

TYPICAL ELEVATIONS

SERIES ES-W425
UNITIZED THERMALLY BROKEN WINDOW WALL SYSTEM

THIS SYSTEM MAY BE USED IN CONJUNCTION WITH F.B.C. APPROVED NON IMPACT 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 FOR NON HIGH VELOCITY HURRICANE ZONE.

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 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** THE LOWEST VALUE RESULTING FROM STEPS 2 AND 3 THAT EXCEED THE DESIGN WIND PRESSURES DETERMINED THRU STEP 1 SHALL APPLY TO ENTIRE SYSTEM.
- STEP 5** FOR SYSTEMS WITH UNANCHORED JAMBS, USING SHEET 6, DETERMINE THE MIN. & MAX. GAP DIMENSIONS.
- STEP 6** WHEN USING THIS SYSTEM WITH DOORS, THE LOWER VALUE OF THE DESIGN PRESSURE RATING FOR THE SYSTEM AND THE DOOR SHALL APPLY.

THIS SYSTEM IS NOT RATED FOR IMPACT.
 INSTALLATION OF THIS SYSTEM OUTSIDE THE HVHZ AREA SHALL MEET THE APPLICABLE REQUIREMENTS FOR WIND BORNE DEBRIS PROTECTION.

Sealed: 9/29/2023

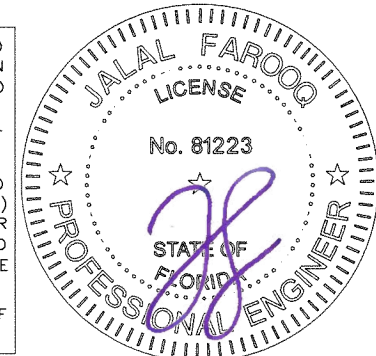
FL #19081

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.



ES-W425 UNITIZED THERMALLY BROKEN WINDOW WALL SYS. (N.I.)

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

TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	description	by
A	02.01.18	UPDATED TO 2017 FBC	
B	02.02.21	UPDATED TO 2020 FBC	
C	09.27.23	UPDATED TO 2023 FBC	

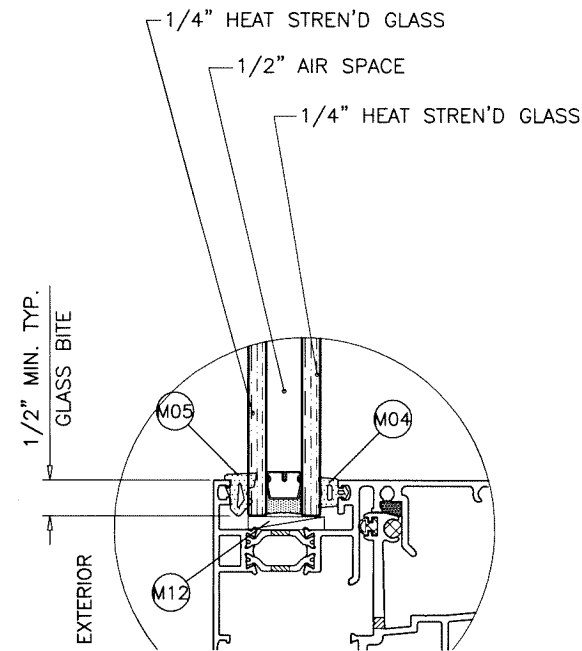
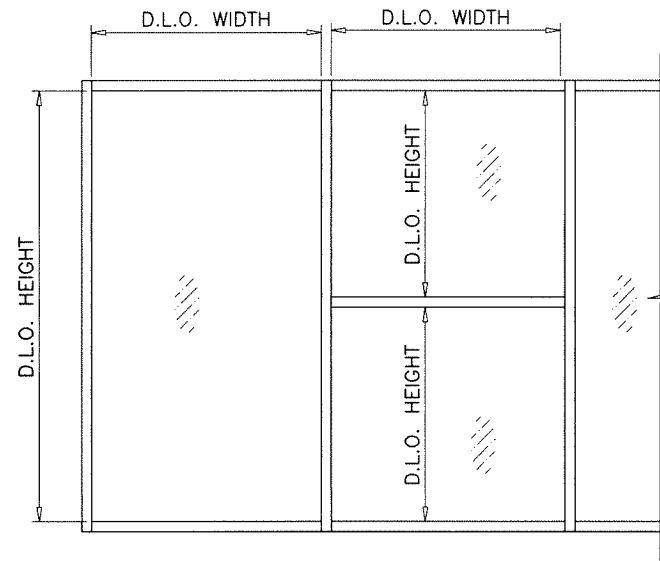
date: 10-16-15
 scale: 1/2"=1'-0"
 dr. by: TARIQ
 chk. by:

drawing no.
W15-80
 sheet 1 of 8

af c
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173 (C.A.N. 9538)
 TEL. (305) 264-8100 FAX. (305) 262-6978

COMP-ANL\W15-80ESW

GLASS DESIGN LOAD CAPACITY - PSF		
NOMINAL DIMS.		1" OVERALL INSUL. GLASS
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+) INT. (-)
27-1/2"	67"	60.0
33-1/2"		60.0
39-1/2"		60.0
45-1/2"		60.0
27-1/2"	73"	60.0
33-1/2"		60.0
39-1/2"		60.0
27-1/2"	79"	60.0
33-1/2"		60.0
39-1/2"		60.0
27-1/2"	81"	60.0
33-1/2"		60.0
39-1/2"		60.0
27-1/2"	85"	60.0
33-1/2"		60.0
27-1/2"	91"	60.0
33-1/2"		60.0



GLAZING DETAIL
1" OVERALL INSUL. GLASS

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

Sealed: 9/29/2023

FL #19081



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 W15-80ESW

ES-W425 UNITIZED THEMALLY BROKEN WINDOW WALL SYS. (N.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

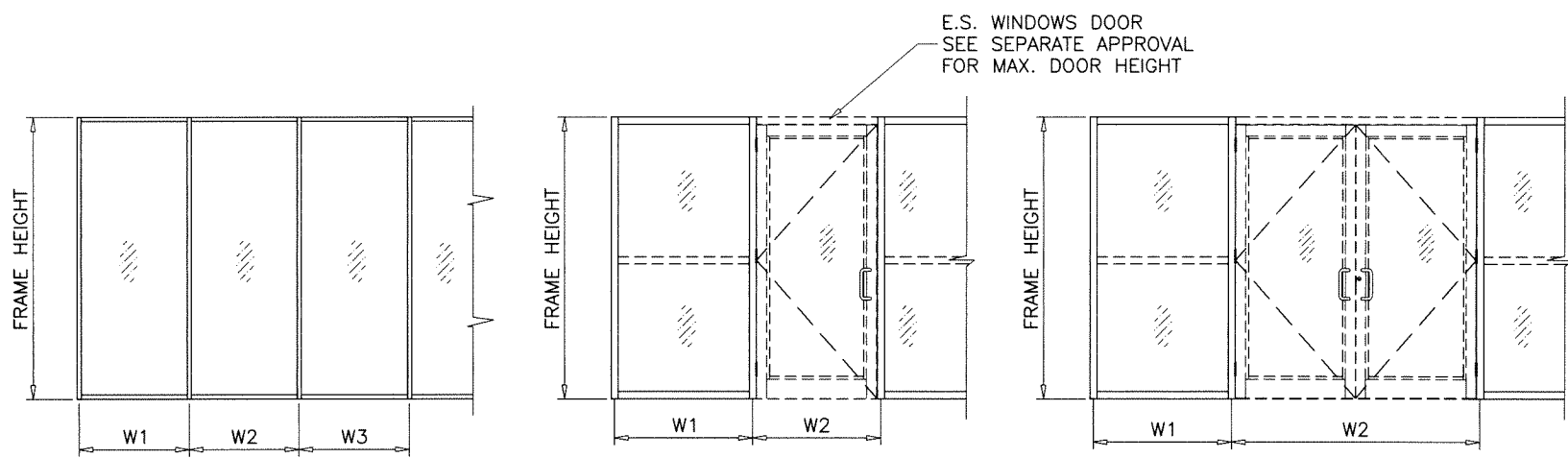
date: 10-16-15	scale: -	dr. by: TARIQ	chk. by:
----------------	----------	---------------	----------

drawing no. W15-80
sheet 2 of 8

MULLION DESIGN LOAD CAPACITY - PSF
WITHOUT INTERMEDIATE HORIZONTALS

NOMINAL DIMS.		JAMB 'J1' MULL 'M1'		JAMB 'J1' MULL 'M2'	
WIDTH (W)	FRAME HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
30"	72"	60.0	60.0	60.0	60.0
36"		60.0	60.0	60.0	60.0
42"		60.0	60.0	60.0	60.0
48"		60.0	60.0	60.0	60.0
54"		50.0	50.0	50.0	50.0
60"		50.0	50.0	50.0	50.0
30"	78"	60.0	60.0	60.0	60.0
36"		60.0	60.0	60.0	60.0
42"		60.0	60.0	60.0	60.0
48"		60.0	60.0	60.0	60.0
54"		50.0	50.0	50.0	50.0
60"		50.0	50.0	50.0	50.0
30"	84"	60.0	60.0	60.0	60.0
36"		60.0	60.0	60.0	60.0
42"		60.0	60.0	60.0	60.0
48"		60.0	60.0	60.0	60.0
54"		50.0	50.0	50.0	50.0
60"		50.0	50.0	50.0	50.0
30"	86"	60.0	60.0	60.0	60.0
36"		60.0	60.0	60.0	60.0
42"		60.0	60.0	60.0	60.0
48"		58.4	58.4	60.0	60.0
54"		50.0	50.0	50.0	50.0
60"		50.0	50.0	50.0	50.0
30"	90"	60.0	60.0	60.0	60.0
36"		60.0	60.0	60.0	60.0
42"		56.0	56.0	60.0	60.0
48"		50.4	50.4	60.0	60.0
54"		46.3	46.3	50.0	50.0
57"		44.7	44.7	50.0	50.0
30"	96"	60.0	60.0	60.0	60.0
36"		52.1	52.1	60.0	60.0
42"		45.6	45.6	55.0	55.0
48"		40.9	40.9	49.3	49.3
53"		37.9	37.9	45.7	45.7

NOTE:
INTERPOLATION BETWEEN WIDTHS ALLOWED.



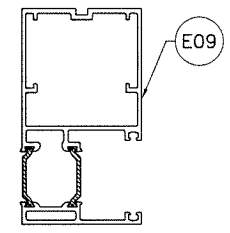
WIDTH (W) = W1
AT JAMB

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

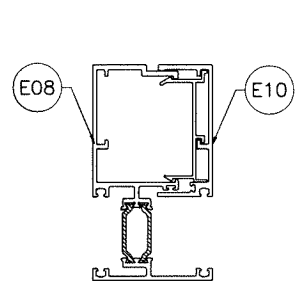
WIDTH (W) = $\frac{W1 + W2}{2}$
AT MULLION

WIDTH (W) = $\frac{W1}{2} + \frac{W2}{4}$
AT MULLION

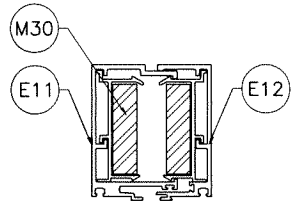
MAX. DOOR HEIGHTS FOR WINDOW WALL WITH DOORS
TO BE LIMITED TO THE MAX. APPROVED DOOR HEIGHTS.



Ix IN ⁴	Sx IN ³
3.9024	1.7270

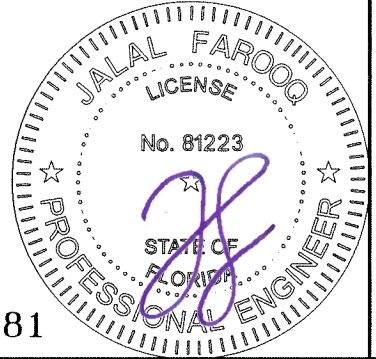


Ix IN ⁴	Sx IN ³
3.6148	1.4518



	Ix IN ⁴	Sx IN ³
ALUMINUM	1.4736	1.0260
STEEL	.5493	.5859
TOTAL	3.0665	
Ix ALUM + Ix STL X 2.9		

Sealed: 9/29/2023



FL #19081

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 W15-80ESW

ES-W425 UNITIZED THEMALLY BROKEN WINDOW WALL SYS. (N.I.)
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

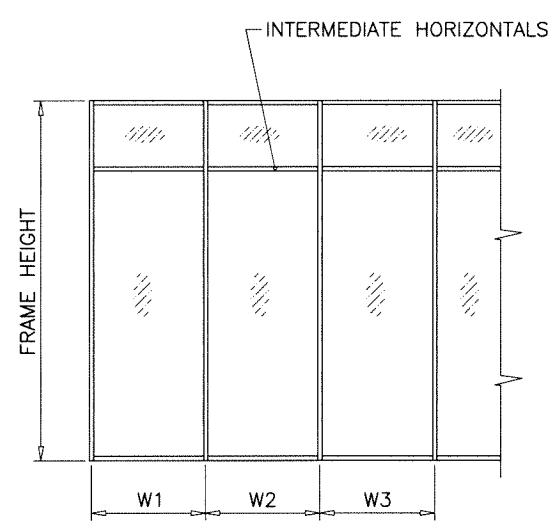
revisions:	no	date	by	description

date: 10-16-15	scale: -	dr. by: TARIQ	chk. by:
----------------	----------	---------------	----------

drawing no.
W15-80
sheet 3 of 8

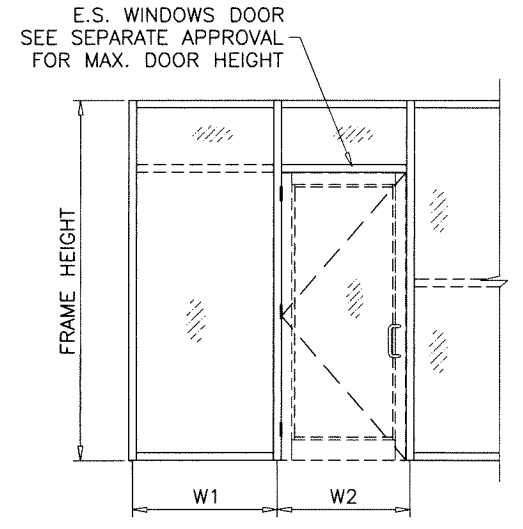
MULLION DESIGN LOAD CAPACITY - PSF WITH INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		JAMB 'J1' MULL 'M1'		JAMB 'J1' MULL 'M2'	
WIDTH (W)	FRAME HEIGHT	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
30"	72"	60.0	60.0	60.0	60.0
36"		60.0	60.0	60.0	60.0
42"		60.0	60.0	60.0	60.0
48"		60.0	60.0	60.0	60.0
54"		50.0	50.0	50.0	50.0
60"		50.0	50.0	50.0	50.0
30"	78"	60.0	60.0	60.0	60.0
36"		60.0	60.0	60.0	60.0
42"		60.0	60.0	60.0	60.0
48"		60.0	60.0	60.0	60.0
54"		50.0	50.0	50.0	50.0
60"		50.0	50.0	50.0	50.0
30"	84"	60.0	60.0	60.0	60.0
36"		60.0	60.0	60.0	60.0
42"		60.0	60.0	60.0	60.0
48"		55.2	55.2	60.0	60.0
54"		49.1	49.1	50.0	50.0
60"		44.2	44.2	50.0	50.0
30"	86"	60.0	60.0	60.0	60.0
36"		60.0	60.0	60.0	60.0
42"		58.8	58.8	60.0	60.0
48"		51.4	51.4	60.0	60.0
54"		45.7	45.7	50.0	50.0
60"		41.1	41.1	49.6	49.6
30"	90"	60.0	60.0	60.0	60.0
36"		59.8	59.8	60.0	60.0
42"		51.3	51.3	60.0	60.0
48"		44.9	44.9	54.1	54.1
54"		39.9	39.9	48.1	48.1
57"		37.8	37.8	45.6	45.6
30"	96"	59.2	59.2	60.0	60.0
36"		49.3	49.3	59.4	59.4
42"		42.3	42.3	50.9	50.9
48"		37.0	37.0	44.6	44.6
53"		33.5	33.5	40.4	40.4

NOTE:
INTERPOLATION BETWEEN WIDTHS ALLOWED.



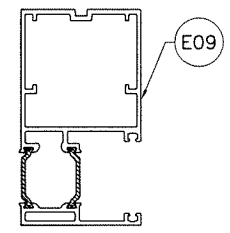
WIDTH (W) = W1
AT JAMB

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



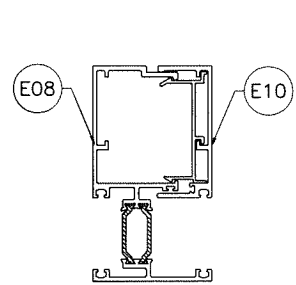
WIDTH (W) = $\frac{W1 + W2}{2}$
AT MULLION

MAX. DOOR HEIGHTS FOR WINDOW WALL WITH DOORS
TO BE LIMITED TO THE MAX. APPROVED DOOR HEIGHTS.



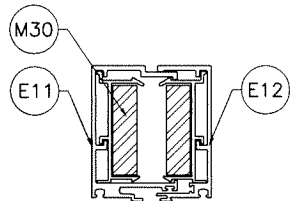
JAMB 'J1'

Ix	IN ⁴	Sx	IN ³
	3.9024		1.7270



MULLION 'M1'

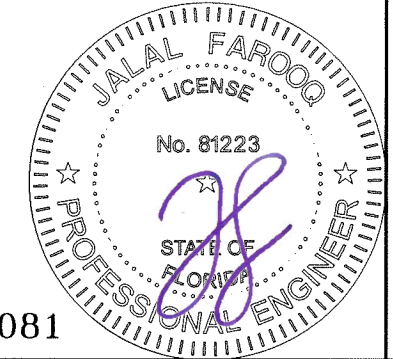
Ix	IN ⁴	Sx	IN ³
	3.6148		1.4518



MULLION 'M2'

	Ix	IN ⁴	Sx	IN ³
ALUMINUM		1.4736		1.0260
STEEL		.5493		.5859
TOTAL		3.0665		
Ix ALUM + Ix STL X 2.9				

Sealed: 9/29/2023



FL #19081

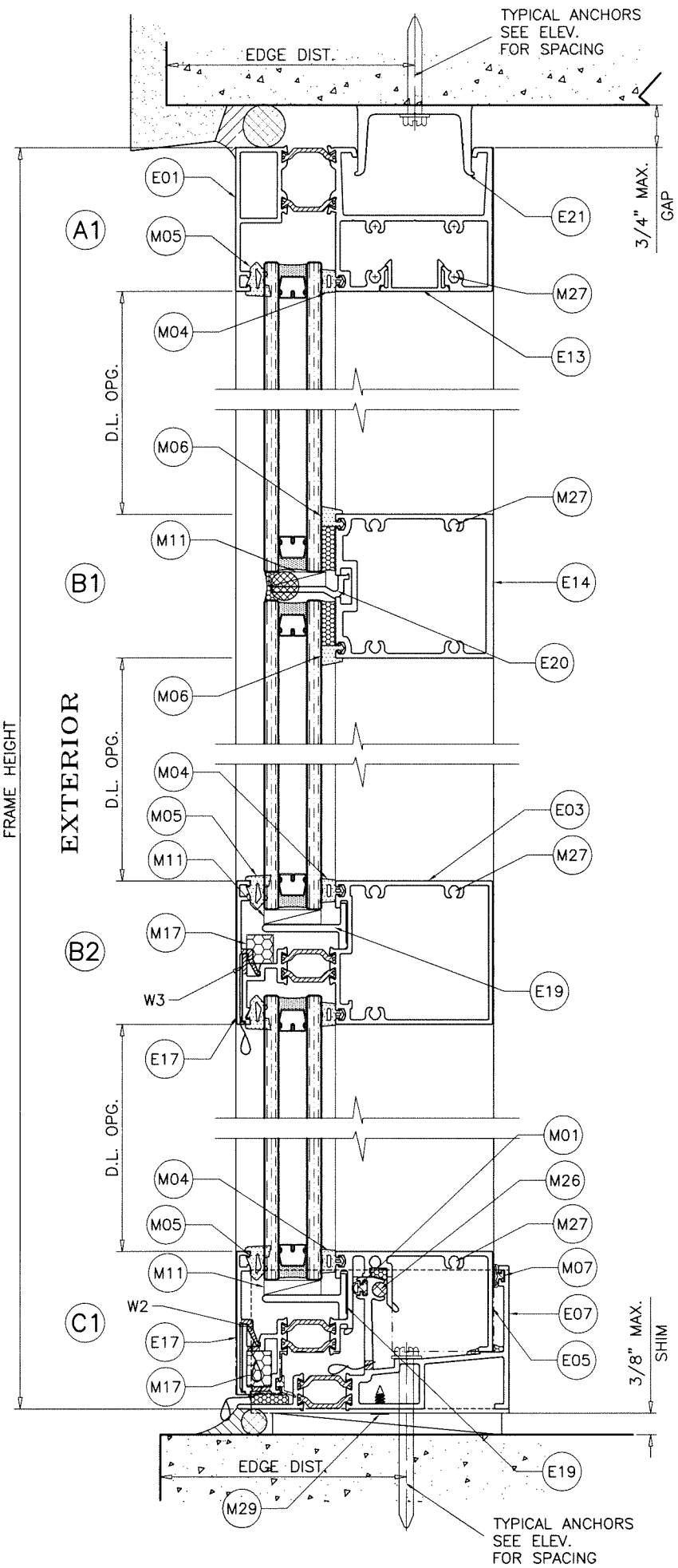
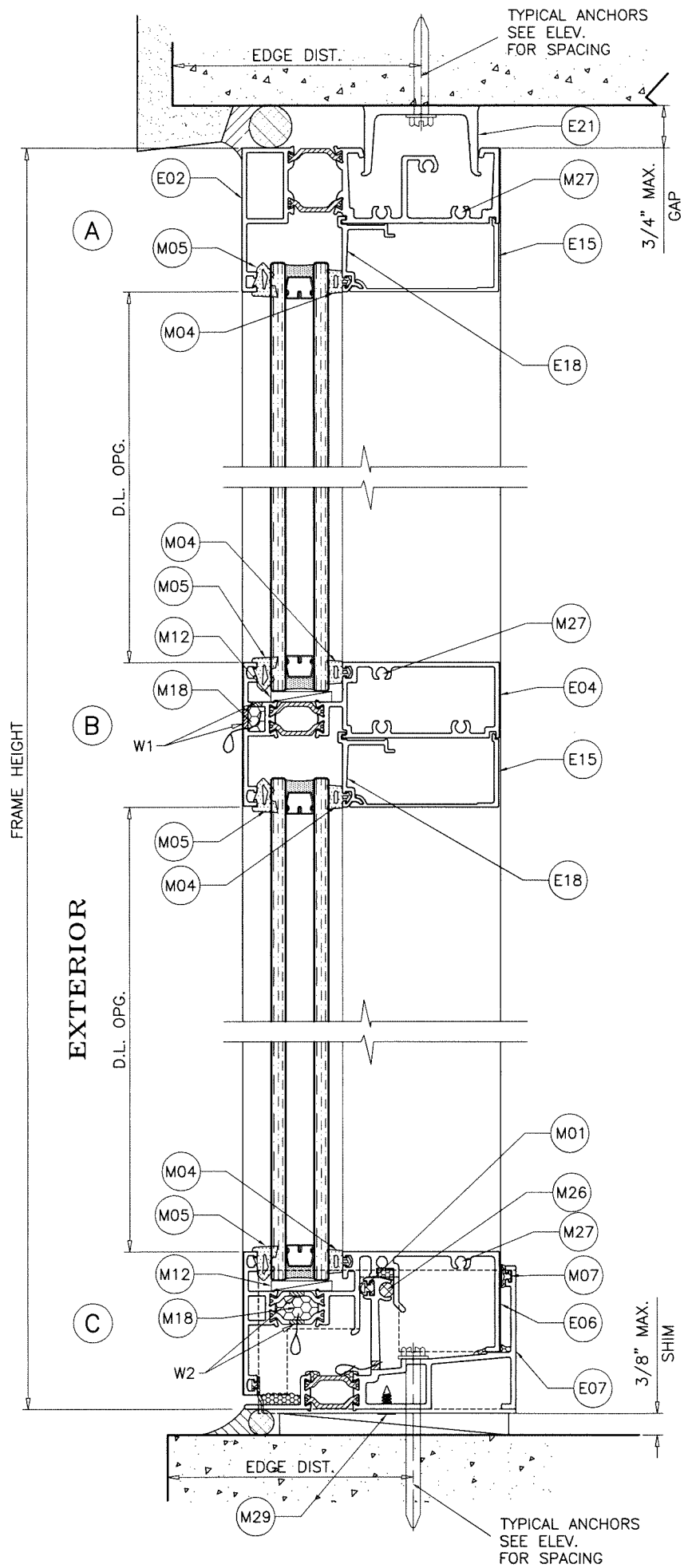
af c
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173 (C.A.N. 3538)
 TEL. (305) 264-8100 FAX. (305) 262-6978
 COMP-ANL\W15-80ESW

ES-W425 UNITIZED THEMALLY BROKEN WINDOW WALL SYS. (N.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:	10-16-15
scale:	-
dr. by:	TARIQ
chk. by:	

drawing no.
W15-80
sheet 4 of 8



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

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A'
1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)
 DIRECTLY INTO CONCRETE (3000 PSI MIN.)
 1-3/4" MIN. EMBED INTO CONC.

ANCHOR EDGE DISTANCES
 INTO CONCRETE = 2-1/2" MIN.

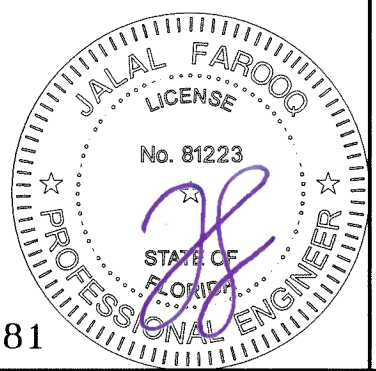
TYPE 'B'
1/4" DIA. TEKS OR SELF-DRILLING SCREWS (GRADE 5 CRS)
 INTO METAL STRUCTURES
 (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
 ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
 STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

ANCHOR EDGE DISTANCES
 INTO METAL STRUCTURE = 1" MIN.

WEEPHOLES:

- W1 = 5/16" X 5/8" WEEP SLOTS AT 3" FROM EACH END AND AT CENTER OF LITE
- W2 = 1/4" X 1" WEEP SLOTS AT 3" FROM EACH END AND AT CENTER OF LITE
- W3 = 3/8" DIA. WEEP HOLES AT 3" FROM EACH END AND AT CENTER OF LITE

Sealed: 9/29/2023



FL #19081

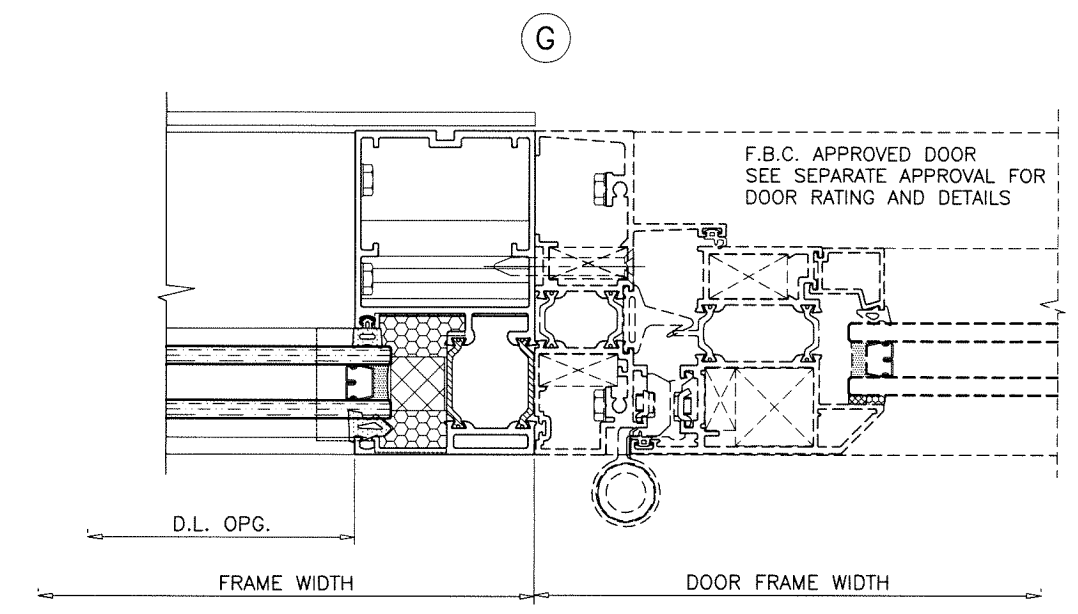
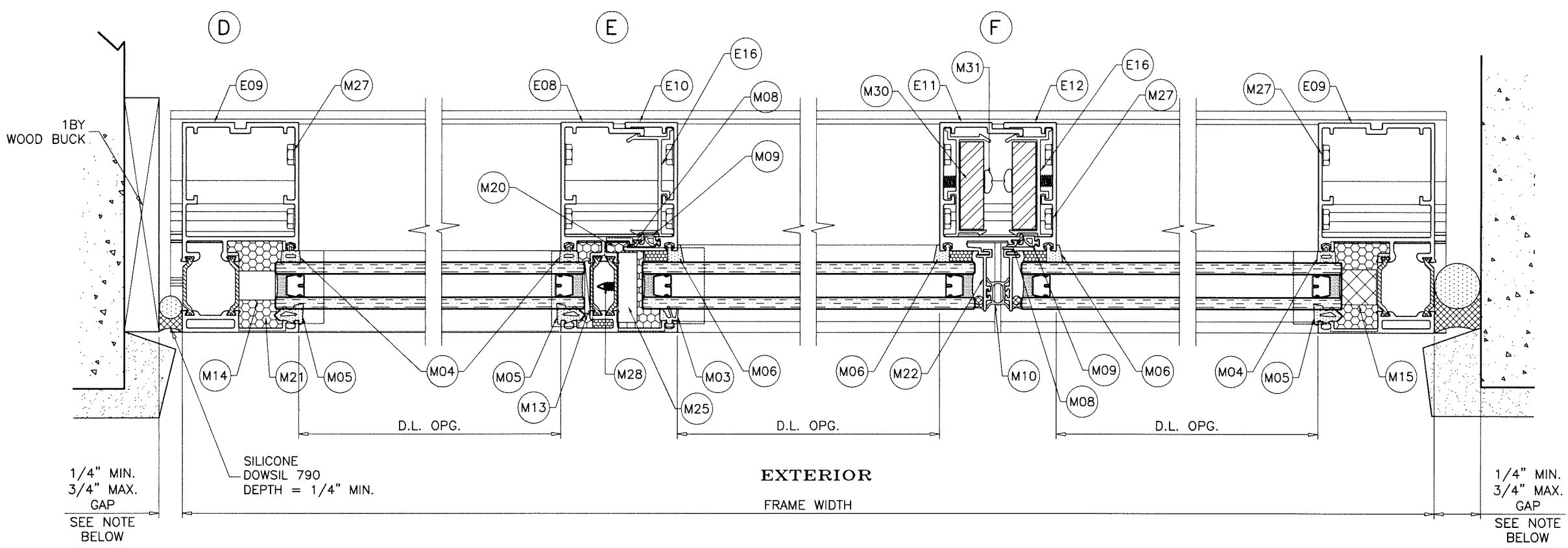
afc
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220 (C.A.N. 3538)
 MIAMI, FLORIDA 33173
 TEL. (305) 264-8100 FAX. (305) 262-6978
 COMP-ANL\W15-80ESW

ES-W425 UNITIZED THEMALLY BROKEN WINDOWALL SYS. (N.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: 10-16-15
 scale: 3/8" = 1"
 dr. by: TARIQ
 chk. by:

drawing no.
W15-80
 sheet 5 of 8



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: 9/29/2023



FL #19081

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\W15-80ESW

ES-W425 UNITIZED THEMALLY BROKEN WINDOWALL SYS. (N.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: 10-16-15
 scale: 3/8" = 1"
 dr. by: TARIQ
 chk. by:

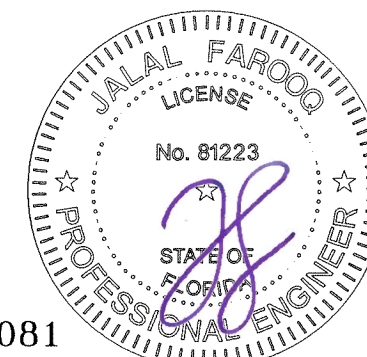
drawing no.
W15-80
 sheet 6 of 8

ITEM NO.	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
E01	ES-W425-502	AS REQD.	FRAME HEAD	6063-T6	-
E02	ES-W425-503	AS REQD.	FRAME HEAD INSIDE REGLAZE	6063-T6	-
E03	ES-W425-504	AS REQD.	HORIZONTAL	6063-T6	-
E04	ES-W425-505A	AS REQD.	HORIZONTAL	6063-T6	-
E05	ES-W425-506	AS REQD.	FRAME SILL	6063-T6	-
E06	ES-W425-507A	AS REQD.	FRAME SILL	6063-T6	-
E07	ES-W425-508	AS REQD.	SILL RECEPTOR	6063-T6	-
E08	ES-W425-510	AS REQD.	FEMALE MULLION	6063-T6	-
E09	ES-W425-511	AS REQD.	FRAME JAMB	6063-T6	-
E10	ES-W425-002	AS REQD.	MALE MULLION BACK	6063-T6	-
E11	ES-W425-003	AS REQD.	SSG FEMALE MULLION	6063-T6	-
E12	ES-W425-004	AS REQD.	SSG MALE MULLION	6063-T6	-
E13	ES-W425-006	AS REQD.	HEAD COVER	6063-T5	-
E14	ES-W425-011	AS REQD.	HORIZONTAL SSG	6063-T6	-
E15	ES-W425-014	AS REQD.	INTERIOR COVER	6063-T6	-
E16	ES-W425-017	AS REQD.	MULLION SNAP CLIP	6063-T5	-
E17	ES-WC25-003	AS REQD.	EXTERIOR GLASS STOP	6063-T6	-
E18	ES-WC25-009	AS REQD.	INTERIOR GLASS STOP	6063-T6	-
E19	ES-WC25-011	AS REQD.	SETTING CHAIR	6063-T6	-
E20	ES-WC25-012	AS REQD.	SETTING CHAIR SSG	6063-T6	-
E21	ES-WC25-013	AS REQD.	ANCHOR CLIP, 9" LONG	6005-T5	-
E22	ES-CF001	AS REQD.	END DAM	6063-T6	-
M01	ES-W625-G01A	AS REQD.	AIR SEAL AT STACK CAPTURED/SSG	SILICONE	DUROMETER 65±5 SHORE A
M02	ES-W625-G02A	AS REQD.	WATER RETAINER	SILICONE	DUROMETER 65±5 SHORE A
M03	ES-W625-G03A	AS REQD.	EXTERIOR GASKET FOR CAPTURED MULLION	SILICONE	DUROMETER 65±5 SHORE A
M04	NS25-G01A	AS REQD.	INTERIOR SPACER CAPTURED	SILICONE	DUROMETER 70±5 SHORE A
M05	NF-315-G04	AS REQD.	EXTERIOR WEDGE GASKET	SILICONE	DUROMETER 70±5 SHORE A
M06	ES-U3525-G08A	AS REQD.	INTERIOR SPACER SSG	SILICONE	DUROMETER 70±5 SHORE A
M07	ES-5008	AS REQD.	BULB GASKET	EPDM	DUROMETER 70±5 SHORE A
M08	ES-7530-G06	AS REQD.	TONGUE CAPTURED/SSG	EPDM	DUROMETER 60±5 SHORE A
M09	ES-7530-G07	AS REQD.	COMPRESSION JOINT CAPTURED/SSG	EPDM	DUROMETER 60±5 SHORE A
M10	ES-7530-G11A	AS REQD.	WATER DEFLECTOR AT VERTICAL JOINT SSG	EPDM	DUROMETER 80±5 SHORE A
M11	ES-21-B04A	2/ LITE	SETTING BLOCK	EPDM	DUROMETER 80±5 SHORE A
M12	NP-200-B02	2/ LITE	SETTING BLOCK	EPDM	DUROMETER 80±5 SHORE A
M13	ES-7530-B01	2/ LITE	SIDE BLOCK	EPDM	DUROMETER 80±5 SHORE A
M14	ES-7530-B05A	AS REQD.	'W' BLOCK, 5/8" LONG	SILICONE	DUROMETER 70±5 SHORE A
M15	80-337	AS REQD.	SIDE BLOCK	-	-
M16	ES-7530-F01	AS REQD.	1 X 1 X 5" FOAM AT STACK	-	CLOSED CELL FOAM
M17	WPSA-N1	AS REQD.	3/4" X 3/4" X 2" RETICULATED FOAM 30PPI	-	OPEN CELL FOAM
M18	W625-F01	AS REQD.	11/16" X 3/8" X 2" RETICULATED FOAM 30PPI	-	OPEN CELL FOAM
M19	W625-F02	AS REQD.	FOAM BLOCK AT VERTICAL END CAP	-	CLOSED CELL FAOM
M20	W625-F03	AS REQD.	END DAM FOAM AT VERTICAL	-	CLOSED CELL FOAM
M21	ES-WW1025T-F03	AS REQD.	FOAM BLOCK AT TOP JAMB	-	CLOSED CELL FOAM
M22	ES-7530-301	AS REQD.	SIDE SNAP SSG	ST. STEEL	-
M23	-	AS REQD.	3/8" BACKER ROD AT VERTICAL MULLION SSG	POLYETHYLENE	CLOSED CELL FOAM
M24	-	AS REQD.	5/8" BACKER ROD AT VERTICAL MULLION SSG	POLYETHYLENE	CLOSED CELL FOAM
M25	ES-W625-302	AS REQD.	END DAM HOLDER AT HEAD	RIGID PVC	-
M26	ES-W625-N01	AS REQD.	1/4" DIA. ROD 1"	NYLON 6	-
M27	#12 X 1-1/2"	AS REQD.	ASSEMBLY FASTENERS	ST/ST	HWH
M28	#8 X 1/2"	AS REQD.	END DAM HOLDER FASTENERS	ST/ST	PH SMS
M29	#8 X 1/2"	AS REQD.	END DAM FASTENERS	ST/ST	FH SMS
M30	-	AS REQD.	1/2" X 1-7/8" BAR REINFORCING, FULL LENGTH	STEEL	-
M31	3/16" X 2-1/2"	1/ BAR	REINF. ATTACHMENT SCREW	ST/ST	-
M32	-	AS REQD.	INSULBAR 24MM OFFSET	POLYAMIDE	ENSINGER
M33	-	AS REQD.	INSULBAR 32MM OFFSET	POLYAMIDE	ENSINGER

SEALANTS:

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

Sealed: 9/29/2023



FL #19081

afc

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 W15-80ESW

ES-W425 UNITIZED THEMALLY BROKEN WINDOW WALL SYS. (N.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: 10-16-15

scale: 3/8" = 1"

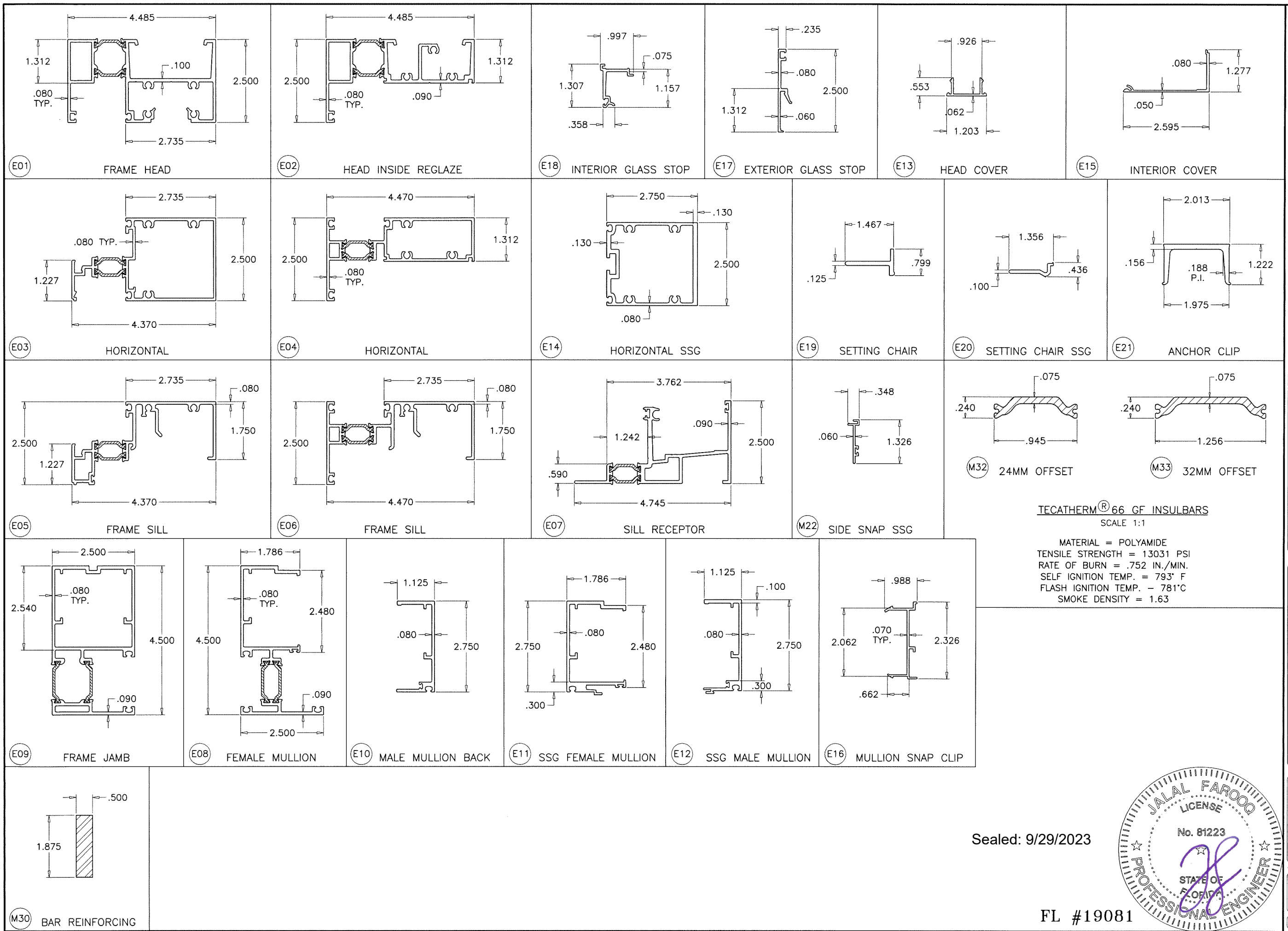
dr. by: TARIQ

chk. by:

drawing no.

W15-80

sheet 7 of 8



TECATHERM® 66 GF 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

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\W15-80ESW

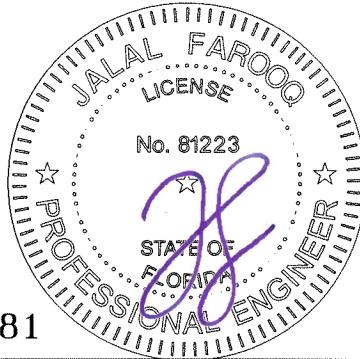
ES-W425 UNITIZED THEMALLY BROKEN WINDOW WALL SYS. (N.I.)
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

no	date	by	description

date: 10-16-15
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

drawing no.
W15-80
sheet 8 of 8

Sealed: 9/29/2023



FL #19081