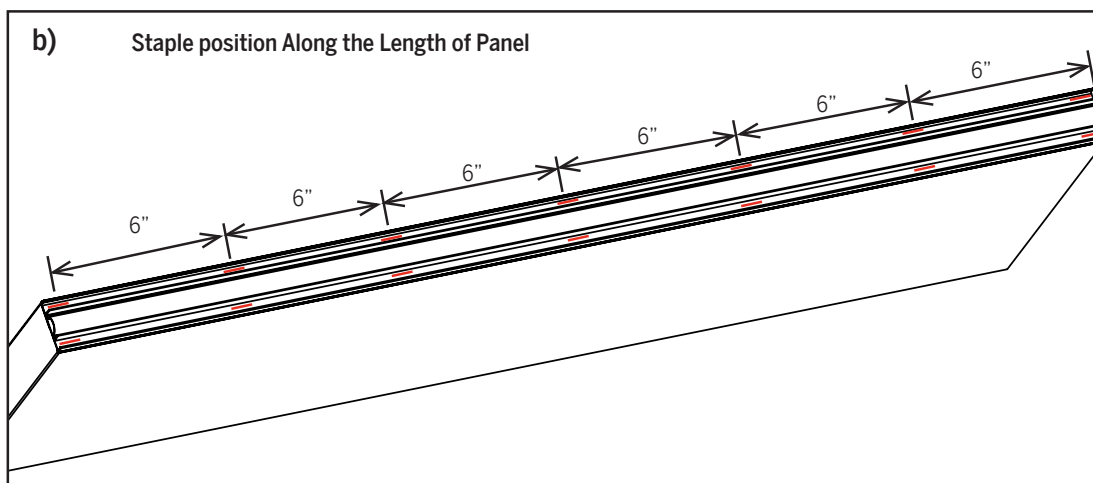
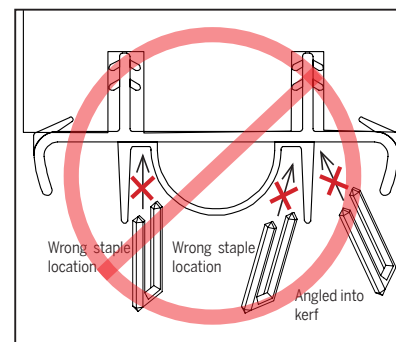
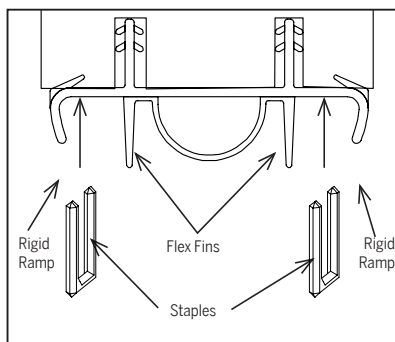
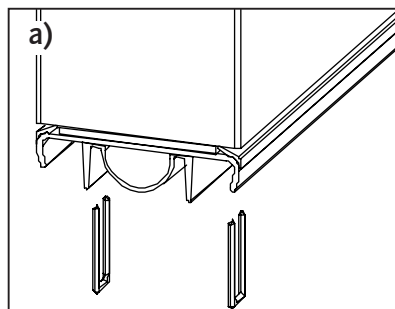


Only 1/2" crown staples should be used to secure the door bottom to the panel. The use of staples with a shorter crown such as crown 1/4" staples will result in cracking and damage to the door bottom.

Required Air Pressure



 Use 80 PSI of air pressure to insert staples. Endura suggests using an air pressure regulator for best results.



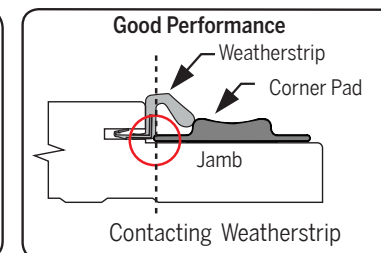
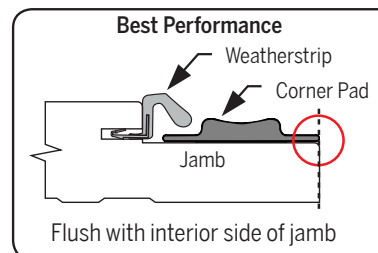
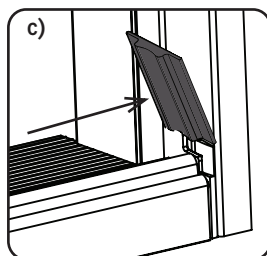
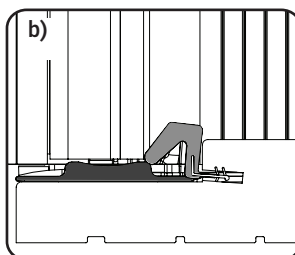
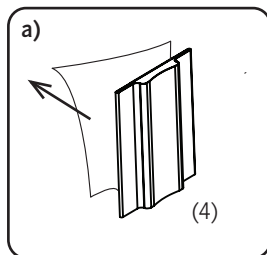
12. Replace Corner Pads (ZAI to Z-AC 2.0)

FOR SINGLE, SIDELITE, HINGED PATIO AND FRENCH DOOR UNITS

Ensure that the old corner pad has been removed from each jamb.

NOTE: For best performance, Do not reapply old/used corner pad. Replace with a new Simple Solution Corner Pad for this step.

- Remove backing paper from Simple Solution Corner Pad (4) to expose adhesive.
- Align Simple Solution Corner Pad with the top of Z-End Base and **inside edge** of the jamb.
- Ensure the Simple Solution Corner Pad contacts the top surface of the Z-End Base and attach to jamb.
- Repeat Steps a - c for the second jamb
- Proceed to step 13



! Suggested for strike margins of 1/8" or less

13. Check the Operation of the Door

Close and open the door several times

- Ensure that the door opens and closes smoothly.
- Ensure the cap operates properly up and down as the door is opened and closed.
- Ensure that Door Bottom makes contact with the Z-AC as the door is closed.
- Ensure the Panel makes contact with the Corner Pad and Z-End Bases.

If you have any questions, please contact your Endura Sales Representative or call Customer Service: 1-800-334-2006

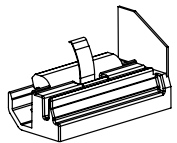
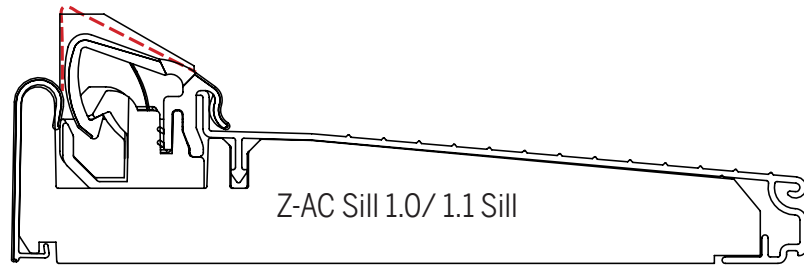


The information contained in this document is the confidential and proprietary information and trade secrets of Endura Products, Inc. Any disclosure, use or dissemination of such information without the express written permission of Endura Products, Inc. is strictly prohibited. Endura Products, Inc. also owns any and all intellectual property rights embodied in such information, including patent rights, copyrights, and trademark rights, and no license of any intellectual property right is intended, nor should any license be implied, as a result of the receipt of this document.

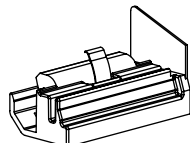
US Patents: 6,789,358; 7,350,336; 8,522,483; 8,991,100; 8,991,101; D722,388; D638,958; D722,387; D722,388; D713,976 and Patents Pending.
Canadian Patents: 2,771,705; D139,250 and Canadian Patents Pending.

8817 West Market Street, Colfax, NC
800/334-2006 www.enduraproducts.com

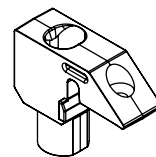
Z-Series Articulating Cap Sill 1.0/1.1 (Z-AC 1.0/1.1)



1.0 Angular
End Base



1.1 Slanted
End Base



1.0/ 1.1
Pin Capture
(French Doors Only)

Z-AC 1.0 Features

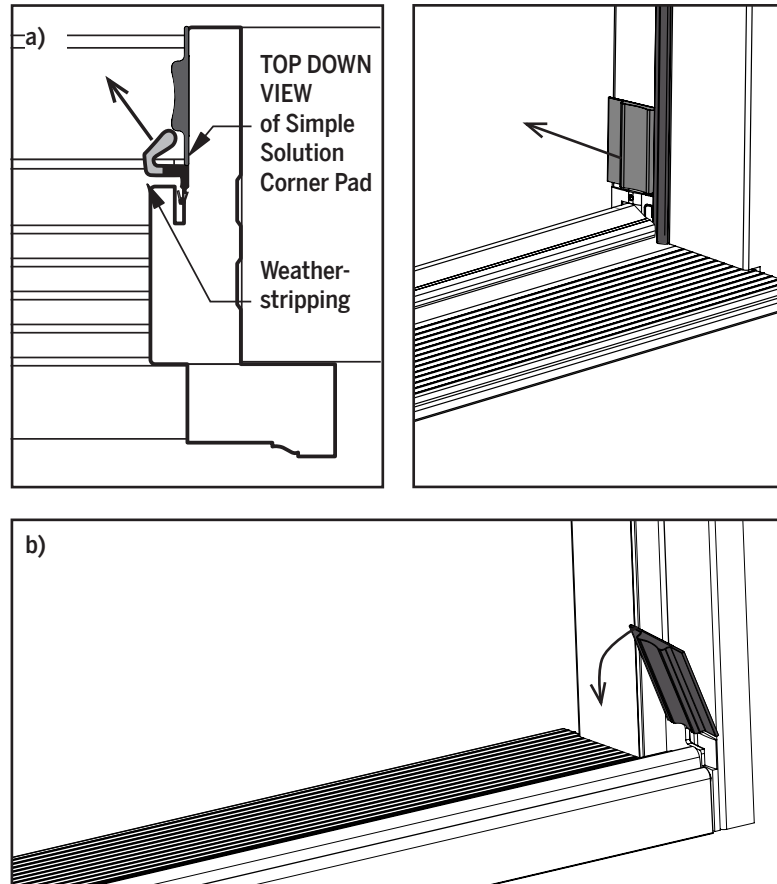
- Slanted cap
- End Bases with Angular Rigid Wall
- Exposed Pin Capture

Z-AC 1.1 Features

- Slanted cap
- End Bases with Slanted Rigid Wall
- Exposed Pin Capture

1. Remove Corner Pads (Z-AC 1.0/ 1.1 to Z-AC 2.0)

- a) Remove the weatherstrip by pulling it out of the kerf slot
- b) (If Present) Remove Simple Solution Corner Pad from each jamb by peeling it off.
- c) Clean any residual debris and dirt from the jamb.
- d) Proceed to Step 2.



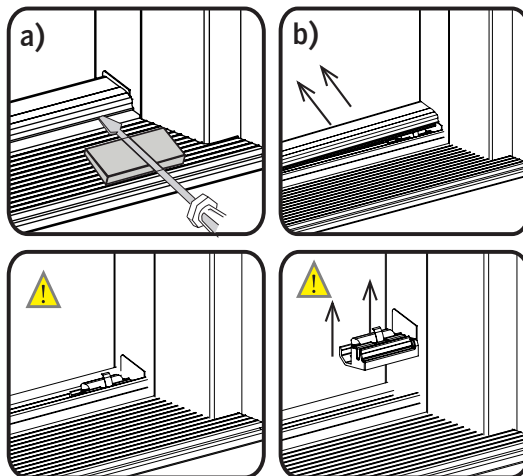
2. Remove OLD Cap (Z-AC 1.0 / 1.1 to Z-AC 2.0)

! Protect aluminum sill deck with a small wood block to prevent damage when prying off sill cap.

- Place a flathead screwdriver under front leg of sill cap at one end. Then pry sill cap up with screwdriver, working from one end to the other.
- Pull sill cap out of channel.

! **Note:** The end bases may be stapled to the frame, or stuck in the sill channel after the cap is removed. If this occurs, remove the bases from the channel using the flat head screw driver.

- Clean any debris out of sill channel and on the jambs.
- Proceed to step 3.



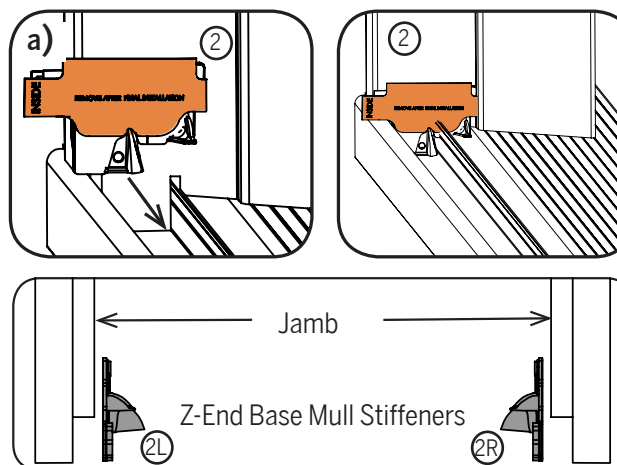
3. Install Z-End Base Mull Stiffeners (Z-AC 1.0 / 1.1 to Z-AC 2.0)

- Insert Z-End Base Mull Stiffeners (2L) & (2R) into each side of the channel against the jambs

! **NOTE:** The Z-End Base Mull Stiffeners are handed and can only be inserted one way. The back of the Z-End Base Mull Stiffener should be flush with the face of the jamb.

! **NOTE:** Do not remove the orange protective gasket label until cap is fully installed into the door unit.

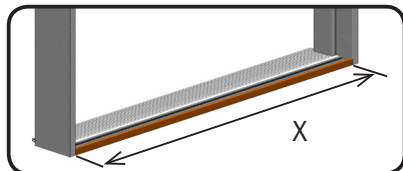
- Proceed to step 4.



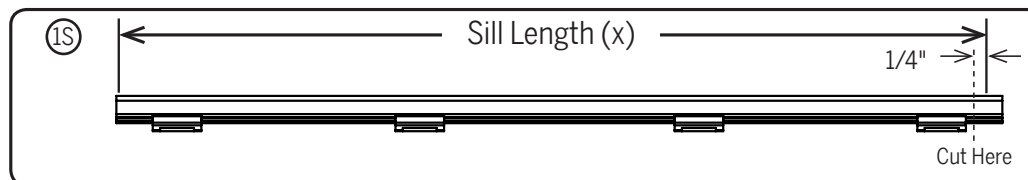
4. Cut NEW Z-Articulating Cap to Length (Z-AC 1.0/ 1.1 to Z-AC 2.0)

FOR SINGLE, SIDELITE & HINGED PATIO DOOR APPLICATIONS

a) Measure the length of the sill (x).



b) Measure and cut new cap (1S) to match length of the sill minus 1/4".

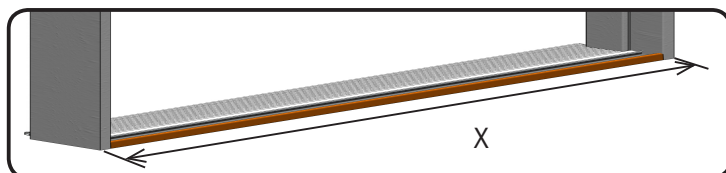


CAUTION: Measure carefully and cut precisely within 1/32" to ensure proper operation. A cap cut too short will not seal correctly.

c) Proceed to step 5

FOR FRENCH (DOUBLE) DOOR APPLICATIONS

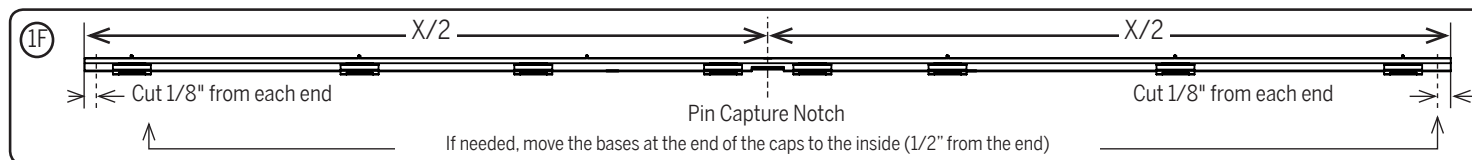
a) Measure the length of the sill (X).



b) Measure and cut new cap (1F) to match length of the sill (x) minus 1/8" on each side.

- Cut on both ends to ensure notch remains in center cap.
- Cap should be the same length on each side of the center of notch - Approximately 1/2 of sill length (X/2) minus 1/8".

CAUTION: Measure carefully and cut precisely within 1/32" to ensure proper operation. A cap cut too short will not seal correctly.

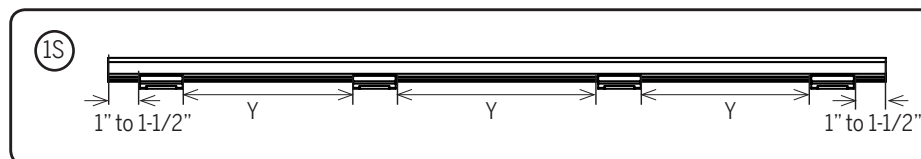


c) Proceed to step 5

5. Apply Spring-Loaded Bases (Z-AC 1.0 & 1.1 to Z-AC 2.0)

SINGLE SIDELITE, HINGED PATIO DOORS ONLY

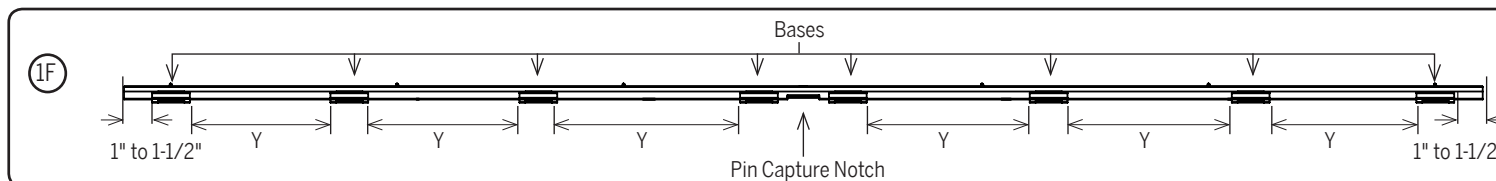
- a) Ensure that all 4 spring-loaded bases are used and properly positioned.
- The spring-loaded bases at the ends of the cap should be 1" to 1-1/2" from the cap's edge.
 - The two spring-loaded center bases should be evenly spaced between the 2 spring-loaded bases at the ends of the cap, approximately 9"-10" inches apart (y).



- b) Proceed to step 6

FRENCH (DOUBLE) OPENING DOORS ONLY

- a) Ensure that all 8 spring-loaded bases are used and properly positioned.
- The spring-loaded bases at the ends of the cap should be 1" to 1-1/2" from the cap's edge.
 - The 4 center spring-loaded bases should be evenly spaced between the 2 spring-loaded bases at the ends of the cap, approximately 10" - 11" inches apart (y).



Note: Bases in the center of the cap should be installed on either side of Pin Capture Notch leaving room for pin capture, which will be installed in the next step

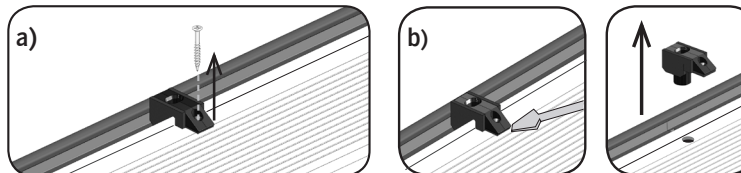
- b) Proceed to step 6

6. Install New Z-AC Pin Capture *French Doors Only* (Z-AC 1.0/ 1.1 to Z-AC 2.0)

⚠ FOR FRENCH DOOR UNITS ONLY

REMOVE Z-AC 1.0/ 1.1 PIN CAPTURE

- Remove screw from screw boss on pin capture.
- Using a flathead screw driver, pry the pin capture from the sill.

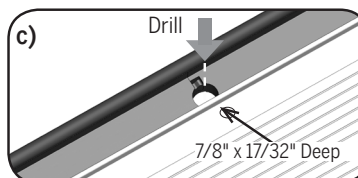
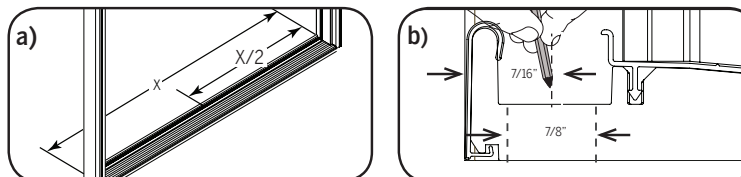


LOCATE AND DRILL PIN CAPTURE HOLE

⚠ **NOTE:** If hole already exists from previous pin cup, the old hole can be used, provided it is centered exactly in the sill from end to end. Simply drill a 7/8" diameter hole deep through the sill substrate in its place .

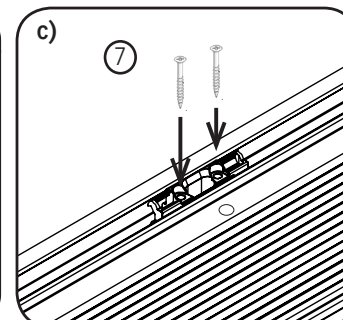
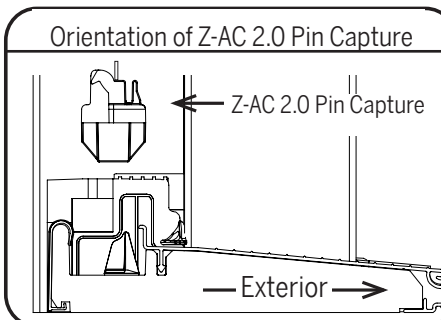
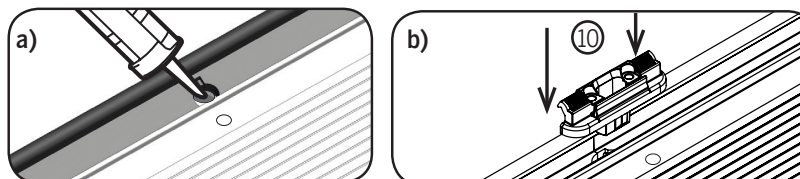
If the hole is not completely centered, Follow the below steps.

- Measure sill length from jamb to jamb (x).
- Mark the cap channel at exactly 1/2 the sill length and 7/16" from the interior of the sill dam.
- Drill 7/8" diameter hole deep through the sill substrate (17/32" deep). This is where the pin capture ⑩ will be inserted.



INSTALL PIN CAPTURE

- Fill bottom of pin capture hole ⑩ with exterior grade caulking.
- Insert pin capture into hole and tap into place with a rubber mallet, if necessary.
- Insert two provided screws ⑦ into mounting holes on pin capture.



REPAIR THE HOLE IN THE DECK

- Fill the hole in the aluminum deck from the original 1.0/1.1 mounting screw with aluminum repair epoxy/putty or an exterior grade sealant.
- Proceed to step 7



7. Insert NEW Sill Cap (ZAI to Z-AC 2.0)

FOR SINGLE, SIDELITE, HINGED PATIO AND FRENCH DOOR UNITS

- Press one end of cap ① into channel and against Z-End Base/ Mull Stiffener ②.
- Bend cap ① slightly upward in center then and press opposite end into channel and against Z-End Base/ Z-End Base Mull Stiffener ②.
- Apply Pressure to the cap ① to fully seat cap into place along entire length of sill.

! Front leg of the cap should touch the deck when seated.

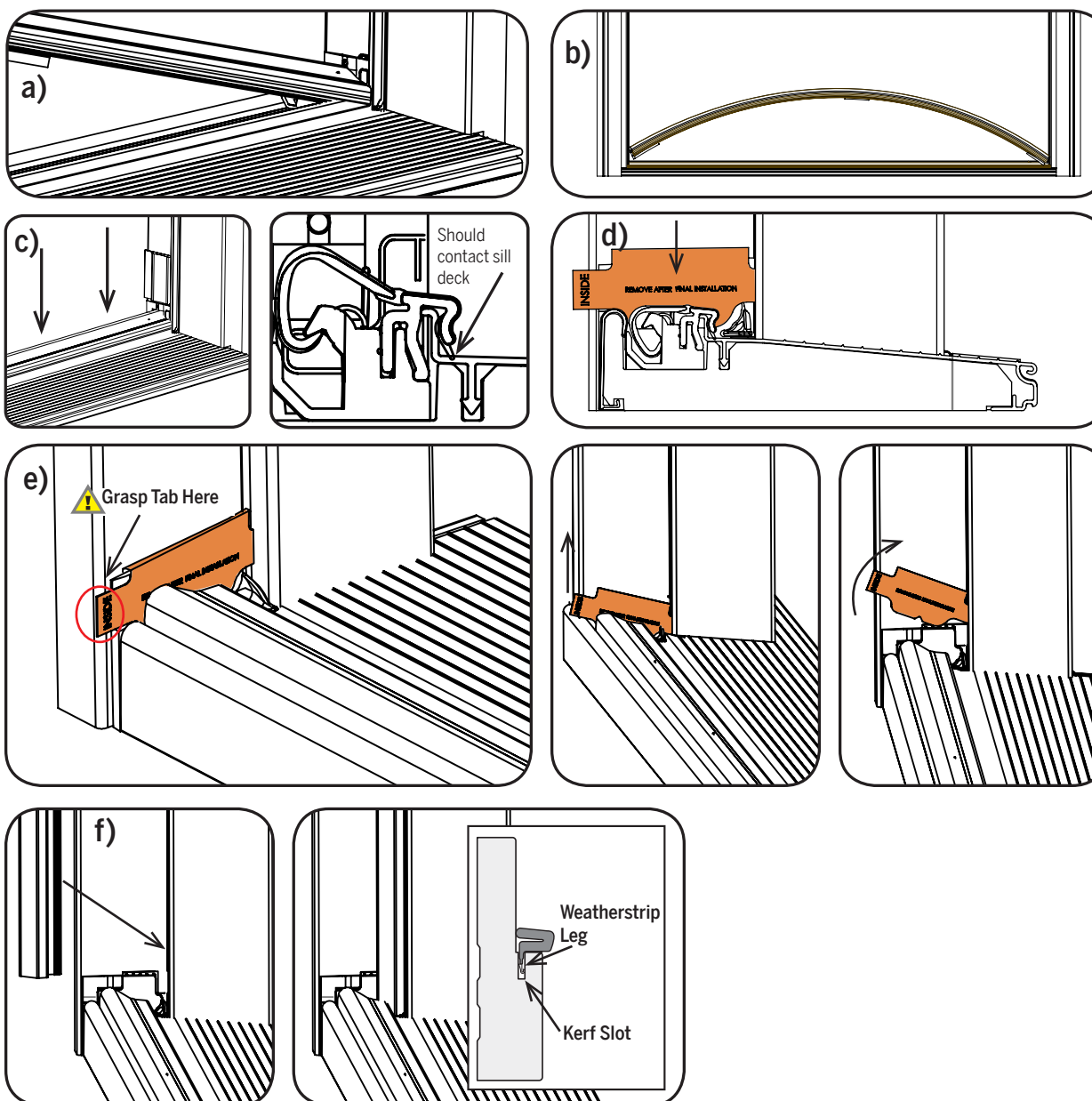
- Depress the cap ①, to gain access to the orange protective labels on each Z-End base/ Mull Stiffener (If Present).

- Grasp the inside tab of the orange protective label on the Z-End base/ Mull Stiffener, shown here (If Present), and lift up and away from the Z-End Base.

! A small portion of the active stiffener will be removed with the label. This is normal.

- Insert weatherstrip by fully installing/placing leg fully into frame kerf slot. Be sure that the Weatherstrip contacts the Weatherstrip Locator on the Z-End Base/ Mull Stiffener.

- Proceed to step 8

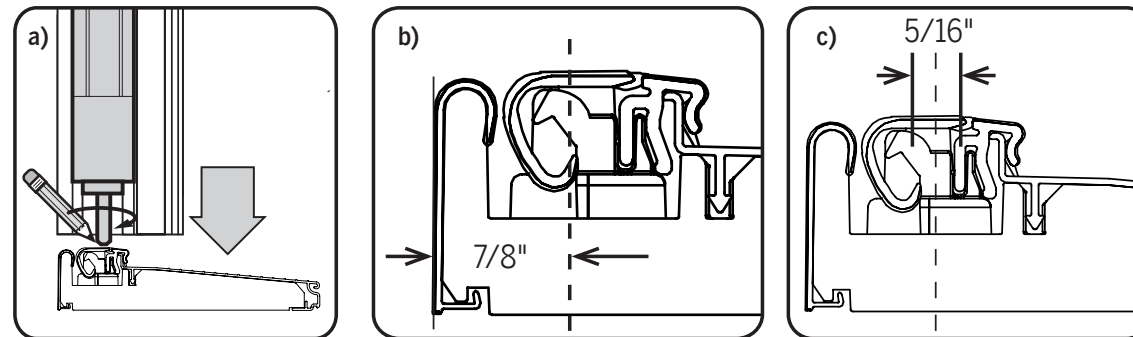


8. Drill Cap For Astragal Bolt *French Door Units Only* (Z-AC 1.0/ 1.1 to Z-AC 2.0)**⚠ FOR FRENCH DOOR UNITS**

- a) Close passive door until header weatherstrip is compressed and door is flush with the opening. Engage astragal bolt to contact and compress Z-AC to mark for drilling.
- b) The center of the mark made should be 7/8" from the interior edge of the sill.
- c) Depress the cap, and using a 5/16" drill bit, drill a hole in the cap.

⚠ Stop drilling once you drill through the cap!

- d) Proceed to step 9



9. Replace Astragal Bottom Sealing Pad and Corner Pad *French Door Units Only* (Z-AC 1.0 & 1.1 to Z-AC 2.0)

! FOR FRENCH DOOR UNITS ONLY

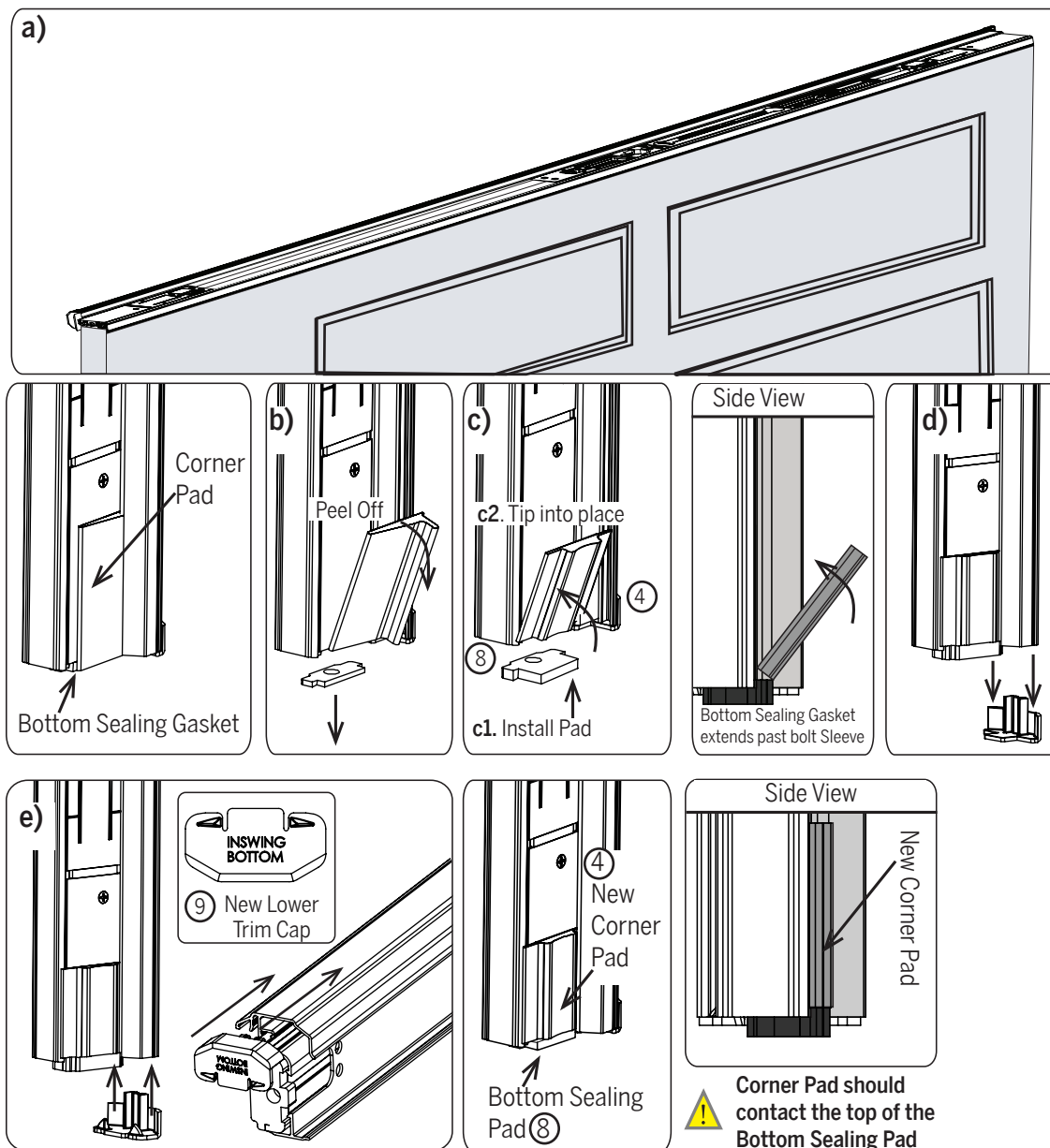
- Remove inactive door panel off its hinges to gain access to the bolt sleeve with corner pad and bottom sealing gasket.
- Remove corner pad and bottom sealing gasket by peeling down and away from the astragal.
- Install new Z-AC Astragal Bottom Sealing Gasket ⑧ by aligning the flush bolt with the hole in the pad c1 then install Simple Solution Corner Pad ④ by tipping into place c2.

! The lip of the Bottom Sealing Gasket should extend out in front of the astragal, and the Simple Solution Corner Pad should be flush with the top of the gasket.

- Remove original Lower Trim Cap by prying it off of the bottom of the astragal.
- Align the new Lower Trim Cap ⑨ with the astragal body, and Insert the Trim cap into the bottom of the astragal.

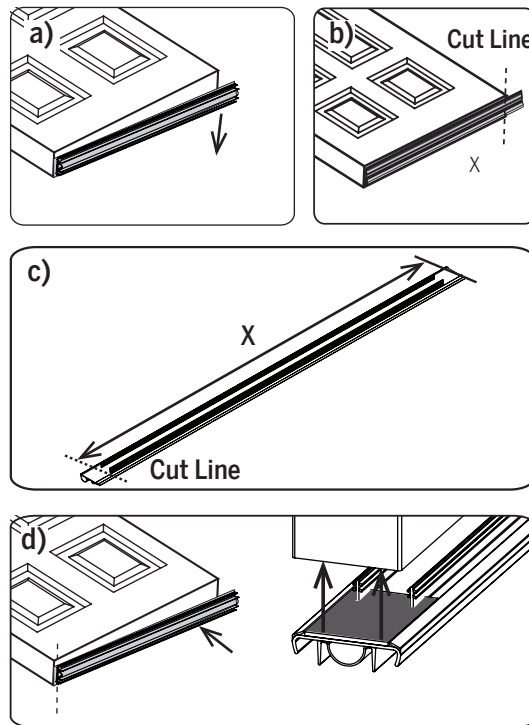
! Use the trim cap that matches astragals body color. Discard the other.

- Proceed to step 10



10. Replace Door Bottom Sweep (Z-AC 1.0/ 1.1 to Z-AC 2.0)**FOR SINGLE, SIDELITE, HINGED PATIO AND FRENCH DOOR UNITS****REMOVE DOOR(S) FROM HINGES**


- a) Remove old door bottom from panel by prying it off with a flathead screwdriver.
***Remove any caulk from the panel and kerf slots using a scraping tool .**
- b) Align the Door Bottom ⑤ with the panel and mark cut line within 1/32". Cut line should match length of panel (X).
- c) Cut down the Door Bottom ⑤ to match the length of the panel (X).
- d) Align Door Bottom flush with the **lock side** of the panel and insert kerfs into slots on door (Kerfed Applications Only).
- e) Proceed to step 11.




11. Stapling Door Bottom to Panel (Z-AC 1.0/ 1.1 to Z-AC 2.0)

FOR SINGLE, SIDELITE, HINGED PATIO AND FRENCH DOOR UNITS

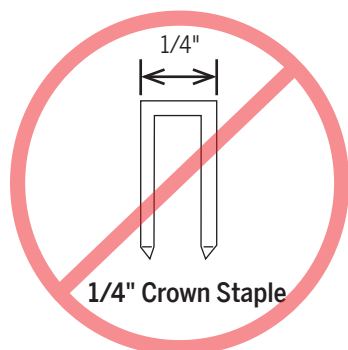
- a) Attach Door Bottom with **two 1/2" crown staples** and **80 PSI of air pressure** at ends between the rigid ramp and flex fins.

 When stapling the Z-AC Door bottom to the panel, staples should be inserted between the **Rigid Ramp** and **Flex Fins**. Staples should be aimed away from the kerf slots in the bottom of the panel to prevent cracking of the door bottom, or damage to the kerfs.

 The insertion of staples at an angle or in the wrong location will result in damage to the door bottom

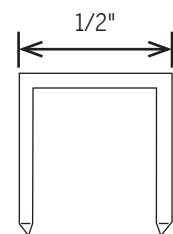
- b) **STAPLE ON SWEEP**- If using a staple-on door sweep, staple on both sides approximately every 6" along the length of the door.
c) Proceed to step 12

Incorrect Size Staple



1/4" Crown Staple

Correct Size Staple




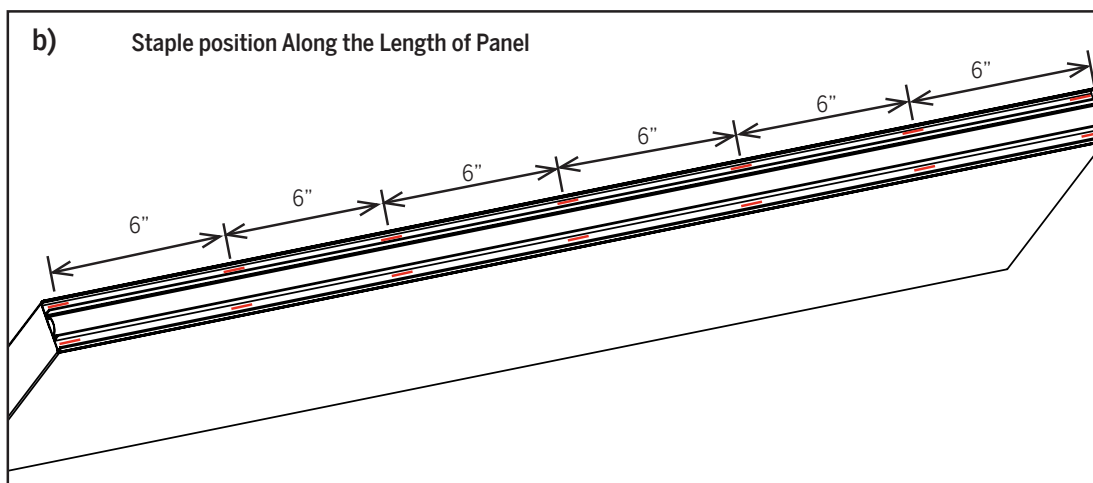
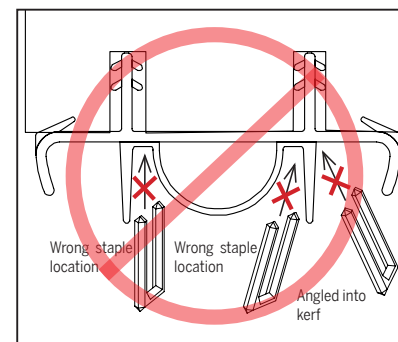
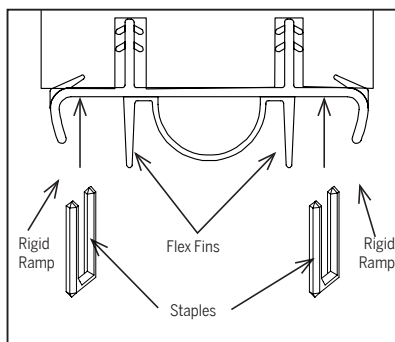
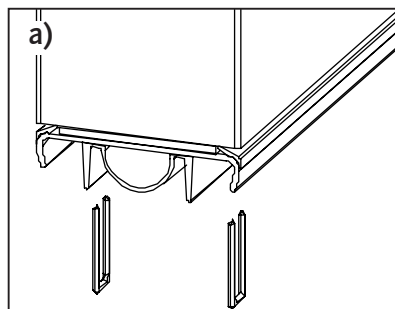
1/2" Crown Staple

Only 1/2" crown staples should be used to secure the door bottom to the panel. The use of staples with a shorter crown such as crown 1/4" staples will result in cracking and damage to the door bottom.

Required Air Pressure



 Use 80 PSI of air pressure to insert staples. Endura suggests using an air pressure regulator for best results.



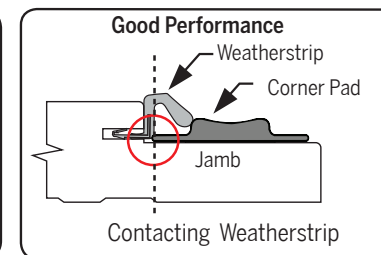
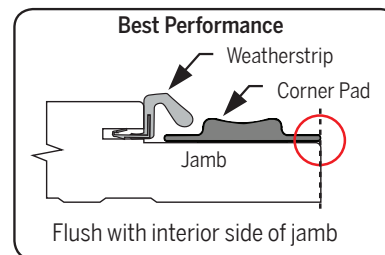
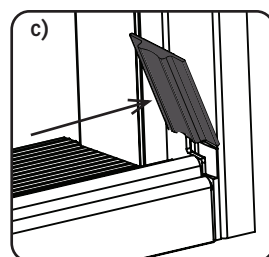
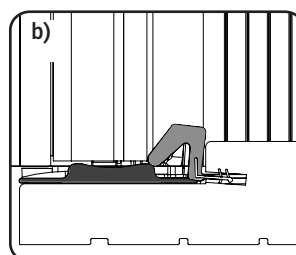
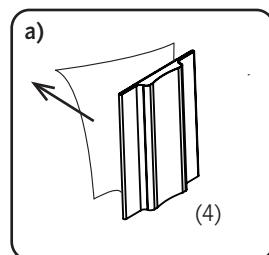
12. Replace Corner Pads (Z-AC 1.0/ 1.1 to Z-AC 2.0)

FOR SINGLE, SIDELITE, HINGED PATIO AND FRENCH DOOR UNITS

Ensure that the old corner pad has been removed from each jamb.

NOTE: For best performance, do not reapply old/used corner pad. Replace with a new Simple Solution Corner Pad for this step.

- Remove backing paper from Simple Solution Corner Pad (4) to expose adhesive.
- Align Simple Solution Corner Pad with the top of Z-End Base and **inside edge** of the jamb.
- Ensure the Simple Solution Corner Pad contacts the top surface of the Z-End Base and attach to jamb.
- Repeat Steps a - c for the second jamb
- Proceed to step 13



! Suggested for strike margins of 1/8" or less

13. Check the Operation of the Door

Close and open the door several times

- Ensure that the door opens and closes smoothly.
- Ensure the cap operates properly up and down as the door is opened and closed.
- Ensure that Door Bottom makes contact with the Z-AC as the door is closed.
- Ensure the Panel makes contact with the Corner Pad and Z-End Bases.

If you have any questions, please contact your Endura Sales Representative or call Customer Service: 1-800-334-2006

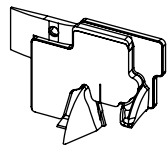
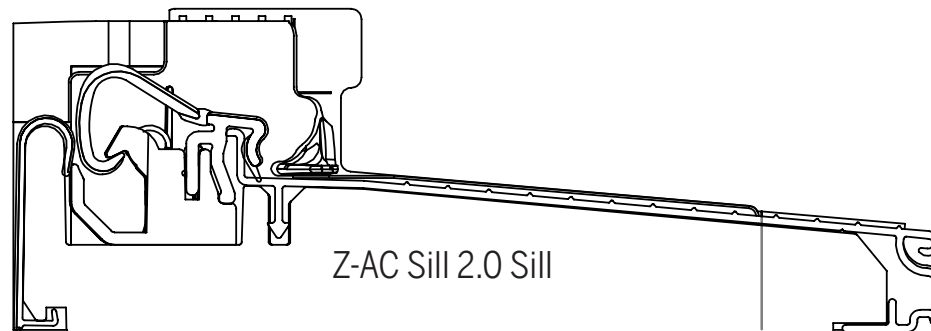


The information contained in this document is the confidential and proprietary information and trade secrets of Endura Products, Inc. Any disclosure, use or dissemination of such information without the express written permission of Endura Products, Inc. is strictly prohibited. Endura Products, Inc. also owns any and all intellectual property rights embodied in such information, including patent rights, copyrights, and trademark rights, and no license of any intellectual property right is intended, nor should any license be implied, as a result of the receipt of this document.

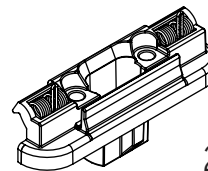
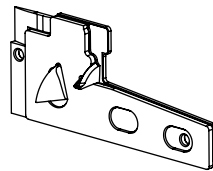
US Patents: 6,789,358; 7,350,336; 8,522,483; 8,991,100; 8,991,101; D722,388; D638,958; D722,387; D722,388; D713,976 and Patents Pending.
Canadian Patents: 2,771,705; D139,250 and Canadian Patents Pending.

8817 West Market Street, Colfax, NC
800/334-2006 www.enduraproducts.com

Z-Series Articulating Cap Sill 2.0 (Z-AC 2.0)



Z-End Base



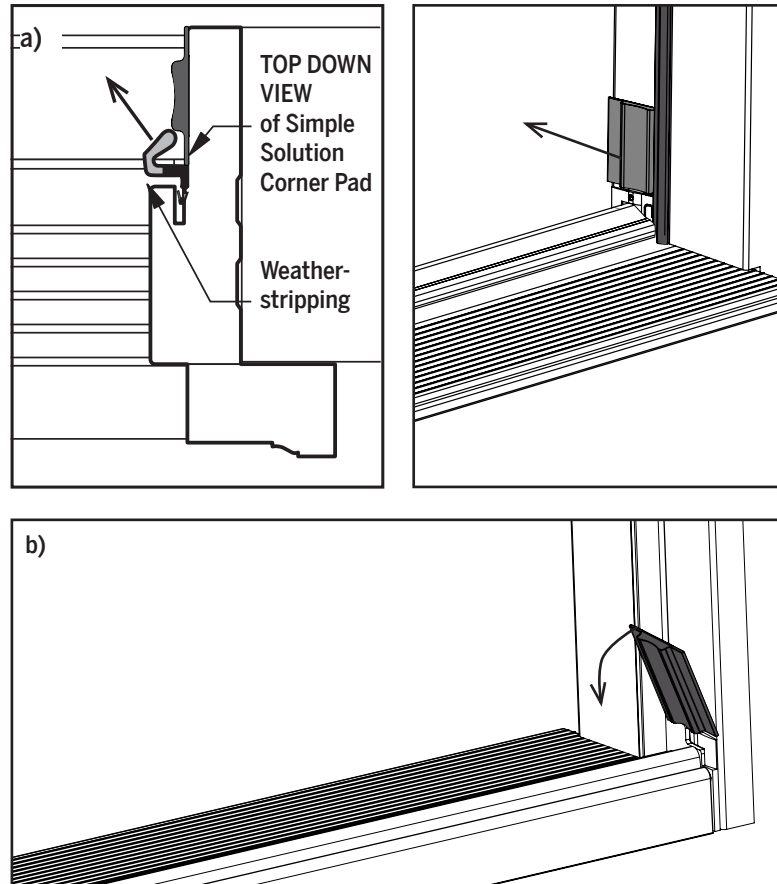
2.0 Pin Capture
(French Doors)

Z-AC 2.0 Features

- Slanted Cap
- Z-End Bases with Weatherstrip Locator
- Pin Capture Under Cap

1. Remove Corner Pads (Z-AC 2.0 to Z-AC 2.0)

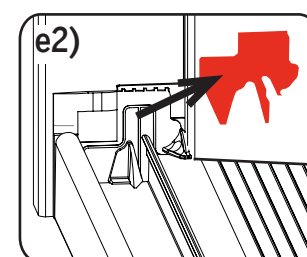
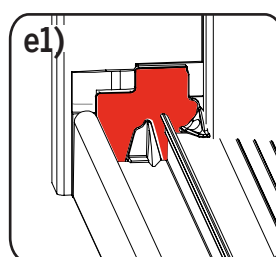
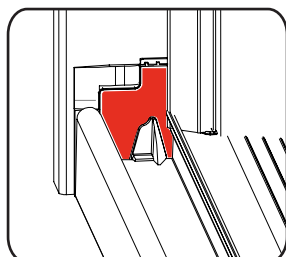
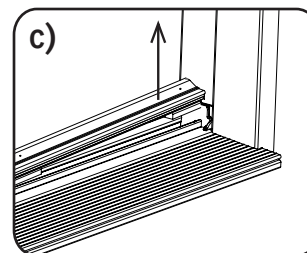
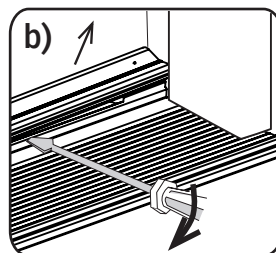
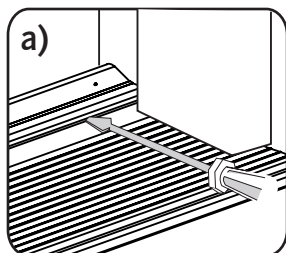
- a) Remove the weatherstrip by pulling it out of the kerf slot
- b) (If Present) Remove Simple Solution Corner Pad from each jamb by peeling it off.
- c) Clean any residual debris and dirt from the jamb.
- d) Proceed to Step 2.



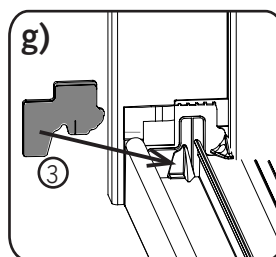
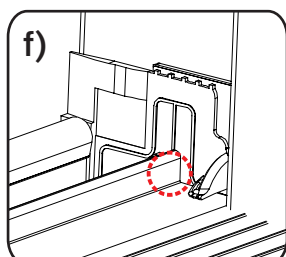
2. Remove Z-AC 2.0 (Z-AC 2.0 to Z-AC 2.0)

SINGLE AND FRENCH DOOR UNITS

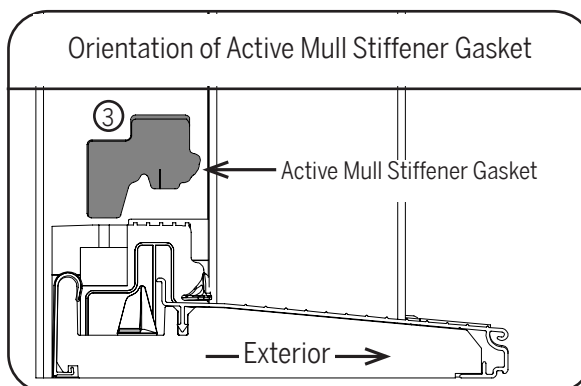
- a) Starting **at the end of the sill**, using a flat head screw driver, insert screw driver head between the front leg of the cap and the sill deck.
- b) Pry the cap up and out of the sill channel along the length of the sill.
- c) Once the end of the cap is no longer attached to the sill, simply pull the cap up and out of the sill.
- d) Clean any debris out of sill Channel
- e) Remove the weatherstrip (e1) and using a scraping tool, remove visible portion of the foam sealing pad (gasket) from the Z-End Base (e2). **Do not remove the plastic Z-End Base, just the foam pad.**
- f) Carefully apply Silicon on the dam of the sill in the area shown, to fill in any gaps that will be created when installing Active Mull Stiffener Gasket ③ in place of the damaged Z-End Base's Gasket



Gasket refers to the foam sealing pad attached to the Z-End Base. **DO NOT ATTEMPT TO REMOVE THE Z-END BASE**



- g) Apply new Active Mull Stiffener Gasket ③ to the Z-End Base in place of the old gasket pad.
- h) Proceed to step 3



3. Remove Z-AC 2.0 (Z-AC 2.0 to Z-AC 2.0)

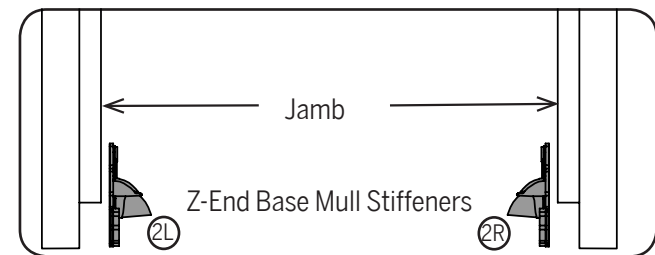
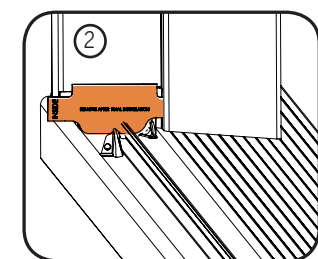
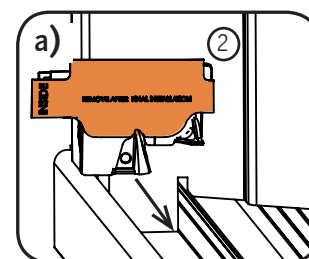
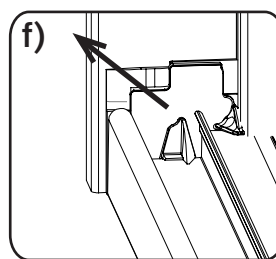
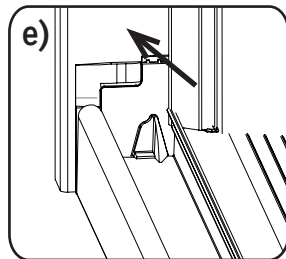
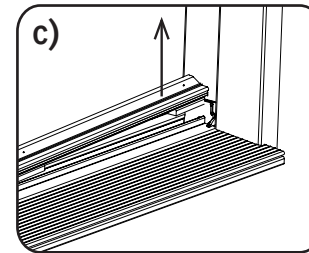
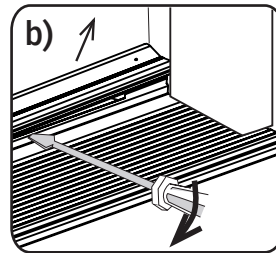
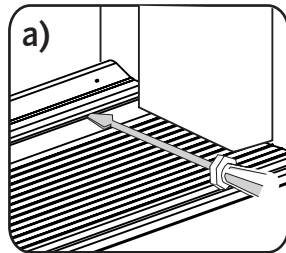
FOR SIDELITE, HINGED PATIO AND PREVIOUSLY RETROFITTED UNITS

- a) Starting **at the end of the sill**, using a flat head screw driver, insert screw driver head between the front leg of the cap and the sill deck.
- b) Pry the cap up and out of the sill channel along the length of the sill.
- c) Once the end of the cap is no longer attached to the sill, simply pull the cap up and out of the sill.
- d) Clean any debris out of sill Channel
- e) Remove the weatherstrip
- f) Remove the installed Z-End Base Mull Stiffener and discard it.
- g) Insert new Z-End Base Mull Stiffeners (2L) & (2R) into each side of the channel against the jambs

NOTE: The Z-End based are handed and can only be inserted one way. The back of the Z-End Base Mull Stiffener should be flush with the face of the jamb.

NOTE: Do not remove the orange protective gasket label until cap is fully installed into the door unit.

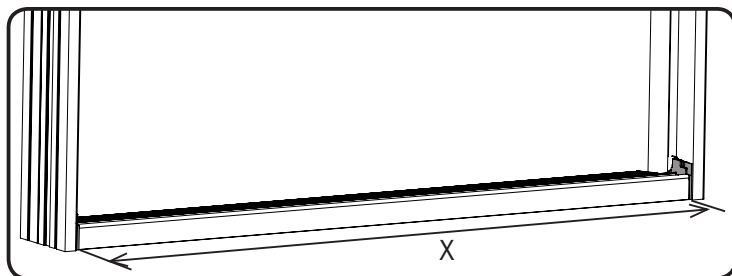
- h) Proceed to step 4



4. Cut NEW Z-Articulating Cap to Length (Z-AC 2.0 to Z-AC 2.0)

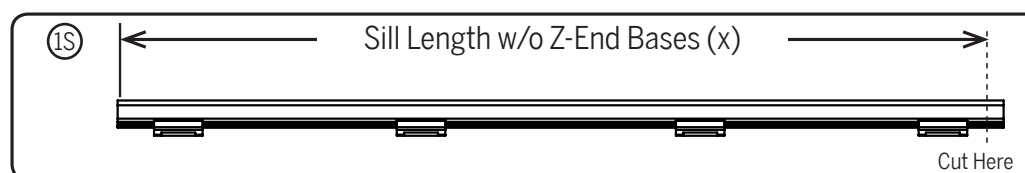
FOR SINGLE, SIDELITE & HINGED PATIO DOOR APPLICATIONS

a) Measure the length of the sill without black Z-End Base Assemblies (X).



c) Proceed to step 5

b) Measure and cut new cap 1S to match length of the sill.

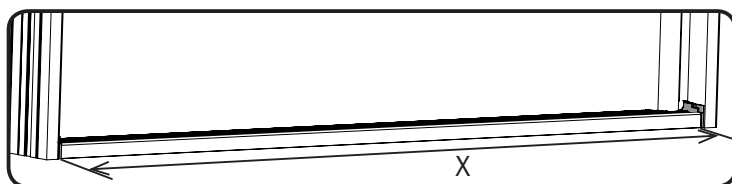


CAUTION: Measure carefully and cut precisely within 1/32" to ensure proper operation. A cap cut too short will not seal correctly.

NOTE: With Field Replacement of Existing Z-AC 2.0 Sill, sill length has been cut down to accommodate Z-End Bases. New Z-AC 2.0 Cap Should be the same length as the old Z-AC 2.0 cap.

FOR FRENCH (DOUBLE) DOOR APPLICATIONS

a) Measure the length of the sill without black Z-End Base Assemblies (X).

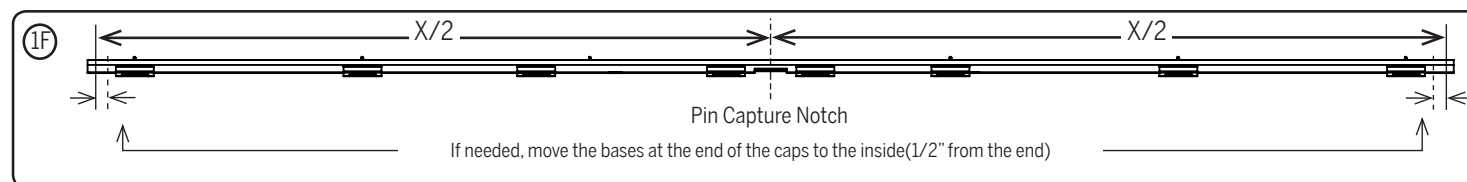


b) Measure and cut new cap 1F to match length of the sill.

- Cut on both ends to ensure notch remains in center cap.
- Cap should be the same length on each side of the center of notch - Approximately 1/2 of sill length (X/2).

CAUTION: Measure carefully and cut precisely within 1/32" to ensure proper operation. A cap cut too short will not seal correctly.

NOTE: With Field Replacement of Existing Z-AC 2.0 Sill, sill length has been cut down to accommodate Z-End Bases. New Z-AC 2.0 Cap Should be the same length as the old Z-AC 2.0 cap.

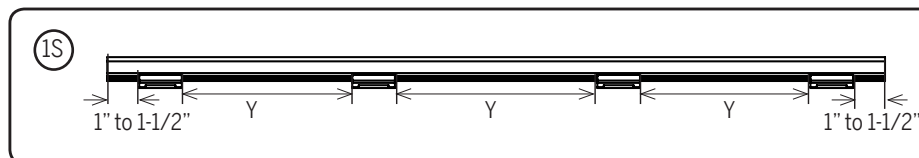


c) Proceed to step 5

5. Apply Spring Loaded Cap Bases (Z-AC 2.0 to Z-AC 2.0)

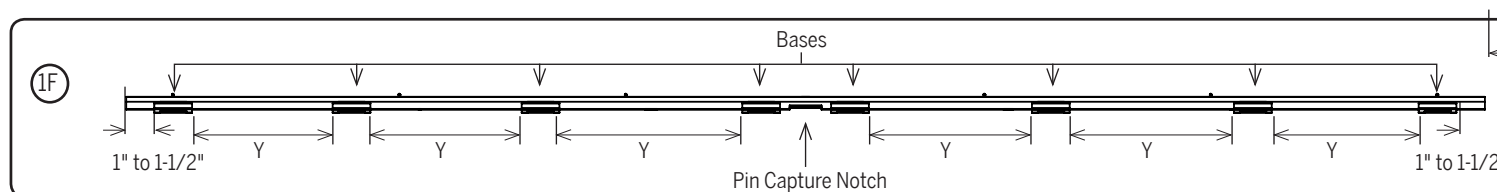
SINGLE, SIDELITE & HINGED PATIO DOORS ONLY

- a) Ensure that all 4 spring-loaded bases are used and properly positioned.
- The spring-loaded bases at the ends of the cap should be 1" to 1-1/2" from the cap's edge.
 - The two spring-loaded center bases should be evenly spaced between the 2 spring-loaded bases at the ends of the cap, approximately 9"-10" inches apart (y).
- b) Proceed to step 6.



FRENCH (DOUBLE) OPENING DOORS ONLY

- a) Ensure that all 8 spring-loaded bases are used and properly positioned.
- The spring-loaded bases at the ends of the cap should be 1" to 1-1/2" from the cap's edge.
 - The 4 center spring-loaded bases should be evenly spaced between the 2 spring-loaded bases at the ends of the cap, approximately 10"-11" inches apart (y).



NOTE: Bases in the center of the cap should be installed on either side of Pin Capture Notch leaving room for pin capture, which will be installed in the next step

- b) Proceed to step 6.

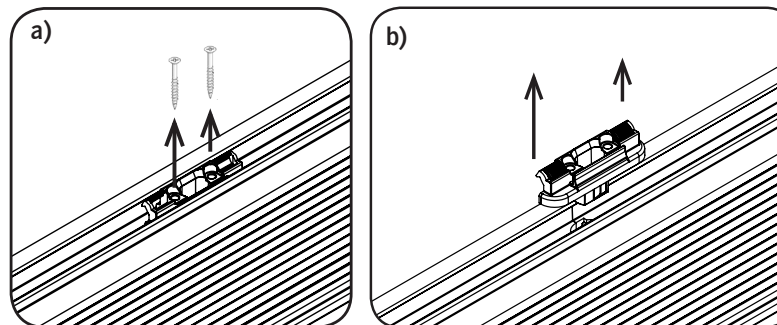
6. Install New Z-AC Pin Capture *French Doors Only* (Z-AC 2.0 to Z-AC 2.0)

FOR FRENCH DOOR UNITS ONLY

FOR FRENCH DOOR UNITS ONLY

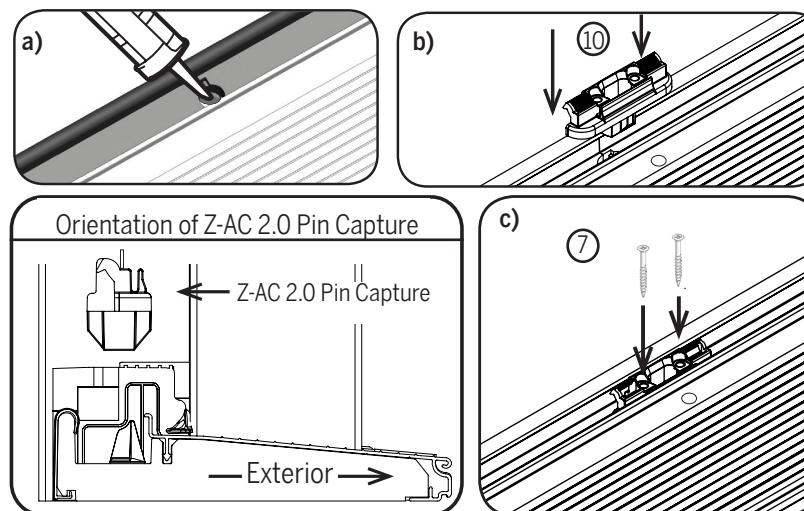
REMOVE Z-AC 1.0/ 1.1 PIN CAPTURE

- Remove screw from screw boss on pin capture.
- Using a flathead screw driver, pry the pin capture from the sill.



INSTALL PIN CAPTURE

- Fill bottom of pin capture hole (10) with exterior grade caulking.
- Insert pin capture into hole and tap into place with a rubber mallet, if necessary.
- Insert two provided screws (7) into mounting holes on pin capture.



7. Insert NEW Sill Cap (Z-AC 2.0 to Z-AC 2.0)

FOR SINGLE, SIDELITE, HINGED PATIO AND FRENCH DOOR UNITS

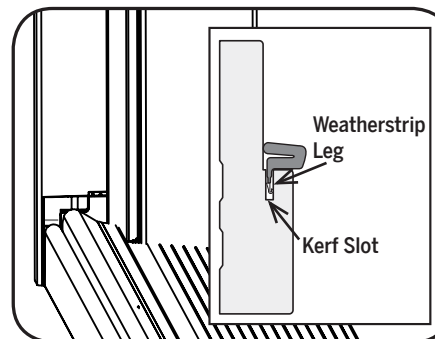
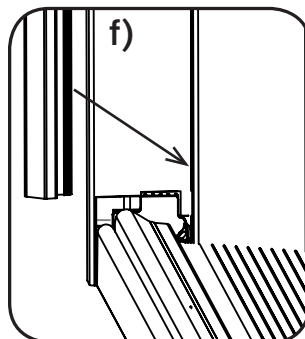
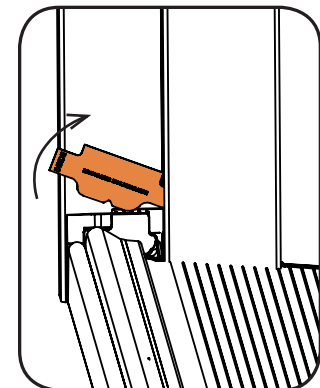
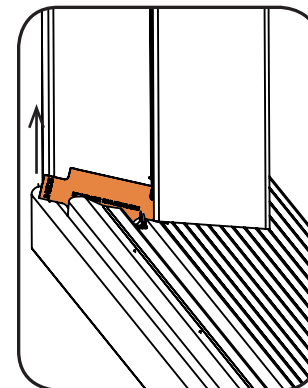
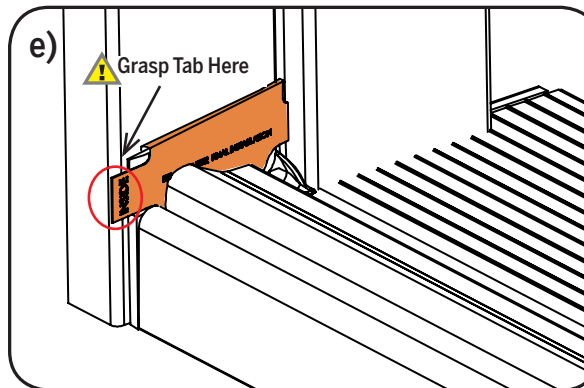
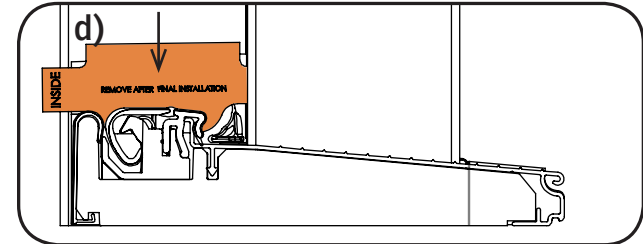
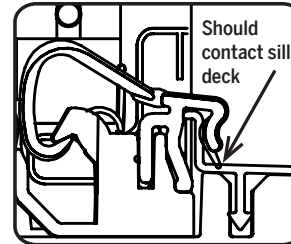
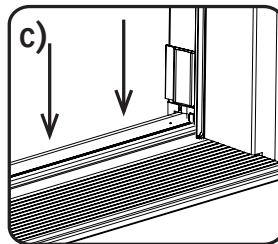
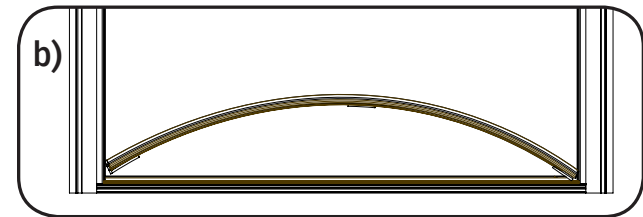
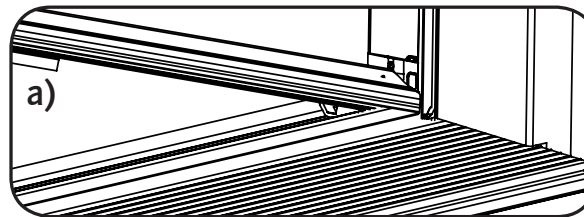
- Press one end of cap ① into channel and against Z-End Base/ Mull Stiffener ②.
- Bend cap ① slightly upward in center then and press opposite end into channel and against Z-End Base/ Z-End Base Mull Stiffener ②.
- Apply Pressure to the cap ① to fully seat cap into place along entire length of sill.

⚠ Front leg of the cap should touch the deck when seated.

- Depress the cap ①, to gain access to the orange protective labels on each Z-End base/ Mull Stiffener (If Present).
- Grasp the inside tab of the orange protective label on the Z-End base/ Mull Stiffener, shown here (If Present), and lift up and away from the Z-End Base.

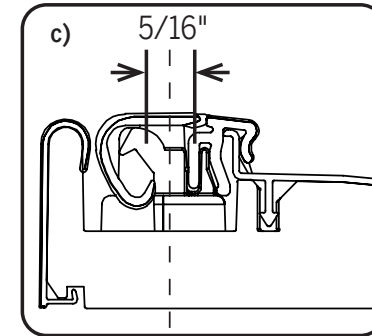
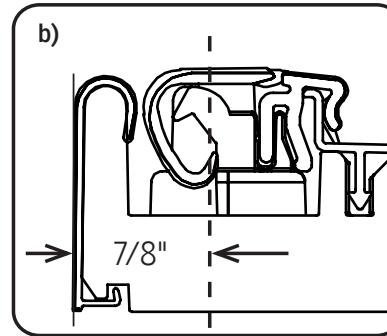
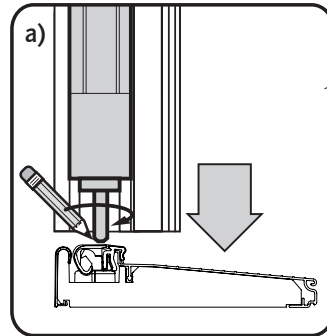
⚠ A small portion of the active stiffener will be removed with the label. This is normal.

- Insert weatherstrip by fully installing/placing leg fully into frame kerf slot. Be sure that the Weatherstrip contacts the Weatherstrip Locator on the Z-End Base/ Mull Stiffener.
- Proceed to step 8



8. Drill Cap For Astragal Bolt *French Door Units Only* (Z-AC 2.0 to Z-AC 2.0)**⚠ FOR FRENCH DOOR UNITS**

- a) Close passive door until header weatherstrip is compressed and door is flush with the opening. Engage astragal bolt to contact and compress Z-AC to mark for drilling.
- b) The center of the mark made should be 7/8" from the interior edge of the sill.
- c) Depress the cap, and using a 5/16" drill bit, drill a hole in the cap.

**⚠ Stop drilling once you drill through the cap!**

- d) Proceed to step 9

9. Replace Astragal Bottom Sealing Pad and Corner Pad *French Door Units Only* (Z-AC 2.0 to Z-AC 2.0)

! FOR FRENCH DOOR UNITS ONLY

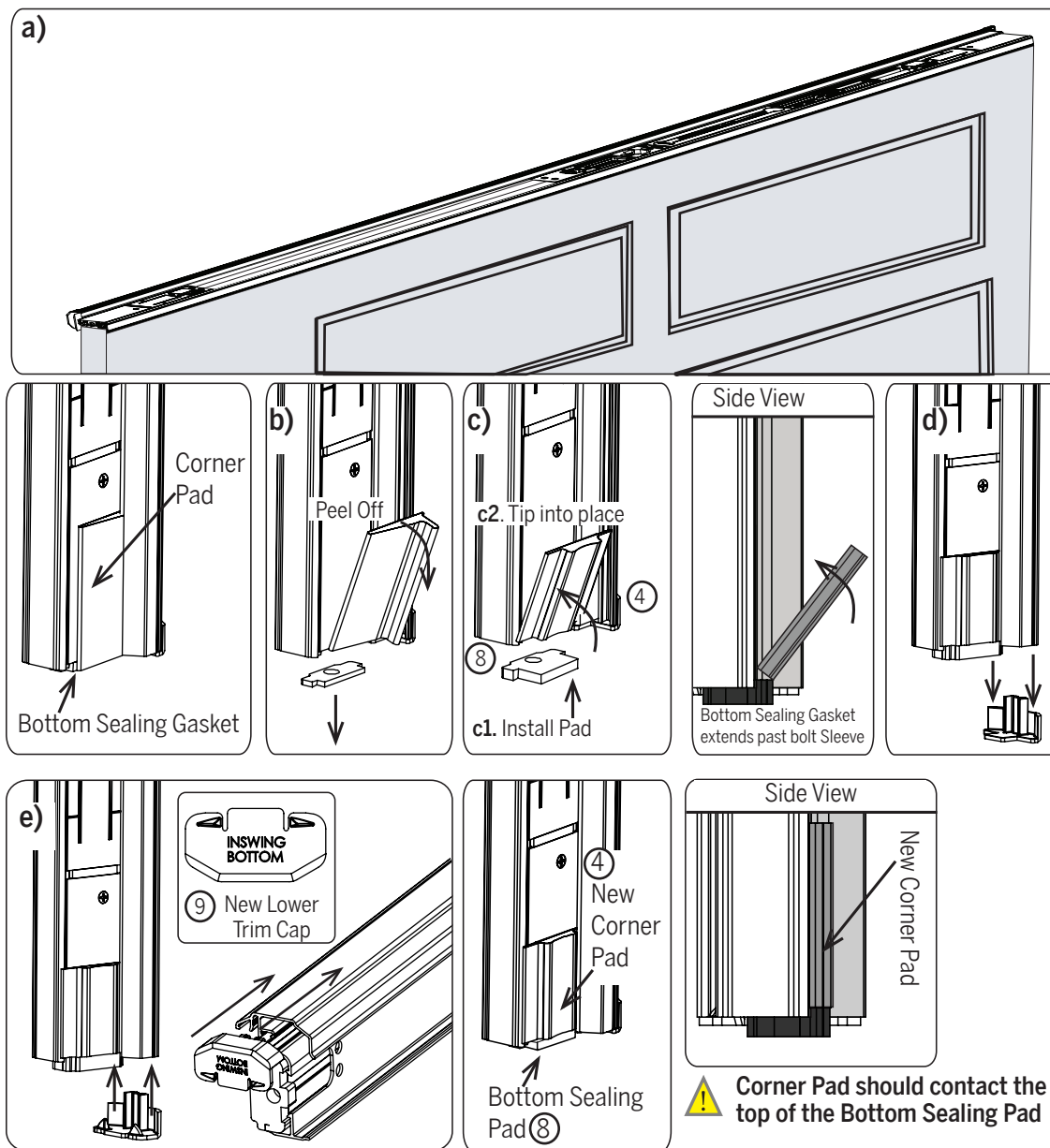
- Remove inactive door panel off its hinges to gain access to the bolt sleeve with corner pad and bottom sealing gasket.
- Remove corner pad and bottom sealing gasket by peeling down and away from the astragal.
- Install new Z-AC Astragal Bottom Sealing Gasket ⑧ by aligning the flush bolt with the hole in the pad c1 then install Simple Solution Corner Pad ④ by tipping into place c2.

! The lip of the Bottom Sealing Gasket should extend out in front of the astragal, and the Simple Solution Corner Pad should be flush with the top of the gasket.

- Remove original Lower Trim Cap by prying it off of the bottom of the astragal.
- Align the new Lower Trim Cap ⑨ with the astragal body, and Insert the Trim cap into the bottom of the astragal.

! Use the trim cap that matches astragals body color. Discard the other

- Proceed to step 9.

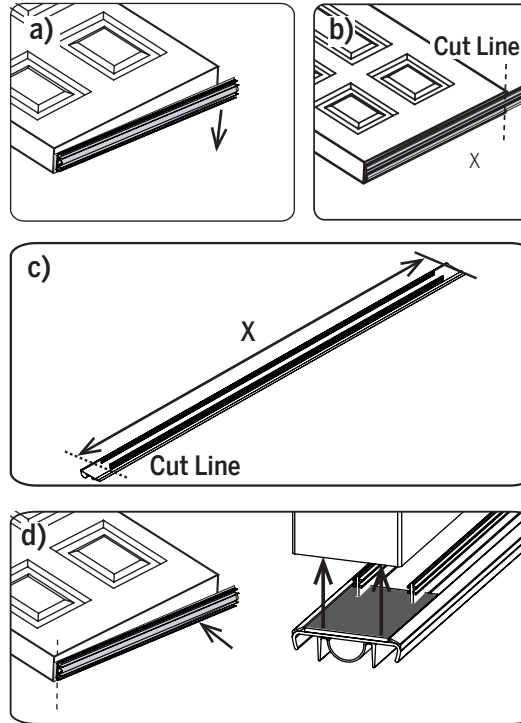


10. Replace Door Bottom Sweep (Z-AC 2.0 to Z-AC 2.0)

FOR SINGLE, SIDELITE, HINGED PATIO AND FRENCH DOOR UNITS

REMOVE DOOR(S) FROM HINGES

- a) Remove old door bottom from panel by prying it off with a flathead screwdriver.
 *Remove any caulk from the panel and kerf slots using a scraping tool .
- b) Align the Door Bottom ⑤ with the panel and mark cut line within 1/32". Cut line should match length of panel (X).
- c) Cut down the Door Bottom ⑤ to match the length of the panel (X).
- d) Align Door Bottom flush with the **lock side** of the panel and insert kerfs into slots on door (Kerfed Applications Only).
- e) Proceed to step 10



11. Stapling Door Bottom to Panel (Z-AC 2.0 to Z-AC 2.0)

FOR SINGLE, SIDELITE, HINGED PATIO AND FRENCH DOOR UNITS

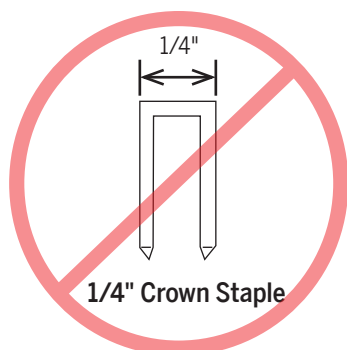
- a) Attach Door Bottom with **two 1/2" crown staples** and **80 PSI of air pressure** at ends between the rigid ramp and flex fins.

! When stapling the Z-AC Door bottom to the panel, staples should be inserted between the **Rigid Ramp** and **Flex Fins**. Staples should be aimed away from the kerf slots in the bottom of the panel to prevent cracking of the door bottom, or damage to the kerfs.

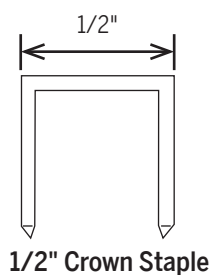
! The insertion of staples at an angle or in the wrong location will result in damage to the door bottom

- b) **STAPLE ON SWEEP-** If using a staple-on door sweep, staple on both sides approximately every 6" along the length of the door.
c) Proceed to step 12

Incorrect Size Staple



Correct Size Staple

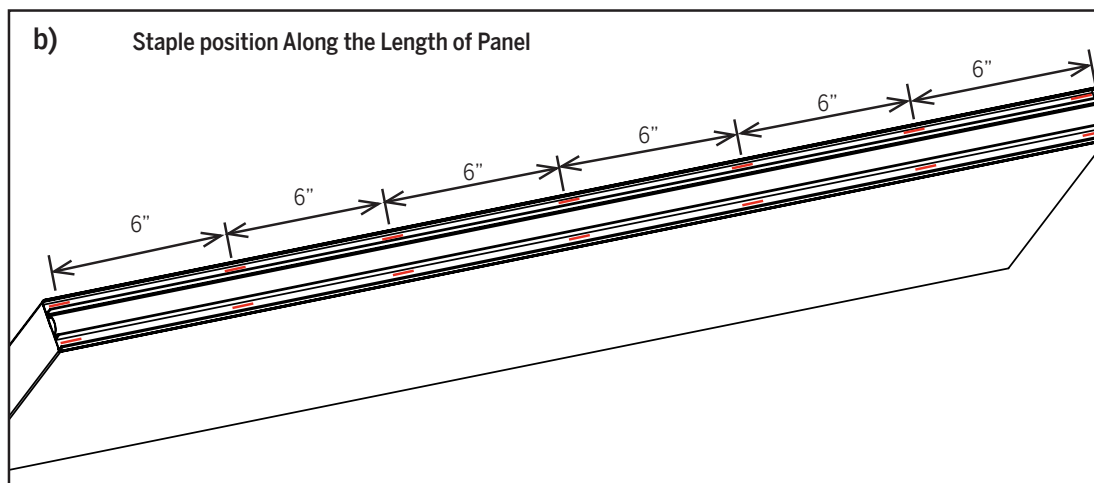
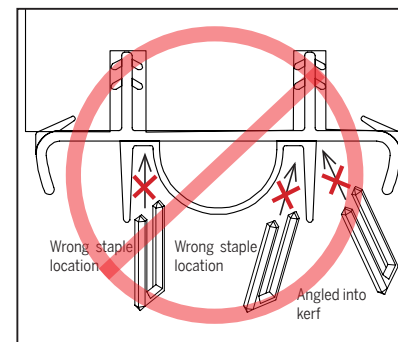
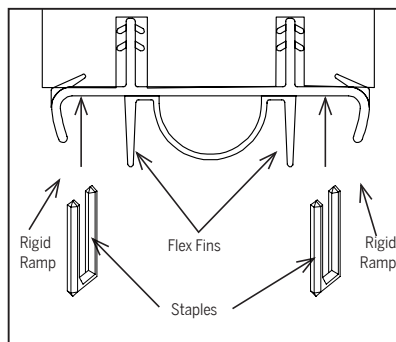
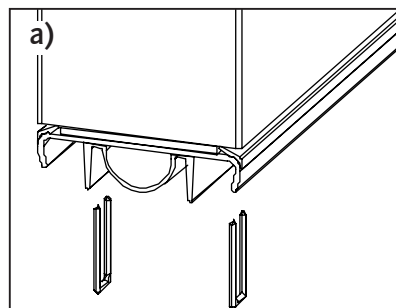


Only 1/2" crown staples should be used to secure the door bottom to the panel. The use of staples with a shorter crown such as crown 1/4" staples will result in cracking and damage to the door bottom.

Required Air Pressure



! Use 80 PSI of air pressure to insert staples. Endura suggests using an air pressure regulator for best results.



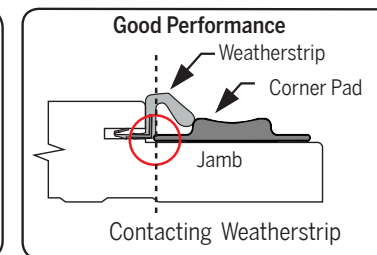
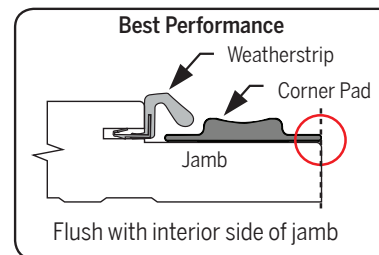
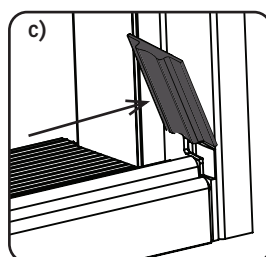
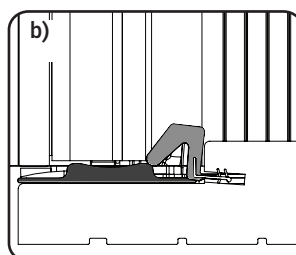
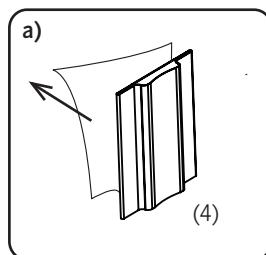
12. Replace Corner Pads (Z-AC 2.0 to Z-AC 2.0)

FOR SINGLE, SIDELITE, HINGED PATIO AND FRENCH DOOR UNITS

Ensure that the old corner pad has been removed from each jamb.

NOTE: For best performance, Do not reapply old/used corner pad. Replace with a new Simple Solution Corner Pad for this step.

- Remove backing paper from Simple Solution Corner Pad (4) to expose adhesive.
- Align Simple Solution Corner Pad with the top of Z-End Base and **inside edge** of the jamb.
- Ensure the Simple Solution Corner Pad contacts the top surface of the Z-End Base and attach to jamb.
- Repeat Steps a - c for the second jamb
- Proceed to step 12.



⚠ Suggested for strike margins of 1/8" or less

13. Check the Operation of the Door

Close and open the door several times

- Ensure that the door opens and closes smoothly.
- Ensure the cap operates properly up and down as the door is opened and closed.
- Ensure that Door Bottom makes contact with the Z-AC as the door is closed.
- Ensure the Panel makes contact with the Corner Pad and Z-End Bases.

If you have any questions, please contact your Endura Sales Representative or call Customer Service: 1-800-334-2006



The information contained in this document is the confidential and proprietary information and trade secrets of Endura Products, Inc. Any disclosure, use or dissemination of such information without the express written permission of Endura Products, Inc. is strictly prohibited. Endura Products, Inc. also owns any and all intellectual property rights embodied in such information, including patent rights, copyrights, and trademark rights, and no license of any intellectual property right is intended, nor should any license be implied, as a result of the receipt of this document.

US Patents: 6,789,358; 7,350,336; 8,522,483; 8,991,100; 8,991,101; D722,388; D638,958; D722,387; D722,388; D713,976 and Patents Pending.
Canadian Patents: 2,771,705; D139,250 and Canadian Patents Pending.
Rev 11.19.15

8817 West Market Street, Colfax, NC
800/334-2006 www.enduraproducts.com