

**SERIES ENV-350 (S.M.I.)
ALUMINUM OUTSWING ENTRANCE DOOR**

THESE DOORS MAY BE USED IN CONJUNCTION WITH F.B.C. APPR'D SMALL MISSILE IMPACT RESISTANT STOREFRONT SYSTEM. LOWER DESIGN PRESSURE FROM DOOR OR STOREFRONT 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 2014 (5TH EDITION)/2017 (6TH 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.

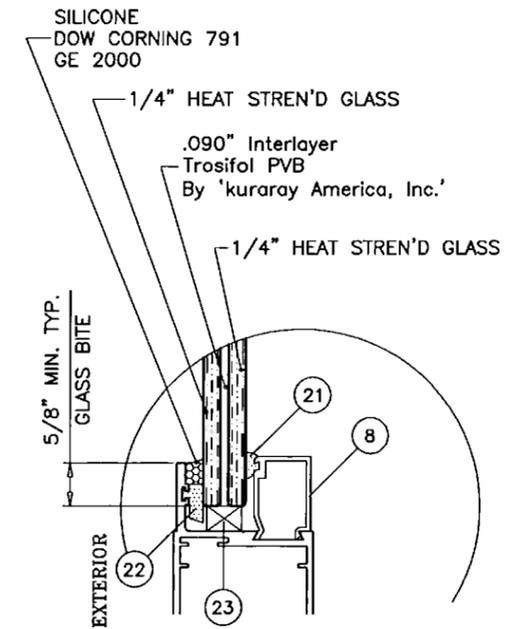
ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

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 2014/2017 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.

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.

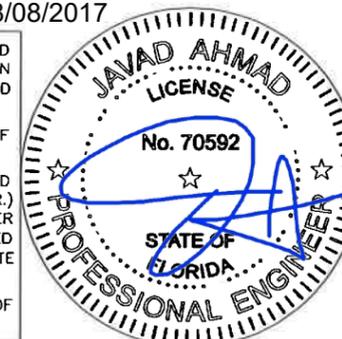


GLAZING DETAIL

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.

Sealed: 08/08/2017
FL #20701

- 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 (C-4.N. 3538)
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978

SERIES ENV-350 OUTSWING ENTRANCE DOOR (S.M.I.)
ENVIRALUM INDUSTRIES INC.
5110 N.W. 72 AVENUE BLDG. C
MIAMI, FL. 33166
TEL. (305) 752-4411 FAX. (305) 406-3877

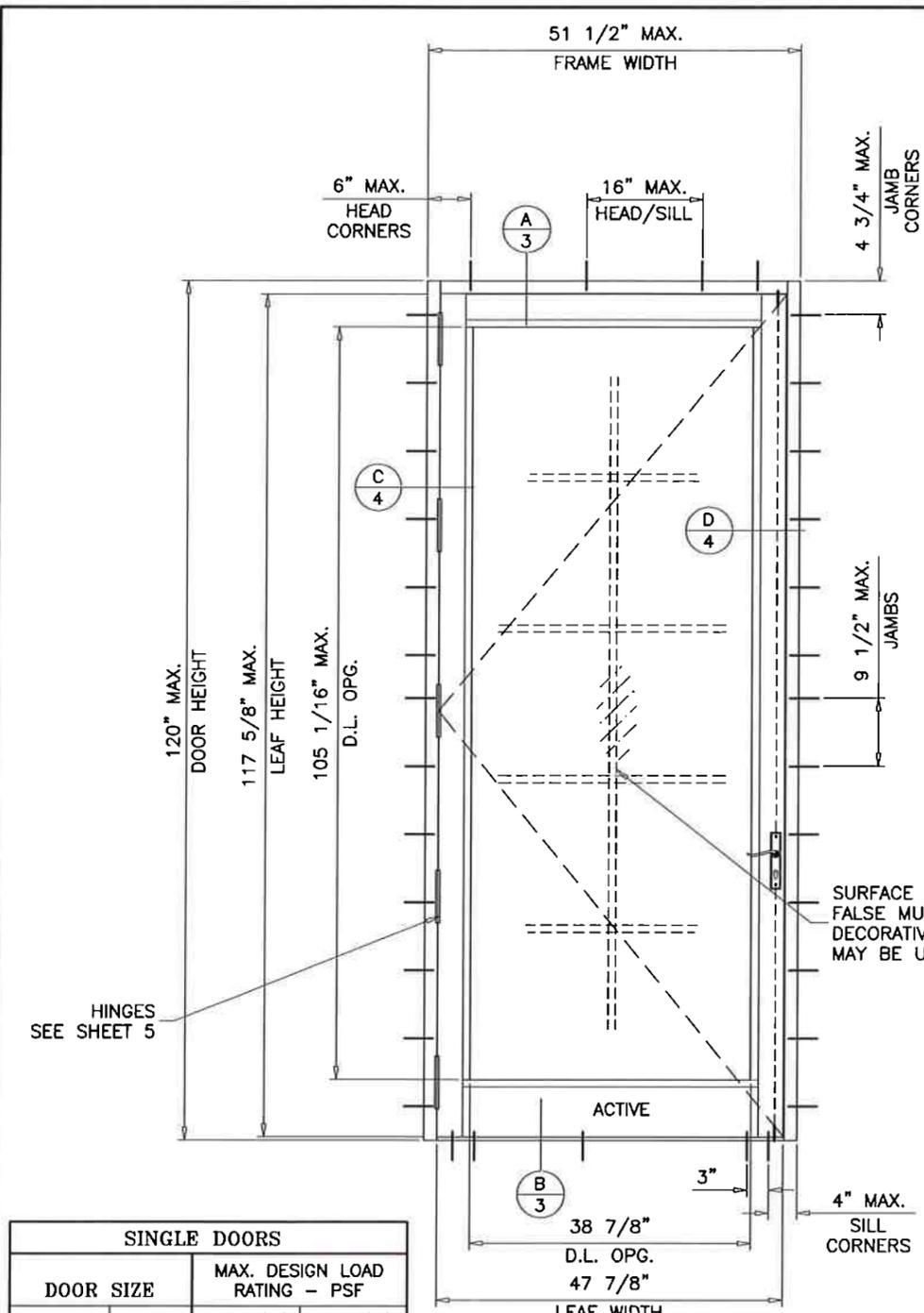
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A	08.08.17		UPDATED TO 2017 FBC

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drawing no.
W16-50

sheet 1 of 7

COMP-ANL\W16-50ENV



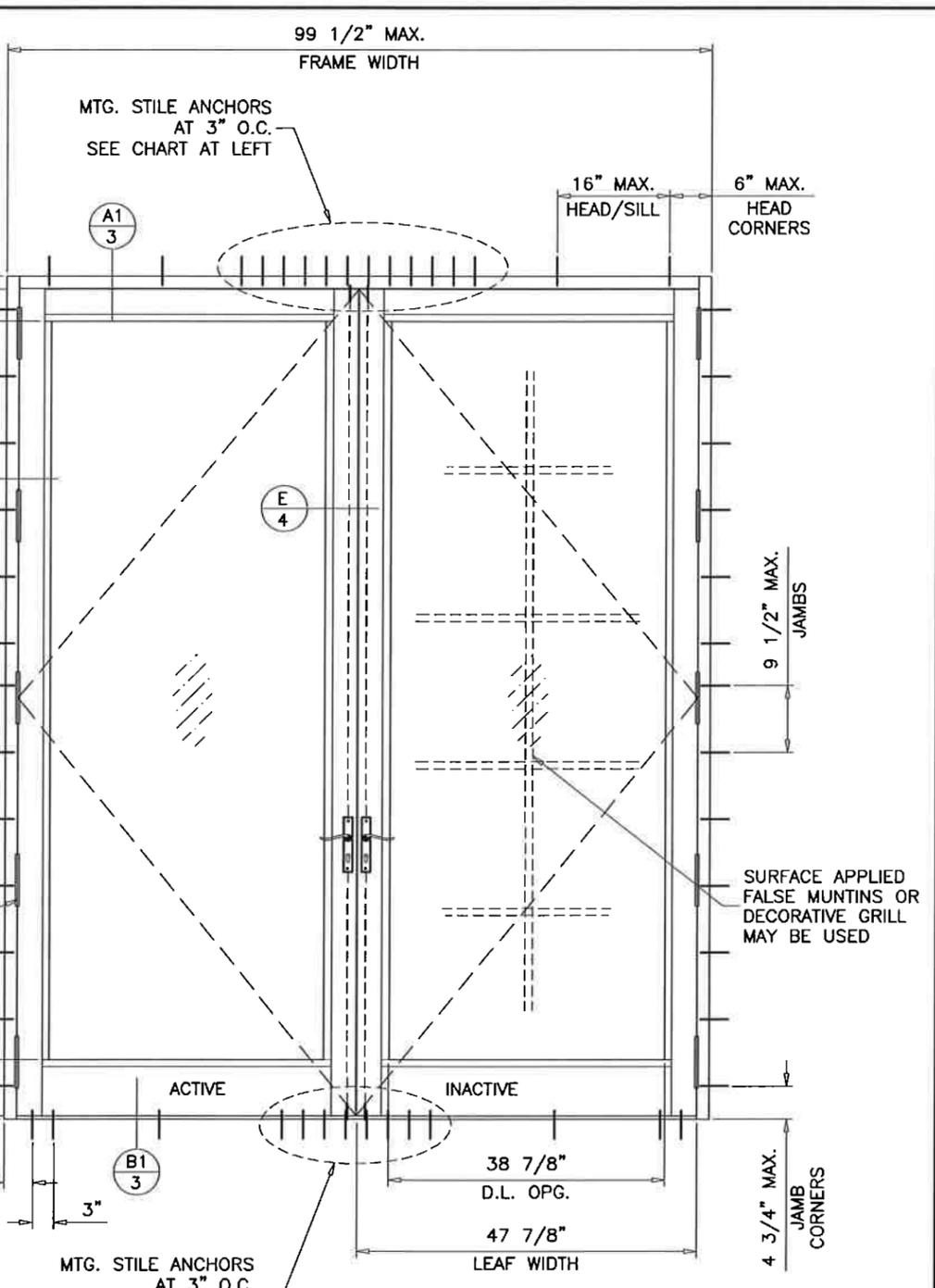
MTG. STILE ANCHOR CAPACITY - PSF								
ANCHOR TYPES	3/8" SHIMS				1/4" SHIMS			
	6	8	10	12	6	8	10	12
A	75.7	100.9	126.1	144.0	83.5	111.3	139.1	144.0
A1	75.7	100.9	126.1	144.0	116.4	144.0	-	-
B	105.5	140.7	144.0	-	144.0	-	-	-

SINGLE DOORS			
DOOR SIZE		MAX. DESIGN LOAD RATING - PSF	
WIDTH	HEIGHT	EXT. (+)	INT. (-)
36"	96"	100.0	144.0
42"		100.0	144.0
48"		96.6	144.0
51-1/2"		90.0	144.0
36"	108"	100.0	144.0
42"		98.1	144.0
48"		85.8	144.0
51-1/2"		80.0	144.0
36"	120"	100.0	144.0
42"		88.3	144.0
48"		77.3	144.0
51-1/2"		72.0	144.0

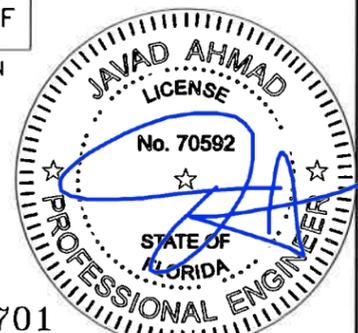
APPROVED FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED.

GLASS D.L.O. DIMS.
 D.L.O. HEIGHT = DOOR FRAME HEIGHT - 14.9375"
 D.L.O. WIDTH (X DOORS) = FRAME WIDTH - 12.8125"
 D.L.O. WIDTH (XX DOORS) = (FRAME WIDTH - 21.875")/2

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



DOUBLE DOORS
 MAXIMUM DESIGN LOAD RATING = + 72.0 PSF
 (FOR SIZE SHOWN ABOVE OR SMALLER) - 144.0 PSF
 NOT APPROVED FOR INSTALLATIONS WHERE WATER INFILTRATION RESISTANCE IS REQUIRED.



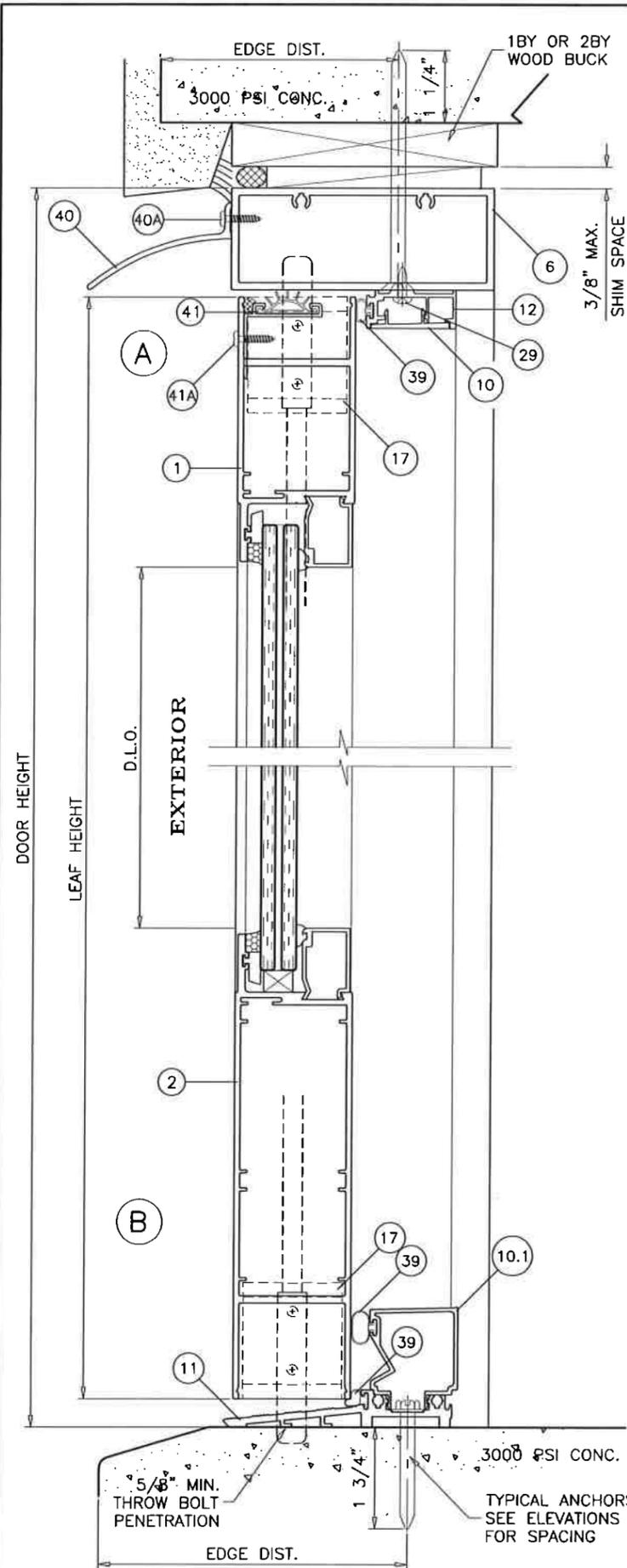
FL #20701

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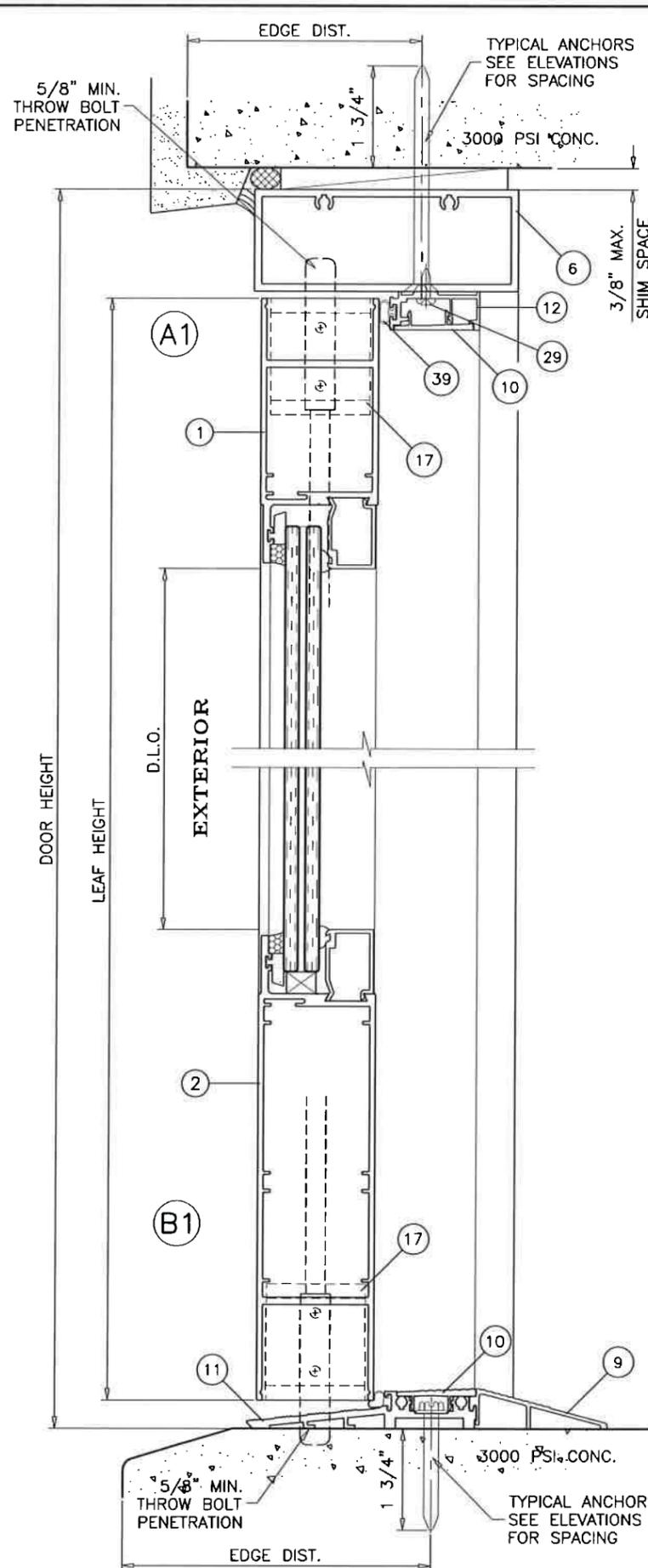
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 TEL. (305) 264-8100 FAX. (305) 262-6978
 COMP-ANL W16-50ENV

SERIES ENV-350 OUTSWING ENTRANCE DOOR (S.M.I.)
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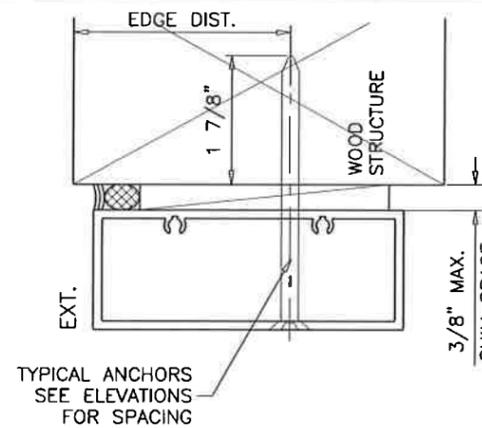
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sheet	2 of 7			



SINGLE DOORS APPROVED FOR WATER INFILTRATION RESISTANCE



DOUBLE DOORS NOT APPROVED FOR WATER INFILTRATION RESISTANCE



WOOD BUCKS AND METAL STRUCTURE NOT BY ENVIRALUM MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A'
5/16" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
 INTO WOOD STRUCTURES
 1-7/8" MIN. PENETRATION INTO WOOD (HEAD/JAMBS)
 THRU 1BY OR 2BY BUCKS INTO CONC. OR MASONRY
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/JAMBS)
 1-1/4" MIN. EMBED INTO MASONRY (JAMBS)

TYPICAL EDGE DISTANCE
 INTO CONCRETE AND MASONRY = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1" MIN.

TYPE 'A1'
5/16" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
 DIRECTLY INTO CONC. OR MASONRY
 1-3/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
 1-3/4" MIN. EMBED INTO FILLED BLOCKS (JAMBS)

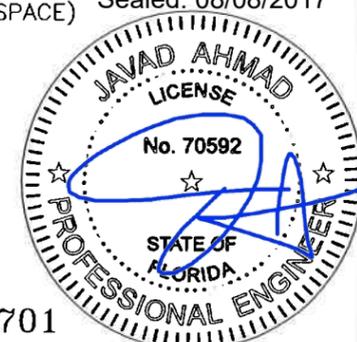
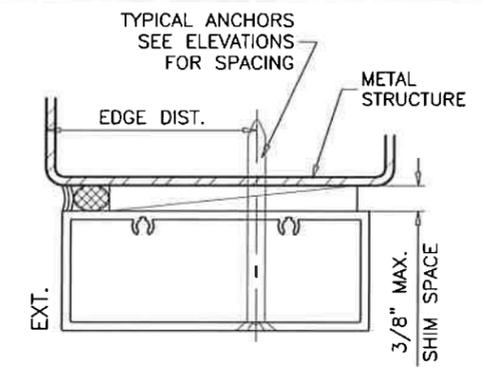
TYPICAL EDGE DISTANCE
 INTO CONCRETE AND MASONRY = 2-1/2" MIN.

TYPE 'B'
5/16" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS)
 INTO METAL STRUCTURES
 STEEL : 1/8" THK. MIN. (Fy = 36 KSI MIN.)
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

INTO MIAMI-DADE COUNTY APPROVED MULLIONS
 ALUMINUM : 1/8" THK. MIN. (6063-T5 MIN.) (NO SHIM SPACE)

TYPICAL EDGE DISTANCE
 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 GROUT FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.



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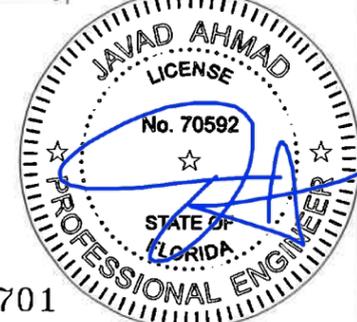
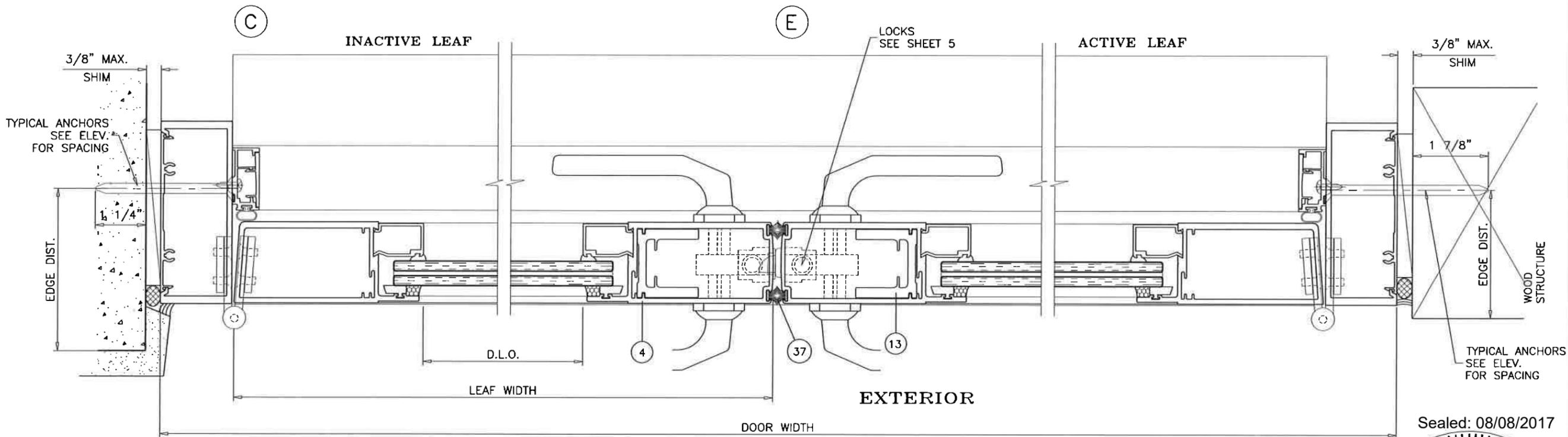
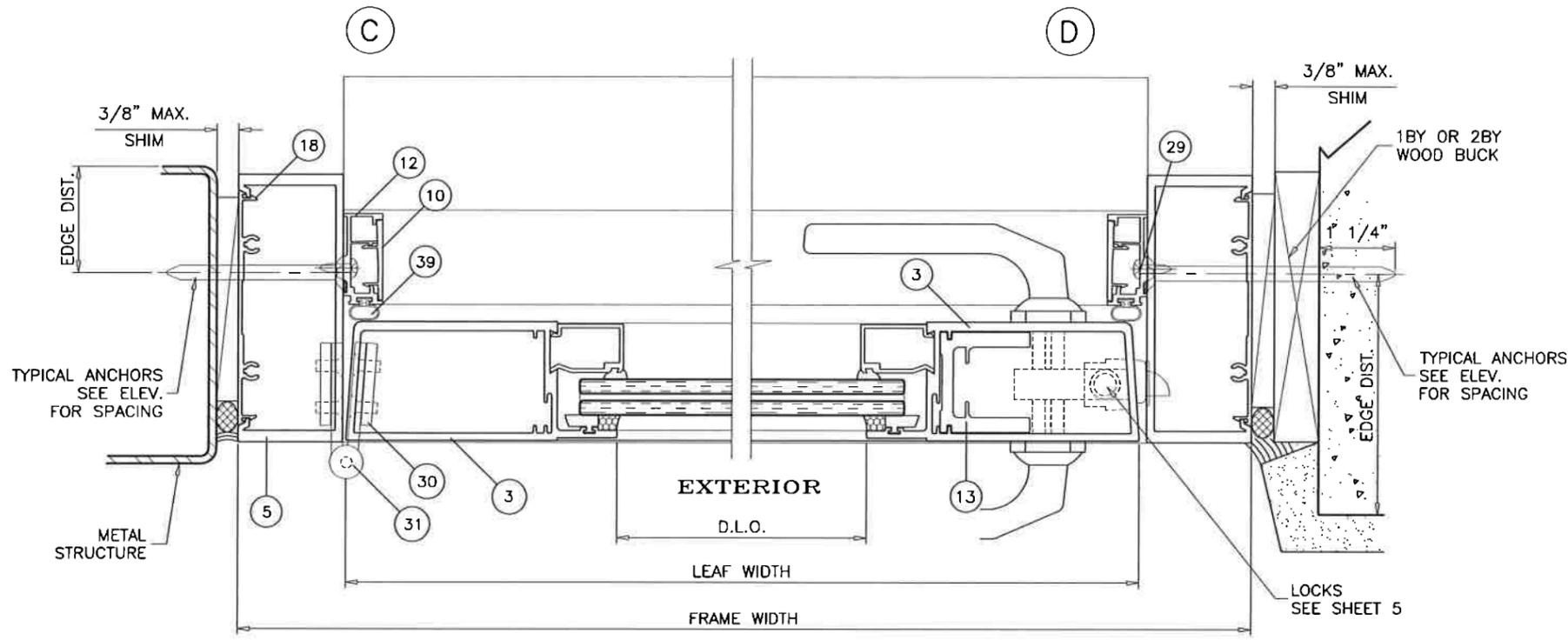
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 COMP-ANL\W16-50ENY

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 sheet 3 of 7



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SERIES EW-350 OUTSWING ENTRANCE DOOR (S.M.I.)
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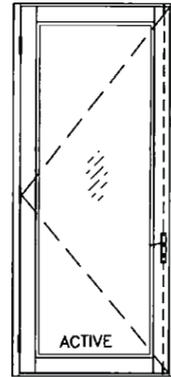
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sheet 4 of 7

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LOCKS: (SINGLE DOORS)

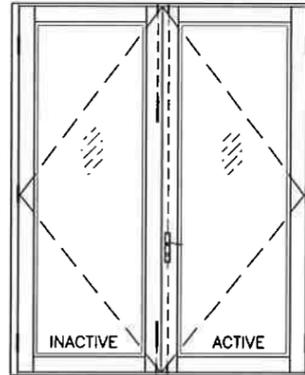
3 POINT LOCK SYSTEM BY 'INTERLOCK' AT 39" FROM BOTTOM
HANDLE ACTIVATES DEAD BOLT AND SHOOT BOLTS ENGAGING AT HEAD AND SILL
KEY OPERATED ON EXTERIOR AND THUMB TURN ON INTERIOR
FASTENED TO ACTIVE LEAF LOCK STILE WITH
(2) #8-32 X 2" OH MS



LOCKS: (DOUBLE DOORS)

ACTIVE LEAF:

THREE POINT LOCK SYSTEM SERIES 2222 BY 'REGENT HARDWARE'
KEY OPERATED FROM EXTERIOR AND THUMB TURN ON INTERIOR WITH CONCEALED FLUSH BOLTS AT TOP & BOTTOM OF LOCK STILE
LOCATED AT 34" FROM BOTTOM OF LEAF

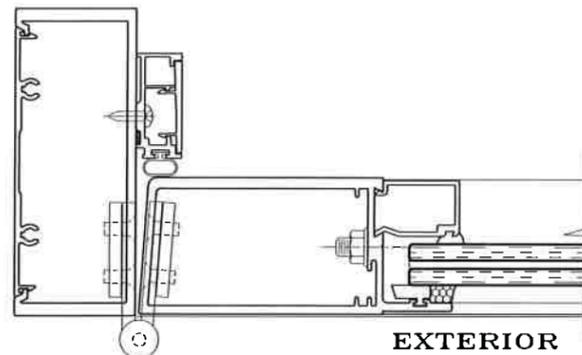


INACTIVE LEAF:

MANUALLY OPERATED TWO POINT LOCK SYSTEM BY 'REGENT HARDWARE' WITH CONCEALED FLUSH BOLTS AT TOP & BOTTOM OF LOCK STILE
FASTENED WITH
(2) #8-32 X 1/4" PH MACHINE SCREWS

HINGES:

4" X 4-1/2" X .130" THK. ST. STEEL KNUCKLE HINGE SERIES 4001 BY 'REGENT HARDWARE' OR SERIES FBB 191 BY 'STANLEY SECURITY SOLUTIONS' OR SERIES TA2314/TA2714 BY 'MCKINNEY ASSA ABLOY'
3 PER LEAF
TOP/BOTTOM HINGES AT 7" FROM EACH END
CENTER HINGE AT MIDSPAN
FASTENED TO
FRAME JAMB WITH (4) 12-24 X 1/2" FH MS
DOOR STILE WITH (4) 12-24 X 1/2" FH MS

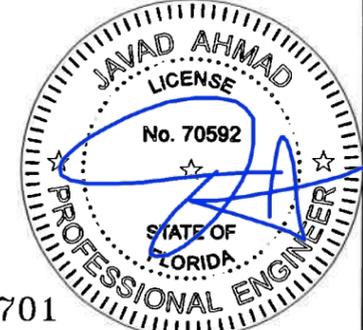


ITEM NO.	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	ENV-351	1/ LEAF	TOP RAIL	6063-T6	ENVIRALUM
2	ENV-352	1/ LEAF	BOTTOM RAIL (8" HIGH)	6063-T6	ENVIRALUM
2.1	ENV-3521	1/ LEAF	ALT. BOTTOM RAIL (10" HIGH)	6063-T6	ENVIRALUM
3	ENV-353	1/ LEAF	HINGE STILE	6063-T6	ENVIRALUM
4	ENV-354	1/ LEAF	LOCK STILE	6063-T6	ENVIRALUM
5	ENV-355	2/ DOOR	FRAME JAMB	6063-T6	ENVIRALUM
6	ENV-356	1/ DOOR	FRAME HEAD	6063-T6	ENVIRALUM
8	ENV-358	4/ LITE	GLASS STOP (LAMINATED GLASS)	6063-T6	ENVIRALUM
9	ENV-359	AS REQD.	THRESHOLD RAMP	6063-T6	ENVIRALUM
10	ENV-3510	AS REQD.	DOOR STOP COVER	6063-T6	ENVIRALUM
10.1	ENV-3518	AS REQD.	THRESHOLD COVER (HI-RISE)	6063-T6	ENVIRALUM
11	ENV-3511	1/ DOOR	THRESHOLD	6063-T6	ENVIRALUM
12	ENV-3512	3/ DOOR	DOOR STOP	6063-T6	ENVIRALUM
13	ENV-3513	1/ LEAF	STILE REINFORCEMENT	6063-T6	ENVIRALUM
16	ENV-3516	1/ LEAF CORNER	SHEAR BLOCK	6063-T6	ENVIRALUM
17	ENV-GC01	2/ LEAF	GUIDE CHANNEL FOR TOP & BOTTOM PIN	6063-T6	ENVIRALUM
18	ENV-454	AS REQD.	FLAT SNAP, 3" LONG	6063-T6	ENVIRALUM
21	ENV-G04	AS REQD.	INTERIOR GASKET	EPDM	GLAZING RUBBER PRODUCTS
22	ENV-G06	AS REQD.	SPACER GASKET	EPDM	GLAZING RUBBER PRODUCTS
23	ENV-SB01	1/ QUARTER POINT	3/8" X 1/2" X 2" SETTING BLOCKS, DUROMETER 80±5	EPDM	GLAZING RUBBER PRODUCTS
25	DOW 791	AS REQD.	GLAZING COMPOUND	SILICONE	DOW CORNING
26	GE SCS2000	AS REQD.	GLAZING COMPOUND	SILICONE	GE MOMENTIVE
27	#12 X 1-1/2	4/ CORNER	FRAME ASSEMBLY SCREWS	ST. STEEL	HWH SMS, AT 16" O.C.
29	#8 X 5/8"	AS REQD.	DOOR STOP ASSEMBLY SCREWS, @ 3" FROM ENDS & 20" O.C.	ST. STEEL	HWH SMS
30	ENV-BP1	2/ HINGE	HINGE BACKING PLATE, 1-1/2" X 1/4" THK. X 8-3/8" LONG	ALUMINUM	-
31	-	3/ LEAF	4-1/2" X 4" BUTT HINGES	ST. STEEL	-
33	1/4-20 X 1"	10/ LEAF	CORNER BLOCK ASSEMBLY	ST. STEEL	HEX HEAD BOLT W/ WASHER
37	ENV-WP1	AS REQD.	WOOL PILE W'STRIPPING	TRILOBAL YARN	ULTRAFAB
39	ENV-BG1	AS REQD.	BULB W'STRIPPING, (.475 BULB W/ FLAP X .270 BK.)	EPDM	ULTRAFAB
40	ENV-3518	AS REQD.	DRIP CAP	ALUMINUM	PEMKO
40A	#8 X 5/8"	AS REQD.	DRIP CAP FASTENERS, AT 3" FROM ENDS & 6" O.C.	ST. STEEL	HWH SELF DRILLING SCREWS
41	ENV-3512	AS REQD.	DOOR SWEEP (TOP)	ALUMINUM	PEMKO
41A	#8 X 1/2"	AS REQD.	DOOR SWEEP FASTENERS, AT 3" FROM ENDS & 6" O.C.	ST. STEEL	FH SELF DRILLING SCREWS

SEALANTS:

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

Sealed: 08/08/2017



FL #20701

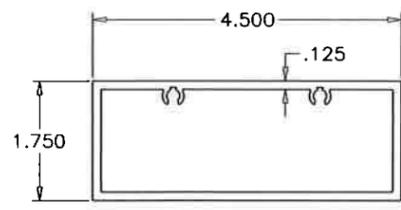
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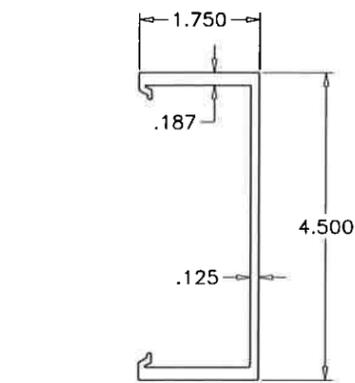
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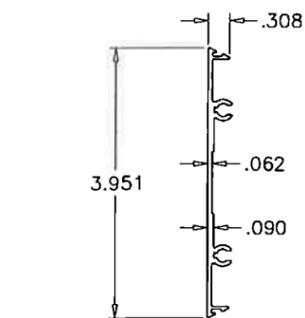
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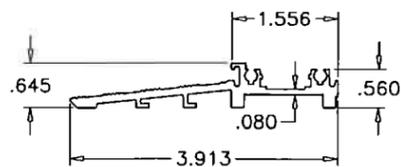
6 FRAME HEAD



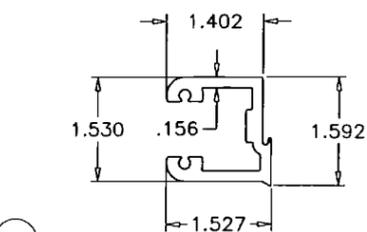
5 FRAME JAMB



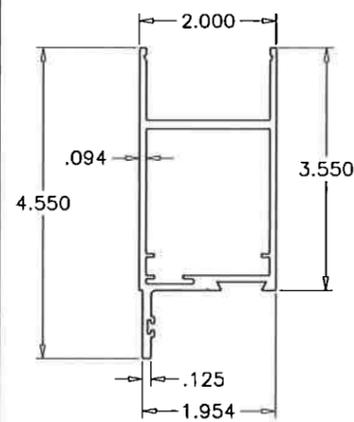
18 FLAT FILLER



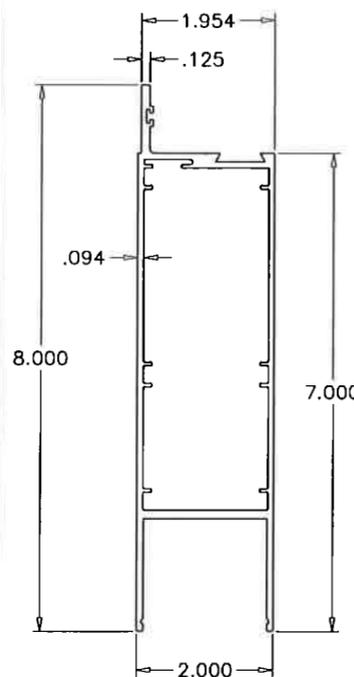
11 THRESHOLD



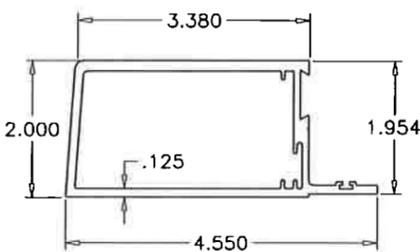
16 SHEAR BLOCK



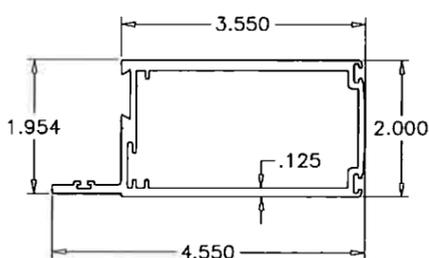
1 TOP RAIL



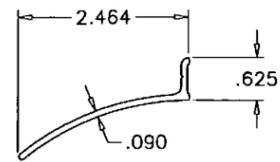
2 BOTTOM RAIL



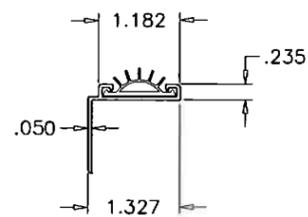
3 HINGE STILE



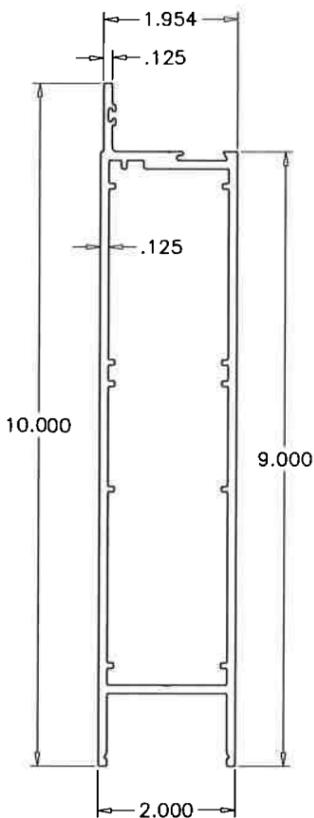
4 LOCK STILE



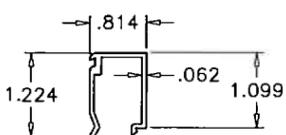
40 DRIP CAP



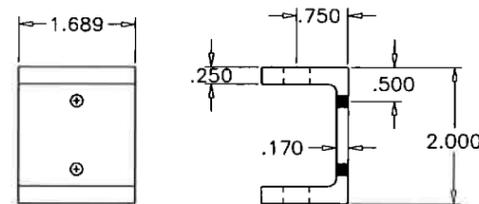
41 DOOR SWEEP (TOP)



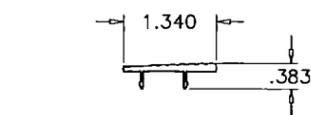
2.1 ALT. BOTTOM RAIL



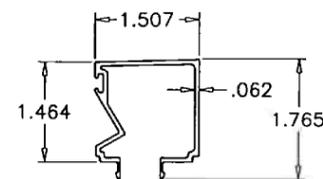
8 GLASS STOP (LAM. GLASS)



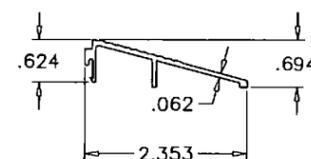
17 GUIDE CHANNEL FOR TOP & BOTTOM PIN



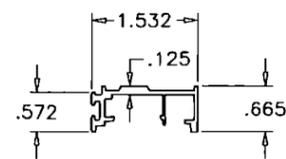
10 DOOR STOP COVER



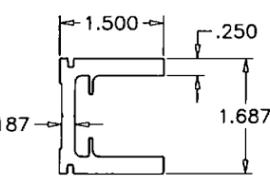
10.1 THRESHOLD COVER



9 THRESHOLD RAMP



12 DOOR STOP



13 STILE REINFORCEMENT

FL #20701



SERIES ENV-350 OUTSWING ENTRANCE DOOR (S.M.I.)

ENVIRALUM INDUSTRIES INC.
5110 N.W. 72 AVENUE BLDG. C
MIAMI, FL. 33166

TEL. (305) 752-4411 FAX. (305) 406-3877

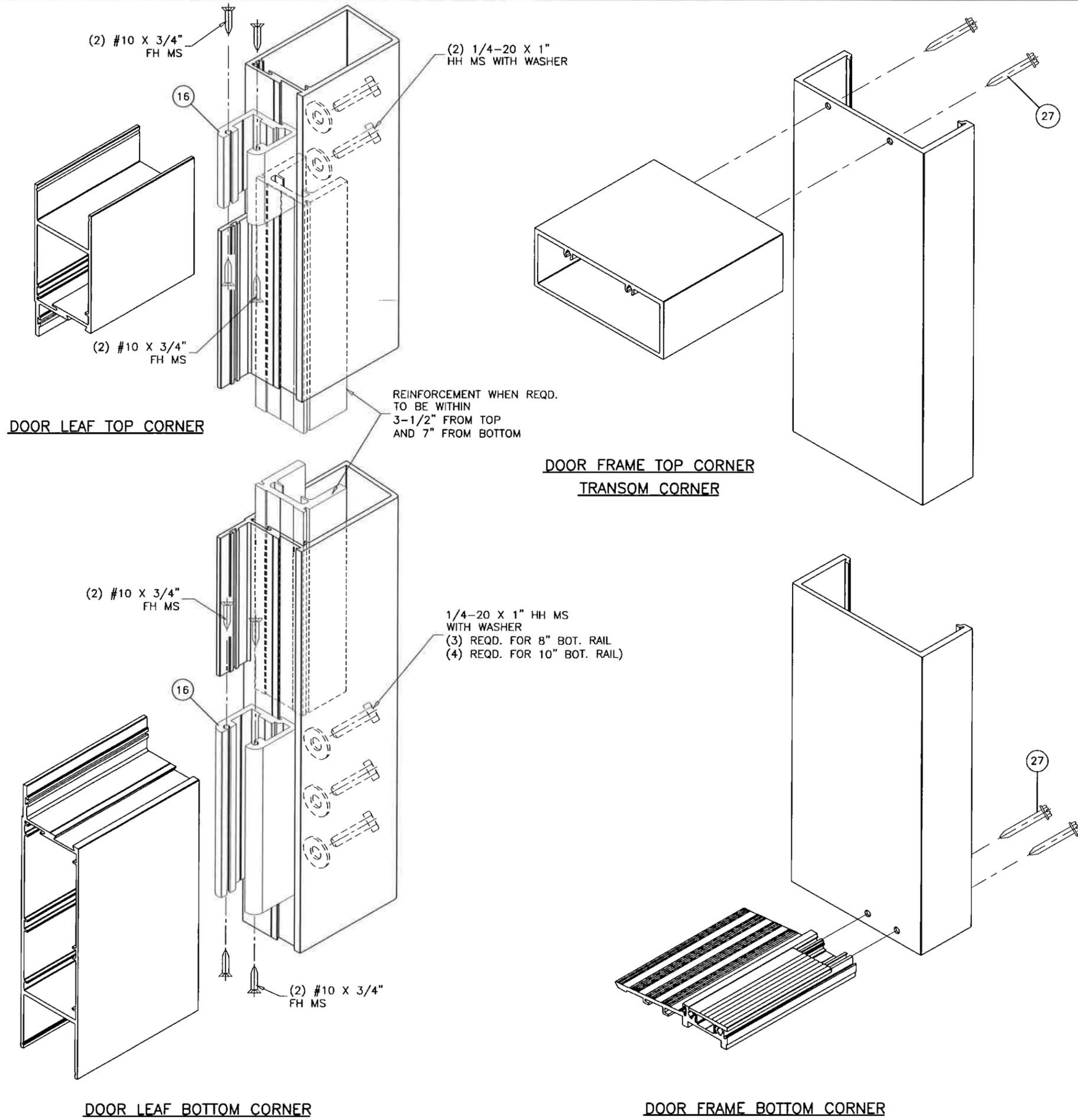
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date: 06-10-16
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

drawing no.
W16-50
sheet 6 of 7

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 W16-50ENV



DOOR LEAF TOP CORNER

DOOR FRAME TOP CORNER
TRANSOM CORNER

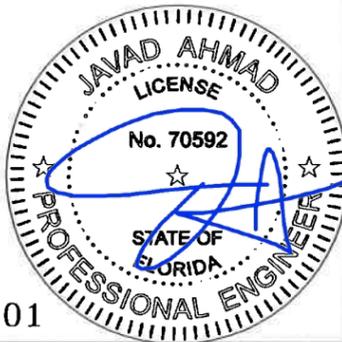
DOOR LEAF BOTTOM CORNER

DOOR FRAME BOTTOM CORNER

REINFORCEMENT WHEN REQD.
TO BE WITHIN
3-1/2" FROM TOP
AND 7" FROM BOTTOM

1/4-20 X 1" HH MS
WITH WASHER
(3) REQD. FOR 8" BOT. RAIL
(4) REQD. FOR 10" BOT. RAIL

Sealed: 08/08/2017



FL #20701

afc
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revisions:

no.	date	by	description

date: 06-10-16
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W16-50
 sheet 7 of 7