

**SERIES ES-8000T (JUMBO)  
ALUMINUM WINDOW WALL SYSTEM**

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2020 (7TH EDITION)/2023 (8TH 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 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 2020/2023 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.

**TYPICAL ELEVATIONS**

**INSTRUCTIONS:**

USE CHARTS AS FOLLOWS.

- STEP 1** DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2** SEE CHARTS ON SHEET 2 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE.
- STEP 3** CHECK MULLION CAPACITY FOR A GIVEN SPACING AND HEIGHT USING CHARTS ON SHEETS 3 FOR WINDOW WALL MULLION AND SHEETS 9 THRU 11 FOR DOOR MULLION THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4** CHECK ANCHOR CAPACITY FOR WINDOW WALL SYSTEM USING CHARTS ON SHEETS 5 THRU 8 FOR DOOR MULLION ANCHOR CAPACITY SEE CHART ON SHEET 12. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 5** THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

THIS SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

WINDOW WALL SYSTEM COMPLY WITH REQUIREMENTS OF ANSI Z97.1.

**Sealed: 7/25/2023 FL #17897**

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.



**af c**  
**AL-FAROOQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 9360 SUNSET DRIVE, SUITE 220  
 MIAMI, FLORIDA 33173  
 TEL. (305) 264-8100 FAX. (305) 262-6978  
 (C.A.N. 3598)  
 COMP-ANL\21-58FES

ES-8000T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)  
**E.S. WINDOWS, LLC**  
 3550 N.W. 49 STREET  
 MIAMI, FL. 33142  
 TEL. (305) 638-5151 FAX. (305) 638-5158

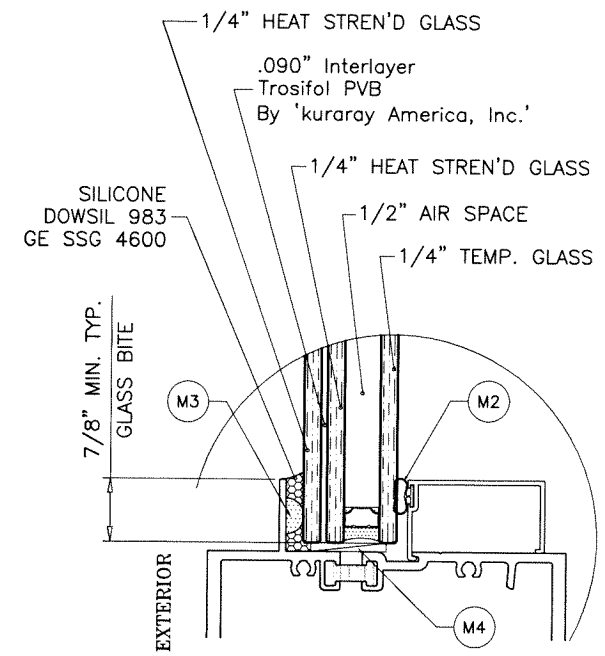
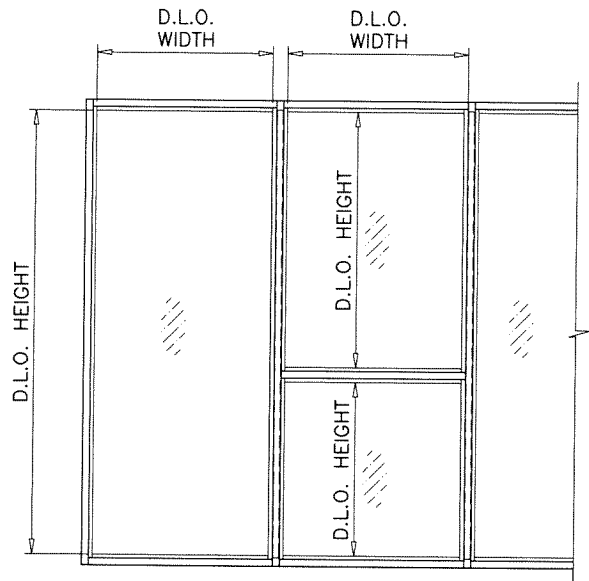
no	date	description
A	01.25.23	GLAZING SILICONE GE ADDED
B	07.25.23	UPDATED TO 2023 FBC

date:	07-29-21
scale:	1/2"=1'-0"
dr. by:	TARIQ
chk. by:	

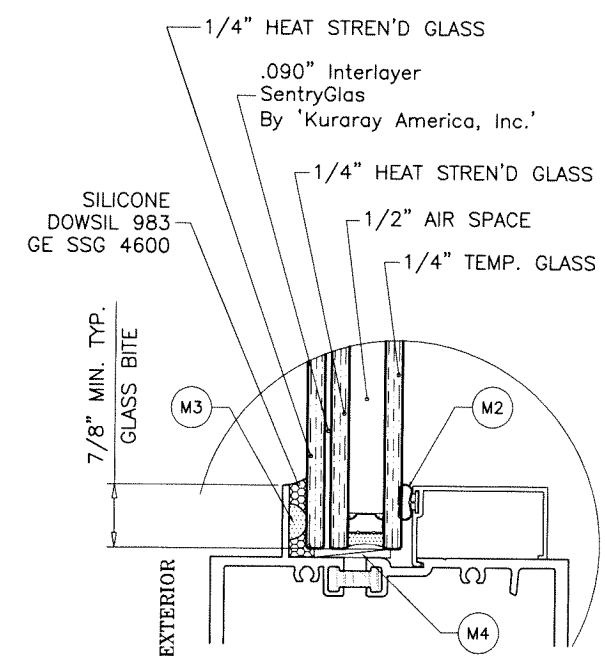
drawing no.  
**21-58F**  
 sheet 1 of 18

GLASS LOAD CAPACITY - PSF					
NOMINAL DIMS.		GLASS TYPES			
D.L.O. WIDTH	D.L.O. HEIGHT	'GL1'		'GL2'	
		EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
60-1/2"	102-1/2"	70.0	70.0	70.0	70.0
66-1/2"		70.0	70.0	70.0	70.0
72-1/2"		70.0	70.0	70.0	70.0
78-1/2"		70.0	70.0	70.0	70.0
84-1/2"		70.0	70.0	70.0	70.0
90-1/2"		70.0	70.0	70.0	70.0
96-1/2"		70.0	70.0	70.0	70.0
102-1/2"		66.1	66.1	66.1	66.1
60-1/2"	114-1/2"	70.0	70.0	70.0	70.0
66-1/2"		70.0	70.0	70.0	70.0
72-1/2"		70.0	70.0	70.0	70.0
78-1/2"		70.0	70.0	70.0	70.0
84-1/2"		70.0	70.0	70.0	70.0
90-1/2"		70.0	70.0	70.0	70.0
96-1/2"		70.0	70.0	70.0	70.0
102-1/2"		-	-	54.4	54.4
60-1/2"	118-1/2"	70.0	70.0	70.0	70.0
66-1/2"		70.0	70.0	70.0	70.0
72-1/2"		70.0	70.0	70.0	70.0
78-1/2"		70.0	70.0	70.0	70.0
84-1/2"		70.0	70.0	70.0	70.0
90-1/2"		70.0	70.0	70.0	70.0
96-1/2"		70.0	70.0	70.0	70.0
102-1/2"		-	-	54.4	54.4
60-1/2"	126-1/2"	70.0	70.0	70.0	70.0
66-1/2"		70.0	70.0	70.0	70.0
72-1/2"		70.0	70.0	70.0	70.0
78-1/2"		70.0	70.0	70.0	70.0
84-1/2"		70.0	70.0	70.0	70.0
90-1/2"		-	-	61.3	61.3
96-1/2"		-	-	57.6	57.6
102-1/2"		-	-	54.4	54.4
60-1/2"	138-1/2"	70.0	70.0	70.0	70.0
66-1/2"		70.0	70.0	70.0	70.0
72-1/2"		70.0	70.0	70.0	70.0
78-1/2"		70.0	70.0	70.0	70.0
84-1/2"		-	-	65.3	65.3
90-1/2"		-	-	61.3	61.3
96-1/2"		-	-	57.6	57.6
60-1/2"	150-1/2"	70.0	70.0	70.0	70.0
66-1/2"		70.0	70.0	70.0	70.0
72-1/2"		70.0	70.0	70.0	70.0
78-1/2"		-	-	70.0	70.0
84-1/2"		-	-	65.3	65.3
90-1/2"	-	-	61.3	61.3	
60-1/2"	162-1/2"	70.0	70.0	70.0	70.0
66-1/2"		69.1	69.1	70.0	70.0
72-1/2"		-	-	70.0	70.0
78-1/2"		-	-	70.0	70.0
84-1/2"	-	-	65.3	65.3	
60-1/2"	174-1/2"	70.0	70.0	70.0	70.0
66-1/2"		-	-	70.0	70.0
72-1/2"		-	-	70.0	70.0
78-1/2"		-	-	70.0	70.0

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



**GLASS TYPE 'GL1'**  
1-5/16" OVERALL INSUL. LAM. GLASS

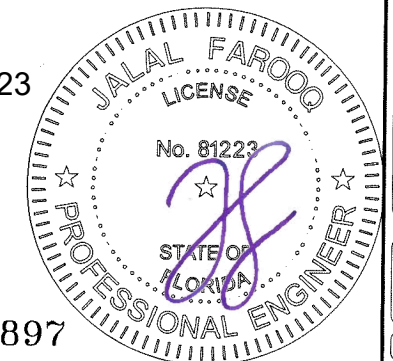


**GLASS TYPE 'GL2'**  
1-5/16" OVERALL INSUL. LAM. GLASS

**1/2" AIR SPACE CONSISTING OF:**  
**SPACER:**  
'HELIMA' LOW PROFILE ALUMINUM SPACER  
BY 'LINGERMANN GMBH'  
AROUND THE PERIMETER OF THE GLASS.  
**PERIMETER SEALANT:**  
SILICONE  
DOWSIL 791  
GE 2000

GLASS

Sealed: 7/25/2023



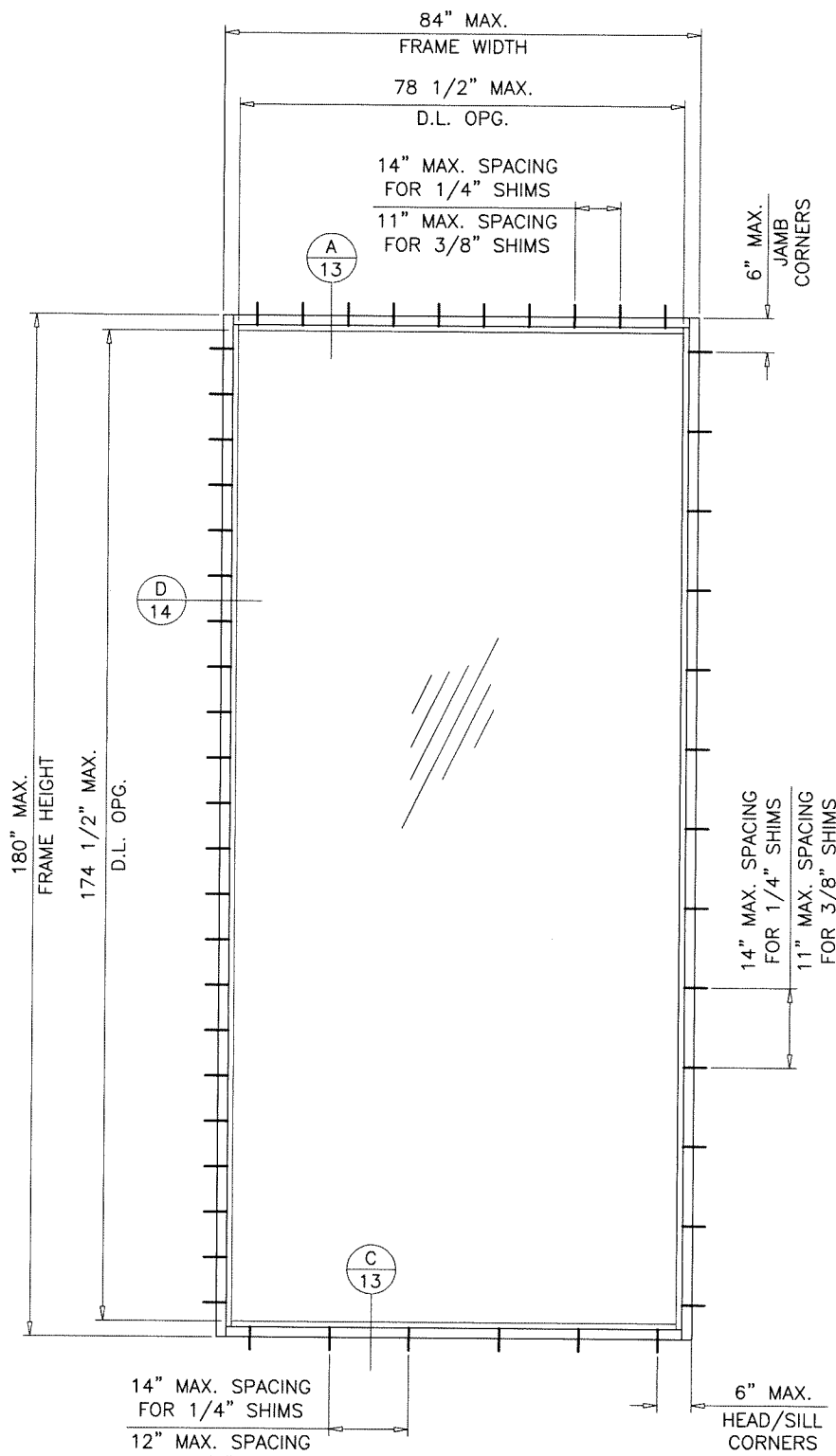
NOTE:  
GLASS CAPACITIES ON THIS SHEET ARE  
BASED ON ASTM E1300-09 (3 SEC. GUSTS).

FL #17897

**af c**  
**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173  
TEL. (305) 264-8100 FAX. (305) 262-6978  
(C.A.N. 3538)  
COMP-ANL\21-58FES

ES-800T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)  
**E.S. WINDOWS, LLC**  
3550 N.W. 49 STREET  
MIAMI, FL. 33142  
TEL. (305) 638-5151 FAX. (305) 638-5158

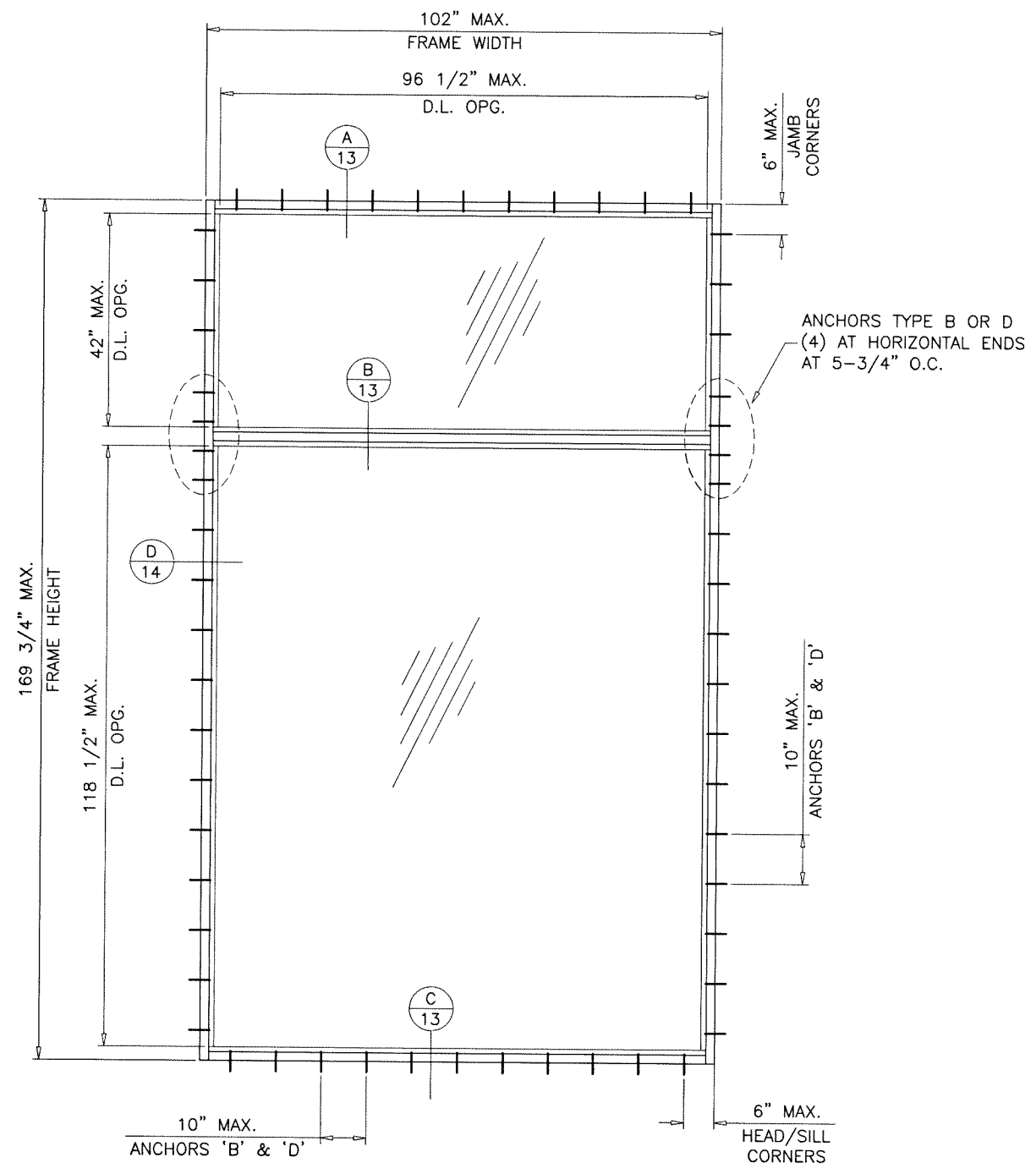
revisions:	no	date	description
date:	07-29-21	scale:	3/8" = 1"
dr. by:	TARIQ	chk. by:	
drawing no.	21-58F		
sheet	2 of 18		



TYPICAL ELEVATION  
SINGLE (O) PANEL

GLASS TYPE 'GL2'  
 MAXIMUM DESIGN LOAD RATING = + 70.0 PSF  
 - 70.0 PSF  
 (FOR SINGLE UNITS SHOWN ABOVE OR SMALLER)

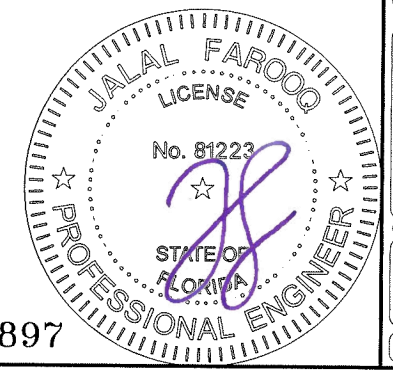
THESE FRAMES CAN BE USED AT ALL SUBSTRATES SHOWN ON SHEETS 13 AND 14.



GLASS TYPES 'GL1' & 'GL2'  
 MAXIMUM DESIGN LOAD RATING = + 70.0 PSF  
 - 70.0 PSF  
 (FOR SINGLE UNIT SHOWN ABOVE ONLY)

THESE FRAMES CAN BE USED AT ALL SUBSTRATES SHOWN ON SHEETS 13 AND 14.

Sealed: 7/25/2023



FL #17897

**af c**  
**AL-FAROOQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 9360 SUNSET DRIVE, SUITE 220 (C.A.N. 3538)  
 MIAMI, FLORIDA 33173 TEL. (305) 264-8100 FAX. (305) 262-6978  
 COMP-ANL\21-58FES

---

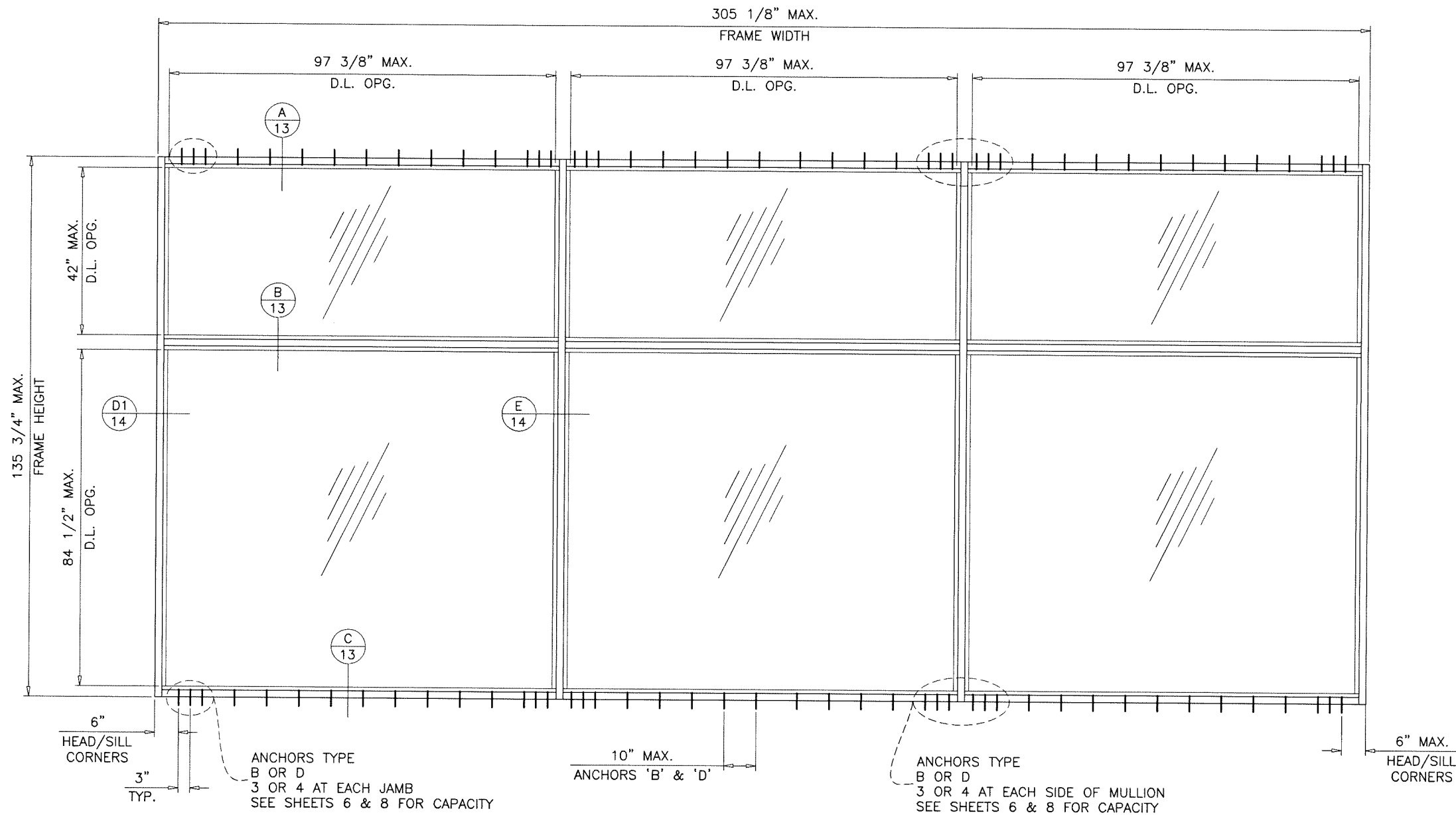
ES-8000T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)  
**E.S. WINDOWS, LLC**  
 3550 N.W. 49 STREET  
 MIAMI, FL. 33142  
 TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	description

revisions:

date: 07-29-21  
 scale: 3/8"=1'-0"  
 dr. by: TARIQ  
 chk. by:

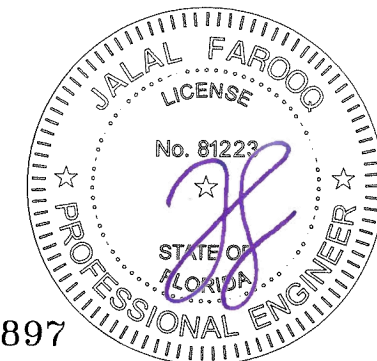
drawing no.  
**21-58F**  
 sheet 3 of 18



GLASS TYPES 'GL1' & 'GL2'  
 MAXIMUM DESIGN LOAD RATING = + 66.9 PSF  
 - 66.9 PSF  
 (FOR SINGLE UNIT SHOWN ABOVE ONLY)

THESE FRAMES CAN BE USED AT ALL SUBSTRATES SHOWN ON SHEETS 13 AND 14.

Sealed: 7/25/2023



FL #17897

**af c**  
**AL-FAROOQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 9360 SUNSET DRIVE, SUITE 220  
 MIAMI, FLORIDA 33173 (C.A.N. 3538)  
 TEL. (305) 264-8100 FAX. (305) 262-6978  
 COMP-ANL\21-58FES

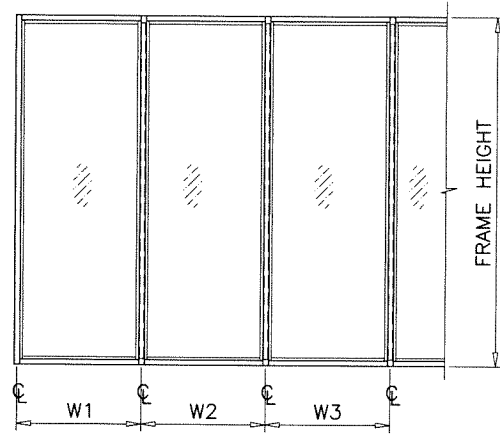
ES-800T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)  
**E.S. WINDOWS, LLC**  
 3550 N.W. 49 STREET  
 MIAMI, FL. 33142  
 TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	by	description

date: 07-29-21  
 scale: 3/8"=1'-0"  
 dr. by: TARIQ  
 chk. by:

drawing no.  
**21-58F**  
 sheet 3.1 of 18

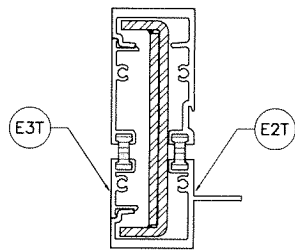
DESIGN LOAD CAPACITY - PSF JAMB/MULLION WITHOUT INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		JAMB 'J1'		MULLION 'M1'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
72"	108"	70.0	70.0	70.0	70.0
84"		70.0	70.0	70.0	70.0
96"		70.0	70.0	70.0	70.0
108"		70.0	70.0	70.0	70.0
72"	120"	70.0	70.0	70.0	70.0
84"		70.0	70.0	70.0	70.0
96"		70.0	70.0	70.0	70.0
108"		70.0	70.0	70.0	70.0
72"	132"	70.0	70.0	70.0	70.0
84"		70.0	70.0	70.0	70.0
96"		70.0	70.0	70.0	70.0
102"		70.0	70.0	70.0	70.0
72"	135-3/4"	70.0	70.0	70.0	70.0
84"		70.0	70.0	70.0	70.0
96"		70.0	70.0	70.0	70.0
101-1/8"		70.0	70.0	70.0	70.0



WIDTH (W) = W1  
AT FRAME JAMB

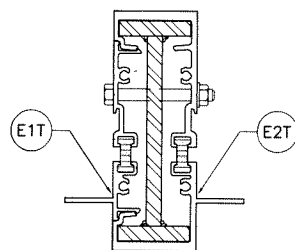
WIDTH (W) =  $\frac{W2 + W3}{2}$   
AT FRAME MULLION

INTERPOLATION BETWEEN WIDTHS ALLOWED.



JAMB 'J1'

	Ix IN <sup>4</sup>	Sx IN <sup>3</sup>
ALUMINUM	6.7077	2.6264
STEEL	3.7533	1.6681
TOTAL Ix ALUM + Ix STL X 2.9	17.4845	



MULLION 'M1'

	Ix IN <sup>4</sup>	Sx IN <sup>3</sup>
ALUMINUM	6.8787	2.6933
STEEL	5.8308	2.5559
TOTAL Ix ALUM + Ix STL X 2.9	23.6206	



**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173 (C.A.N. 3538)  
TEL. (305) 264-8100 FAX. (305) 262-6978

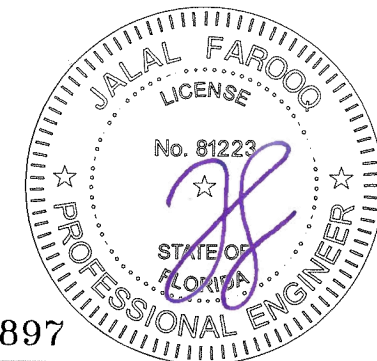
COMP-ANL\21-58FES

ES-8000T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)

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

MULLIONS

Sealed: 7/25/2023



FL #17897

revisions:	no	date	by	description

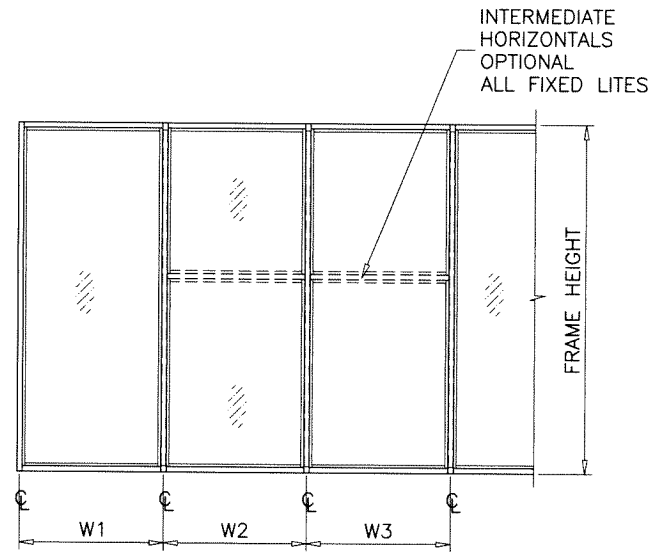
  

date: 07-29-21	scale: -	dr. by: TARIO	chk. by:
drawing no. 21-58F			
sheet 4 of 18			

ANCHOR LOAD CAPACITY - PSF  
EXT.(+) & INT.(-)

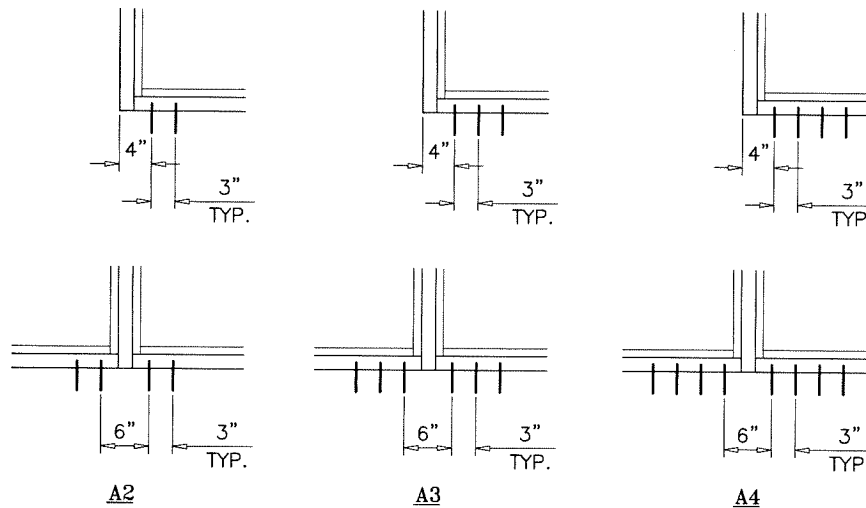
NOMINAL DIMS.		ANCHORS TYPE 'A'							
WIDTH (W)	FRAME HEIGHT	1/4" MAX. SHIM			3/8" MAX. SHIM			1/2" SHIM	
		A2	A3	A4	A2	A3	A4	A3	A4
36"	84"	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
54"		70.0	70.0	70.0	68.6	70.0	70.0	70.0	70.0
60"		70.0	70.0	70.0	65.2	70.0	70.0	70.0	70.0
36"	90"	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	66.7	70.0	70.0	70.0	70.0
54"		70.0	70.0	70.0	62.1	70.0	70.0	70.0	70.0
60"		70.0	70.0	70.0	58.7	70.0	70.0	68.4	70.0
36"	96"	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	67.1	70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	61.1	70.0	70.0	70.0	70.0
54"		70.0	70.0	70.0	56.7	70.0	70.0	66.1	70.0
60"		70.0	70.0	70.0	53.4	70.0	70.0	62.2	70.0
36"	102"	70.0	70.0	70.0	69.9	70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	62.1	70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	56.4	70.0	70.0	65.8	70.0
54"		70.0	70.0	70.0	52.2	70.0	70.0	60.8	70.0
60"		69.6	70.0	70.0	48.9	70.0	70.0	57.0	70.0
36"	108"	70.0	70.0	70.0	65.2	70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	57.8	70.0	70.0	67.4	70.0
48"		70.0	70.0	70.0	52.4	70.0	70.0	61.1	70.0
54"		70.0	70.0	70.0	48.3	70.0	70.0	56.3	70.0
60"		68.7	70.0	70.0	45.1	67.7	70.0	52.7	70.0
36"	114"	70.0	70.0	70.0	61.1	70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	54.1	70.0	70.0	63.1	70.0
48"		69.6	70.0	70.0	48.9	70.0	70.0	57.0	70.0
54"		64.0	70.0	70.0	45.0	67.5	70.0	52.5	69.9
60"		59.7	70.0	70.0	41.9	62.9	70.0	48.9	65.2
36"	120"	70.0	70.0	70.0	57.5	70.0	70.0	67.1	70.0
42"		70.0	70.0	70.0	50.8	70.0	70.0	59.3	70.0
48"		65.3	70.0	70.0	45.9	68.8	70.0	53.5	70.0
54"		59.9	70.0	70.0	42.1	63.1	70.0	49.1	65.4
60"		55.7	70.0	70.0	39.1	58.7	70.0	45.6	60.8

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



WIDTH (W) = W1  
AT FRAME JAMB

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

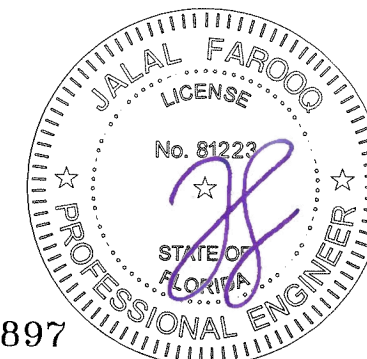


ANCHORS TYPES: SEE SHEET 13 FOR DESCRIPTION

- A2 = (2) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
- A3 = (3) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION
- A4 = (4) ANCHORS TYPE 'A' AT EACH SIDE OF JAMB AND MULLION

Sealed: 7/25/2023

ANCHORS



FL #17897

**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173 (C.A.N. 3538)  
TEL. (305) 264-8100 FAX. (305) 262-6978  
COMP-ANL\21-58FES

ES-8000T (JUMBO) ALUM WINDOW WALL SYS. (L.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: 07-29-21  
scale: -  
dr. by: TARIQ  
chk. by:

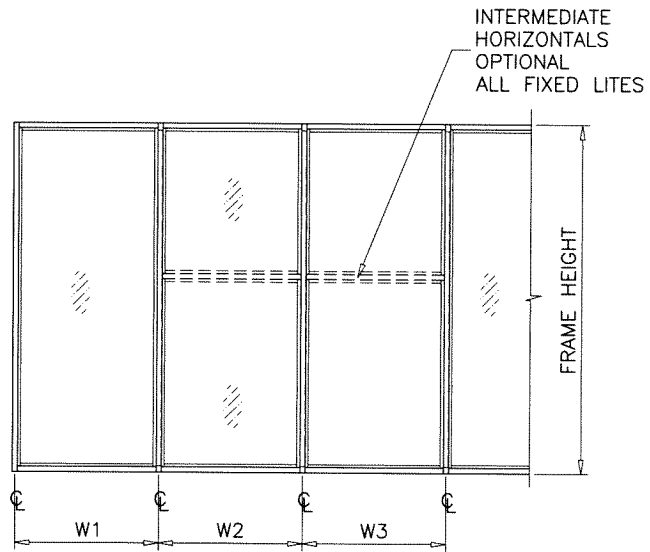
drawing no.  
**21-58F**  
sheet 5 of 18



ANCHOR LOAD CAPACITY - PSF  
EXT.(+) & INT.(-)

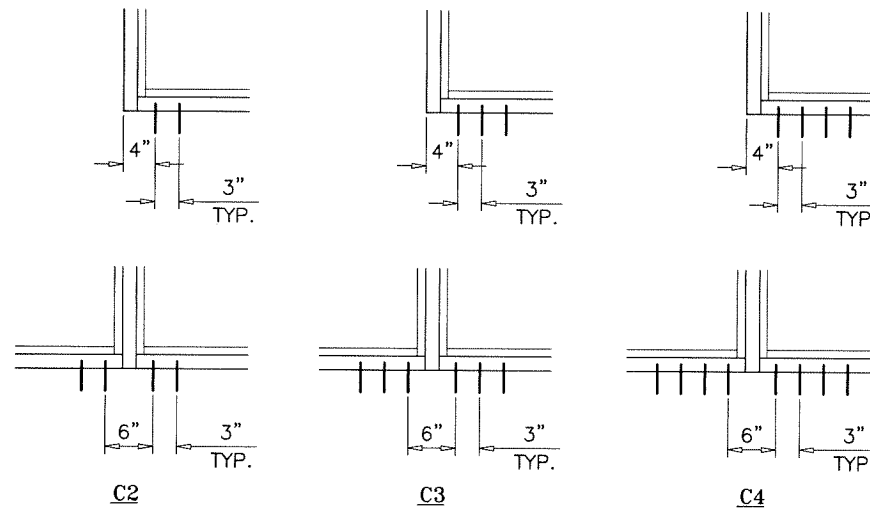
NOMINAL DIMS.		ANCHORS TYPE 'C'							
WIDTH (W)	FRAME HEIGHT	1/4" MAX. SHIM			3/8" MAX. SHIM			1/2" SHIM	
		C2	C3	C4	C2	C3	C4	C3	C4
36"	84"	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
54"		70.0	70.0	70.0	69.6	70.0	70.0	70.0	70.0
60"		70.0	70.0	70.0	66.1	70.0	70.0	70.0	70.0
36"	90"	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	67.6	70.0	70.0	70.0	70.0
54"		70.0	70.0	70.0	63.0	70.0	70.0	70.0	70.0
60"		70.0	70.0	70.0	59.5	70.0	70.0	70.0	70.0
36"	96"	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	68.0	70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	62.0	70.0	70.0	70.0	70.0
54"		70.0	70.0	70.0	57.5	70.0	70.0	68.2	70.0
60"		70.0	70.0	70.0	54.1	70.0	70.0	64.1	70.0
36"	102"	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	63.0	70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	57.2	70.0	70.0	67.8	70.0
54"		70.0	70.0	70.0	52.9	70.0	70.0	62.7	70.0
60"		70.0	70.0	70.0	49.6	70.0	70.0	58.8	70.0
36"	108"	70.0	70.0	70.0	66.1	70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	58.6	70.0	70.0	69.5	70.0
48"		70.0	70.0	70.0	53.1	70.0	70.0	63.0	70.0
54"		70.0	70.0	70.0	49.0	70.0	70.0	58.1	70.0
60"		70.0	70.0	70.0	45.8	68.7	70.0	54.3	70.0
36"	114"	70.0	70.0	70.0	62.0	70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	54.9	70.0	70.0	65.0	70.0
48"		70.0	70.0	70.0	49.6	70.0	70.0	58.8	70.0
54"		70.0	70.0	70.0	45.6	68.4	70.0	54.1	70.0
60"		70.0	70.0	70.0	42.5	63.8	70.0	50.4	67.2
36"	120"	70.0	70.0	70.0	58.4	70.0	70.0	69.2	70.0
42"		70.0	70.0	70.0	51.5	70.0	70.0	61.1	70.0
48"		70.0	70.0	70.0	46.5	69.8	70.0	55.1	70.0
54"		70.0	70.0	70.0	42.7	64.0	70.0	50.6	67.4
60"		70.0	70.0	70.0	39.7	59.5	70.0	47.0	62.7

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



WIDTH (W) = W1  
AT FRAME JAMB

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



ANCHORS TYPES: SEE SHEET 13 FOR DESCRIPTION

- C2 = (2) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
- C3 = (3) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION
- C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF JAMB AND MULLION

ANCHORS

Sealed: 7/25/2023



FL #17897

**af c**  
**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173 (C.A.N. 3538)  
TEL. (305) 264-8100 FAX. (305) 262-6978  
COMP-ANL\21-58FES

ES-800T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)  
**E.S. WINDOWS, LLC**  
3550 N.W. 49 STREET  
MIAMI, FL. 33142  
TEL. (305) 638-5151 FAX. (305) 638-5158

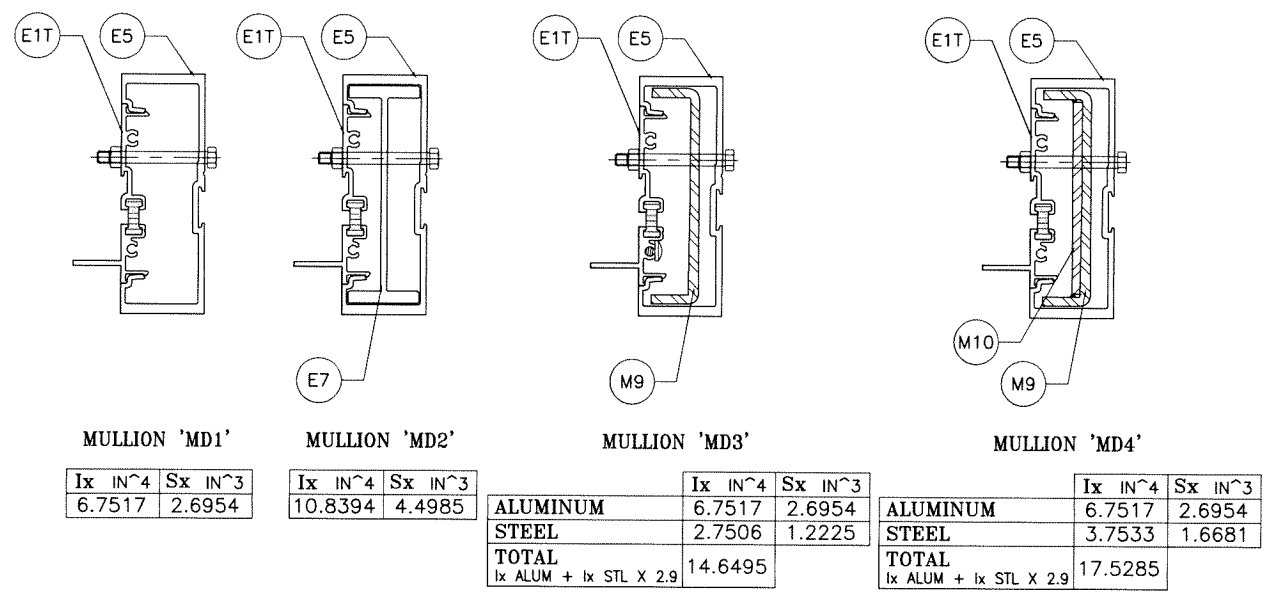
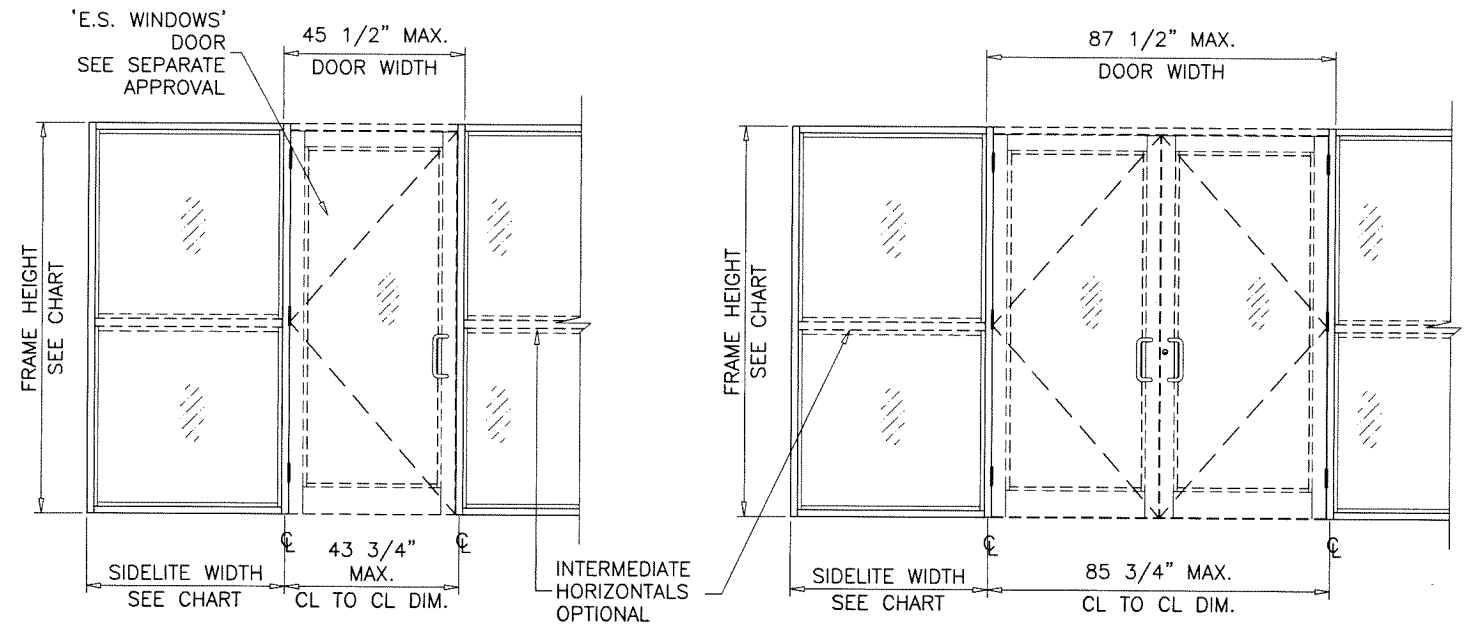
revisions:	no	date	description
date:	07-29-21	scale:	-
dr. by:	TARIO	chk. by:	
drawing no.	21-58F		
sheet	7 of 18		





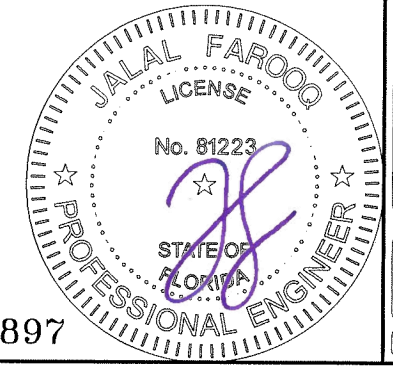
DOOR MULLION LOAD CAPACITY-PSF											
SIDELITE WIDTH INCHES	FRAME HEIGHT INCHES	MULL 'MD1'		MULL 'MD2'		MULL 'MD3'		MULL 'MD4'		MULL 'MD5'	
		EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
32	86-1/2	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
36		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
48		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
54		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
60		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
32	98-1/2	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
36		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
48		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
54		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
60		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
32	110-1/2	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
36		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
48		66.1	66.1	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
32	120	-	-	-	-	-	-	-	-	70.0	70.0
36		-	-	-	-	-	-	-	-	70.0	70.0
42		-	-	-	-	-	-	-	-	70.0	70.0
48		-	-	-	-	-	-	-	-	70.0	70.0

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



DOOR-WINDOWALL  
TRANSITION MULLION

Sealed: 7/25/2023



FL #17897

**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173  
TEL. (305) 264-8100 FAX. (305) 262-6978  
C.A.N. 3538

ES-8000T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)  
**E.S. WINDOWS, LLC**  
3550 N.W. 49 STREET  
MIAMI, FL. 33142  
TEL. (305) 638-5151 FAX. (305) 638-5158

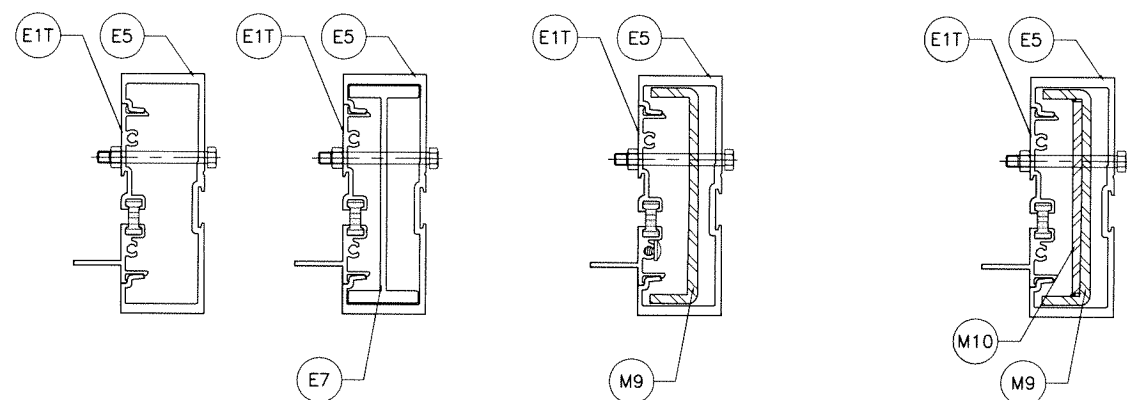
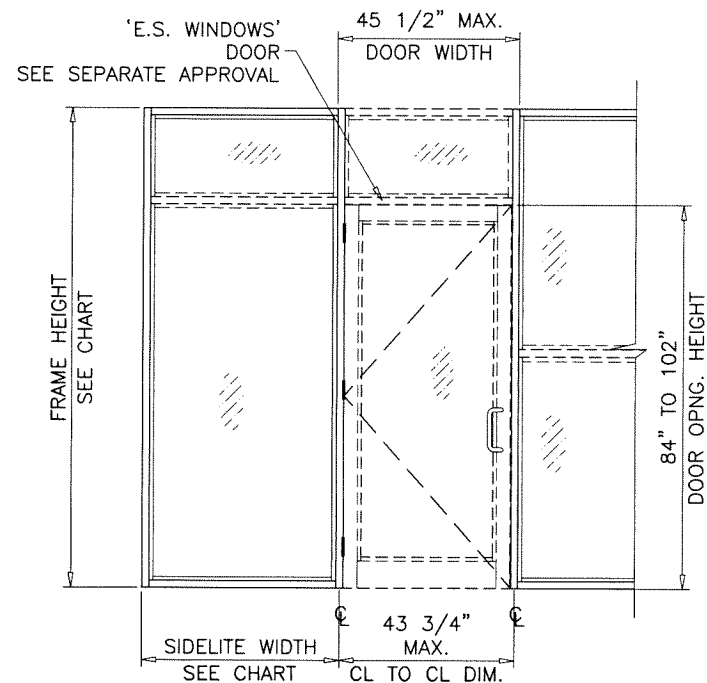
no	date	description

date: 07-29-21  
scale: -  
dr. by: TARIQ  
chk. by:

drawing no.  
**21-58F**  
sheet 9 of 18

DOOR MULLION LOAD CAPACITY-PSF											
SIDELITE WIDTH INCHES	FRAME HEIGHT INCHES	MULL 'MD1'		MULL 'MD2'		MULL 'MD3'		MULL 'MD4'		MULL 'MD5'	
		EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
32	98-1/2	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
36		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
48		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
54		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
32	110-1/2	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
36		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42		70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
48		66.1	66.1	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
32	114	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
36		69.1	69.1	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42		64.3	64.3	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
48		60.2	60.2	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
32	120	62.3	62.3	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
36		59.2	59.2	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
42		55.2	55.2	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
48		51.6	51.6	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



MULLION 'MD1'

Ix IN <sup>4</sup>	Sx IN <sup>3</sup>
6.7517	2.6954

MULLION 'MD2'

Ix IN <sup>4</sup>	Sx IN <sup>3</sup>
10.8394	4.4985

MULLION 'MD3'

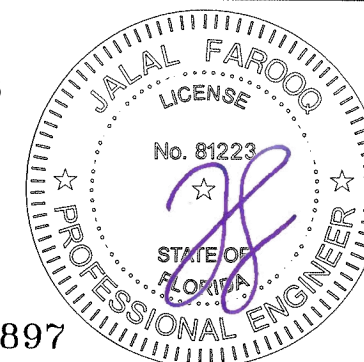
Ix IN <sup>4</sup>	Sx IN <sup>3</sup>
ALUMINUM	6.7517
STEEL	2.7506
TOTAL	14.6495
Ix ALUM + Ix STL X 2.9	

MULLION 'MD4'

Ix IN <sup>4</sup>	Sx IN <sup>3</sup>
ALUMINUM	6.7517
STEEL	3.7533
TOTAL	17.5285
Ix ALUM + Ix STL X 2.9	

DOOR-WINDOWALL  
TRANSITION MULLION

Sealed: 7/25/2023



FL #17897

**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173  
TEL. (305) 264-8100 FAX. (305) 262-6978  
C.A.N. 3538

ES-8000T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)  
**E.S. WINDOWS, LLC**  
3550 N.W. 49 STREET  
MIAMI, FL. 33142  
TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	by	description

date: 07-29-21  
scale: -  
dr. by: TARIQ  
chk. by:

drawing no.  
**21-58F**  
sheet 10 of 18

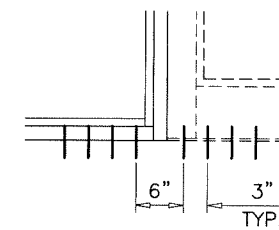
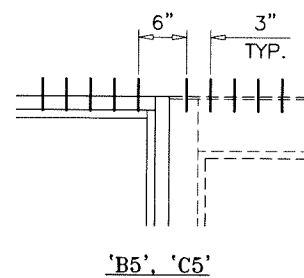
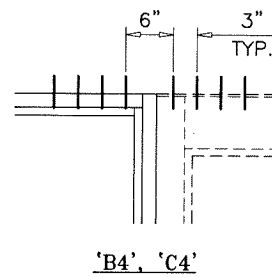
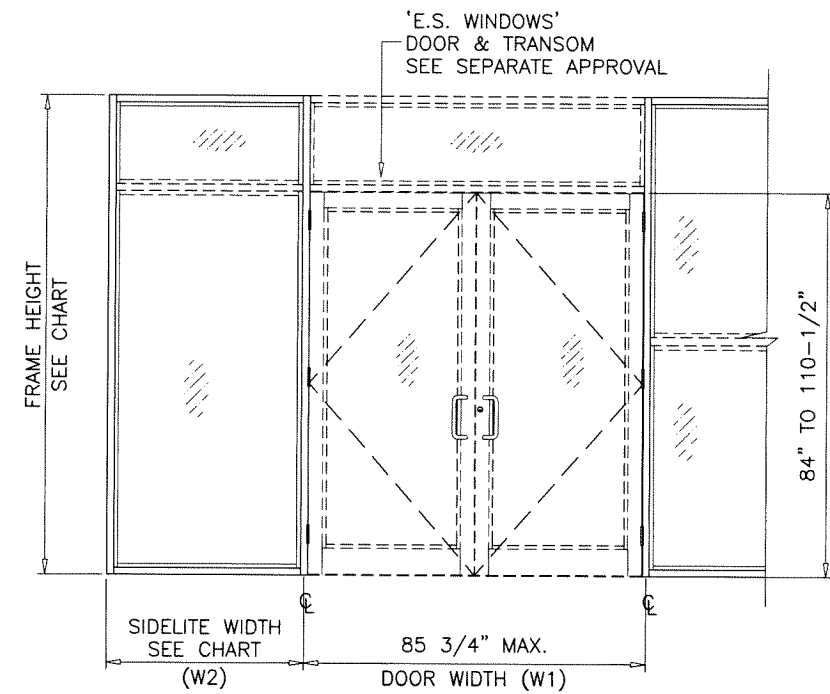
COMP-ANL 21-58FES



DOOR MULLION HEAD ANCHOR LOAD CAPACITY - PSF					
NOMINAL DIMS.				'B4'/'C4'	'B5'/'C5'
WIDTH (W1) INCHES	WIDTH (W2) INCHES	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+) INT.(-)	EXT.(+) INT.(-)
85-3/4	30	96	84	70.0	70.0
	36			70.0	70.0
	42			70.0	70.0
	48			70.0	70.0
	54			70.0	70.0
	60			70.0	70.0
	30	102		70.0	70.0
	36			70.0	70.0
	42			70.0	70.0
	48			70.0	70.0
	54			70.0	70.0
	60			70.0	70.0
	30	108	70.0	70.0	
	36		70.0	70.0	
	42		70.0	70.0	
	48		70.0	70.0	
	54		70.0	70.0	
	60		70.0	70.0	
	30	114	70.0	70.0	
	36		70.0	70.0	
	42		70.0	70.0	
	48		68.0	70.0	
	54		70.0	70.0	
	60		70.0	70.0	
30	120	70.0	70.0		
36		68.9	70.0		
42		65.4	70.0		
48		70.0	70.0		
54		70.0	70.0		
60		70.0	70.0		
85-3/4	30	102	90	70.0	70.0
	36			70.0	70.0
	42			70.0	70.0
	48			69.1	70.0
	54			70.0	70.0
	60			70.0	70.0
	30	108		70.0	70.0
	36			70.0	70.0
	42			70.0	70.0
	48			69.4	70.0
	54			70.0	70.0
	60			70.0	70.0
	30	114	70.0	70.0	
	36		70.0	70.0	
	42		70.0	70.0	
	48		66.8	70.0	
	54		70.0	70.0	
	60		70.0	70.0	
	30	120	70.0	70.0	
	36		70.0	70.0	
	42		67.6	70.0	
	48		64.3	70.0	
	54		70.0	70.0	
	60		70.0	70.0	

DOOR MULLION HEAD ANCHOR LOAD CAPACITY - PSF					
NOMINAL DIMS.				'B4'/'C4'	'B5'/'C5'
WIDTH (W1) INCHES	WIDTH (W2) INCHES	FRAME HEIGHT INCHES	DOOR HEIGHT INCHES	EXT.(+) INT.(-)	EXT.(+) INT.(-)
85-3/4	30	108	96	70.0	70.0
	36			70.0	70.0
	42			70.0	70.0
	48			68.1	70.0
	54			70.0	70.0
	60			70.0	70.0
	30	114		70.0	70.0
	36			70.0	70.0
	42			68.8	70.0
	48			65.6	70.0
	54			70.0	70.0
	60			70.0	70.0
30	120	70.0	70.0		
36		69.9	70.0		
42		66.4	70.0		
48		63.2	70.0		
54		70.0	70.0		
60		70.0	70.0		
85-3/4	30	114	102	70.0	70.0
	36			70.0	70.0
	42			67.6	70.0
	48			64.4	70.0
	54			70.0	70.0
	60			70.0	70.0
	30	120		70.0	70.0
	36			68.6	70.0
	42			65.2	70.0
	48			62.1	70.0
	54			70.0	70.0
	60			70.0	70.0
85-3/4	30	120	110-1/2	70.0	70.0
	36			66.8	70.0
	42			63.6	70.0
	48			60.7	70.0
	54			70.0	70.0
	60			70.0	70.0

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



ANCHORS TYPES: SEE SHEET 8 FOR DESCRIPTION

B4 = (4) ANCHORS TYPE 'B' AT EACH SIDE OF DOOR MULLION

B5 = (5) ANCHORS TYPE 'B' AT EACH SIDE OF DOOR MULLION

C4 = (4) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION

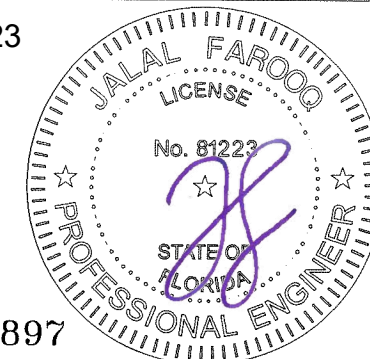
C5 = (5) ANCHORS TYPE 'C' AT EACH SIDE OF DOOR MULLION

ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.

SHIM SPACE FOR ANCHORS TYPE 'C' LIMITED TO 1/4" MAX.

TRANSITION MULLION ANCHORS

Sealed: 7/25/2023



FL #17897

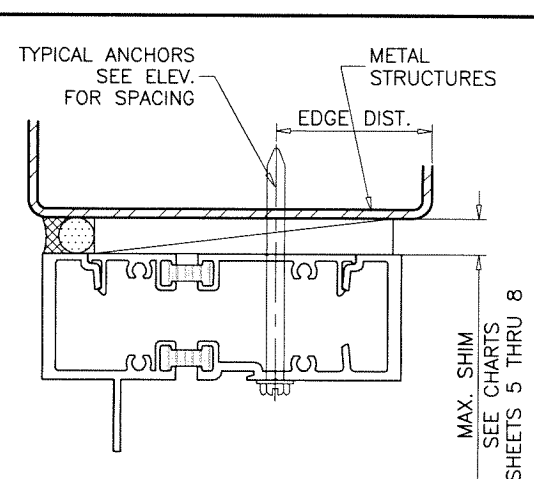
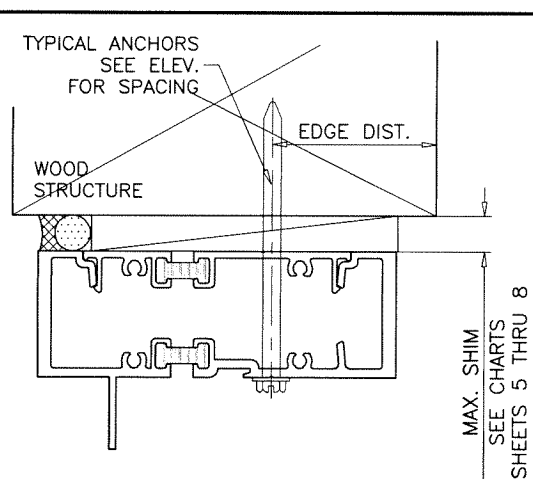
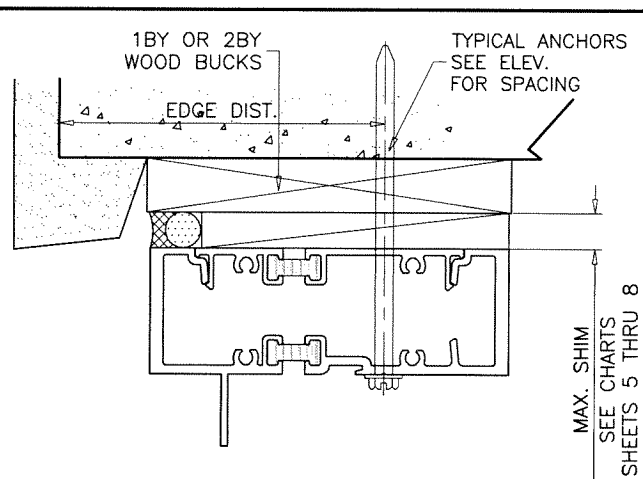
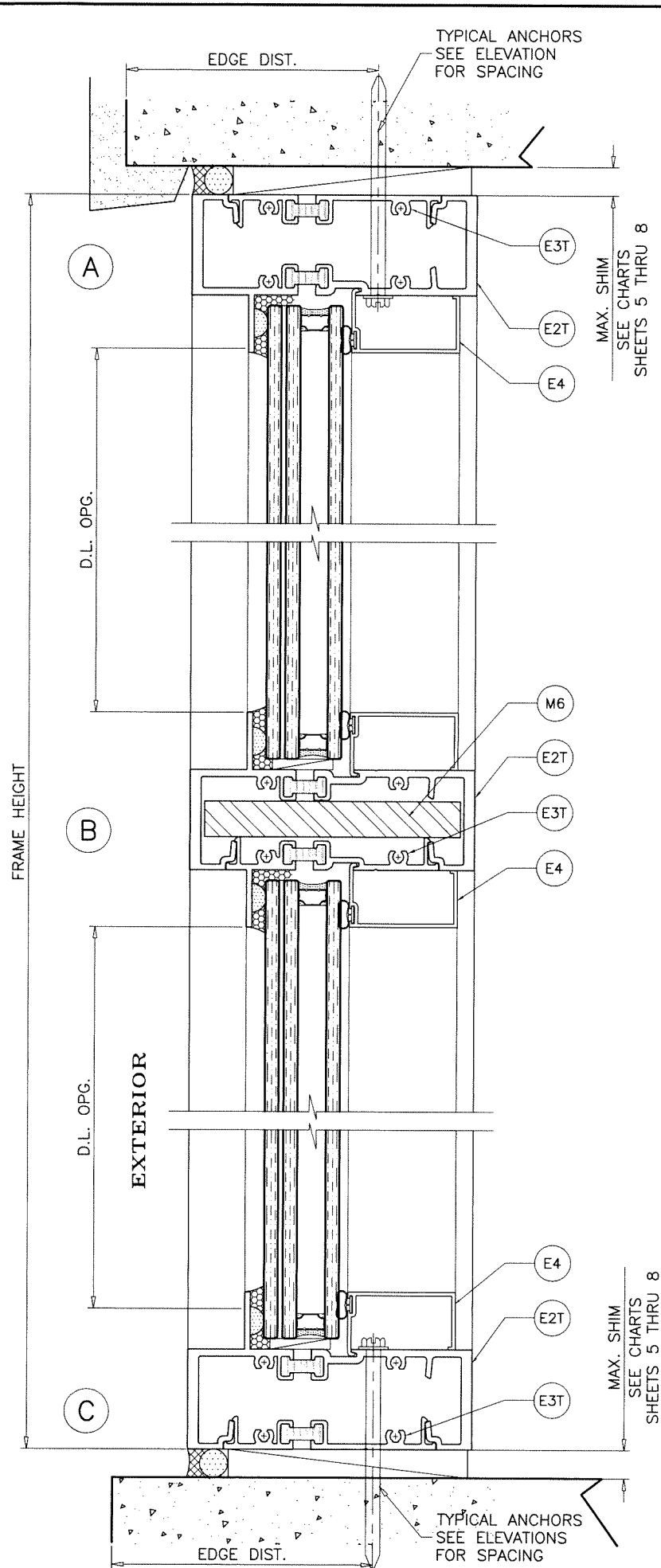
**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173  
TEL. (305) 264-8100 FAX. (305) 262-6978  
COMP-ANL\21-58FES

ES-800T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)  
**E.S. WINDOWS, LLC**  
3550 N.W. 49 STREET  
MIAMI, FL. 33142  
TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	description

date: 07-29-21  
scale: -  
dr. by: TARIQ  
chk. by:

drawing no.  
**21-58F**  
sheet 12 of 18



1BY OR 2BY WOOD BUCKS AND METAL STRUCTURE NOT BY 'E.S. WINDOWS'. MUST SUSTAIN 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)  
 INTO WOOD STRUCTURES  
 2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)  
 THRU 1BY OR 2BY 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 CONC. OR BLOCKS  
 2" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)  
 2" MIN. EMBED INTO FILLED BLOCKS (JAMBS)

**ANCHOR EDGE DISTANCES**  
 INTO CONCRETE AND MASONRY = 2-1/2" MIN.  
 INTO WOOD STRUCTURE = 1" MIN.

**TYPE 'B' - 5/16" DIA. ULTRACON BY 'DEWALT'** (Fu=177 KSI, Fy=155 KSI)  
 INTO WOOD STRUCTURES  
 2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)  
 THRU 1BY OR 2BY 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 CONC. OR BLOCKS  
 2" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)  
 2" MIN. EMBED INTO FILLED BLOCKS (JAMBS)

**ANCHOR EDGE DISTANCES**  
 INTO CONCRETE AND MASONRY = 2-1/2" MIN.  
 INTO WOOD STRUCTURE = 1-1/4" MIN.

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

**SEALANTS:**

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

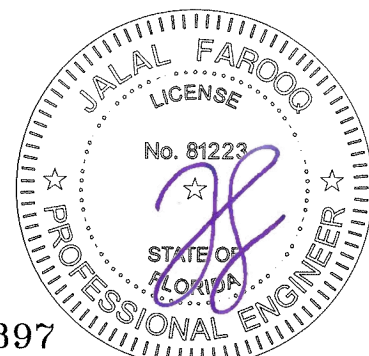
**TYPE 'C' - 1/4" DIA. TEKS OR SELF DRILLING SCREWS** (GRADE 5 CRS)  
 INTO F.B.C. APPROVED MULLIONS  
 OR  
 INTO METAL STRUCTURES (HEAD/SILL/JAMBS)  
 (3) THREADS MIN. PENETRATION BEYOND SUBSTRATE  
 ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)  
 STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)  
 (STEEL IN CONTACT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

**ANCHOR EDGE DISTANCES**  
 INTO METAL STRUCTURE = 1/2" MIN.

**TYPE 'D' - 5/16" 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. PENETRATION BEYOND SUBSTRATE  
 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.

Sealed: 7/25/2023



FL #17897

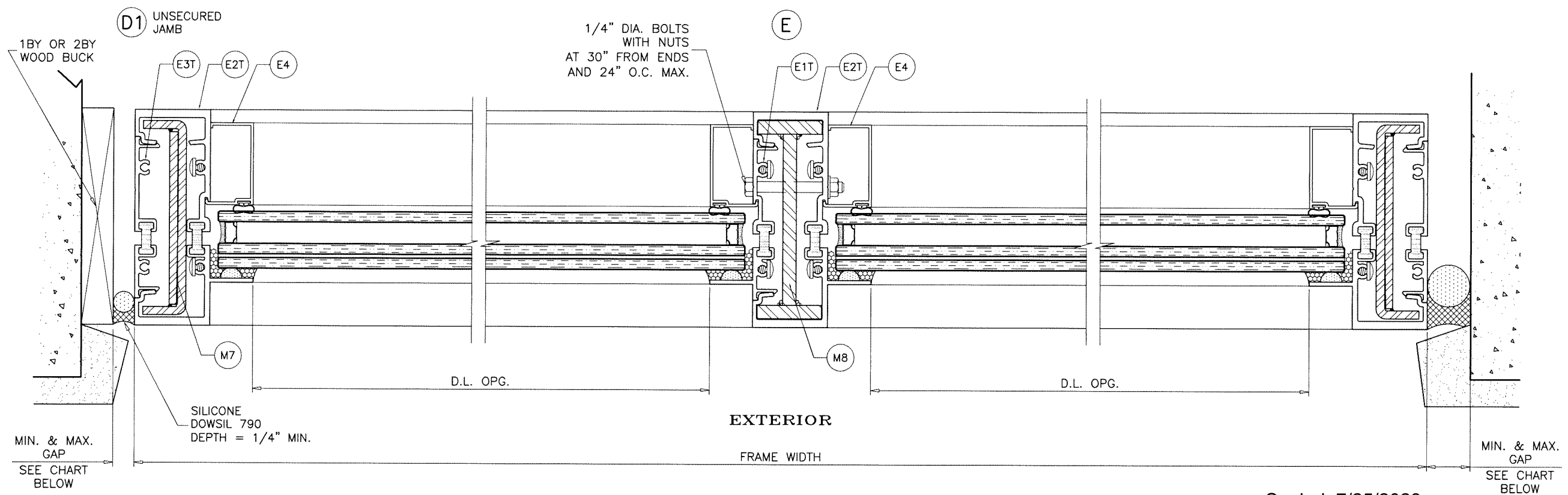
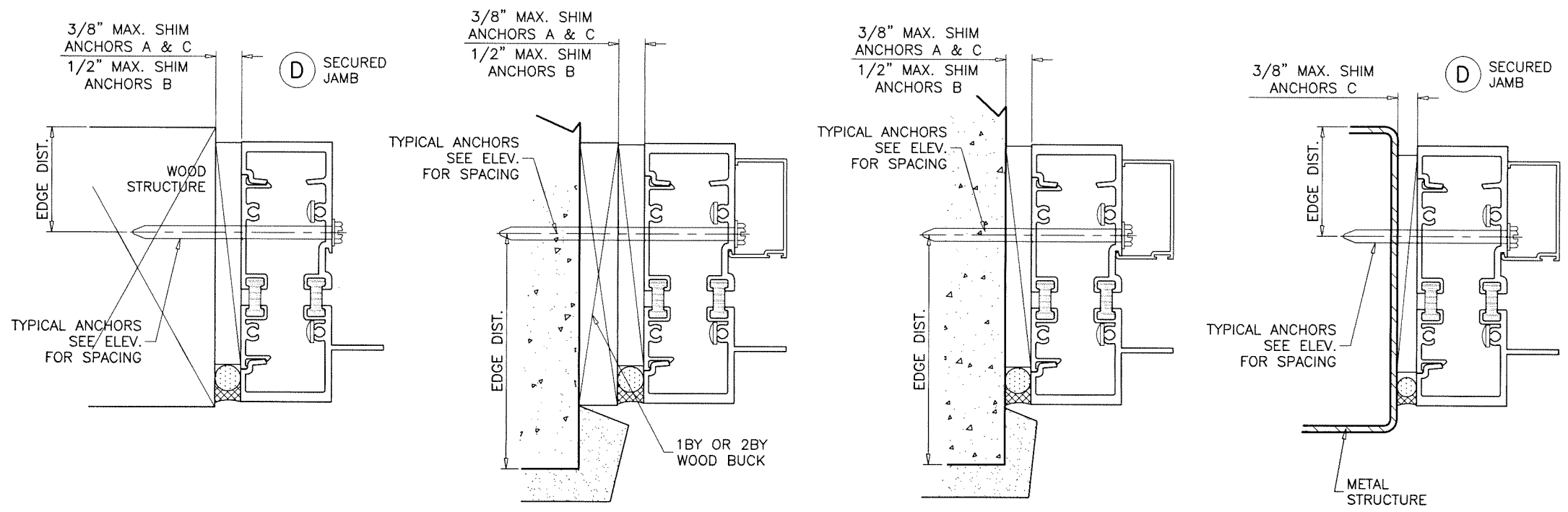
**AL-FAROOQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 9360 SUNSET DRIVE, SUITE 220  
 MIAMI, FLORIDA 33173  
 TEL. (305) 264-8100 FAX. (305) 262-6978  
 COMP-ANL 21-58FS

ES-8000T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)  
**E.S. WINDOWS, LLC**  
 3550 N.W. 49 STREET  
 MIAMI, FL. 33142  
 TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	by	description

date: 07-29-21  
 scale: 3/8" = 1"  
 dr. by: TARIQ  
 chk. by:

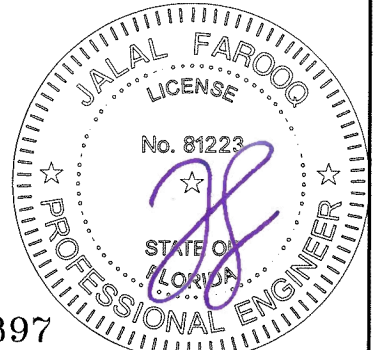
drawing no.  
**21-58F**  
 sheet 13 of 18



MAX. GAPS FOR UNANCHORED JAMBS		
MAX. FRAME HEIGHT	JAMB J1	
	MIN.	MAX.
96"	1/4"	1"
102"	1/4"	1"
108"	3/8"	1"
120"	3/8"	1"
132"	3/8"	1"
135-3/4"	3/8"	1"

NOTE:  
 MAX. MOVEMENT CONSIDERED=100% STRETCH.  
 PLEASE REFER TO SEALANT MANUFACTURER'S DATA AND APPLICATION MANUAL FOR COMPATABILITY OF SEALANT TO SUBSTRATE & WINDOW WALL MATERIAL/FINISH AND COMPLIANCE FOR WARRANTY.  
 REFER TO ACI-117-10 FOR CONSTRUCTION TOLERANCES.  
 ALTERNATE SEALANTS AT JAMB GAPS CAN BE DESIGNED BY ENGINEER OF RECORD BASED ON MANUFACTURER GUIDE LINES.  
 GAPS LESS THAN 1/4" MAY BE DESIGNED BY ENGINEER OF RECORD BY THE USE OF BOND BREAKER TAPE OR 15% OF GAP ALLOWED MOVEMENT.

Sealed: 7/25/2023



FL #17897

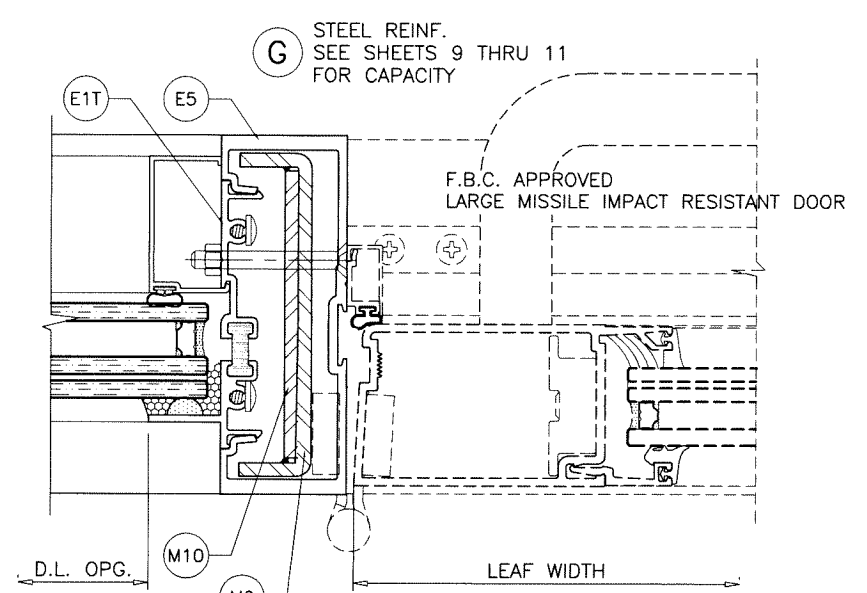
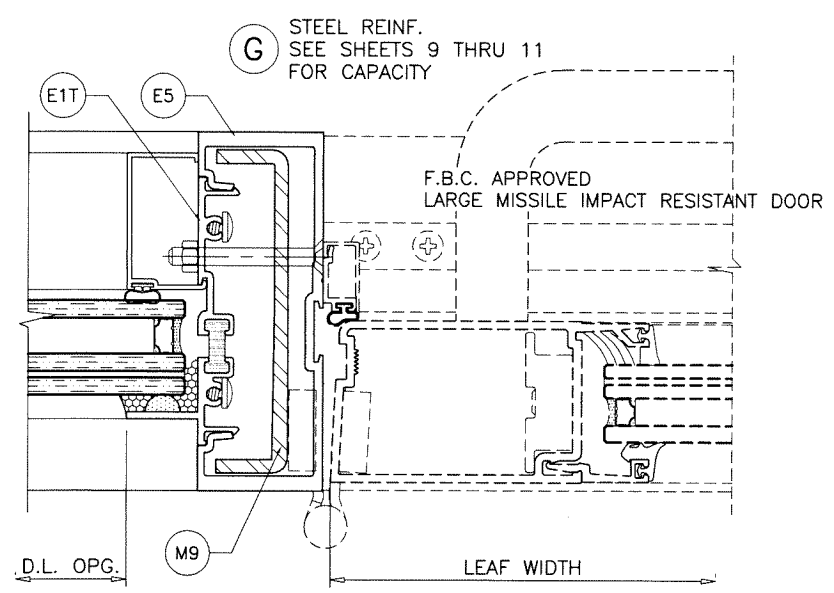
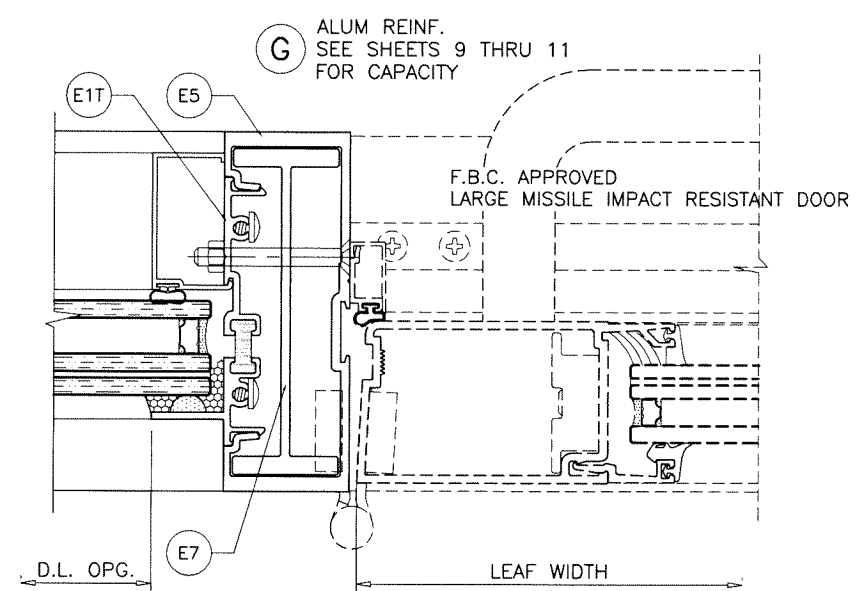
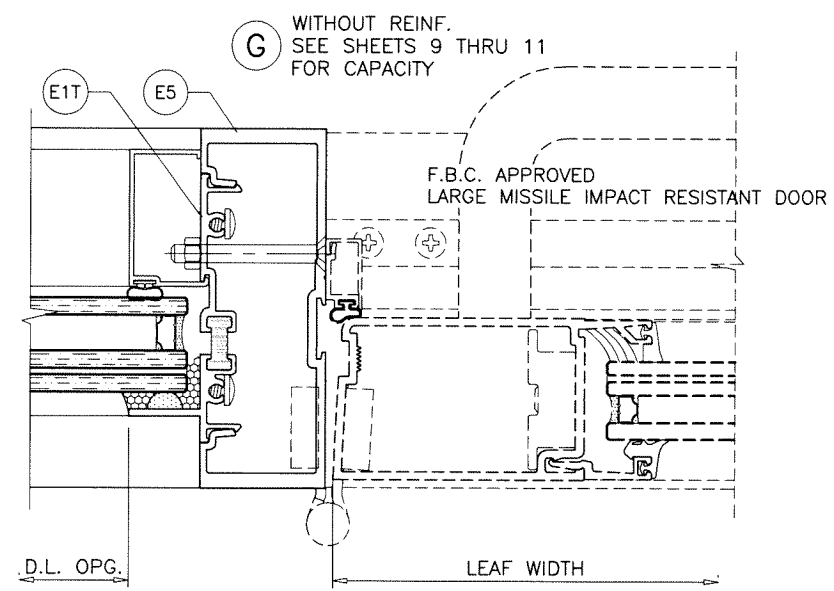
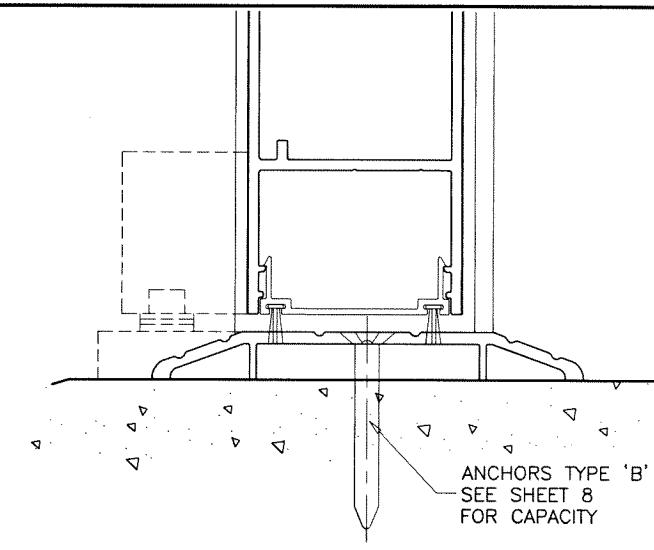
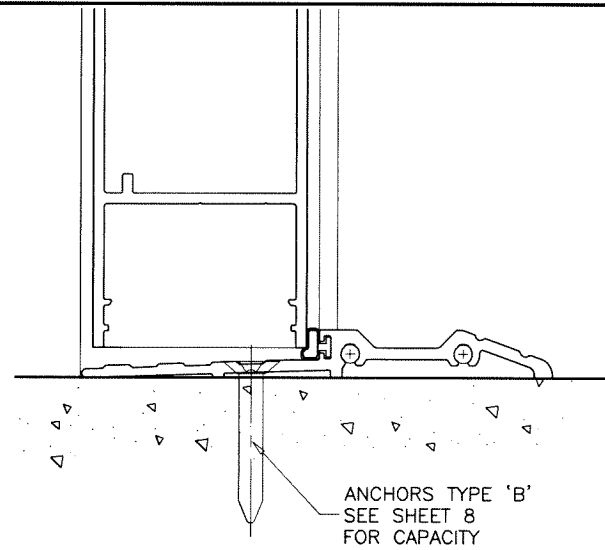
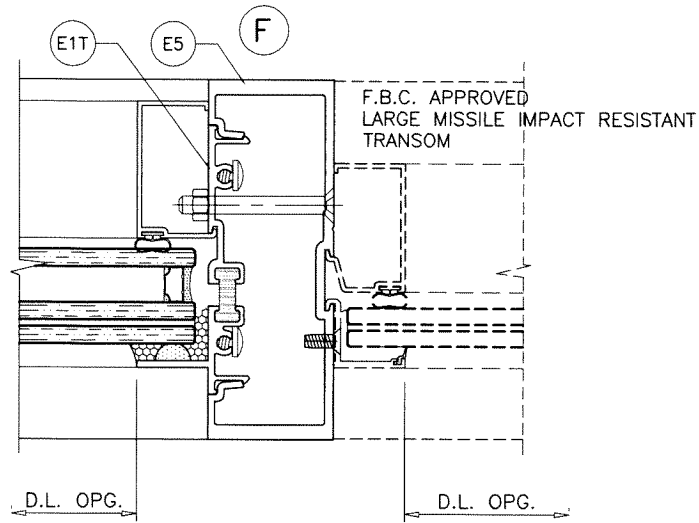
**AL-FAROOQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 9360 SUNSET DRIVE, SUITE 220  
 MIAMI, FLORIDA 33173  
 TEL. (305) 264-8100 FAX. (305) 262-6978  
 COMP-ANL\21-58FES

ES-8000T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)  
**E.S. WINDOWS, LLC**  
 3550 N.W. 49 STREET  
 MIAMI, FL. 33142  
 TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	description

date: 07-29-21  
 scale: 3/8" = 1"  
 dr. by: TARIQ  
 chk. by:

drawing no.  
**21-58F**  
 sheet 14 of 18



SEE SEPARATE APPROVAL FOR DESIGN LOAD  
CAPACITY OF DOORS AND DOOR ANCHORS.  
LOWER VALUES FROM DOORS APPROVAL  
OR STOREFRONT SYSTEM CAPACITY CHARTS  
WILL APPLY TO ENTIRE SYSTEM.

Sealed: 7/25/2023



FL #17897

**af c**  
**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173  
TEL. (305) 264-8100 FAX. (305) 262-6978  
COMP-ANL\21-58FES

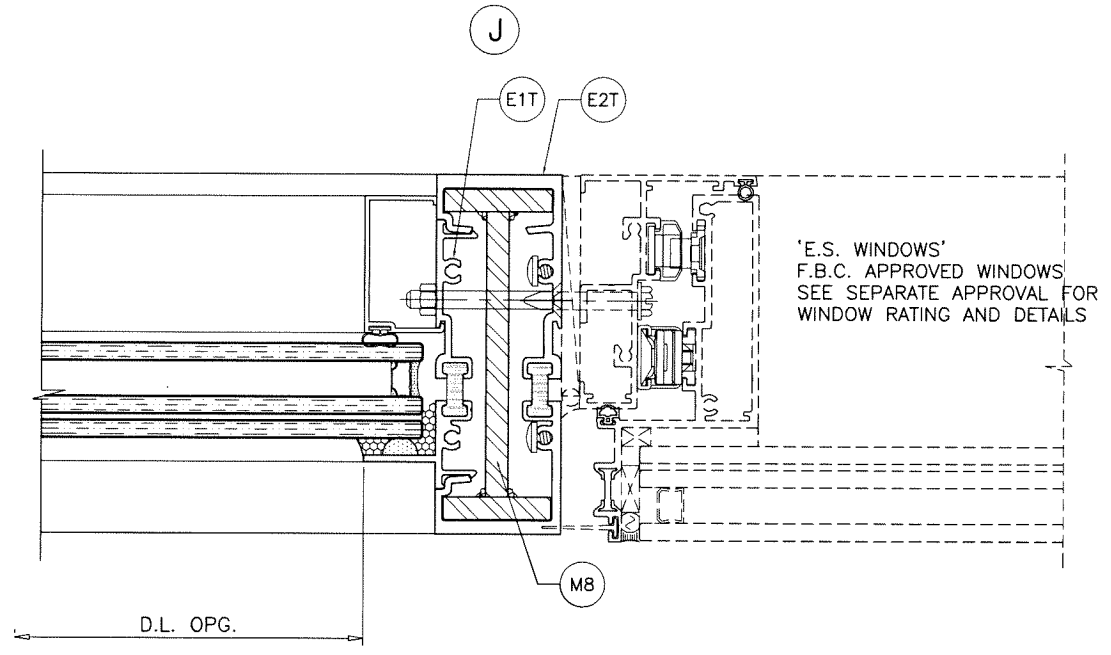
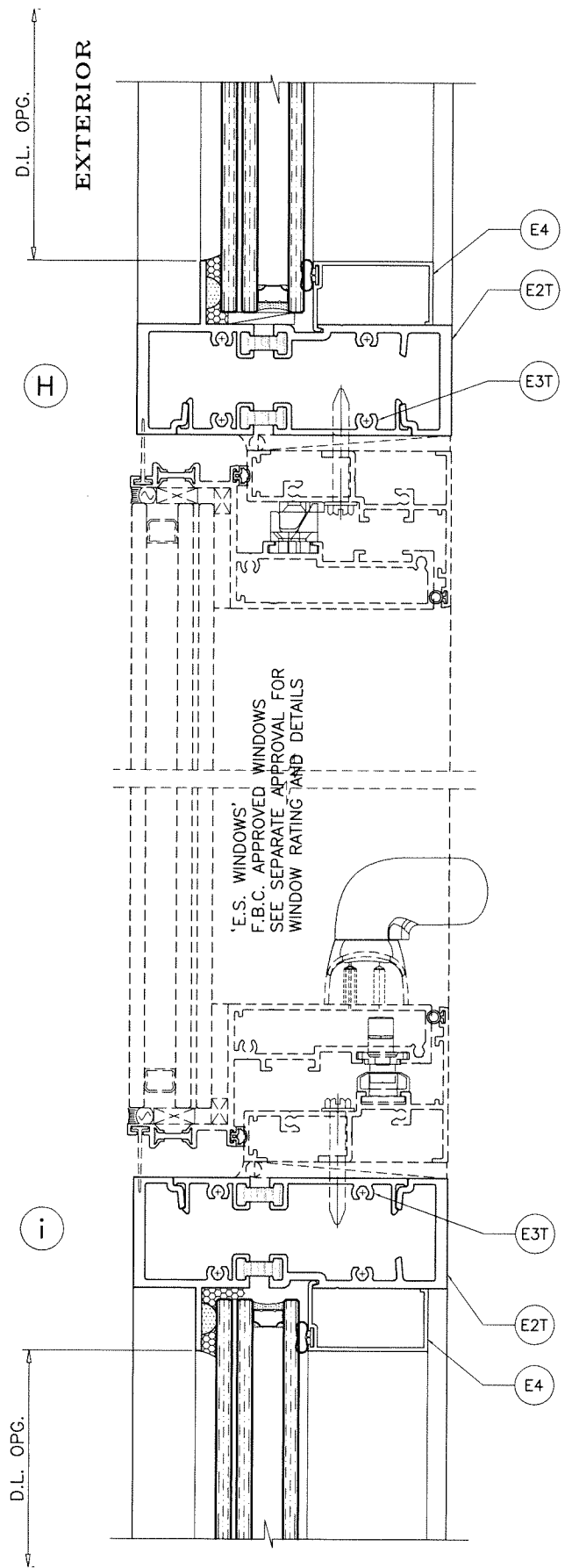
ES-8000T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)  
**E.S. WINDOWS, LLC**  
3550 N.W. 49 STREET  
MIAMI, FL. 33142  
TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	by	description

date: 07-29-21  
scale: 3/8" = 1"  
dr. by: TARIQ  
chk. by:

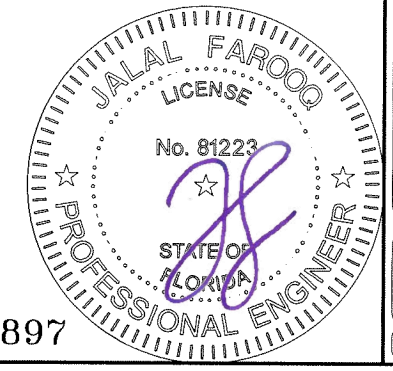
drawing no.  
**21-58F**  
sheet 15 of 18





Sealed: 7/25/2023

FL #17897



**af c**

**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173 (C.A.N. 3538)  
TEL. (305) 264-8100 FAX. (305) 262-6978  
COMP-ANL\21-58FES

---

ES-8000T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)

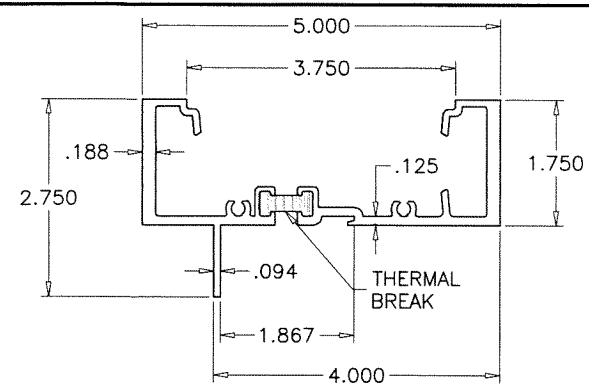
**E.S. WINDOWS, LLC**  
3550 N.W. 49 STREET  
MIAMI, FL. 33142  
TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	by	description

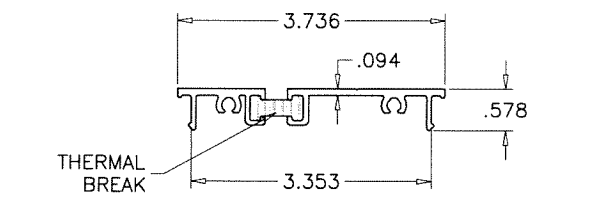
date: 07-29-21  
scale: 3/8" = 1"  
dr. by: TARIQ  
chk. by:

drawing no.  
**21-58F**

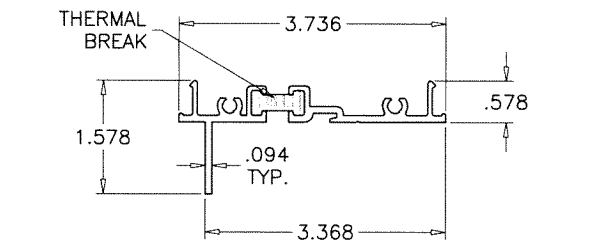
sheet 16 of 18



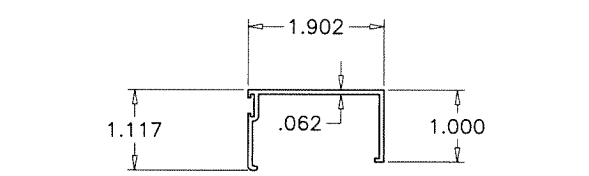
(E2T) WINDOW WALL FRAME



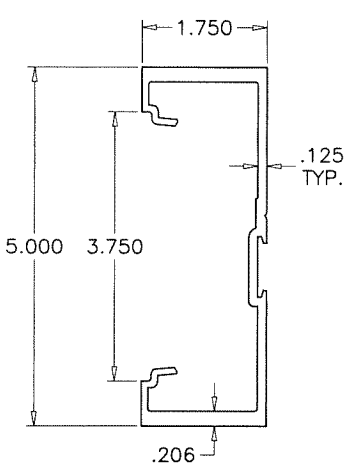
(E3T) SHEAR CLIP



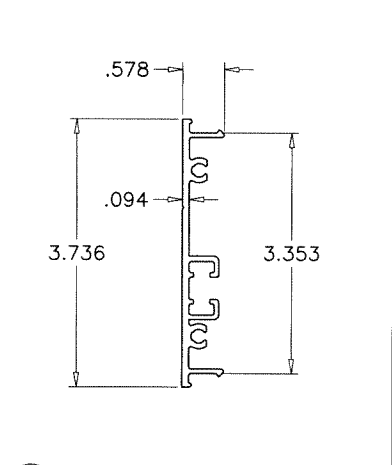
(E1T) INTERMEDIATE SNAP



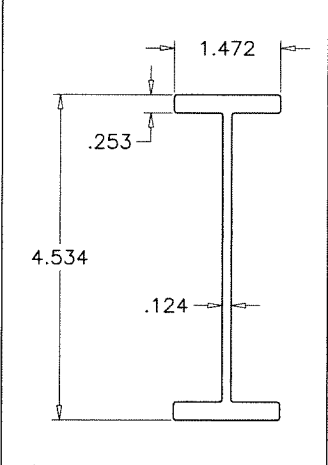
(E4) GLAZING BEAD



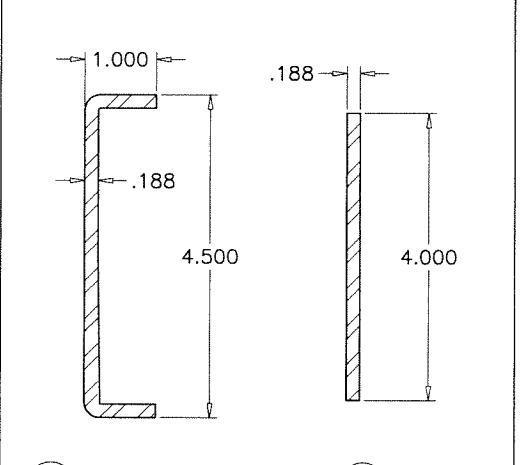
(E5) DOOR MULLION



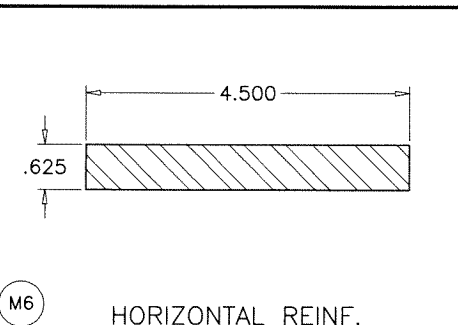
(E6) DOOR MULL SNAP-IN PLATE



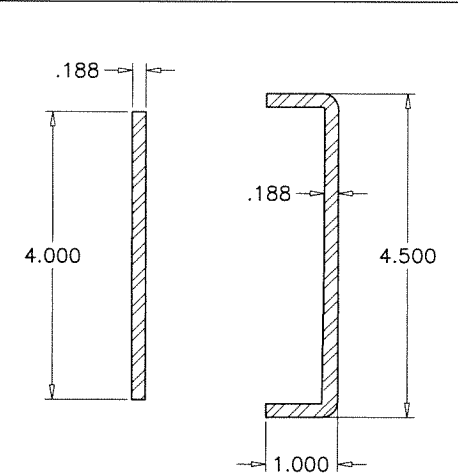
(E7) DOOR MULL STIFFENER



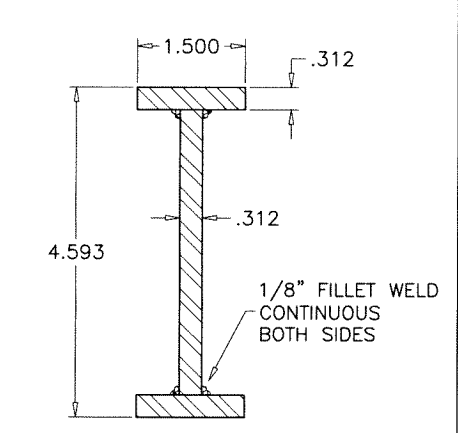
(M9) DOOR MULL STEEL REINF.



(M6) HORIZONTAL REINF.



(M7) JAMB REINF.



(M8) MULLION REINF.

ITEM #	PART #	REQ'D	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
E1T	ES-8000T-013T	AS REQD.	INTERMEDIATE SNAP	6005-T5	-
E2T	ES-8000T-008T	AS REQD.	WINDOW WALL FRAME	6063-T6	-
E3T	ES-8000T-003T	AS REQD.	SHEAR CLIP	6063-T6	-
E4	ES-8000T-005	AS REQD.	GLAZING BEAD	6005-T5	-
E5	-	AS REQD.	DOOR MULLION	6005-T5	-
E6	ES-8000T-003	AS REQD.	DOOR MULL SNAP-IN PLATE	6005-T5	-
E7	-	AS REQD.	DOOR MULLION STIFFENER	6005-T5	-
M1	#12 X 1-1/2"	AS REQD.	ASSEMBLY FASTENERS	ST. STEEL	PH SMS
M2	ES-8010	AS REQD.	INTERIOR GLAZING GASKET	EPDM	DUROMETER 60±5 SHORE A
M3	ES-8011A	AS REQD.	1/4" GLASS SPACER	SILICONE	DUROMETER 85±5 SHORE A
M4	ES-9550-B01A	2/ LITE	SETTING BLOCKS AT 1/4 POINTS	SILICONE	DUROMETER 80±5 SHORE A
M5	1/4" X 2-1/8"	AS REQD.	MULLION FASTENERS	ST. STEEL	BOLT WITH NUT
M6	-	AS REQD.	HORIZONTAL REINFORCING	STEEL	A36, Fu MIN. = 58 KSI
M7	-	AS REQD.	JAMB REINFORCING	STEEL	A36, Fu MIN. = 58 KSI
M8	-	AS REQD.	MULLION REINFORCING	STEEL	A36, Fu MIN. = 58 KSI
M9	-	AS REQD.	DOOR MULLION REINFORCING CHANNEL	STEEL	A36, Fu MIN. = 58 KSI
M10	-	AS REQD.	DOOR MULLION REINFORCING BAR	STEEL	A36, Fu MIN. = 58 KSI

THERMAL BREAK:  
FRAME MEMBERS FILLED AND DEBRIDGED USING  
'BAYDUR TB 100-30' MANUFACTURED BY  
'BAYER MATERIALSCIENCE, LLC.

Sealed: 7/25/2023 FL #17897



**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
9360 SUNSET DRIVE, SUITE 220  
MIAMI, FLORIDA 33173  
TEL. (305) 264-8100 FAX. (305) 262-6978  
C.A.N. 3538

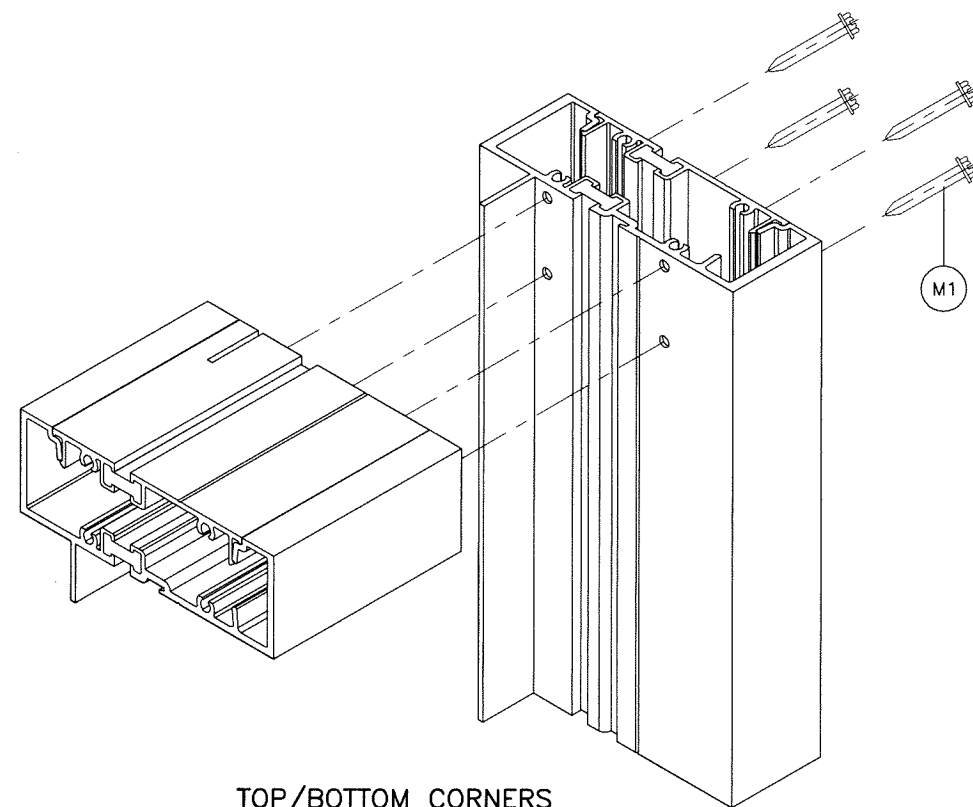
ES-8000T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)  
**E.S. WINDOWS, LLC**  
3550 N.W. 49 STREET  
MIAMI, FL. 33142  
TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	by description

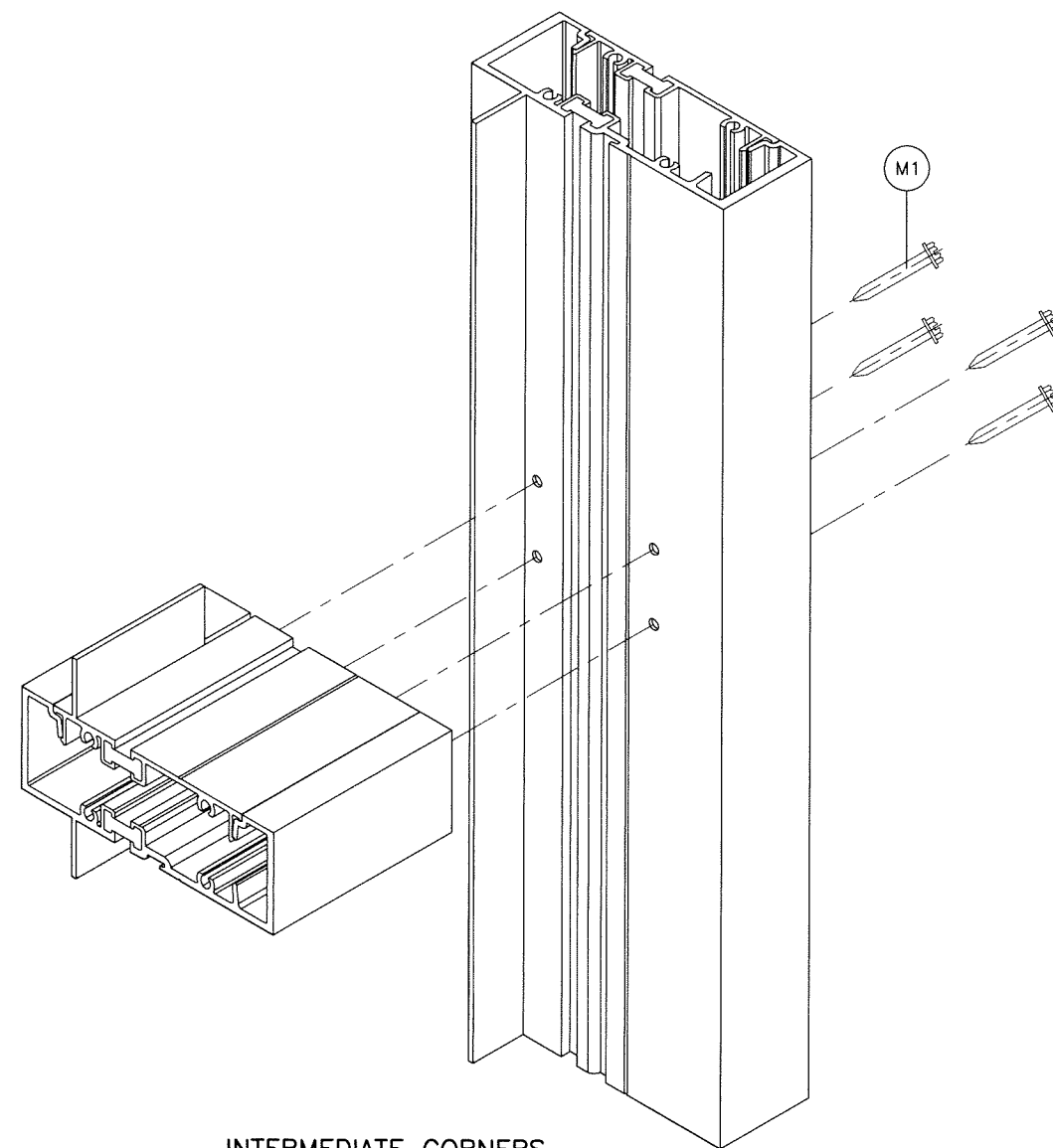
date: 07-29-21	scale: 3/8" = 1"
dr. by: TARIQ	chk. by:

drawing no.  
**21-58F**  
sheet 17 of 18

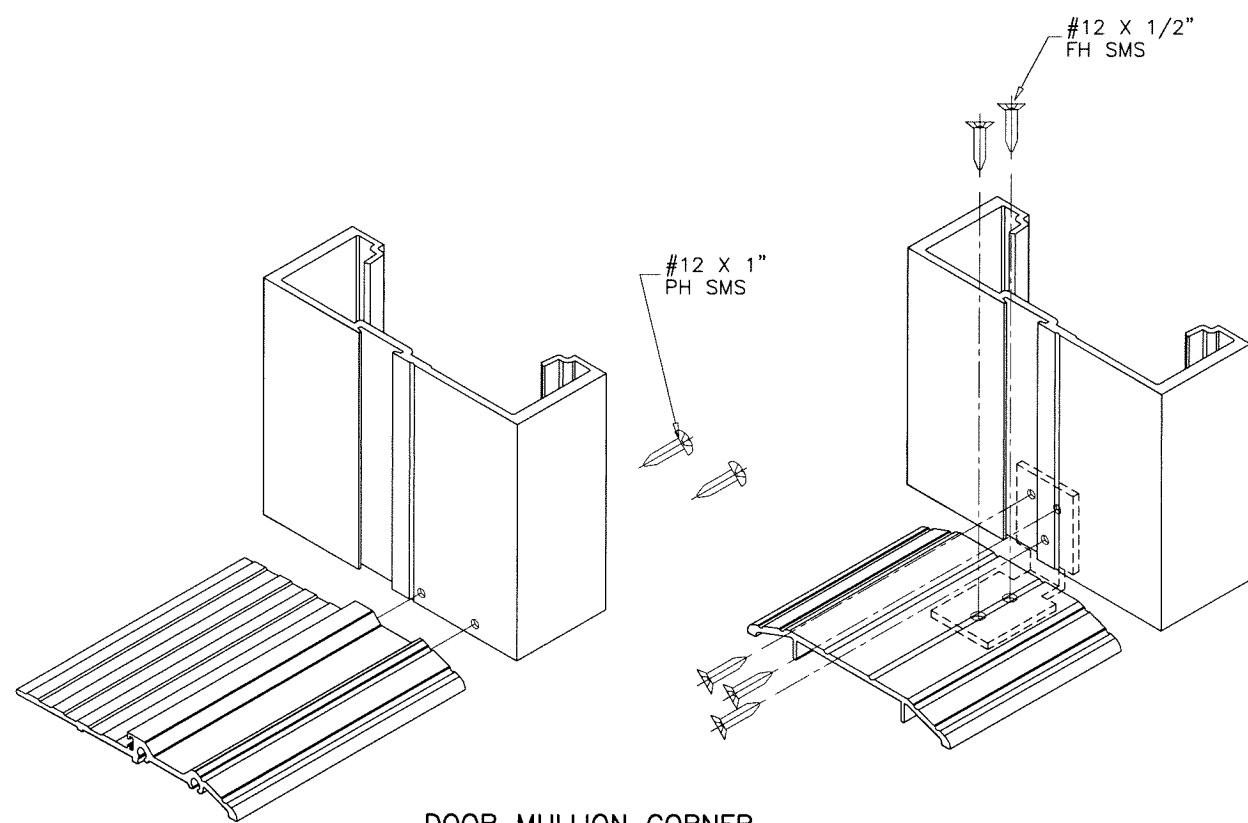
COMP-ANL\21-58FES



TOP/BOTTOM CORNERS

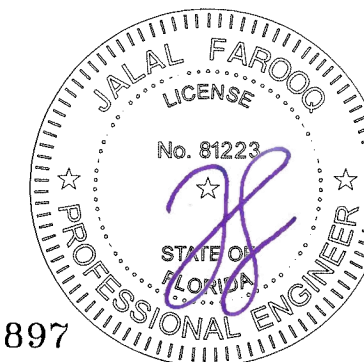


INTERMEDIATE CORNERS



DOOR MULLION CORNER

Sealed: 7/25/2023



FL #17897

**afc**  
**AL-FAROOQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 9360 SUNSET DRIVE, SUITE 220  
 MIAMI, FLORIDA 33173 (C.A.N. 3538)  
 TEL. (305) 264-8100 FAX. (305) 262-6978  
 COMP-ANL 21-58FES

ES-8000T (JUMBO) ALUM WINDOW WALL SYS. (L.M.I.)  
**E.S. WINDOWS, LLC**  
 3550 N.W. 49 STREET  
 MIAMI, FL. 33142  
 TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	by	description

date: 07-29-21  
 scale: 3/8" = 1"  
 dr. by: TARIQ  
 chk. by:

drawing no.  
**21-58F**  
 sheet 18 of 18