

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

SERIES ES P250 (N.I.)
ALUMINUM THERMALLY BROKEN FIXED WINDOW

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER
CHARTS SHOWN ON SHEET 2.

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE
COMBINATIONS OF FIX./FIX. OR FIXED WITH OTHER
WINDOW TYPES IN MODULES OF TWO OR MORE WINDOWS USING
F.B.C. APPROVED MULLIONS IN BETWEEN.
LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL
WILL APPLY TO ENTIRE SYSTEM.

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.

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.

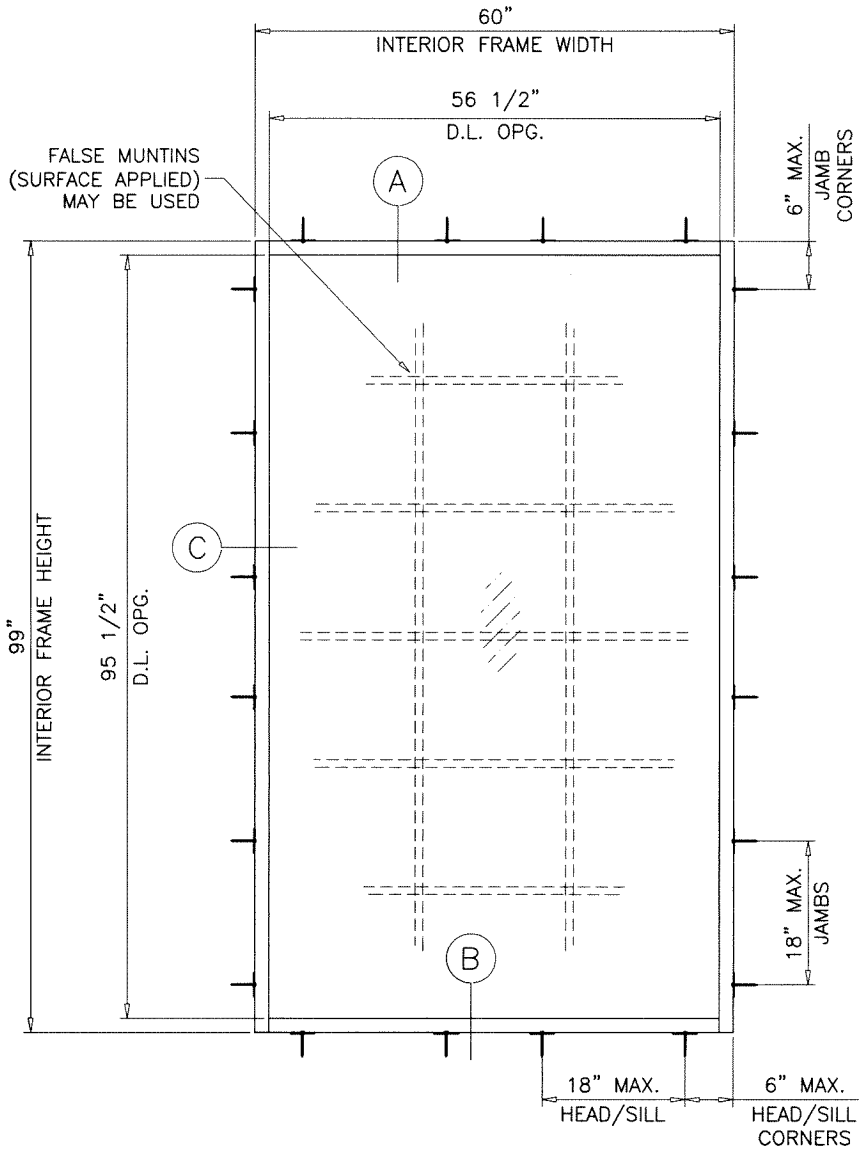
A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.
ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

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 ELEVATION

Sealed: 10/9/2023

FL #19063

- 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.



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\W15-78ESW

ES-P250 ALUM THERMALLY BROKEN FIXED W. (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
	A	10.13.17		description
	B	01.21.21		UPDATED TO 2017 FBC
	C	09.27.23		UPDATED TO 2020 FBC
				UPDATED TO 2023 FBC

date: 10-13-15	scale: 1/2"=1'-0"	dr. by: TARIQ	chk. by:
----------------	-------------------	---------------	----------

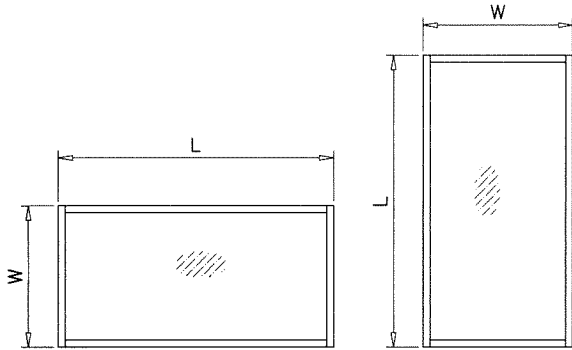
drawing no.

W15-78

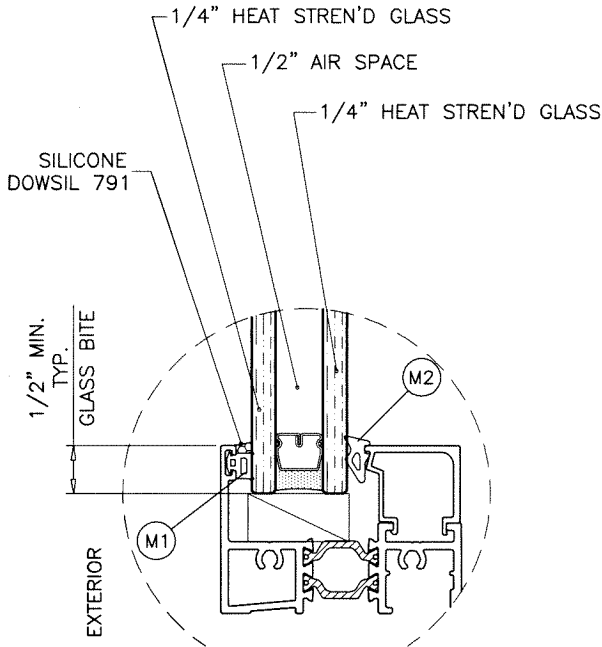
sheet 1 of 6

DESIGN LOAD CAPACITY - PSF			
INTERIOR FRAME DIMS.		1" OVERALL INSUL. GLASS	
WIDTH	HEIGHT	EXT.(+)	INT.(-)
30"	48"	120.0	120.0
36"		120.0	120.0
42"		114.3	114.3
48"		100.0	100.0
54"		100.0	100.0
60"		100.0	100.0
66"		100.0	100.0
72"		100.0	100.0
30"	54"	120.0	120.0
36"		120.0	120.0
42"		114.3	114.3
48"		100.0	100.0
54"		88.9	88.9
60"		88.9	88.9
66"		88.9	88.9
72"		88.9	88.9
30"	60"	120.0	120.0
36"		120.0	120.0
42"		114.3	114.3
48"		100.0	100.0
54"		88.9	88.9
60"		80.0	80.0
66"		80.0	80.0
72"		80.0	80.0
30"	66"	120.0	120.0
36"		119.3	119.3
42"		109.1	109.1
48"		100.0	100.0
54"		88.9	88.9
60"		80.0	80.0
66"		72.7	72.7
72"		72.7	72.7
30"	72"	120.0	120.0
36"		120.0	120.0
42"		112.5	112.5
48"		100.0	100.0
54"		88.9	88.9
60"		80.0	80.0
66"		72.7	72.7
72"		66.7	66.7
30"	78"	120.0	120.0
36"		119.3	119.3
42"		107.7	107.7
48"		99.4	99.4
54"		88.9	88.9
60"		80.0	80.0
66"		72.7	72.7
72"		66.7	66.7

DESIGN LOAD CAPACITY - PSF			
INTERIOR FRAME DIMS.		1" OVERALL INSUL. GLASS	
WIDTH	HEIGHT	EXT.(+)	INT.(-)
30"	84"	120.0	120.0
36"		108.5	108.5
42"		97.4	97.4
48"		89.5	89.5
54"		83.7	83.7
60"		79.6	79.6
66"		72.7	72.7
30"	90"	120.0	120.0
36"		116.2	116.2
42"		103.9	103.9
48"		95.0	95.0
54"		88.5	88.5
60"		80.0	80.0
66"		72.7	72.7
30"	96"	120.0	120.0
36"		110.2	110.2
42"		98.2	98.2
48"		89.5	89.5
54"		83.0	83.0
60"		78.1	78.1
30"	102"	118.5	118.5
36"		102.3	102.3
42"		90.9	90.9
48"		82.6	82.6
54"		76.4	76.4
30"	108"	120.0	120.0
36"		111.4	111.4
42"		98.8	98.8
48"		89.5	89.5
54"		82.5	82.5
30"	114"	120.0	120.0
36"		104.4	104.4
42"		92.4	92.4
48"		83.5	83.5



NOTE:
WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED
VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE.



GLAZING DETAIL
1" OVERALL INSUL. GLASS



NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-09 (3 SEC. GUSTS).
FL #19063

Sealed: 10/9/2023

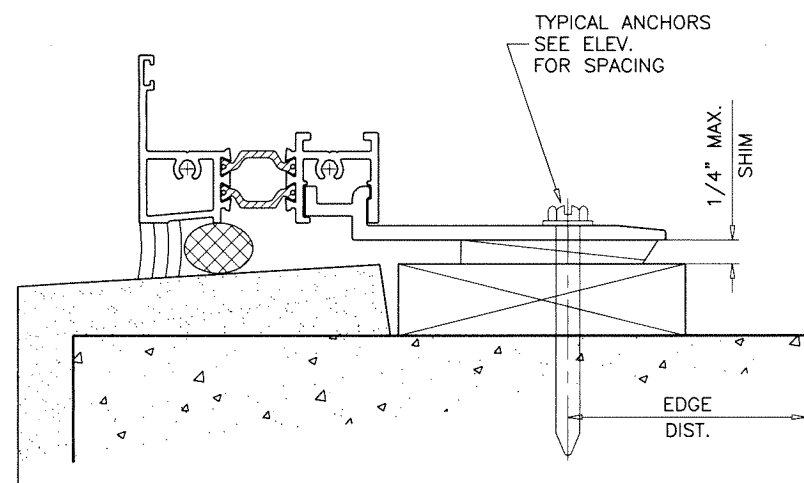
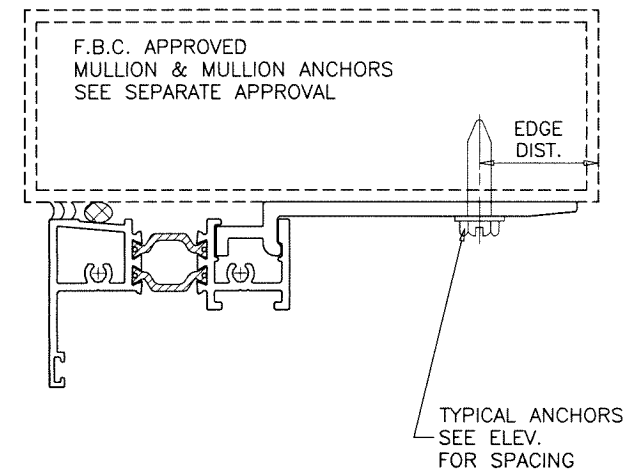
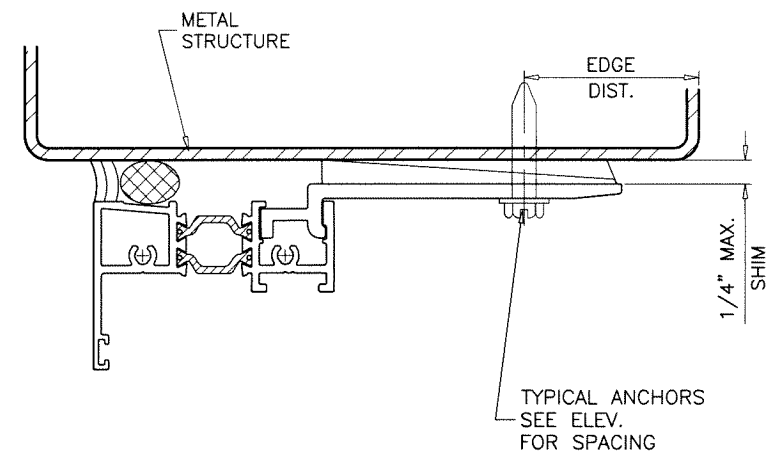
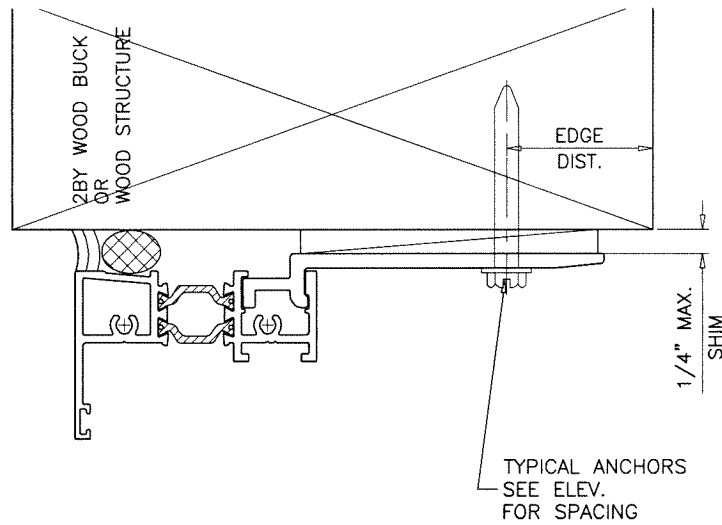
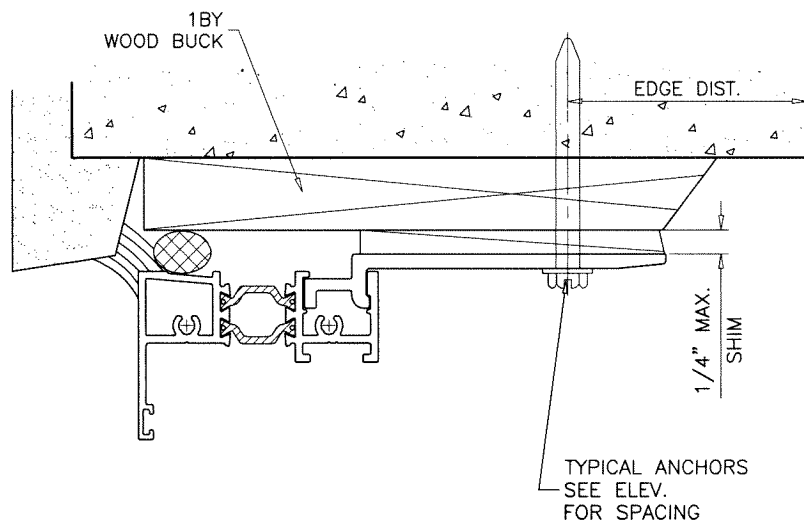
afcc
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
(C.A.N. 3538)

ES-P250 ALUM THERMALLY BROKEN FIXED W. (N.I.)
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

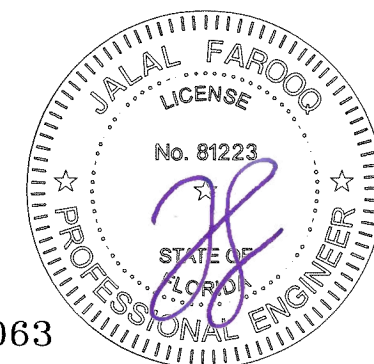
revisions:
no date by description

date: 10-13-15
scale: 1/2" = 1"
dr. by: TARIQ
chk. by:

drawing no.
W15-78
sheet 2 of 6



Sealed: 10/9/2023



FL #19063

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

a f c
COMP-ANL\W15-78ESW

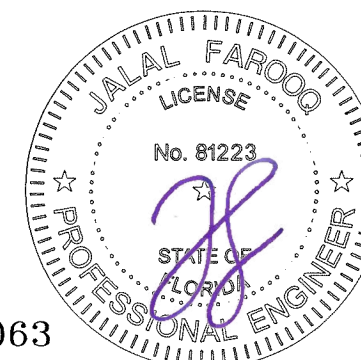
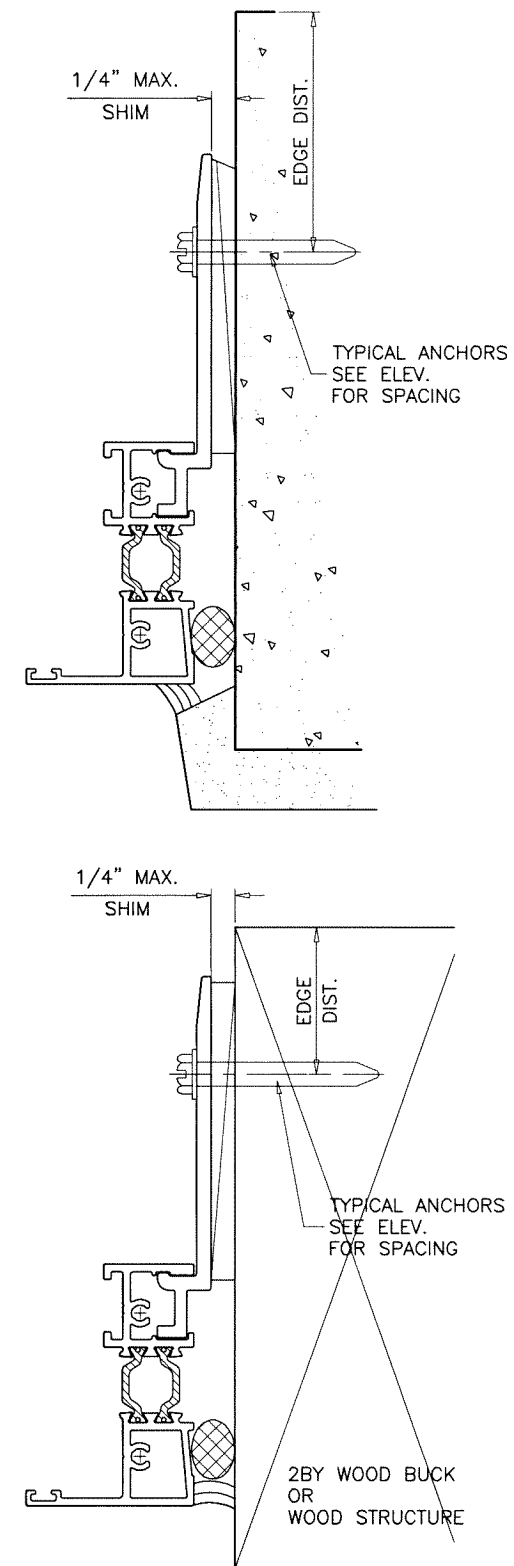
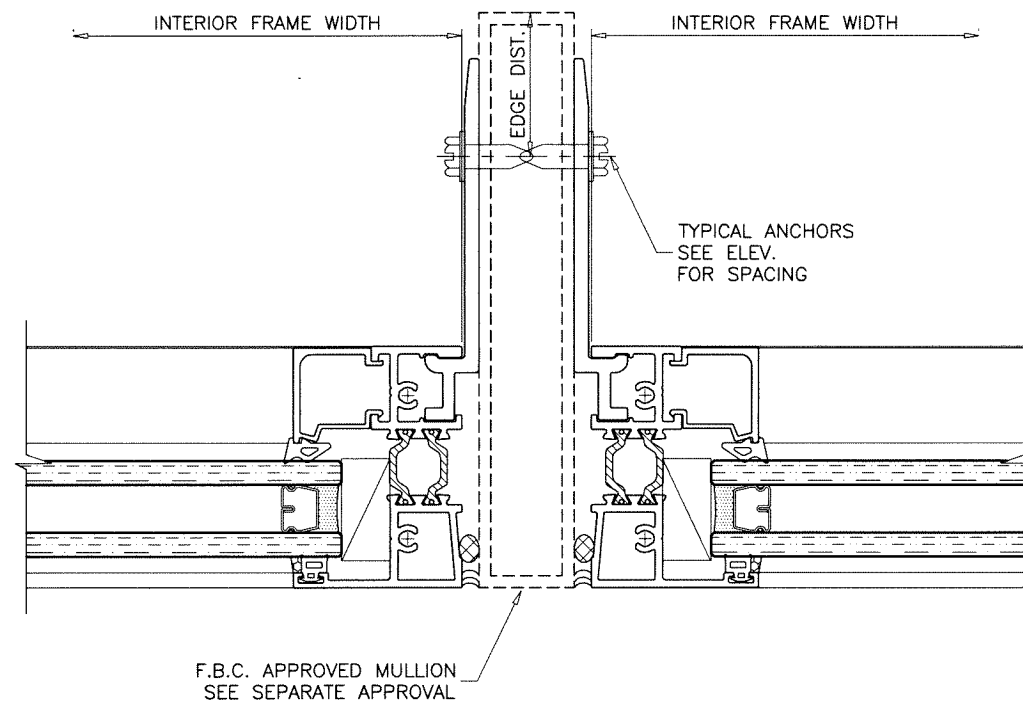
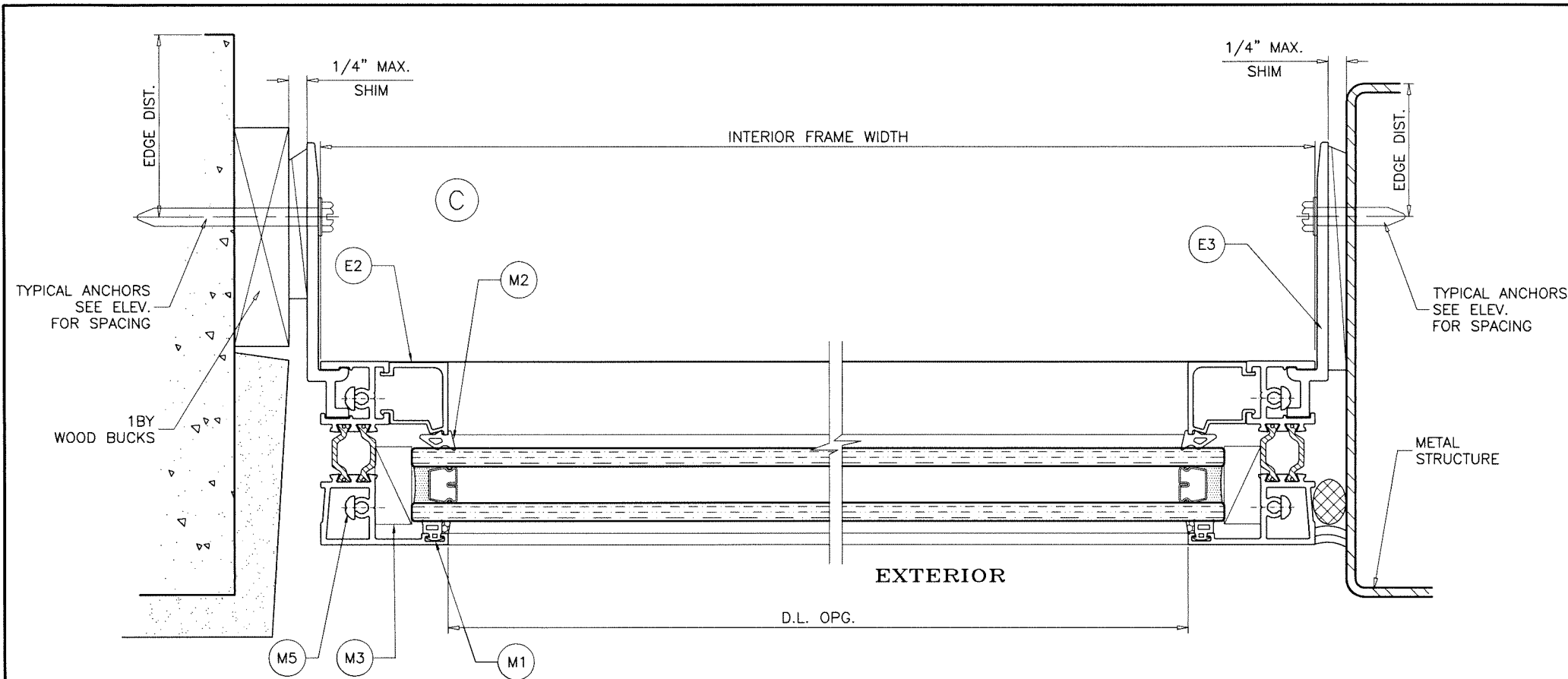
ES-P250 ALUM THERMALLY BROKEN FIXED W. (N.I.)

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: 10-13-15
scale: 1/2" = 1"
dr. by: TARIQ
chk. by:

drawing no.
W15-78
sheet 4 of 6



Sealed: 10/9/2023

FL #19063

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

COMP-ANL\W15-78ESW

ES-P250 ALUM THERMALLY BROKEN FIXED W. (N.I.)

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

revisions:	
no	by description

date: 10-13-15	scale: 1/2" = 1"	dr. by: TARIQ	chk. by:	
----------------	------------------	---------------	----------	--

drawing no. W15-78	sheet 5 of 6
------------------------------	--------------

E1WINDOW FRAME

E2GLASS STOP

E3STRAP ANCHOR

M420MM OFFSET

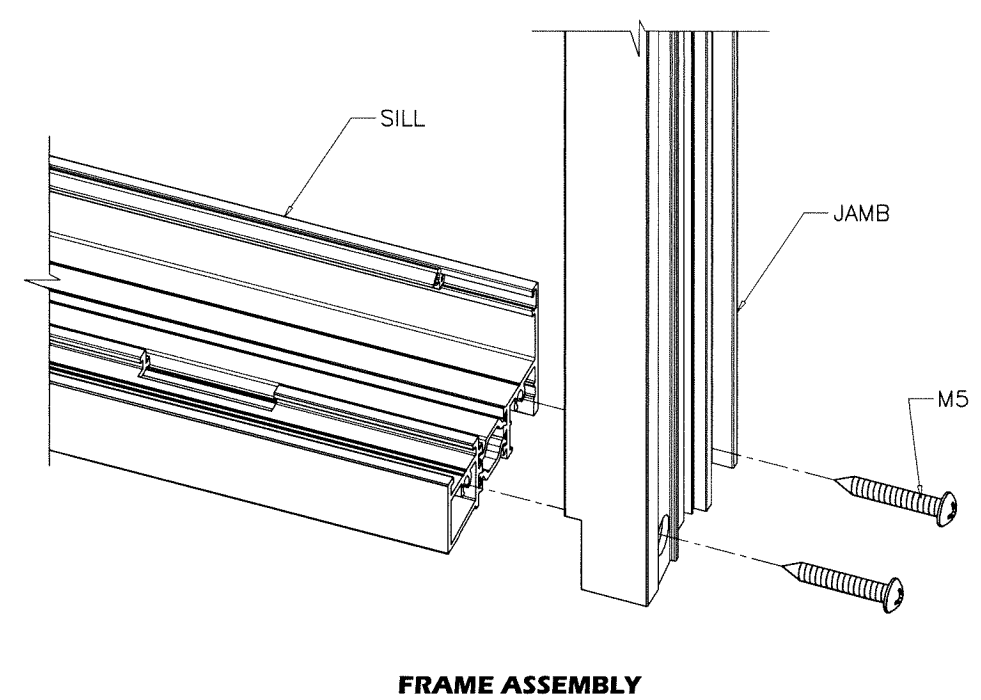
TECATHERM® 66 GF INSULBARS

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

ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
E1	ES-P250-006-007	4	WINDOW FRAME	6063-T6	-
E2	ES-P250-008	4	GLASS STOP	6063-T5	-
E3	ES-P252-007	AS REQD.	STRAP ANCHOR, 4" LONG	6005-T5	-
M1	ES-P251-G02	AS REQD.	GLAZING GASKET (EXTERIOR)	SCR-900	TREMCO TR-19619SW, DUROMETER 70±5 SHORE A
M2	ES-P251-G03	AS REQD.	GLAZING GASKET (INTERIOR)	EPDM	TREMCO TR-3234E, DUROMETER 70±5 SHORE A
M3	ES-45T-B01	2/ SIDE	SETTING BLOCK, 4" LONG, AT 1/4 POINTS	EPDM	SOLUCIONESENCAUCHO, DUROMETER 80±5 SHORE A
M4	2479	AS REQD.	INSULBAR 20MM OFFSET	POLYAMIDE	ENSINGER
M5	#10 X 1-1/4"	-	ASSEMBLY FASTENERS	ST/ST	PH SMS

SEALANT:
ALL JOINTS AND FRAME CONNECTIONS SEALED WITH
WHITE/ALUMINUM COLORED SILICONE.



Sealed: 10/9/2023

FL #19063



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

ES-P250 ALUM THERMALLY BROKEN FIXED W. (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: 10-13-15

scale: 1/2" = 1"

dr. by: TARIQ

chk. by:

drawing no.

W15-78

sheet 6 of 6