Oldcastle BuildingEnvelope®
A CRH COMPANY

FG-5750 StormMax® Storefront

installation & glazing manual

NOTE

THE INSTALLATION DETAILS FOUND IN THIS PACKAGE ARE GENERIC AND ARE FOR REPRESENTATION ONLY WITH THE INTENT OF GIVING THE INSTALLATION TEAM A VISUAL REPRESENTATION AS TO HOW THE ASSEMBLIES TYPICALLY INSTALL. THE SHOP SUBMISSION DRAWINGS AND DETAILS ARE THE GOVERNING DOCUMENTS AND AS SUCH THIS PACKAGE IS TO BE USED ONLY AS A RESOURCE.
FOLLOW SEALANT MANUFACTURERS' RECOMMENDATIONS FOR USE AND APPLICATION OF ALL STRUCTURAL SILICONE SEALANT AND WEATHER SEAL SILICONE SEALANT.
CUSTOMER / PROJECT QUALITY ASSURANCE PROCEDURES ARE SEPARATE DOCUMENTS AND ARE TO BE FOLLOWED IN CONJUNCTION WITH THIS MANUAL

1-866-OLDCASTLE (653-2278) **OBE.com**

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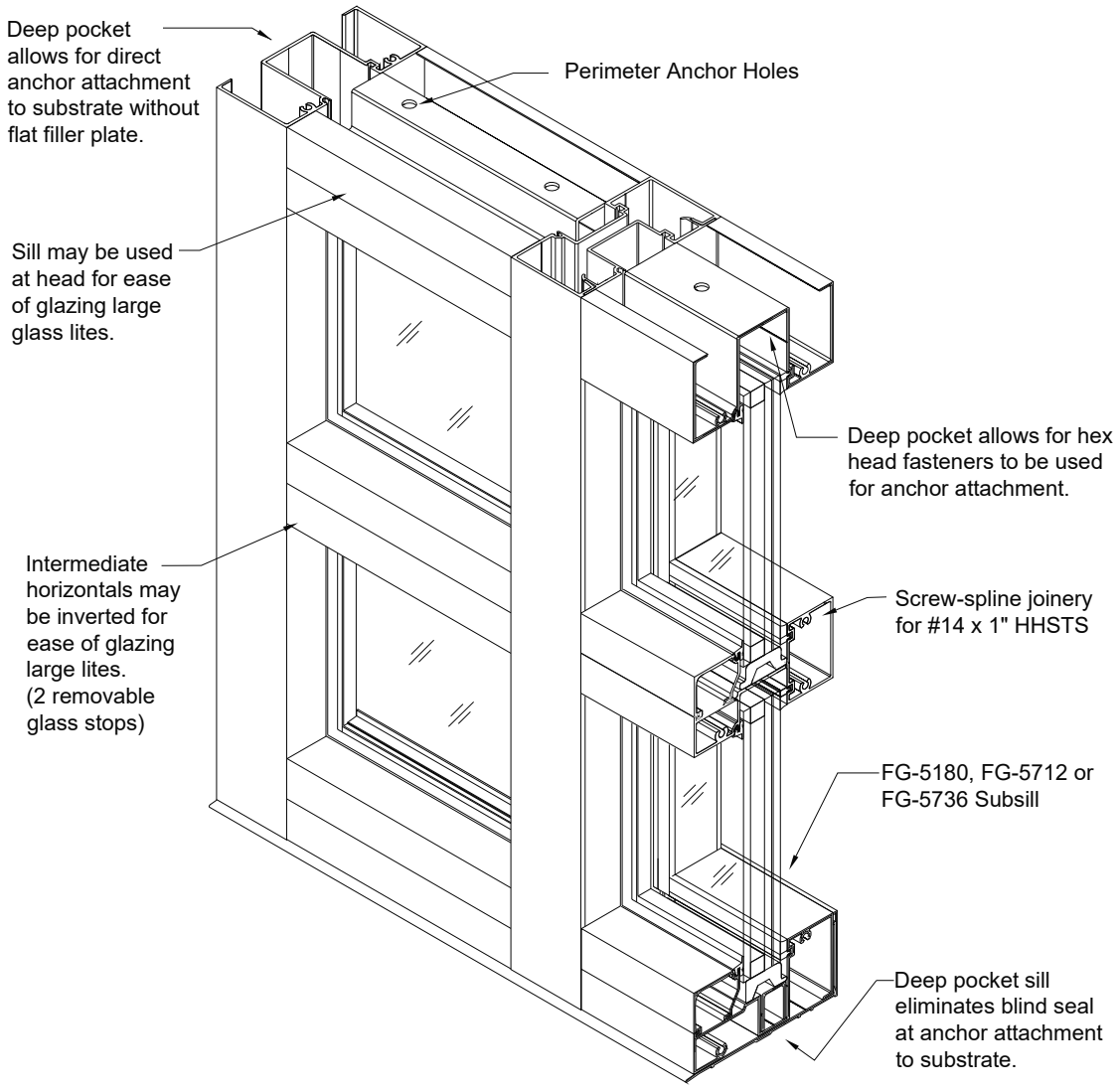
PRODUCT FEATURES

- Screw-spline joinery
- EZPunch or Drill Jig fabrication
- Panelized assembly
- Deep pocket perimeter sections:
    - Eliminates drilling access holes with blind seals
    - Eliminates flat filler plate at head and wall jambs
    - Allows for up to 3/8" diameter hex head anchor bolt attachment to substrate
    - Intermediate horizontals may be inverted for ease of glazing large lites
    - Sill may be used at head for ease of glazing large lites
- Heavy wall mullion option without reinforcement
- Steel or aluminum reinforcing attachment to mullions at head and sill only
- Tested with and without reinforcement at various design pressures
- Tested with 96" x 96" MSD-375 / WSD-500 impact-resistant entrance doors
- Anodized or factory painted finishing options



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IMPORTANT NOTICE:

Completely read these instructions prior to beginning work. These recommendations are for general erection/installation procedures only. For actual job conditions, see shop drawings if applicable. For perimeter anchor types and spacing, refer to the approved shop drawings or consult structural engineer/project design professional.

GENERAL NOTES

Oldcastle BuildingEnvelope®'s FG-5750 StormMax® (2-1/2" x 5") impact resistant storefront system represents the latest in product development technology. This system was designed to meet the stringent requirements of Florida Building Codes High Velocity Hurricane Zone (HVHZ) as well as the International Building Code for glass and glazing systems. FG-5750 StormMax® successfully passed a series of large missile impact and cyclic wind tests with a variety of impact-resistant glass compositions.

Check all shop drawings and installation instructions to become familiar with the project before work begins. The shop drawings take precedence and include specific details for the project. The installation instructions are of a general nature and only cover the most common conditions.

ARCHITECTURAL PRODUCT

It is the responsibility of Oldcastle BuildingEnvelope® to supply a system to meet the architect's specification.

BUILDING CODES

Oldcastle BuildingEnvelope® does not control the application nor selection of its product configurations, sealant, or glazing materials, and assumes no responsibility thereof. It is the responsibility of the owner, architect, and installer to make these selections in strict compliance with applicable laws and building codes.

STRUCTURAL SEALANTS

DOWSIL™ 995 Silicone Structural Sealant was used on the test specimen for glass to metal adhesion. To comply with Florida Building Code HVHZ Protocols, DOWSIL™ 995 Silicone Structural Sealant must be used for glass to metal adhesion.

PERIMETER SEALANTS

Due to varying job conditions, all perimeter sealants used should be approved by the sealant manufacturer to ensure the sealant will function for the conditions shown in these instructions and shop drawings. Sealants must be compatible with all surfaces where adhesion is required, including other sealant surfaces. Use primers where directed by sealant manufacturer. Be sure to store sealants at recommended temperature and check container for remainder of shelf life before using. DOWSIL™ 795 Silicone Building Sealant was the perimeter sealant used on the test specimen.

MATERIAL AND WORK ACCEPTANCE

OLDCASTLE BUILDINGENVELOPE® MATERIALS

Check all material upon arrival for quality and to assure against shipping damage. Any visible damage must be noted on the freight bill at the time of receipt. If a claim is required, then the receiving party must process a claim with the freight company.

OTHER TRADES WORK

Completely check construction that will receive your materials against contract documents. Notify general contractor by letter of any discrepancies before proceeding with work. Failure to do so constitutes acceptance of work by other trades.

MATERIAL HANDLING, PROTECTION, AND STORAGE

Handle the material carefully. Do not drop from the truck. Stack with adequate separation so that the material will not rub together. Store material off the ground. Protect against the elements and other construction hazards by using a well-ventilated covering away from other trades. Remove material from package if it is wet or located in a damp area.

SHOP

- Cardboard wrapped or paper interleaved material must be kept dry. Immediately remove aluminum from cardboard or paper interleaved materials should it get wet to prevent staining or etching the aluminum finish.
- Check arriving materials for quantity and keep record of where various materials are stored.

JOB SITE

- Material at job site must be stored in a safe place well removed from possible damage by other trades.
- Cardboard wrapped or paper interleaved materials must be kept dry. Immediately remove aluminum from cardboard or paper interleaved materials should it get wet to prevent staining or etching the aluminum finish.
- Keep record of where various materials are stored.
- Protect materials after erection. Cement, plaster, and other alkaline solutions are very harmful to the finish.

EXPANSION JOINTS

Expansion joints and perimeter seals shown in these instructions and in the shop drawings are shown at standard size. Actual dimensions may vary due to perimeter conditions and/or differences in metal temperature between the time of fabrication and time of installation. For example, a 12-foot unrestrained length of aluminum extrusion can expand or contract 3/32 of an inch over a 50-degree Fahrenheit change. Any movement potential should be accounted for at time of the installation.

GLASS

Glazing gaskets are designed for a compression fit against glass and can accommodate (+/- 1/32"). Be sure to check overall glass size and thickness.

CLEANING

Final cleaning of exposed aluminum surfaces should be done in accordance with AAMA 609.1 for anodized aluminum and AAMA 610.1 for painted aluminum. Cement, plaster, terrazzo, alkaline and acid-based materials used to clean masonry are very harmful to finishes and should be removed immediately or permanent staining will occur. A spot test is recommended before any cleaning agent is used. Aluminum shall be cleaned with plain water containing a mild detergent. No abrasive agent shall be used.

GENERAL CONSTRUCTION NOTES

A. Study these instructions, shop drawings, erection drawings, and architectural drawings before starting any work. Follow installation and glazing instructions.
B. Completely check construction which will receive your materials against contract documents. Notify the general contractor by letter of any discrepancies before proceeding with your work since this constitutes acceptance of work by other trades.
C. Coordinate protection of installed materials with general contractors and other trades.
D. Do not install wall if there is a walkway with a downslope towards an entrance or a storefront.
E. All materials are to be installed plumb and level.
F. All work should start from an established benchmark and column centerlines established by the architect and the general contractor.

G. Protect all aluminum to be placed directly in contact with uncured masonry or incompatible materials with a heavy coat of zinc chromate or bituminous paint.
H. After sealant is set and a representative amount of the wall has been glazed (500 square feet or more), run a water hose test to check installation. On large jobs, hose test should be repeated during glazing operation. Test should be conducted in accordance with AAMA 501.2 specifications. This test should not be performed at entrances installed in the system.

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FRAME FABRICATION

1.0 Establish Frame Size

NOTE: The storefront opening must be square and plumb before installation.
When measuring the rough opening, take multiple measurements and use the smallest dimension. This assures a proper fit of the storefront system.

Measure width of Rough Opening.
A. Measure opening at bottom.
B. Measure opening at center.
C. Measure opening at top.

The Frame Width will be the smallest dimension less 1/2" allowing for a minimum of 1/4" caulk joint at each jamb.

Note: Product approved with minimum caulk joint 1/4" and maximum caulk joint 1/2".

Repeat process to determine Frame Height.
A. Measure opening from top to bottom of left side.
B. Measure opening from top to bottom of middle.
C. Measure opening from top to bottom of right side.

The Frame Height will be the smallest dimension less 1/2". This allows for a 1/4" caulk joint at both the Head and Sill.

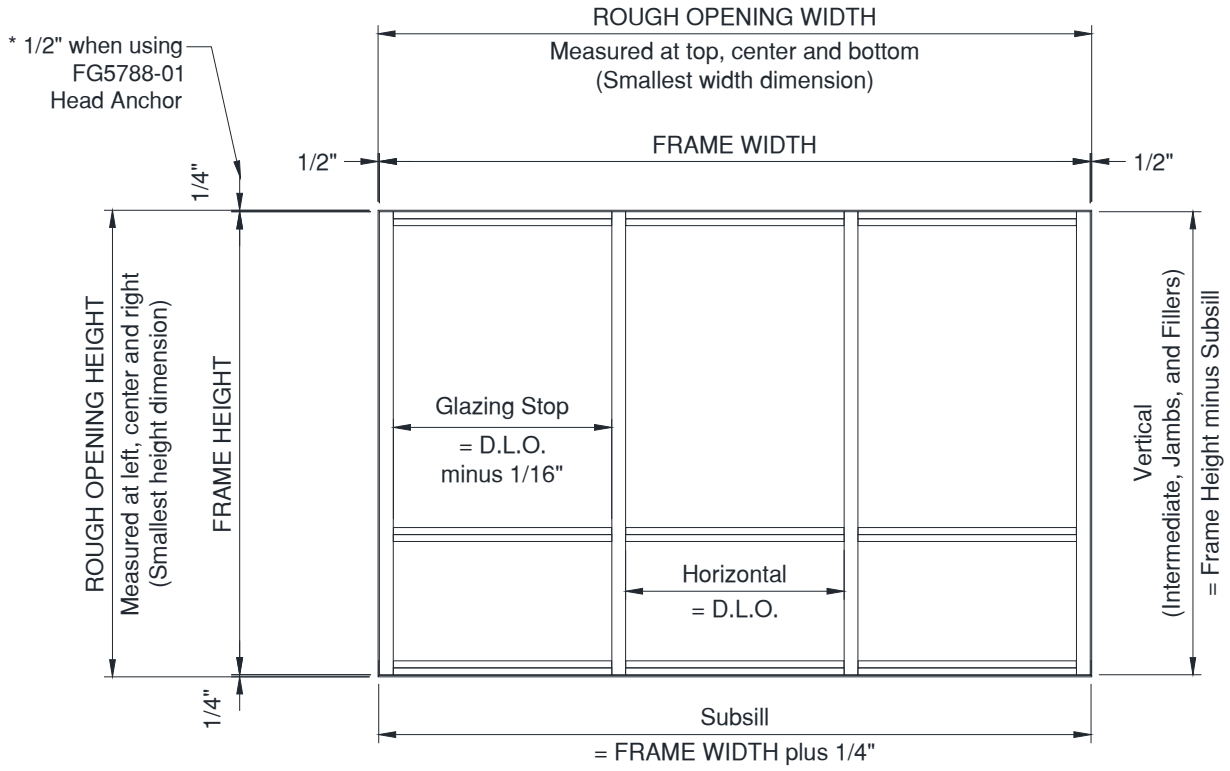

Figure 1: Measuring Rough Opening, Guide without Door

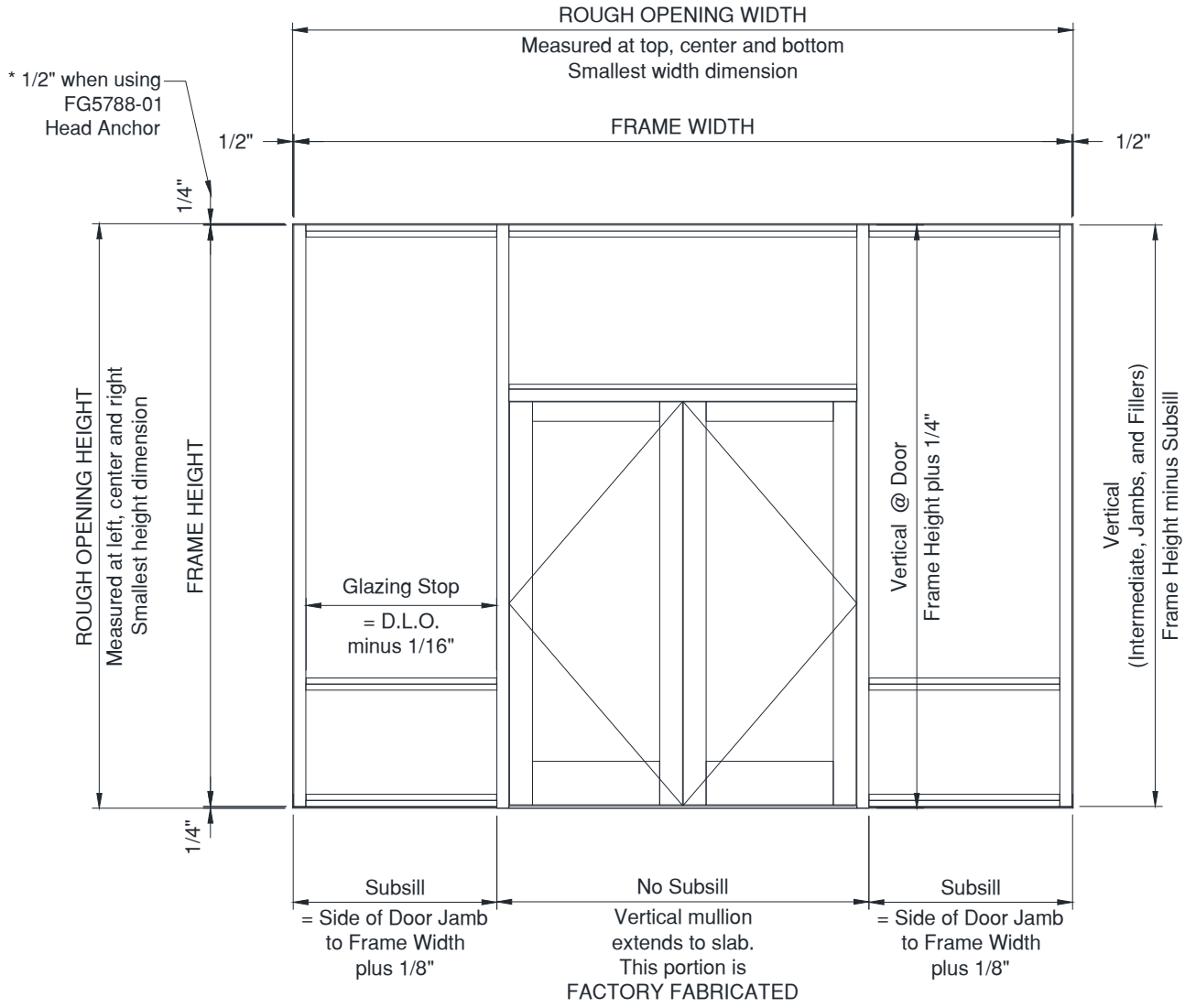

Figure 2: Measuring Rough Opening, Guide with Door

2.0 Cut Members to Size

Framing Members

Frame without Entrance

FG-5180, FG-5712 or FG-5726 Subsill at Frames without Doors	Frame Width plus (+) 1/4"

Frame at Entrance Sidelite

Note: Sill Receptor to butt tight against Door Jamb.

FG-5180, FG-5712 or FG-5726 Subsill at Entrance Locations	Door Jamb to Frame Width plus (+) 1/8"

Verticals

FG-5715 and FG-5761 Mullion Fillers FG-5753, FG-5754, and FG-5774 Mullions FG-5750 Jamb FG-5782 and FG-5783 Expansion Mullions FG-5706, FG-5707, FG-5778, FG-5779, FG-5784, and FG-5785 Corner Mullions	
Verticals in Frame with FG-5712 or FG-5726 Subsill	Frame Height minus (-) 5/8"
Verticals in Frame with FG-5180 Subsill	Frame Height minus (-) 1/8"

Horizontals

FG-5750 and FG-5786 Head FG-5752 Horizontal FG-5751 and FG-5787 Sill	D.L.O.
FG-5760 Glass Stops FG-5259 Sill Filler	D.L.O. minus (-) 1/16"

Accessories: Dry Glaze

CW-998 Bulb Gasket	Expansion Mullion Height
FG-5730 Exterior Gasket at Vertical FG-5732 Interior Gasket at Vertical	D.L.O. plus (+) 1/4" per foot plus (+) 1-1/2"
FG-5730 Exterior Gasket at Horizontal FG-5732 Interior Gasket at Horizontal	D.L.O. plus (+) 1/4" per foot

Accessories: Wet Glaze

CW-998 Bulb Gasket	Expansion Mullion Height
FG-5730 Exterior Gasket at Vertical	D.L.O. plus (+) 1/4" per foot plus (+) 1-1/2"
FG-5731 Spacer Gasket at Vertical	D.L.O. plus (+) 1/4" per foot plus (+) 1-7/8"
FG-5730 Exterior Gasket at Horizontal FG-5731 Spacer Gasket at Horizontal	D.L.O. plus (+) 1/4" per foot

Abbreviations used within these instructions:

D.L.O. = Day Light Opening
D.O.H. = Door Opening Height
D.O.W. = Door Opening Width
Ø = Diameter

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3.0 Vertical Hole Prep Locations

Drill or punch holes in Verticals for attaching Horizontals. See *Figure 5* for Drill Jig reference guide.

*Note: Reglet for **FG-5730** Gasket is always to the exterior for Exterior Glaze installations and to the interior for Interior Glaze installations.*

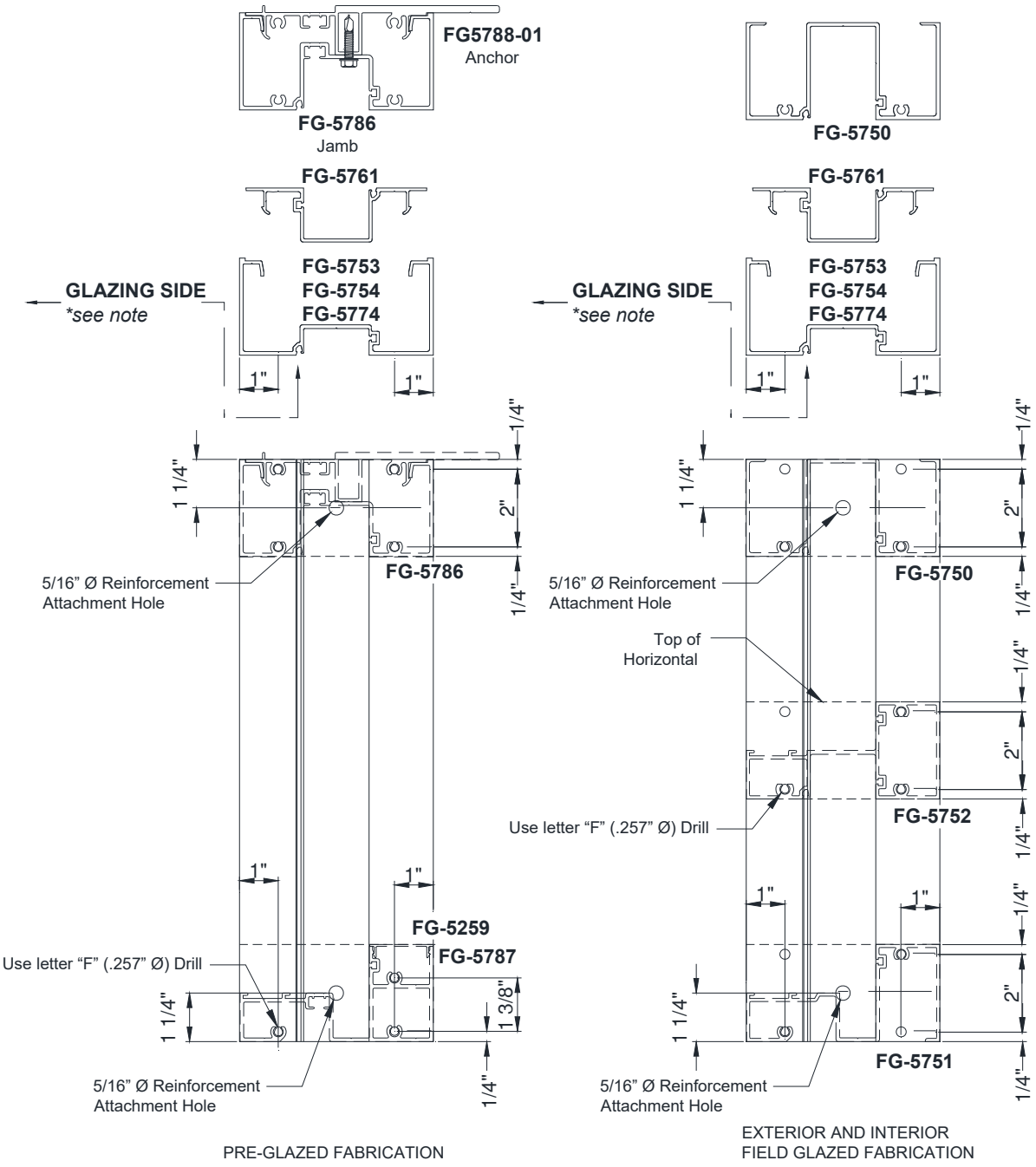

Figure 3: Vertical Mullion Fabrication, Standard Assembly

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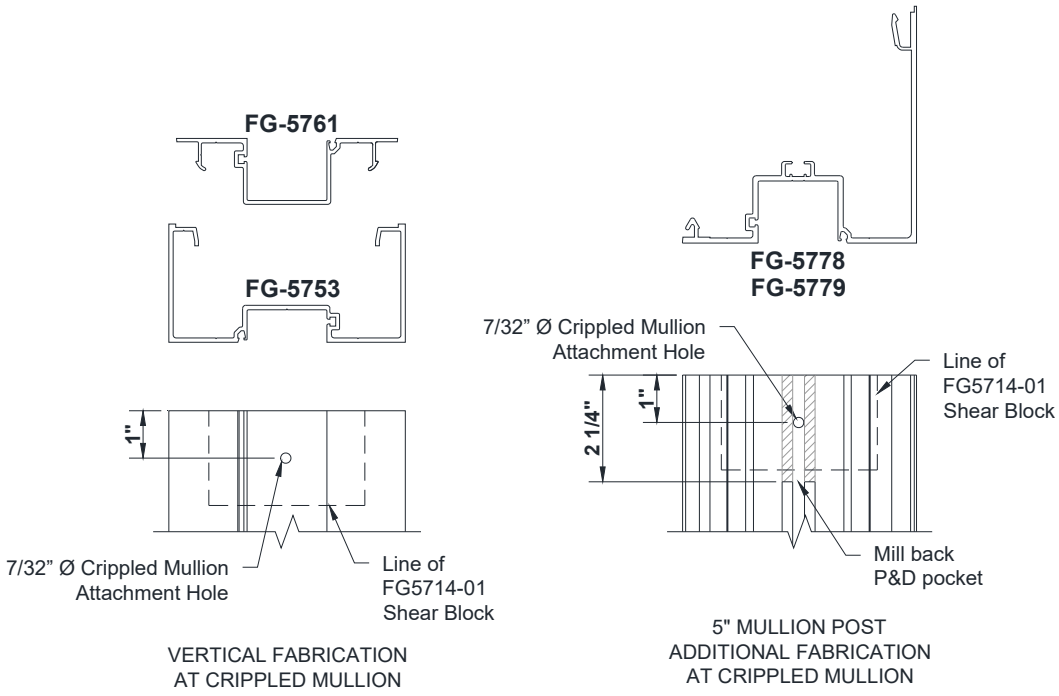

Figure 4: Vertical Mullion Fabrication, Crippled Mullion Assembly

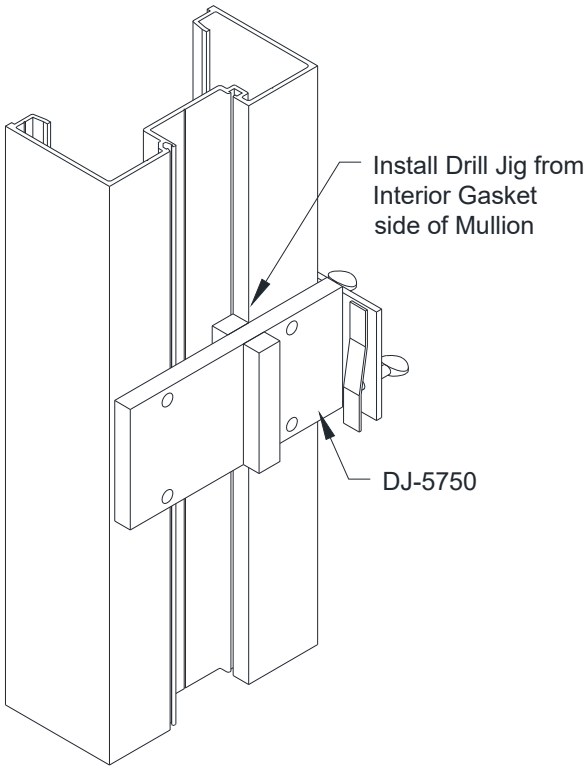

Figure 5: Drill Jig Reference Guide

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4.0 Reinforcement

Note: Steel reinforcement shown. Aluminum reinforcement similar.

Cut reinforcement 1" less than length of vertical mullion. Prepare reinforcement by placing pilot holes centered in the width of the steel or aluminum at 3/4" from ends and match-drill holes to vertical mullion. Reinforcement is to be attached to the Intermediate Vertical with **FS-354** fasteners.

Note: **FS-354** hex head fastener location is below glass line and does not interfere with glazing.

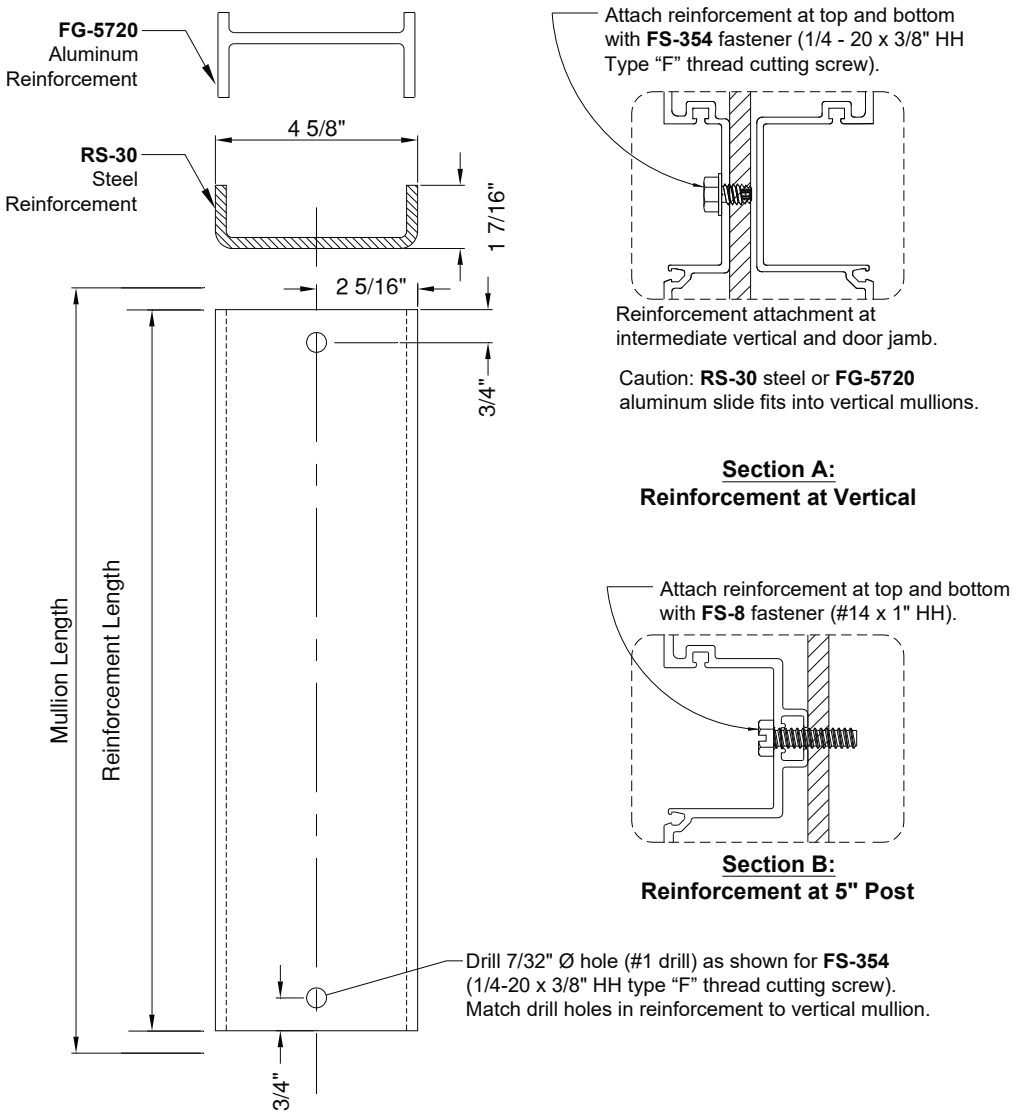

Figure 6: Reinforcement Fabrication

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5.0 Head / Sill

Prepare Head and Sill by placing pilot holes centered on the "V" groove of metal, reference *Figure 7* and *Figure 8* for generic hole location and verify quantity and locations with approved Shop Drawings.

Note: Removable glass stop at head facilitates glazing of large lites. (Reference Figure 15, Page 21)

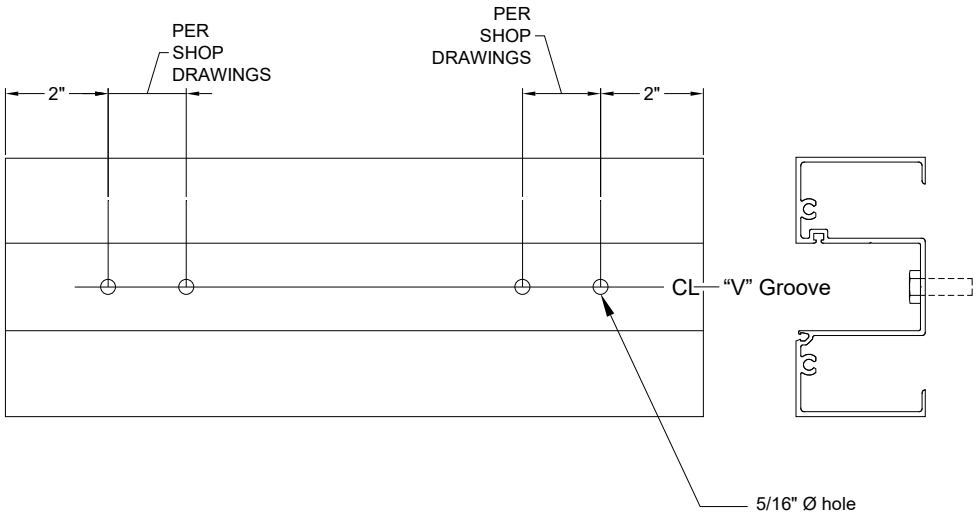

Figure 7: Head FG-5750

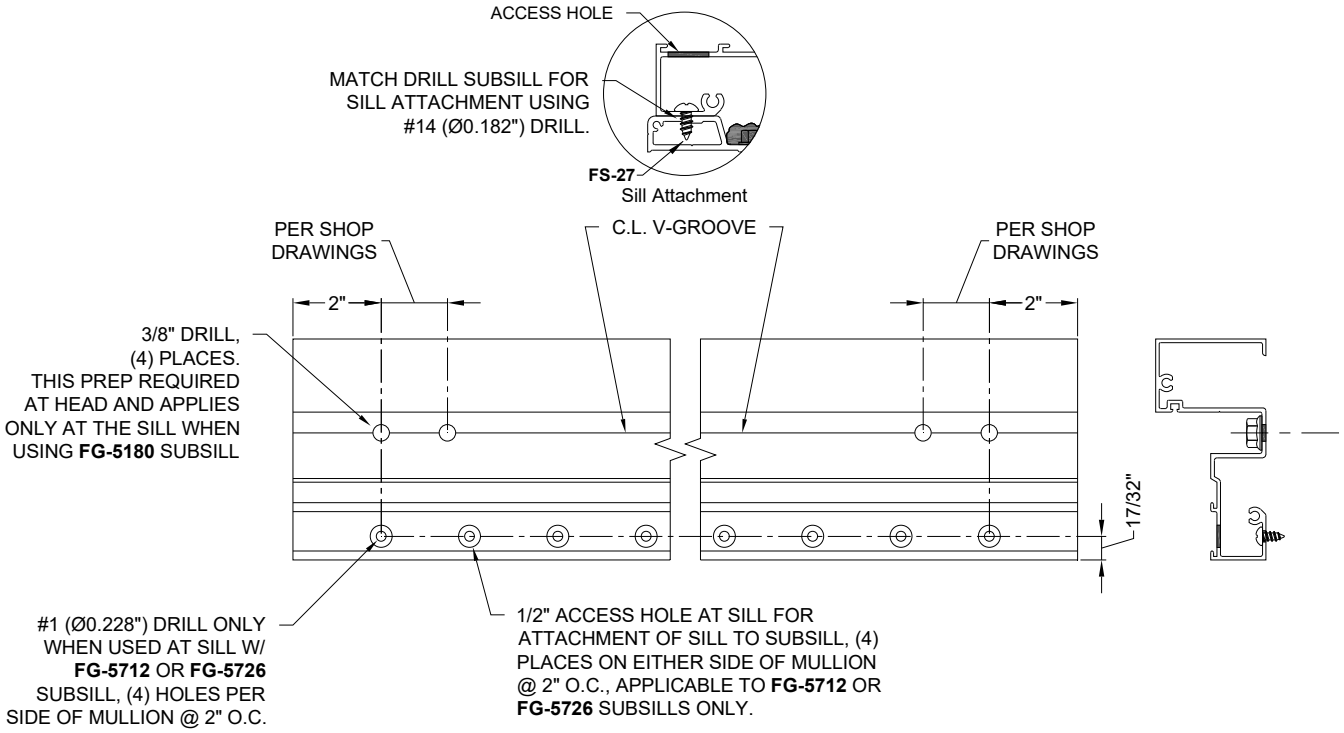

Figure 8: Head / Sill FG-5751

6.0 Horizontal at Cripple Mullion

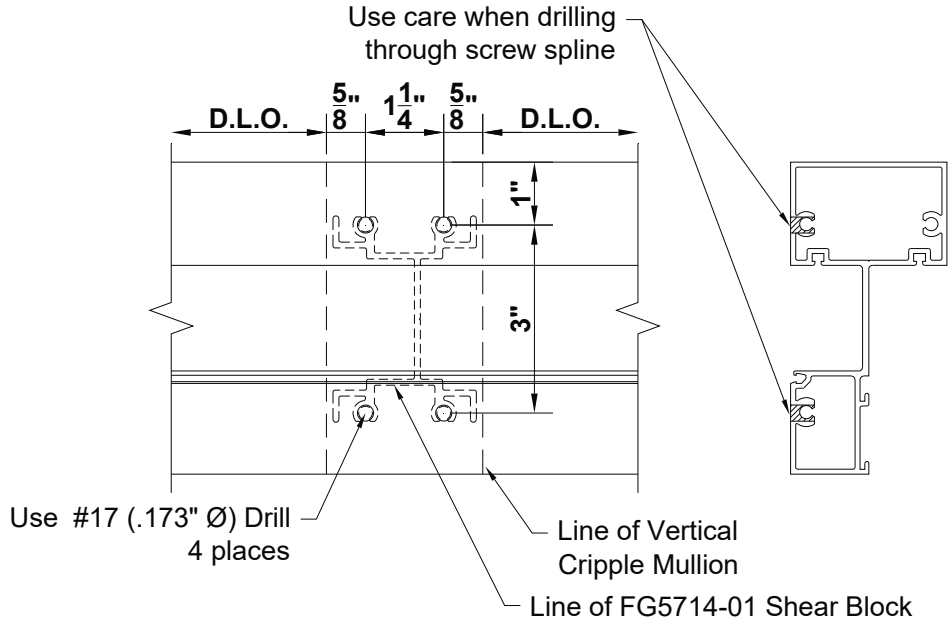

Figure 9: Intermediate Horizontal FG-5752, for FG-5753 or FG-5754 Cripple Mullion

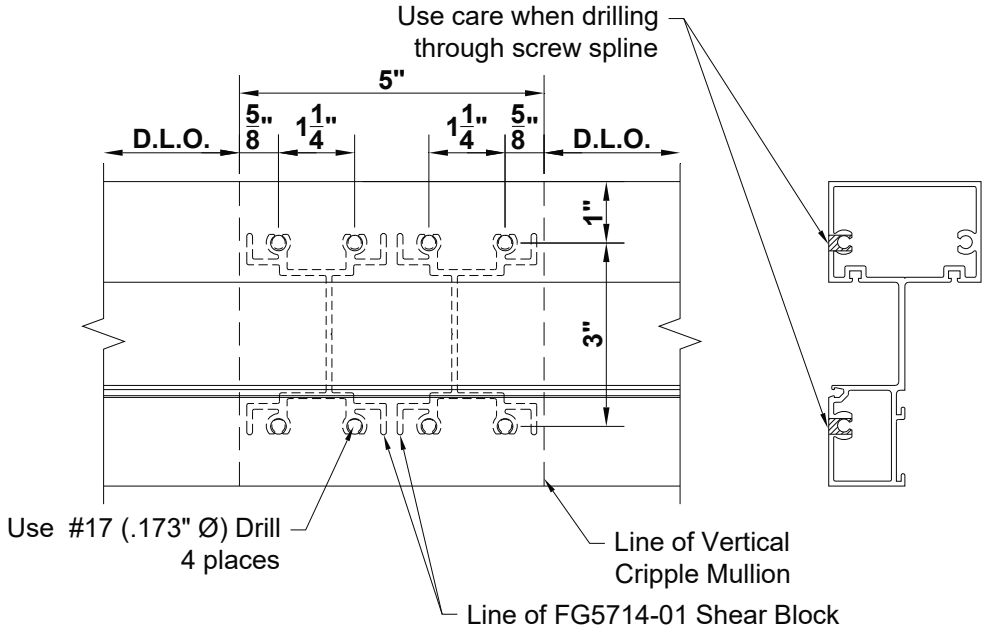

Figure 10: Intermediate Horizontal FG-5752, for FG-5778 with FG-5779 Cripple Mullion

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7.0 Wall Jamb

When required, holes for anchors must be fabricated in the Jamb. The number of anchors will vary; reference charts, approved shop drawings, and engineered calculations for the exact number and locations. If an anchor hole occurs at the intersection of an Intermediate Horizontal, locate the hole as close to the intended location as possible, avoiding the Horizontal.

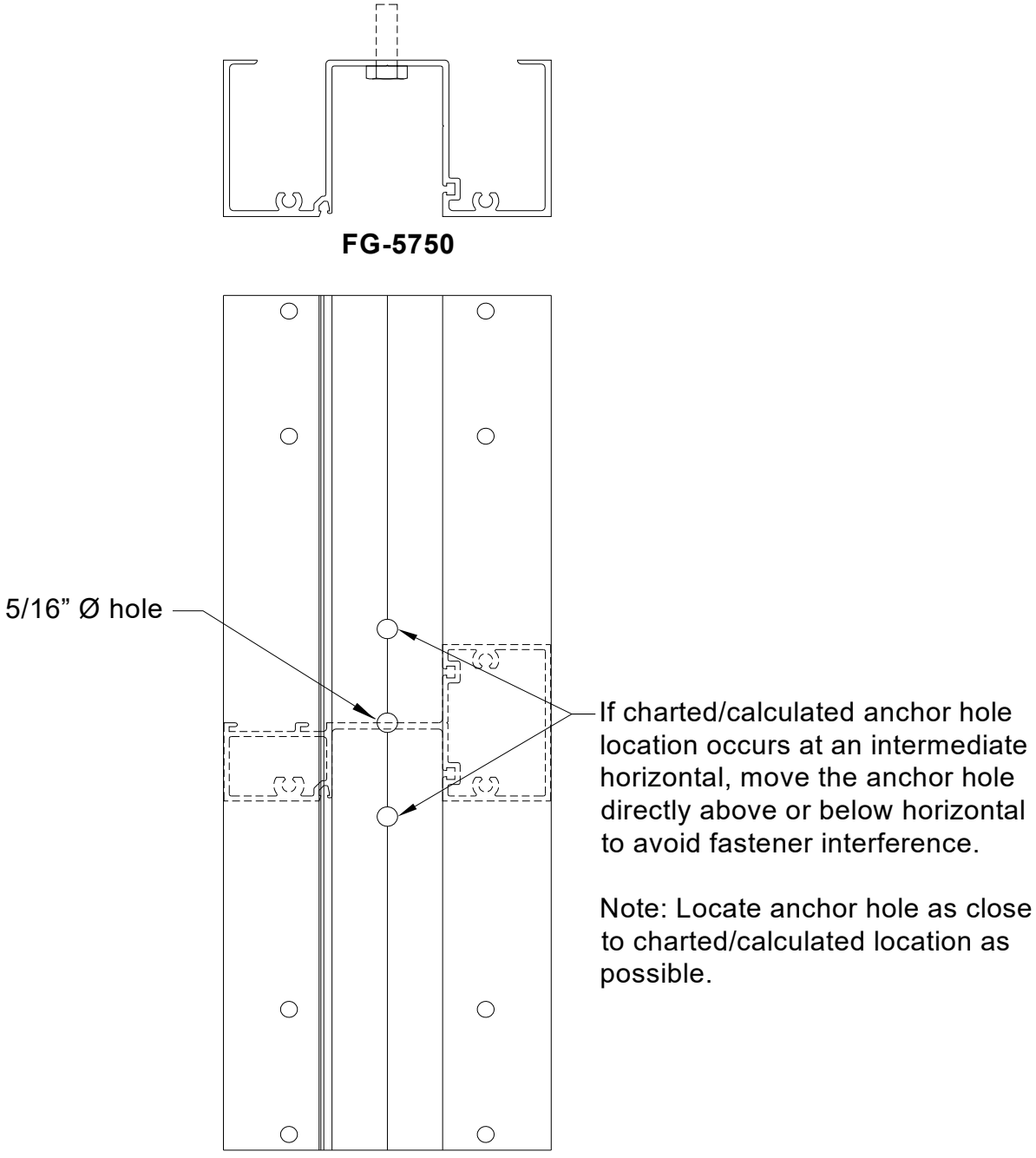

Figure 11: Wall Jamb

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8.0 Subsill Flashing

For Inside Glazing option, use FG-5180 Subsill.

8.1 FG-5180 Subsill

8.1.1 Drill 3/16" dia. hole for non-structural fasteners used for temporarily attaching Subsill to substrate as shown in *Figure 12*. Repeat this hole pattern for each additional 12'-0" of length or as required until structural fasteners are installed.

8.1.2 Drill two each 9/64" dia. holes (#25 drill) at each end of Subsill, except end abutting Door Jamb, for attaching **AN101-01** End Dams. For end condition at Door Jamb, Reference Page 31.

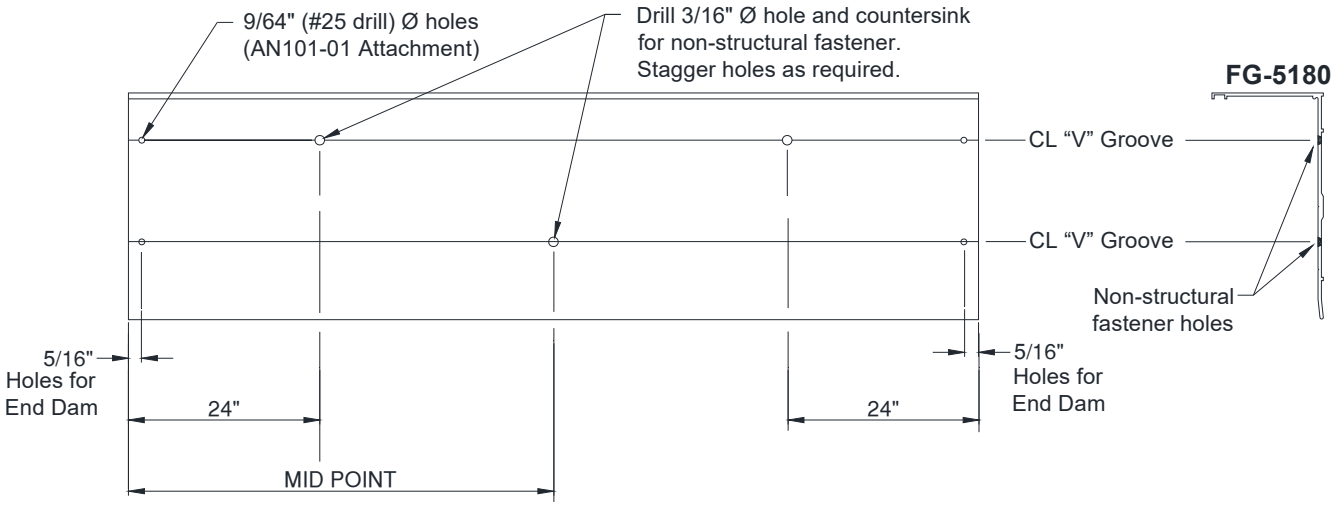

Figure 12: FG-5180 Subsill

8.2 FG-5712 or FG-5726 Subsill

8.2.1 Drill 3/16" dia. hole for non-structural fasteners used for temporarily attaching Subsill to substrate as shown. Repeat this hole pattern for each additional 12'-0" of length or as required until structural fasteners are installed.

8.2.2 Drill 5/16" weep holes along front face of Subsill at mid-lite locations. Depth of weep hole should be a minimum of 1-1/2" and a maximum of 2" to ensure full penetration through the front hollow section. Reference *Figure 13*.
Note: If Subsill splice is used, add a weep hole 3" on each side of the splice.

8.2.3 Anchorage option #2 requires the access holes to be patched with silicone sheet and thoroughly sealed over after Anchor Bolt installation. **This is a critical step.**

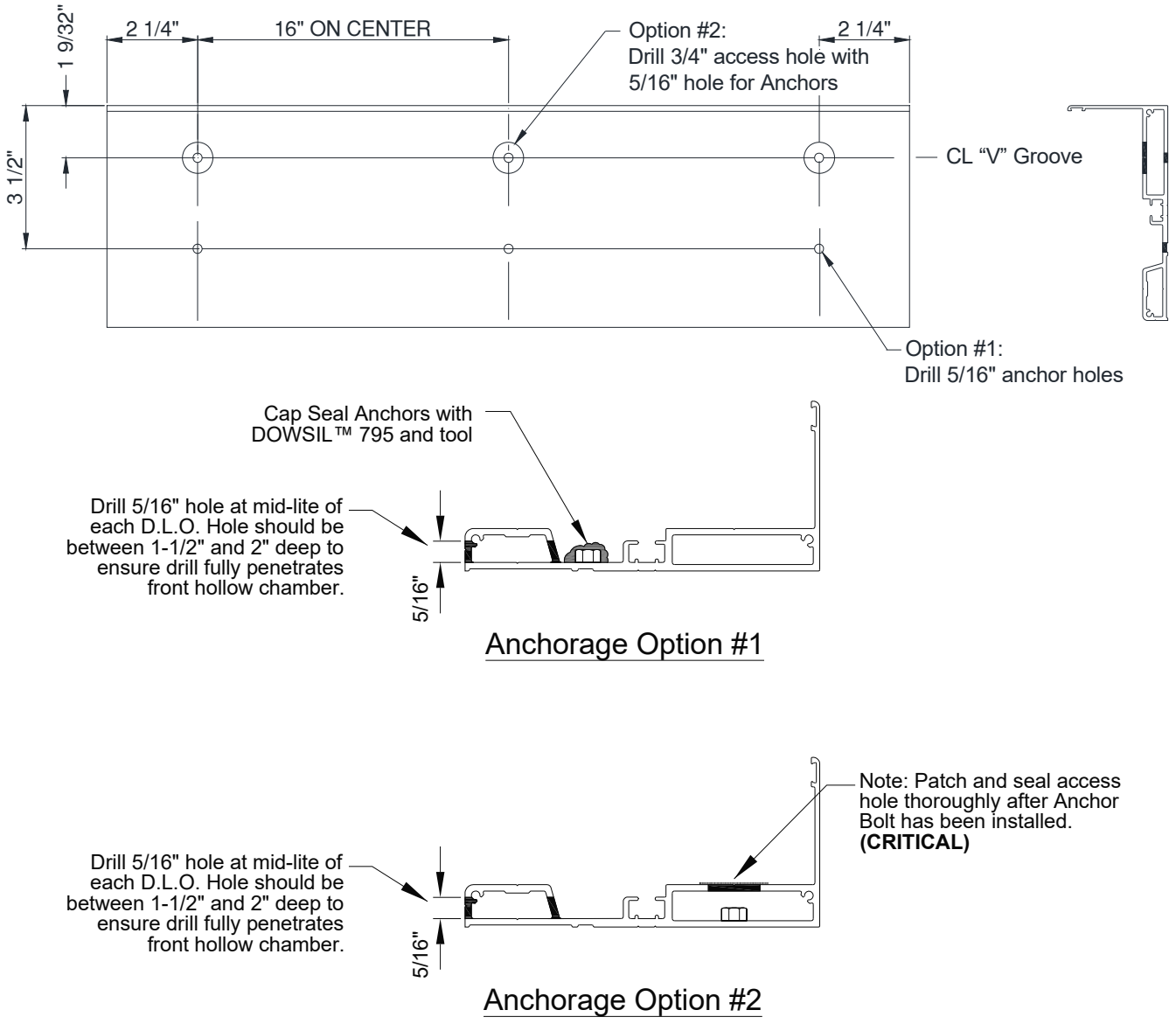

Figure 13: FG-5712 Subsill (FG-5726 similar)

FRAME ASSEMBLY

9.0 Joinery Tape Application

Reference *Figure 15*, *Page 21*, for location.

9.1 Clean surfaces where Tape is to be applied with isopropyl alcohol to remove all dirt and cutting oils. Allow surface to dry before applying Tape.

9.2 Position **SM5601** 1/8" x 1/2" Isocryl Tape on Vertical Mullions at Horizontal intersections, as shown in *Figure 15*, *Page 21*. Alternatively, tape may be applied to ends of horizontals. Ensure screw splines are kept free of sealant material.

9.3 Just prior to attaching each Horizontal, remove protective cover from tape.

9.4 Attach frame horizontals, using a box knife to trim excess sealant tape where exposed. Do not pull Tape to trim.

Note: FG-5730 gasket reglet is always to exterior for outside glazed elevations and interior for inside glazed.

CRITICAL: Tape at rear of sill is a critical seal location when using the FG-5712 Subsill and must be applied as indicated.

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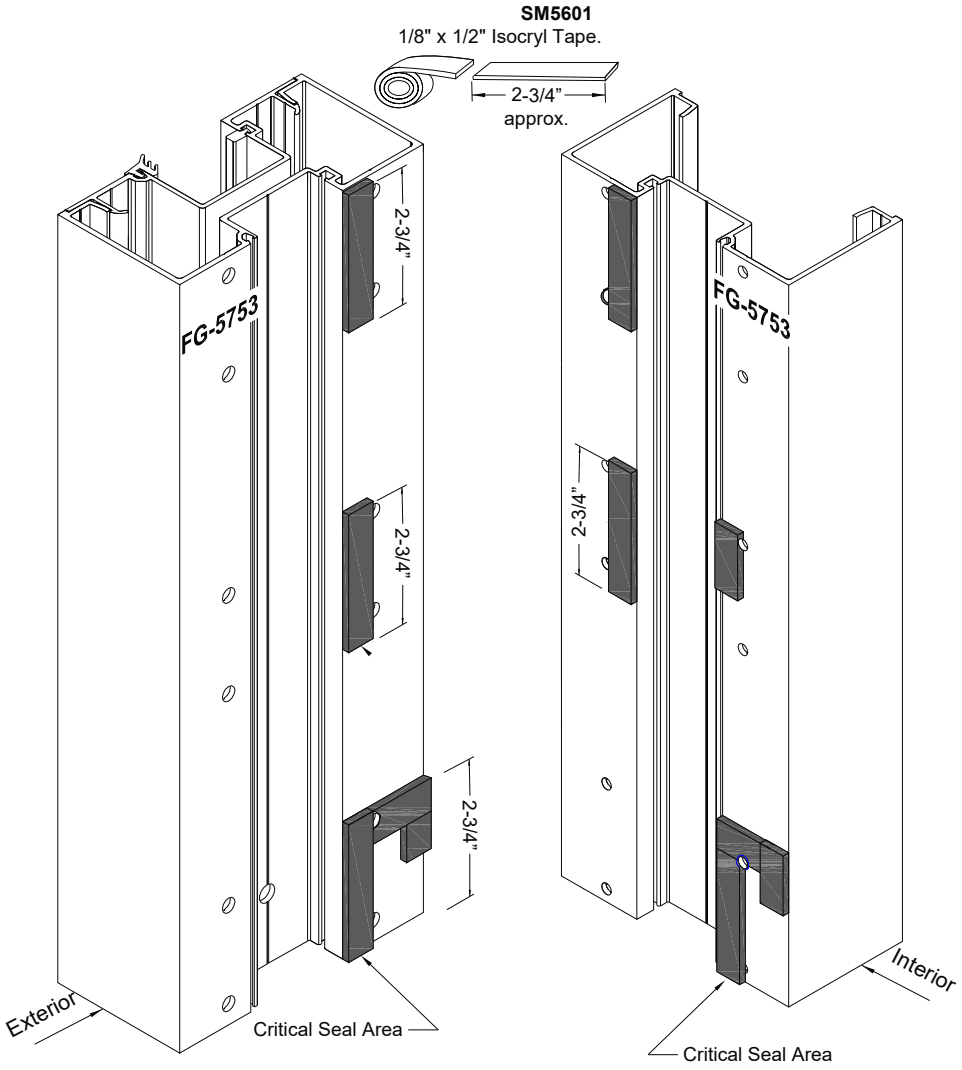

Figure 14: Tape Application

10.0 Frame Panel Assembly

10.1 If the **FG-5731** Interior Spacer Gasket is pre-installed, remove it and cut per *Section 2.0 Cut Members to Size* (page 10). Set aside.

10.2 Clean framing members at locations where Butyl Tape is noted to be attached. At Tape intersection, there should be no gaps.

10.3 Attach Horizontals to Verticals using **FS-8** (#14 x 1" HH STS). Trim excess sealant Tape at joints with razor knife. DO NOT PULL TAPE TO TRIM. See *Figure* 3 (page 11) for hole prep locations.

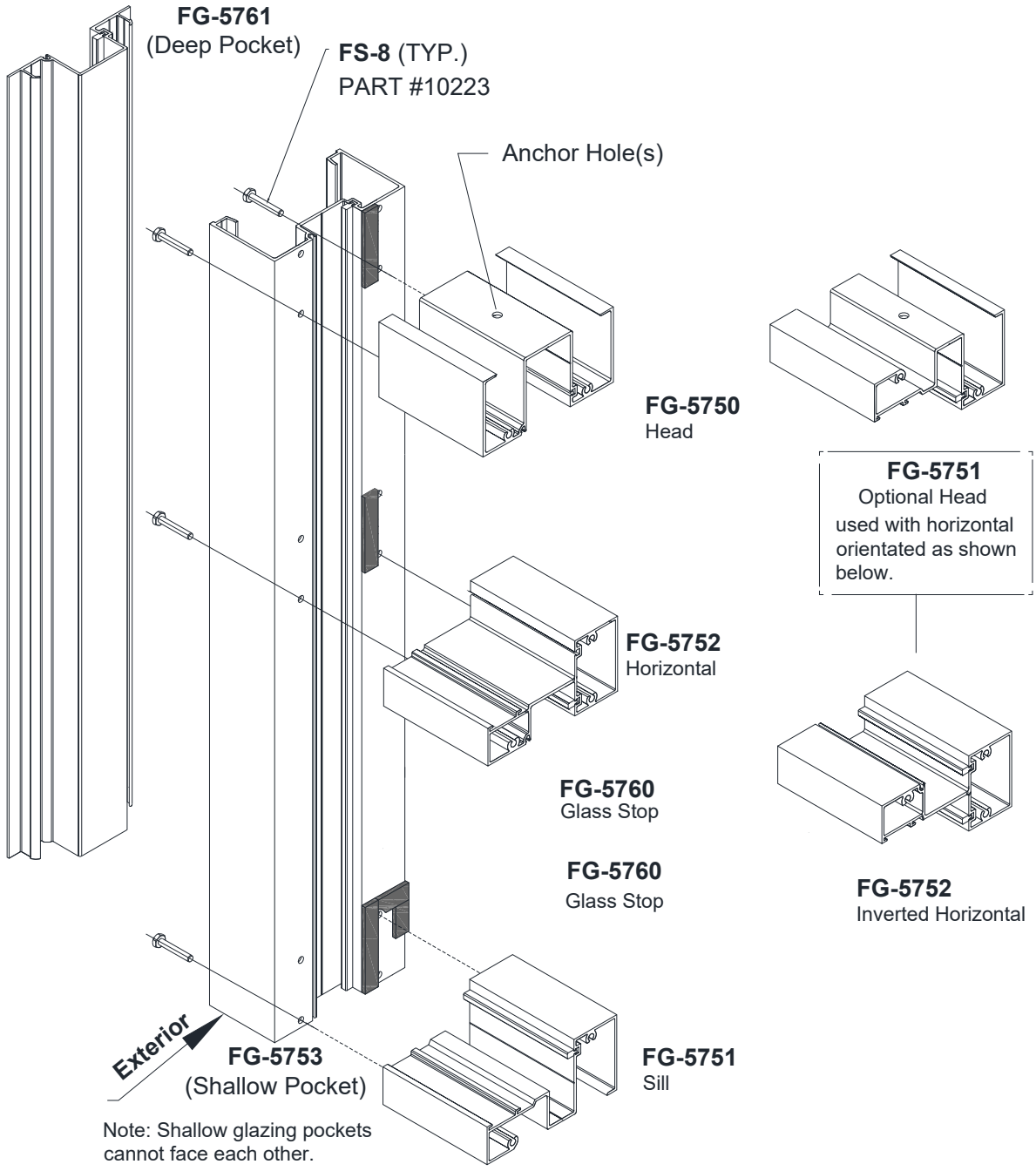

Figure 15: Frame Panel Assembly, Exterior Glaze

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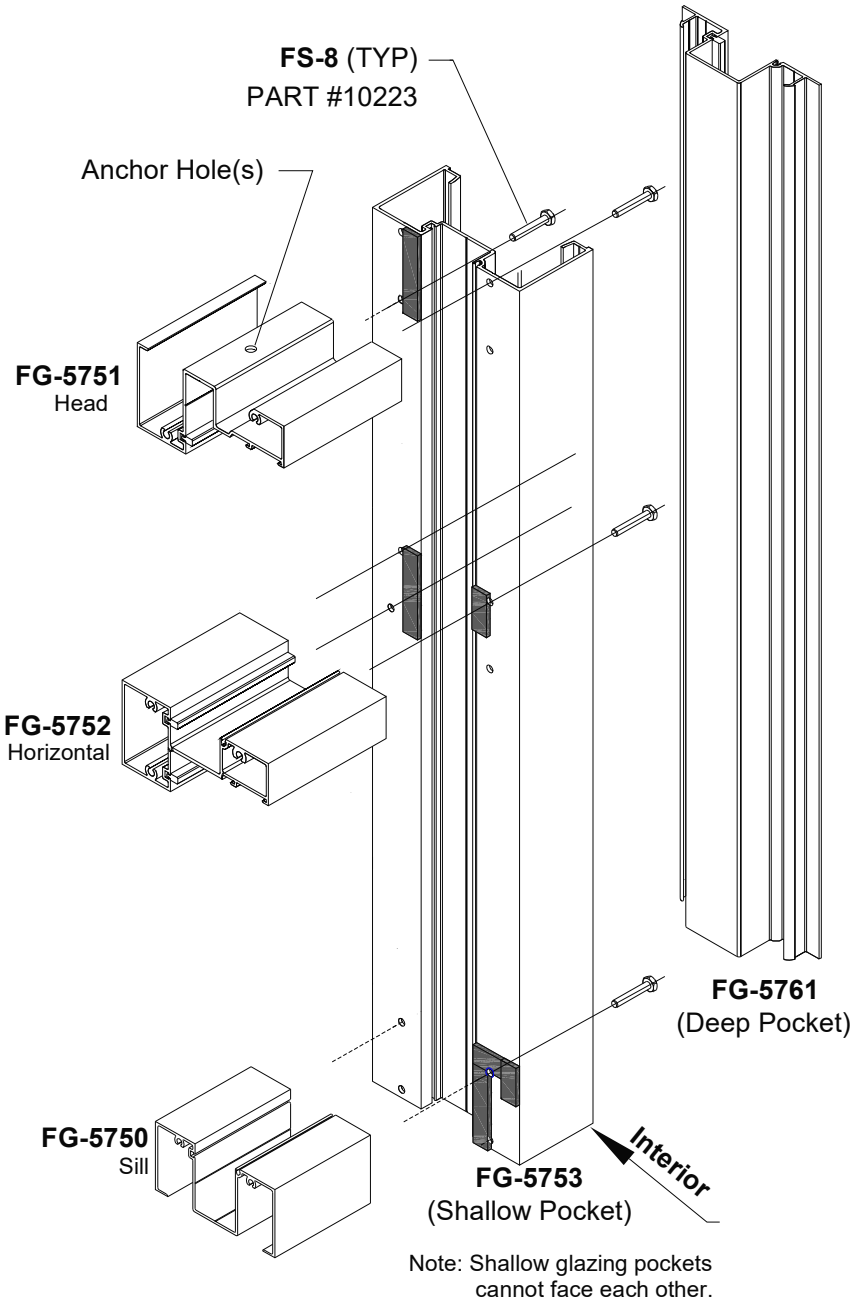

Figure 16: Frame Panel Assembly, Interior Glaze

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11.0 Cripple Mullion Assembly

Notes:

- *Cripple Mullions may be used in the top or bottom day light openings only.*
- *Instructions shown for **FG-5753** or **FG-5754** with **FG- 5761** Filler. The FG-5750 StormMax® storefront 5" post mullion assembly (**FG-5778** with **FG-5779**) is similar. Reference Figure 10 (Page 15) for Horizontal hole pattern.*

11.1 As shown in *Figure 17*, mount **FG5714-01** Shear Block to the flat surface of the **FG-5752** Intermediate Horizontal with (4) **FS-96** fasteners. *Note: The 5" post mullion assembly requires (8) **FS-96** fasteners.*

11.2 Vertical Mullion runs through at opposite end. Prepare hole pattern as per *Figure 4* (Page 12) and sealant tape per *Figure 14* (Page 20). Attach to **FG-5751** Head / Sill at screw splines.

11.3 Attach Vertical Mullion to Shear Block at 1" from the Horizontal with **FS-56** fastener.

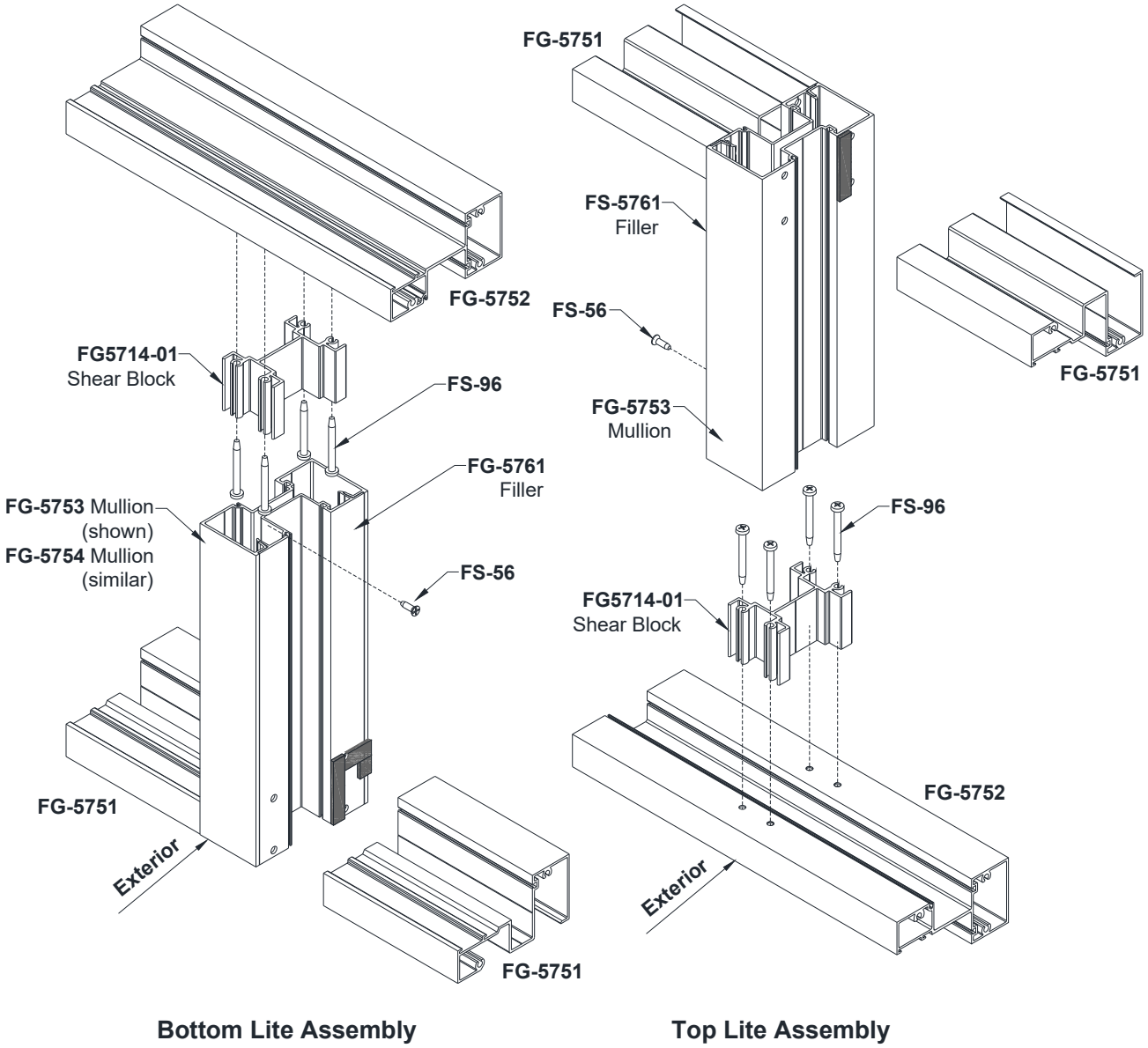

Figure 17: Cripple Mullion Assembly

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12.0 Subsill End Dam Assembly

12.1 FG-5180 Subsill

12.1.1 Apply **SM5601** Isocryl Tape to End Dam as shown in Figure *18*. Attach End Dam to Subsill.

12.1.2 Match drill holes in Subsill to End Dam with #36 Ø drill and attach End Dam to Subsill with **FS-23** fasteners.

Note: Reference Figure *26*, *Page 31,* for Subsill abutting Entrance Door Jamb.

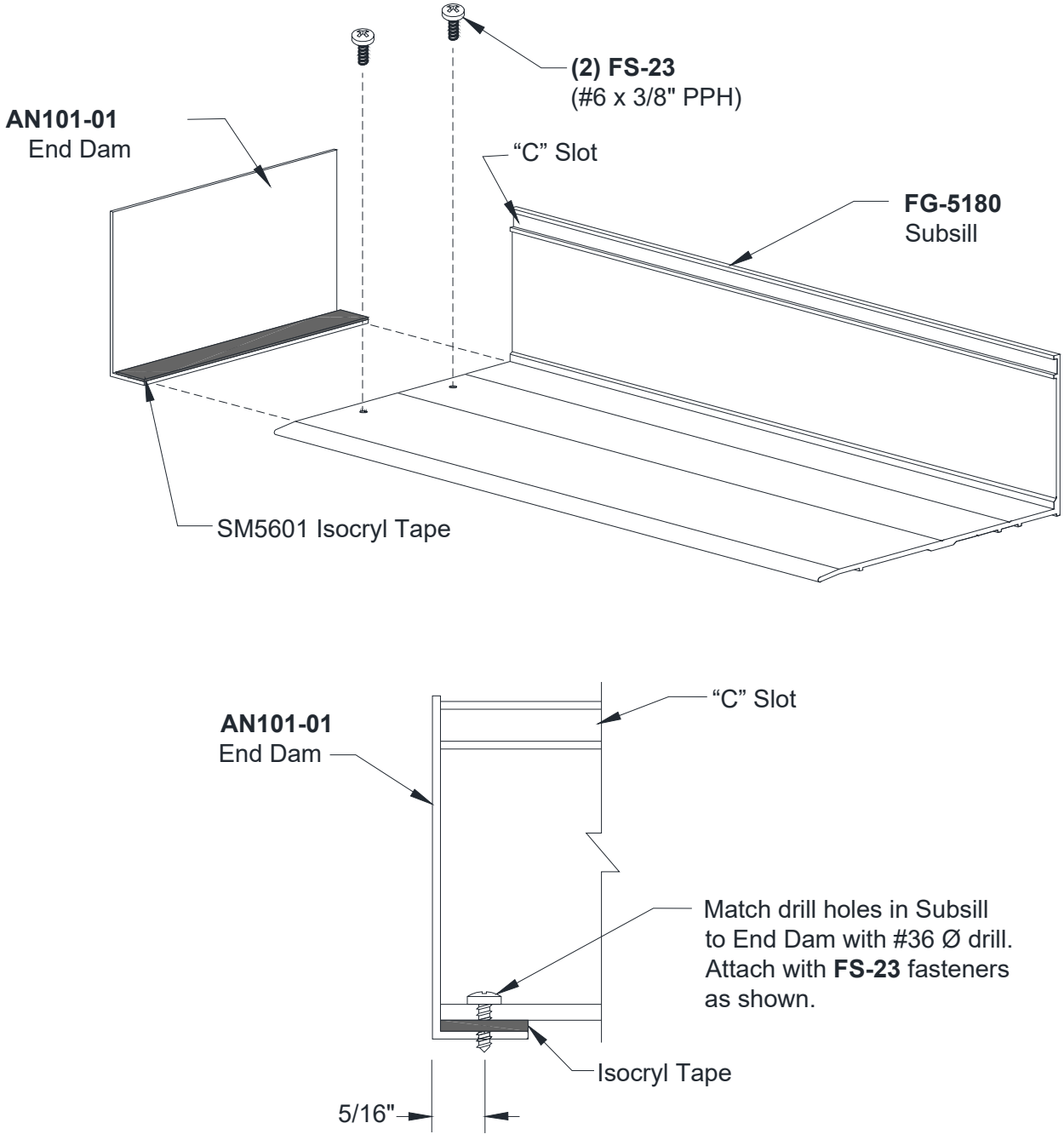

Figure 18: End Dam Attachment for FG-5180 Subsill

12.2 FG-5712 or FG-5726 Subsill

12.2.1 Apply **SM5601** Isocryl Tape to End Dam as shown in *Figure 19*. Attach End Dam to Subsill. The **FG-5712** Subsill will use the **AN-101-01** End Dam, while the **FG-5726** will use **AN-104-01.** Note that the **AN-104-01** comes pre-fabricated, while the **AN-101-01** requires customer fabrication.

12.2.2 For **AN-101-01**, drill holes in End Dam to align with Subsill per *Figure 19* and attach End Dam to Subsill with **FS-23** fasteners.

Note: Reference Figure *26*, *Page 31,* for Subsill abutting Entrance Door Jamb.

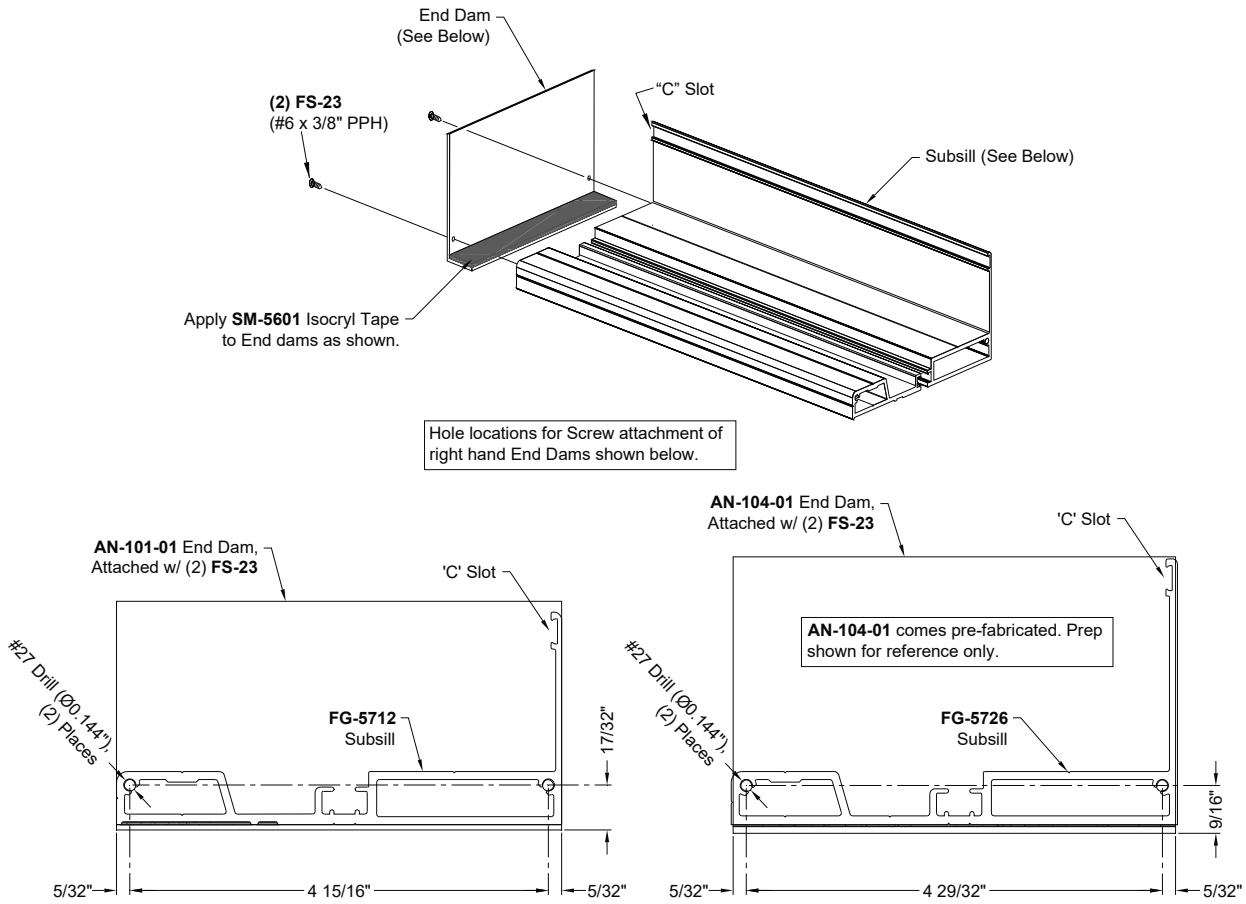

Figure 19: End Dam Attachment for FG-5712 or **FG-5726 Subsill**

13.0 Corner Condition

FG-5712 Subsill shown in typical Subsill 90-deg corner detail. **FG-5180** and **FG-5726** Subsills similar.

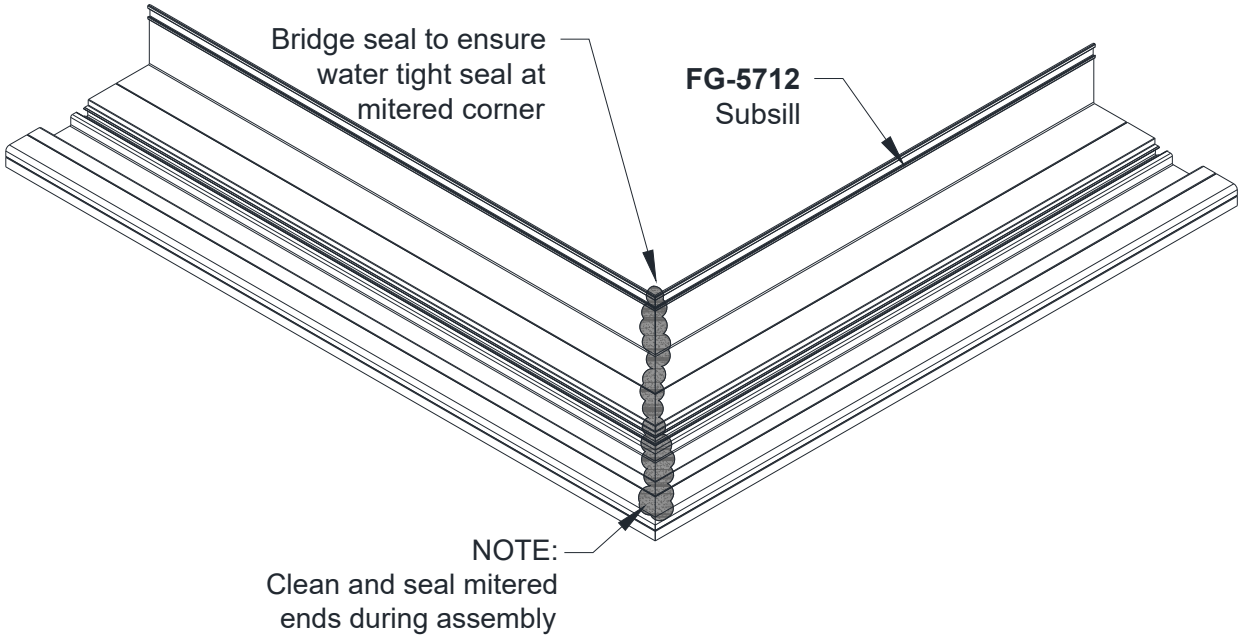

Figure 20: Sealant at Subsill Corner (Wet and Dry)

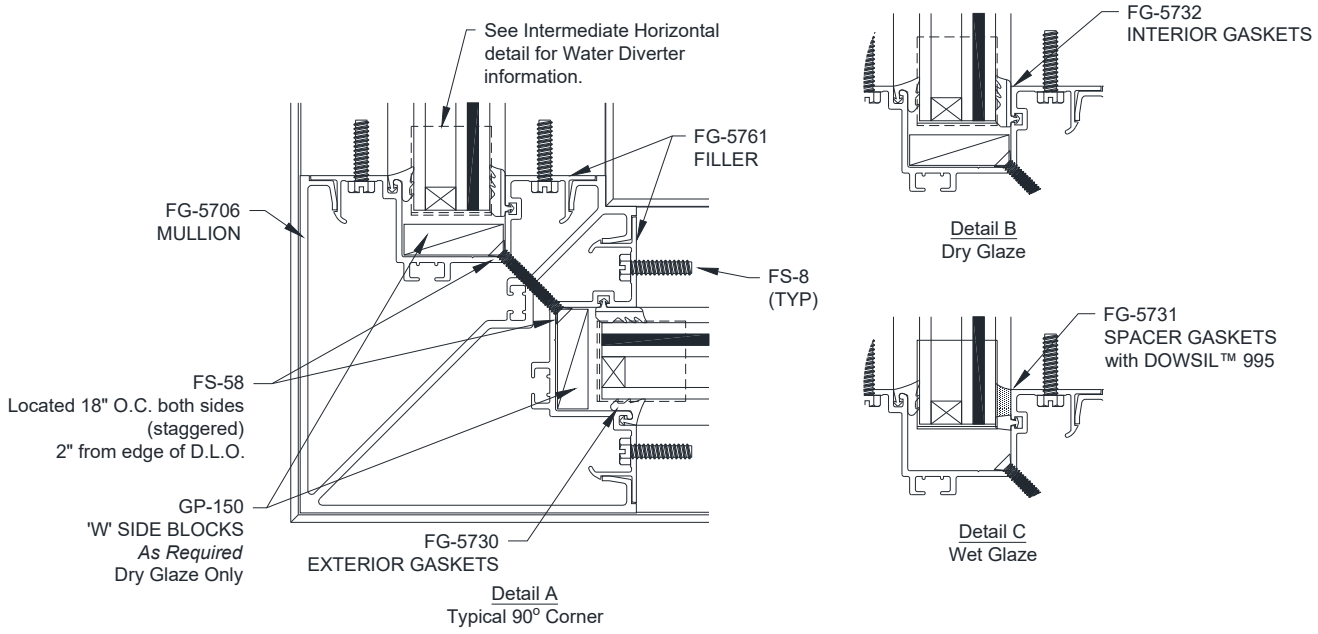

Figure 21: 90° Outside Corner

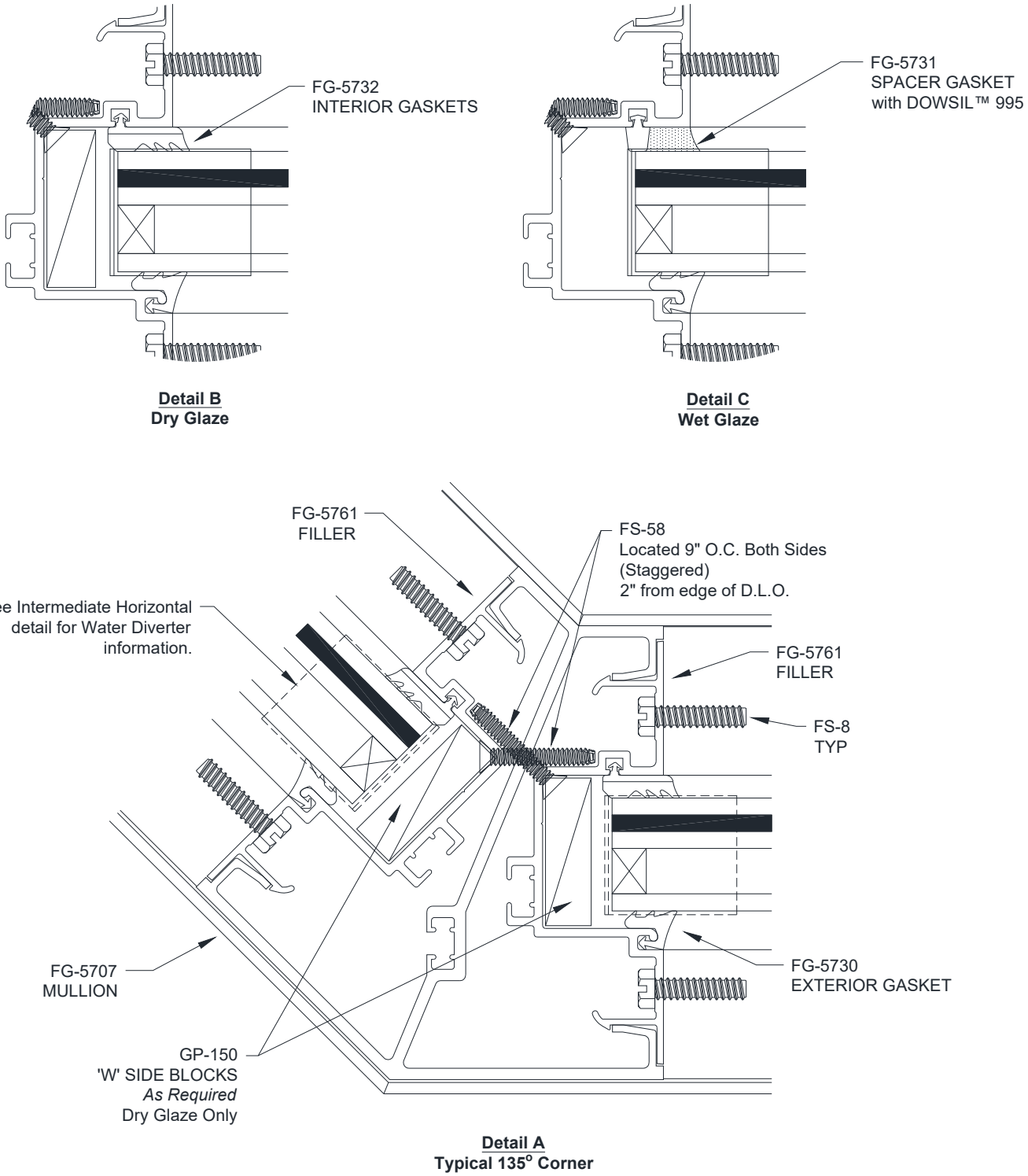

Figure 22: 135° Outside Corner

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FRAME INSTALLATION

14.0 Subsill Installation and Sealant Application

14.1 FG-5180 Subsill

14.1.1 Position fabricated Subsill with End Dams into opening. Center into opening allowing shim space at jambs.

14.1.2 Shim beneath Subsill to be a maximum of 1/2". Attach Subsill Flashing to structure with non-structural fasteners using attachment holes shown on *Page 17*. Wedge shims tightly between End Dams and Jamb substrate at each end prior to installing frame panels. These shims prevent the End Dams from being dislodged while frame panels are being installed. Completely seal End Dams as shown.

14.1.3 Cap seal anchor fasteners with **DOWSIL™ 795** sealant.

Notes:

- It is CRITICAL to tool sealant.
- End Dam must be sealed to substrate before panel installation.

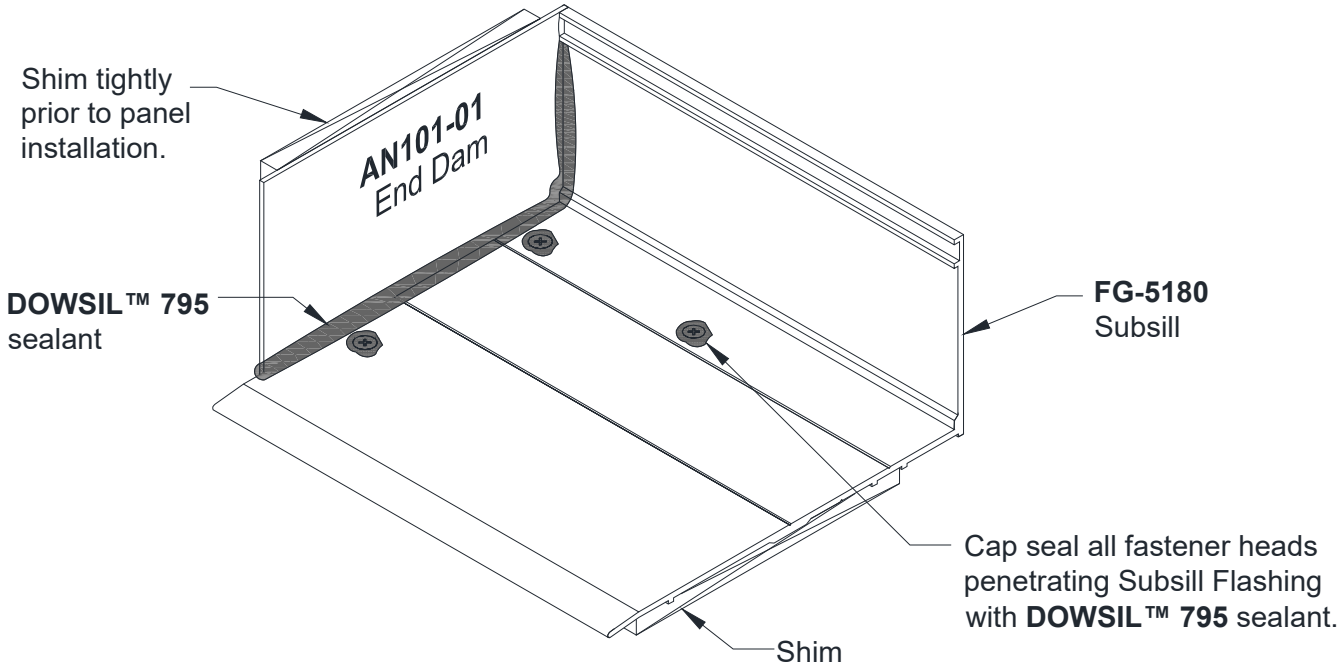

Figure 23: Subsill Installation and Sealant Application for FG-5180 Subsill

14.2 FG-5712 or FG-5726 Subsill

14.2.1 Position fabricated Subsill with installed End Dams into opening. Center into opening allowing shim space at Jambs.

14.2.2 Shim beneath Subsill to be a maximum of 1/2". Attach Subsill Flashing to structure with structural fasteners using attachment holes shown on Page 18. Wedge shims tightly between End Dams and Jamb substrate at each end prior to installing frame panels. These shims prevent the End Dams from being dislodged while frame panels are being installed. Completely seal and tool End Dams to Subsill as shown.

14.2.3 Cap seal anchor fasteners with **DOWSIL™ 795** sealant.

Notes:

- It is CRITICAL to tool sealant.
- End Dam must be sealed to substrate before panel installation.

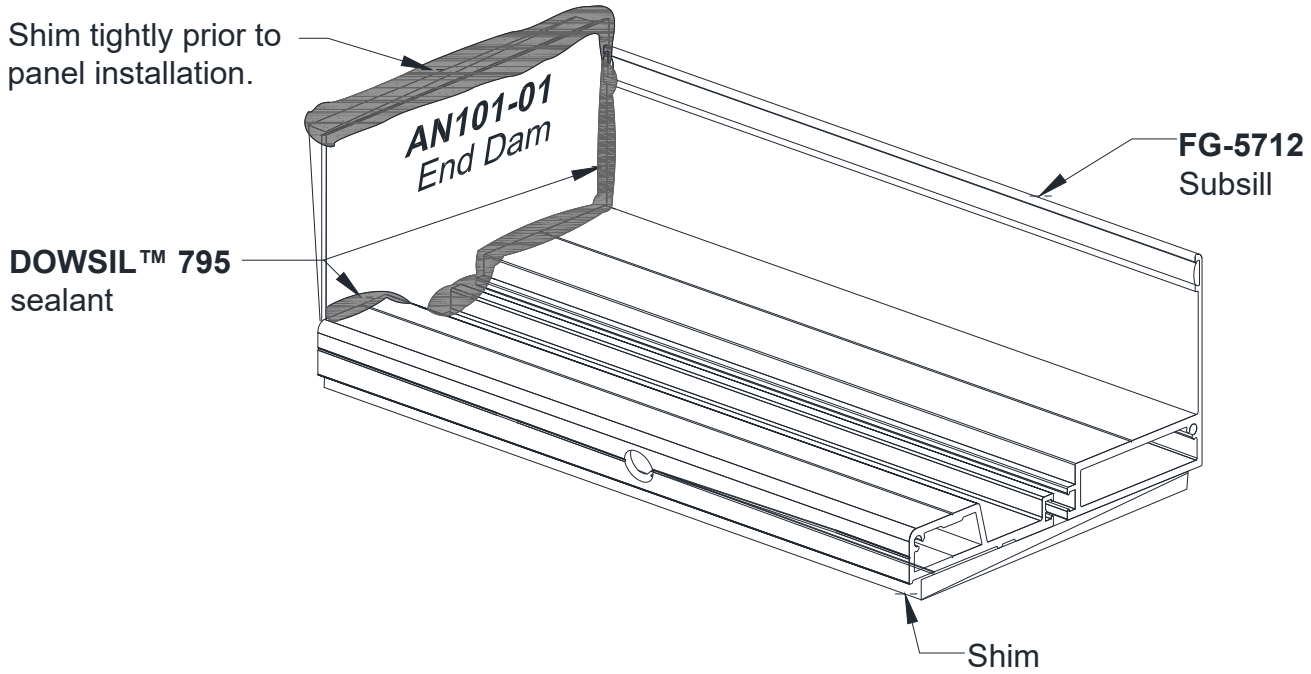

Figure 24: Subsill Installation and Sealant Application for FG-5712 Subsill (FG-5726 is similar)

15.0 Splice Sleeve at Subsill

15.1 Locate splice sleeves near center of D.L.O. at panel positioned over splice.

15.2 If using **FG-5712** or **FG-5726** Subsill, apply backer rod and Sealant to cavities of Subsill and P&D pocket at splice.

15.3 Splicing of **FG-5712** Subsill is shown below; the procedure for **FG-5726** is identical.

15.4 Apply Sealant to **UW466** Silicone Splice Sheet at all Sill Receptor splices, as shown in *Figure 25*.

15.5 Seal face of Subsill at splice. Marry with perimeter Sealant.
Note: Rear joint of Subsill at splice may be sealed as optional cosmetic finish.

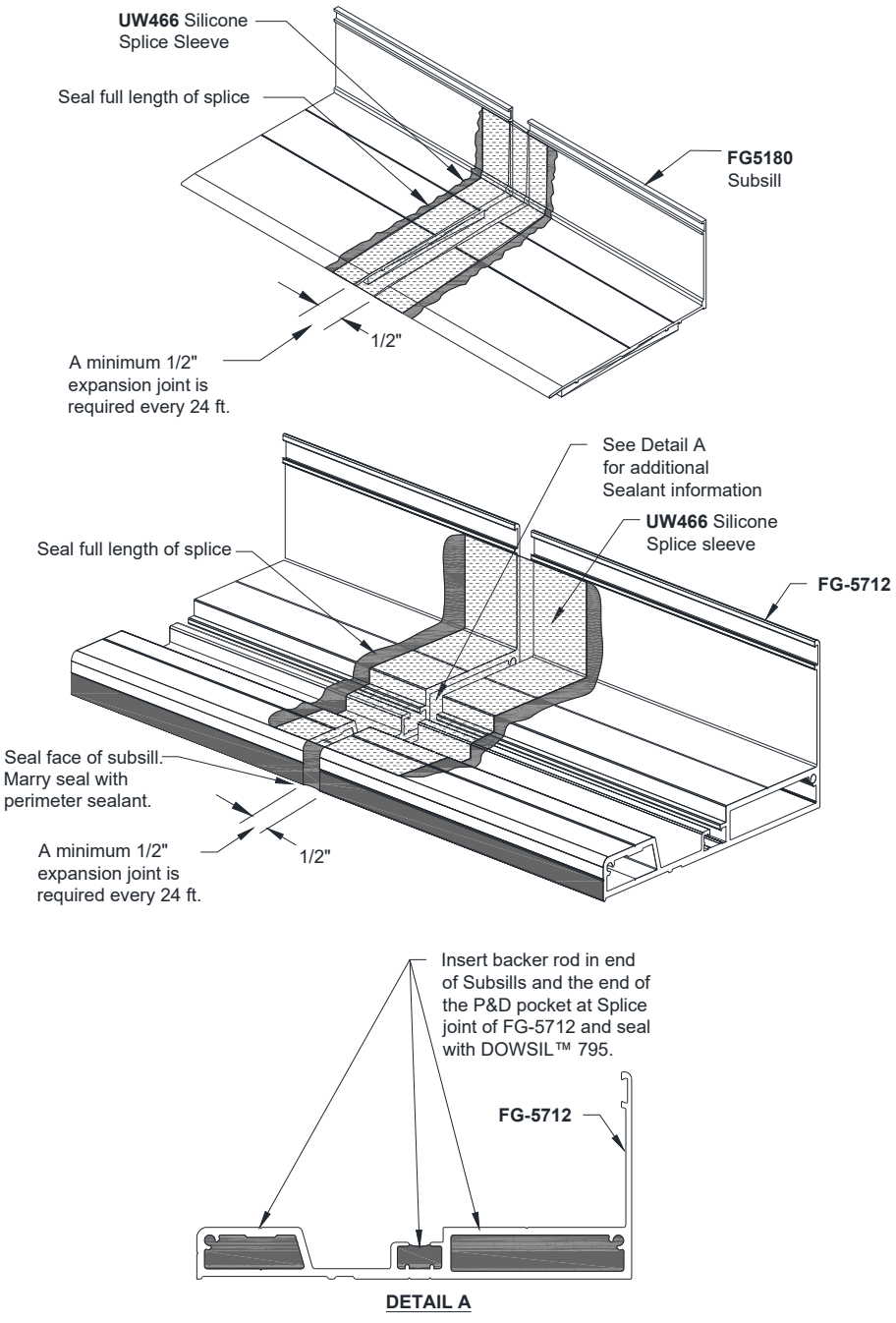

Figure 25: Splice Sleeve at Subsill

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16.0 Sidelite Subsill Installation at Door Frame

Where entrances occur, install entrance frames first. Subsill butts against door jamb(s). The Subsill abutting the door jamb does not require an end dam.

Notes:

- The bottom of the inside of the Door Jamb Mullion must be sealed to the substrate and the end of the Subsill must also be sealed. Reference *Figure 26*.
- **RS-30** steel and **FG-5720** aluminum stiffeners are slide to fit and must be installed in frame jamb prior to installation. **FG-5761** filler must be used in lieu of **FG-5780** when stiffeners are present.

16.1 FG-5180 Subsill

16.1.1 Installation of **FG-5180** Subsill similar to *Figure 26*.

16.1.2 Cap seal all fasteners in Subsill.

16.2 FG-5712 or FG-5726 Subsill

16.2.1 Seal end of **FG-5712** or **FG-5726** prior to installing at door frame. Fill cavities and P&D pocket with backing rod and apply sealant. Tool sealant as needed.

16.2.2 Installation of **FG-5712** Subsill shown in *Figure 26*. **FG-5726** is similar.

16.2.3 Cap seal all fasteners in Subsill.

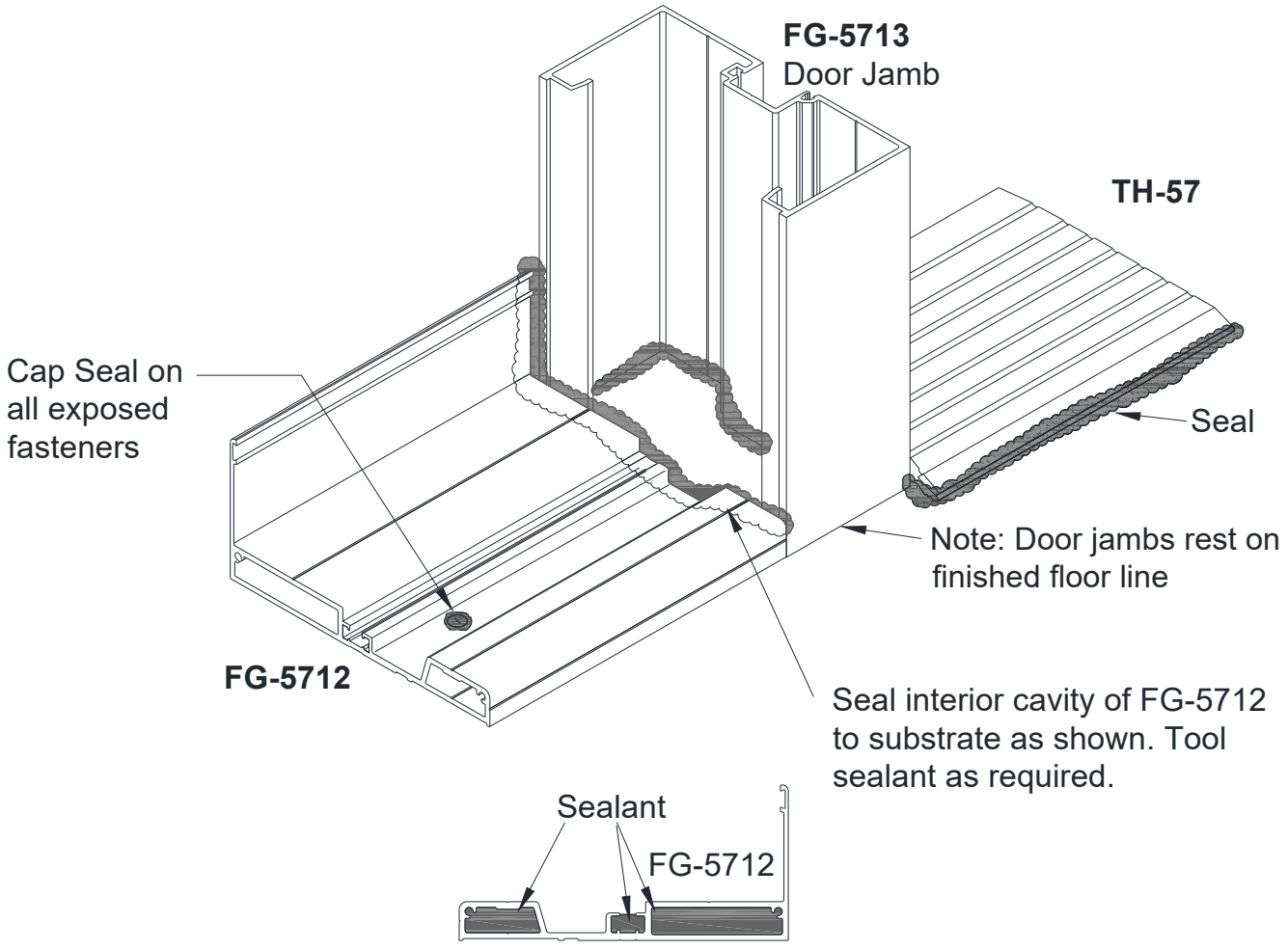

Figure 26: Door Jamb and Sill Receptor Sealant Application

17.0 Panel Installation

17.1 Working one bay at a time, run a continuous bead of DOWSIL™ 795 perimeter sealant along the full length of the Subsill's "C" slot just prior to installing frame panels, as shown in *Figure 27*. Do not allow sealant to skin over prior to installing frame panels. Remove excess sealant after panels are installed.

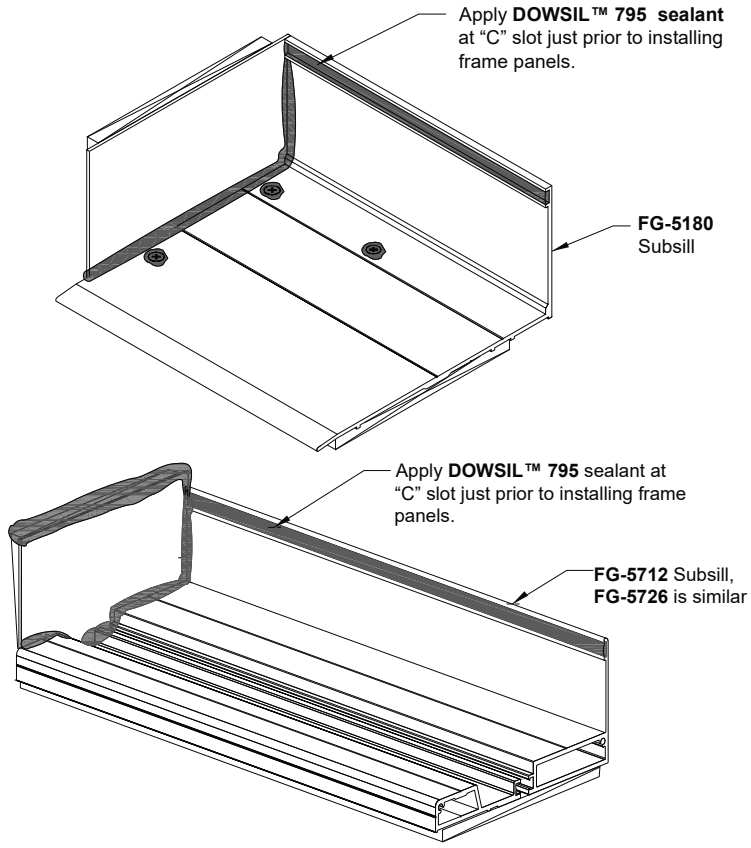

Figure 27: "C" Slot Sealant Application

17.2 Install assembled frame panels into opening starting with jamb and continue working toward the last bay. Reference illustrations shown in *Figure 28*. Use install option "A" or "B" as required. *NOTE: **RS-30** steel or **FG-5720** aluminum reinforcement slide fits into **FG-5753** Vertical and must be inserted and attached prior to installing panels.*

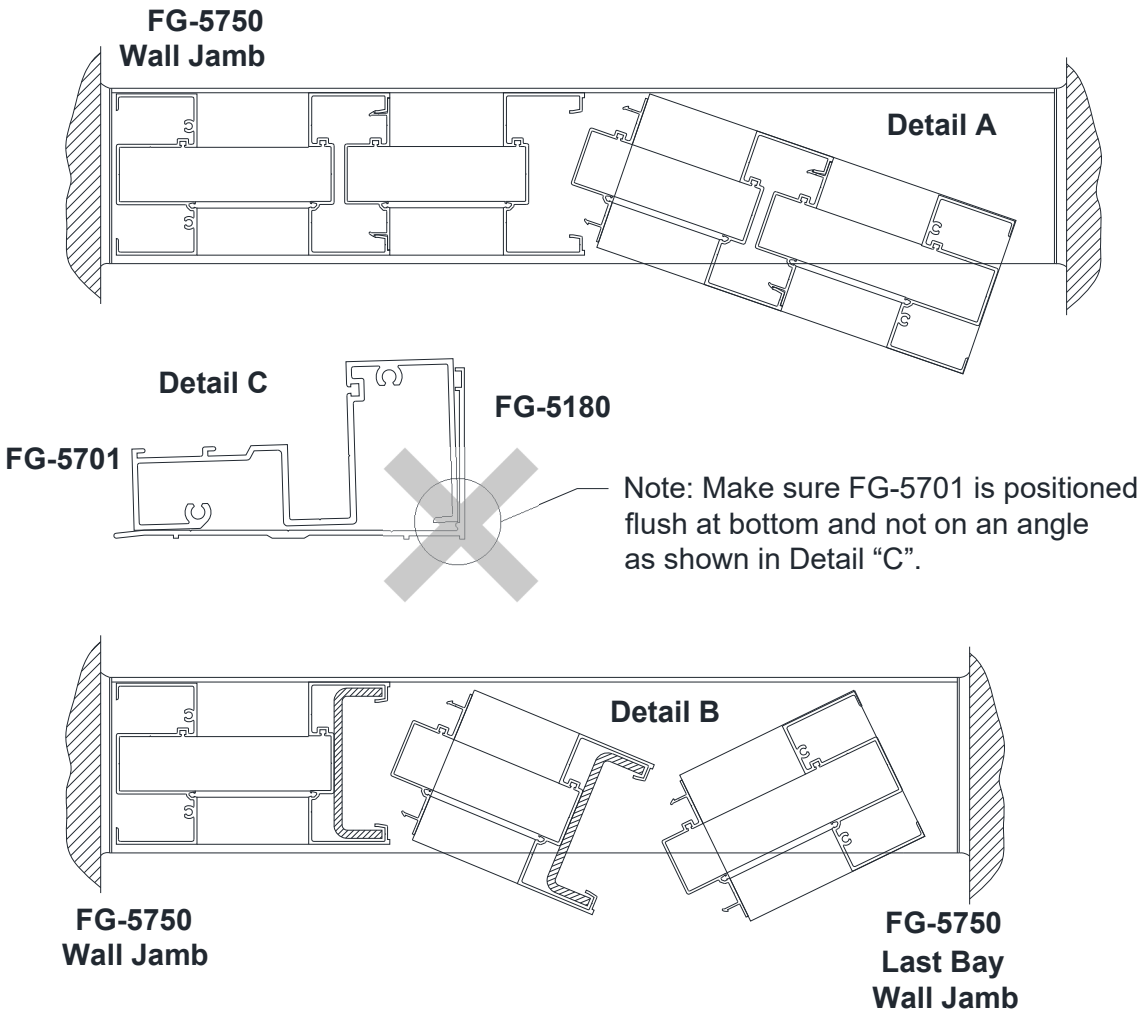

Figure 28: Panel Installation

17.3 FG-5180 Subsill

17.3.1 Match drill holes through Sill into substrate for perimeter fasteners. Match drill holes in Head and wall jamb into substrate.

17.3.2 Anchor panels to substrate, as shown in *Figure 29*.

17.3.3 Completely seal exterior and interior perimeter with a continuous bead of **DOWSIL™ 795** sealant.

17.4 FG-5712 or FG-5726 Subsill

17.4.1 Match drill holes through Sill into Subsill for perimeter fasteners. Match drill holes in Head and wall jamb into substrate. Anchor panels to the Subsill and substrate, as shown in *Figure 29*.

17.4.2 Completely seal exterior and interior perimeter with a continuous bead of **DOWSIL™ 795** sealant. After storefront frame is in place, apply a continuous fillet seal at face of Sill where it contacts the Subsill. Reference *Figure 29*. **This seal is critical.**

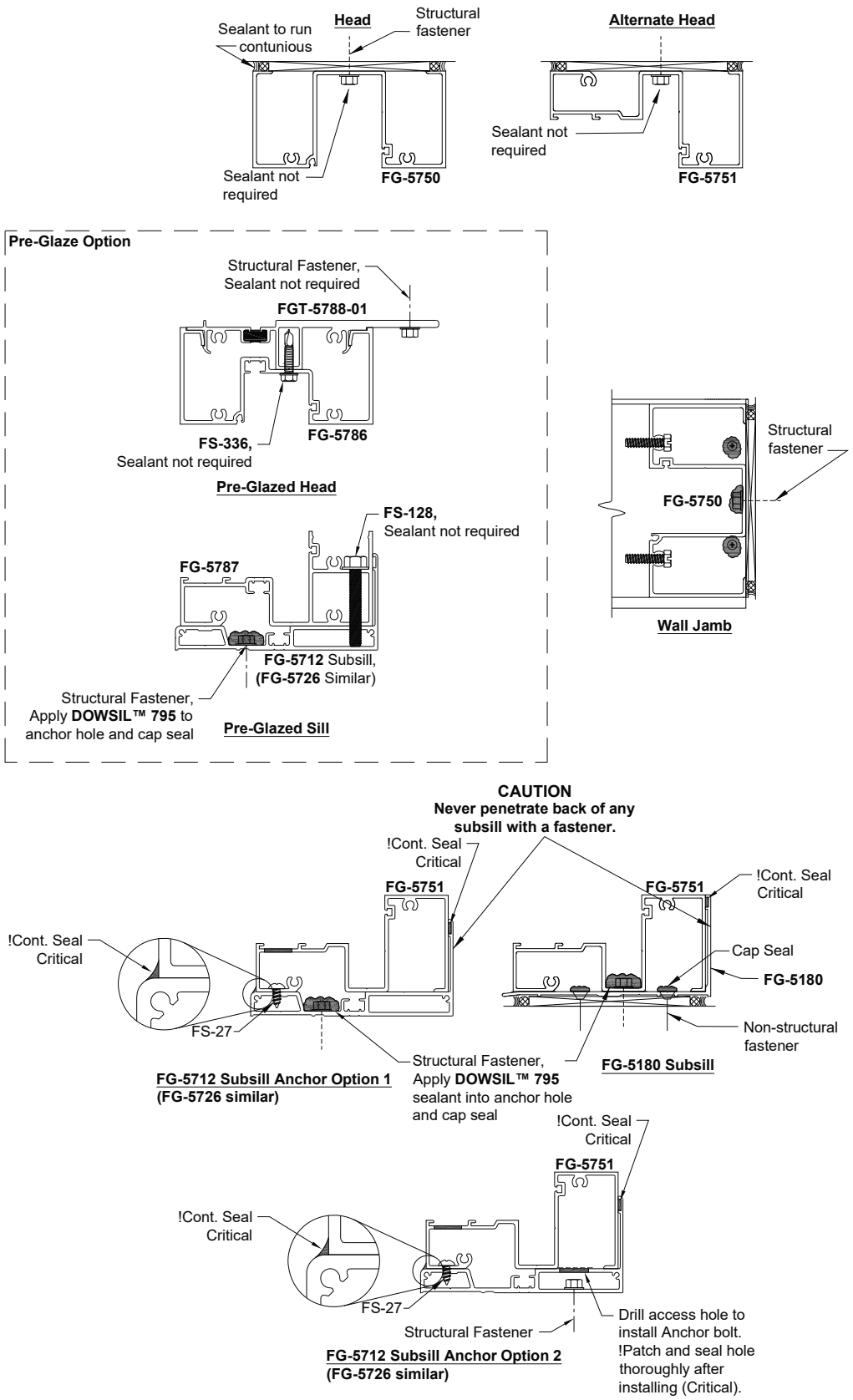

Figure 29: Panelized Frame Attachment to Substrate

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GLAZING

18.0 Glass Sizes for FG-5750 System

Glass Width and Height = D.L.O. + 1-1/8"

Note: Glass tolerances are not addressed in the above formula. Consult glass manufacturer for glass tolerances prior to ordering.

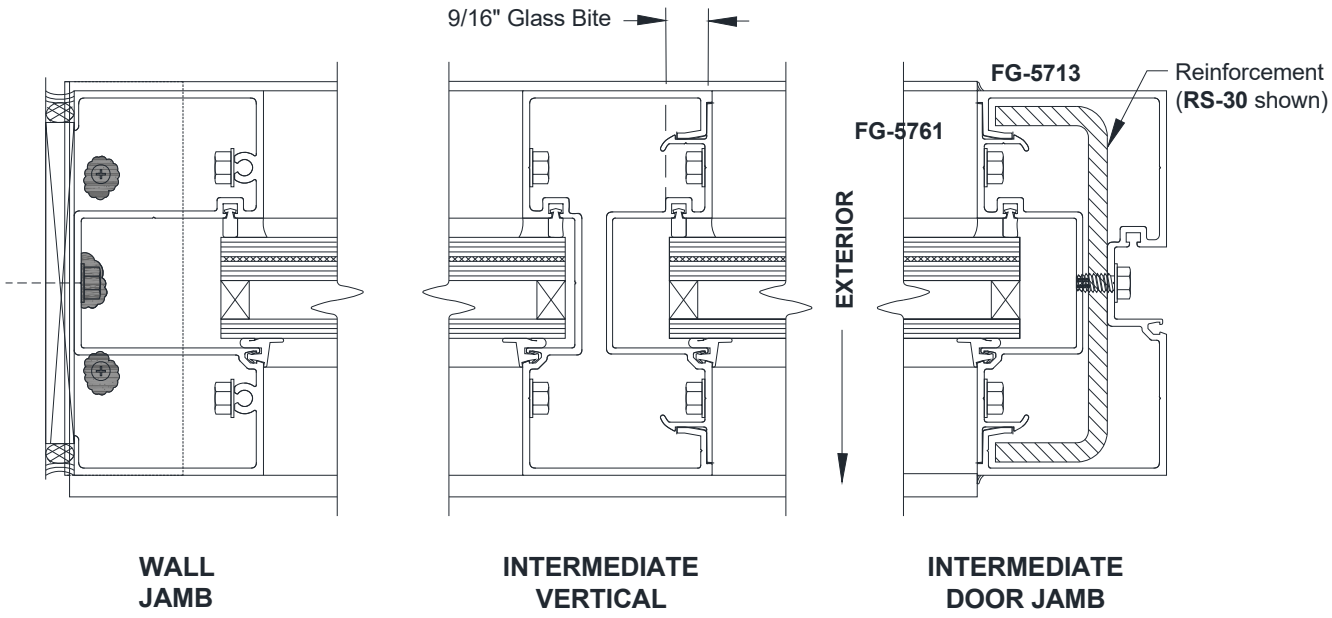

Figure 30: Glass Sizing

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19.0 Preparation of Frame Opening for Glass

19.1 Prepare the frame opening by removing all dirt and debris from the glazing pockets and gasket reglets.

SETTING BLOCKS

19.1.1 Set glass on two setting blocks, part number noted in the shop drawings. The preferred location is at the 1/4 points.

DEFLECTION

19.1.2 If the 1/4 point location causes excessive deflection of the intermediate horizontal, move the setting blocks equally towards the corners of the lite as far as the 1/8 points. The outer end of the block **CANNOT** be closer than 6" to the corner of the glass.

19.1.3 The intermediate horizontal must not exceed 1/8" and a door header is limited to 1/16". Check deadload charts for proper setting block locations.

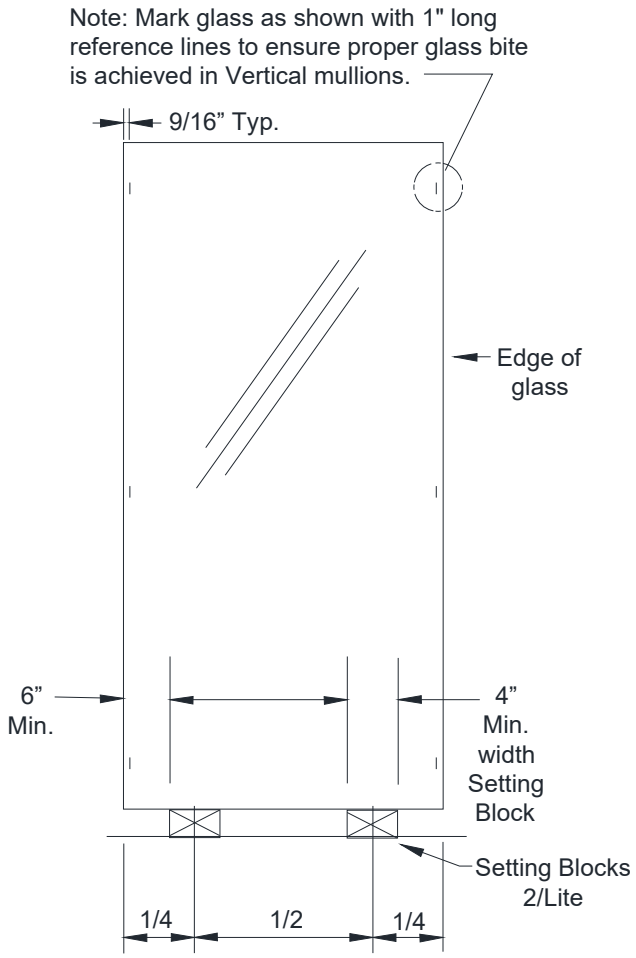

Figure 31: Glass Marking and Setting Blocks

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20.0 Wet Glazing

Note: Wet Glaze Option is only available for Exterior Glazed storefront systems. For Interior Glazed storefront applications, see Section 21.0 Dry Glazing, Page 41.

20.1 Preparing and Installing Interior Gasket

Note: Glaze from bottom up

20.1.1 Remove all debris from glazing pockets to prevent blockage of weeps/drains.

20.1.2 Install **FG-5731** Spacer Gasket around the opening. Vertical gasket runs through.

20.1.3 Install **FG-5721** Setting Chair in sill member and **FG-5743** Setting Block at quarter points of each lite or as specified by glass manufacturer. Reference instructions in *Section 19.0 Preparation of Frame Opening for Glass* on Page 36.

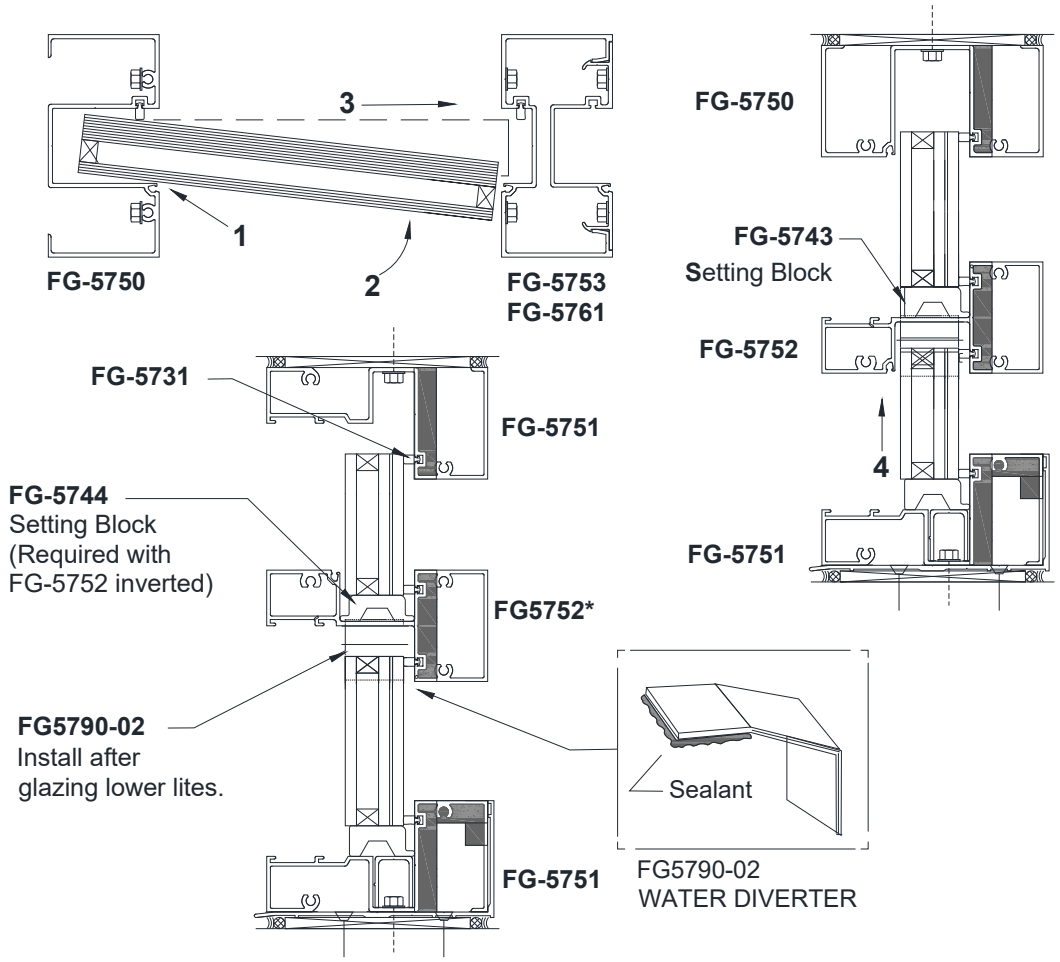

Figure 32: Wet Glaze Glass Installation

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20.2 Setting Glass and Exterior Gasket

Note: Glaze from bottom up

20.2.1 Center glass into opening making sure proper glass penetration is achieved. Rest glass on Setting Blocks and press tightly against **FG-5731** Gasket.

20.2.2 Apply **DOWSIL™ 795** sealant to one end of **FG-5790** Water Diverter and position at each end of Horizontal, as shown in *Figure 32*, after glazing lower lites.

20.2.3 Install **FG-5760** hook-in glass stops as shown in *Figure 33*.

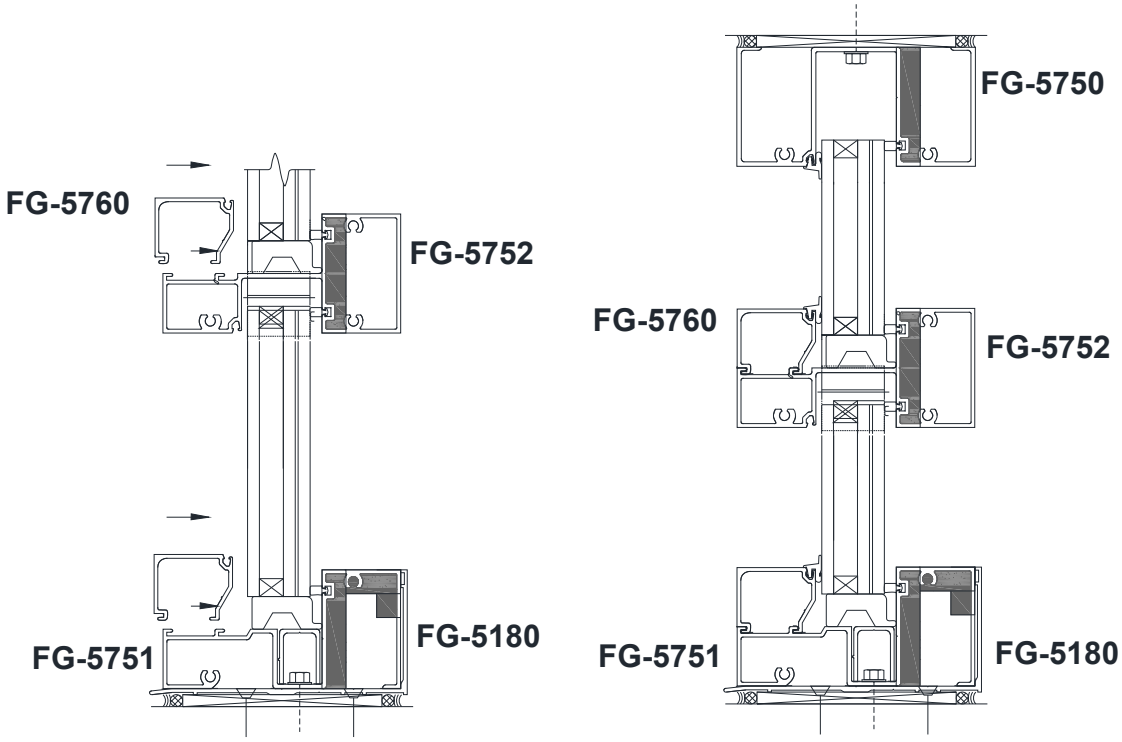

Figure 33: Glass Stop Installation

20.2.4 Verify the glass bite is 9/16".

20.2.5 Cut the **FG-5730** Gasket a minimum of 1/4" per foot longer than the D.L.O., to provide adequate compression, and miter the ends of the gaskets at a 20° angle, as shown in *Figure 34*.

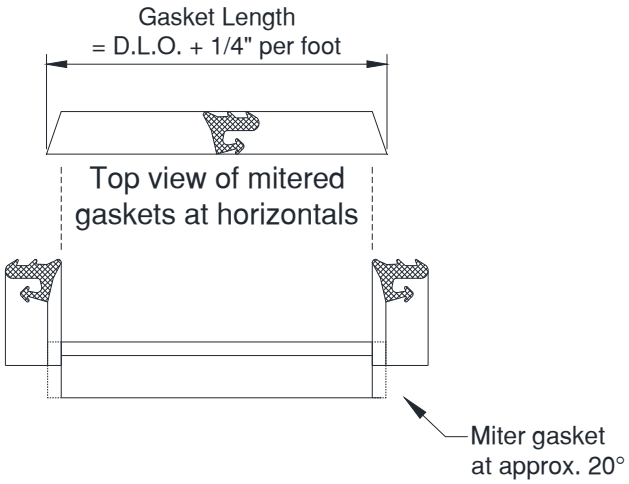

Figure 34: Exterior Gasket Cut Detail

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20.2.6 Install exterior **FG-5730** glazing gaskets starting at the middle of the glass, following the guide in *Figure 35*. ***Do not stretch gaskets to make them fit.***

20.2.7 After gaskets are pressed into place, pull gasket from pocket at corners as shown in Figure *36*, *Detail A*. Clean glass and gaskets a minimum of 2" from each end with isopropyl alcohol.

20.2.8 Apply **DOWSIL™ 995** sealant and push Gasket into reglet, compressing from the corner first, Figure *36 Detail B*. Clean squeeze out immediately.

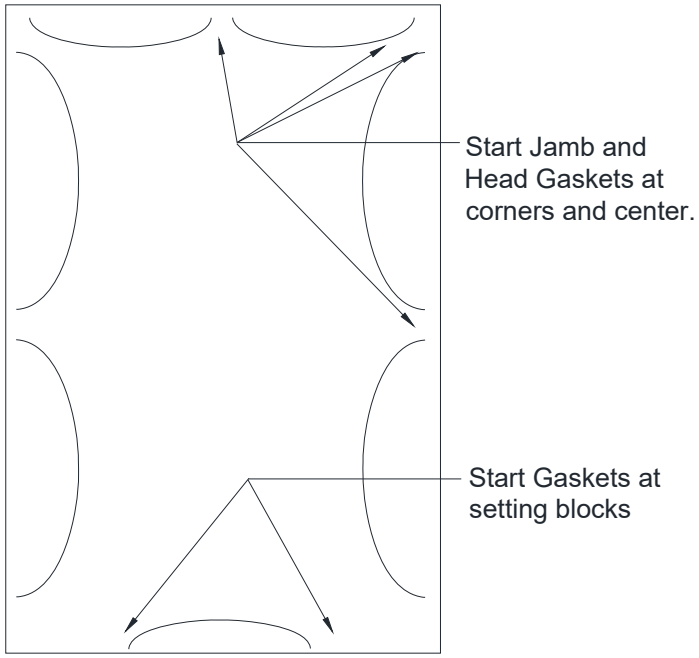

Figure 35: Exterior Gasket Installation

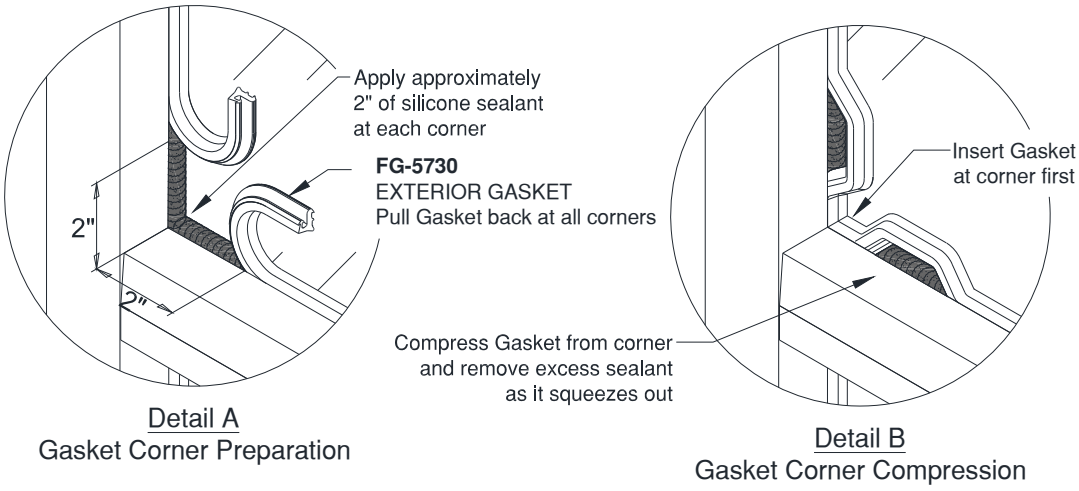

Figure 36: Exterior Gasket at Corners

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20.3 Application of Interior Structural Sealant

20.3.1 Mask off glass and aluminum with 1" wide (minimum) low adhesion masking tape. Working a single D.L.O. at a time, fill cavity around full perimeter of D.L.O. with **DOWSIL™ 995** sealant as shown in *Figure 37*; care should be taken not to leave any voids and eliminate air bubbles in sealant. **Immediately tool**, creating a finished joint with a beveled/curved joint surface

20.3.2 Remove masking tape before sealant skins, taking care not to damage tooled sealant.

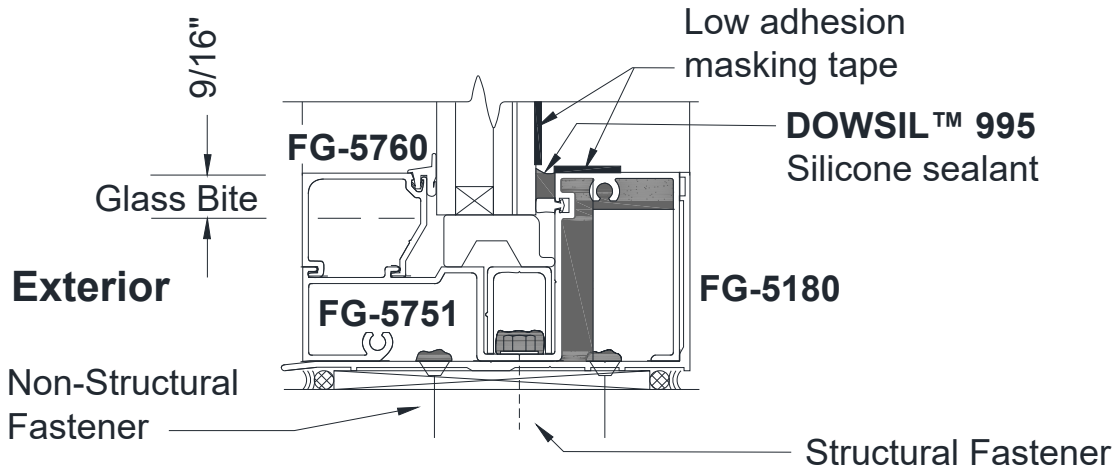

Figure 37: Wet Glaze Interior Sealant Detail

21.0 Dry Glazing

21.1 Preparing and Installing Interior Gasket

Note: Glaze from bottom up

21.1.1 Remove **FG-5732** Gasket from roll and allow to relax in a protected location overnight. Cut Gasket per material cut list on Page 10.
Note: When installed, vertical Gasket runs through while horizontal Gasket butts into the vertical Gasket. See Figure 38 for representation of the Gasket corner.

21.1.2 Remove all debris from glazing pockets to prevent blockage of weeps/drains.

21.1.3 Install **FG-5732** interior Gasket prior to glazing, starting gaskets at the middle of the glass opening and working out toward the corners.

21.1.4 After Gasket is installed, pull Gasket from pocket at corner junctions a minimum of 2". Clean Gasket and framing surfaces with isopropyl alcohol.

21.1.5 Apply sealant in the raceway per the locations indicated in, *Figure 38*, and set the vertical Gasket first. Apply sealant at the connection point of the horizontal Gasket and the vertical Gasket before setting horizontal Gasket. Clean any squeeze out immediately.

21.1.6 Install Setting Blocks per shop drawings. Reference instructions on Page 36.

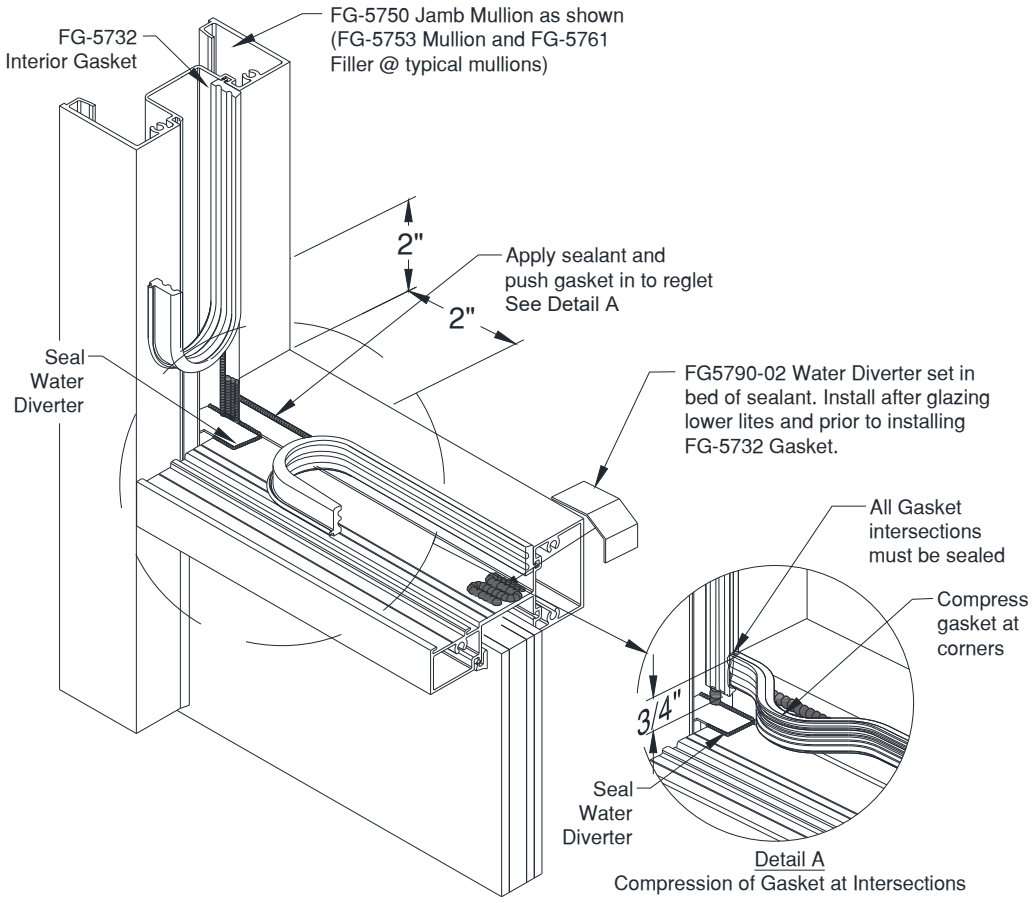

Figure 38: Dry Glaze Interior Gasket Installation

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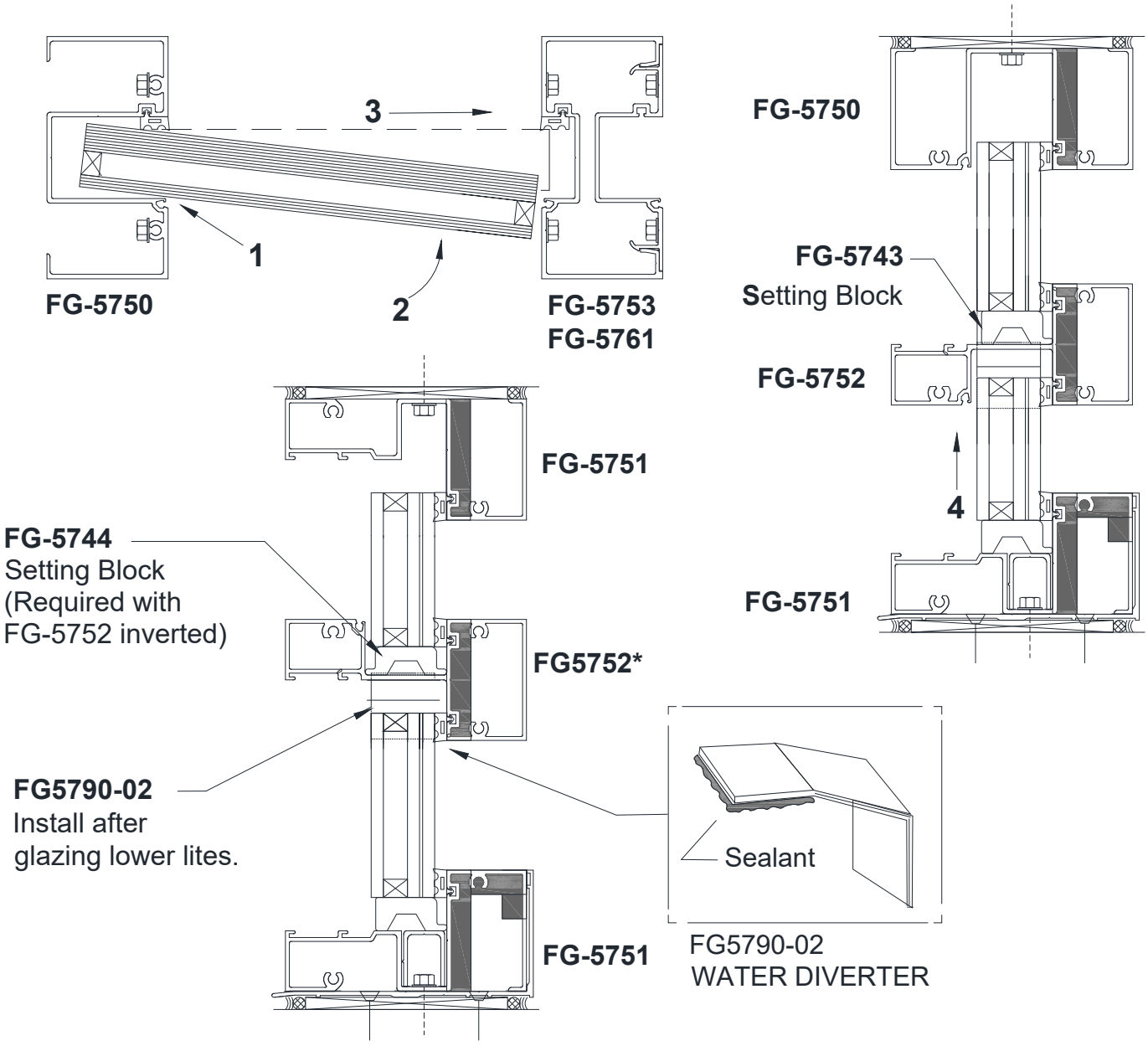

Figure 39: Dry Glaze Installation, Exterior Glaze

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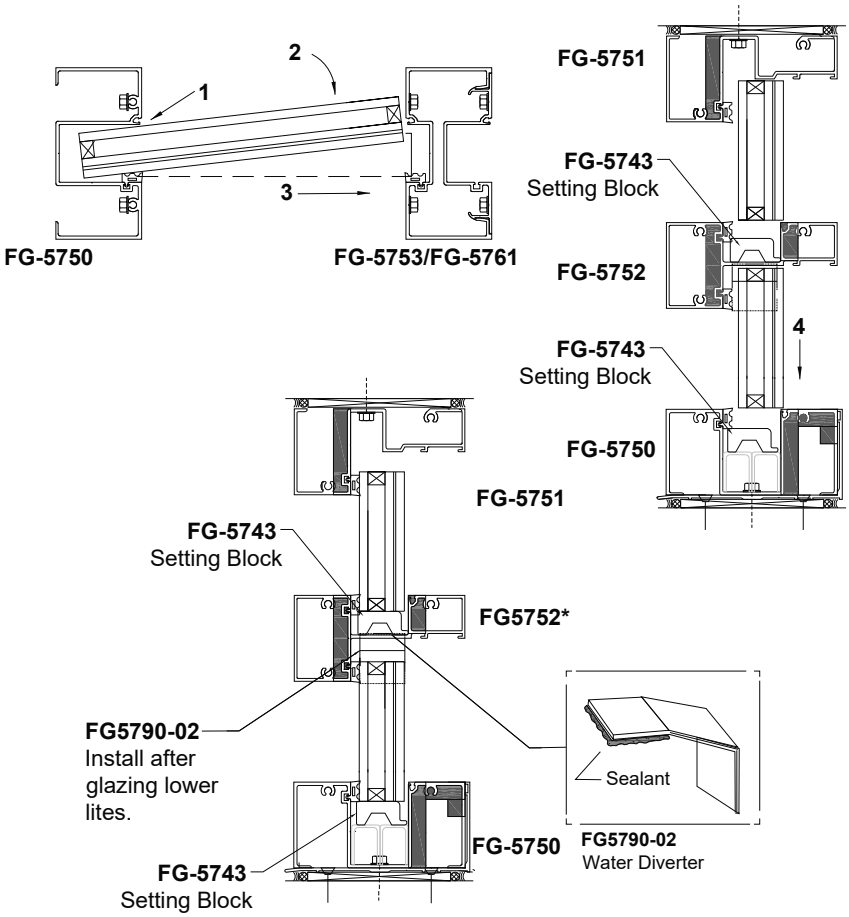

Figure 40: Dry Glaze Installation, Interior Glaze

21.2 Setting Glass and Exterior Gasket

21.2.1 Center glass into opening making sure proper glass penetration is achieved with a 9/16" glass bite. Rest glass on Setting Blocks and press tightly against **FG-5732** Gasket.

21.2.2 Install Water Diverters after lower lite is in position. Place a bed of sealant on the end of the Horizontal and place the Water Diverter per *Figure 38*.

21.2.3 Install **FG-5760** hook-in glass stops as shown in *Figure 41.*

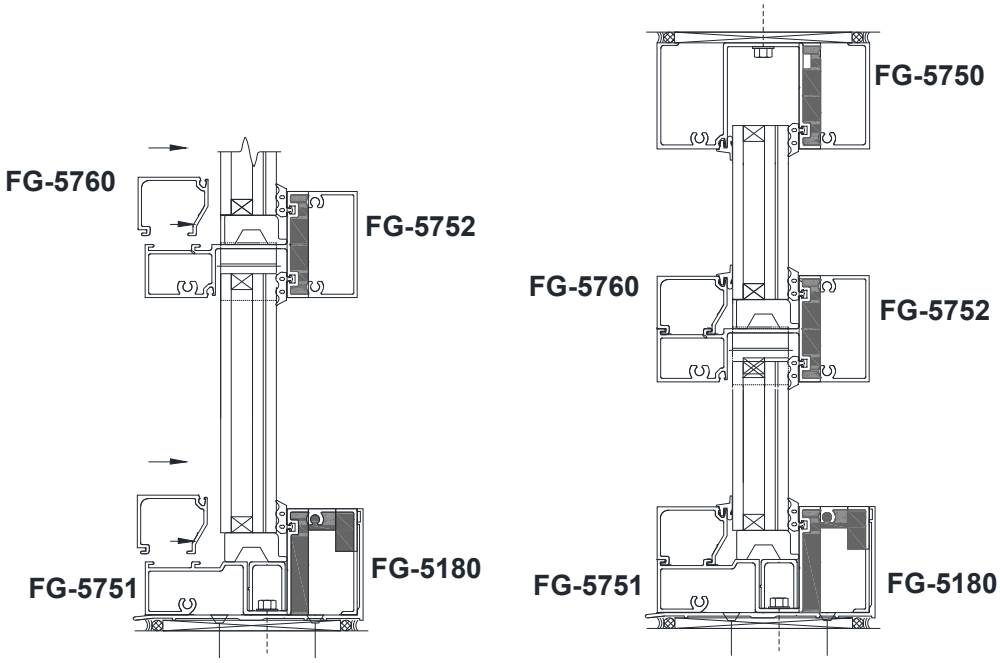

Figure 41: Dry Glaze Glass Stop Installation, Exterior Glaze

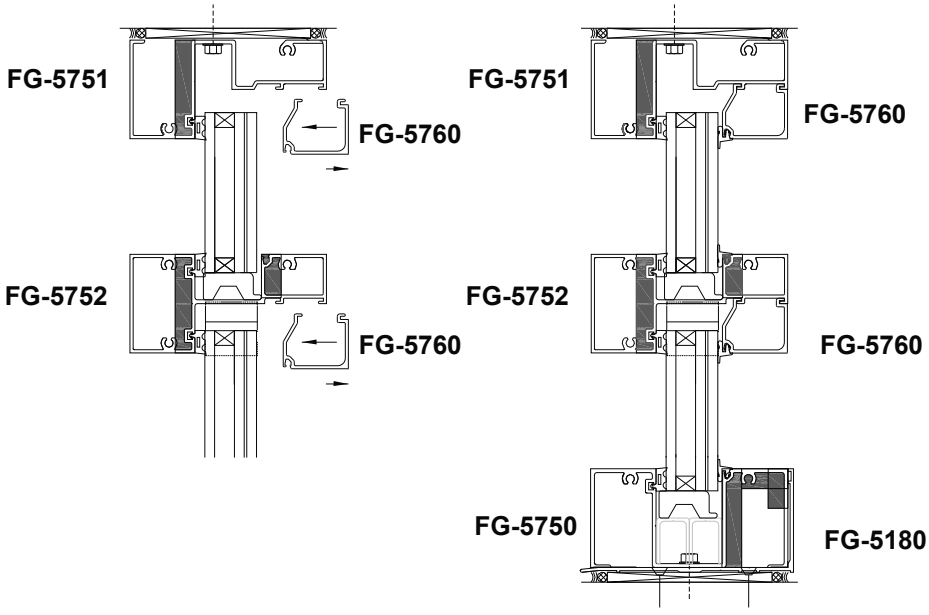

Figure 42: Dry Glaze Glass Stop Installation, Interior Glaze

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21.2.4 Cut the **FG-5730** Gasket a minimum of 1/4" per foot longer than the D.L.O., to provide adequate compression, and miter the ends of the gaskets at a 20° angle, as shown in *Figure 43.*

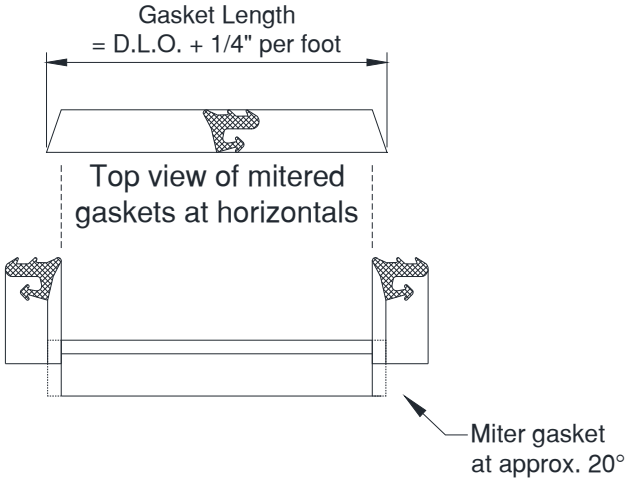

Figure 43: Exterior Gasket Cut Detail

21.2.5 Install exterior **FG-5730** glazing gaskets starting at the middle of the glass. ***Do not stretch gaskets to make them fit.***

21.2.6 After gaskets are pressed into place, pull gasket from pocket at corners as shown in *Figure 44*, *Detail A*. Clean glass and gaskets a minimum of 2" from each end with isopropyl alcohol.

21.2.7 Apply **DOWSIL™ 795** sealant and push Gasket into reglet, compressing from the corner first, *Figure 44 Detail B*. Clean squeeze out immediately.

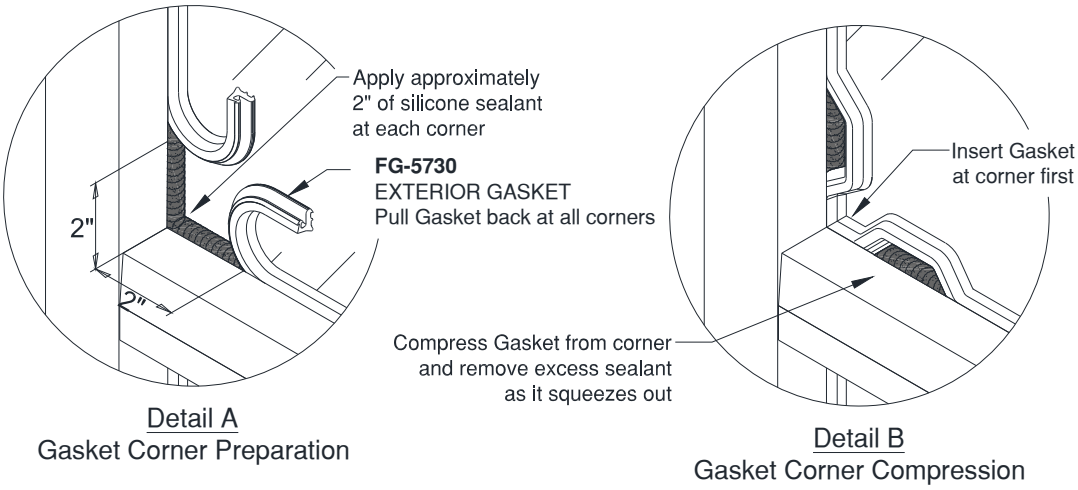

Figure 44: Exterior Gasket at Corners

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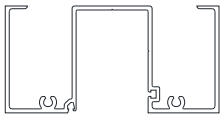
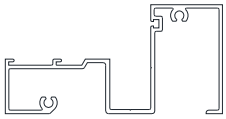
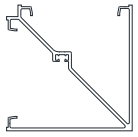
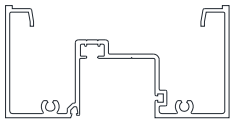
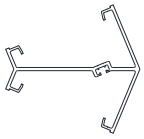
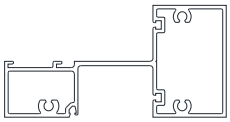
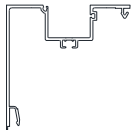
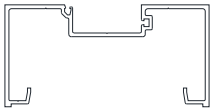
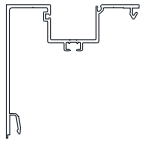
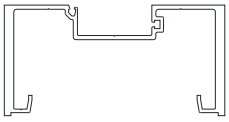
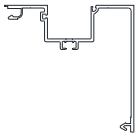
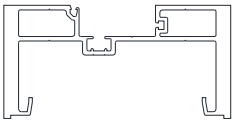
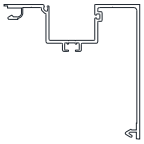
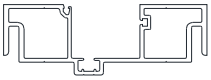
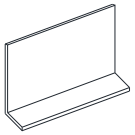
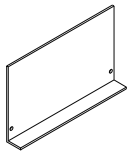
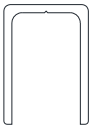
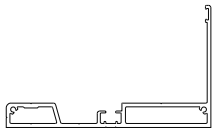
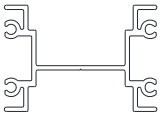
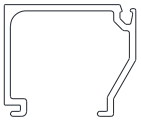
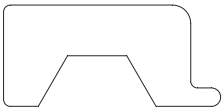
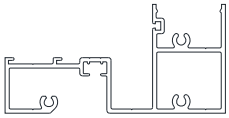
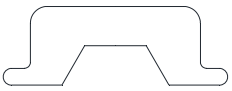
PARTS LIST

Parts not shown to scale.

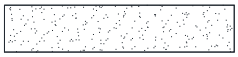
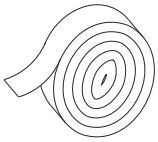
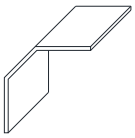
Extrusions

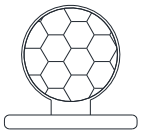
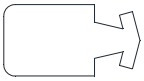
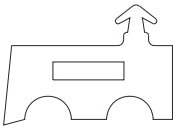
FG-5750 	Head / Jamb	FG-5783 	Expansion Mullion
FG-5751 	Head / Sill	FG-5706 	90° Corner Mullion
FG-5786 	Pre-Glazed Head	FG-5707 	135° Corner Mullion
FG-5752 	Intermediate Horizontal	FG-5778 	90° Corner Mullion 5" Post
FG-5753 	Mullion	FG-5779 	90° Corner Mullion 5" Post
FG-5754 	Heavy Mullion	FG-5784 	90° Corner Mullion
FG-5774 	Heavy Mullion	FG-5785 	90° Corner Mullion
FG-5782 	Expansion Mullion	FG-5715 	Flat Filler

Extrusions (cont.) / Parts & Accessories

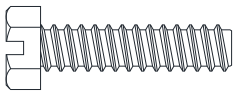
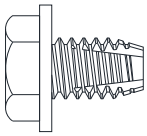
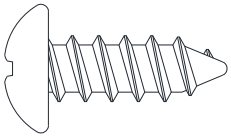
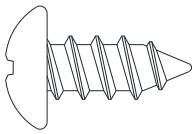
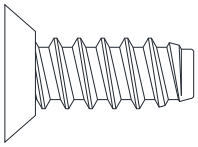
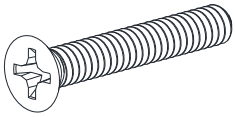
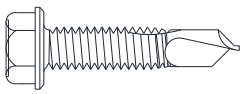
FG-5259 	Pre-Glazed Sill Filler	FGT5788-01 	Pre-Glazed Head Anchor
FG-5761 	Mullion Filler	AN101-01 	Subsill End Dam for FG-5180 or FG-5712
FG-5180 	Subsill	AN-104-01 	Subsill End Dam for FG-5726
FG-5712 	Subsill	FG5721-01 	Setting Chair
FG-5726 	Full Height Subsill	FG5714-01 	Shear Block
FG-5760 	Glass Stop	CH-55 	Channel for 5" Jamb
FG-5777 	Pocket Filler	FG-5743 	Setting Block
FG-5787 	Pre-Glazed Sill	FG-5744 	Setting Block

Parts & Accessories (cont.) / Gaskets

GP-150 	'W' Side Block
SM5601 	Joint Sealant Tape 1/8" x 1/2"
UW-466 	15151 - 100' Roll 15126 - 1' Piece
FG5790-02 	Water Diverter
FG-5720 	Aluminum Reinforcement
RS-30 	Steel Reinforcement

CW-998 	Bulb Gasket
FG-5730 	Exterior Glazing Gasket
FG-5731 	Interior Spacer Gasket Wet Glaze Option
FG-5732 	Dry Glaze Gasket

Fasteners

FS-8 	#14 x 1" HHSTS Assembly Screw	FS-354 	1/4" – 20 x 3/8" HWH Type F
FS-23 	#6 x 3/8" PRH		
FS-27 	#12 x 1/2" PPH		
FS-56 	#10 x 1/2" UCPFH SMS		
FS-58 	#10 x 1" PFH		
FS-96 	#12 x 2-1/2” PPH		
FS-128 	5/16"-24 x 2” HWH MS		
FS-336 	1/4-20 x 1-1/8" HWH KWIKFlex		

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