Oldcastle BuildingEnvelope®

ArmorDefend™ 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.

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Version: 2024-0604

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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® ArmorDefend™ Storefront (2" x 4 ½") is a single-sourced, forced-entry resistant glass and glazing school security system that ensures the frame and glass work together to protect what matters most. ArmorDefend™ storefront was designed and tested to work in unison with ArmorGarde™ or ArmorGarde™ Plus glass to meet the stringent requirements of ASTM E 2395, *Standard Specification for Voluntary Security Performance of Window and Door Assemblies with Glazing Impact*; ASTM F 1233, *Standard Test Method for Security Glazing Materials and Systems*; and the ballistic and forced entry requirements of 5-aa1. Proper use of this system will assure optimum results in erection and long-term performance. ArmorDefend™ was designed and tested to work in unison with ArmorGarde™ or ArmorGarde™ Plus glazing for delayed forced-entry security applications for schools, daycares, pharmacies, luxury brands, jewelers, wineries, restaurants, and other business where security is a priority.

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 cover the most common conditions.

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.

INSTALLER QUALIFICATIONS

These architectural framing systems are intended for fabrication, assembly, sealing, installation and glazing by professionals with appropriate knowledge and experience of the system(s) and their incorporation into various building conditions.

STRUCTURAL SEALANTS

The fabrication and installation of a structural silicone-glazed (SSG) or wet glazed system requires more technical knowledge and experience than is required for a conventional pressure-glazed or dry glazed system. The glazing contractor should take all steps as outlined and required by the structural silicone sealant manufacturer, glass fabricator, framing manufacturer, and the project professional engineer of record as well as follow local building code requirements and industry best practices to ensure the proper installation and safe performance of the SSG system.

The glazing contractor for each project needs to ensure compliance with each step, including, but not limited to, design reviews, formal adhesion testing, formal compatibility testing, project specification compliance, validating procedures, field testing, and quality control validation of installed product and surrounding conditions.

Testing of component materials for use in a SSG or wet glazed system is mandatory to fulfill project specifications and warranty requirements and must be submitted by the glazing contractor to the structural silicone manufacturer. All materials that comprise the structural silicone joint, such as the framing system (with the job-specific finish) and job-specific glass must be tested by the structural silicone manufacturer for compatibility and adhesion. All other accessory materials in contact with the structural silicone, such as setting

blocks, spacers, gaskets, sweeps, air seals and expansion joints, must also be submitted to the silicone sealant manufacturer for compatibility testing.
To ensure that nothing has changed in formulation or chemistry since the initial tests, subsequent testing during periodic time frames of the project is to be conducted to confirm continued acceptance of the material for use on the project.

To ensure the structural performance and integrity of the insulating glass unit (IGU), the glazing contractor must submit the project shop drawings to the glass fabricator to obtain approval for use of their product(s) in any 2, 3 or 4-sided SSG applications.

Quality control procedures for field glazing are to be increased beyond those required for shop glazing. Job conditions will normally have dust, dirt, and other construction debris on the surfaces where structural silicone is to be applied. Great care should be exercised in cleaning and preparing these surfaces for silicone application. The recommendations of the silicone sealant manufacturer are to be strictly enforced and followed. The fabrication and installation of the SSG system and its components, whether shop or field glazed, should be governed by a quality control program, and all steps, procedures, and test reports should be documented throughout the project.

Prior to installation of any SSG system, refer to industry documents (e.g., AAMA Curtain Wall Design Guide Manual, ASTM C1401-14, and AAMA SSGDG-17) for detailed instructions and recommendations.

THE GLAZING CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR ENSURING COMPLIANCE WITH THE ABOVE AND ASSUMES FULL LIABILITY FOR ANY ISSUES ARISING FROM NONCOMPLIANCE.

DOWSIL™ 995 Silicone Structural Sealant was used on the wet glazed version of ArmorDefend™ test specimen for glass to metal adhesion.

GLAZING PRACTICES

The air and water performance of the framing system is directly related to the completeness and integrity of the installation process, including but not limited to the assembly seals of the framing joinery, the installed glazing gaskets, and the alignment of the framing joinery glazing plane. Before glazing, verify the glazing pocket width and glazing infill thickness, as both must be in tolerance to assure adequate edge pressure and to achieve the desired air and water performance levels. (In general, framing systems utilizing 1" insulating glass are designed to accommodate a thickness variance of +/- 1/32"). Note: Excessive pressure can cause glass breakage and/or IGU failure. Consult the glass manufacturer for their recommended edge pressure per lineal inch.

To achieve the designed and tested air and water performance, best practices include:

- Glazing gaskets should be cut ¼" longer per foot, and lay flat, preferably for 24 hours
- Gaskets should be cut as single monolithic pieces and "crowded" during their installation to avoid corner gaps caused by post-installation relaxation
- The interior glazing gasket should be installed so as to avoid stretching, buckles, or tears
- Corners must be cut square, and at a slight angle when required to conform to the bevel on the intersecting gasket; sealed and butted together.
- Gasket corner joinery must also be crowded, and sealant applied onto the gasket contact frame surface and into gasket reglet raceway where applicable.
- Gasket corner seals are to be done just prior to installing glass, while the sealant is still wet and uncured, and ensure exterior gaskets are installed so as to place the glass into it's final in service condition and allow the sealant to conform to optimum configuration. Note: If the sealant cures prior to glazing, the cured sealant could create excessive edge pressure onto the glass and has the potential to cause glass breakage.
- The glass must be checked for squareness, size dimension, and thickness along the edges paying attention to any variances from center edge to corner edge

- Check the placement of the installed glass and verify there is proper edge bite into the pocket, and proper edge clearance from framing elements

After sealant has set and a representative amount of the wall has been installed and glazed (250 square feet or more) run a water hose test in accordance with AAMA 501.2 specifications to check installation. On large projects the hose test should be repeated during the glazing operation. Consult and follow NGA's GANA Manual and FGMA Glazing Manual for proper glazing technique and procedure.

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.

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.
- 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.
- 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.

CLEANING

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 or a petroleum product, such as white gasoline, kerosene, or distillate. No abrasive agent shall be used.

THERMAL IMPROVEMENT SUGGESTIONS

To maintain or improve wall installation, the following items should be considered:

- Blinds or drapes prevent warm air from washing the window.
- Warm air ventilators too far from window will not adequately wash the window with air to prevent condensation.
- In extreme conditions, the fan of the heating systems should not cycle on and off but run continuously.
- Some heating systems have a water injection feature that can raise humidity levels. The higher the humidity levels the more likely condensation or frost will form. Raising the temperature and reducing humidity will usually solve this problem.
- On rare occasions, an extremely cold storm may cause frost to appear on the glass or framing. A space heater and electric fan blowing along the plane of the window wall can reduce or eliminate this temporary condition.

FABRICATION SUGGESTIONS

Oldcastle BuildingEnvelope® recommends the use of our EZ Punch tooling for faster and more accurate fabrication of wall systems. If hand fabricating the mullions, drill fixtures are available to improve accuracy. Fabrication instructions for use of these drill fixtures are described within this manual on page 10.

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.

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. For the rough opening's width, measure the top, middle, and bottom of the opening. For the rough opening's height, measure the left, center, and right side of the opening.

Measure width of rough opening.

A. Measure opening at bottom.
B. Measure opening at center.
C. Measure opening at top.

Measure height of rough opening.

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.

When determining the Frame Width and Frame Height, allow 1/4" minimum clearance for shimming and caulking around the perimeter of the frame. At the Head Joint, allow a minimum of 3/8" space for the FG-3413 Sill Receptor.

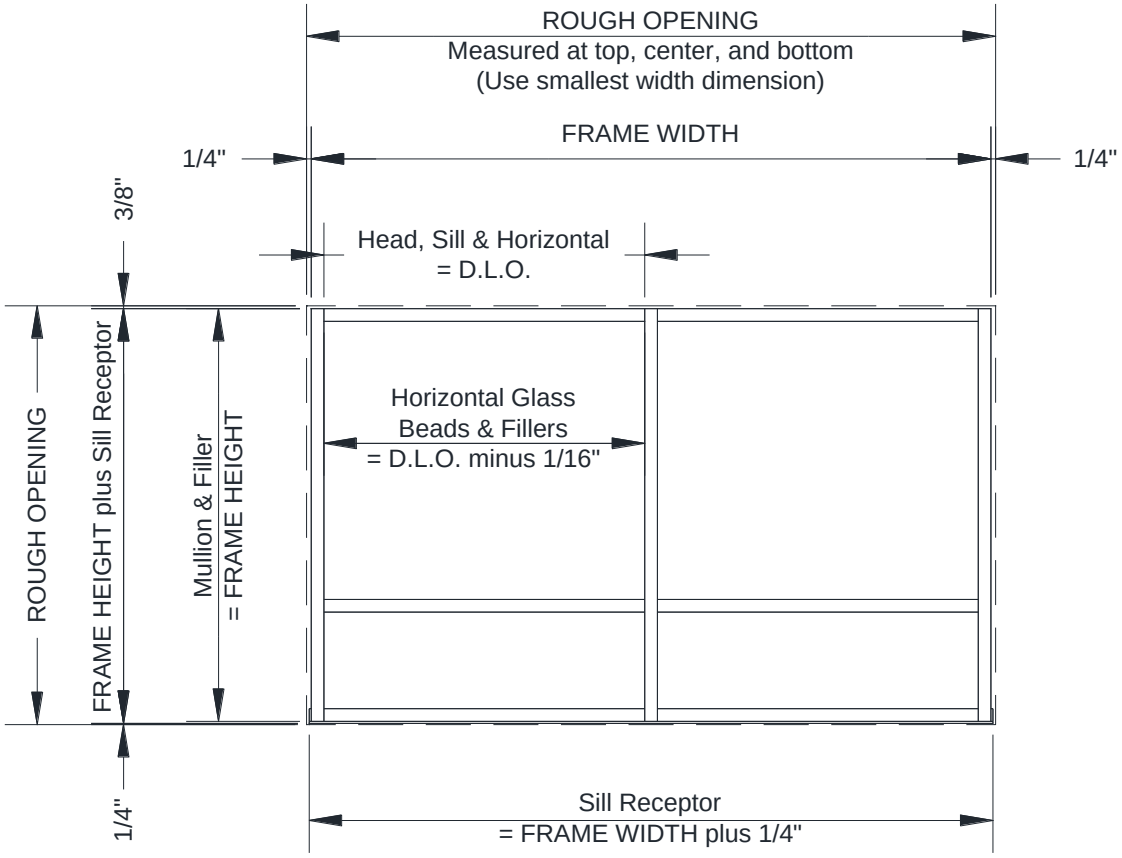

Figure 1: Measuring Rough Opening, Guide without Door

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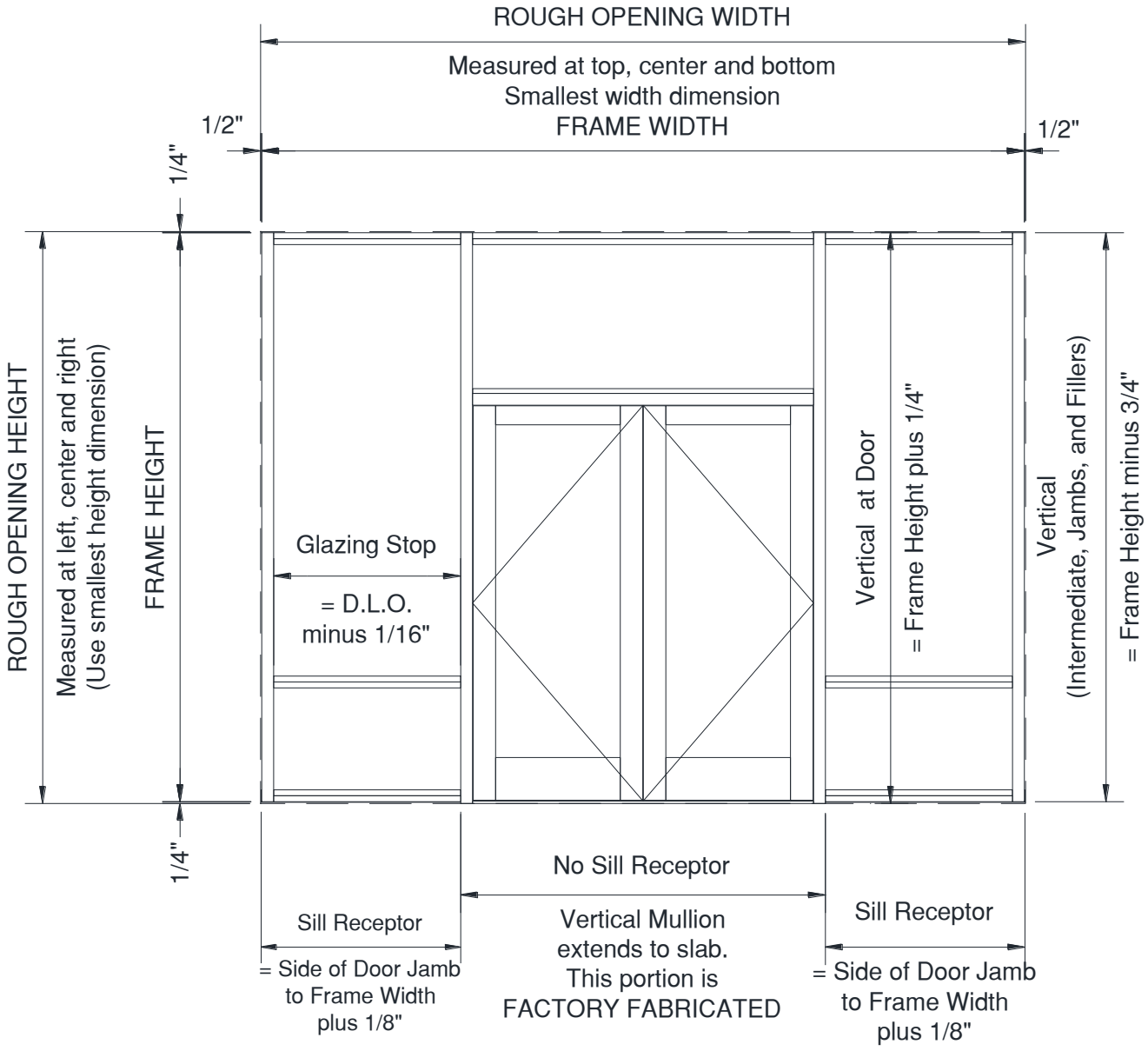

Figure 2: Measuring Rough Opening, Guide with Door

2.0 Cut Material to Length

Framing Members

Frame without Entrance

FG-3413 Sill Receptor	Frame Width plus (+) 1/4"

Frame At Entrance Sidelite

Note: Sill & Sill Receptor to butt tight against Door Jamb.

FG-3413 Sill Receptor	Door Jamb to Frame Width plus (+) 1/4"

Verticals

FG-2122 and FG-2188 and FG-3514 Filler FG-3328 and FG-3329 Expansion Vertical FG-3495 Jamb FG-3495 and FG-3595 Vertical	Rough Opening minus (-) 1/2" minus (-) Head Joint minus (-) Sill Joint

Horizontals

FG-2122 and FG-2188 and FG-3514 Filler FG-3144 Glass Stop	D.L.O. minus (-) 1/16"
FG-3197 and FG-3495 Horizontal FG-3198 Sill FG-3495 Head	D.L.O.

Accessories: Dry Glaze

FG-1133 Horizontal Gasket	D.L.O. plus (+) 1/4" per foot
FG-1133 Vertical Gasket	D.L.O. plus (+) 1/4" per foot plus (+) 1"

Accessories: Wet Glaze

FG-1133 Horizontal Gasket GP-147 and GP-148 Horizontal Spacer Gasket	D.L.O. plus (+) 1/4" per foot
FG-1133 Vertical Gasket GP-147 Vertical Spacer Gasket	D.L.O. plus (+) 1/4" per foot plus (+) 1"

3.0 Mullion Fabrication Using Drill Fixture

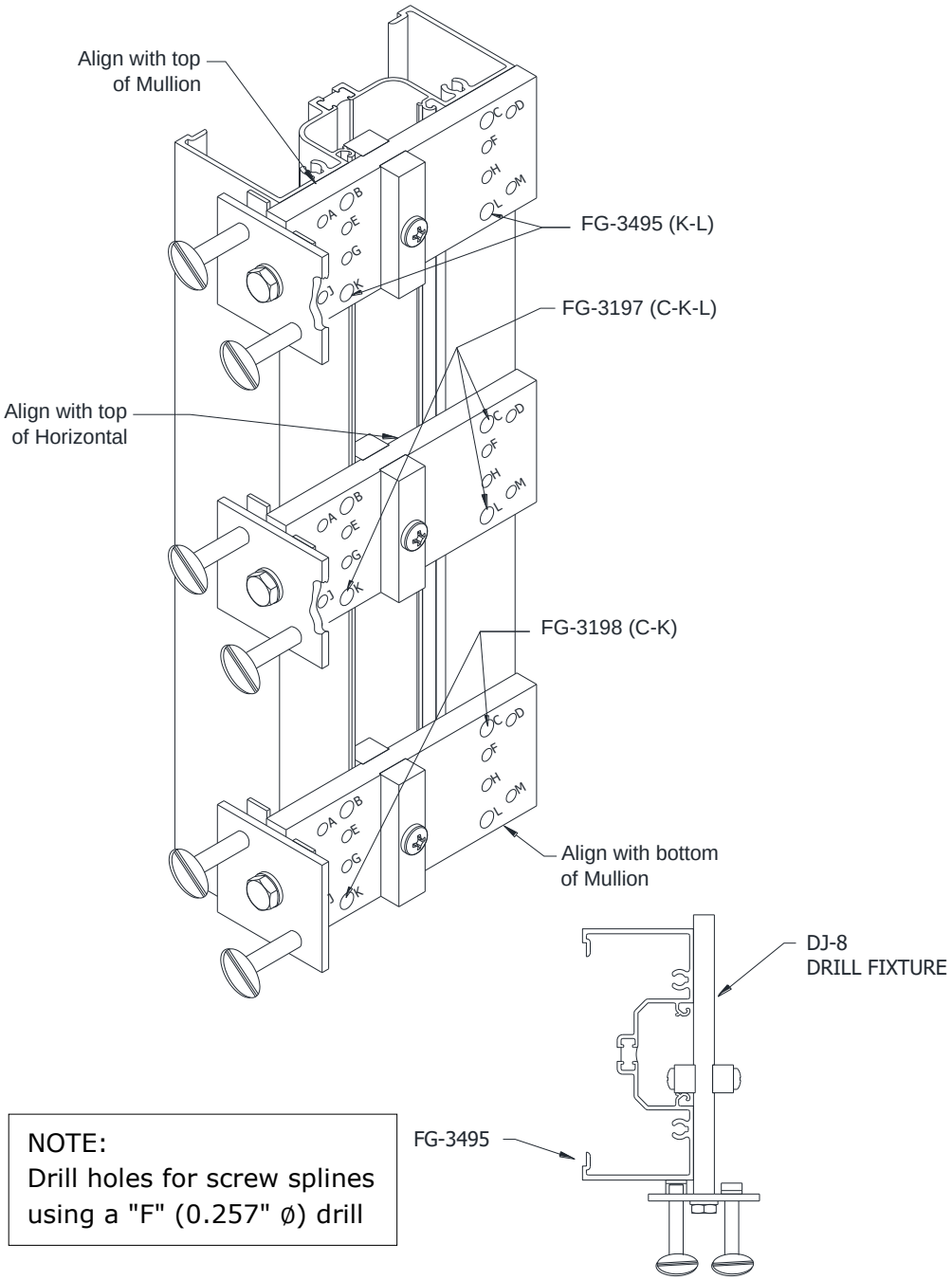

Figure 3: DJ-8 Drill Fixture

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SILL ASSEMBLY / INSTALLATION

4.0 Installation for Thermal Performance

NOTE: For the greatest thermal benefit from ArmorDefend™ storefront, review the details below.

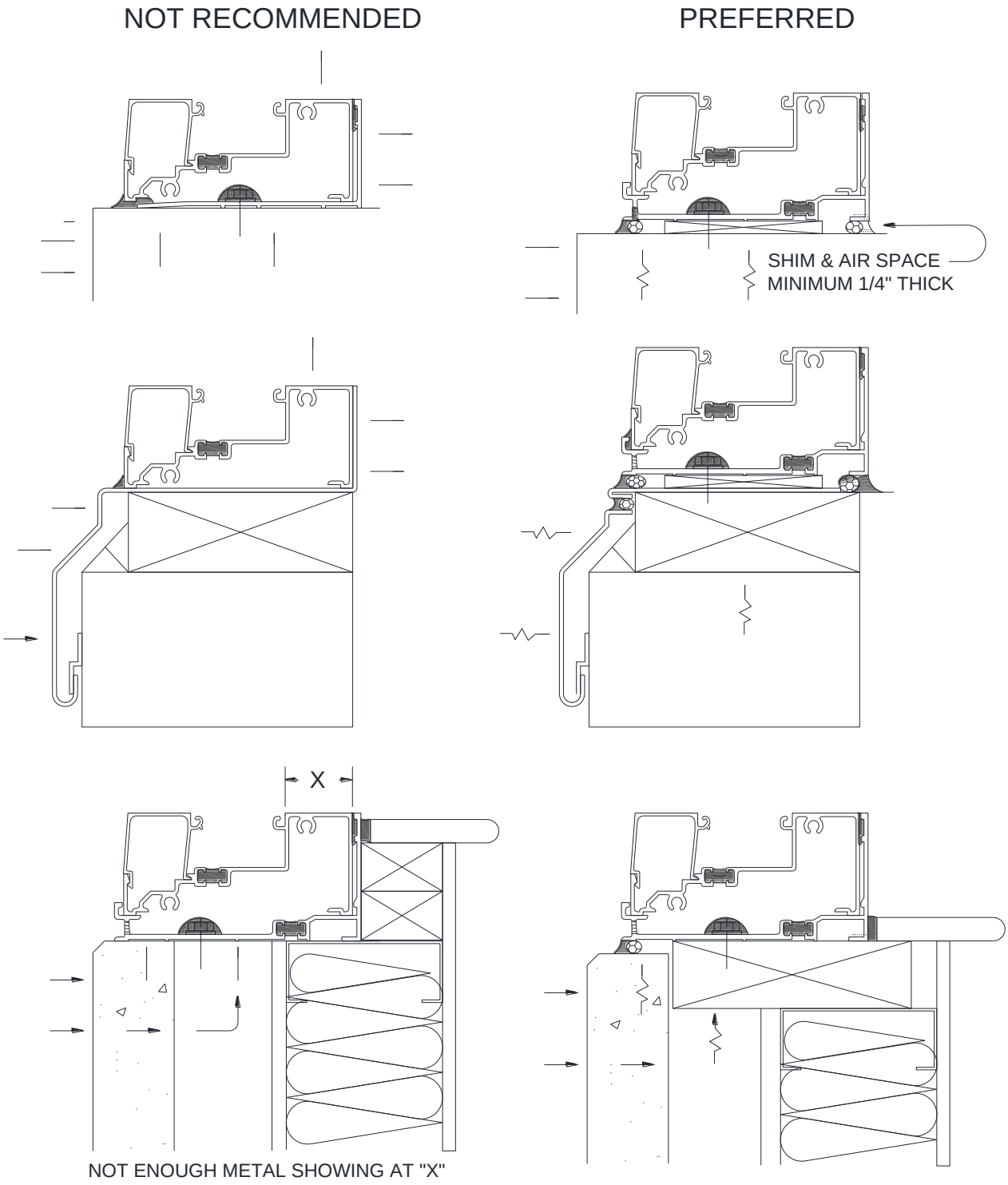

Figure 4: Thermal Performance Installation Recommendations

5.0 Sill Receptor End Dam Assembly

Apply sealant to FG-3413 Sill Receptor and attach FG-3000-FP-78 End Dam with (2) FS-320.

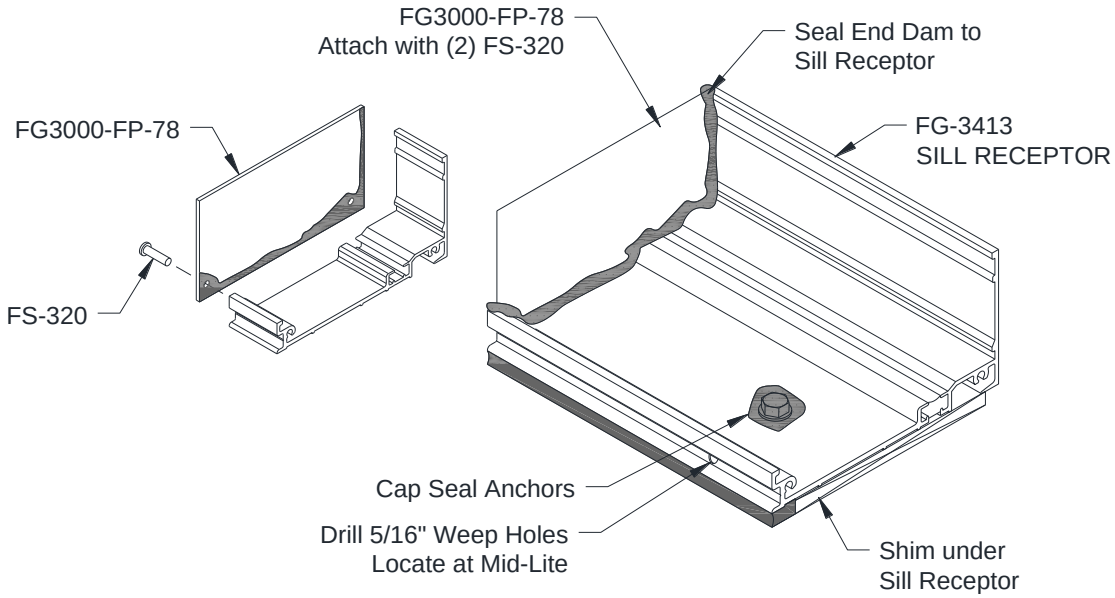

Figure 5: Sill Receptor End Dam

6.0 Sill Receptor End Dam Installation

6.1 Position fabricated Sill Receptor with End Dams into opening. Center into opening allowing shim space at Jambs. Shim to level.

6.2 Anchor Sill Receptor within 4" from either side of intermediate mullions. Anchor size and frequency should be determined by structural requirements. Cap seal flashing anchors as shown in *Figure 5*.

6.3 Drill 5/16" Weep Holes located at each Mid-Lite.

6.4 Apply sealant to Silicone Splice Sheet at Sill Receptor splices, as shown in *Figure 6*, with non-skinning, non-hardening sealant. Fill all breaks in Flashing, including the vertical splice joint and under the Splice.

6.5 Run a continuous bead of sealant along the groove in the front and back legs of the Sill Receptor and around the splice joint, see *Figure 6*, and immediately install Frame. Remove excess sealant after frame is installed.

NOTE:

- Sill Receptor shall be installed level and should never tilt towards interior of building.
- The FG-3413 Sill Receptor is designed to withstand a maximum end reaction of 600 lbs.
- Splice Sill Receptor at mid-lite.

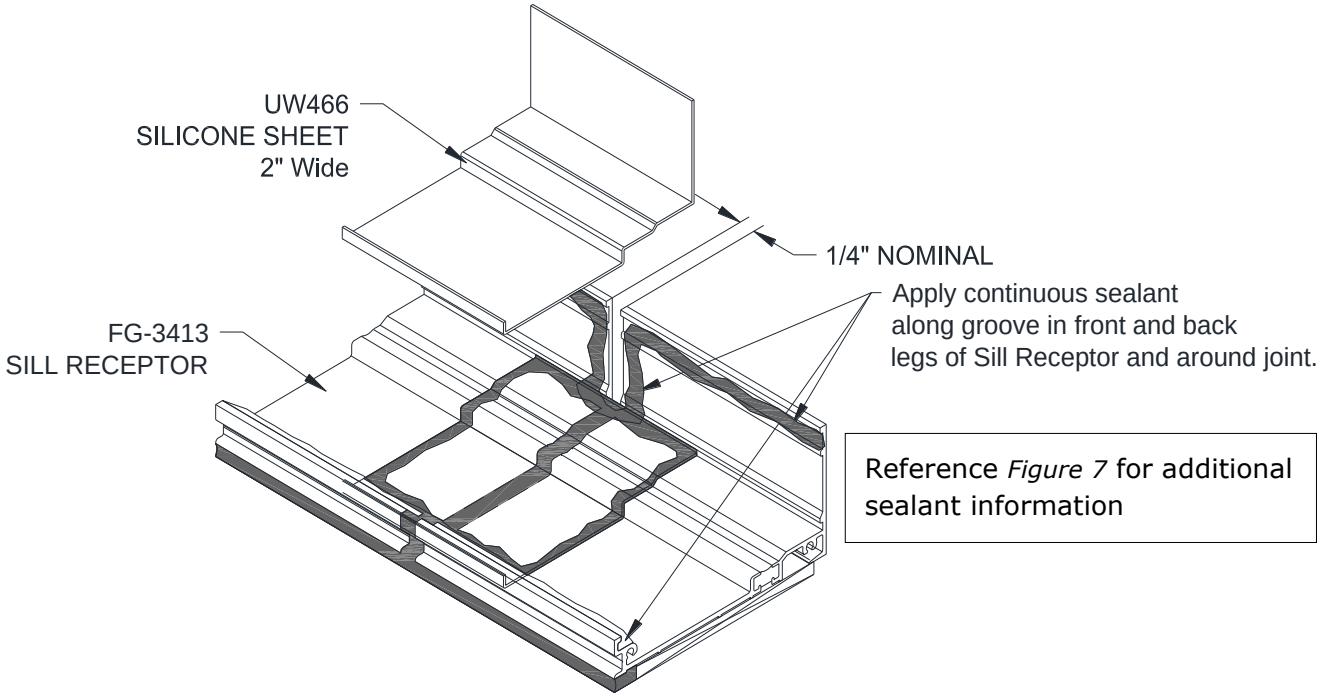

Figure 6: Sill Receptor Splice Installation and Sealant

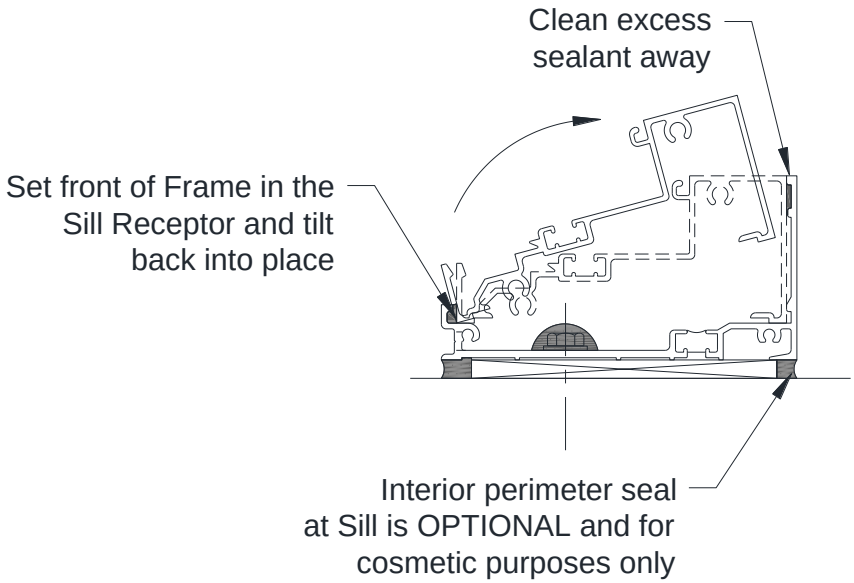

Figure 7: Sill Installation Into Sill Receptor

7.0 Sidelite Sill Receptor Installation at Door Frame

When entrances occur, install entrance frames first. Sill Receptor butts against door jamb(s). The Sill Receptor abutting the Door Jamb does not require an End Dam.

Field Note: The bottom of the inside of the Door Jamb Mullion must be sealed to the substrate and the end of the Sill Receptor must also be sealed.

NOTES:

A. Use Shear Blocks as shown in the ArmorDefend™ entrance installation manual to secure Horizontals to tubular frames.
B. Door Frame is anchored by fasteners through threshold and Door Frame Header.

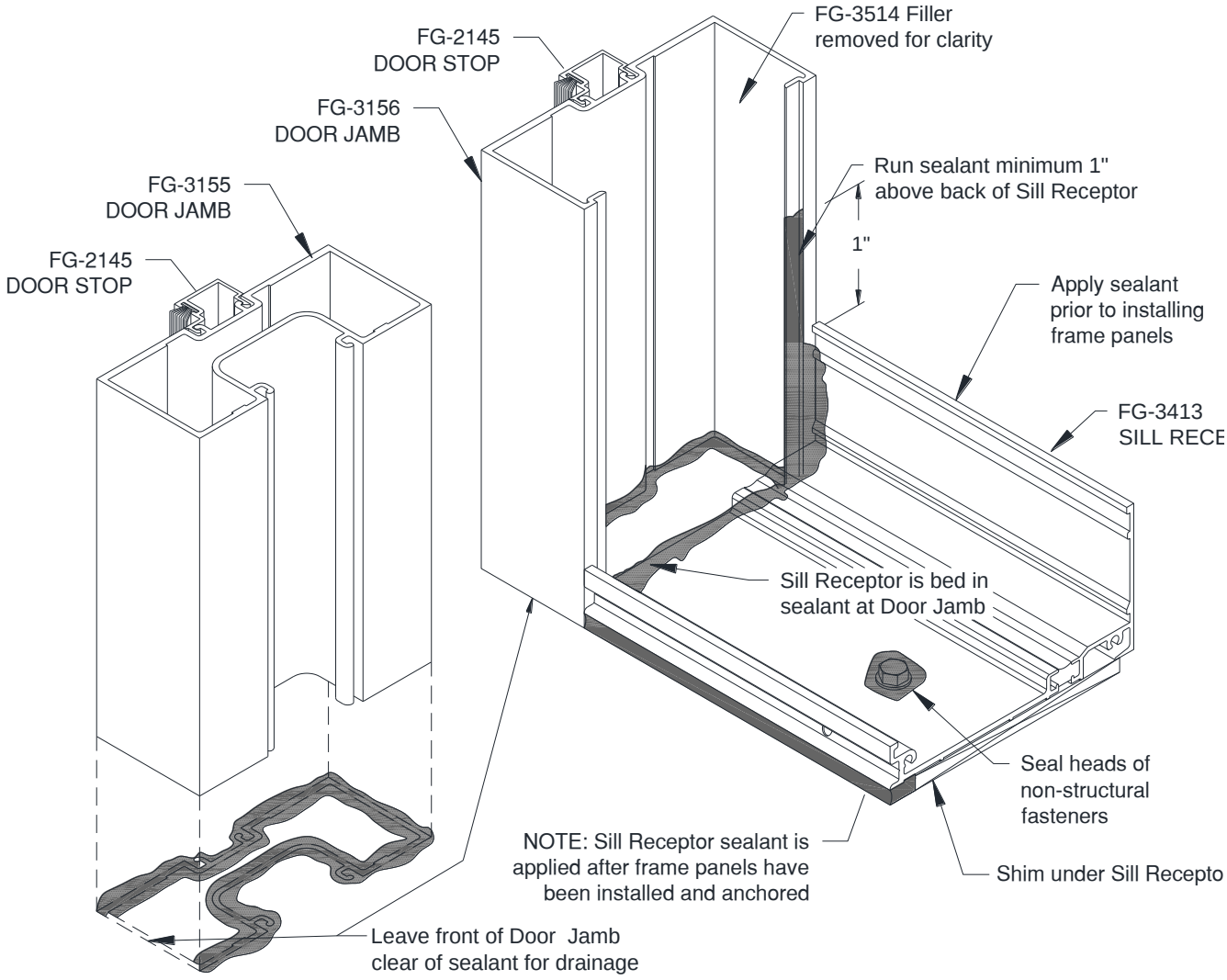

Figure 8: Door Jamb and Sill Receptor Sealant Application

FRAME ASSEMBLY

8.0 Frame Panel Assembly

8.1 Apply Silicone Sealant and assemble frame as shown in Figure *9*. Attach Horizontals to Verticals using FS-8 (#14 x 1" STS Spline Screws). See Figure *3* (page 10) for hole prep locations.

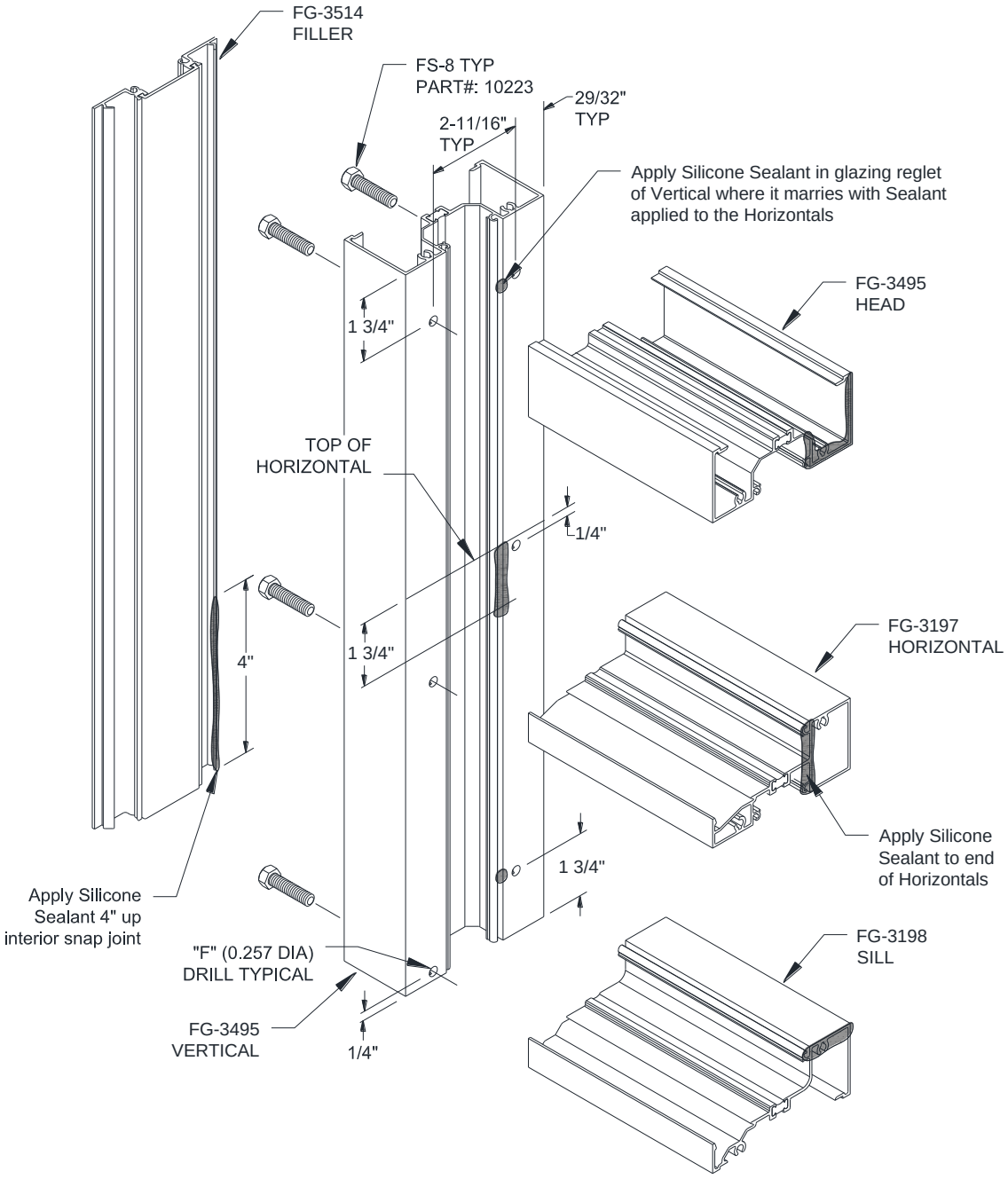

Figure 9: Frame Panel Assembly

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9.0 General Guidelines and Details

A. Anchor size and frequency should be determined by structural requirements.
B. Sill and Head Anchors should be located so that Anchors are not more than 4" away from each side of the Mullion.
C. Assembly without flashing is not recommended.
D. Assembly using a non-thermal or sheet metal flashing will result in loss of thermal continuity and is not recommended.
E. Do not anchor wall through vertical leg of Sill Receptor.

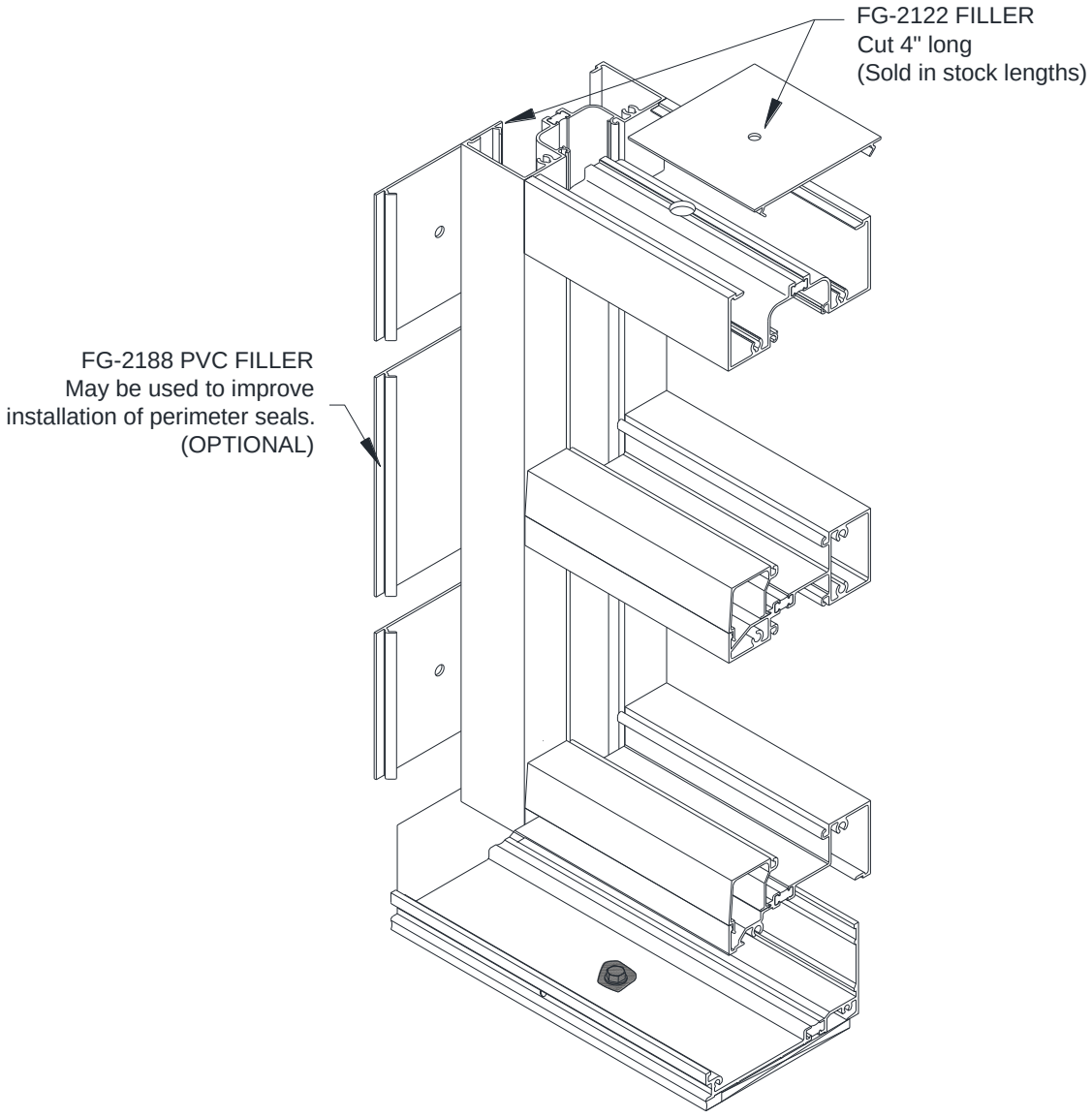

Figure 10: Filler Assembly

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10.0 Anchorage

Reference Figure 11 for Anchor and Sealant locations. Do not cover the weep hole, Point E, Figure 11.

10.1 Apply Sealant along length of Sill Receptor at Point A.

10.2 Once the wall is secured, apply fillet seal between Sill Receptor and front of Sill, Point B, at FG-3413 Sill Receptor.

10.3 The quality of the inside and outside perimeter seals, Points C, may be improved by using FG-2188 rigid PVC Filler. The part may be used in full lengths or cut into pieces. Its purpose is to provide support for the backer rod, regardless of joint size. Interior perimeter seal at Sill, Point D, is for cosmetic purposes and is optional.

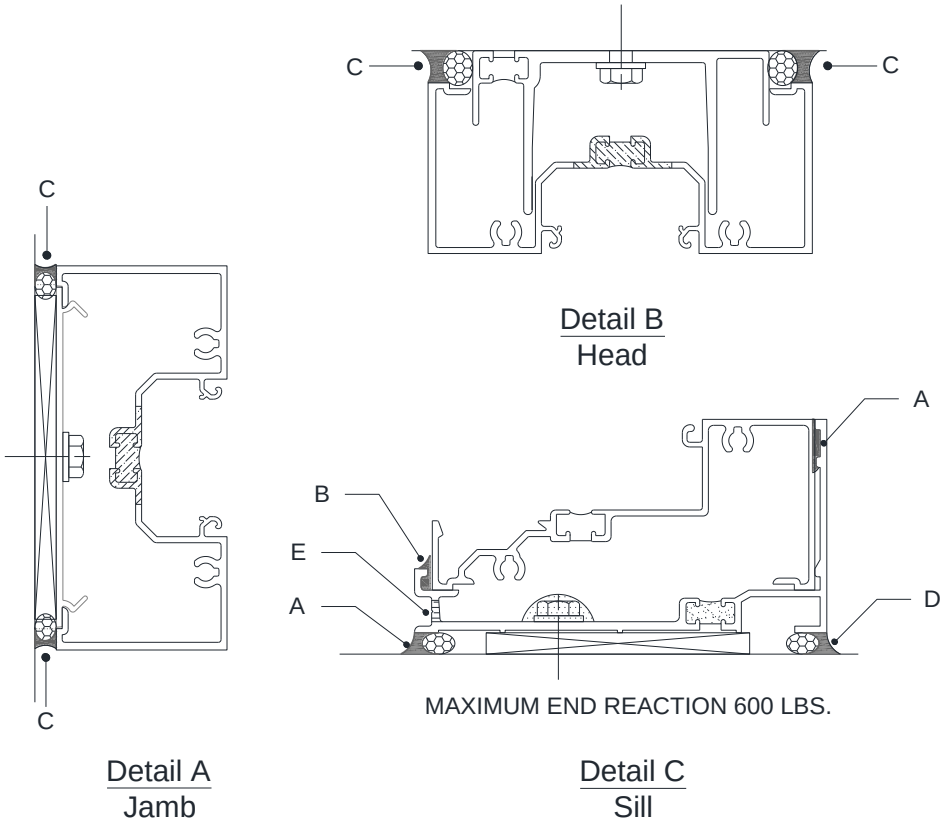

Figure 11: Anchor Details

FRAME ASSEMBLY

11.0 Frame Installation Notes

- The example in this manual portrays the installation of the ArmorDefend™ center set system. Reference the price catalog for specific extrusions and anchors required for other installations. Note the locations of various seals and ensure proper locations of these seals when installing typical runs and expansion sections of each system. These seals are shown in SILL ASSEMBLY / INSTALLATION (page 11).
- The Sill Receptors for these products are designed so that sill anchors may be properly sealed prior to frame installation. The frame is dropped into the Sill Receptor. This prevents any additional fasteners from penetrating the Sill and potentially causing leaks from under the Sill. Be sure to properly cap seal all Sill Anchors prior to beginning installation of frames.

12.0 Expansion Mullion Installation

Multiple units may require the use of an Expansion Mullion if the total run exceeds 24 feet in length. When the elevation exceeds the 24-foot limit, locate Expansion Mullions at no more than every 20 feet.

Locate splice in Sill Receptor at a distance of no more than every 12 feet. A minimum of 7/16" clearance between the Jamb and Sill End Dam must be provided at each end of units when using Expansion Mullions. This will allow the minimum 3/8" clearance to move the units sideways so that the second unit may be rotated into position and interlocked into first unit. Once in position, units should be centered into opening to provide equal joints at the jambs. Oldcastle BuildingEnvelope® recommends the use of the FG-2188 PVC filler in the Jambs and Head to improve the perimeter seal.

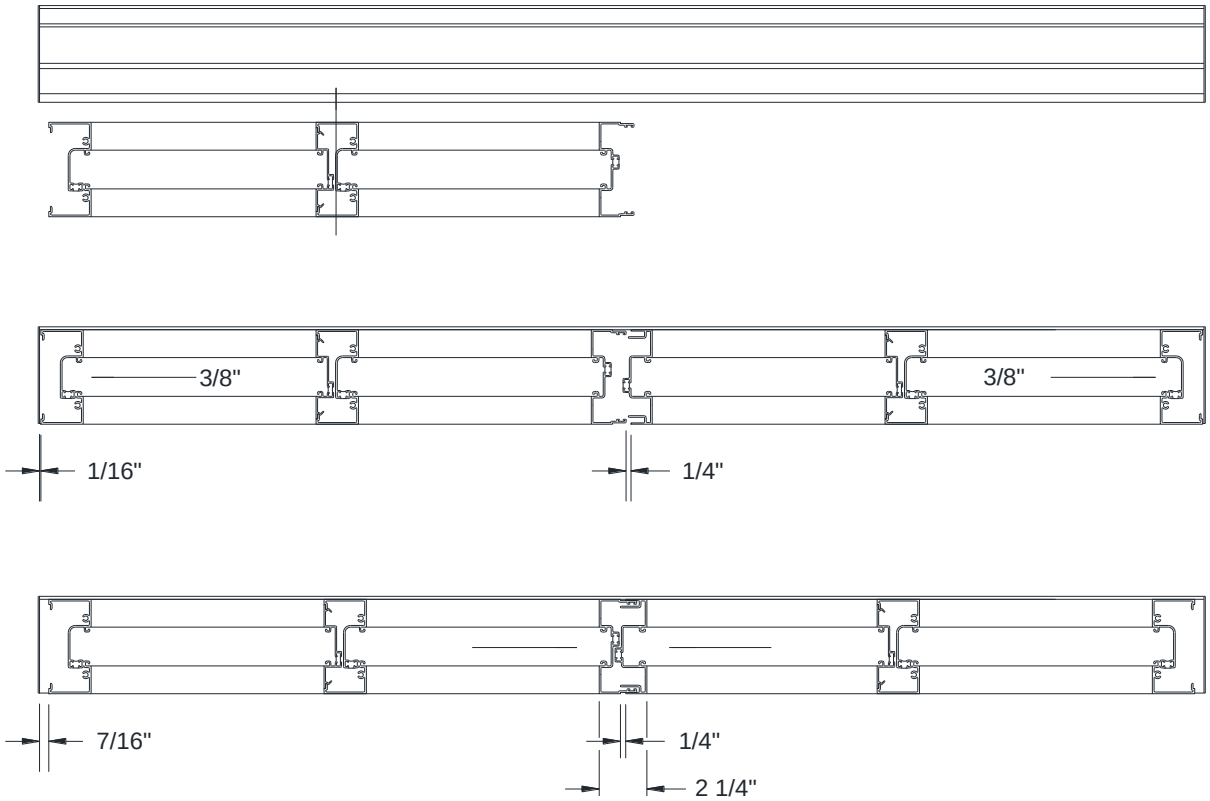

Figure 12: Expansion Mullion Installation Guide

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GLAZING

13.0 Dry Glazing

13.1 Preparing Gasket and Installing Interior Gasket

13.1.1 Remove Gasket from roll and allow to relax in a protected location overnight. Cut Gasket per material cut list on page 8.

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

13.1.3 When installed, vertical Gasket runs through while horizontal Gasket butts into the vertical. Miter the horizontal Gasket at 15° per *Figure 13*, *Detail A*, to accommodate this installation situation.

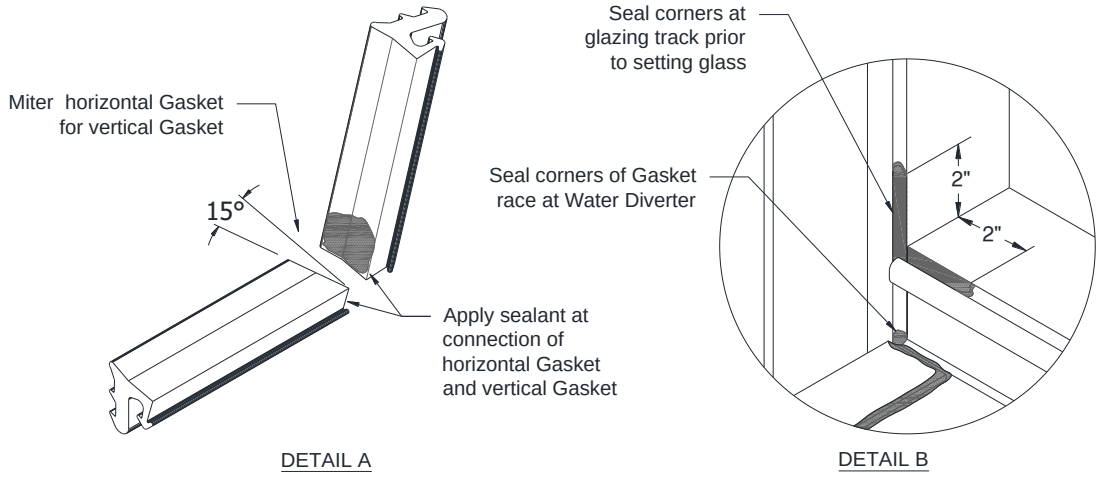

Figure 13: Dry Glazing Gasket Corner Install

13.1.4 Install interior Gasket prior to glazing, starting gaskets at the middle of the glass and working out toward the corners.

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

13.1.6 Apply sealant in the raceway per the locations indicated in *Figure 13*, *Detail B*, 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.

13.1.7 Install Setting Blocks per shop drawings; depending on the glass size, Setting Blocks will be located at either 1/4 points or 1/8 points.

13.1.8 Install the FG-1000-FP-2 Water Diverters on each end of Horizontals, set in sealant as depicted in *Figure 14*. A full Dry Glaze assembly is also shown in *Figure 14*.

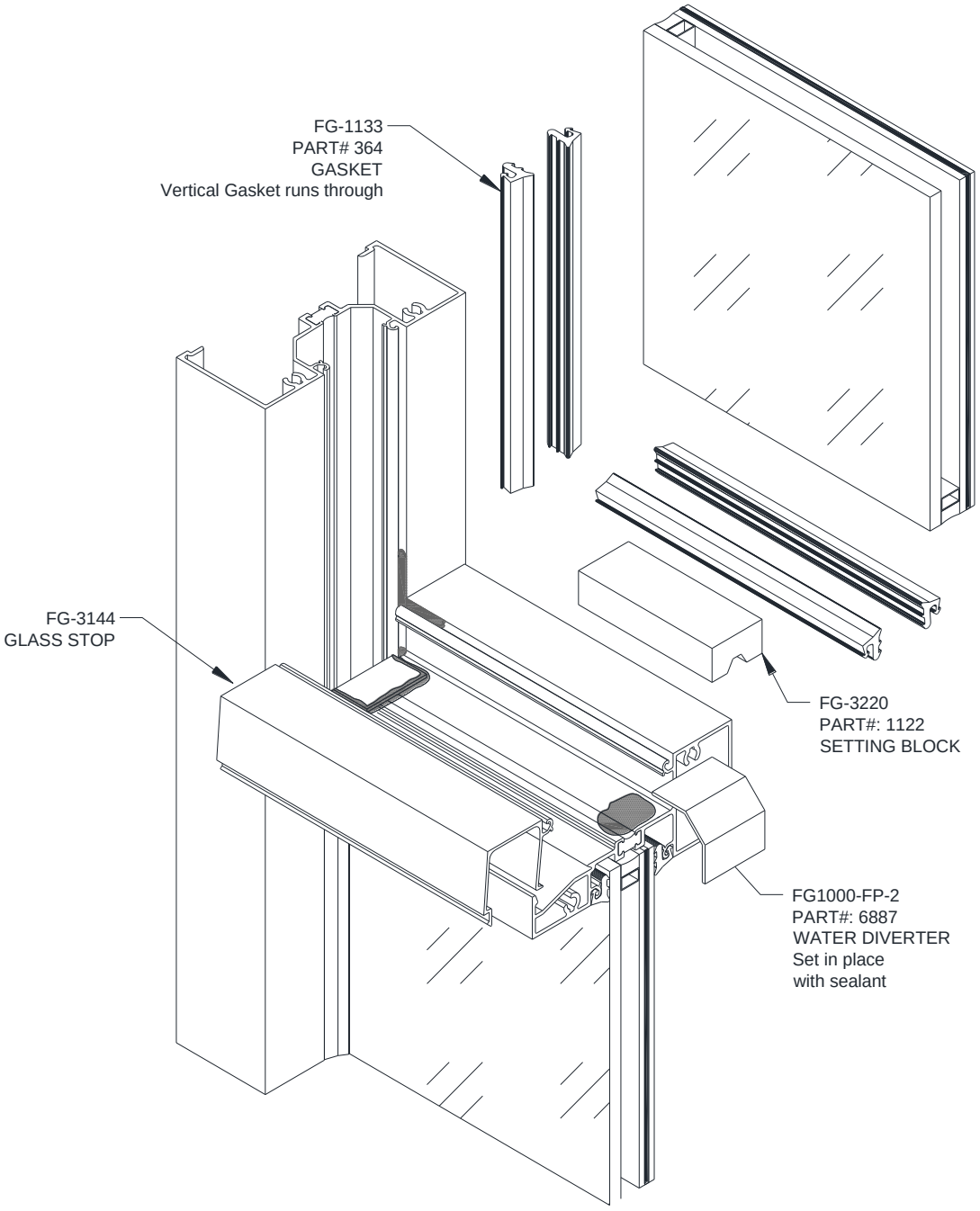

Figure 14: Dry Glazing Assembly

13.2 Setting Glass and Exterior Gasket

Note: Glaze from bottom up. Glass bite at typical Horizontal and Vertical members is 7/16".

13.2.1 Wet top of setting block with soapy water.

13.2.2 Set glass into opening, pushing into the deep pocket first and then centering it in the D.L.O.

13.2.3 Once glass is set in place, push glass against interior gasket at Setting Block area. **Failure to do so may cause diagonal cracks toward Setting Blocks due to glass bending while installing Gasket in corners.**

13.2.4 Install 1" thick ArmorGarde™ or ArmorGarde™ Plus Security Glazing into framing, pushing into the deep pocket first. After centering in the D.L.O., pull glass up and position the Setting Block.

13.2.5 Install exterior FG-3144 Glass Stop.

13.2.6 Cut the FG-1133 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 *15*, *Detail A.*

13.2.7 Install exterior FG-1133 glazing gaskets starting at the middle of the glass.

13.2.8 After gaskets are pressed into place, pull gasket from pocket at corners as shown in Figure *15*, *Detail B*. Clean glass and gaskets a minimum of 2" from each end with isopropyl alcohol.

13.2.9 Apply sealant and push Gasket into reglet, compressing from the corner first, Figure *15*, *Detail C*. Clean squeeze out immediately.

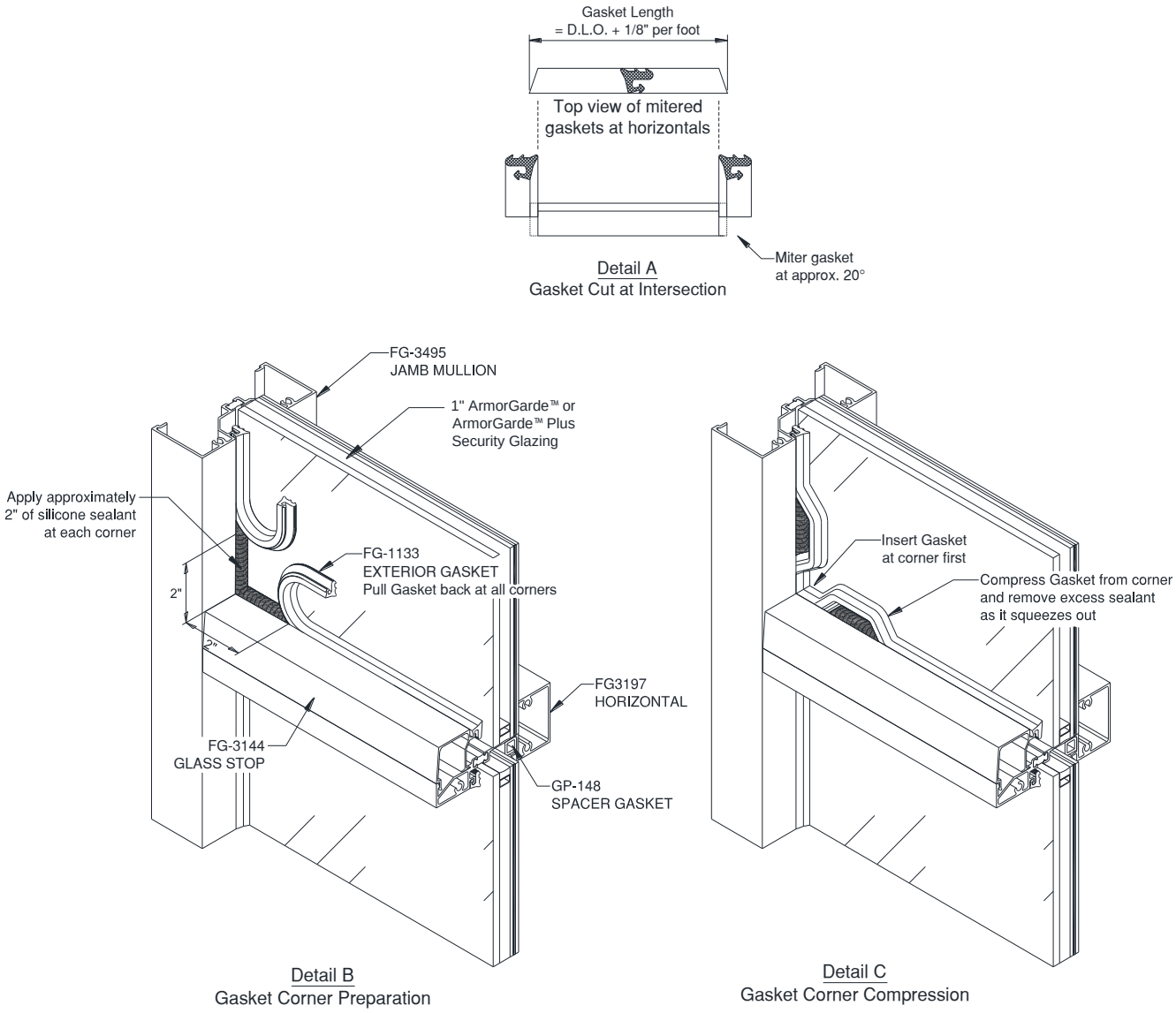

Figure 15: Exterior Gasket Installation

13.3 Side Block Installation in Dry Glazed System

13.3.1 Install **GP-150** side block in the deep mullion pocket after glazing. Blocks to be located at centerline of lites smaller than 4’ tall and quarter points of larger lites. See Figure 16.

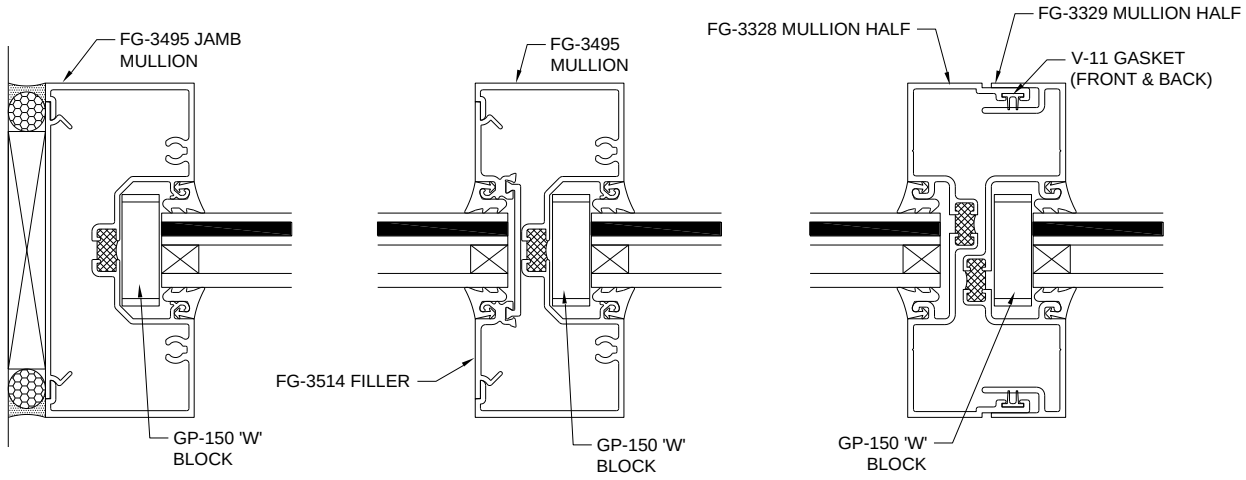

Figure 16: Side Block Installation

14.0 Wet Glazing

Note: Glaze from bottom up.

14.1 Preparing and Installing Interior Gasket

14.1.1 Remove Gasket from roll and allow to relax in a protected location overnight.

14.1.2 Cut GP-147 Gasket and GP-148 Gasket to length of associated metal framing:

- GP-147 cut in lengths to match Verticals (FG-3495 and FG-3329) and Horizontals (FG-3197, FG-3198, and FG-3495)
- GP-148 cut in lengths to match Intermediate Horizontals (FG-3197)

14.1.3 Install GP-147 Spacer Gasket in the deep pockets of the Verticals and Horizontals per the details in Figure *20* (page 26). *Note FG-3514 will not use a silicone backer gasket.*

14.1.4 Install a 6" piece of V2108 DSA Tape every 18" O.C. of all Vertical and Horizontal framing members, reference Figure *20* (page 26).

14.1.5 Install GP-149 Setting Blocks at quarter points of each lite of glass or as specified by glass manufacturer. A full Wet Glaze assembly is shown in Figure *17*.

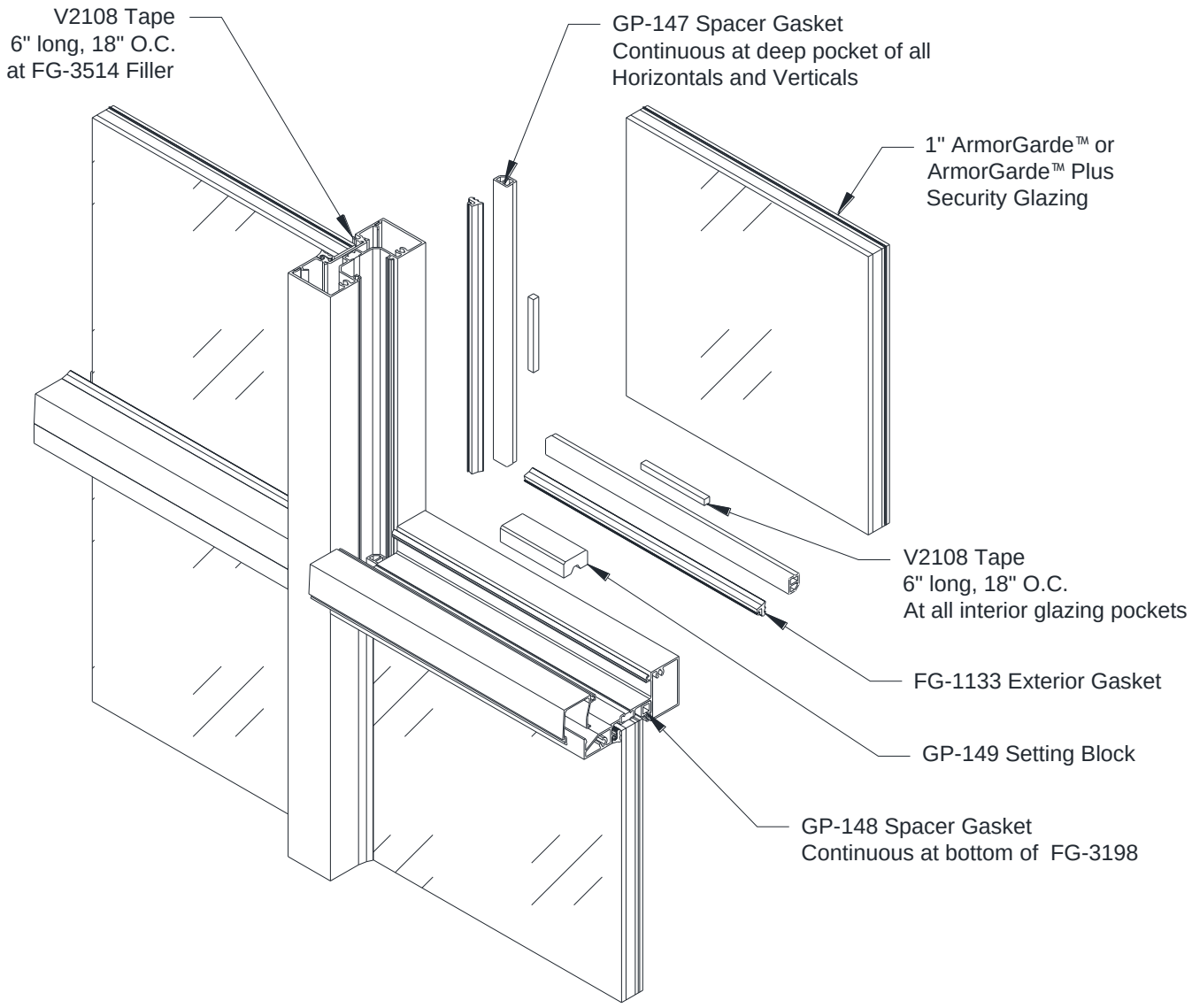

Figure 17: Wet Glazing Assembly

14.2 Setting Glass and Installing Exterior Gasket

14.2.1 Install 1" thick ArmorGarde™ or ArmorGarde™ Plus Security Glazing into framing, pushing into the deep pocket first. After centering in the D.L.O., pull glass up and position the Setting Block.

14.2.2 Install exterior FG-3144 Glass Stop.

14.2.3 Cut the FG-1133 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 18 Detail A.*

14.2.4 Install exterior FG-1133 glazing gaskets starting at the middle of the glass.

14.2.5 After gaskets are pressed into place, pull gasket from pocket at corners as shown in *Figure 18 Detail B*. Clean glass and gaskets a minimum of 2" from each end with isopropyl alcohol.

14.2.6 Apply sealant and push Gasket into reglet, compressing from the corner first, *Figure 18 Detail C*. Clean squeeze out immediately.

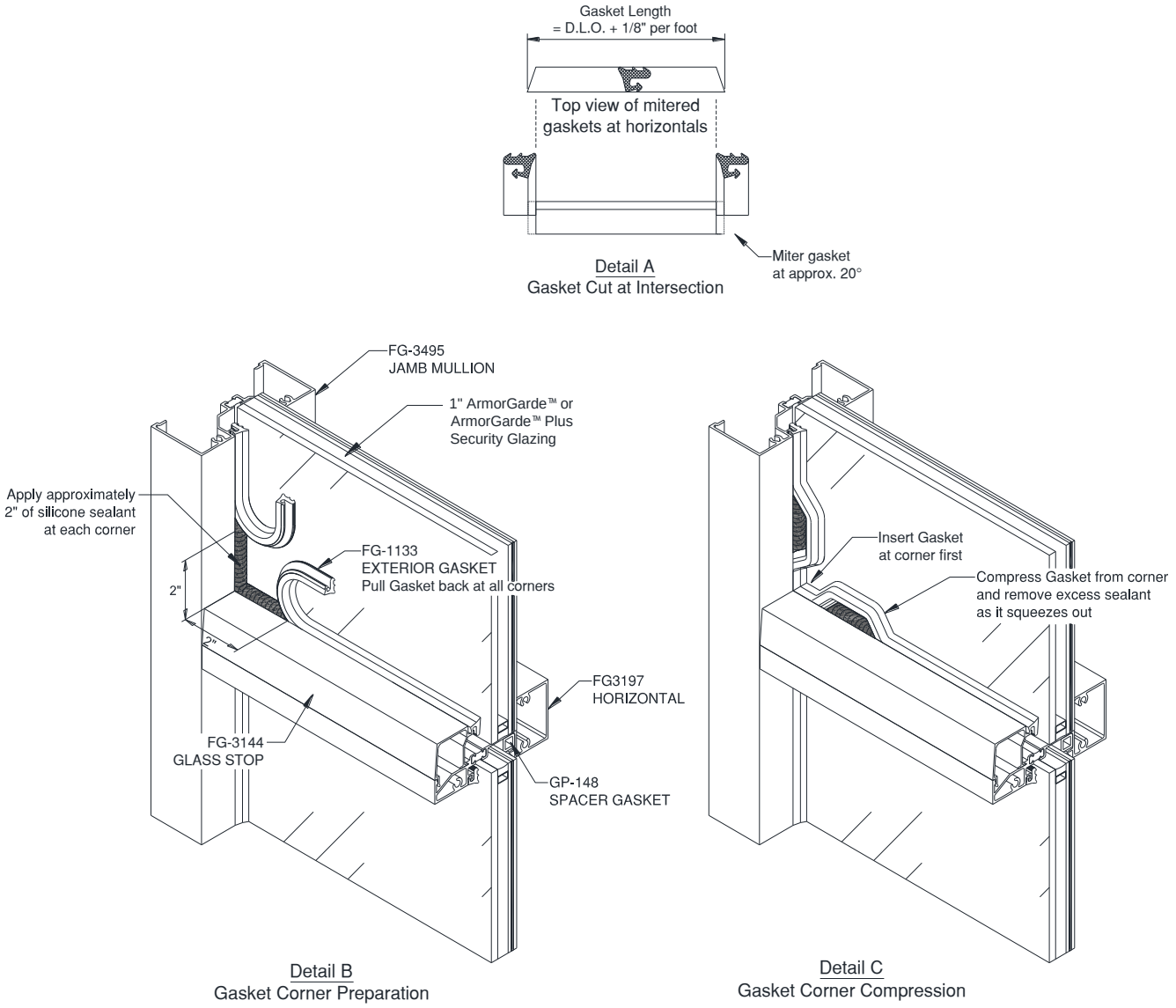

Figure 18: Exterior Gasket Installation

14.3 Application of Interior Structural Sealant

14.3.1 Verify the glass bite is 7/16". Remove Exterior Gasket and return to the steps in *14.2 Setting Glass and Installing Exterior Gasket* and adjust to attain proper glass bite.

14.3.2 Mask off glass and aluminum with 1" wide (minimum) low adhesion masking tape. Reference Figure *19* for masking tape application location. Working a single D.L.O. at a time, fill cavity around full perimeter of D.L.O. with DOWSIL™ 995 Silicone Structural Sealant, as shown in Figure *19 Detail A*; 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, Figure *19 Detail B*.

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

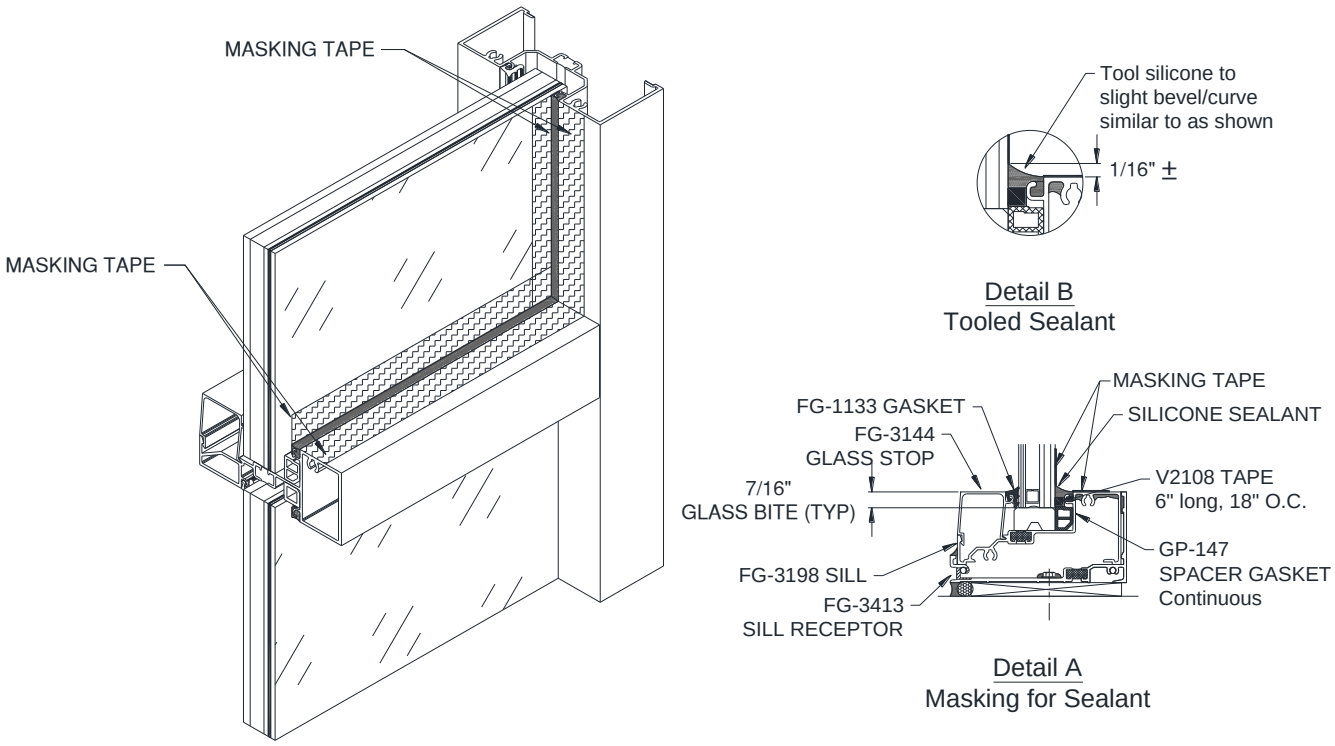

Figure 19: Interior Sealant Application

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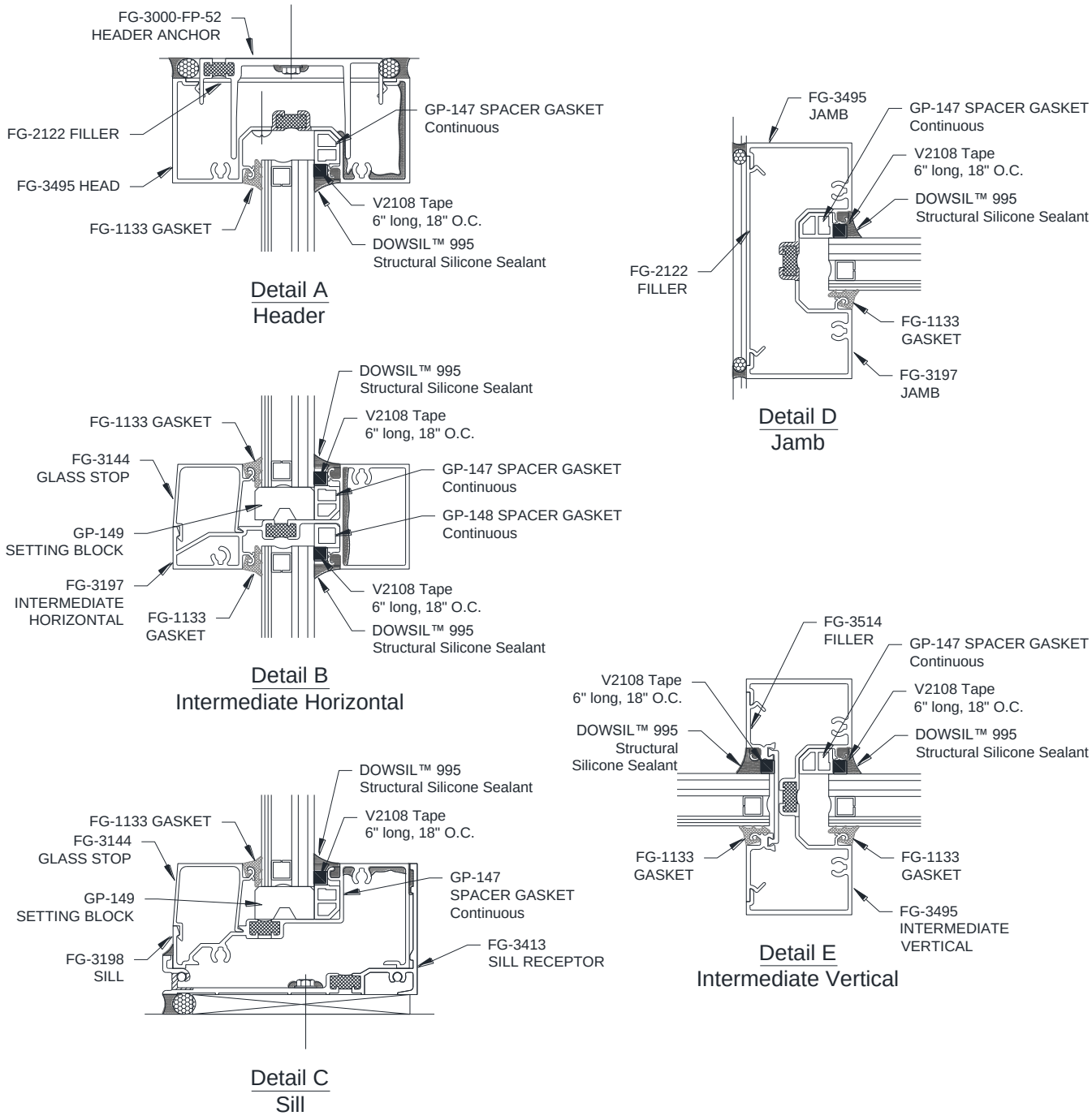
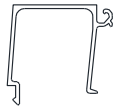
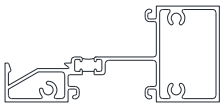
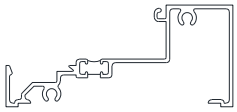
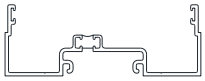
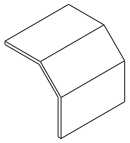
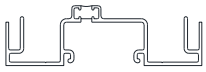
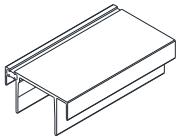
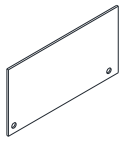
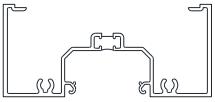
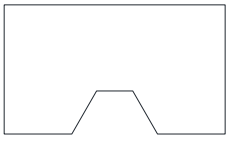
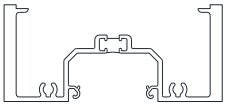
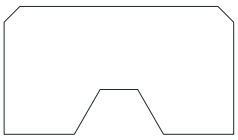


Figure 20: Wet Glaze Section Details

PARTS LIST

Parts not shown to scale.

FG-3144 	GLASS STOP (for FG-3197 and FG-3198)	FG-2122 	FLAT FILLER
FG-3197 	INTERMEDIATE HORIZONTAL	FG-2188 	VINYL FILLER (for Caulk Stop) 12' LENGTH
FG-3198 	SILL	FG-3514 	OPEN BACK FILLER
FG-3328 	EXPANSION MULLION (for FG-3327)	FG-1000-FP-2 	WATER DIVERTER
FG-3329 	EXPANSION MULLION (for FG-3326)	FG-3000-FP-52 	ANCHOR For FG-3495
FG-3413 	SILL RECEPTOR	FG-3000-FP-78 	END DAM for FG-3413
FG-3495 	OPEN BACK HEAD / JAMB / MULLION	FG-3220 	SETTING BLOCK For DRY GLAZE
FG-3595 	OPEN BACK HEAVY MULLION	GP-149 	SETTING BLOCK For WET GLAZE

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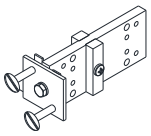
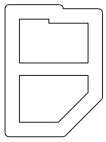
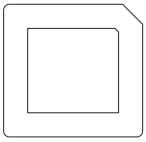
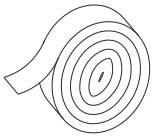
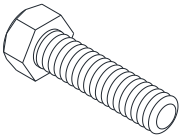
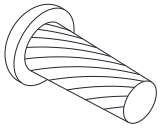
DJ-8 	DRILL FIXTURE
FG-1133 	1" GLAZING GASKET
GP-147 	SPACER GASKET
GP-148 	SPACER GASKET
V-11 	GASKET
GP-150 	SIDE BLOCK

UW-466 	SPLICE FOR FG-3413 10' ROLL
V2108 	DSA TAPE
FS-8 	#14 x 1" HHSTS ASSEMBLY SCREW
FS-320 	M4 X 16mm Helical Knurled Pin