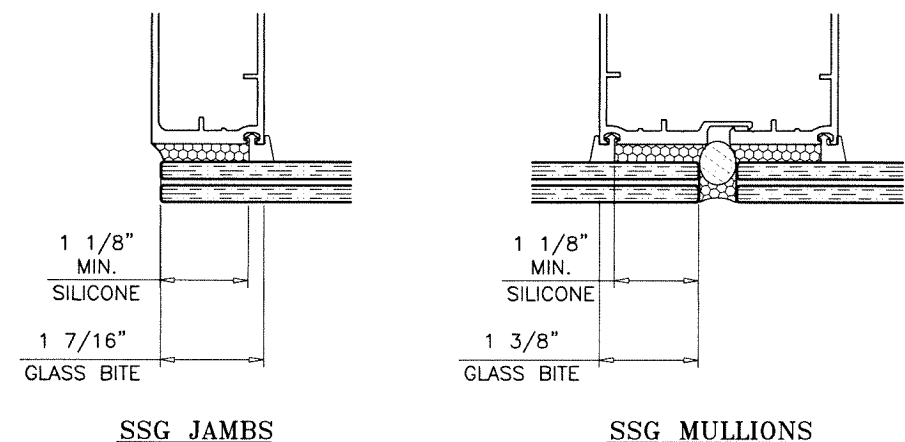
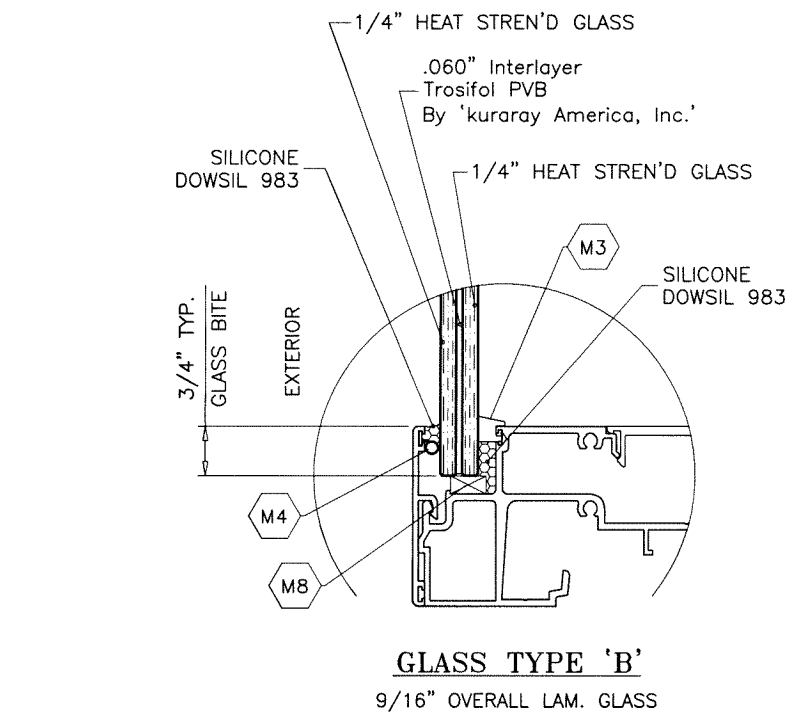
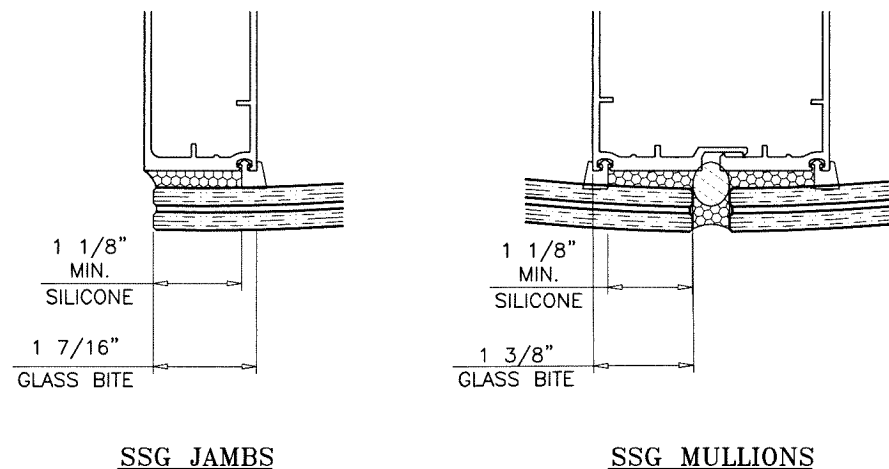
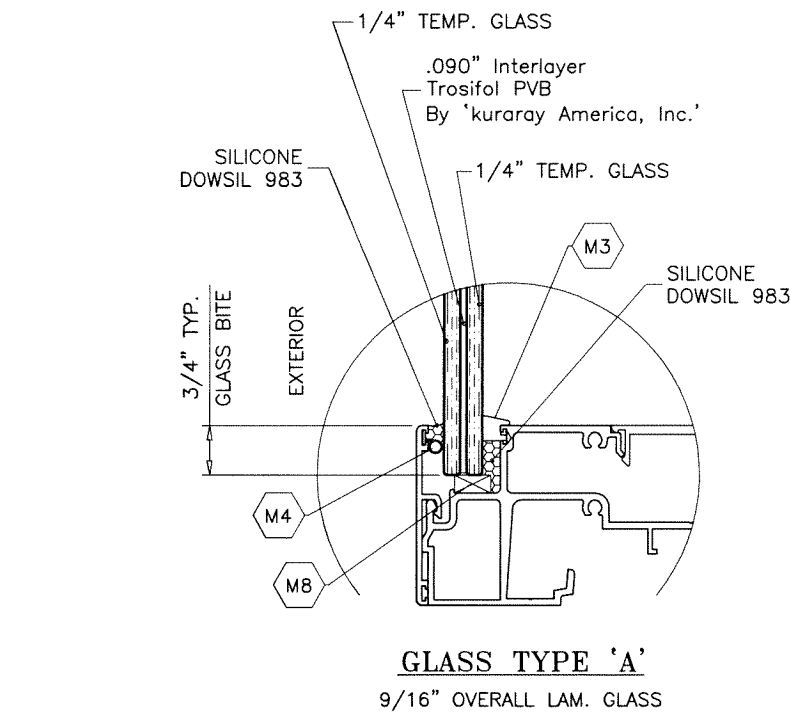




THIS SYSTEM IS RATED FOR SMALL MISSILE IMPACT.
F.B.C. APPROVED IMPACT RESISTANT SHUTTERS
REQUIRED FOR INSTALLATIONS UP TO 30 FT. OF GRADE.
SHUTTERS NOT REQD. FOR INSTALLATIONS ABOVE 30 FT. OF GRADE.

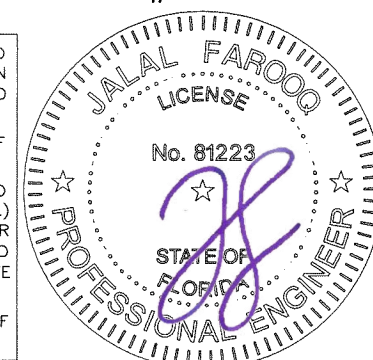
PRODUCT COMPLIES WITH REQUIREMENTS OF ANSI Z97.1.

**LAMINATED GLASS
SMALL MISSILE IMPACT**

Sealed: 7/3/2025

FL #22244

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.



SERIES 7100 SSG ALUMINUM WINDOW WALL SYSTEM

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

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.

ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2023 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)'.

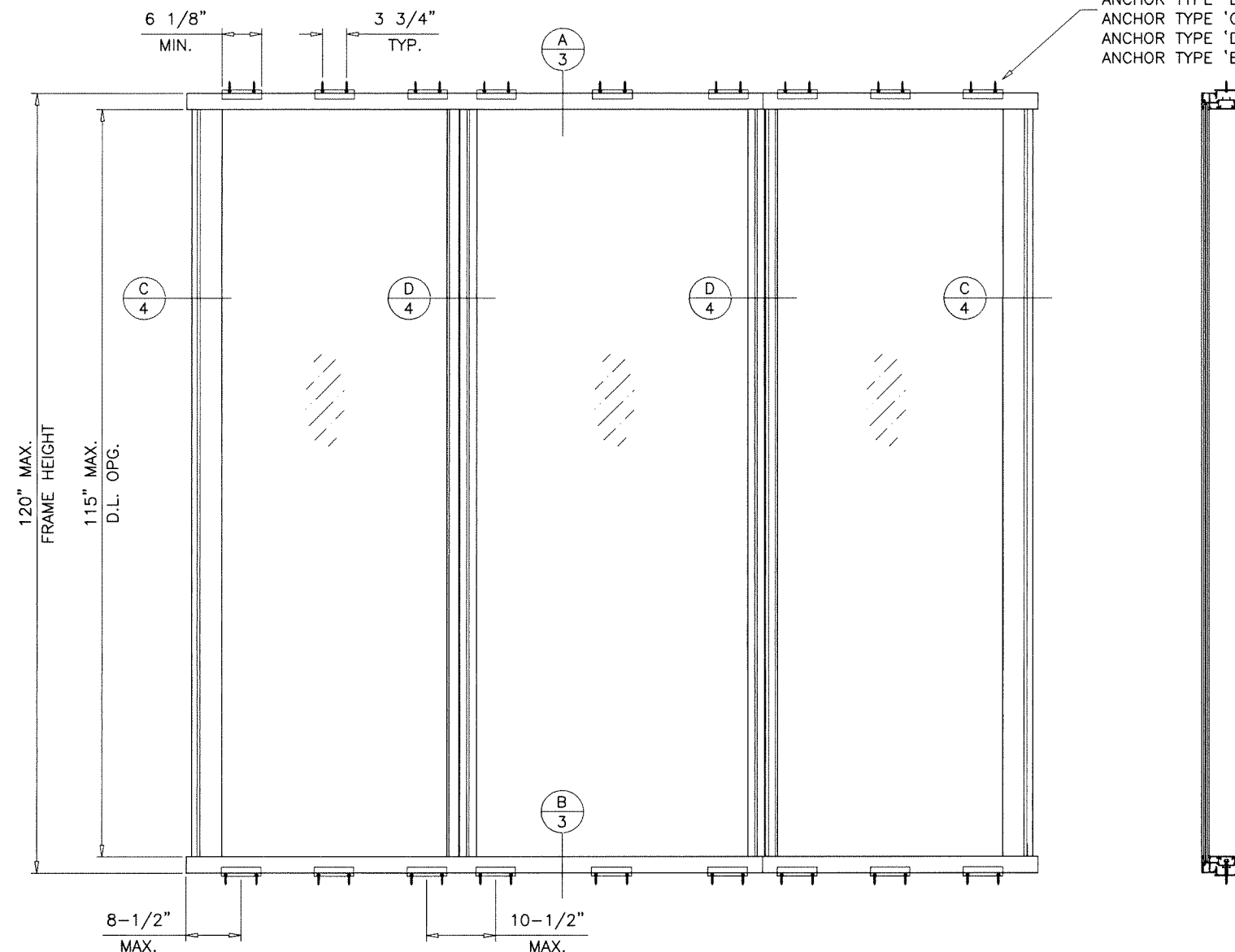
MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE. LABELING TO COMPLY WITH SECTION 1709.9.2.

af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
WWW.AFCENG.COM
FBPE #3538
STORE 25-61F-ES

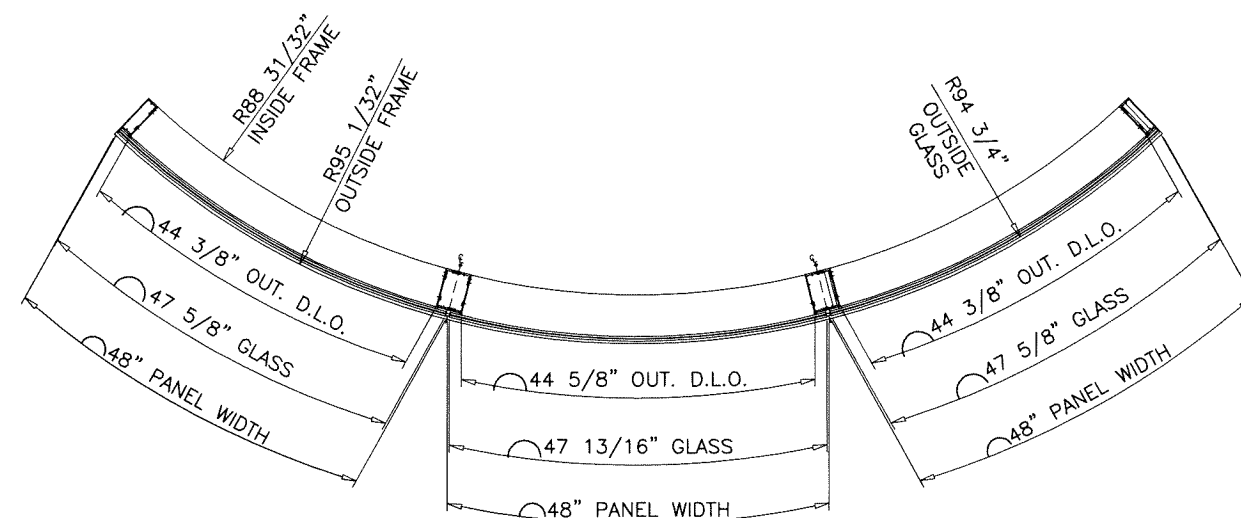
SERIES 7100 SSG ALUM WINDOW WALL SYSTEM (S.M.I.)

E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:		no date by description	
date:	06-10-25	scale:	1/2"=1'-0"
dr. by:	TARIQ	chk. by:	
drawing no.	25-61F		
sheet	1 of 5		



LIMIT MAX. LOADS FOR
ANCHOR TYPE 'A' = 92.3 PSF
ANCHOR TYPE 'B' = 111.9 PSF
ANCHOR TYPE 'C' = 109.9 PSF
ANCHOR TYPE 'D' = 124.7 PSF
ANCHOR TYPE 'E' = 125.0 PSF



TYPICAL ELEVATION
TESTED UNIT

APPROVAL APPLIES TO SINGLE LITE SSG GLASS UNITS
OR MULTIPLE LITES SSG GLASS UNITS IN SSG FRAMES

GLASS TYPE 'A' ONLY

MAX. DESIGN LOAD = + 100.0 PSF
- 125.0 PSF

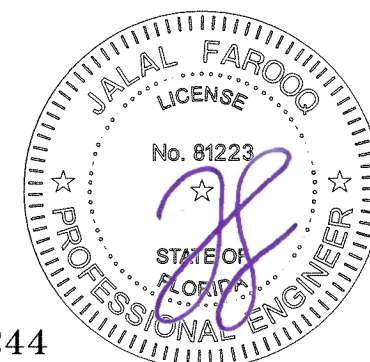
MAX. FRAME HEIGHT = 120 IN.

MAX. MULLION SPACING CL TO CL = 48 IN.

MAX. D.L. OPG. HEIGHT = 115 IN.

MAX. D.L. OPG. WIDTH = 44-5/8 IN.

MIN. SSG GLASS RADIUS = 94-3/4 IN.



Sealed: 7/3/2025

FL #22244

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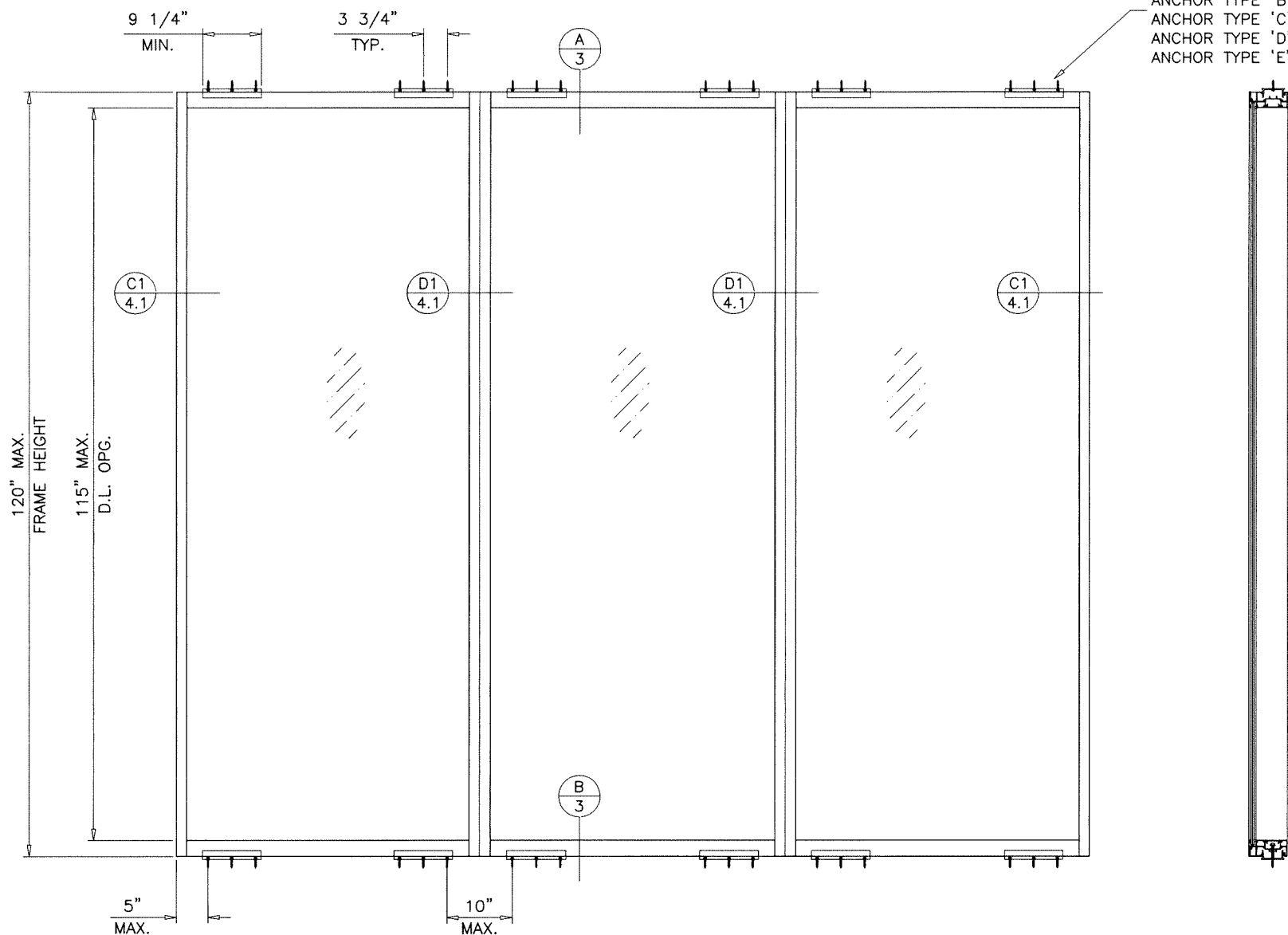
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chk. by:

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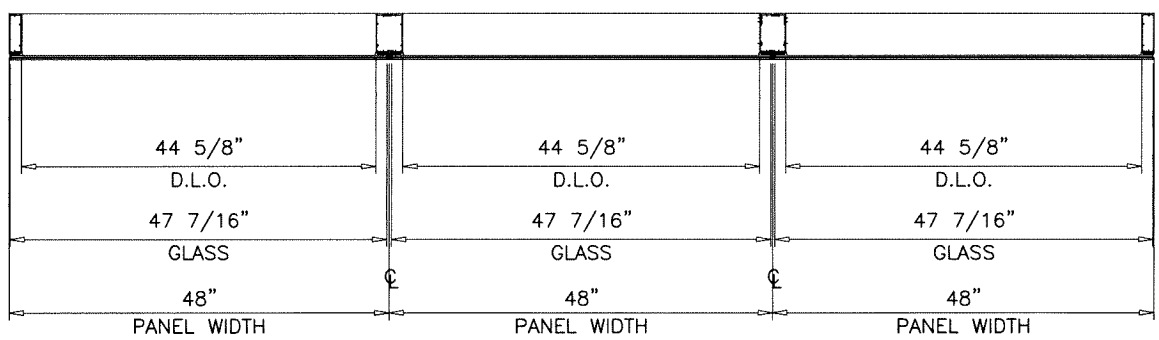
25-61F

sheet 2 of 5

STORE 25-61F-ES



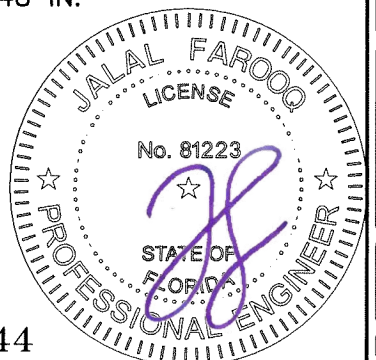
LIMIT MAX. LOADS FOR
 ANCHOR TYPE 'A' = 92.3 PSF
 ANCHOR TYPE 'B' = 111.9 PSF
 ANCHOR TYPE 'C' = 109.9 PSF
 ANCHOR TYPE 'D' = 124.7 PSF
 ANCHOR TYPE 'E' = 125.0 PSF



TYPICAL ELEVATION

APPROVAL APPLIES TO SINGLE LITE OR MULTIPLE LITES UNITS
 GLASS TYPE 'B' ONLY
 MAX. DESIGN LOAD = + 100.0 PSF
 - 116.0 PSF

MAX. FRAME HEIGHT = 120 IN.
 MAX. MULLION SPACING CL TO CL = 48 IN.
 MAX. D.L. OPG. HEIGHT = 115 IN.
 MAX. D.L. OPG. WIDTH = 44-5/8 IN.



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STORE 25-61F-ES

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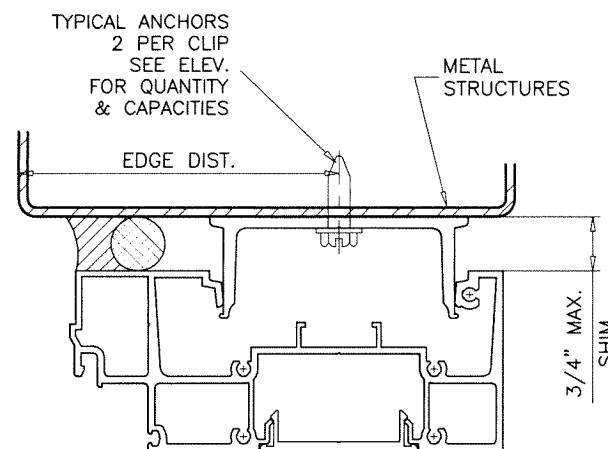
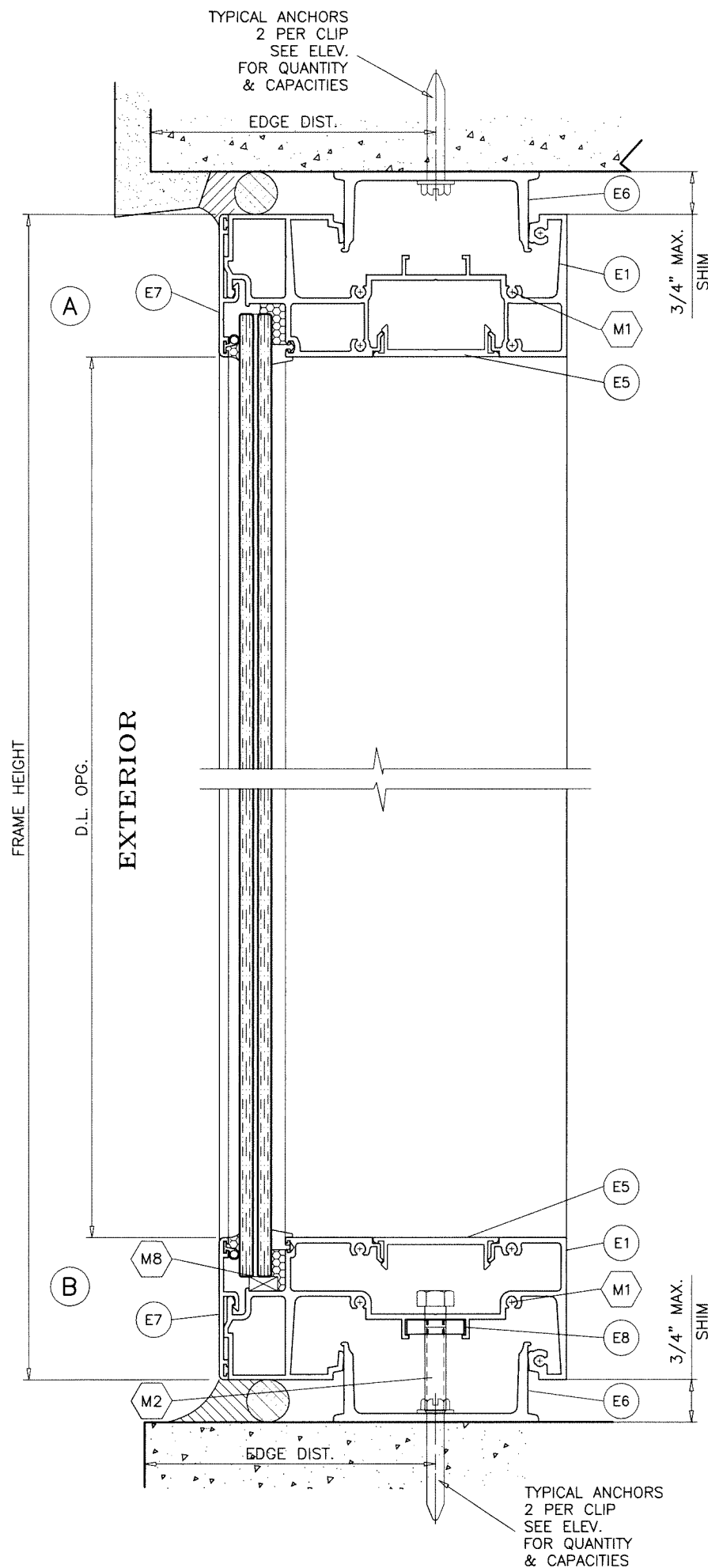
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 MIAMI, FL. 33142
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date: 06-10-25
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 dr. by: TARIQ
 chk. by:

revisions:

no	date	by	description

drawing no.
25-61F
 sheet 2.1 of 5



METAL STRUCTURES NOT BY E.S. WDW.
MUST SUPPORT LOADS IMPOSED BY GLAZING SYSTEM AND
TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A'

1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)

DIRECTLY INTO CONCRETE (3000 PSI MIN.)
WITH 1-3/4" MIN. EMBED INTO CONC.

ANCHOR EDGE DISTANCES

INTO CONCRETE = 2-1/2" MIN.

TYPE 'B'

5/16" DIA ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI)

DIRECTLY INTO CONCRETE (3500 PSI MIN.)
WITH 2" MIN. EMBED INTO CONC.

ANCHOR EDGE DISTANCES

INTO CONCRETE = 3-1/8" MIN.

TYPE 'C'

#14 SMS OR SELF DRILLING SCREWS ST/ST (Fu=100 KSI, Fy=65 KSI)

INTO METAL STRUCTURES
(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)

ANCHOR EDGE DISTANCES

INTO METAL STRUCTURE = 1/2" MIN.

TYPE 'D'

#14 SMS OR SELF DRILLING SCREWS ST/ST (Fu=100 KSI, Fy=65 KSI)

INTO METAL STRUCTURES
(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
ALUMINUM: 1/4" THK. MIN. (6063-T5 MIN.)
STEEL: 1/4" THK. MIN. (Fy = 36 KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

ANCHOR EDGE DISTANCES

INTO METAL STRUCTURE = 1/2" MIN.

TYPE 'E'

5/16" DIA. SELF DRILLING SCREWS (GRADE 5 CRS)

INTO METAL STRUCTURES
(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
ALUMINUM: 1/4" THK. MIN. (6063-T5 MIN.)
STEEL: 1/4" THK. MIN. (Fy = 36 KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

ANCHOR EDGE DISTANCES

INTO METAL STRUCTURE = 5/8" MIN.

Sealed: 7/3/2025

FL #22244



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STORE 25-61F-ES

SERIES 7100 SSG ALUM WINDOW WALL SYSTEM (S.M.I.)

E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:	
no	date by description

date: 06-10-25

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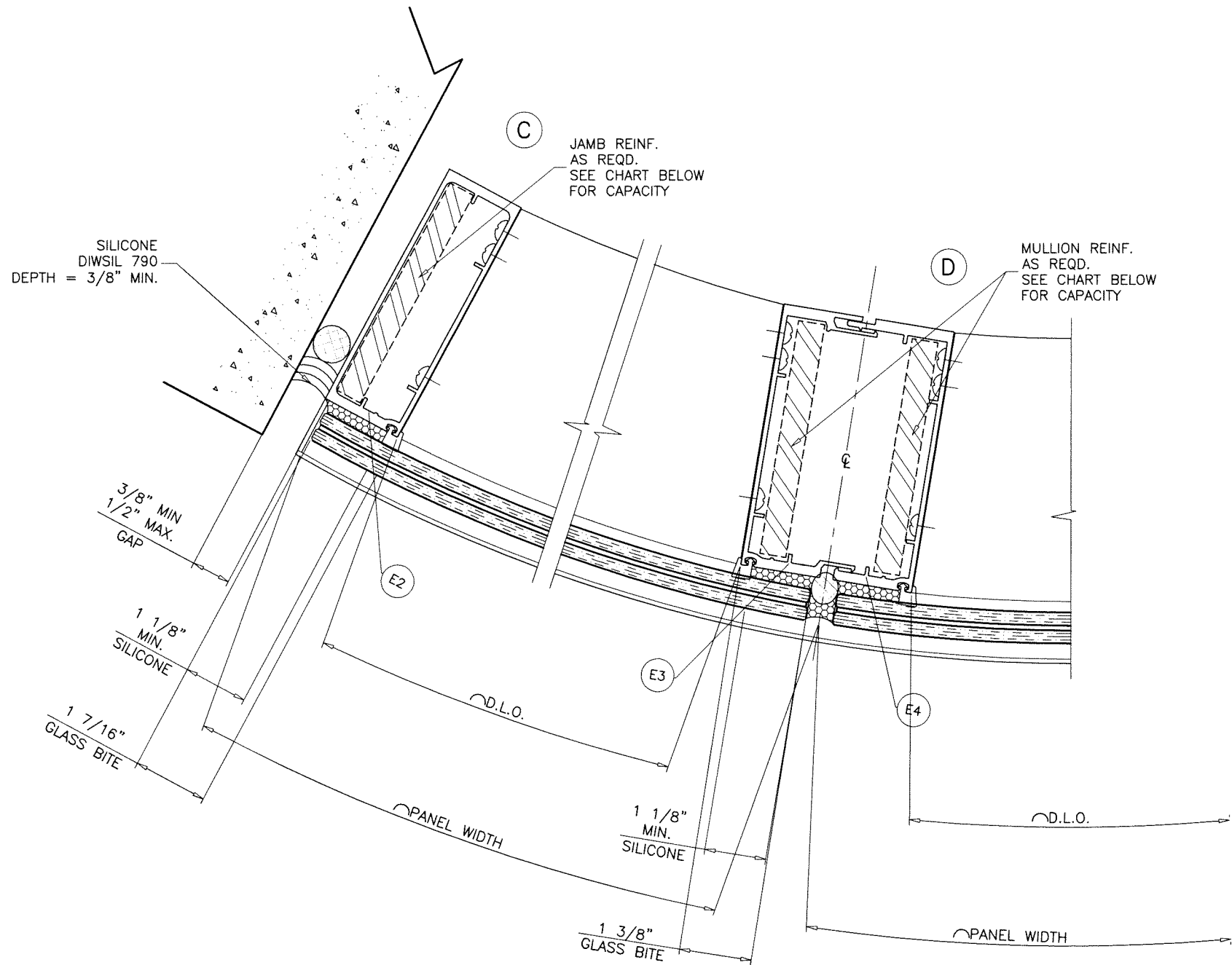
dr. by: TARIQ

chk. by:

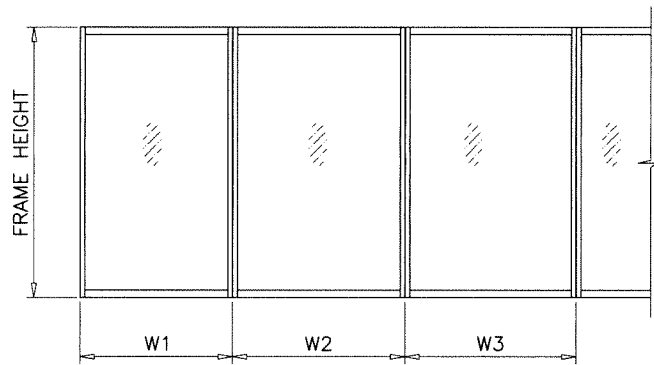
drawing no.

25-61F

sheet 3 of 5



JAMB & MULLION DESIGN LOAD CAPACITY - PSF											
NOMINAL DIMS.		JAMB WITHOUT REINF.		JAMB WITH (1) STEEL BAR		MULLION WITHOUT REINF.		MULLION WITH (1) STEEL BAR		MULLION WITH (2) STEEL BARS	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
36"	102"	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0
42"		100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0
48"		100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0
36"	108"	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0
42"		100.0	124.5	100.0	125.0	100.0	117.0	100.0	125.0	100.0	125.0
48"		100.0	111.1	100.0	125.0	100.0	104.4	100.0	125.0	100.0	125.0
36"	114"	100.0	120.9	100.0	125.0	100.0	113.6	100.0	125.0	100.0	125.0
42"		100.0	105.2	100.0	125.0	98.8	98.8	100.0	125.0	100.0	125.0
48"		93.7	93.7	100.0	125.0	88.0	88.0	100.0	125.0	100.0	125.0
36"	120"	100.0	103.3	100.0	125.0	97.0	97.0	100.0	125.0	100.0	125.0
42"		89.7	89.7	100.0	125.0	84.3	84.3	100.0	125.0	100.0	125.0
48"		79.7	79.7	100.0	125.0	74.9	74.9	100.0	119.3	100.0	125.0

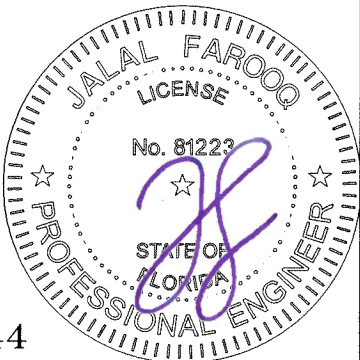


WIDTH (W) = W1
AT JAMB

WIDTH (W) = $\frac{W2 + W3}{2}$
AT MULLION

Sealed: 7/3/2025

FL #22244



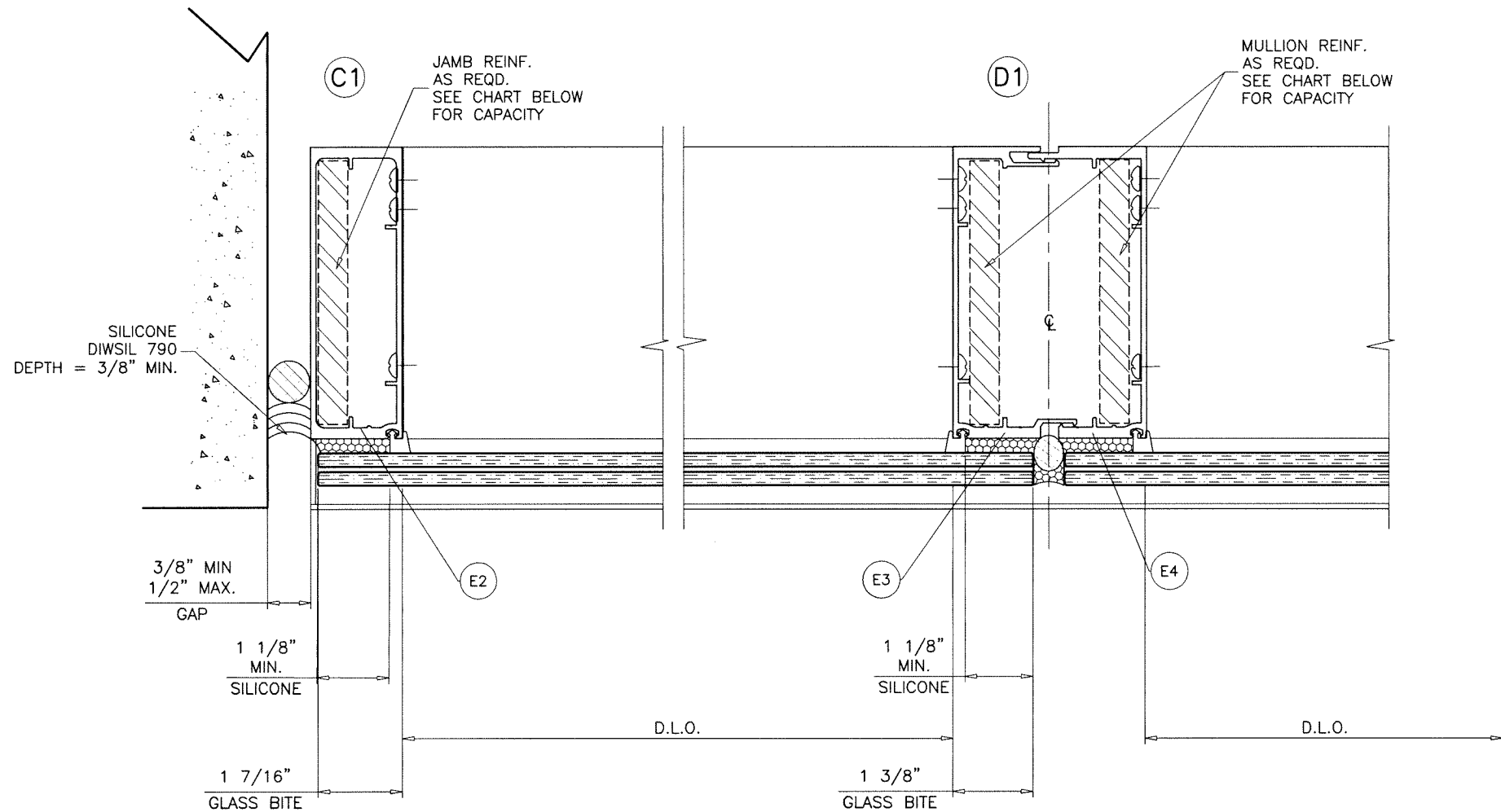
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
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SERIES 7100 SSG ALUM WINDOW WALL SYSTEM (S.M.I.)

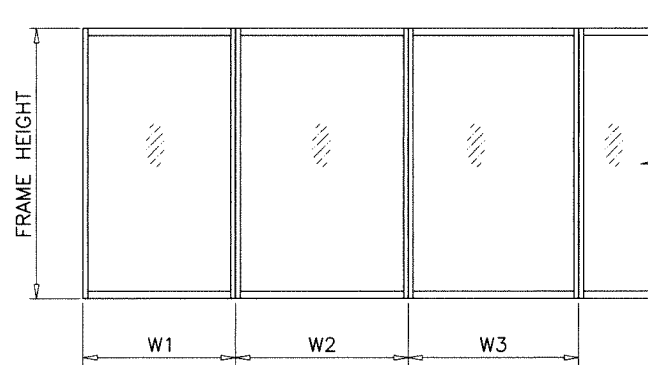
E.S. WINDOWS, LLC
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MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:		by description	
no	date		

date: 06-10-25
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:
drawing no. 25-61F
sheet 4 of 5



JAMB & MULLION DESIGN LOAD CAPACITY - PSF											
NOMINAL DIMS.		JAMB WITHOUT REINF.		JAMB WITH (1) STEEL BAR		MULLION WITHOUT REINF.		MULLION WITH (1) STEEL BAR		MULLION WITH (2) STEEL BARS	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
36"	102"	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0
42"		100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0
48"		100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0
36"	108"	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0	100.0	125.0
42"		100.0	124.5	100.0	125.0	100.0	117.0	100.0	125.0	100.0	125.0
48"		100.0	111.1	100.0	125.0	100.0	104.4	100.0	125.0	100.0	125.0
36"	114"	100.0	120.9	100.0	125.0	100.0	113.6	100.0	125.0	100.0	125.0
42"		100.0	105.2	100.0	125.0	98.8	98.8	100.0	125.0	100.0	125.0
48"		93.7	93.7	100.0	125.0	88.0	88.0	100.0	125.0	100.0	125.0
36"	120"	100.0	103.3	100.0	125.0	97.0	97.0	100.0	125.0	100.0	125.0
42"		89.7	89.7	100.0	125.0	84.3	84.3	100.0	125.0	100.0	125.0
48"		79.7	79.7	100.0	125.0	74.9	74.9	100.0	119.3	100.0	125.0



WIDTH (W) = W1
AT JAMB

WIDTH (W) = $\frac{W2 + W3}{2}$
AT MULLION

Sealed: 7/3/2025

FL #22244



SERIES 7100 SSG ALUM WINDOW WALL SYSTEM (S.M.I.)

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STORE 25-61F-ES

revisions:
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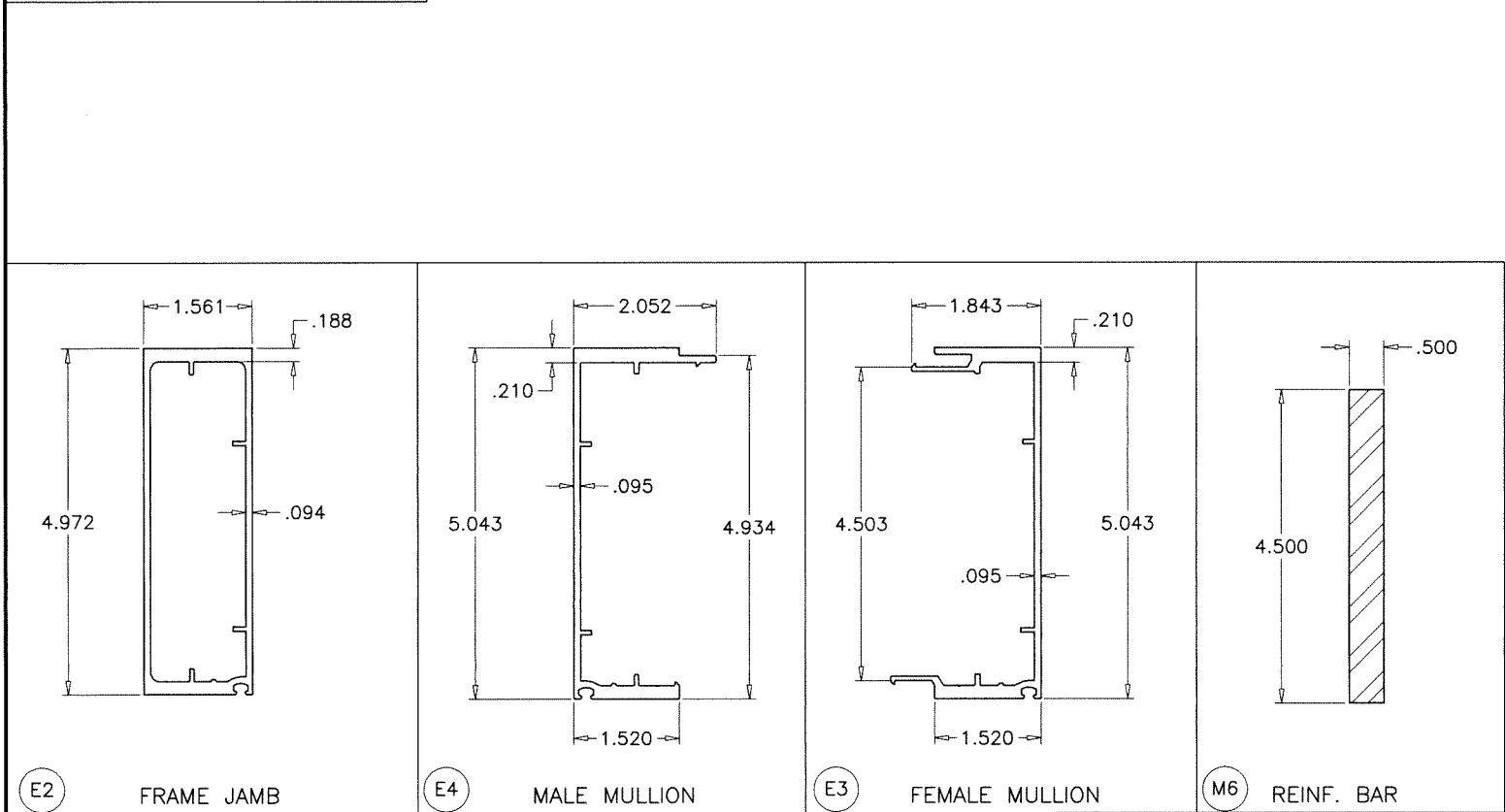
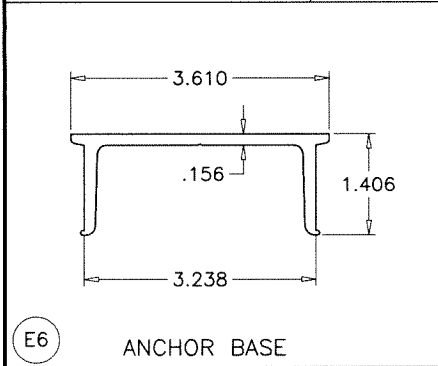
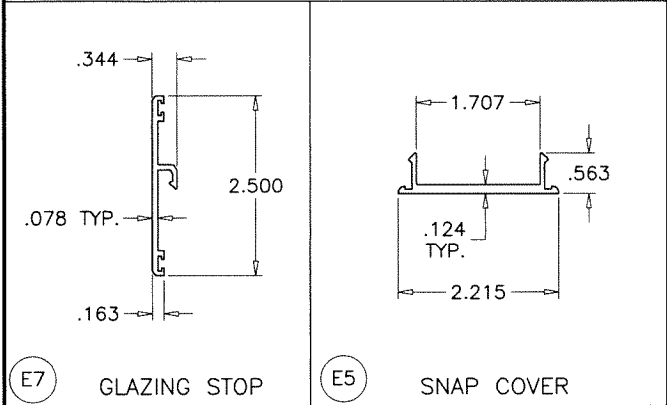
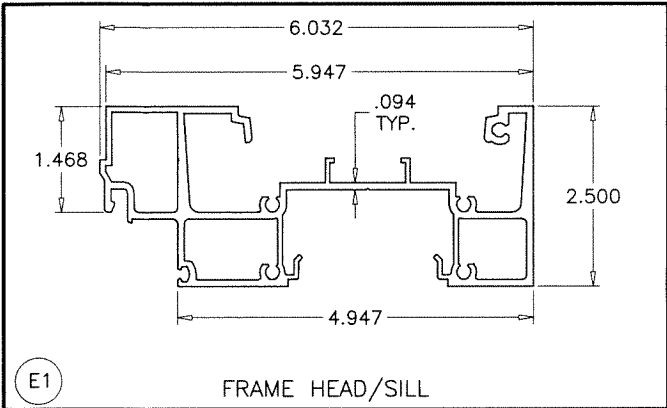
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chk. by:

drawing no.

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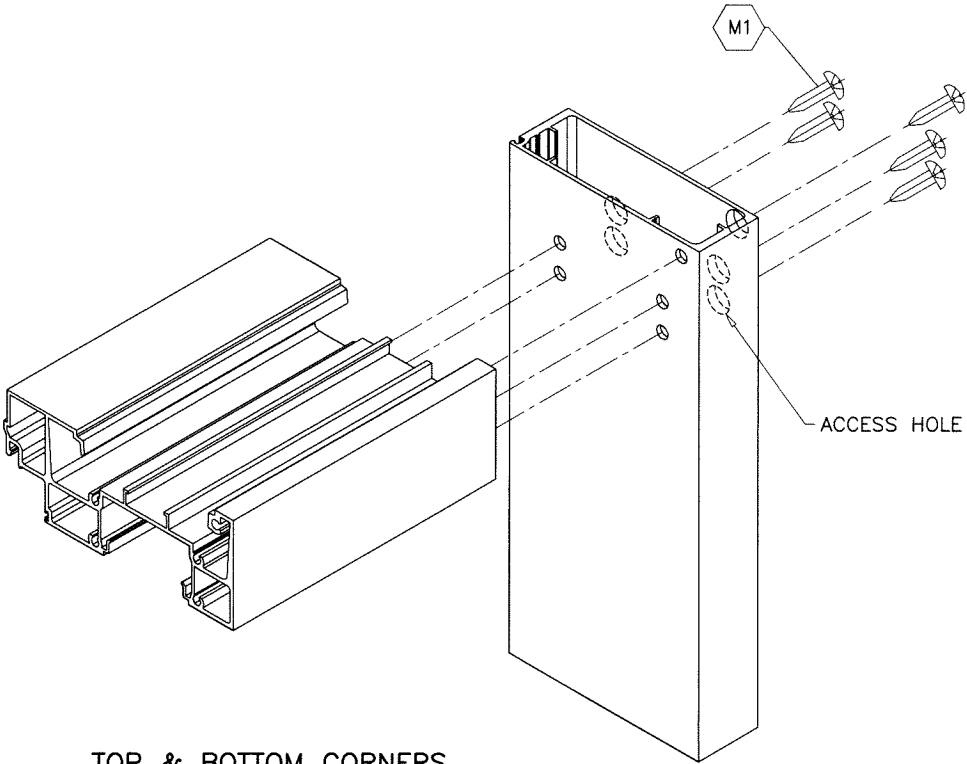
sheet 4.1 of 5



ITEM NO.	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
E1	ES-7000-059	AS REQD.	FRAME HEAD/SILL	6063-T6	-
E2	ES-7000-060	AS REQD.	FRAME JAMB	6005-T5	-
E3	ES-7000-061	AS REQD.	FEMALE MULLION	6005-T5	-
E4	ES-7000-062	AS REQD.	MALE MULLION	6005-T5	-
E5	ES-7003A	AS REQD.	SNAP COVER	6063-T5	-
E6	ES-7004	AS REQD.	ANCHOR BASE, LENGTH AS REQD.	6005-T5	-
E7	ES-7006	AS REQD.	GLAZING STOP	6063-T6	-
E8	-	AS REQD.	1/4" X 1" BAR WITH 3/8" THREADED HOLE	6063-T6	-
M1	#12 X 1"	AS REQD.	FRAME ASSEMBLY SCREWS	ST. STEEL	PH SMS
M2	3/8" BOLT	AS REQD.	LEVELING SCREW	ST. STEEL	-
M3	ES-U3525-G08A	AS REQD.	INTERIOR WEDGE GASKET	SILICONE	DUROMETER 70±5 SHORE A
M4	ES-7000-G01A	AS REQD.	EXTERIOR BULB GASKET	SILICONE	DUROMETER 60±5 SHORE A
M6	-	AS REQD.	REINFORCING BAR	STEEL	A36, Fu MIN. = 58 KSI
M8	80-334A	2/ LITE	SETTING BLOCK (LAM. GLASS)	SILICONE	DUROMETER 80±5 SHORE A
-	-	-	-	-	-

SEALANTS:

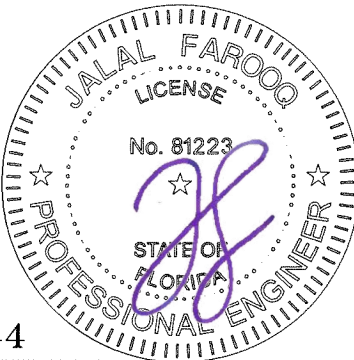
ALL FRAME CORNERS, JOINTS, MULLION SEAMS AND PERIMETER OF GLAZING BEAD TO FRAME SEALED WITH SILICONE SEALANT.



TOP & BOTTOM CORNERS

Sealed: 7/3/2025

FL #22244



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sheet 5 of 5