

Window Accessories Installation Manual

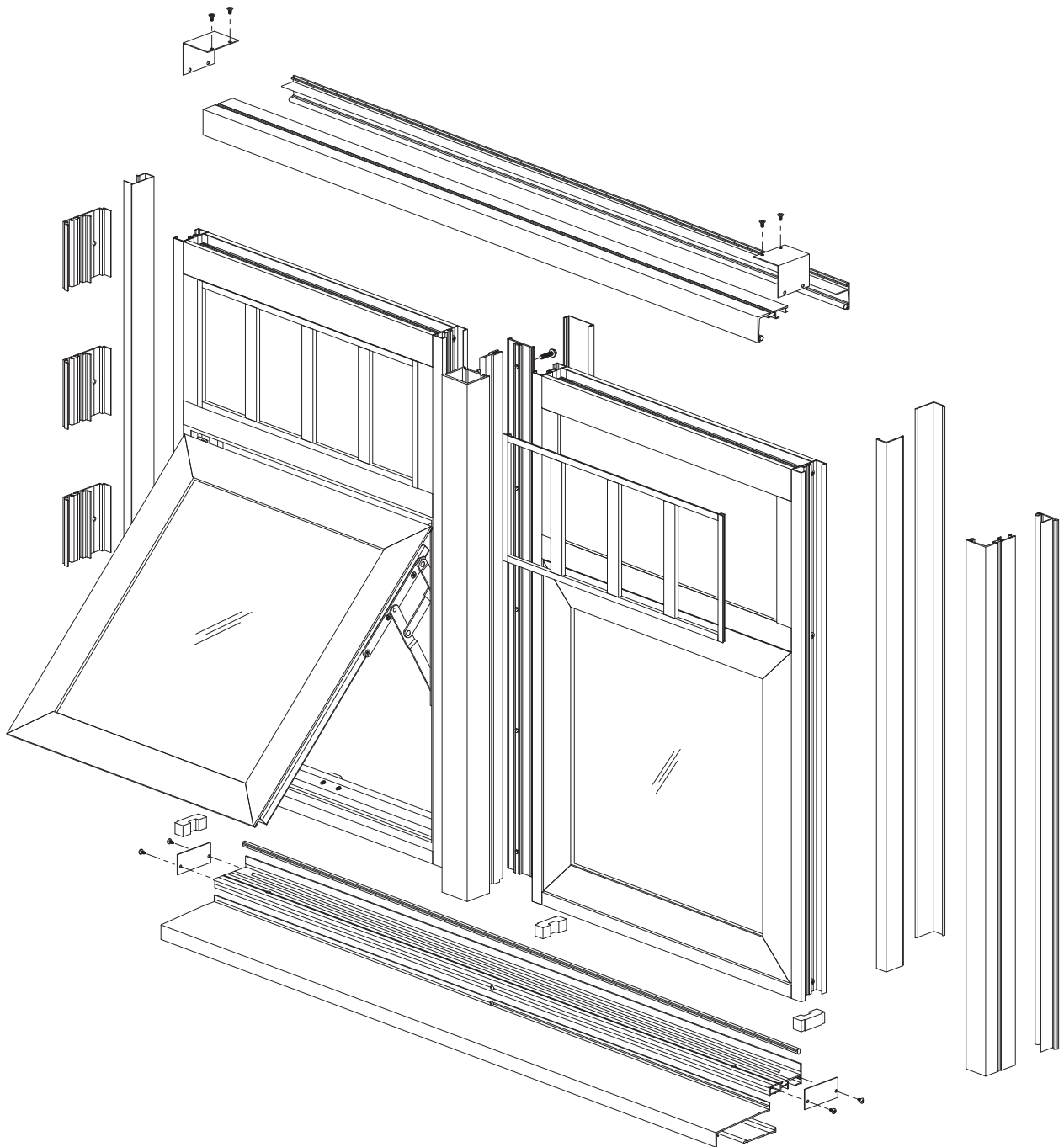


TABLE OF CONTENTS

Installation Notes Page ii & iii

2-1/4" WINDOW DEPTH ACCESSORIES INSTALLATION (YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)

2-1/4" Window Jamb Plugs Page 1
2-1/4" Window Depth Sill Flashings Pages 2 to 7
2-1/4" Window Depth Head / Jamb Receptors..... Pages 8 to 14
2-1/4" Window Depth Strap Anchors..... Page 15
2-1/4" Window Depth Steel Twist Anchors..... Page 16
2-1/4" Window Stacking Mullions Pages 17 to 23
2-1/4" Window I-Mullion..... Pages 24 & 25

3-1/2" WINDOW DEPTH ACCESSORIES INSTALLATION (YOW 350 T, YOW 350 TU, YOW 350 TUH, & YOW 350 XT)

3-1/2" Window Jamb Plugs Page 26
3-1/2" Window Depth Sill Flashings Pages 27 to 32
3-1/2" Window Depth Head / Jamb Receptors..... Pages 33 to 38
3-1/2" Window Depth Strap / Twist Anchors Page 39
3-1/2" Window Depth Stacking Mullions..... Pages 40 to 45
3-1/2" Window Zero Mullion Pages 46 & 47
3-1/2" Window Mullion Clip..... Pages 48 & 49

4" WINDOW DEPTH ACCESSORIES INSTALLATION (YFW 400 TU, YFW 400 TUH, YVS 400 TU, YVS 410 TU, YVS 410 TUH, & YSW 400T)

4" Window Jamb Plugs..... Page 50
4" Window Depth Head / Jamb Receptors..... Pages 51 to 55
4" Window Depth Head / Jamb Receptors..... Pages 56 to 62
4" Window Depth Strap / Twist Anchors Page 63
4" Window Depth Stacking Mullions / Horizontals..... Pages 64 to 68

UNIVERSAL WINDOW ACCESSORIES

Edge Clip Anchor Installation Page 69
Trim & Clip Anchor Installation Page 70
Panning Options Pages 71 to 73

INSTALLATION NOTES

1. Do not drop, roll or drag boxes of aluminum framing. Move and stack boxes with proper support to prevent distortion. If fork lifts are used, be especially careful about striking the boxes when lifting or moving.
2. Store in a dry, out of the way area. If rain exposure, condensation or any water contact is likely, then all packaging material should be removed. Wet packaging materials will discolor and may stain aluminum finishes and paints.
3. All materials should be checked for quantity and quality upon receipt, YKK AP must be notified immediately of any discrepancies in shipment. Check to make sure that you have the required shims, sealants, supplies, and tools necessary for the installation.
4. Carefully check the openings and surrounding conditions that will receive your material. Remember, if the construction is not per the construction documents, it is your responsibility to notify the general contractor in writing. Any discrepancies must be brought to the general contractor's attention before you proceed with the installation.
5. Collect your shop drawings, materials, packing list, and this installation manual. Carefully review parts location, the sequence of installation, when you glaze it, and how you seal it. Installation instructions are of a general nature and may not cover every condition you will encounter. The shop drawings and/or installation manuals were prepared specifically for the product.
6. Any material substitutions must be of equal or greater quality.
7. Make certain that material samples have been sent for compatibility testing for all manufacturer's sealants involved. Make certain that sealants have been installed in strict accordance with the manufacturer's recommendations and specifications.
8. Consult sealant manufacturer for proper sealant and backer rod selection.
9. Remember to isolate, in a approved manner, all aluminum from uncured masonry or other incompatible materials.
10. System-to-structure fasteners are not supplied by YKK AP. Fasteners called out on shop drawings are to indicate minimum sizes for design loading.
11. If any questions arise concerning YKK AP products or their installation, contact YKK AP for clarification before proceeding.

INSTALLATION NOTES

12. YKK AP window installation is typically completed before drywall, flooring and other products which may still be in process. Take the extra time to wrap and protect the work produced.
13. Cutting tolerances are plus or minus one thirty second unless otherwise specified.
14. YKK AP windows are prefinished, prefabricated, and preassembled products, and must be protected against damage.
15. Concrete, mortar, plaster, muriatic acid and other alkaline and acid based construction and cleaning materials may be very harmful to window finishes and should be removed with water and mild soap immediately or permanent damage or staining of the finishes will occur. A spot test is recommended before any cleaning agent is used, and abrasive type cleaners must never be used.
16. Windows are never to be used as ladders, step stools, scaffolds or scaffold supports.
17. All work must start from, and be referenced to benchmarks, offset lines and/or column centerlines established by the architectural drawings and the general contractor.
18. All windows must be installed plumb, square, level and true, and in accordance with approved shop drawings and these installation instructions.
19. Glass and glazing building codes governing the design and use of products vary widely. YKK AP America Inc. does not control the selection of products, product configurations, operating hardware and function, or glazing materials, and YKK AP assumes no responsibility for these design considerations. It is the responsibility of the design professional, owner, architect, specifier, general contractor, and the installer to make these selections in strict accordance with all applicable codes.
20. Do not fasten ceiling support angles, blind pockets, drapery tracks, convector covers or stools to the windows or the receptors. The window system is not designed to support the additional load and must be free to expand and contract under normal thermal cycling conditions.
21. Check our website, www.ykkap.com, for the latest installation manual update prior to commencing work.

2-1/4" WINDOW JAMB PLUGS

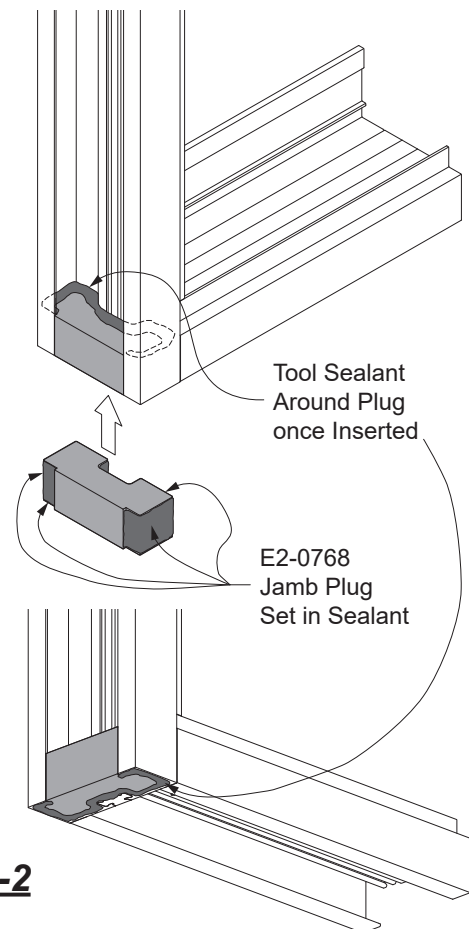
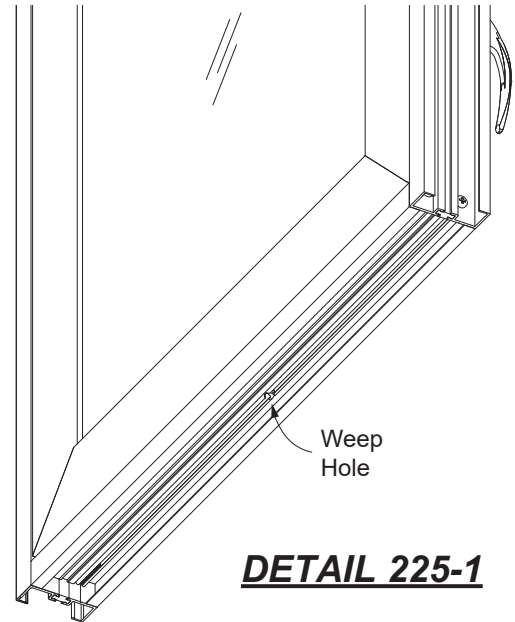
(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)

For use with sill flashing:

Note: If the window itself doesn't have weep holes at the bottom as shown in **Detail 225-1**. (i.e. weepless), then disregard this procedure and skip to the next page.

-Apply sealant to all contact sides of the E2-0768 jamb plug and insert it into both jambs, flush with the bottom of the frame. Tool sealant at the top and bottom of the plug to ensure any gaps between the plug and the jamb are completely filled.

See **Detail 225-2**.



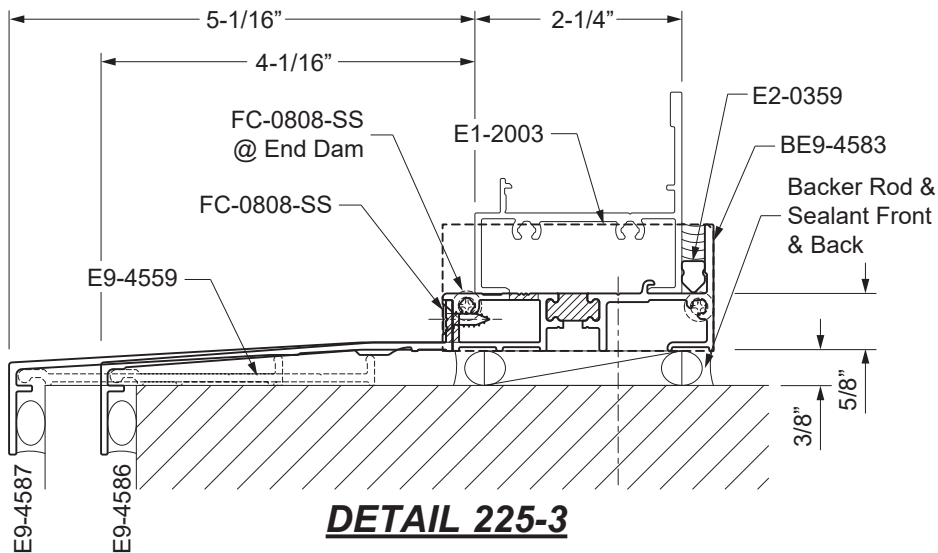
2-1/4" WINDOW DEPTH SILL FLASHING

(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)

- BE9-4583 is used for all 2-1/4" deep operable windows.
- Optional sill extenders may be used depending upon the project.

-Sill flashing must be installed and sealed (3/8" caulk joint) both front and back before installation of sill extenders E9-4586 or E9-4587..

See **Detail 225-3**.



2-1/4" WINDOW DEPTH SILL FLASHING

(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)

Fabricate Sill Flashing:

-Cut the sill flashing to the dimension as shown on the approved shop drawings.

For applications without jamb receptors, Frame Width + 1/4".

For applications with jamb receptors, Frame Width + 2-3/4".

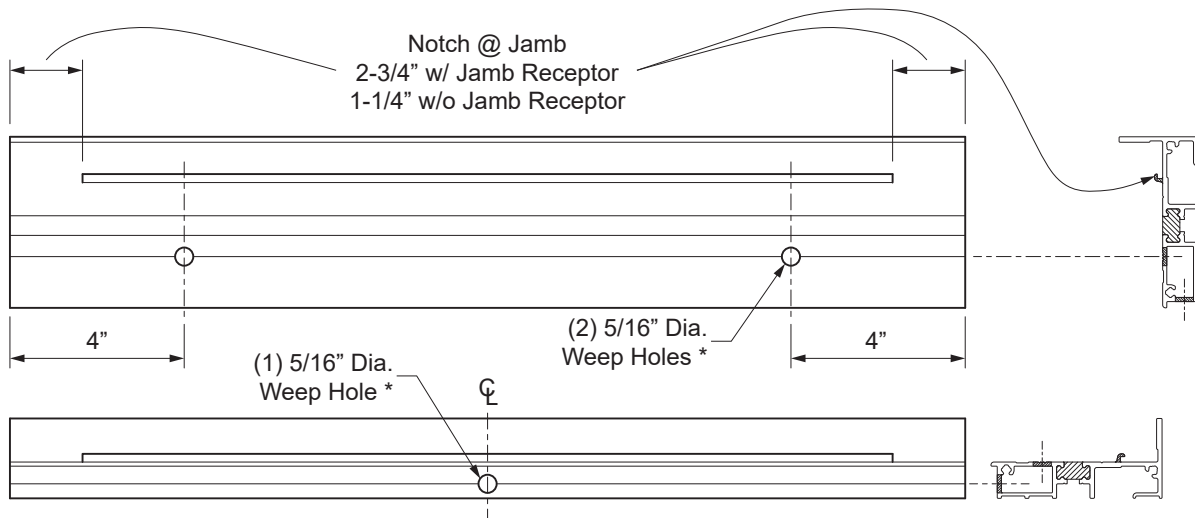
Note: The sill flashing may support multiple window units within the width of the rough opening.

-Notch the return leg of the sill flashing as shown in **Detail 225-4** around the jambs. For notching at stacking or zero mullions, see **Detail 225-5** on **Page 5**.

For Sill Flashing without Optional Sill Extenders:

-Drill 5/16" diameter weep holes into the sill flashing, two on top of it, 4" from each end per window unit width, and one in front of the flashing at the midpoint of each window unit width.

For Sill Flashing with Optional Sill Extenders: The weep holes at the front of the sill flashing should be match drilled at the jobsite after installing the sill extenders to the sill flashing. See **Pages 4** and **5**.



DETAIL 225-4

* **Note:** Weep holes in sill flashing not required for weepless windows.

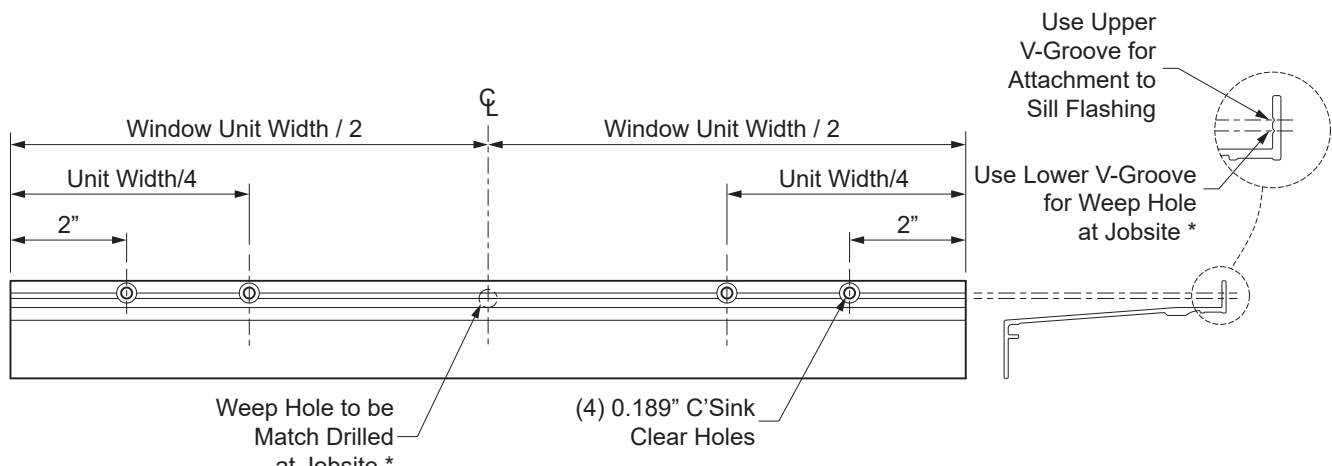
2-1/4" WINDOW DEPTH SILL FLASHING

(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)

Fabricate Optional Sill Extenders:

-Drill 0.189" countersunk holes at the upper V-groove, 4" from each end per unit width and at the quarter points of each window unit width. Match drill 0.141" diameter tap holes into the sill flashing for anchorage. Do not drill the weep hole at this time.

See **Detail 225-5**.



DETAIL 225-5

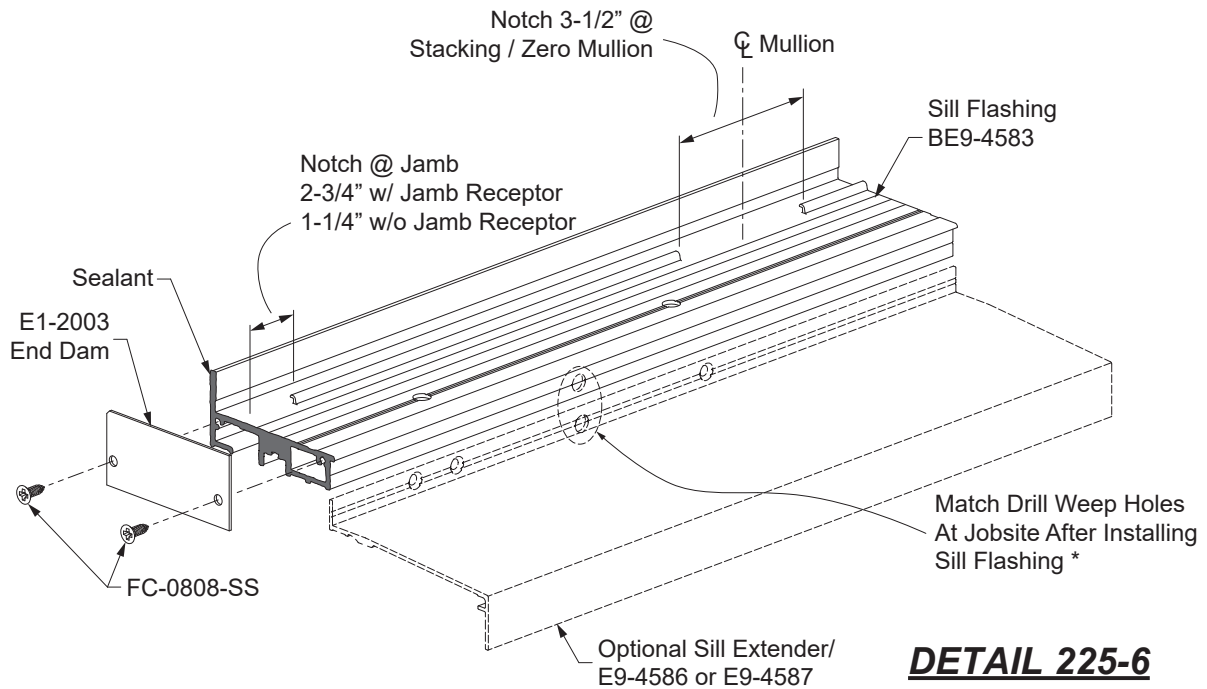
* **Notes:** Weep holes in sill flashing not required for weepless windows. See notes on **Detail 225-9** for weep hole fabrication.

2-1/4" WINDOW DEPTH SILL FLASHING

(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)

- Apply sealant to the end of the sill flashing.
- Install the E1-2003 end dam with two FC-0808-SS screws at each end of the flashing.
- Tool the sealant at the end dam to ensure a water tight seal.

See **Detail 225-6**.



DETAIL 225-6

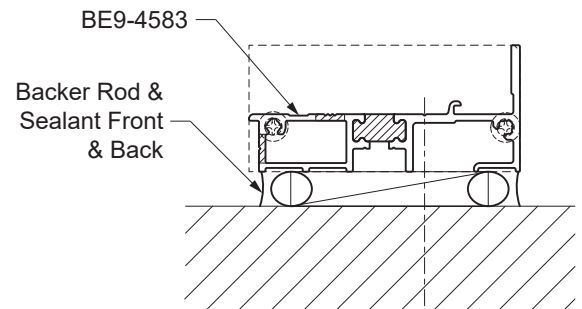
* **Note:** Weep holes in sill flashing not required for weepless windows.

Install the Sill Flashing:

-If a head receptor is used, locate the sill flashing plumb from the head receptor. Fasten the sill flashing into the substrate using anchor fasteners specified by Florida Product Approvals and or engineering calculations. Seal anchor fastener heads.

-Apply backer rods and sealant front and back at the sill flashing.

See **Detail 225-7**.

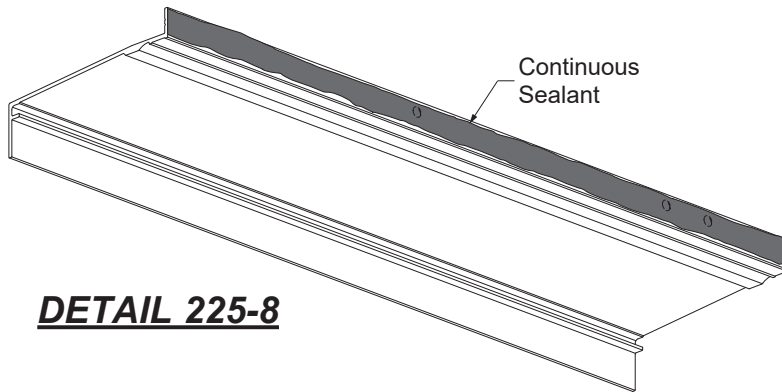


DETAIL 225-7

2-1/4" WINDOW DEPTH SILL FLASHING

(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)

-If using an optional sill extender, apply continuous sealant to the back of the extender as shown in **Detail 225-8**.



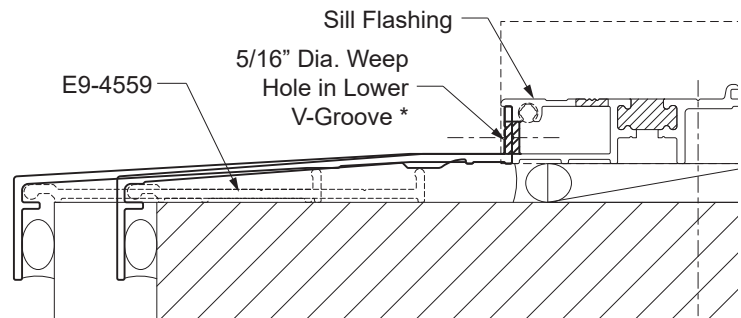
DETAIL 225-8

Install Optional Sill Extender:

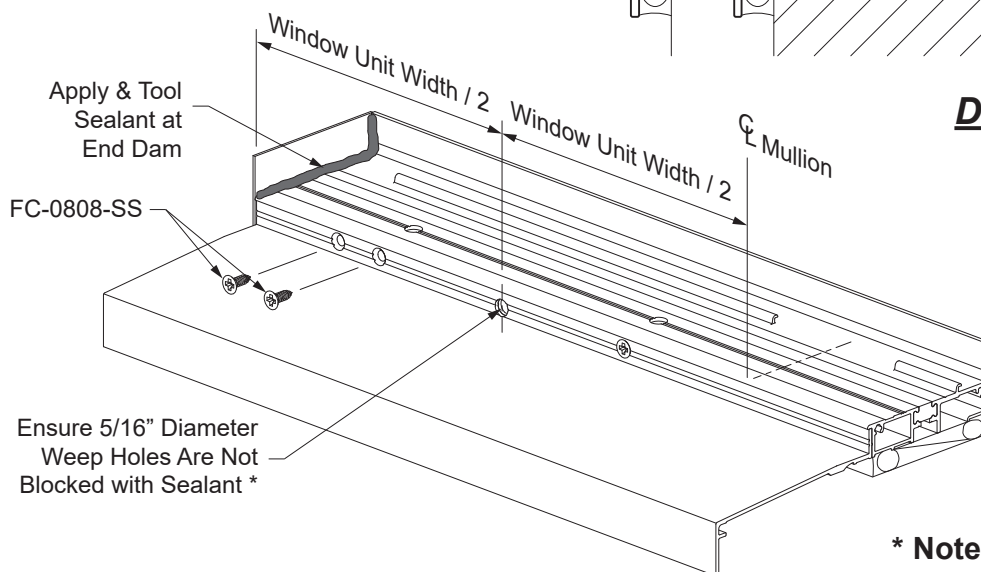
-Attach the extender using FC-0808-SS fasteners to the sill flashing along with E9-4559 sill trim base to the substrate.

-Match drill the 5/16" diameter weep holes into the lower V-Groove of the sill extender at the mid points of every window unit width. Wipe away excess sealant from the weep holes.

See **Detail 225-9**.



DETAIL 225-9



*** Note:** Weep holes in sill flashing not required for weepless windows.

2-1/4" WINDOW DEPTH SILL FLASHING

(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)

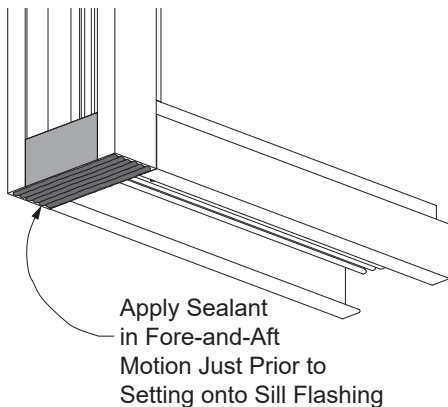
For use with sill flashing:

Notes: The following procedure is to be performed just prior to installing the window itself.
If receptors are used, refer to **Pages 8 thru 11** before installing the window.

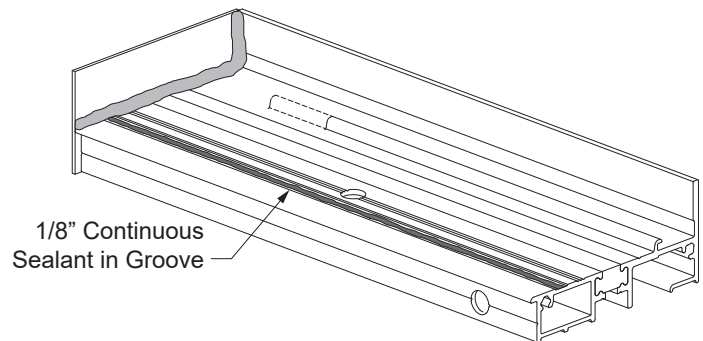
-Apply sealant (minimum 1/4" bead) to the bottom of the jamb plug in a fore-and-aft motion, covering the bottom of the jamb as shown in **Detail 225-10** (not required for weepless windows.)

-Apply continuous 1/8" minimum bead of sealant into the groove of the sill flashing as shown in **Detail 225-11**.
Ensure the sealant does not block any weep holes.

-Install the window immediately after application. Tool excess sealant.



DETAIL 225-10
Not required for weepless
windows.



DETAIL 225-11
Weep holes in sill flashing
not required for weepless
windows.

2-1/4" WINDOW DEPTH HEAD / JAMB RECEPTORS

(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)

-E9-4577 is used for YOW 225 & YOW 225 H, while BE9-4577 is used for YOW 225 TU and YOW 225 TUH.

-A minimum of 1/4" perimeter caulk joint is required.

-Receptors can be used at the head and or jamb. If jamb receptors are used, a sill flashing is required.

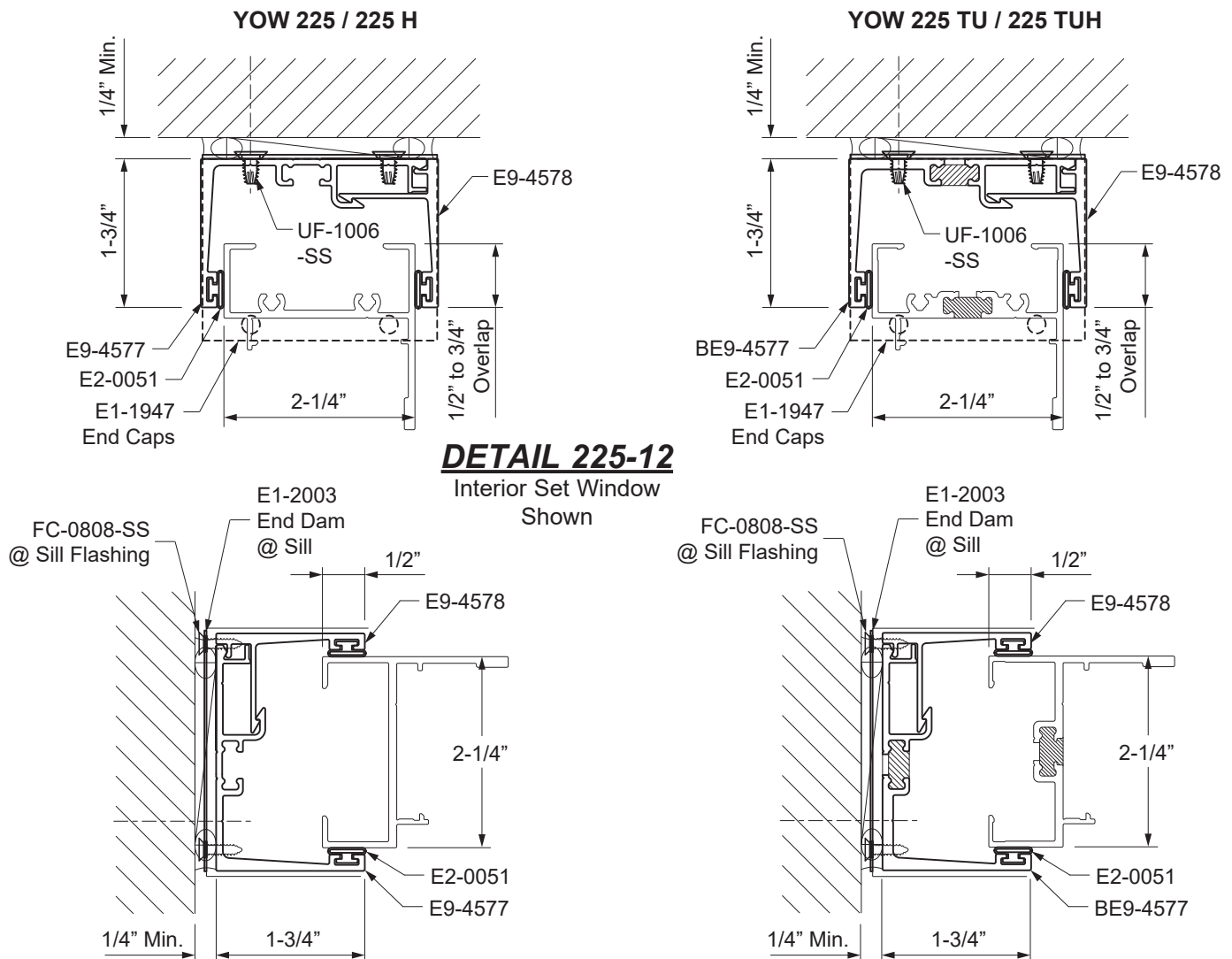
-Overlap with the window system itself is between 1/2" to 3/4" at head, 1/2" at jambs.

-E2-0051 bulb gasket is required and must be installed into the receptor and the receptor stop.

-E1-1947 end caps are required and must be attached at each end of the head receptor using UF-1006-SS fasteners (2 per end dam) prior to receptor installation.

See **Detail 225-12**.

Note: If a head and jamb receptor system is assembled in the shop, the system must be inspected on the job site prior to and after field installation. Reseal any cracked or broken seals.



2-1/4" WINDOW DEPTH HEAD / JAMB RECEPTORS

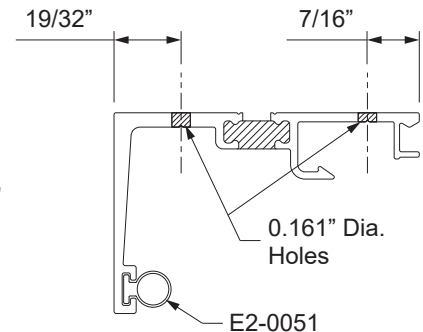
INSTALLATION OPTIONS AND PROCEDURES

Install window receptor system at the head only or at the head and jambs:

Note: sill flashing is required when using head and or jamb receptors.

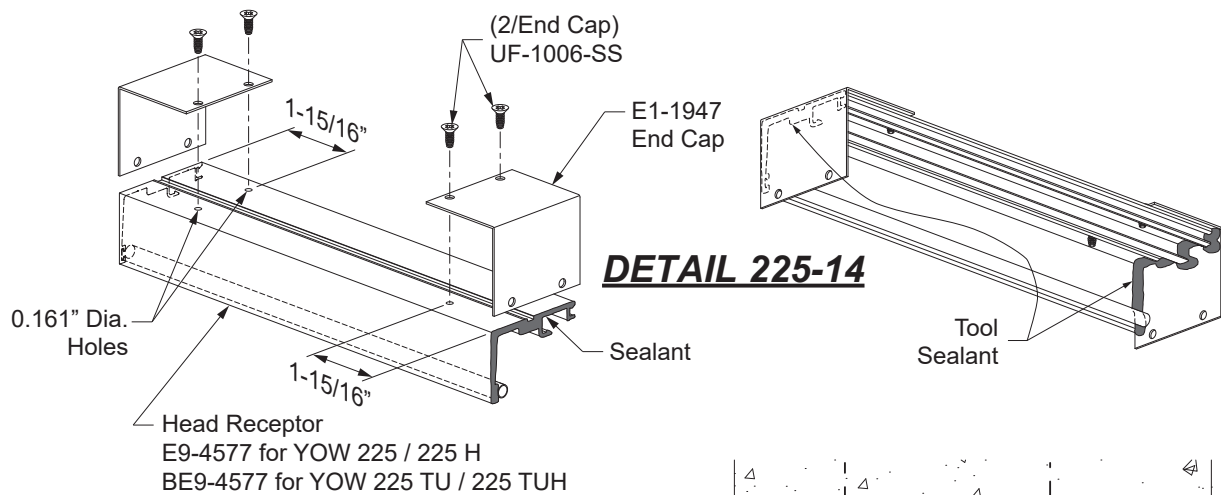
Head receptors must be assembled prior to installation.

- Drill (2) 0.161" dia. tap holes, 1-15/16" from each end, along the v-grooves located at the underside of the receptor.
- Cut E2-0051 bulb gasket to the length of the receptor plus (+) 1/4" and install it into the receptor reglet.
- Apply sealant to each end of the head receptor.
- Attach an end cap E1-1947 at each end of the head receptor with (2) UF-1006-SS screws.
- Tool the sealant to the end cap.



DETAIL 225-13

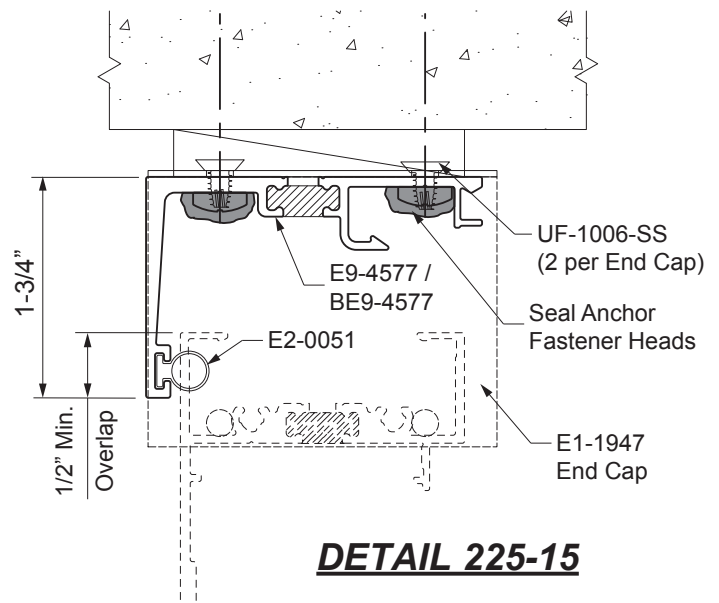
See **Details 225-13 & 225-14.**



DETAIL 225-14

- Refer to structural calculations to determine the size and location of anchor fasteners (minimum #10 fasteners).
- Shim and secure the exterior leg of receptor(s) using the required fasteners; 1/4" minimum joint width, 3/8" maximum.
- Seal anchor fastener heads for head and or jamb receptors.

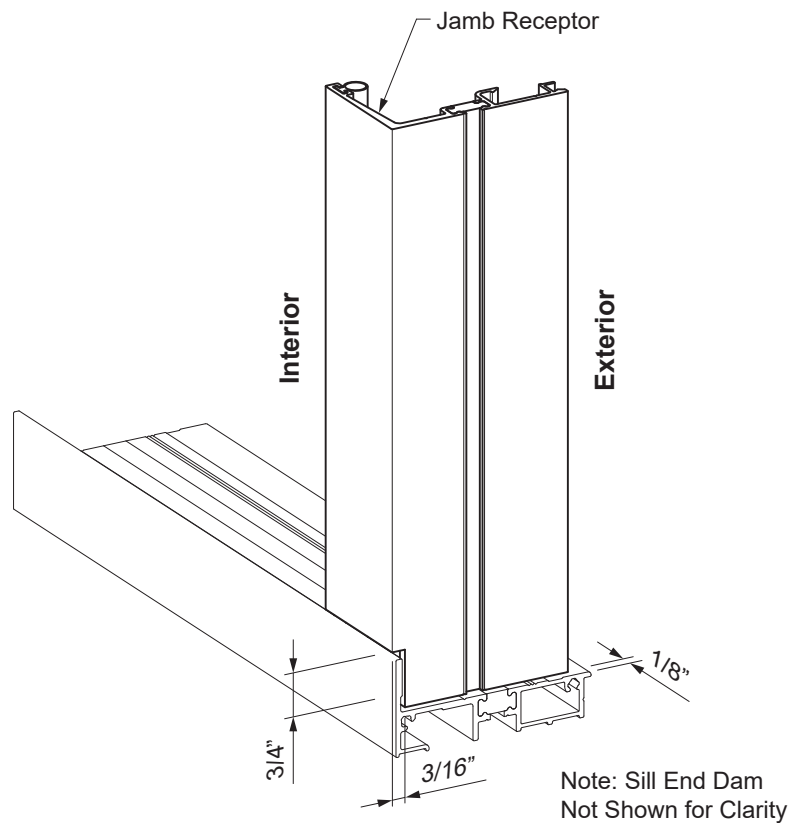
See **Detail 225-15.**



DETAIL 225-15

2-1/4" WINDOW DEPTH HEAD / JAMB RECEPTORS**INSTALLATION OPTIONS AND PROCEDURES**

-In applications where the receptor clip is installed on the exterior, the jamb receptor is to be notched around the sill flashing as shown in **Detail 225-16**. Note that it is to be installed 1/8" inward from the edge of the sill flashing.

**DETAIL 225-16**

2-1/4" WINDOW DEPTH HEAD / JAMB RECEPTORS

INSTALLATION OPTIONS AND PROCEDURES - JAMB RECEPTOR WITH SILL FLASHING

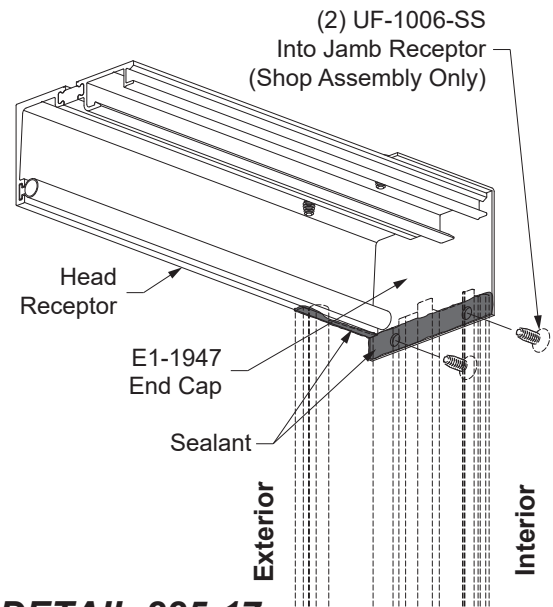
- When receptors are used at both the head and the jamb, the head receptor will run through. Sill flashing will also be required.
- Seal the intersection of receptors and end caps prior to anchoring the jamb receptor.
- If assembling a head and jamb receptor system in the shop, drill tap holes for #10 screws into the jamb receptor using the pilot holes in the end dam, and attach the end dam to the jamb receptor using (2) UF-1006-SS screws.

Note: This procedure is the same in cases where the orientation of the receptors is reversed.

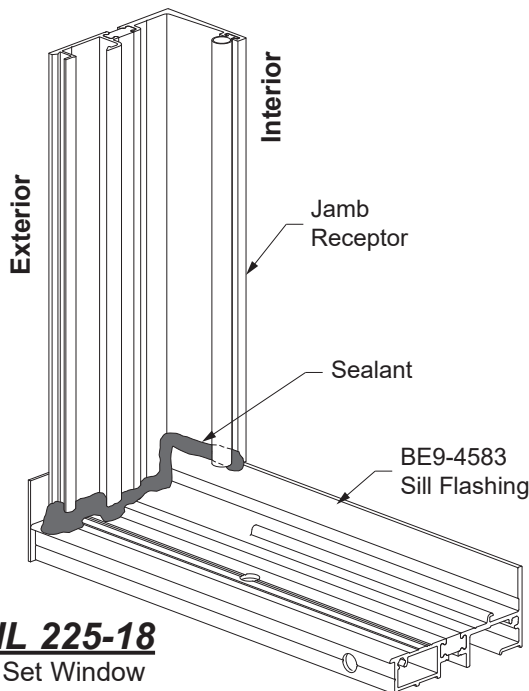
See **Detail 225-17**.

- Locate the jamb receptor on top of the sill flashing, inside the end dams and end caps at the head receptor. Shim as required and fasten the jamb receptor into the jamb substrate.
- Seal the jamb receptor at the sill flashing.

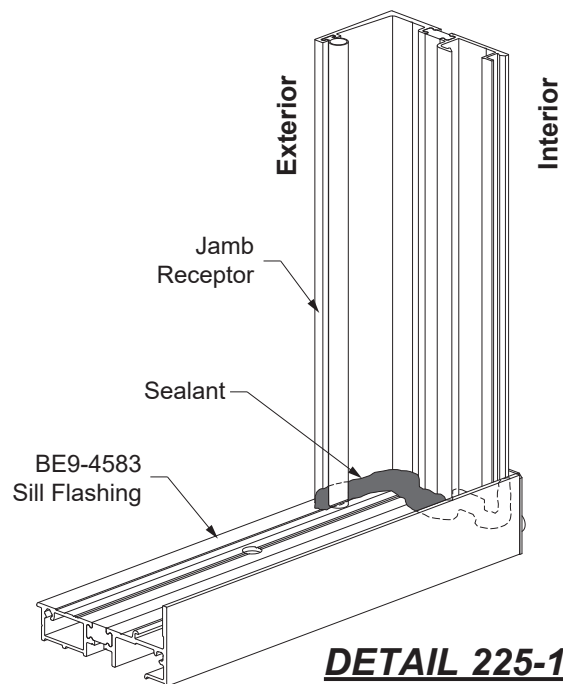
See **Details 225-18 & 225-18A**.



DETAIL 225-17



DETAIL 225-18
Exterior Set Window

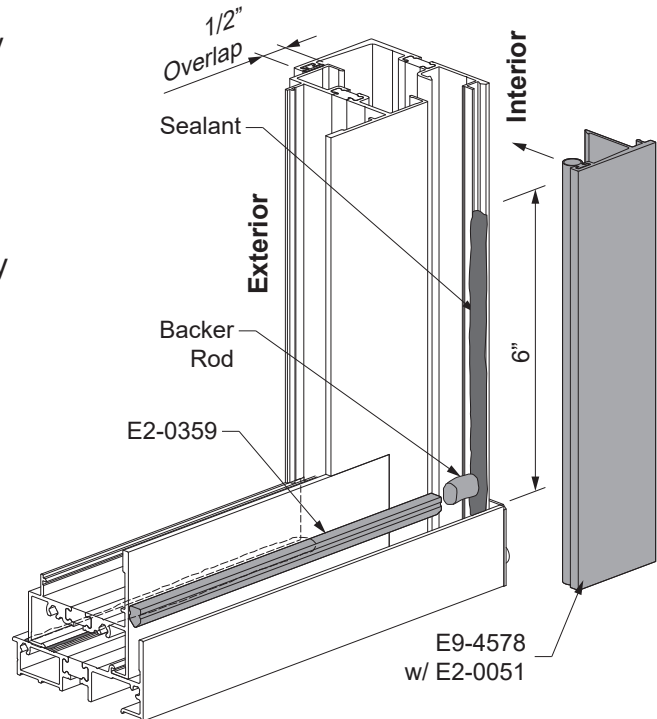


DETAIL 225-18A
Interior Set Window

2-1/4" WINDOW DEPTH HEAD / JAMB RECEPTORS

INSTALLATION OPTIONS AND PROCEDURES - JAMB RECEPTOR WITH SILL FLASHING

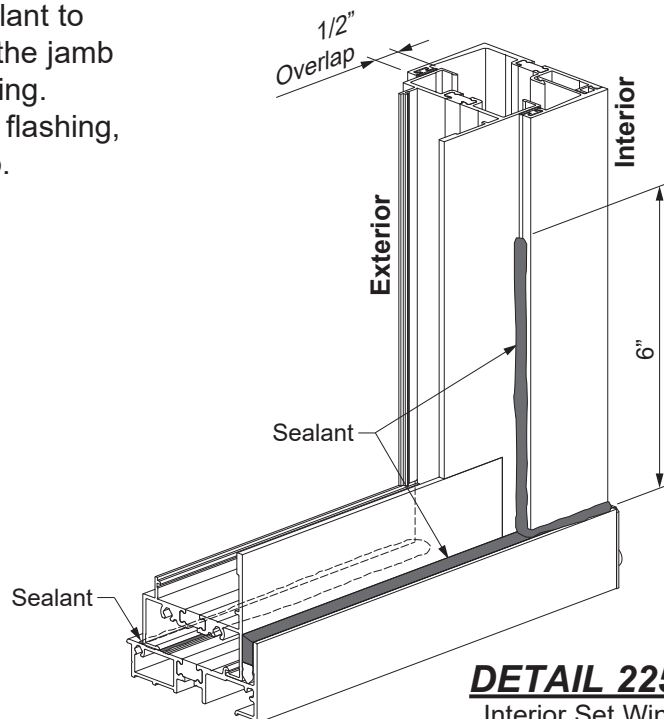
- Install the window frame into the opening.
- Shim the sill/jamb of the window to ensure that they are installed plumb, square, and level.
- Push in the E2-0359 spacer (cut to width of window frame) between the sill and sill flashing.
- Push in backer rod between spacer and jamb receptor. Fill cavity with sealant.
- Just prior to installing the interior receptor stop, apply sealant at the interior receptor snap, 6" from the top of the sill flashing as shown in **Detail 225-19**.
- Snap in interior receptor leg.



DETAIL 225-19
Interior Set Window

- After the receptor stop is installed, apply sealant to the gap in the sill flashing and to the joint of the jamb receptor up to 6" from the top of the sill flashing.
- Apply sealant to the front of the sill at the sill flashing, leaving a 1/2" to 3/4" weep gap at each jamb.

See **Detail 225-20**.



DETAIL 225-20
Interior Set Window

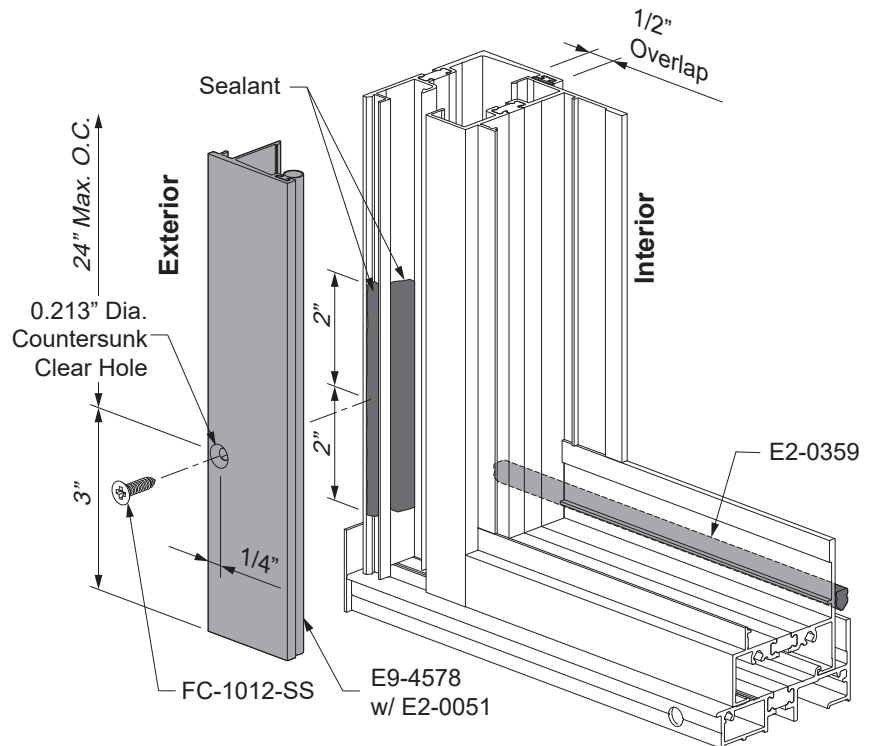
2-1/4" WINDOW DEPTH HEAD / JAMB RECEPTORS

INSTALLATION OPTIONS AND PROCEDURES - JAMB RECEPTOR WITH SILL FLASHING

-In applications where the receptor clip is installed on the exterior, the clip is to be cut to such that it runs continuously from the flat surface of the sill flashing to bottom of the head receptor.

-Additionally #10 flathead screws will be required to secure the clip onto the jamb receptor.

-Drill 0.213" diameter countersunk holes into the receptor clip as shown in **Detail 225-21** at 3" from each end and at maximum 24" on center.



DETAIL 225-21
Exterior Set Window

-Drill 0.161" diameter tap holes in the return leg where the clip snaps into the receptor, aligning with the clear holes in the receptor clip.

-Install the window frame into the opening.

-Push in the E2-0359 spacer (cut to width of window frame) between the sill and sill flashing. Apply sealant to the top of the spacer, filling in the void between the sill flashing and the window frame

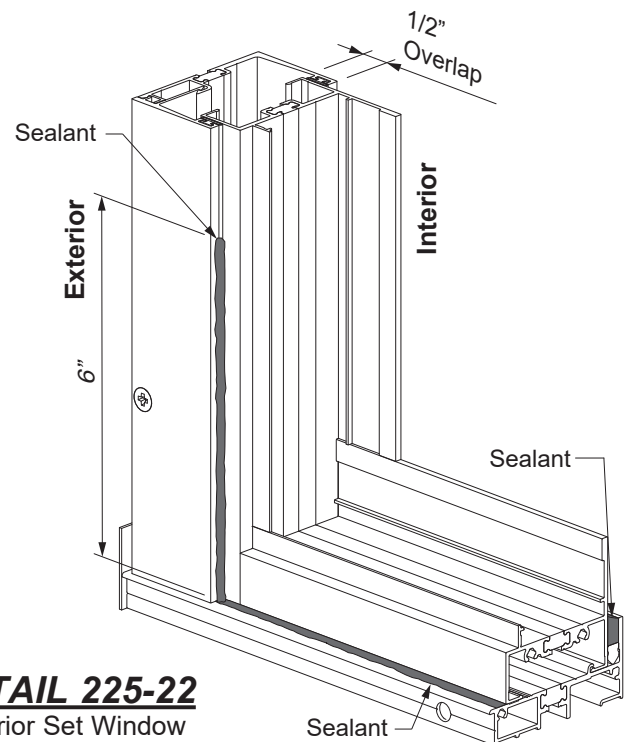
-Prior to snapping on the exterior receptor clip, apply sealant to the voids in the receptor, 4" long centered at the tap holes as shown in **Detail 225-22**.

-Snap in the exterior receptor clip.

-Apply sealant to the joint of the jamb receptor and the window frame up 6" from the top of the sill flashing.

-Apply sealant to the front of the sill at the sill flashing, leaving a 1/2" to 3/4" weep gap at each jamb.

See **Detail 225-22**.



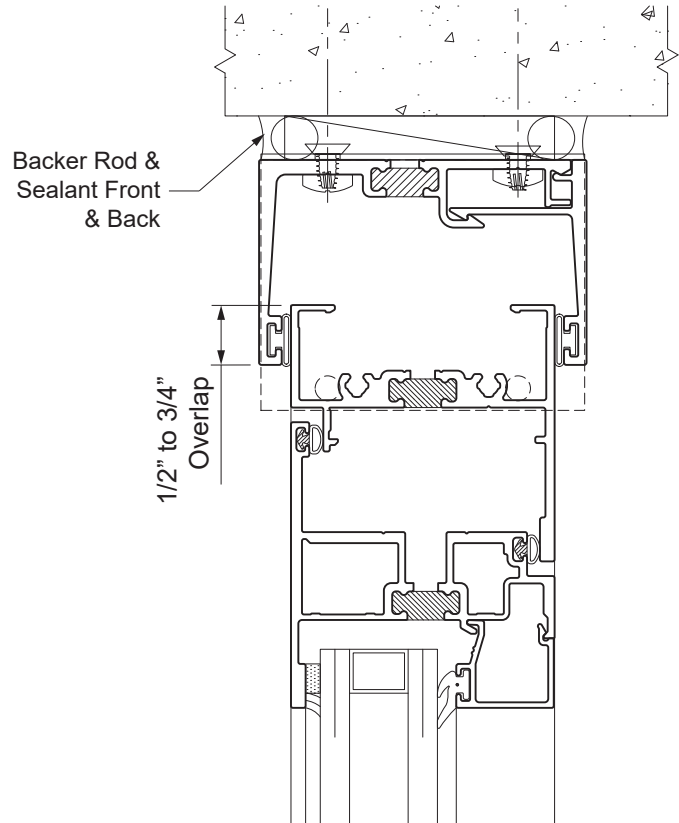
DETAIL 225-22
Exterior Set Window

2-1/4" WINDOW DEPTH HEAD / JAMB RECEPTORS**INSTALLATION OPTIONS AND PROCEDURES**

Seal Receptors and Sill Flashing

-Install backer rod and apply and tool perimeter sealant on both the exterior and interior.

See **Detail 225-23**.

**DETAIL 225-23**

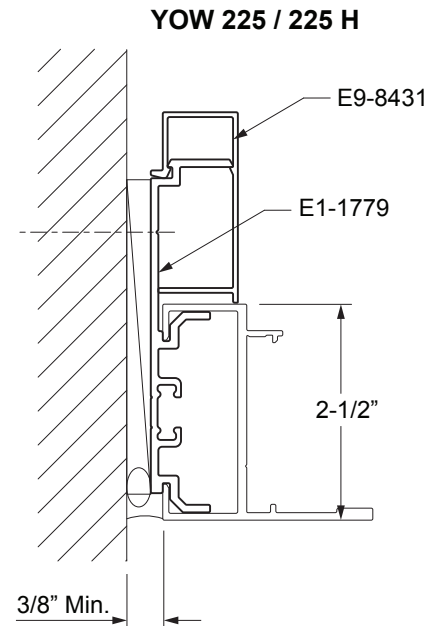
2-1/4" WINDOW DEPTH STRAP ANCHORS

(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)

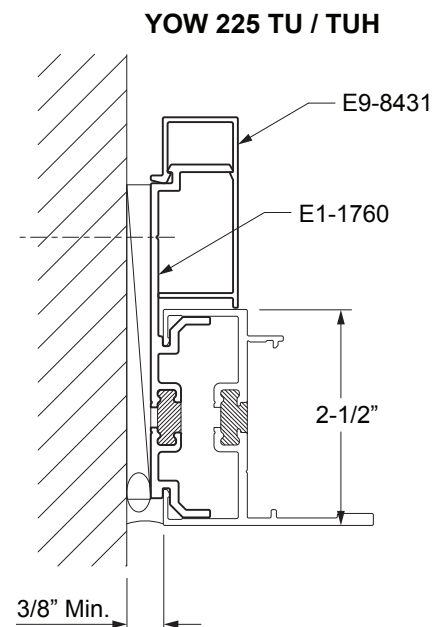
- E1-1779 is used for YOW 225 & YOW 225 H, while E1-1760 is used at YOW 225 TU and YOW 225 TUH. Both strap anchors use the E9-8431 interior cover.
- A minimum of 3/8" perimeter caulk joint is required. Strap anchors reduce the clearance into the rough opening by 1/8" on each side, 1/4" width and height.
- Anchor location and fastener size to be determined by test reports or engineer of record.

See **Details 225-24 & 225-25**.

Notes: Strap anchors can be used with interior sealant as long as the sealant is tooled. Strap anchors cannot be used at receptors nor at sill flashing.



DETAIL 225-24



DETAIL 225-25

2-1/4" WINDOW DEPTH TWIST ANCHORS

**APPROVED FOR UP TO WIND ZONE 3 ONLY
(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)**

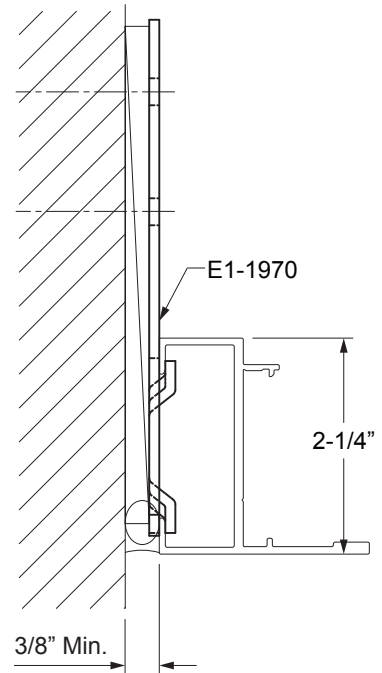
E1-1970 Steel twist anchors are available and when used, must be installed:

- A minimum of 3" from the corner of all frames.
- At 15" on center.
- A maximum of 3" on each side of the centerline of ventilator locking points.
- A maximum of 3" from the edge of framing joints or mullions.
- For full anchor engagement in the window frame, the twist anchor must be at 90° angle from the window.

-A minimum of 3/8" perimeter caulk joint is required.
Steel twist anchors reduce the clearance into the rough opening by 1/8" on each side, 1/4" width and height.

See **Detail 225-26**.

Notes: Twist anchors can be used with interior sealant as long as the sealant is tooled. Twist anchors cannot be used at receptors nor at sill flashing.



DETAIL 225-26
YOW 225 & YOW 225 H
Shown

2-1/4" WINDOW DEPTH STACKING MULLION

STACKING MULLION FABRICATION

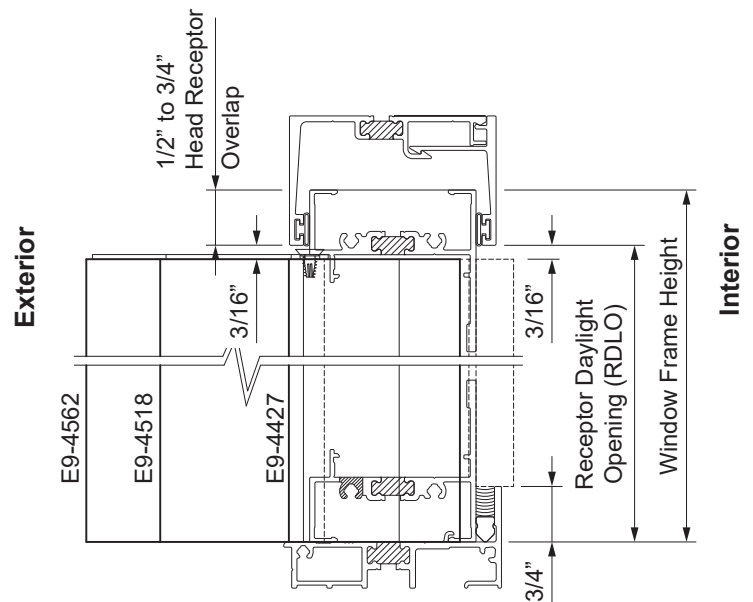
For use without head receptor:

-Stacking mullions are cut to window frame height.

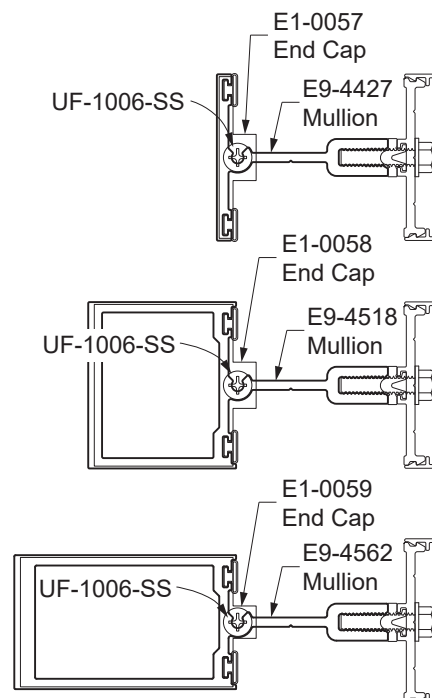
For use with head receptor:

-Stacking mullions are cut to receptor daylight opening minus 3/16".

See **Detail 225-27**.



DETAIL 225-27



2-1/4" WINDOW DEPTH STACKING MULLION

STACKING MULLION GENERAL INSTALLATION NOTES

-Stacking mullion anchor clips cannot be used with the sill flashing.

-Refer to the chart at right for proper window overlap with stacking mullions.

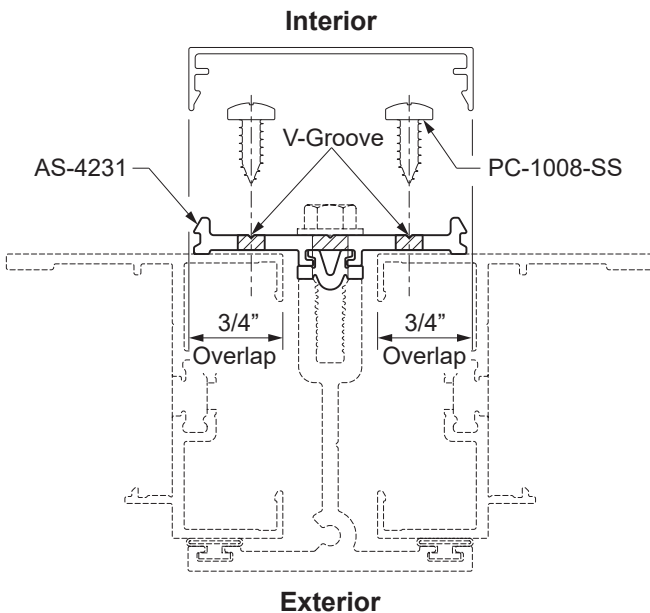
-The AS-4231 interior cover base is attached to the window jambs with PC-1008-SS screws. Refer to the Florida Product Approvals and or engineering calculations for vertical fastener spacing.

-Where 3/4" interior overlap is specified, drill 0.213" diameter clear holes for the PC-1008-SS screws at the v-groove in the interior cover base as shown in **Detail 225-28A**.

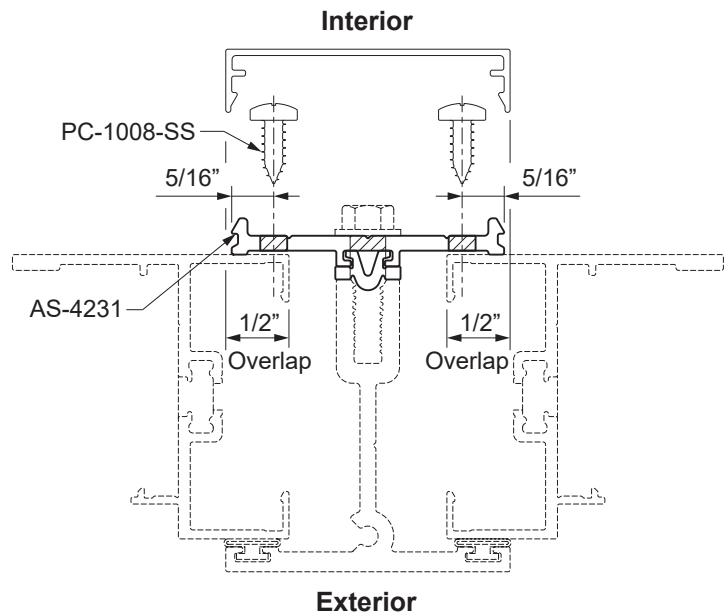
-Where 1/2" interior overlap is specified, drill 0.213" diameter clear holes for PC-1008-SS screws at 5/16" from the edge of the interior cover base as shown in **Detail 225-28B**.

-If stacking mullions are used with head receptors, see sealant instructions on **Page 23**.

Mullion No.	Max Pressure	Hinge Type	Overlap
E9-4427 or E9-4518	65 PSF	4-Bar Hinge	3/4" Exterior & Interior
E9-4427 or E9-4518	65 PSF	Butt Hinge	1/2" Exterior & Interior
E9-4562	80 PSF	4-Bar Hinge	1/2" Ext. ~3/4" Int.
E9-4562	80 PSF	Butt Hinge	1/2" Ext. ~3/4" Int.



DETAIL 225-28A

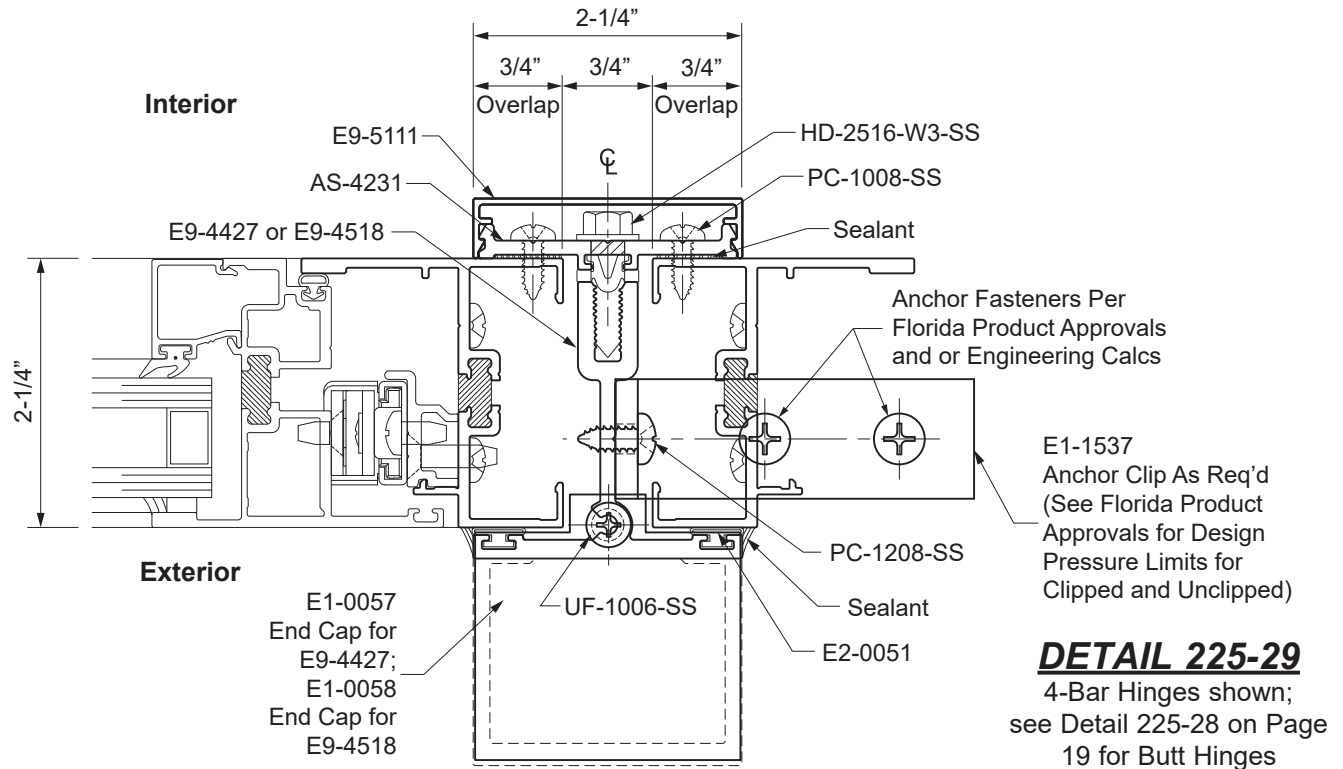


DETAIL 225-28B

2-1/4" WINDOW DEPTH STACKING MULLION

65 PSF MAXIMUM

(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)



DETAIL 225-29
4-Bar Hinges shown;
see Detail 225-28 on Page
19 for Butt Hinges

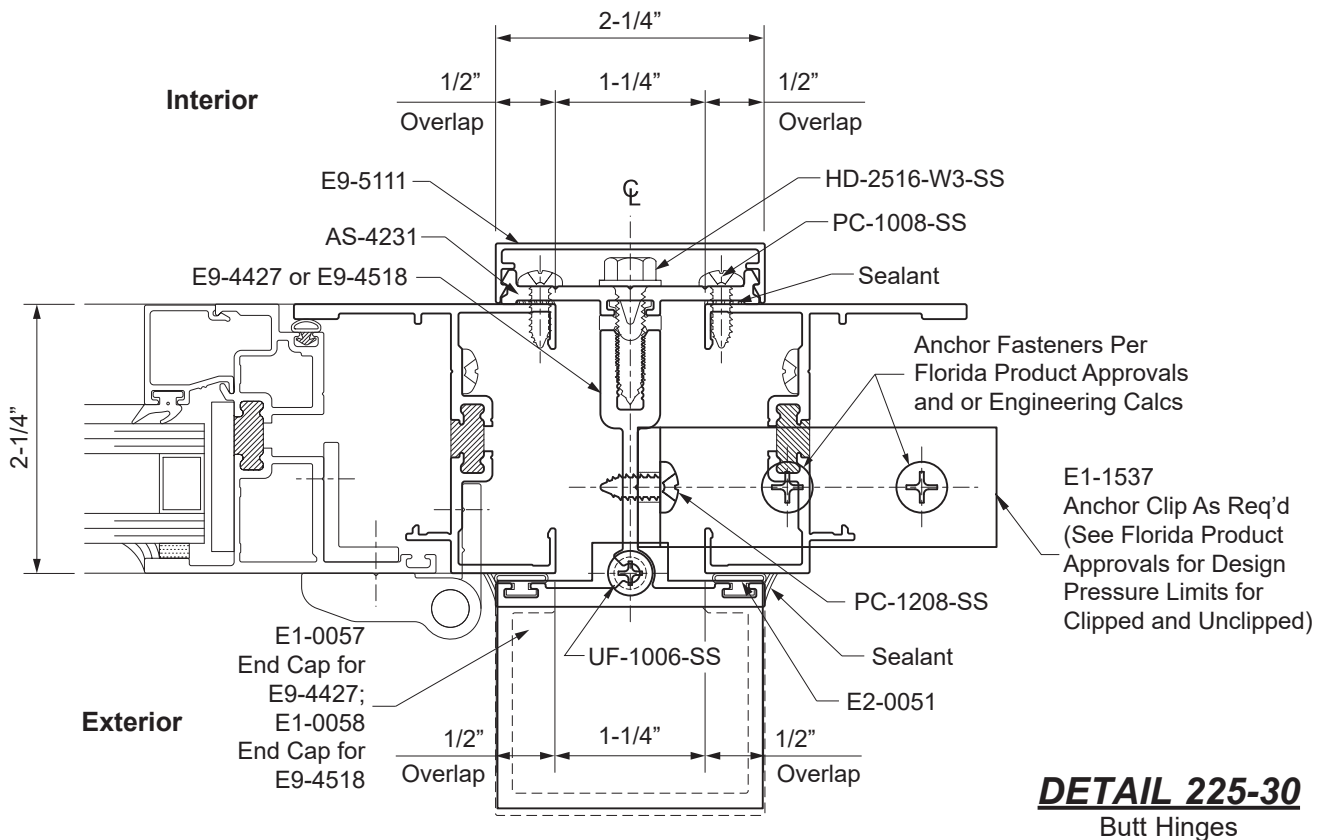
1. Install the first window assembly into the opening according to the installation instructions for that system.
2. Cut two pieces of gasket, E2-0051, to stacking mullion height and install into the reglets.
3. Install mullion end cap to each end of the stacking mullion with a UF-1006-SS fastener.
Note: Mullion end cap required only at the head if sill flashing is used.
4. If using anchor clips, attach them to what will be the open side of the stacking mullion:
 - Attach anchor clip, E1-1965, to the top and bottom of one side of the stacking mullion such that each clip extends 1/4" past the end of the mullion.
 - Attach anchor clips with two PC-1208-SS fasteners at each end (do not completely tighten yet).**Note:** Refer to engineer of record or Florida Product Approvals for the use of clipped or unclipped mullions.
5. Install the stacking mullion into the opening according to **Detail 225-29** on for 4-bar hinges or **Detail 225-30** on **Page 20** for butt hinges:
See Installation instructions for applications with higher loads on **Page 21**.
 - Slide each anchor clip tight against the masonry.
 - Attach each anchor clip to the masonry with two flat head fasteners.
 - Now completely tighten the PC-1208-SS fasteners used to attach the anchor clips to the mullion.

2-1/4" WINDOW DEPTH STACKING MULLION

65 PSF MAXIMUM

(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH) - CONTINUED

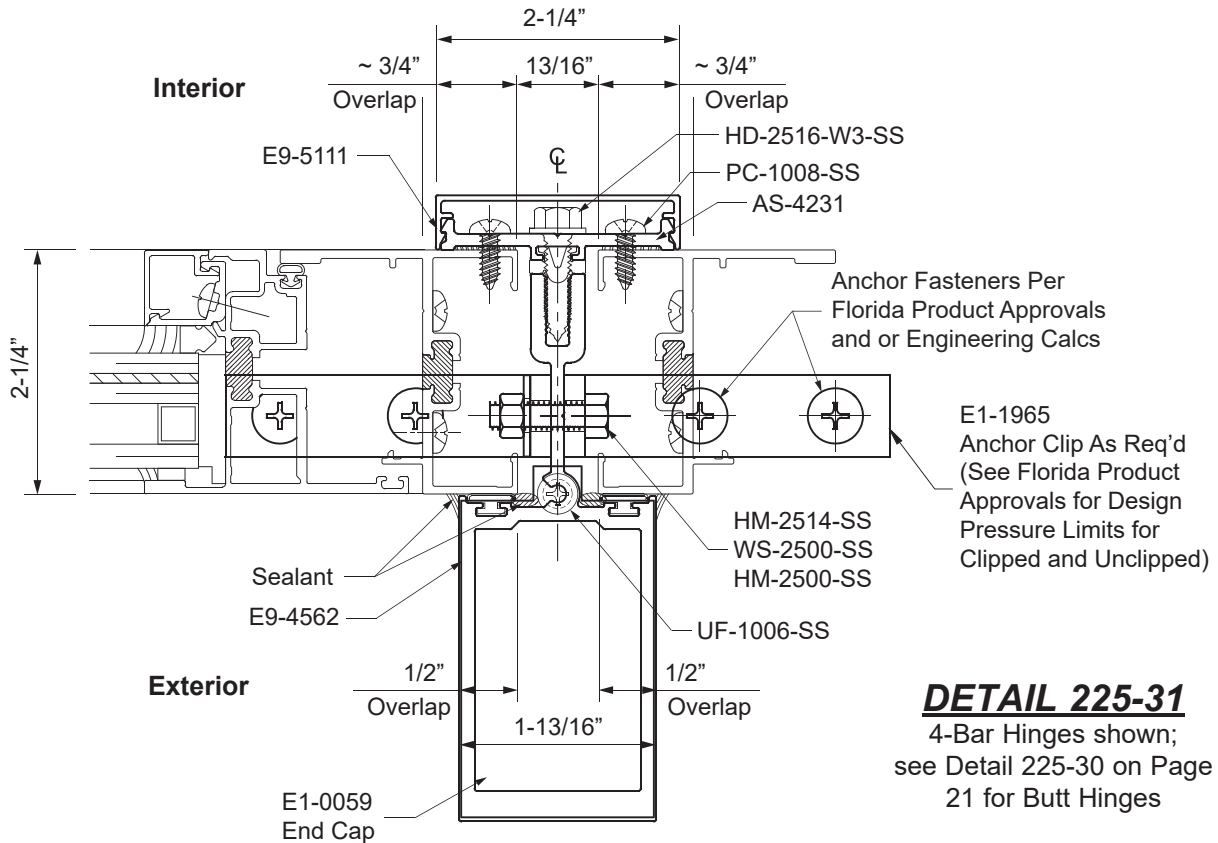
6. Carefully slide the second window assembly in and anchor it to the masonry.
7. To ensure a watertight seal run a bead of sealant up each interior frame jamb at the stacking mullion. Additionally, run a cap seal along the joint between the exterior frame jambs and the stacking mullion. If the exterior of the window is inaccessible, sill flashing must be used and stack mullion to be unclipped application only.
8. Attach the pressure plate, AS-4231, to the stacking mullion:
 - Install HD-2516-W3-SS fasteners at 1-1/2" from each end maximum and then 9" on center.
 - Pressure plates are pre-drilled; drill additional 0.281" diameter (#9/32) holes if necessary.
 - Start installing fasteners at the center of the pressure plate and work towards each end.
 - Torque each fastener to 40 to 45 inch-pounds.
9. Install PC-1008-SS fasteners, one on each side, through the pressure plate into the window frames:
 - (2) 6" from top and bottom of the frame and at 12" max. O.C.
10. Install snap cover, E9-5111, starting from the bottom and work up the mullion.
11. Run a cap seal between the frame and stacking mullion at the exterior. If the exterior of the window is inaccessible, sill flashing must be used and stack mullion to be unclipped.



2-1/4" WINDOW DEPTH STACKING MULLION

80 PSF MAXIMUM

(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)



DETAIL 225-31

4-Bar Hinges shown;
see Detail 225-30 on Page
21 for Butt Hinges

1. Install the first window assembly into the opening according to the instructions on Pages 1 thru 8.
2. Cut two pieces of gasket, E2-0051, to stacking mullion height and install into the reglets.
3. Install mullion end cap, E1-0059, to each end of the stacking mullion with a UF-1006-SS fastener.
Note: Mullion end cap required only at the head if sill flashing is used.

4. If using anchor clips, attach them to what will be the open side of the stacking mullion:
 - Attach anchor clip, E1-1965, to the top and bottom of one side of the stacking mullion such that each clip extends 1/4" past the end of the mullion.
 - Attach anchor clips with two HM-2514-SS bolts, two WS-2500-SS washers, and two HM-2500-SS nuts (do not completely tighten yet).

Note: Refer to engineer of record or Florida Product Approvals for the use of clipped or unclipped mullions.

5. Install the stacking mullion into the opening according to **Detail 225-31** for 4-bar hinges or **Detail 225-32** on **Page 22** for butt hinges:

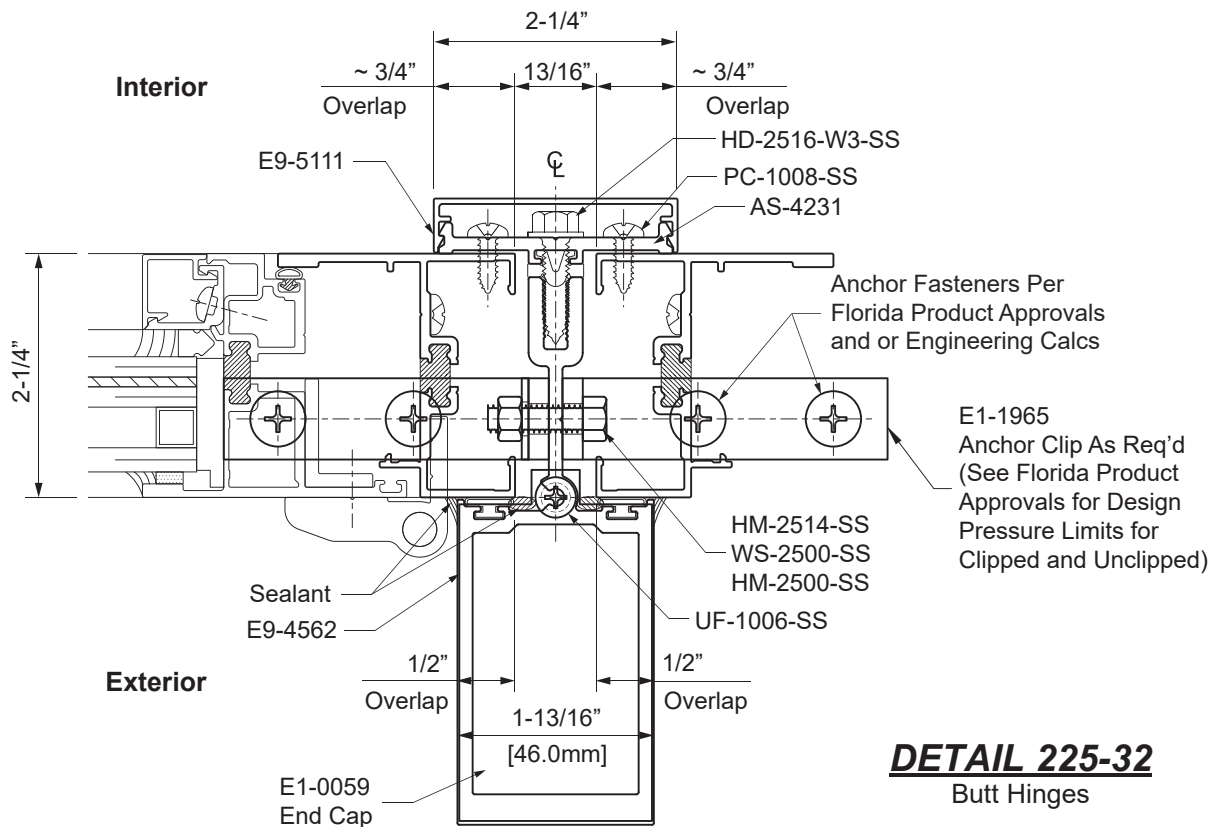
- Slide each anchor clip tight against the masonry.
- Attach each anchor clip to the masonry with two flat head fasteners.
- Now completely tighten the HM-2514-SS bolts used to attach the anchor clips to the mullion.

2-1/4" WINDOW DEPTH STACKING MULLION

80 PSF MAXIMUM

(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH) - CONTINUED

6. Carefully slide the second window assembly in and anchor it to the masonry.
7. To ensure a watertight seal run a bead of sealant up each interior frame jamb at the stacking mullion. Additionally, run a cap seal along the joint between the exterior frame jambs and the stacking mullion. If the exterior of the window is inaccessible, run a bead of sealant along the backside of each stacking mullion leg prior to installing the windows into the stacking mullion.
8. Attach the pressure plate, AS-4231, to the stacking mullion:
 - Install HD-2516-W3-SS fasteners at 1-1/2" from each end maximum and then 9" on center.
 - Pressure plates are pre-drilled; drill additional 0.281" diameter (#9/32) holes if necessary.
 - Start installing fasteners at the center of the pressure plate and work towards each end.
 - Torque each fastener to 40 to 45 inch-pounds.
9. Install PC-1008-SS fasteners, one on each side, through the pressure plate into the window frames:
 - (2) 6" below the top of the frame.
 - (2) 6" above the bottom of the frame.
10. Install snap cover, E9-5111, starting from the bottom and work up the mullion.
11. Run a cap seal between the frame and stacking mullion at the exterior. If the exterior of the window is inaccessible, run a bead of sealant along the backside of the receptor leg prior to installing the windows.



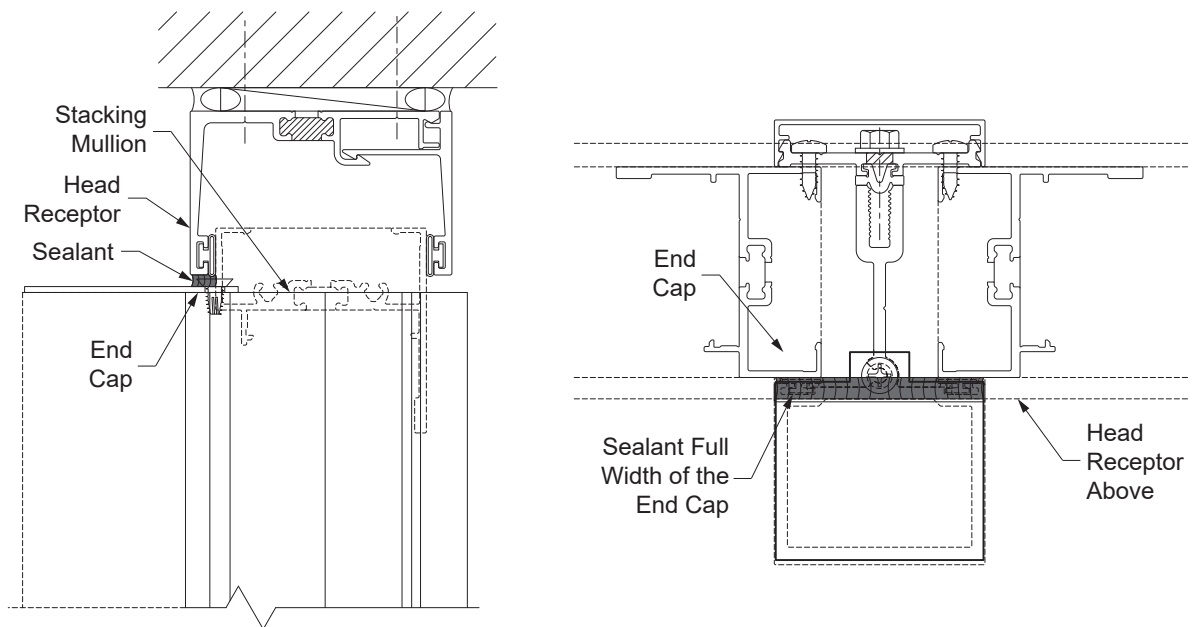
DETAIL 225-32
Butt Hinges

2-1/4" WINDOW DEPTH STACKING MULLION

SEAL STACKING MULLIONS WITH HEAD RECEPTOR (YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)

-When using stacking mullion with head receptors, apply sealant between the end cap at the stacking mullion and the head receptor. Run the sealant the full width of the end cap. Tool and wipe away excess sealant.

See **Detail 225-33**.



DETAIL 225-33

E9-4427 & E9-4518

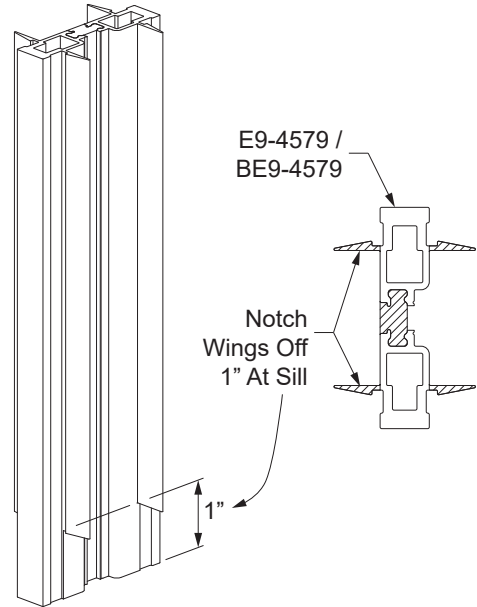
Stacking Mullions (65 PSF) Shown,
E9-4562 (80 PSF) Similar

2-1/4" WINDOW DEPTH I-MULLION

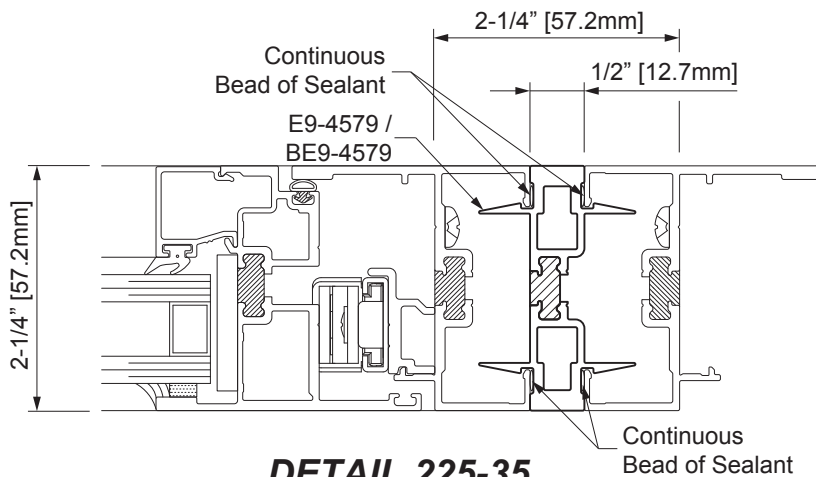
(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)

Sill Flashing may be used with the I-mullion, unclipped.
 -The I-mullion is cut to window frame height.
 -Notch the wings of the I-mullion off 1" at the sill. This will prevent interference with the jamb plugs.
 See **Detail 225-34**.

-Apply continuous sealant to the corners of the E9-4579 / BE9-4579 mullion on one side first.
 -Snap the window frame in on that side.
 See **Detail 225-35 & 225-36**.



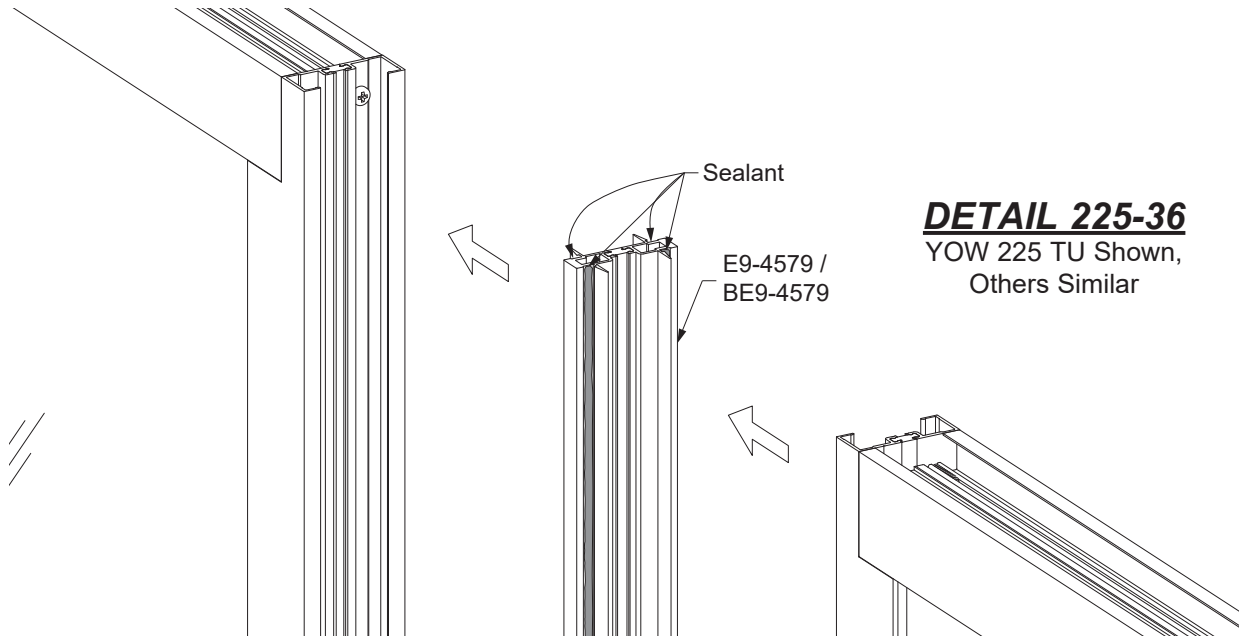
DETAIL 225-34
 YOW 225 TU Shown,
 Others Similar



DETAIL 225-35
 YOW 225 TU Shown,
 Others Similar

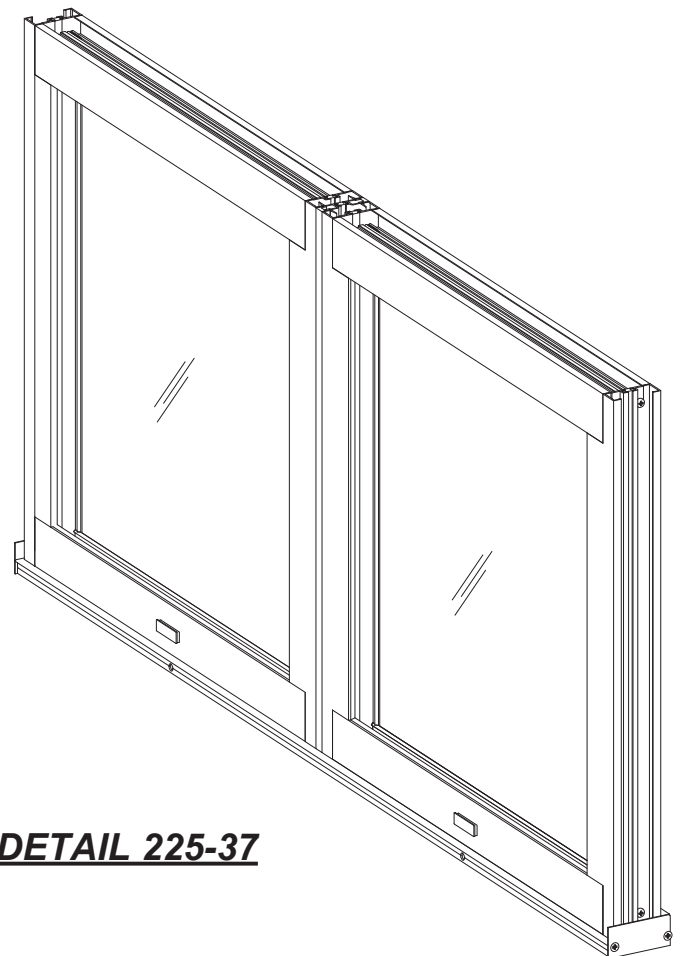
2-1/4" WINDOW DEPTH I-MULLION

(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH) - CONTINUED



-Seal the other side of the mullion, and then snap the other window frame in.
See **Detail 225-36 & 225-37**.

Note: Not an expansion mullion. Do not use in openings with more than three windows.



DETAIL 225-37

3-1/2" WINDOW JAMB PLUGS

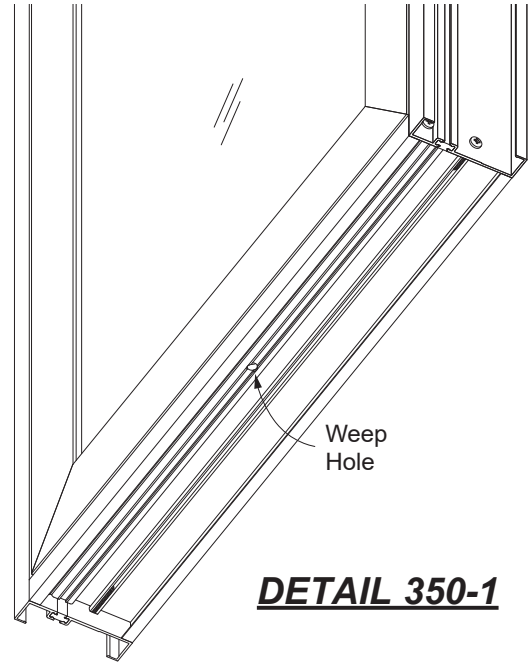
(YOW 350 T & YOW 350 TU/TUH)

For use with sill flashing:

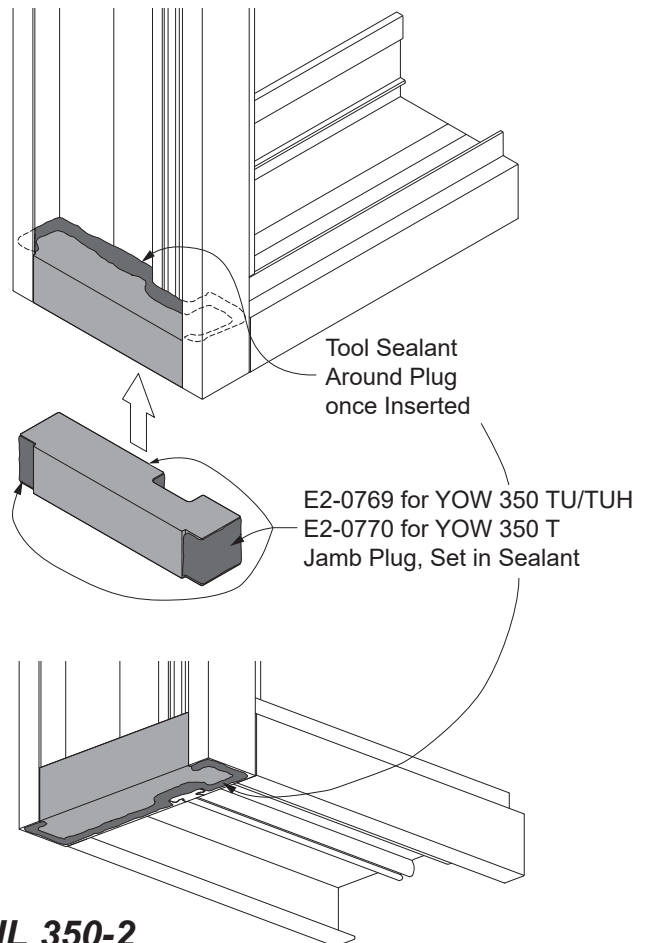
Note: If the window itself doesn't have weep holes at the bottom as shown in **Detail 350-1**. (i.e. weepless), then disregard this procedure and skip to the next page.

-Apply sealant to all contact sides of the E2-0769/ E2-0770 jamb plug and insert it into both jambs, flush with the bottom of the frame. Tool sealant at the top and bottom of the plug to ensure any gaps between the plug and the jamb are completely filled.

See **Detail 350-2**.



DETAIL 350-1



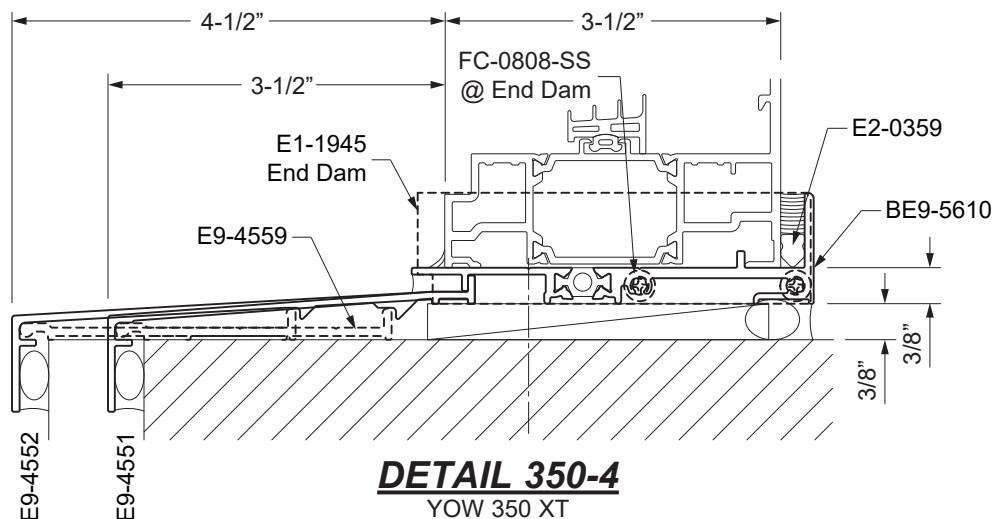
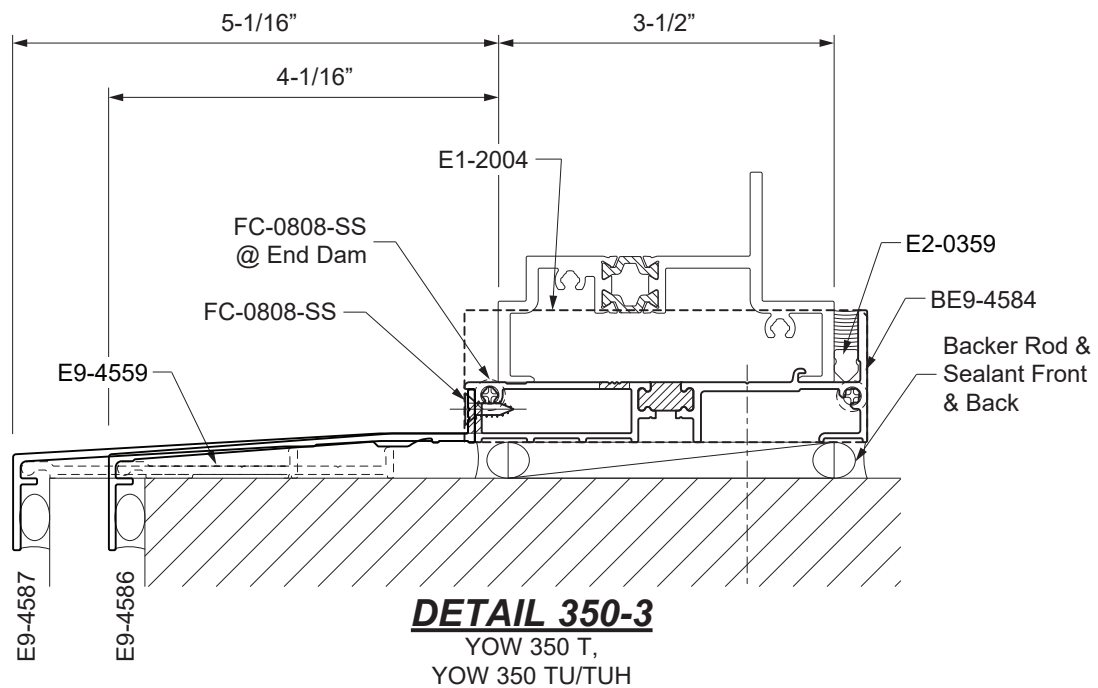
DETAIL 350-2

3-1/2" WINDOW DEPTH SILL FLASHING

(YOW 350 T, YOW 350 TU/TUH, & YOW 350 XT)

- BE9-5610 is used for YOW 350 XT, while BE9-4584 is used for YOW 350 T and YOW 350 TU.
- Sill extenders may be used depending upon the project.
- A 3/8" caulk joint is required when using optional sill extenders, E9-4586 or E9-4587.
- For BE9-5610 sill flashing, backer rods and sealant must be applied front and back before installing sill extenders.

See **Details 350-3 & 350-4.**



3-1/2" WINDOW DEPTH SILL FLASHING

(YOW 350 T & YOW 350 TU/TUH)

Fabricate Sill Flashing:

-Cut the sill flashing to the dimension as shown on the approved shop drawings.

For applications without jamb receptors, Frame Width + 1/4".

For applications with jamb receptors, Frame Width + 2-3/4".

Note: The sill flashing may support multiple window units within the width of the rough opening.

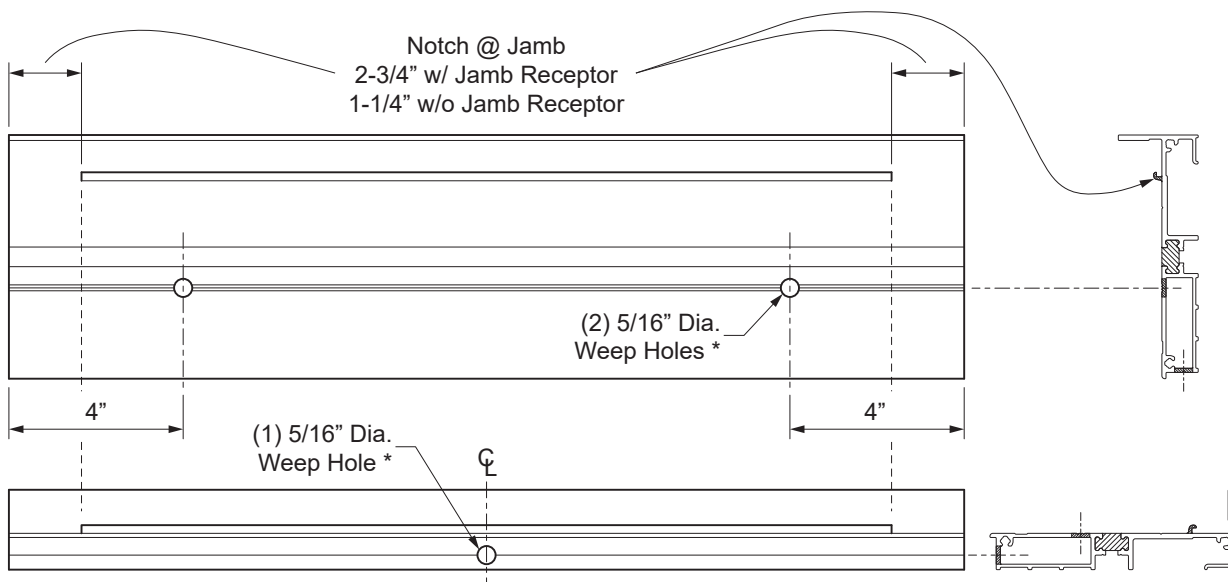
-Notch the return leg of the sill flashing as shown in **Detail 350-5** around the jambs. For notching at stacking or zero mullions, see **Detail 350-7** on **Page 30**.

For Sill Flashing without Optional Sill Extenders:

-Drill 5/16" diameter weep holes into the sill flashing, two on top of it, 4" from each end per window unit width, and one in front of the flashing at the midpoint of each window unit width.

For Sill Flashing with Optional Sill Extenders: The weep holes at the front of the sill flashing should be match drilled at the jobsite after installing the sill extenders to the sill flashing.

See **Pages 30** and **31**.



DETAIL 350-5

* **Note:** Weep holes in sill flashing not required for weepless windows.

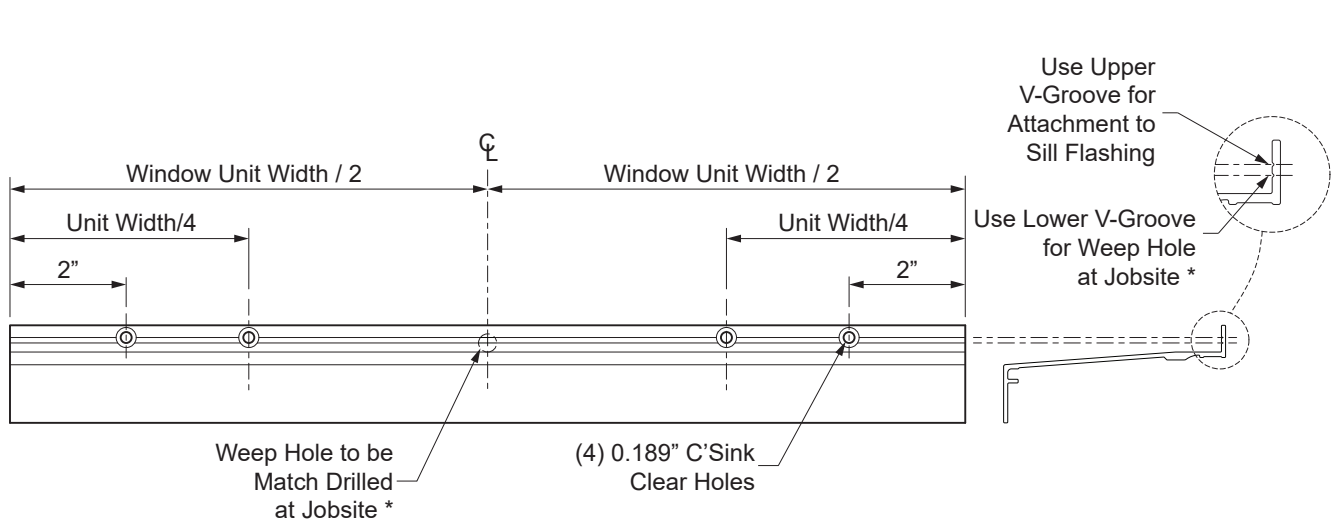
3-1/2" WINDOW DEPTH SILL FLASHING

(YOW 350 T & YOW 350 TU/TUH)

Fabricate Optional Sill Extenders:

-Drill 0.189" countersunk holes at the upper V-groove, 4" from each end per unit width and at the quarter points of each window unit width. Match drill 0.141" diameter tap holes into the sill flashing for anchorage. Do not drill the weep hole at this time.

See **Detail 350-6**.



DETAIL 350-6

* **Notes:** Weep holes in sill flashing not required for weepless windows. See notes on **Detail 350-10** for weep hole fabrication.

For YOW 350 XT:

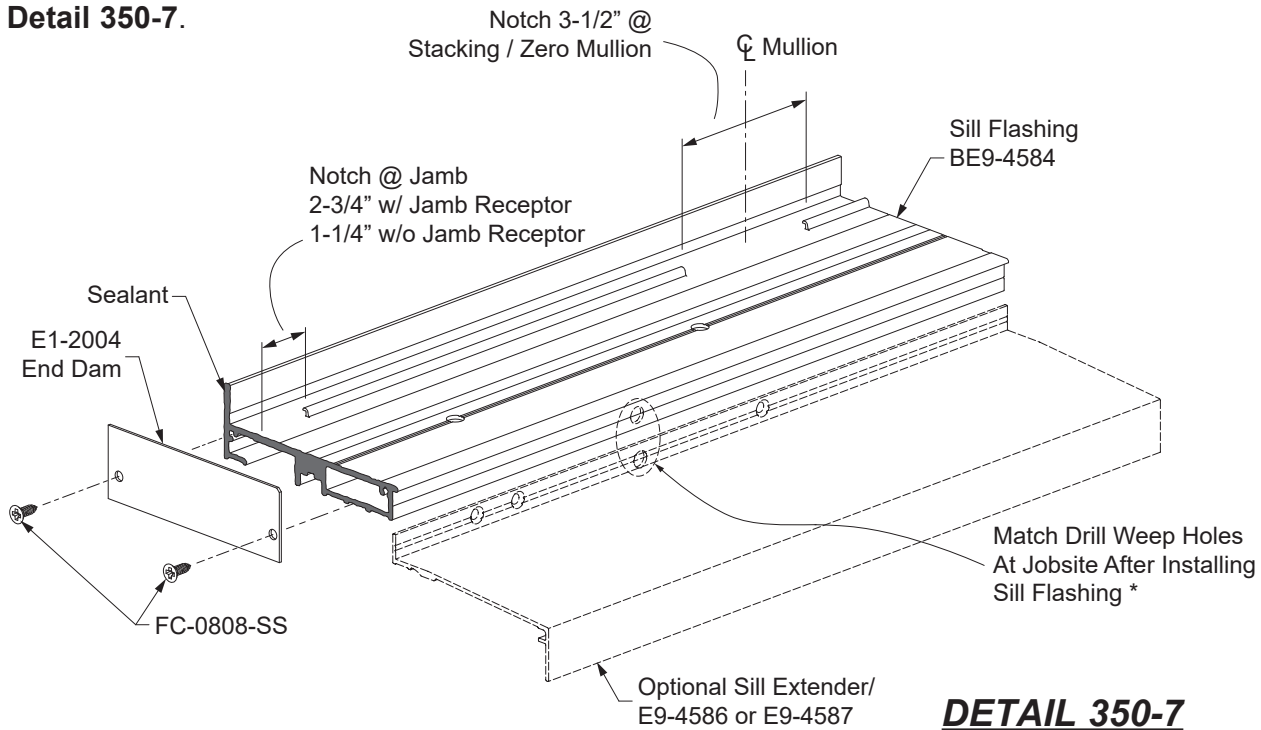
-Sill extenders are cut to the same length as the sill flashing and require no further fabrication.

3-1/2" WINDOW DEPTH SILL FLASHING

(YOW 350 T & YOW 350 TU/TUH) INSTALLATION OPTIONS AND PROCEDURES

- Apply sealant to the end of the sill flashing.
- Install the end dam E1-2004 with two FC-0808-SS screws at each end of the flashing.
- Tool the sealant at the end dam to ensure a water tight seal.

See **Detail 350-7**.



DETAIL 350-7

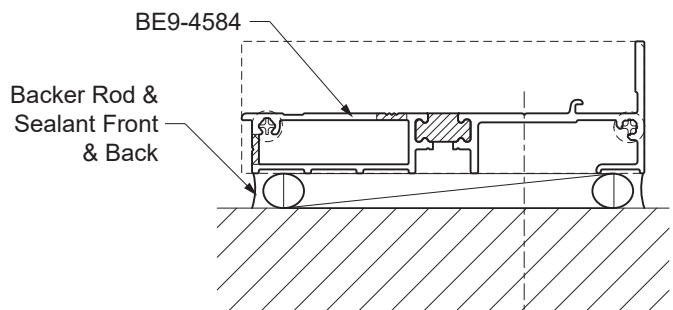
* **Note:** Weep holes in sill flashing not required for weepless windows.

Install the Sill Flashing:

-If a head receptor is used, locate the sill flashing plumb from the head receptor. Fasten the sill flashing into the substrate using anchor fasteners specified by Florida Product Approvals and or engineering calculations. Seal anchor fastener heads.

-Prior to installing optional sill extenders, Apply backer rods and sealant front and back at the sill flashing.

See **Detail 350-8**.

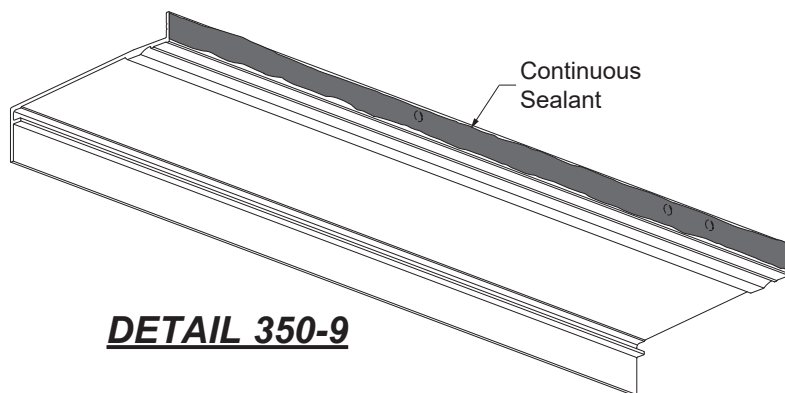


DETAIL 350-8

3-1/2" WINDOW DEPTH SILL FLASHING

(YOW 350 T & YOW 350 TU/TUH) INSTALLATION OPTIONS AND PROCEDURES

-If using an optional sill extender, apply continuous sealant to the back of the extender as shown in **Detail 350-9**.



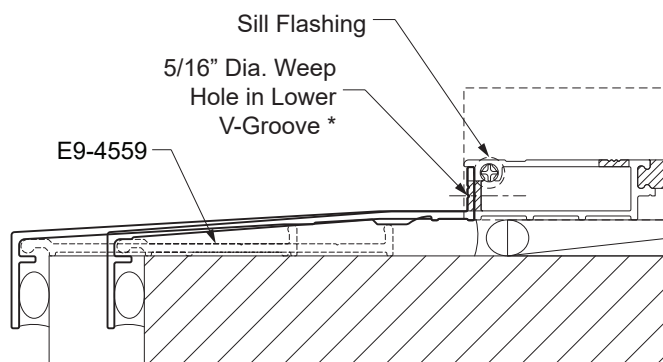
DETAIL 350-9

Install Optional Sill Extender:

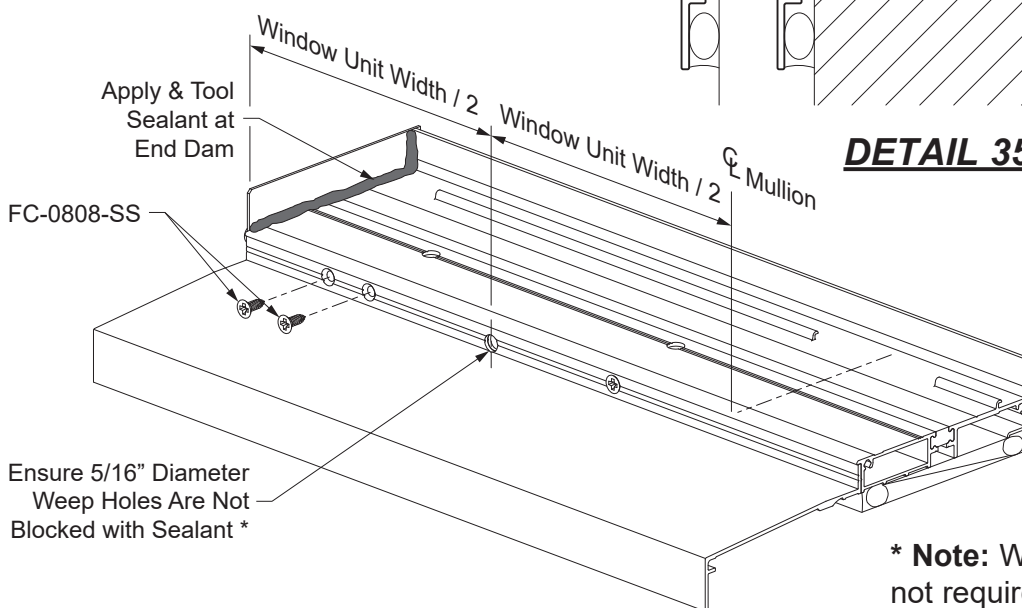
-Attach the extender using FC-0808-SS fasteners to the sill flashing along with E9-4559 sill trim base to the substrate.

-Match drill the 5/16" diameter weep holes into the lower V-Groove of the sill extender at the mid points of every window unit width. Wipe away excess sealant from the weep holes.

See **Detail 350-10**.



DETAIL 350-10



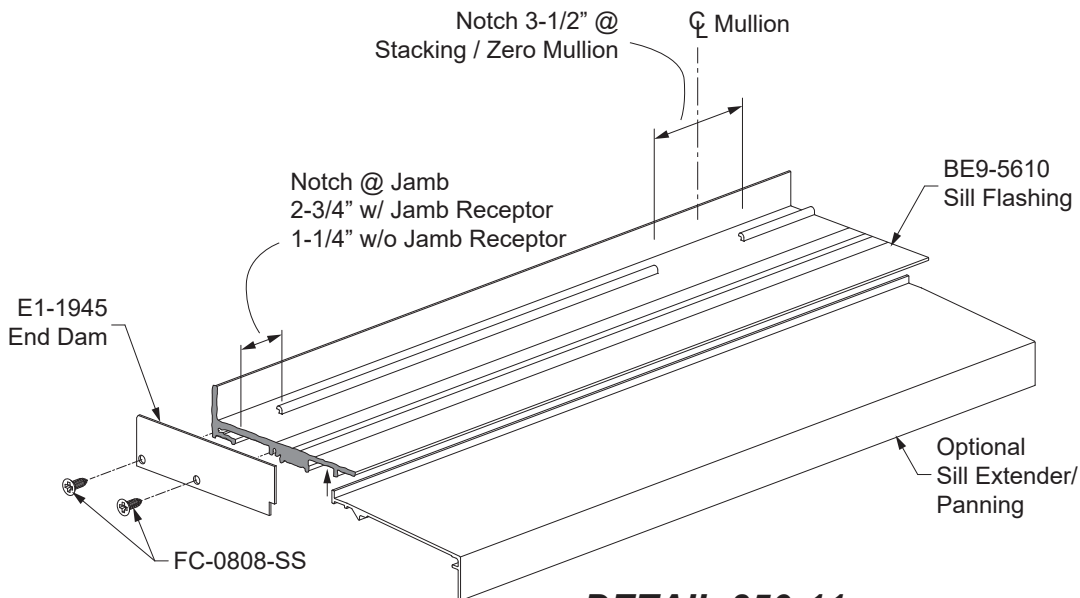
*** Note:** Weep holes in sill flashing not required for weepless windows.

3-1/2" WINDOW DEPTH SILL FLASHING

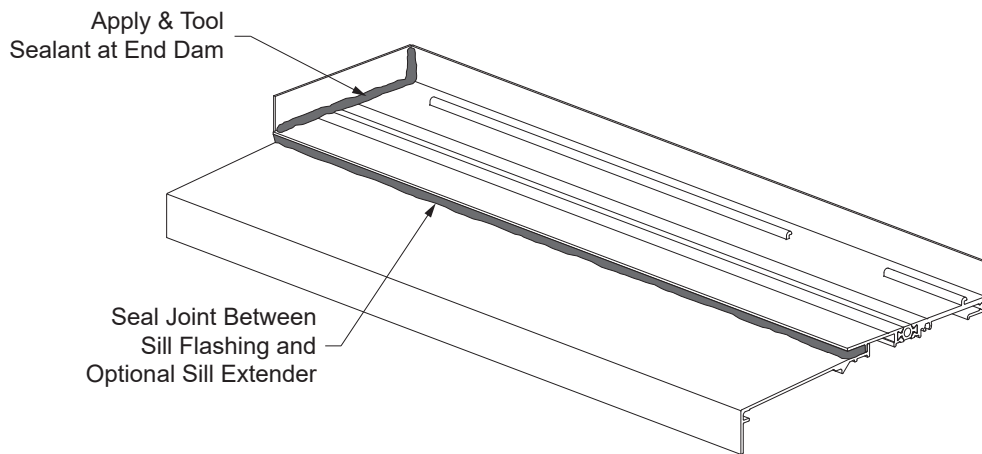
**(YOW 350 XT)
INSTALLATION OPTIONS AND PROCEDURES**

- Notch the return leg of the sill flashing as shown in **Detail 350-11** around the jambs and mullions.
- Apply sealant to the end of the sill flashing.
- Install the end dam E1-1945 with two FC-0808-SS screws at each end of the flashing.
- If a head receptor is used, locate the sill flashing plumb from the head receptor. Fasten the sill flashing into the substrate along with any applicable panning. Seal anchor fastener heads.

See **Detail 350-11**.



DETAIL 350-11



3-1/2" WINDOW DEPTH SILL FLASHING

(YOW 350 T & YOW 350 TU/TUH) INSTALLATION OPTIONS AND PROCEDURES

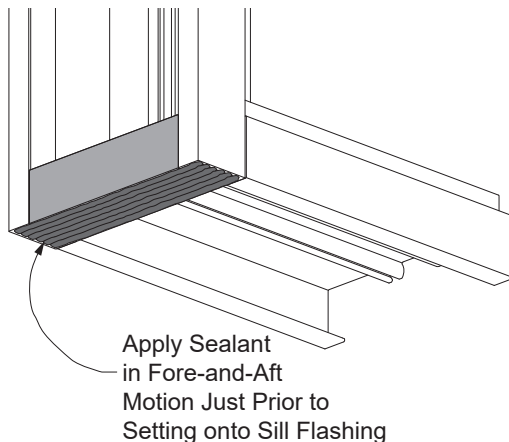
For use with sill flashing:

Notes: the following procedure is to be performed just prior to installing the window itself.

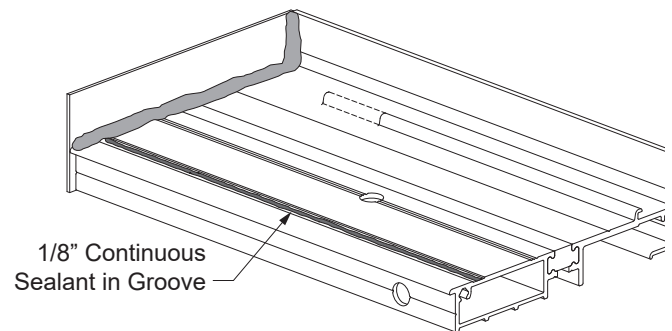
-Apply sealant (minimum 1/4" bead) to the bottom of the jamb plug in a fore-and-aft motion, covering the bottom of the jamb as shown in **Detail 350-12**.

-Apply continuous 1/8" bead of sealant into the groove of the sill flashing as shown in **Detail 350-13**. Ensure the sealant does not block any weep holes.

-Install the window immediately after application. Tool excess sealant.



DETAIL 350-12
Not required for weepless windows.



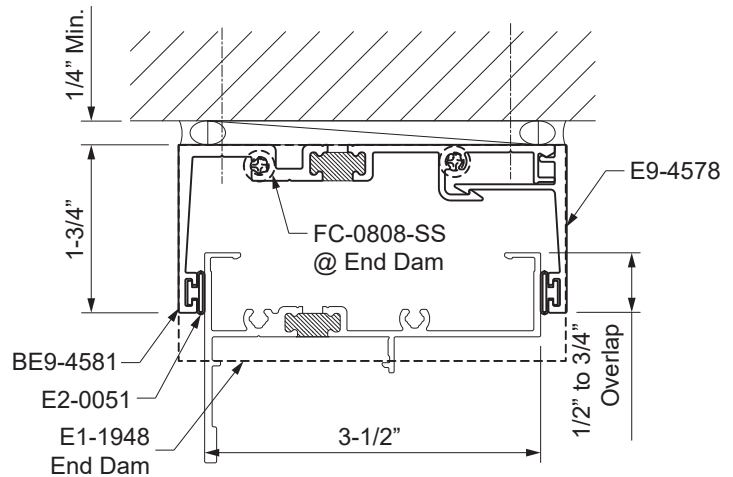
DETAIL 350-13
Weep holes in sill flashing not required for weepless windows.

3-1/2" WINDOW DEPTH HEAD / JAMB RECEPTOR

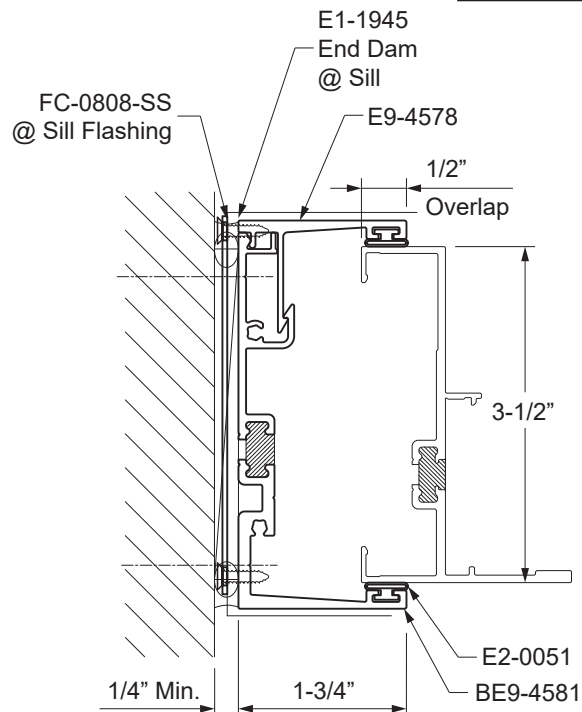
(YOW 350 T, YOW 350 TU, YOW 350 XT) INSTALLATION OPTIONS AND PROCEDURES

- Receptors can be used at the head and or jamb. If jamb receptors are used, a sill flashing is required.
- A minimum of 1/4" perimeter caulk joint is required.
- Overlap with the window system itself is between 1/2" to 3/4" at head, 1/2" at jambs.
- E2-0051 bulb gasket is required and must be installed into the receptor and the receptor stop.
- E1-1948 end dams are required and must be attached at each end of the head receptor using FC-0808-SS fasteners (2 per end dam) prior to receptor installation.

See **Detail 350-14**.



DETAIL 350-14



3-1/2" WINDOW DEPTH HEAD / JAMB RECEPTOR

(YOW 350 T, YOW 350 TU, YOW 350 XT) INSTALLATION OPTIONS AND PROCEDURES

Install window receptor system at the head only or at the head and jambs:

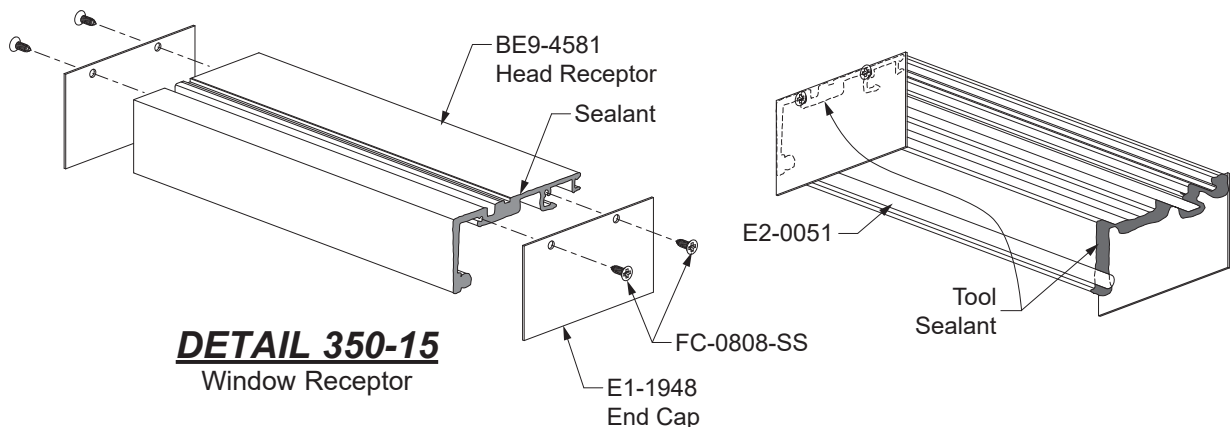
Head receptors must be assembled prior to installation.

-Cut E2-0051 bulb gasket to the length of the receptor plus (+) 1/4" and install it into the receptor reglet.

-Apply sealant to each end of the head receptor.

-Attach an end cap (E1-1948) at each end of the head receptor with (2) FC-0808-SS screws.

See **Detail 350-15**.

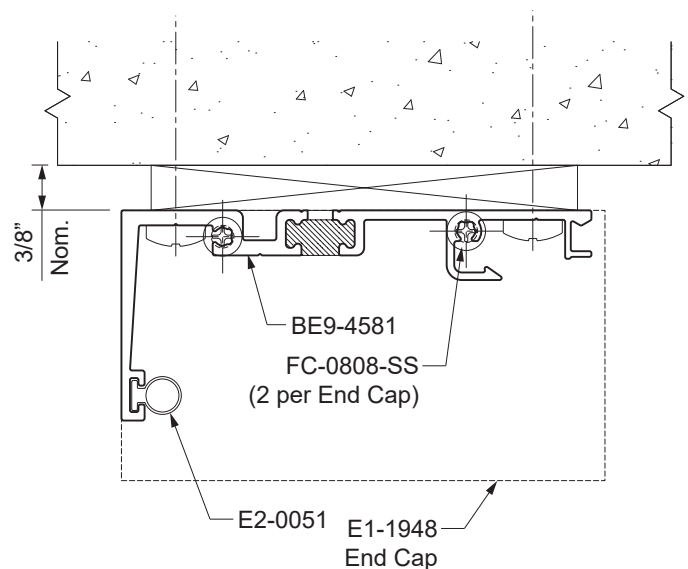


DETAIL 350-15
Window Receptor

-Refer to structural calculations to determine the size and location of fasteners (minimum #10 fasteners).

-Shim and secure the exterior leg of receptor(s) using the required fasteners; 1/4" minimum joint width.

See **Detail 350-16**.



DETAIL 350-16

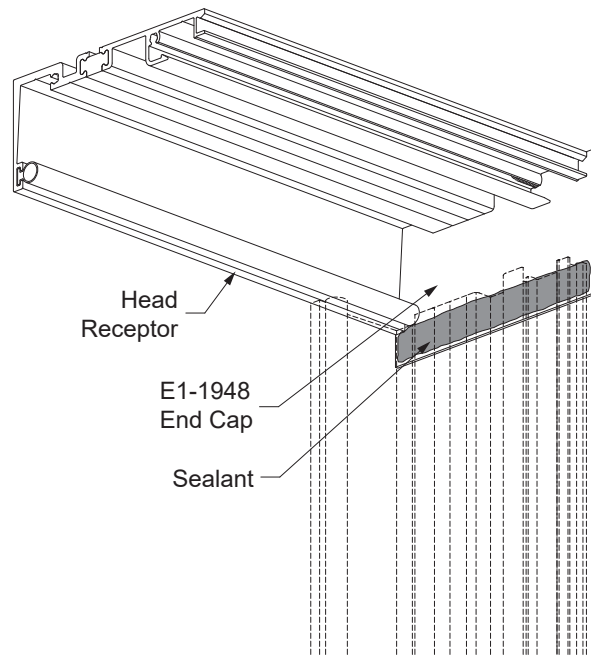
3-1/2" WINDOW DEPTH HEAD / JAMB RECEPTOR

**(YOW 350 T, YOW 350 TU, YOW 350 XT)
INSTALLATION OPTIONS AND PROCEDURES**

JAMB RECEPTOR WITH SILL FLASHING

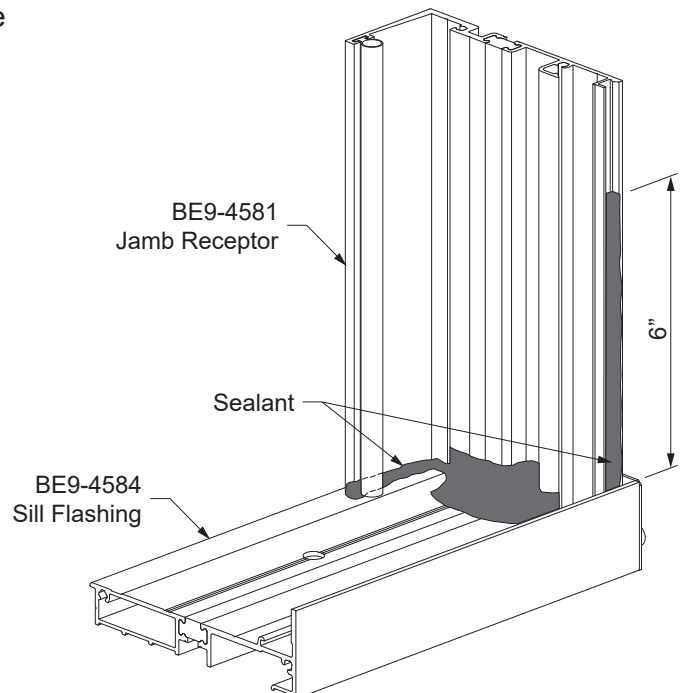
- When receptors are used at both the head and the jamb, the head receptor will run through. Sill flashing will also be required.
- Seal the intersection of receptors and end caps prior to anchoring the jamb receptor.

See **Detail 350-17**.



DETAIL 350-17

- Locate the BE9-4581 jamb receptor on top of the sill flashing, inside the end dams and end caps at the head receptor. Shim as required and fasten the jamb receptor into the jamb substrate.
- Seal the jamb receptor at the sill flashing. Apply sealant at the interior receptor snap, 6" from the top of the sill flashing as shown in **Detail 350-18**.



DETAIL 350-18

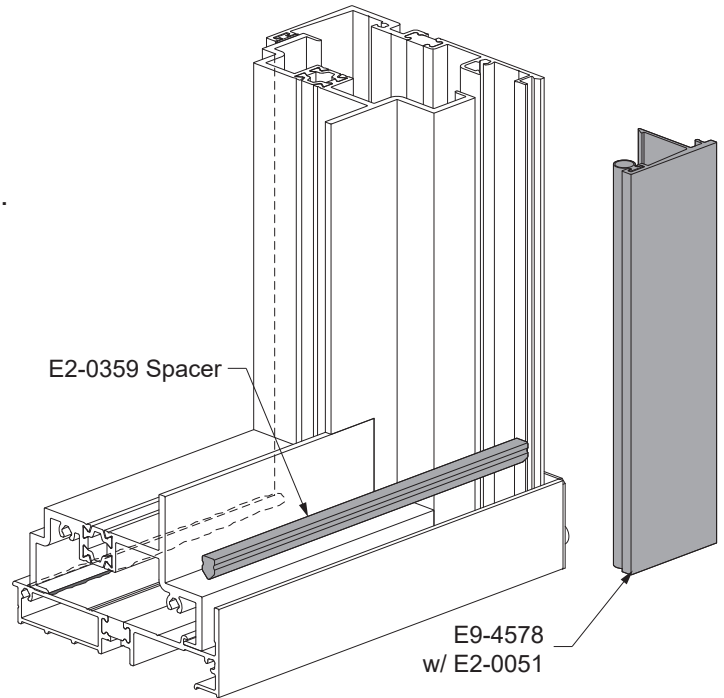
3-1/2" WINDOW DEPTH HEAD / JAMB RECEPTOR

(YOW 350 T, YOW 350 TU, YOW 350 XT) INSTALLATION OPTIONS AND PROCEDURES

JAMB RECEPTOR WITH SILL FLASHING

- Install the window frame into the opening.
- Shim the sill / jambs of the window to ensure that they are installed plumb, square, and level.
- Push in the spacer between the sill and sill flashing.
- Snap in interior receptor leg(s).

See **Detail 350-19**.

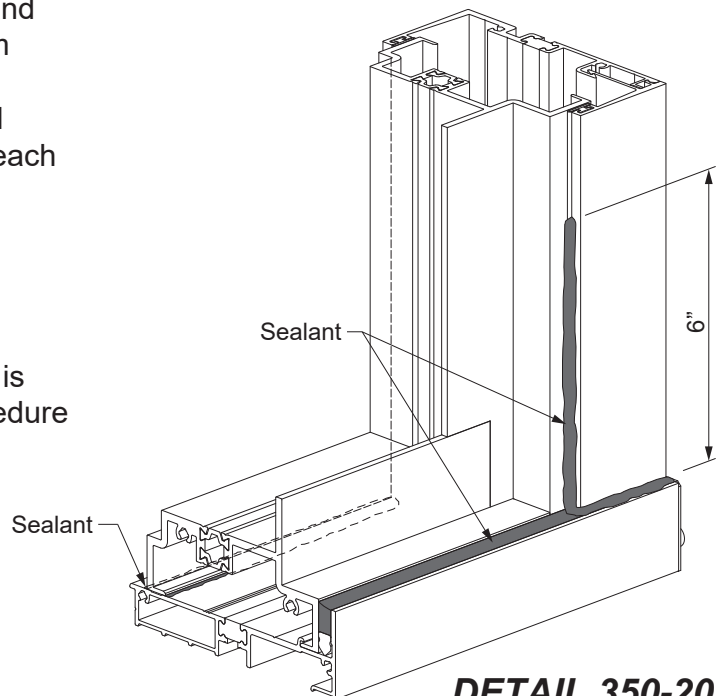


DETAIL 350-19

- Apply sealant to the gap in the sill flashing and to the joint of the jamb receptor up to 6" from the top of the sill flashing.
- Apply sealant to the front of the sill at the sill flashing, leaving a 1/2" to 3/4" weep gap at each jamb.

See **Detail 350-20**.

Note: In applications where the receptor clip is installed on the exterior, the installation procedure is similar to that of the 2-1/4" window depth.



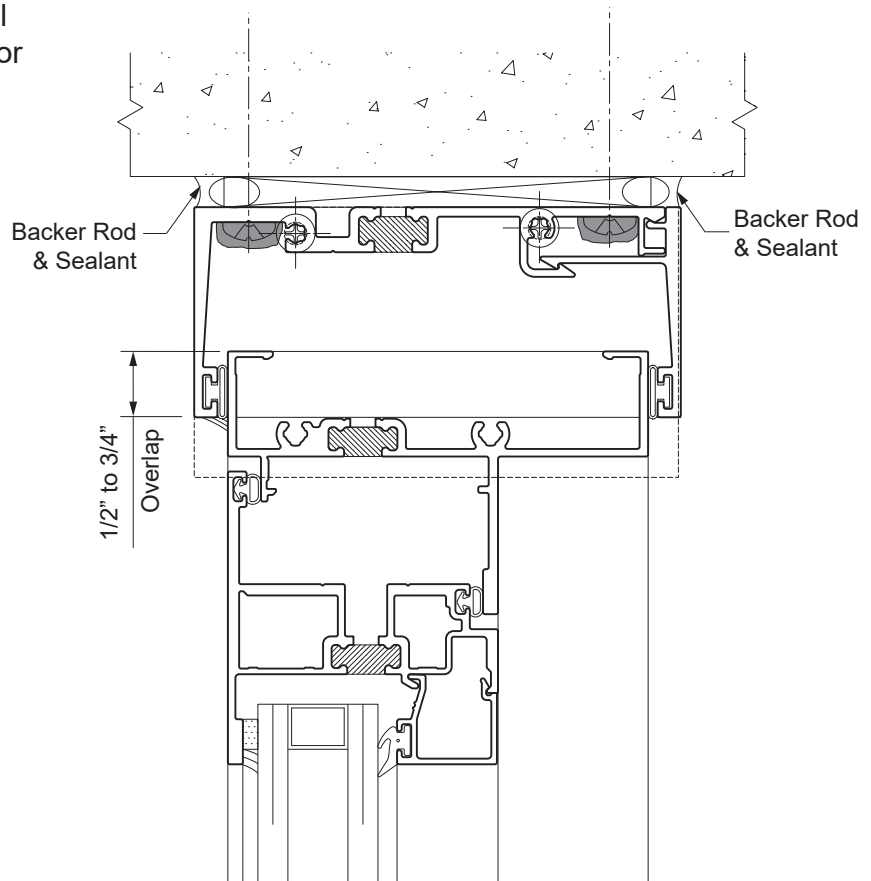
DETAIL 350-20

3-1/2" WINDOW DEPTH HEAD / JAMB RECEPTOR**INSTALLATION OPTIONS AND PROCEDURES:**

Seal Receptors and sill flashing

-Install backer rod and apply and tool perimeter sealant on both the exterior and interior.

See **Detail 350-21**.



DETAIL 350-21

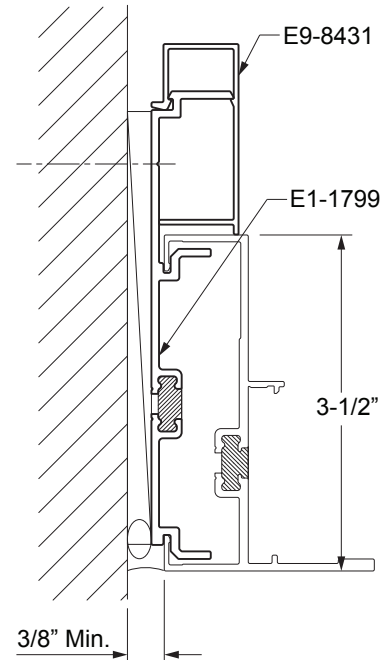
3-1/2" WINDOW DEPTH STRAP / TWIST ANCHORS

(YOW 350 T & YOW 350 TU / TUH ONLY)

- The strap anchor cannot be used for YOW 350 XT.
- A minimum of 3/8" perimeter caulk joint is required.
Strap anchors reduce the clearance into the rough opening by 1/8" on each side, 1/4" width and height.
- Anchor location and fastener size to be determined by test reports or engineer of record.

See **Detail 350-22**.

Notes: Strap anchors can be used with interior sealant as long as the sealant is tooled. Strap anchors cannot be used at receptors nor at sill flashing.



DETAIL 350-22

APPROVED FOR UP TO WIND ZONE 3 ONLY (YOW 350 T & YOW 350 TU)

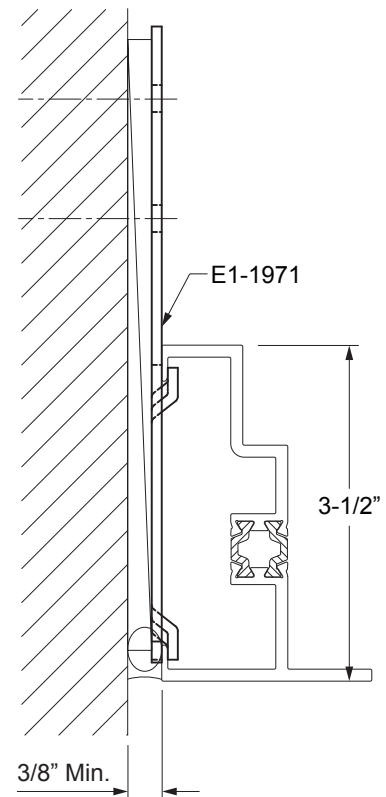
E1-1971 Steel twist anchors are available and when used, must be installed:

- A minimum of 3" from the corner of all frames.
- At 15" on center.
- A maximum of 3" on each side of the centerline of ventilator locking points.
- A maximum of 3" from the edge of framing joints or mullions.
- For full anchor engagement in the window frame, the twist anchor must be at 90° angle from the window.

-A minimum of 3/8" perimeter caulk joint is required.
Steel twist anchors reduce the clearance into the rough opening by 1/8" on each side, 1/4" width and height.

See **Detail 350-23**.

Notes: Twist anchors can be used with interior sealant as long as the sealant is tooled. Twist anchors cannot be used at receptors nor at sill flashing.



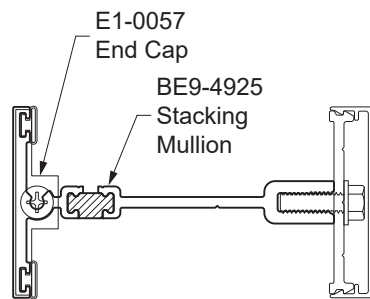
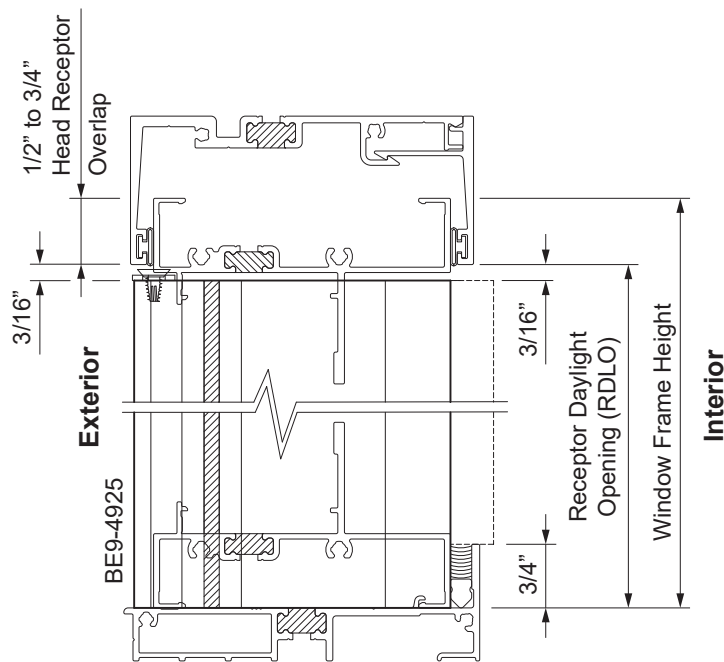
DETAIL 350-23

3-1/2" WINDOW DEPTH STACKING MULLION

**(YOW 350 T, YOW 350 TU, YOW 350 XT)
INSTALLATION OPTIONS AND PROCEDURES**

For use without head receptor:
-Stacking mullions are cut to window frame height.

For use with head receptor:
-Stacking mullions are cut to receptor daylight opening minus 3/16".
See **Detail 350-24**.



DETAIL 350-24

3-1/2" WINDOW DEPTH STACKING MULLION

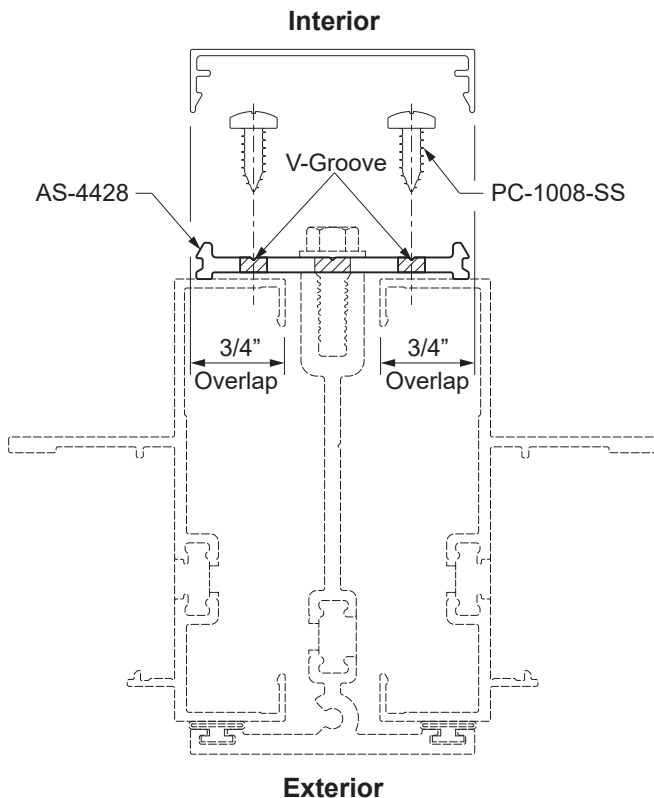
STACKING MULLION GENERAL INSTALLATION NOTES

-Stacking mullion anchor clips cannot be used with the sill flashing.
 -Refer to the chart at right for proper window overlap with stacking mullions.

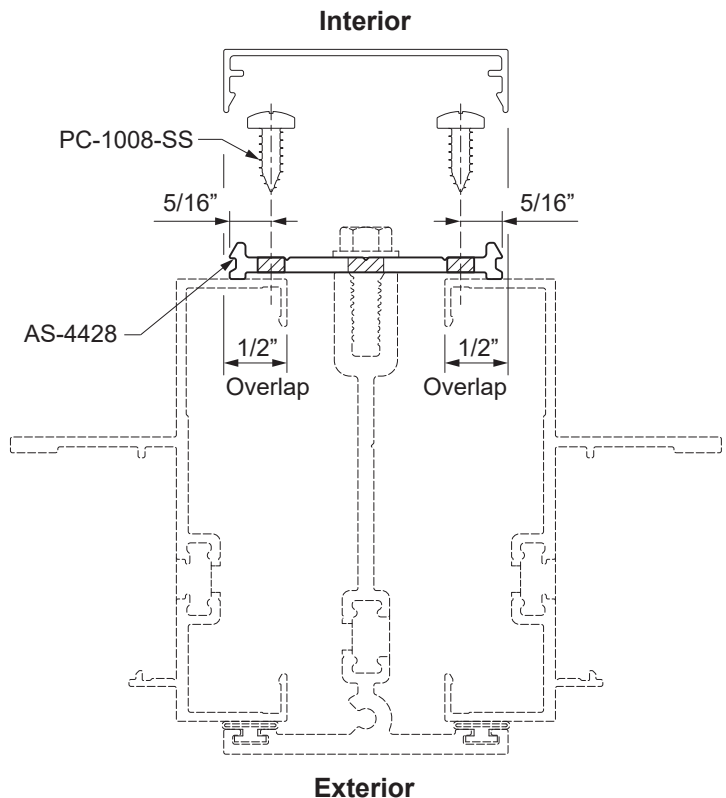
-The AS-4428 interior cover base is attached to the window jambs with PC-1008-SS screws. Refer to the Florida Product Approvals and or engineering calculations for vertical fastener spacing.

Mullion No.	Max Pressure	Hinge Type	Overlap
BE9-4925	65 PSF	4-Bar Hinge	3/4" Exterior & Interior
BE9-4925	65 PSF	Butt Hinge	1/2" Exterior & Interior

-Where 3/4" interior overlap is specified, drill 0.213" diameter clear holes for the PC-1008-SS screws at the v-groove in the interior cover base as shown in **Detail 350-25A**.
 -Where 1/2" interior overlap is specified, drill 0.213" diameter clear holes for PC-1008-SS screws at 5/16" from the edge of the interior cover base as shown in **Detail 350-25B**.
 -If stacking mullions are used with head receptors, see sealant instructions on **Page 45**.



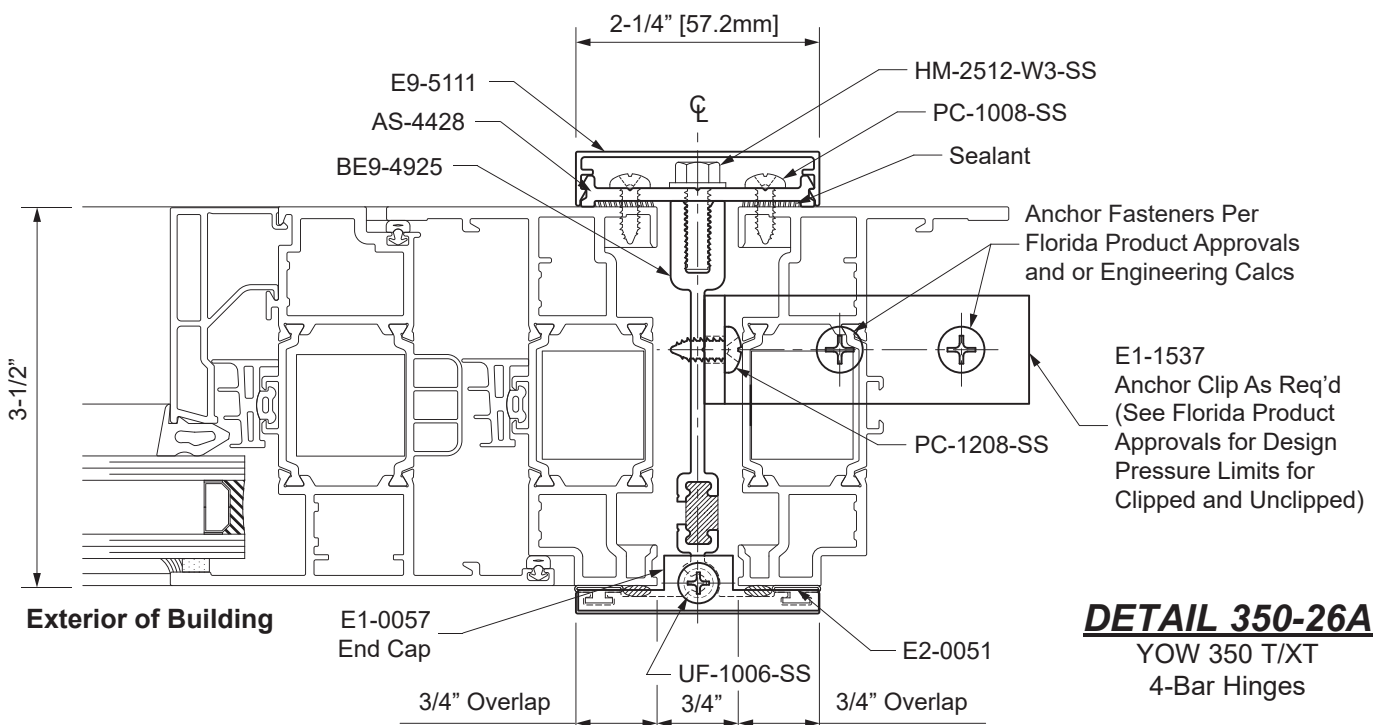
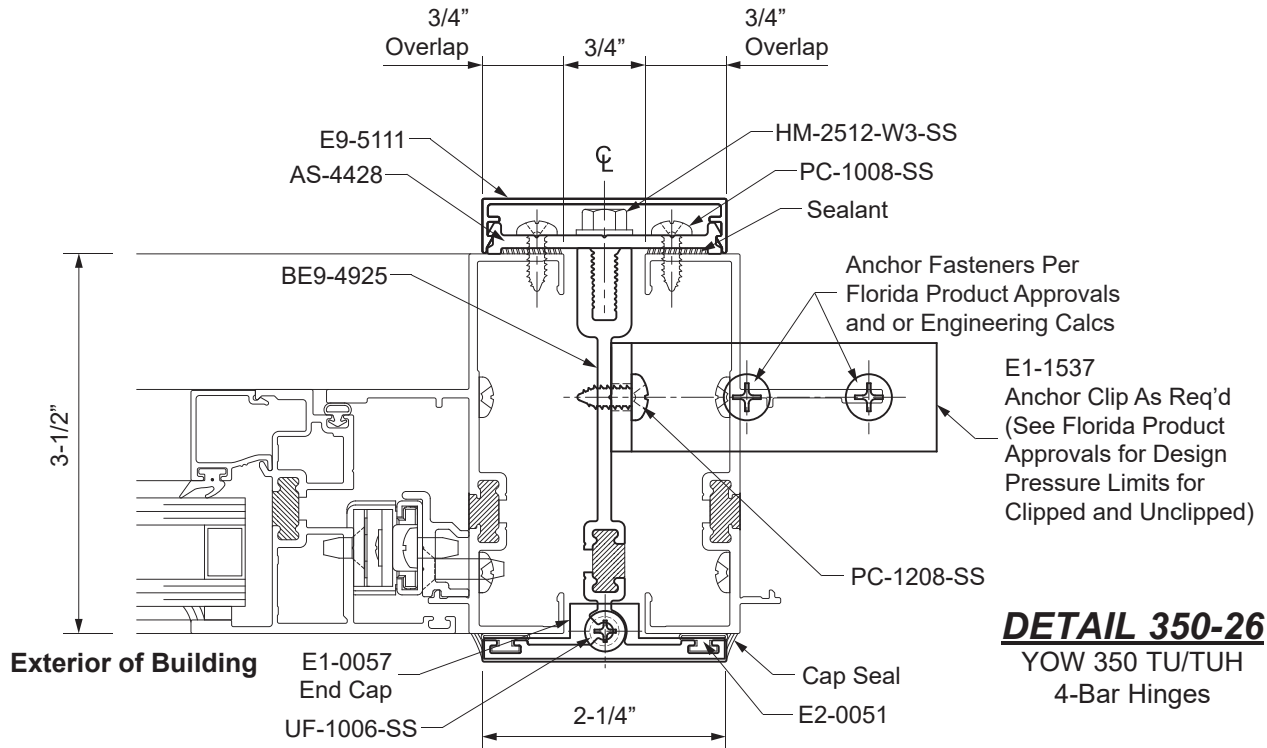
DETAIL 350-25A



DETAIL 350-25B

3-1/2" WINDOW DEPTH STACKING MULLION

(YOW 350 T, YOW 350 TU, YOW 350 TUH, YOW 350 XT)



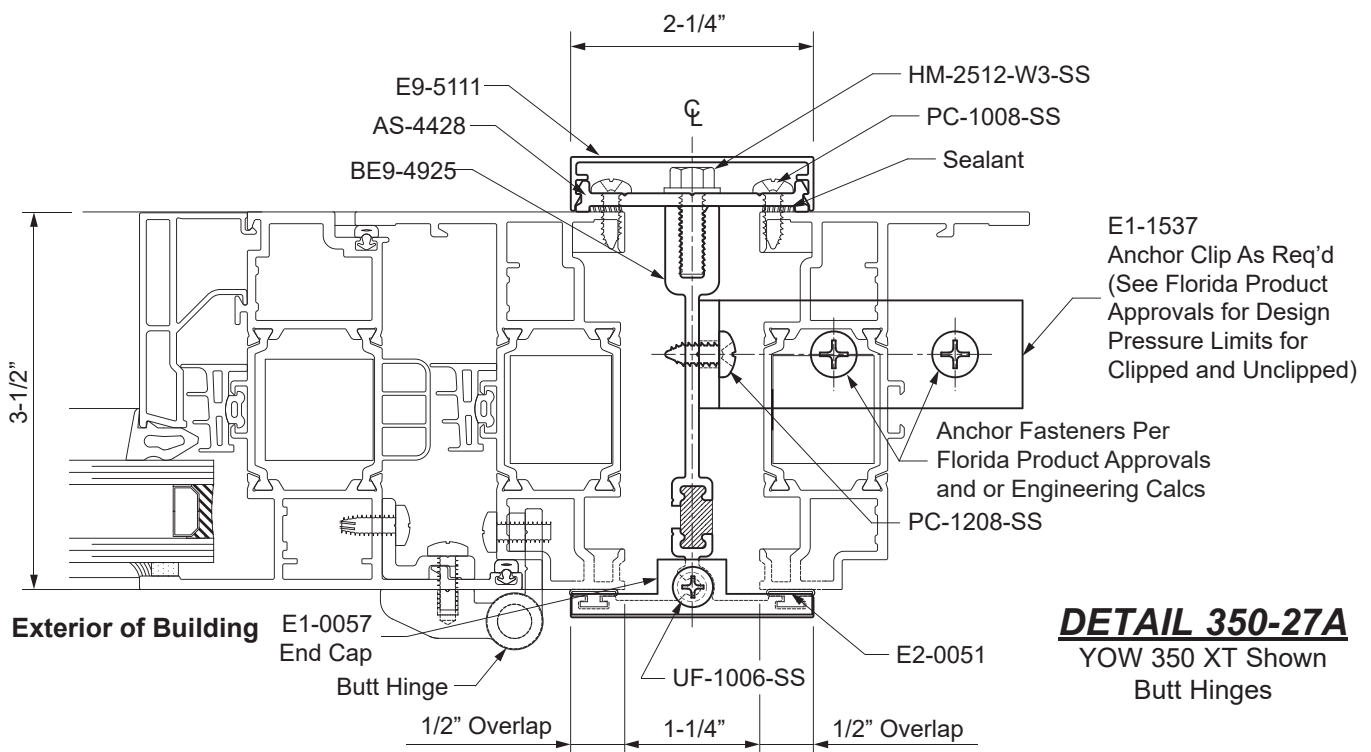
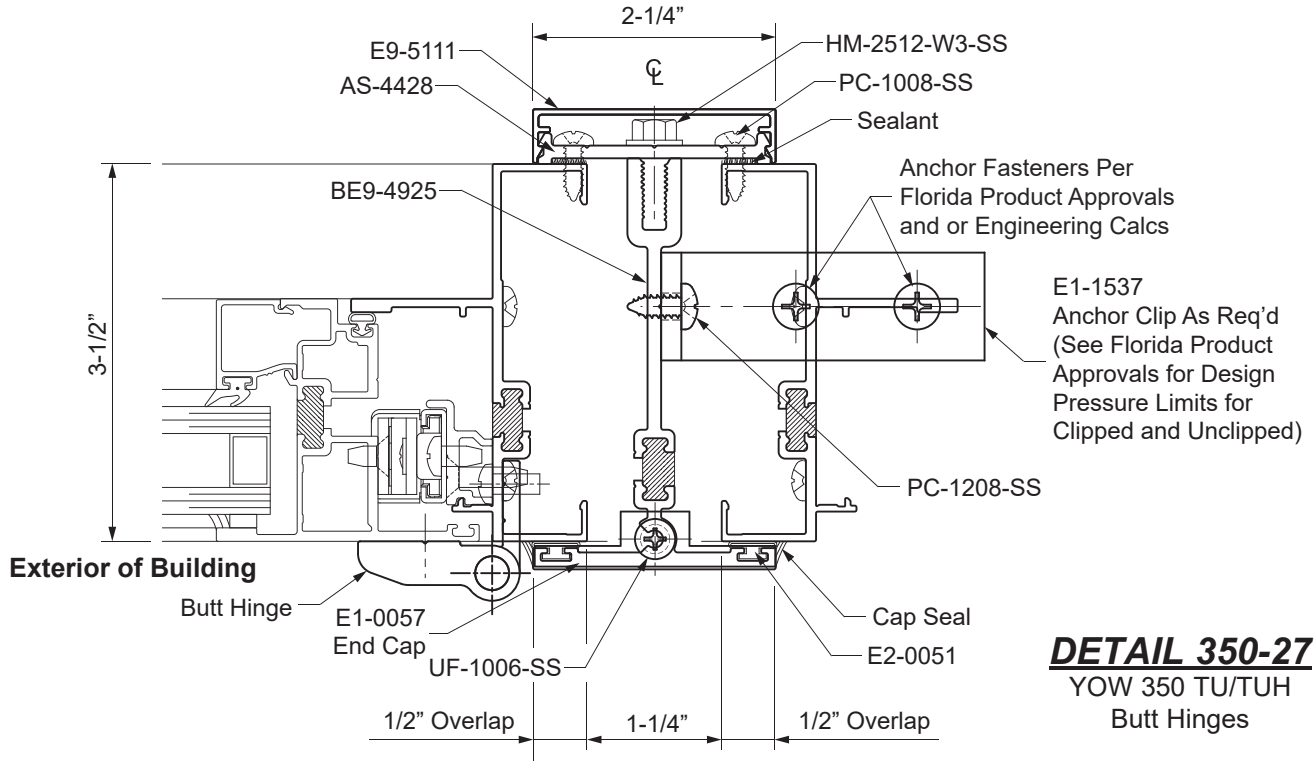
3-1/2" WINDOW DEPTH STACKING MULLION

(YOW 350 T, YOW 350 TU, YOW 350 TUH, YOW 350 XT) - CONTINUED

1. Install the first window assembly into the opening according to the installation instructions on for that system.
2. Cut two pieces of gasket, E2-0051, to stacking mullion height and install into the reglets.
3. Install mullion end cap, E1-0057, to each end of the stacking mullion with a UF-1006-SS fastener.
4. Attach anchor clips to what will be the open side of the stacking mullion:
 - Attach anchor clip, E1-1537, to the top and bottom of one side of the stacking mullion such that each clip extends 1/4" past the end of the mullion.
 - Attach anchor clips with two PC-1208-SS fasteners at each end (do not completely tighten yet).
5. Install the stacking mullion into the opening according to **Detail 350-26/26A** on **Page 42** for 4-bar hinges, or **Detail 350-27/27A** on **Page 44** for butt hinges.
 - Slide each anchor clip tight against the masonry.
 - Attach each anchor clip to the masonry with two flat head fasteners.
 - Now completely tighten the PC-1208-SS fasteners used to attach the anchor clips to the mullion.
6. Carefully slide the second window assembly in and anchor it to the masonry.
7. To ensure a watertight seal run a bead of sealant up each interior frame jamb at the stacking mullion. Additionally, run a cap seal along the joint between the exterior frame jambs and the stacking mullion. If the exterior of the window is inaccessible, sill flashing must be used and stack mullion to be unclipped application only.
8. Attach the pressure plate, AS-4428, to the stacking mullion:
 - Install HM-2512-W3-SS fasteners at 1-1/2" from each end maximum and then 9" on center. Pressure plates are pre-drilled; drill additional 0.281" diameter (#9/32) holes if necessary.
 - Start installing fasteners at the center of the pressure plate and work towards each end.
 - Torque each fastener to 40 to 45 inch-pounds.
9. Install PC-1008-SS fasteners, one on each side, through the pressure plate into the window frames:
 - (2) 6" below the top of the frame.
 - (2) 6" above the bottom of the frame.
10. Install snap cover, E9-5111, starting from the bottom and work up the mullion.
11. Run a cap seal between the frame and receptor at the exterior. If the exterior of the window is inaccessible, sill flashing must be used and stack mullion to be unclipped.

3-1/2" WINDOW DEPTH STACKING MULLION

(YOW 350 T, YOW 350 TU, YOW 350 TUH, YOW 350 XT)

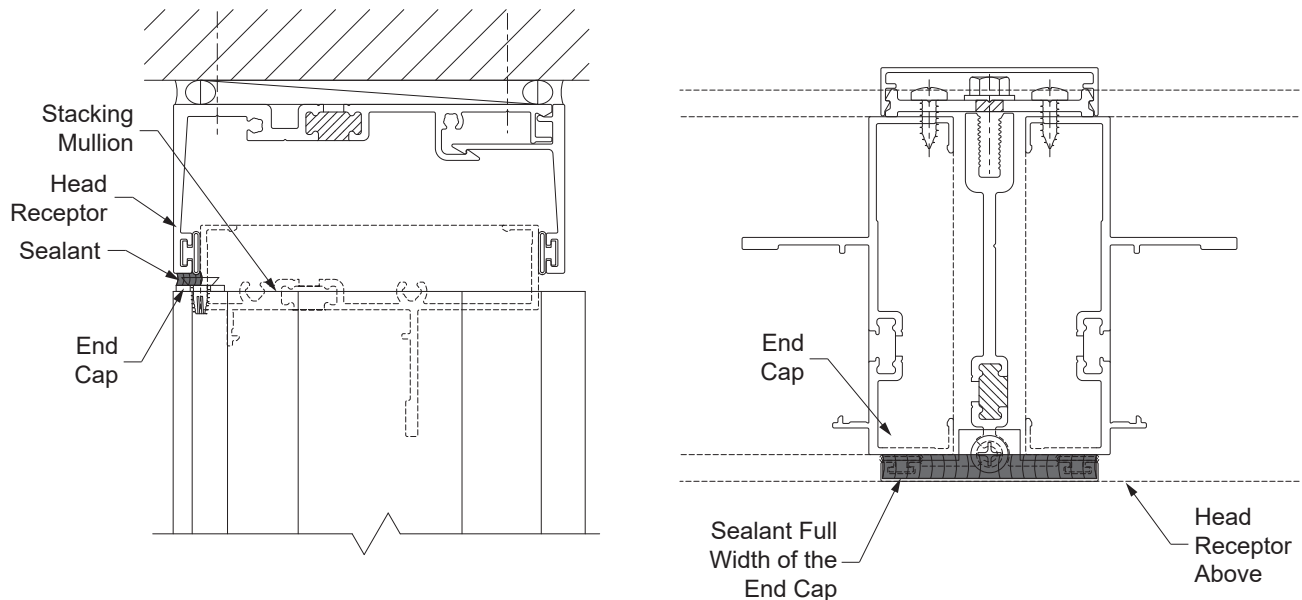


3-1/2" WINDOW DEPTH STACKING MULLION

SEAL STACKING MULLIONS WITH HEAD RECEPTOR (YOW 350 T, YOW 350 TU, YOW 350 TUH, YOW 350 XT)

-When using stacking mullion with head receptors, apply sealant between the end cap at the stacking mullion and the head receptor. Run the sealant the full width of the end cap. Tool and wipe away excess sealant.

See **Detail 350-28**.



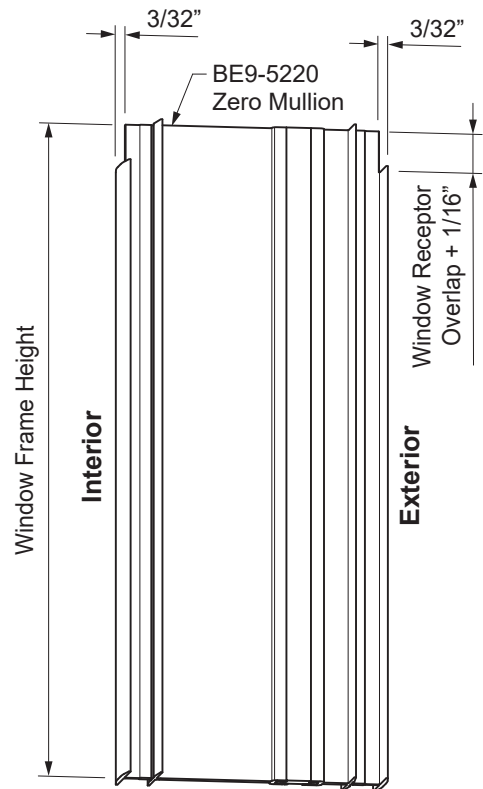
DETAIL 350-28

3-1/2" WINDOW DEPTH ZERO MULLION

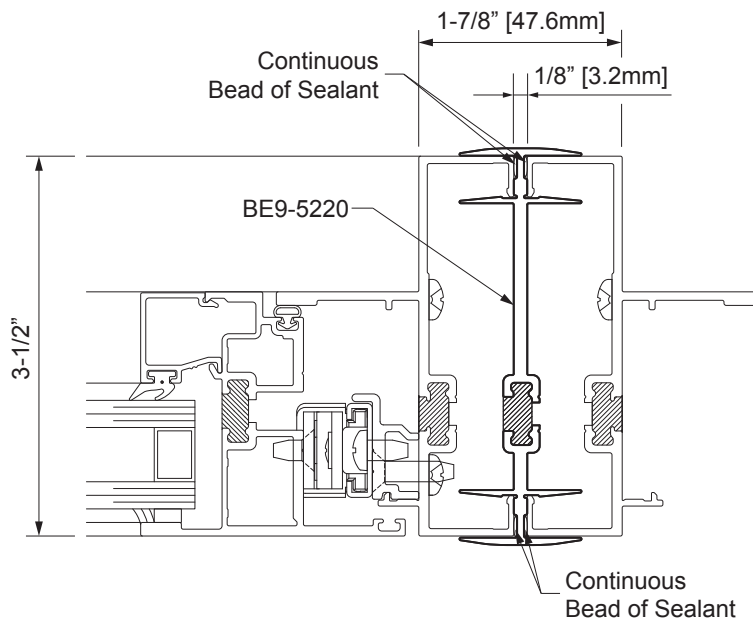
(YOW 350 T, YOW 350 TU, YOW 350 TUH, YOW 350 XT)

Sill Flashing may be used with the zero mullion, unclipped.
-The I-mullion is cut to window frame height and notched as shown in **Detail 350-29**.

-Apply continuous sealant to the corners of the BE9-5220 mullion on one side first.
-Snap the window frame in on that side.
See **Detail 350-30 & 350-31**.



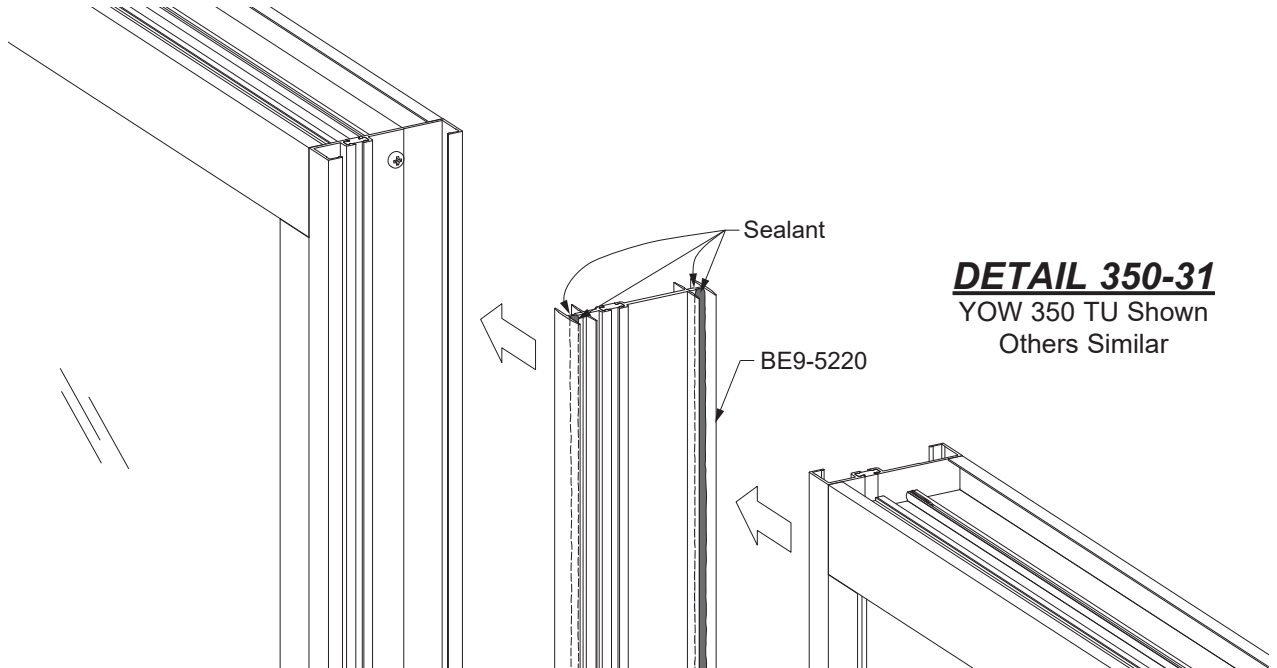
DETAIL 350-29



DETAIL 350-30
YOW 350 TU Shown
Others Similar

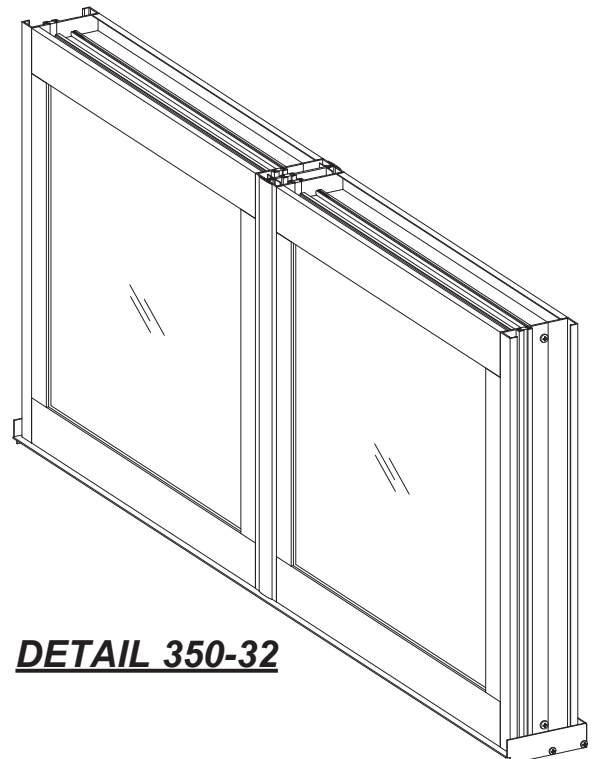
3-1/2" WINDOW DEPTH ZERO MULLION

(YOW 350 T, YOW 350 TU, YOW 350 TUH, YOW 350 XT) - CONTINUED



-Seal the other side of the mullion, and then snap the other window frame in.
See **Detail 350-31 & 350-32**.

Note: Not an expansion mullion. Do not use in openings with more than three windows.



3-1/2" WINDOW DEPTH MULLION CLIP

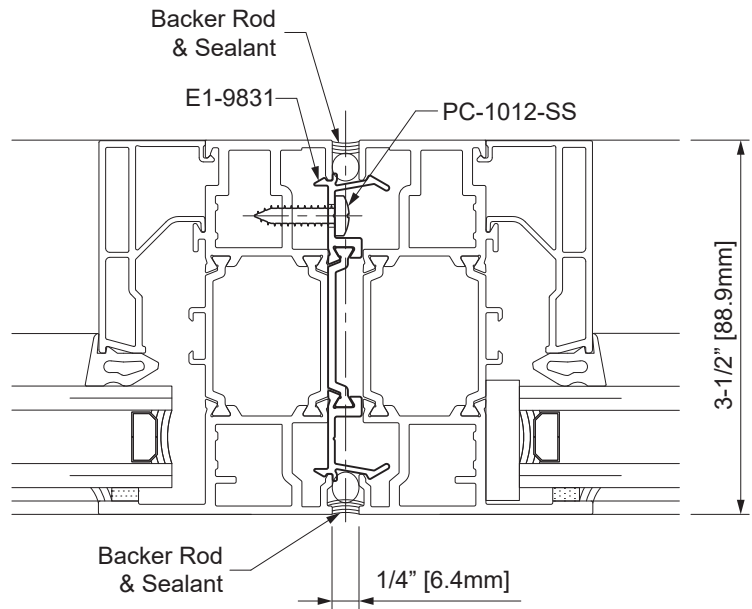
(YOW 350 XT Only)

Sill Flashing may be used with or without the E1-9831 mullion clip. Use of the mullion clips will create a 1/4" gap between the window frames.

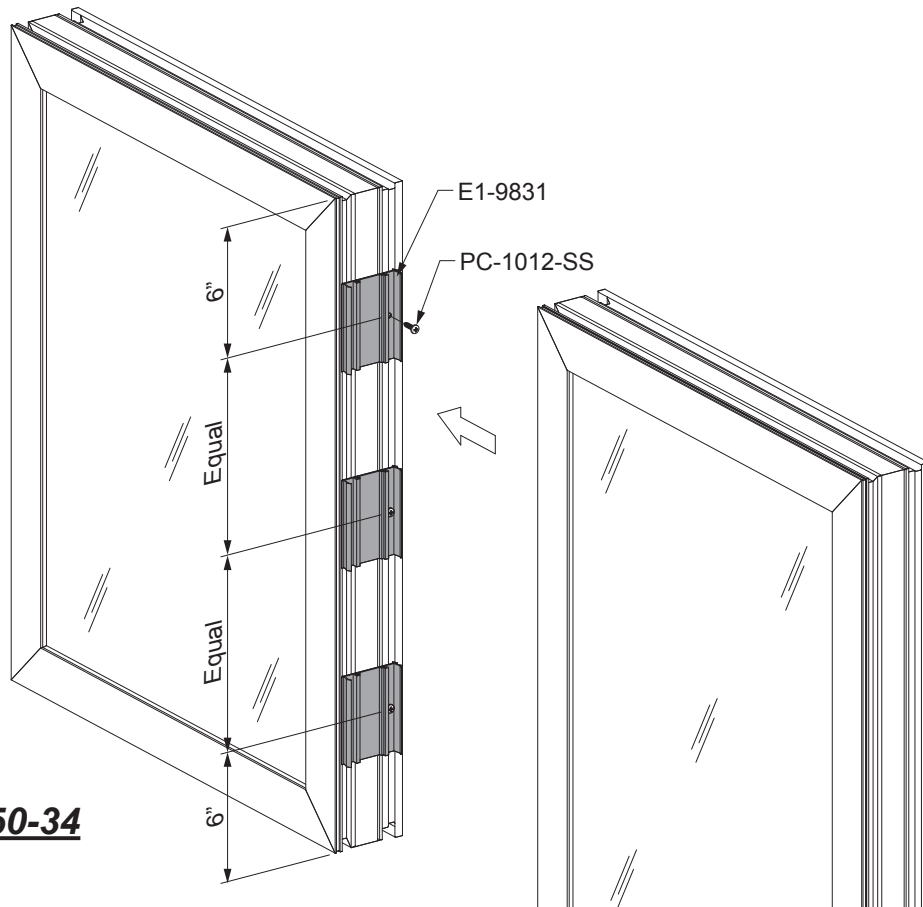
See **Detail 350-33**.

-Snap in the mullion clips, securing each of them to one of the window frames with a PC-1012-SS screw. Clips are to be located 6" from the top and bottom of the mullion, and one at the midpoint vertically, unless specified by applicable engineer.

See **Detail 350-34**.



DETAIL 350-33



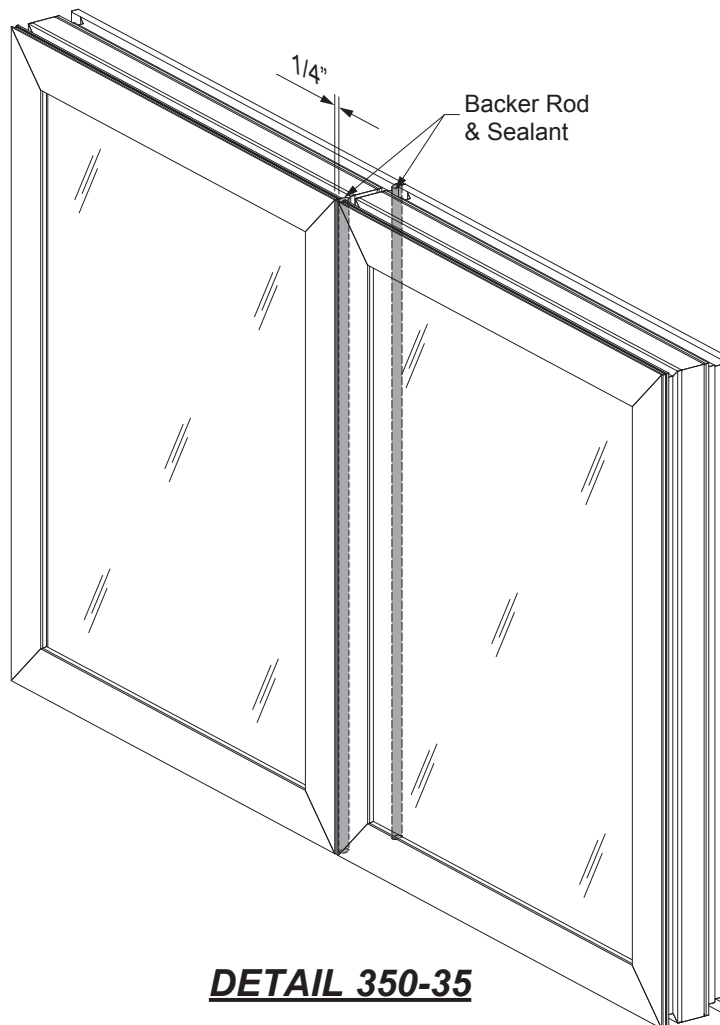
DETAIL 350-34

3-1/2" WINDOW DEPTH MULLION CLIP

(YOW 350 XT Only, Continued)

- Snap the other window frame onto the mullion clips.
- Apply backer rod and sealant to the interior and exterior of the system.

See **Detail 350-35**.



4" WINDOW JAMB PLUGS

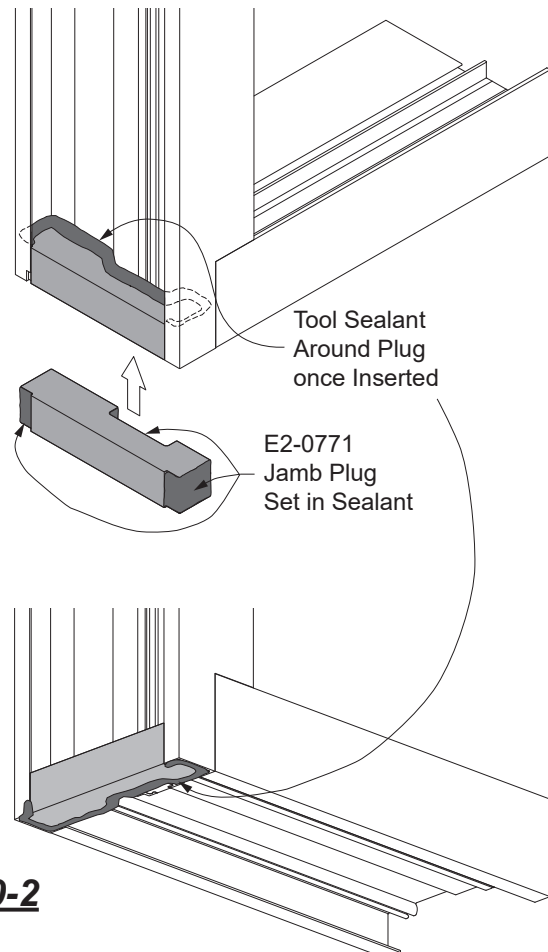
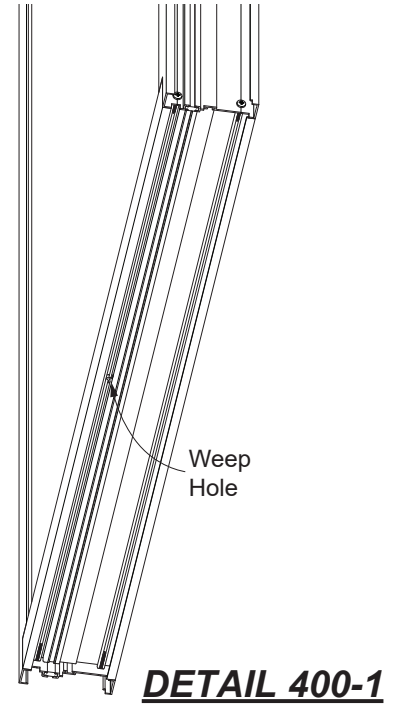
((YFW 400 TU/TUH ONLY))

For use with sill flashing:

Note: If the window itself doesn't have weep holes at the bottom as shown in **Detail 400-1**. (i.e. weepless), then disregard this procedure and skip to the next page.

-Apply sealant to all contact sides of the E2-0771 jamb plug and insert it into both jambs, flush with the bottom of the frame. Tool sealant at the top and bottom of the plug to ensure any gaps between the plug and the jamb are completely filled.

See **Detail 400-2**.

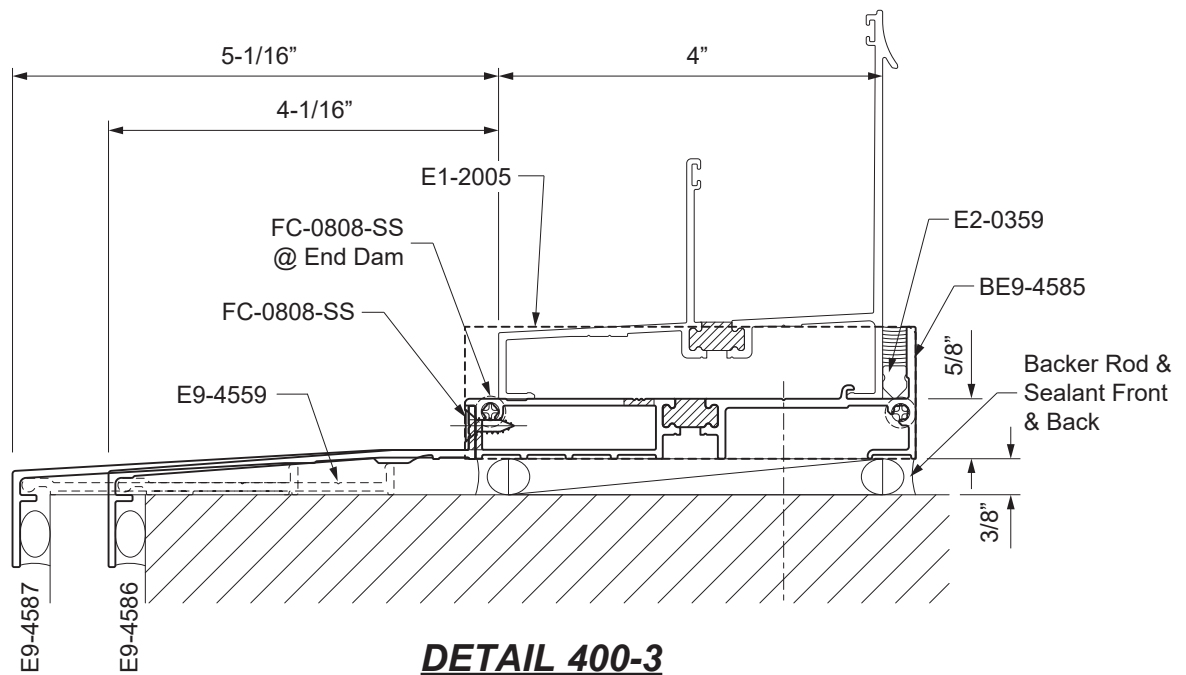


4" WINDOW DEPTH SILL FLASHING

(YFW 400 TU/TUH, YVS 400 TU, & YVS 410 TU/TUH)

- Sill extenders may be used depending upon the project.
- A 3/8" caulk joint is required when using optional sill extenders, E9-4586 or E9-4587.
- E1-2005 end dams are required and must be attached at each end of the sill flashing using FC-0808-SS fasteners (2 per end dam) prior to sill flashing installation.
- Sill flashing must be sealed both front and back before installation of sill extenders.

See **Detail 400-3**.



4" WINDOW DEPTH SILL FLASHING

(YFW 400 TU/TUH, YVS 400 TU, & YVS 410 TU/TUH)

Fabricate Sill Flashing:

-Cut the sill flashing to the dimension as shown on the approved shop drawings.

For applications without jamb receptors, Frame Width + 1/4".

For applications with jamb receptors, Frame Width + 2-3/4".

Note: The sill flashing may support multiple window units within the width of the rough opening.

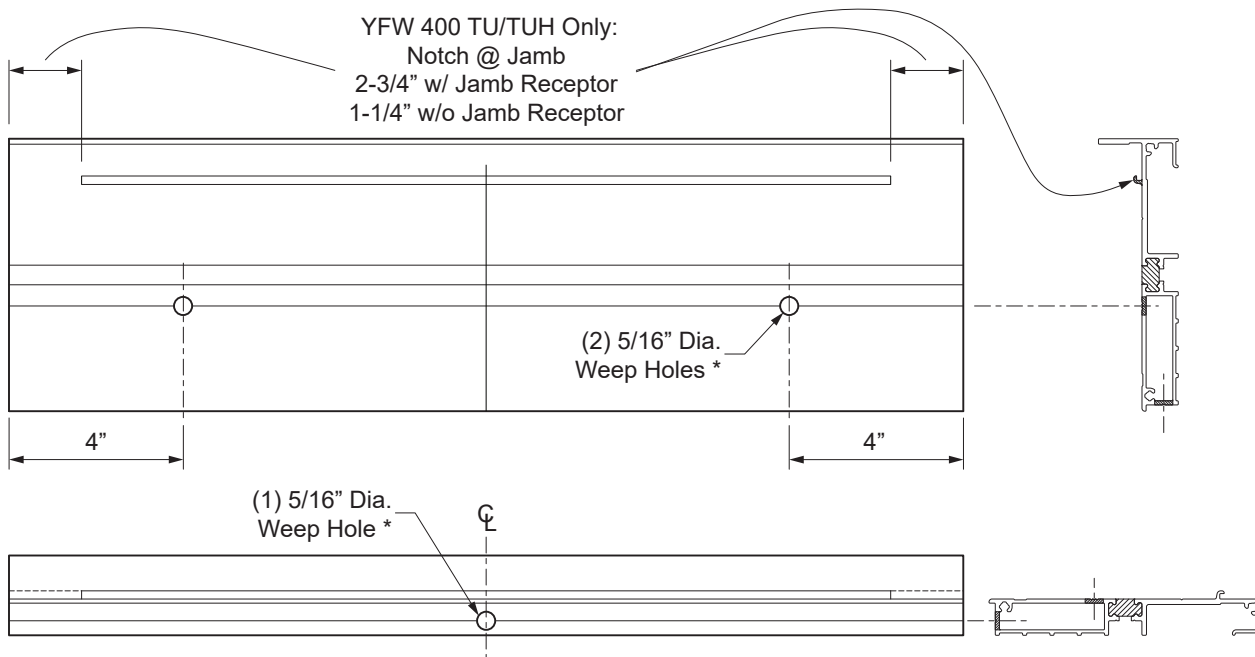
-Notch the return leg of the sill flashing as shown in **Detail 400-4** around the jambs. For notching at stacking or zero mullions, see **Detail 400-6** on **Page 54**.

For Sill Flashing without Optional Sill Extenders:

-Drill 5/16" diameter weep holes into the sill flashing, two on top of it, 4" from each end per window unit width, and one in front of the flashing at the midpoint of each window unit width.

For Sill Flashing with Optional Sill Extenders: The weep holes at the front of the sill flashing should be match drilled at the jobsite after installing the sill extenders to the sill flashing.

See **Pages 54** and **55**.



DETAIL 400-4

* **Note:** Weep holes in sill flashing not required for weepless windows.

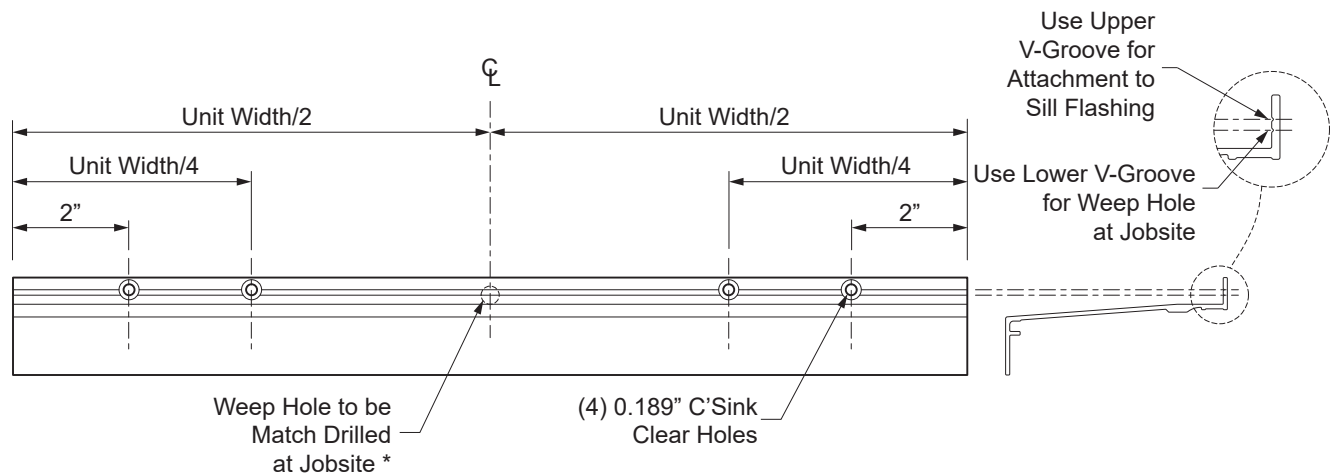
4" WINDOW DEPTH SILL FLASHING

(YFW 400 TU/TUH, YVS 400 TU, & YVS 410 TU/TUH)

Fabricate Optional Sill Extenders:

-Drill 0.189" countersunk holes at the upper V-groove, 4" from each end per unit width and at the quarter points of each window unit width. Match drill 0.141" diameter tap holes into the sill flashing for anchorage. Do not drill the weep hole at this time.

See **Detail 400-5**.



DETAIL 400-5

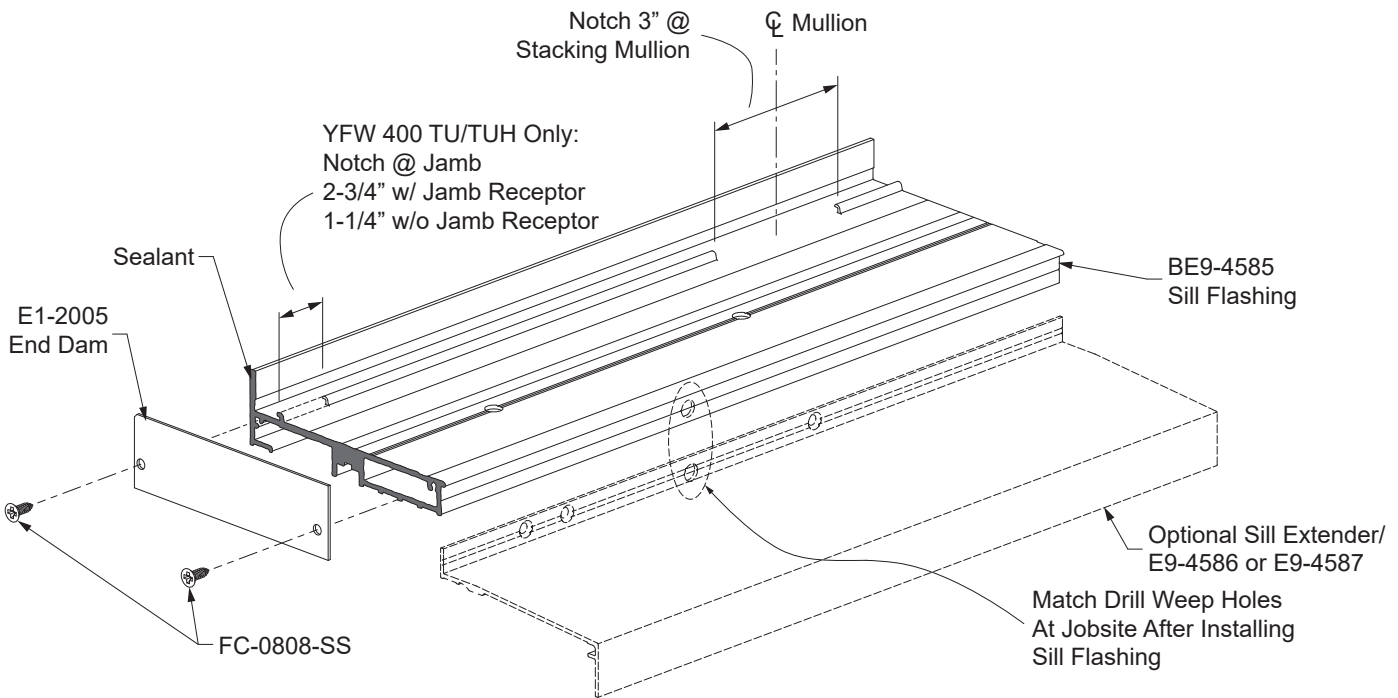
* **Notes:** Weep holes in sill flashing not required for weepless windows. See notes on **Detail 400-8** for weep hole fabrication.

4" WINDOW DEPTH SILL FLASHING

(YFW 400 TU/TUH, YVS 400 TU, & YVS 410 TU/TUH)

- Apply sealant to the end of the sill flashing.
- Install the E1-2005 end dam with two FC-0808-SS screws at each end of the flashing.
- Tool the sealant at the end dam to ensure a water tight seal.

See **Detail 400-6**.



DETAIL 400-6

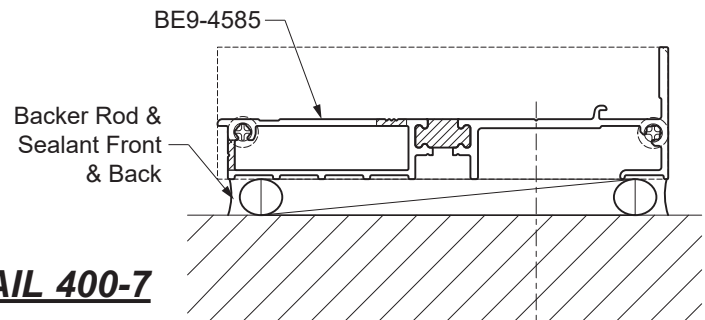
* **Note:** Weep holes in sill flashing not required for weepless windows.

Install the Sill Flashing:

-If a head receptor is used, locate the sill flashing plumb from the head receptor. Fasten the sill flashing into the substrate using anchor fasteners specified by Florida Product Approvals and or engineering calculations. Seal anchor fastener heads.

-Apply backer rods and sealant front and back at the sill flashing.

See **Detail 400-7**.

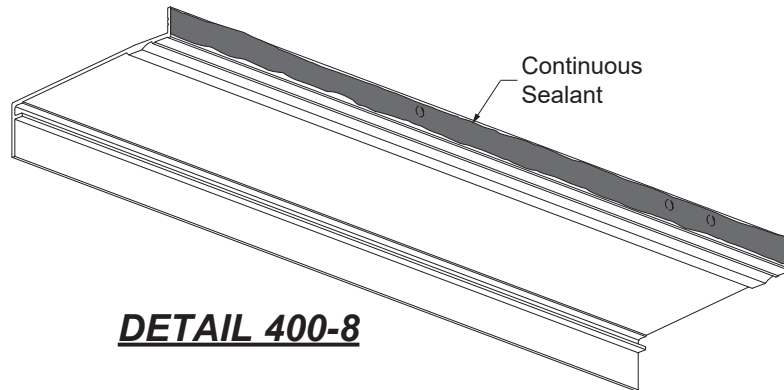


DETAIL 400-7

4" WINDOW DEPTH SILL FLASHING

(YFW 400 TU/TUH, YVS 400 TU, & YVS 410 TU/TUH)

-If using an optional sill extender, apply continuous sealant to the back of the extender as shown in **Detail 400-8**.

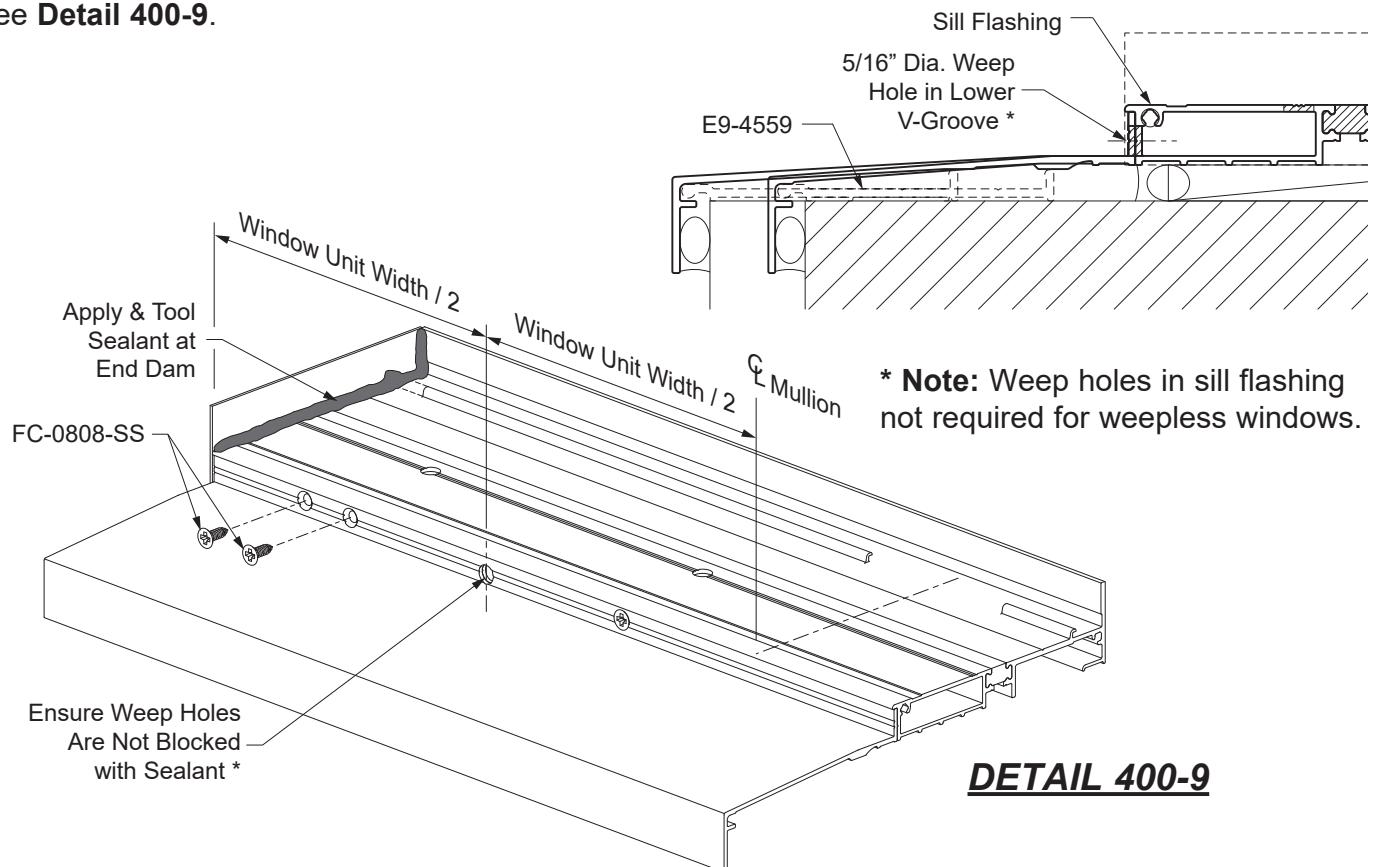


DETAIL 400-8

Install Optional Sill Extender:

- Attach the extender using FC-0808-SS fasteners to the sill flashing along with E9-4559 sill trim base to the substrate.
- Match drill the 5/16" diameter weep holes into the lower V-Groove of the sill extender at the mid points of every window unit width. Wipe away excess sealant from the weep holes.

See **Detail 400-9**.

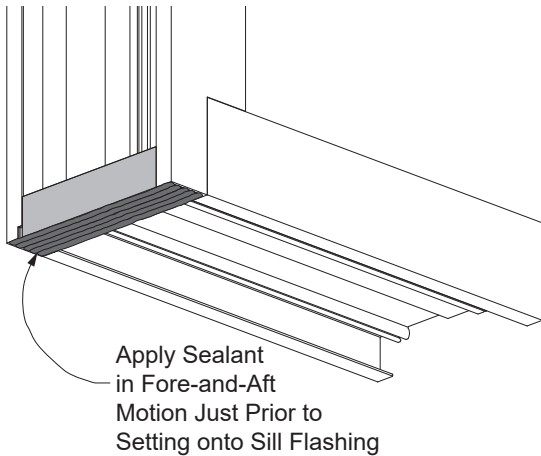


DETAIL 400-9

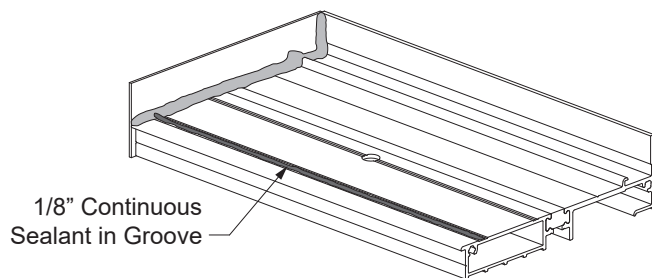
4" WINDOW DEPTH SILL FLASHING**(YFW 400 TU/TUH ONLY)
INSTALLATION OPTIONS AND PROCEDURES**

Note: the following procedure is to be performed just prior to installing the window itself.

- Apply sealant (minimum 1/4" bead) to the bottom of the jamb plug in a fore-and-aft motion, covering the bottom of the jamb as shown in **Detail 400-10**.
- Apply continuous 1/8" bead of sealant into the groove of the sill flashing as shown in **Detail 400-11**. Ensure the sealant does not block any weep holes.
- Install the window immediately after application. Tool excess sealant.



DETAIL 400-10
Not required for weepless windows.



DETAIL 400-11
Weep holes in sill flashing not required for weepless windows.

4" WINDOW DEPTH HEAD / JAMB RECEPTORS

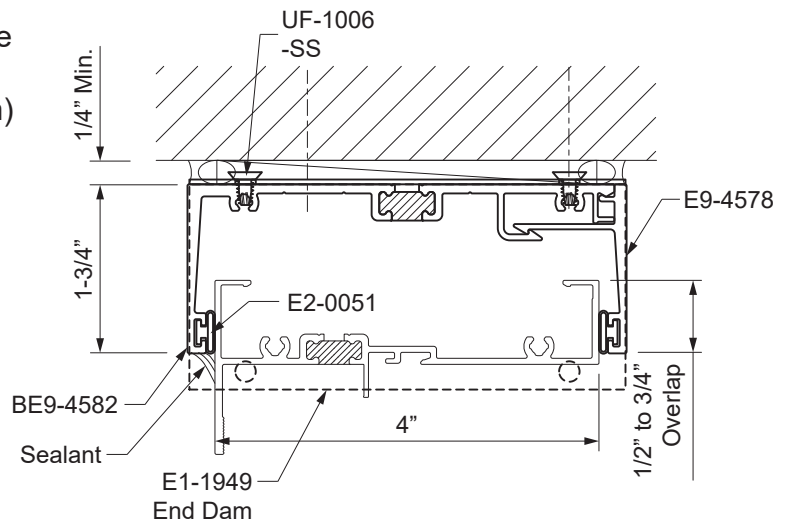
(YFW 400 TU/TUH, YVS 400 TU, YVS 410 TU/TUH, YSD 400 T HEAD ONLY)

- Receptors can be used at the head and or jamb. If jamb receptors are used, a sill flashing is required.
- A minimum of 1/4" perimeter caulk joint is required.
- Overlap with the window system itself is between 1/2" to 3/4".
- E2-0051 bulb gasket is required and must be installed into the receptor and the receptor stop.
- E1-1949 end dams are required and must be attached at each end of the head receptor using UF-1006-SS fasteners (2 per end dam) prior to receptor installation.

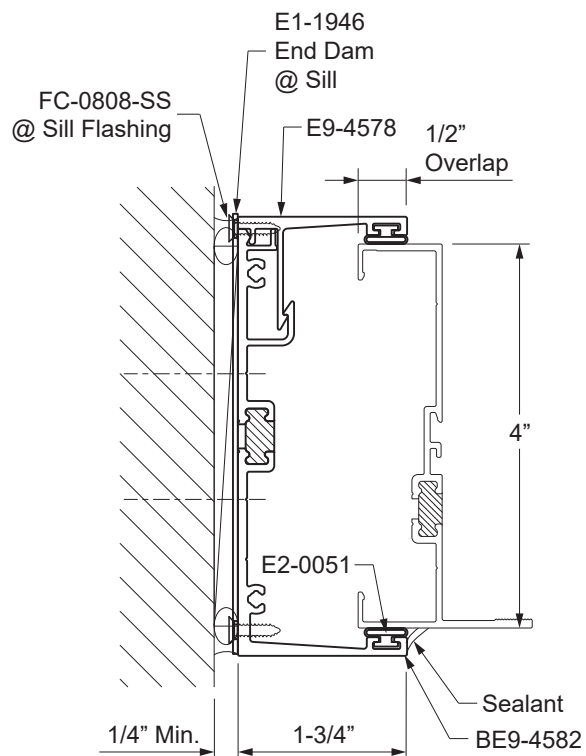
* Alternate back seal to be tooled to the maximum height of receptor gasket at head and jambs.

See **Detail 400-12**.

Note: If a head and jamb receptor system is assembled in the shop, the system must be inspected on the job site prior to and after field installation. Reseal any cracked or broken seals.



DETAIL 400-12



4" WINDOW DEPTH HEAD / JAMB RECEPTORS

INSTALLATION OPTIONS AND PROCEDURES

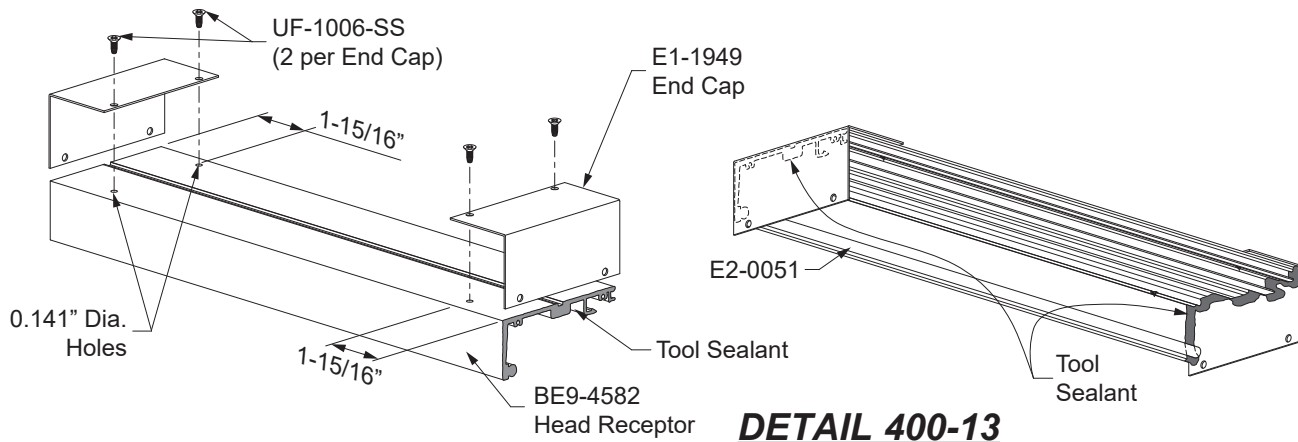
Install window receptor system at the head only or at the head and jambs:

Note: sill flashing is required when using head and or jamb receptors.

Head receptors must be assembled prior to installation.

- Drill (2) 0.161" dia. tap holes, 1-15/16" from each end, along the screw splines located at the underside of the receptor.
- Cut E2-0051 bulb gasket to the length of the receptor plus (+) 1/4" and install it into the receptor reglet.
- Apply sealant to each end of the head receptor.
- Attach an end cap E1-1949 at each end of the head receptor with (2) UF-1006-SS screws.
- Tool the sealant to the end cap.

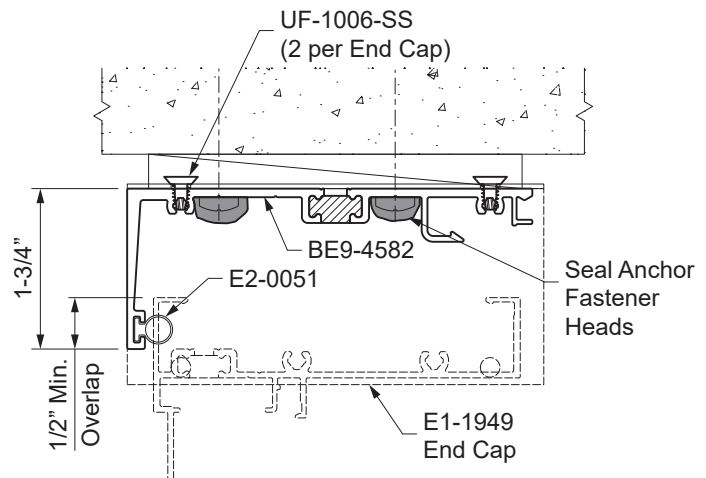
See **Detail 400-13**.



DETAIL 400-13

- Refer to structural calculations to determine the size and location of fasteners (minimum #10 fasteners).
- Shim and secure the exterior leg of receptor(s) using the required fasteners; 3/8" nominal joint width.
- Seal anchor fastener heads for head and or jamb receptors.

See **Detail 400-14**.

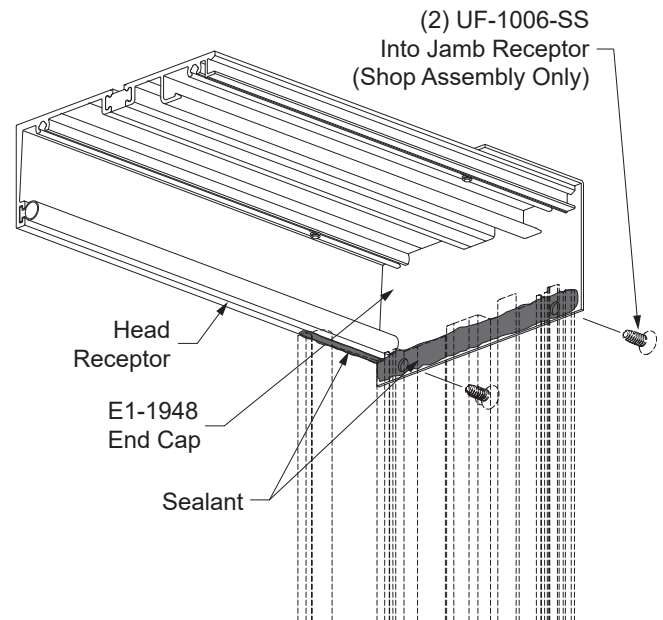


DETAIL 400-14

4" WINDOW DEPTH HEAD / JAMB RECEPTORS

INSTALLATION OPTIONS AND PROCEDURES - JAMB RECEPTOR WITH SILL FLASHING

- When receptors are used at both the head and the jamb, the head receptor will run through. Sill flashing will also be required.
- Jamb receptors will run from the top of the nub on the sill flashing to the underside of the head receptor.
- Seal the intersection of receptors and end caps prior to anchoring the jamb receptor.
- If assembling a head and jamb receptor system in the shop, drill tap holes for #8 screws into the jamb receptor using the pilot holes in the end dam, and attach end dam to the jamb receptor using (2) UF-1006-SS screws.

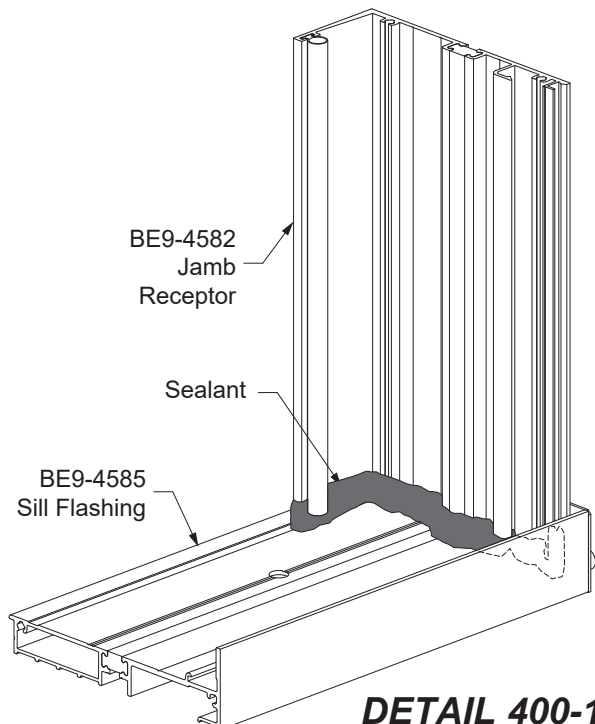


DETAIL 400-15

See **Detail 400-15**.

- Locate the BE9-4582 jamb receptor on top of the sill flashing, inside the end dams and end caps at the head receptor. Shim as required and fasten the jamb receptor into the jamb substrate.
- Seal the jamb receptor at the sill flashing.

See **Detail 400-16**.

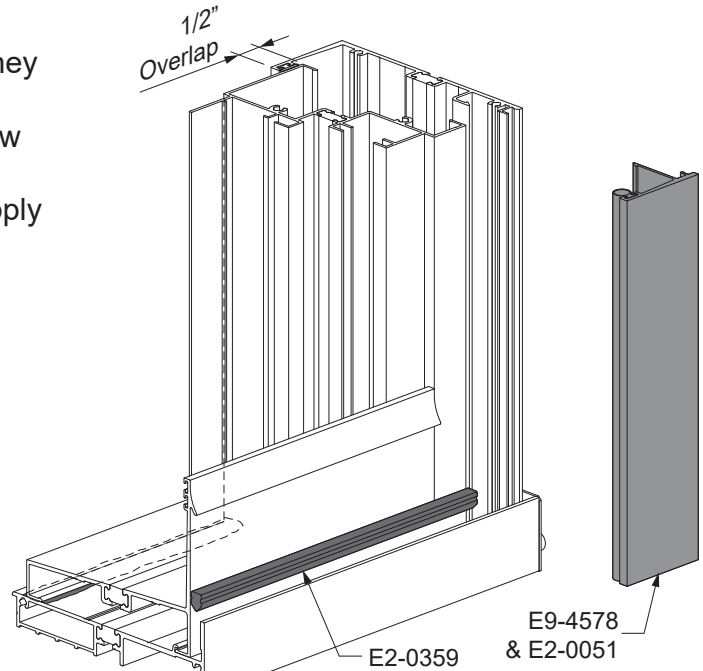


DETAIL 400-16

4" WINDOW DEPTH HEAD / JAMB RECEPTORS

INSTALLATION OPTIONS AND PROCEDURES - JAMB RECEPTOR WITH SILL FLASHING

- Install the window frame into the opening.
- Shim the sill/jamb of the window to ensure that they are installed plumb, square, and level.
- Push in the E2-0359 spacer (cut to width of window frame) between the sill and sill flashing.
- Just prior to installing the interior receptor stop, apply sealant at the interior receptor snap, 6" from the top of the sill flashing as shown in **Detail 400-17**.
- Snap in interior receptor leg(s).

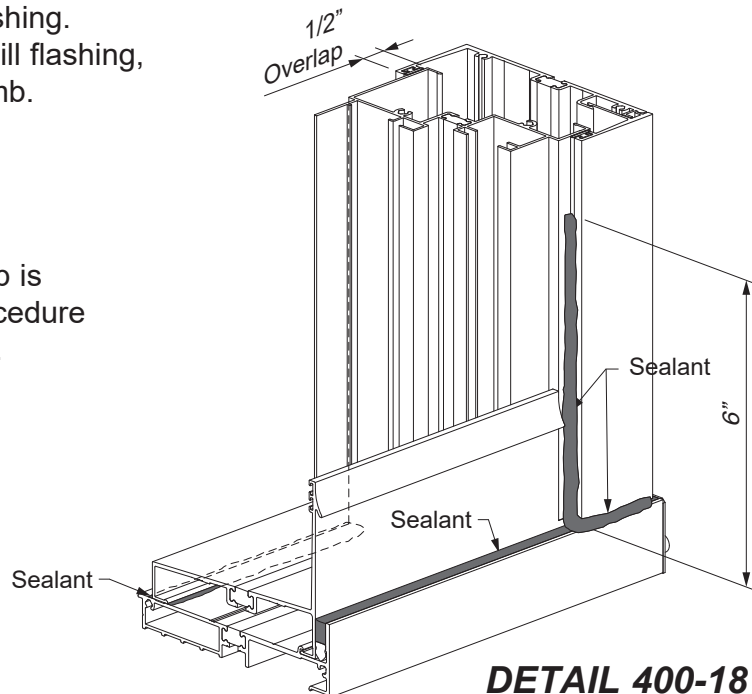


DETAIL 400-17

- After receptor stop is installed, apply sealant to the gap in the sill flashing and to the joint of the jamb receptor up to 6" from the top of the sill flashing.
- Apply sealant to the front of the sill at the sill flashing, leaving a 1/2" to 3/4" weep gap at each jamb.

See **Detail 400-18**.

Note: In applications where the receptor clip is installed on the exterior, the installation procedure is similar to that of the 2-1/4" window depth.



DETAIL 400-18

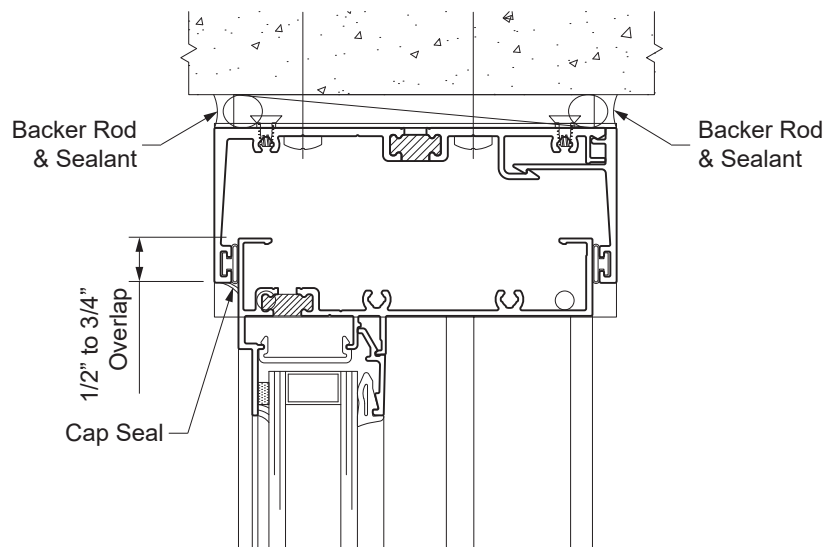
4" WINDOW DEPTH HEAD / JAMB RECEPTORS

INSTALLATION OPTIONS AND PROCEDURES

Seal Receptors and Sill Flashing

-Install backer rod and apply and tool perimeter sealant on both the exterior and interior.

See **Detail 400-19**.



DETAIL 400-19

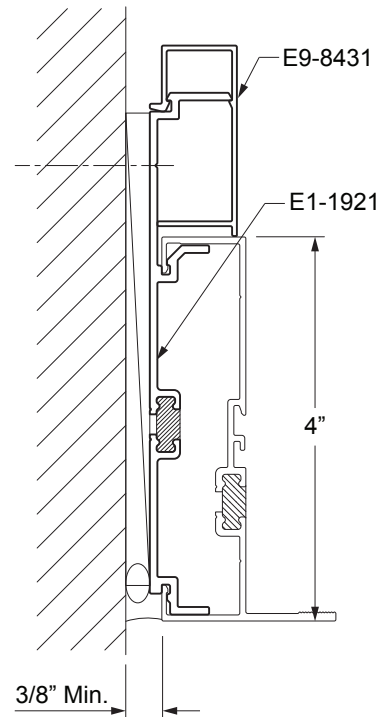
4" WINDOW DEPTH STRAP / TWIST ANCHORS

(YFW 400 TU/TUH, YVS 400 TU, & YVS 410 TU/TUH)

- A minimum of 3/8" perimeter caulk joint is required. Strap anchors reduce the clearance into the rough opening by 1/8" on each side, 1/4" width and height.
- Anchor location and fastener size to be determined by test reports or engineer of record.

See **Detail 400-20**.

Notes: Strap anchors can be used with interior sealant as long as the sealant is tooled. Strap anchors cannot be used at receptors nor at sill flashing.



DETAIL 400-20

APPROVED FOR UP TO WIND ZONE 3 ONLY
(YFW 400 TU/TUH, YVS 400 TU, & YVS 410 TU/TUH)

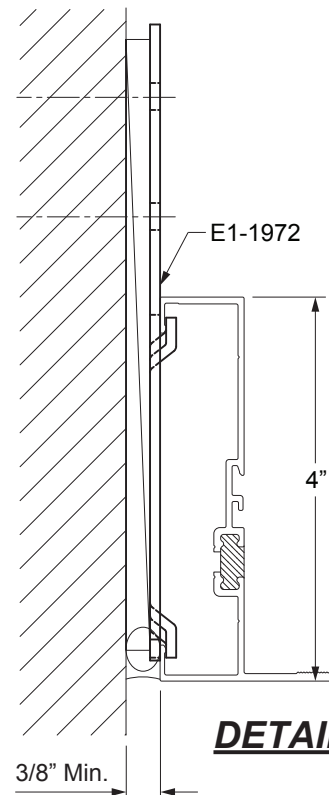
E1-1972 Steel twist anchors are available and when used, must be installed:

- A minimum of 3" from the corner of all frames.
- At 15" on center.
- A maximum of 3" on each side of the centerline of ventilator locking points.
- A maximum of 3" from the edge of framing joints or mullions.
- For full anchor engagement in the window frame, the twist anchor must be at 90° angle from the window.

- A minimum of 3/8" perimeter caulk joint is required. Steel twist anchors reduce the clearance into the rough opening by 1/8" on each side, 1/4" width and height.

See **Detail 400-21**.

Notes: Twist anchors can be used with interior sealant as long as the sealant is tooled. Twist anchors cannot be used at receptors nor at sill flashing.



DETAIL 400-21

4" WINDOW DEPTH STACKING MULLION FABRICATION

(YFW 400 TU/TUH, YSD 400 T, YVS 400 TU, & YVS 410 TU/TUH) INSTALLATION OPTIONS AND PROCEDURES

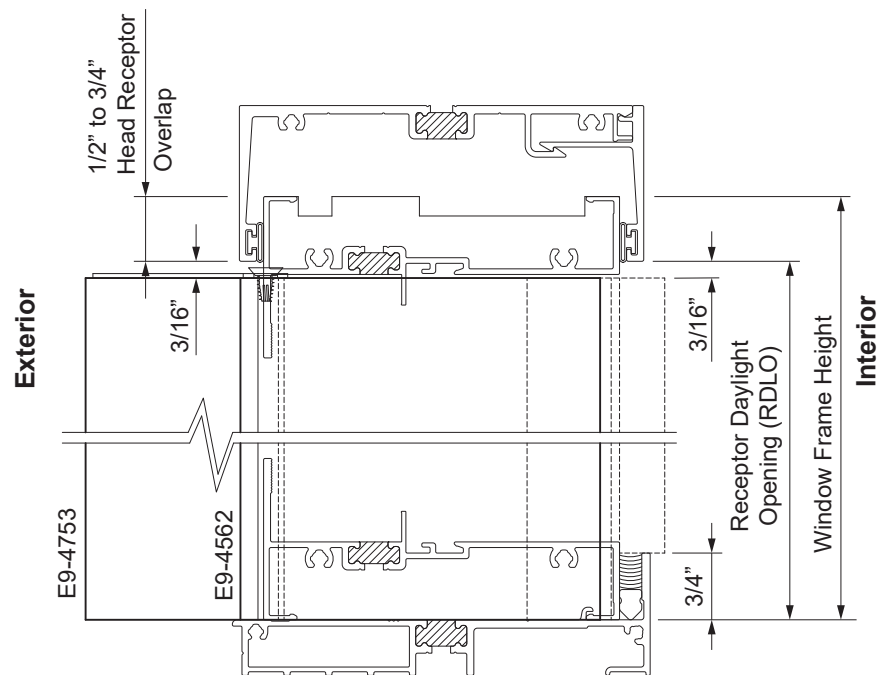
For use without head receptor:

-Stacking mullions are cut to window frame height.

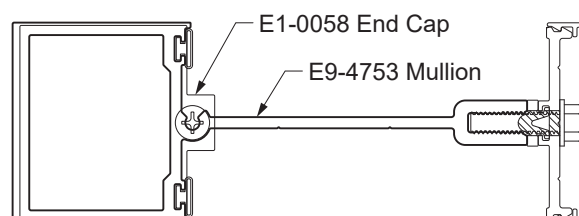
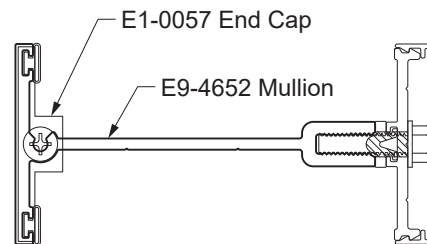
For use with head receptor:

-Stacking mullions are cut to receptor daylight opening minus 3/16".

See **Detail 400-22**.



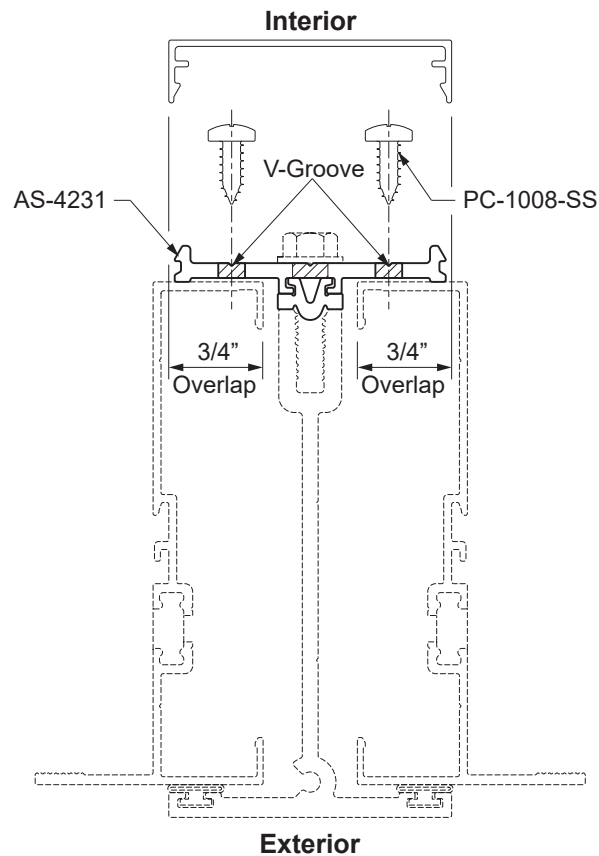
DETAIL 400-22



4" WINDOW DEPTH STACKING MULLION

STACKING MULLION GENERAL INSTALLATION NOTES

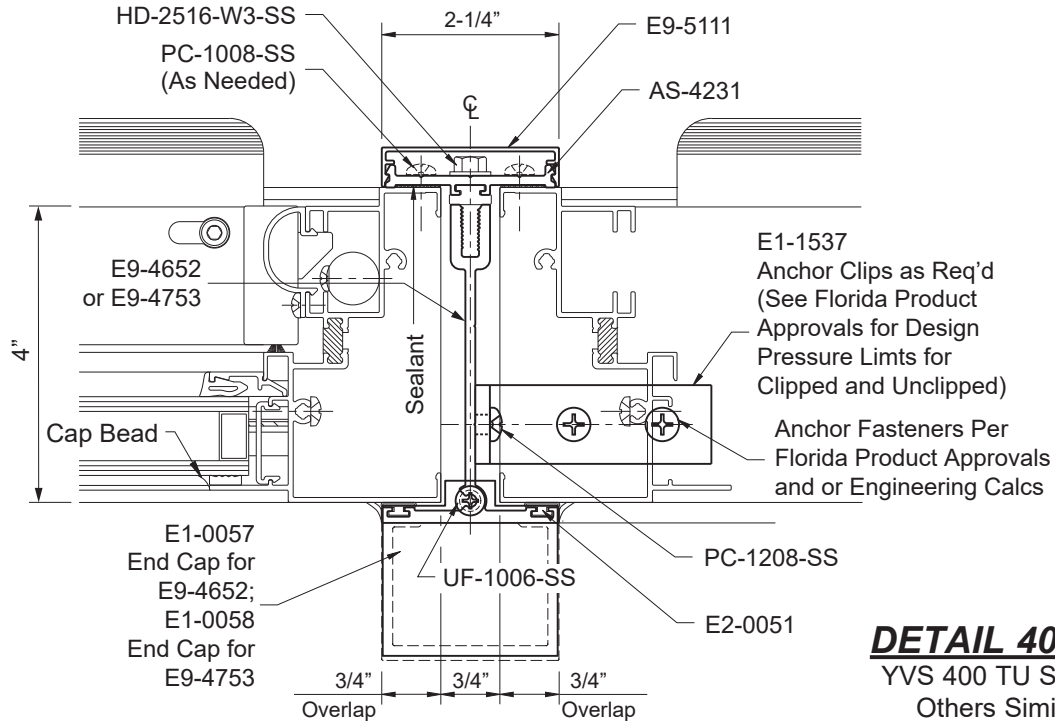
- Stacking mullions cannot be used with double hung windows.
- Stacking mullion anchor clips cannot be used with the sill flashing.
- Window overlap for 4" window systems is 3/4", unless otherwise specified.
- The AS-4231 interior cover base is attached to the window jambs with PC-1008-SS screws. Refer to the Florida Product Approvals and or engineering calculations for vertical fastener spacing.
- Drill 0.213" diameter clear holes for the PC-1008-SS screws at the v-groove in the interior cover base as shown in **Detail 400-23**.
- If stacking mullions are used with head receptors, see sealant instructions on **Page 66**.



DETAIL 400-23

4" WINDOW DEPTH VERTICAL STACKING MULLION

(YFW 400 TU/TUH, YSD 400 T, YVS 400 TU, YVS 410 TU/TUH)



DETAIL 400-24
YVS 400 TU Shown
Others Similar

1. Install the first window assembly into the opening:
 - Shim and anchor according to the installation instructions for that system.
2. Cut two pieces of gasket, E2-0051, to stacking mullion height and install into the reglets.
3. Install mullion end cap to each end of the stacking mullion with a UF-1006-SS fastener.
4. Attach anchor clips to what will be the open side of the stacking mullion:
 - Attach anchor clip, E1-1537, to the top and bottom of one side of the stacking mullion such that each clip extends 1/4" past the end of the mullion.
 - Attach anchor clips with two PC-1208-SS fasteners at each end (do not completely tighten yet).

Note: Refer to engineer of record or Florida Product Approvals for the use of clipped or unclipped mullions.
5. Install the stacking mullion into the opening according to **Detail 400-24**:
 - Slide each anchor clip tight against the masonry.
 - Attach each anchor clip to the masonry with two flat head fasteners.
 - Now completely tighten the PC-1208-SS fasteners used to attach the anchor clips to the mullion.
6. Carefully slide the second window assembly in and anchor it to the masonry.

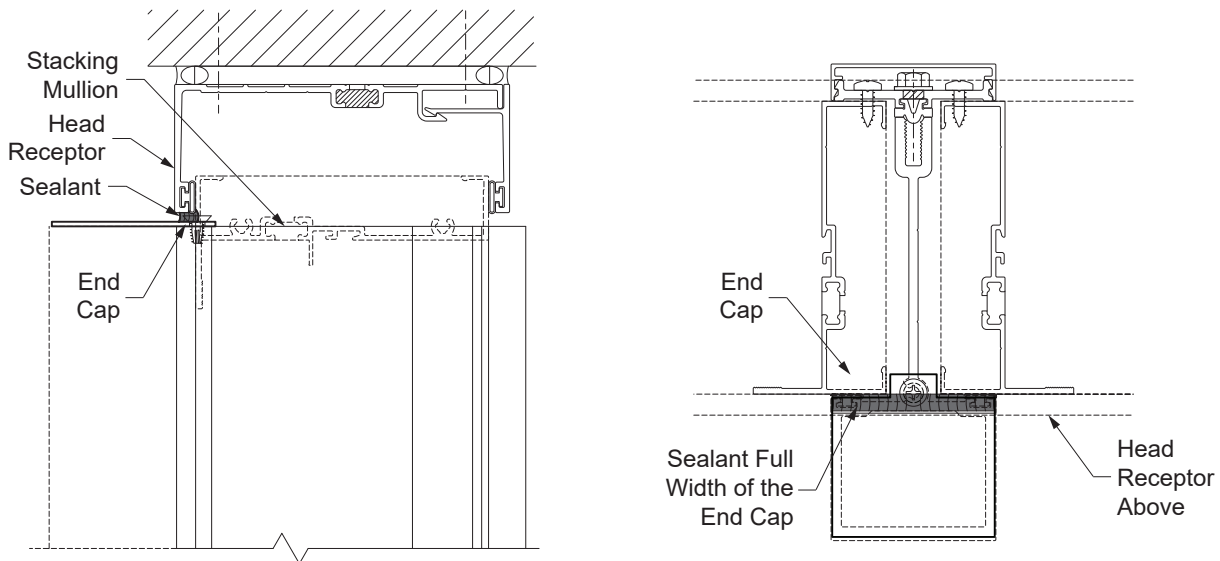
4" WINDOW DEPTH VERTICAL STACKING MULLION (Continued)

(YFW 400 TU/TUH, YSD 400 T, YVS 400 TU, YVS 410 TU/TUH)

7. Run beads of sealant up each interior frame jamb at the stacking mullion.
8. Attach the pressure plate, AS-4231, to the stacking mullion:
 - Install HD-2516-W3-SS fasteners at 1-1/2" from each end maximum and then 9" on center.
 - Pressure plates are pre-drilled; drill additional 0.281" diameter (#9/32) holes if necessary.
 - Start installing fasteners at the center of the pressure plate and work towards each end.
 - Torque each fastener to 40 to 45 inch-pounds.
9. Install PC-1008-SS fasteners through the pressure plate into the window frames as necessary.
10. Install snap cover, E9-5111, starting from the bottom and work up the mullion.

-When using stacking mullion with head receptors, apply sealant between the end cap at the stacking mullion and the head receptor. Run the sealant the full width of the end cap. Tool and wipe away excess sealant.

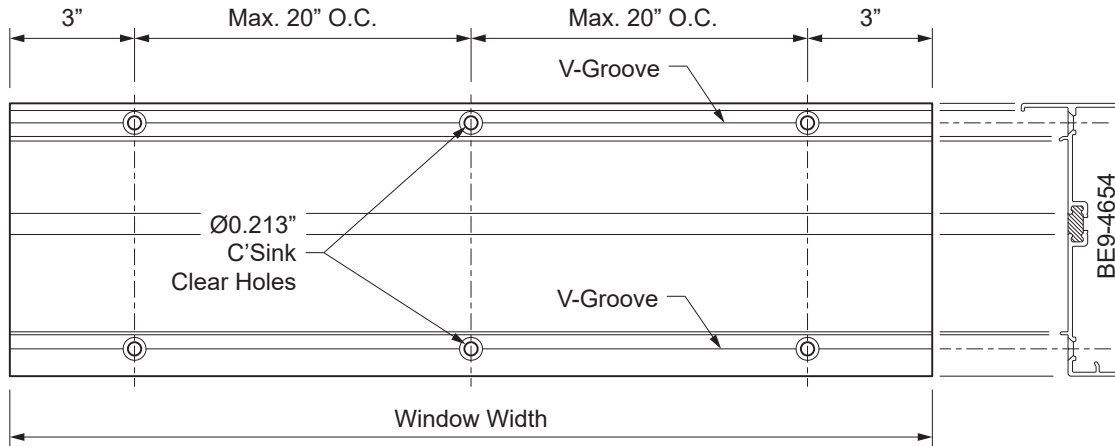
See **Detail 400-25**.



DETAIL 400-25

4" WINDOW DEPTH STACKING HORIZONTAL

(YFW 400 TU/TUH, YSW 400 T, YVS 400 TU, YVS 410 TU/TUH)



DETAIL 400-26

Note: Horizontal stacking mullions cannot be used with jamb receptor.

1. Cut stacking horizontal BE9-4654 to window width.

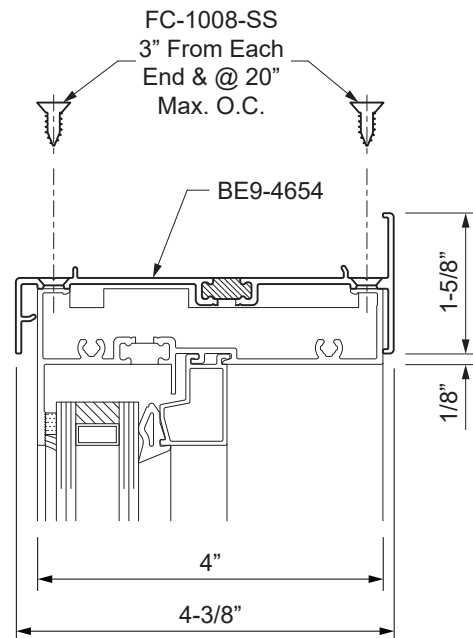
Attach Stacking Horizontal to Bottom Window First:

2. Drill $\text{Ø}0.213$ " countersunk clear holes along the v-grooves into the horizontal, 3" from each end of the mullion and at 20" maximum on center.

See **Detail 400-26**.

3. Set the stacking horizontal on top of the lower window, and drill $\text{Ø}0.161$ " tap holes into the top of the lower window, using the pilot holes already drilled into the horizontal.
4. Secure the stacking horizontal to the top of the lower window with FC-1008-SS fasteners.

See **Detail 400-27**.



DETAIL 400-27

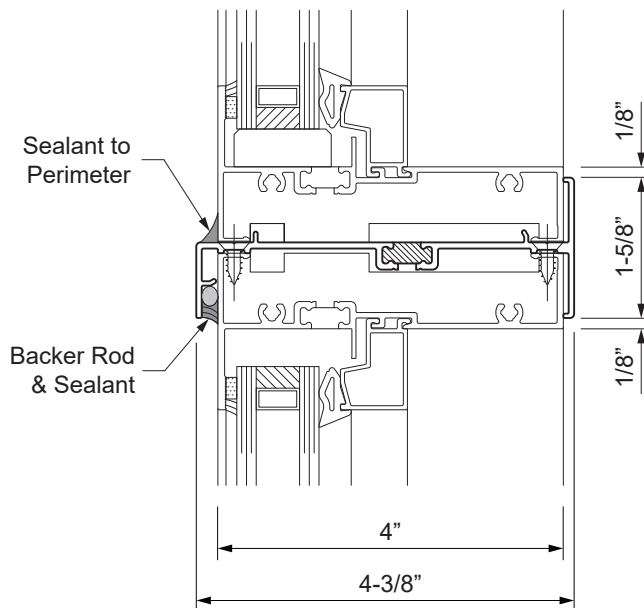
4" WINDOW DEPTH STACKING HORIZONTAL (Continued)

(YFW 400 TU/TUH, YSW 400 T, YVS 400 TU, YVS 410 TU/TUH)

5. Set the upper unit on top of the stacking horizontal.
6. Apply backer rod and continuous sealant to the underside of the exterior of the horizontal. Tool the sealant. Also, apply and tool sealant to topside of the exterior of the horizontal all the way to the perimeter of the window.

See **Detail 400-28**.

7. Anchor the stacking horizontal and windows per approved shop drawings.



DETAIL 400-28

Note: End condition is to be determined per specific project.

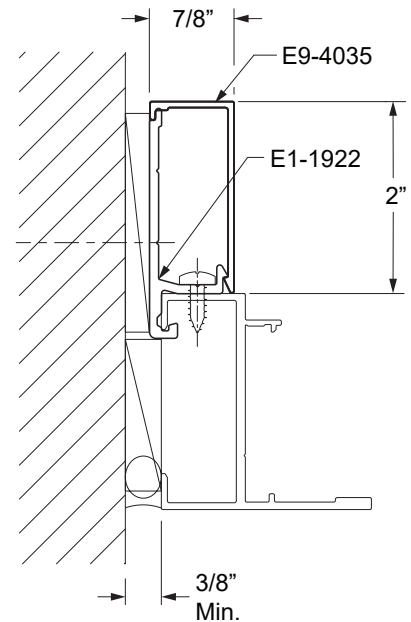
EDGE CLIP ANCHOR

FOR MOST YKK WINDOW SYSTEMS

- A minimum of 3/8" perimeter caulk joint is required. Edge clip anchors reduce the clearance into the rough opening by 1/8" on each side, 1/4" width and height.
- Anchor location and fastener size to be determined by test reports or engineer of record.

See **Detail A-1**.

Note: If using an interior air barrier, order part E1-1922 as E9-4034 to make the clip continuous to properly seal the interior.



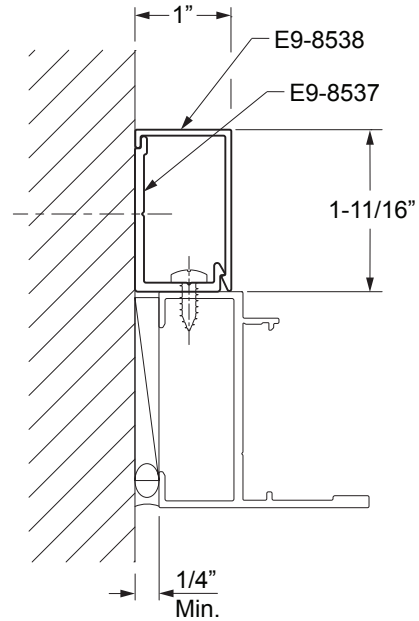
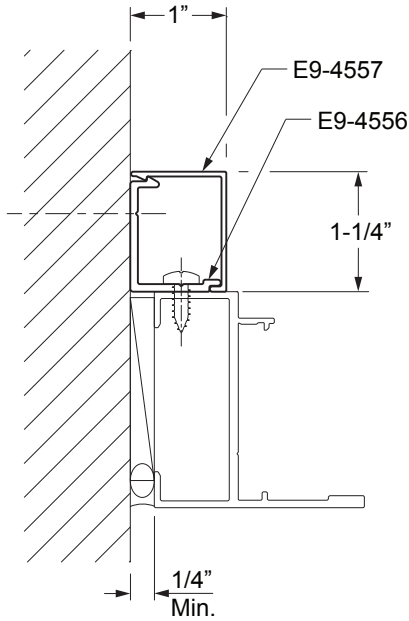
DETAIL A-1
YOW 225 Shown,
Others Similar

TRIM & CLIP ANCHOR

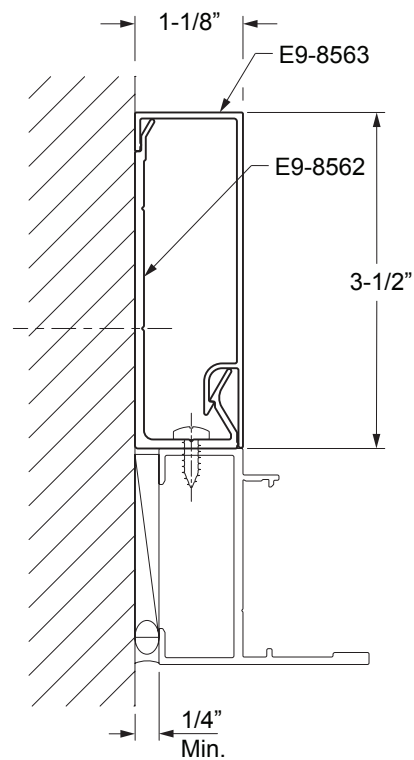
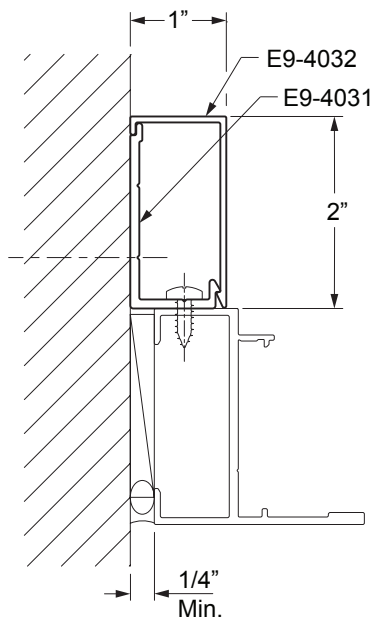
FOR MOST YKK WINDOW SYSTEMS

- A minimum of 1/4" perimeter caulk joint is required.
- Fastener size and location to be determined by test reports or engineer of record.

See **Detail A-2**.



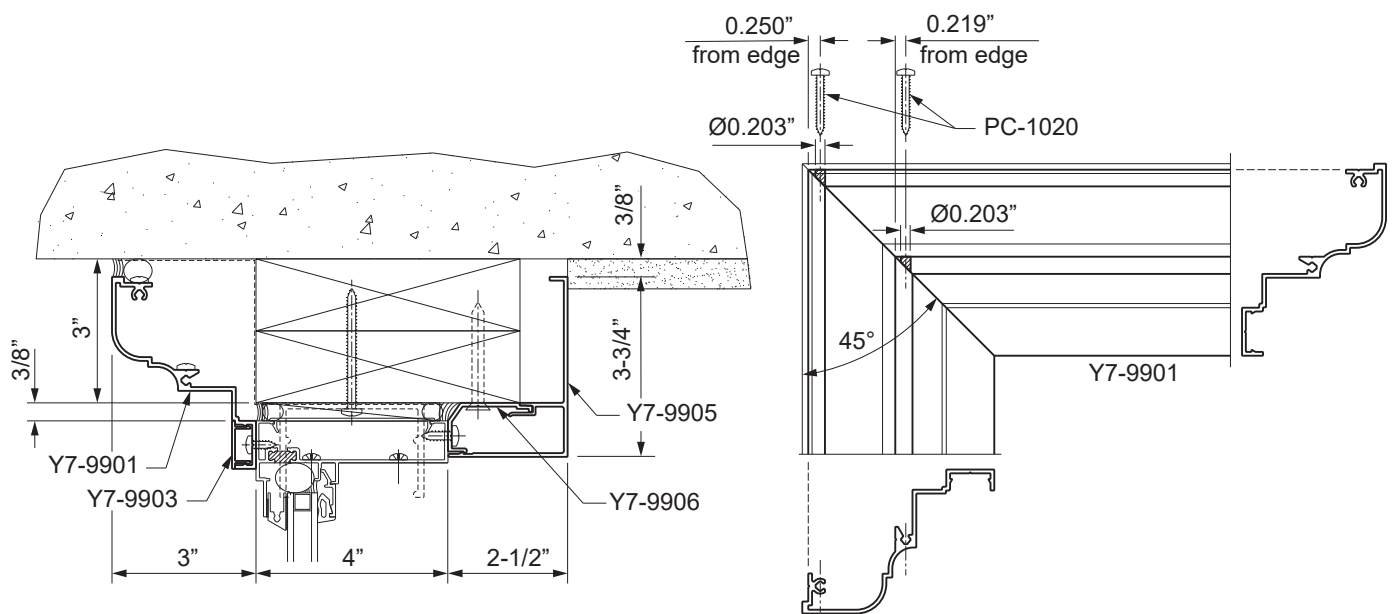
DETAIL A-2
YOW 225 Shown,
Others Similar



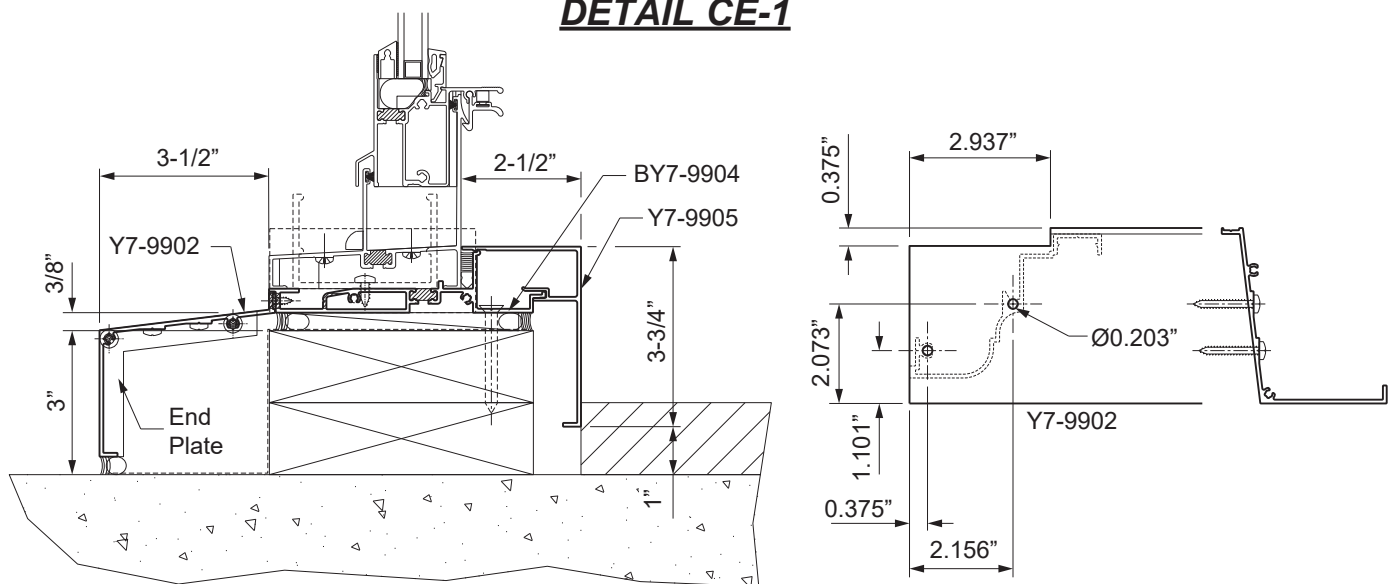
PANNING OPTIONS

CUSTOM JOBSITE EXAMPLE 1 (YVS 410 TU)

- Exterior panning should be fabricated according to **Detail CE-1**.
- Interior panning can be fabricated like trim & clip.



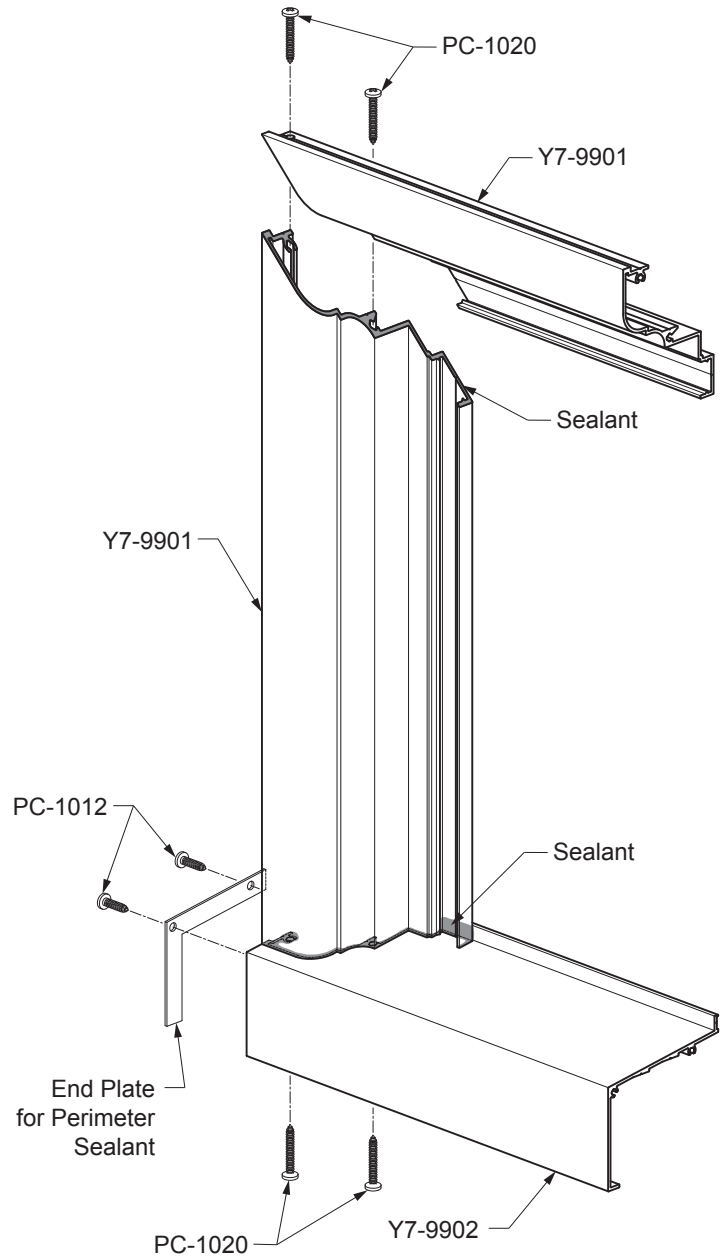
DETAIL CE-1



PANNING OPTIONS

CUSTOM JOBSITE EXAMPLE 1 (YVS 410 TU, Continued)

- Apply sealant to ends of the panning members as shown in **Detail CE-2**.
- Fasten the vertical and horizontal panning members together using PC-1220 screws. Custom end plates may be used at the sill panning.



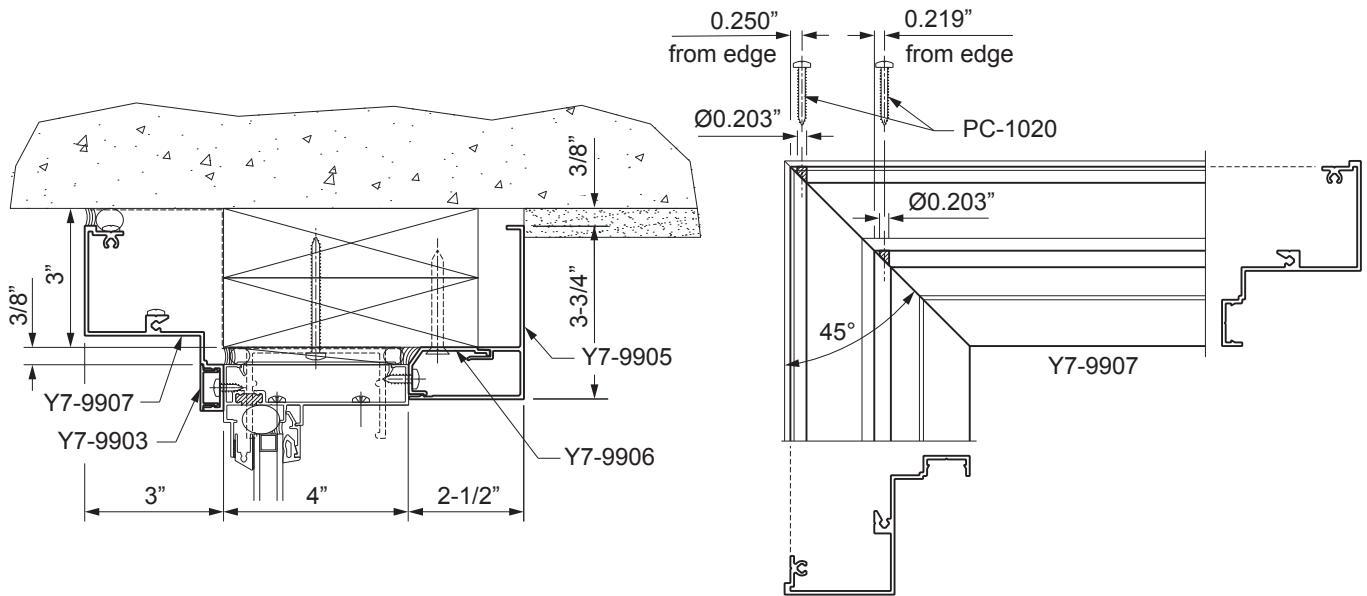
DETAIL CE-2

- Before installing any panning, install sill flashing first. Then install the window into the frame opening, and apply the primary sealant.
- Fasten the exterior panning to the window frame using fasteners as indicated on the approved shop drawings. Apply any additional exterior sealant.

See **Details CE-2 & CE-3**.

PANNING OPTIONS

CUSTOM JOBSITE EXAMPLE 1 (YVS 410 TU, Continued)



DETAIL CE-3



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