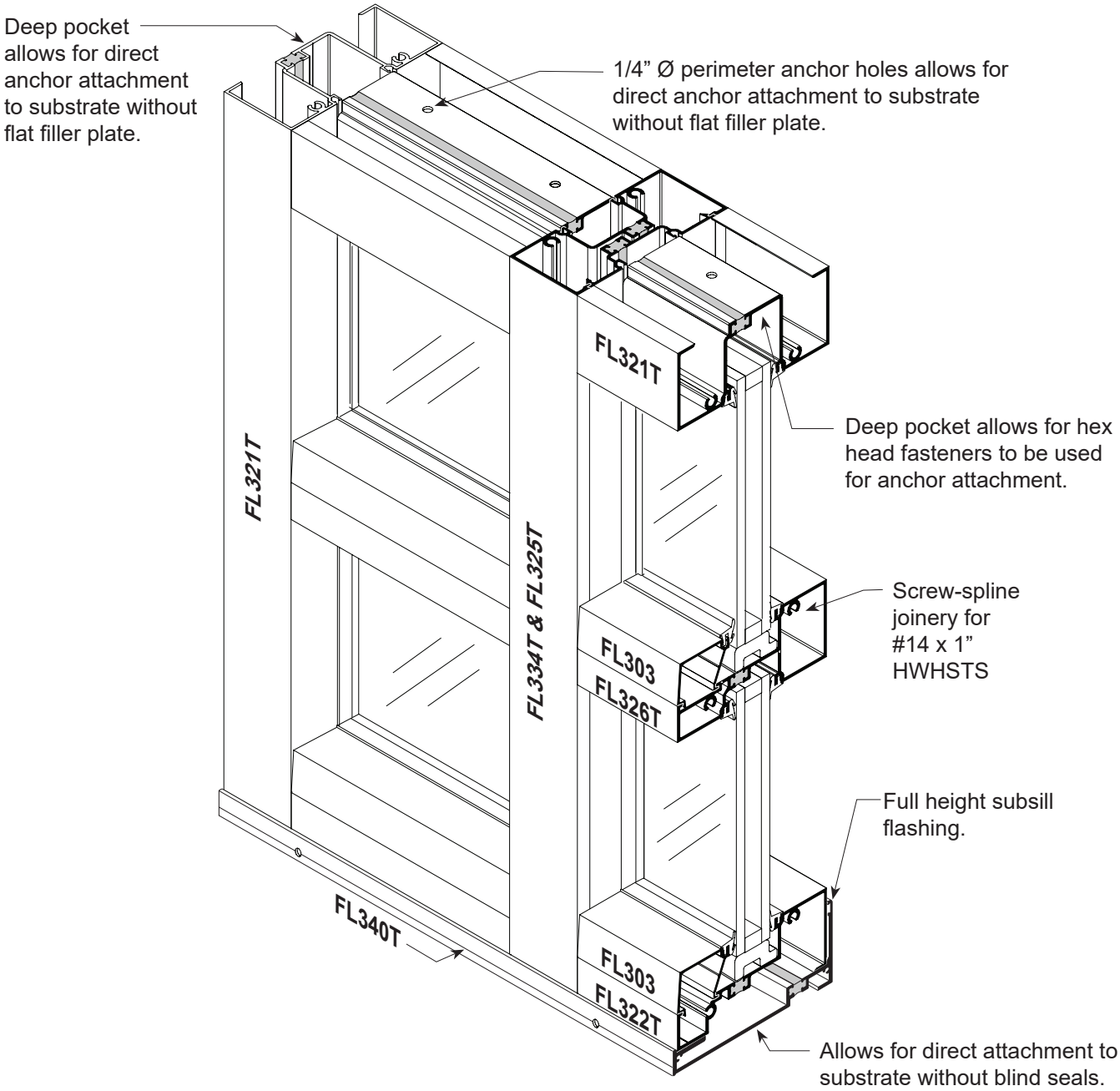
FL300T

THERMAL STOREFRONT SYSTEM

INSTALLATION INSTRUCTIONS
2” x 4 1/2” for 1” Glass



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Coral® Architectural Products

April 2018

THERMAL STOREFRONT SYSTEM

These instructions are for typical installations. Reference shop drawings for special notations on installations and glazing.

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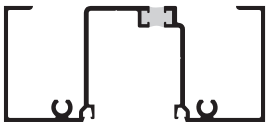
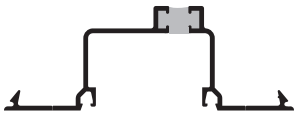
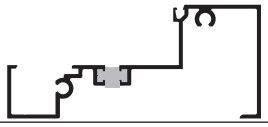
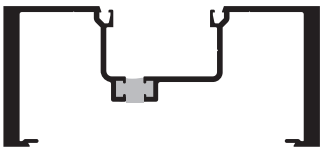
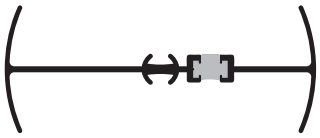
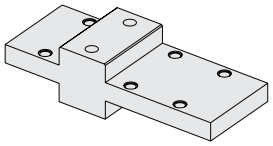
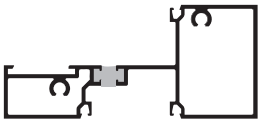
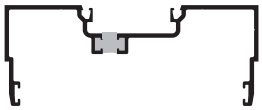
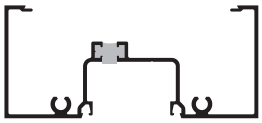
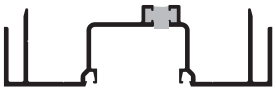
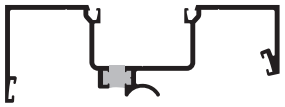
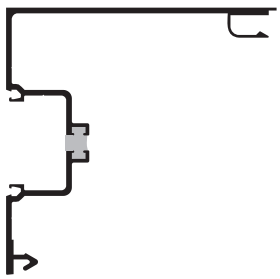
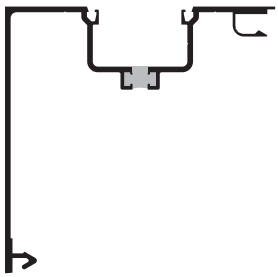
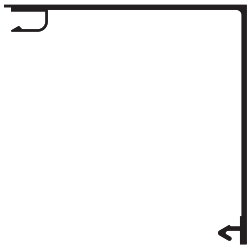
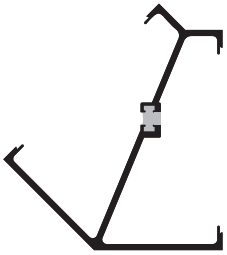
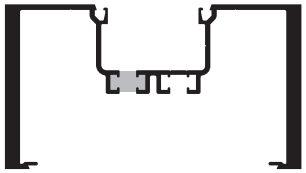
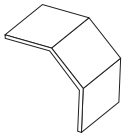
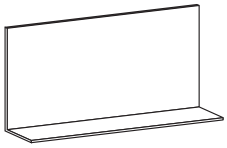
FL300T SYSTEM PARTS

PARTS			
PART DESCRIPTION	**PART NO.**	**PART DESCRIPTION**	**PART NO.**
 **Head/Jamb and Vertical** (Deep Pocket)	**FL321T**	 **Deep Pocket Filler**	**FL313T**
 **Sill/Optional Head**	**FL322T**	 **Heavy Vertical Mullion**	**FL316T**
 **Glass Stop**	**FL303**	 **Axel Interlock**	**FL320T**
 **Shallow Pocket Filler**	**FL325T**	 **Drill Jig**	**DJ300**
 **Intermediate Horizontal**	**FL326T**	 **Expansion Male Mullion**	**FL310T**
 **Standard Verticle Mullion**	**FL334T**	 **Expansion Female Mullion**	**FL311T**
 **Sub-Sill**	**FL340T**	 **Rotating Mullion**	**FL321T**
 **Single Pocket Corner Post Mullion**	**FL351T**	 **Single Pocket Corner Post Mullion**	**FL353T**

FL300T SYSTEM PARTS

PARTS			
PART DESCRIPTION	**PART NO.**	**PART DESCRIPTION**	**PART NO.**
 90° Corner Post Trim	**FL350**	 **135° Corner Post Mullion**	**CS135T**
 **Heavy Wide Mullion**	**FL346**		

FL300T SYSTEM PARTS

PARTS			
PART DESCRIPTION	PART NO.	PART DESCRIPTION	PART NO.
 FL518	FL518	 Weathering for D200	WP200
 Door Stop (Standard used)	DS200	 Schnee-Morehead SM5601 1/8" x 1/2" Tacky Tape	SM5601
 CS115	CS115	 EPDM Gasket (Standard Gasket)	NG1
 CS105	CS105	 Vinyl Gasket (Standard Weathering Gasket for FL210 and CS118 / CS119)	VG10
 CS106	CS106	 AS90	AS90
 CS107	CS107	 AS16	AS16
 CS108	CS108	 AS31	AS31
 CS109	CS109	 Water Diverter	WD300-1
 Setting Block	SB3	 End Dam	ED340-1

INSTALLATION INSTRUCTIONS

- General Installation Information -

RECOMMENDED GUIDELINES FOR ALL INSTALLATIONS:

1. **REVIEW CONTRACT DOCUMENTS.** Check shop drawings, installation instructions, architectural drawings and shipping lists to become thoroughly familiar with the project. The shop drawings take precedence and include specific details for the project. Field verified notations shown within shop drawings must be resolved prior to installation. The installation instructions are of general nature and cover most conditions.
2. **INSTALLATION.** All materials shall be installed plumb, level and true.
3. **BENCHMARKS.** All work should start from established benchmarks and column center lines established by the architect and general contractor.
4. **FIELD WELDING.** All field welding must be adequately shielded to avoid any splatter on glass or aluminum. Advise general contractor and other trades accordingly. All field welds of steel anchors must receive touch-up paint (zinc chromate) to avoid rust.
5. **SURROUNDING CONDITIONS.** Make certain that construction which will receive your materials is in accordance with the contract documents. If not, notify the general contractor in writing and resolve differences before proceeding with work.
6. **ISOLATION OF ALUMINUM.** Aluminum to be placed in direct contact with uncured masonry or incompatible materials should be isolated with a heavy coat of zinc chromate or bituminous paint.
7. **SEALANTS.** Sealants must be compatible with all materials with which they have contact, including other sealant surfaces. Consult with sealant manufacturer for recommendations relative to joint size, shelf life, compatibility, cleaning, priming, tooling, adhesion, etc. It is the responsibility of the Glazing Contractor to submit a statement from the sealant manufacturer indicating that glass and glazing materials have been tested for compatibility and adhesion with glazing sealants, and interpreting test results relative to material performance, including recommendations for primers and substrate preparation required to obtain adhesion. The chemical compatibility of all glazing materials and framing sealants with each other and with like materials used in glass fabrication must be established.
8. **FASTENING.** Only those fasteners used within the system are specified in these instructions. Due to the varying perimeter conditions and performance requirements perimeter fasteners are not specified in these instructions. Reference the shop drawings or anchor charts for perimeter fasteners.
9. **BUILDING CODES.** Due to the diversity in state, local and national codes that govern the design and application of architectural products, it is the responsibility of the architect, owner and installer to assure that products selected for use on each project comply with all the applicable building codes and laws. CORAL ARCHITECTURAL PRODUCTS exercises no control over the use or application of it's products, glazing materials and operating hardware and assumes no responsibility thereof.
10. **EXPANSION JOINTS.** Expansion joints and perimeter seals shown in these instructions and shop drawings are shown at normal size. Expansion mullion gaps should be based on temperature at time of installation.

INSTALLATION INSTRUCTIONS

- General Installation Information -

11. **WATER HOSE TEST.** After a representative amount of the storefront system has been glazed (500 square feet) and the sealant has cured, a water hose test should be conducted in accordance with AAMA 501.2 specifications to check the installation. This test should be repeated every 500 square feet during the glazing operation. Note: This test procedure should not be used for entrance doors.
12. **COORDINATION WITH OTHER TRADES.** Coordinate with the general contractor and sequence with other trades items which offset the storefront installation such as back-up walls, partitions, ceilings and mechanical ducts.
13. **MATERIAL HANDLING:**
    A. SHOP
        1. Cardboard wrapped or paper interleaved material must be kept dry.
        2. Immediately remove aluminum from cardboard wrapped or paper interleaved materials should it get wet to prevent staining or etching aluminum finish.
        3. Check arriving materials for quantity and keep record of where various materials are stored.
    B. JOB SITE
        1. Material at job site must be stored in a safe place well removed from possible damage by other trades.
        2. Cardboard wrapped or paper interleaved material must be keep dry. (See 13.A.2)
        3. Keep record of where various materials are stored.
        4. Protect materials after erection. Cement, plaster, mortar and other alkaline solutions are very harmful to the finish.
14. **CARE AND MAINTENANCE.** Final cleaning of exposed aluminum surfaces should be done in accordance with AAMA. 609.1 for anodized aluminum and 610.1 for painted aluminum.
15. **CORAL ARCHITECTURAL PRODUCTS.** It is the responsibility of CORAL ARCHITECTURAL PRODUCTS to supply a system to meet the architect's specifications.

FRAME FABRICATION

Establish Frame Size and Cut Metal to Length

STEP 1.

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 1/4” caulk joint at each jamb.

Repeat process to determine frame height.

A. Beginning on left side of opening, measure dimension from top to bottom.
B. Repeat at center.
C. Repeat at right side of opening.
The frame height will be the smallest dimension less 1 ⅛” allowing 5/8” for subsill and a 1/4” caulk joint at the head and beneath the subsill.

STEP 2.

Cut members to size.

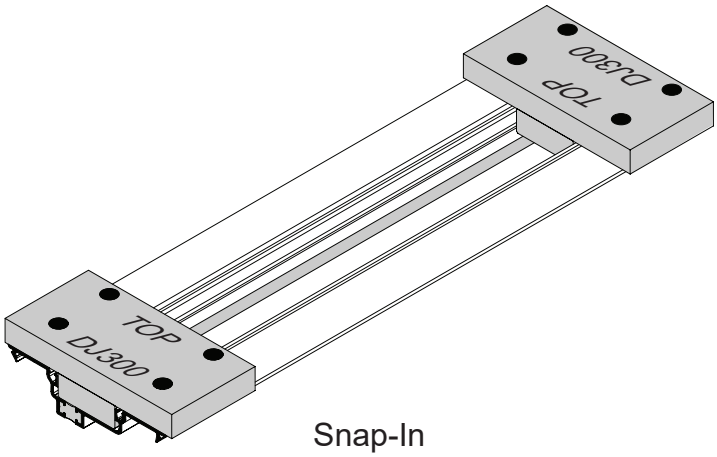
A. Cut subsill to frame dimension plus 1/4”. The subsill at entrance locations butt tight against door jambs and is cut 1/8” longer than width of side lights on either side of door frame.
B. Wall jambs and intermediate vertical mullions are cut to frame height.
C. Horizontal members are cut to D.L.O.
D. Snap-on glass stops are cut D.L.O. minus (-) 1/16”.

FRAME FABRICATION

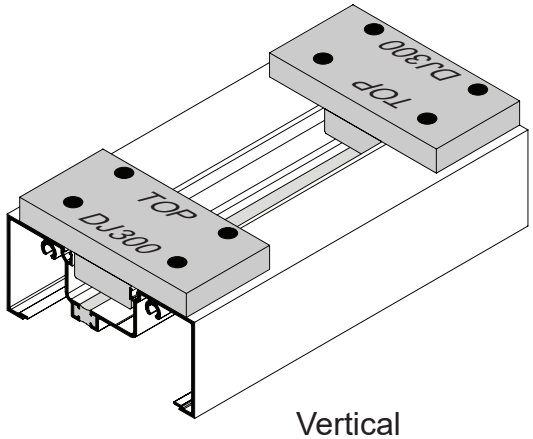
STEP 3.

Mark location for horizontals on vertical extrusions and drill holes for screw spline. Reference **STEP 4** for correct orientation of drill jig.

NOTE: FL300T parts are handed. Carefully ensure to hand parts prior to layout of horizontal locations.The illustration below depicts parts as they would be snapped together, thus handed / orientated correctly. See **Step 4** Diagram.



Snap-In
Filler



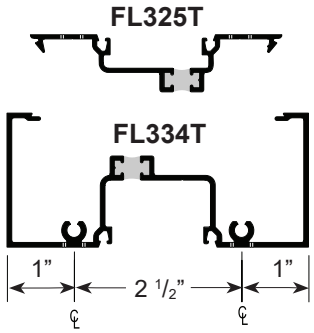
Vertical
Mullion

Note: Thermal cavity hands these parts.

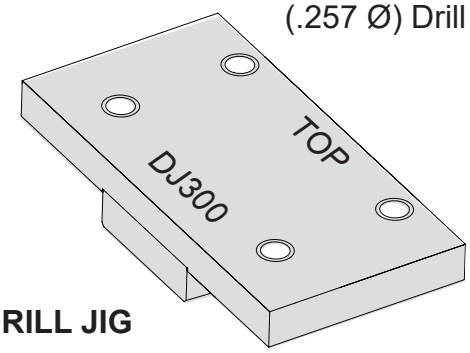
FRAME FABRICATION

STEP 4.

Drill or punch holes in verticals for attaching horizontals.

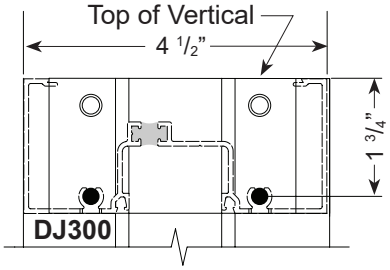


Use Letter “F” (.257 Ø) Drill

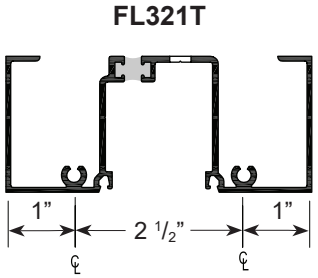


DRILL JIG

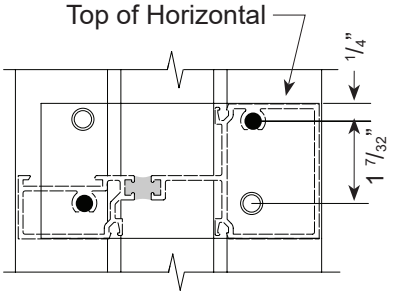
EXTERIOR GLAZING



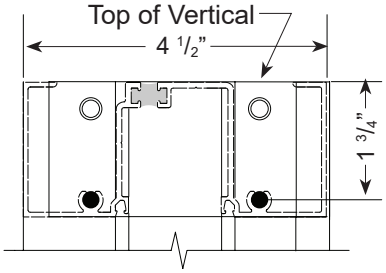
FL334T
Header

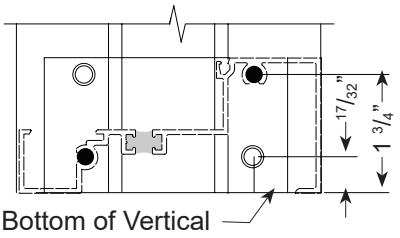


HEAD / WALL JAMB



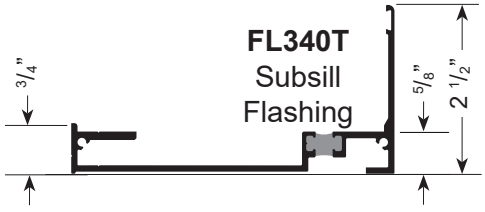
FL326T
Horizontal





FL322T
Sill

Note: Vertical at door jamb extends to floor

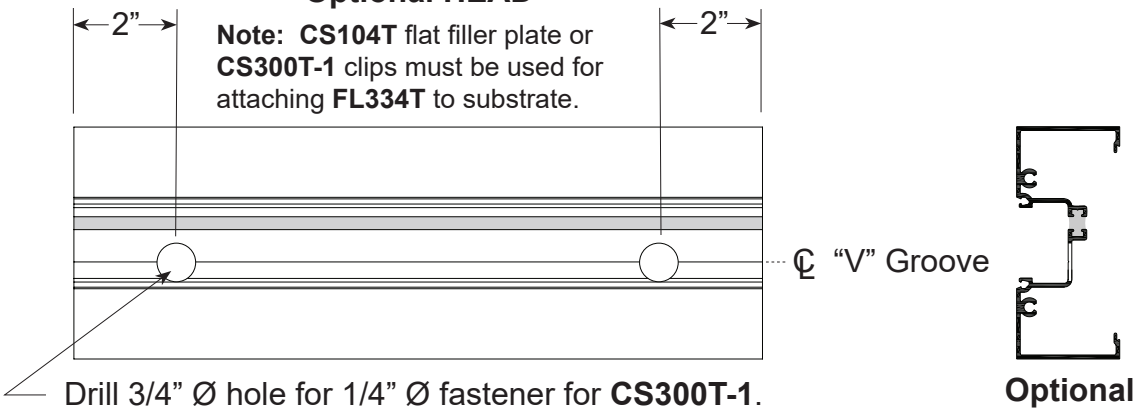


FRAME FABRICATION

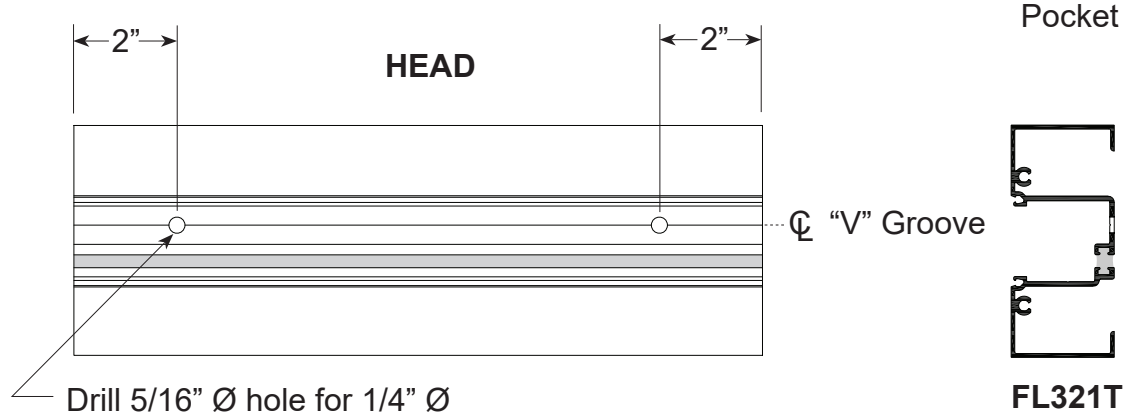
STEP 6.

Fabricate head and sill anchor holes. Reference anchor charts for number of anchor holes and locations for each substrate. First hole is always 2" from end. Each additional fastener hole is located at required minimum spacing between fasteners based on substrate as shown in anchor charts on Pg 38-41.

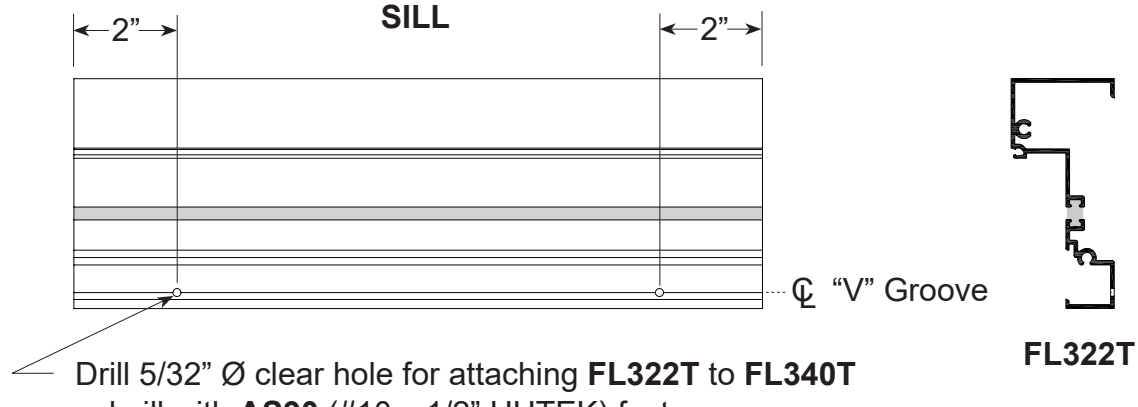
Optional HEAD



HEAD

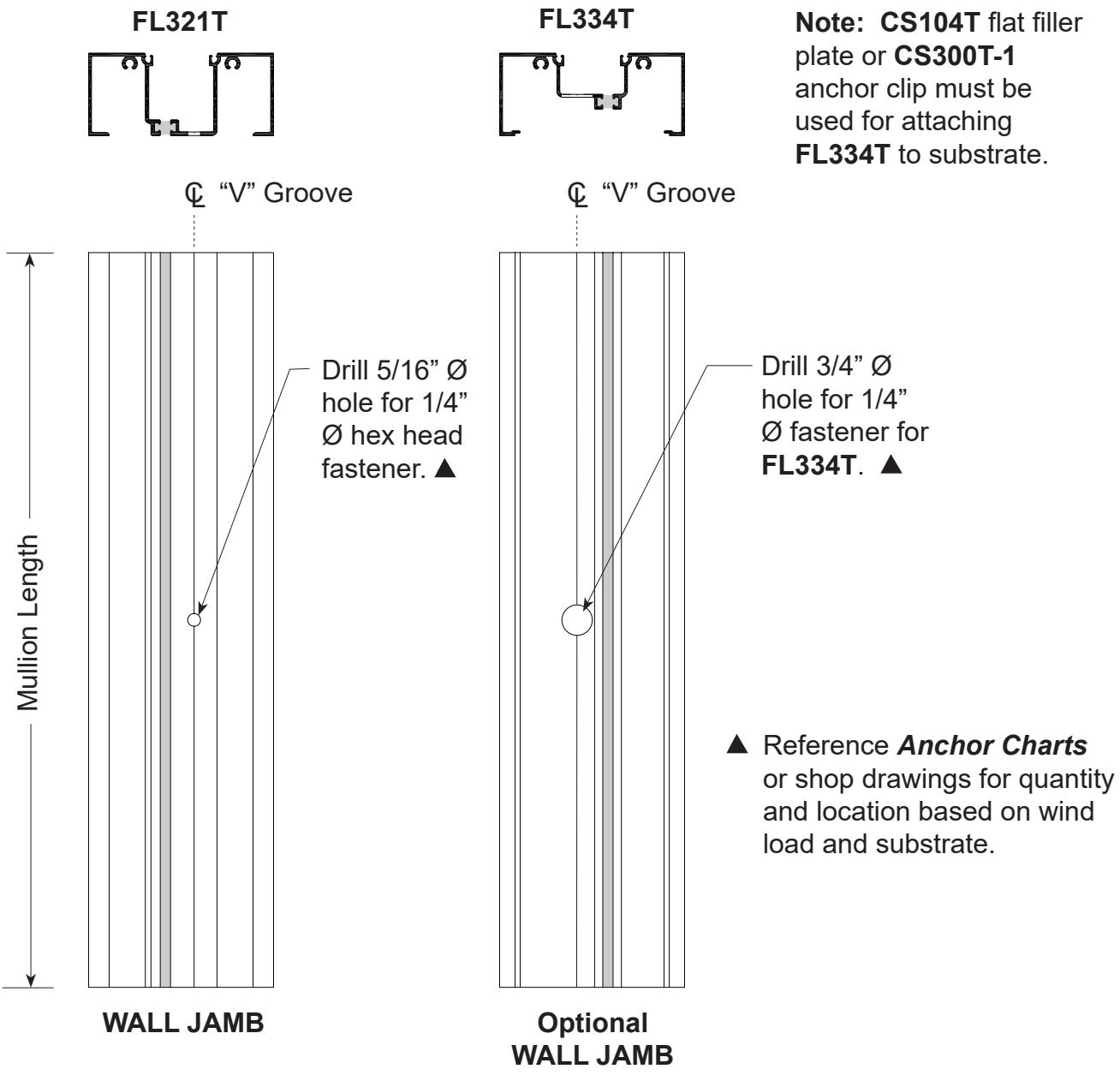


SILL



FRAME FABRICATION

STEP 7.
Fabricate wall jamb for anchor holes when required. **(Reference Anchor Charts on Pg 38-41)**



Note: CS104T flat filler plate or **CS300T-1** anchor clip must be used for attaching **FL334T** to substrate.

▲ Reference ***Anchor Charts*** or shop drawings for quantity and location based on wind load and substrate.

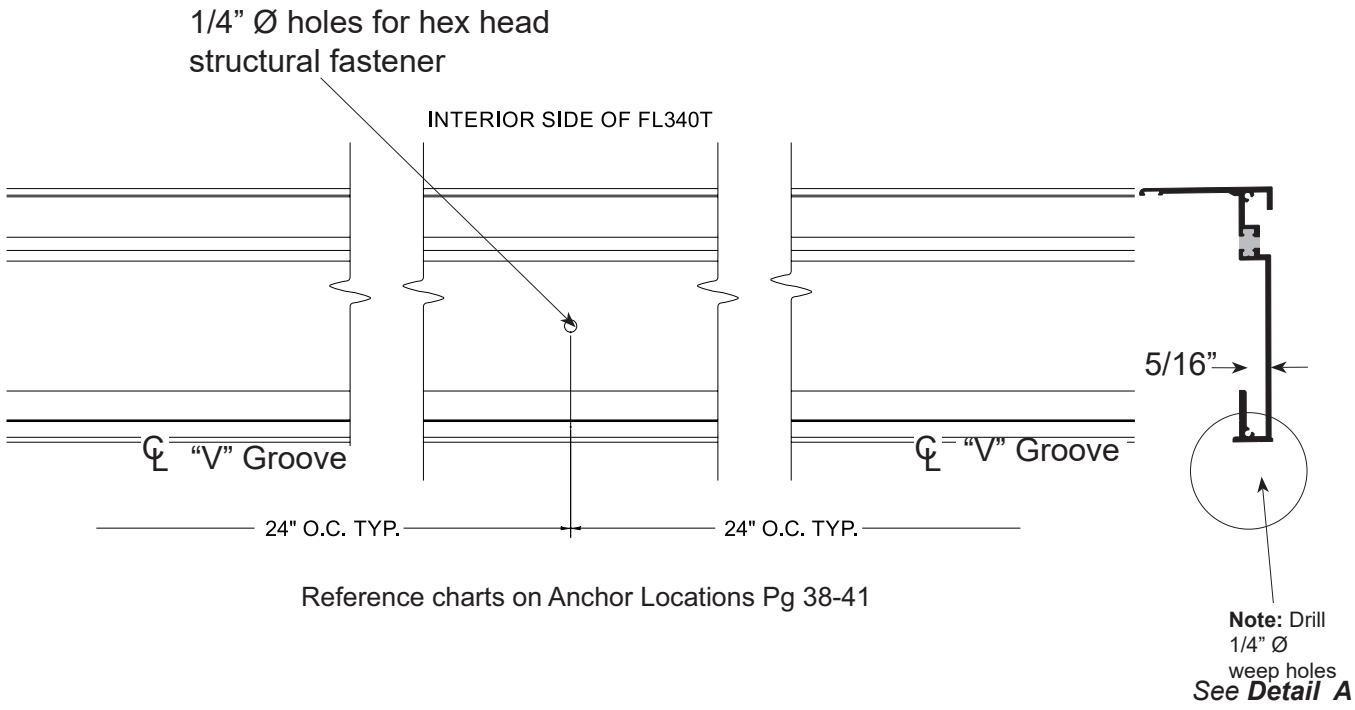
Note: Do not locate anchor holes at intersection of intermediate horizontal. Locate hole just above or below horizontal. Check anchor chart for spacing and quantity based on substrate.

FRAME FABRICATION

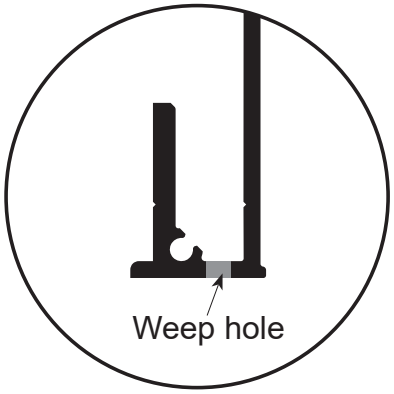
STEP 8.

Fabricate **FL340T** subsill flashing for 1/4” Ø hex head structural fastener and weep holes. Hole location dimensions for fasteners in subsill are approximate. Drill 1/4” Ø weep holes as shown in **Detail “A”**.

SUBSILL FLASHING



Reference charts on Anchor Locations Pg 38-41



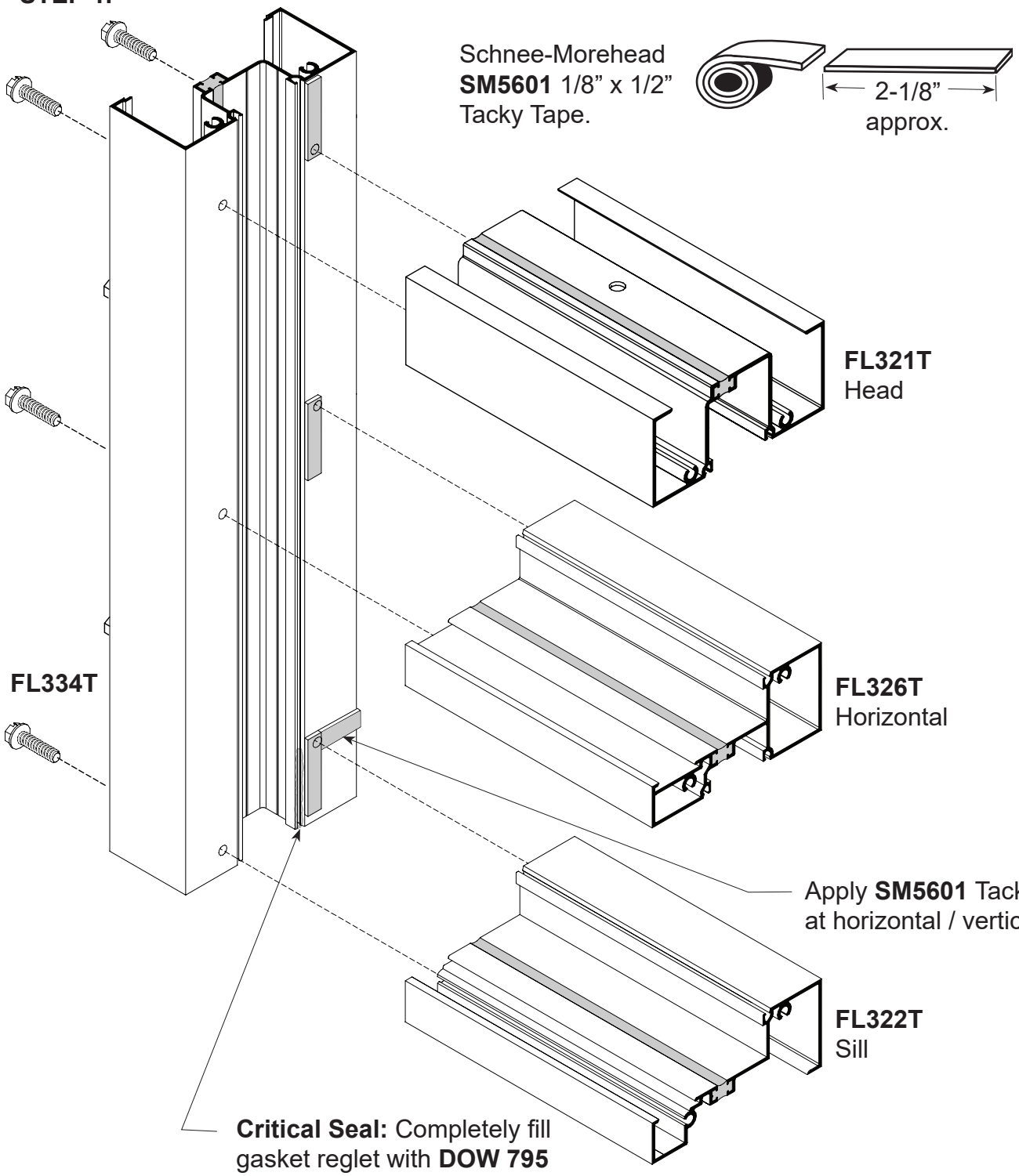
Detail A

1. Drill 1/4” Ø hole for hex head structural fasteners used for attaching subsill to substrate as shown.

2. Drill 1/4” Ø weep holes in locations as shown. Locate one weep hole 6” from each end and additional holes approximately 48” on center. Total weep holes should average 2 each between each vertical mullion.

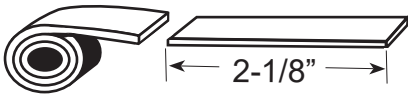
FRAME ASSEMBLY - EXTERIOR GLAZING

STEP 1.



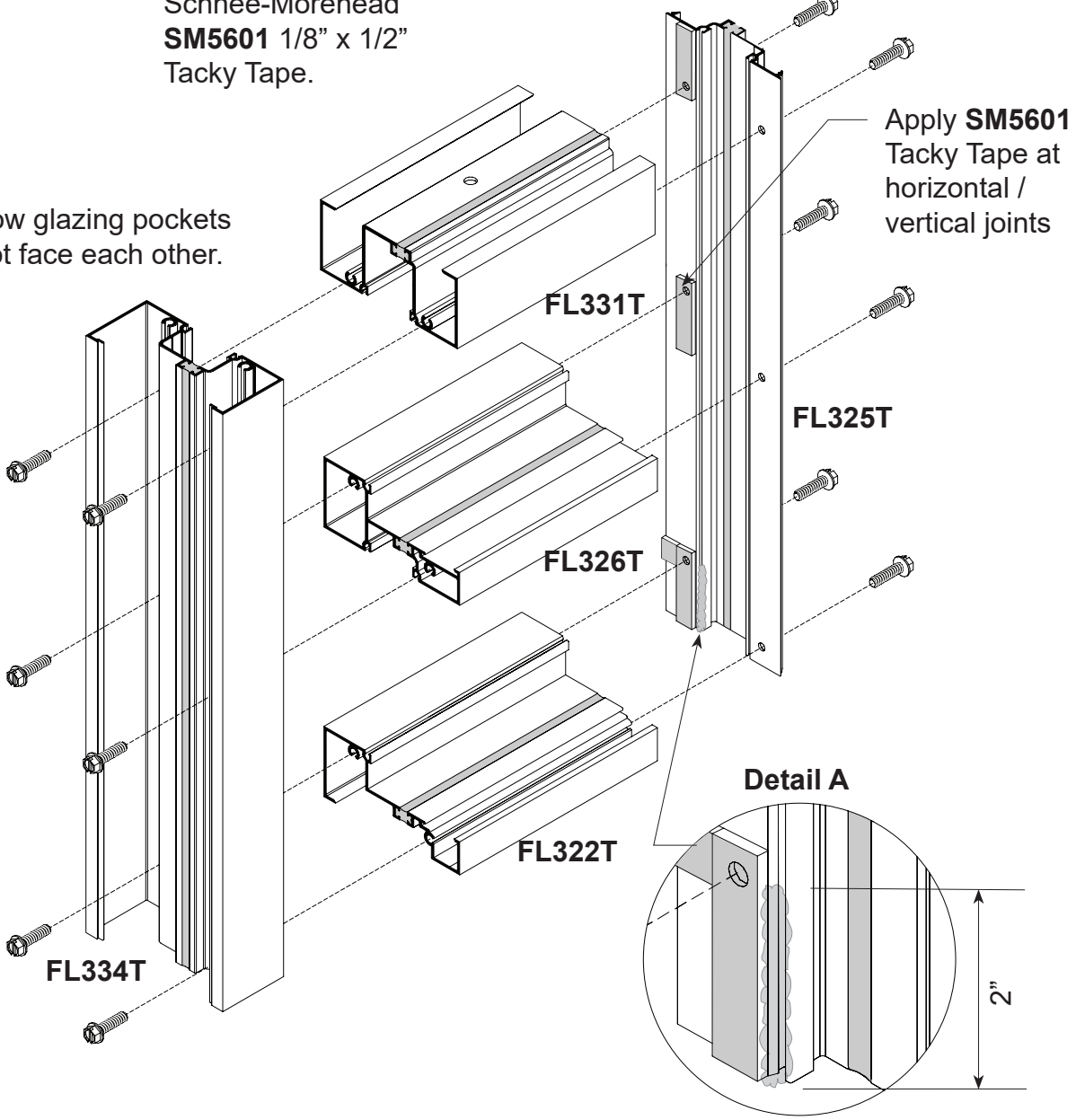
FRAME ASSEMBLY - EXTERIOR GLAZING

STEP 2.



Schnee-Morehead **SM5601** 1/8” x 1/2” Tacky Tape.

Note:
Shallow glazing pockets cannot face each other.



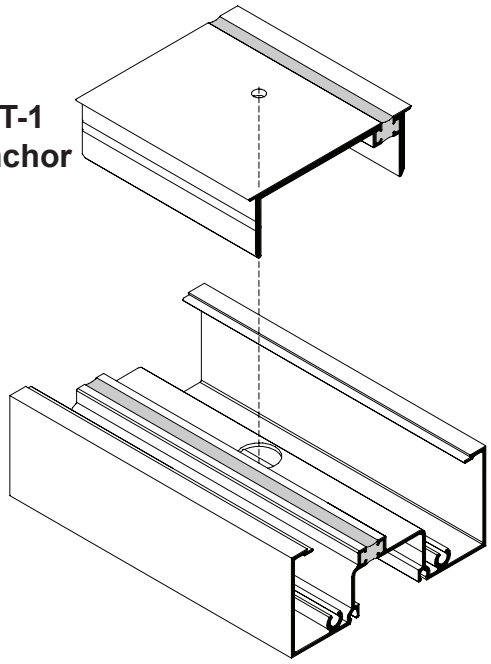
Attach horizontals to verticals using **AS16** (#14 x 1” HHSTS spline screws).
See **Page 13** *for hole prep locations.*

Detail A

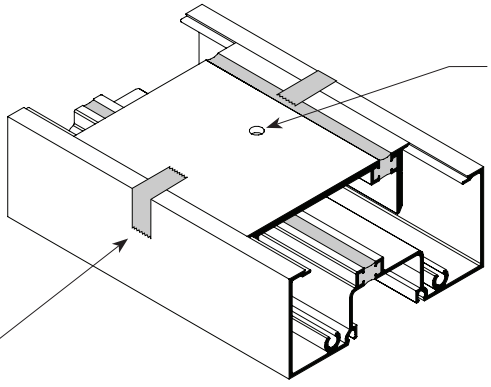
Critical Seal: Completely fill gasket reglet with **DOW 795** sealant at bottom as shown.

FRAME ASSEMBLY

Using Optional FL334T with CS300T-1 in lieu of FL331T



Tape **CS300T-1** head anchors to head members at clearance hole locations.
See **Detail B** below.



Detail B

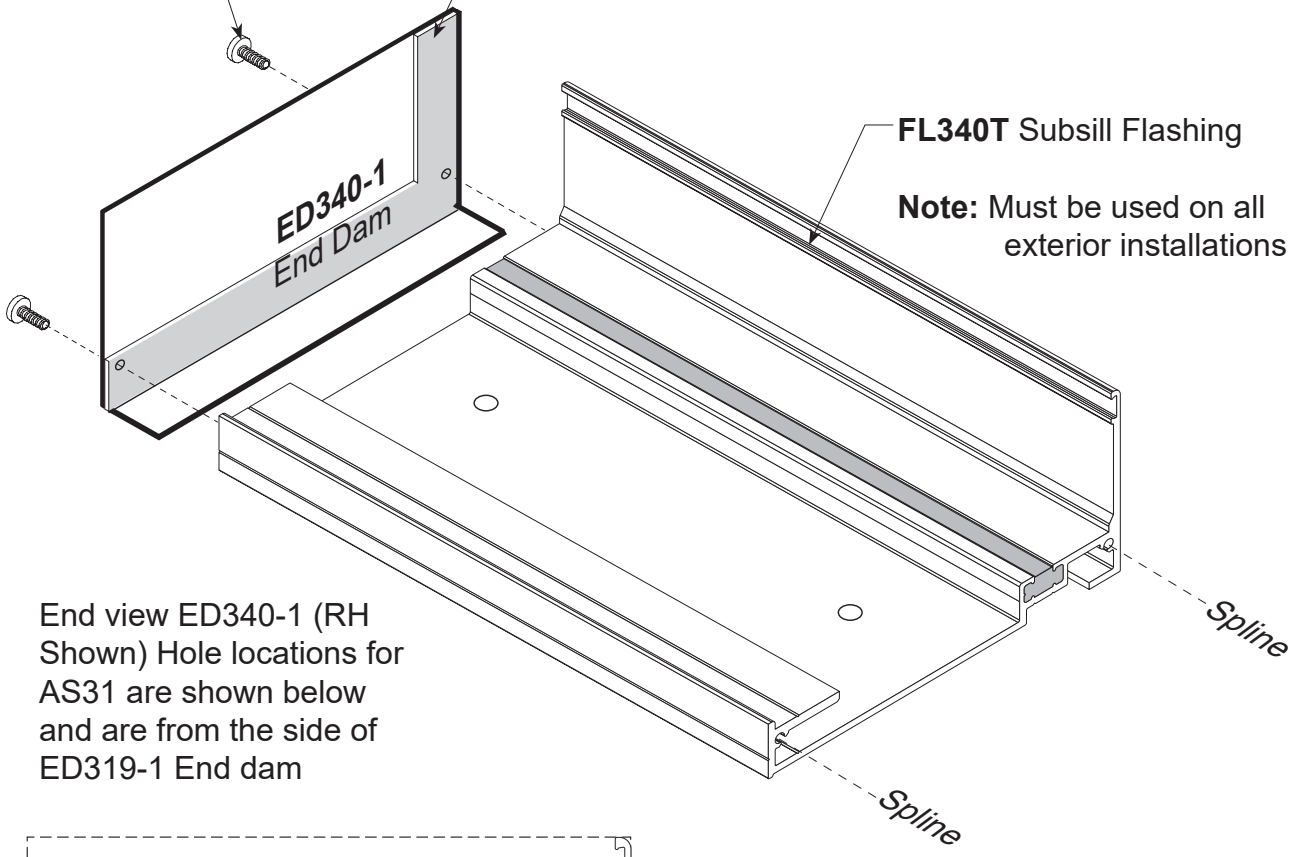
FRAME ASSEMBLY

STEP 3.

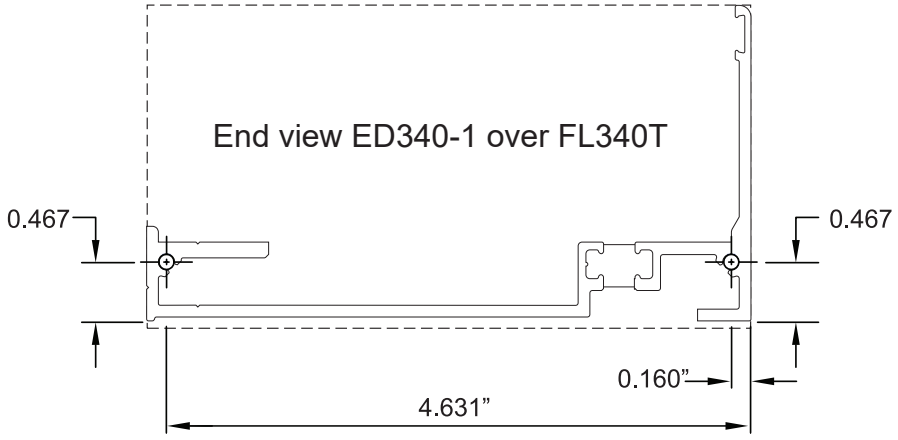
Apply **SM5601** Tacky sealant tape to **ED340-1** end dams and attach to each end of subsill with **AS31** fasteners at spline locations as shown below.

AS31
(#6 x 3/8" PPH)
Screw

SM5601
1/8" x 1/2"
Tacky Tape



End view ED340-1 (RH Shown) Hole locations for AS31 are shown below and are from the side of ED319-1 End dam

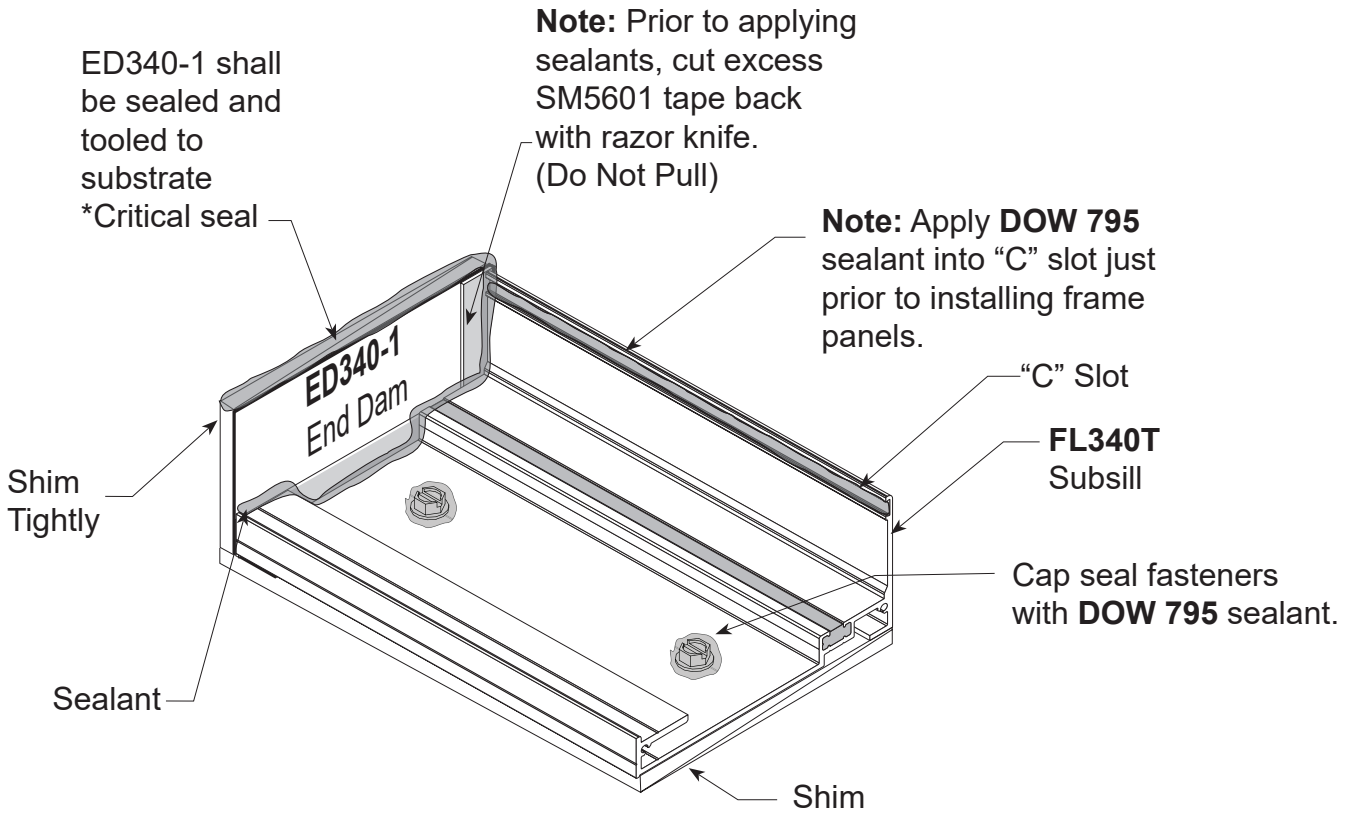


Drill # 21 hole @ .160 4.631 as shown above

FRAME INSTALLATION

STEP 1.

Center subsill into opening allowing for a 1/4” minimum shim space at each end to ensure a good caulk joint.



Shim beneath subsill to be a minimum of 1/4”. Attach subsill flashing to structure with structural fasteners using attachment holes shown on **Page 16**. Cap seal fastener heads as shown.

Wedge shims tightly between end dams and jamb substrate on each end prior to installing frame panels. These shims prevent the end dam from dislodging while frame panels are being installed. Completely seal end dams as shown.

Run a continuous bead of **DOW 795** sealant along the full length of the subsill “C” slot as shown above just prior to installing frame panels. Do not allow sealant to harden prior to installing frame panels. Remove excess sealant after panels are installed.

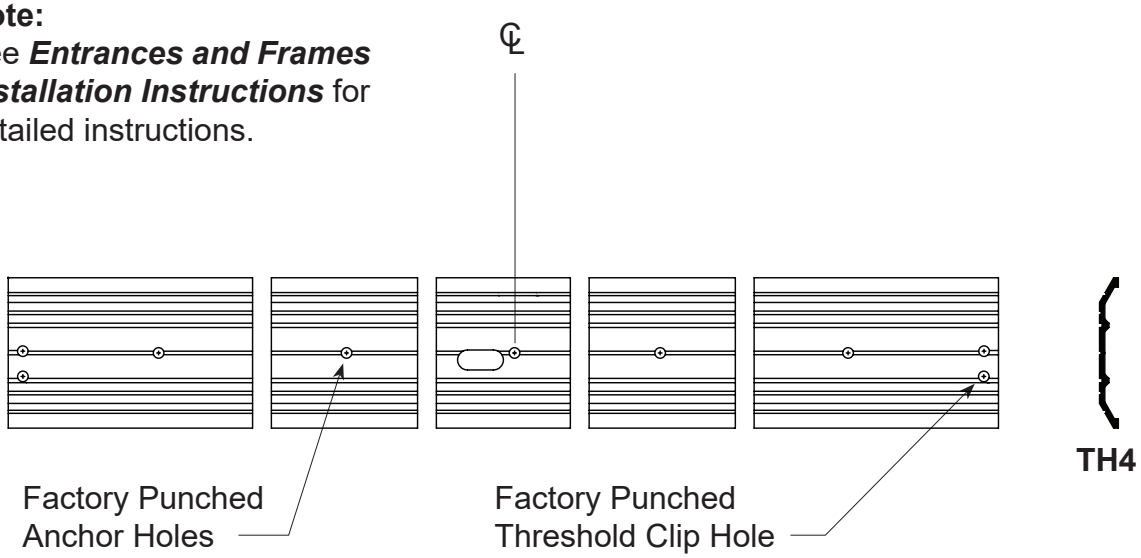
Note: Remove all debris from subsill to prevent clogging weep holes prior to installing panels.

PREPARATION OF DOOR FRAME

All hardware back-up plates are installed in the frame at the factory. Door stops and transom sash are cut to length in the factory. Stock transom frames are fabricated for a vertical frame size of 10’ - 5 1/2”. If your transom opening is smaller, cut the verticals members down to the appropriate length. Leave a minimum 1/4” caulk joint at the head. The fabrication for the transom head horizontal should be made using either a drill fixture or punch die set for Series **FL300** framing. (See **Page 13** for hole locations). Review frame anchor charts for configuration and for substrate to which the frame will be attached. Drill anchor holes into door jamb at wall and **CS104** flat filler. Apply **SM5601** Tacky Tape to joint intersections at door header and transom head. Assemble frame with **AS16** spline screws. Use threshold clips as shown on **Page 23** for attaching threshold. Install transom sash if applicable. The frame is now ready for installation.

THRESHOLD FABRICATION

Note:
See ***Entrances and Frames Installation Instructions*** for detailed instructions.

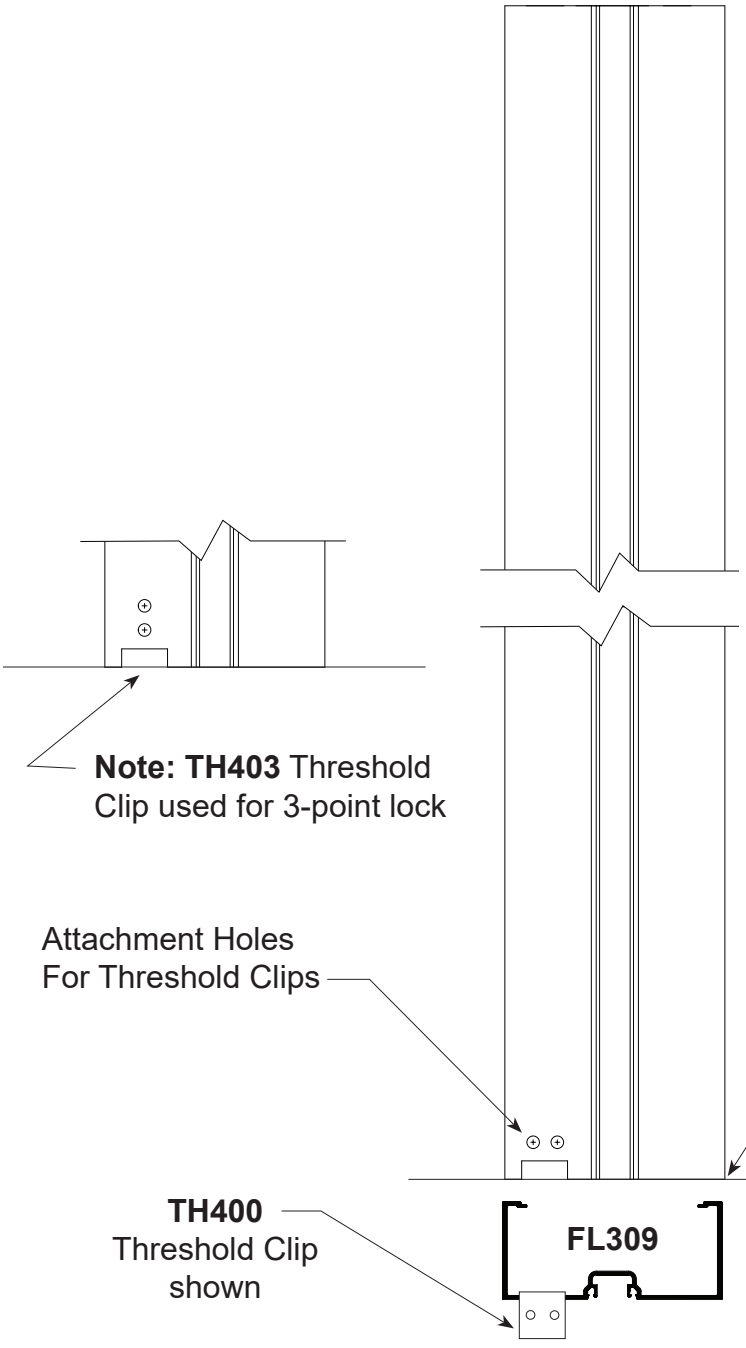


Threshold For Door Pair. (Butt Hung Shown, Offset Pivot Similar.)

FRAME INSTALLATION

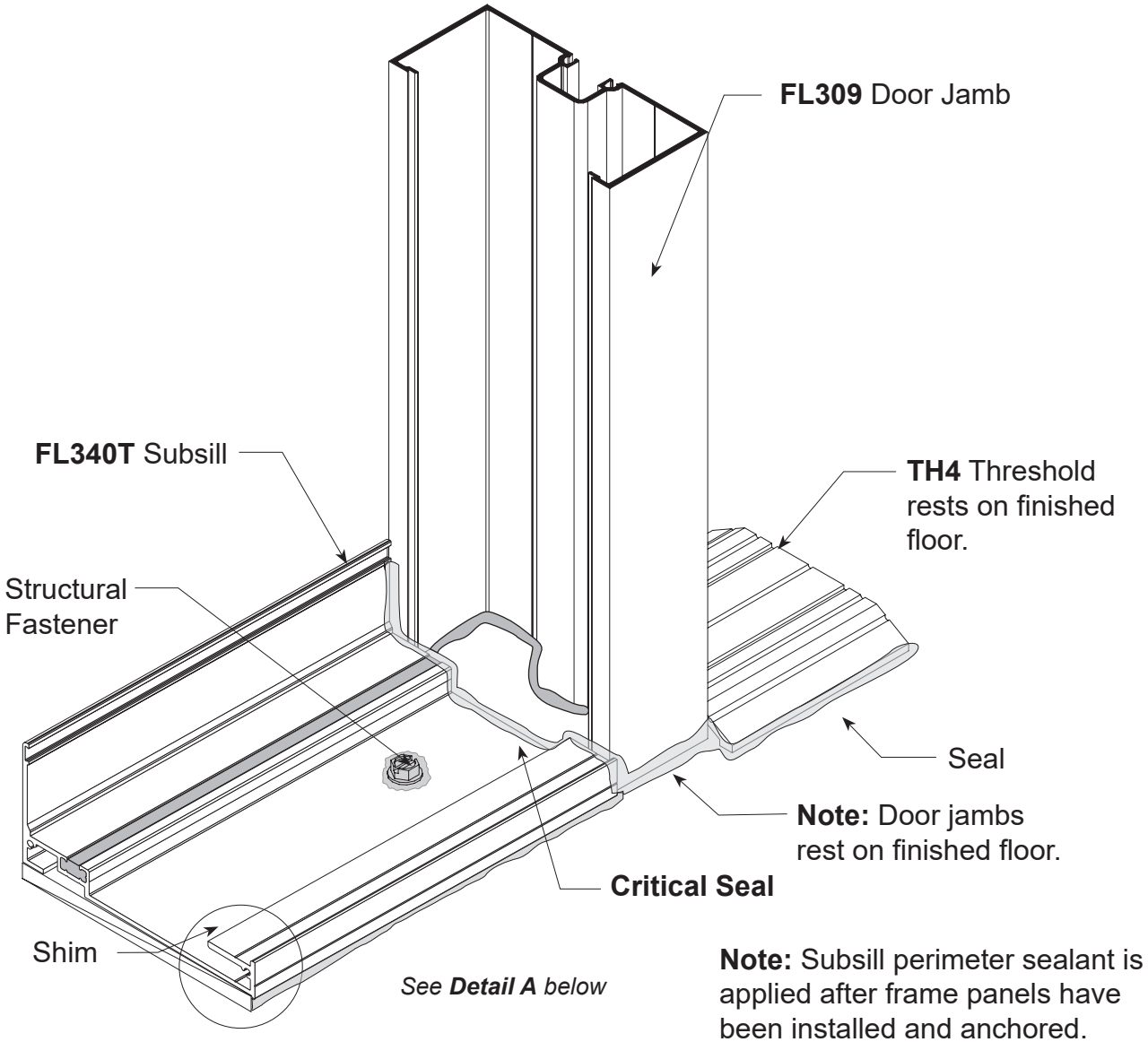
INSTALLATION OF DOOR FRAME

1. Door frame and threshold shall be completely assembled with joints neatly aligned and tight.
2. Door frame shall be installed square and plumb. Measure frame diagonally from corner to corner and shim until the measurements are equal.
3. Level door frame threshold. The door frame is designed to have the jambs extend to floor.
4. Install fasteners through frame and threshold anchor holes and securely anchor to the substrate. Position shims between framing and substrate to prevent members from bowing.
5. Install door stops.
6. You are now ready to install the door.

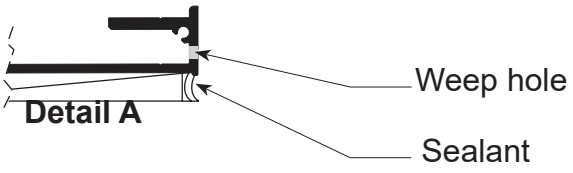


ENTRANCE DOOR FRAME INSTALLATION WITH SUBSILL FOR SIDELIGHTS

Where entrance doors occur, install entrance door frames first.
Subsill butts against door jamb.
The subsill abutting the door jamb does not require an end dam.



Note: Subsill perimeter sealant is applied after frame panels have been installed and anchored.



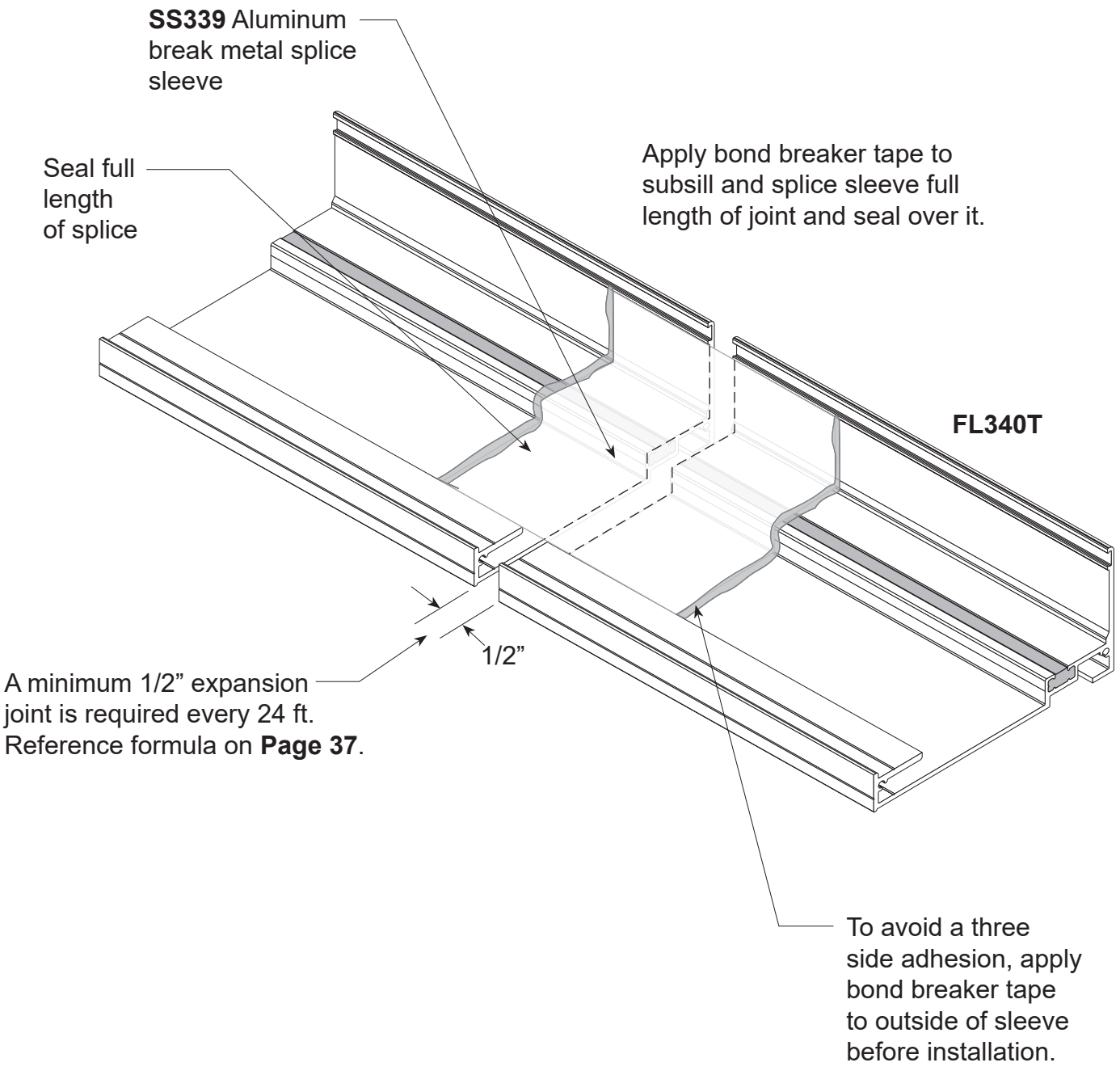
Detail A

Caution: Be careful not to seal over weep hole.

FRAME INSTALLATION

SPECIAL CONDITIONS
SPLICE SLEEVE AT SUBSILL

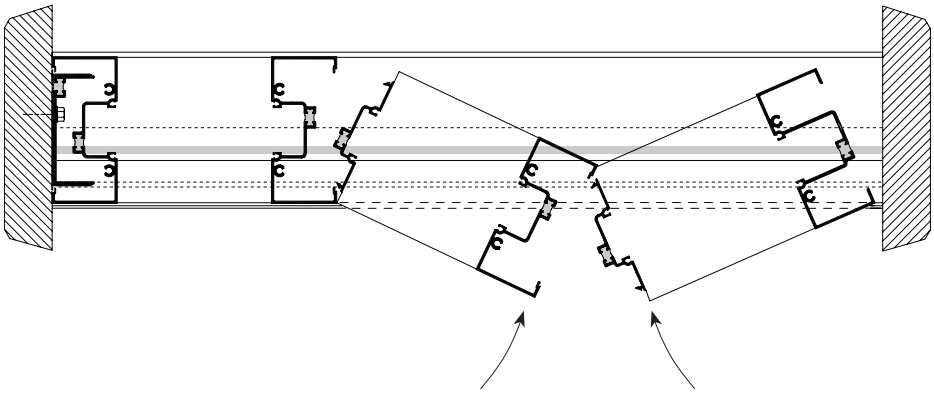
STEP 1. Locate splice sleeves near center of D.L.O. at panel positioned over splice.

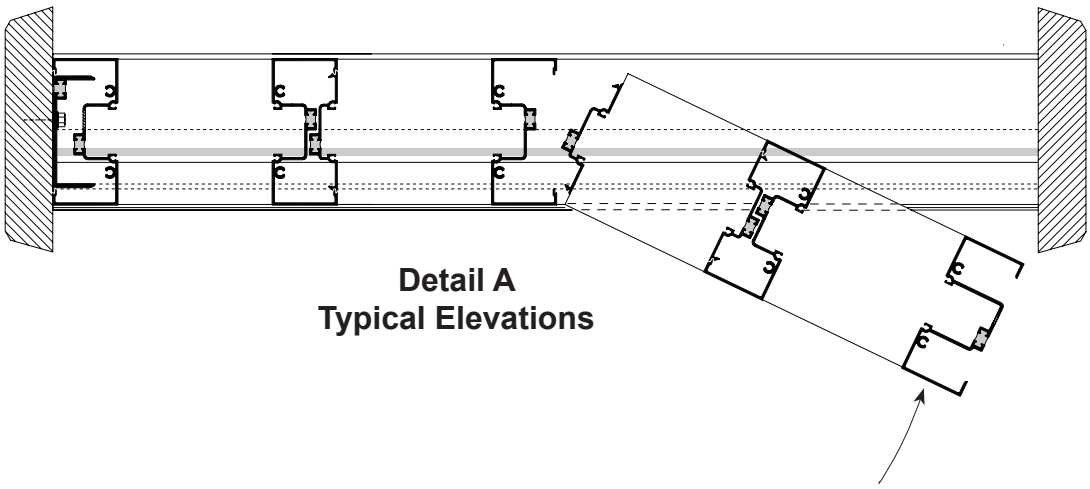


FRAME INSTALLATION

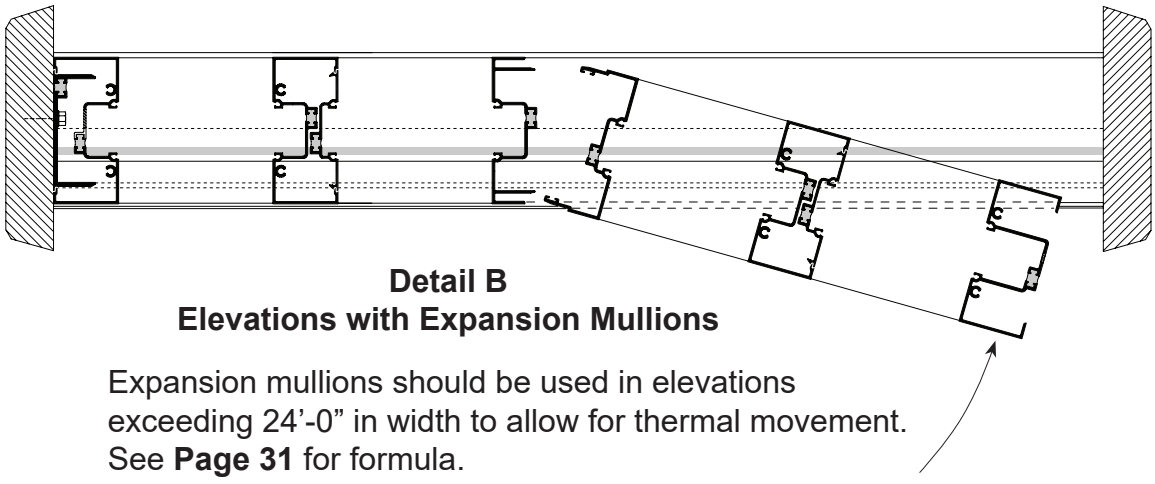
STEP 2.

Screw spline joinery allows for frames to be shop fabricated into panels and shipped to job site assembled. Each panel must have at least one vertical deep pocket for glazing. Arrange panels so that two shallow pockets never face each other. **Reference Page 12 (FRAME ASSEMBLY).**





Detail A
Typical Elevations



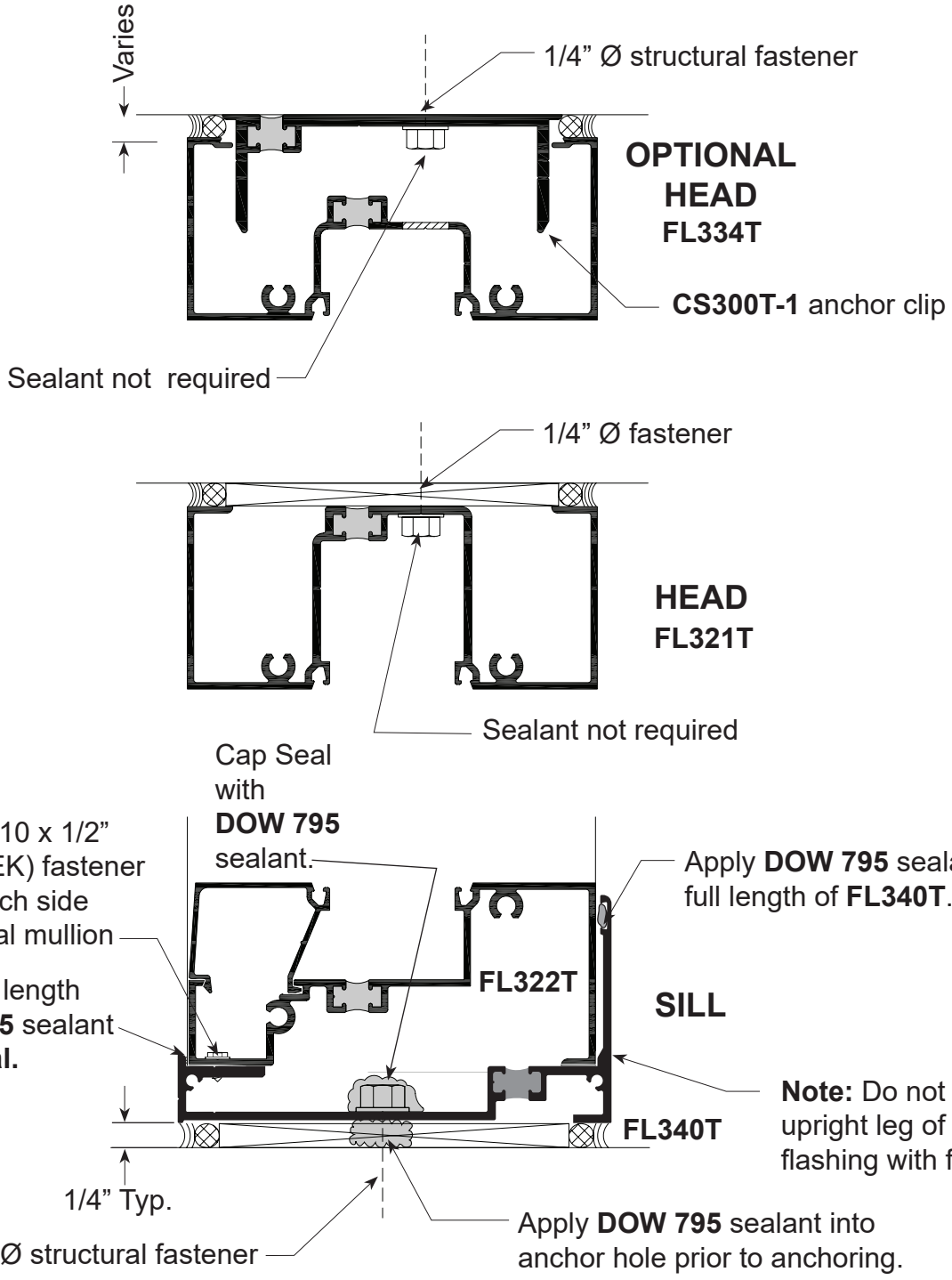
Detail B
Elevations with Expansion Mullions

Expansion mullions should be used in elevations exceeding 24’-0” in width to allow for thermal movement. See **Page 31** for formula.

FRAME INSTALLATION

STEP 3.

After all panels are installed and frame panels are attached to substrate at head, then attach sill to subsill with **AS90** 6” on each side of vertical mullions in location shown below.

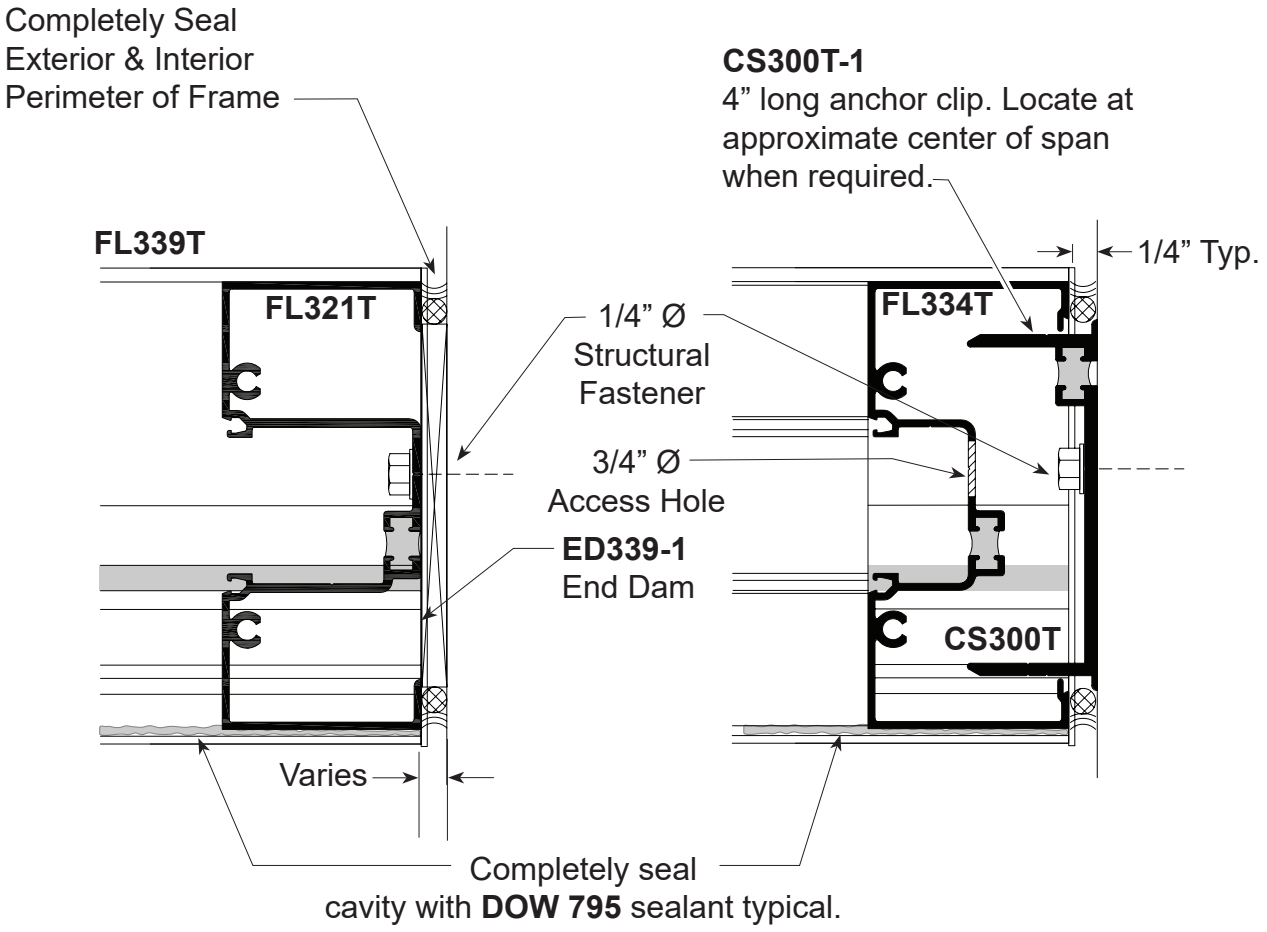


STEP 4.

In high velocity wind zone areas and/or high spans, it may be necessary to attach jamb to substrate as shown to limit deflection. When required, match drill holes in jamb to substrate. Anchor and shim as required.
Cap seal fastener heads with **DOW 795** sealant.

When all frames are secured to the opening, then completely seal exterior and interior perimeter with a continuous bead of **DOW 795** sealant. Completely seal exterior cavity in FL340T full length of sill as shown below.

1. All internal and external sealants to be **DOW 795**.



FRAME INSTALLATION

90º CORNER

1. Install the mitered subsill FL340 on one side of the corner, test fit other side to confirm corner miter fits as desired. Anchor this part to the substrate seal open cavities with DOW 795 to the substrate and tool same, install the other half in the same manner anchor to substrate and seal to existing half of this corner, fill any and all cavities with sealant and tool. Cap seal all exposed fasteners and tool. Reference **figure "A "**.

2. Apply sealant to the back edge of the FL340 as shown page 21 and install the first corner panel (shown RH panel) in **Figure "B"**

3. Repeat this application for the LH panel as shown in **figure "B"**

4. Use quick clamps or a block of wood and dead blow hammer to get corners snapped together

5. Once corner is snapped together anchor both left and right panels to the FL340 with AS90 fasteners as shown on page 27

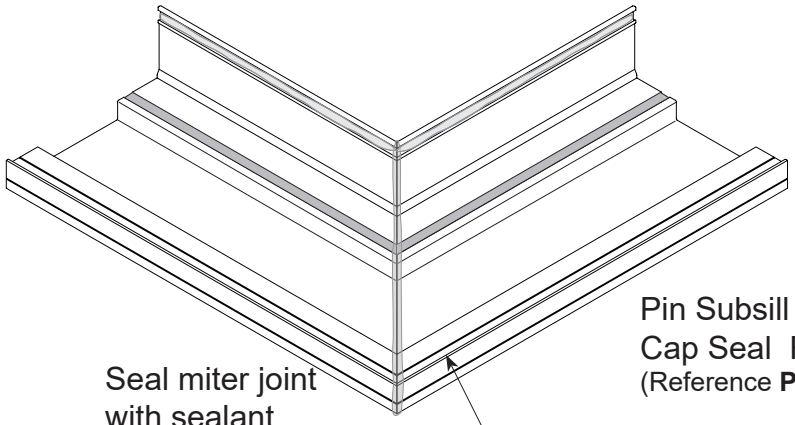


Fig. A.

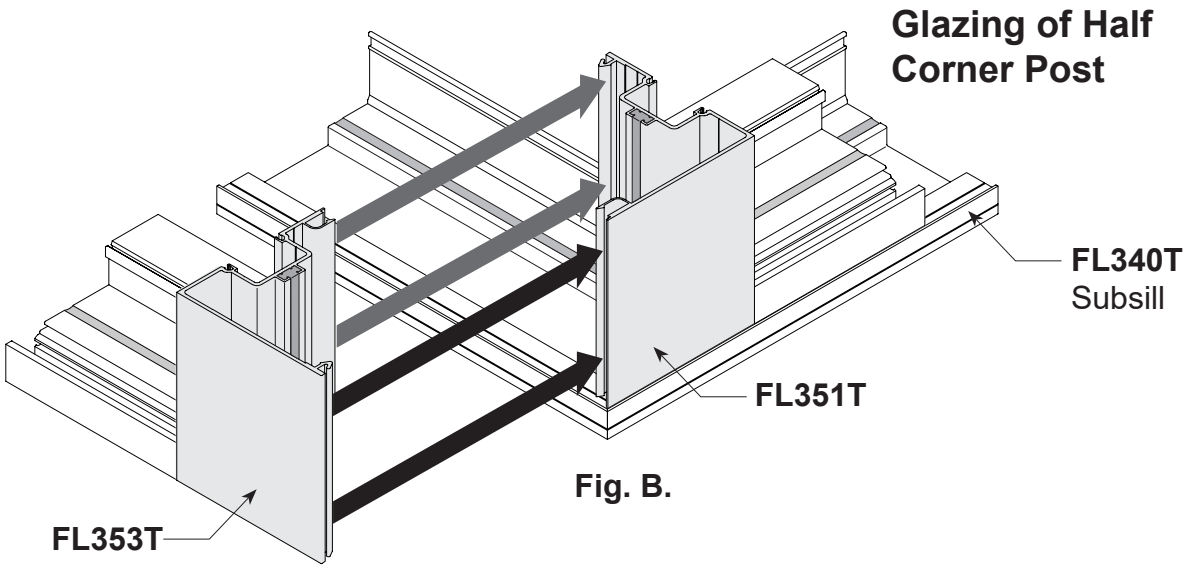
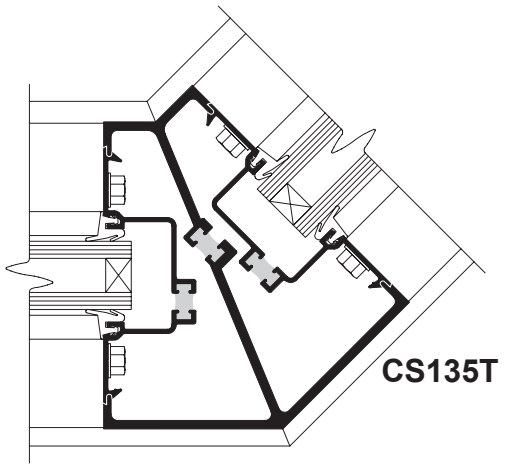


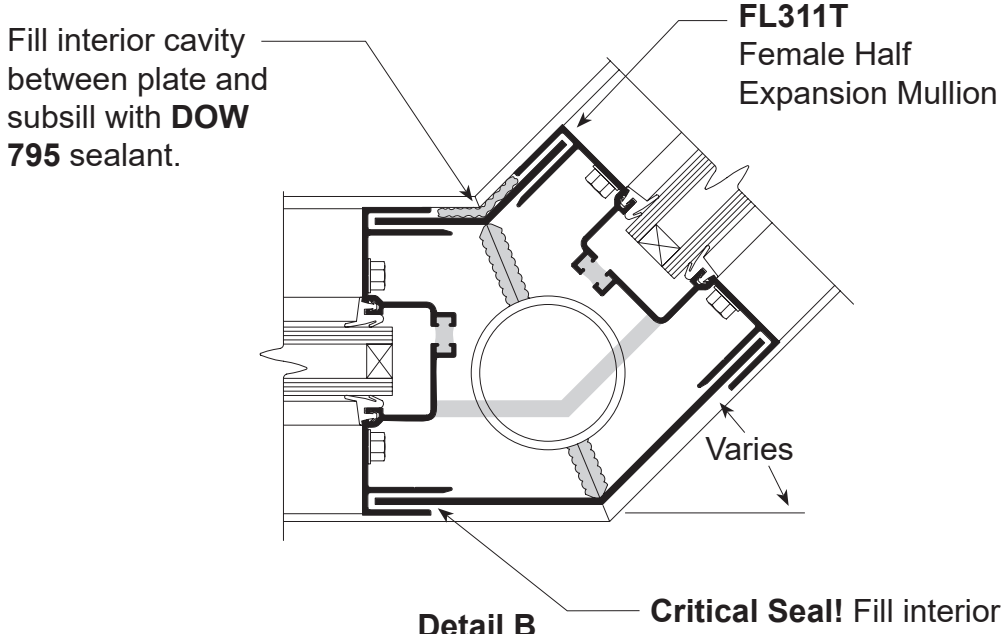
Fig. B.

135° INSIDE / OUTSIDE CORNERS



135°/45° Corner
Detail A

BREAK METAL ANGLE CORNERS



Detail B

Critical Seal! Fill interior cavity of **FL311T** with **DOW 795** sealant prior to inserting aluminum brake metal filler plates at interior and exterior. Once installed, be sure to clean and tool excess sealant.

GLASS SIZE FORMULAS

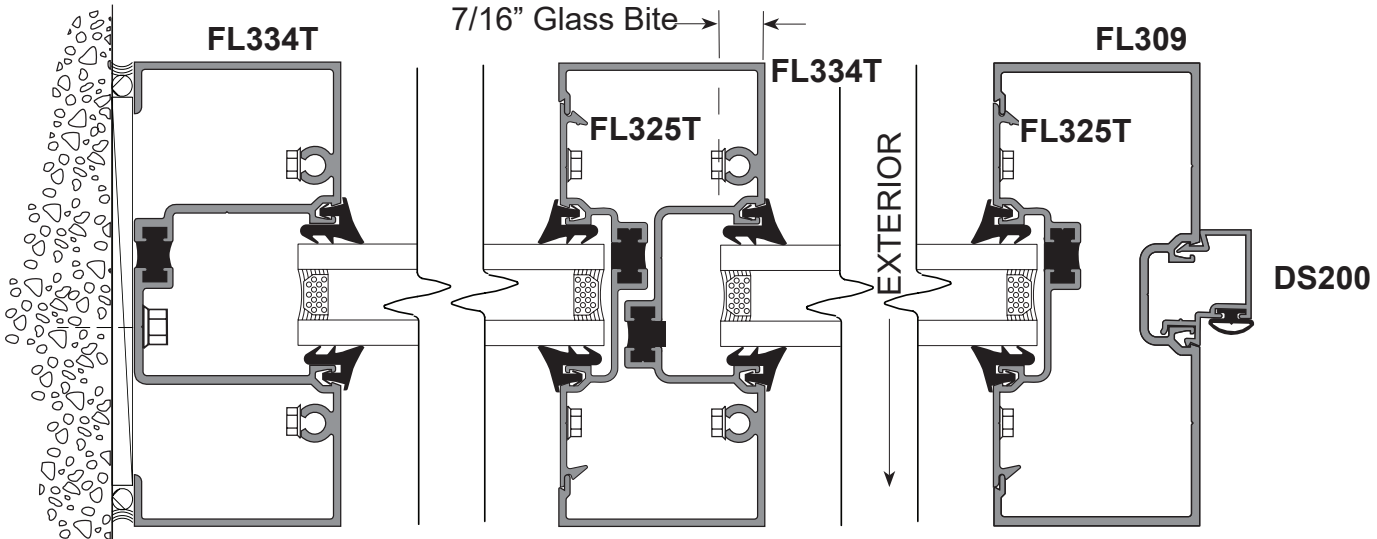
Glass Sizes for **FL300T** System:

Glass Width and Height = D.L.O. + 7/8”

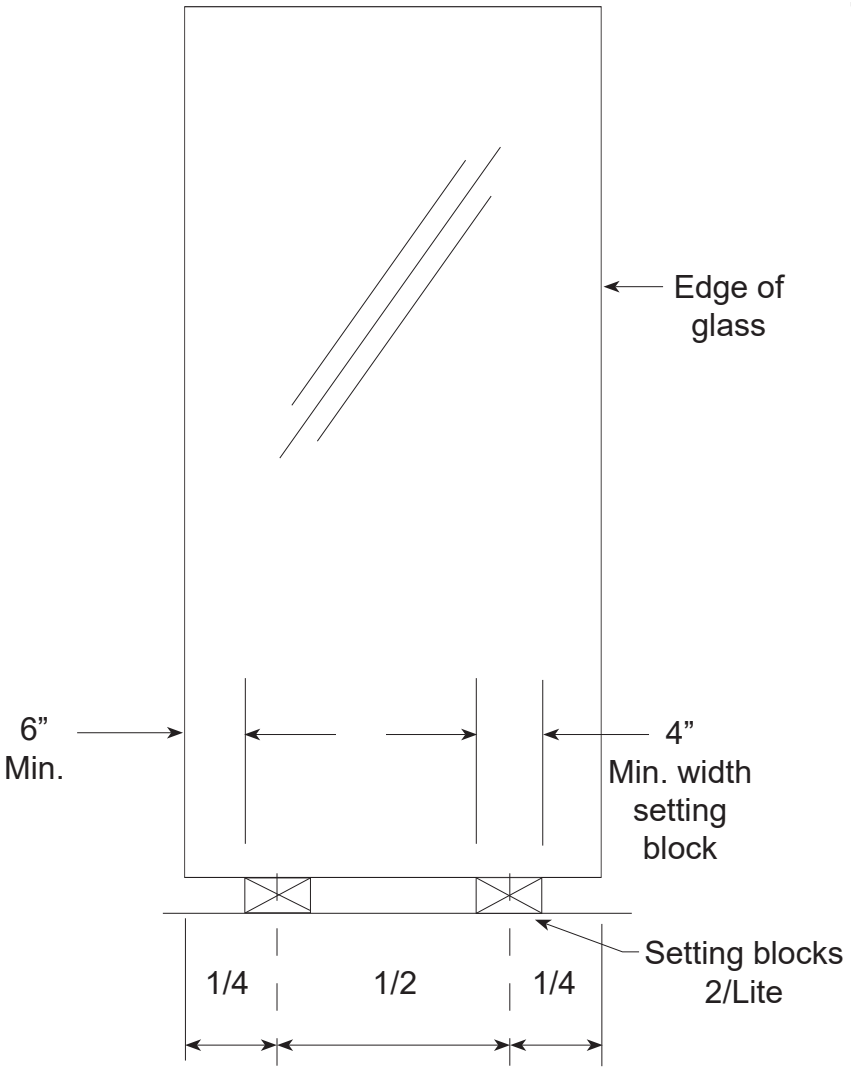
FL300T Door Frames with surface mounted closers
Transom parts FL307T Transom bar and FL314T Header
Width: door opening width - 1 1/8"
Height: daylite opening + 7/8"

FL300T Door Frames with concealed closers
Transom parts FL312 Transom bar and FL314T Header
Width: door opening width - 1 1/8" (CS115/FL518 will be on both vertical sides)
Height: daylite opening (taken from top of sash CS115 to bottom of FL314T) - 1/8"

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



PREPARATION OF FRAME OPENING FOR GLASS



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

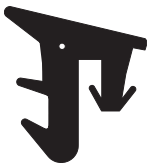
2. Install interior gasket as shown on **page 32**.

3. **SETTING BLOCKS**
Glass should be set on two identical setting blocks having a Shore A Durometer of 85 + or -5. The preferred location is at the 1/4 points.

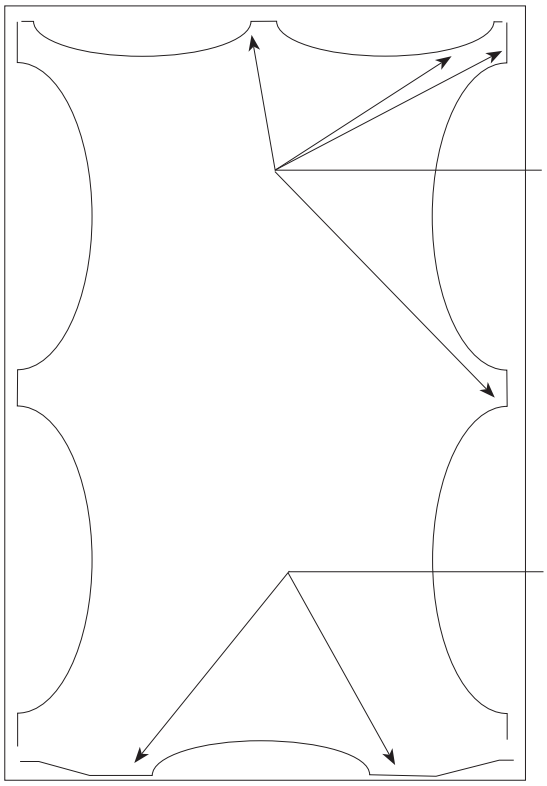
   If the 1/4 point location causes excessive deflection of the intermediate horizontal, move the setting blocks equally towards the corners of the lite as far as the 1/8 points. The outer end of the block **CANNOT** be closer than 6” to the corner of the glass.

4. **DEFLECTION**
The intermediate horizontal must not exceed 1/8” and a door header is limited to 1/16”. Check dead load charts for proper setting block locations.

INSTALLATION OF TOP LOAD GLAZING GASKETS



NG1 glazing gasket shown actual size.

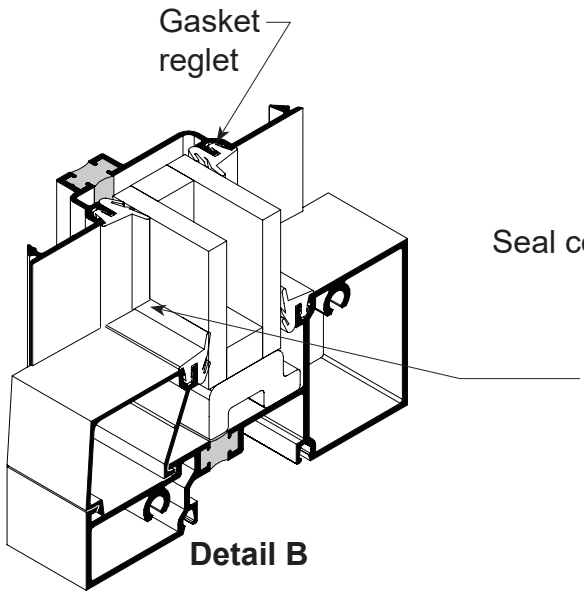


Detail A

1. Cut gaskets a minimum of 3/16" longer per foot than aluminum extrusion.

2. **Do not stretch gasket to make them fit.**

It is very important that gaskets are installed correctly as shown in **Detail "A"**, to prevent shrinkage at corners.

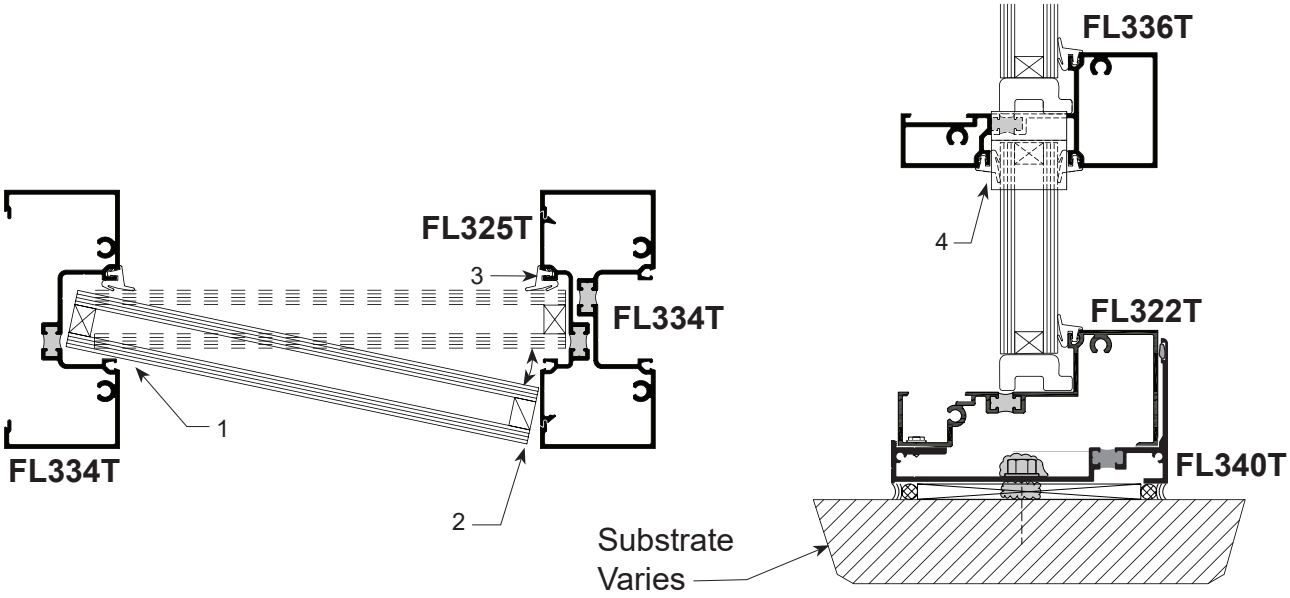


Detail B

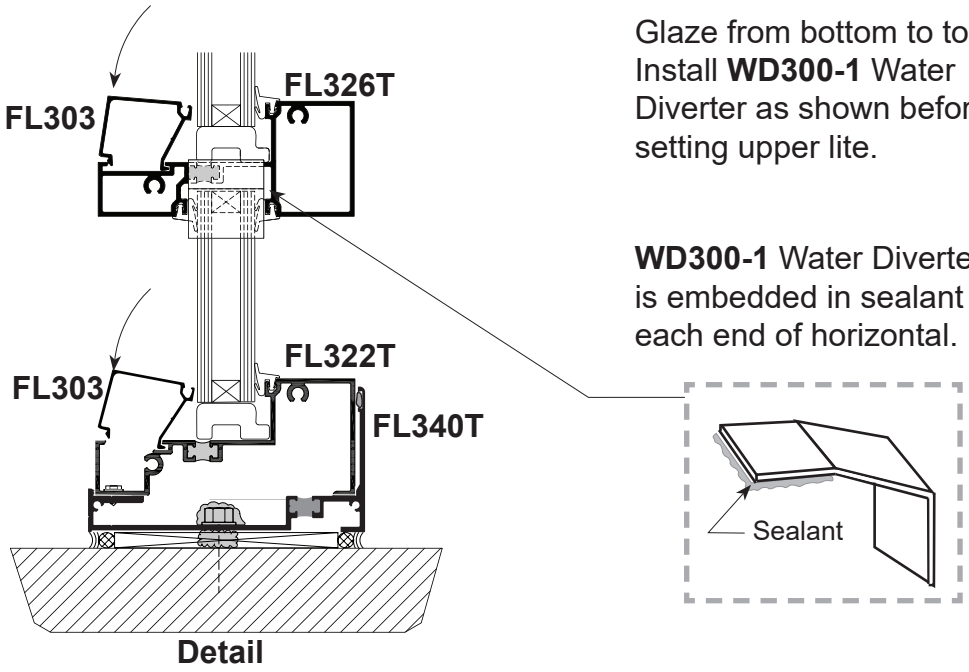
3. Pull gaskets back 2" in both directions at corner intersections & seal with **DOW 795** silicone sealant. This should be done on interior & exterior for best performance.

EXTERIOR GLAZING
GLASS SIZES*

GLASS SIZE = DAYLIGHT OPENING + 7/8”
Consult glass manufacturer for glass tolerance before ordering glass.
* (See door frame instructions for glass size at transom.)



1. Install interior gasket. Vertical gaskets run through. **Reference Page 32.**
2. Set glass in place following the four step procedure shown above. Center glass in the opening, making sure proper glass penetration is achieved. Rest glass on setting blocks.
3. Press glass against installed gaskets and snap-in **FL303** Glass Stop as shown below.
4. Install **NG1** exterior gaskets as shown on **Page 32.** Make sure glass has been pushed back against the interior gaskets, if gaskets are hard to push in use a diluted mixture of window cleaner spray the cavity and gasket with same use a vinyl roller to push gasket in and smooth out.



Detail

Glaze from bottom to top. Install **WD300-1** Water Diverter as shown before setting upper lite.

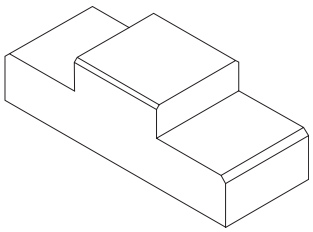
WD300-1 Water Diverter is embedded in sealant at each end of horizontal.

DOOR PREPARATION AND GLAZING

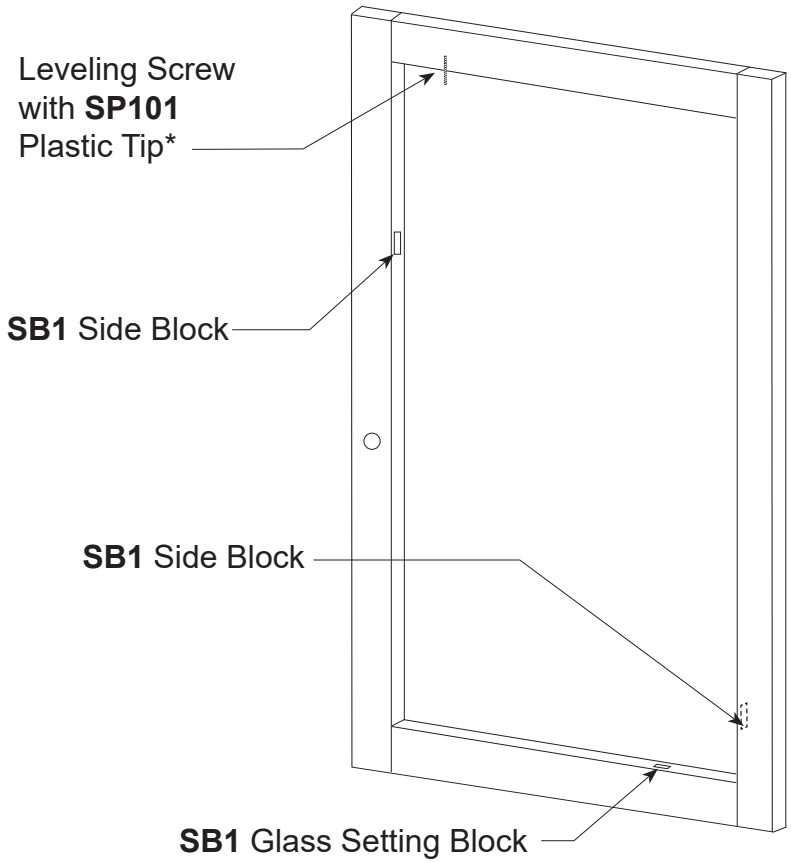
Door glass stops and gaskets are shipped loose.

1. Install SB1 Side blocks as shown below. (RH door shown, LH door will be opposite.)
2.Install **DG100 or DG101** glass stops on interior side of door.
3. Center glass in opening on setting blocks and align with side blocks.
4. Once the glass is in the correct position, lightly screw the glass adjustment screw down with **SP101** plastic tip attached to the top of the glass.
5. Install horizontal door glass stops.
6. Square door using adjustment screw located in top rail of door as required.

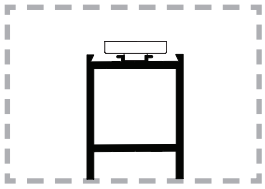
SB1



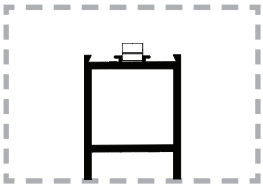
Side Block & Setting Block are Shown Inverted for Clarity



For 1” Glass (Rotate 90º From 1/4” Position)

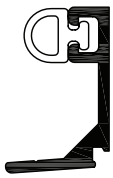


For 1/4” Glass

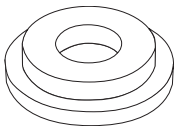


DG100 Glass Stop with bulb gasket and 1/4” glass

Use **DG101** Glass Stop for 7/8” insulating glass.



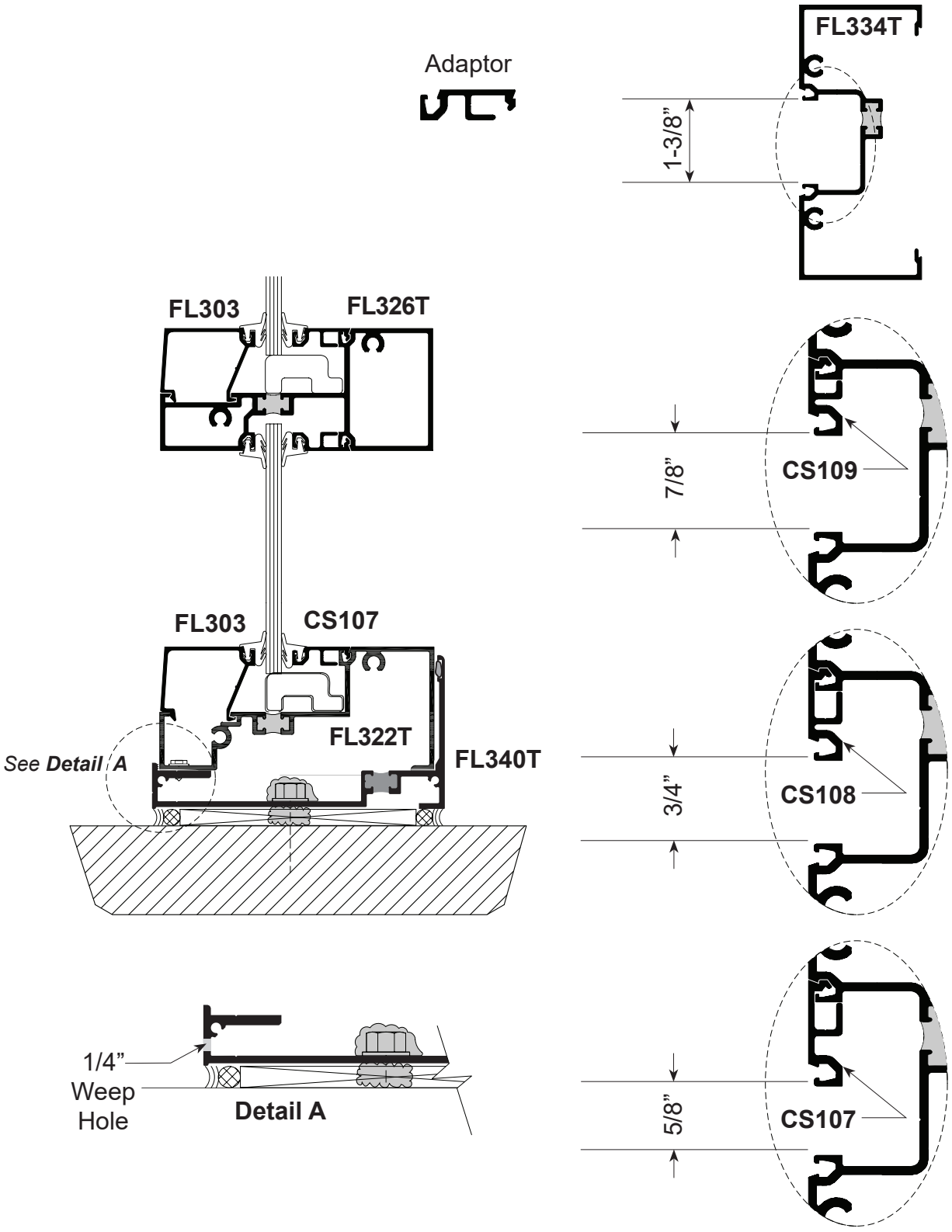
DG101



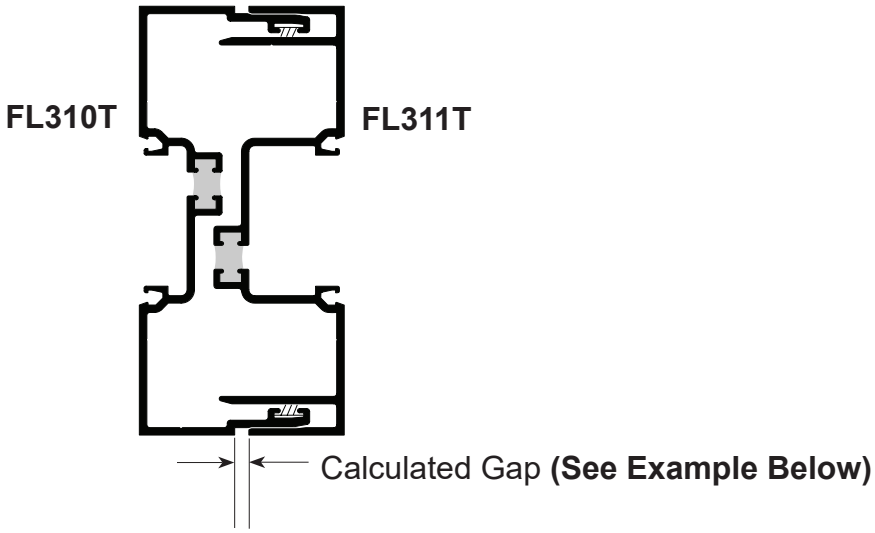
SP102

NOTE: If 7/8” glass is being glazed into door, install **SP102** plastic tip over **SP101**

SPECIAL CONDITIONS
TRANSITION GLAZING



SPECIAL CONDITIONS
EXPANSION MULLIONS



Detail

Calculated gap is determined by job conditions project specifications and temperature at the time of installation. Expansions mullions allow for 3/8” maximum movement.

EXPANSION GAP SIZE FORMULA= Length (“) x Fº difference x .0000129

L = Length in inches, between center line of expansion mullion in elevation.

Fº = Specified Temperature Variation

.0000129 = Thermal Coefficient for Aluminum

FOR EXAMPLE:

Assume 100º temperature variation specified and temperature at job site on day of installation is 60º

1. 100º - 60º = 40º temperature difference

2. Length of elevation between expansion mullions equals 20’- 0” or 240”

3. 240” x .0000129 x 40º = .124” Therefore, set expansion mullion gap at .124” or 1/8”.

Coral Architectural Products

NOTE: Charts shown are for reference only.
Anchor locations provided in shop drawings and/or product approvals shall supersede chart below.

PERIMETER FASTENERS:

1. TYPICAL INSTALLATION INTO SUBSTRATES
   A. 3000 PSI CONCRETE
   B. STEEL, 18 GA. MIN.
   C. HOT ROLLED STEEL, 1/8" MIN. THICKNESS
   D. SO. PINE, GRADE NO. 2 OR BETTER

2. FIRST ANCHOR IS 2" FROM EDGE OF VERTICAL. EACH ADDITIONAL FASTENER IS AT REQUIRED MIN. SPACING.

ANCHOR LENGTHS ARE SHOWN TO MEET MINIMUM EMBEDMENT.

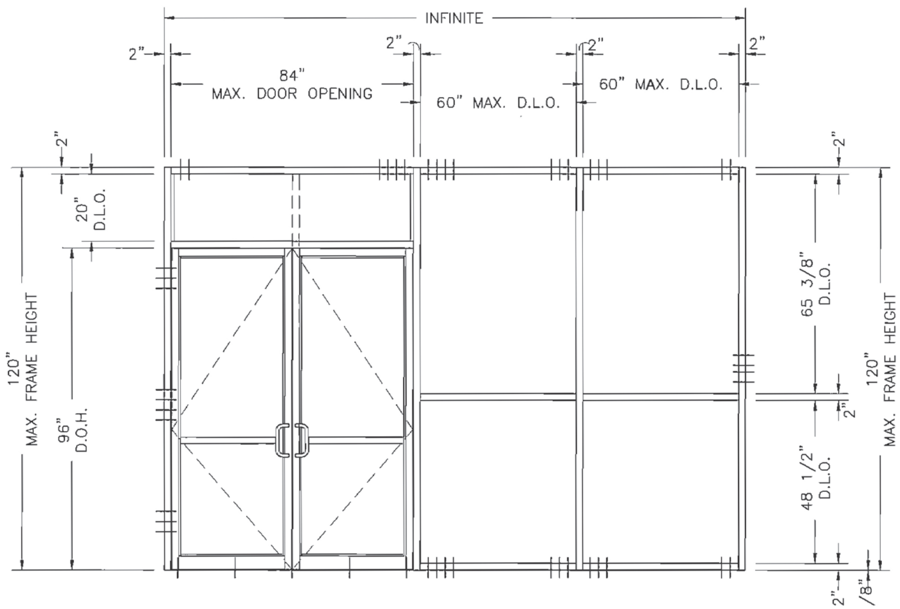
DOOR PAIR DEPICTED, SINGLE DOORS QUALIFIED BY SAME.

FOR DOOR FRAMES WITHOUT SIDELITES, ANCHORING SHALL BE DUPLICATED ON BOTH JAMBS AS SHOWN (PAIRS AND/ OR SINGLES).

HEAD AND SILL
#14 X 3" WOOD SCREWS WITH 2" MIN. EMBEDMENT, 1-3/4" MIN. EDGE DISTANCE. LOCATE FIRST ANCHOR 2" FROM EDGE OF MULLION AND ADDITIONAL FASTENERS @ 3" MIN. SPACING .

DOOR FRAME JAMB ANCHORS #14 X 3" PAN OR HEX HEAD WOOD SCREW	
LOCATION	SPACING
FROM BOTTOM OF FRAME (3) TOTAL	11-1/2", 14-1/2", 17-1/2"
FROM CENTERLINE (4) TOTAL	1-1/2", 4-1/2" ABOVE CENTERLINE 1-1/2", 4-1/2" BELOW CENTERLINE
FROM BOTTOM OF DOOR HEADER (3) TOTAL	11-1/2", 14-1/2", 17-1/2"

NOTE:
DOOR FRAMES WITH AND WITHOUT TRANSOM SHALL BE ANCHORED AS SHOWN ON CHART ABOVE.



WOOD SUBSTRATE - 3" THICK ANCHOR LOCATIONS

JAMB
#14 X 3" WOOD SCREWS WITH 2" MIN. EMBEDMENT, 1-3/4" MIN. EDGE DISTANCE. LOCATE (1) ANCHOR @ 1-1/2" ABOVE AND BELOW CENTERLINE AND ADDITIONAL FASTENERS @ 3" MIN. SPACING .

THRESHOLD ANCHORS 1/4" X 2-1/2" FHP TAPCON OR EQUAL - 1-3/4" MINIMUM EMBEDMENT, 2-1/2" MIN. EDGE DISTANCE	
SINGLE DOORS UP TO 48" (3 ANCHORS TOTAL)	(1) EACH 4" FROM EACH JAMB
	(1) EACH AT CENTER LINE OF DOOR OPENING
PAIRS DOORS UP TO 96" (5 ANCHORS TOTAL)	(1) EACH AT 4" FROM EACH JAMB
	(1) EACH AT CENTER LINE OF DOOR OPENING
	(1) EACH BETWEEN CENTER LINE AND JAMB ANCHORS

NOTE:
WOOD FRAMING THAT IS LESS THAN 2-1/2" SHALL BE CONSIDERED BLOCKING. STOREFRONT FRAMING SHALL BE FASTENED THROUGH WOOD INTO STEEL OR CONCRETE SUBSTRATE.

NOTE:
MULLION JAMB ANCHORS MAY BE OMITTED FOR HEIGHTS LESS THAN 9'-0"

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FLORIDA PRODUCT APPROVAL DRAWINGS FOR FL300T

WOOD FASTENER LOCATIONS

REV	BY	DATE	DESCRIPTION

PROJECT NO. FL300T
DRAWN DEG | DATE 3/28/18
CHECKED WS | APPROVED EAB
SHEET 14 OF 17

NOTE: Charts shown are for reference only.
Anchor locations provided in shop drawings and/or product approvals shall supersede chart below.

PERIMETER FASTENERS:

1. TYPICAL INSTALLATION INTO SUBSTRATES
   A. 3000 PSI CONCRETE
   B. STEEL, 18 GA. MIN.
   C. HOT ROLLED STEEL, 1/8" MIN. THICKNESS
   D. SO. PINE, GRADE NO. 2 OR BETTER

2. FIRST ANCHOR IS 2" FROM EDGE OF VERTICAL. EACH ADDITIONAL FASTENER IS AT REQUIRED MIN. SPACING.

ANCHOR LENGTHS ARE SHOWN TO MEET MINIMUM EMBEDMENT.

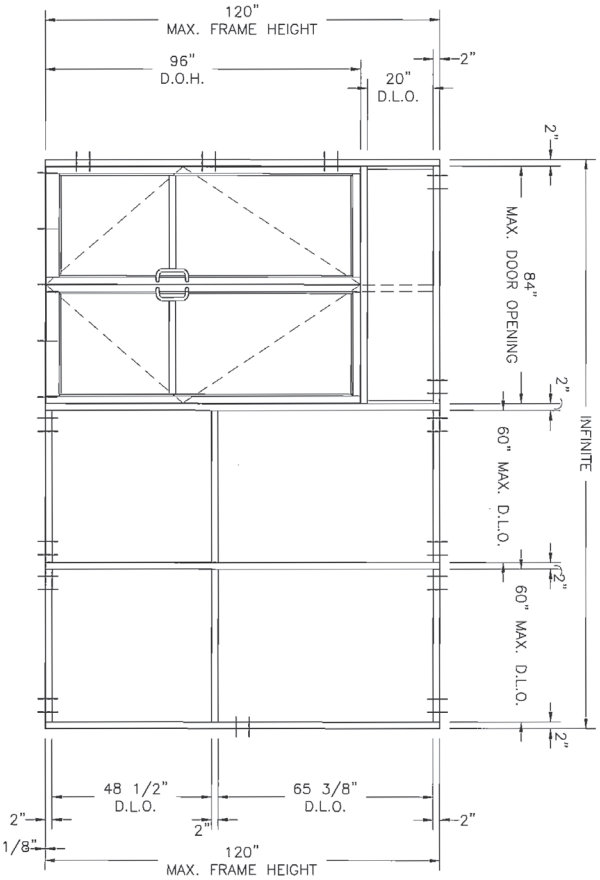
DOOR PAIR DEPICTED, SINGLE DOORS QUALIFIED BY SAME.

FOR DOOR FRAMES WITHOUT SIDELITES, ANCHORING SHALL BE DUPLICATED ON BOTH JAMBS AS SHOWN (PAIRS AND/ OR SINGLES).

DOOR FRAME JAMB ANCHORS 1/4" X 3" HEX OR FLAT HEAD TAPCONS	
LOCATION	SPACING
FROM BOTTOM OF FRAME (2) TOTAL	8-1/2", 12-1/2"
FROM CENTERLINE (2) TOTAL	2" ABOVE CENTERLINE 2" BELOW CENTERLINE
FROM BOTTOM OF DOOR HEADER (2) TOTAL	8-1/2", 12-1/2"

NOTE:
DOOR FRAMES WITH AND WITHOUT TRANSOM SHALL BE ANCHORED AS SHOWN ON CHART ABOVE.

THRESHOLD ANCHORS 1/4" X 2-1/2" FHP TAPCON OR EQUAL - 1-3/4" MINIMUM EMBEDMENT, 2-1/2" MIN. EDGE DISTANCE	
SINGLE DOORS UP TO 48" (3 ANCHORS TOTAL)	(1) EACH 4" FROM EACH JAMB
	(1) EACH AT CENTER LINE OF DOOR OPENING
PAIRS DOORS UP TO 96" (5 ANCHORS TOTAL)	(1) EACH AT 4" FROM EACH JAMB
	(1) EACH AT CENTER LINE OF DOOR OPENING
	(1) EACH BETWEEN CENTER LINE AND JAMB ANCHORS



CONCRETE SUBSTRATE ANCHOR LOCATIONS

HEAD AND SILL
1/4" X 2-1/2" TAPCON WITH 1-3/4" MIN. EMBEDMENT, MIN. 4" SPACING, 2-1/2" MIN. EDGE DISTANCE. LOCATE FIRST ANCHOR 2" FROM EDGE OF MULLION AND ADDITIONAL FASTENERS @ 4" MIN. SPACING.

JAMB
1/4" X 2-1/2" TAPCON WITH 1-3/4" MIN. EMBEDMENT, 2-1/2" MIN. EDGE DISTANCE. LOCATE (1) ANCHOR @ 2" ABOVE AND BELOW CENTERLINE

NOTE:
MULLION JAMB ANCHORS MAY BE OMITTED FOR HEIGHTS LESS THAN 9'-0"

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BE-4870

FLORIDA PRODUCT
APPROVAL DRAWINGS FOR FL300T

CONCRETE FASTENER LOCATIONS

Coral
Architectural Products
3010 RICE MINE ROAD TUSCALOOSA, AL 35406
PHONE 800-772-7737 FAX 800-255-7320

REV	BY	DATE	DESCRIPTION

PROJECT NO.	FL300T
DRAWN	DPB
DATE	3/28/18
CHECKED	WS
APPROVED	EAB
SHEET	15 OF 17

NOTE: Charts shown are for reference only.
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PERIMETER FASTENERS:

1. TYPICAL INSTALLATION INTO SUBSTRATES
   A. 3000 PSI CONCRETE
   B. STEEL, 18 GA. MIN.
   C. HOT ROLLED STEEL, 1/8" MIN. THICKNESS
   D. SO. PINE, GRADE NO. 2 OR BETTER

2. FIRST ANCHOR IS 2" FROM EDGE OF VERTICAL. EACH ADDITIONAL FASTENER IS AT REQUIRED MIN. SPACING.

ANCHOR LENGTHS ARE SHOWN TO MEET MINIMUM EMBEDMENT.

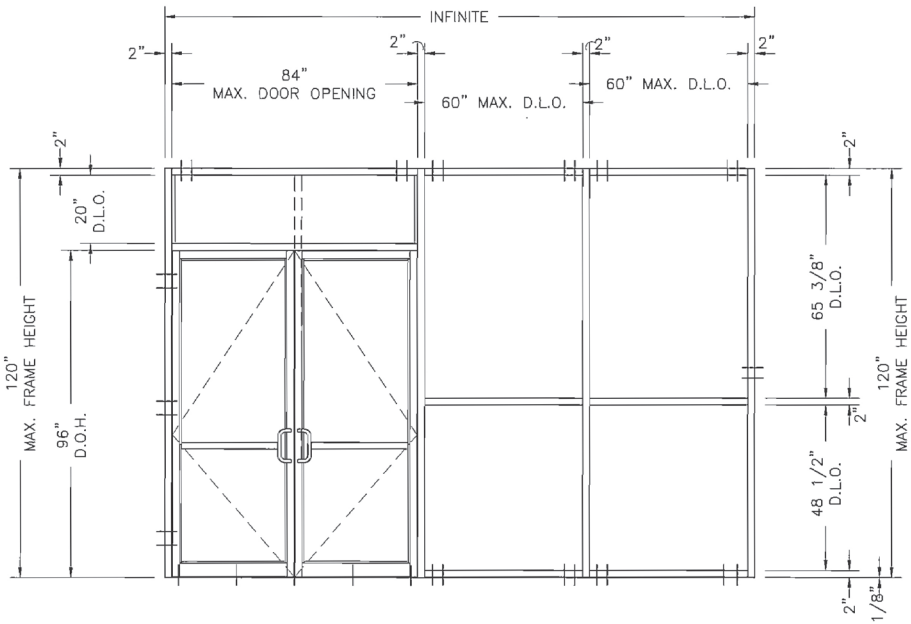
DOOR PAIR DEPICTED, SINGLE DOORS QUALIFIED BY SAME.

FOR DOOR FRAMES WITHOUT SIDELITES, ANCHORING SHALL BE DUPLICATED ON BOTH JAMBS AS SHOWN (PAIRS AND/ OR SINGLES).

DOOR FRAME JAMB ANCHORS 1/4-14 X 2-1/2" TEK 3 HEX OR FLAT HEAD SCREWS	
LOCATION	SPACING
FROM BOTTOM OF FRAME (2) TOTAL	8-1/2", 12-1/2"
FROM CENTERLINE (2) TOTAL	2" ABOVE CENTERLINE 2" BELOW CENTERLINE
FROM BOTTOM OF DOOR HEADER (2) TOTAL	8-1/2", 12-1/2"

NOTE:
DOOR FRAMES WITH AND WITHOUT TRANSOM SHALL BE ANCHORED AS SHOWN ON CHART ABOVE.

HEAD AND SILL
1/4" X 2-1/2" TEK 3 SCREW.
LOCATE FIRST ANCHOR 2" FROM EDGE OF MULLION AND ADDITIONAL ANCHORS @ 2" MIN. SPACING .



LIGHT GAUGE MIN. 18 GA. STEEL SUBSTRATE ANCHOR LOCATIONS

JAMB
1/4" X 2-1/2" TEK 3 SCREW.
LOCATE (1) ANCHOR @ 1" ABOVE AND BELOW CENTERLINE

NOTE:
MULLION JAMB ANCHORS MAY BE OMITTED FOR HEIGHTS LESS THAN 9'-0"

THRESHOLD ANCHORS 1/4" X 2-1/2" FHP TAPCON OR EQUAL - 1-3/4" MINIMUM EMBEDMENT, 2-1/2" MIN. EDGE DISTANCE	
SINGLE DOORS UP TO 48" (3 ANCHORS TOTAL)	(1) EACH 4" FROM EACH JAMB
	(1) EACH AT CENTER LINE OF DOOR OPENING
PAIRS DOORS UP TO 96" (5 ANCHORS TOTAL)	(1) EACH AT 4" FROM EACH JAMB
	(1) EACH AT CENTER LINE OF DOOR OPENING
	(1) EACH BETWEEN CENTER LINE AND JAMB ANCHORS

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4/26/18

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3015 BERT KOUNS INDUSTRIAL LOOP, SHREVEPORT, LA. 71118
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FLORIDA PRODUCT APPROVAL DRAWINGS FOR FL300T

LIGHT GAUGE STEEL FASTENER LOCATIONS

PROJECT NO. FL300T	
DRAWN DEG	DATE 3/26/18
CHECKED WS	APPROVED EAB
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Anchor locations provided in shop drawings and/or product approvals shall supersede chart below.

PERIMETER FASTENERS:

1. TYPICAL INSTALLATION INTO SUBSTRATES
   A. 3000 PSI CONCRETE
   B. STEEL, 18 GA. MIN.
   C. HOT ROLLED STEEL, 1/8" MIN. THICKNESS
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2. FIRST ANCHOR IS 2" FROM EDGE OF VERTICAL. EACH ADDITIONAL FASTENER IS AT REQUIRED MIN. SPACING.

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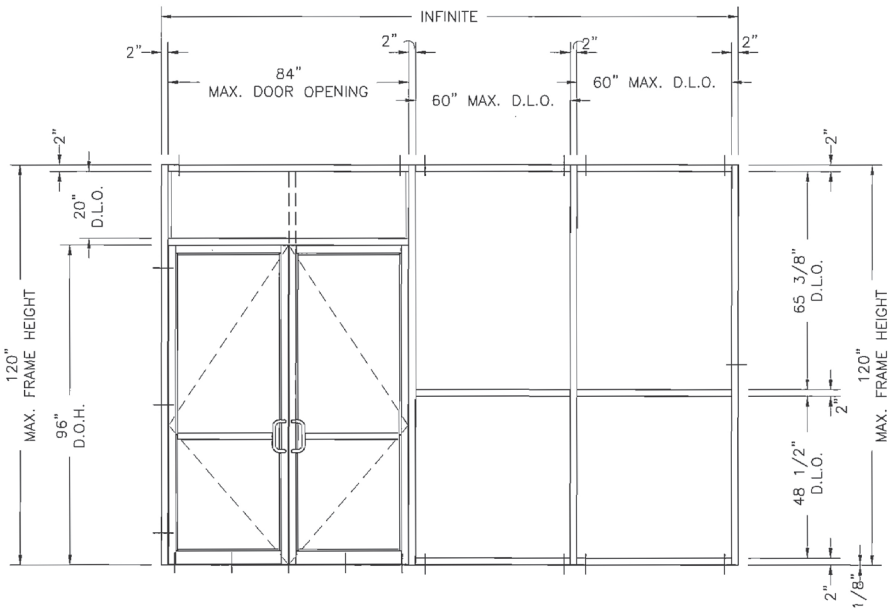
DOOR PAIR DEPICTED, SINGLE DOORS QUALIFIED BY SAME.

FOR DOOR FRAMES WITHOUT SIDELITES, ANCHORING SHALL BE DUPLICATED ON BOTH JAMBS AS SHOWN (PAIRS AND/ OR SINGLES).

DOOR FRAME JAMB ANCHORS 1/4-14 X 2-1/2" TEK 3 HEX OR FLAT HEAD SCREWS OR 1/4" X 2-1/2" BOLT	
LOCATION	SPACING
FROM BOTTOM OF FRAME (1) TOTAL	8-1/2"
FROM CENTERLINE (1) TOTAL	AT CENTERLINE
FROM BOTTOM OF DOOR HEADER (1) TOTAL	8-1/2"

NOTE:
DOOR FRAMES WITH AND WITHOUT TRANSOM SHALL BE ANCHORED AS SHOWN ON CHART ABOVE.

HEAD AND SILL
1/4" X 2" PAN HEAD OR TEK SCREW
OR
1/4" X 2" TYPE F BOLT OR STANDARD SAE BOLT AND TAP
OR
1/4" X 2" BOLT, NUT, AND WASHER
LOCATE ANCHORS 2" FROM EDGE OF MULLION.



HOT ROLLED STEEL SUBSTRATE ANCHOR LOCATIONS

JAMB
1/4" X 2-1/2" TEK 3 SCREW OR BOLT
LOCATE ANCHOR @ CENTERLINE

NOTE:
MULLION JAMB ANCHORS MAY BE OMITTED FOR HEIGHTS LESS THAN 9'-0"

THRESHOLD ANCHORS 1/4" X 2-1/2" FHP TAPCON OR EQUAL - 1-3/4" MINIMUM EMBEDMENT, 2-1/2" MIN. EDGE DISTANCE	
SINGLE DOORS UP TO 48" (3 ANCHORS TOTAL)	(1) EACH 4" FROM EACH JAMB
	(1) EACH AT CENTER LINE OF DOOR OPENING
PAIRS DOORS UP TO 96" (5 ANCHORS TOTAL)	(1) EACH AT 4" FROM EACH JAMB
	(1) EACH AT CENTER LINE OF DOOR OPENING
	(1) EACH BETWEEN CENTER LINE AND JAMB ANCHORS

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PROJECT NO.	
FL300T	
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SHEET 17 OF 17	

REV | BY | DATE | DESCRIPTION

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FLORIDA PRODUCT APPROVAL DRAWINGS FOR FL300T

HOT ROLLED STTEL FASTENER LOCATIONS