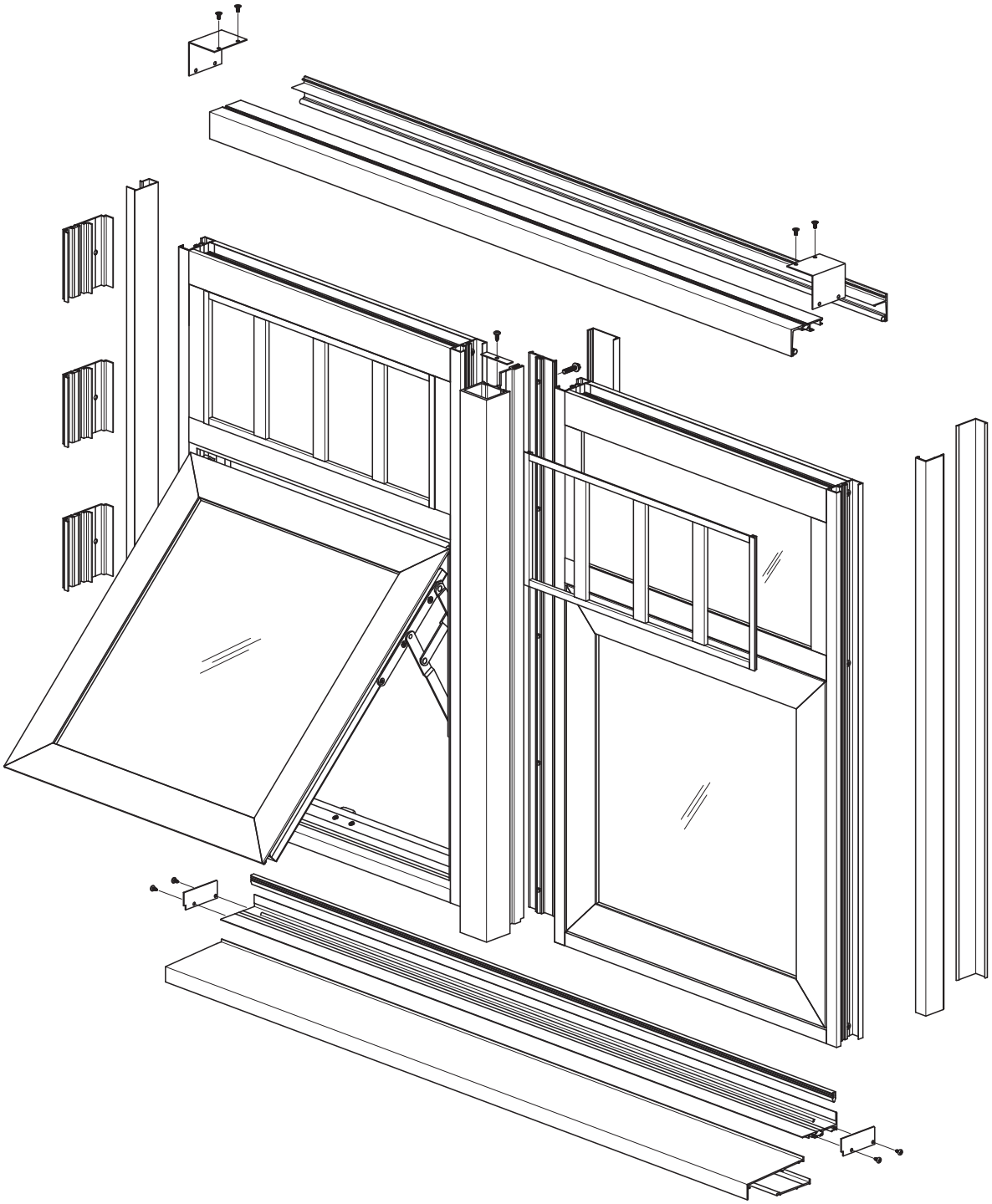
Window Accessories Installation Manual



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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.

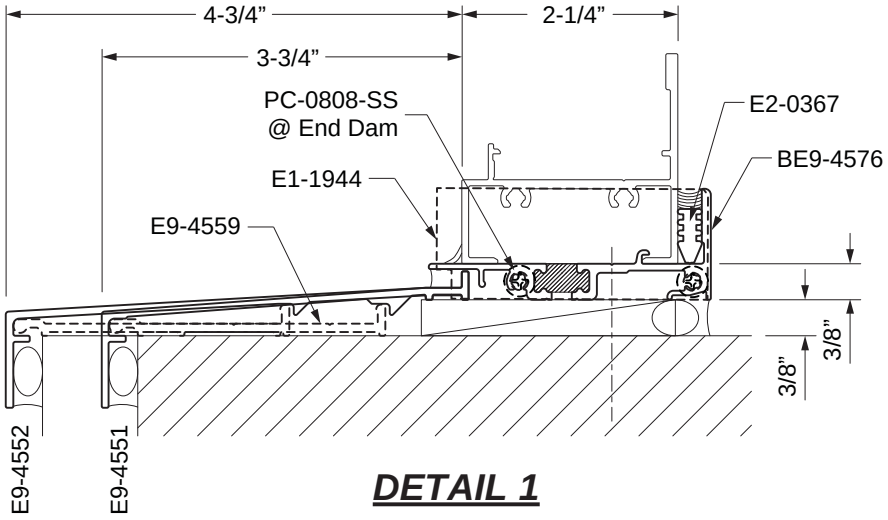
21. Check our website, www.ykkap.com, for the latest installation manual update prior to commencing work.

2-1/4” WINDOW DEPTH SILL FLASHINGS

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

-BE9-4576 is used for all 2-1/4” deep operable windows.
-Sill extenders may be used depending upon the project.
-A 3/8” caulk joint is required when using optional sill extenders.

See **Detail 1**.



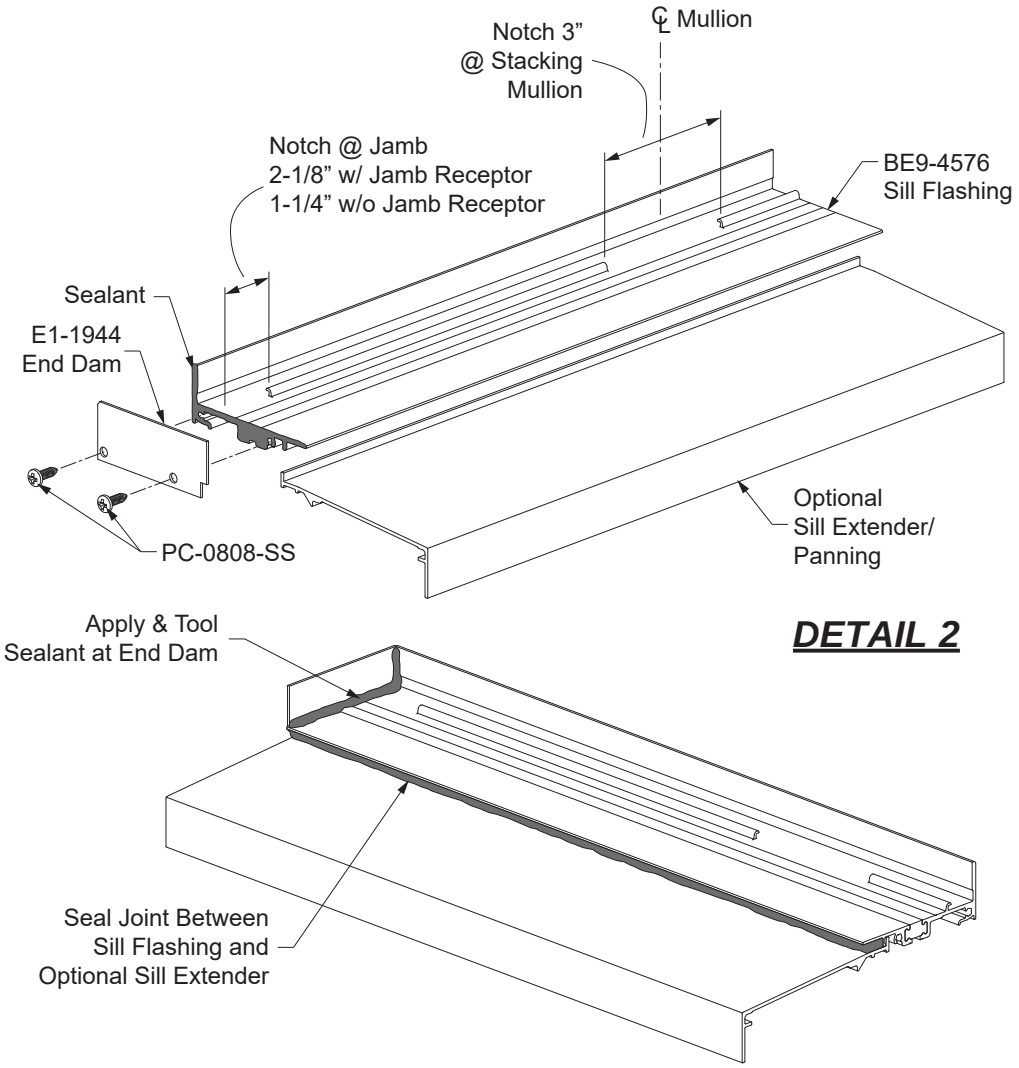
DETAIL 1

2-1/4” WINDOW DEPTH SILL FLASHINGS

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

-Notch the return leg of the sill flashing as shown in **Detail 2** around the jambs and mullions.
-Apply sealant to the end of the sill flashing.
-Install the end dam E1-1944 with two PC-0808-SS screws at each end of the flashing.
-Apply and tool sealant to the inside of the end dam at 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 along with any applicable panning. Seal anchor fastener heads. Seal the joint between the sill flashing and the panning.

See **Detail 2**.



DETAIL 2

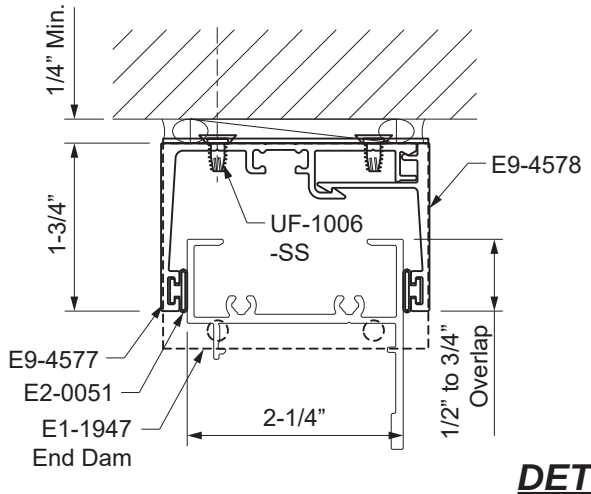
2-1/4” WINDOW DEPTH HEAD / JAMB RECEPTORS

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

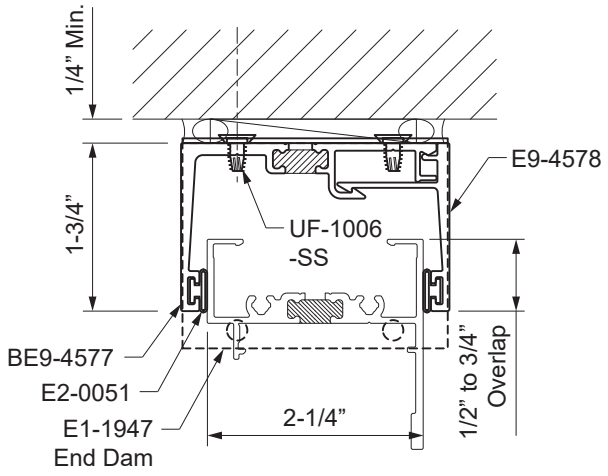
-E9-4577 is used for YOW 225 & YOW 225 H, while BE9-4577 is used for YOW 225 TU and YOW 225 TUH.
-A minimum of 1/4” perimeter caulk joint is required.
-Receptors can be used at the head and or jamb. If jamb receptors are used, a sill flashing is required.
-Overlap with the window system itself is between 1/2” to 3/4”.
-E1-1947 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.
See **Detail 3**.

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.

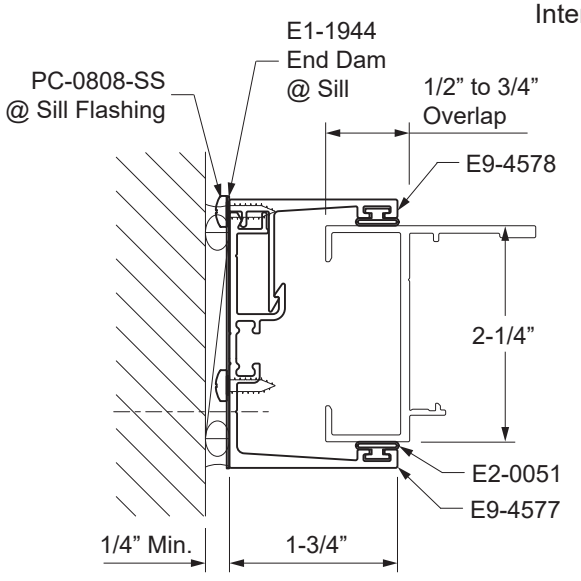
YOW 225 / 225 H

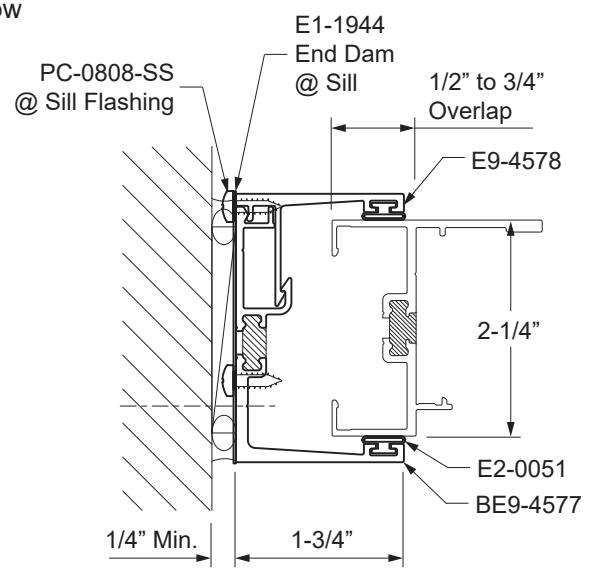


YOW 225 TU / 225 TUH



DETAIL 3
Interior Set Window Shown





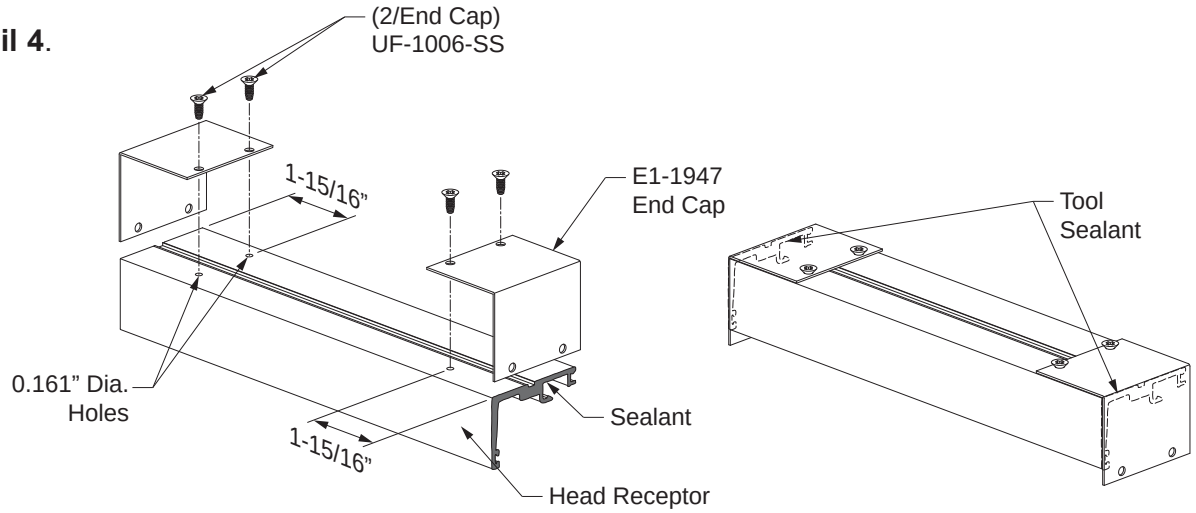
2-1/4” WINDOW DEPTH HEAD / JAMB RECEPTORS

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.
-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.

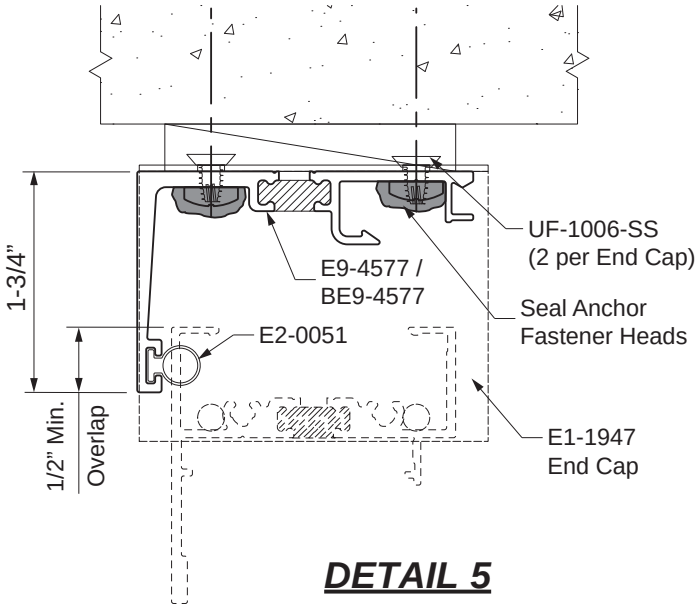
See **Detail 4**.



DETAIL 4

-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 5**.

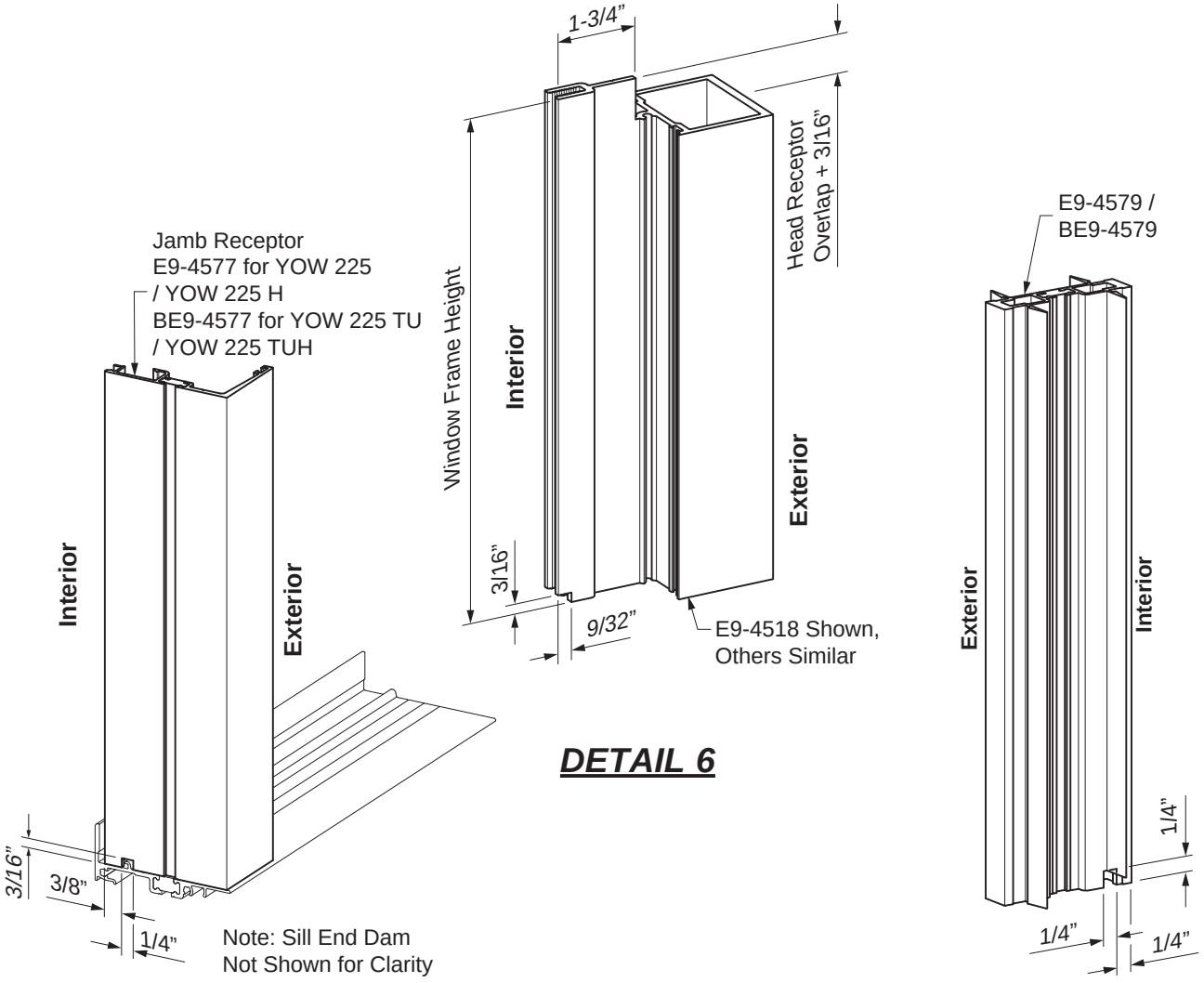


DETAIL 5

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

INSTALLATION OPTIONS AND PROCEDURES

Notch Jamb receptors and stacking mullions around sill flashing.
-As a alternative to notching the return leg of the sill flashing, the jamb receptors and stacking mullions can be notched around the return leg as shown in **Detail 6**.
-If head receptors are used in conjunction with stacking mullions running the full height of the window, then the stacking mullion must be notched at the head also as shown in **Detail 6.**
-Apply sealant to the end of the sill flashing and to the void where the jamb receptor was notched.
-Install the end dam and fasten the sill flashing to the substrate as previously shown on **Page 2**.

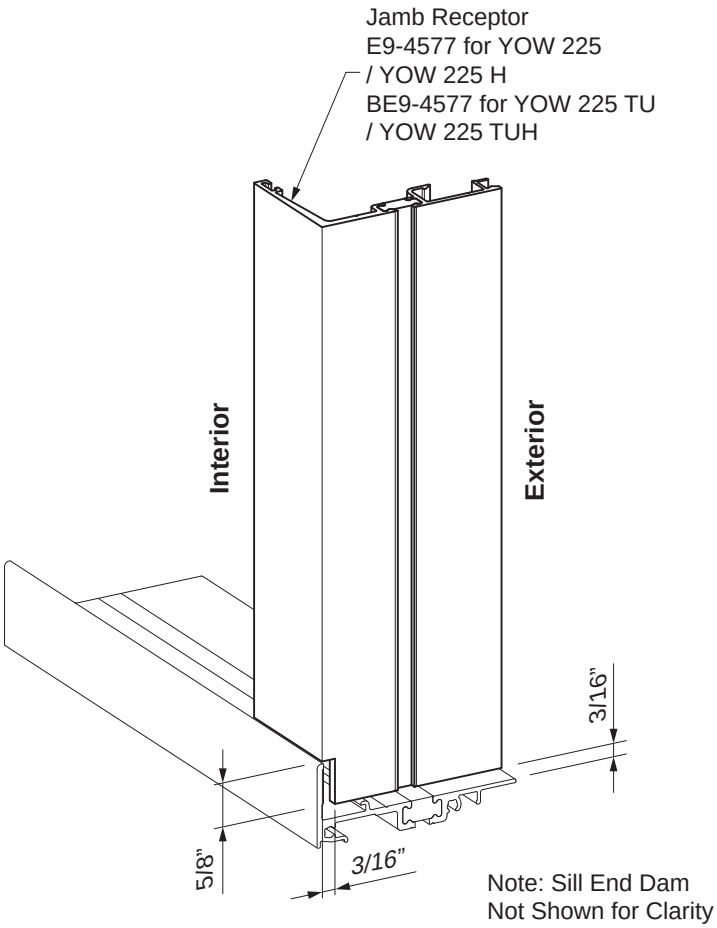


DETAIL 6

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 cut to leave a 3/16” space above the flat surface of the sill flashing.
-Additionally, the return leg at the jamb receptor is to be notched around the sill flashing as shown in **Detail 7**.



DETAIL 7

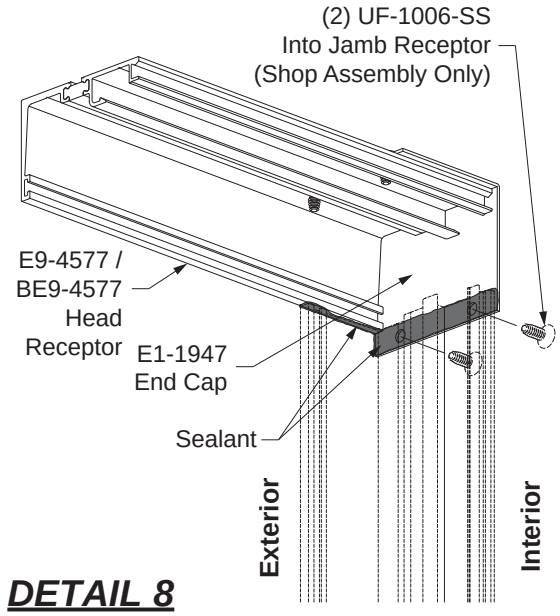
2-1/4” WINDOW DEPTH HEAD / JAMB RECEPTORS

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 jamb receptor to the end dam using (2) UF-1006-SS screws.

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

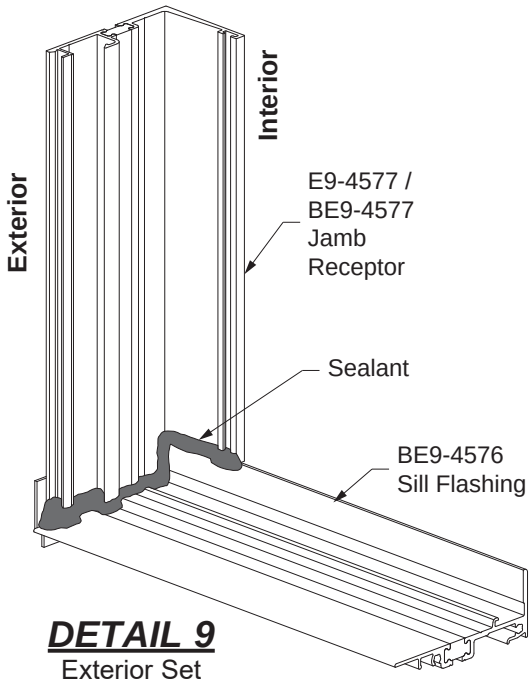
See **Detail 8**.



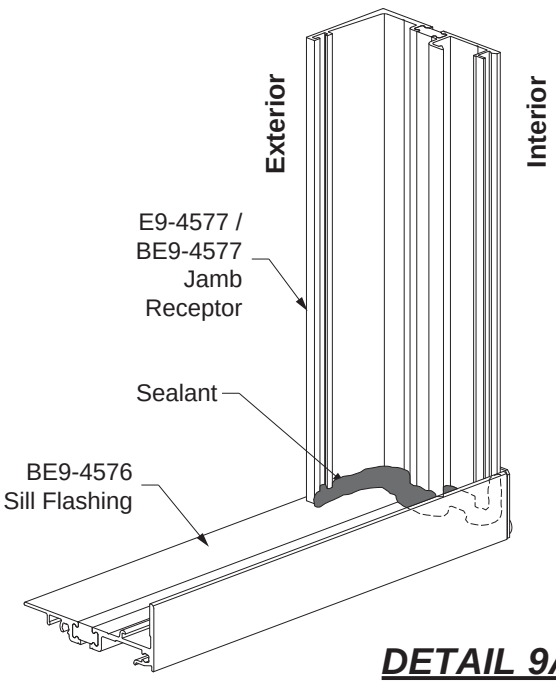
DETAIL 8

-Locate the BE9-4577 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 9 & 9A**.



DETAIL 9
Exterior Set
Window

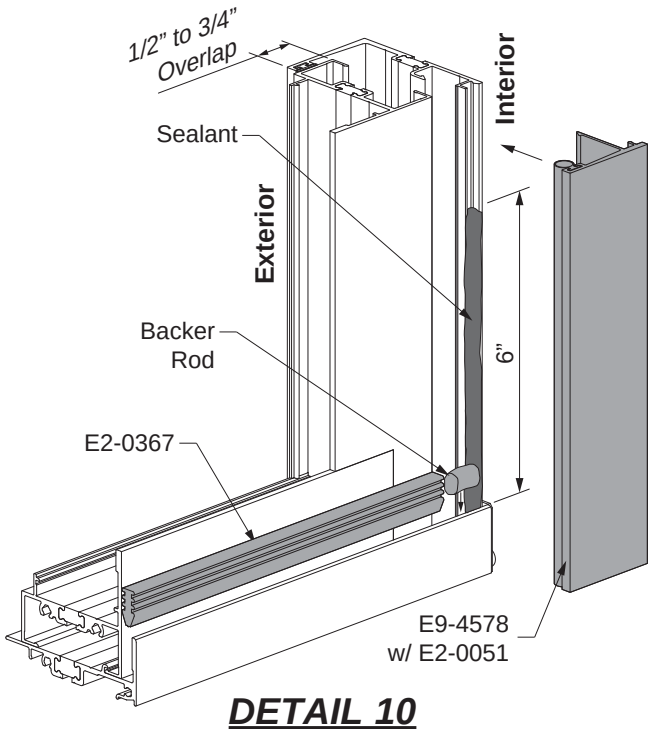


DETAIL 9A
Interior Set
Window

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

INSTALLATION OPTIONS AND PROCEDURES - JAMB RECEPTOR WITH SILL FLASHING

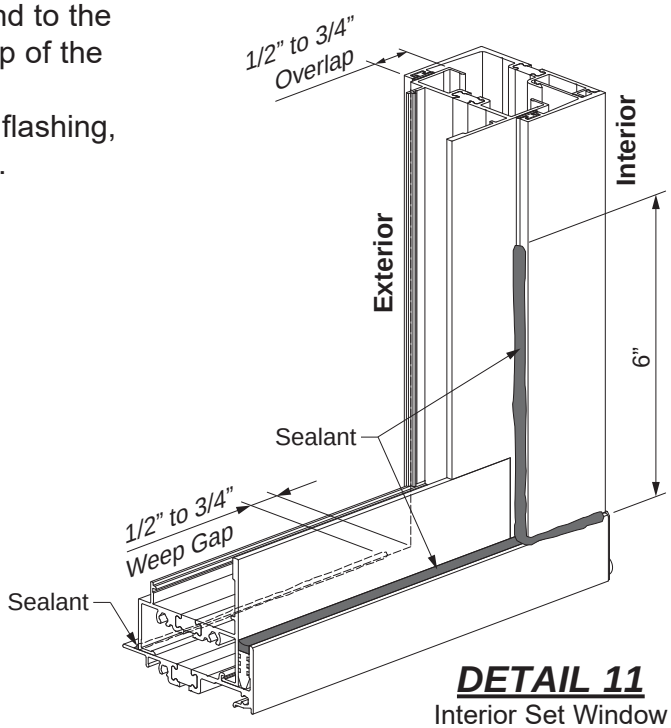
-Install the window frame into the opening.
-Shim the sill/jambs of the window to ensure that they are installed plumb, square, and level.
-Push in the E2-0367 spacer (cut to width of window frame) between the sill and sill flashing.
-Push in backer road between spacer and jamb receptor. Fill cavity with sealant.
-Just prior to installing the interior receptor, apply sealant at the interior receptor snap, 6” from the top of the sill flashing as shown in **Detail 10**.
-Snap in interior receptor leg(s).



DETAIL 10
Interior Set Window

-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 11.**



DETAIL 11
Interior Set Window

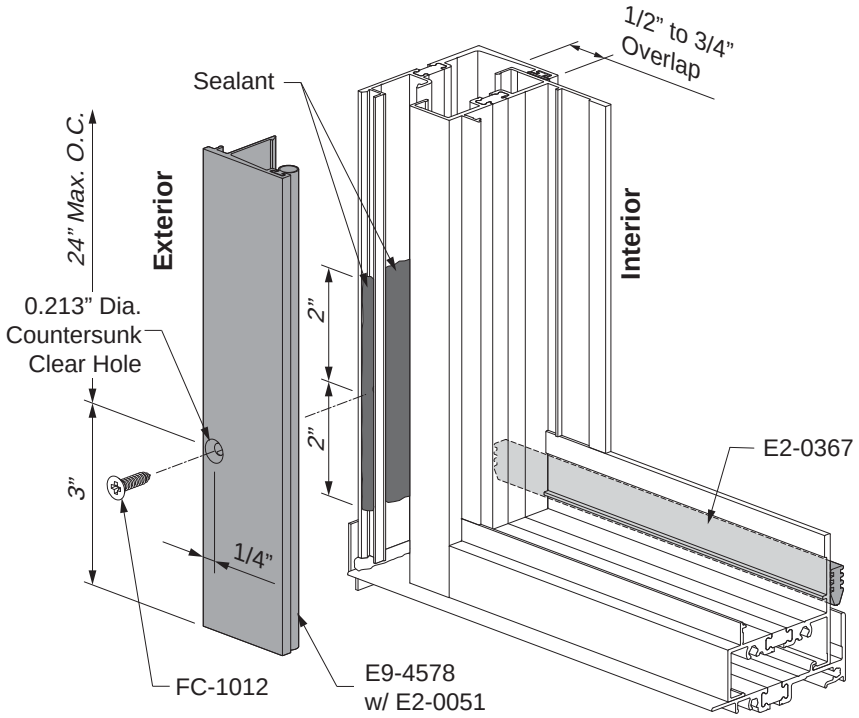
2-1/4” WINDOW DEPTH HEAD / JAMB RECEPTORS

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 12** at 3” from each end and at maximum 24” on center.

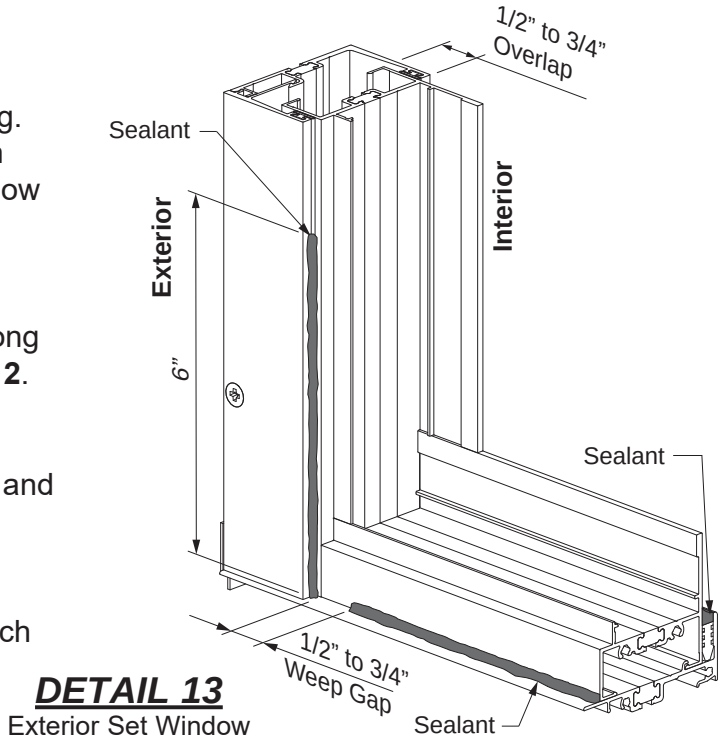


DETAIL 12
Exterior Set Window

-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 E2-0367 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 12**.
-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 13**.



DETAIL 13
Exterior Set Window

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

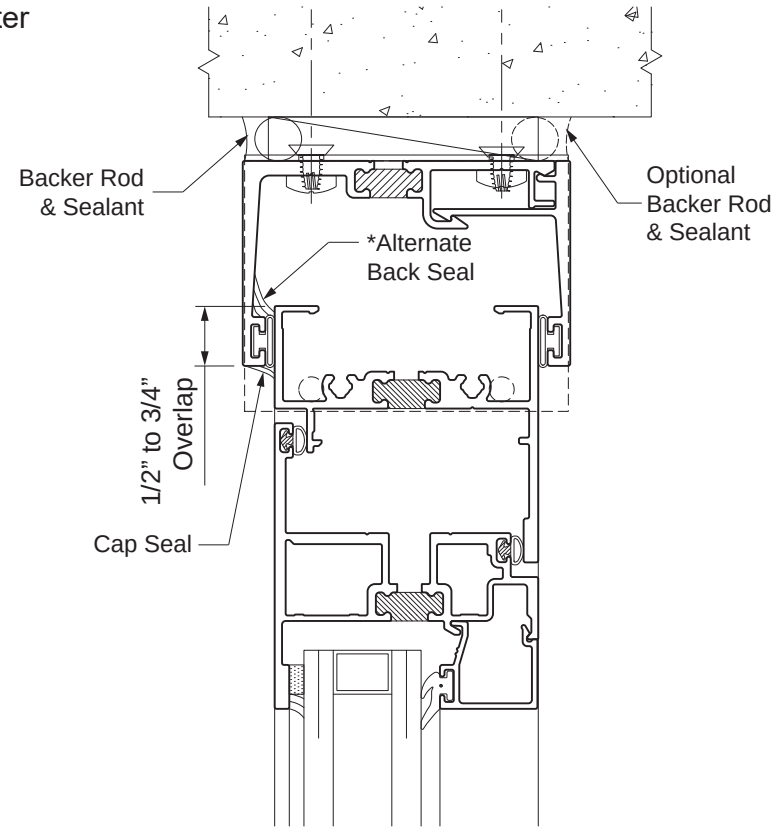
INSTALLATION OPTIONS AND PROCEDURES

Seal Receptors and Sill Flashing

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

See **Detail 14**.

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



DETAIL 14

2-1/4” WINDOW DEPTH STRAP ANCHORS

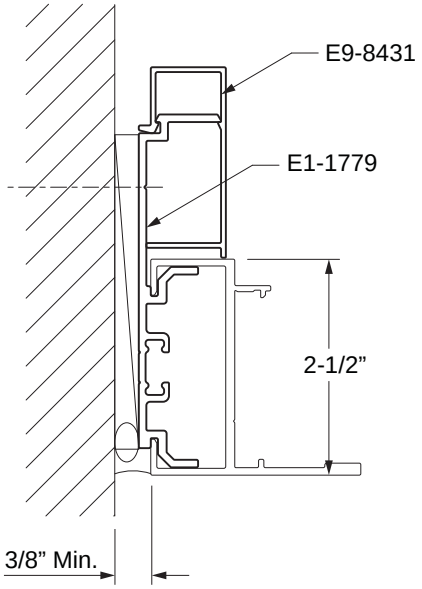
(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)

-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 15** & **16**.

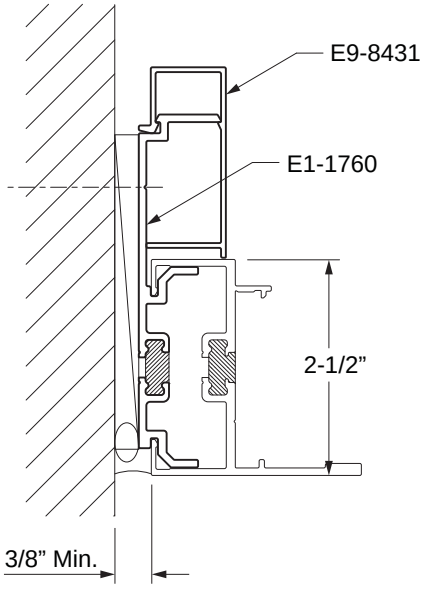
Note: Interior air barrier application is difficult when using strap anchors.

YOW 225 / 225 H



DETAIL 15

YOW 225 TU / TUH



DETAIL 16

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)

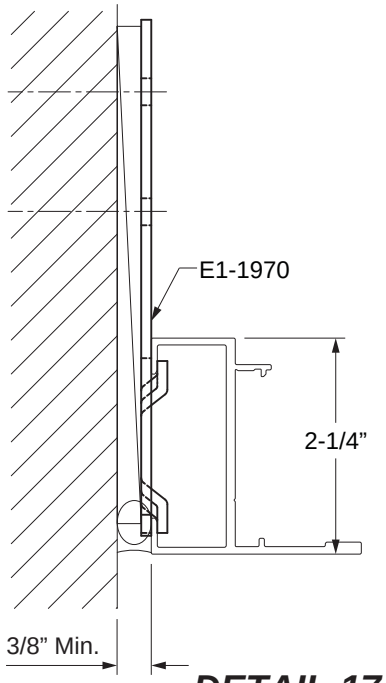
E1-1970 Steel twist anchors are available and when used, must be installed:

- -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 17**.

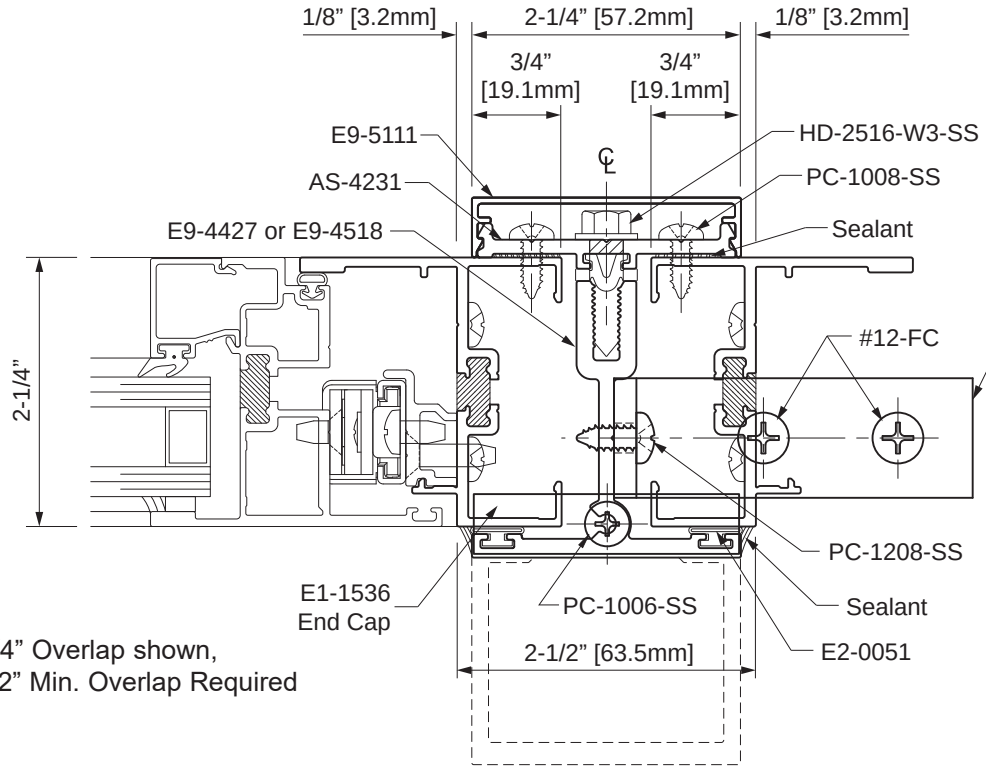
Note: Interior air barrier application is difficult when using twist anchors.



DETAIL 17
YOW 225
YOW 225 H

2-1/4” WINDOW DEPTH STACKING MULLION

65 PSF MAXIMUM
(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)



E1-1965 Anchor Clip As Req’d (See Florida Product Approvals for Design Pressure Limits for Clipped and Unclipped)

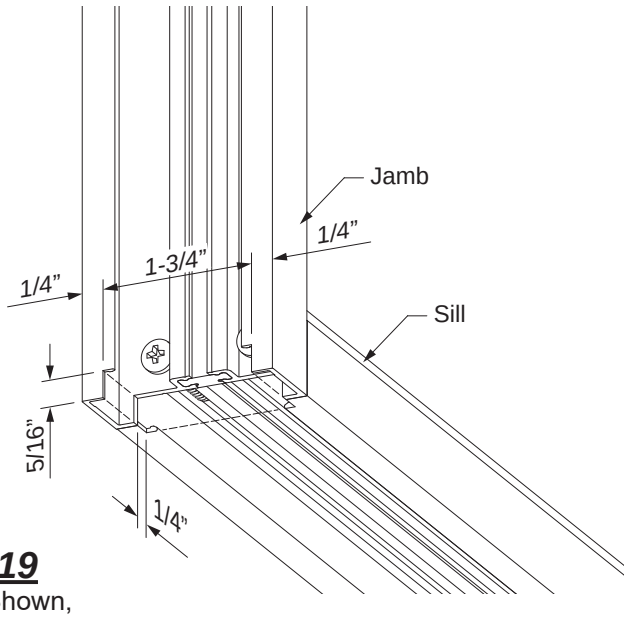
* 3/4” Overlap shown, 1/2” Min. Overlap Required

DETAIL 18

4-Bar Hinges shown; see Detail 20 on Page 15 for Butt Hinges

* Min. 1/2” overlap required both front and rear

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, E1-1536, to each end of the stacking mullion with a PC-1006-SS fastener.
4. For stacking mullions using the E1-1965 clip, the window jamb on the side of the clip will need to be notched as shown in **Detail 19**.



DETAIL 19

YOW 225 TU Shown, Others Similar

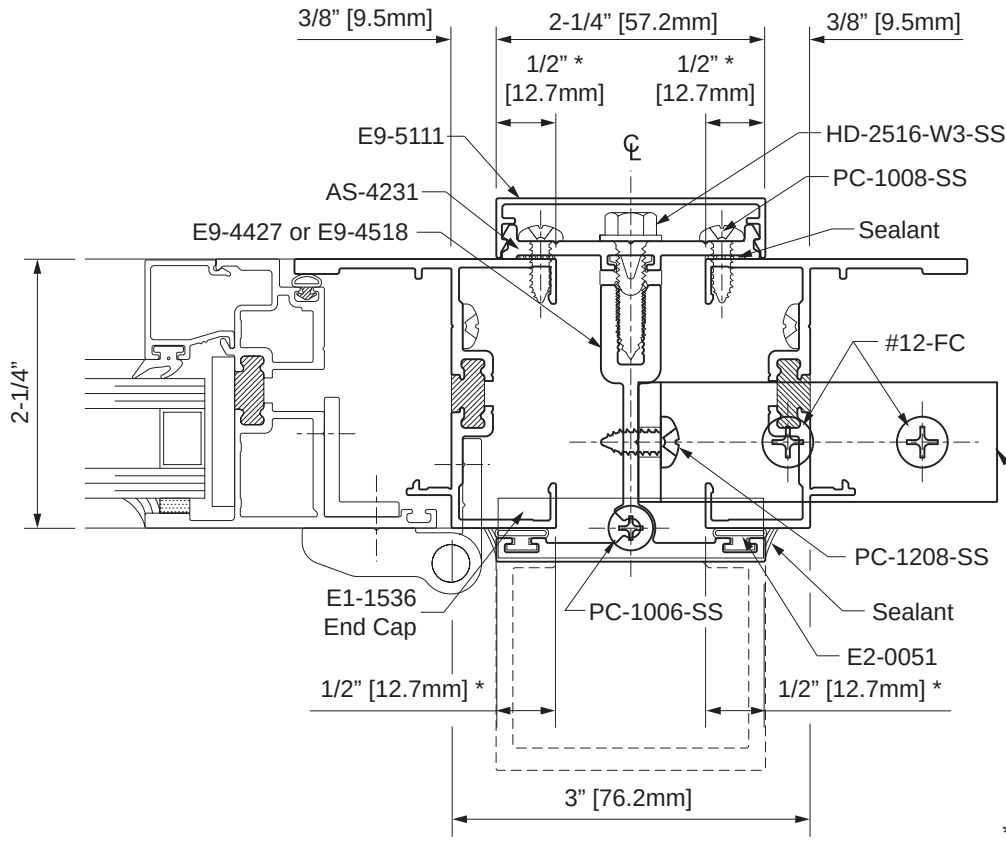
2-1/4” WINDOW DEPTH STACKING MULLION

65 PSF MAXIMUM
(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH) - CONTINUED

5. Attach anchor clips 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.
6. Install the stacking mullion into the opening according to **Detail 18** on **Page 13** for 4-bar hinges or **Detail 20** on **Page 15** for butt hinges:
   See Installation instructions for applications with higher loads on **Page 16**.
   -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.
7. Carefully slide the second window assembly in and anchor it to the masonry.
8. 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.
9. 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 50 inch-pounds.
10. 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.
11. Install snap cover, E9-5111, starting from the bottom and work up the mullion.
12. 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.

2-1/4” WINDOW DEPTH STACKING MULLION

65 PSF MAXIMUM
(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH) - CONTINUED

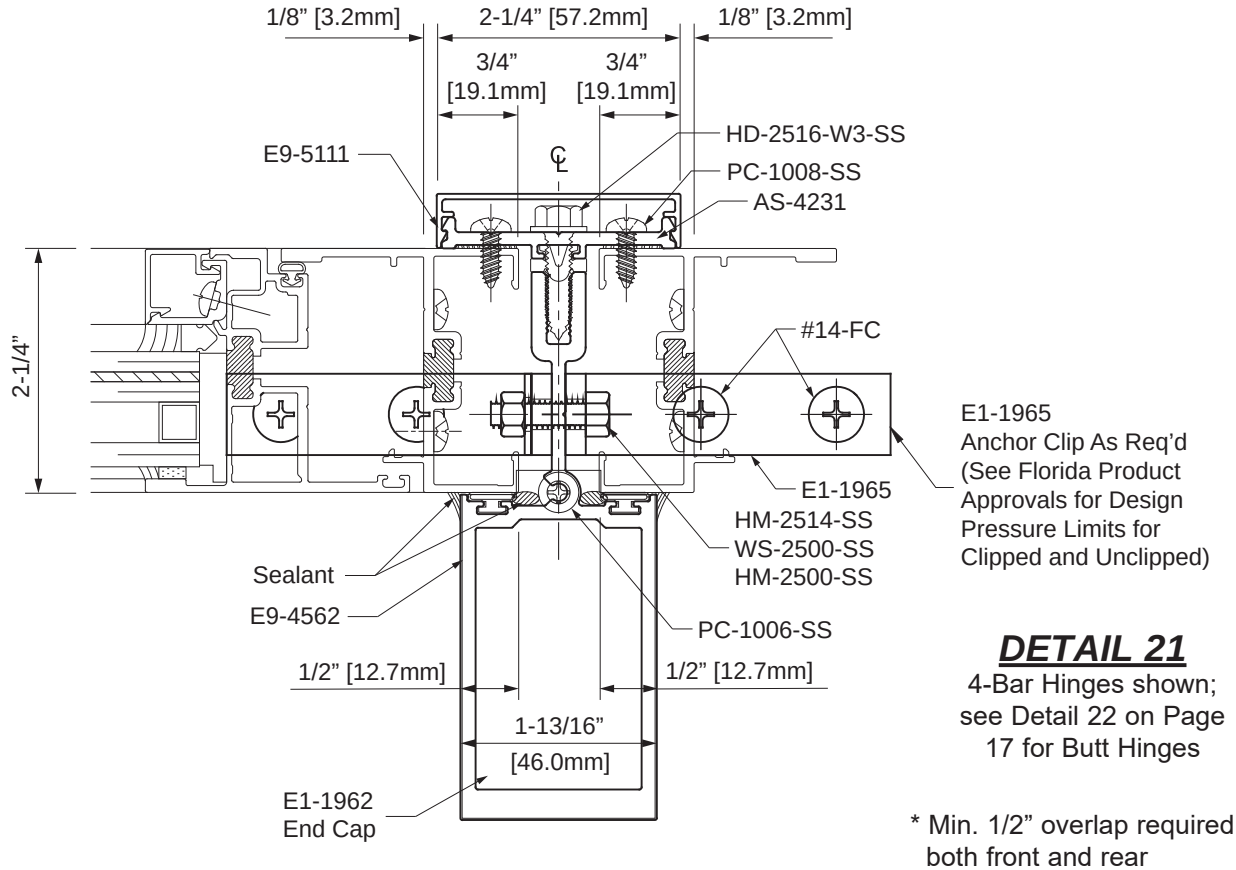


DETAIL 20
Butt Hinges

* Min. 1/2” overlap required both front and rear (3/4” maximum).

2-1/4” WINDOW DEPTH STACKING MULLION

80 PSF MAXIMUM
(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)



DETAIL 21
4-Bar Hinges shown; see Detail 22 on Page 17 for Butt Hinges

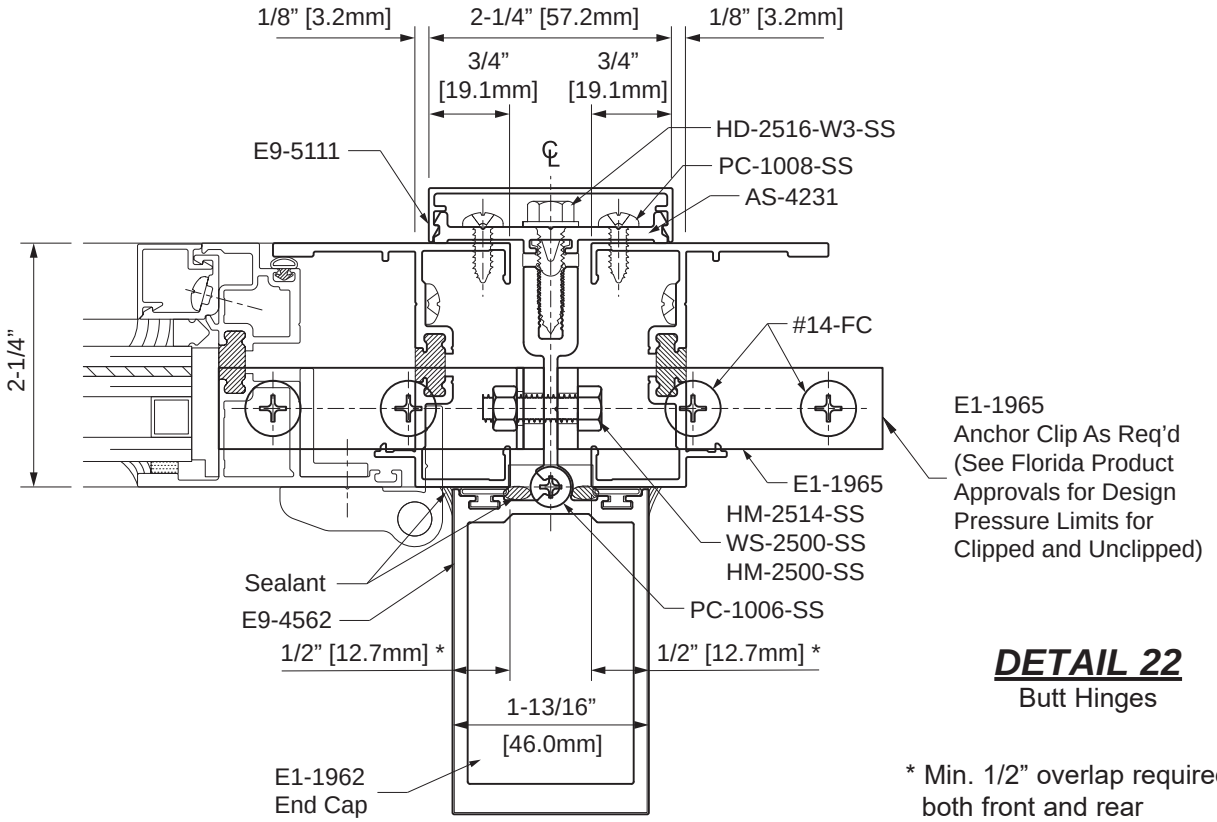
* Min. 1/2” overlap required both front and rear

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, E1-1962, to each end of the stacking mullion with a PC-1006-SS fastener.
4. For stacking mullions using the E1-1965 clip, the window jamb on the side of the clip will need to be notched as previously shown in **Detail 19** on **Page 13**.
5. Attach anchor clips 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.
6. Install the stacking mullion into the opening according to **Detail 21** for 4-bar hinges or **Detail 22** on **Page 17** 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

7. Carefully slide the second window assembly in and anchor it to the masonry.
8. 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.
9. 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 50 inch-pounds.
10. 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.
11. Install snap cover, E9-5111, starting from the bottom and work up the mullion.
12. Run a cap seal between the frame and receptor at the exterior. If the exterior of the window is inaccessible, run a bead of sealant along the backside of the receptor leg prior installing the windows.

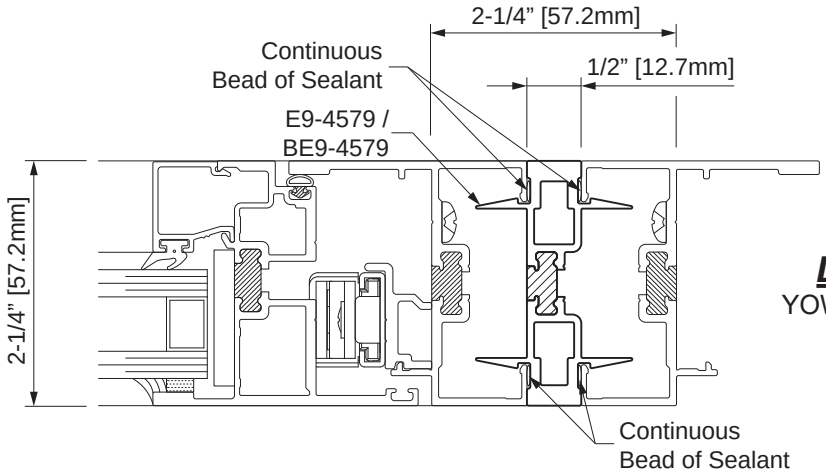


DETAIL 22
Butt Hinges

* Min. 1/2” overlap required both front and rear

2-1/4” WINDOW DEPTH I-MULLION

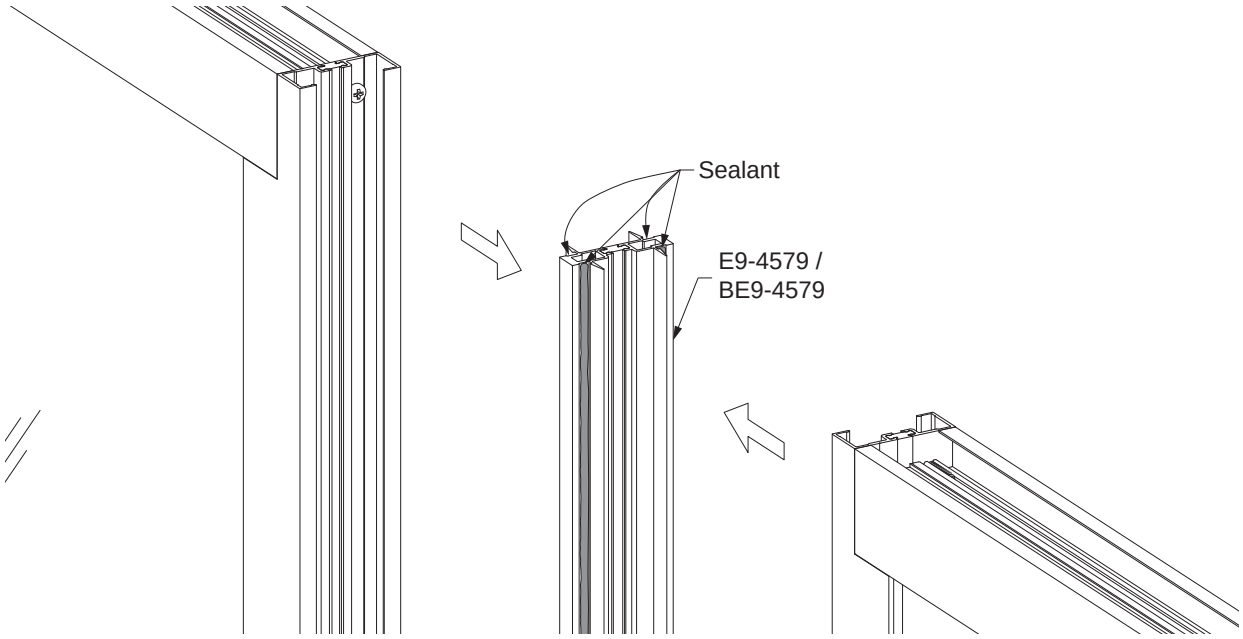
(YOW 225, YOW 225 H, YOW 225 TU, & YOW 225 TUH)



DETAIL 23
YOW 225 TU Shown,
Others Similar

Sill Flashing may be used with the I-mullion, unclipped. When the sill flashing is used, the I-mullion must be notched as shown in **Detail 6** on **Page 5**.
-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.
-Seal the other side of the mullion, and then snap the other window frame in.
See **Detail 24 & 25**.

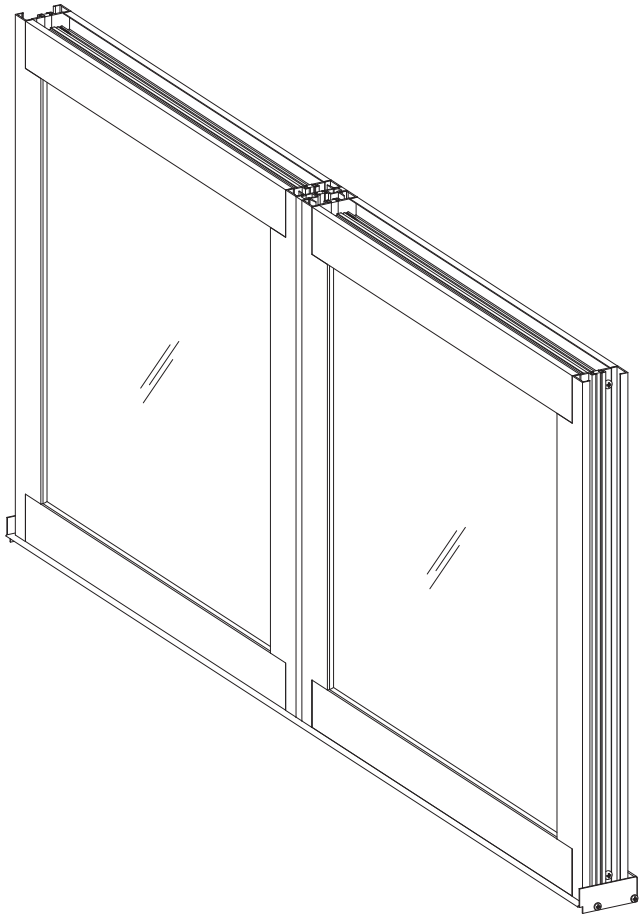
Note: Not an expansion mullion. Do not use in openings with more than three windows.



DETAIL 24
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



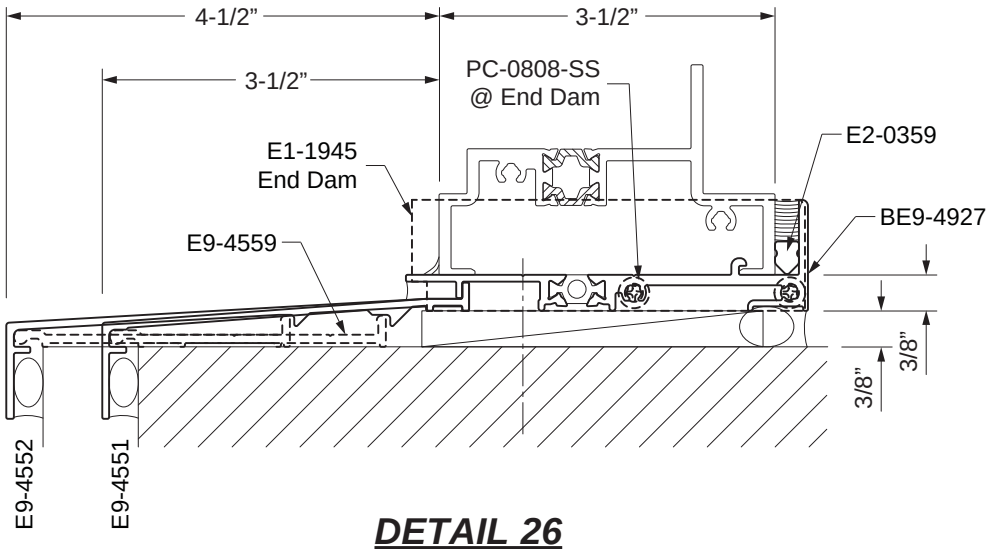
DETAIL 25

3-1/2” WINDOW DEPTH SILL FLASHING

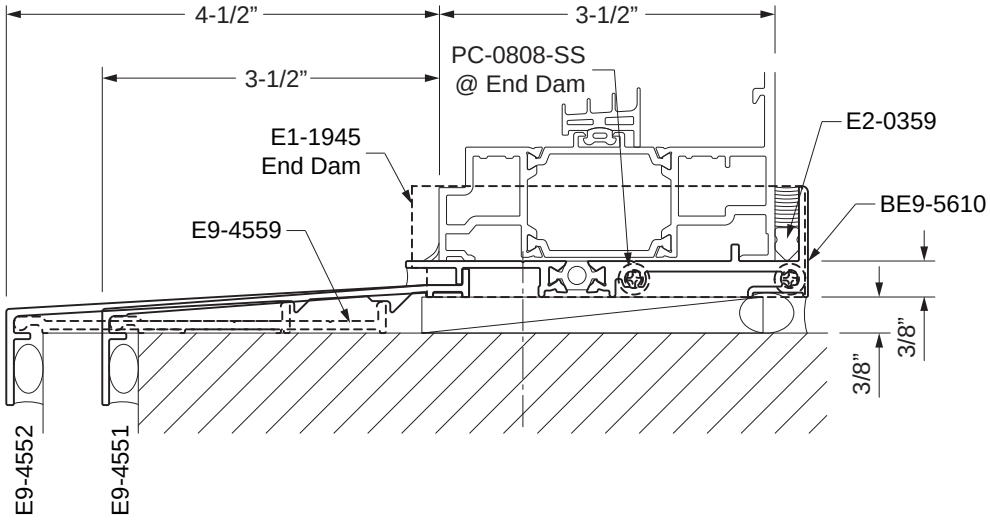
(YOW 350 T, YOW 350 TU, & YOW 350 XT)

-BE9-5610 is used for YOW 350 XT, while BE9-4927 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.

See **Detail 26**.



DETAIL 26

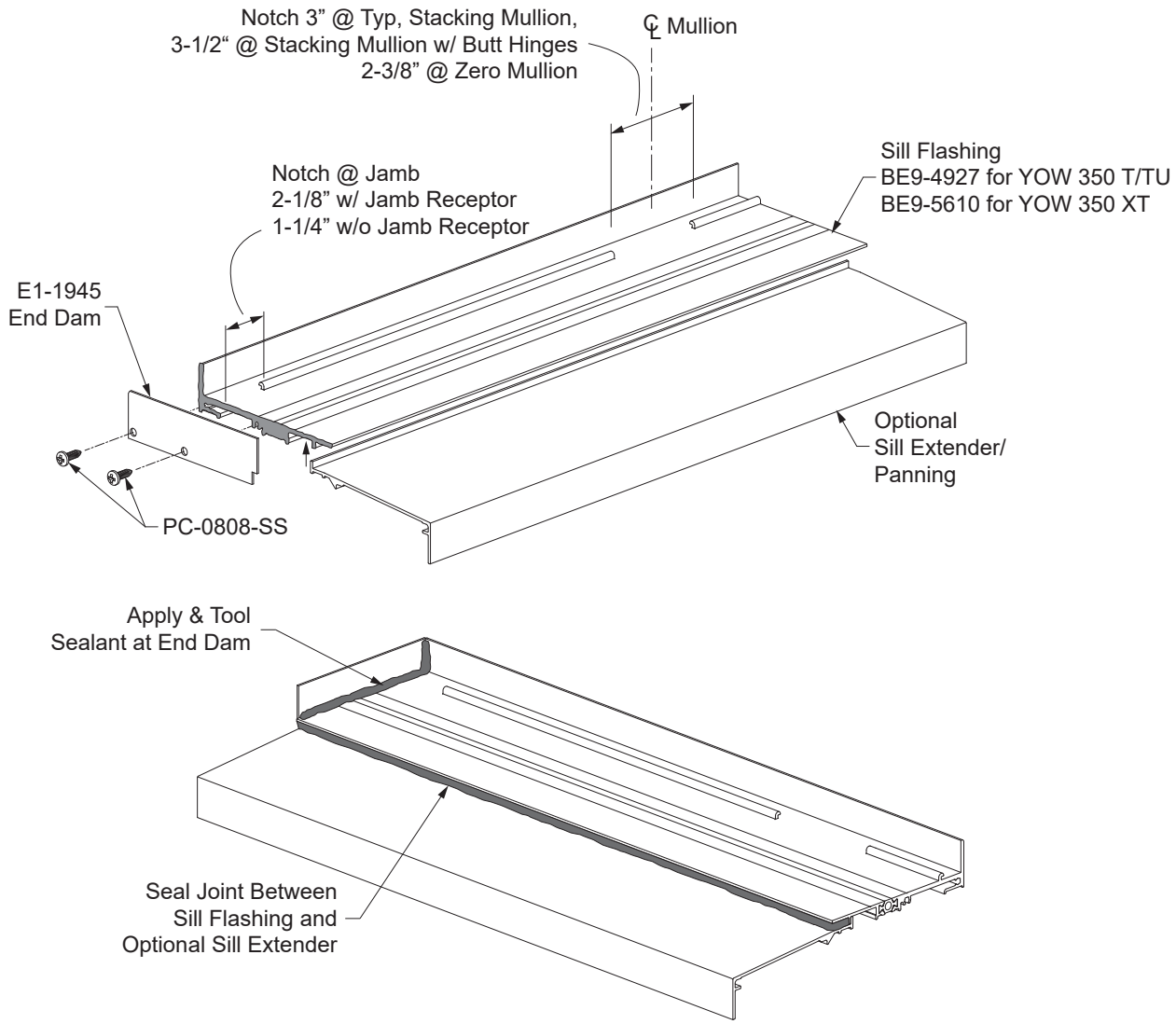


3-1/2” WINDOW DEPTH SILL FLASHING

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

OPTION 5: Install sill flashing.
-Notch the return leg of the sill flashing as shown in **Detail 27** around the jambs and mullions.
-Apply sealant to the end of the sill flashing.
-Install the end dam E1-1945 with two PC-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 27**.



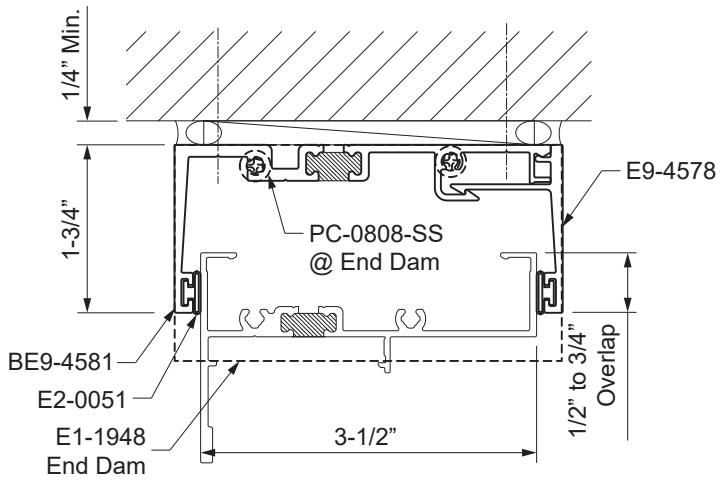
DETAIL 27

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

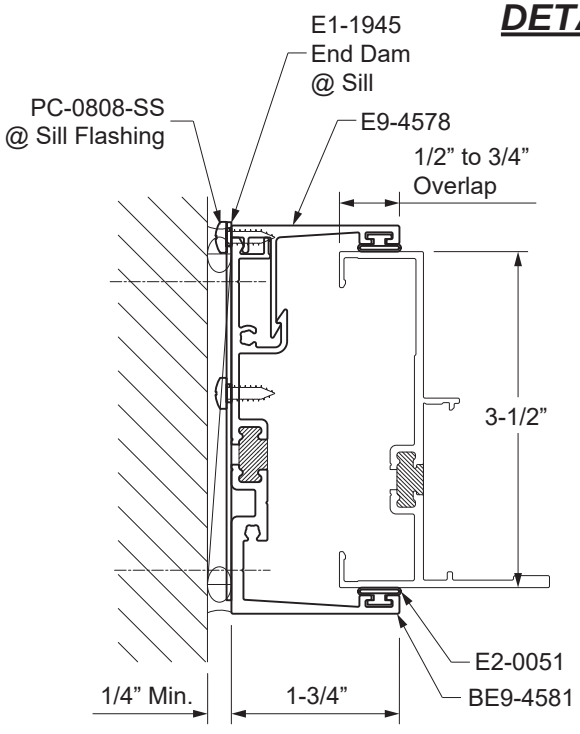
(YOW 350 T, YOW 350 TU, YOW 350 XT)
INSTALLATION OPTIONS AND PROCEDURES

-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”.
-E1-1948 end dams are required and must be attached at each end of the head receptor using PC-0808-SS fasteners (2 per end dam) prior to receptor installation.

See **Detail 28**.



DETAIL 28



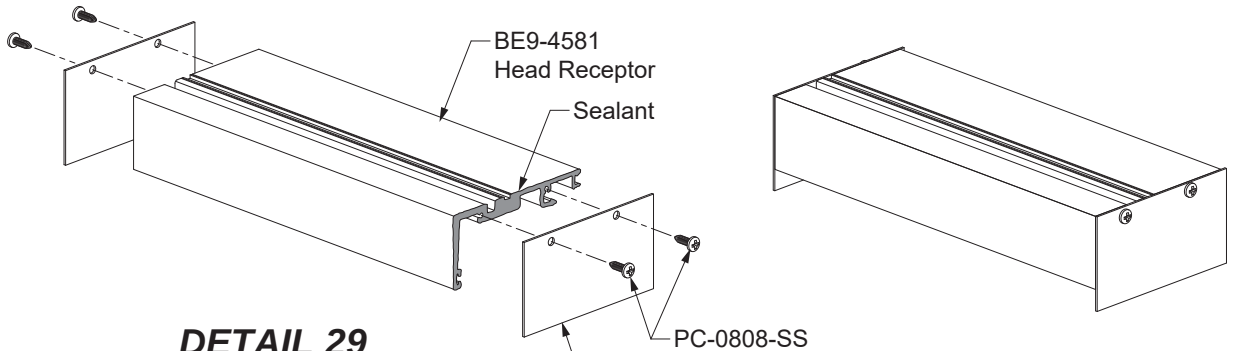
3-1/2” WINDOW DEPTH HEAD / JAMB RECEPTOR

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

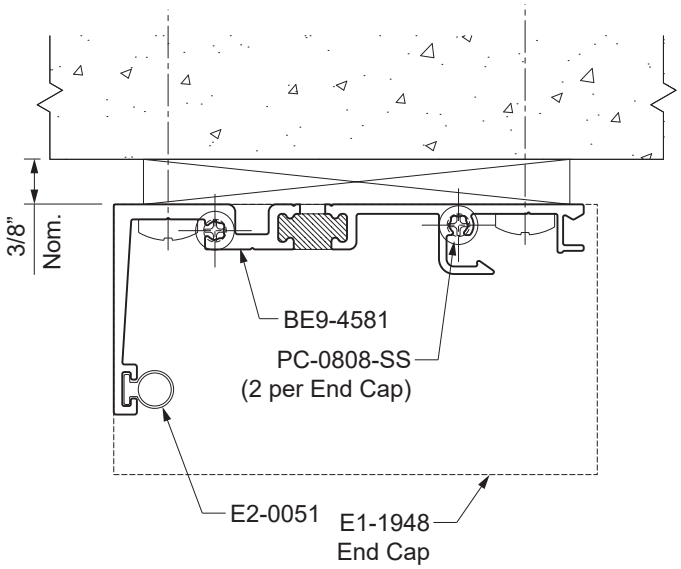
See **Detail 29**.



DETAIL 29
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; 3/8” nominal joint width.

See **Detail 30**.

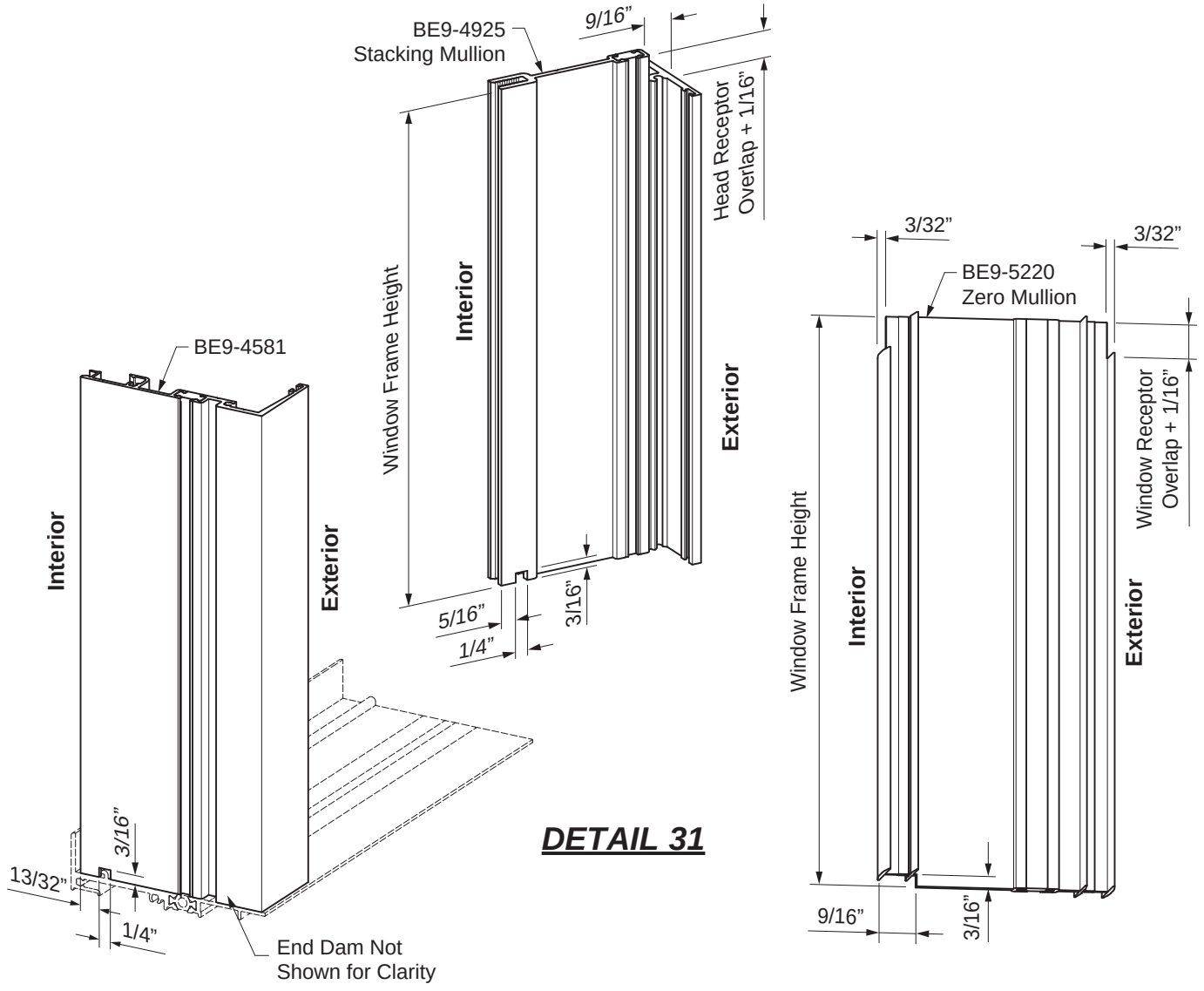


DETAIL 30

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

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

OPTION 7A: Notch jamb receptors and stacking mullions around sill flashing.
-As a alternative to notching the return leg of the sill flashing, the jamb receptors and stacking mullions can be notched around the return leg as shown in **Detail 31**.
-If head receptors are used in conjunction with stacking mullions or zero mullions running the full height of the window, then the mullion must be notched at the head also as shown in **Detail 31**.
-Apply sealant to the end of the sill flashing and to the void where the jamb receptor was notched.
-Install the end dam and fasten the sill flashing to the substrate as previously shown on **Page 21**.



DETAIL 31

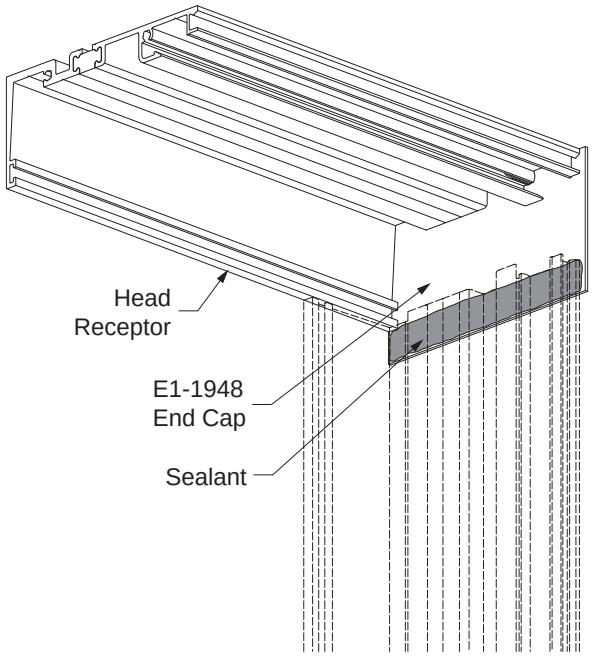
3-1/2” WINDOW DEPTH HEAD / JAMB RECEPTOR

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

JAMB RECEPTOR WITH SILL FLASHING

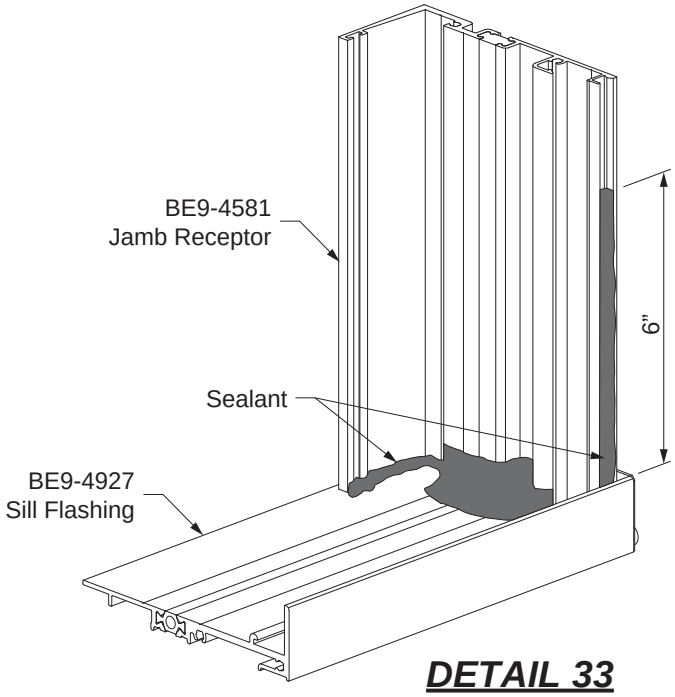
-When receptors are used at both the head and the jamb, the head receptor will run through. Sill flashing will also be required.
-Seal the intersection of receptors and end caps prior to anchoring the jamb receptor.

See **Detail 32**.



DETAIL 32

-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 33**.



DETAIL 33

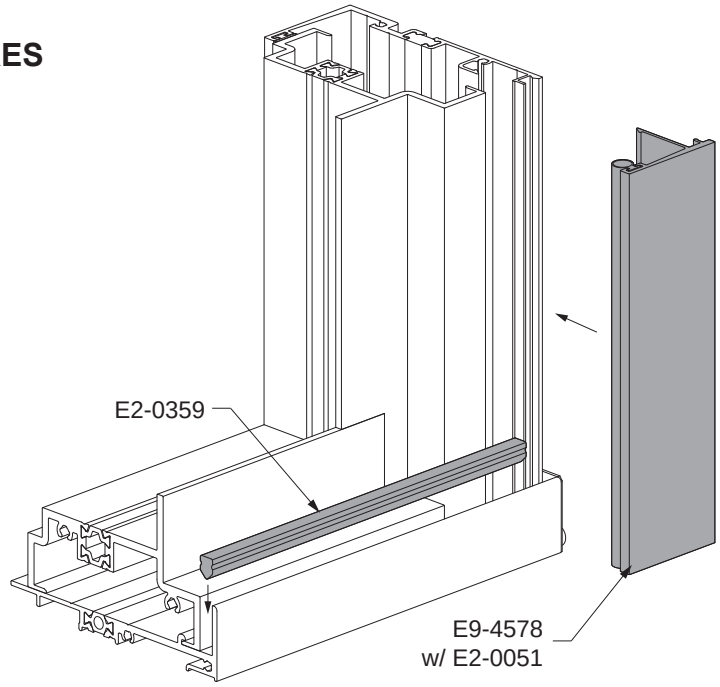
3-1/2” WINDOW DEPTH HEAD / JAMB RECEPTOR

(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 E2-0359 spacer between the sill and sill flashing.
-Snap in interior receptor leg(s).

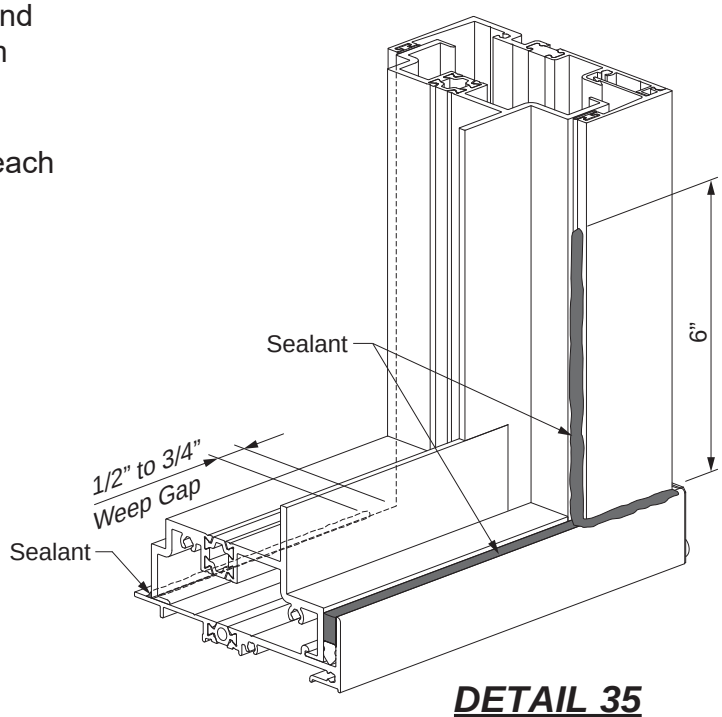
See **Detail 34**.



DETAIL 34

-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 35**.



DETAIL 35

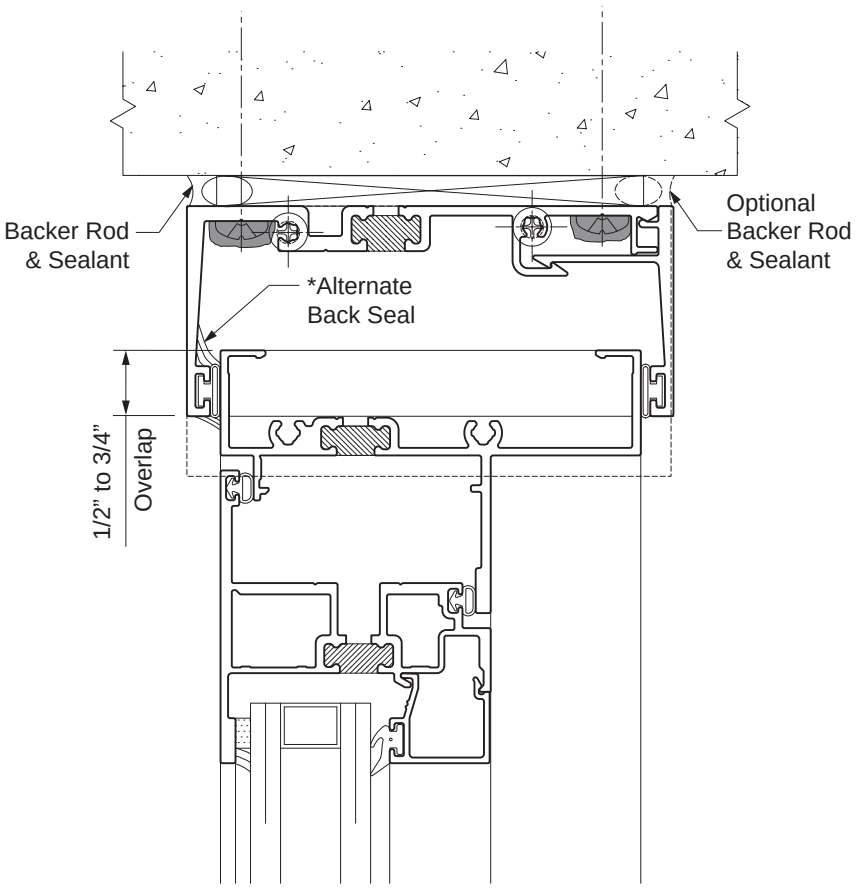
3-1/2” WINDOW DEPTH HEAD / JAMB RECEPTOR

INSTALLATION OPTIONS AND PROCEDURES:
Seal Receptors and sill flashing

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

See **Detail 36**.

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



DETAIL 36

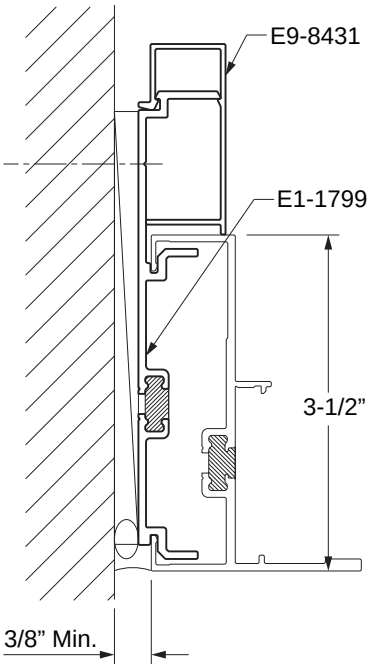
3-1/2” WINDOW DEPTH STRAP / TWIST ANCHORS

(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 37**.

Note: Interior air barrier application is difficult when using strap anchors.



DETAIL 37

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

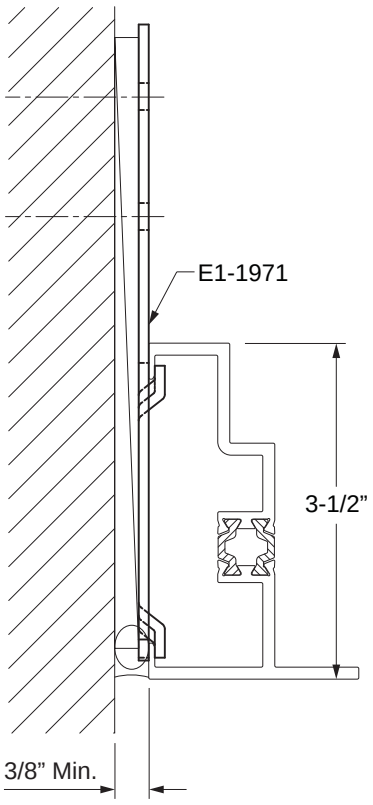
E1-1971 Steel twist anchors are available and when used, must be installed:

- -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 38**.

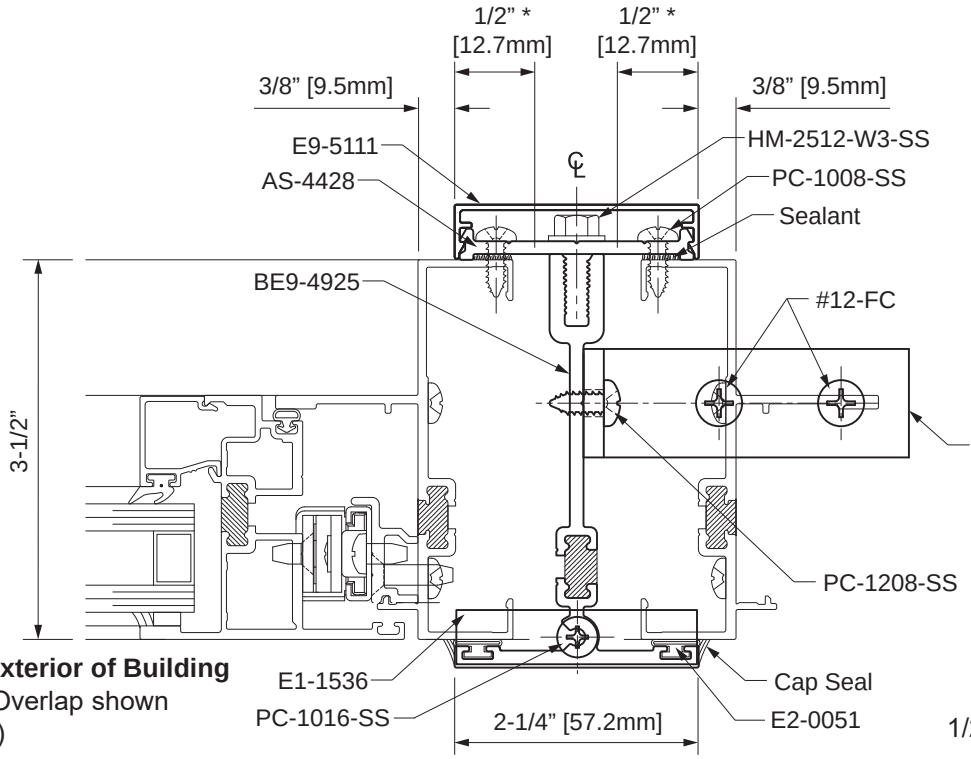
Note: Interior air barrier application is difficult when using twist anchors.



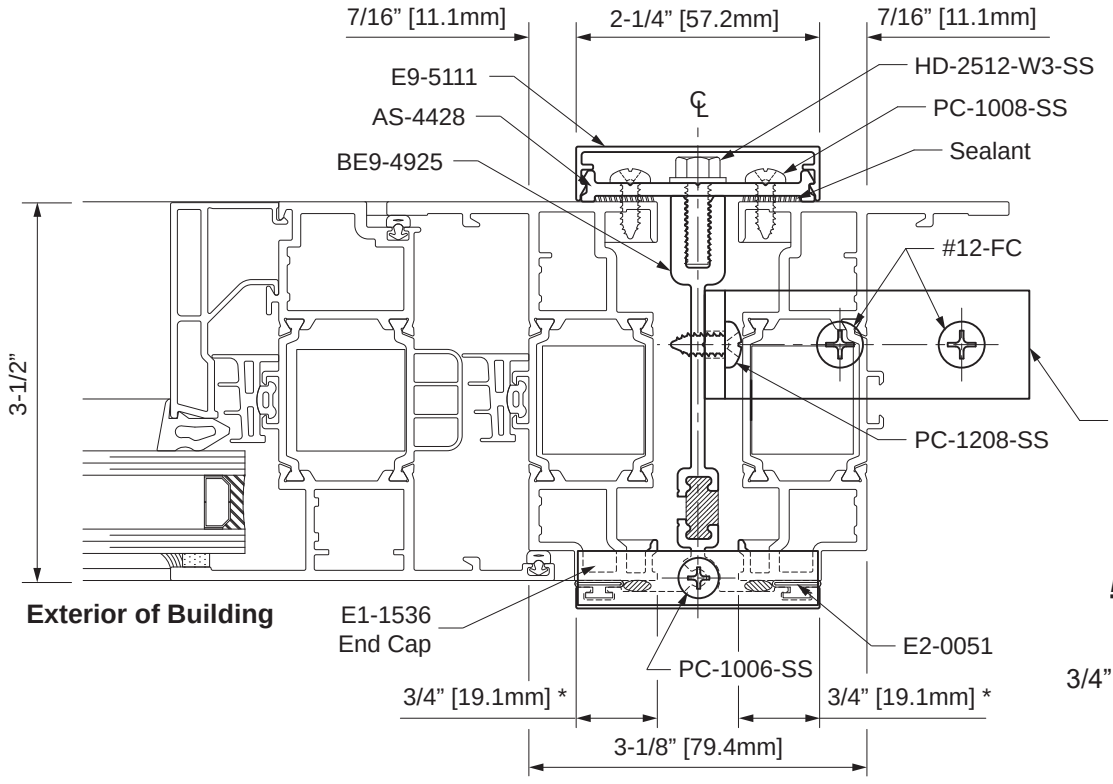
DETAIL 38

3-1/2” WINDOW DEPTH STACKING MULLION

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



DETAIL 39
YOW 350 TU/TUH
4-Bar Hinges
1/2” Min. Overlap Shown
3/4” Max.

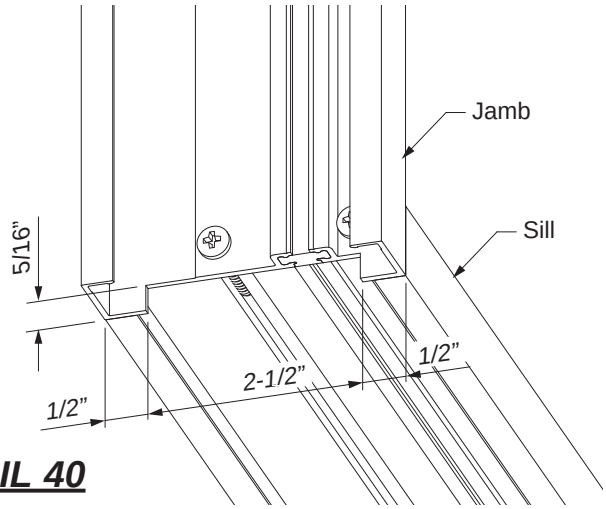


DETAIL 39A
YOW 350 T/XT
4-Bar Hinges
3/4” Max. Overlap Shown
1/2” Min. Req’d

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, E1-1536, to each end of the stacking mullion with a PC-1006-SS fastener.
4. For stacking mullions using the E1-1537 clip, the window jamb on the side of the clip will need to be notched as shown in **Detail 40**.

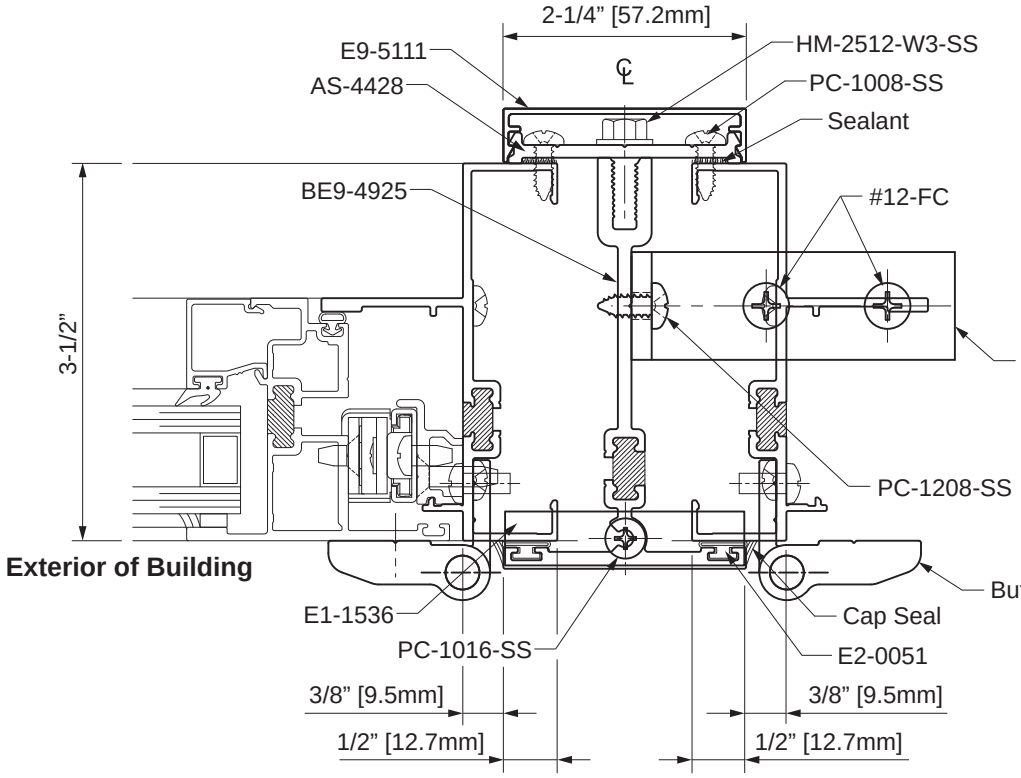


DETAIL 40

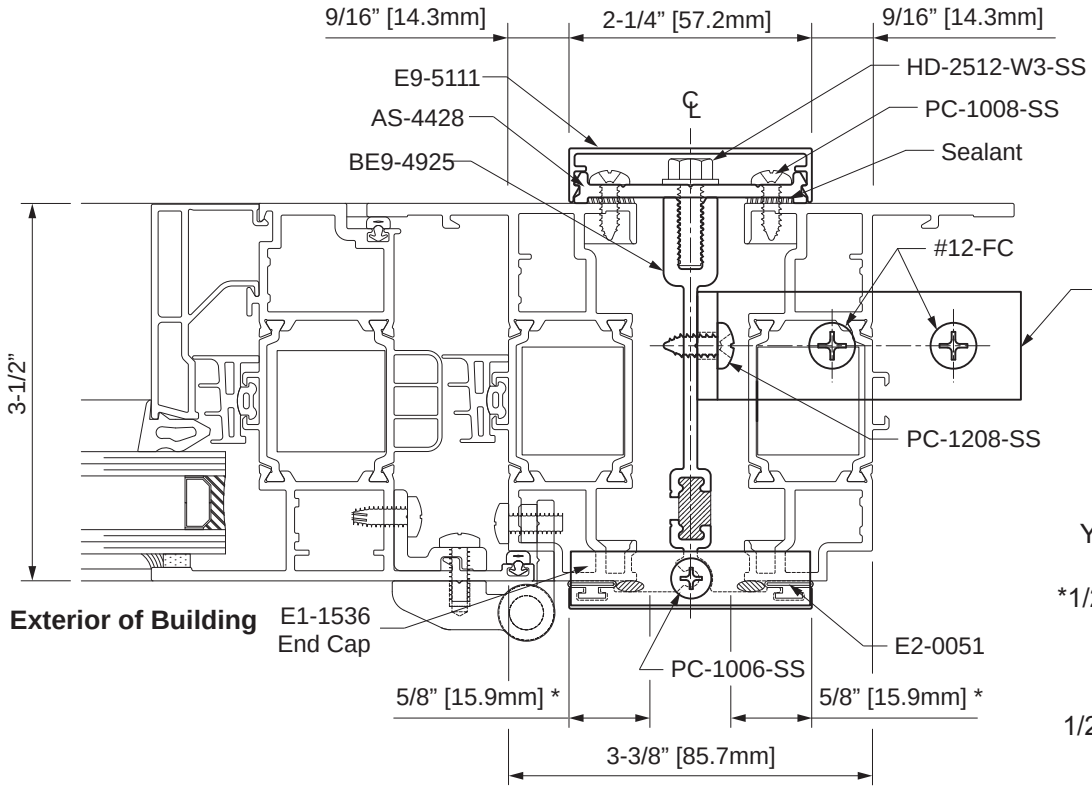
5. Attach anchor clips to what will be the open side of the stacking mullion:
   - -Attach anchor clip, E1-1537, to the top and bottom of one side of the stacking mullion such that each clip extends 1/4” past the end of the mullion.
   - -Attach anchor clips with two PC-1208-SS fasteners at each end (do not completely tighten yet).
6. Install the stacking mullion into the opening according to **Detail 39/39A** on **Page 29** for 4-bar hinges, or **Detail 41/41A** on **Page 31** 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.
7. Carefully slide the second window assembly in and anchor it to the masonry.
8. 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.
9. 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 50 inch-pounds.
10. 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.
11. Install snap cover, E9-5111, starting from the bottom and work up the mullion.
12. 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)



DETAIL 41
YOW 350 TU/TUH
Butt Hinges
1/2” Overlap Req’d

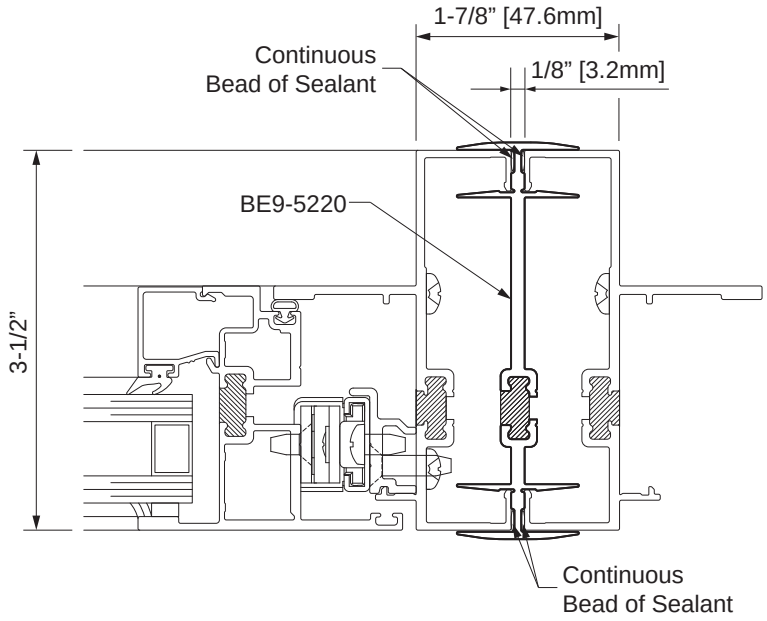


DETAIL 41A
YOW 350 XT Shown
Butt Hinges
*1/2” Min. Overlap Req’d
5/8” Max.

For YOW 350T
1/2” Min. Overlap Req’d
3/4” Max.

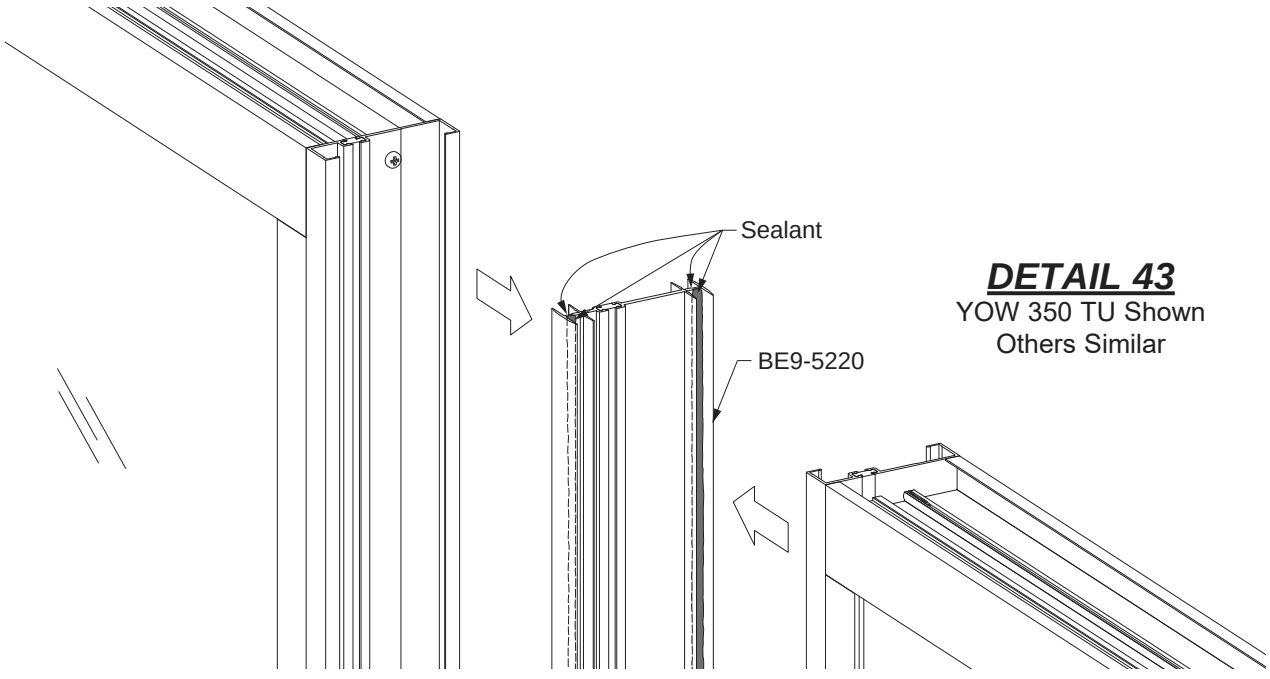
3-1/2” WINDOW DEPTH ZERO MULLION

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



DETAIL 42
YOW 350 TU Shown
Others Similar

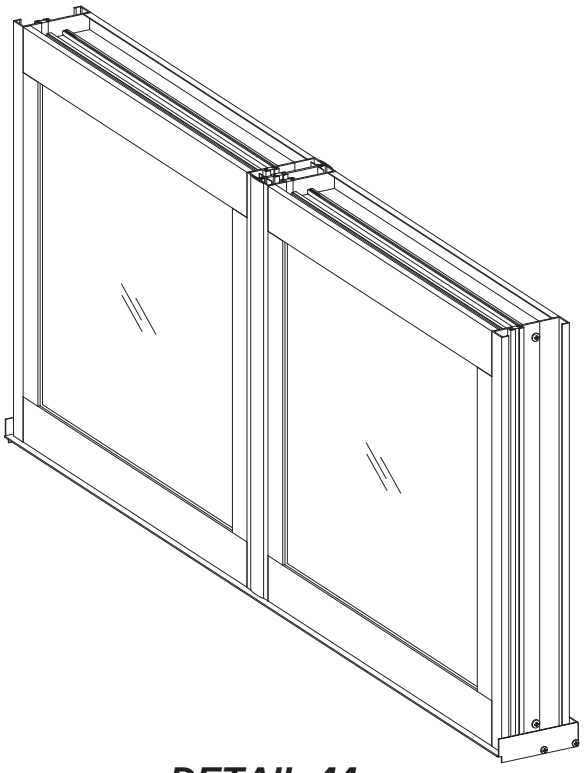
Sill flashing may be used with or without the zero mullion, unclipped. When the sill flashing is used, it must be notched.
-Apply continuous sealant to the corners of the BE9-5220 mullion on one side first.
-Snap the window frame in on that side.
-Seal the other side of the mullion, and then snap the other window frame in.
See **Detail 43 & 44**.



DETAIL 43
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



DETAIL 44

3-1/2” WINDOW DEPTH MULLION CLIP

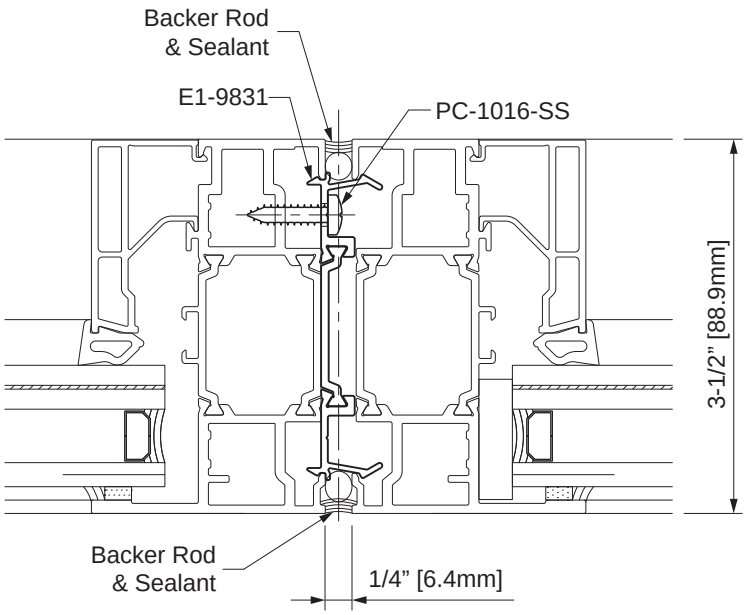
(YOW 350 XT Only)

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.

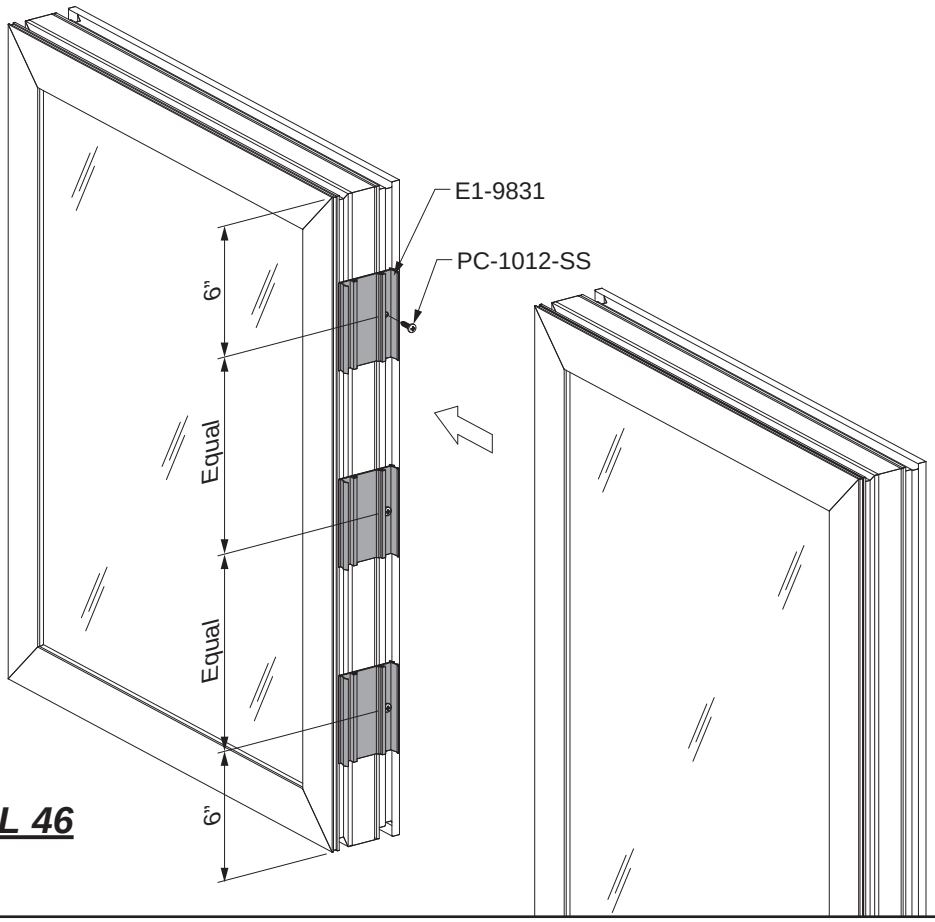
See **Detail 45**.

-Snap in the mullion clips, securing each of them to one of the window frames with a PC-1016-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. 46**.



DETAIL 45



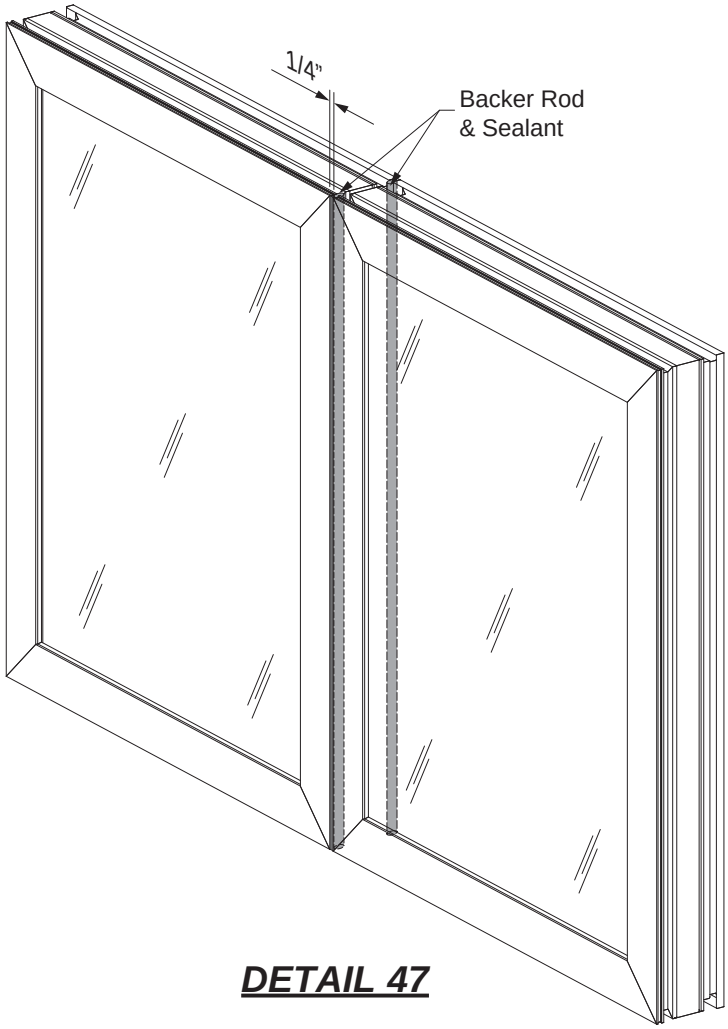
DETAIL 46

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 47**.



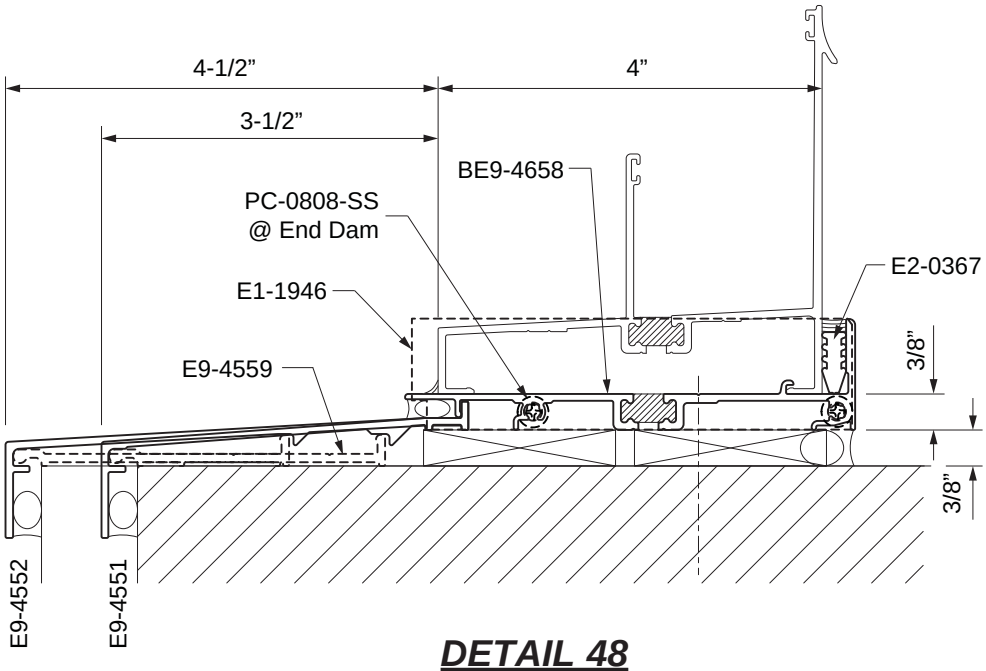
DETAIL 47

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.
-E1-1946 end dams are required and must be attached at each end of the sill flashing using PC-0808-SS fasteners (2 per end dam) prior to sill flashing installation.

See **Detail 48**.



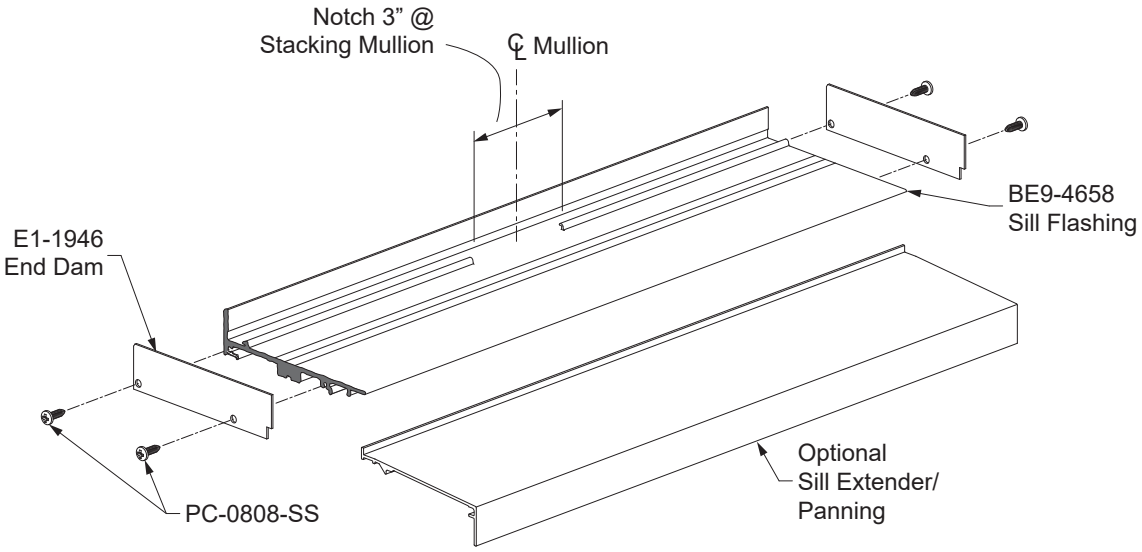
DETAIL 48

4” WINDOW DEPTH SILL FLASHING

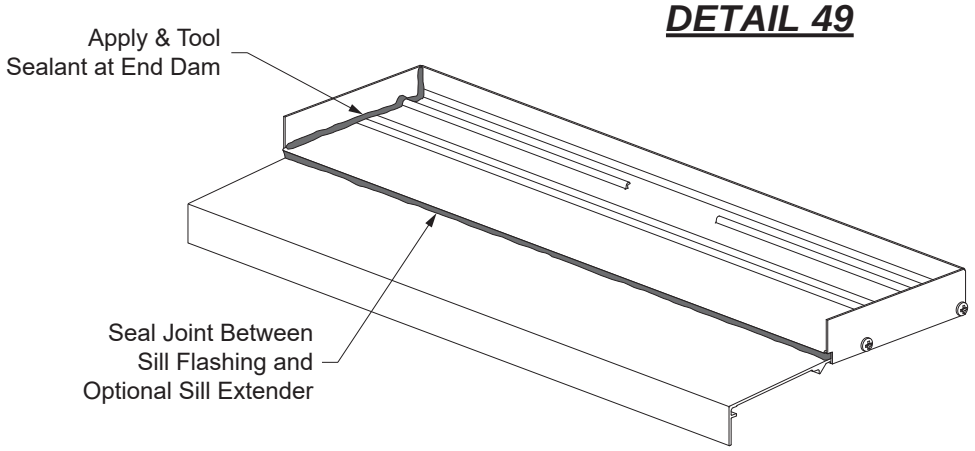
(YFW 400 TU/TUH, YVS 400 TU, & YVS 410 TU/TUH) INSTALLATION OPTIONS AND PROCEDURES

Install sill flashing.
-Notch the return leg of the sill flashing as shown in **Detail 49** around the mullions. Areas at jambs do not require fabrication.
-Apply sealant to the end of the sill flashing.
-Install the end dam E1-1946 with two PC-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 49**.



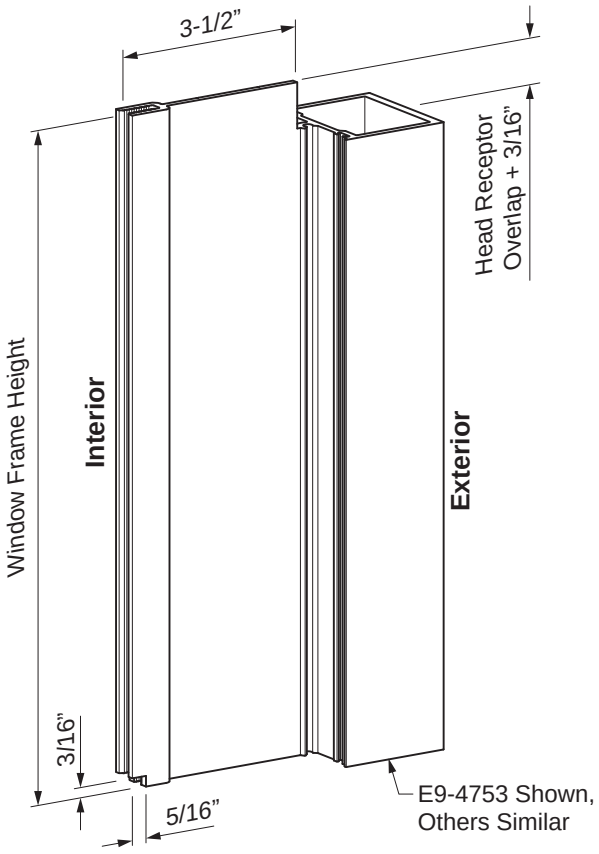
DETAIL 49



4” WINDOW DEPTH STACKING MULLION FABRICATION

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

-As a alternative to notching the return leg of the sill flashing, the stacking mullion can be notched around the return leg as shown in **Detail 50**.
-If head receptors are used in conjunction with stacking mullions running the full height of the window, then the stacking mullion must be notched at the head also as shown in **Detail 50.**
-Apply sealant to the end of the sill flashing and to the void where the jamb receptor was notched.
-Install the end dam and fasten the sill flashing to the substrate as previously shown on **Page 37**.



DETAIL 50

4” WINDOW DEPTH HEAD / JAMB RECEPTORS

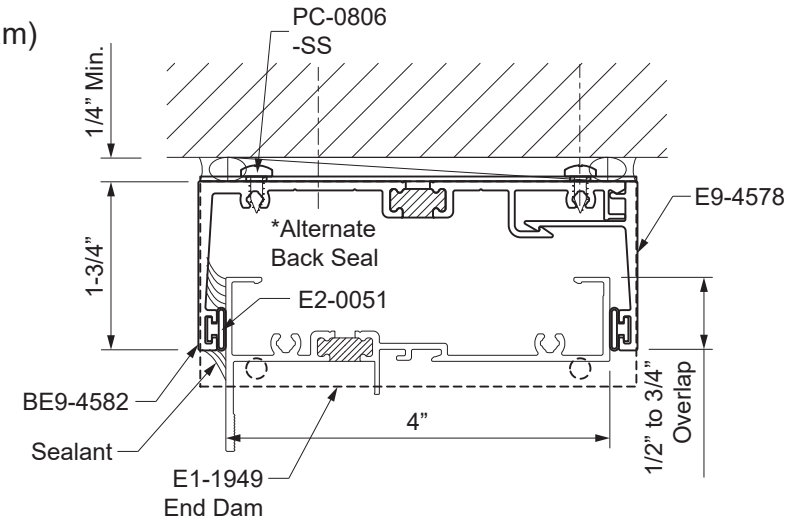
(YFW 400 TU/TUH, YVS 400 TU, YVS 410 TU/TUH, YSD 400 T HEAD ONLY)

-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”.
-E1-1949 end dams are required and must be attached at each end of the head receptor using PC-0806-SS fasteners (2 per end dam) prior to receptor installation.

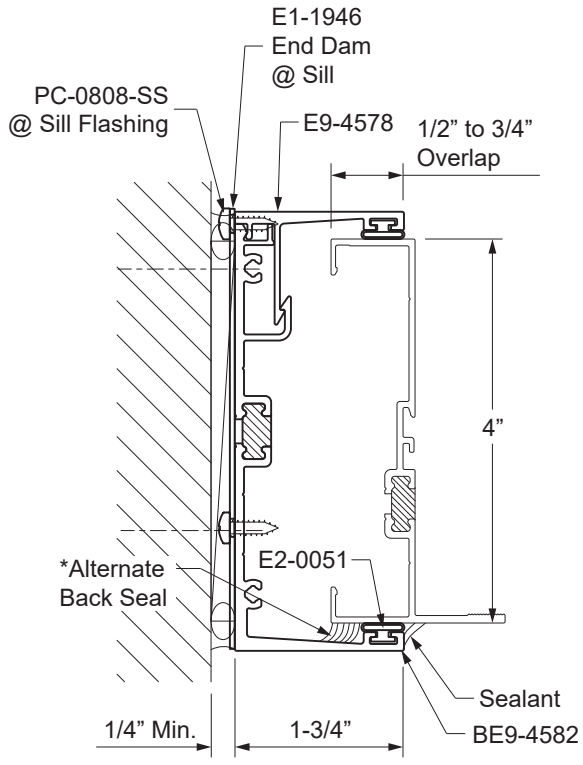
* Alternate back seal to be tooled to the maximum height of receptor gasket at head and jambs.

See **Detail 51**.

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 51



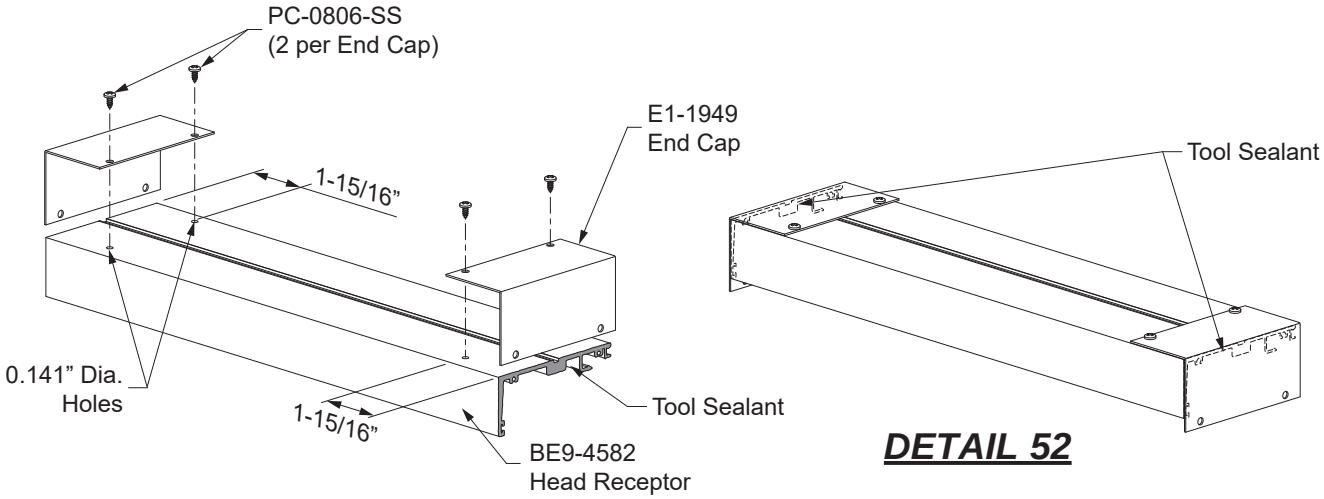
4” WINDOW DEPTH HEAD / JAMB RECEPTORS

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.
-Apply sealant to each end of the head receptor.
-Attach an end cap E1-1949 at each end of the head receptor with (2) PC-0806-SS screws.
-Tool the sealant to the end cap.

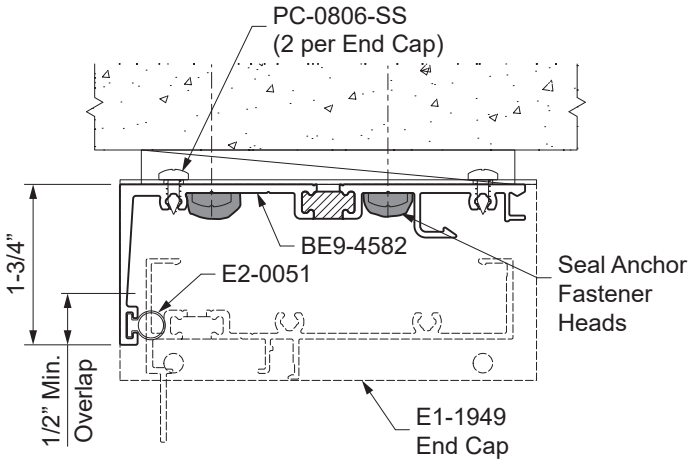
See **Detail 52**.



DETAIL 52

-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 53**.



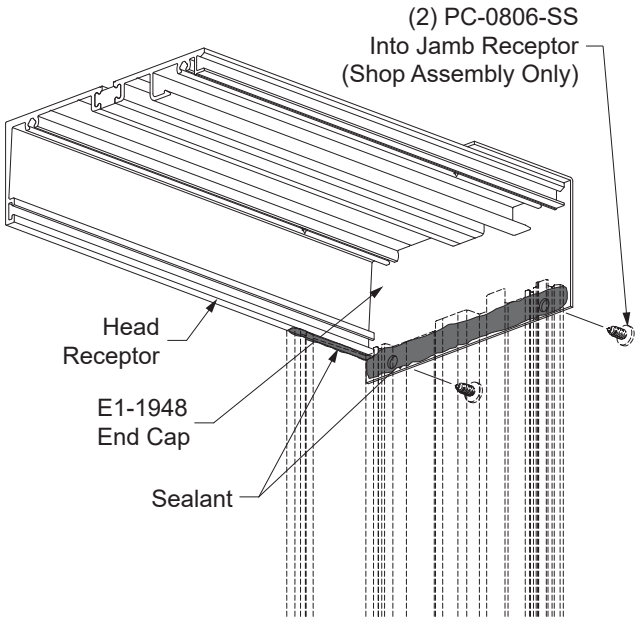
DETAIL 53

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 the jamb receptor to the end dam using (2) PC-0806-SS screws.

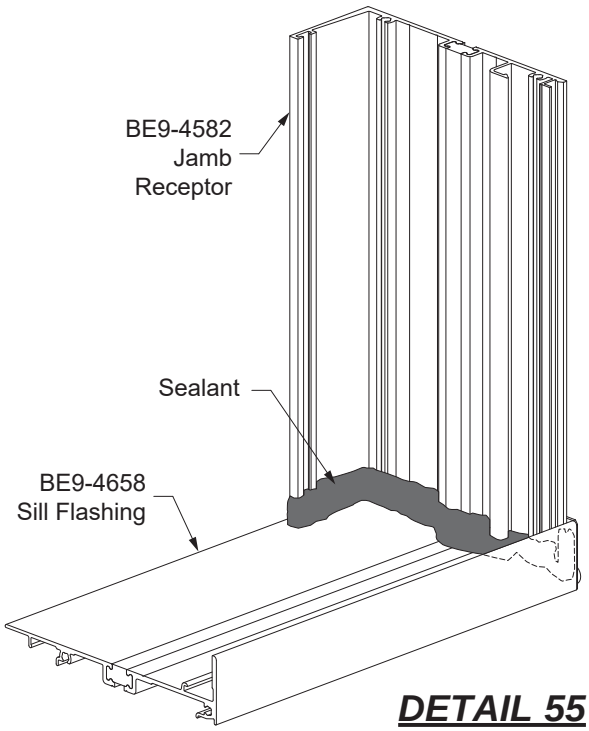
See **Detail 54**.



DETAIL 54

-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 55**.

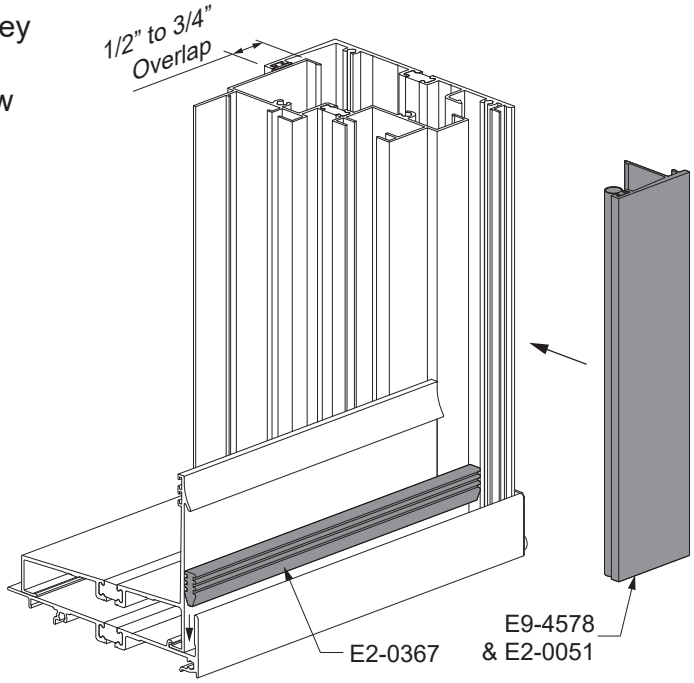


DETAIL 55

4” WINDOW DEPTH HEAD / JAMB RECEPTORS

INSTALLATION OPTIONS AND PROCEDURES - JAMB RECEPTOR WITH SILL FLASHING

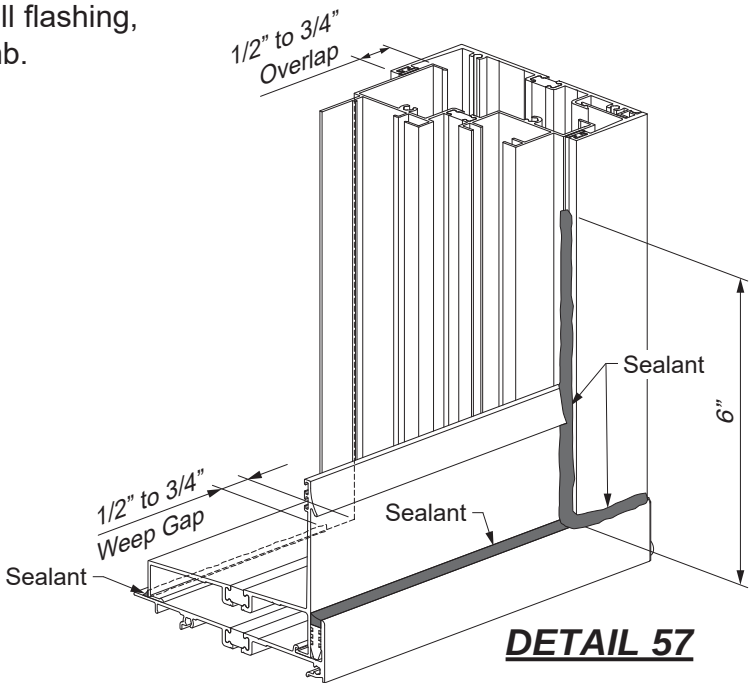
-Install the window frame into the opening.
-Shim the sill/jambs of the window to ensure that they are installed plumb, square, and level.
-Push in the E2-0367 spacer (cut to width of window frame) between the sill and sill flashing.
-Just prior to installing the interior receptor, apply sealant at the interior receptor snap, 6” from the top of the sill flashing as shown in **Detail 56**.
-Snap in interior receptor leg(s).



DETAIL 56

-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 57.**



DETAIL 57

4” WINDOW DEPTH HEAD / JAMB RECEPTORS

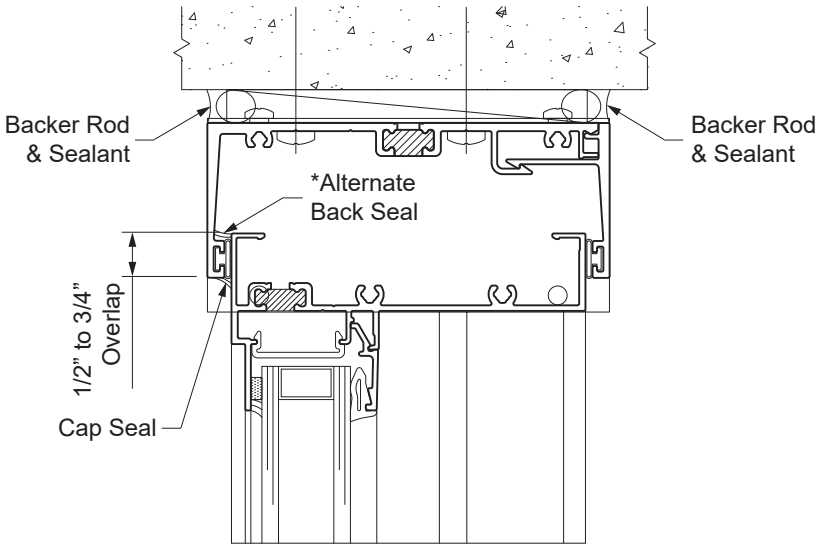
INSTALLATION OPTIONS AND PROCEDURES

Seal Receptors and Sill Flashing

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

See **Detail 58**.

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



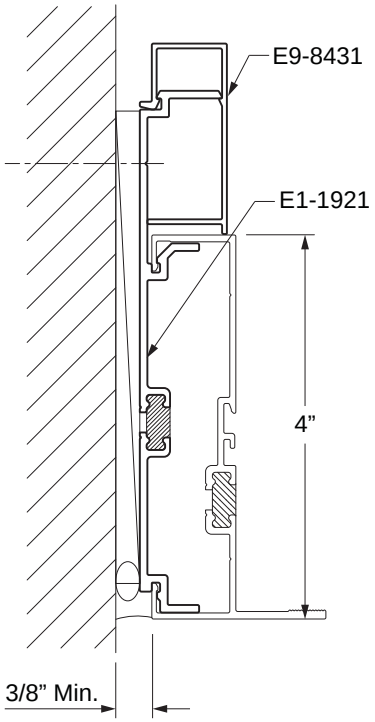
DETAIL 58

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 59**.



DETAIL 59

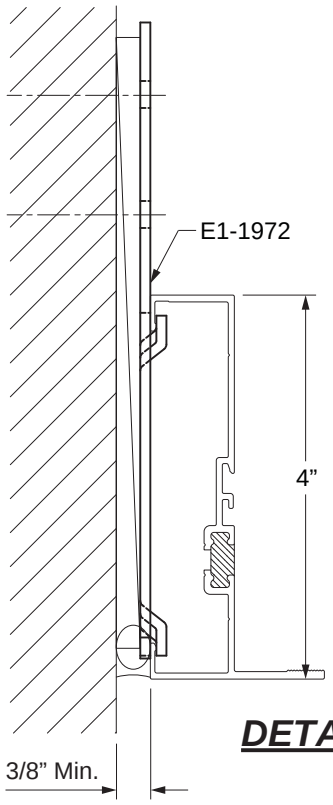
APPROVED FOR UP TO WIND ZONE 3 ONLY
(YFW 400 TU/TUH, YVS 400 TU, & YVS 410 TU/TUH)

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.

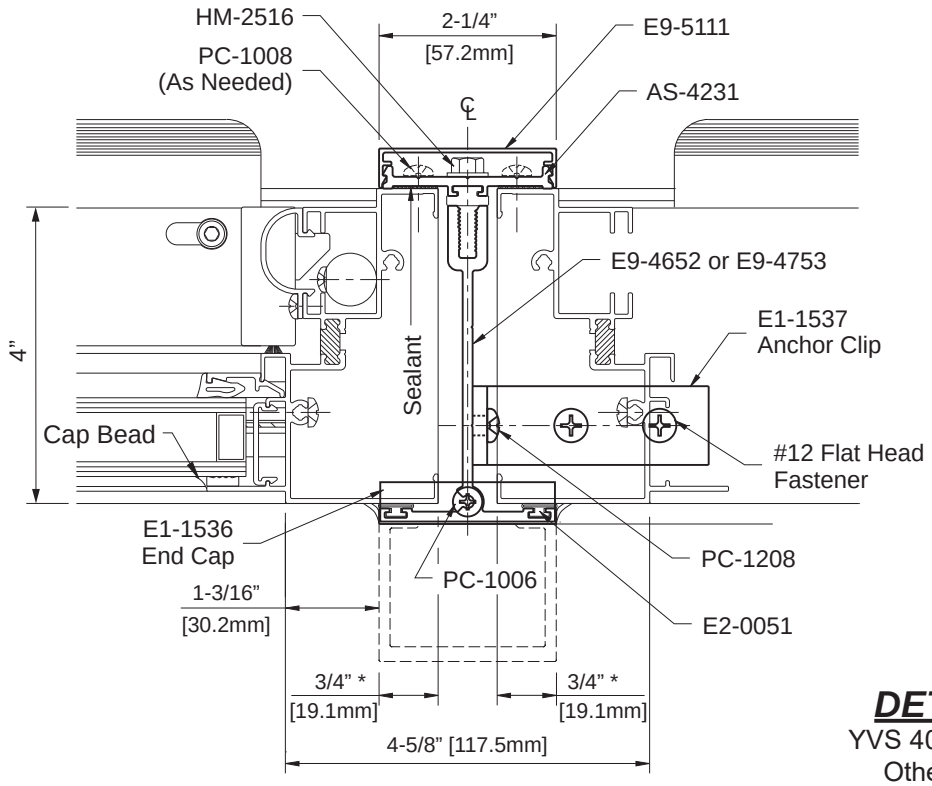
See **Detail 60**.



DETAIL 60

4” WINDOW DEPTH VERTICAL STACKING MULLION

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



DETAIL 61
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, E1-1536, to each end of the stacking mullion with a PC-1006 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 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 61**:
   -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 fasteners used to attach the anchor clips to the mullion.
6. Carefully slide the second window assembly in and anchor it to the masonry.

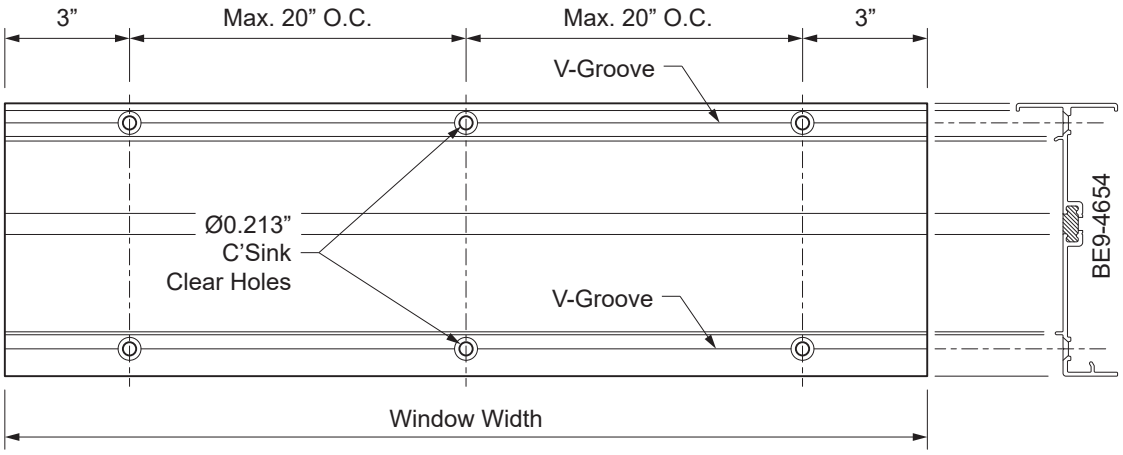
4” WINDOW DEPTH VERTICAL STACKING MULLION (Continued)

(YFW 400 TU/TUH, 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 HM-2516 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 50 inch-pounds.
9. Install PC-1008 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.

4” WINDOW DEPTH STACKING HORIZONTAL

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



DETAIL 62

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

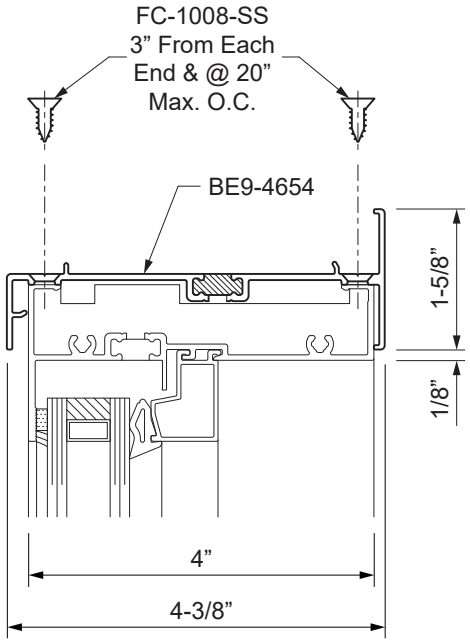
Attach Stacking Horizontal to Bottom Window First:

2. Drill Ø0.213” 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 62**.

3. Set the stacking horizontal on top of the lower window, and drill Ø0.161” 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 63**.



DETAIL 63

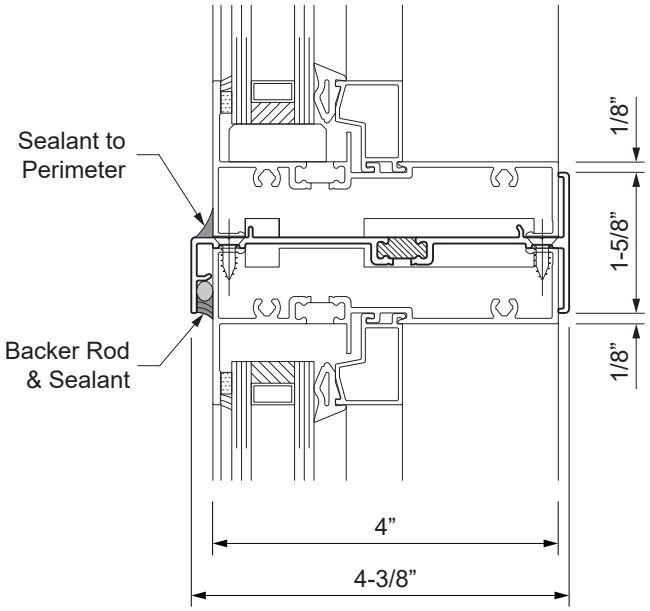
4” WINDOW DEPTH STACKING HORIZONTAL (Continued)

(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 64**.

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



DETAIL 64

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

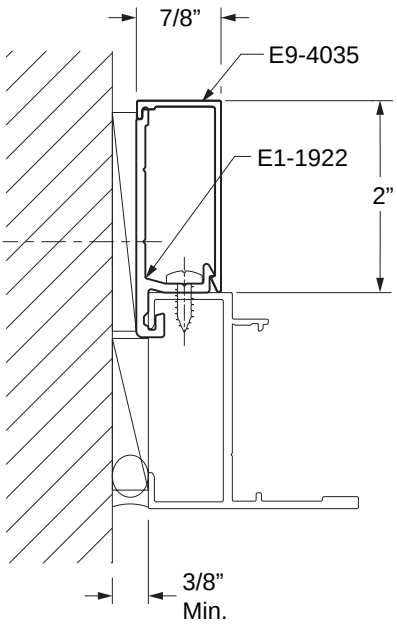
EDGE CLIP ANCHOR

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 65**.

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



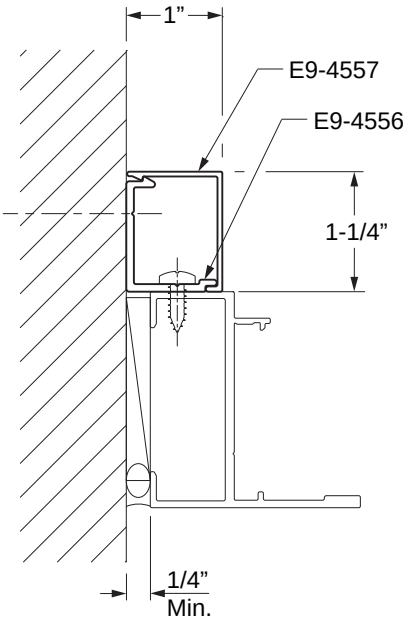
DETAIL 65
YOW 225 Shown,
Others Similar

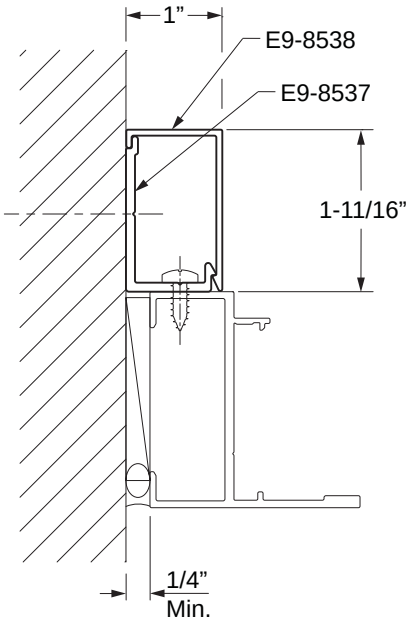
TRIM & CLIP ANCHOR

FOR MOST YKK WINDOW SYSTEMS

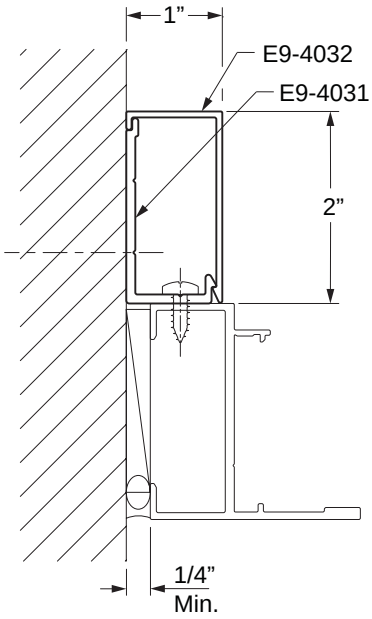
-A minimum of 1/4” perimeter caulk joint is required.
-Fastener size and location to be determined by test reports or engineer of record.

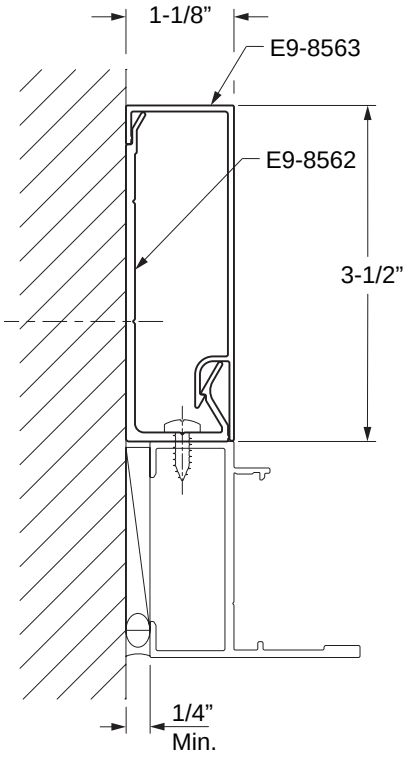
See **Detail 66**.





DETAIL 66
YOW 225 Shown,
Others Similar

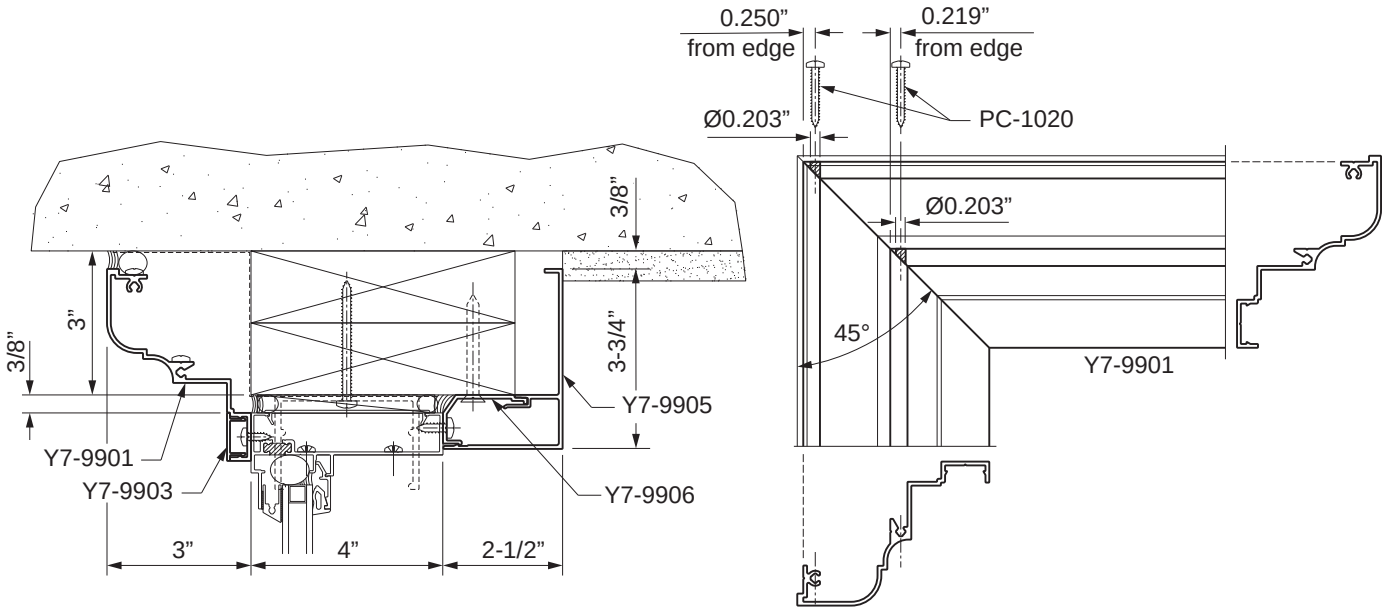




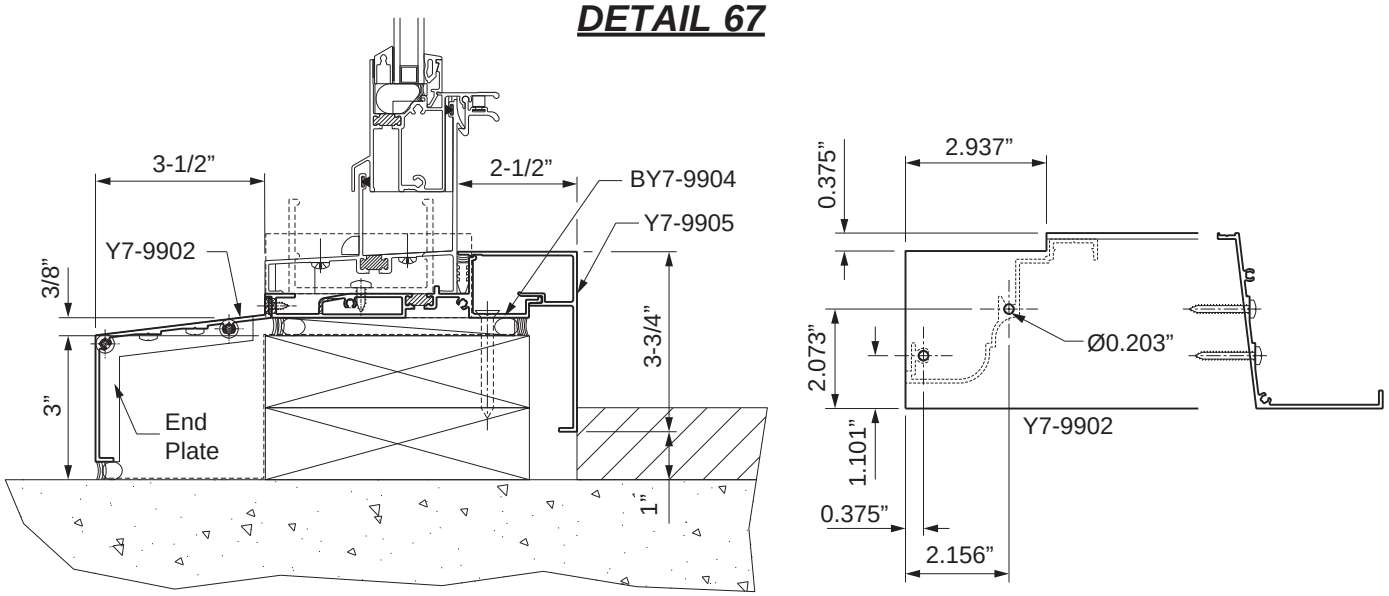
PANNING OPTIONS

LEE HIGH SCHOOL EXAMPLE (YVS 410 TU)

-Exterior panning should be fabricated according to **Detail 67.**
-Interior panning can be fabricated like trim & clip.



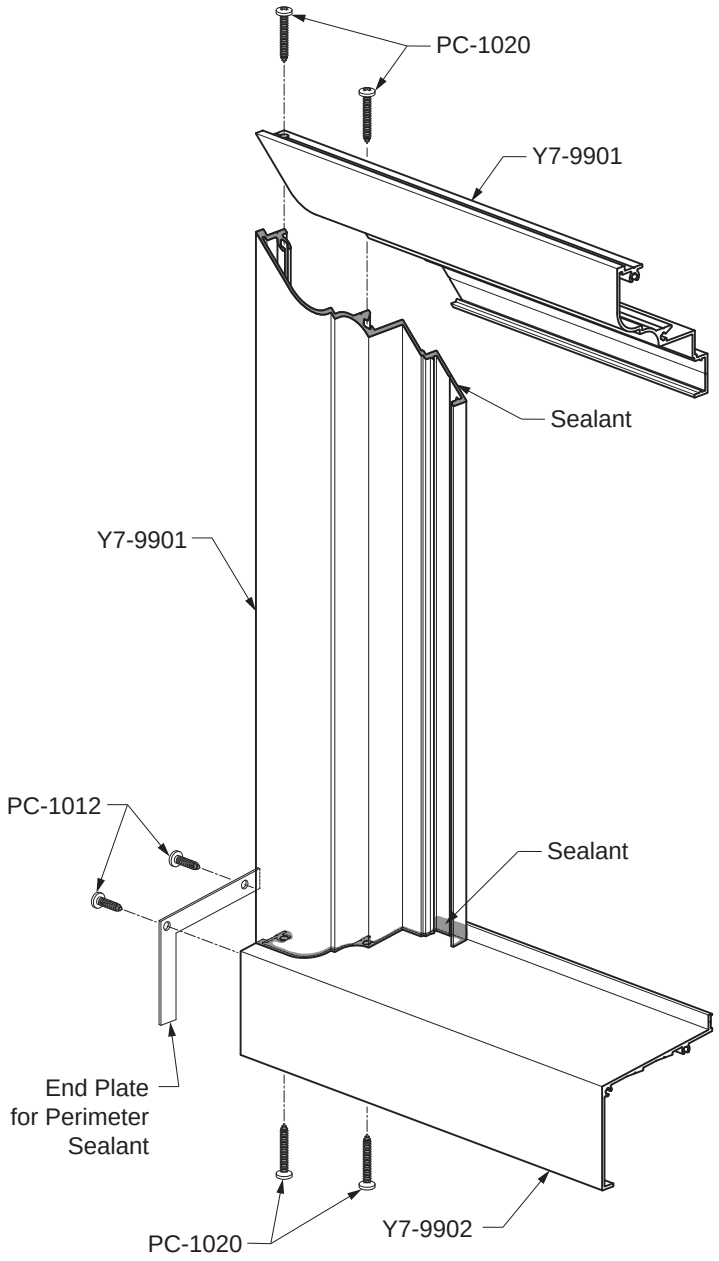
DETAIL 67



PANNING OPTIONS

LEE HIGH SCHOOL EXAMPLE (YVS 410 TU, Continued)

-Apply sealant to ends of the panning members as shown in **Detail 68**.
-Fasten the vertical and horizontal panning members together using PC-1220 screws. Custom end plates may be used at the sill panning.



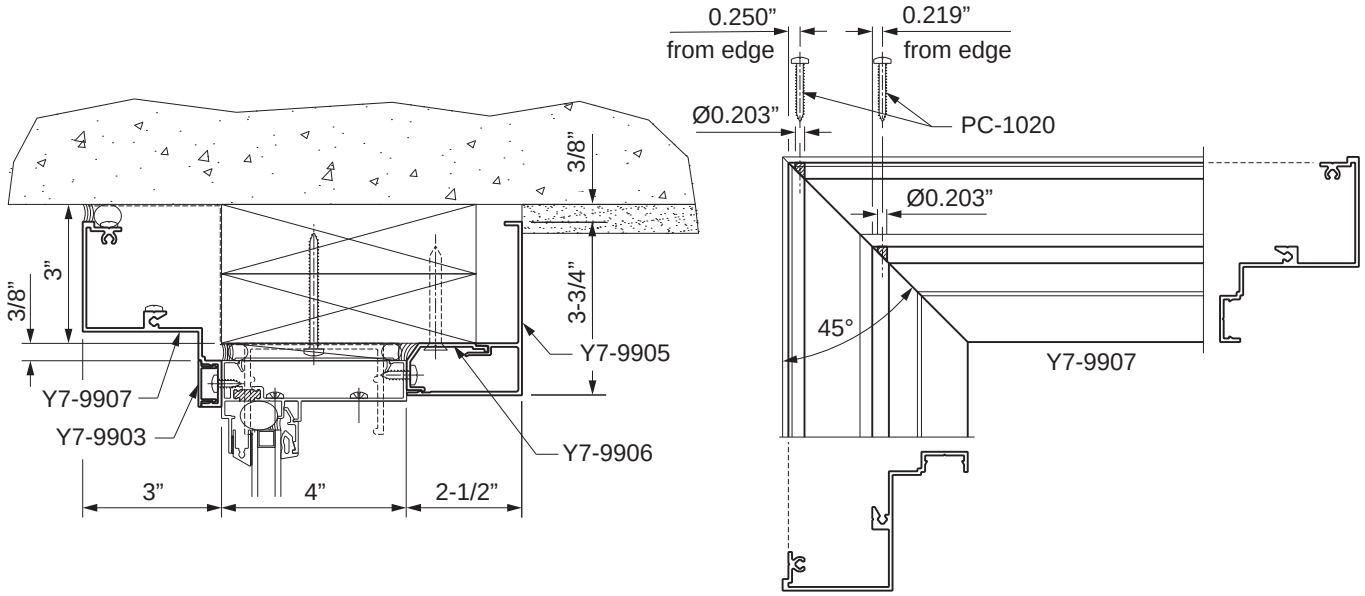
DETAIL 68

-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 68** & **69**.

PANNING OPTIONS

LEE HIGH SCHOOL EXAMPLE (YVS 410 TU, Continued)



DETAIL 69

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