

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

ES-8860
ALUMINUM WINDOW WALL SYSTEM

THIS SYSTEM MAY BE USED IN CONJUNCTION WITH F.B.C. APPR'D
LARGE MISSILE IMPACT RESISTANT DOORS.

LOWER DESIGN PRESSURE FROM WINDOW WALL OR DOOR APPROVAL
WILL APPLY TO ENTIRE SYSTEM.

CODE REQUIREMENTS FOR SAFEGUARDS MUST BE OBSERVED.

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).

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 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.

INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

STEP 1 DETERMINE DESIGN WIND PRESSURE REQUIREMENTS BASED
ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING
APPLICABLE ASCE 7 STANDARD.

STEP 2 SEE CHARTS ON SHEET 3.2 FOR GLASS DESIGN LOAD
CAPACITY.

STEP 3 FOR SSG SYSTEMS USING SHEET 3 & 3.1, VERIFY
MINIMUM SILICONE BITE REQD. FOR DESIGN LOADS.

STEP 4 CHECK MULLION DESIGN LOAD CAPACITY FOR A GIVEN
SPACING AND HEIGHT USING CHARTS ON SHEETS 4 & 5
THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.

STEP 5 USING CHARTS ON SHEET 6 & 6.1 SELECT ANCHOR
OPTION WITH DESIGN LOAD CAPACITY MORE THAN DESIGN
LOAD SPECIFIED IN STEP 1 ABOVE.

STEP 6 THE LOWEST VALUE RESULTING FROM STEPS 2 THRU 5
THAT EXCEED THE DESIGN WIND PRESSURES DETERMINED
THRU STEP 1 SHALL APPLY TO ENTIRE SYSTEM.

STEP 7 FOR UNANCHORED JAMBS, USING SHEET 8, DETERMINE
THE MIN. & MAX. GAP DIMENSIONS.

STEP 8 WHEN USING THIS SYSTEM WITH DOORS, THE LOWER
VALUE OF THE DESIGN PRESSURE RATING FOR THE
SYSTEM AND THE DOOR SHALL APPLY.

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

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.



Sealed: 8/1/2023 FL #22526

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)

STORE\18-01F-ES

ES-8860 ALUM WINDOW WALL SYSTEM (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
A	06.12.18
B	08.12.19
C	10.23.20
D	04.12.22
E	07.31.23
description	
MULLION CHART REV.	
GENERAL REVISION	
GENERAL REVISION	
NEW TEST ADDED	
UPDATED TO 2023 FBC	

date: 12-18-17

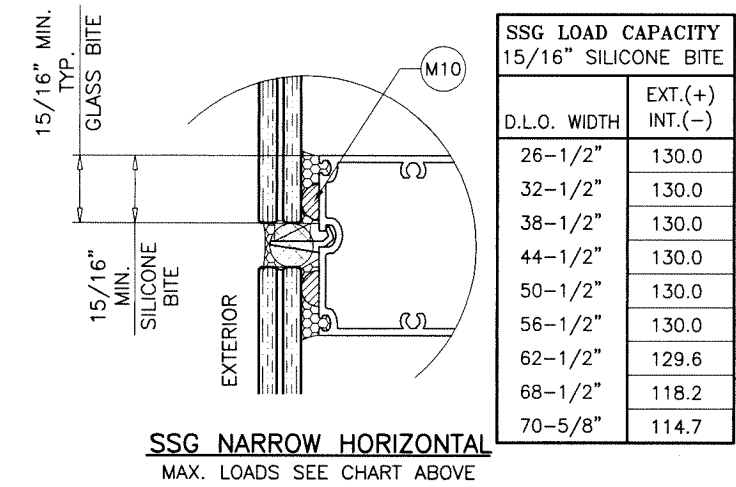
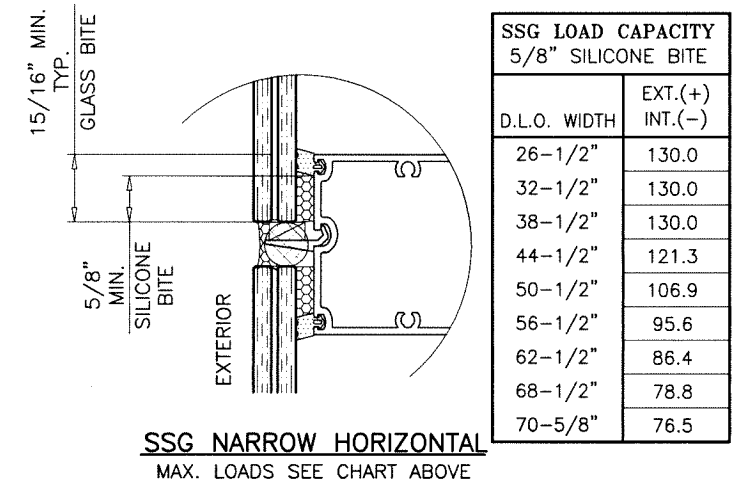
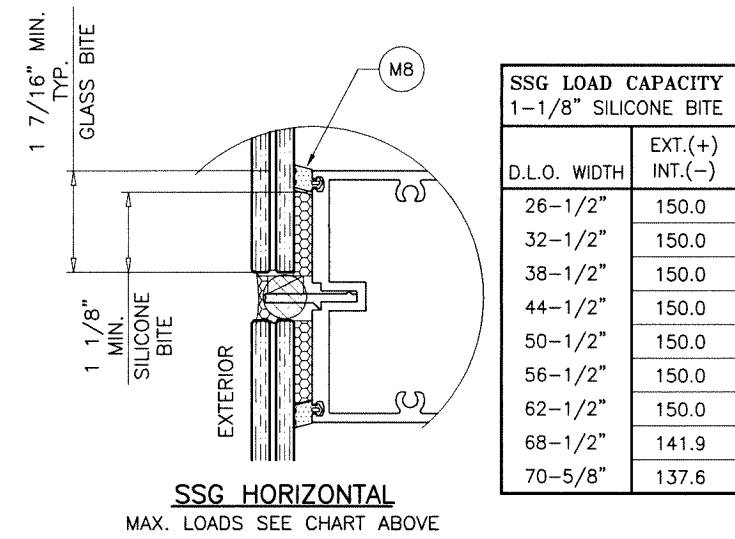
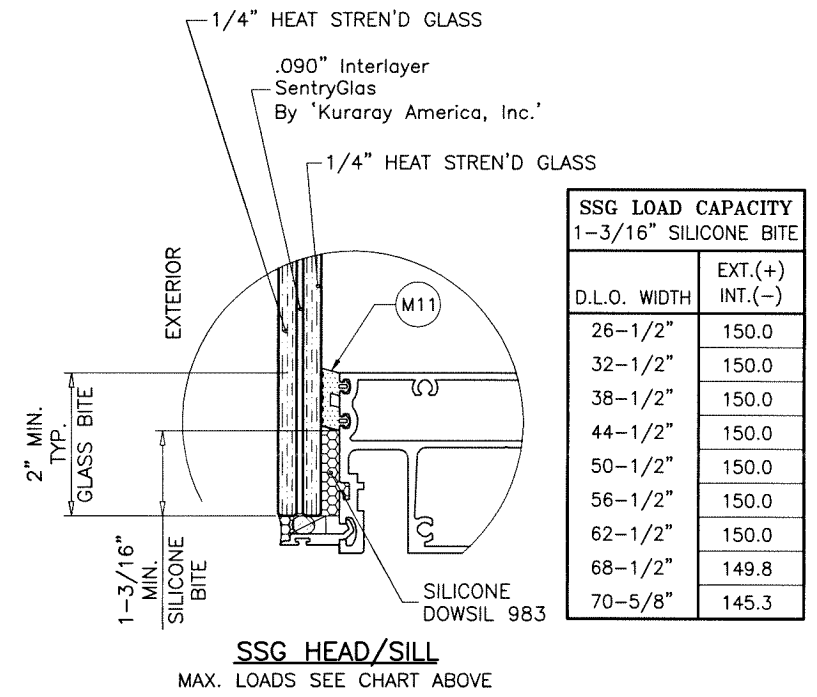
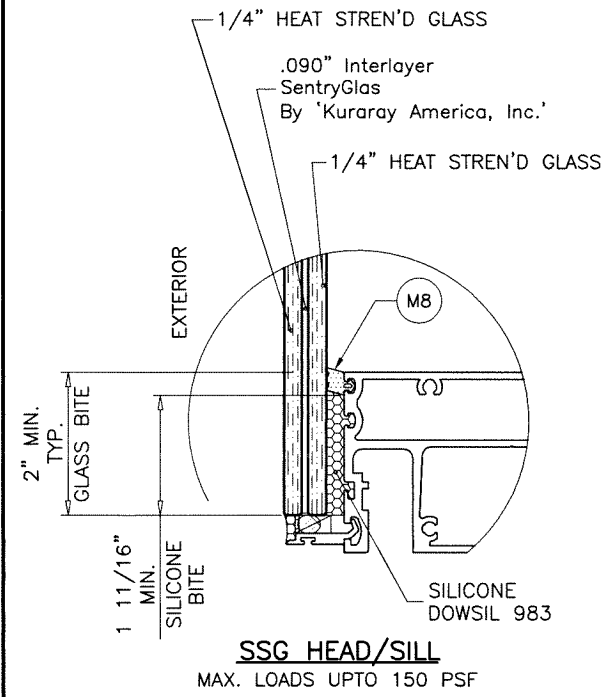
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dr. by: TARIQ

chk. by:

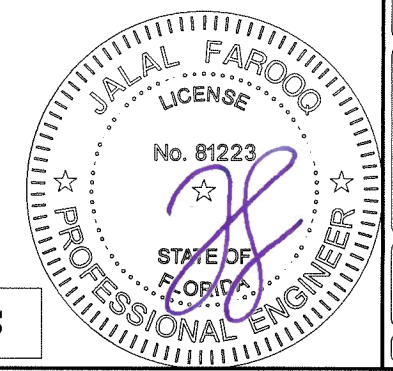
drawing no.
18-01F

sheet 1 of 14



GLAZING DETAILS

Sealed: 8/1/2023 FL #22526



GLASS

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a f c

STORE 18-01F-ES

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revisions:	
no	description

date: 12-18-17	scale: -	dr. by: TARIQ	chk. by:
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drawing no.

18-01F

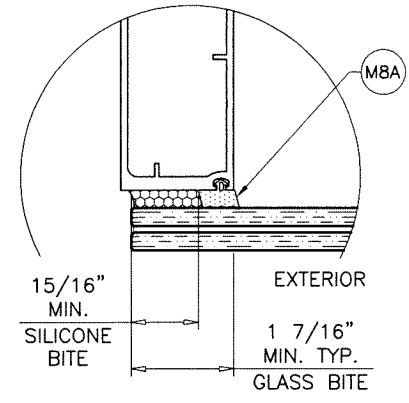
sheet 3 of 14

GLASS

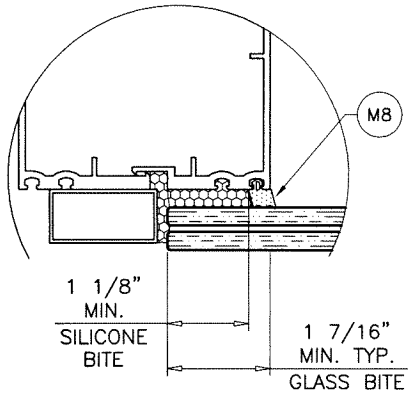
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dr. by:	TARIQ
chk. by:	

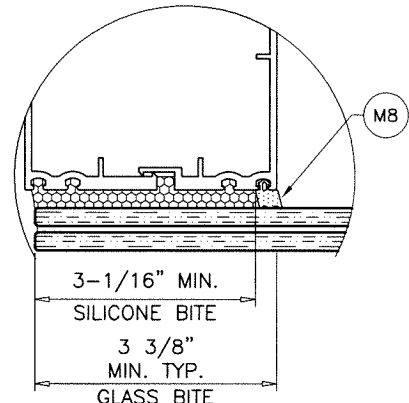
SSG LOAD CAPACITY 1-1/4" SILICONE BITE	
D.L.O. WIDTH	EXT.(+) INT.(-)
26-1/2"	130.0
32-1/2"	130.0
38-1/2"	130.0
44-1/2"	130.0
50-1/2"	130.0
56-1/2"	127.4
62-1/2"	115.2
68-1/2"	105.1
70-5/8"	101.9



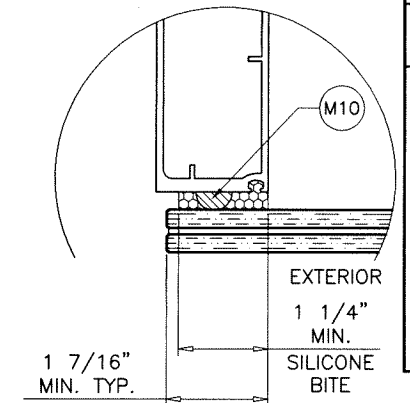
SSG JAMB
MAX. LOADS SEE CHART BELOW



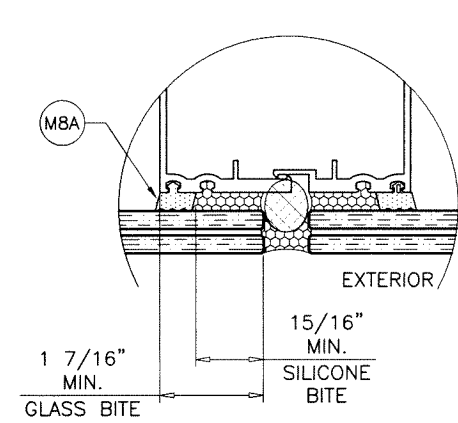
SSG JAMB
MAX. LOADS SEE CHART BELOW



SSG JAMB
MAX. LOADS UPTO 150 PSF

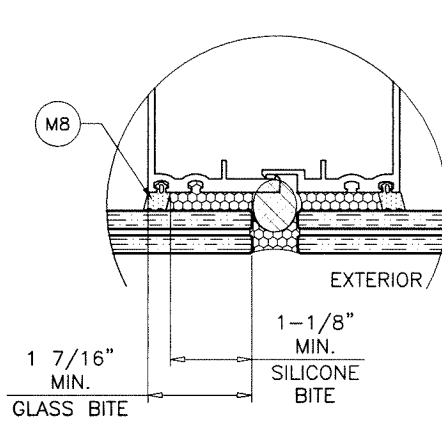


SSG JAMB
MAX. LOADS SEE CHART ABOVE



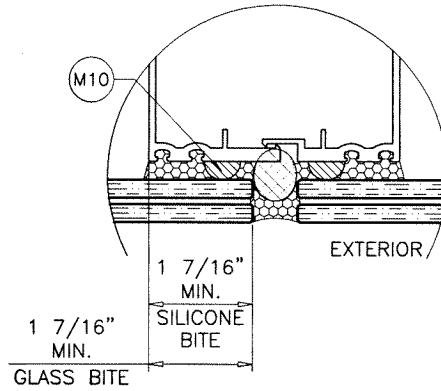
SSG MULLION
MAX. LOADS SEE CHART ABOVE

SSG LOAD CAPACITY 15/16" SILICONE BITE	
D.L.O. WIDTH	EXT.(+) INT.(-)
26-1/2"	92.0
32-1/2"	92.0
38-1/2"	92.0
44-1/2"	92.0
50-1/2"	92.0
56-1/2"	92.0
62-1/2"	86.4
68-1/2"	78.8
70-5/8"	76.5



SSG MULLION
MAX. LOADS SEE CHART ABOVE

SSG LOAD CAPACITY 1-1/8" SILICONE BITE	
D.L.O. WIDTH	EXT.(+) INT.(-)
26-1/2"	130.0
32-1/2"	130.0
38-1/2"	130.0
44-1/2"	130.0
50-1/2"	128.3
56-1/2"	114.7
62-1/2"	103.7
68-1/2"	94.6
70-5/8"	91.8

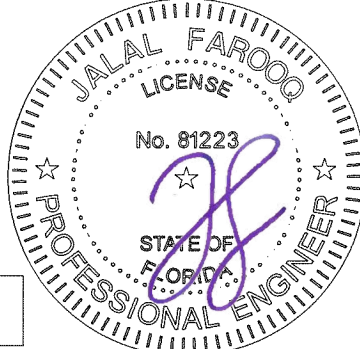


SSG MULLION
MAX. LOADS SEE CHART ABOVE

SSG LOAD CAPACITY 1-7/16" SILICONE BITE	
D.L.O. WIDTH	EXT.(+) INT.(-)
26-1/2"	130.0
32-1/2"	130.0
38-1/2"	130.0
44-1/2"	130.0
50-1/2"	130.0
56-1/2"	130.0
62-1/2"	130.0
68-1/2"	120.9
70-5/8"	117.2

Sealed: 8/1/2023 FL #22526

GLASS

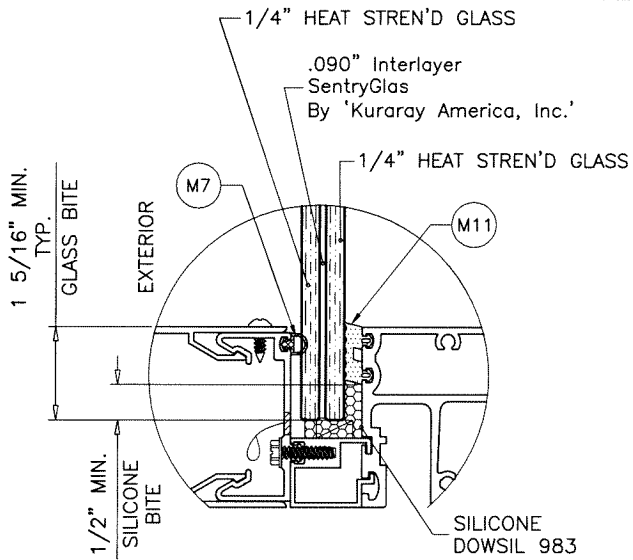
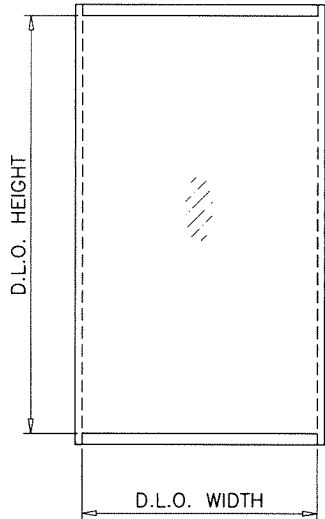
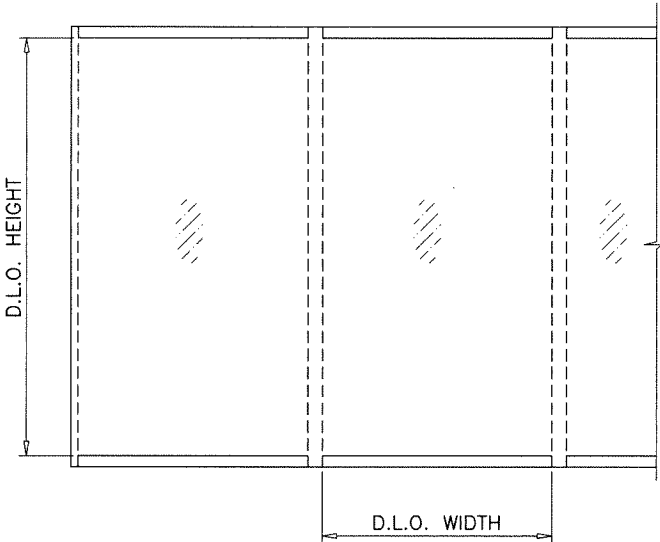


DESIGN LOAD CAPACITY - PSF			
NOMINAL DIMS.		9/16" LAM. GLASS	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+)	INT.(-)
26-1/2"	93"	150.0	150.0
32-1/2"		150.0	150.0
38-1/2"		150.0	150.0
44-1/2"		150.0	150.0
50-1/2"		148.1	148.1
56-1/2"		132.5	132.5
62-1/2"		121.0	121.0
68-1/2"		113.0	113.0
26-1/2"	99"	150.0	150.0
32-1/2"		150.0	150.0
38-1/2"		150.0	150.0
44-1/2"		150.0	150.0
50-1/2"		134.6	134.6
56-1/2"		121.7	121.7
62-1/2"		121.0	121.0
68-1/2"		113.0	113.0
26-1/2"	103"	150.0	150.0
32-1/2"		150.0	150.0
38-1/2"		150.0	150.0
44-1/2"		150.0	150.0
50-1/2"		130.3	130.3
56-1/2"		121.7	121.7
62-1/2"		121.0	121.0
68-1/2"		113.0	113.0
26-1/2"	105-3/4"	150.0	150.0
32-1/2"		150.0	150.0
38-1/2"		150.0	150.0
44-1/2"		147.9	147.9
50"		129.2	129.2
50-1/2"		121.7	121.7
56-1/2"		121.7	121.7
62-1/2"		121.0	121.0
68-1/2"		113.0	113.0
26-1/2"	109"	150.0	150.0
32-1/2"		150.0	150.0
38-1/2"		150.0	150.0
44-1/2"		144.1	144.1
50-1/2"		121.7	121.7
56-1/2"		121.7	121.7
62-1/2"		121.0	121.0
68-1/2"		113.0	113.0
26-1/2"	115"	150.0	150.0
32-1/2"		150.0	150.0
38-1/2"		150.0	150.0
44-1/2"		137.1	137.1
50-1/2"		121.7	121.7
56-1/2"		121.7	121.7
62-1/2"		121.0	121.0
68-1/2"		113.0	113.0
70-5/8"		111.0	111.0

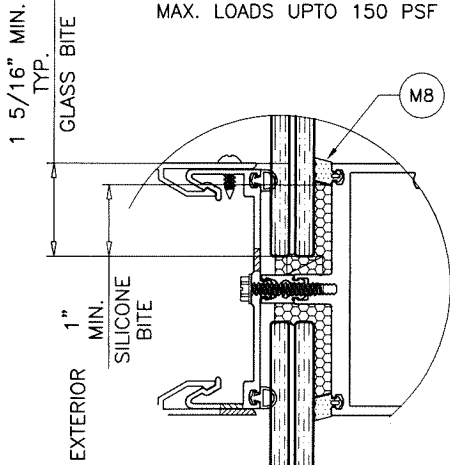
DESIGN LOAD CAPACITY - PSF			
NOMINAL DIMS.		9/16" LAM. GLASS	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+)	INT.(-)
26-1/2"	121"	150.0	150.0
32-1/2"		150.0	150.0
38-1/2"		150.0	150.0
44-1/2"		129.8	129.8
50-1/2"		121.7	121.7
56-1/2"		121.7	121.7
62-1/2"		116.0	116.0
68-1/2"		85.0	85.0
26-1/2"	127"	150.0	150.0
32-1/2"		150.0	150.0
38-1/2"		150.0	150.0
44-1/2"		129.8	129.8
50-1/2"		121.7	121.7
56-1/2"		121.7	121.7
62-1/2"		112.0	112.0
68-1/2"		85.0	85.0
26-1/2"	133"	150.0	150.0
32-1/2"		150.0	150.0
38-1/2"		150.0	150.0
44-1/2"		128.6	128.6
50-1/2"		121.7	121.7
56-1/2"		120.0	120.0
62-1/2"		92.7	92.7
68-1/2"		85.0	85.0
26-1/2"	139"	150.0	150.0
32-1/2"		150.0	150.0
38-1/2"		130.0	130.0
50-1/2"		121.7	121.7
56-1/2"		116.0	116.0
62-1/2"		92.7	92.7
68-1/2"		85.0	85.0
26-1/2"	145"	150.0	150.0
32-1/2"		150.0	150.0
38-1/2"		130.0	130.0
44-1/2"		121.7	121.7
50-1/2"		121.7	121.7
56-1/2"		102.0	102.0
62-1/2"		92.7	92.7
26-1/2"	151"	150.0	150.0
32-1/2"		150.0	150.0
38-1/2"		130.0	130.0
44-1/2"		121.7	121.7
50-1/2"		121.7	121.7
56-1/2"		102.0	102.0
62-1/2"		92.7	92.7
26-1/2"	157"	150.0	150.0
32-1/2"		150.0	150.0
38-1/2"		130.0	130.0
44-1/2"		121.7	121.7
50-1/2"		121.7	121.7
56-1/2"		102.0	102.0

DESIGN LOAD CAPACITY - PSF			
NOMINAL DIMS.		9/16" LAM. GLASS	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+)	INT.(-)
26-1/2"	163"	150.0	150.0
32-1/2"		130.0	130.0
38-1/2"		121.7	121.7
44-1/2"		121.7	121.7
50-1/2"		102.0	102.0
56-1/2"		102.0	102.0
26-1/2"	168"	150.0	150.0
32-1/2"		130.0	130.0
38-1/2"		121.7	121.7
44-1/2"		121.7	121.7
50-1/2"		102.0	102.0
56-1/2"		102.0	102.0
26-1/2"	169"	150.0	150.0
32-1/2"		130.0	130.0
38-1/2"		121.7	121.7
44-1/2"		121.7	121.7
50-1/2"		102.0	102.0
56-1/2"		102.0	102.0
26-1/2"	175"	150.0	150.0
32-1/2"		130.0	130.0
38-1/2"		121.7	121.7
44-1/2"		121.7	121.7
50-1/2"		102.0	102.0
56-1/2"		102.0	102.0

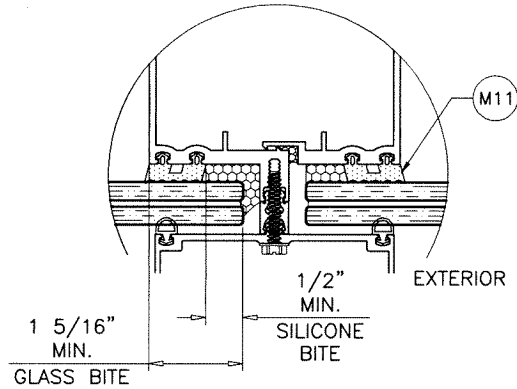
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



CAPTURED HEAD/SILL
MAX. LOADS UPTO 150 PSF



CAPTURED HORIZONTAL
MAX. LOADS UPTO 150 PSF



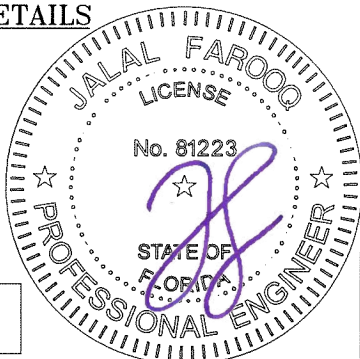
CAPTURED JAMB/MULLION
MAX. LOADS UPTO 150 PSF

GLAZING DETAILS

Sealed: 8/1/2023

FL #22526

GLASS



af c
AL-FAROOQ CORPORATION
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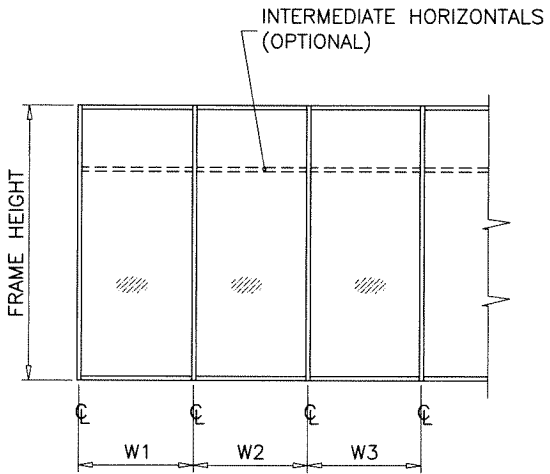
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revisions:		no		date		by		description	
date:		12-18-17		scale:		dr. by:		chk. by:	
drawing no.		18-01F		sheet		3.2 of 14			

MULLION DESIGN LOAD CAPACITY – PSF WITH OR WITHOUT INTERMEDIATE HORIZONTALS									
NOMINAL DIMS.		JAMB 'J1'		JAMB 'J2'		MULLION 'M1'		MULLION 'M1A'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
30"	96"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
60"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
66"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
72"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
74–1/8"		–	–	121.7	121.7	–	–	121.7	121.7
30"	102"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
60"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
66"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
72"		–	–	127.4	127.4	127.4	127.4	130.0	130.0
74–1/8"		–	–	121.7	121.7	–	–	121.7	121.7
30"	108"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
60"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
66"		–	–	122.5	122.5	122.5	122.5	130.0	130.0
72"		–	–	121.7	121.7	112.3	112.3	130.0	130.0
74–1/8"		–	–	121.7	121.7	–	–	121.7	121.7
30"	114"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
54"		128.8	128.8	130.0	130.0	130.0	130.0	130.0	130.0
60"		115.9	115.9	121.7	121.7	119.5	119.5	130.0	130.0
66"		–	–	121.7	121.7	108.6	108.6	130.0	130.0
72"		–	–	121.7	121.7	99.6	99.6	130.0	130.0
74–1/8"		–	–	121.7	121.7	–	–	121.7	121.7
30"	120"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48"		129.9	129.9	130.0	130.0	130.0	130.0	130.0	130.0
54"		115.5	115.5	121.7	121.7	118.4	118.4	130.0	130.0
60"		–	–	121.7	121.7	106.6	106.6	130.0	130.0
66"		–	–	121.7	121.7	96.9	96.9	130.0	130.0
72"		–	–	121.7	121.7	88.8	88.8	130.0	130.0
74–1/8"		–	–	121.7	121.7	–	–	121.7	121.7
30"	126"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
48"		117.0	117.0	119.4	119.4	119.4	119.4	130.0	130.0
54"		104.0	104.0	106.2	106.2	106.2	106.2	130.0	130.0
60"		–	–	95.5	95.5	95.5	95.5	130.0	130.0
66"		–	–	86.9	86.9	86.9	86.9	130.0	130.0
72"		–	–	79.6	79.6	79.6	79.6	123.5	123.5

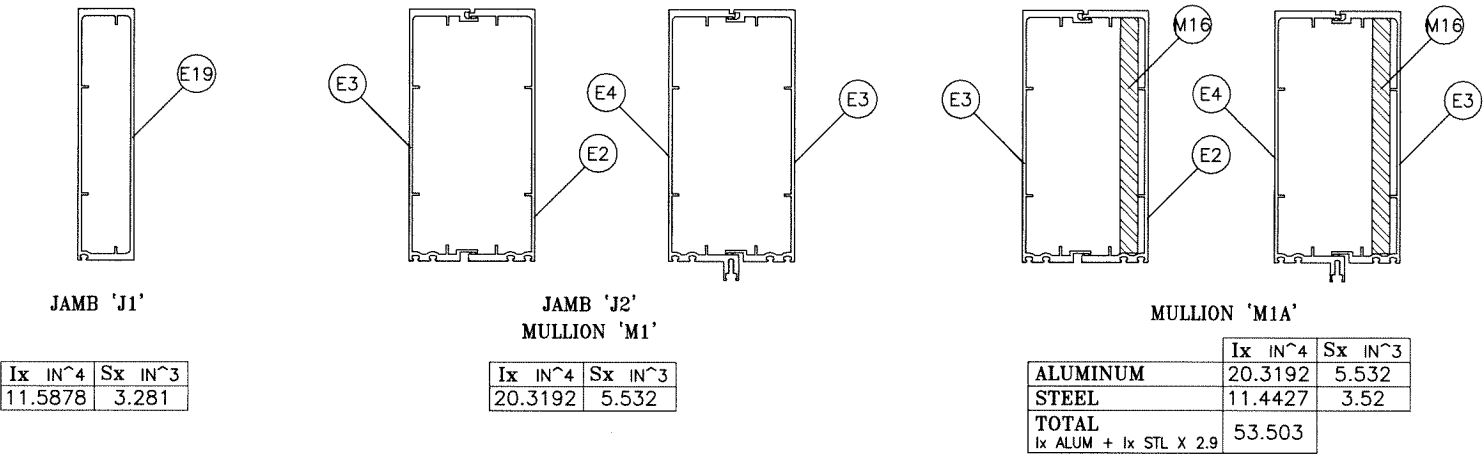
MULLION DESIGN LOAD CAPACITY – PSF WITH OR WITHOUT INTERMEDIATE HORIZONTALS									
NOMINAL DIMS.		JAMB 'J1'		JAMB 'J2'		MULLION 'M1'		MULLION 'M1A'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
30"	132"	130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
36"		130.0	130.0	130.0	130.0	130.0	130.0	130.0	130.0
42"		121.0	121.0	122.9	122.9	122.9	122.9	130.0	130.0
48"		105.9	105.9	107.6	107.6	107.6	107.6	130.0	130.0
54"		–	–	95.6	95.6	95.6	95.6	130.0	130.0
60"		–	–	86.1	86.1	86.1	86.1	130.0	130.0
66"		–	–	78.2	78.2	78.2	78.2	122.8	122.8
72"		–	–	71.7	71.7	71.7	71.7	112.6	112.6
30"	138"	130.0	130.0	93.4	93.4	93.4	93.4	130.0	130.0
36"		128.3	128.3	77.8	77.8	77.8	77.8	130.0	130.0
42"		110.0	110.0	66.7	66.7	66.7	66.7	130.0	130.0
48"		96.3	96.3	58.4	58.4	58.4	58.4	130.0	130.0
54"		–	–	51.9	51.9	51.9	51.9	130.0	130.0
60"		–	–	46.7	46.7	46.7	46.7	123.6	123.6
66"		–	–	42.5	42.5	42.5	42.5	112.4	112.4
72"		–	–	–	–	–	–	–	–
30"	144"	130.0	130.0	82.2	82.2	82.2	82.2	130.0	130.0
36"		117.1	117.1	68.5	68.5	68.5	68.5	130.0	130.0
42"		100.4	100.4	58.7	58.7	58.7	58.7	130.0	130.0
48"		87.8	87.8	51.4	51.4	51.4	51.4	130.0	130.0
54"		–	–	45.7	45.7	45.7	45.7	126.1	126.1
60"		–	–	41.1	41.1	41.1	41.1	113.5	113.5
66"		–	–	37.4	37.4	37.4	37.4	103.2	103.2
72"		–	–	–	–	–	–	–	–

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

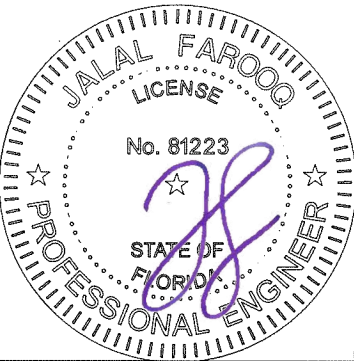


WIDTH (W) = W1
AT JAMB

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



Sealed: 8/1/2023 FL #22526



MULLION

af c

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

STORE 18-01F-ES

ES-8860 ALUM WINDOW WALL SYSTEM (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: 12-18-17
scale: –
dr. by: TARIQ
chk. by:

drawing no.
18-01F

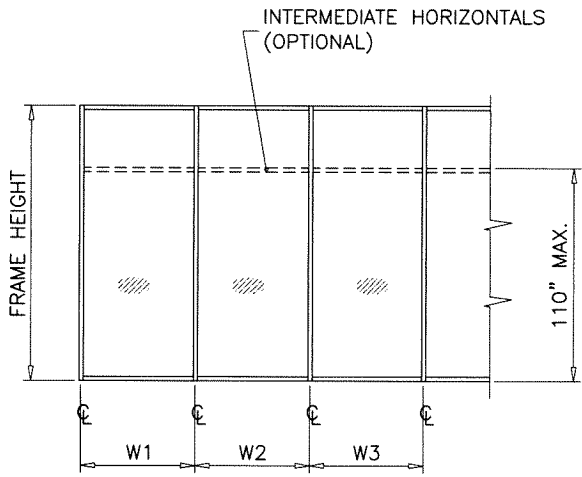
sheet 4 of 14

MULLION DESIGN LOAD CAPACITY – PSF WITH OR WITHOUT INTERMEDIATE HORIZONTALS							
NOMINAL DIMS.		JAMB 'J3'		JAMB 'J4'		MULLION 'M2'	
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
30"	132"	150.0	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0	150.0
42"		150.0	150.0	150.0	150.0	150.0	150.0
48"		150.0	150.0	150.0	150.0	150.0	150.0
54"		150.0	150.0	150.0	150.0	150.0	150.0
60"		150.0	150.0	150.0	150.0	150.0	150.0
66"		150.0	150.0	150.0	150.0	150.0	150.0
72"		150.0	150.0	150.0	150.0	150.0	150.0
30"	138"	150.0	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0	150.0
42"		150.0	150.0	150.0	150.0	150.0	150.0
48"		150.0	150.0	150.0	150.0	150.0	150.0
54"		150.0	150.0	150.0	150.0	150.0	150.0
60"		150.0	150.0	150.0	150.0	150.0	150.0
66"		150.0	150.0	150.0	150.0	150.0	150.0
72"		92.0	92.0	102.0	102.0	102.0	102.0
30"	144"	150.0	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0	150.0
42"		150.0	150.0	150.0	150.0	150.0	150.0
48"		150.0	150.0	150.0	150.0	150.0	150.0
54"		150.0	150.0	150.0	150.0	150.0	150.0
60"		150.0	150.0	150.0	150.0	150.0	150.0
66"		150.0	150.0	150.0	150.0	150.0	150.0
72"		92.0	92.0	102.0	102.0	102.0	102.0
30"	150"	150.0	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0	150.0
42"		150.0	150.0	150.0	150.0	150.0	150.0
48"		150.0	150.0	150.0	150.0	150.0	150.0
54"		150.0	150.0	150.0	150.0	150.0	150.0
60"		150.0	150.0	150.0	150.0	150.0	150.0
66"		92.0	92.0	102.0	102.0	102.0	102.0
72"		92.0	92.0	102.0	102.0	102.0	102.0
30"	156"	150.0	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0	150.0
42"		150.0	150.0	150.0	150.0	150.0	150.0
48"		150.0	150.0	150.0	150.0	150.0	150.0
54"		150.0	150.0	150.0	150.0	150.0	150.0
60"		150.0	150.0	150.0	150.0	150.0	150.0
66"		92.0	92.0	102.0	102.0	102.0	102.0
72"		92.0	92.0	102.0	102.0	102.0	102.0
30"	162"	150.0	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0	150.0
42"		150.0	150.0	150.0	150.0	150.0	150.0
48"		150.0	150.0	150.0	150.0	150.0	150.0
54"		150.0	150.0	150.0	150.0	150.0	150.0
60"		150.0	150.0	150.0	150.0	145.7	145.7
66"		92.0	92.0	102.0	102.0	102.0	102.0
72"		92.0	92.0	102.0	102.0	102.0	102.0
30"	168"	150.0	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0	150.0
42"		150.0	150.0	150.0	150.0	150.0	150.0
48"		150.0	150.0	150.0	150.0	150.0	150.0
54"		150.0	150.0	150.0	150.0	150.0	150.0
60"		92.0	92.0	102.0	102.0	102.0	102.0
66"		92.0	92.0	102.0	102.0	102.0	102.0
72"		92.0	92.0	102.0	102.0	102.0	102.0
30"	173"	150.0	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0	150.0
42"		150.0	150.0	150.0	150.0	150.0	150.0
48"		147.7	147.7	147.7	147.7	143.0	143.0
54"		145.0	145.0	145.0	145.0	140.3	140.3
60"		92.0	92.0	102.0	102.0	102.0	102.0
66"		92.0	92.0	102.0	102.0	102.0	102.0

MULLION DESIGN LOAD CAPACITY – PSF WITH OR WITHOUT INTERMEDIATE HORIZONTALS							
NOMINAL DIMS.		JAMB 'J3'		MULLION 'M2'			
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)		
30"	174"	150.0	150.0	150.0	150.0		
36"		150.0	150.0	150.0	150.0		
42"		150.0	150.0	150.0	150.0		
48"		147.7	147.7	143.0	143.0		
54"		145.0	145.0	140.3	140.3		
60"		92.0	92.0	92.0	92.0		
66"		92.0	92.0	92.0	92.0		
72"		92.0	92.0	92.0	92.0		
30"	180"	150.0	150.0	150.0	150.0		
36"		150.0	150.0	150.0	150.0		
42"		150.0	150.0	150.0	150.0		
48"		150.0	150.0	147.5	147.5		
54"		135.5	135.5	131.1	131.1		
60"		92.0	92.0	92.0	92.0		
66"		92.0	92.0	92.0	92.0		
30"	186"	150.0	150.0	150.0	150.0		
36"		150.0	150.0	150.0	150.0		
42"		150.0	150.0	150.0	150.0		
48"		142.7	142.7	138.1	138.1		
53–1/2"		128.1	128.1	123.9	123.9		
54"		92.0	92.0	92.0	92.0		
60"		92.0	92.0	92.0	92.0		
66"		92.0	92.0	92.0	92.0		
30"	192"	150.0	150.0	150.0	150.0		
36"		150.0	150.0	150.0	150.0		
42"		150.0	150.0	148.2	148.2		
48"		133.9	133.9	129.6	129.6		
53–1/2"		120.2	120.2	116.3	116.3		
54"		92.0	92.0	92.0	92.0		
60"		92.0	92.0	92.0	92.0		
66"		92.0	92.0	92.0	92.0		
30"	193"	150.0	150.0	150.0	150.0		
36"		150.0	150.0	150.0	150.0		
42"		150.0	150.0	146.6	146.6		
48"		132.6	132.6	128.3	128.3		
53–1/2"		118.9	118.9	115.1	115.1		
54"		92.0	92.0	92.0	92.0		
60"		92.0	92.0	92.0	92.0		
66"		92.0	92.0	92.0	92.0		
30"	198"	130.0	130.0	130.0	130.0		
36"		130.0	130.0	130.0	130.0		
42"		130.0	130.0	130.0	130.0		
48"		126.0	126.0	115.9	115.9		
54"		92.0	92.0	92.0	92.0		
60"		92.0	92.0	92.0	92.0		
66"		92.0	92.0	92.0	92.0		
30"	204"	130.0	130.0	130.0	130.0		
36"		130.0	130.0	130.0	130.0		
42"		130.0	130.0	124.8	124.8		
48"		118.7	118.7	109.2	109.2		
54"		92.0	92.0	92.0	92.0		
60"		92.0	92.0	91.9	91.9		
66"		92.0	92.0	91.9	91.9		

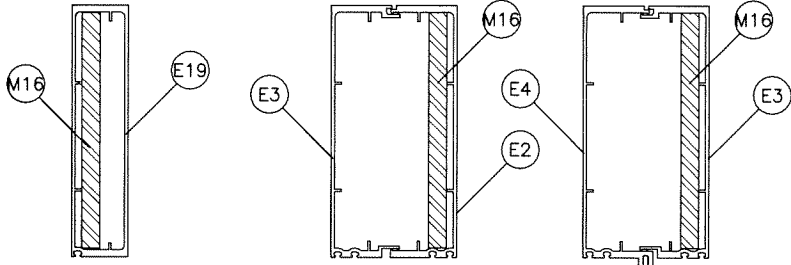
INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

MULLION DESIGN LOAD CAPACITY – PSF WITH OR WITHOUT INTERMEDIATE HORIZONTALS							
NOMINAL DIMS.		JAMB 'J3'		MULLION 'M2'			
WIDTH (W)	FRAME HEIGHT	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)		
30"	210"	92.0	92.0	92.0	92.0		
36"		92.0	92.0	92.0	92.0		
42"		92.0	92.0	92.0	92.0		
48"		92.0	92.0	92.0	92.0		
54"		92.0	92.0	92.0	92.0		
60"		89.6	89.6	86.7	86.7		
30"	213"	92.0	92.0	92.0	92.0		
36"		92.0	92.0	92.0	92.0		
42"		92.0	92.0	92.0	92.0		
48"		92.0	92.0	92.0	92.0		
54"		92.0	92.0	92.0	92.0		
60"		87.1	87.1	84.3	84.3		



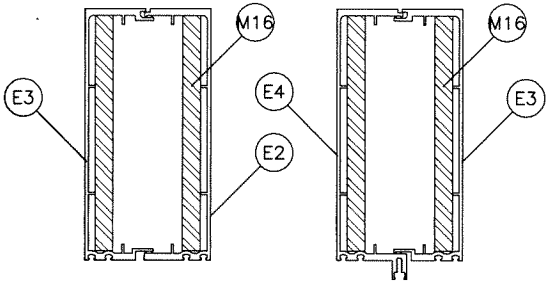
WIDTH (W) = W1
AT JAMB

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



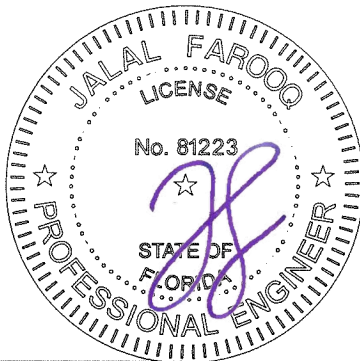
	Ix IN^4	Sx IN^3
ALUMINUM	11.5878	3.281
STEEL	11.4427	3.5208
TOTAL Ix ALUM + Ix STL X 2.9	44.7716	

	Ix IN^4	Sx IN^3
ALUMINUM	20.3192	5.532
STEEL	11.4427	3.52
TOTAL Ix ALUM + Ix STL X 2.9	53.503	

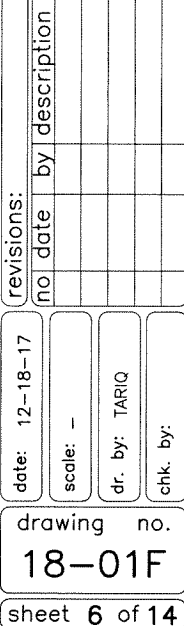


	Ix IN^4	Sx IN^3
ALUMINUM	20.3192	5.532
STEEL	22.8854	7.0417
TOTAL Ix ALUM + Ix STL X 2.9	86.6869	

MULLION



Sealed: 8/1/2023

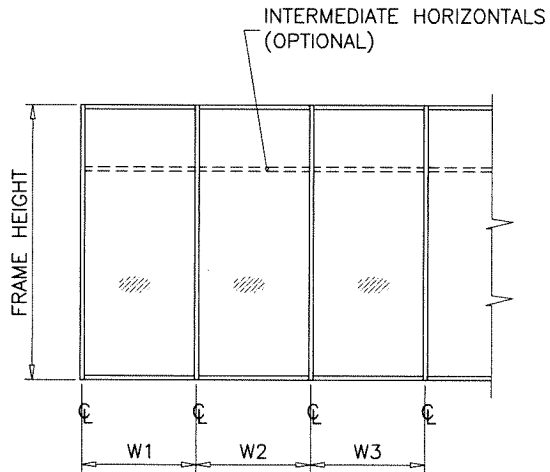


ANCHOR DESIGN LOAD CAPACITY - PSF EXT.(+) & INT.(-)						
NOMINAL DIMS.		ANCHOR TYPE 'A'			ANCHOR TYPE 'B'	
WIDTH (W)	FRAME HEIGHT	'A4'	'A5'	'A6'	'B4'	'B5'
30"	120"	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0
42"		150.0	150.0	150.0	150.0	150.0
48"		147.0	150.0	150.0	150.0	150.0
54"		130.7	150.0	150.0	150.0	150.0
60"		117.6	147.0	150.0	150.0	150.0
66"		106.9	133.6	150.0	150.0	150.0
72"		98.0	122.5	147.0	150.0	150.0
74-1/4"		95.2	119.0	142.8	150.0	150.0
30"	126"	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0
42"		150.0	150.0	150.0	150.0	150.0
48"		140.0	150.0	150.0	150.0	150.0
54"		124.4	150.0	150.0	150.0	150.0
60"		112.0	140.0	150.0	150.0	150.0
66"		101.8	127.3	150.0	150.0	150.0
72"		93.3	116.7	140.0	149.4	150.0
74-1/4"		90.7	113.3	136.0	145.1	150.0
30"	132"	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0
42"		150.0	150.0	150.0	150.0	150.0
48"		133.6	150.0	150.0	150.0	150.0
54"		118.8	148.5	150.0	150.0	150.0
60"		106.9	133.6	150.0	150.0	150.0
66"		97.2	121.5	145.8	150.0	150.0
72"		89.1	111.4	133.6	142.6	150.0
30"	138"	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0
42"		146.1	150.0	150.0	150.0	150.0
48"		127.8	150.0	150.0	150.0	150.0
54"		113.6	142.0	150.0	150.0	150.0
60"		102.3	127.8	150.0	150.0	150.0
66"		93.0	116.2	139.4	148.8	150.0
72"		85.2	106.5	127.8	136.4	150.0
30"	144"	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0
42"		140.0	150.0	150.0	150.0	150.0
48"		122.5	150.0	150.0	150.0	150.0
54"		108.9	136.1	150.0	150.0	150.0
60"		98.0	122.5	147.0	150.0	150.0
66"		89.1	111.4	133.6	142.6	150.0
72"		81.7	102.0	102.0	102.0	102.0
30"	150"	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0
42"		134.4	150.0	150.0	150.0	150.0
48"		117.6	147.0	150.0	150.0	150.0
54"		104.5	130.7	150.0	150.0	150.0
60"		94.1	117.6	141.1	150.0	150.0
66"		85.5	106.9	128.3	136.9	150.0
72"		78.4	92.0	92.0	92.0	92.0
30"	156"	150.0	150.0	150.0	150.0	150.0
36"		150.0	150.0	150.0	150.0	150.0
42"		129.2	150.0	150.0	150.0	150.0
48"		113.1	141.3	150.0	150.0	150.0
54"		100.5	125.6	150.0	150.0	150.0
60"		90.5	113.1	135.7	144.8	150.0
66"		82.2	102.8	123.4	131.6	150.0
72"		75.4	92.0	92.0	92.0	92.0

ANCHOR DESIGN LOAD CAPACITY - PSF EXT.(+) & INT.(-)						
NOMINAL DIMS.		ANCHOR TYPE 'A'			ANCHOR TYPE 'B'	
WIDTH (W)	FRAME HEIGHT	'A4'	'A5'	'A6'	'B4'	'B5'
30"	162"	150.0	150.0	150.0	150.0	150.0
36"		145.2	150.0	150.0	150.0	150.0
42"		124.4	150.0	150.0	150.0	150.0
48"		108.9	136.1	150.0	150.0	150.0
54"		96.8	121.0	145.2	150.0	150.0
60"		87.1	108.9	130.7	139.4	150.0
66"		79.2	92.0	92.0	92.0	92.0
72"		72.6	90.7	92.0	92.0	92.0
30"	168"	150.0	150.0	150.0	150.0	150.0
36"		140.0	150.0	150.0	150.0	150.0
42"		120.0	150.0	150.0	150.0	150.0
48"		105.0	131.3	150.0	150.0	150.0
54"		93.3	116.7	140.0	149.4	150.0
60"		84.0	105.0	126.0	134.4	150.0
66"		76.4	92.0	92.0	92.0	92.0
72"		70.0	87.5	92.0	92.0	92.0
30"	174"	150.0	150.0	150.0	150.0	150.0
36"		135.2	150.0	150.0	150.0	150.0
42"		115.9	144.8	150.0	150.0	150.0
48"		101.4	126.7	150.0	150.0	150.0
54"		90.1	112.6	135.2	144.2	150.0
60"		81.1	92.0	92.0	92.0	92.0
66"		73.7	92.0	92.0	92.0	92.0
72"		67.6	84.5	92.0	92.0	92.0
30"	180"	150.0	150.0	150.0	150.0	150.0
36"		130.7	150.0	150.0	150.0	150.0
42"		112.0	140.0	150.0	150.0	150.0
48"		98.0	122.5	147.0	150.0	150.0
54"		87.1	108.9	130.7	139.4	150.0
60"		78.4	92.0	92.0	92.0	92.0
66"		71.3	89.1	92.0	92.0	92.0
30"	186"	150.0	150.0	150.0	150.0	150.0
36"		126.5	150.0	150.0	150.0	150.0
42"		108.4	135.5	150.0	150.0	150.0
48"		94.8	118.6	142.3	150.0	150.0
54"		84.3	105.4	126.5	134.9	150.0
60"		75.9	92.0	92.0	92.0	92.0
66"		69.0	86.2	92.0	92.0	92.0
30"	192"	147.0	150.0	150.0	150.0	150.0
36"		122.5	150.0	150.0	150.0	150.0
42"		105.0	131.3	150.0	150.0	150.0
48"		91.9	114.8	137.8	147.0	150.0
54"		81.7	92.0	92.0	92.0	92.0
60"		73.5	91.9	92.0	92.0	92.0
66"		66.8	83.5	92.0	92.0	92.0
30"	198"	130.0	130.0	130.0	130.0	130.0
36"		118.8	130.0	130.0	130.0	130.0
42"		101.8	127.3	130.0	130.0	130.0
48"		89.1	111.4	129.7	130.0	130.0
54"		79.2	92.0	92.0	92.0	92.0
60"		71.3	89.1	92.0	92.0	92.0
30"	204"	130.0	92.0	92.0	92.0	92.0
36"		115.3	92.0	92.0	92.0	92.0
42"		98.8	92.0	92.0	92.0	92.0
48"		86.5	92.0	92.0	92.0	92.0
54"		76.9	92.0	92.0	92.0	92.0
60"		69.2	86.5	92.0	92.0	92.0

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.

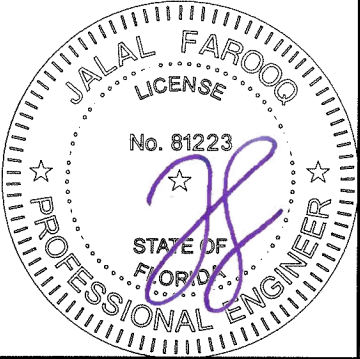
ANCHOR DESIGN LOAD CAPACITY - PSF EXT.(+) & INT.(-)						
NOMINAL DIMS.		ANCHOR TYPE 'A'			ANCHOR TYPE 'B'	
WIDTH (W)	FRAME HEIGHT	'A4'	'A5'	'A6'	'B4'	'B5'
30"	210"	92.0	92.0	92.0	92.0	92.0
36"		92.0	92.0	92.0	92.0	92.0
42"		92.0	92.0	92.0	92.0	92.0
48"		84.0	92.0	92.0	92.0	92.0
54"		74.7	92.0	92.0	92.0	92.0
60"		67.2	84.0	92.0	92.0	92.0
30"	213"	92.0	92.0	92.0	92.0	92.0
36"		92.0	92.0	92.0	92.0	92.0
42"		92.0	92.0	92.0	92.0	92.0
48"		82.8	92.0	92.0	92.0	92.0
54"		73.6	92.0	92.0	92.0	92.0
60"		66.3	82.8	92.0	92.0	92.0



WIDTH (W) = W1
AT JAMB

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

Sealed: 8/1/2023 FL #22526



ANCHORS

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

ES-8860 ALUM WINDOW WALL SYSTEM (L.M.I.)

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

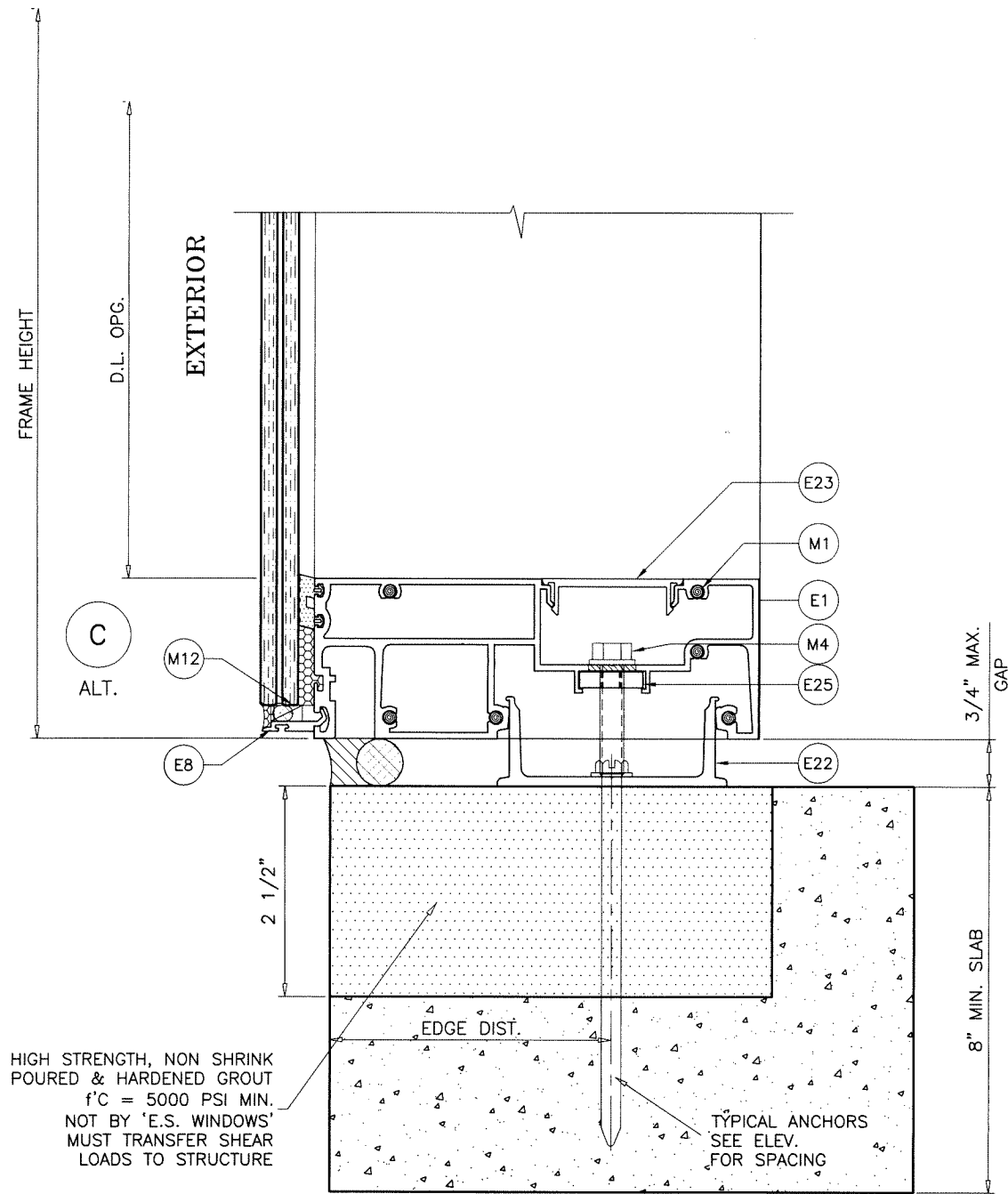
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no	date	by	description

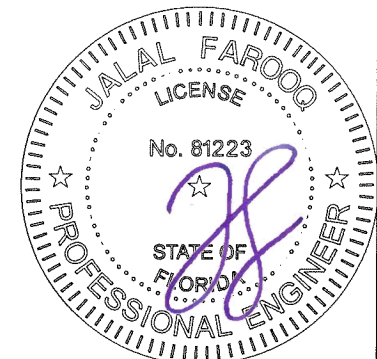
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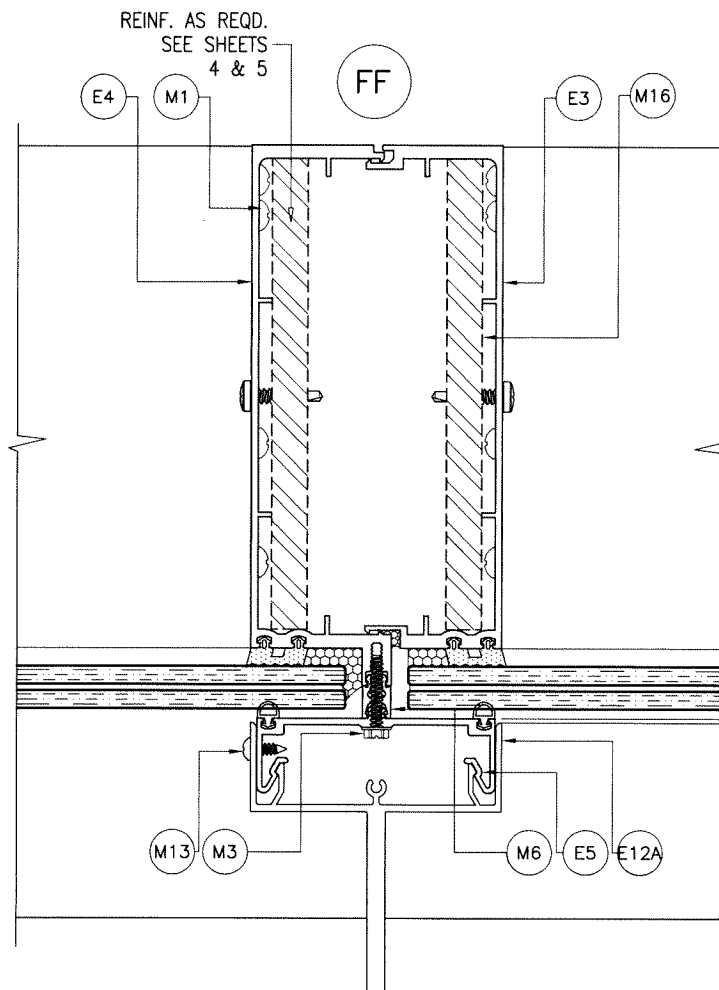
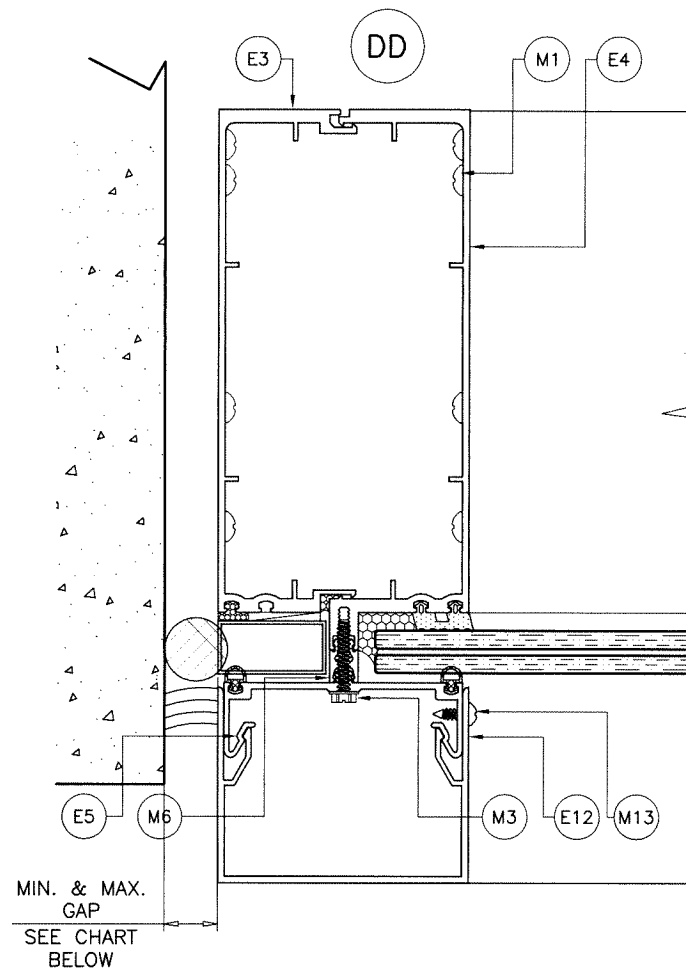
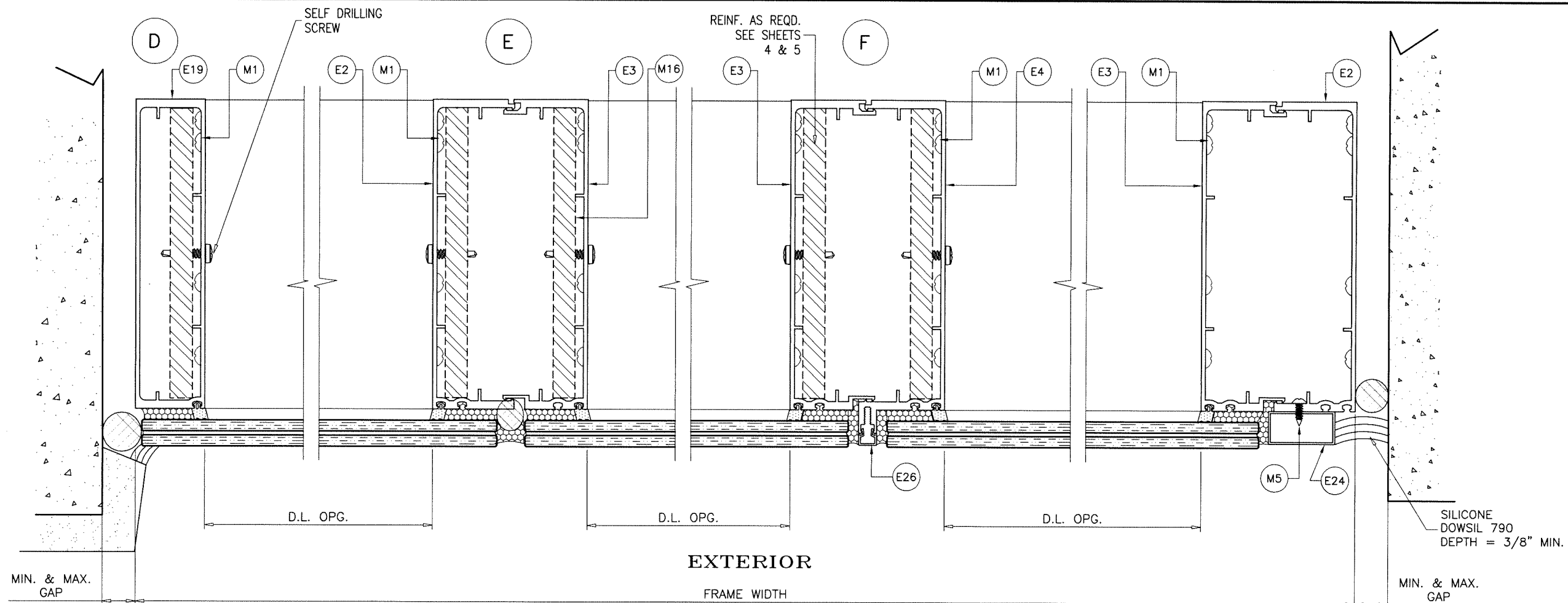
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Sealed: 8/1/2023 FL #22526



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)		STORE\18-01F-ES
ES-8860 ALUM WINDOW WALL SYSTEM (L.M.I.)		E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638-5151 FAX. (305) 638-5158
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no date	by description	chk. by:
drawing no. 18-01F		sheet 7.1 of 14



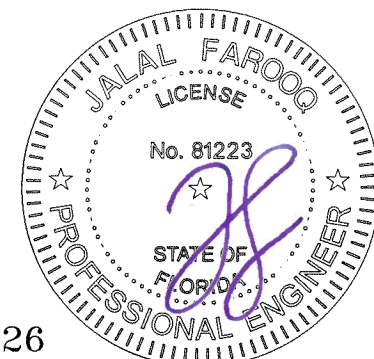
MAX. FRAME HEIGHT	GAP	
	MIN.	MAX.
120"	7/16"	3/4"
168"	9/16"	3/4"
213"	11/16"	3/4"

NOTE:
 MAX. MOVEMENT CONSIDERED=100% STRETCH.
 PLEASE REFER TO SEALANT MANUFACTURER'S DATA AND APPLICATION MANUAL FOR COMPATABILITY OF SEALANT TO SUBSTRATE & WINDOWALL 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: 8/1/2023



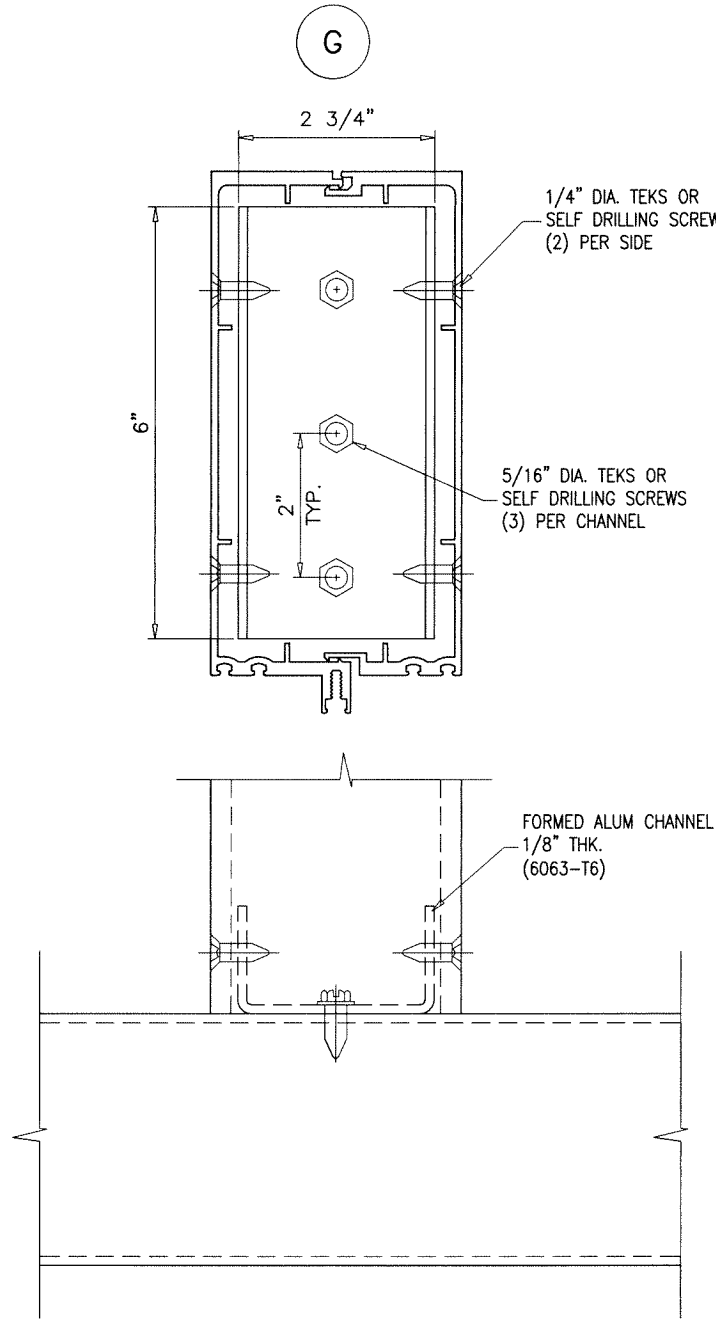
FL #22526

al-farooq
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

ES-8860 ALUM WINDOW WALL SYSTEM (L.M.I.)

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

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drawing no.	18-01F			
sheet	8 of 14			

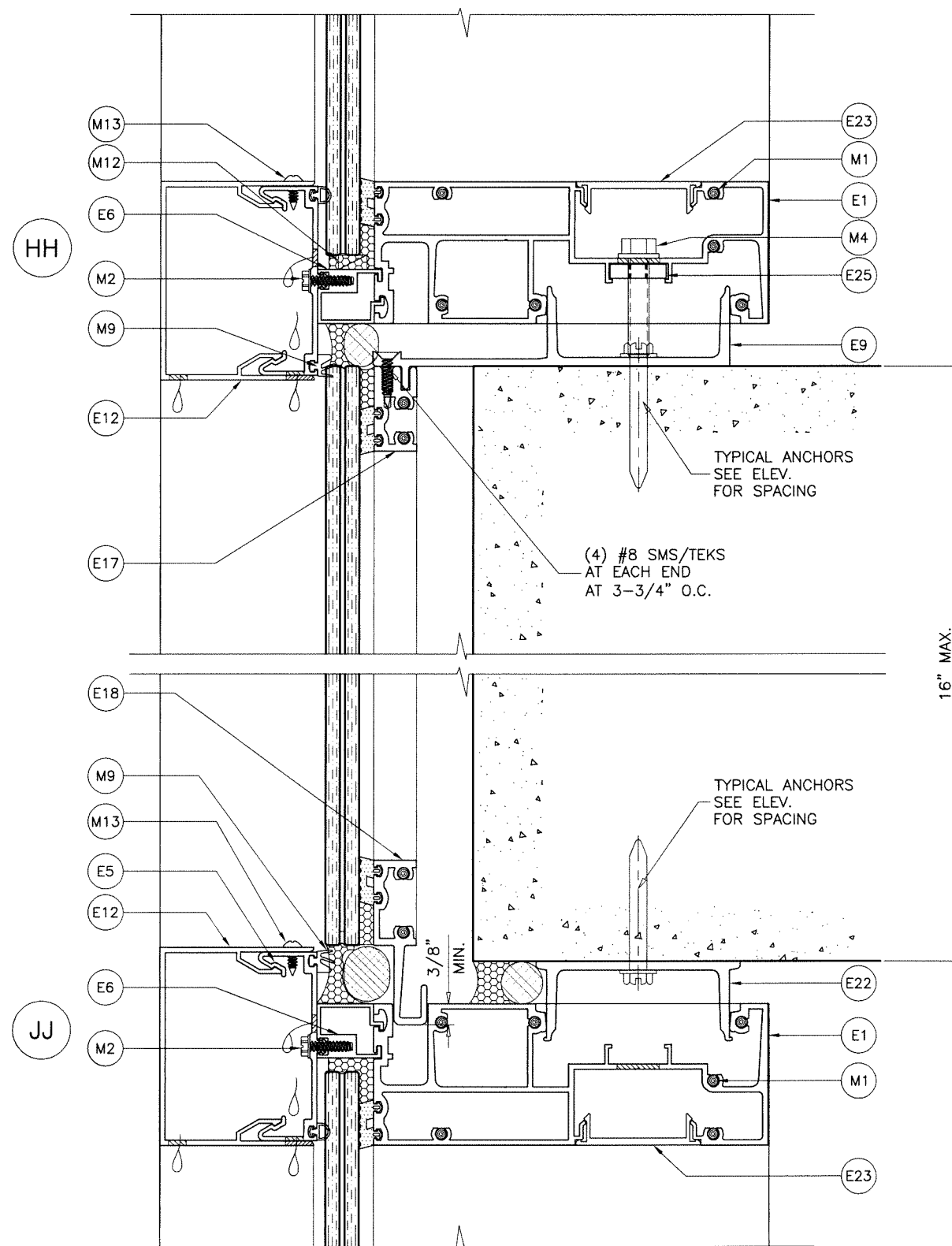
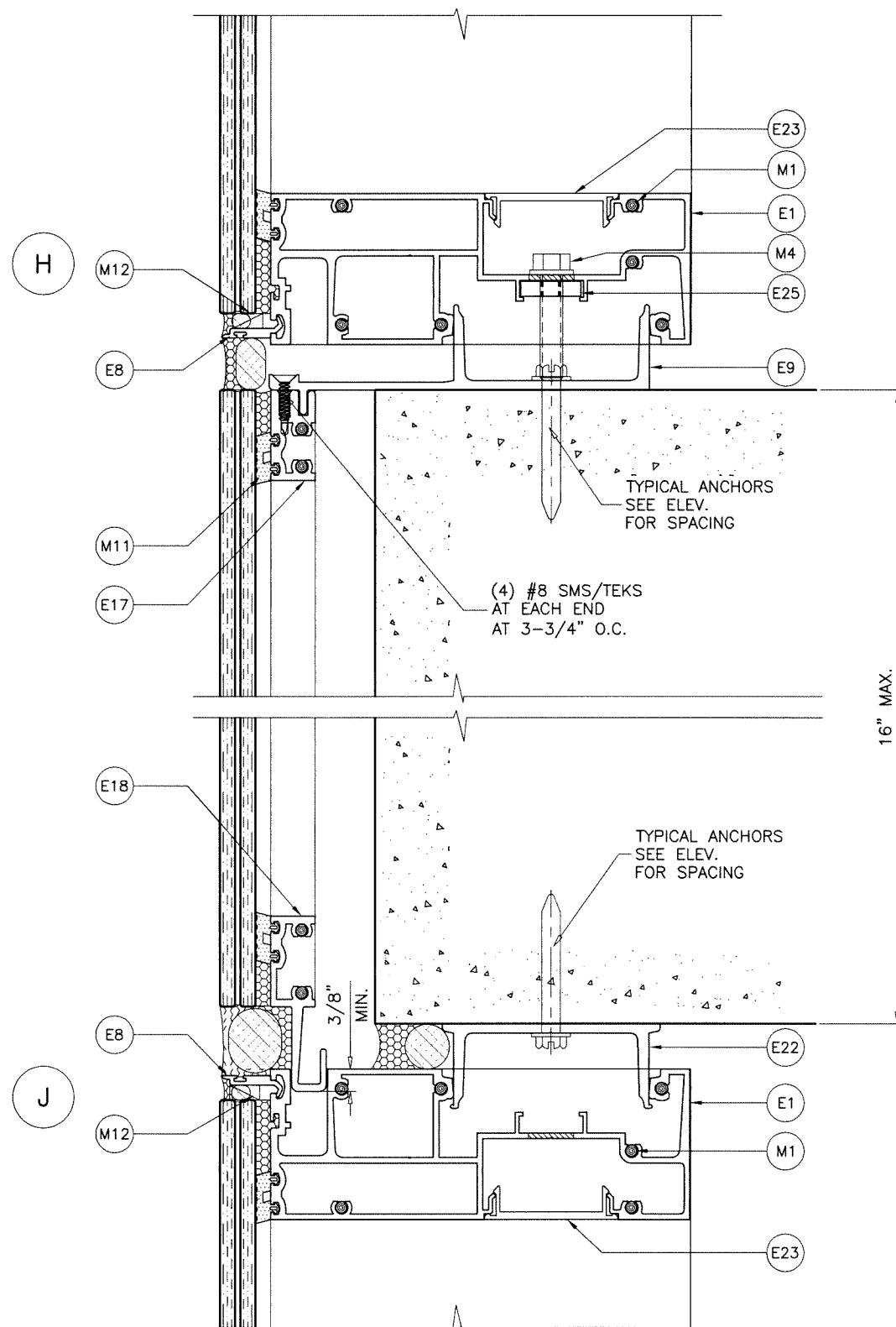


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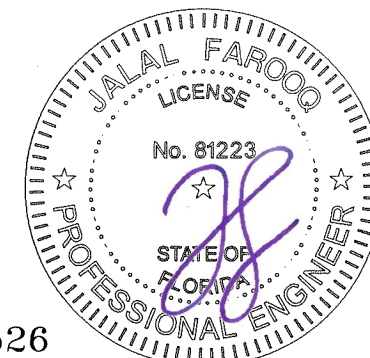


FL #22526

AL-FAROOQ CORPORATION ENGINEERS & PRODUCT DEVELOPMENT 9360 SUNSET DRIVE, SUITE 220 MIAMI, FLORIDA 33173 TEL. (305) 264-8100 FAX. (305) 262-6978 STORE 18-01F-ES																									
ES-8860 ALUM WINDOW WALL SYSTEM (L.M.I.)																									
E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638-5151 FAX. (305) 638-5158																									
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drawing no. 18-01F	sheet 9 of 14																								



Sealed: 8/1/2023



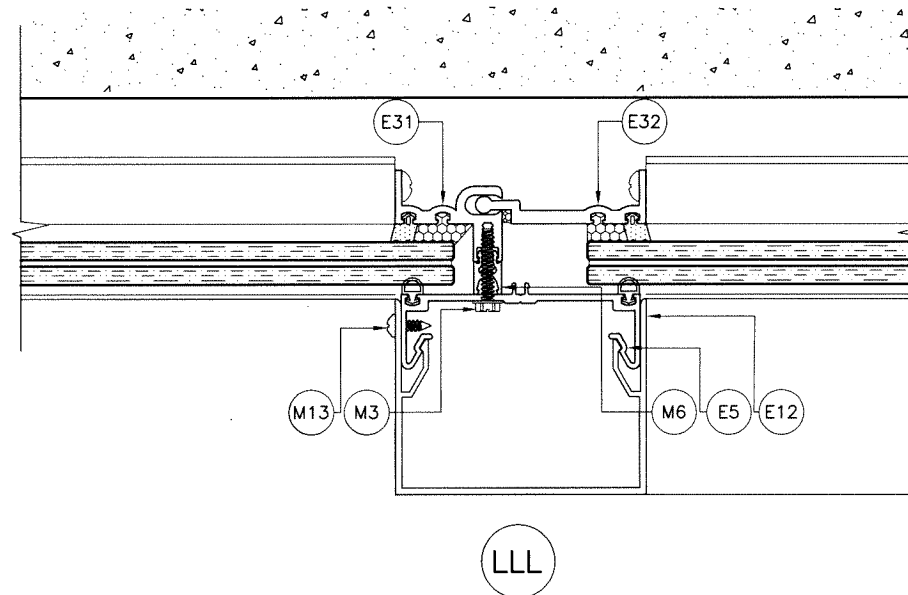
FL #22526

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

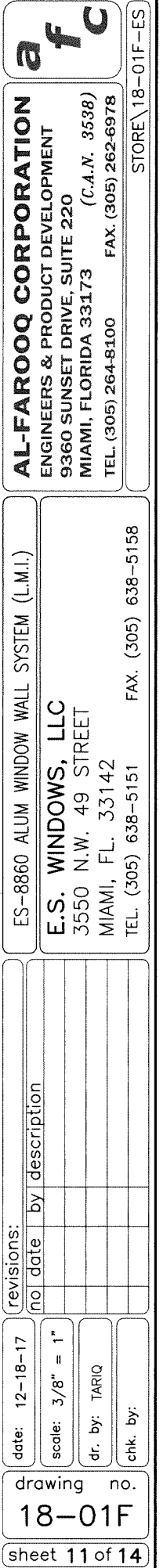
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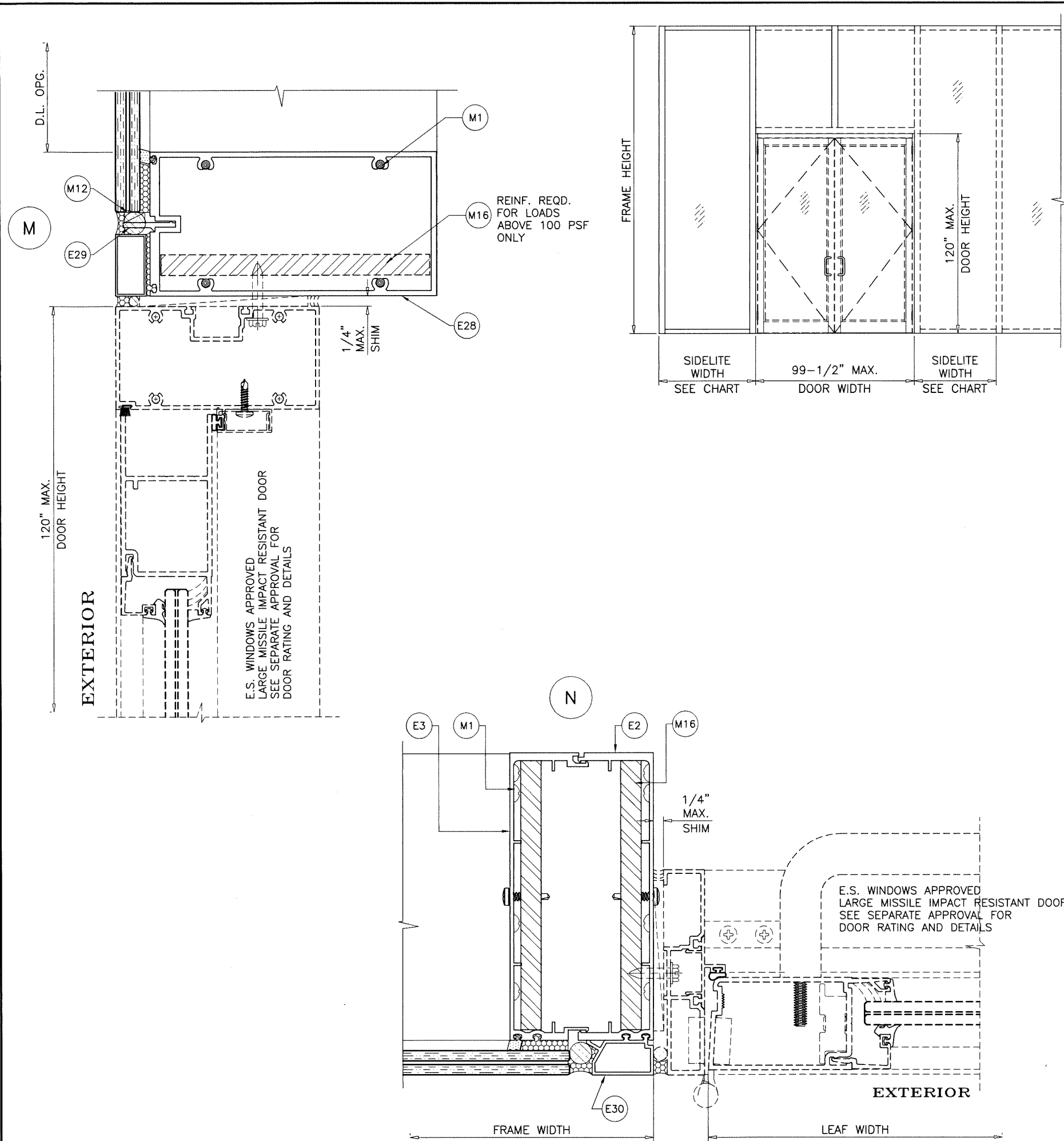
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142

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chk. by:			
drawing no. 18-01F			
sheet 10 of 14			



FL #22526





DOOR MULLION LOAD CAPACITY - PSF			
NOMINAL DIMS.		MULL 'DM'	
SIDELITE WIDTH INCHES	FRAME HEIGHT INCHES	EXT.(+)	INT.(-)
30	132		130.0
36			130.0
42			130.0
48			130.0
54			130.0
60			130.0
66	138		130.0
72			130.0
30			130.0
36			130.0
42			130.0
48			130.0
54			130.0
60			130.0
66			130.0
30	144		130.0
36			130.0
42			130.0
48			130.0
54			130.0
60			130.0
66	150		130.0
72			130.0
30			130.0
36			130.0
42			130.0
48			130.0
54			130.0
60			130.0
30	156		130.0
36			130.0
42			130.0
48			130.0
54			130.0
60			130.0
30	162		130.0
36			130.0
42			130.0
48			130.0
54			128.8
60			123.3
30	168		130.0
36			130.0
42			129.0
48			123.1
54			117.8
60			112.5
30	174		130.0
36			124.4
42			118.5
48			113.2
54			108.4
60			103.1

DOOR MULLION LOAD CAPACITY - PSF			
NOMINAL DIMS.		MULL 'DM'	
SIDELITE WIDTH INCHES	FRAME HEIGHT INCHES	EXT.(+)	INT.(-)
30	180		120.7
36			114.8
42			109.5
48			104.6
54			100.2
60			95.8
30	186		111.8
36			106.4
42			101.5
48			97.1
54			92.7
60			88.3
30	192		104.1
36			99.1
42			94.6
48			90.4
54			86.2
60			82.0
30	198		97.2
36			92.6
42			88.4
48			84.5
54			80.6
60			76.7
30	204		91.1
36			86.8
42			82.9
48			79.3
54			75.8
60			72.3

FL #22526



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ES-8860 ALUM WINDOW WALL SYSTEM (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

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chk. by:

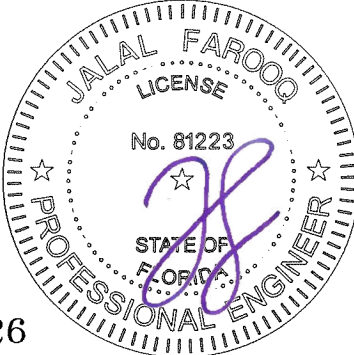
drawing no.
18-01F
sheet 12 of 14

ITEM NO.	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
E1	ES-8860-007	AS REQD.	FRAME HEAD AND SILL	6063-T6	-
E2	ES-8860-008	AS REQD.	SSG FEMALE MULLION	6005-T5	-
E3	ES-8860-009	AS REQD.	SSG AND CAPTURED MALE MULLION	6005-T5	-
E4	ES-8860-010	AS REQD.	SSG AND CAPTURED MALE MULLION	6005-T5	-
E5	ES-8860-011	AS REQD.	PRESSURE PLATE	6063-T6	-
E6	ES-8860-012	AS REQD.	PRESSURE PLATE ADAPTER (HEAD/SILL)	6063-T6	-
E8	ES-8860-014	AS REQD.	SETTING CHAIR	6063-T6	-
E9	ES-8860-015	AS REQD.	ANCHOR	6063-T6	-
E10	ES-8860-016	AS REQD.	PRESSURE PLATE COVER (HEAD/SILL)	6063-T6	-
E11	ES-8860-017	AS REQD.	HEAD/SILL PRESSURE PLATE	6063-T6	-
E11A	ES-8860-011	AS REQD.	HORIZONTAL/VERTICAL PRESSURE PLATE	6063-T6	-
E12	ES-8860-018	AS REQD.	PRESSURE PLATE COVER	6063-T6	-
E12A	ES-8860-401	AS REQD.	PRESSURE PLATE COVER	6063-T6	-
E13	ES-8860-001	AS REQD.	SSG/CAPTURED MULLION SLAD COVER	6063-T6	-
E14	ES-8860-002	AS REQD.	SSG MULLION SLAD COVER	6063-T6	-
E15	ES-8860-003	AS REQD.	SSG MULLION SLAD COVER	6063-T6	-
E16	ES-8860-004	AS REQD.	JAMB SLAD COVER	6063-T6	-
E17	ES-8860-005	AS REQD.	HEAD SLAD COVER	6063-T6	-
E18	ES-8860-006	AS REQD.	SILL SLAD COVER	6063-T6	-
E19	ES-WW8832-104	AS REQD.	JAMB MULLION	6063-T6	-
E20	ES-WW8832-101	AS REQD.	HORIZONTAL MULLION	6005-T5	-
E21	ES-WW8832-107	AS REQD.	SETTING CHAIR (LAM. GLASS)	6005-T5	-
E22	ES-7004	AS REQD.	ANCHOR	6005-T5	-
E23	ES-7003A	AS REQD.	SNAP COVER	6063-T5	-
E24	ES-T-097	AS REQD.	FILLER TUBE	6063-T6	-
E25	ALU-P-020	AS REQD.	SILL LEVELER	6063-T6	-
E26	ES-8860-021	AS REQD.	COVER	6063-T5	-
E27	ES-8860-022	AS REQD.	HORIZONTAL MULLION	6063-T6	-
E28	GW-7000-129	AS REQD.	HORIZONTAL MULLION SSG	6063-T6	-
E29	GW-5250-206	AS REQD.	STRUCTURAL GLAZING SHELF	6063-T6	-
E30	ES-8860-025	AS REQD.	JAMB FILLER	6063-T5	-
E31	ES-8860-023	AS REQD.	SSG/CAPTURED MULLION SLAD COVER	6063-T6	-
E32	ES-8860-024	AS REQD.	SSG MULLION SLAD COVER	6063-T5	-
M1	#12 X 1-1/2"	AS REQD.	FRAME ASSEMBLY FASTENERS	ST/ST	PH SMS
M2	#10 X 3/4"	AS REQD.	HORIZONTAL PRESSURE PLATE FASTENERS	ST/ST	HWH SMS
M3	#10 X 1"	AS REQD.	VERTICAL PRESSURE PLATE FASTENERS	ST/ST	HWH SMS
M4	3/8-16 X 2"	AS REQD.	LEVELING SCREW	ST/ST	HWH TAP BOLT
M5	#8 X 1/2"	AS REQD.	FILLER TUBE FASTENERS	ST/ST	PH SMS
M6	W5250-301	AS REQD.	9/16" CW SPACER	-	-
M7	WW7000-NE003	AS REQD.	SPACER GASKET	SILICONE	DUROMETER 70±5 SHORE A
M8	WW5250-NS02	AS REQD.	INTERIOR GASKET	SILICONE	DUROMETER 60±5 SHORE A
M8A	ES-8860-G01	AS REQD.	INTERIOR GASKET	SILICONE	DUROMETER 60±5 SHORE A
M9	ES-W625-G03A	AS REQD.	EXTERIOR GASKET (CAPTURED VERT. MULLION)	SILICONE	DUROMETER 60±5 SHORE A
M10	-	AS REQD.	BUMPON SPACER, 4" LONG	SILICONE	DUROMETER 65±5 SHORE A
M11	ES-8860-G02	AS REQD.	INTERIOR GASKET	SILICONE	DUROMETER 70±5 SHORE A
M12	80-378A	2/ LITE	SETTING BLOCKS AT 1/4 POINTS (LAM. GLASS)	EPDM	DUROMETER 85±5 SHORE A
M13	#8 X 1/2"	AS REQD.	PRESSURE PLATE COVER FASTENERS	ST/ST	FH SMS
M14	-	AS REQD.	7/8" OPEN CELL FOAM BACKER ROD AT VERTICAL	POLYETHYLENE	-
M15	-	AS REQD.	3/8" OPEN CELL FOAM BACKER ROD AT HORIZONTAL	POLYETHYLENE	-
M16	-	AS REQD.	MULLION REINF. BAR (1/2" X 6-1/2")	STEEL	-

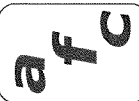
SEALANTS:

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

Sealed: 8/1/2023



FL #22526

**AL-FAROOQ CORPORATION**
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
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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: 12-18-17

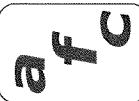
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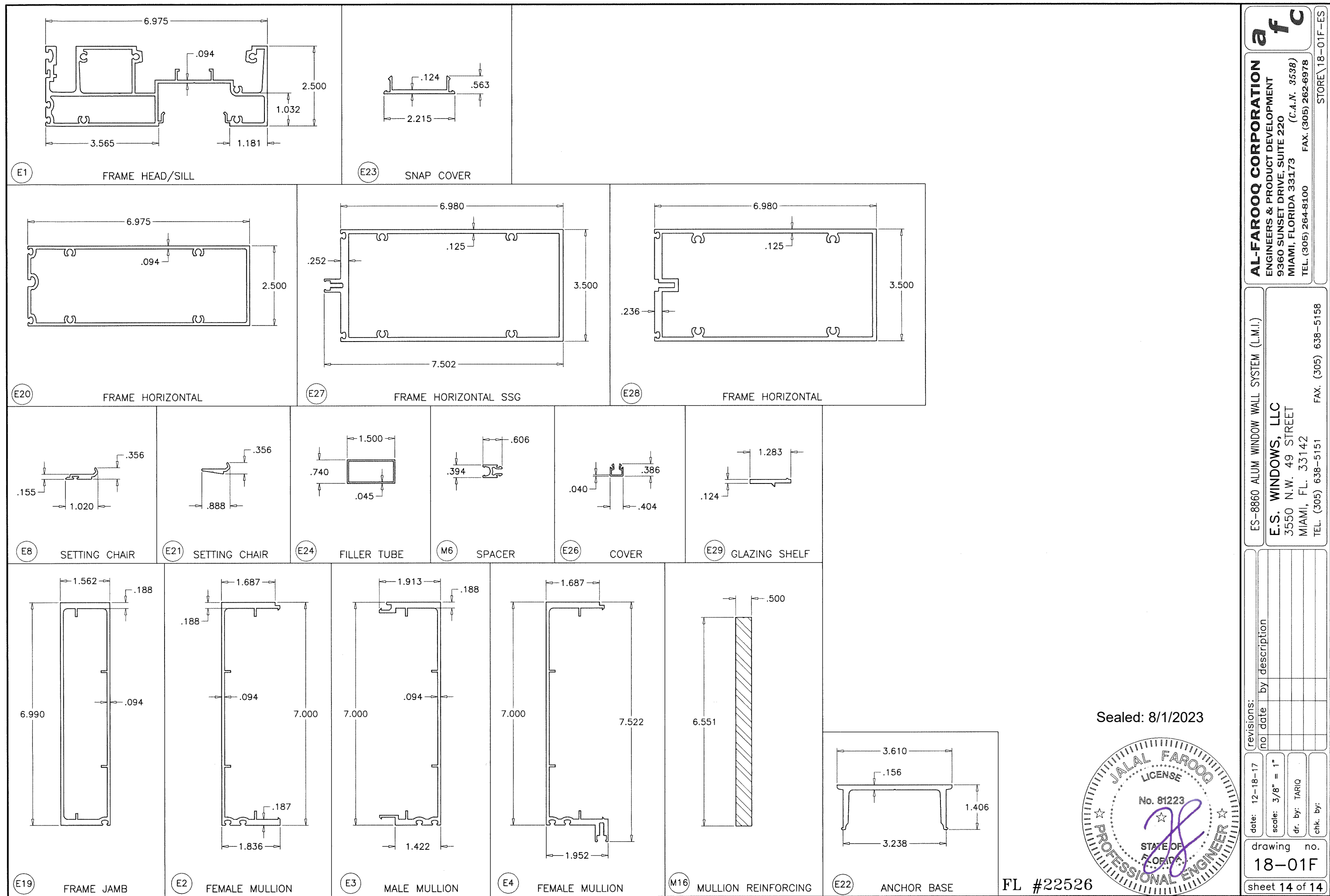
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chk. by:

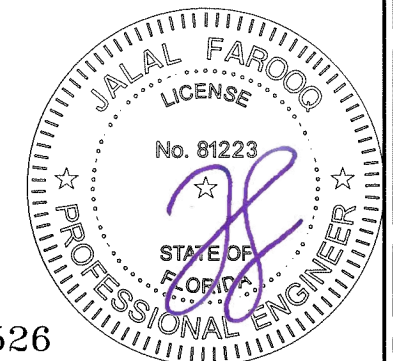
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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978

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ES-8860 ALUM WINDOW WALL SYSTEM (L.M.I.)

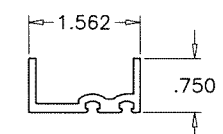
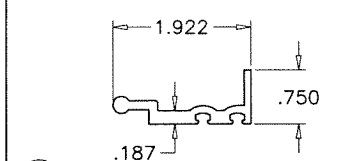
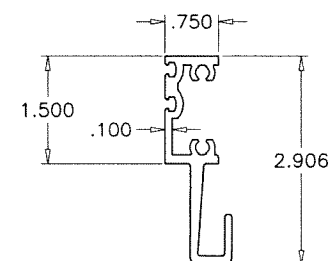
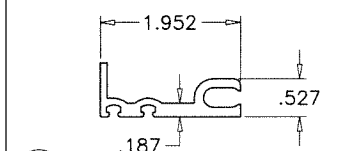
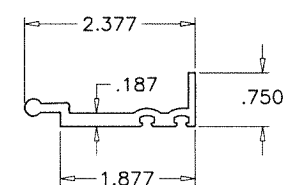
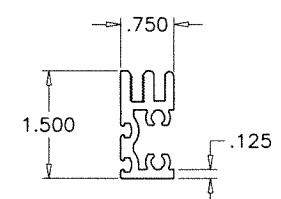
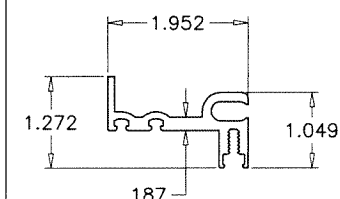
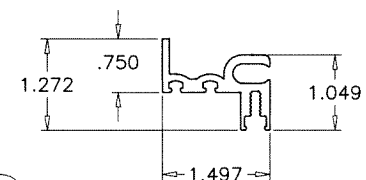
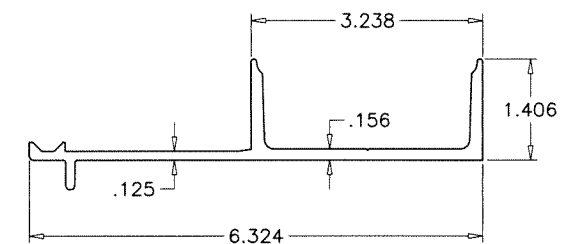
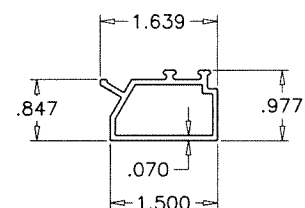
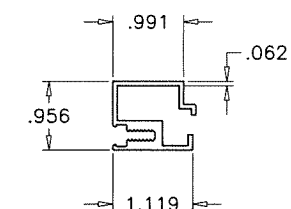
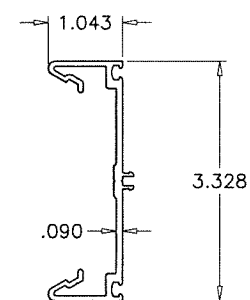
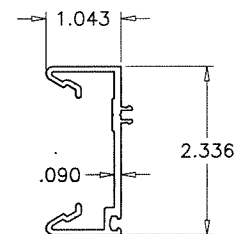
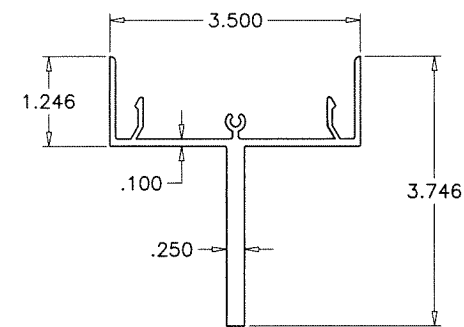
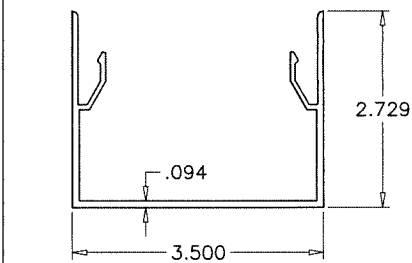
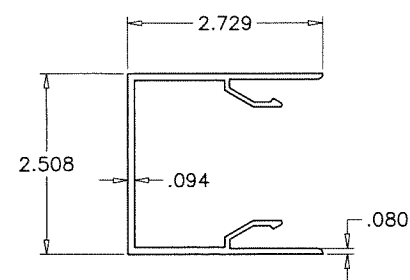
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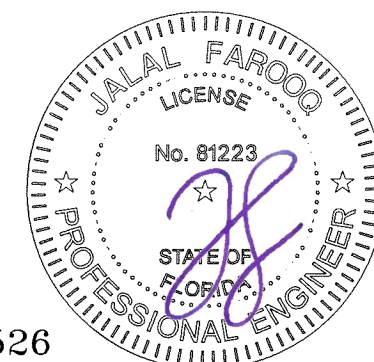
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chk. by:

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18-01F
sheet 14 of 14

FL #22526



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FL #22526

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