

NOTE:
GLASS CAPACITIES ARE BASED ON
ASTM E1300-09 (3 SEC. GUSTS)
AND FLORIDA BUILDING COMMISSION
DECLARATORY STATEMENT DCA05-DEC-219

GLASS D.L.O. FORMULAE:
D.L.O. WIDTH = FRAME WIDTH - 14.0" (STD. JAMBS)
D.L.O. WIDTH = FRAME WIDTH - 11.0" (NARROW JAMBS)
D.L.O. HEIGHT = FRAME HEIGHT - 15.750"

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-9100
ALUMINUM OUTSWING ENTRANCE DOOR

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2020 (7TH EDITION)/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.

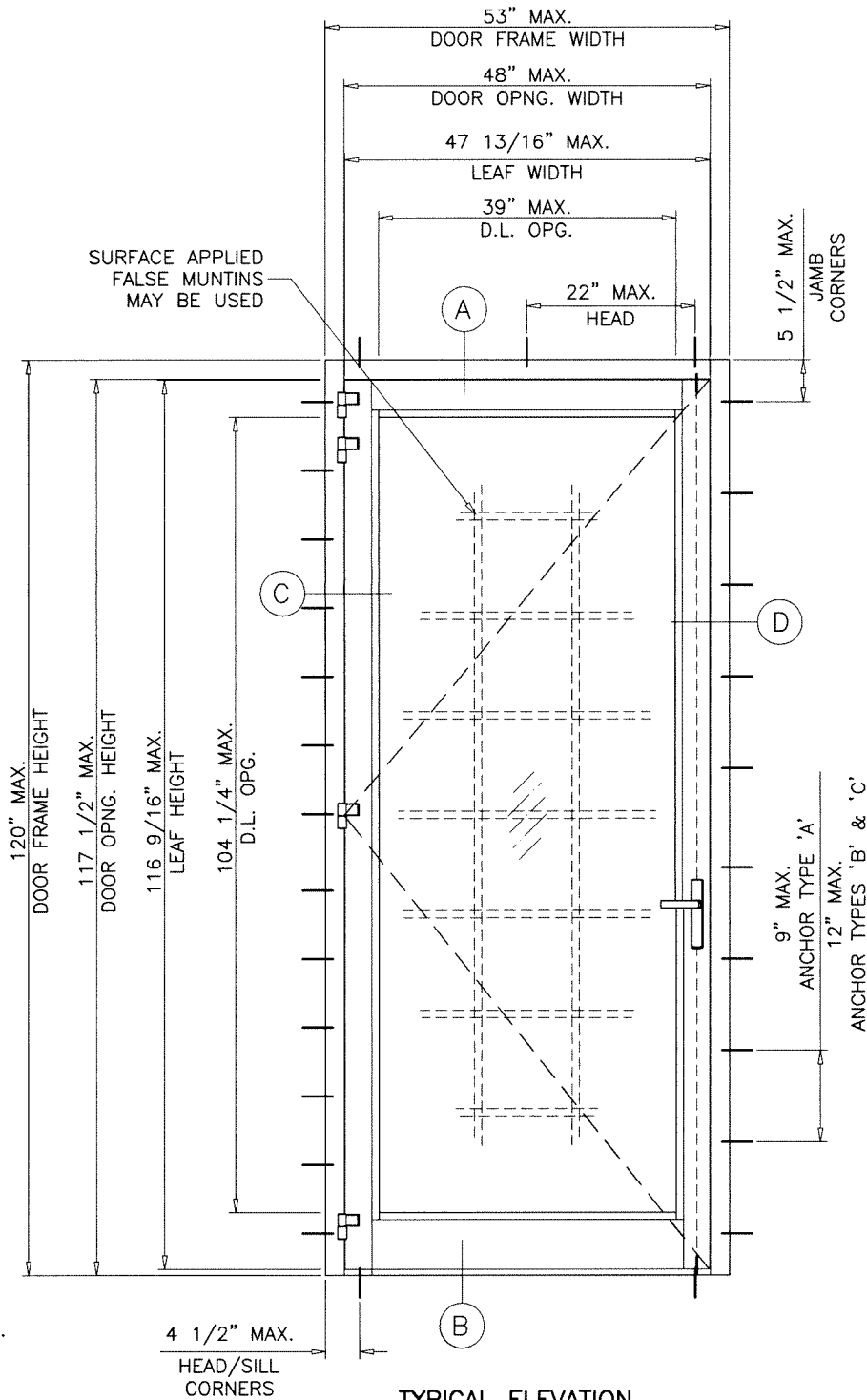
MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2020/2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

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.

DOORS WITH MEDIUM THRESHOLD ARE NOT APPROVED FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED.
DOORS USING ES-9026 (HIGH THRESHOLD) ARE APPROVED FOR WATER INFILTRATION RESISTANCE.
SEE SHEET 3 FOR DETAILS.

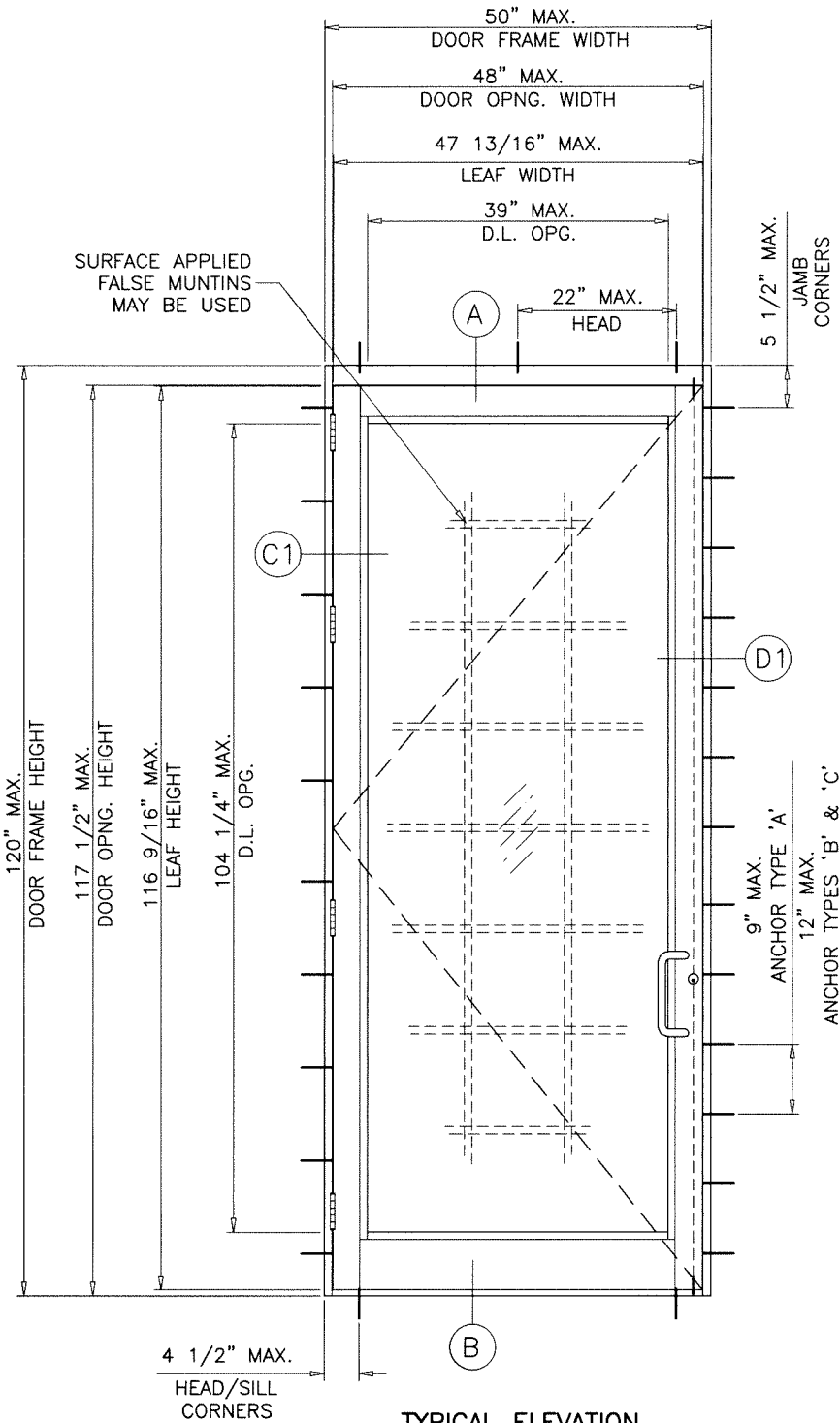


TYPICAL ELEVATION
STD. JAMBS

GLASS TYPES 'A', 'A2i' & 'A3i'
MAXIMUM DESIGN LOAD RATING = + 120.0 PSF
(FOR SIZES SHOWN ABOVE OR SMALLER) - 150.0 PSF
AS PERMITTED BY FBC

GLASS TYPE 'A1i'
MAXIMUM DESIGN LOAD RATING = + 120.0 PSF
(FOR SIZES SHOWN ABOVE OR SMALLER) - 144.0 PSF
AS PERMITTED BY FBC

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



TYPICAL ELEVATION
NARROW JAMBS

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FL #22527

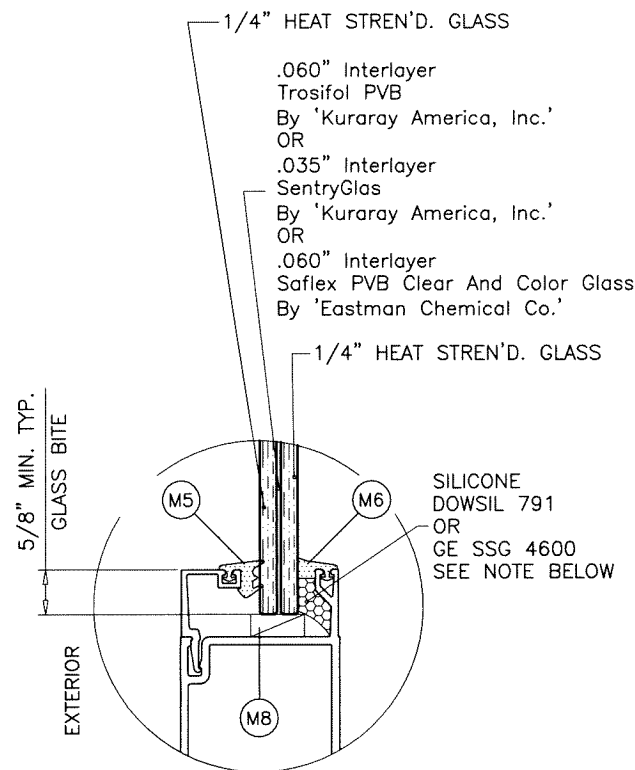
A- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.
B- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.
C- SITE 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 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL\W17-56ES

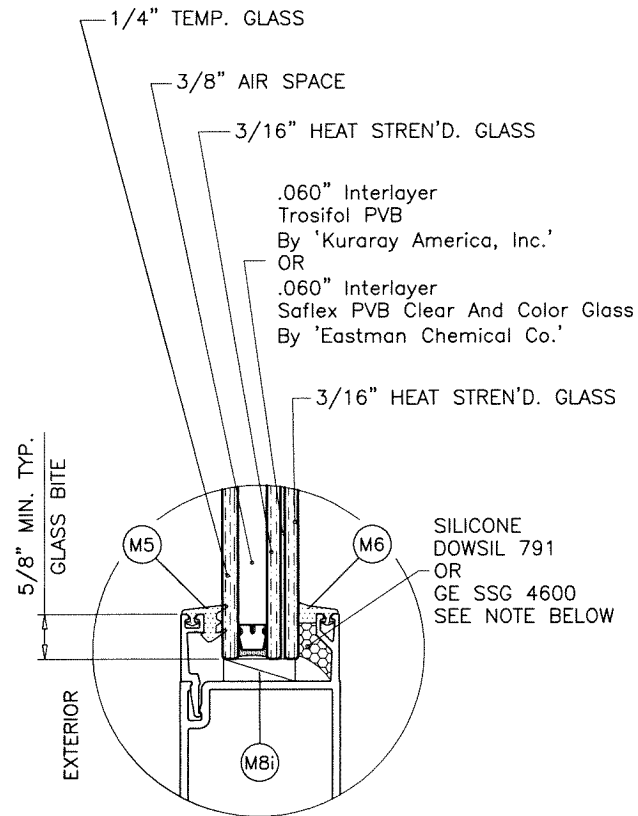
ES-9100 ALUMINUM OUTSWING DOOR (S.M.I.)
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:		no	date	by	description
		A	10.05.20		UPDATED TO 2020 FBC
		B	03.22.22		THRESHOLD OPTION ADDED
		C	07.25.23		SILICONE OPTION ADDED
		D	02.27.26		INSUL. GLASS MUNTIN ADDED
date:	06-07-17	scale:	1/2"=1'-0"	dr. by:	TARIQ
chk. by:		drawing no.:	W17-56	sheet	1 of 7



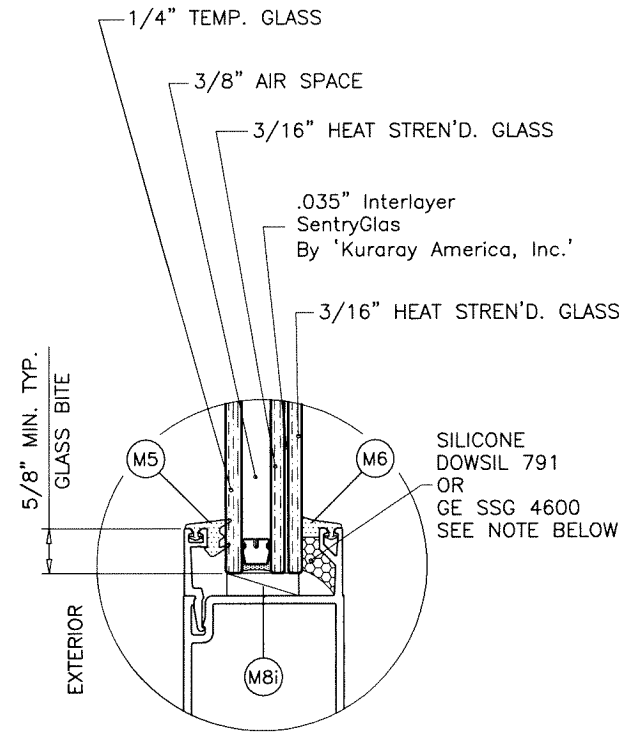
GLASS TYPE 'A'

9/16" OVERALL LAM. H.S. GLASS



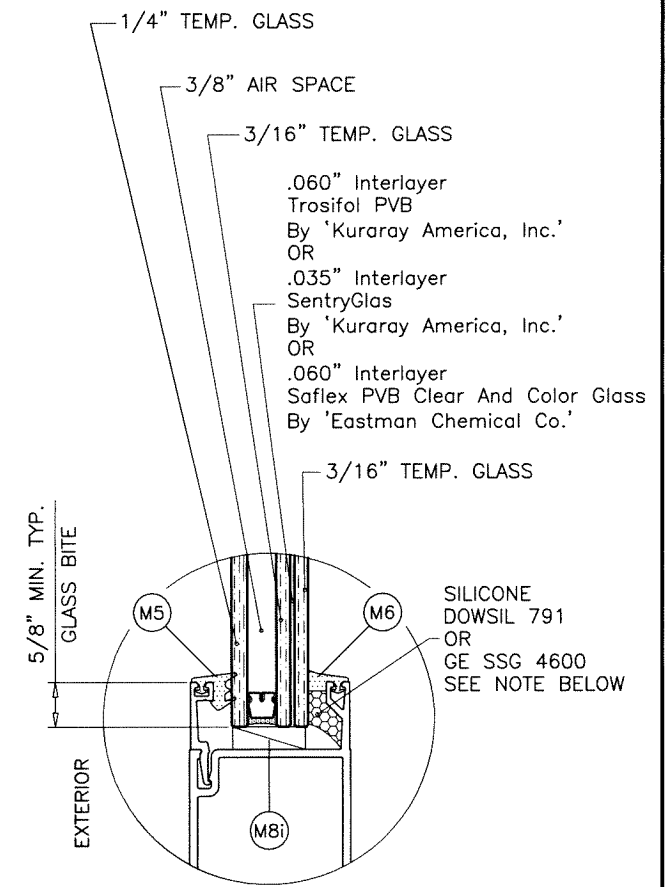
GLASS TYPE 'A1i'

1-1/16" OVERALL INSUL. LAM. H.S. GLASS



GLASS TYPE 'A2i'

1-1/16" OVERALL INSUL. LAM. H.S. GLASS

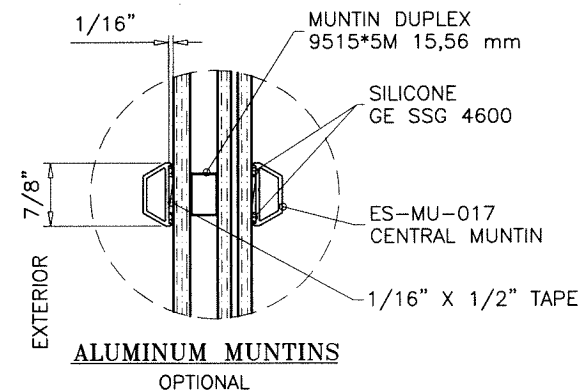


GLASS TYPE 'A3i'

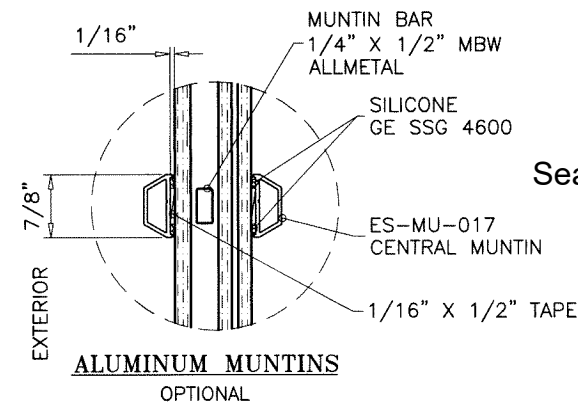
1-1/16" OVERALL INSUL. LAM. TEMP. GLASS

GLAZING OPTIONS

NOTE:
FOR GE SSG 4600 SILICONE
LIMIT MAX DESIGN LOADS TO ± 120.0 PSF
LIMIT MAX. D.L. OPG. WIDTH TO 33 INCHES



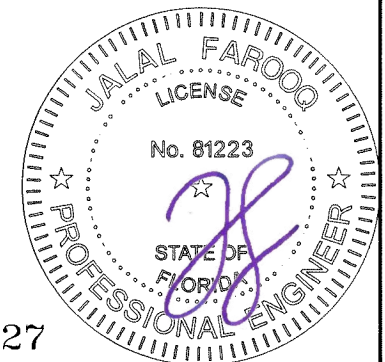
ALUMINUM MUNTINS
OPTIONAL



ALUMINUM MUNTINS
OPTIONAL

3/8" AIR SPACE CONSISTING OF:
SPACER:
'HELIMA' LOW PROFILE ALUMINUM SPACER
BY 'LINGERMANN GMBH'
AROUND THE PERIMETER OF THE GLASS.
PERIMETER SEALANT:
SILICONE
DOWSIL 791

Sealed: 03/20/2026



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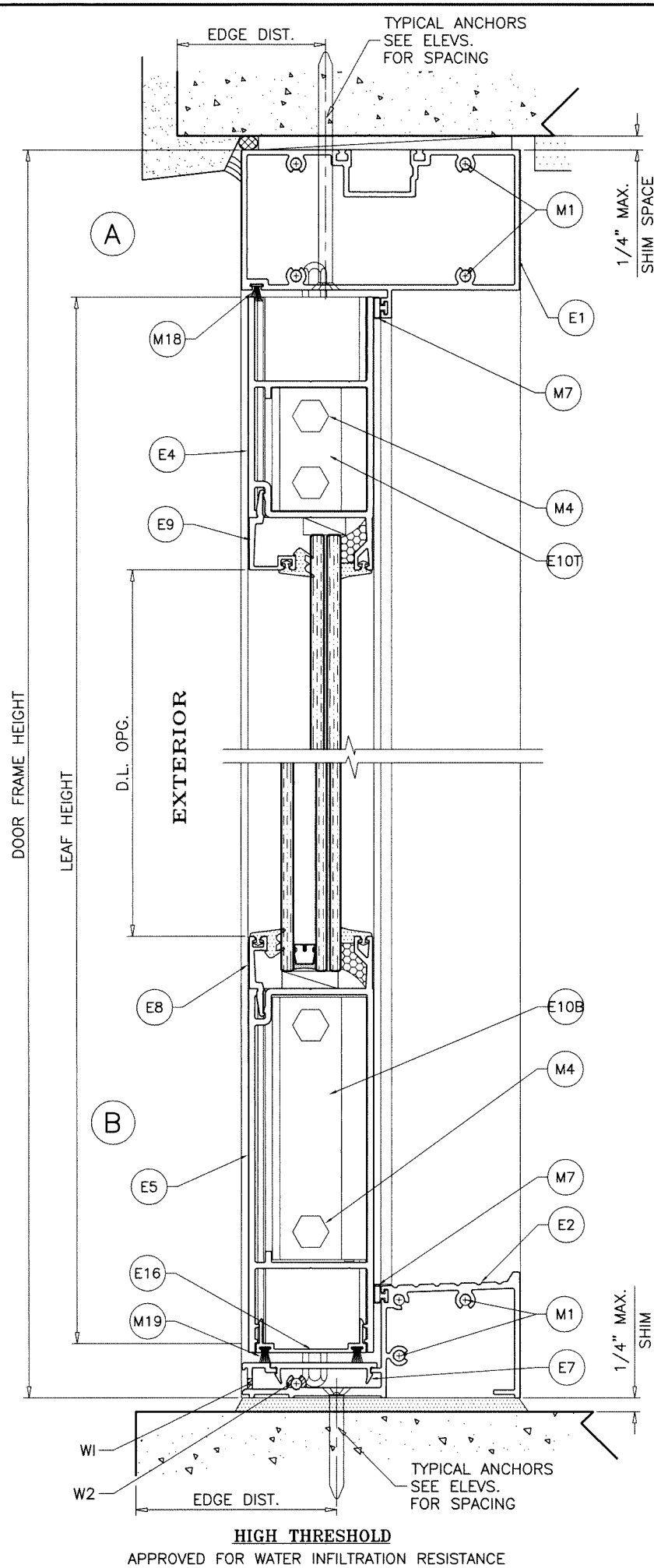
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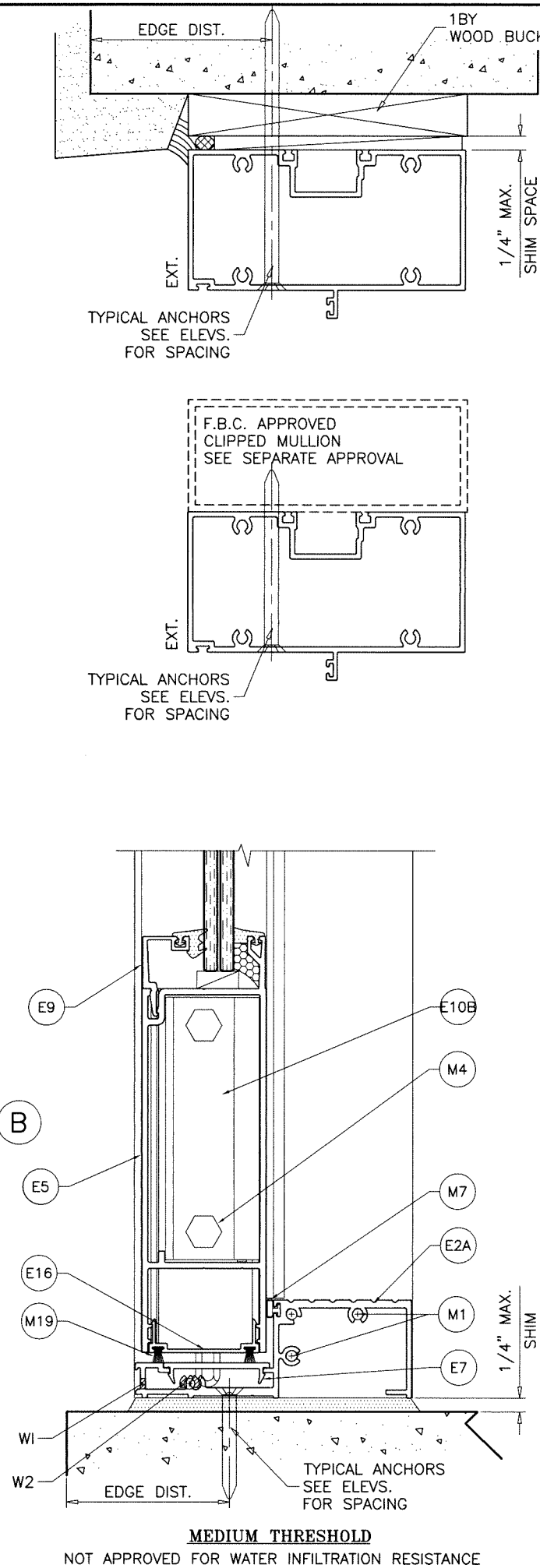
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date: 06-07-17
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dr. by: TARIQ
chk. by:

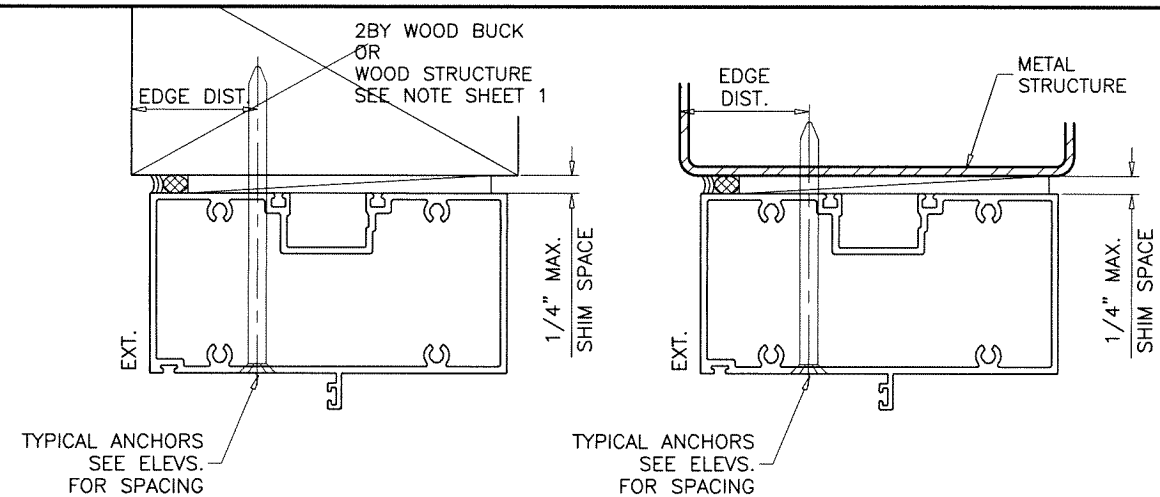
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W17-56
sheet 2 of 7



HIGH THRESHOLD
APPROVED FOR WATER INFILTRATION RESISTANCE



MEDIUM THRESHOLD
NOT APPROVED FOR WATER INFILTRATION RESISTANCE



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

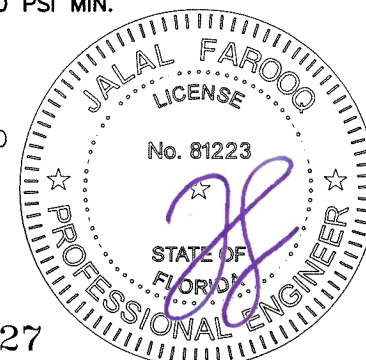
TYPICAL ANCHORS: SEE ELEV. FOR SPACING
1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
 1-1/2" MIN. PENETRATION INTO WOOD (HEAD/JAMBS)
 THRU 1BY BUCKS INTO CONC. OR MASONRY
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/JAMBS)
 1-1/4" MIN. EMBED INTO MASONRY (JAMBS)
 DIRECTLY INTO FILLED BLOCKS
 1-3/4" MIN. EMBED INTO FILLED BLOCKS (JAMBS)
1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)
 DIRECTLY INTO CONCRETE
 1-3/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
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. PENETRATION BEYOND SUBSTRATE
 ALUMINUM: 3/16" THK. MIN. (6063-T5 MIN.)
 STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE
 INTO CONCRETE AND MASONRY = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1" MIN.
 INTO METAL STRUCTURE = 3/4" MIN.
 WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.
 CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
 C-90 GROUT FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.

WEEPHOLES:
 W1 = 2" X 3/16" WEEP HOLES AT 1" FROM EACH END
 AND AT MIDSPAN
 W2 = 3/4" WEEP NOTCH AT 3/4" FROM EACH END

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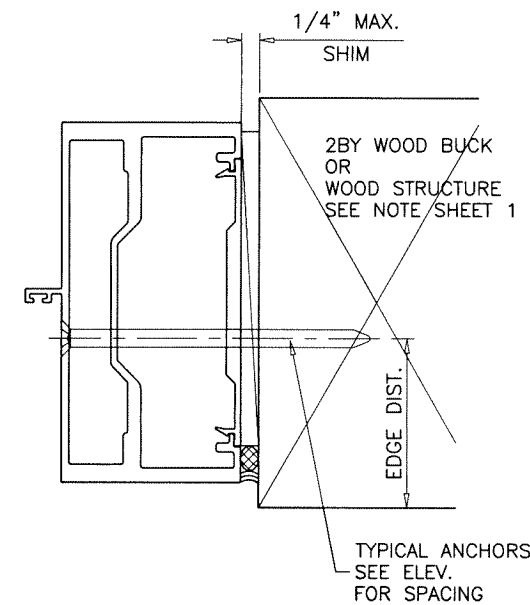
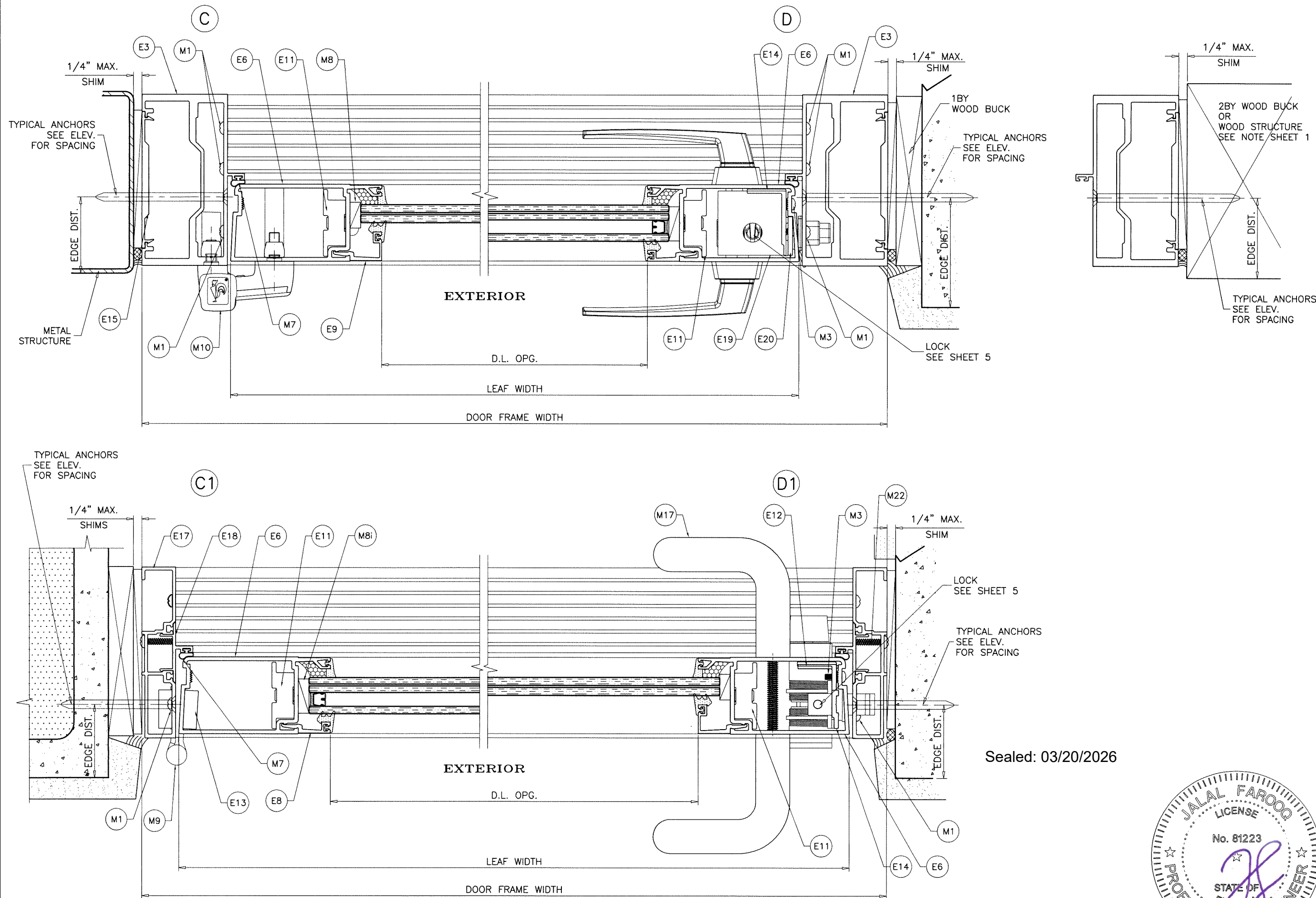
ES-9100 ALUMINUM OUTSWING DOOR (S.M.I.)

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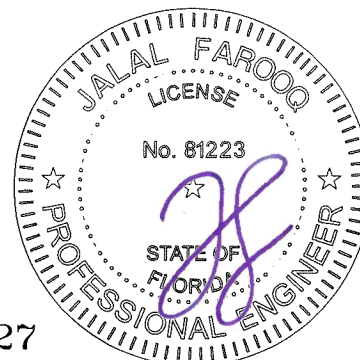
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sheet 4 of 7

ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
E1	ES-9012	1	DOOR FRAME HEAD	6063-T6	-
E2	ES-9026	1	HIGH THRESHOLD	6063-T6	-
E2A	ES-9000-036	1	MEDIUM THRESHOLD	6063-T6	-
E3	ES-9013	2	FRAME JAMB (STD.)	6063-T6	-
E4	ES-9001	1	TOP RAIL	6063-T5	-
E5	ES-9002	1	BOTTOM RAIL	6063-T5	-
E6	ES-9003	2	HINGE/LOCK STILE	6063-T5	-
E7	ES-9027	1	SILL COVER	6063-T5	-
E8	ES-9029	4/ LEAF	GLASS STOP (INSUL. LAM. GLASS)	6063-T5	-
E9	ES-9004	4/ LEAF	GLASS STOP (LAM. GLASS)	6063-T5	-
E10	ES-9008	AS REQD.	CORNER BLOCK	6063-T5	-
E11	ES-9009	AS REQD.	CORNER PLATE	6063-T5	-
E12	ES-9010	AS REQD.	SUPPORT ANGLE	6063-T5	-
E13	ES-9011	AS REQD.	HINGE BACKUP PLATE	6063-T5	-
E14	ES-9020	AS REQD.	LOCK BACKUP PLATE	6063-T5	-
E15	ES-9016	AS REQD.	SHEAR CLIP	6063-T5	-
E16	ES-9005	AS REQD.	W'STRIP ADAPTER	6063-T5	-
E17	ES-7530-213	2	FRAME JAMB (NARROW)	6063-T6	-
E18	ES-7530-214	2	DOOR STOP	6063-T6	-
E19	ALU-A-027	2	BOLT GUIDE ANGLE (2 X 2 X 1/8")	6063-T6	AT TOP & BOTTOM OF LOCK STILE
E20	ALU-P-030	-	LOCK SPACER PLATE (1-1/2" X 1/8")	6063-T6	-
M1	#12 X 1"	AS REQD.	FRAME/LEAF ASSEMBLY FASTENERS	ST/ST	PH SMS
M2	12-24 X 1/2"	AS REQD.	HINGE, INTER. PIVOT & SILL SLIP	ST/ST	FH MS
M3	8-32 X 1/2"	AS REQD.	BOLT GUIDE ANGLE & LOCK BACKUP PLATE FASTENERS	ST/ST	PH SMS
M4	3/8-16 X 1"	AS REQD.	LEAF ASSEMBLY FASTENERS	ST/ST	HEX BOLT
M5	ES-9000-G01	AS REQD.	EXTERIOR GLAZING GASKET	SILICONE	DUROMETER 70±5 SHORE A
M6	ES-9000-G02	AS REQD.	INTERIOR GLAZING GASKET	EPDM	DUROMETER 70±5 SHORE A
M7	ES-9000-G03	AS REQD.	BULB W'STRIPPING	TPE/POLYPROPYLENE	-
M8	ES-9000-B01	2/ LITE	SETTING BLOCKS (LAM. GLASS) AT 1/4 POINTS	EPDM	DUROMETER 80±5 SHORE A
M8i	ES-9000-B02A	2/ LITE	SETTING BLOCKS (INSUL. LAM. GLASS) AT 1/4 POINTS	EPDM	DUROMETER 80±5 SHORE A
M9	-	AS REQD.	BUTT HINGES (4 X 4-1/2")	ST/ST	-
M10	60 AT	AS REQD.	RESIDENTIAL HINGES	-	DR. HAHN
M17	-	AS REQD.	DOOR PUSH/PULL	-	-
M18	W13272NK	AS REQD.	PILE W'STRIPPING AT HEAD	WOOL	-
M19	W13351NK	AS REQD.	PILE W'STRIPPING	WOOL	-
M21	#8 X 1"	AS REQD.	KEEPER FASTENERS	ST/ST	FH SMS
M22	#12 X 2"	AS REQD.	FRAME SILL ASSEMBLY FASTENERS (NARROW JAMB)	ST/ST	PH SMS

LOCK SINGLE DOOR:

OPTION #1:
SURFACE MOUNT 3 POINT LOCK SYSTEM (DL01-6063)
BY 'INTERLOCK USA'
KEY OPERATED ON EXTERIOR AND THUMB TURN ON INTERIOR
LEVER TYPE HANDLE AT 38" FROM BOTTOM ACTIVATES SHOOT BOLTS ENGAGING AT HEAD AND SILL
FASTENED WITH
(2) #10 X 3/4" FH SMS

OPTION #2:
SURFACE MOUNT 3 POINT LOCK SYSTEM (MS1953-350)
BY 'ADAMS RITE'
KEY OPERATED ON EXTERIOR AND THUMB TURN ON INTERIOR
FASTENED WITH (4) #8 X 1/2" FH SMS
LEVER TYPE HANDLE AT 38" FROM BOTTOM ACTIVATES SHOOT BOLTS ENGAGING AT HEAD AND SILL
FASTENED WITH
(2) 8-32 X 2-1/2" OH MACHINE SCREWS

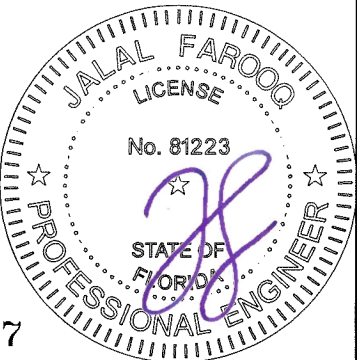
HINGES:

OPTION #1:
4-1/2" LONG FLUSH MOUNT STEEL BUTT HINGES
(4) PER LEAF
TOP AND BOTTOM HINGES AT 9" FROM EACH END
INTERMEDIATE HINGES AT 34" O.C. MAX.
FASTENED WITH 12-24 X 1/2" FH MACHINE SCREWS
FOUR PER HASP(LEAF).

OPTION #2:
SERIES 60AT DIE CAST ALUMINUM HINGE
BY 'DR HAHN'
(2) AT 6" AND 12" FROM TOP
(1) AT 6" FROM BOTTOM
(1) AT MIDSPAN

SEALANTS:

ALL FRAME JOINTS AND SEAMS SEALED WITH DOW CORNING 791 SILICONE.



Sealed: 03/20/2026

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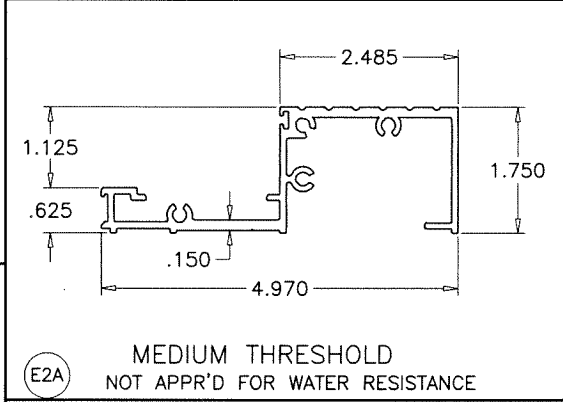
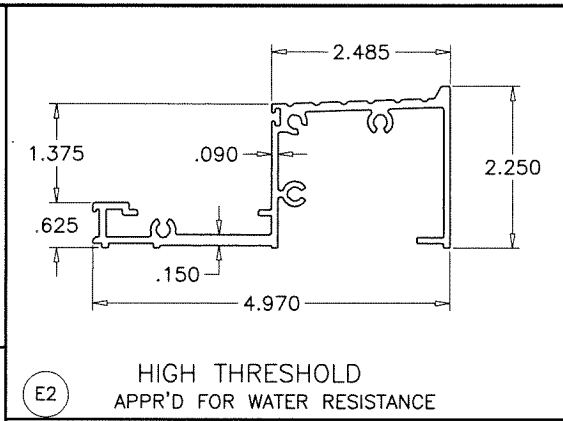
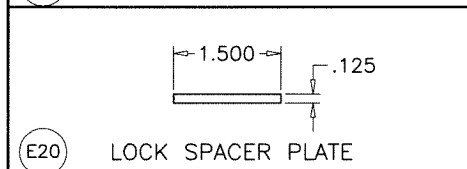
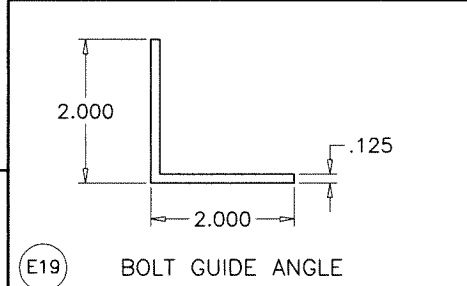
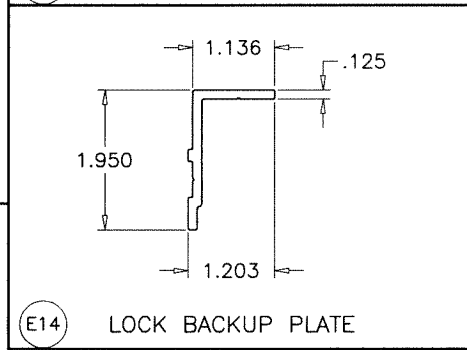
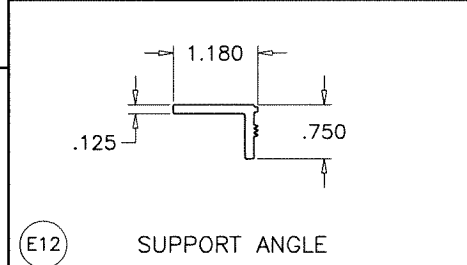
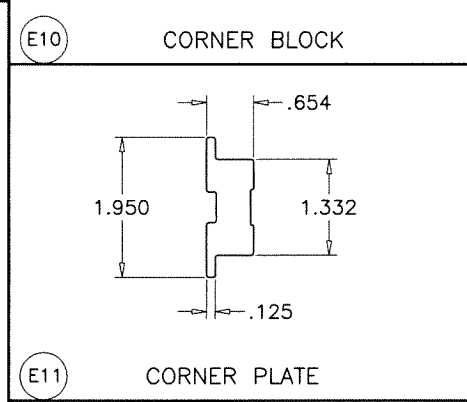
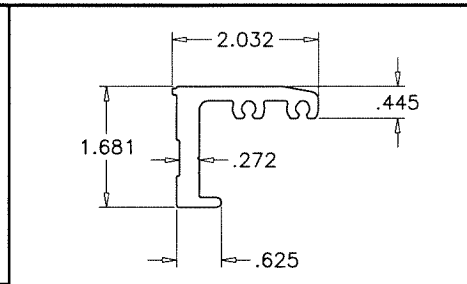
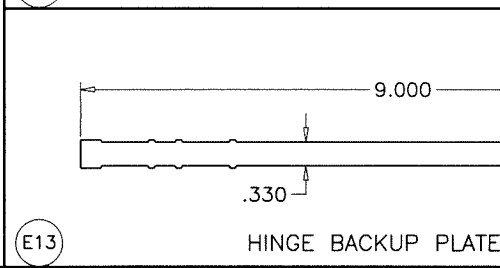
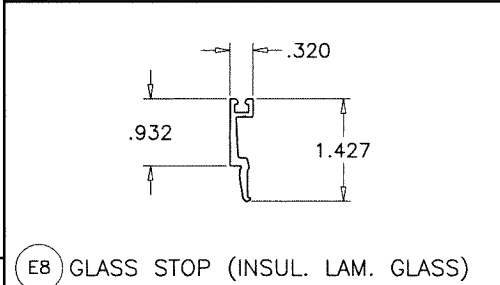
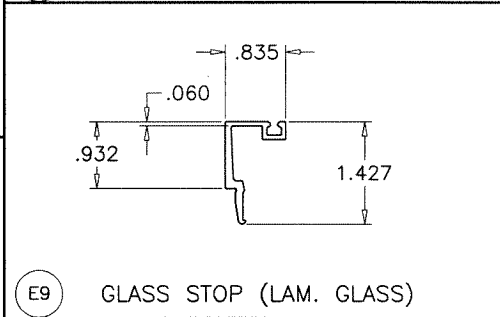
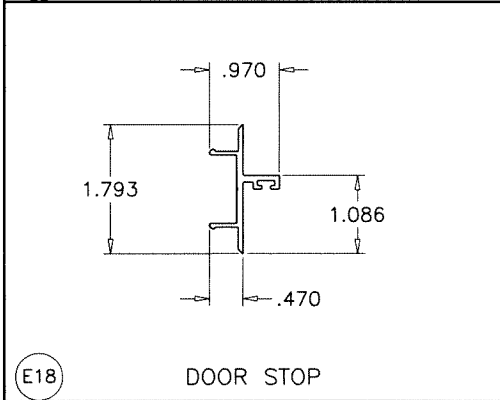
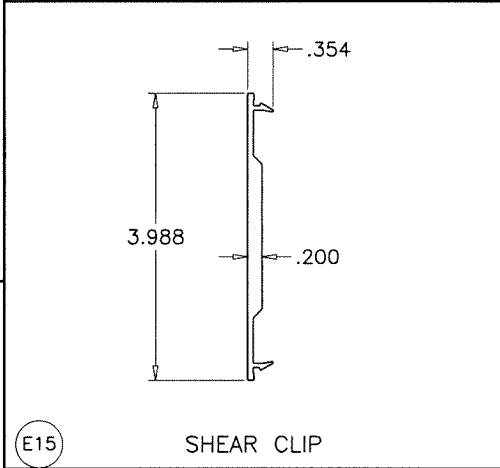
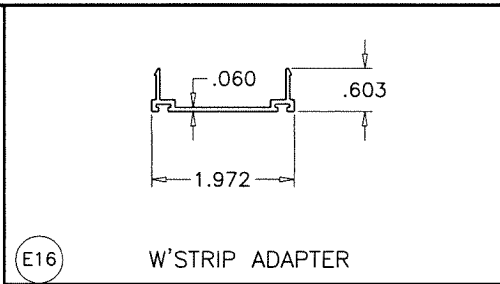
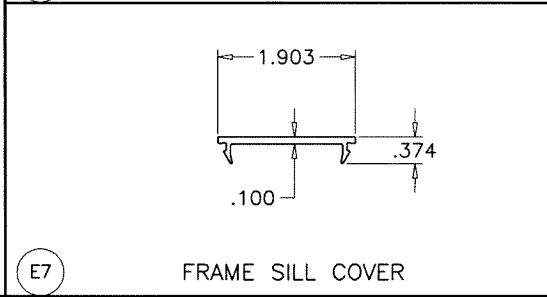
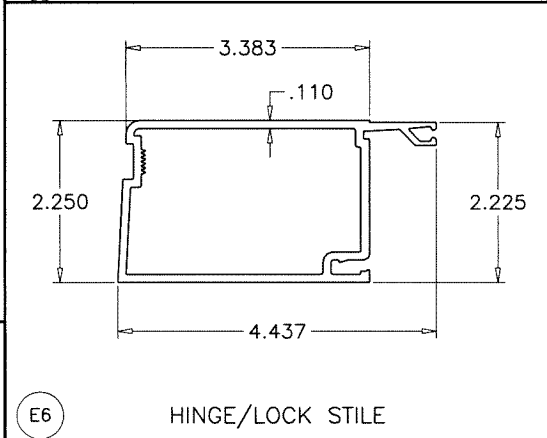
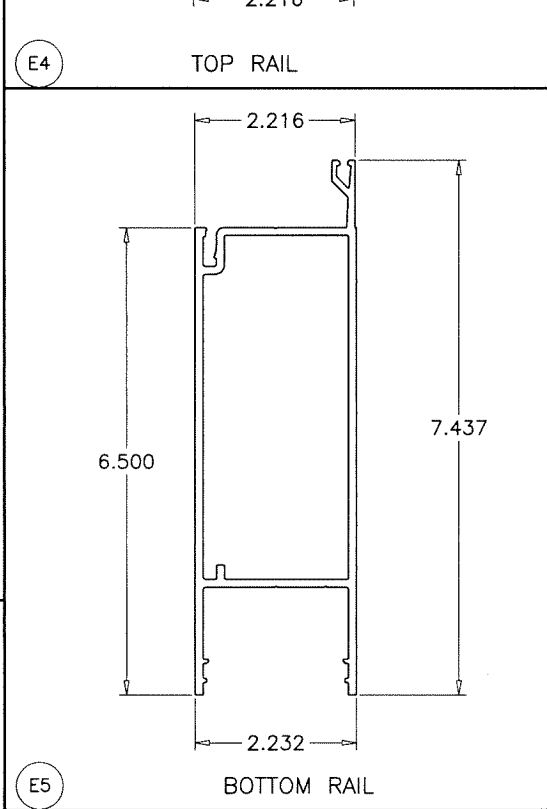
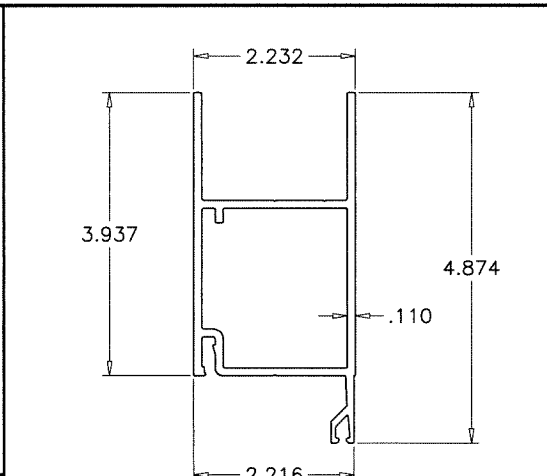
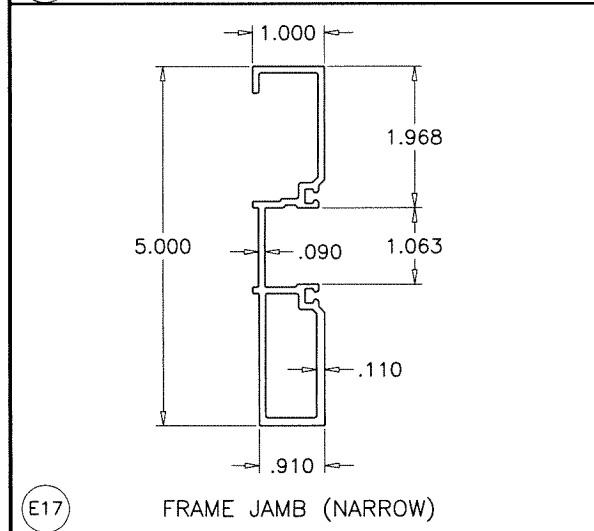
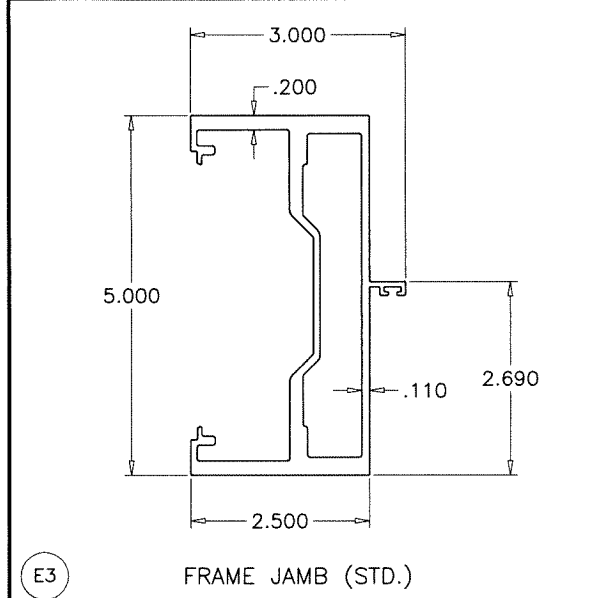
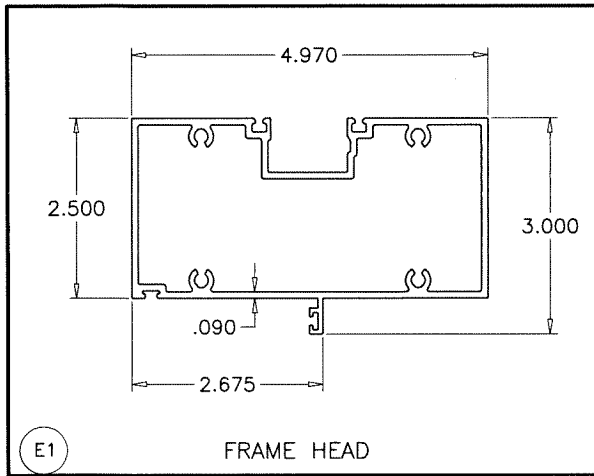
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dr. by: TARIQ
chk. by:

drawing no.
W17-56

sheet 5 of 7

COMP-ANL\W17-56ES



Sealed: 03/20/2026

FL #22527

JALAL FAROOQ
LICENSE
No. 81223
STATE OF FLORIDA
PROFESSIONAL ENGINEER

date: 06-07-17
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

revisions:

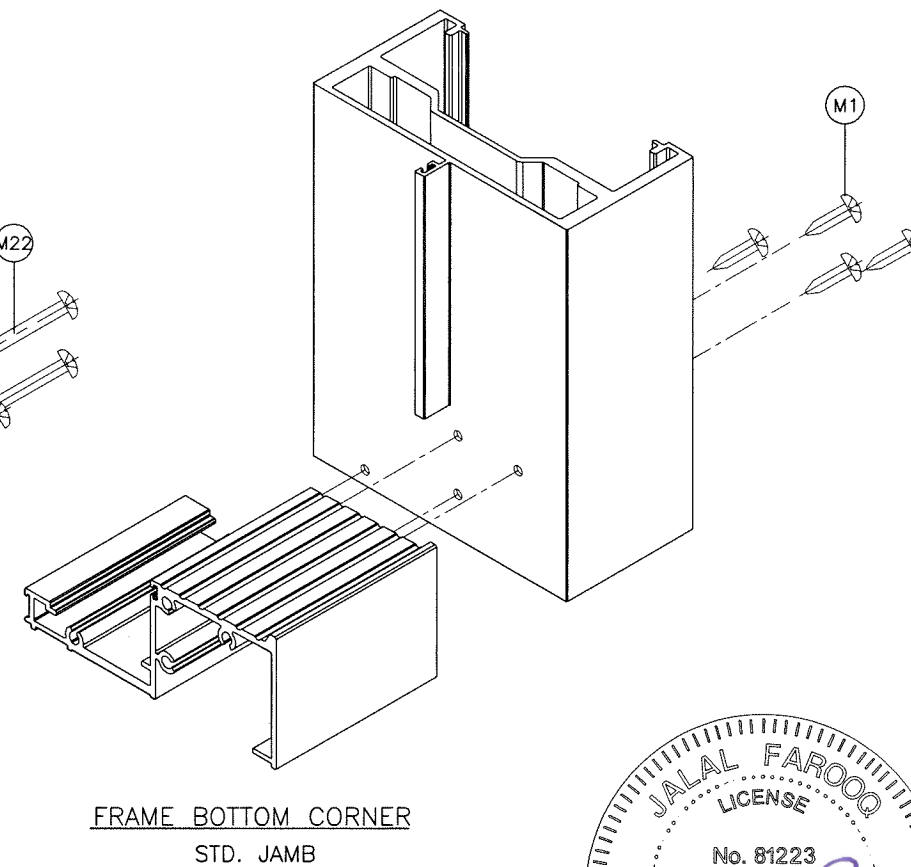
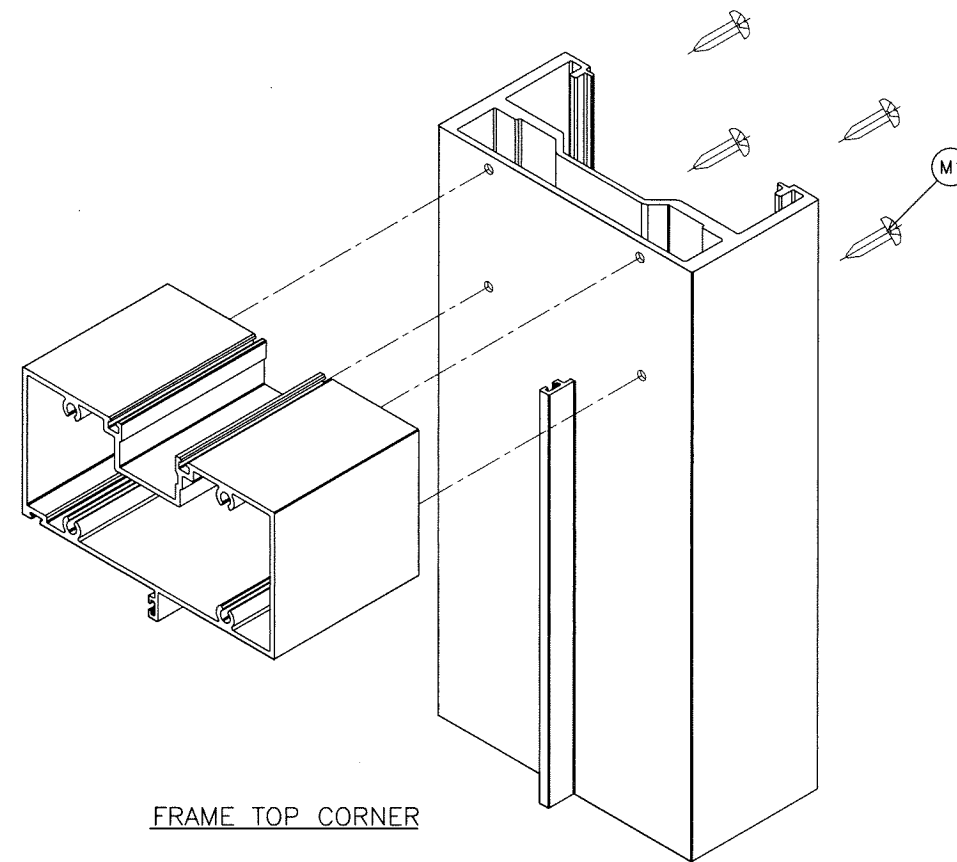
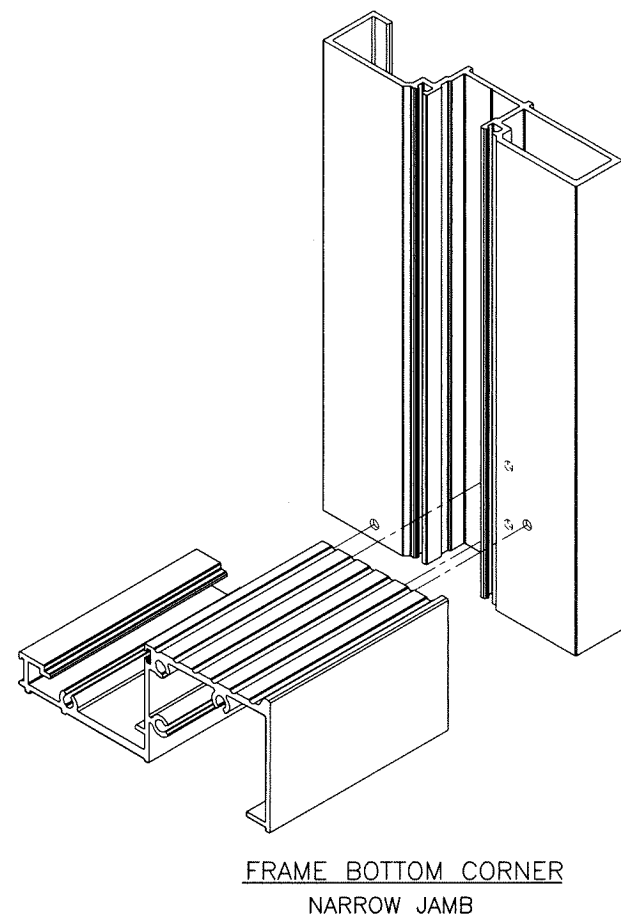
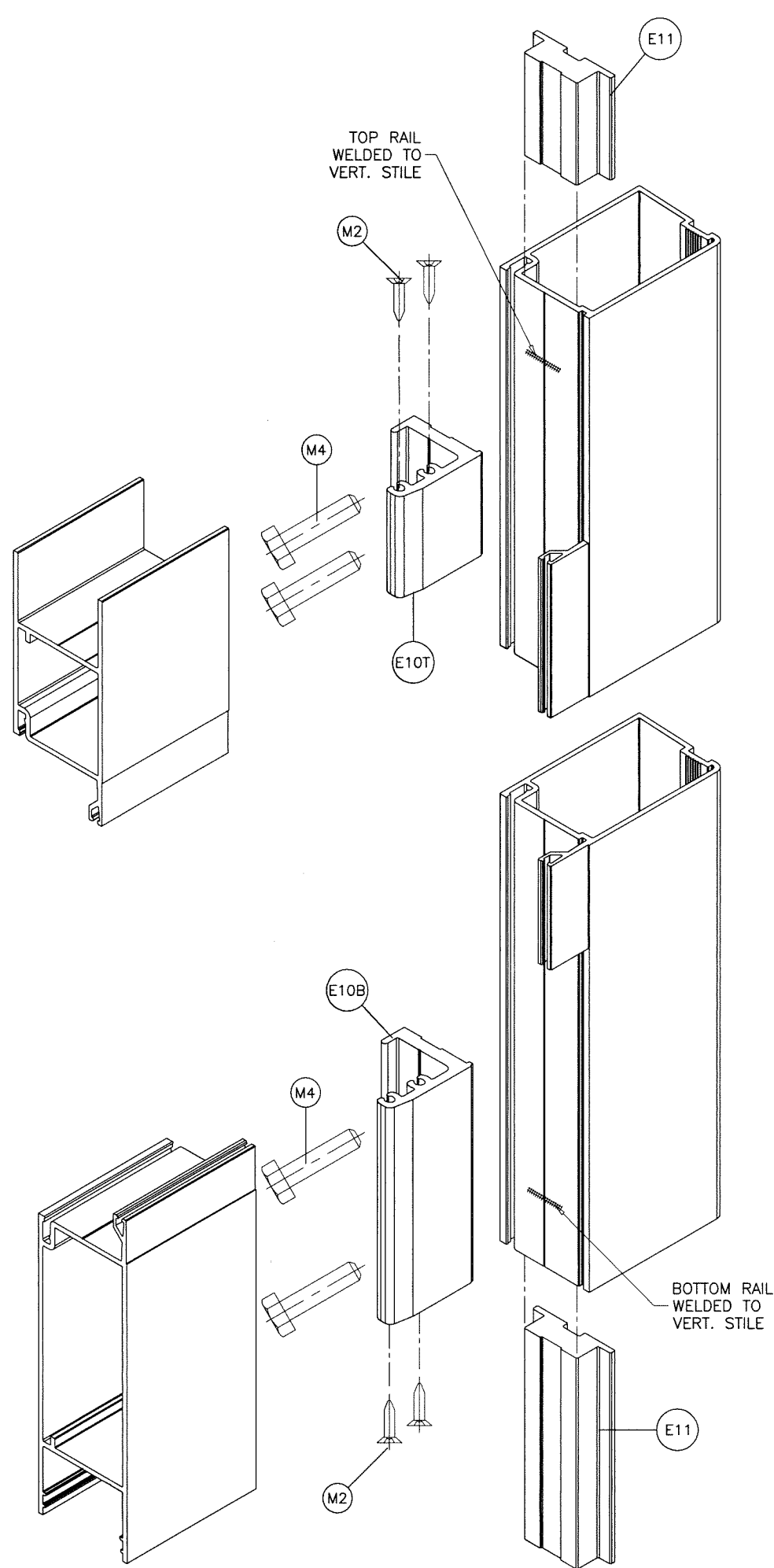
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sheet 6 of 7

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 262-6978
FAX. (305) 262-6978
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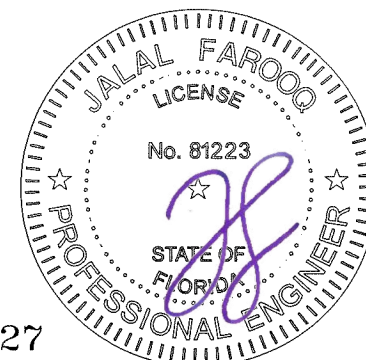
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151
FAX. (305) 638-5158

ES-9100 ALUMINUM OUTSWING DOOR (S.M.I.)



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sheet 7 of 7

FL #22527