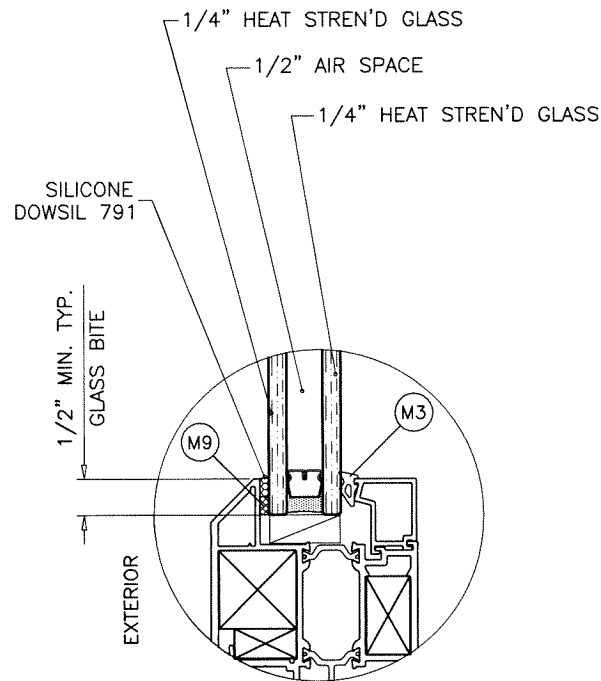




GLAZING DETAIL
1" OVERALL INSUL. GLASS

DOORS NOT RATED FOR IMPACT.

INSTALLATION OF THIS SYSTEM OUTSIDE THE HVHZ AREA SHALL MEET THE APPLICABLE REQUIREMENTS FOR WIND BORNE DEBRIS PROTECTION.

SERIES ES-45T (N.I.)

ALUMINUM THERMALLY BROKEN OUTSWING DOOR

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2023 (8TH EDITION)/2026 (9TH 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 2023/2026 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

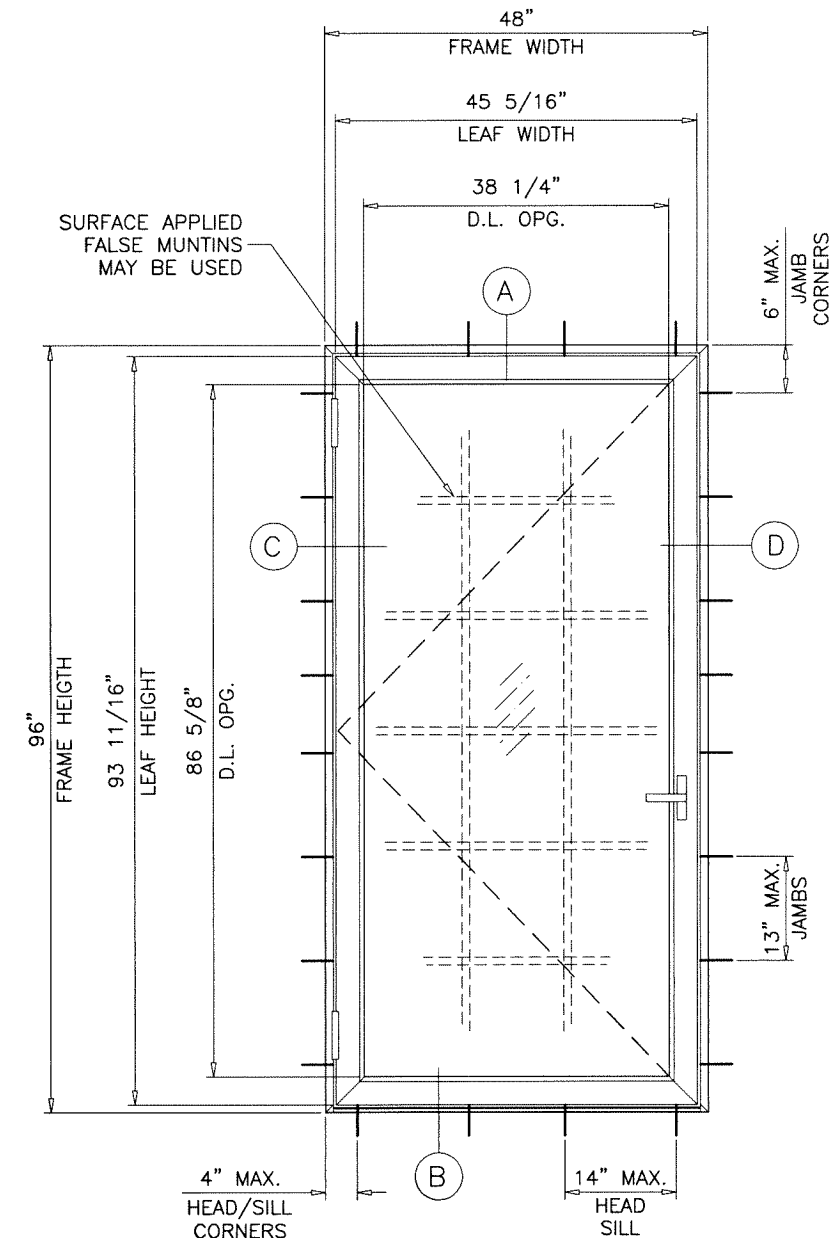
THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC. CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, 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.

DOORS APPROVED FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED.

NOTE:
GLASS CAPACITIES ARE BASED ON
ASTM E1300-16 (3 SEC. GUSTS)
AND FLORIDA BUILDING COMMISSION
DECLARATORY STATEMENT DCA05-DEC-219



TYPICAL ELEVATION

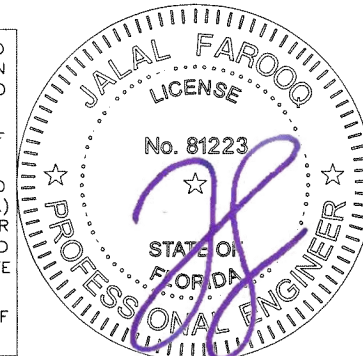
MAXIMUM DESIGN LOAD RATING = + 70.0 PSF
(FOR SIZES SHOWN ABOVE OR SMALLER) - 70.0 PSF

FASTENERS AND CONNECTORS (AS APPLICABLE) SHOWN IN THIS APPROVAL MAY NOT MEET CORROSION RESISTANCE REQUIREMENTS FOR COASTAL OR SALT WATER EXPOSURE ZONES. COMPLIANCE WITH THESE CONDITIONS TO BE CHECKED PER FBC 1711.

Sealed: 7/16/2026

FL #19072

- 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.



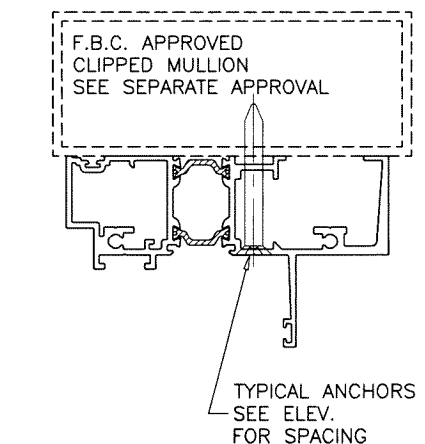
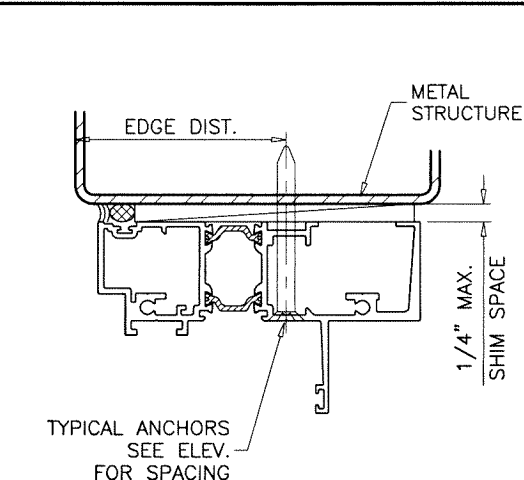
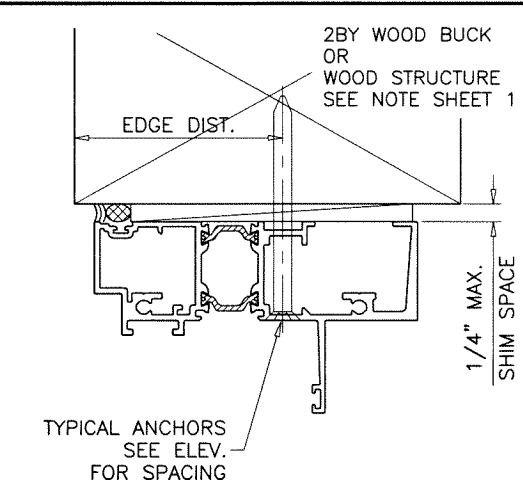
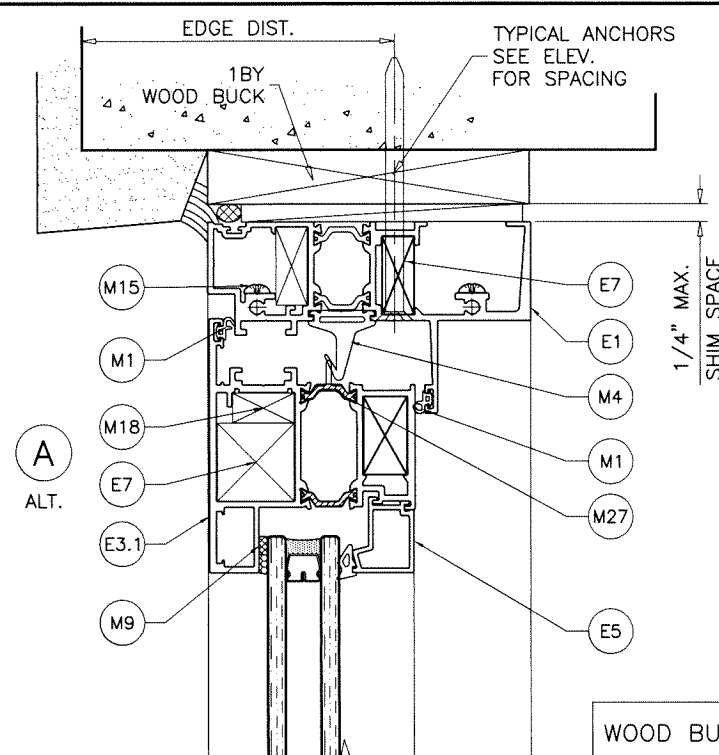
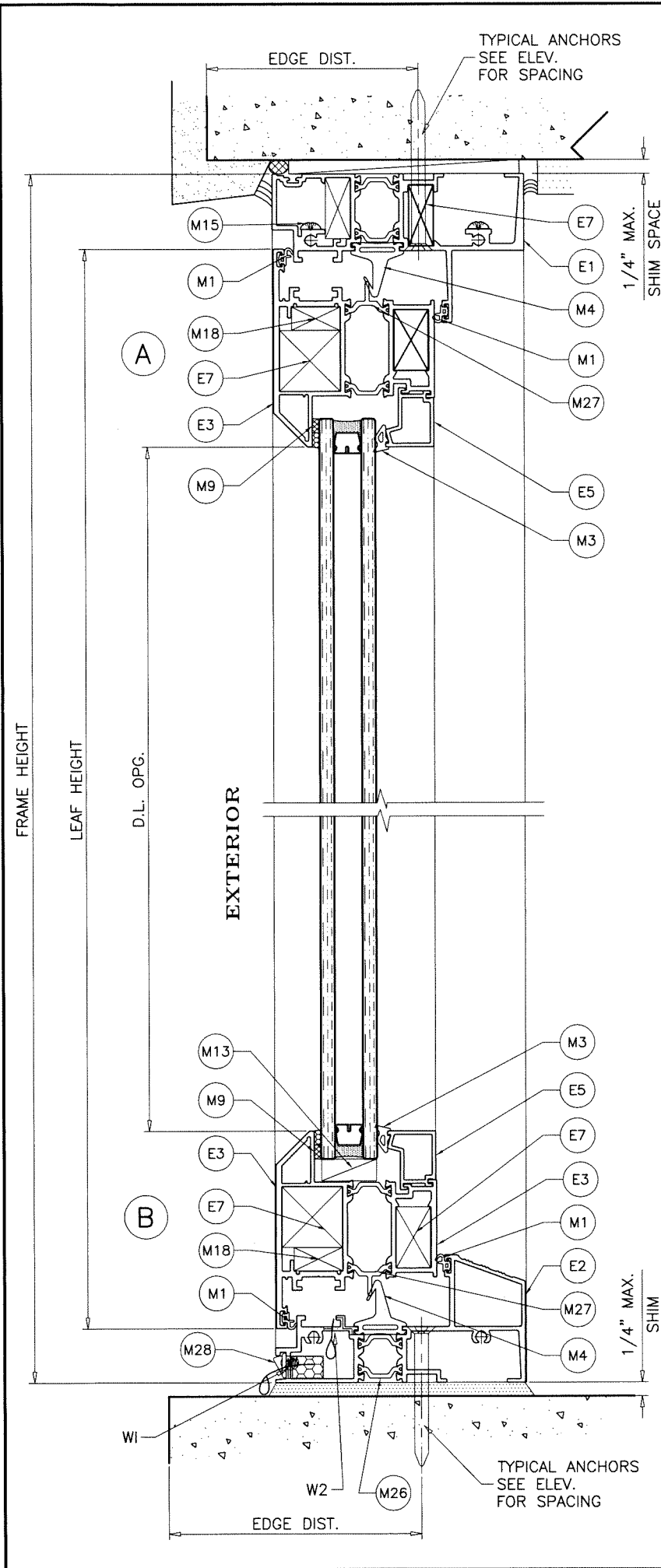
ES-45T ALUM THERMALLY BROKEN OUTSWING DOOR (N.I.)

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

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)

COMP-ANL\W15-79ESW

revisions:		by description	
no	date	no	date
A	04.16.19	ALT	LEAF STILE ADDED
B	12.17.20	UPDATED TO 2020 FBC	
C	07.31.23	UPDATED TO 2023 FBC	
D	07.10.26	UPDATED TO 2026 FBC	
date: 10-14-15		scale: 1/2"=1'-0"	
drawing no.		dr. by: TARIQ	
sheet 1 of 5		chk. by:	



WOOD BUCKS AND METAL STRUCTURE NOT BY 'E.S. WINDOWS' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

#14 DIA. CRETE-FLEX SS4 BY 'DEWALT' ($F_u=190$ KSI, $F_y=127$ KSI)

1/4" DIA. ULTRACON SS4 410 BY 'DEWALT' ($F_u=190$ KSI, $F_y=164$ KSI)

1/4" DIA. ULTRACON+ BY 'DEWALT' ($F_u=164$ KSI, $F_y=148$ KSI)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1-1/2" MIN. PENETRATION INTO WOOD (HEAD/JAMBS)

THRU 1BY BUCKS INTO CONC. OR BLOCKS
1-1/4" MIN. EMBED INTO CONCRETE (HEAD/JAMBS)
1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

DIRECTLY INTO CONCRETE OR BLOCKS
1-3/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1-3/4" MIN. EMBED INTO FILLED BLOCKS (JAMBS)

1/4" DIA. BI-FLEX 300 SELF DRILLING SCREWS BY 'DEWALT'

1/4" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS)

INTO F.B.C. APPROVED MULLIONS
OR
INTO METAL STRUCTURES (HEAD/JAMBS)
(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
STEEL: 1/8" THK. MIN. ($F_y = 36$ KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE

INTO CONCRETE AND BLOCKS = 2-1/2" MIN.

INTO WOOD STRUCTURE = 1" MIN.

INTO METAL STRUCTURE = 3/4" MIN.

WOOD AT HEAD OR JAMBS SG = 0.55 MIN.

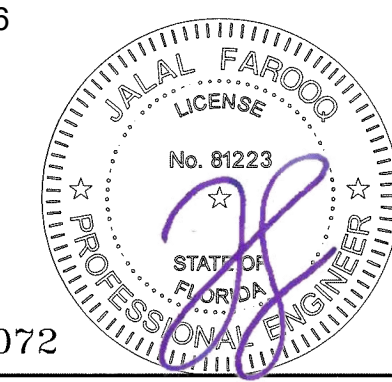
CONCRETE AT HEAD, SILL OR JAMBS $f'_c = 3000$ PSI MIN.

C-90 HOLLOW/FILLED BLOCK AT JAMBS $f'_m = 2000$ PSI MIN.

WEEPHOLES:

W1 = 1-3/4" X 1/4" WEEPHOLES WITH WEEP COVERS AT 6" FROM EACH END

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COMP-ANL W15-79ESW

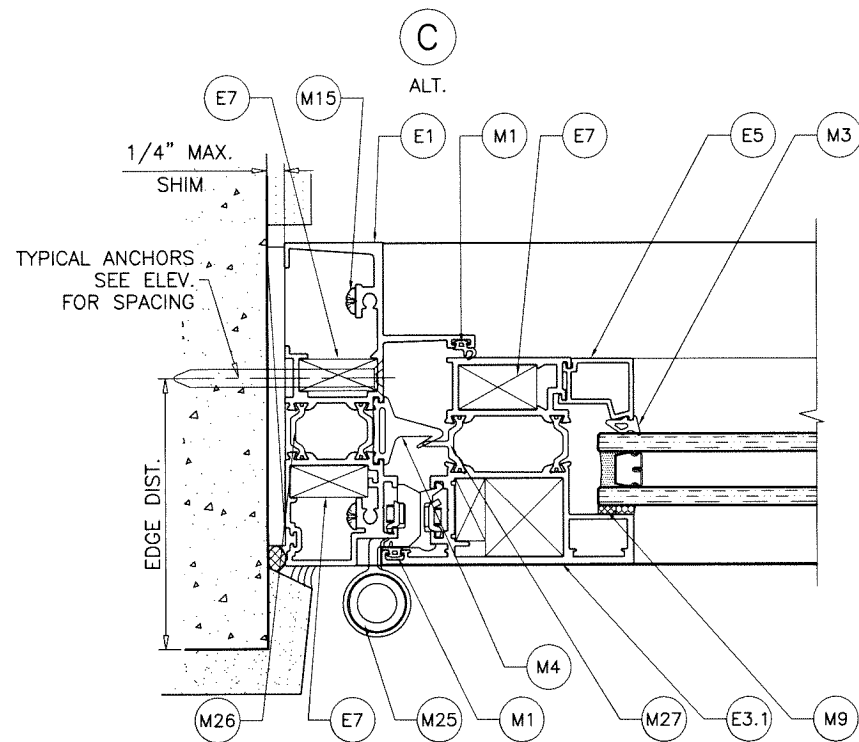
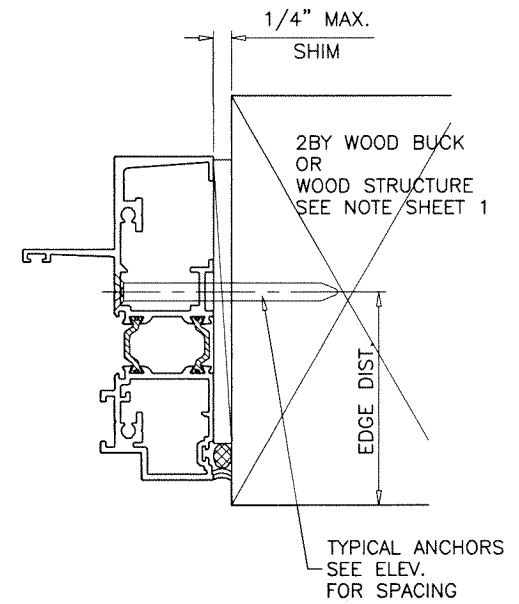
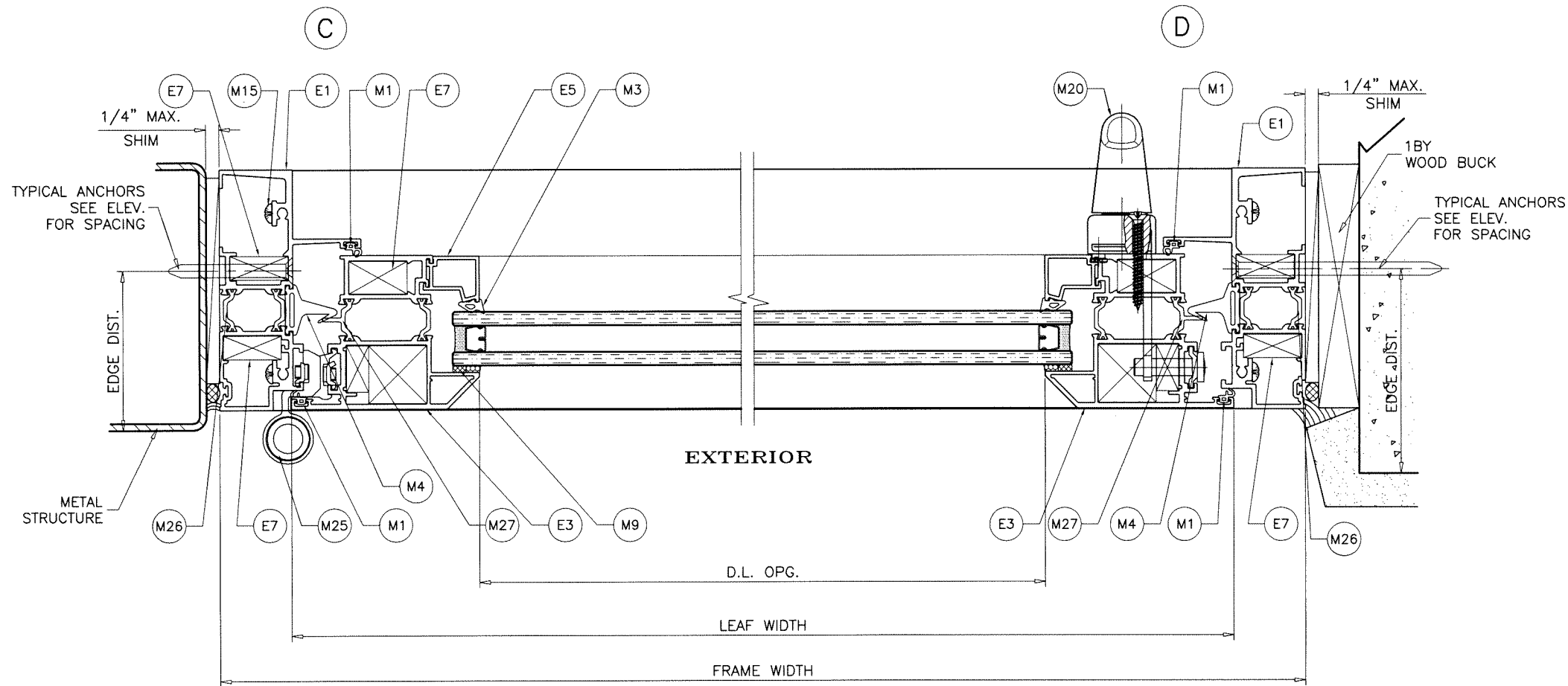
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Revisions:	
no	by description

date: 10-14-15	scale: 3/8" = 1"	dr. by: TARIQ	chk. by:	
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drawing no. W15-79	sheet 2 of 5
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Sealed: 7/16/2026



FL #19072

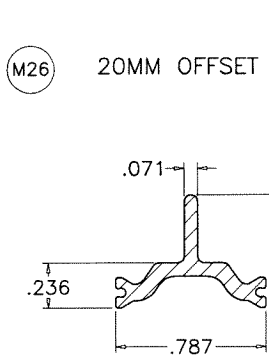
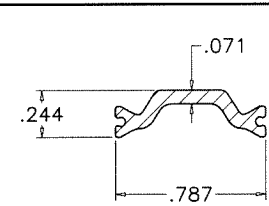
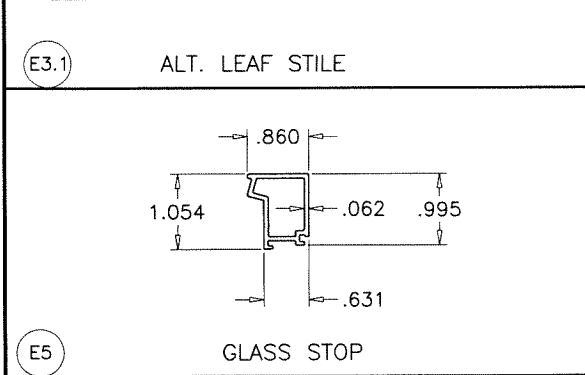
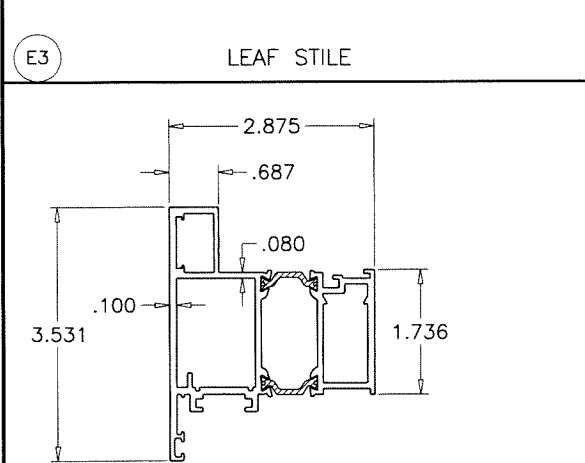
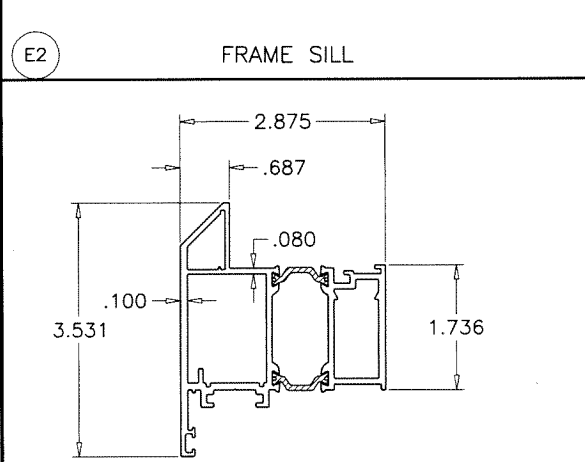
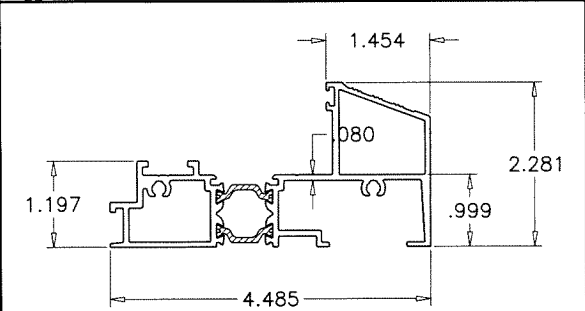
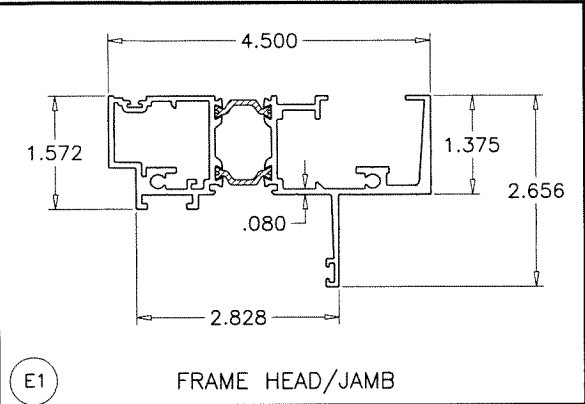
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W15-79
 sheet 3 of 5

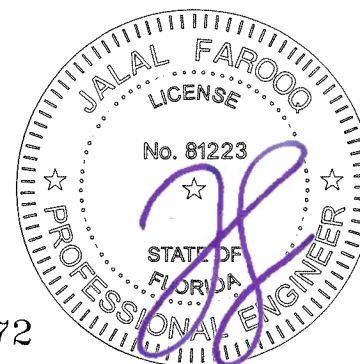


TECATHERM® 66 GF INSULBARS
SCALE 1:1

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-45T-001-002	3	FRAME HEAD/JAMB	6063-T6	-
E2	ES-45T-003-004	1	FRAME SILL	6063-T6	-
E3	ES-45T-005-006	4	LEAF STILE	6063-T6	-
E3.1	ES-45T-051	4	ALT. LEAF STILE	6063-T6	-
E5	ES-45T-007	4/	LEAF GLASS STOP	6063-T6	-
E7	ES-45T-011	AS REQD.	CORNER KEY	6063-T6	-
E14	ES-EUR-001	1	EURO BAR	6063-T6	-
M1	ES-P251-G01	AS REQD.	FRAME/LEAF GASKET	EPDM	DUROMETER 70±5 SHORE A
M3	ES-P251-G03	AS REQD.	GLAZING GASKET	EPDM	DUROMETER 70±5 SHORE A
M4	ES-P251-G04	AS REQD.	CHAMBER DIVIDER EXTRUSION	EPDM	DUROMETER 60±5 SHORE A
M5	ES-P251-G04A	AS REQD.	CHAMBER DIVIDER MOLDED CORNER	EPDM	DUROMETER 60±5 SHORE A
M9	-	AS REQD.	SINGLE FACE TAPE (1/8" X 1/4")	POLYURETHANE	-
M13	NF-315-B02	2/LITE	SETTING BLOCK, AT 1/4 POINTS	EPDM	DUROMETER 80±5 SHORE A
M15	#12 X 1-3/4" PH	-	FRAME ASSEMBLY FASTENERS	ST/ST	-
M18	ES-45T-C01	AS REQD.	CORNER JOINT	CAST ALUMINUM	MASTER #0333
M20	MHSS-1500	-	LOCKING HANDLE, AT 35-1/2" FROM BOTTOM	CAST ALUMINUM	INTERLOCK
M21	895955	-	HANDLE FORK	CAST ALUMINUM	INTERLOCK
M22	899915	-	HANDLE PIN	ST. STEEL	INTERLOCK
M25	A105	-	BUTT HINGE, AT 6-11/16" FROM TOP & BOTTOM	ALUMINUM	DR. HAHN
M26	1673	-	INSULBAR 20MM OFFSET	POLYAMIDE	ENSINGER
M27	964200	-	INSULBAR 20MM OFFSET WITH FIN	POLYAMIDE	ENSINGER
M28	WA2L	-	WEEP HOLE COVER	RIGID PVC	PREFERRED

Sealed: 7/16/2026



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