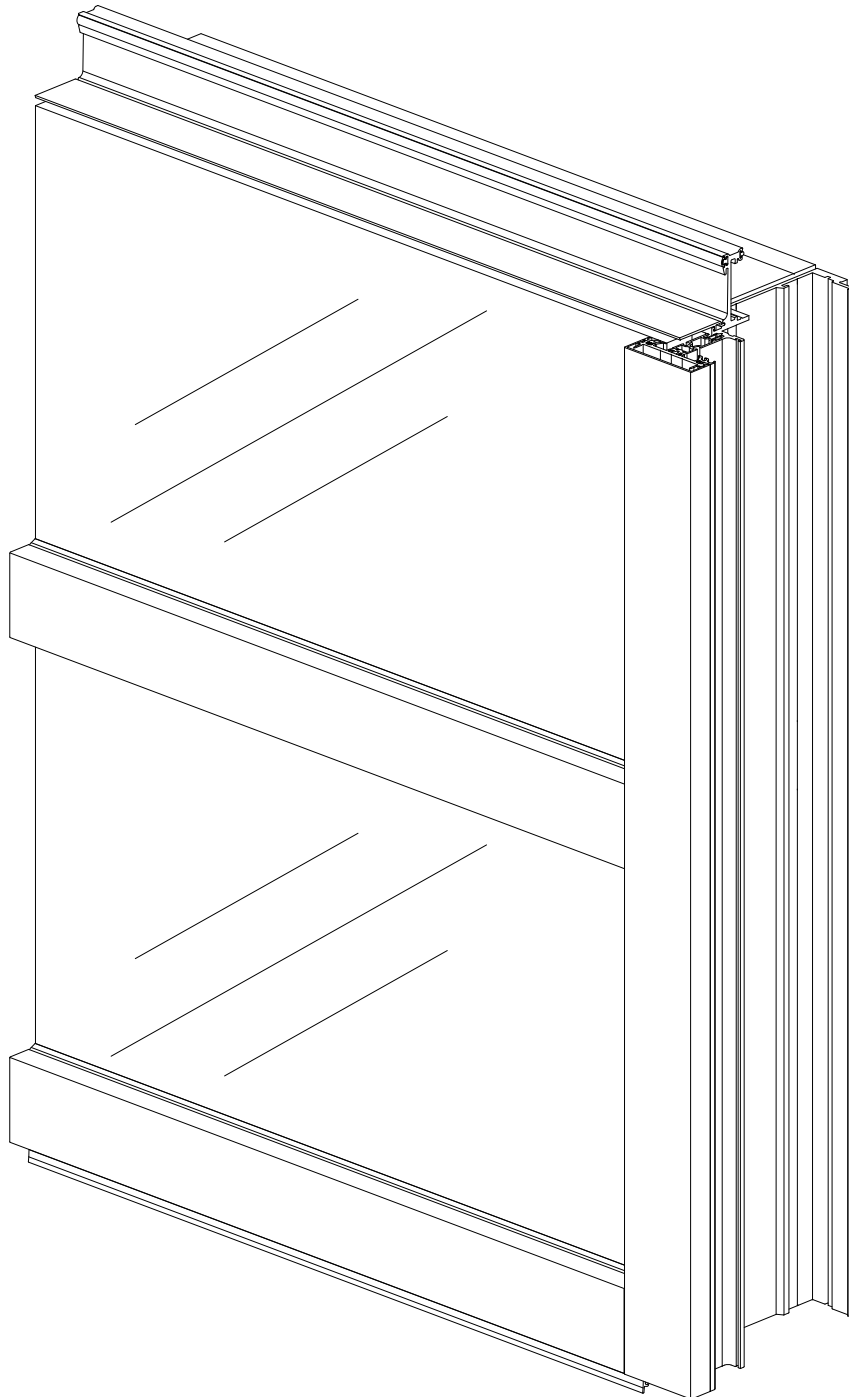


YUW 750 XT Unitized Curtain Wall System

4 Side Captured



Installation Manual



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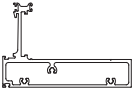
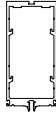



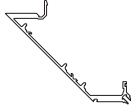


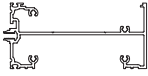
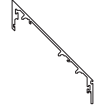


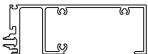
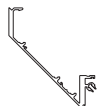



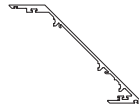






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Installation Notes

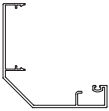
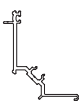
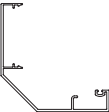
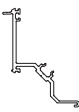







1. Do not drop, roll or drag boxes of aluminum framing. Move and stack boxes with proper support to prevent distortion. If fork lifts are used, be especially careful about striking the boxes when lifting or moving.
2. Store in a dry, out of the way area. If rain exposure, condensation or any water contact 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 quality and quantity 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. Gather your shop drawings, materials, packing list, and this installation manual. Carefully review parts location, the sequence it goes therein, 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 sealants have been installed in strict accordance with the manufacturer's recommendations and specifications.
8. Remember to isolate, in an approved manner, all aluminum from uncured masonry or other incompatible materials.
9. System-to-structure fasteners are not supplied by YKK AP. Fasteners called out on shop drawings are to indicate minimum sizes for design loading.
10. If any questions arise concerning YKK AP products or their installation, contact YKK AP for clarification before proceeding.
11. YKK AP storefront and/or curtain wall framing 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.
12. Cutting tolerances are plus zero, minus one thirty second unless otherwise noted.
13. Check our website, www.ykkap.com, for the latest installation manual update prior to commencing work.

FRAMING MEMBERS









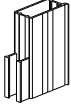

	Stacking Tray For 7-1/2" System	E9-7027		Jamb Mullion For 7-1/2" System	E9-7098
	Stacking Tray For 6" System	E9-7037		Jamb Mullion For 6" System	E9-7063
	Intermediate Horizontal For 7-1/2" System	E9-7097		Outside Corner Male Mullion For 7-1/2" System	E9-7045
	Intermediate Horizontal For 6" System	E9-7064		Outside Corner Male Mullion For 6" System	E9-7068
	Open Back Head/Sill For 7-1/2" System	E9-7099		Outside Corner Female Mullion For 7-1/2" System	E9-7046
	Open Back Head/Sill For 6" System	E9-7065		Outside Corner Female Mullion For 6" System	E9-7069
	Stacking Sill For 7-1/2" System	E9-7096		Inside Corner Male Mullion * For 7-1/2" System	E9-7047
	Stacking Sill For 6" System	E9-7077		Inside Corner Male Mullion * For 6" System	E9-7070
	Male Mullion For 7-1/2" System	E9-7095		Inside Corner Female Mullion Half * For 7-1/2" System	E9-7048
	Male Mullion For 6" System	E9-7061		Inside Corner Female Mullion Half * For 6" System	E9-7071
	Female Mullion For 7-1/2" System	E9-7002		Starter Sill	E9-7094
	Female Mullion For 6" System	E9-7062		Face Cover	E9-1206

* Inside corners are available only for SSG.

FRAMING MEMBERS


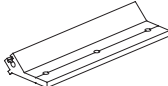

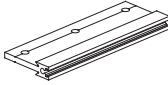

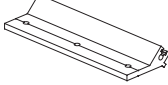

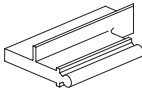

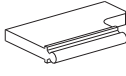

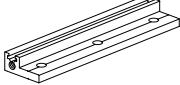
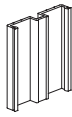
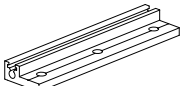
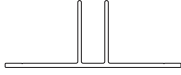
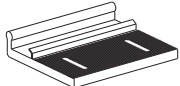
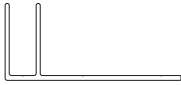
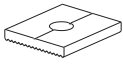

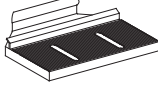


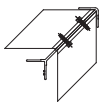

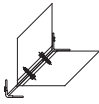
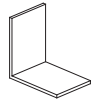
	Outside Corner Face Cover For 1" Glazing	E9-7056		Outside Corner Pressure Plate For 1" Glazing	E9-7055
	Outside Corner Face Cover For 1-5/16" Glazing	E9-7080		Outside Corner Pressure Plate For 1-5/16" Glazing	E9-7081
	Flush Filler Use with E9-7043	E9-7044		Mullion Interlocking Clip For 7-1/2" System	E9-7003
	Flush Filler Use with E9-7065	E9-7066		Mullion Interlocking Clip For 6" System	E9-7072
	Pressure Plate For 1" Glazing	E9-7054		1/4" Adaptor For 1-5/16" Glazing	E9-7749
	Pressure Plate For 1-5/16" Glazing	E9-7057			

ACCESSORIES

	Stack Joint Plate	E1-7001		Mullion Reinforcement Clip For 7-1/2" System	E1-7007
	End Dam	E1-7002		Mullion Sleeve Right Hand For 7-1/2" System	E1-7021
	Mullion Clip Use with E9-7002	E1-7003		Mullion Sleeve Left Hand For 7-1/2" System	E1-7022
	Mullion Clip Use with E9-7062	E1-7072		Mullion Sleeve Right Hand For 6" System	E1-7075
	Mullion Anchor Sleeve	E1-7006		Mullion Sleeve Left Hand For 6" System	E1-7076




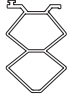









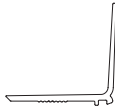



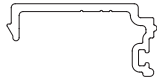

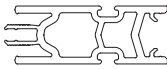


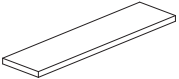

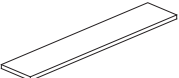
* Inside corners are available only for SSG.

ACCESSORIES

	Mullion Reinforcement Clip For 6" System	E1-7046		90° I.S. Corner Mullion Anchor (LH)	E1-7033
	Corner Mullion Sleeve Right Hand For 7-1/2" System	E1-7048		90° O.S. Corner Mullion Anchor	E1-7032
	Corner Mullion Sleeve Left Hand For 7-1/2" System	E1-7049		90° I.S. Corner Mullion Anchor (RH)	E1-7034
	Corner Mullion Clip Use with E9-7046 & E9-7069	E1-7050		Bracket Sleeve	E1-7092
	Corner Mullion Sleeve Right Hand For 6" System	E1-7079		Bracket Sleeve	E1-3906
	Corner Mullion Sleeve Left Hand For 6" System	E1-7080		Leveling Bracket Right Hand	E1-7014
	Corner Mullion Reinforcement Clip	E1-7051		Leveling Bracket Left Hand	E1-7015
	Mullion Anchor For 6" System	E1-7004		L Anchor	E1-3907
	Jamb Anchor For 6" System	E1-7005		Lock Washer	E1-3908
	Mullion Anchor For 7-1/2" System	E1-7024		90° L Anchor For 90° Outside Corner	E1-3917
	Jamb Anchor For 7-1/2" System	E1-7025		Setting Block Chair For 1" Glazing	E1-7009
	90° I.S. Corner Anchor *	E1-7028		Setting Block Chair For 1-5/16" Glazing	E1-7010
	90° O.S. Corner Anchor	E1-7029		90° Corner Starter Sill Splice	E1-7027



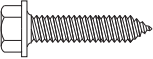



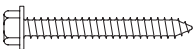


* Inside corners are available only for SSG.

ACCESSORIES

	Jamb Stack Block	E1-7081		Weather Seal Gasket	E2-7010
	Silicone Splice Sleeve	E2-0070		Sill Horizontal Weather Seal	E2-7016
	3/4" Spacer Sponge	E2-0725		Captured Joint Plug	E2-0102
	Noise Reduction Clip	E2-3906		Joint Plug For Female Mullion	E2-0721
	Interior Gasket	E2-7001		I.G.U. Cap For 1" Glazing	E3-7002
	SSG Corner Spacer *	E2-7014		I.G.U. Cap For 1-5/16" Glazing	E3-7018
	Air Water Seal Gasket	E2-7002		Sill Track Adaptor	E3-7023
	Horizontal Interior Gasket	E2-7003		Pocket Filler For 1" Glazing	E3-7008
	Stacking Tray Gasket	E2-7004		Pocket Filler For 1-5/16" Glazing	E3-7015
	Exterior Gasket	E2-7005		Thermal Barrier	E3-7017
	SSG Wiper Gasket *	E2-7009		SSG Corner Tongue Adaptor	E3-7011
	SSG Setting Block For 1" Glazing	E2-7011		End Cap	E3-7024
	SSG Setting Block For 1-5/16" Glazing	E2-7017			

* Inside corners are available only for SSG.

FASTENERS

	#10 x 5/8" FHSMS Type AB, Zinc Plated Steel	PC-1010		#10 x 5/8" PHSMS Type AB, Stainless Steel, For Attachment of End Dam to Sill Starter	PC-1010-SS
	1/4"-20 x 1" HWHS Type CA, Zinc Plated Steel	HD-2520-W3		1/2"-13 x 1/2" Set Screw Zinc Plated Steel For Leveling Bracket	YM-5008
	#12 x 1-1/4" L Stainless Steel, For Screw Spline Attachment	HC-1220-SS		#10-24 x 1/2" FHUCMS Stainless Steel, For Attachment of End Cap to Vertical Mullion	UF-1008-SS
	#12 x 1-3/4" L Stainless Steel, For Screw Spline Attachment at Corner	HC-1228-SS		#10 x 1/2" PHSMS TYPE AB, Stainless Steel, For Attachment of Angle to Jamb	PC-1008-SS
	1/4"-20x2" HHMS Stainless Steel, For Pressure Plate Attachment	HM-2532-SS			

UNIT INSTALLATION

STEP 1 CHECK OPENINGS

Elevations and slabs must be within adjustment of anchoring system. See approved shop drawings for allowable adjustment.

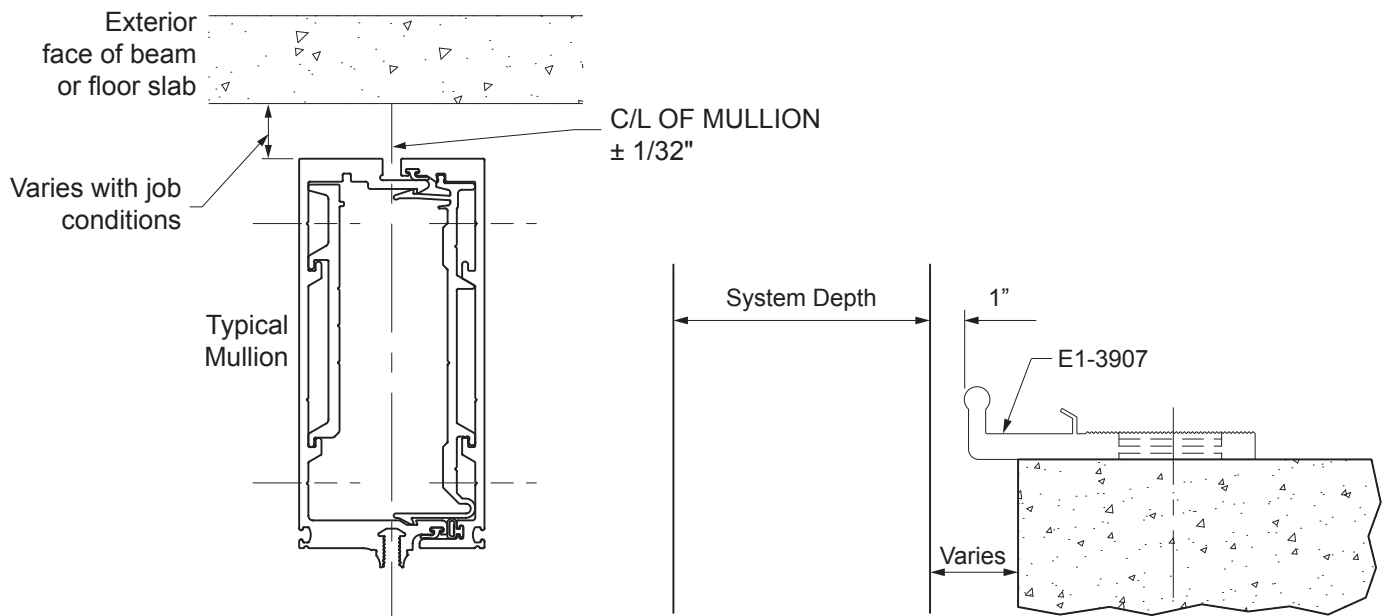
Anchoring surfaces of perimeter construction must be level and plumb within the adjustment limits of the head, sill and jamb. See approved shop drawings for allowable adjustment.

STEP 2 LAY OUT ANCHOR AND MULLION CENTERLINES

-Use wall lines established by the general contractor. On each floor, lay out a reference line to establish in and out wall locations.

-Use columns center lines established by the general contractor. On each floor, lay out mullion center lines and anchor center lines.

See **Detail 1**.



Detail 1

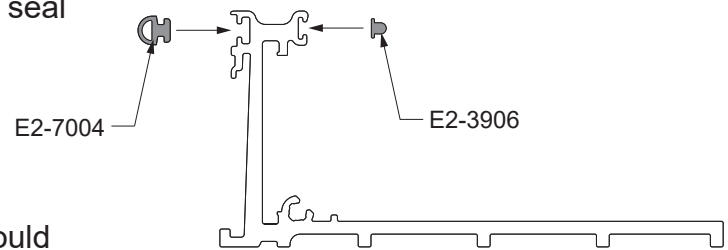
UNIT INSTALLATION

STEP 3

INSTALL STARTER SILL

Prior to anchoring the starter sill, the stacking tray gasket (E2-7004) and the stacking tray spacer (E2-3906) should be installed to the starter sill pieces.

-Cut the stacking tray spacer to the length of starter sill. For starter sill jamb pieces, cut the air water seal gasket to starter sill length plus (+) 1/8". For intermediate starter sill pieces, cut the air water seal gasket to starter sill length (+) 1/4".

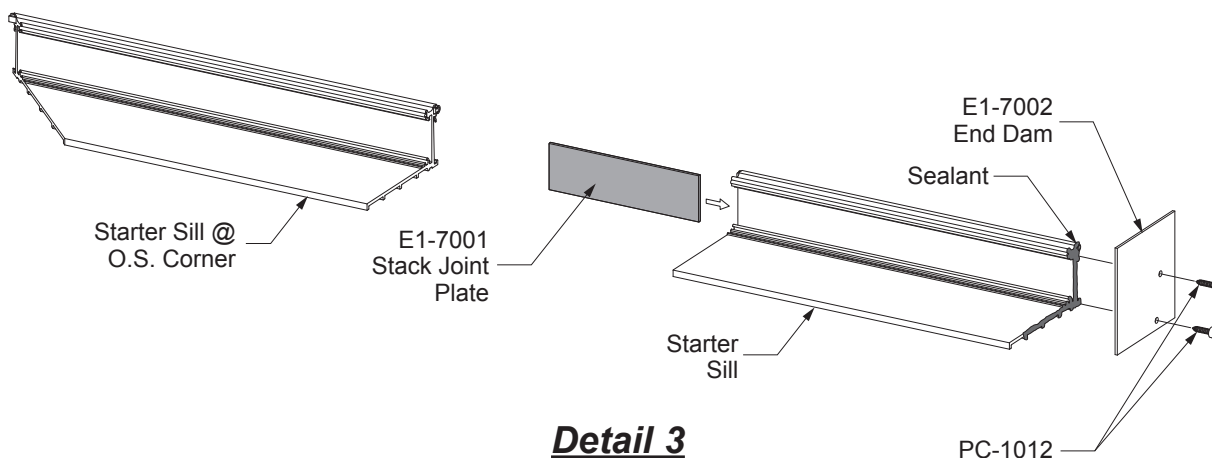
**Detail 2**

-Install the gaskets into the starter sill as shown in **Detail 2**.

- Apply bond breaker tape to the front of the stack joint plate.
 - Slide stack joint plate into starter sill and secure the plate with tape.
 - Apply sealant to the starter sill at the jamb where the end dam will be placed.
 - Attach end dams at jamb location with (2) PC-1012 screws.
 - Locate the back of the curtain wall system (back of the vertical mullions) and mark locations.
- Note: the back of the E9-7011 starter sill is to be flush with the back of the mullions for 7-1/2" system.
- Locate the centerline of the vertical mullions from established column lines and mark the locations.

See **Detail 3**.

Note: Neither outside nor inside corners can utilize the stack joint plate.

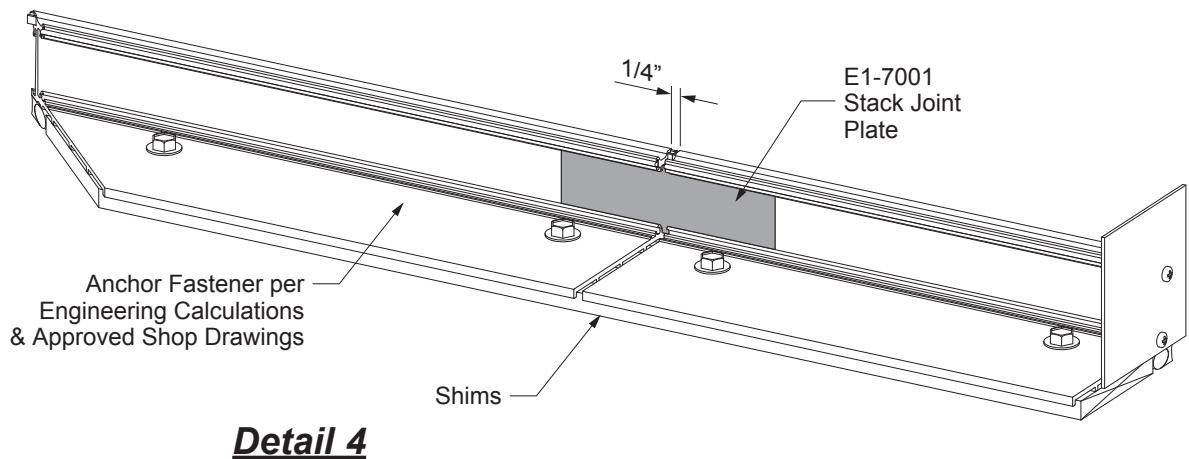
**Detail 3**

UNIT INSTALLATION

STEP 3 (Continued) INSTALL STARTER SILL

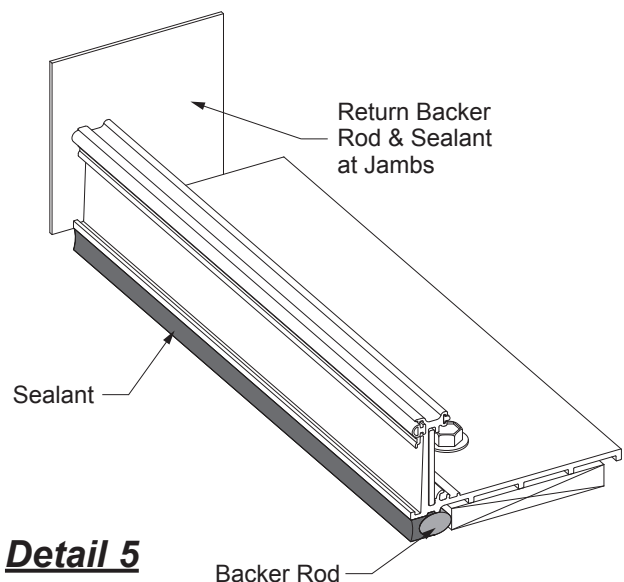
- Position sill track and shim as necessary to place it at the proper height. (measured from established benchmark) the shim stack and perimeter anchors to be located per approved shop drawings. The sill track must be level and straight. Leave 1/4" space between starter sill ends at the splice.
- Field match and drill building condition for the sill track's perimeter fasteners. Locate fasteners from interfering with the unit's sill horizontal, when unit is installed. Apply fasteners.
- Slide stack joint plate to center across splice joint and align bond breaker tape with 1/4" space.

See **Detail 4**.



- Insert backer rod and apply perimeter primary sealant including return to back of starter sill at jambs.

See **Detail 5**.

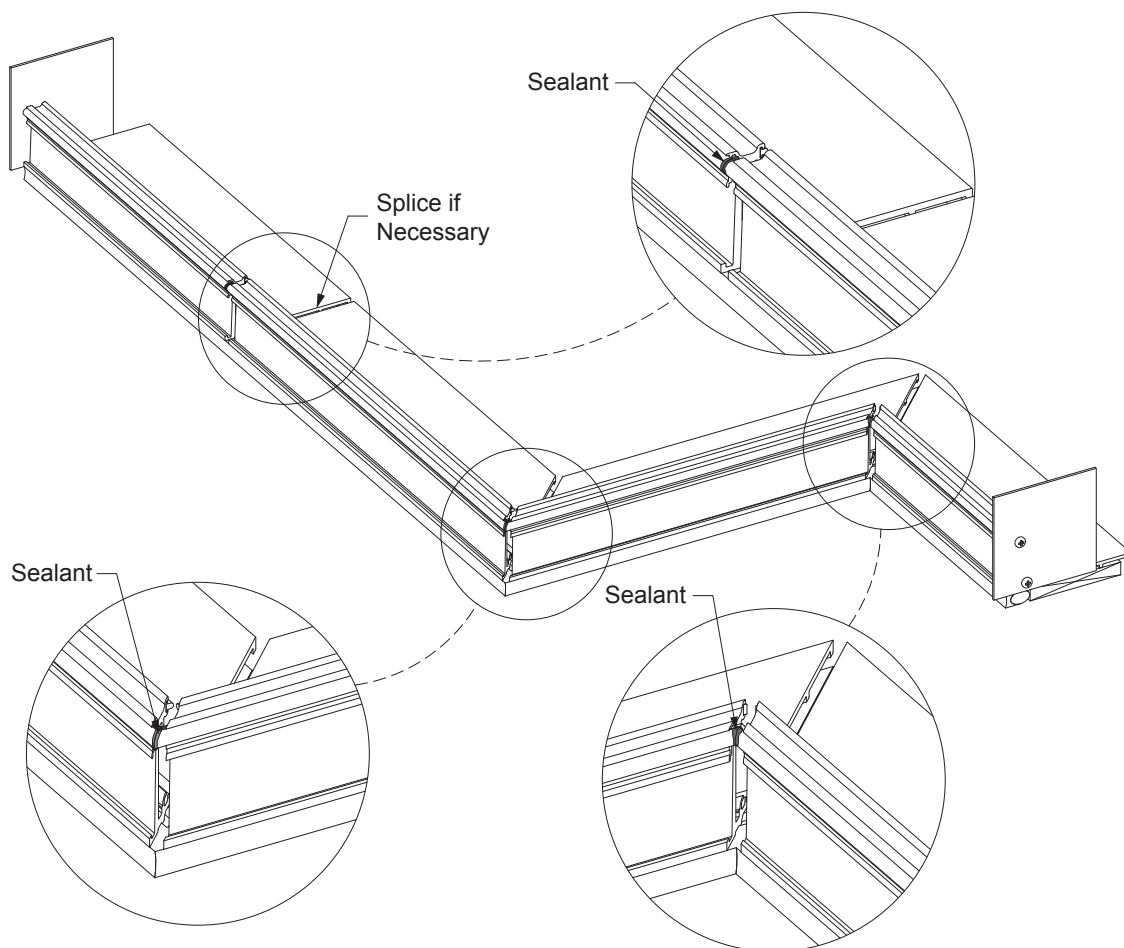


UNIT INSTALLATION

STEP 3 (Continued) INSTALL STARTER SILL

-Seal between gasket ends of the air water seal gasket, crowding them together where splices occur. Tool silicone smooth.

See **Detail 6**.



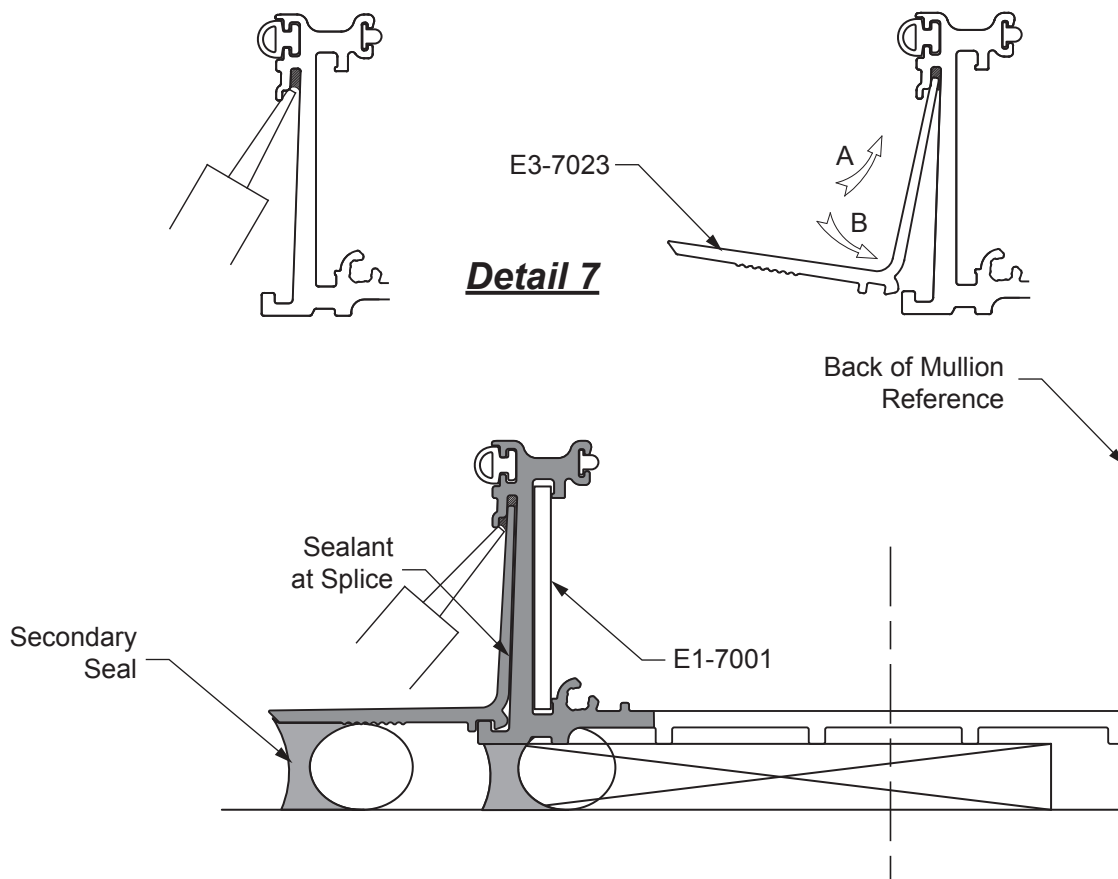
Detail 6

UNIT INSTALLATION

STEP 3 (Continued) INSTALL STARTER SILL

- Cut the E3-7023 PVC adaptor to fit up to the splice location. Adaptors can be spliced between starter splices if needed, leaving a 1/4" gap and joined with a E2-0070 silicone sheet.
- Before installing the PVC sill track adaptor, apply a bead of silicone sealant into the upper cavity of the starter sill.
- While the silicone is still wet, insert the PVC sill track adaptor into the cavity starter sill. With the top leg in place, engage the bottom of the adaptor into the starter sill as shown.
- See splice detail for sealant of the splice, then apply backer rod and apply the secondary seal.
- Seal the top lip continuously as shown.

See **Detail 7**.

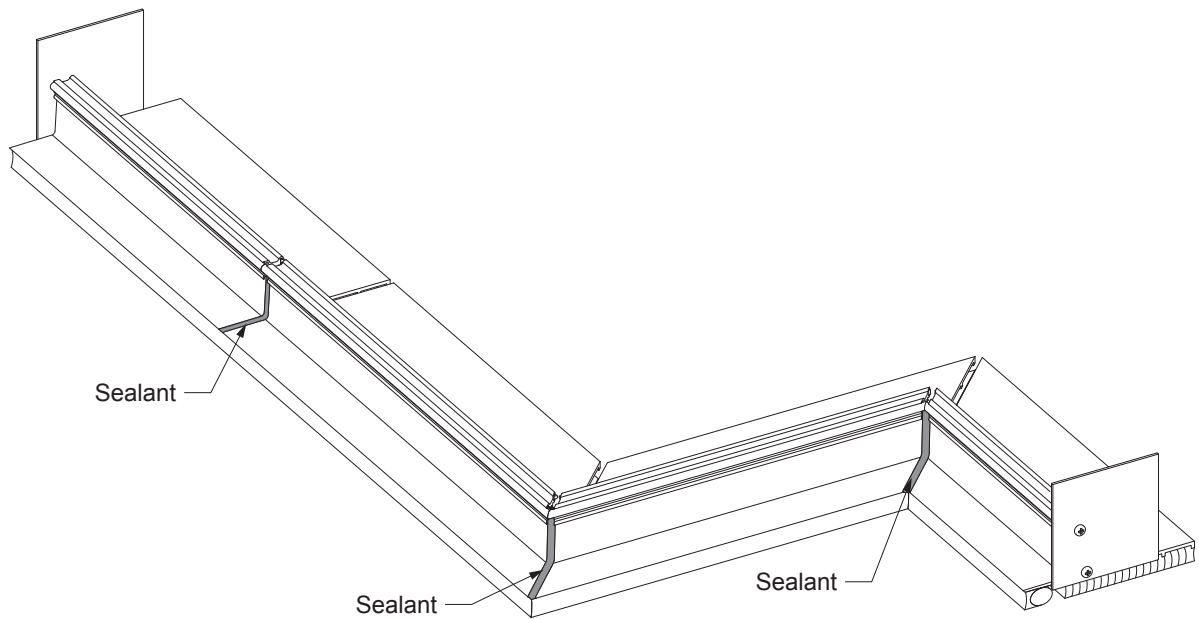


UNIT INSTALLATION

STEP 3 (Continued) INSTALL STARTER SILL

-Apply and tool sealant at the gaps between the starter sill members at the PVC adaptors.

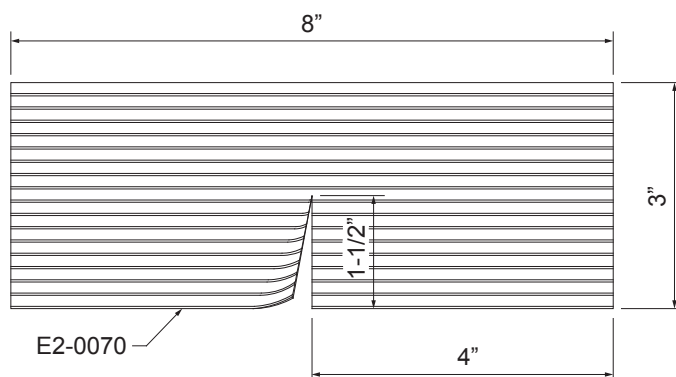
See **Detail 8**.



Detail 8

Prepare the Splices at Corner

- Cut the E2-0070 splices in the middle as shown in **Detail 9**.
- Do not cut the splices for non-corner joints.

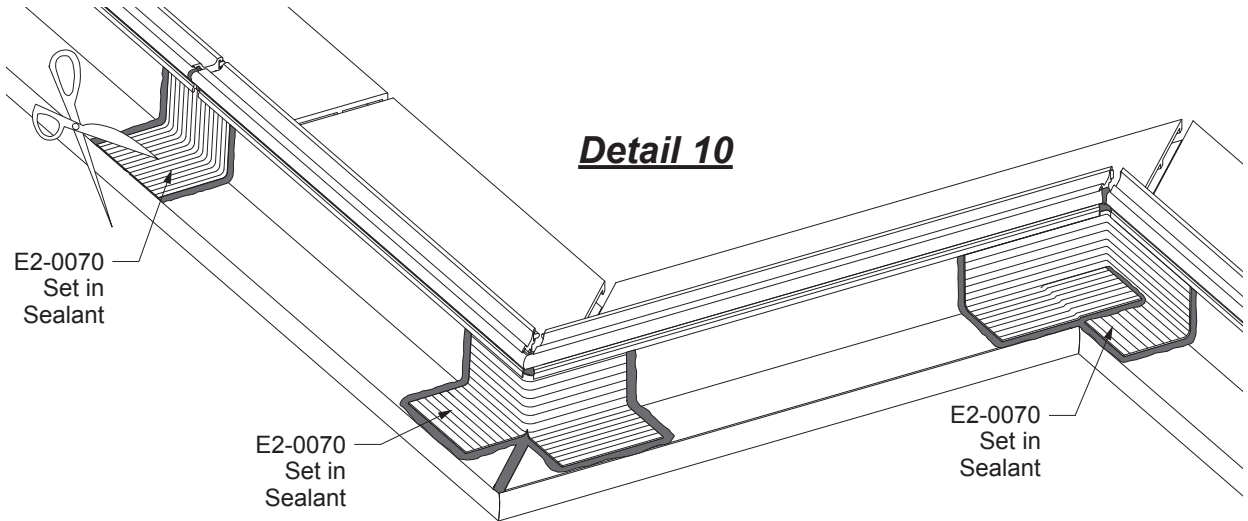


Detail 9

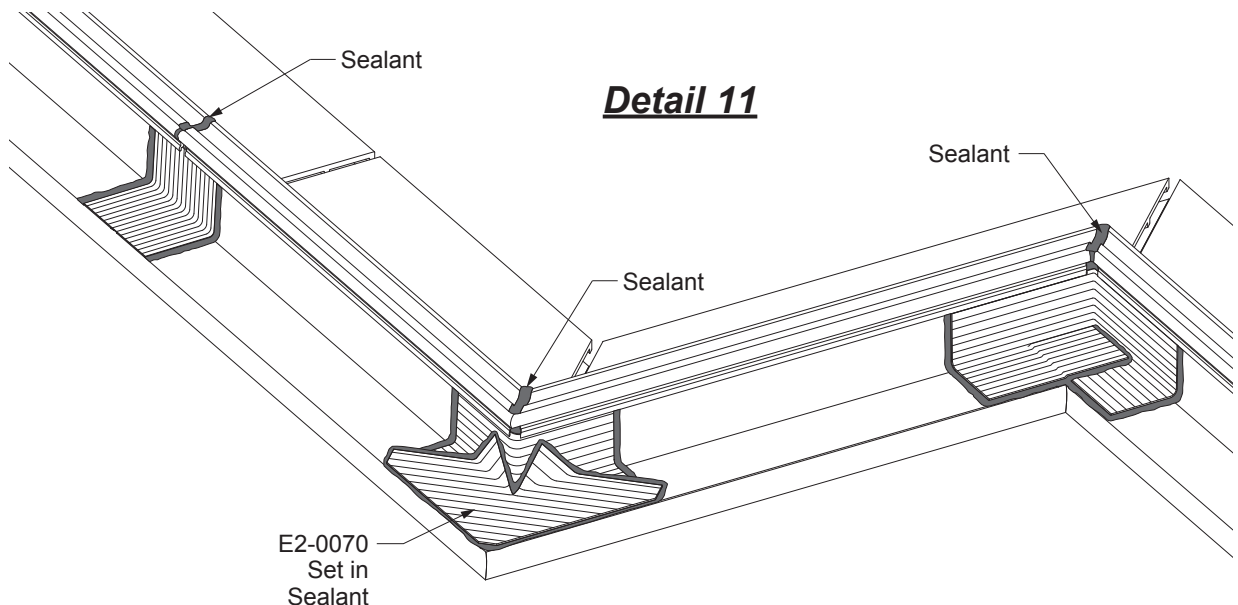
UNIT INSTALLATION

STEP 3 (Continued) INSTALL STARTER SILL

-Apply the E2-0070 as shown in **Detail 10**. Adhere the splices to the PVC adaptor with sealant.



-Apply an additional E2-0070 splice to the outside corner as shown in **Detail 11**. Trim off any overhanging portion of the splice, and adhere with sealant.
-Fill the gaps at the very top of the starter sill with sealant.



UNIT INSTALLATION

STEP 4

INSTALL ANCHORS

- See approved shop drawings for anchor types and locations.
- Locate the centerline of the vertical mullions from established column lines and mark the locations.

Note: Aluminum anchors must be separated from concrete and steel building substrates with a material to prevent galvanic reaction.

- Locate centerline of aluminum anchor and mark for centerline of mullion. Also locate anchor at in/out position. Apply aluminum washer and attach to building substrate. Final in/out adjustment can be made prior to tightening in place.
- Tighten bolts down after final adjustment.

Note:

Anchors and fasteners to be sized per engineering calculations and approved shop drawings.

See **Detail 12** on **Page 14**.

UNIT INSTALLATION

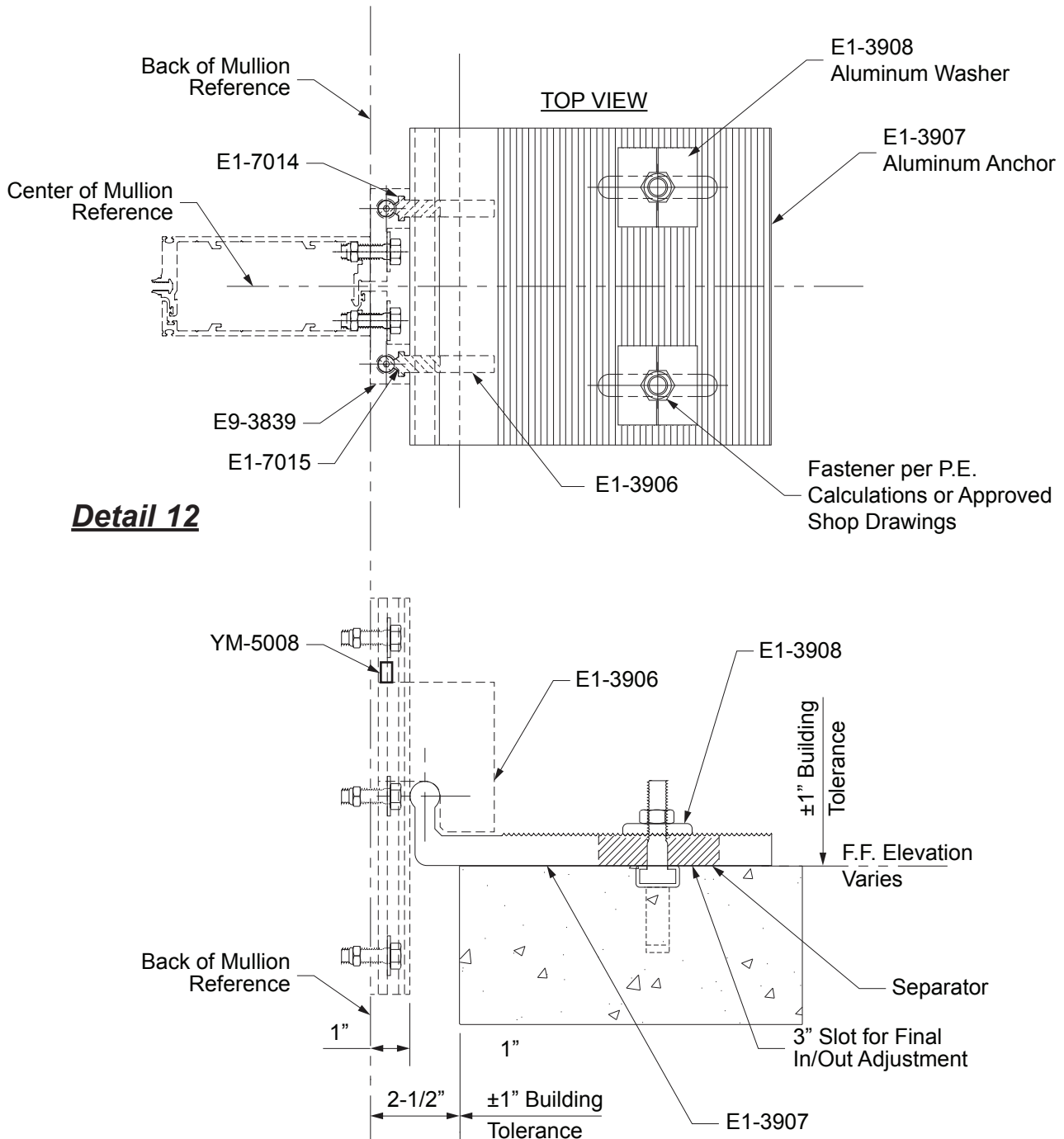
STEP 4 (Continued)
INSTALL ANCHORS

*** Note:**

Anchor assembly allows $\pm 1"$ construction tolerance.

-Provide anchor fasteners as per approved shop drawings or engineering calculations.

-Place isolator between substrate and anchor.



UNIT INSTALLATION

STEP 5

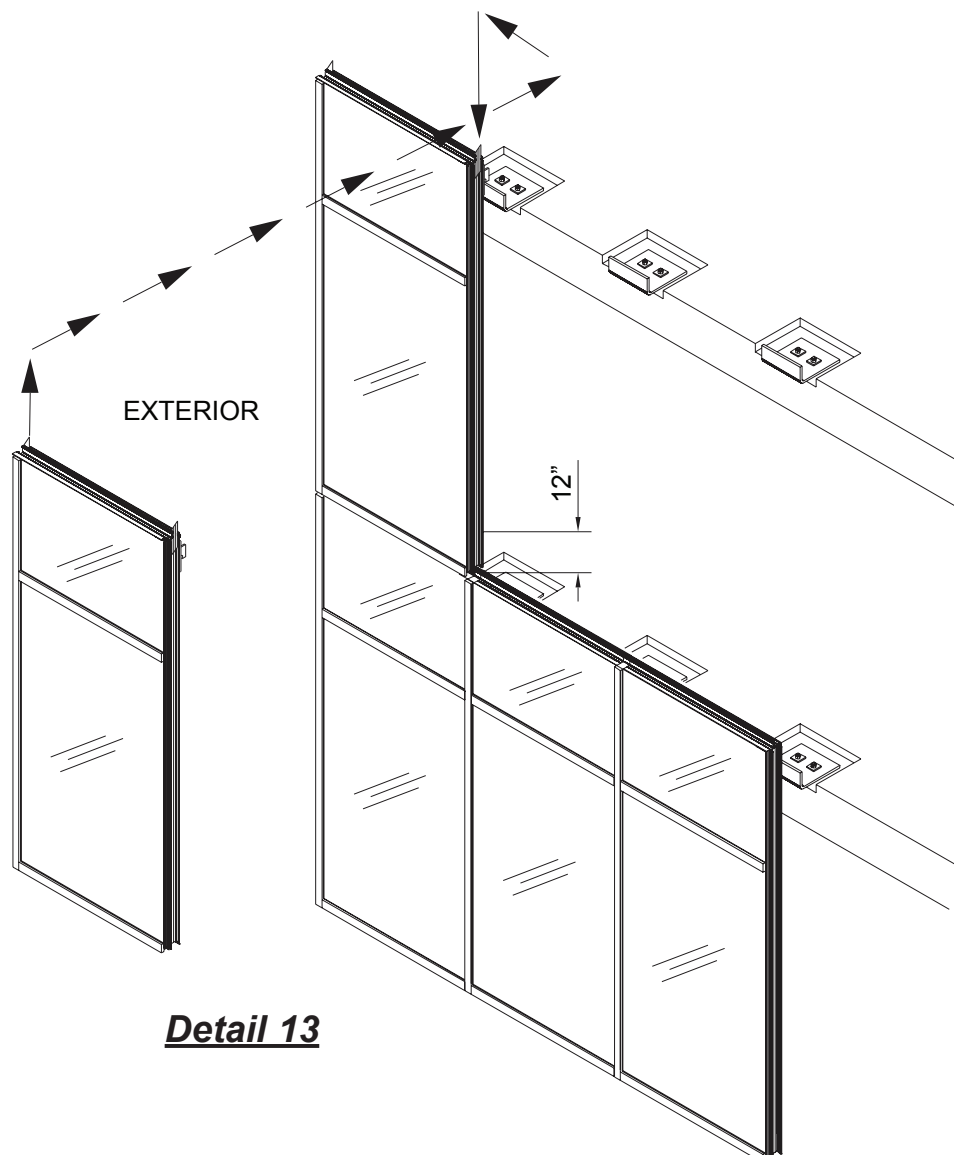
CURTAIN WALL UNIT INSTALLATION

Note: All curtain wall installation, per YKK AP fabrication instructions, is shown with the installation starting from left, and any deviation from left to right may require shop / fabrication drawing modification. Reference the key plans shown in approved shop drawings for starting locations.

Clean and prepare all surfaces for sealant application per sealant manufacturer's recommendations.

Inspect frames prior to hoisting. The hoist spreader beam chains should be spaced apart the length of the distance between mullion sleeves. The movement of the frame must be controlled as it is being hoisted. It must not be allowed to swing or spin. Check maximum unit weight to ensure hoisting requirements.

See **Detail 13**.



UNIT INSTALLATION

STEP 5 (Continued)

CURTAIN WALL UNIT INSTALLATION

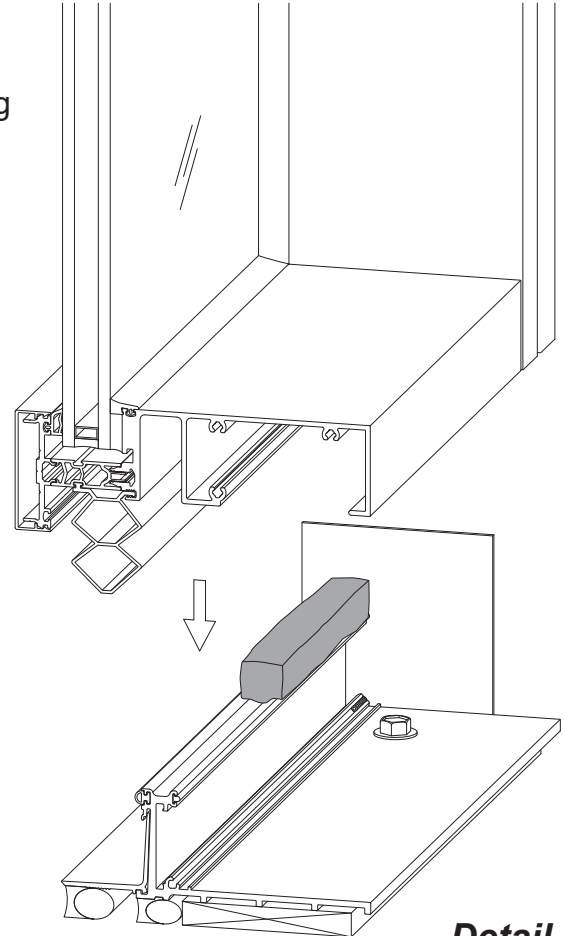
-Prior to setting the curtain wall units, install E2-0725 spacer sponge. Coat the sponge with a non-hardening silicone and place on top of the stack joint as shown in **Detail 14**.

-Install the first unit (from left to right) by lifting it over the starter sill of the unit below and engage bottom of unit until it is resting on temporary shims at head of unit below.

Note: While setting the unit, take care not to allow the sill horizontal weather seal to get caught on the starter sill weather seal below. Engage anchor bolts at head of unit with anchor pre-installed on site conditions.

-Remove temporary shims at expansion horizontal as well as 4" long reinforcing angle from the right side of the head horizontal used for hoisting.

-Using an allen wrench, adjust set screws in leveling bracket to ensure the unit is level and the unit is supported by the aluminum anchor.

**Detail 14**

See **Detail 14**.

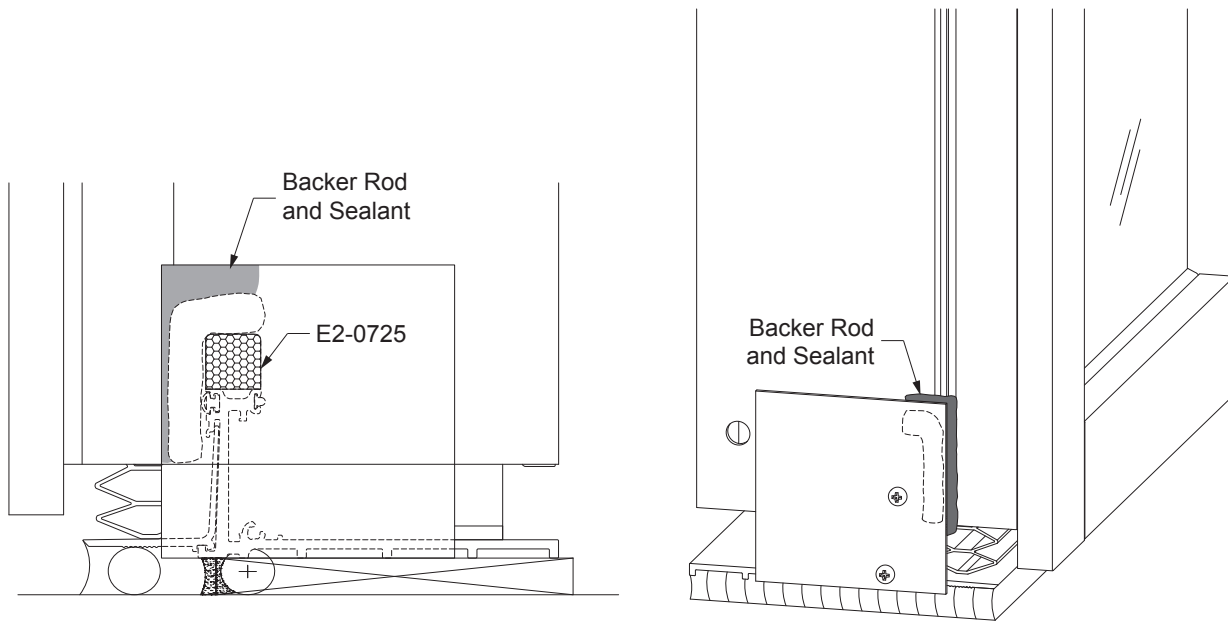
UNIT INSTALLATION

STEP 5 (Continued)

CURTAIN WALL UNIT INSTALLATION

-Block the jamb unit to prevent lateral movement when the adjacent unit is set.

-At the jamb, insert a backer rod at the end dam and apply and tool sealant as shown in **Detail 15**.



Detail 15

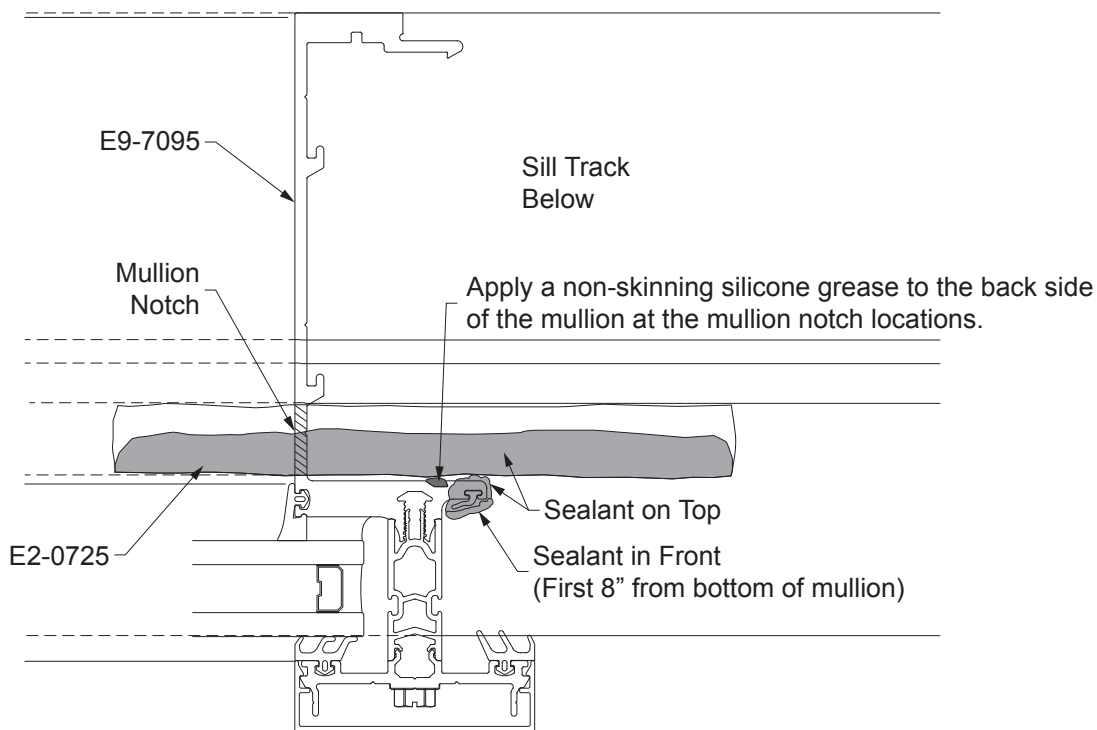
UNIT INSTALLATION

STEP 5 (Continued)

CURTAIN WALL UNIT INSTALLATION

- Just prior to installing next unit, apply sealant to the E9-7095 mullion from bottom of mullion to 8" above horizontal air/water seal gasket. Add sealant to the top of the E9-7095 mullion as shown.
- Install the E2-0725 spacer sponge, thoroughly coated with a non-hardening silicone sealant centered, on top of the stack joint tray (typical at all mullion locations).

See **Detail 16**.



Detail 16

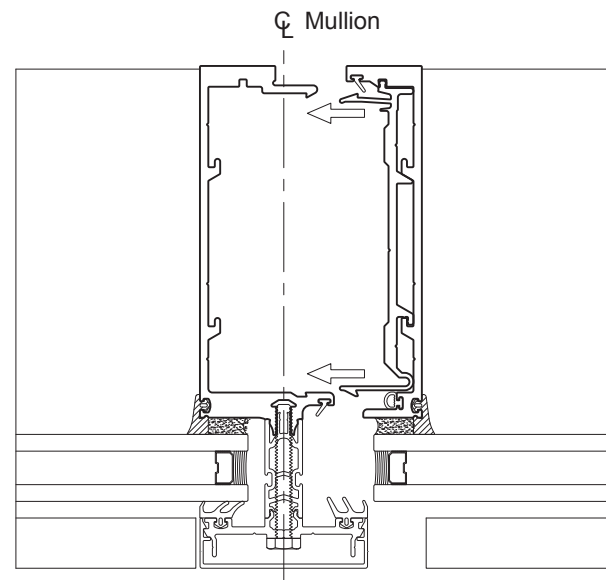
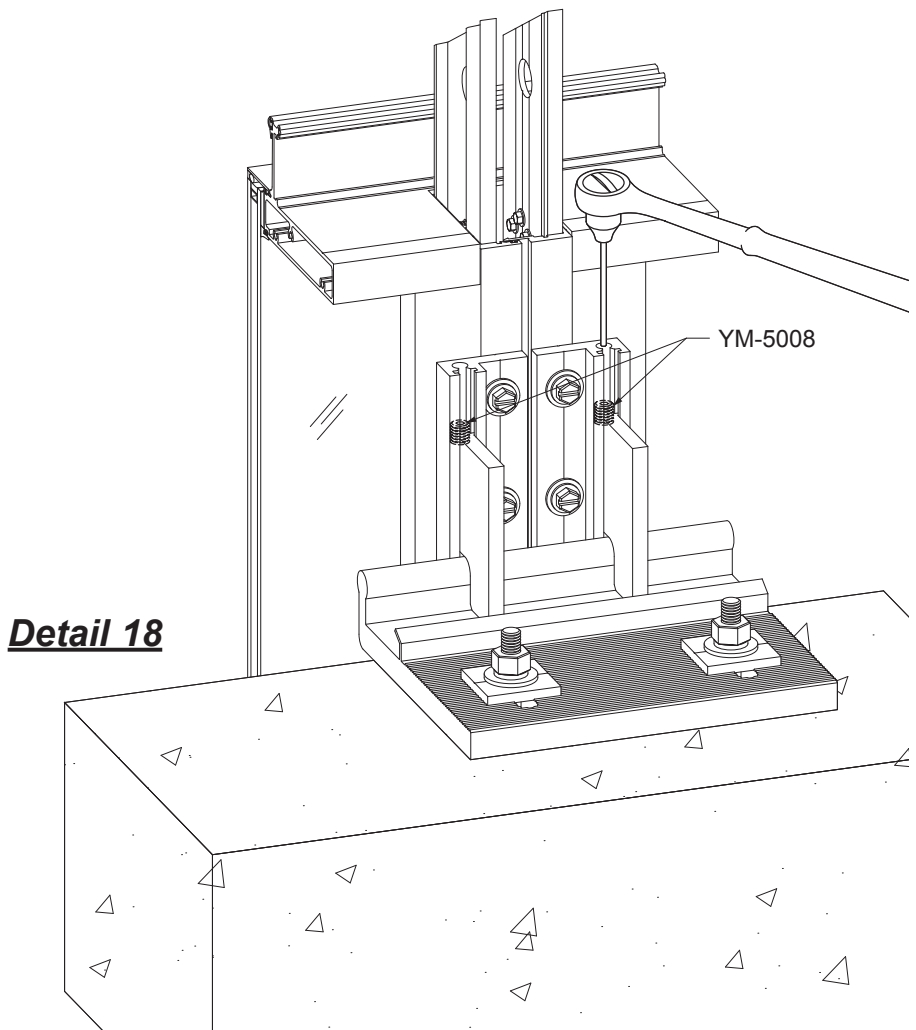
UNIT INSTALLATION

STEP 5 (Continued)**CURTAIN WALL UNIT INSTALLATION**

-Install the next unit by lifting unit up to clear the leg at the sill and move to the left to engage the units together as shown in **Detail 17**. Squeeze the mullion halves together until the clips engage.

Slide unit down to engage unit at the sill track. Check to make sure that the E2-7010 air seal vertical gaskets have not slid down from the mullion reglets. When stacking units, align mullions with unit below. Use temporary shims at sill track to level unit at nominal position (Approximately 1").

-Adjust unit height to make sure that it is level, plumb and at the correct height. Once unit is level, tighten anchors to secure frame and remove temporary shims at sill. See **Detail 18**.

**Detail 17****Detail 18**

UNIT INSTALLATION

STEP 5 (Continued) CURTAIN WALL UNIT INSTALLATION

-Slide the E1-7001 stainless steel bar w/ bond breaker tape at the left side to engage the adjoining unit and center it on the mullion centerline. Apply a bead of sealant at both sides of intermediate stainless steel bars to prevent the bars from walking.

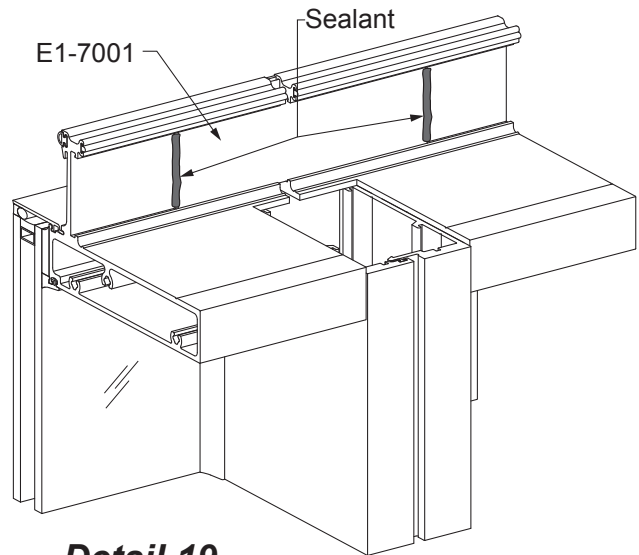
See **Detail 19**.

-Join the ends of the stacking tray gasket E2-7004 together with sealant, trimming off excess sealant.

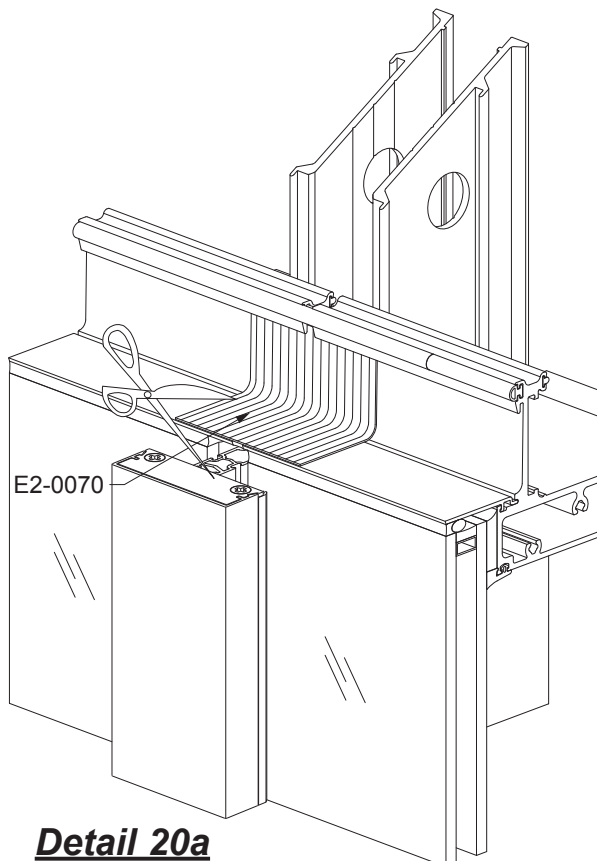
Note: Gasket ends should be square cut & joined tight.

-Place the E2-0070 silicone sheet centered over the joint as shown in **Detail 20a**. Fold down and cut the sheet at the face of glass. Remove the silicone sheet for now.

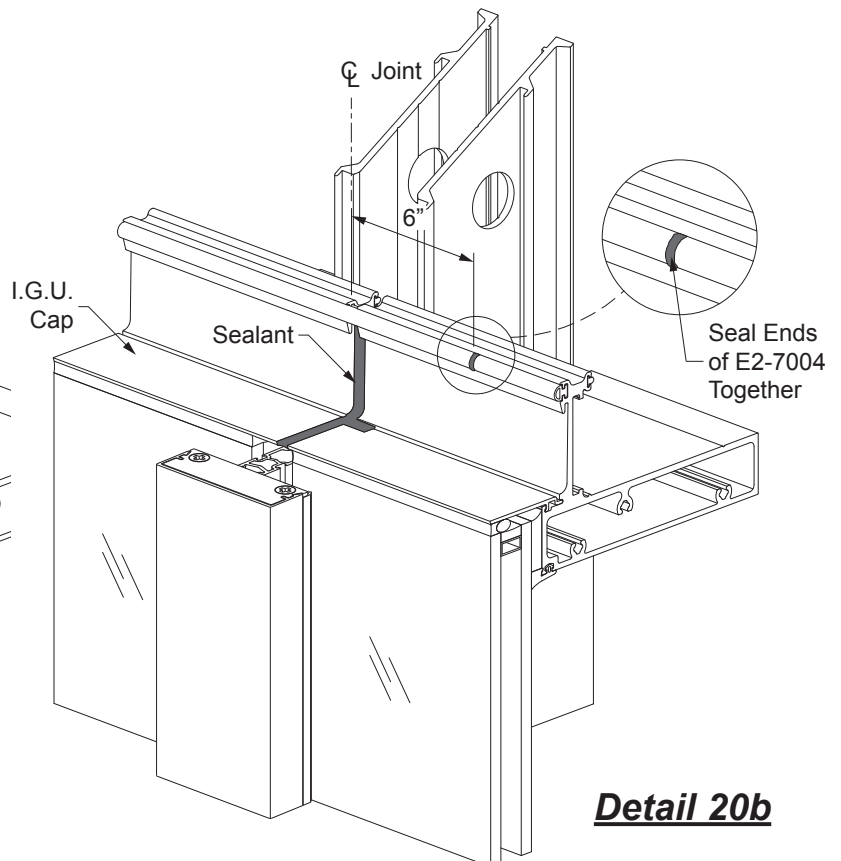
-Fill the joint between the I.G.U. caps with sealant as shown in **Detail 20b**.



Detail 19



Detail 20a

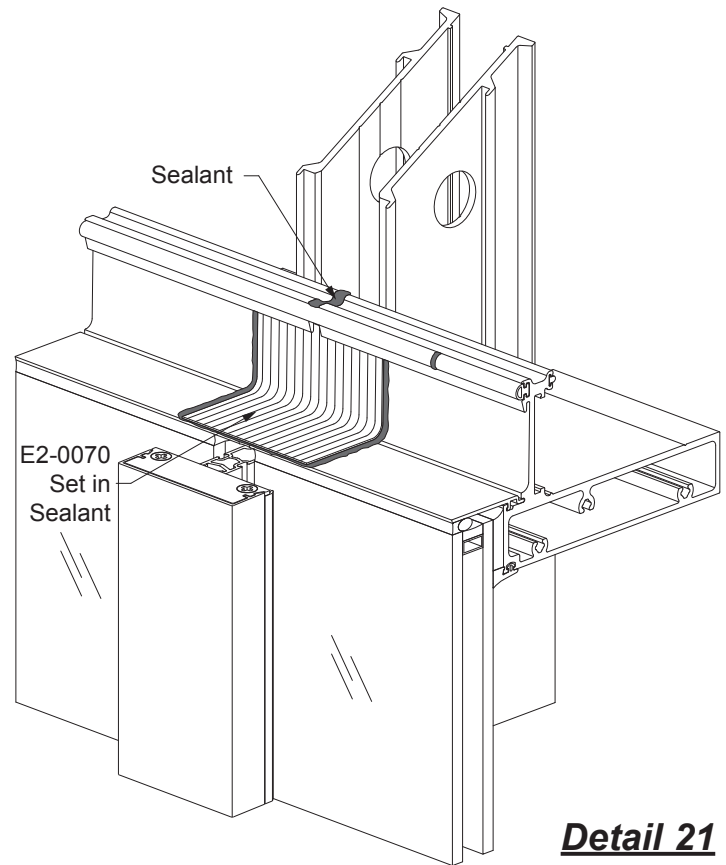


Detail 20b

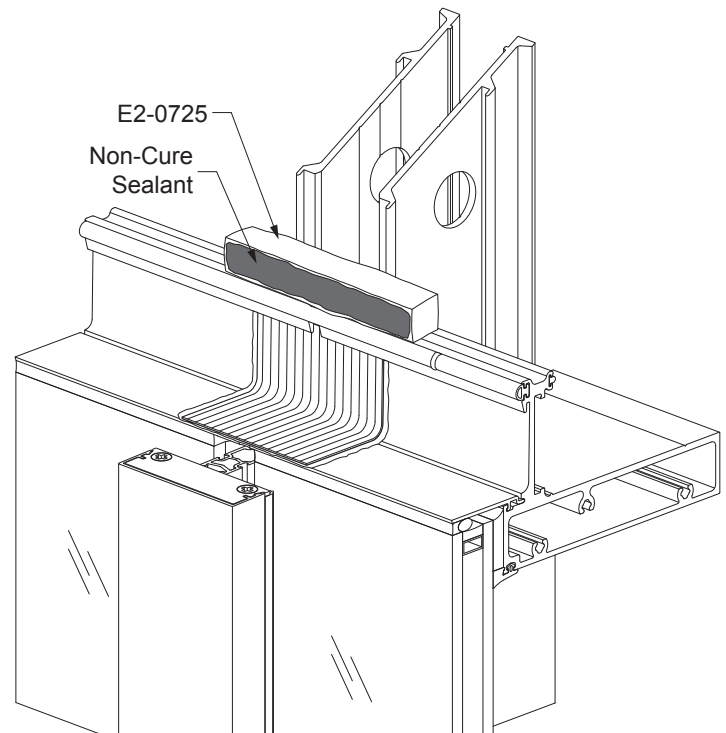
UNIT INSTALLATION

STEP 5 (Continued) CURTAIN WALL UNIT INSTALLATION

- Seal the area where the sheet will be located. Set the silicone sheet back into place as shown in **Detail 21**, tucking it into the slot above. Tool sealant smooth.
- Fill the gap at the top of the stacking tray with sealant.
- Inspect the splice joint for any gap where air or water may penetrate. Seal completely watertight.
- Continue across elevation in a similar manner. Check unit spacing to eliminate dimensional build-up of the width of the elevation. If necessary, block and clamp mullion halves together to keep units in alignment during installation of the next unit.
- Before proceeding to the next floor, inspect all horizontal joints. All splice sealant must be cured to avoid sealant tearing.
- Continue to the next floor. Install units using steps as previously stated.
- Add E2-0725 spacer sponges, coated with non-curing silicone sealant, above every joint as shown in **Detail 22**. Applying a liberal amount of non-curing silicone sealant at the front of the sponge ensures a water-tight seal against the interior face of the mullions.



Detail 21



Detail 22

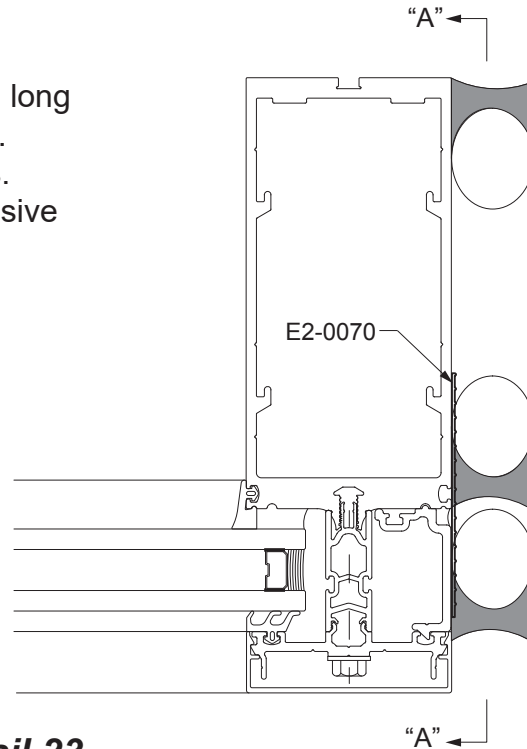
UNIT INSTALLATION

STEP 6

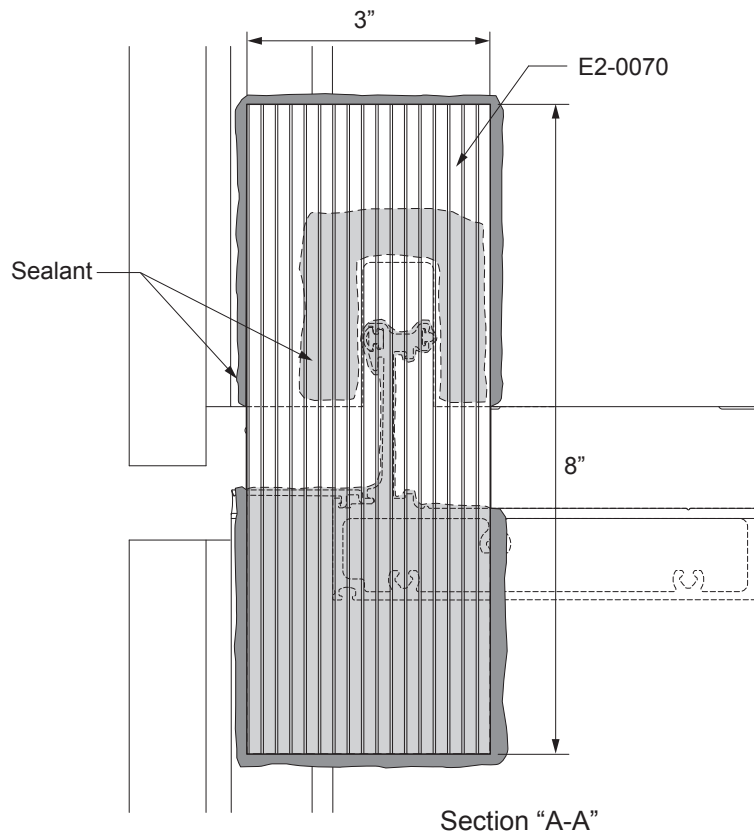
APPLY PERIMETER SEALANT

-At stack joint jambs apply a piece of 4" wide x 5" long silicone sheet across end of stack joint as shown.
Set silicone sheet in sealant and seal over edges.
Tool to maintain a low profile and minimize excessive sealant build up.

See **Detail 23**.



Detail 23

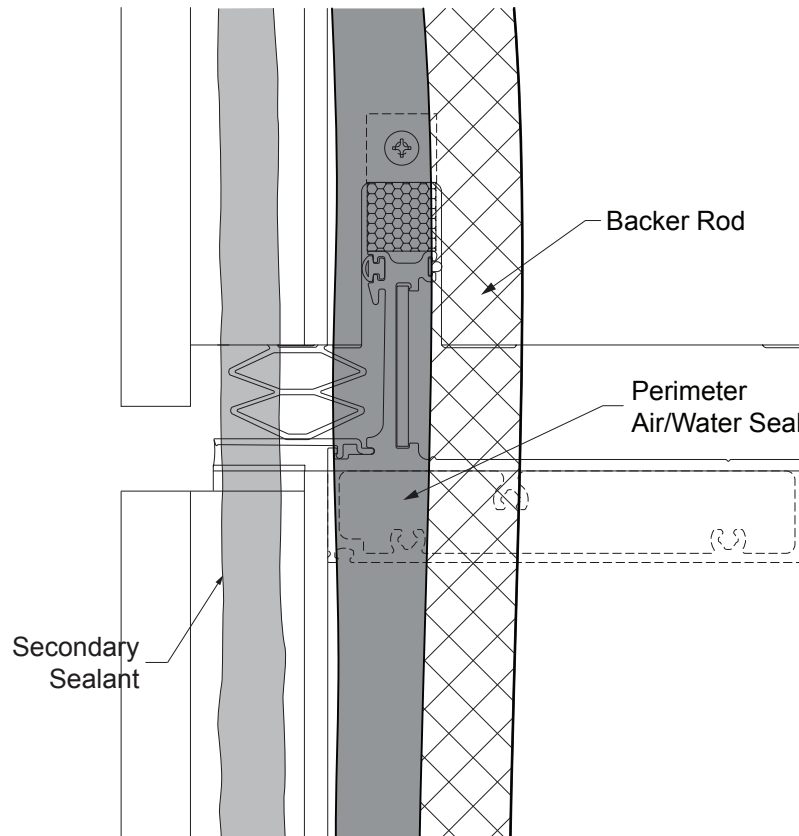


UNIT INSTALLATION

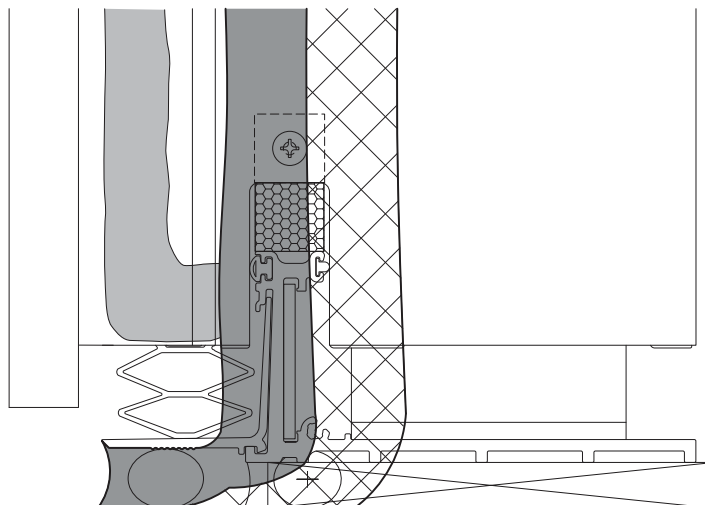
STEP 6 (Continued)

APPLY PERIMETER SEALANT

-Apply backer rod and perimeter seals. See **Detail 24**.



Detail 24



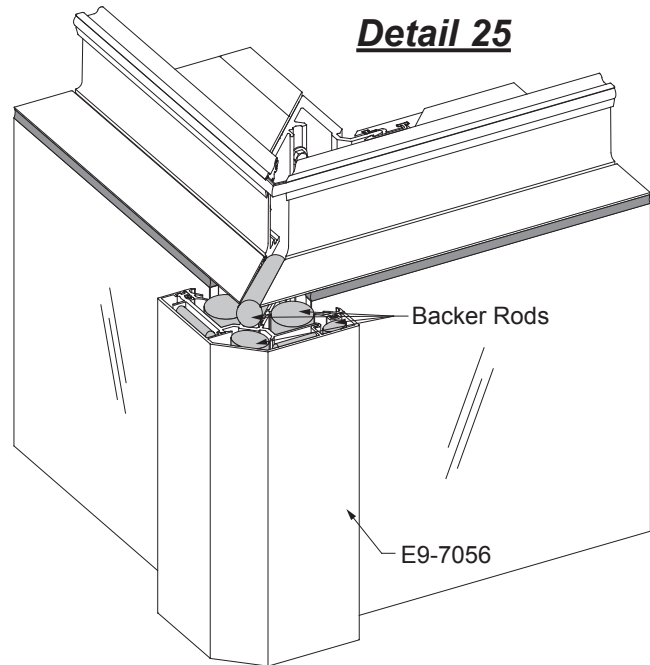
UNIT INSTALLATION

STEP 7

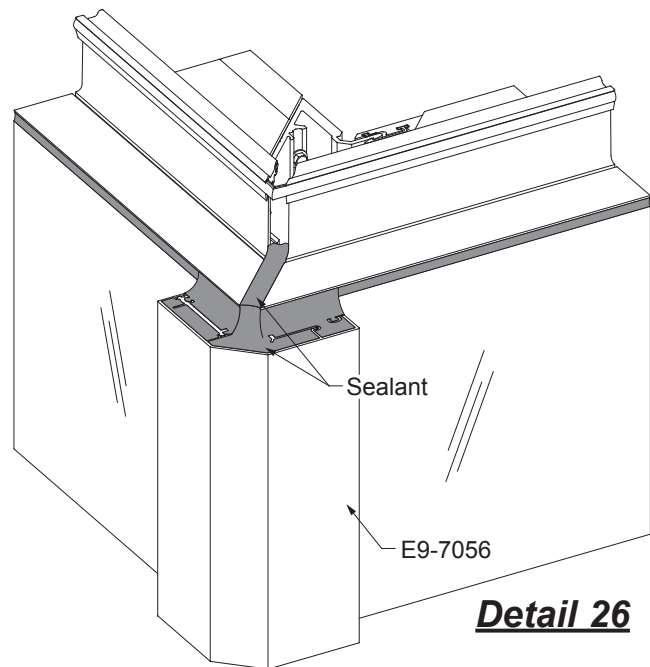
CURTAIN WALL UNIT INSTALLATION @ 90° Outside Corner

Note: for 90° Inside Corner, refer to the installation instructions for SSG YUW 750 XT.

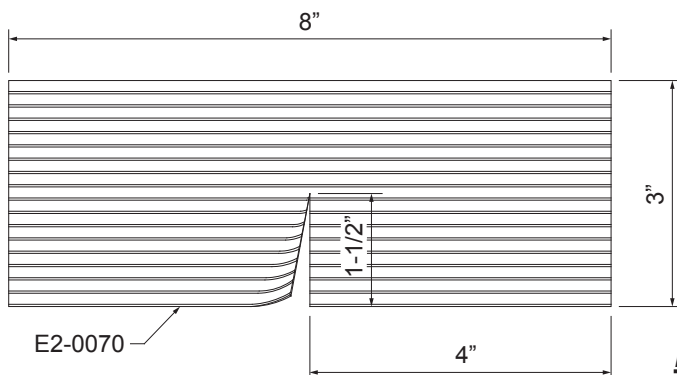
-Insert backer rods in the voids behind the corner face cover and pressure plate, and under the sill track adaptor at the corner joint. See **Detail 25**.



-Apply sealant to the voids and cavities therein. See **Detail 26**.



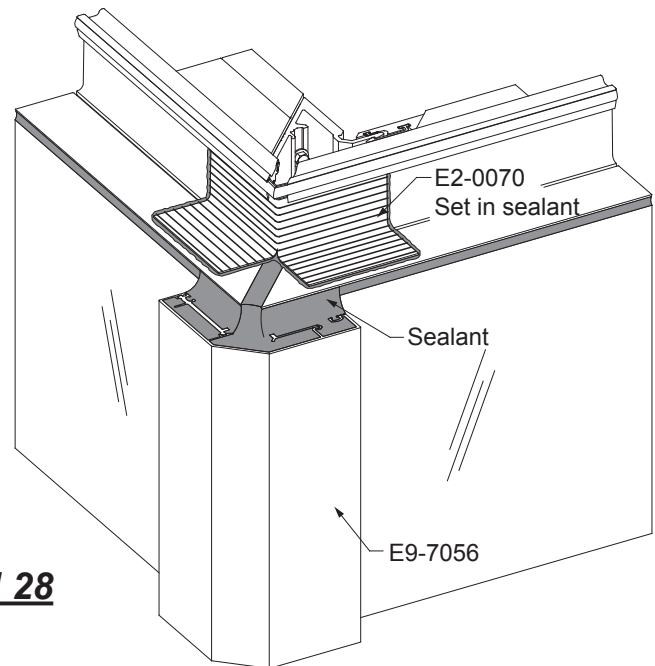
Cut two silicone splice sleeves (E2-0070) in the center. See **Detail 27**.



Detail 27

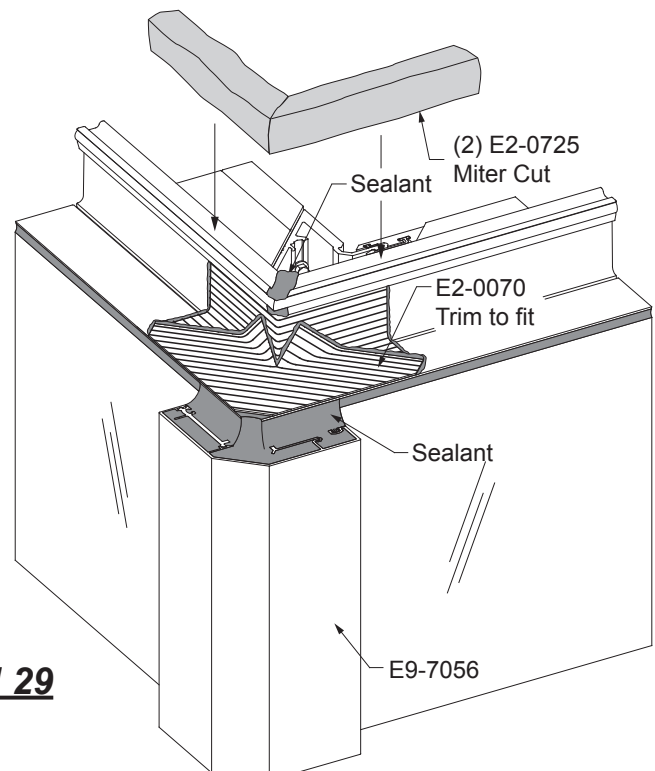
UNIT INSTALLATION**STEP 7****CURTAIN WALL UNIT INSTALLATION @ 90° Outside Corner**

Apply the first silicone splice sleeve as shown in **Detail 28**. Set in sealant to adhere to the corner.

**Detail 28**

Apply the second silicone splice sleeve as shown in **Detail 29**. Set in sealant to adhere to the corner. Trim off any overhanging silicone splice. Fill gap in the top of the stacking tray with sealant. Fill all other gaps at the top of the stacking trays for all other units.

Apply two E2-0725 spacer sponges, coated with a non-curing silicone sealant, to the top of the stacking tray at the corner. Miter cut to fit.

**Detail 29**



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