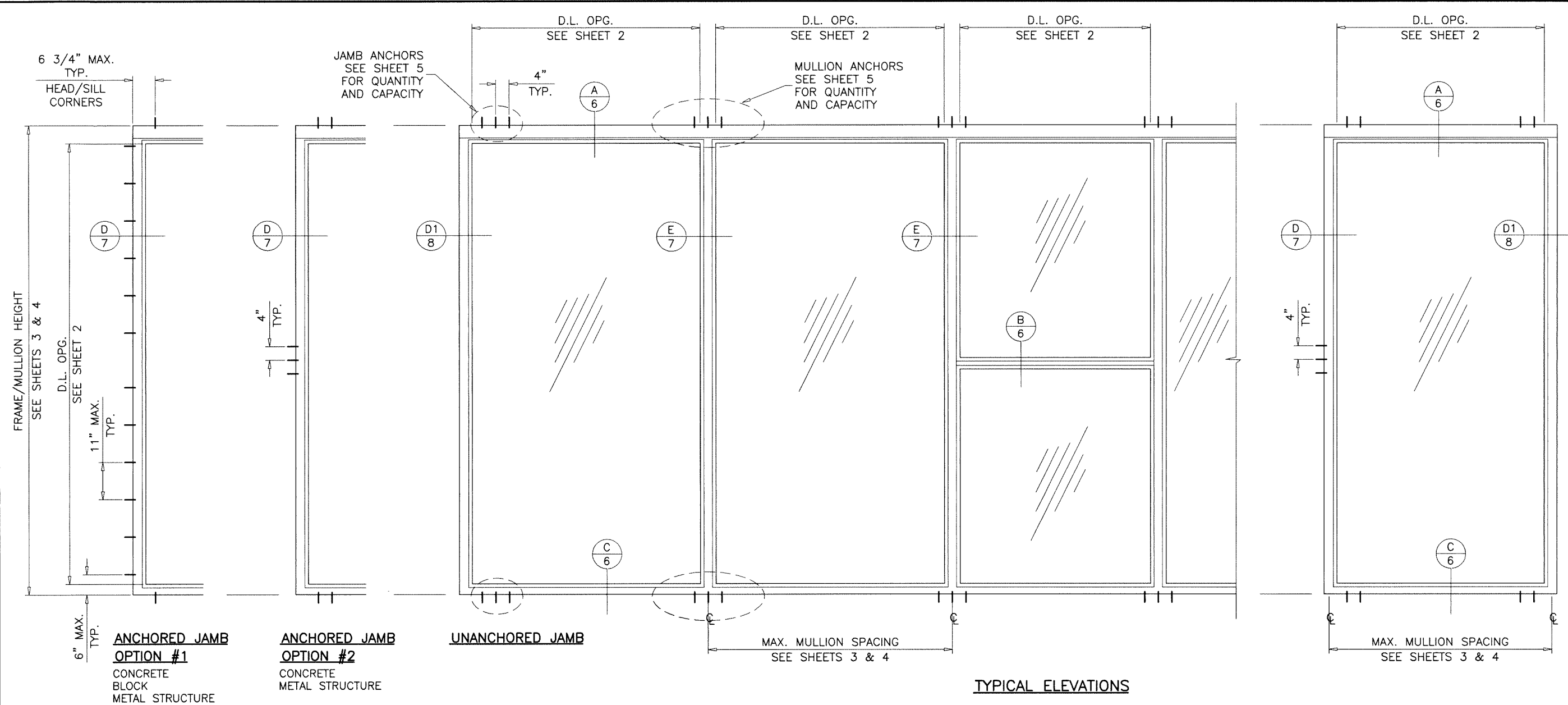




SERIES 7000XL ALUMINUM WINDOW WALL SYSTEM

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.

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 2 FOR GLASS DESIGN LOAD CAPACITY.
- STEP 3** CHECK MULLION DESIGN LOAD CAPACITY FOR A GIVEN SPACING AND HEIGHT USING CHARTS ON SHEETS 3 & 4. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4** CHECK ANCHOR CAPACITY FOR WINDOW WALL SYSTEM USING CHARTS ON SHEET 5. THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 5** THE LOWEST VALUE RESULTING FROM STEPS 2 THRU 4 THAT EXCEED THE DESIGN WIND PRESSURES DETERMINED THRU STEP 1 SHALL APPLY TO ENTIRE SYSTEM.
- STEP 6** FOR UNANCHORED JAMBS, USING SHEET 7, DETERMINE THE MIN. & MAX. GAP DIMENSIONS.

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.

INSUL. LAM. GLASS
SMALL MISSILE IMPACT

Sealed: 10/24/2024

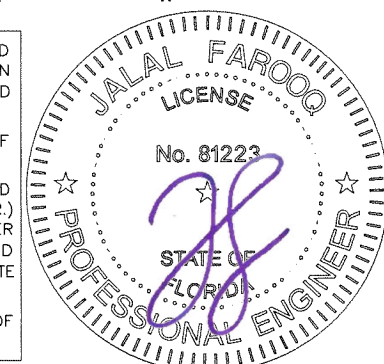
FL #47097

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.



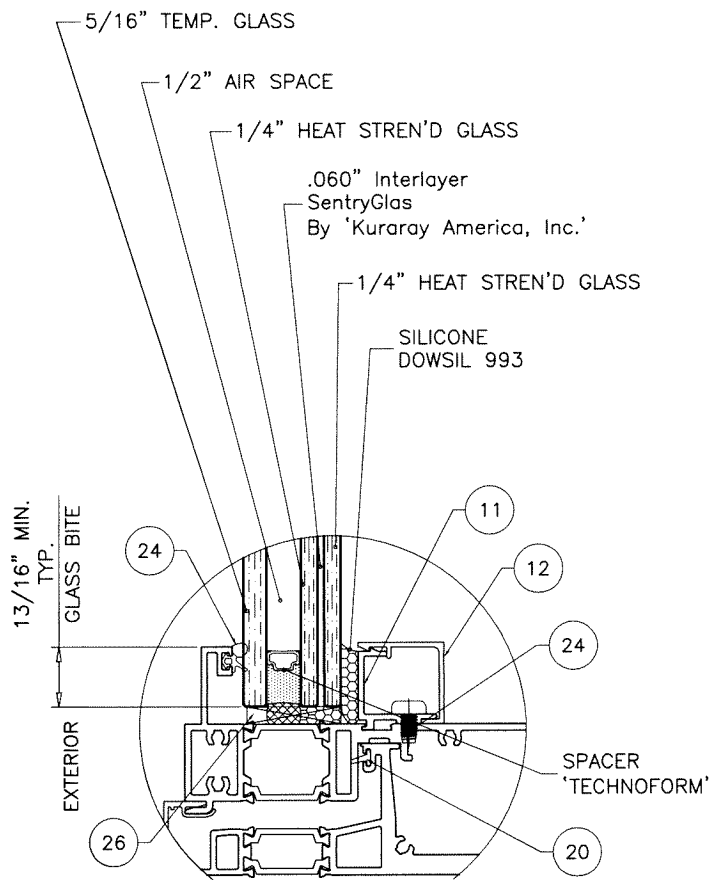
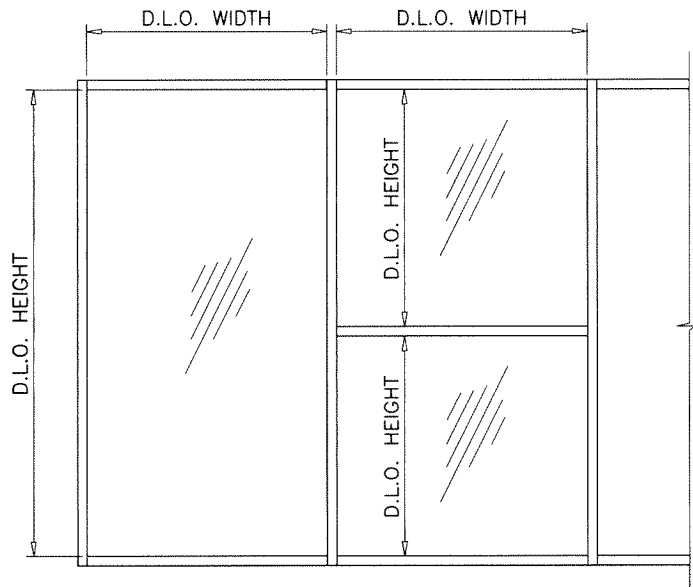
af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
WWW.AFCENG.COM
STORE 24-77F-RWW
FBPE #3538

SERIES 7000XL ALUMINUM WINDOW WALL SYS. (S.M.I.)
REFLECTION WINDOW + WALL
2525 North Elston Avenue
Chicago, Illinois 60647
Phone: 773 770 0377 www.reflectionwindow.com

revisions:		no		date		by		description	
date:	10-17-24	scale:	3/8"=1'-0"	dr. by:	TARIQ	chk. by:		drawing no.	24-77F
								sheet 1 of 11	

GLASS DESIGN LOAD CAPACITY -- PSF			
NOMINAL DIMS.		INSUL. LAM. GLASS	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT.(+)	INT.(-)
43-3/8"	105-1/2"	110.0	130.0
49-3/8"		110.0	130.0
55-3/8"		110.0	117.3
59-3/8"		110.0	110.0
67-3/8"		97.8	97.8
73-3/8"		90.3	90.3
79-3/8"		83.8	83.8
43-3/8"	111-1/2"	110.0	130.0
49-3/8"		110.0	130.0
55-3/8"		110.0	117.3
59-3/8"		110.0	110.0
67-3/8"		97.8	97.8
73-3/8"		90.3	90.3
43-3/8"	123-1/2"	110.0	130.0
49-3/8"		110.0	130.0
55-3/8"		110.0	117.3
59-3/8"		110.0	110.0
67-3/8"	129-1/2"	97.8	97.8
43-3/8"		110.0	130.0
49-3/8"		110.0	127.5
55-3/8"		110.0	117.3
59-3/8"		110.0	110.0
43-3/8"	135-1/2"	110.0	130.0
49-3/8"		110.0	126.2
55-3/8"		110.0	116.6
59-3/8"		110.0	110.0
43-3/8"	141-1/2"	110.0	130.0
49-3/8"		110.0	125.1
55-3/8"		110.0	115.4
59-3/8"		110.0	110.0

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



GLAZING DETAIL
1-5/16" OVERALL NOMINAL GLASS

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

Sealed: 10/24/2024



GLASS

SERIES 7000XL ALUMINUM WINDOW WALL SYS. (S.M.I.)

REFLECTION WINDOW + WALL

2525 North Elston Avenue
Chicago, Illinois 60647
Phone: 773 770 0377 www.reflectionwindow.com

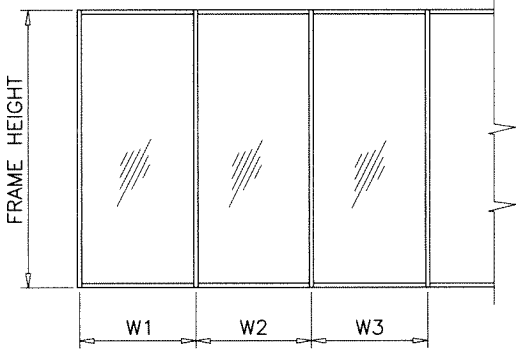
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
WWW.AFCENG.COM

STORE 24-77F-RWW
PBPE #3538

revisions:		no		date		by description	
date:	10-17-24	scale:	3/8" = 1"	dr. by:	TARIQ	chk. by:	
drawing no.		24-77F		sheet 2 of 11			

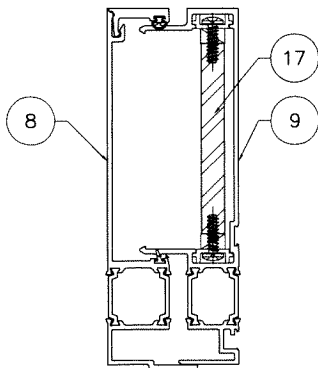
MULLION DESIGN LOAD CAPACITY - PSF WITHOUT INTERMEDIATE HORIZONTALS									
NOMINAL DIMS.		JAMB 'J1'		JAMB 'J2'		MULLION 'MF1' & 'ZM1'		MULLION 'MF2' & 'ZM2'	
WIDTH (W)	FRAME HEIGHT MULL LENGTH	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
48"	114"	110.0	130.0	110.0	130.0	110.0	130.0	110.0	130.0
54"		110.0	130.0	110.0	130.0	110.0	130.0	110.0	130.0
60"		110.0	130.0	110.0	130.0	110.0	130.0	110.0	130.0
64"		110.0	130.0	110.0	130.0	110.0	128.9	110.0	130.0
72"		110.0	130.0	110.0	130.0	110.0	118.3	110.0	130.0
78"		110.0	130.0	110.0	130.0	110.0	112.2	110.0	130.0
84"		110.0	130.0	110.0	130.0	107.5	107.5	110.0	130.0
48"	120"	110.0	130.0	110.0	130.0	110.0	130.0	110.0	130.0
54"		110.0	130.0	110.0	130.0	110.0	130.0	110.0	130.0
60"		110.0	130.0	110.0	130.0	110.0	121.2	110.0	130.0
64"		110.0	130.0	110.0	130.0	110.0	115.0	110.0	130.0
72"		110.0	130.0	110.0	130.0	105.2	105.2	110.0	130.0
78"		110.0	129.4	110.0	130.0	99.5	99.5	110.0	130.0
84"		110.0	129.4	110.0	130.0	99.5	99.5	110.0	130.0
48"	126"	110.0	130.0	110.0	130.0	110.0	130.0	110.0	130.0
54"		110.0	130.0	110.0	130.0	110.0	119.3	110.0	130.0
60"		110.0	130.0	110.0	130.0	109.0	109.0	110.0	130.0
64"		110.0	130.0	110.0	130.0	103.3	103.3	110.0	130.0
72"		110.0	122.5	110.0	130.0	94.2	94.2	110.0	123.9
48"	132"	110.0	130.0	110.0	130.0	110.0	120.2	110.0	130.0
54"		110.0	130.0	110.0	130.0	108.1	108.1	110.0	130.0
60"		110.0	128.3	110.0	130.0	98.6	98.6	110.0	129.7
64"		110.0	121.5	110.0	130.0	93.4	93.4	110.0	122.8
72"		110.0	110.5	110.0	130.0	84.9	84.9	110.0	111.7
48"	138"	110.0	130.0	110.0	130.0	109.5	109.5	110.0	130.0
54"		110.0	128.0	110.0	130.0	98.4	98.4	110.0	129.4
60"		110.0	116.6	110.0	130.0	89.7	89.7	110.0	117.9
64"		110.0	110.4	110.0	130.0	84.8	84.8	110.0	111.6
48"	144"	110.0	128.4	110.0	130.0	98.7	98.7	110.0	129.8
54"		110.0	115.5	110.0	130.0	88.8	88.8	110.0	116.8
60"		105.4	105.4	110.0	130.0	81.0	81.0	106.6	106.6
64"		99.8	99.8	110.0	124.0	76.7	76.7	100.9	100.9
48"	150"	110.0	113.2	110.0	130.0	87.0	87.0	110.0	114.4
54"		101.7	101.7	110.0	126.4	78.2	78.2	102.9	102.9
60"		92.7	92.7	110.0	115.2	71.3	71.3	93.8	93.8
64"		87.7	87.7	109.0	109.0	67.4	67.4	88.7	88.7

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



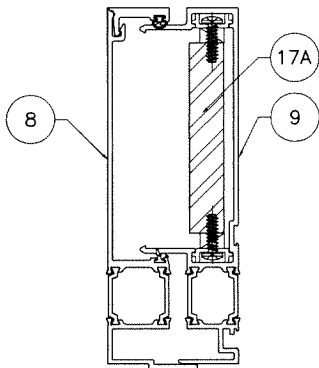
WIDTH (W) = W1
AT JAMB

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



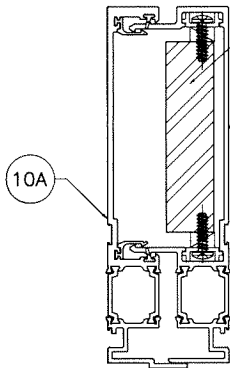
JAMB 'J1'

	Ix IN^4	Sx IN^3
ALUMINUM	7.320	2.489
STEEL	2.400	1.219
TOTAL	14.210	
Ix ALUM + Ix STL X 2.9	14.210	



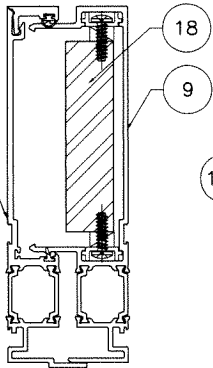
JAMB 'J2'

	Ix IN^4	Sx IN^3
ALUMINUM	7.320	2.489
STEEL	3.600	1.829
TOTAL	17.656	
Ix ALUM + Ix STL X 2.9	17.656	

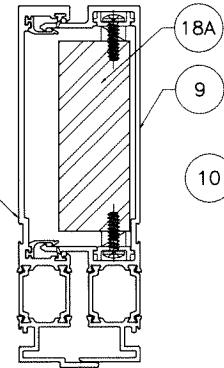


MULLION 'MF1'

	Ix IN^4	Sx IN^3
ALUMINUM	7.479	2.551
STEEL	5.004	2.542
TOTAL	21.845	
Ix ALUM + Ix STL X 2.9	21.845	

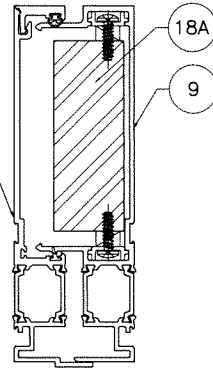


MULLION 'ZM1'



MULLION 'MF2'

	Ix IN^4	Sx IN^3
ALUMINUM	7.479	2.551
STEEL	7.404	3.761
TOTAL	28.736	
Ix ALUM + Ix STL X 2.9	28.736	



MULLION 'ZM2'

Sealed: 10/24/2024



FL #47097

SERIES 7000XL ALUMINUM WINDOW WALL SYS. (S.M.I.)

REFLECTION WINDOW + WALL

2525 North Elston Avenue
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AL-FAROOQ CORPORATION

ENGINEERS & PRODUCT DEVELOPMENT

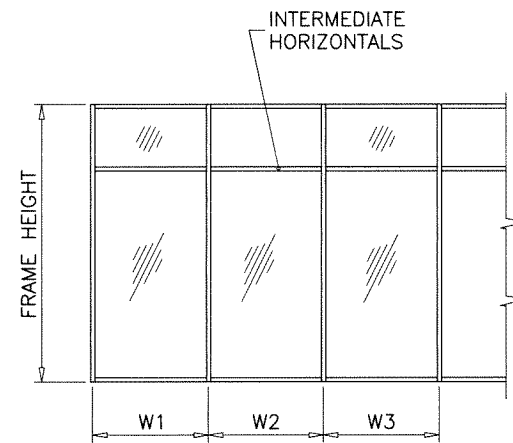
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173

TEL: (305) 264-8100 WWW.AFCENG.COM

STORE 24-77F-RWW

revisions:	no	date	by	description
date:	10-17-24			
scale:	3/8" = 1"			
dr. by:	TARIQ			
chk. by:				
drawing no.	24-77F			
sheet	3 of 11			

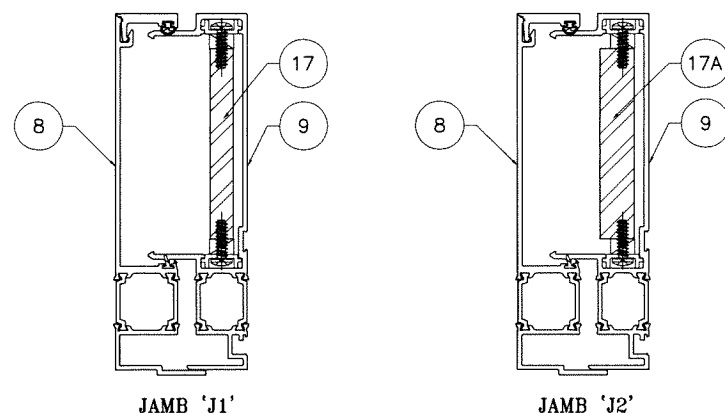
MULLION DESIGN LOAD CAPACITY – PSF WITH INTERMEDIATE HORIZONTALS									
NOMINAL DIMS.		JAMB 'J1'		JAMB 'J2'		MULLION 'MF1' & 'ZM1'		MULLION 'MF2' & 'ZM2'	
WIDTH (W)	FRAME HEIGHT MULL LENGTH	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
48"	114"	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
54"		110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
60"		110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
64"		110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
48"	120"	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
54"		110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
60"		110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
64"		110.0	110.0	110.0	110.0	104.4	104.4	110.0	110.0
48"	126"	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
54"		110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
60"		110.0	110.0	110.0	110.0	101.0	101.0	110.0	110.0
64"		110.0	110.0	110.0	110.0	94.7	94.7	110.0	110.0
48"	132"	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0
54"		110.0	110.0	110.0	110.0	102.2	102.2	110.0	110.0
60"		110.0	110.0	110.0	110.0	92.0	92.0	110.0	110.0
64"		110.0	110.0	110.0	110.0	86.2	86.2	110.0	110.0
48"	138"	110.0	110.0	110.0	110.0	105.2	105.2	110.0	110.0
54"		110.0	110.0	110.0	110.0	93.5	93.5	110.0	110.0
60"		109.5	109.5	110.0	110.0	84.2	84.2	110.0	110.0
64"		102.6	102.6	110.0	110.0	78.9	78.9	103.8	103.8
48"	144"	110.0	110.0	110.0	110.0	94.6	94.6	110.0	110.0
54"		109.4	109.4	110.0	110.0	84.1	84.1	110.0	110.0
60"		98.4	98.4	110.0	110.0	75.7	75.7	99.5	99.5
64"		92.3	92.3	110.0	110.0	70.9	70.9	93.3	93.3
48"	150"	108.9	108.9	110.0	110.0	83.7	83.7	110.0	110.0
54"		96.8	96.8	110.0	110.0	74.4	74.4	97.9	97.9
60"		87.1	87.1	108.2	108.2	66.9	66.9	88.1	88.1
64"		81.7	81.7	101.5	101.5	62.8	62.8	82.6	82.6



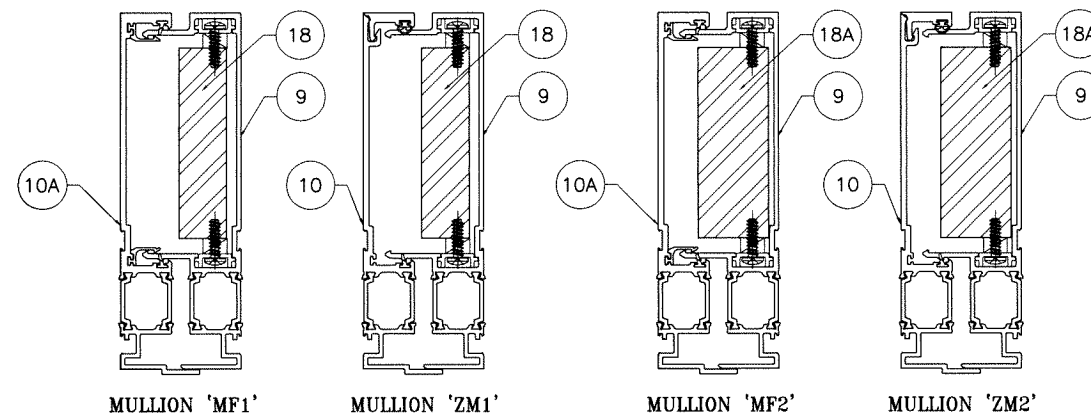
WIDTH (W) = W1
AT JAMB

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

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



	I_x IN ⁴	S_x IN ³
ALUMINUM	7.320	2.489
STEEL	2.400	1.219
TOTAL $I_x \text{ ALUM} + I_x \text{ STL} \times 2.9$	14.210	



	$I_x \text{ IN}^4$	$S_x \text{ IN}^3$
ALUMINUM	7.479	2.551
STEEL	5.004	2.542
TOTAL $I_x \text{ ALUM} + I_x \text{ STL} \times 2.9$	21.845	

	Ix IN^4	Sx IN^3
ALUMINUM	7.479	2.551
STEEL	7.404	3.761
TOTAL Ix ALUM + Ix STL X 2.9	28.736	

Sealed: 10/24/2024



FL #47097

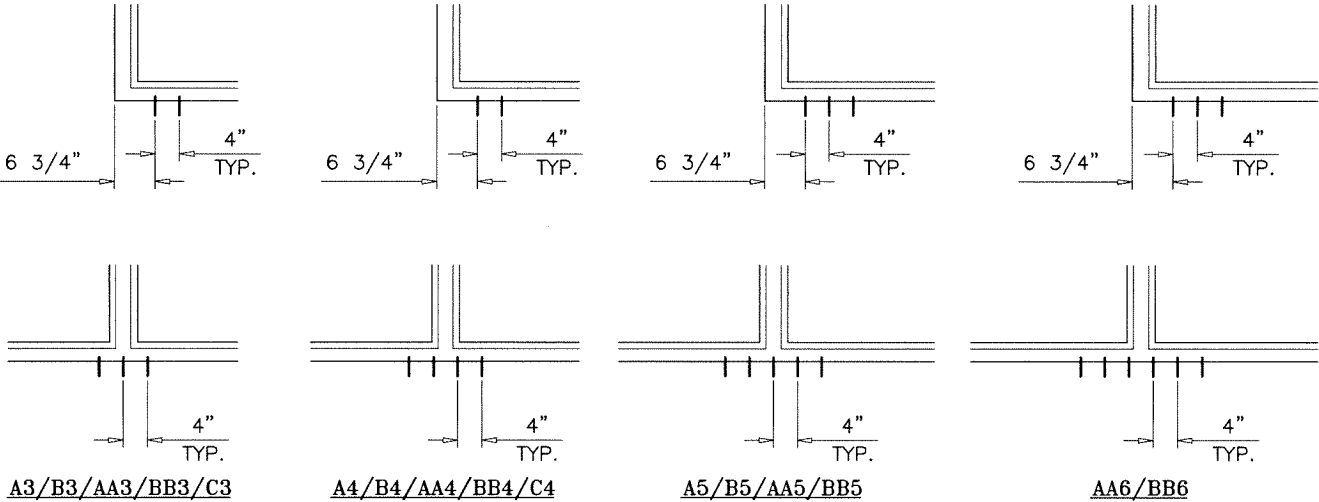
SERIES 7000XL ALUMINUM WINDOW WALL SYS. (S.M.I.)

REFLECTION WINDOW + WALL
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date: 10-17-24		revisions:	
scale: 3/8" = 1"		no	by description
dr. by: TARIQ			
chk. by:			
drawing no. 24-77F			
sheet 4 of 11			

ANCHOR LOAD CAPACITY - PSF												
WITH OR WITHOUT INTERMEDIATE HORIZONTALS												
NOMINAL DIMS.		ANCHOR TYPE 'A' & 'B'				ANCHOR TYPE 'AA' & 'BB'				ANCHOR TYPE 'C'		
		A3/B3	A4/B4	A5/B5	A6/B6	AA3/BB3	AA4/BB4	AA5/BB5	AA6/BB6	C3	C4	C5
WIDTH (W)	FRAME HEIGHT MULL LENGTH	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
48"	114"	130.0	130.0	130.0	130.0	11.6	130.0	130.0	130.0	130.0	130.0	130.0
54"		118.6	130.0	130.0	130.0	99.2	130.0	130.0	130.0	128.7	130.0	130.0
60"		106.7	130.0	130.0	130.0	89.3	119.1	130.0	130.0	115.8	130.0	130.0
64"		100.1	130.0	130.0	130.0	83.7	111.6	130.0	130.0	108.6	130.0	130.0
72"		88.9	118.6	130.0	130.0	74.4	99.2	124.0	130.0	96.5	128.7	130.0
78"		82.1	109.5	130.0	130.0	68.7	91.6	114.5	130.0	89.1	118.8	130.0
84"		76.2	101.7	127.1	130.0	63.8	85.1	106.3	130.0	82.7	110.3	130.0
48"	120"	126.8	130.0	130.0	130.0	106.1	130.0	130.0	130.0	130.0	130.0	130.0
54"		112.7	130.0	130.0	130.0	94.3	125.7	130.0	130.0	122.3	130.0	130.0
60"		101.4	130.0	130.0	130.0	84.8	113.1	130.0	130.0	110.0	130.0	130.0
64"		95.1	126.8	130.0	130.0	79.5	106.1	130.0	130.0	103.2	130.0	130.0
72"		84.5	112.7	130.0	130.0	70.7	94.3	117.8	130.0	91.7	122.3	130.0
78"		78.0	104.0	130.0	130.0	65.3	87.0	108.8	130.0	84.6	112.9	130.0
84"		72.1	98.1	127.1	130.0	60.4	81.1	103.9	130.0	79.7	107.0	130.0
48"	126"	120.7	130.0	130.0	130.0	101.0	130.0	130.0	130.0	130.0	130.0	130.0
54"		107.3	130.0	130.0	130.0	89.8	119.7	130.0	130.0	116.4	130.0	130.0
60"		96.6	128.8	130.0	130.0	80.8	107.7	130.0	130.0	104.8	130.0	130.0
64"		90.5	120.7	130.0	130.0	75.8	101.0	126.3	130.0	98.3	130.0	130.0
72"		80.5	107.3	130.0	130.0	67.3	89.8	112.2	130.0	87.3	116.4	130.0
48"	132"	115.2	130.0	130.0	130.0	96.4	128.5	130.0	130.0	125.0	130.0	130.0
54"		102.4	130.0	130.0	130.0	85.7	114.3	130.0	130.0	111.2	130.0	130.0
60"		92.2	122.9	130.0	130.0	77.1	102.8	128.5	130.0	100.0	130.0	130.0
64"		86.4	115.2	130.0	130.0	72.3	96.4	120.5	130.0	93.8	125.0	130.0
72"		76.8	102.4	130.0	128.0	64.3	85.7	107.1	130.0	83.4	111.2	130.0
48"	138"	110.2	130.0	130.0	130.0	92.2	123.0	130.0	130.0	119.6	130.0	130.0
54"		98.0	130.0	130.0	130.0	82.0	109.3	130.0	130.0	106.3	130.0	130.0
60"		88.2	117.6	130.0	130.0	73.8	98.4	123.0	130.0	95.7	127.6	130.0
64"		82.7	110.2	130.0	130.0	69.2	92.2	115.3	130.0	89.7	119.6	130.0
48"	144"	105.6	130.0	130.0	130.0	88.4	117.8	130.0	130.0	114.6	130.0	130.0
54"		93.9	125.2	130.0	130.0	78.6	104.7	130.0	130.0	101.9	130.0	130.0
60"		84.5	112.7	130.0	130.0	70.7	94.3	117.8	130.0	91.7	122.3	130.0
64"		79.2	105.6	130.0	130.0	66.3	88.4	110.5	130.0	86.0	114.6	130.0
48"	150"	101.4	130.0	130.0	130.0	84.8	113.1	130.0	130.0	110.0	130.0	130.0
54"		90.1	120.2	130.0	130.0	75.4	100.6	125.7	130.0	97.8	130.0	130.0
60"		81.1	108.2	130.0	130.0	67.9	90.5	113.1	130.0	88.0	117.4	130.0
64"		76.1	101.4	126.8	130.0	63.6	84.8	106.1	127.3	82.5	110.0	130.0

INTERPOLATION BETWEEN WIDTHS OR HEIGHTS ALLOWED.



ANCHORS TYPES: SEE SHEET 6 FOR DESCRIPTION

A3/B3/AA3/BB3/C3 = (3) ANCHORS AT MULLION CENTER OR (2) ANCHORS AT JAMB SIDE

A4/B4/AA4/BB4/C4 = (4) ANCHORS AT MULLION CENTER OR (2) ANCHORS AT JAMB SIDE

A5/B5/AA5/BB5 = (5) ANCHORS AT MULLION CENTER OR (3) ANCHORS AT JAMB SIDE

AA6/BB6 = (6) ANCHORS AT MULLION CENTER OR (3) ANCHORS AT JAMB SIDE

Sealed: 10/24/2024

MULLION

JALAL FAROOQ

LICENSE

No. 81223

STATE OF FLORIDA

PROFESSIONAL ENGINEER

date: 10-17-24

scale: 3/8" = 1"

dr. by: TARIQ

chk. by:

FL #47097

af c

AL-FAROOQ CORPORATION

ENGINEERS & PRODUCT DEVELOPMENT

9360 SUNSET DRIVE, SUITE 220

MIAMI, FLORIDA 33173

TEL: (305) 264-8100

WWW.AFCENG.COM

STORE\24-77F-RWW

FBPE #3538

SERIES 7000XL ALUMINUM WINDOW WALL SYS. (S.M.I.)

REFLECTION WINDOW + WALL

2525 North Elston Avenue

Chicago, Illinois 60647

Phone: 773 770 0377

www.reflectionwindow.com

revisions:

no	date	by	description

date: 10-17-24

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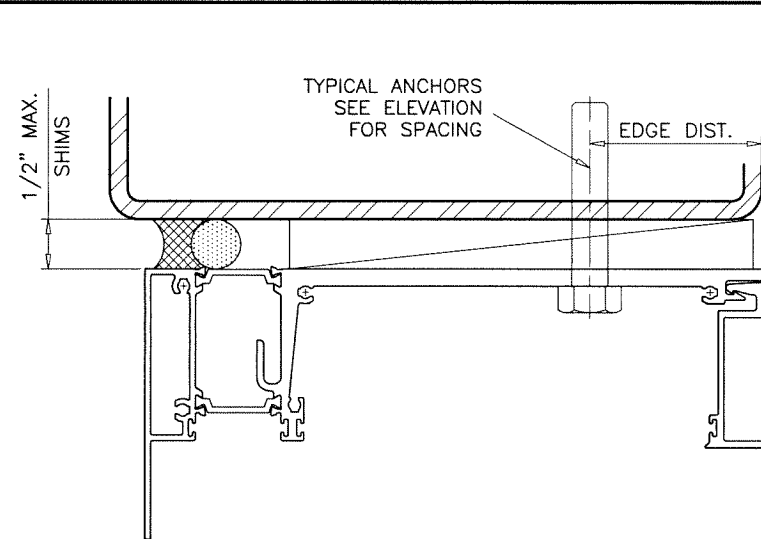
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chk. by:

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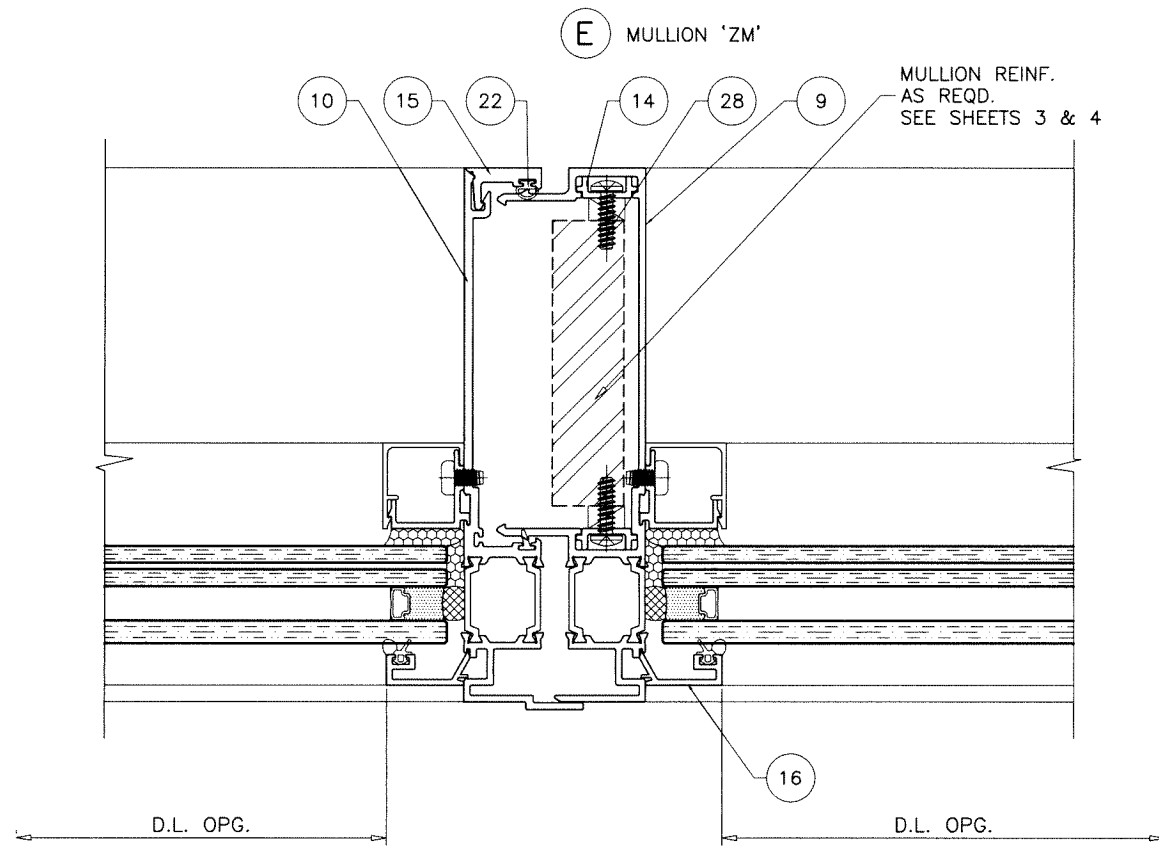
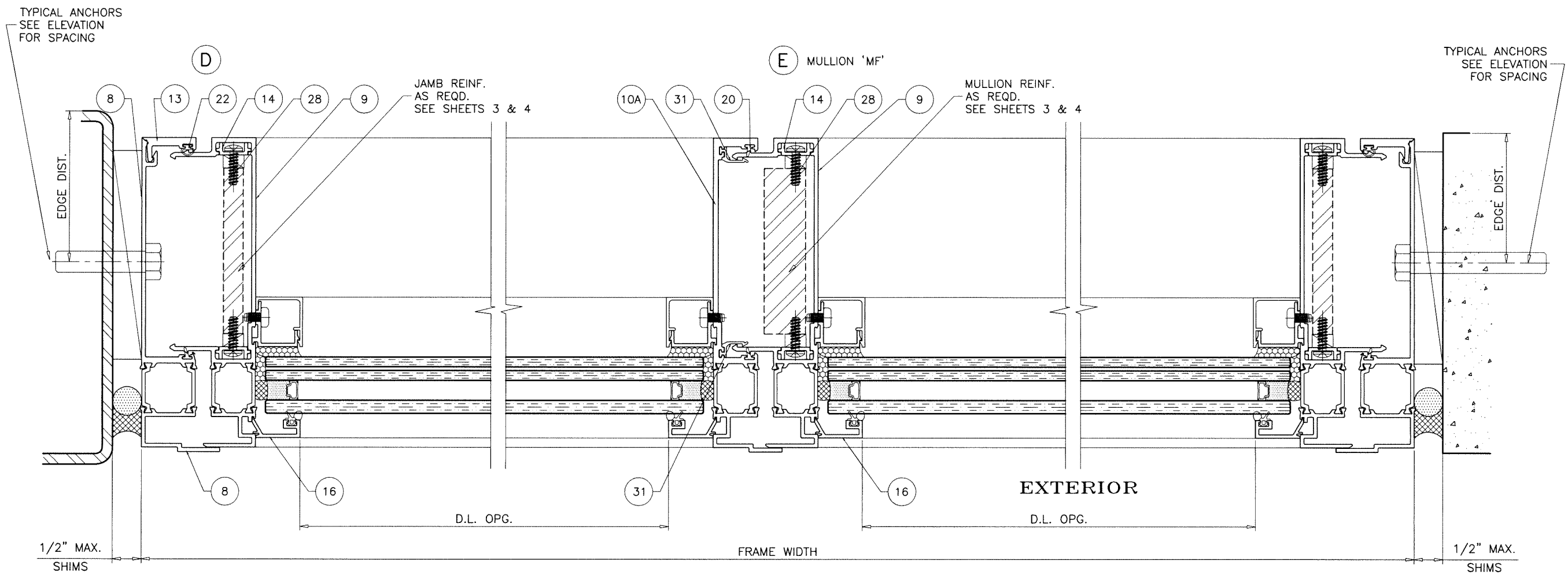
24-77F

sheet 5 of 11



A circular professional engineer seal for Jalal Farooq. The outer ring contains the text "JALAL FAROOQ" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside the ring, the word "LICENSE" is at the top and "STATE OF FLORIDA" is at the bottom, also separated by two stars. In the center, the license number "No. 81223" is printed above a large, stylized purple signature. The seal has a dashed inner circle and a solid outer circle with tick marks.

date:	10-17-24					
scale:	$\frac{3}{8}" = 1"$					
dr. by:	TARIQ					
chk. by:						
drawing no.		24-77F				
sheet		6 of		11		



Sealed: 10/24/2024



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revisions:	
no	date by description

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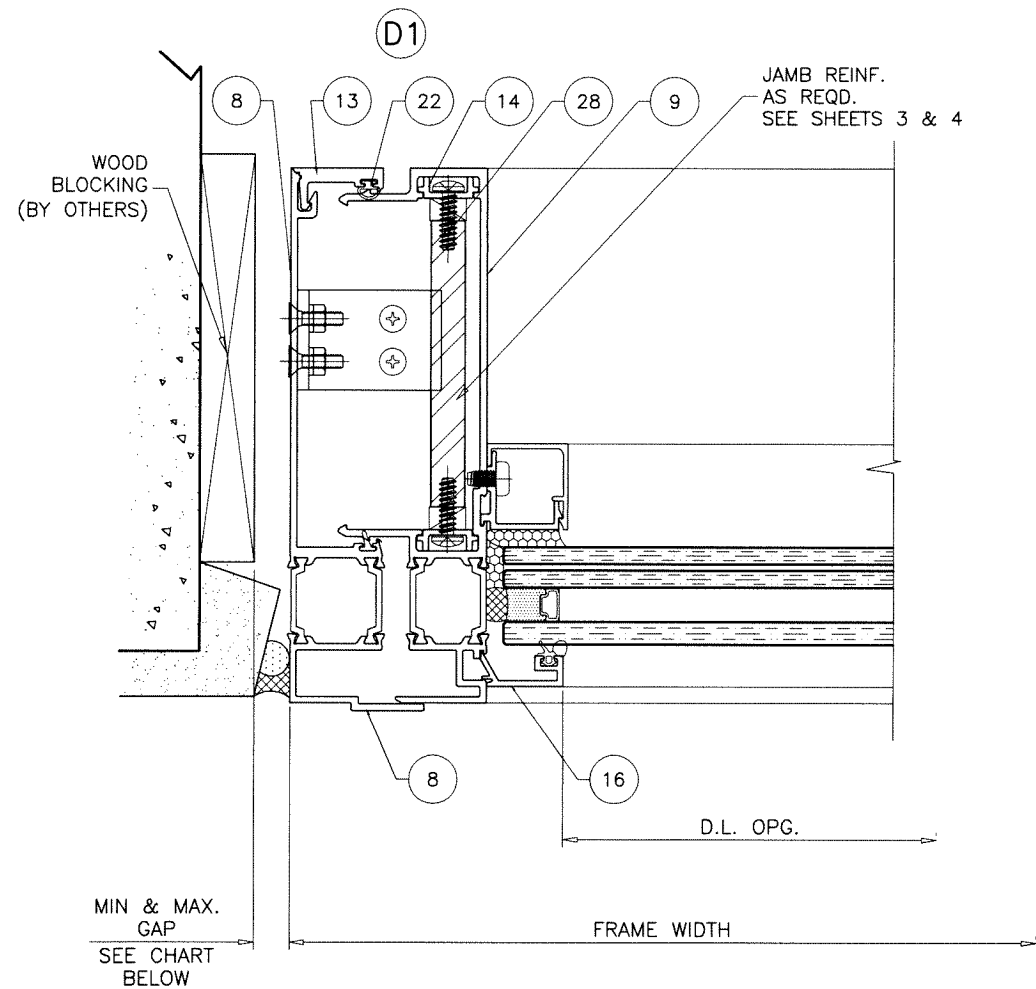
dr. by: TARIQ

chk. by:

drawing no.

24-77F

sheet 7 of 11

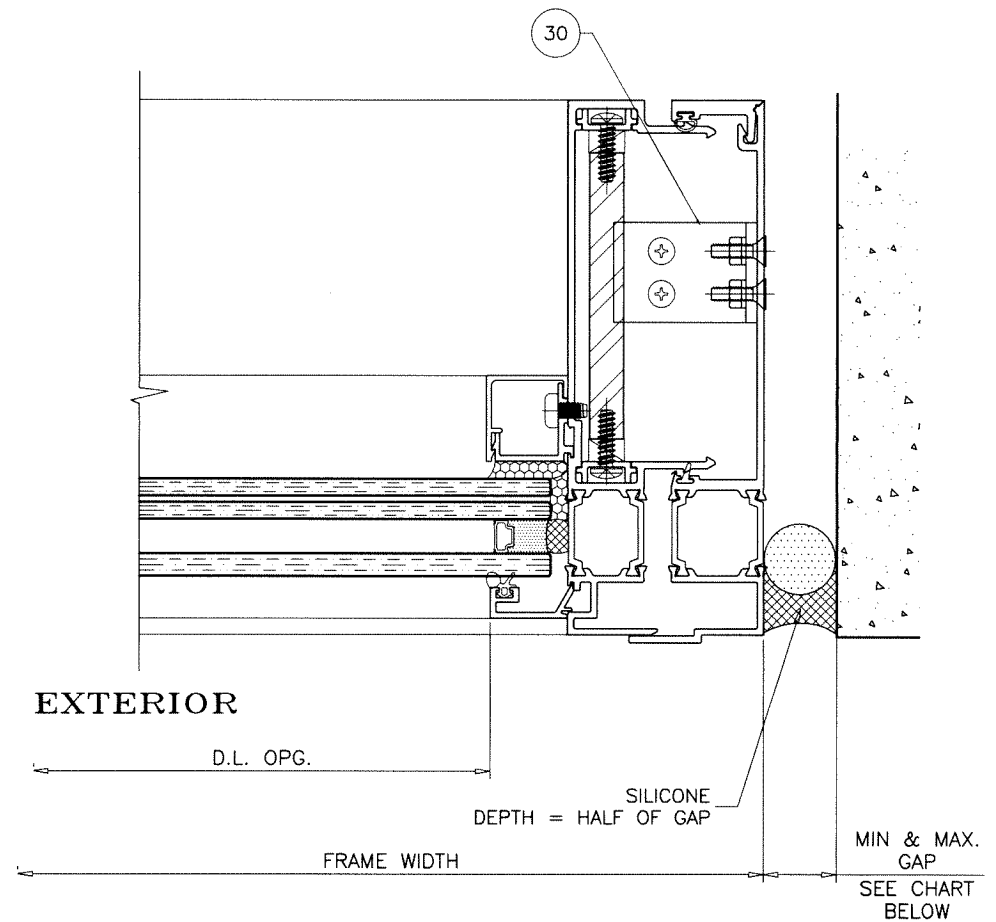


MAX. FRAME HEIGHT	GAP	
	MIN.	MAX.
114"	5/8"	1-1/4"
132"	11/16"	1-1/4"
150"	3/4"	1-1/4"

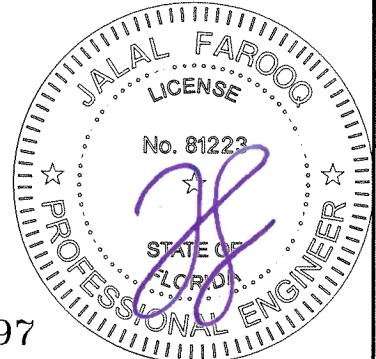
NOTE:
 SILICONE MOVEMENT CONSIDERED = 50% STRETCH.
 PLEASE REFER TO SEALANT MANUFACTURER'S DATA AND APPLICATION MANUAL FOR COMPATIBILITY OF SEALANT TO SUBSTRATE & WINDOW WALL MATERIAL/FINISH AND COMPLIANCE FOR WARRANTY.
 REFER TO ACI-117-10 FOR CONSTRUCTION TOLERANCES.

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: 10/24/2024



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24-77F

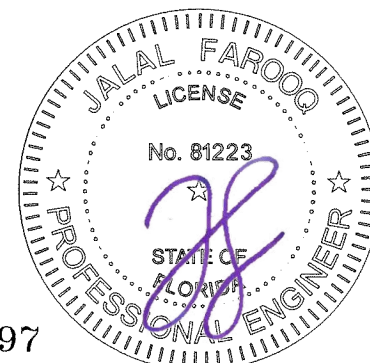
sheet 8 of 11

ITEM NO.	PART NO.	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	—	—	HEAD RECEPTOR	6063—T6	—
2	—	—	HEAD RECEPTOR BACK	6063—T6	—
3	—	—	FRAME HEAD	6063—T6	—
4	—	—	FRAME HORIZONTAL	6063—T6	—
5	—	—	FRAME SILL	6063—T6	—
6	—	—	SILL RECEPTOR	6063—T6	—
7	—	—	SILL RECEPTOR BACK	6063—T6	—
8	—	—	FEMALE JAMB	6063—T6	—
9	—	—	MALE JAMB/MULLION	6063—T6	—
10	—	—	FEMALE MULLION (ZM)	6063—T6	—
10A	—	—	FEMALE MULLION (MF)	6063—T6	—
11	—	—	GLASS STOP HEAD/SILL/TRANSOM	6063—T6	—
12	—	—	GLASS STOP COVER	6063—T6	—
13	—	—	ZIPPER SNAP (JAMB)	6063—T6	—
14	—	—	REINFORCING GUIDE	6063—T6	—
15	—	—	ZIPPER SNAP (MULLION)	6063—T6	—
16	—	—	GLASS STOP JAMB/MULLION	6063—T6	—
17	—	—	JAMB REINFORCING	STEEL	A36, Fu = MIN. = 58 KSI
17A	—	—	JAMB REINFORCING	STEEL	A36, Fu = MIN. = 58 KSI
18	—	—	MULLION REINFORCING	STEEL	A36, Fu = MIN. = 58 KSI
18A	—	—	MULLION REINFORCING	STEEL	A36, Fu = MIN. = 58 KSI
19	—	—	SILL INSERT	6063—T5	—
20	—	—	FINGER GASKET	EPDM / SILICONE	—
21	—	—	EXTERIOR BULB GASKET (HORIZONTALS)	EPDM / SILICONE	—
22	—	—	EXTERIOR BULB GASKET (VERTICALS)	EPDM / SILICONE	—
23	—	—	HEAD RECEPTOR GASKET	EPDM / SILICONE	—
24	—	—	GLASS STOP GASKET	EPDM / SILICONE	—
25	—	—	PRESS-IN BULB GASKET (SILL)	EPDM / SILICONE	—
26	—	—	SETTING BLOCK	SILICONE	MIN. DUROMETER 70, SHORE A
27	MBP6—10	AS REQD.	GLASS STOP FASTENERS, AT 8" O.C.	ST. STEEL	—
28	MBP6—20	AS REQD.	REINF. BAR FASTENERS, AT 24" O.C.	ST. STEEL	—
29	SDP10—3/4"	—	ASSEMBLY FASTENERS	ST. STEEL	SELF DRILLING PAN HEAD
30	—	AS REQD.	SUPPORT ANGLE	6063—T6	—
31	—	AS REQD.	MF MULLION SNAP	6063—T6	—
32	—	—	—	—	—

SEALANTS:

ALL FRAME CORNERS, JOINTS, SEALED WITH SILICONE SEALANT.

Sealed: 10/24/2024

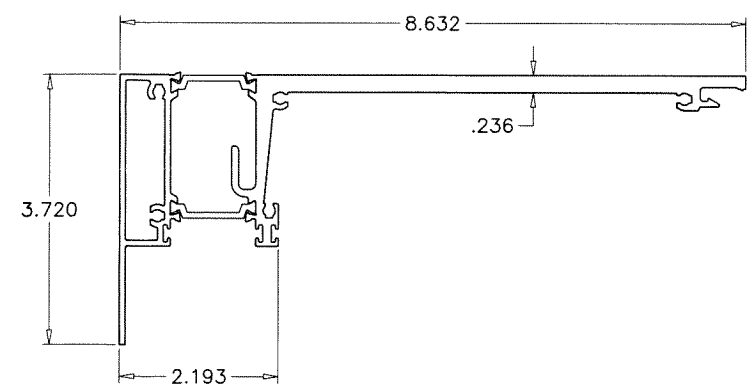


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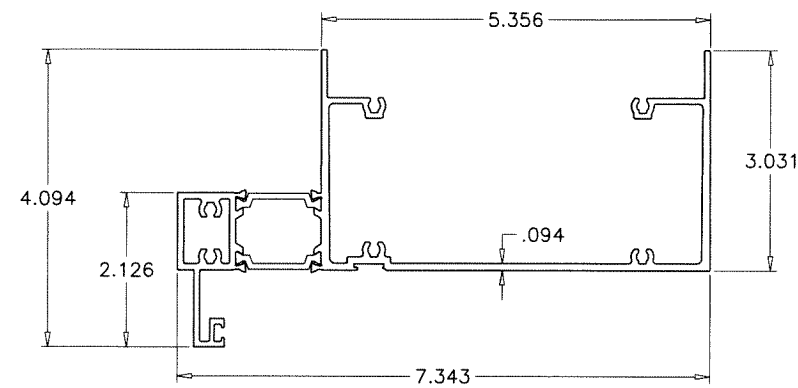
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chk. by:	no	date	by description

drawing no. 24-77F

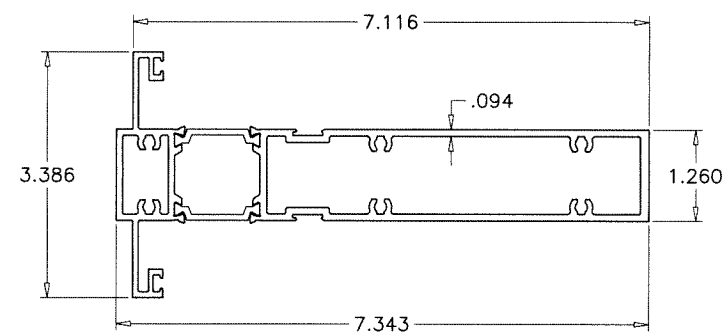
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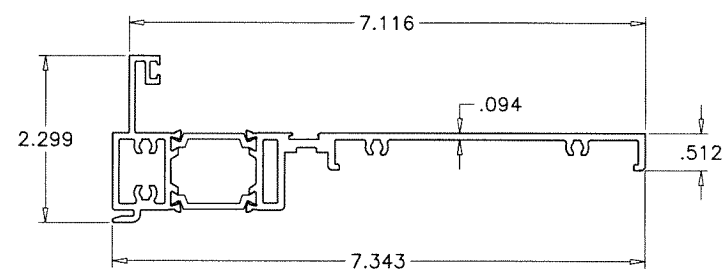
1 HEAD RECEPTOR



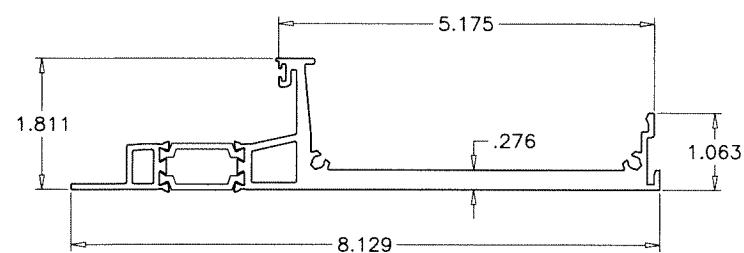
3 FRAME HEAD



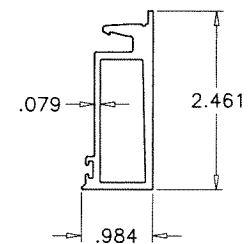
4 FRAME HORIZONTAL



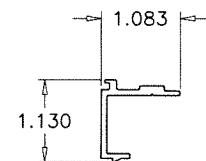
5 FRAME SILL



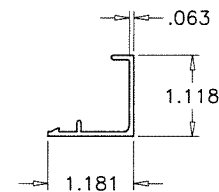
6 SILL RECEPTOR



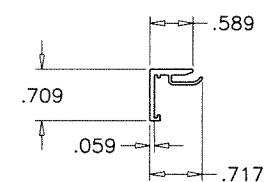
2 HEAD RECEPTOR BACK



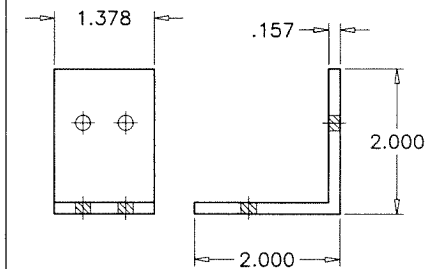
11 GLASS STOP
HEAD/SILL/TRANSOM



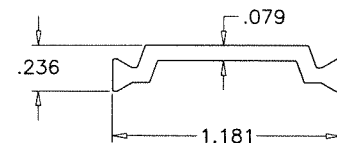
12 GLASS STOP COVER



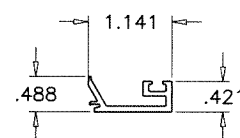
19 SILL INSERT



30 SUPPORT ANGLE



7 SILL RECEPTOR BACK



16 GLASS STOP
JAMB/MULLION

INSULBARS
SCALE 1:1

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

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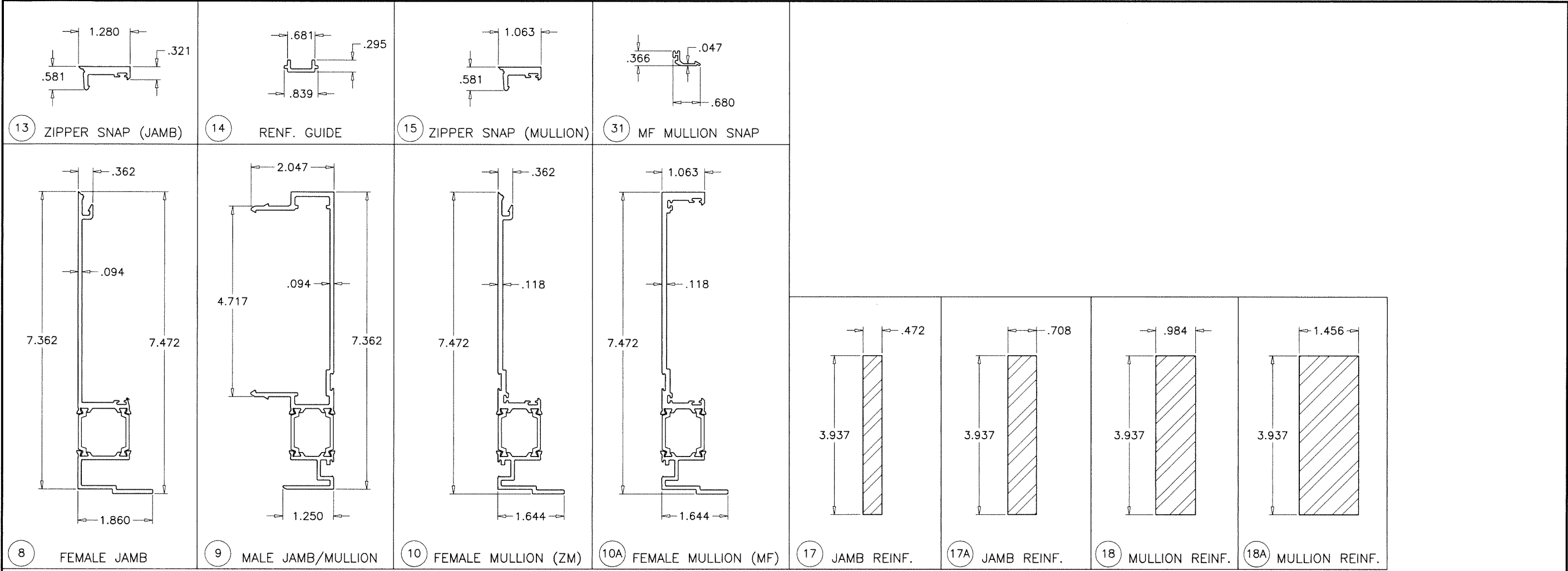
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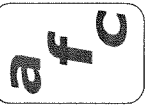
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sheet 10 of 11			



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sheet 11 of 11