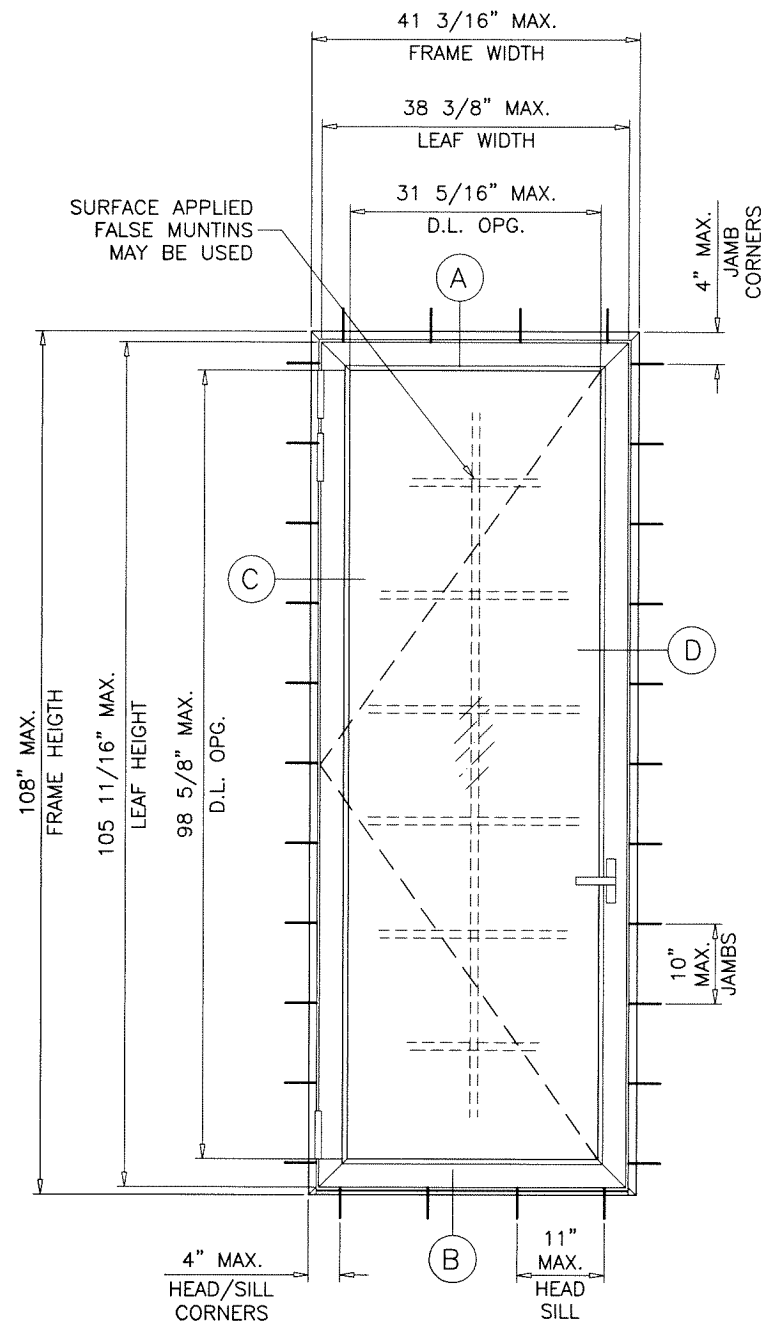
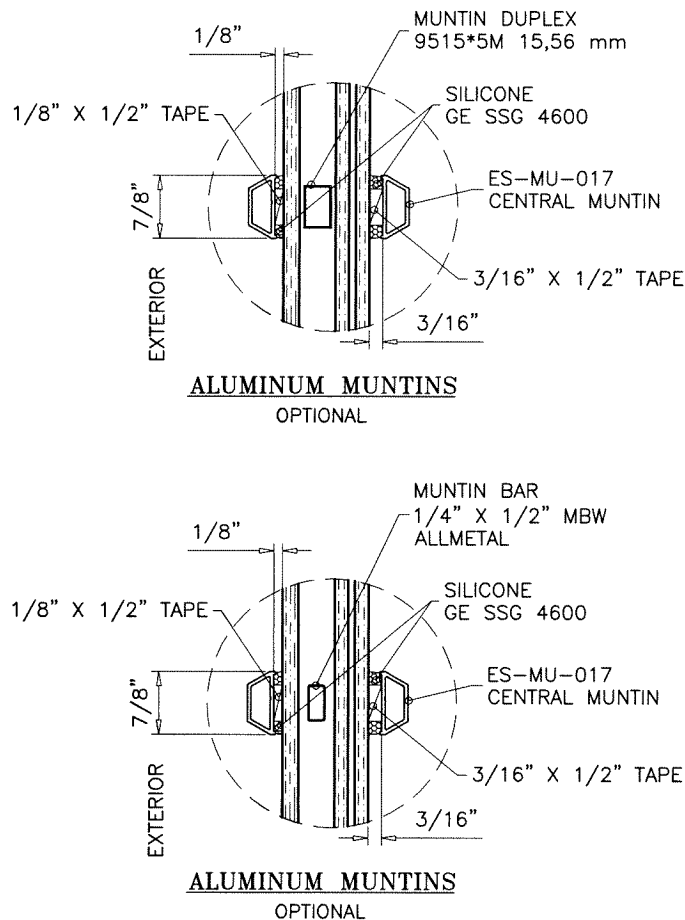
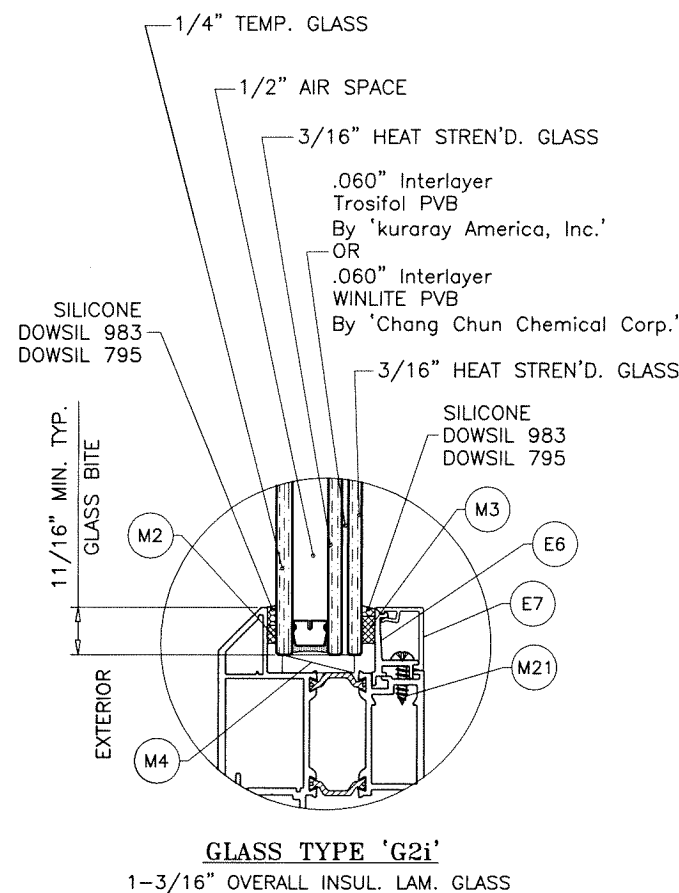




THESE DOORS ARE RATED FOR SMALL MISSILE IMPACT.
F.B.C. APPROVED IMPACT RESISTANT SHUTTERS REQUIRED
FOR INSTALLATIONS UP TO 30 FT. OF GRADE.
SHUTTERS NOT REQD. FOR INSTALLATIONS ABOVE 30 FT. OF GRADE.

ES-46T THERMAL ALUMINUM OUTSWING ENTRANCE DOOR

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).

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 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.

1/2" AIR SPACE CONSISTING OF:
SPACER:
'HELIMA' LOW PROFILE ALUMINUM SPACER
BY 'LINGERMANN GMBH'
AROUND THE PERIMETER OF THE GLASS.
PERIMETER SEALANT:
SILICONE
DOWSIL 791
GE 2000

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

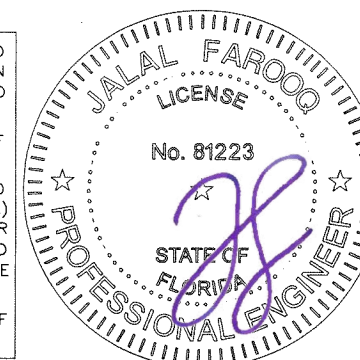
GLASS D.L.O. FORMULAE:
D.L.O. WIDTH = FRAME WIDTH - 9.750"
D.L.O. HEIGHT = FRAME HEIGHT - 9.375"

GLASS TYPE 'G2i'
MAXIMUM DESIGN LOAD RATING = + 100.0 PSF
(FOR SIZES SHOWN ABOVE OR SMALLER) - 120.0 PSF
AS PERMITTED BY FBC

DOOR HEIGHT AND WIDTH SIZE MUST COMPLY
EGRESS REQUIREMENTS PER FBC AS APPLICABLE.

Sealed: 03/20/2026

FL #21835



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
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MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL W17-08ES

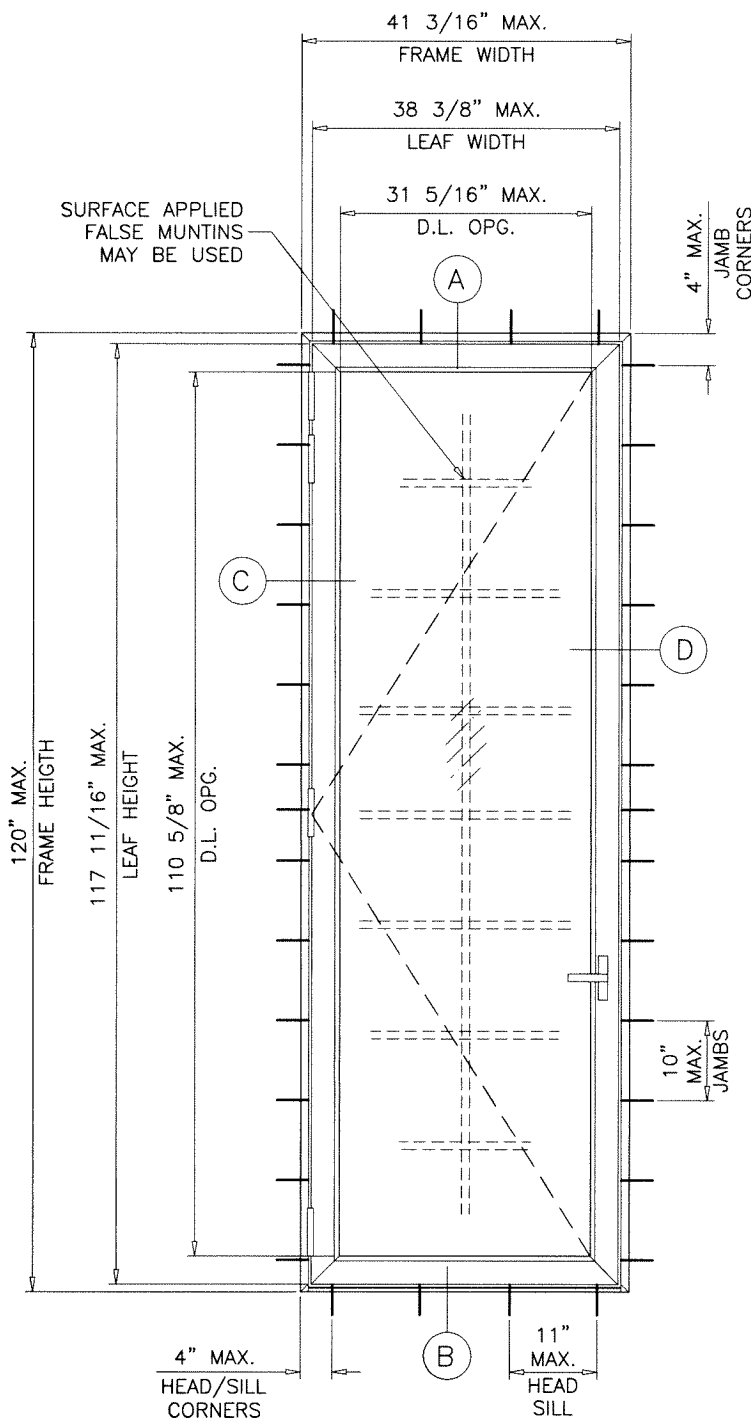
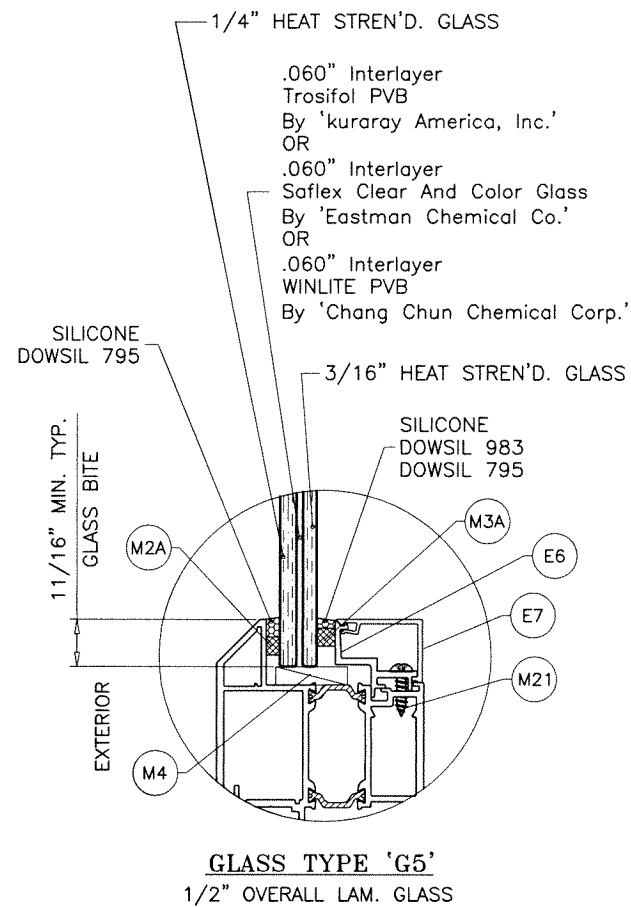
ES-46T THERMAL ALUM FRENCH DOOR (S.M.I.)

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
	E	02.09.21		LAM. GLASS OPTION ADDED.
	F	07.31.23		UPDATED TO 2023 FBC
	G	08.26.24		WINLITE INTERLAYER ADDED
	H	02.27.26		INSUL. GLASS MUNTIN ADDED

date: 01-02-17
scale: 1/2"=1'-0"
dr. by: TARIQ
chk. by:

drawing no.
W17-08
sheet 1 of 6

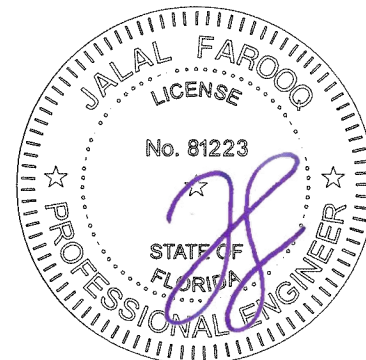


TYPICAL ELEVATION

GLASS TYPE 'G5'
 MAXIMUM DESIGN LOAD RATING = + 100.0 PSF
 (FOR SIZES SHOWN ABOVE OR SMALLER) - 120.0 PSF
 AS PERMITTED BY FBC

DOOR HEIGHT AND WIDTH SIZE MUST COMPLY
 EGRESS REQUIREMENTS PER FBC AS APPLICABLE.

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COMP-ANL\W17-08ES

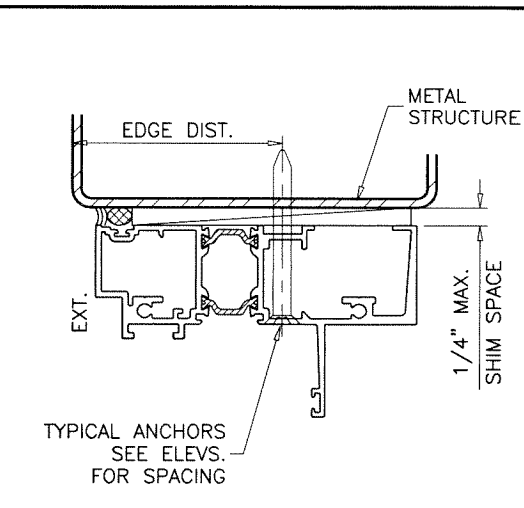
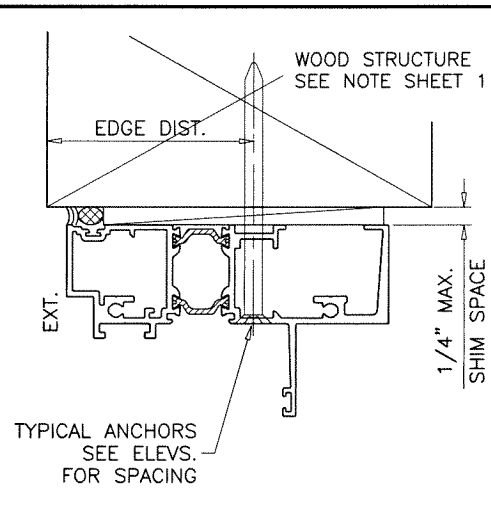
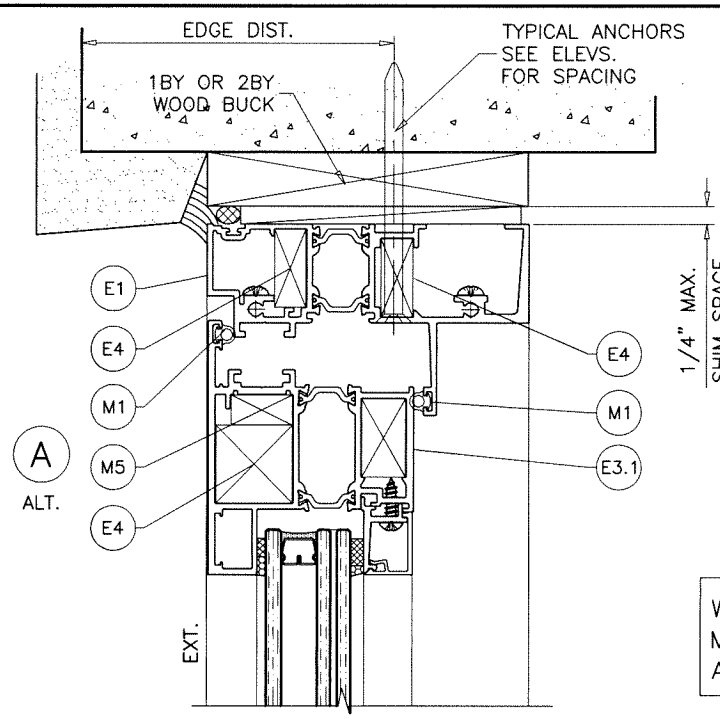
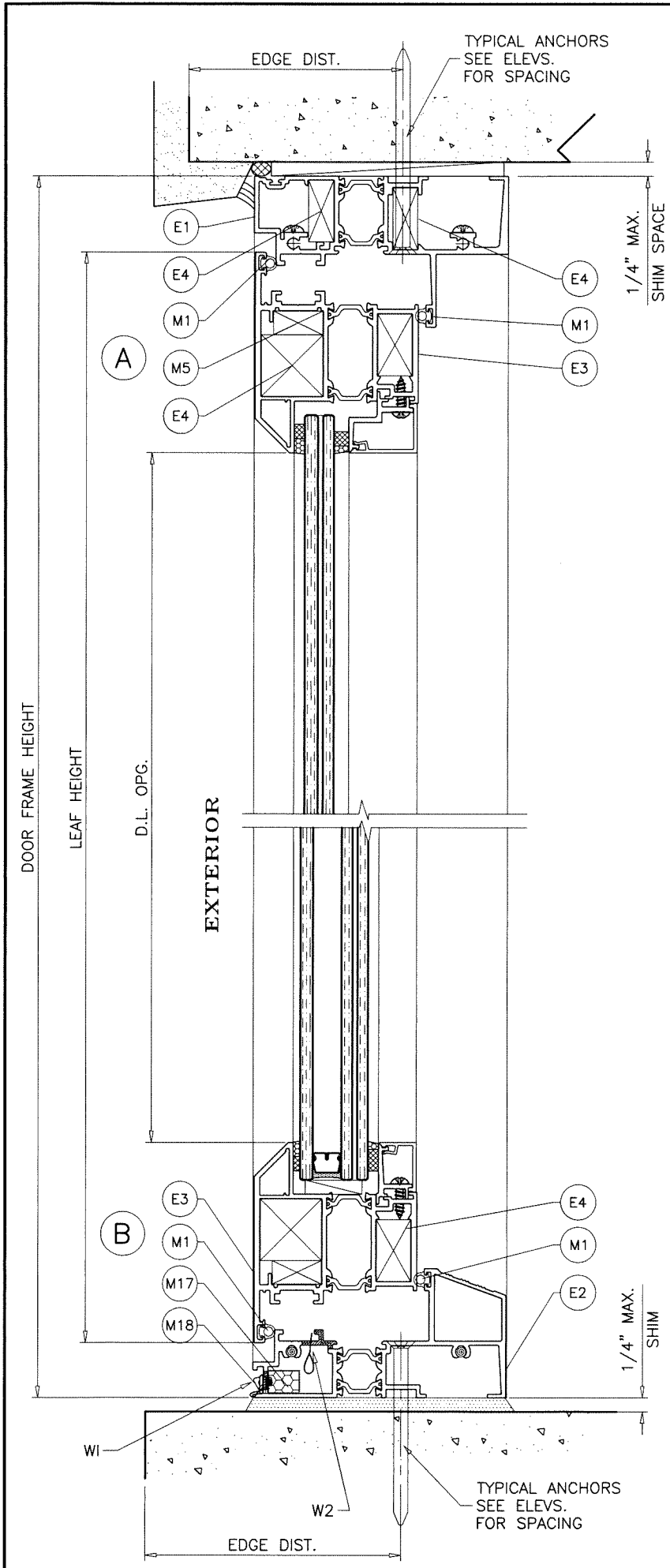
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revisions:	
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date: 01-02-17
 scale: 1/2"=1'-0"
 dr. by: TARIQ
 chk. by:

drawing no.
W17-08
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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' (Fu=190 KSI, Fy=127 KSI)

1/4" DIA. ULTRACON SS4 410 BY 'DEWALT' (Fu=190 KSI, Fy=164 KSI)

1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)

INTO WOOD STRUCTURES
2" MIN. PENETRATION INTO WOOD (HEAD/JAMBS)

THRU 1BY OR 2BY 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
2" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
2" MIN. EMBED INTO GROUT FILLED BLOCKS (JAMBS)

1/4" DIA. DRIL-FLEX SELF DRILLING SCREWS BY 'DEWALT' (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. (Fy = 36 KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

ANCHOR EDGE DISTANCES

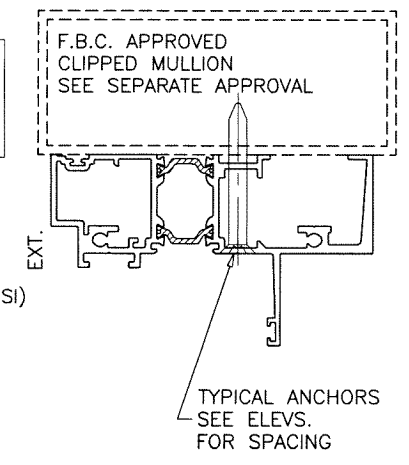
INTO CONCRETE AND BLOCKS = 2-1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

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 = 1-7/8" X 5/16" WEEP HOLES AT 6" FROM EACH END WITH PVC BAFFLE

W2 = 1" X 7/16" WEEP HOLES AT 6" FROM EACH END



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revisions:	
no	date by description

date: 01-02-17

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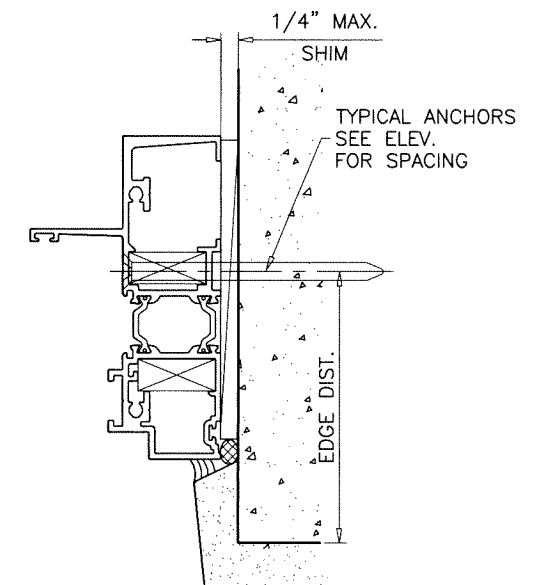
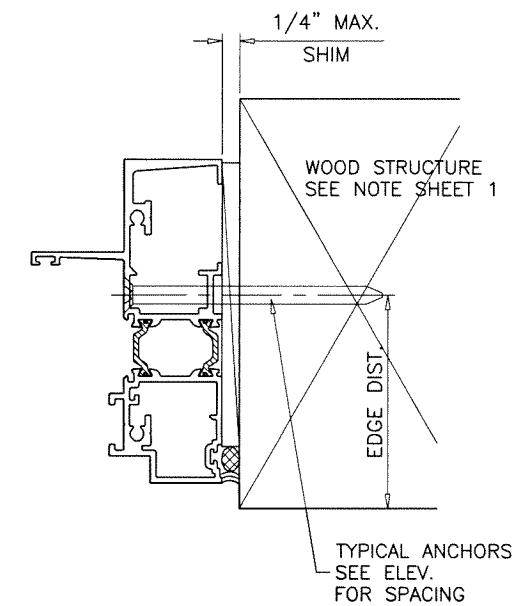
dr. by: TARIQ

chk. by:

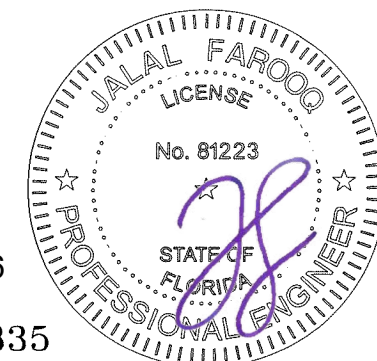
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W17-08

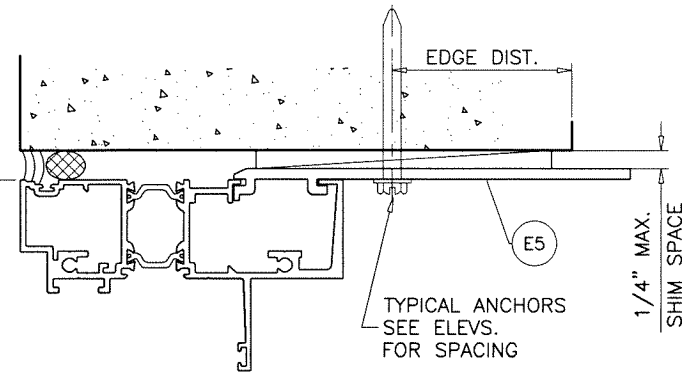
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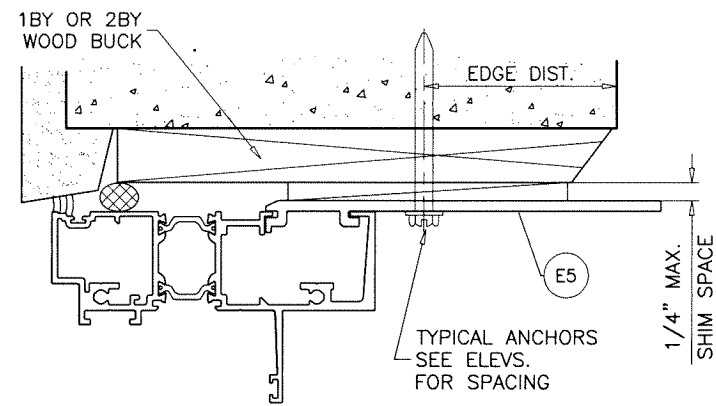
FL #21835

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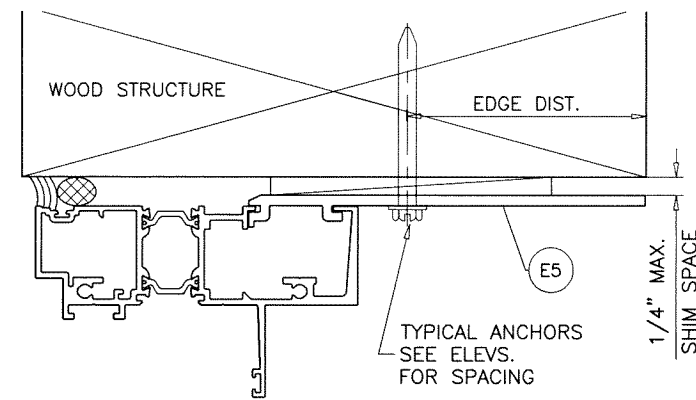
DOOR FRAME HEIGHT



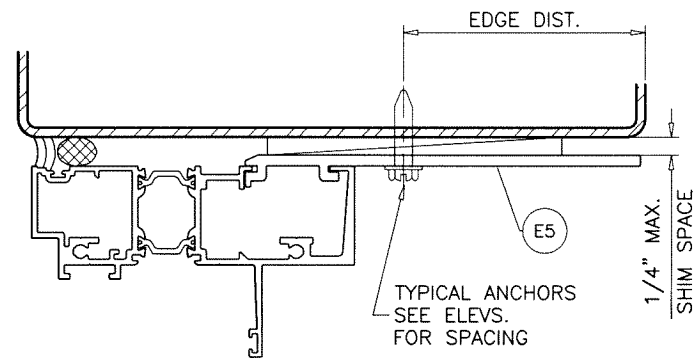
DOOR HEAD/JAMB



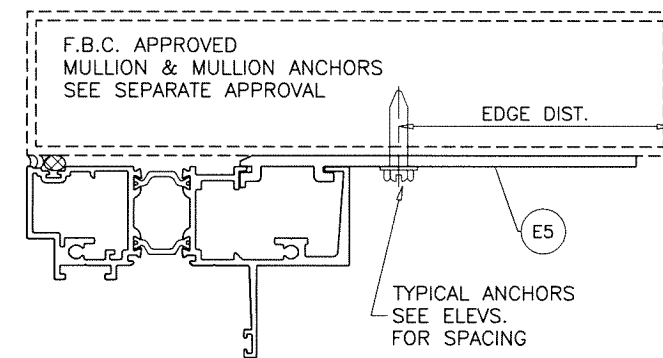
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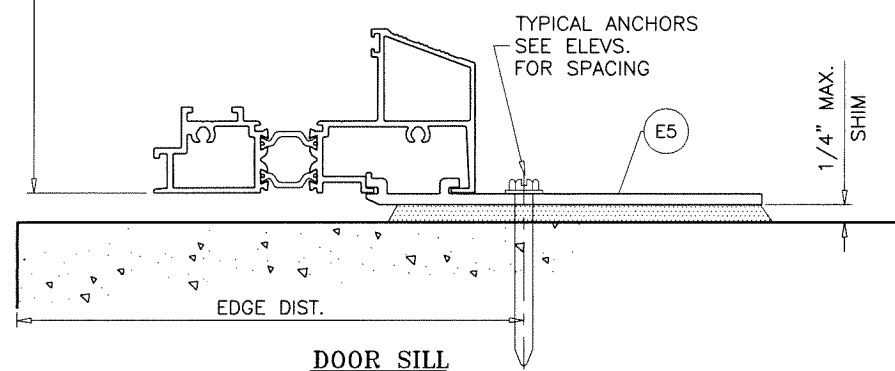
DOOR HEAD/JAMB



DOOR HEAD/JAMB



DOOR HEAD/JAMB

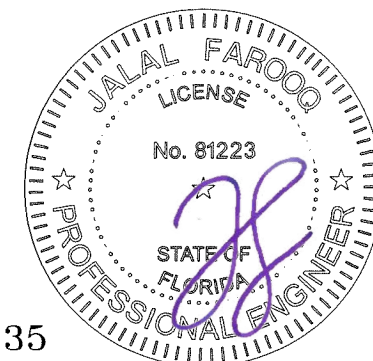


DOOR SILL

INSTALLATION DETAILS WITH STRAP ANCHOR

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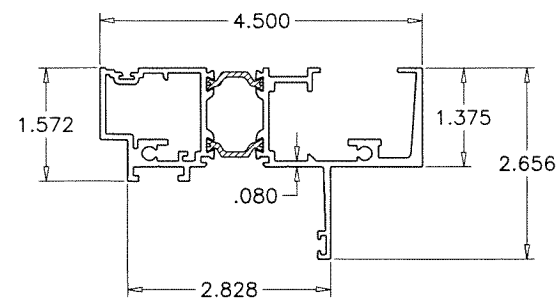
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AL-FAROOQ CORPORATION
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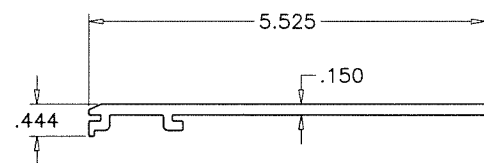
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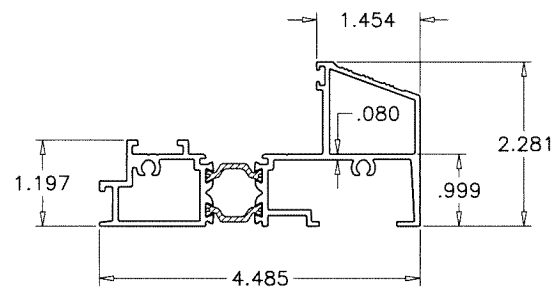
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W17-08
sheet 4 of 6



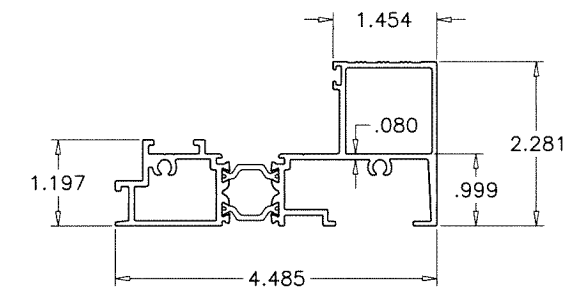
E1 DOOR FRAME HEAD/JAMB



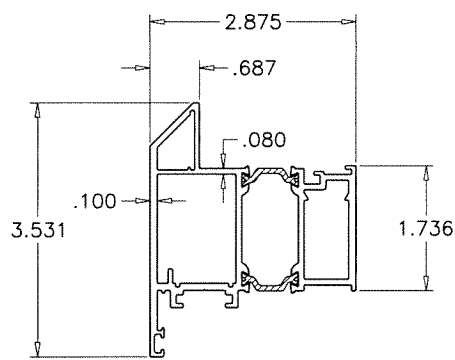
E5 STRAP ANCHOR CLIP



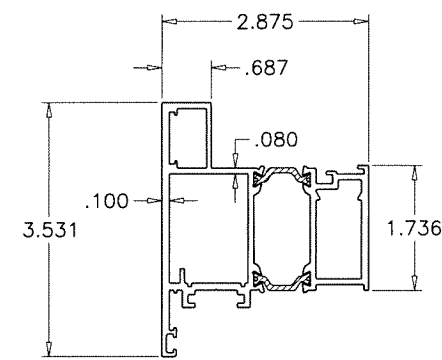
E2 FRAME SILL



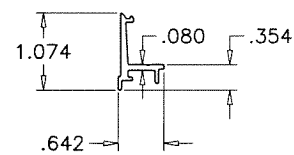
(E2.1) ALT. FRAME SILL



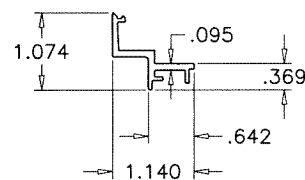
E3 LEAF STILE



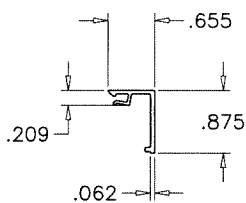
(E3.1) ALT. LEAF STILE



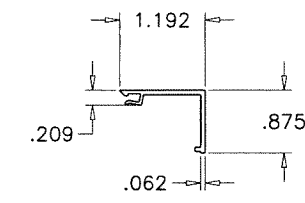
E6 GLASS STOP (DOOR)
(INSUL. LAM. GLASS)



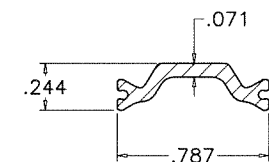
(E6A) GLASS STOP (DOOR)
(LAM. GLASS)



E7 GLASS STOP COVER (DOOR)
(INSUL. LAM. GLASS)



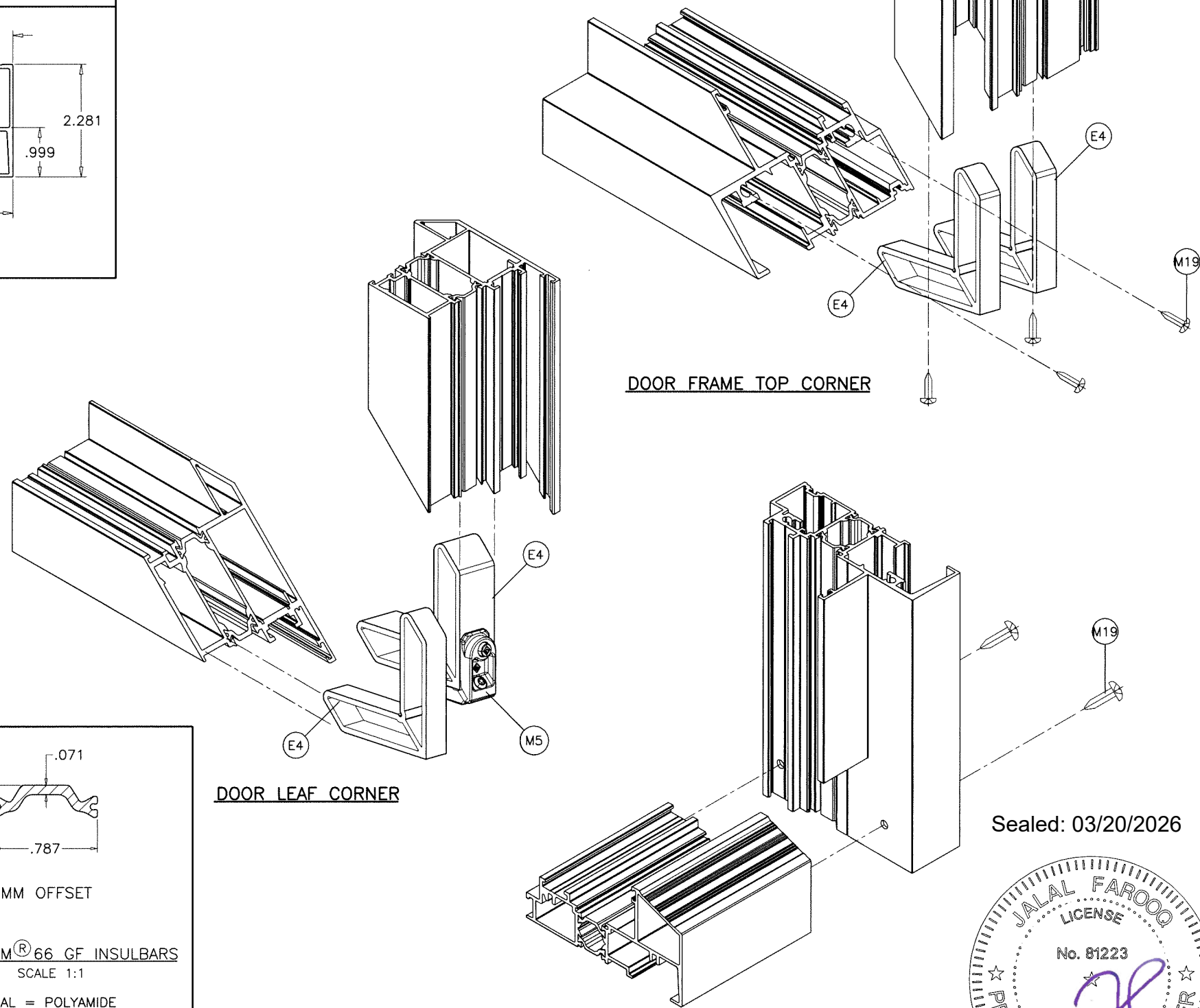
(E7A) GLASS STOP COVER (DOOR)
(LAM. GLASS)



(M22) 20MM 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

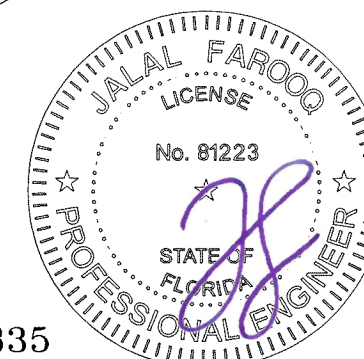


DOOR FRAME TOP CORNER

DOOR LEAF CORNER

THRESHOLD CORNERS

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chk. by:

drawing no.

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sheet 6 of 6