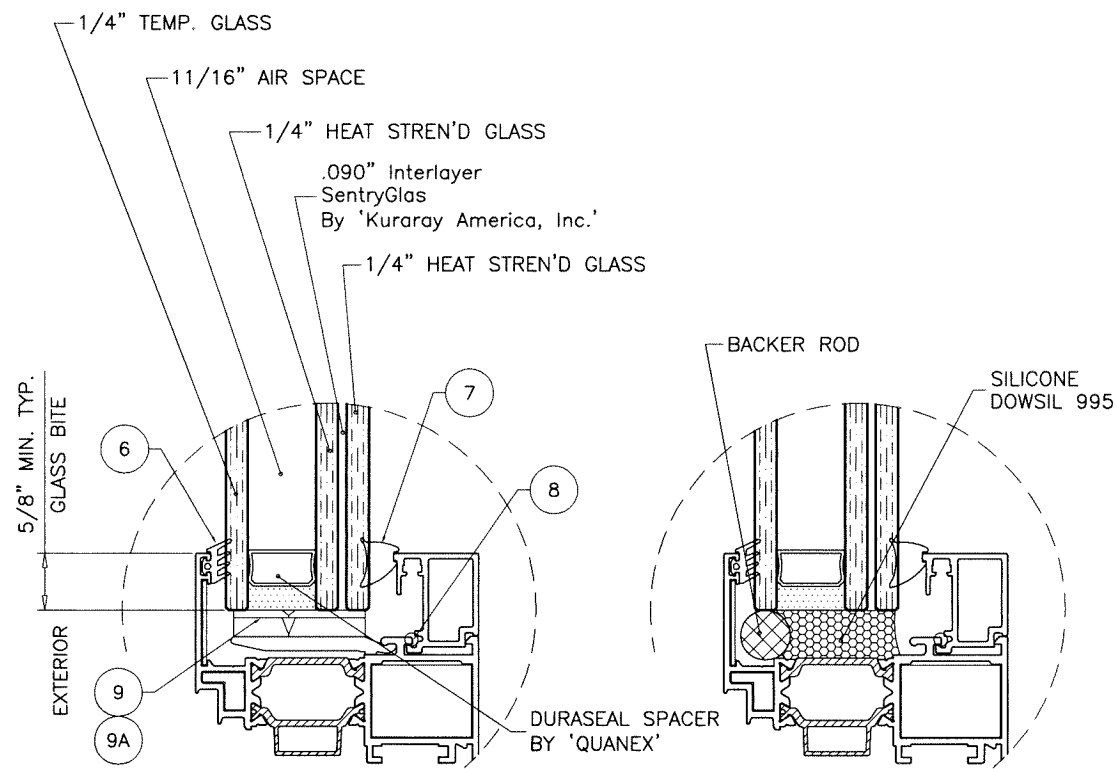




GLAZING DETAIL
1-7/16" OVERALL INSUL. LAM. GLASS

SERIES S67/S77/S91

THERMALLY BROKEN ALUMINUM INSWING TILT & TURN WINDOW

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF T&T/T&T OR TILT & TURN WITH OTHER WINDOW TYPES IN MODULES OF TWO OR MORE WINDOWS USING F.B.C. APPROVED MULLIONS IN BETWEEN.

LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2023 (8TH EDITION)/2026 (9TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.

ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE LOAD-BEARING, (HIGH DENSITY PLASTIC/COMPOSITE, METAL OR OTHER RIGID MATERIALS).

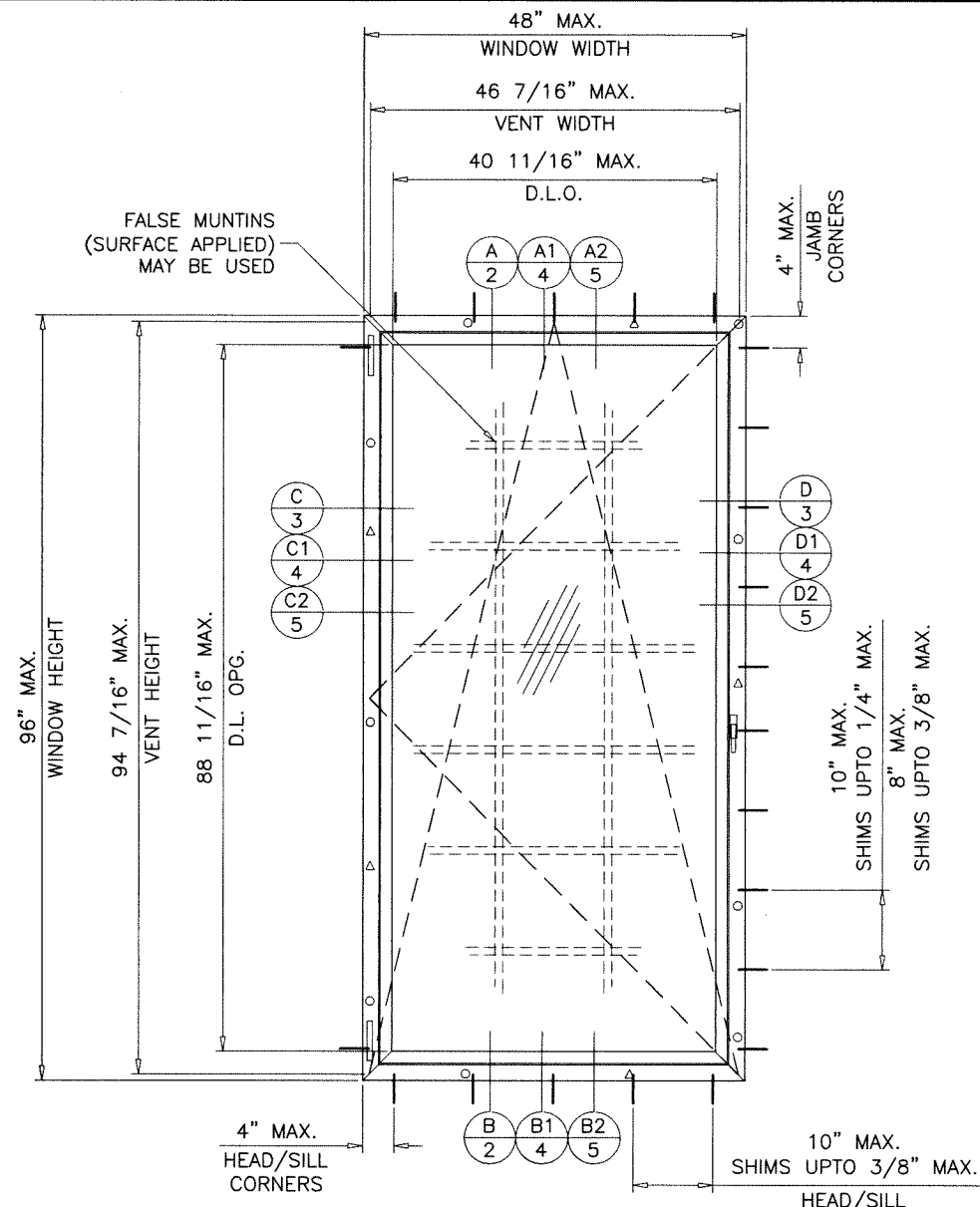
MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2023/2026 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC. CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.

MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE. LABELING TO COMPLY WITH SECTION 1709.9.2.

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-16 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219



- △ FIXED LOCKING POINTS
- ADJUSTABLE LOCKING POINTS
- HINGES
- ⌚ HANDLE

TYPICAL ELEVATION

TESTED UNIT

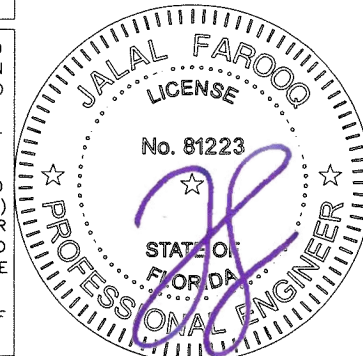
MAXIMUM DESIGN LOAD RATING = + 70.0 PSF
(FOR SIZES SHOWN ABOVE OR SMALLER) - 70.0 PSF

FASTENERS AND CONNECTORS (AS APPLICABLE) SHOWN IN THIS APPROVAL MAY NOT MEET CORROSION RESISTANCE REQUIREMENTS FOR COASTAL OR SALT WATER EXPOSURE ZONES. COMPLIANCE WITH THESE CONDITIONS TO BE CHECKED PER FBC 1711.

Sealed: 9/8/2026

THESE WINDOWS ARE RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

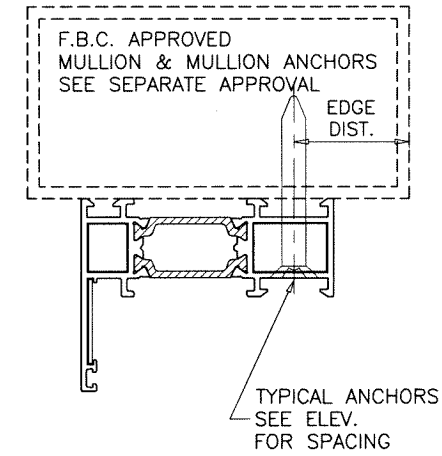
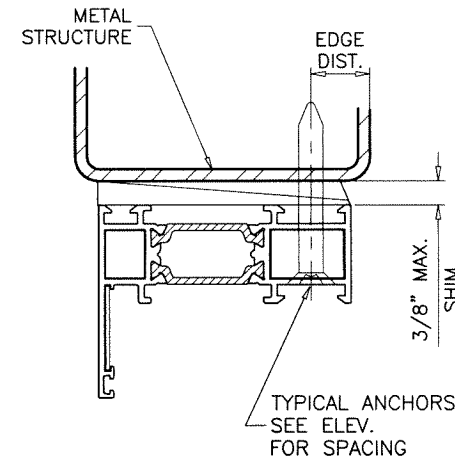
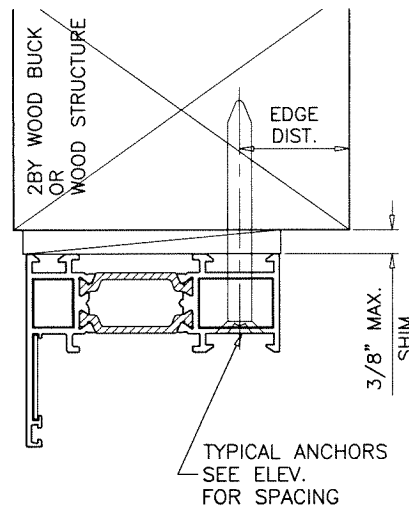
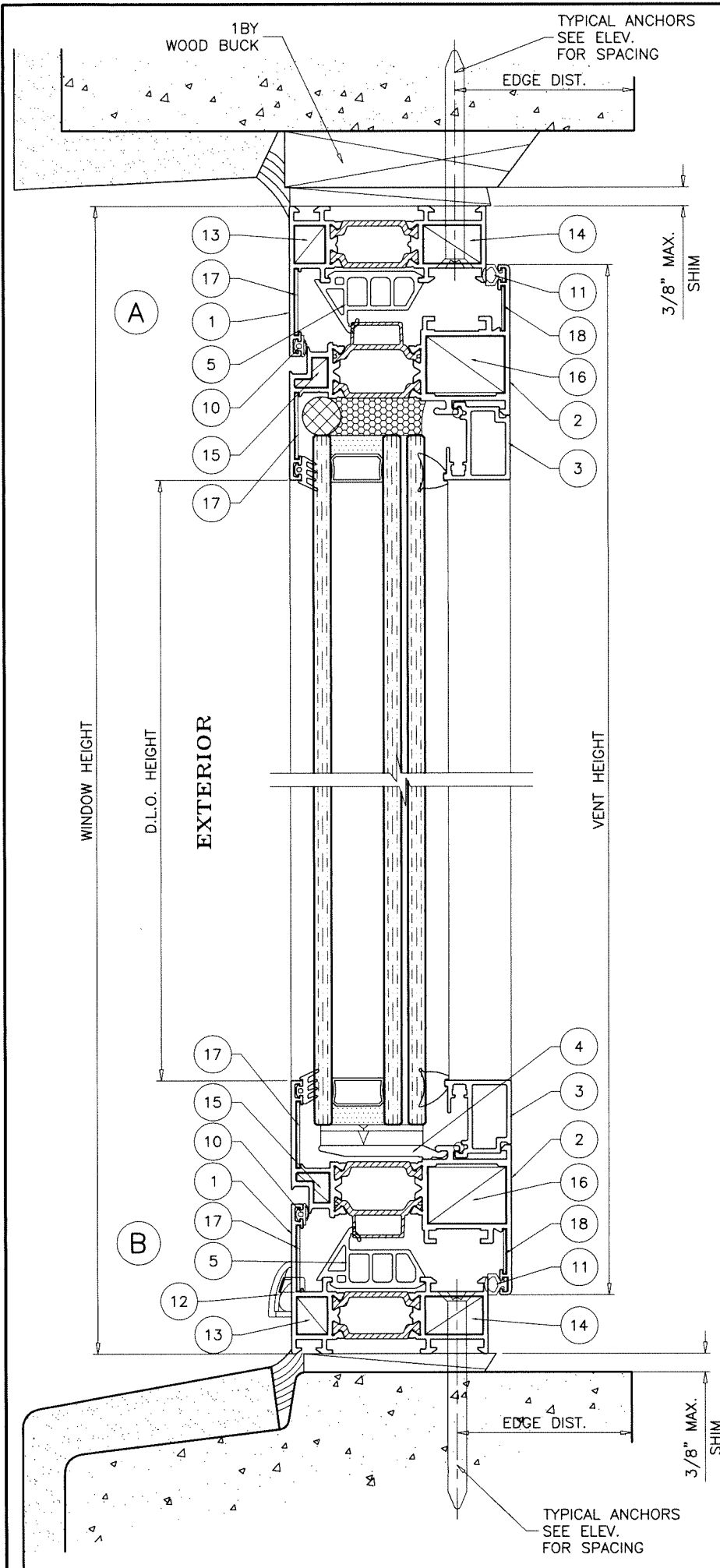
- A- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.
- B- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.
- C- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
- D- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.



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revisions:		no	date	by	description
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date:	06-01-23	scale:	1/2"=1'-0"	dr. by:	TARIQ
chk. by:					
drawing no.	23-25F				
sheet	1 of 8				



WOOD BUCKS AND METAL STRUCTURE NOT BY 'ALUMIL' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

WEEPHOLES:

W1 = 1-3/8" X 5/16" WEEP SLOTS AT 5" FROM EACH END AND AT MIDSPAN WITH PLASTIC BAFFLE

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI) INTO 2BY WOOD BUCKS OR WOOD STRUCTURES 1-1/2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)

THRU 1BY BUCKS INTO CONC. OR BLOCKS 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS) 1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

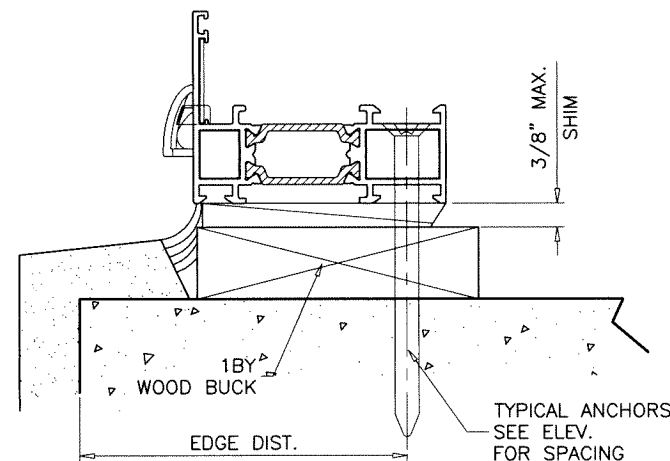
DIRECTLY INTO CONCRETE OR BLOCKS 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS) 1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

1/4" DIA. TEKS OR SELF-DRILLING SCREWS (GRADE 5 CRS) INTO F.B.C. APPROVED MULLIONS OR INTO METAL STRUCTURES (HEAD/SILL/JAMBS) (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.) STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.) (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

CRITICAL EDGE DISTANCE

INTO CONCRETE AND BLOCKS = 2-1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

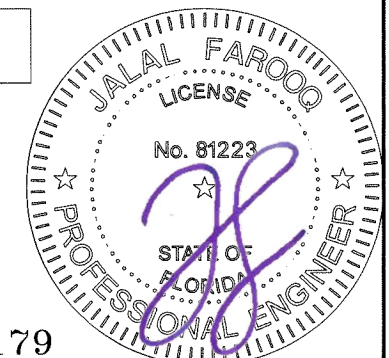
WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.
CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.



SERIES S67

Sealed: 9/8/2026

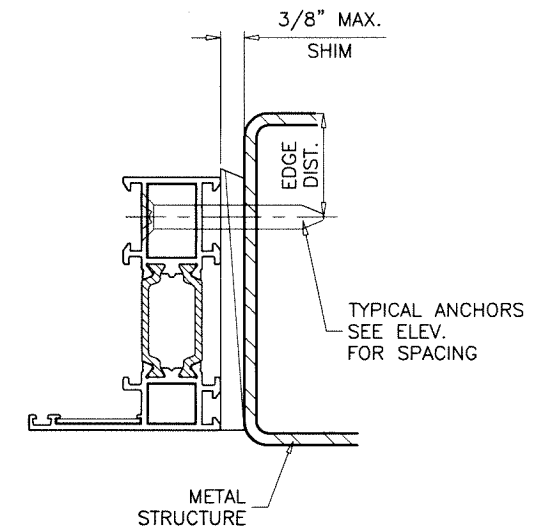
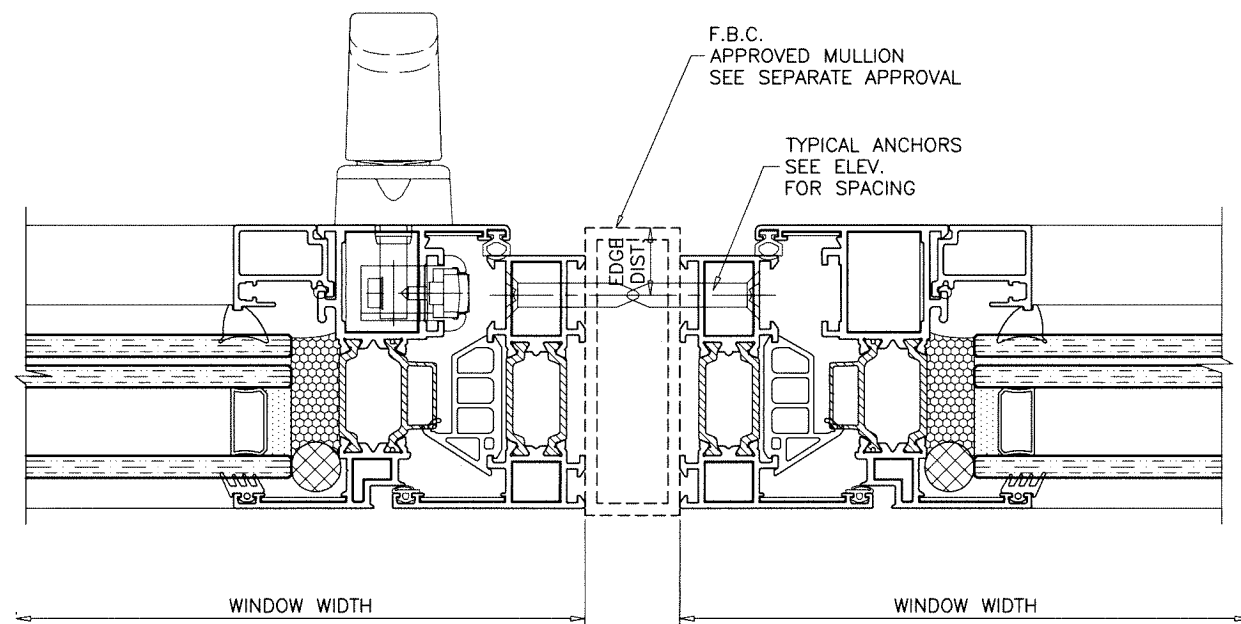
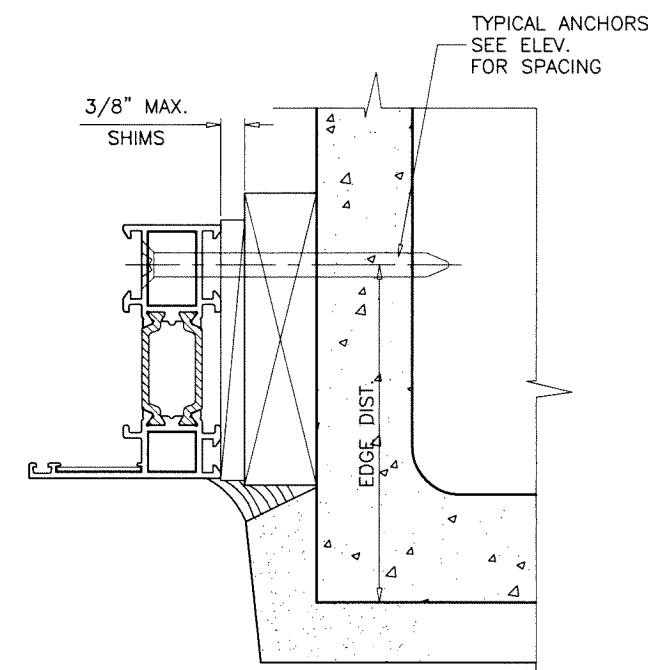
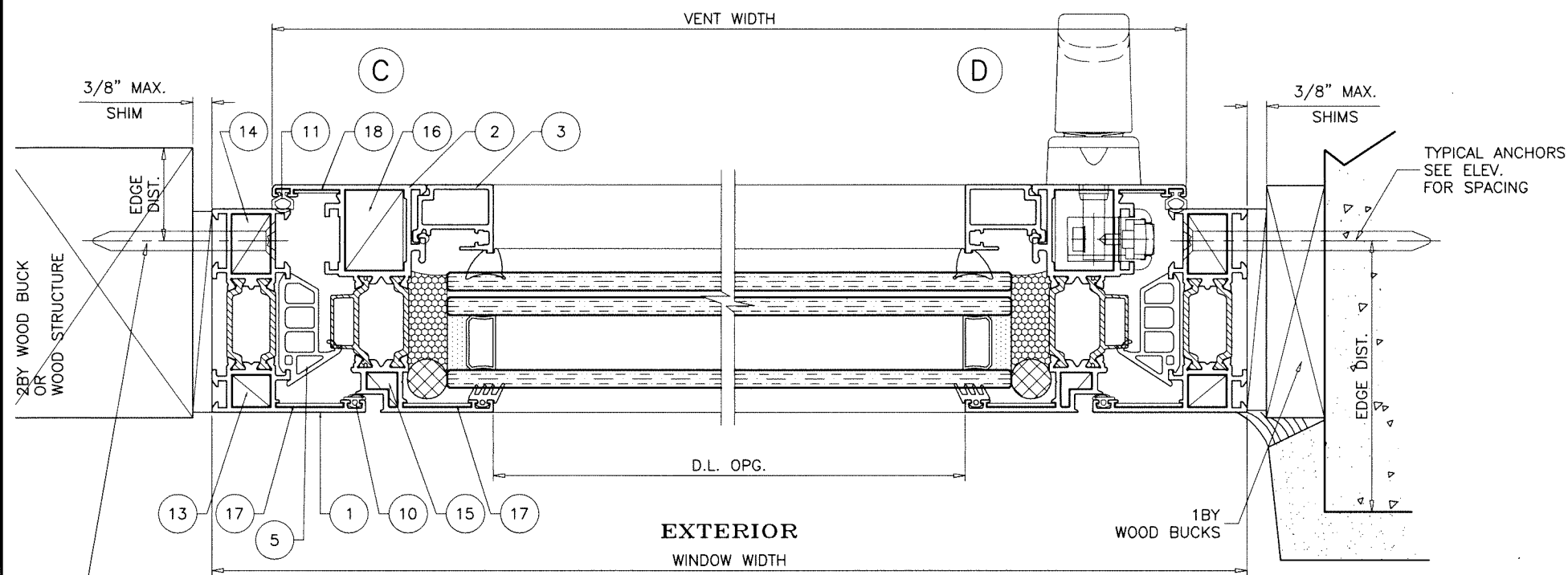
FL #44179



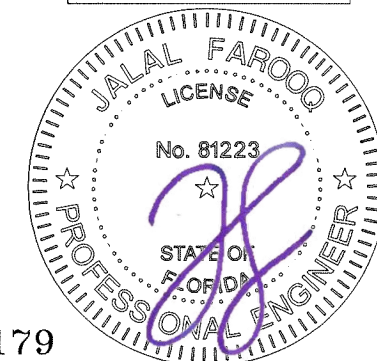
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revisions:	no	date	by	description
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chk. by:				
drawing no.	23-25F			
sheet	2 of 8			

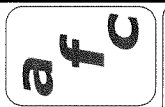


SERIES S67



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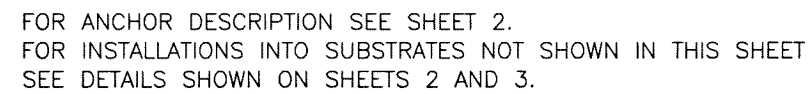
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chk. by:

drawing no.

23-25F

sheet 3 of 8



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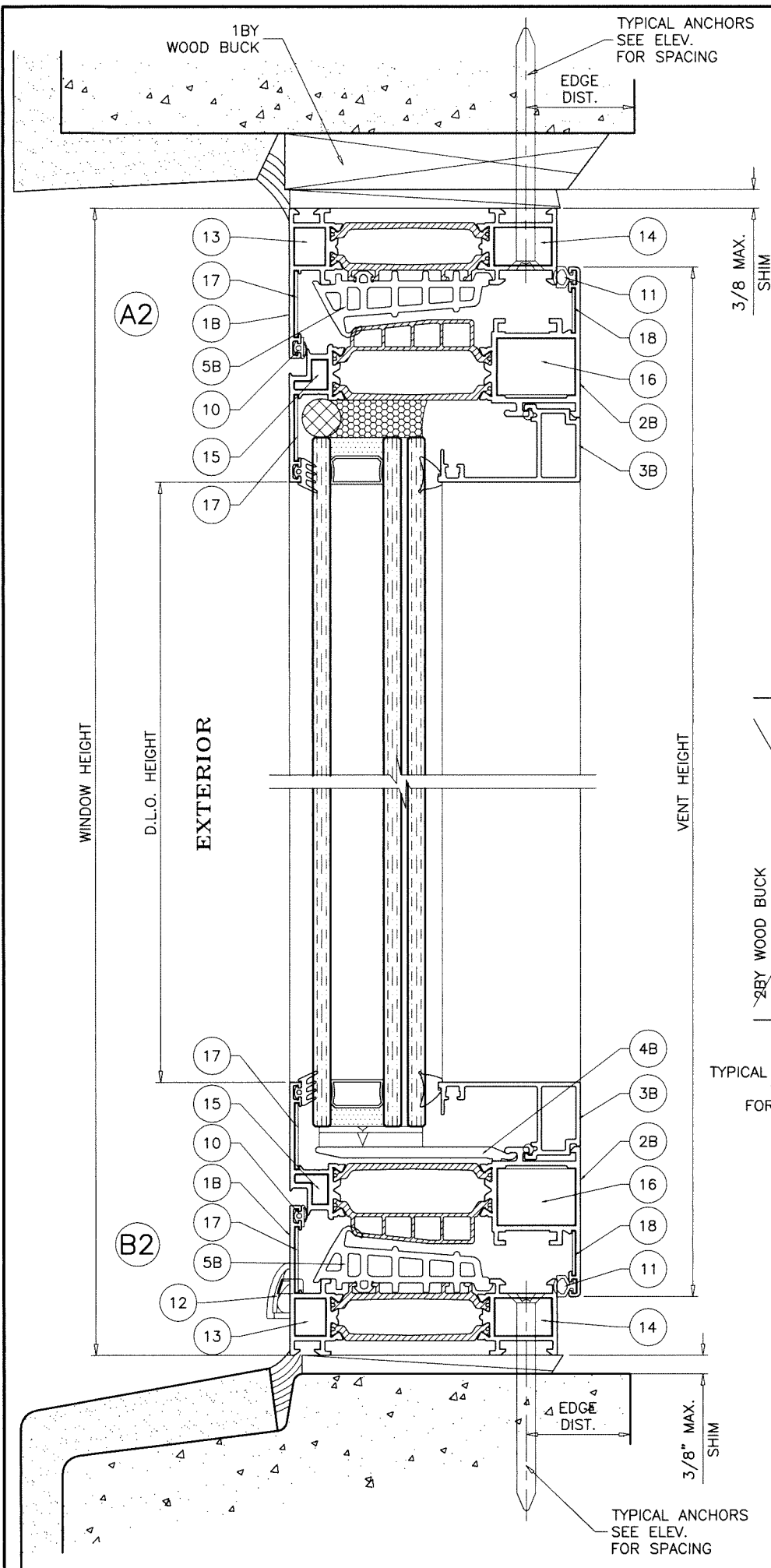
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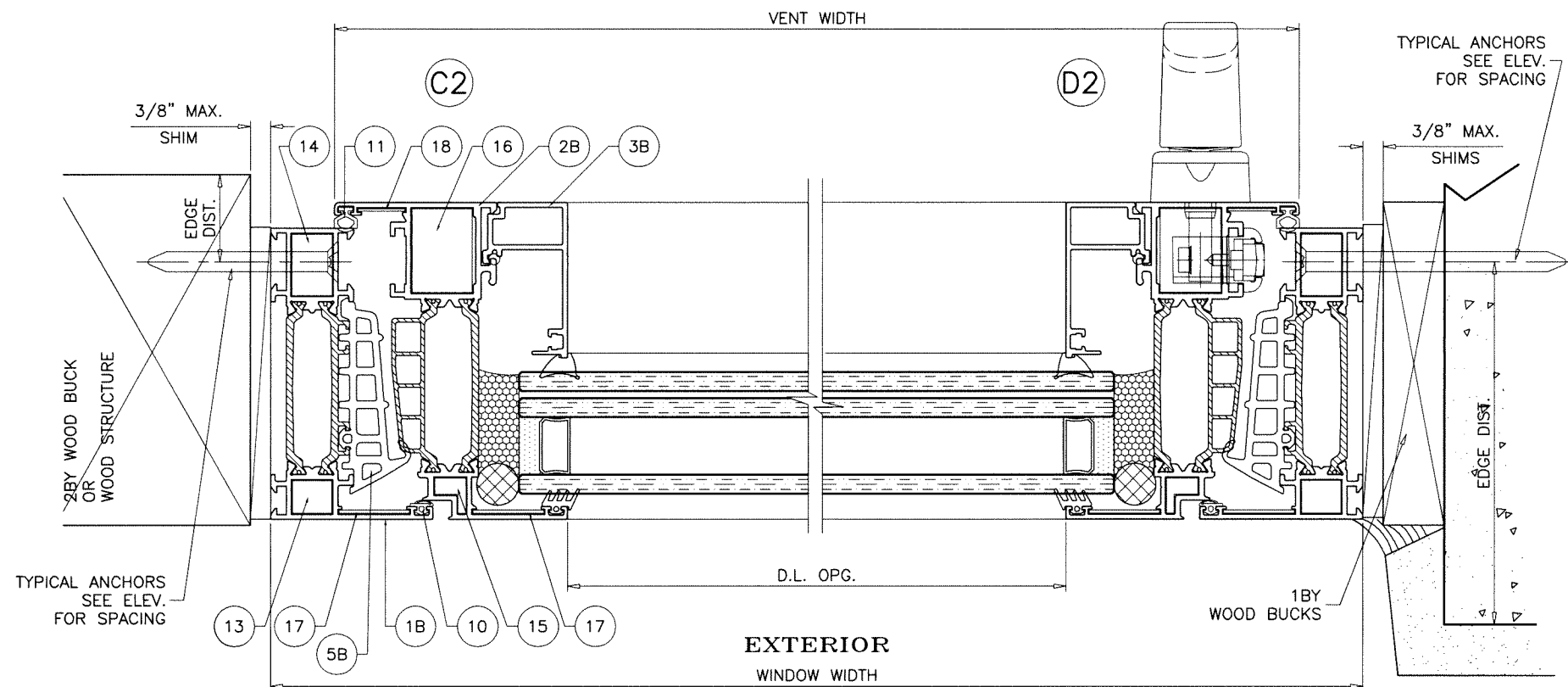
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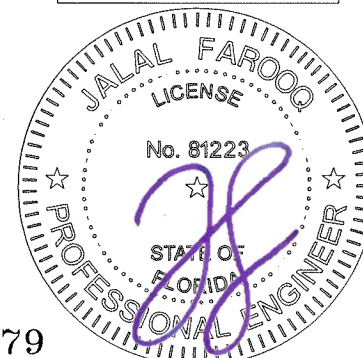
sheet 4 of 8



FOR ANCHOR DESCRIPTION SEE SHEET 2.
FOR INSTALLATIONS INTO SUBSTRATES NOT SHOWN IN THIS SHEET
SEE DETAILS SHOWN ON SHEETS 2 AND 3.



SERIES S91



Sealed: 9/8/2026

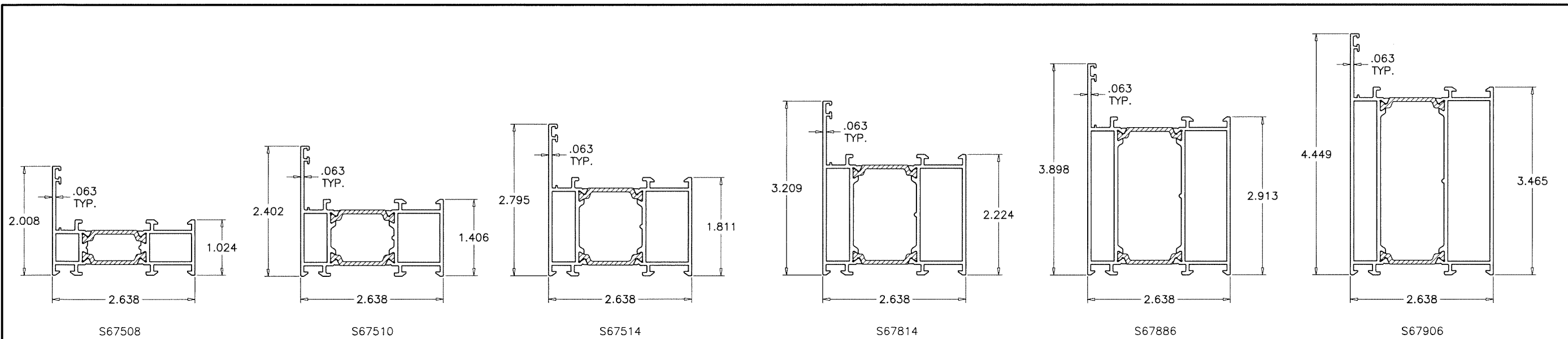
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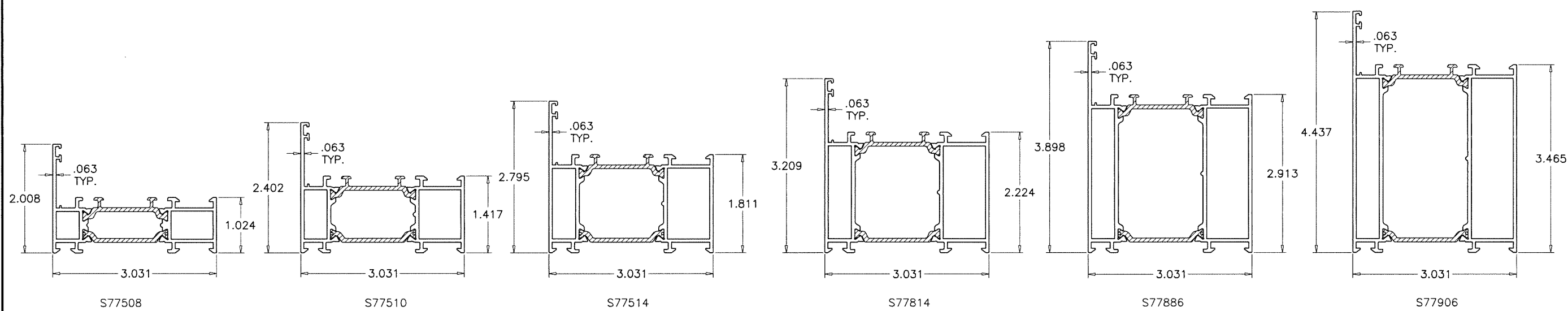
S67/S77/S91 THERMALLY BROKEN INSWING TILT & TURN W. (L.M.I.)

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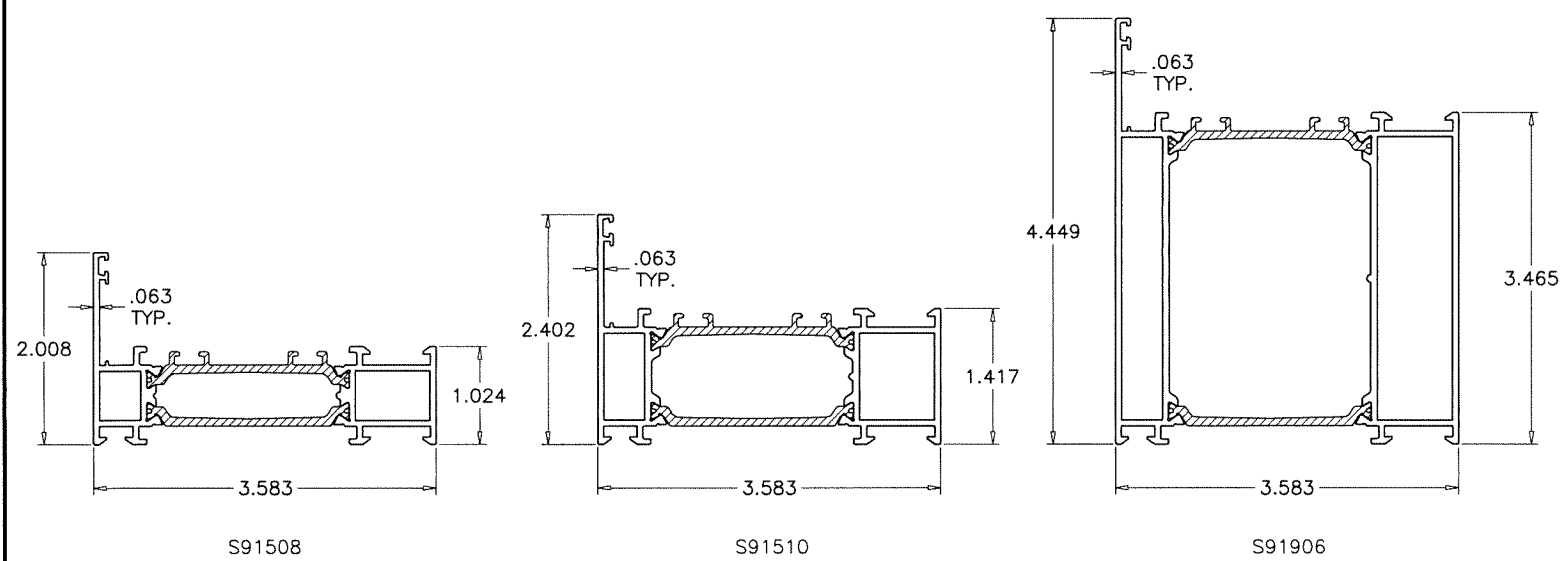
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drawing no.		23-25F	
sheet		5 of 8	



① WINDOW FRAMES (S67)



①A WINDOW FRAMES (S77)

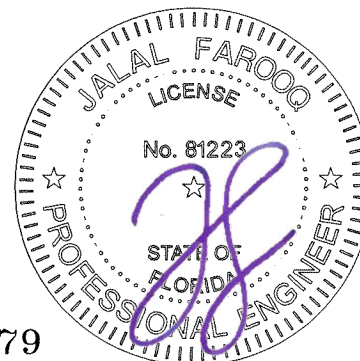


①B WINDOW FRAMES (S91)

WINDOWS TESTED WITH SERIES S67 FRAME (#S67508)
APPROVED WITH ALTERNATE FRAME WIDTHS AND HEIGHTS OF S67 SERIES
ALSO WITH ALTERNATE FRAME WIDTHS AND HEIGHTS OF
S77 & S91 SERIES

INSULBARS
MATERIAL = POLYAMIDE
TENSILE STRENGTH = 13031 PSI
RATE OF BURN = .752 IN./MIN.
SELF IGNITION TEMP. = 793° F
FLASH IGNITION TEMP. = 781°C
SMOKE DENSITY = 1.63

Sealed: 9/8/2026

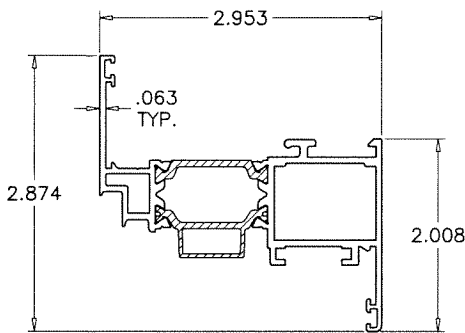


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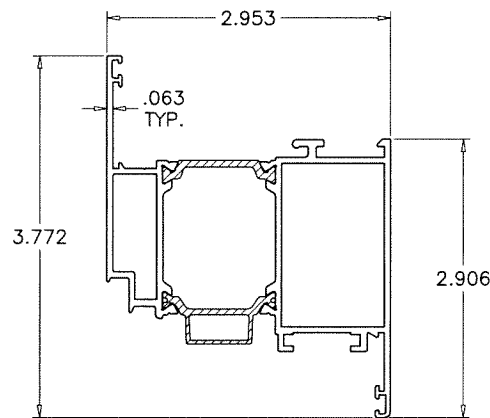
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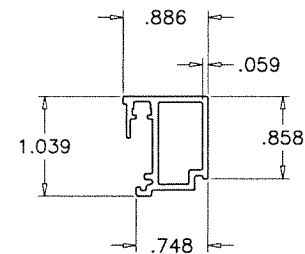
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chk. by:				
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sheet	6 of 8			



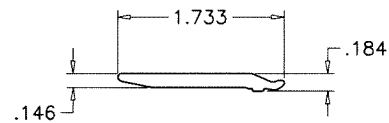
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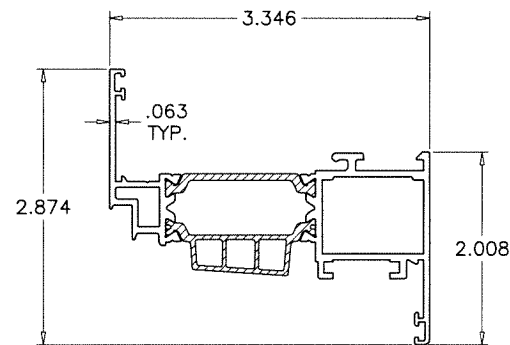
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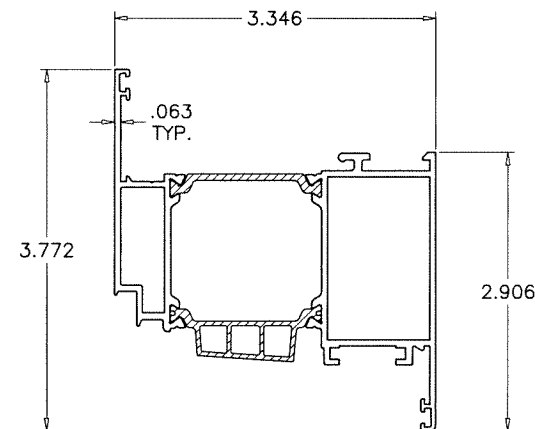
③ GLASS STOP (S67)



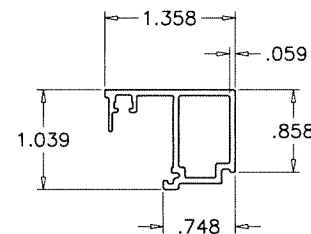
④ GLASS SUPPORT (S67)



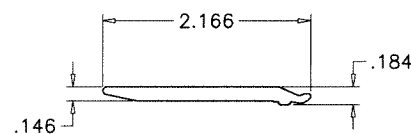
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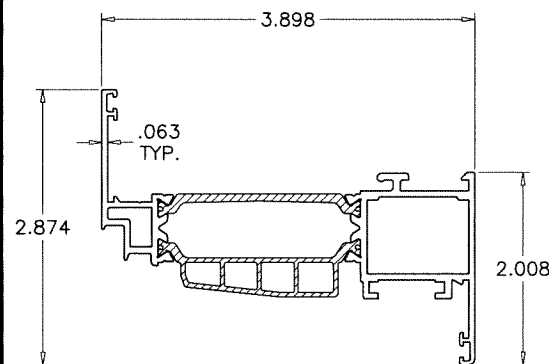
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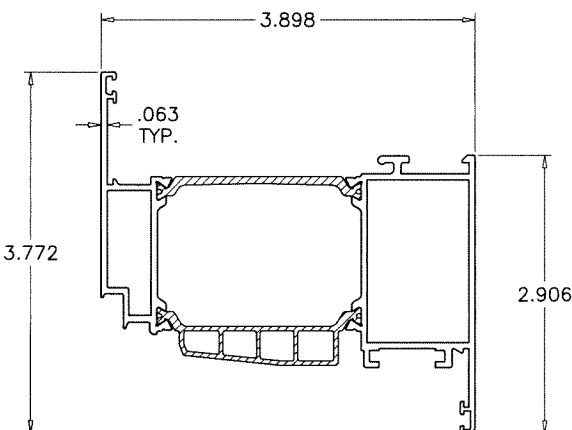
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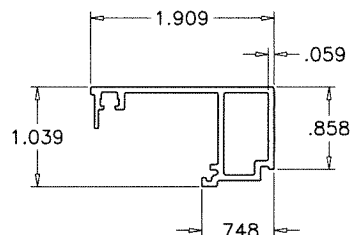
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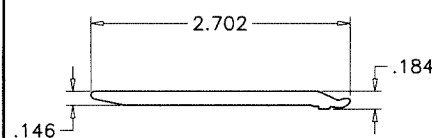
S91936



S91938



③B GLASS STOP (S91)



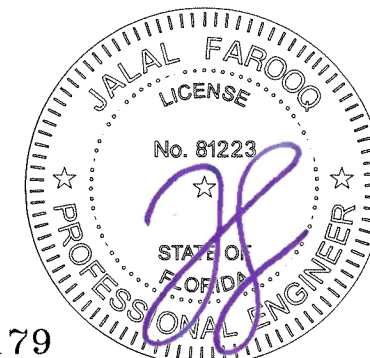
④B GLASS SUPPORT (S91)

WINDOWS TESTED WITH SERIES S67 FRAME (#S67508)
APPROVED WITH ALTERNATE FRAME WIDTHS AND HEIGHTS OF S67 SERIES
ALSO WITH ALTERNATE FRAME WIDTHS AND HEIGHTS OF
S77 & S91 SERIES

INSULBARS

MATERIAL = POLYAMIDE
TENSILE STRENGTH = 13031 PSI
RATE OF BURN = .752 IN./MIN.
SELF IGNITION TEMP. = 793° F
FLASH IGNITION TEMP. = 781°C
SMOKE DENSITY = 1.63

Sealed: 9/8/2026



FL #44179

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dr. by:	TARIQ			
chk. by:				
drawing no.	23-25F			
sheet	7 of 8			

ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	—	4	SERIES S67 WINDOW FRAMES	6060-T66	—
1A	—	4	SERIES S77 WINDOW FRAMES	6060-T66	—
1B	—	4	SERIES S91 WINDOW FRAMES	6060-T66	—
2	—	4	SERIES S67 SASHES	6060-T66	—
2A	—	4	SERIES S77 SASHES	6060-T66	—
2B	—	4	SERIES S91 SASHES	6060-T66	—
3	—	4	SERIES S67 GLASS STOP	6060-T66	—
3A	S60433	4	SERIES S77 GLASS STOP	6060-T66	—
3B	S60440	4	SERIES S91 GLASS STOP	6060-T66	—
4	290-67-001-00	4	SERIES S67 GLASS SUPPORT, 3.1" LONG	6060-T66	—
4A	—	4	SERIES S77 GLASS SUPPORT, 2-3/4" LONG	6060-T66	—
4B	—	4	SERIES S91 GLASS SUPPORT, 3.1" LONG	6060-T66	—
5	210-67-223-03	AS REQD.	SERIES S67 CENTRAL GASKET	EPDM	—
5A	210-77-924-00	AS REQD.	SERIES S77 CENTRAL GASKET	EPDM	—
5B	210-91-510-00	AS REQD.	SERIES S91 CENTRAL GASKET	EPDM	—
6	200-06-860-01	AS REQD.	EXTERIOR GLAZING GASKET	EPDM	—
7	200-09-008-01	AS REQD.	INTERIOR GLAZING GASKET	EPDM	—
8	220-31-230-03	AS REQD.	GLAZING BEAD GASKET	EPDM	—
9	290-00-005-00	2	SETTING BLOCKS, AT 1/4 POINTS	EPDM	—
9A	290-00-002-00	2	SETTING BLOCKS, AT 1/4 POINTS	EPDM	—
10	220-11-001-01	AS REQD.	FRAME W'STRIPPING GASKET	EPDM	—
11	220-60-002-01	AS REQD.	VENT W'STRIPPING GASKET	EPDM	—
12	310-11-501-00	AS REQD.	WEEP HOLE COVER	POLYAMIDE	—
13	140-58-520-00	AS REQD.	FRAME CORNER CLEAT	DIE CAST ALUM	—
14	140-58-280-00	AS REQD.	FRAME CORNER CLEAT	DIE CAST ALUM	—
15	165-77-116-00	AS REQD.	VENT CORNER CLEAT	DIE CAST ALUM	—
16	140-58-320-00	AS REQD.	VENT CORNER CLEAT	DIE CAST ALUM	—
17	180-77-280-00	AS REQD.	ALIGNMENT CORNER KEY	ALUMINUM	—
18	180-77-155-00	AS REQD.	ALIGNMENT CORNER KEY	ALUMINUM	—
19	—	—	—	—	—

SEALANTS:

ALL FRAME AND VENT CORNERS AND INSTALLATION SCREWS SEALED WITH CLEAR/ALUMINUM COLORED SEALANT.

LOCKS:

STANDARD FIXED POINT LOCK BY 'FAPIM' WITH
(1) LOCKING POINT AT HEAD/SILL AT 14" FROM LOCK JAMB
(1) LOCKING POINT AT LOCK JAMB AT 50" FROM BOTTOM
(2) LOCKING POINTS AT HINGE JAMB AT 27" FROM TOP/BOTTOM
FASTENED WITH (2) #8-32 X 1/2" PH SMS

ADJUSTABLE LOCK BY 'FAPIM' WITH
(1) LOCKING POINT AT HEAD/SILL AT 35" FROM LOCK JAMB
(4) LOCKING POINTS AT LOCK JAMB AT 5-1/2", 22", 68" & 95" FROM BOTTOM
(3) LOCKING POINTS AT HINGE JAMB AT 10", 45" & 80" FROM BOTTOM
EACH FASTENED WITH (2) #8 X 5/8" FH SMS

HINGES:

ALUMIL 'ADVANCED' EURO GROOVE T/T MECHANISM BY 'FAPIM'
LOCATED AT WINDOW FRAME 5" FROM TOP AND BOTTOM CORNERS
FASTENED TO FRAME WITH (3) #10 X 1/2" PH SMS
FASTENED TO VENT WITH (4) #10 X 1/2" PH SMS

Sealed: 9/8/2026



FL #44179

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revisions:
no. date by description

date: 06-01-23

scale: 1/2" = 1"

dr. by: TARIQ

chk. by:

drawing no.

23-25F

sheet 8 of 8