

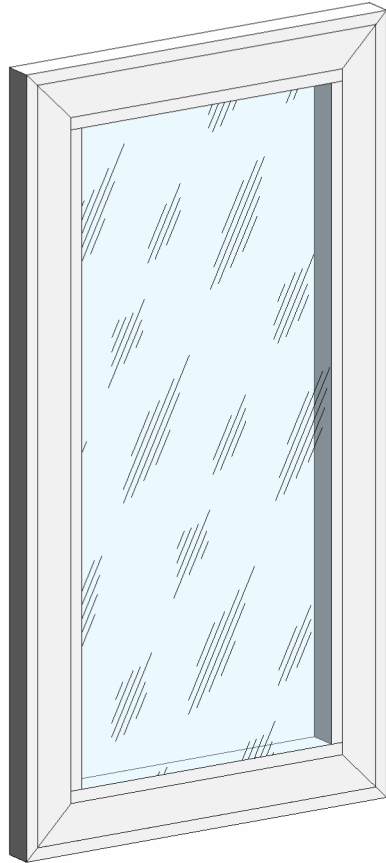
SHEET INDEX	
101	COVER PAGE
102	TYPICAL ELEVATION
103	GLAZING DETAILS
104	SECTIONAL DETAILS
105	SECTIONAL DETAILS
106	ANCHORAGE LAYOUT
107	PARTS LIST
108	FRAME ASSEMBLY

NOTE: THIS PRODUCT CAN BE COMBINED WITH OTHER FBC APPROVED ECO WINDOW SYSTEM, LLC PRODUCTS. WHEN MULLED COMBINATIONS ARE USED, THE LOWER DESIGN PRESSURE FROM EACH PRODUCT WILL APPLY TO THE ENTIRE SYSTEM. FINAL APPROVAL OF ALL DESIGNS SHALL BE GRANTED BY THE GOVERNING MUNICIPALITY.

ECO WINDOW SYSTEMS

ECO-NOVO SERIES: 595 FIX CASEMENT WINDOW SYSTEM

(LARGE AND SMALL MISSILE IMPACT RATED)



FIX CASEMENT WINDOW SYSTEM

MAXIMUM DESIGN LOAD RATING = ± 60 PSF

(FOR SIZES SHOWN OR SMALLER)

GENERAL NOTES

- THIS SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE EIGHTH EDITION (2023), FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE (HVHZ) PER TAS 201/202/203.
- GLASS CAPACITIES FOUND IN THE CHARTS HEREIN THIS CERTIFICATION ARE BASED ON ASTM E1300-16 (3 SEC. GUSTS).
- DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR.
- PRESSURES PROVIDED IN THE CERTIFICATION ARE BASED ON THE ALLOWABLE STRESS DESIGN METHOD (ASD).
- THIS PRODUCT HAS BEEN TESTED IN ACCORDANCE WITH THE STANDARDS IN NOTE 1 OF THE GENERAL NOTES AND IS LARGE MISSILE IMPACT RESISTANT AND DOES NOT REQUIRE IMPACT RESISTANT SHUTTERS.
- NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
- THE ARCHITECT/ENGINEER OF RECORD FOR THE PROJECT SUPERSTRUCTURE WITH WHICH THIS DESIGN IS USED SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING SURFACES TO THIS DESIGN WHICH SHALL BE COORDINATED BY THE PERMITTING CONTRACTOR. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.
- THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
- THE CONTRACTOR IS RESPONSIBLE FOR INSULATING ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.

- FASTENERS DESCRIBED IN THIS CERTIFICATION ARE PERMITTED TO BE SUBSTITUTE PROVIDED THE STRENGTH OF THE ALTERNATIVE ANCHOR IS EQUAL TO OR GREATER THAN THE ORIGINALLY SPECIFIED ANCHOR. FINAL APPROVAL OF SUBSTITUTED ANCHORS SHALL BE BY OTHERS.
- FASTENERS SHALL BE CADMIUM PLATED OR OTHERWISE CORROSION-RESISTANT MATERIAL AND SHALL COMPLY WITH "SPECIFICATIONS FOR ALUMINUM STRUCTURES" SECTION J.3 OF THE CURRENT CODE BY THE ALUMINUM ASSOCIATION, INC., & ANY APPLICABLE FEDERAL, STATE, AND/OR LOCAL CODES.
- ENGINEER'S SEAL AFFIXED HERE VALIDATES THE STRUCTURAL DESIGN AS SHOWN ONLY. THE USE OF THIS SPECIFICATION BY THE CONTRACTOR, ET AL., INDEMNIFIES AND SAVES HARMLESS THIS ENGINEER FROM ALL COSTS AND DAMAGES, INCLUDING LEGAL FEES AND APPELLATE FEES, RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, AND CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, AND FEDERAL CODES, AND FROM DEVIATIONS OF THIS PLAN.
- THIS PRODUCT IS APPROVED FORCED ENTRY RESISTANCE FOR AS PER ASTM F588.
- EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.
- SAFEGUARDS MUST BE OBSERVED (NOT IN THIS CERTIFICATION).
- PRODUCT SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER SYSTEM CONTAINING THE FOLLOWING:

ECO WINDOW SYSTEMS, LLC
8502 NW 80TH STREET, MEDLEY, FL 33166
APPROVED BY FLORIDA BUILDING COMMISSION
FLORIDA PRODUCT APPROVAL NUMBER FL# 47225.1

INSTRUCTIONS: (CLICK ON THE BUTTON ON THE RIGHT TO DIRECTLY REACH THE DETAIL)

STEP 1 - WIND PRESSURE CALCULATION (BY OTHERS):
DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.

STEP 2 SIZE AND CAPACITY SELECTION
SEE THE LOADING CHART ON SHEET **103** FOR DESIGN LOAD CAPACITY OF DESIRED WINDOW SIZE. THIS VALUE SHOULD MEET OR EXCEED THE DESIGN WIND LOAD REQUIREMENT OBTAINED IN STEP 1 ABOVE. [CLICK HERE](#)

STEP 3 ANCHOR SELECTION
• SELECT APPROPRIATE ANCHOR FROM SHEET **106**. [CLICK HERE](#)

• ANCHORAGE DETAILS- FOR VARIOUS SUBSTRATES- SEE SHEET **102** AND **106**. [CLICK HERE](#)

THIS SYSTEM IS APPROVED FOR INSTALLATION WHERE WATER INFILTRATION RESISTANCE IS REQUIRED.

THIS SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT AND COMPLY WITH REQUIREMENTS OF ANSI Z97.1.

FL#47225.1



JAVAD AHMAD PE, inc
7875 NW 12th St., Suite 102
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Ph: (305) 424-8001
support@ja-pe.com

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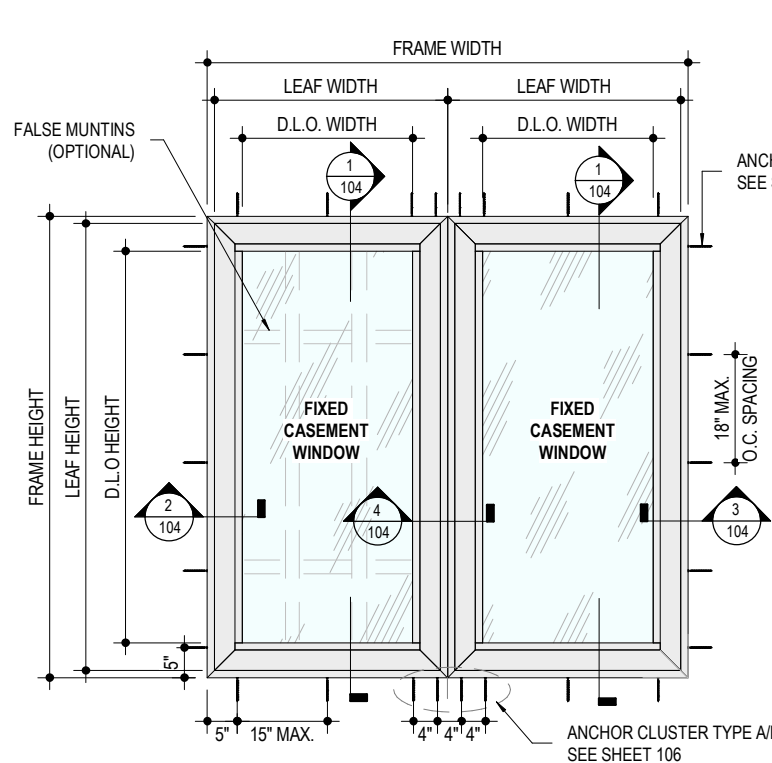
ECO-NOVO SERIES: 595 FIX CASEMENT WINDOW
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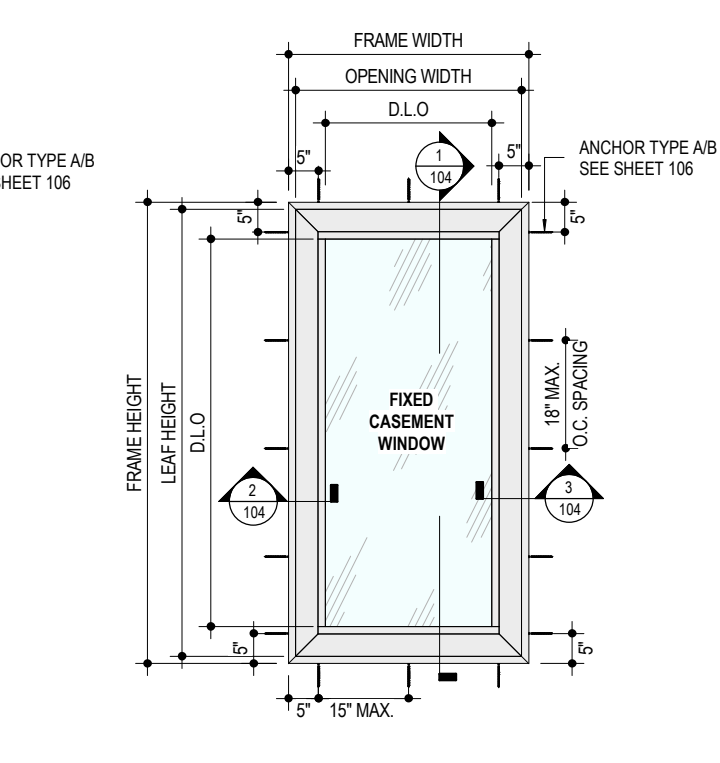
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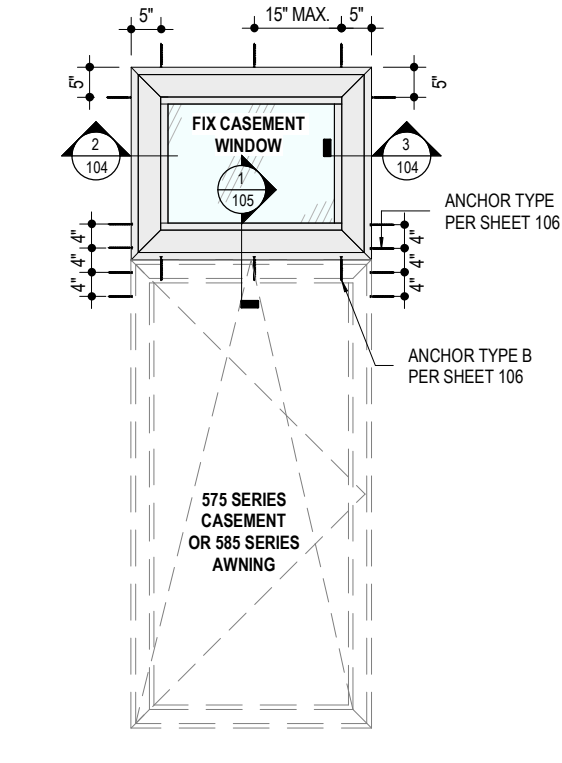
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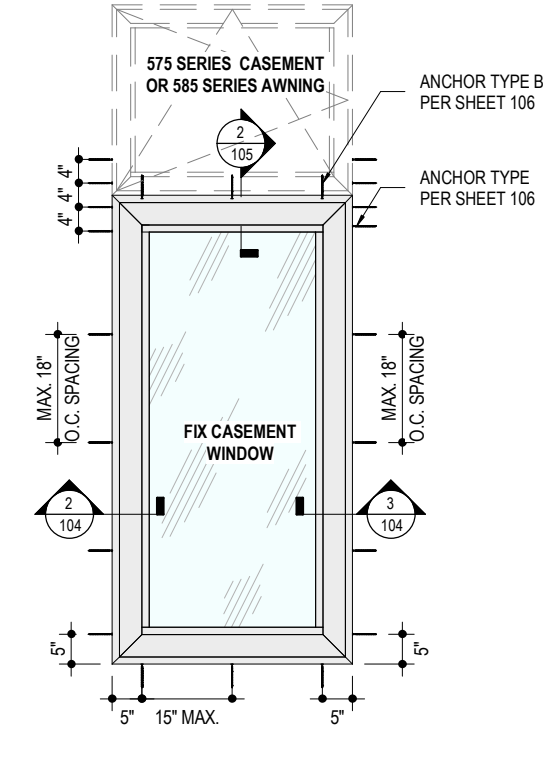
1
102
TYPICAL FIX CASEMENT ELEVATION
NOT TO SCALE



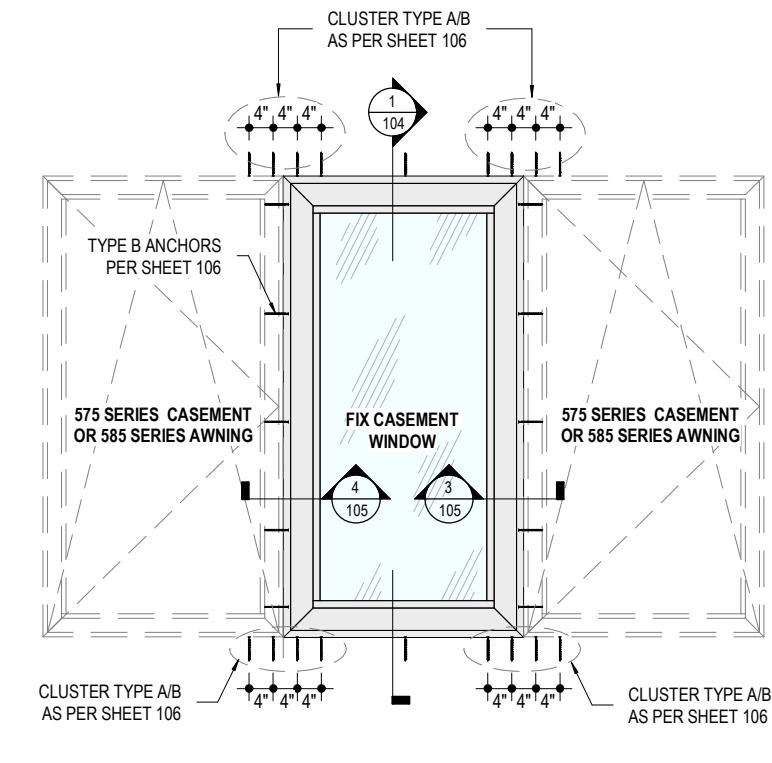
2
102
TYPICAL SINGLE FIX CASEMENT ELEVATION
NOT TO SCALE



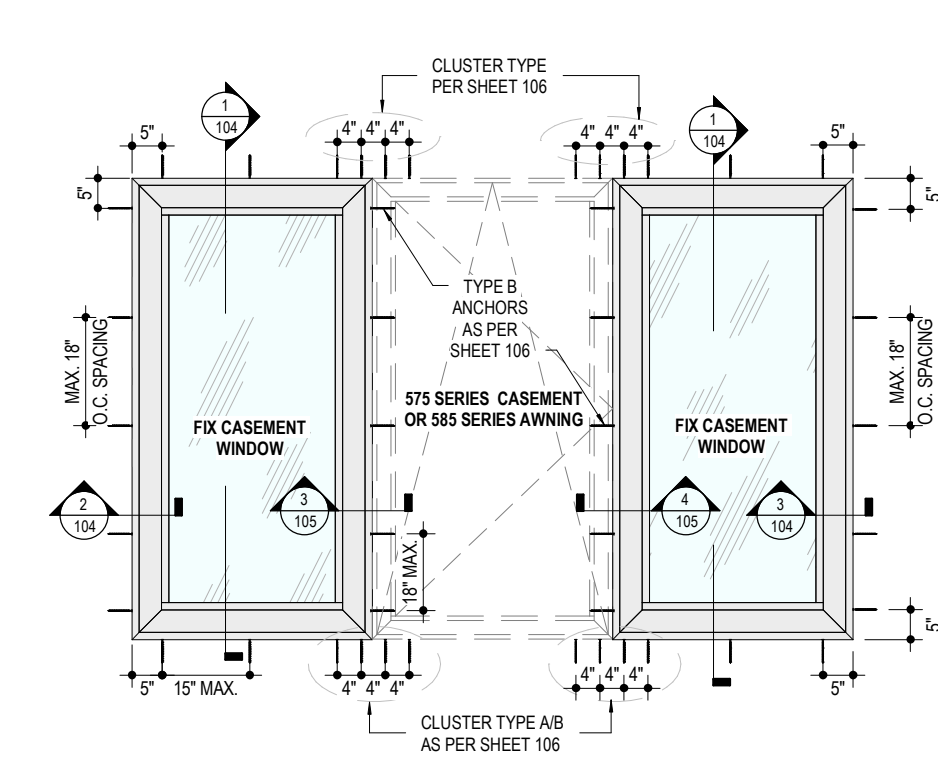
4
102
ALTERNATIVE ELEVATION 1
NOT TO SCALE



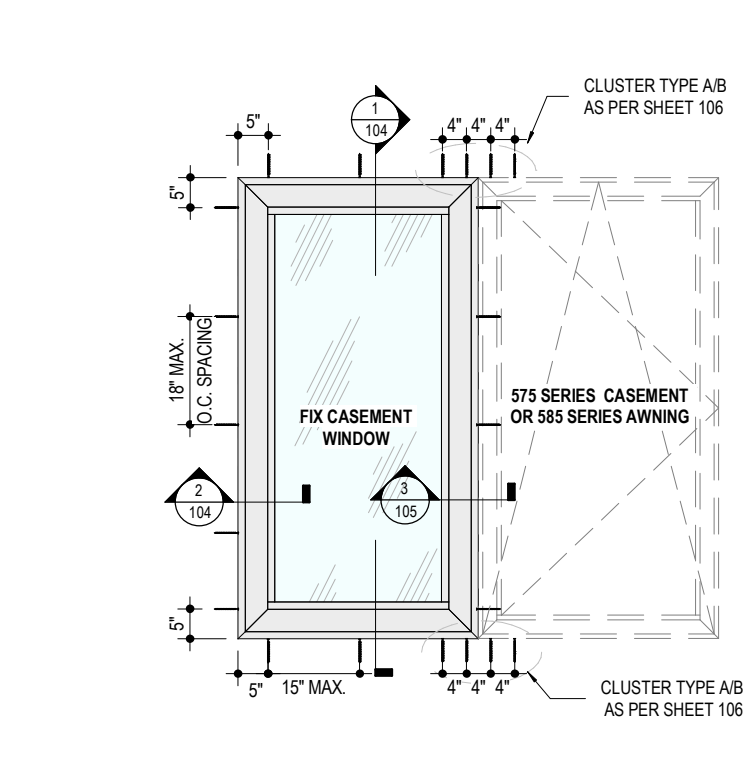
3
102
ALTERNATIVE ELEVATION 2
NOT TO SCALE



5
102
ALTERNATIVE ELEVATION 3
NOT TO SCALE



6
102
ALTERNATIVE ELEVATION 4
NOT TO SCALE



7
102
ALTERNATIVE ELEVATION 5
NOT TO SCALE

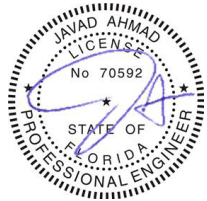


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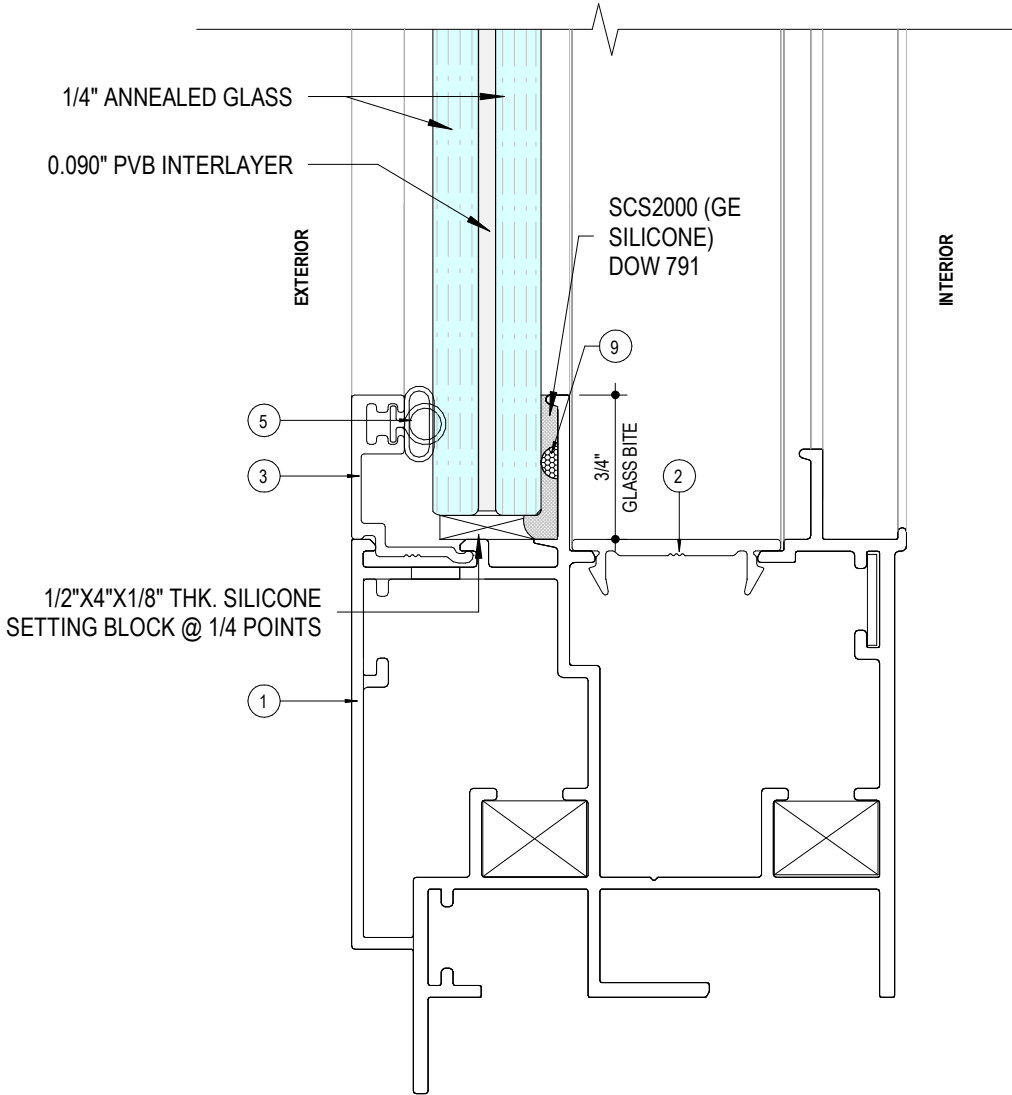
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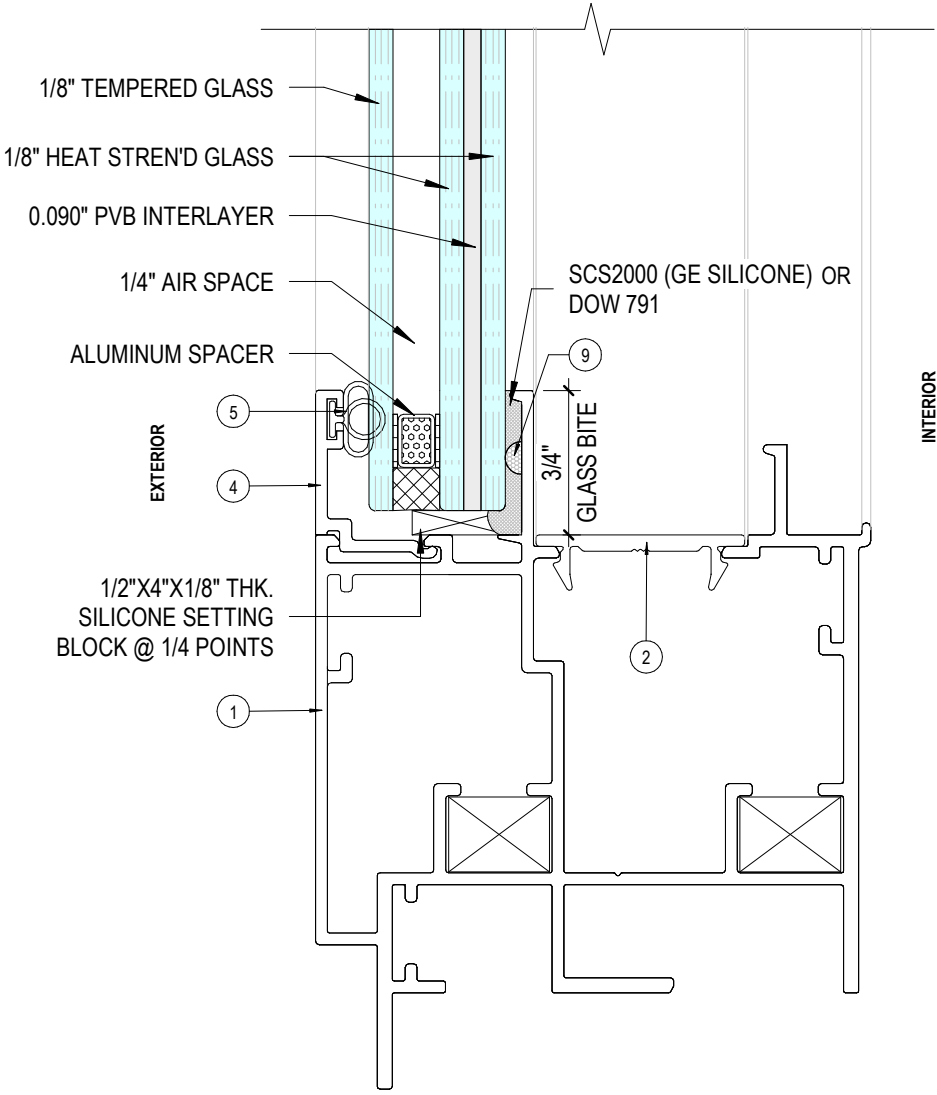
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1 9/16" LAMINATED GLASS UNIT
103 NOT TO SCALE



2 11/16" INSULATED GLASS UNIT
103 NOT TO SCALE

MAXIMUM DESIGN LOAD RATING = ± 60 PSF
(FOR SIZES SHOWN OR SMALLER)

- MAX. FRAME HEIGHT = 76"
MAX. FRAME WIDTH:
• FOR DOUBLE FIX CASEMENT = 80"
• FOR SINGLE FIX CASEMENT = 40"
MAX. D.L.O HEIGHT = FRAME HEIGHT - 8"
MAX. D.L.O WIDTH = FRAME WIDTH - 8"



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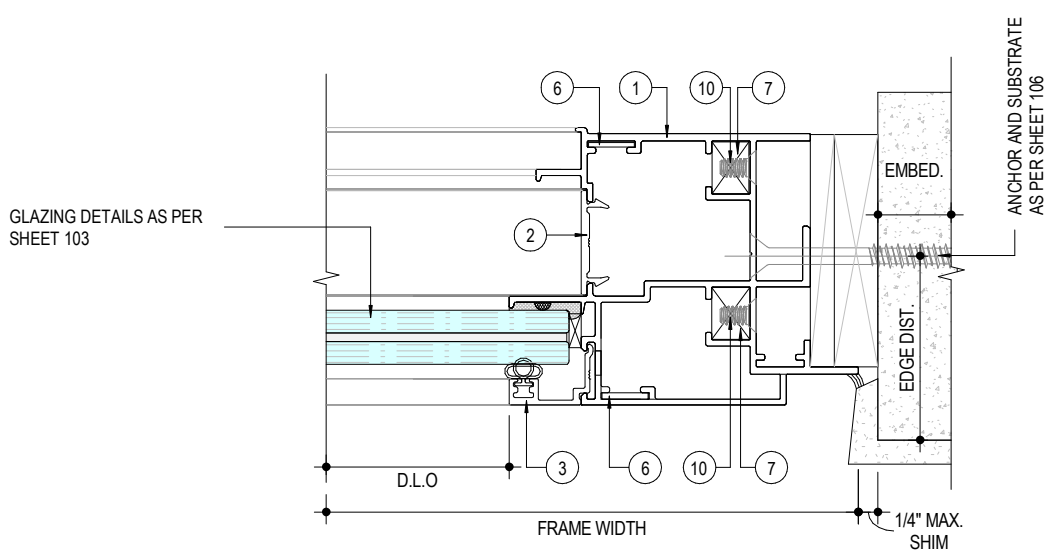
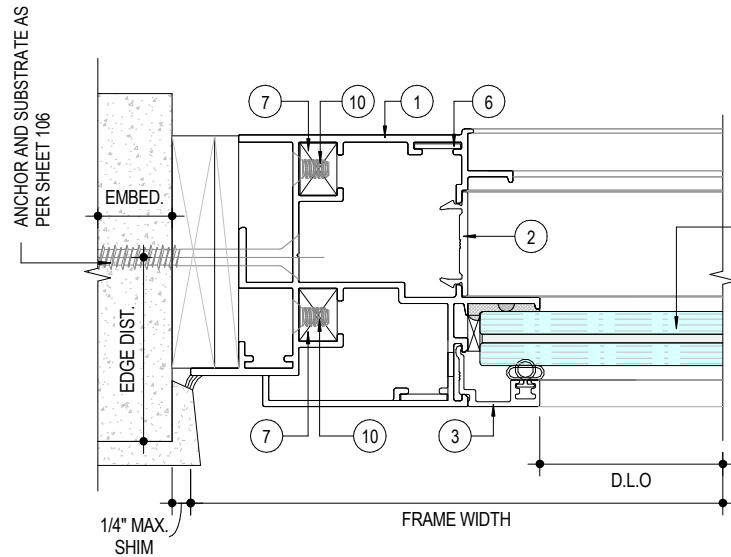
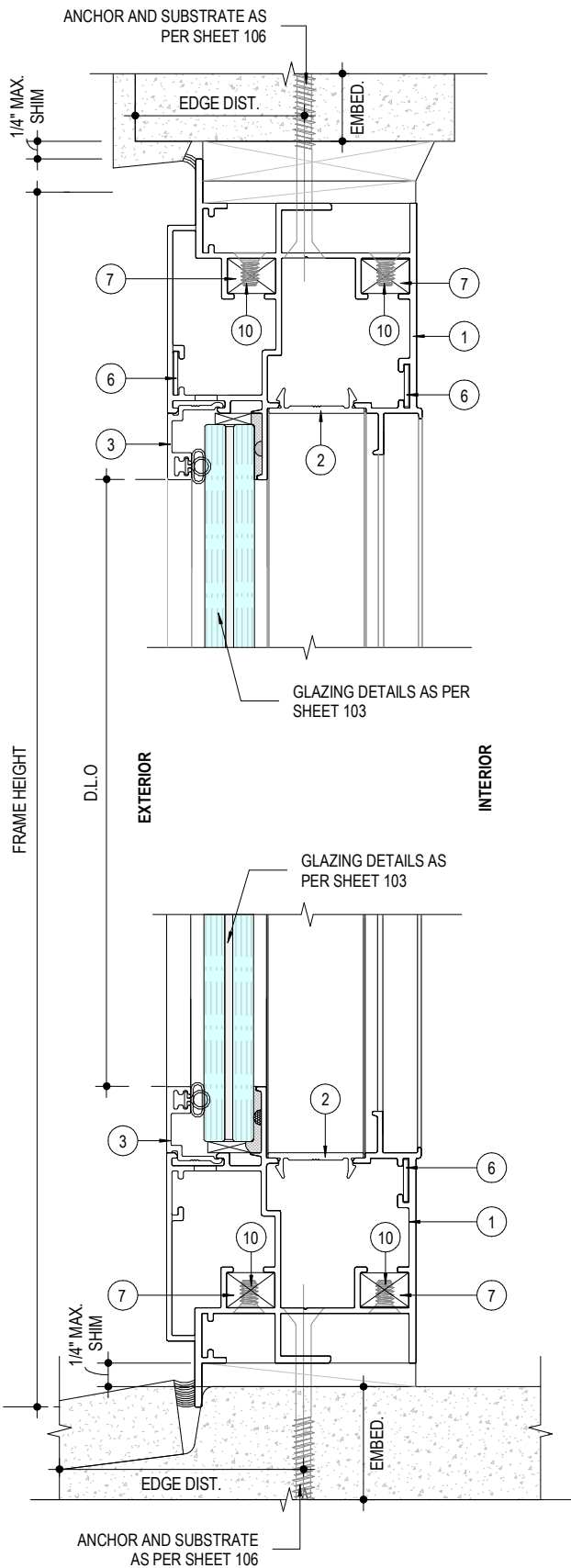
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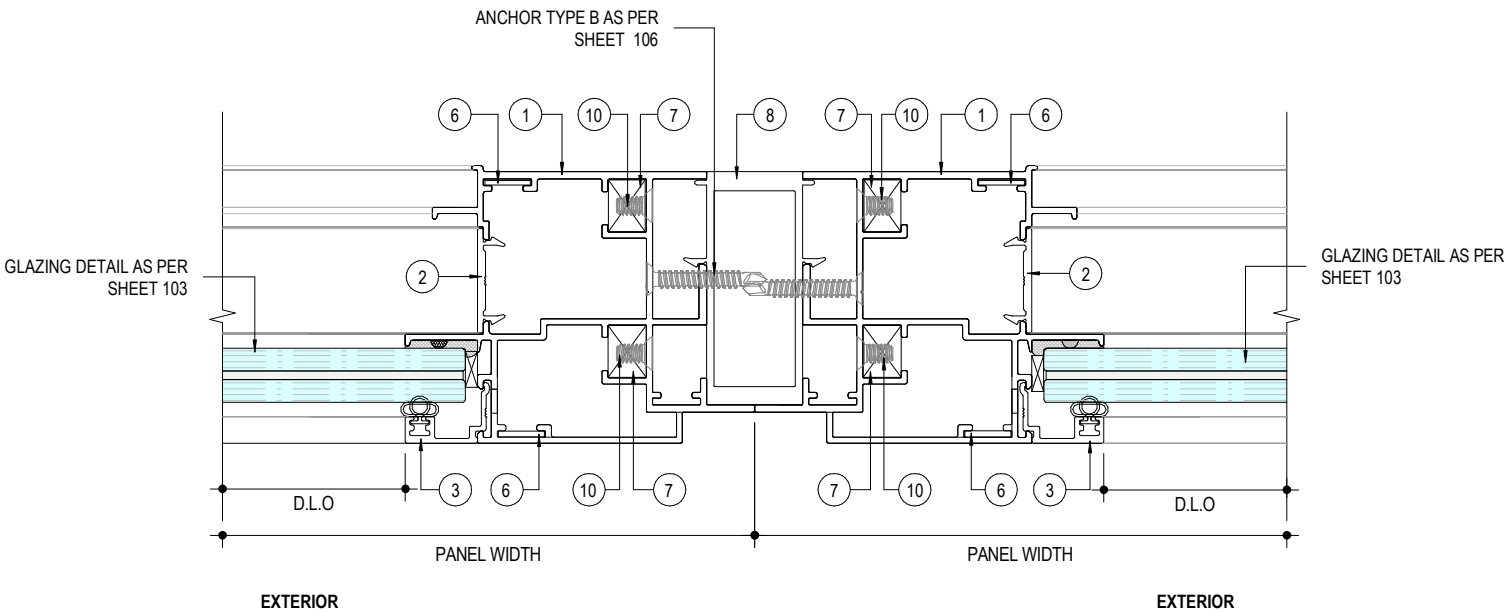


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2
104
FIX CASEMENT JAMB DETAIL 1
NOT TO SCALE

3
104
FIX CASEMENT JAMB DETAIL 2
NOT TO SCALE



4
104
FIX CASEMENT INTERMEDIATE MULLION DETAIL
NOT TO SCALE

1
104
FIXED CASEMENT SILL AND HEAD DETAIL
NOT TO SCALE



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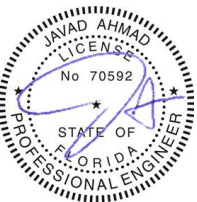
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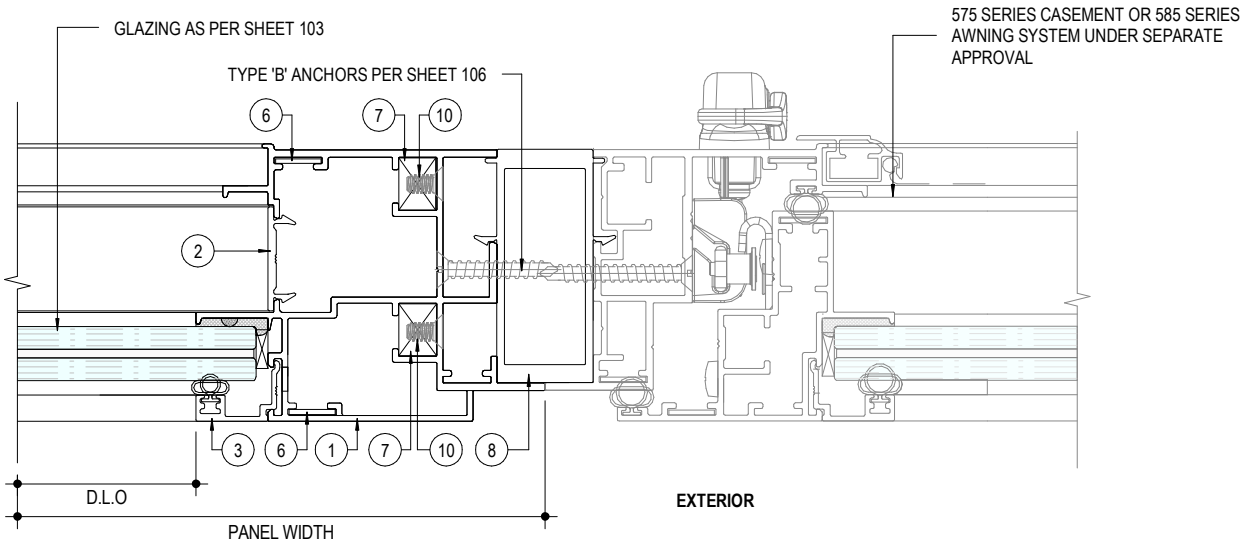
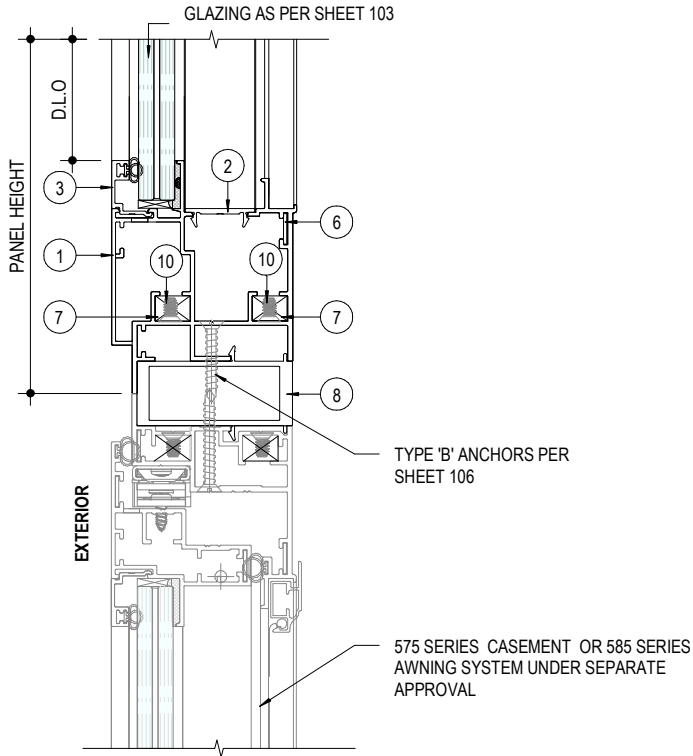


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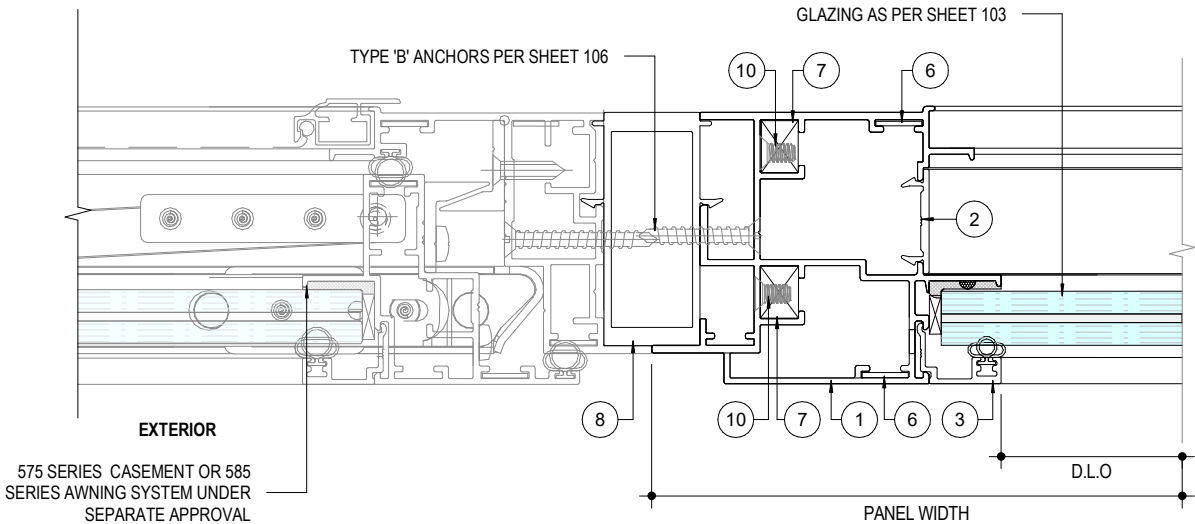
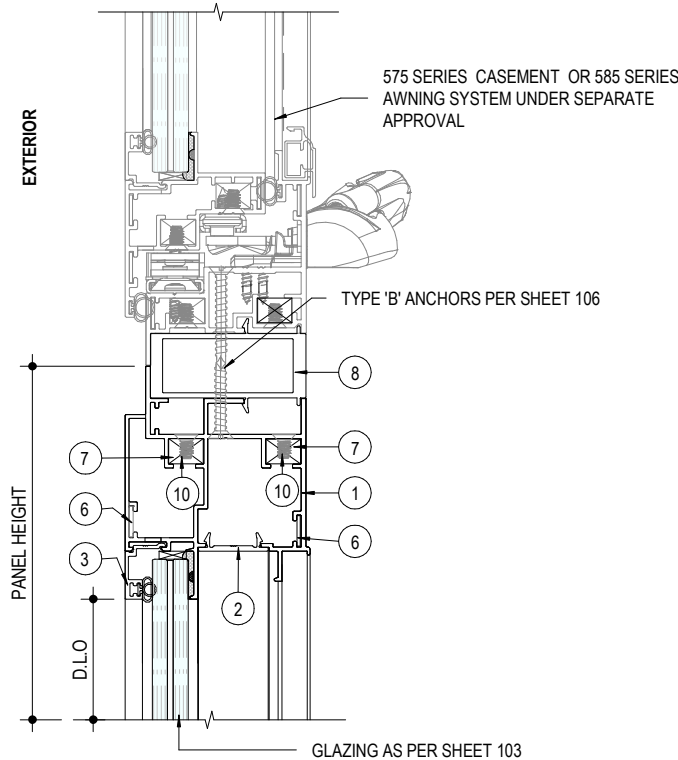
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1
105
INTERMEDIATE HORIZONTAL MULLION DETAIL 1
NOT TO SCALE

3
105
FIX CASEMENT TO ALTERNATIVE SYSTEM - INTERMEDIATE DETAIL
NOT TO SCALE



2
105
INTERMEDIATE HORIZONTAL MULLION DETAIL 2
NOT TO SCALE

4
105
ALTERNATIVE SYSTEM TO FIX CASEMENT - INTERMEDIATE DETAIL
NOT TO SCALE

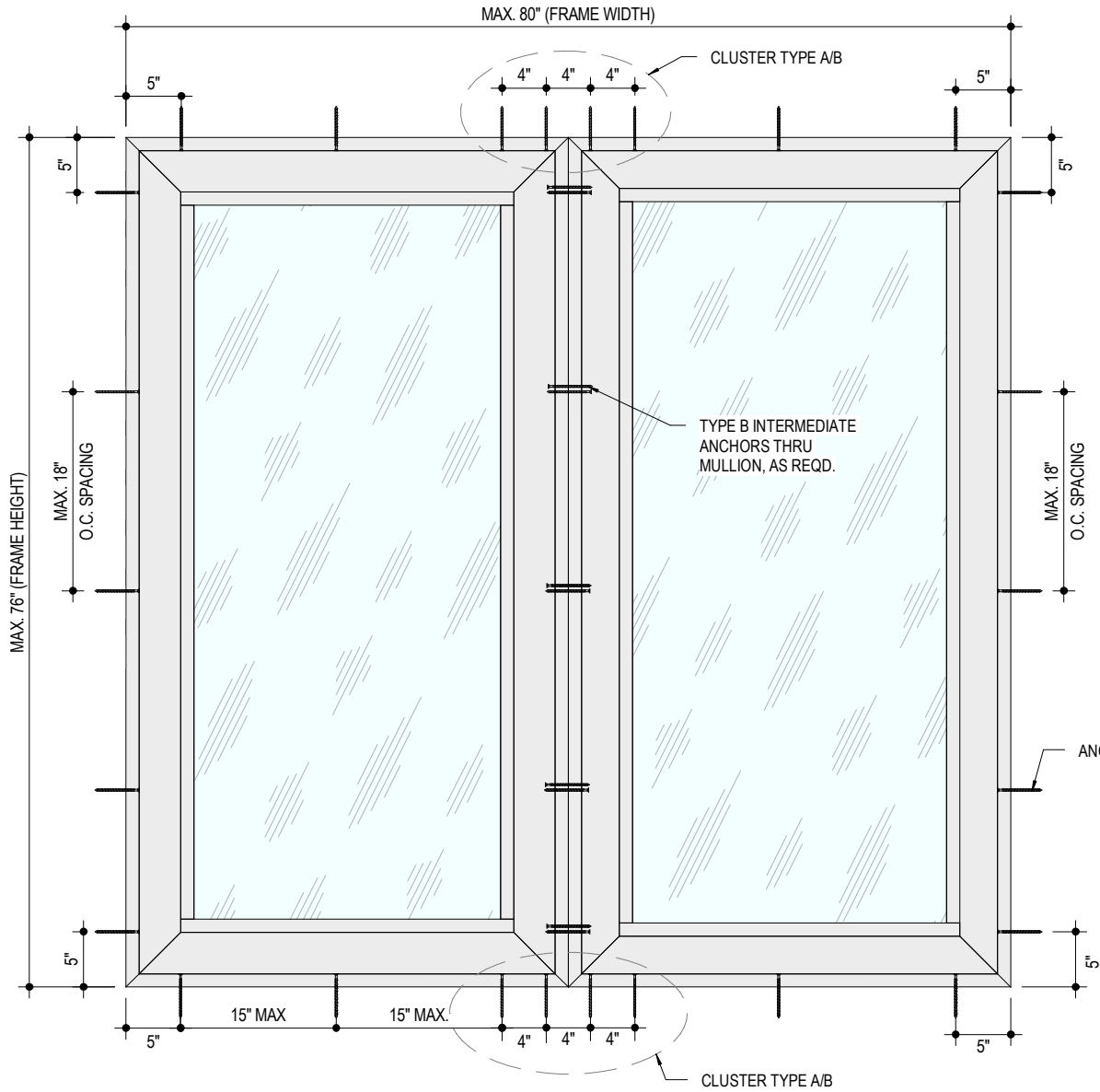
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No.	DATE				

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1
106
TYPICAL ANCHORAGE LAYOUT
NOT TO SCALE

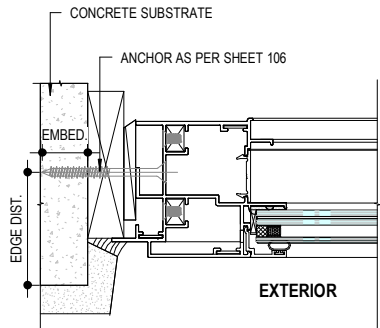
TYPICAL ANCHOR TYPES:

TYPE A - 1/4" DEWALT ULTRACON+ (Fu = 177,000 PSI, Fy = 155,000 PSI)

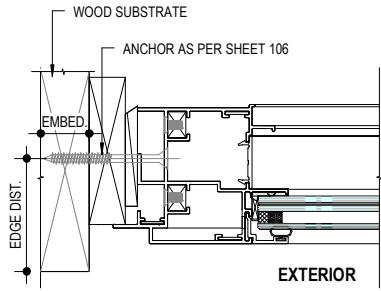
- INTO 2BY WOOD WITH 1-1/2" MIN PENETRATION, AND 1-3/4" MIN EDGE DISTANCE AND 18" O.C. SPACING @ JAMB AND 15" O.C. SPACING @ SILL & HEAD
- DIRECTLY INTO CONCRETE OR GROUT FILLED MASONRY WITH 1-3/4" EMBEDMENT, 2-1/2" MIN EDGE DISTANCE AND 18" O.C. SPACING @ JAMB AND 15" O.C. SPACING @ SILL & HEAD
- DIRECTLY INTO HOLLOW MASONRY WITH 1-1/2" EMBEDMENT, 1-1/2" MIN EDGE DISTANCE, AND 18" O.C. SPACING @ JAMB AND 15" O.C. SPACING @ SILL & HEAD

TYPE B - #12-24 SS SCREWS (GRADE 5 MIN)

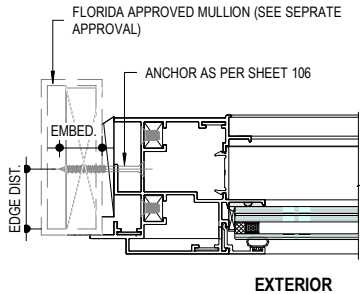
- INTO 1/8" MIN. THK. ALUMINUM / STEEL WITH (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS, AND 3/4" MIN EDGE DISTANCE AND 18" O.C. SPACING @ JAMB AND 15" O.C. SPACING @ SILL & HEAD
- INTO MIN. 1/8" THK. APPROVED MULLIONS WITH (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS, AND 3/4" MIN EDGE DISTANCE AND 18" O.C. SPACING @ JAMB AND 15" O.C. SPACING @ SILL & HEAD



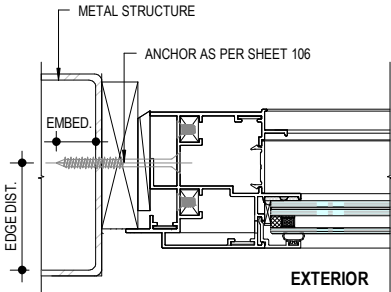
2
106
ANCHORAGE INTO CONCRETE
NOT TO SCALE



3
106
ANCHORAGE INTO WOOD STRUCTURE
NOT TO SCALE



4
106
ANCHORAGE INTO ALUMINUM MULLION
NOT TO SCALE



5
106
ANCHORAGE INTO METAL STRUCTURE
NOT TO SCALE

ANCHOR / SUBSTRATE NOTES:

- WOOD AT HEAD OR JAMBS SHOULD BE MIN. SOUTHERN YELLOW PINE #2 (SG=0.55 MIN.) OR EQ.
- CONCRETE AT HEAD OR JAMBS SHOULD BE MIN. f'c= 3000 PSI
- C-90 HOLLOW/GROUT FILLED MASONRY UNITS AT JAMBS f'm= 1500 PSI
- STEEL (1/8" THK., A36 MIN) AT HEAD OR JAMBS
- ALUMINUM (1/8" THK., 6063-T6 MIN) AT HEAD OR JAMBS
- STEEL IN CONTACT WITH ALUMINUM TO BE PAINTED BY OTHERS.

NOTE:

THE SUPPORTING WOOD BUCKS, CONCRETE AND METAL STRUCTURE SHOWN ON THIS SHEET SHALL BE DESIGNED BY OTHERS AND ARE NOT PART OF THIS APPROVAL. THEY MUST BE CAPABLE OF WITHSTANDING THE LOADS IMPOSED BY THE GLAZING SYSTEM AND TRANSFERRING THEM TO THE BUILDING STRUCTURE.

SEALANTS:

ALL JOINTS AND FRAME CONNECTIONS SHALL BE SEALED WITH ALUMINUM COLOR SEALANT.



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PARTS LIST

NO.	PART #	QTY	DESCRIPTION	MATERIAL
1	E587	AS RQ'D	FIX CASEMENT FRAME	6063-T6
2	E677	AS RQ'D	FIX CASEMENT SNAP-IN COVER	6063-T6
3	E278	AS RQ'D	GLAZING BEAD FOR 11/16 INSULATED -LAM. GLASS	6063-T6
4	E279	AS RQ'D	GLAZING BEAD FOR 9/16 LAMINATED GLASS	6063-T6
5	G283	AS RQ'D	BULB GASKET	EPDM
6	A572	16u.	STEEL FACE ALIGNMENT KEY	ST/STEEL
7	A571	16u.	ALUMINUM CORNER KEY	6063-T5
8	E588	AS RQ'D	CASEMENT MULLION	6063-T6
9	FLB-23	AS RQ'D	BUMP-ON SPACER	SILICONE
10	-	AS RQ'D	10-24X1/2 MACHINE SCREW	SS

FL#47225.1



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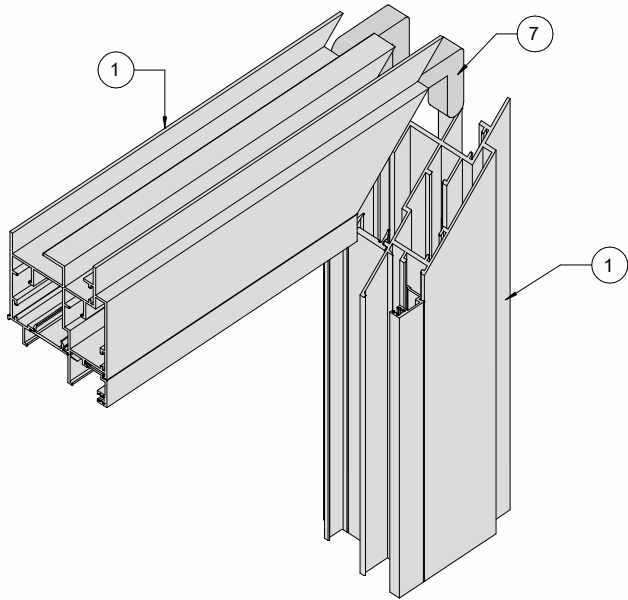
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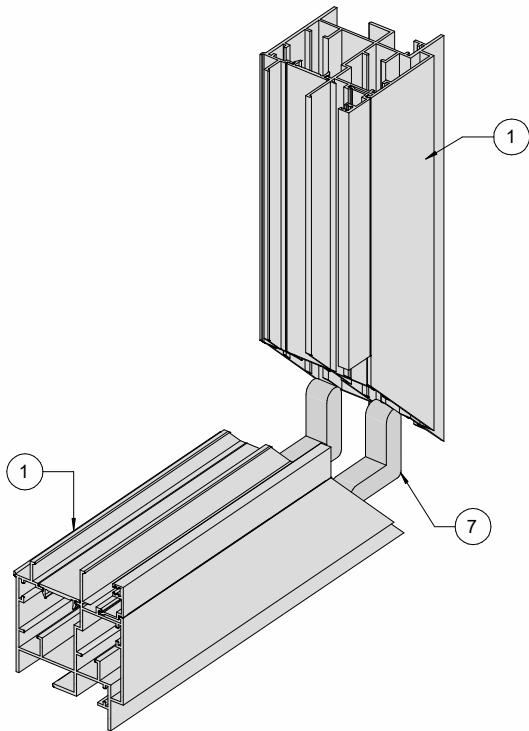
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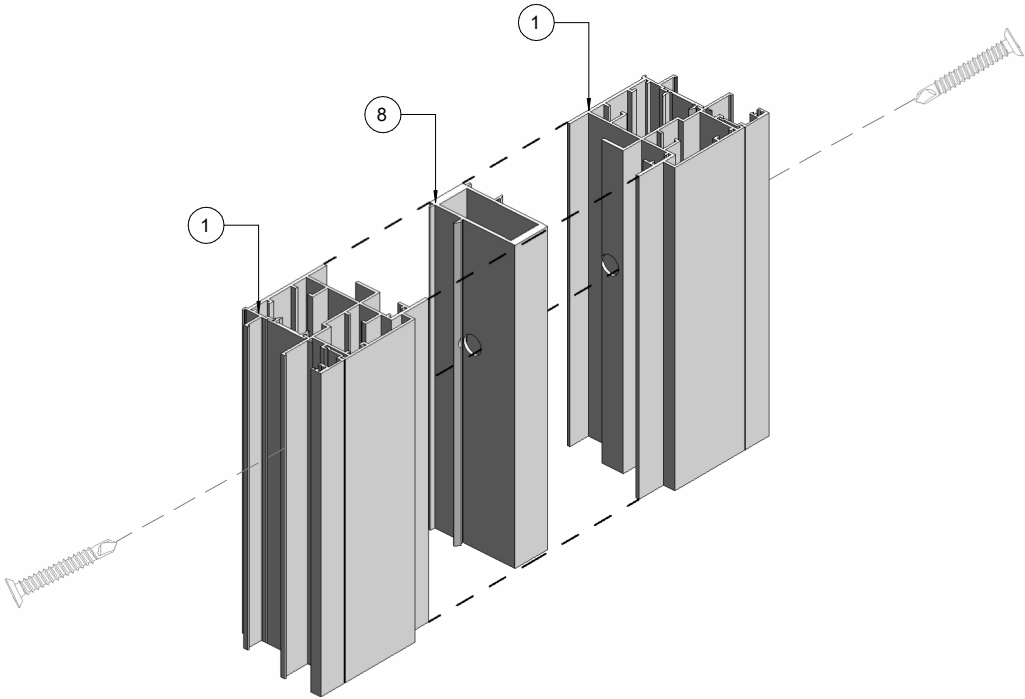
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TOP CORNER FRAME ASSEMBLY DETAIL



BOTTOM CORNER FRAME ASSEMBLY DETAIL



INTERMEDIATE CASEMENT MULLION ASSEMBLY DETAIL



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