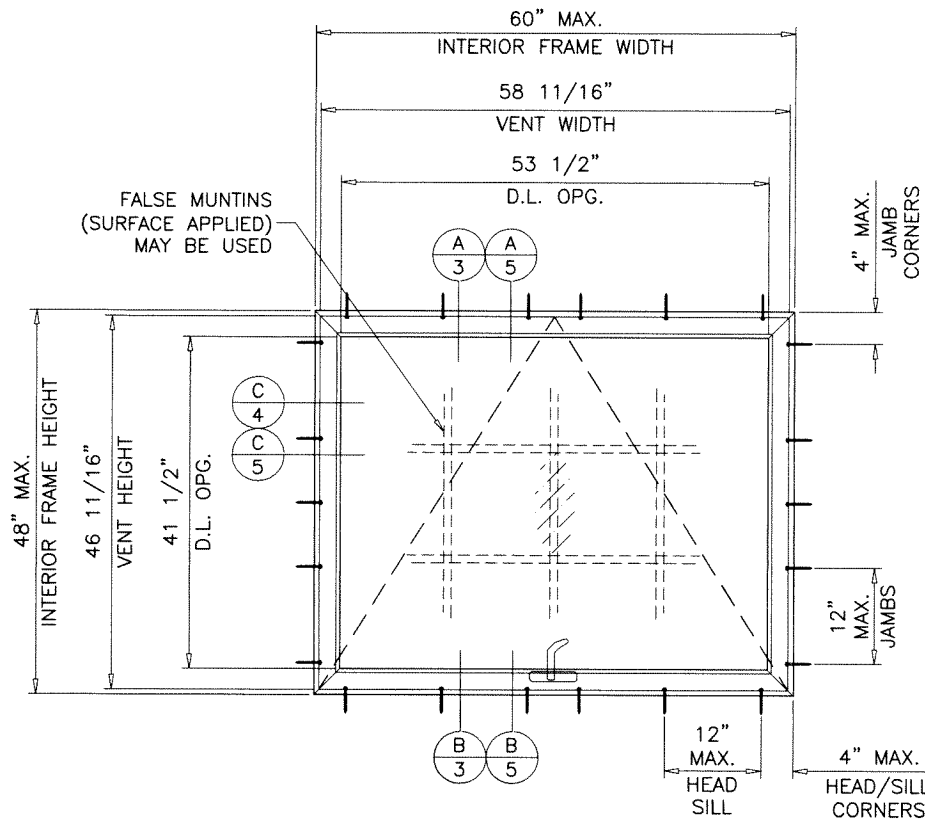
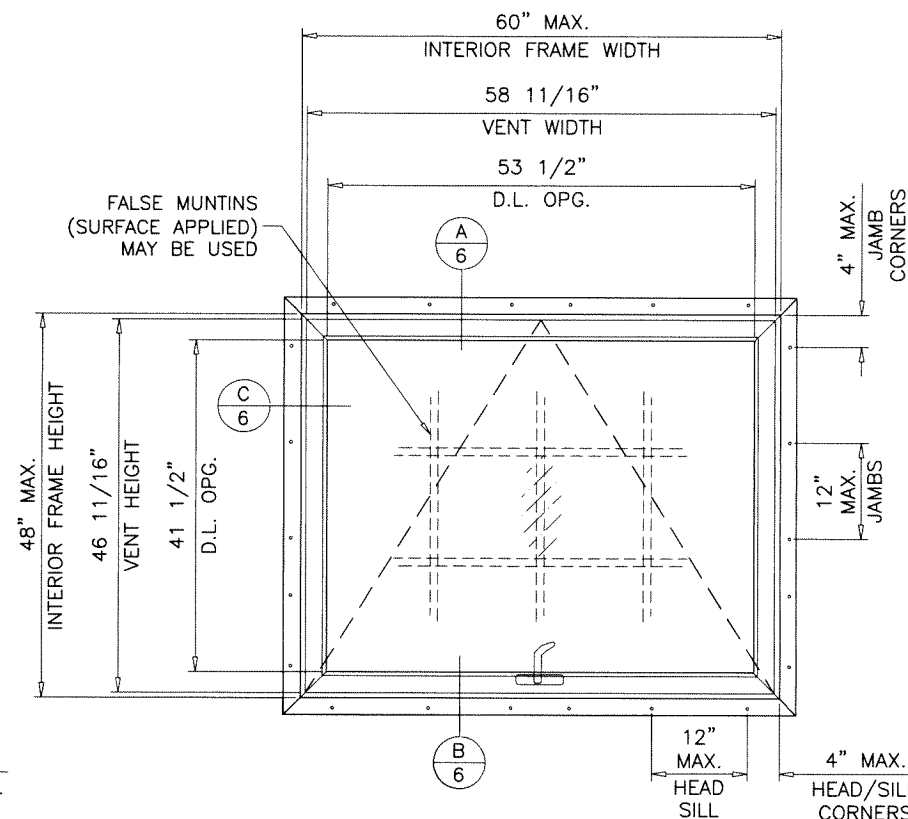
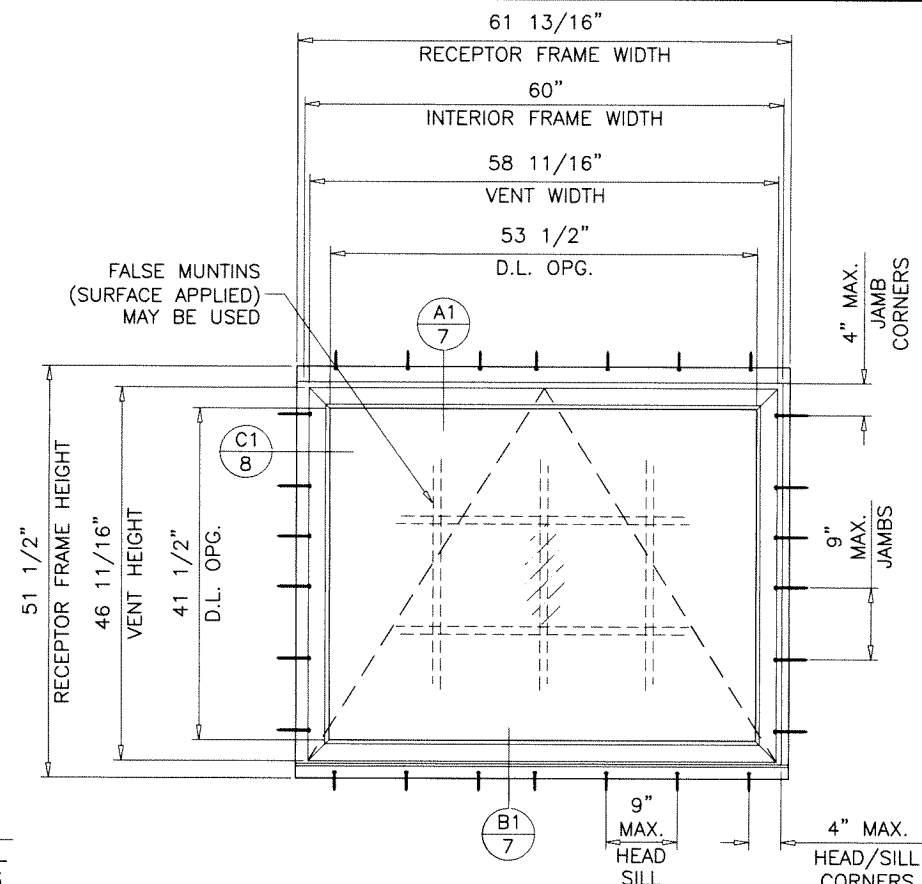




TYPICAL ELEVATION
ANCHORS THRU WDW. FRAMES



TYPICAL ELEVATION
ANCHORS THRU NAIL FIN



TYPICAL ELEVATION
ANCHORS THRU RECEPTOR FRAMES

ES-P252 (L.M.I.) **THERMAL ALUMINUM AWNING WINDOW**

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF AWNING/AWNING OR AWNING 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 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.

MAXIMUM DESIGN LOAD RATING = + 70.0 PSF
(FOR SIZES SHOWN ABOVE OR SMALLER) **- 75.0 PSF**

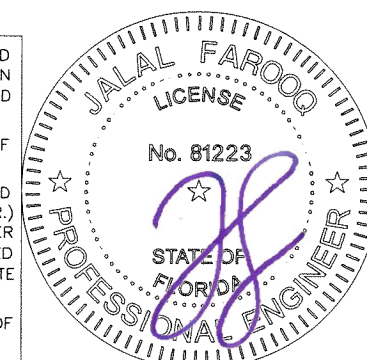
NOTE:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219

THESE WINDOWS ARE RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

Sealed: 7/19/2023

FL #39705

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

ES-P252 THERMAL ALUMINUM AWNING WDW. (L.M.I.)

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

COMP-ANL\21-59F-ES

revisions:	no	date	by	description
	A	04.28.23		NAIL FIN REV.
	B	07.07.23		UPDATED TO 2023 FBC

date: 08-09-21

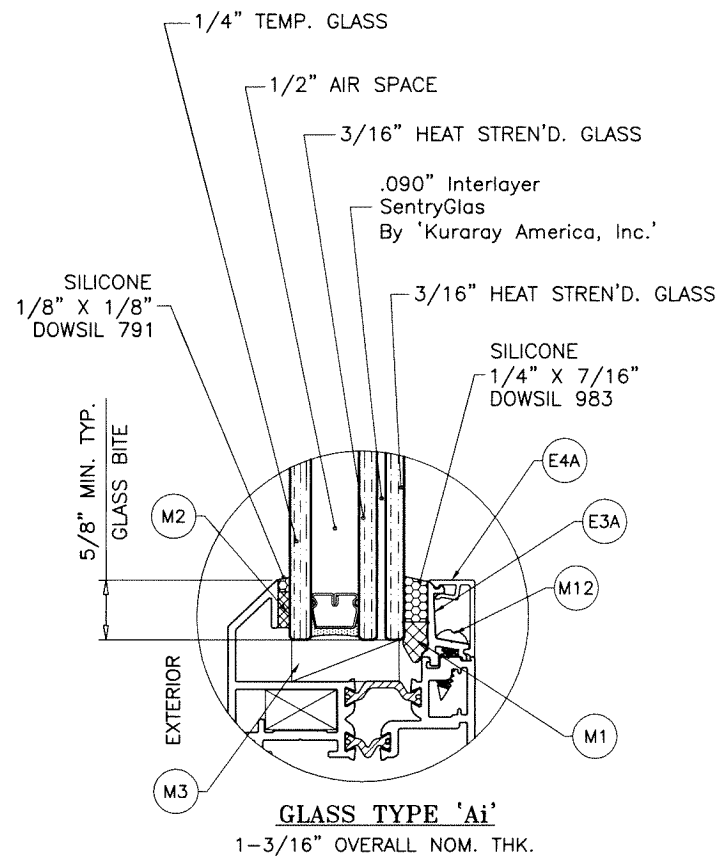
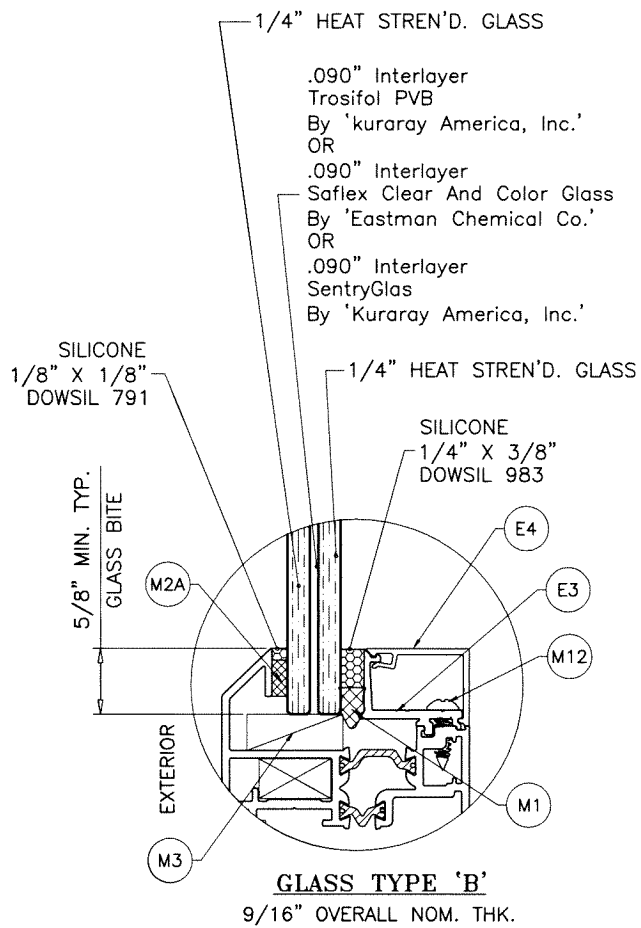
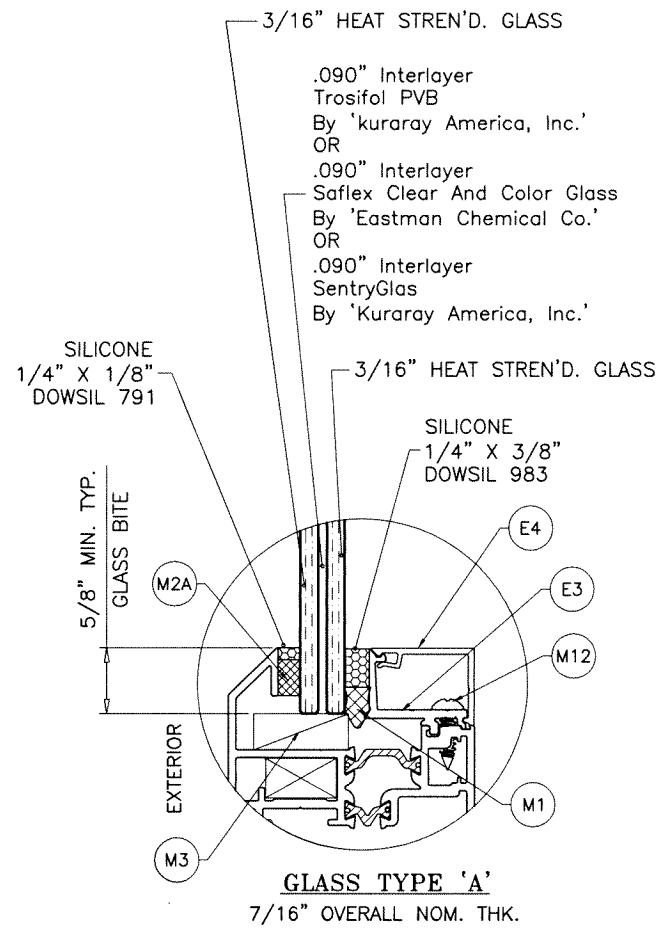
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dr. by: TARIQ

chk. by:

drawing no. **21-59F**

sheet **1** of **11**



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

Sealed: 7/19/2023

FL #39705



AL-FAROOQ CORPORATION
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COMP-ANL\21-59F-ES

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revisions:
no date by description

date: 08-09-21

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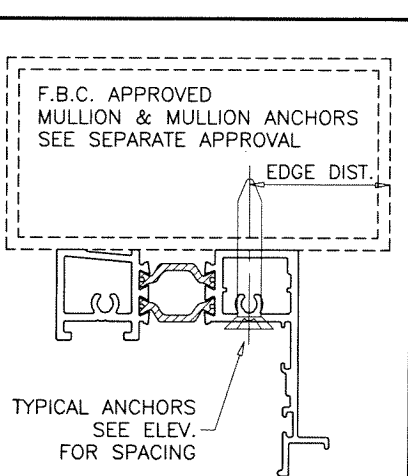
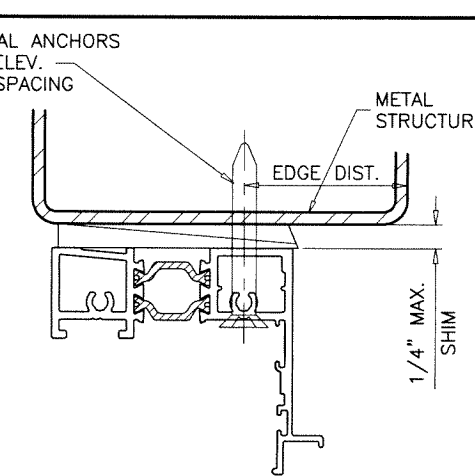
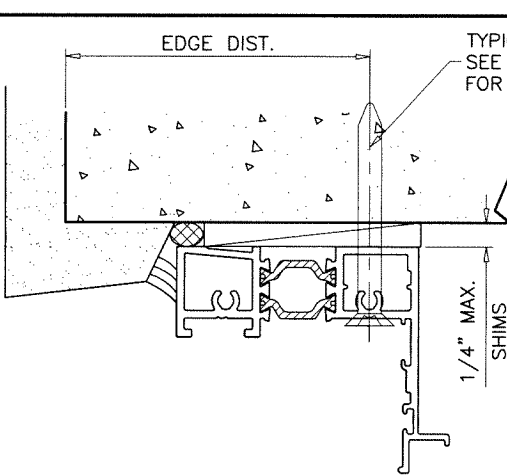
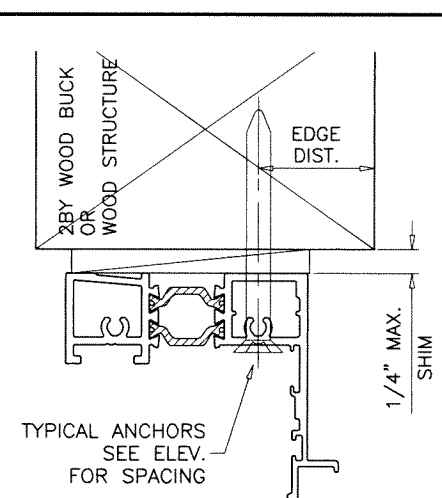
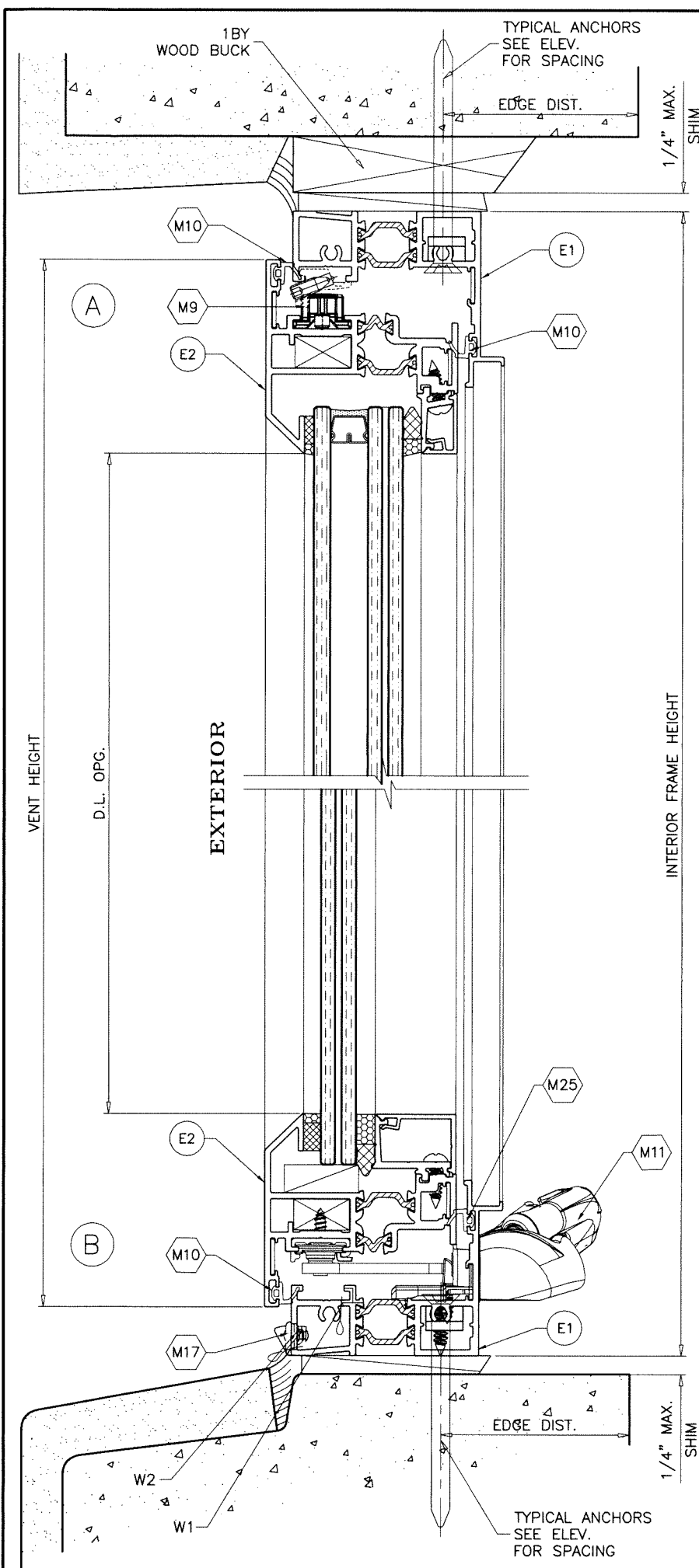
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chk. by:

drawing no.

21-59F

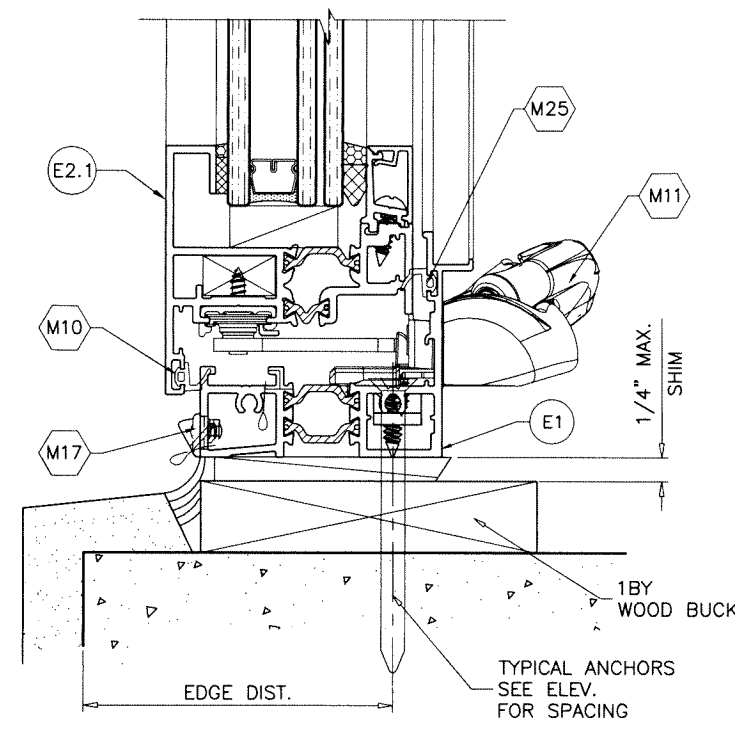
sheet 2 of 11



1BY OR 2BY WOOD BUCKS AND METAL STRUCTURE NOT BY 'E.S. WDW.' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

WEEPHOLES:

- W1 = 2" X 5/16" WEEPHOLES AT 3-1/4" FROM EACH END AND AT MIDSPAN
- W2 = 1-1/2" X 1/4" WEEPHOLES AT 6" FROM EACH END WITH NYLON BAFFLE



TYPICAL ANCHORS: SEE ELEV. FOR SPACING

- 1/4" 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. AGGRE-GATOR 300 BY 'DEWALT' (Fu=96 KSI, Fy=57 KSI)
- 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/SILL/JAMBS)
- THRU 1BY BUCKS INTO CONC. OR BLOCKS
- 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
- 1-1/2" MIN. EMBED INTO FILLED BLOCKS (JAMBS)
- DIRECTLY INTO CONC. OR BLOCKS
- 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
- 1-1/2" MIN. EMBED INTO FILLED BLOCKS (JAMBS)

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

1/4" DIA. DRIL-FLEX SELF DRILLING SCREWS BY 'DEWALT' (GRADE 5 CRS)

- INTO F.B.C. APPROVED MULLIONS
- OR
- INTO METAL STRUCTURES (HEAD/SILL/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)

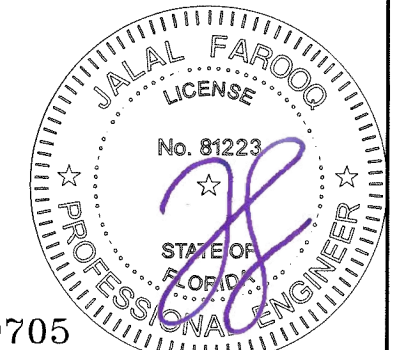
ANCHOR EDGE DISTANCES

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

- WOOD AT HEAD, 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.

Sealed: 7/19/2023

FL #39705



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COMP-ANL\21-59F-ES

ES-P252 THERMAL ALUMINUM AWNING WDW. (L.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

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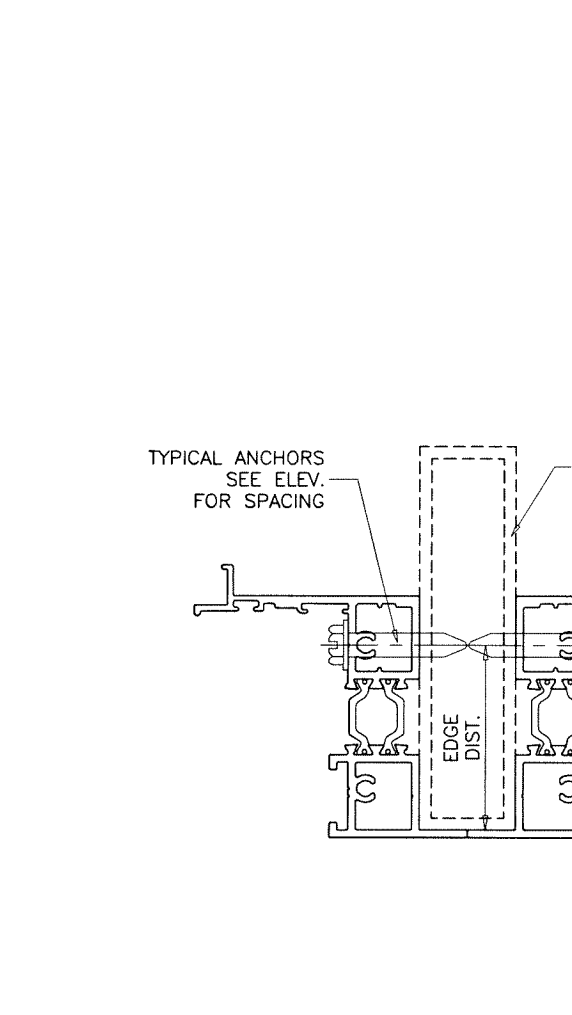
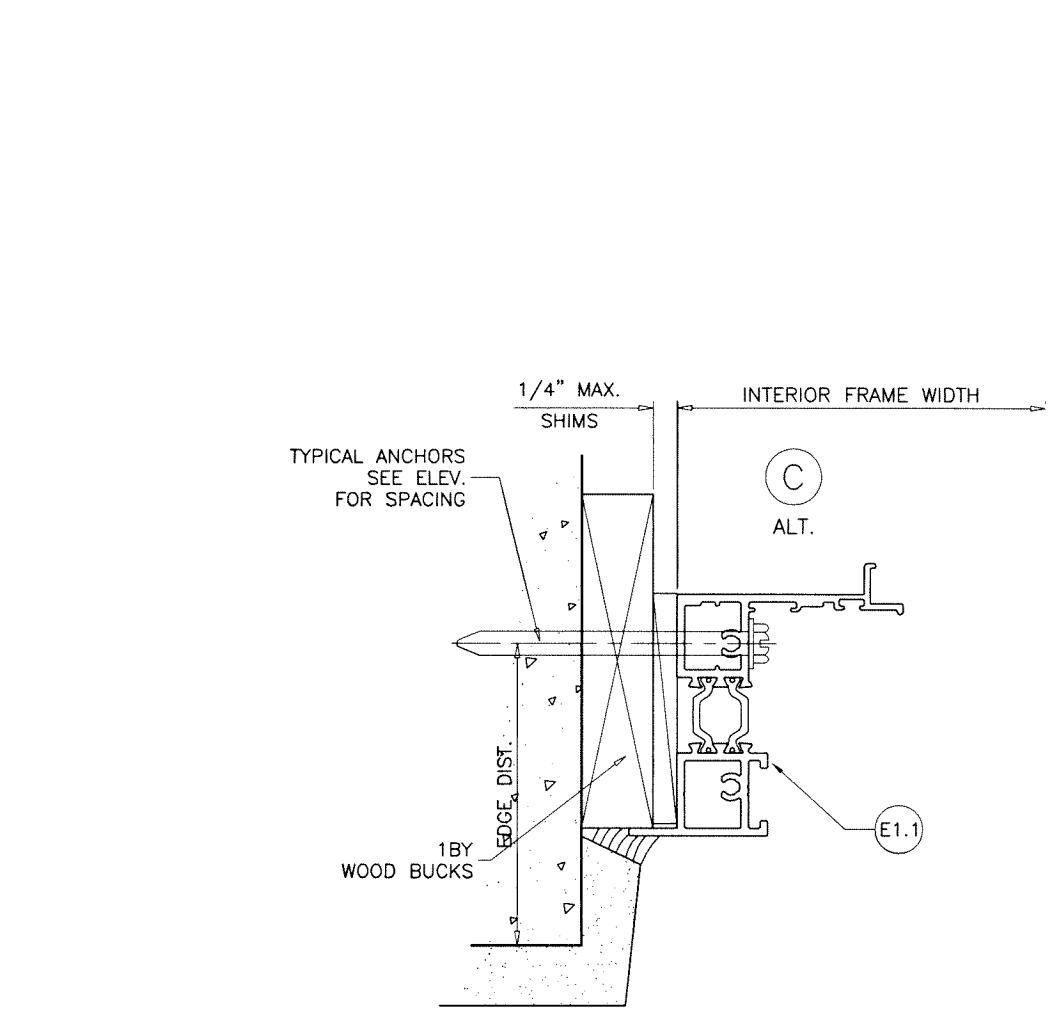
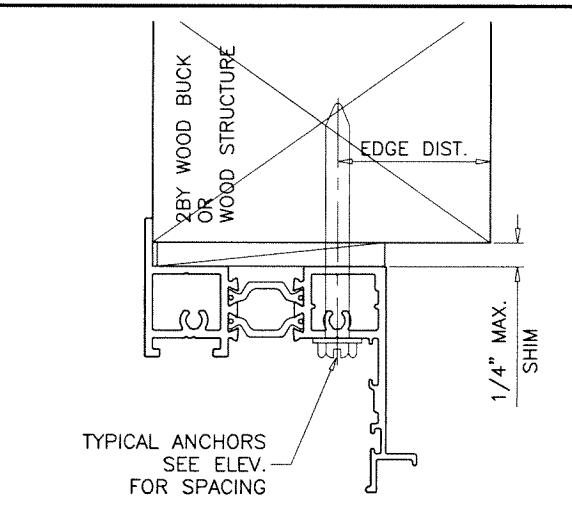
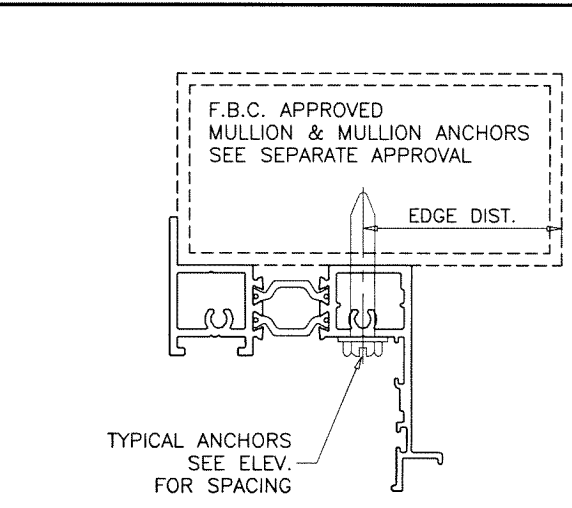
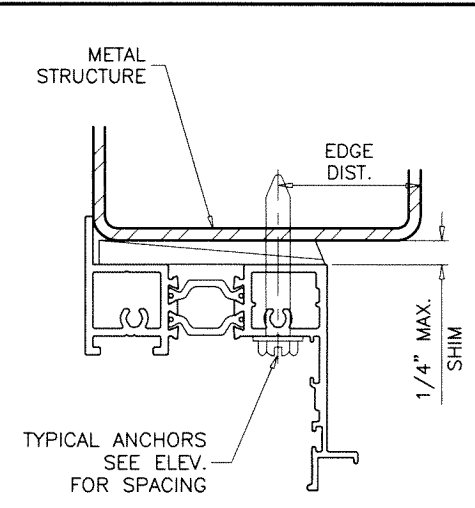
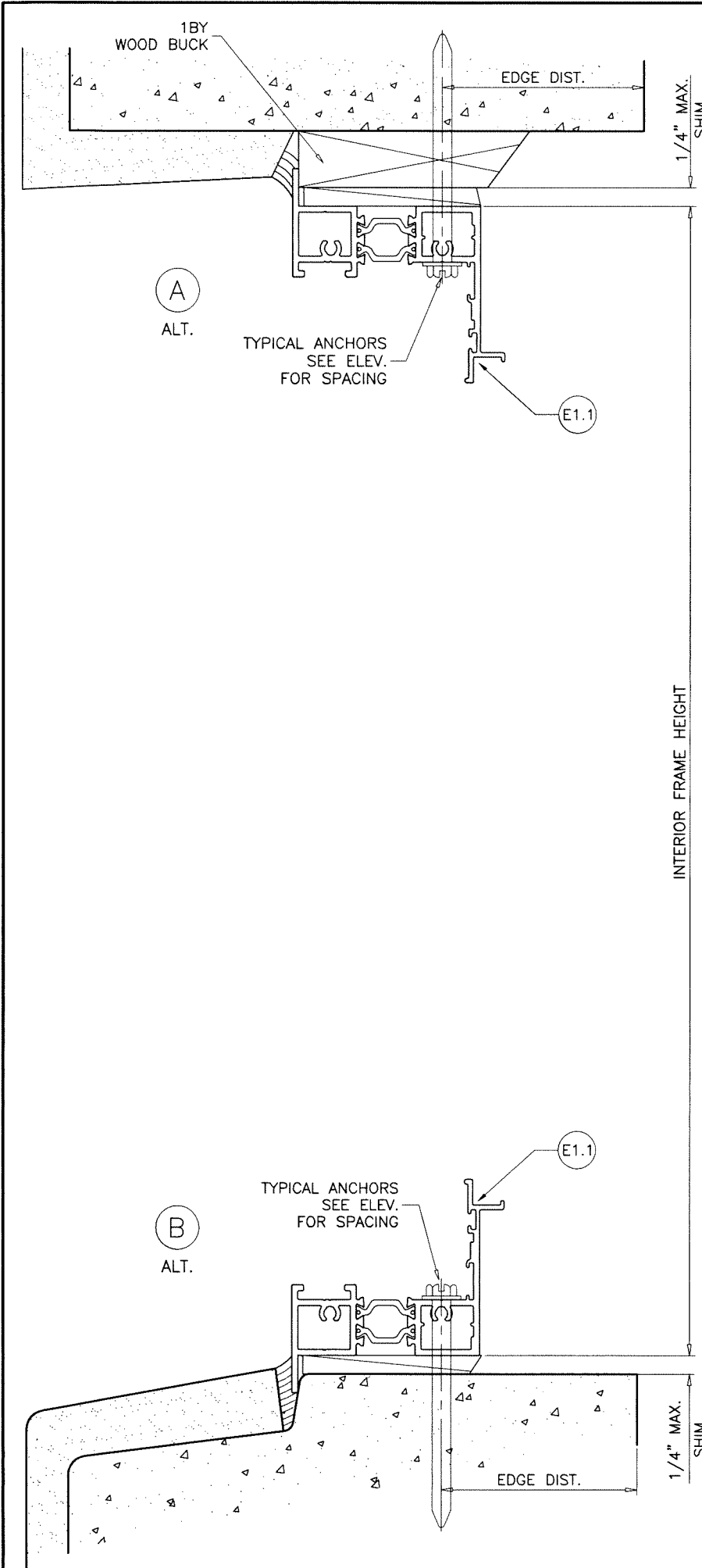
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chk. by:

drawing no.

21-59F

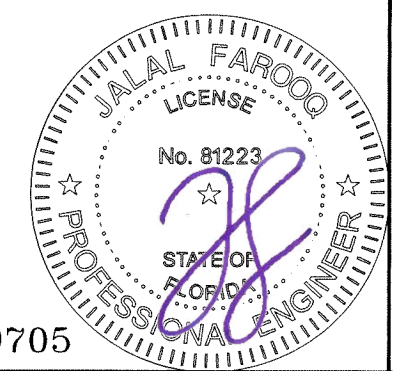
sheet 3 of 11



INSTALLATION DETAILS WITH FLANGE FRAME
SEE SHEETS 3 & 4 FOR WINDOW DETAILS

Sealed: 7/19/2023

FL #39705



AL-FAROOQ CORPORATION
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COMP-ANL 21-59F-ES

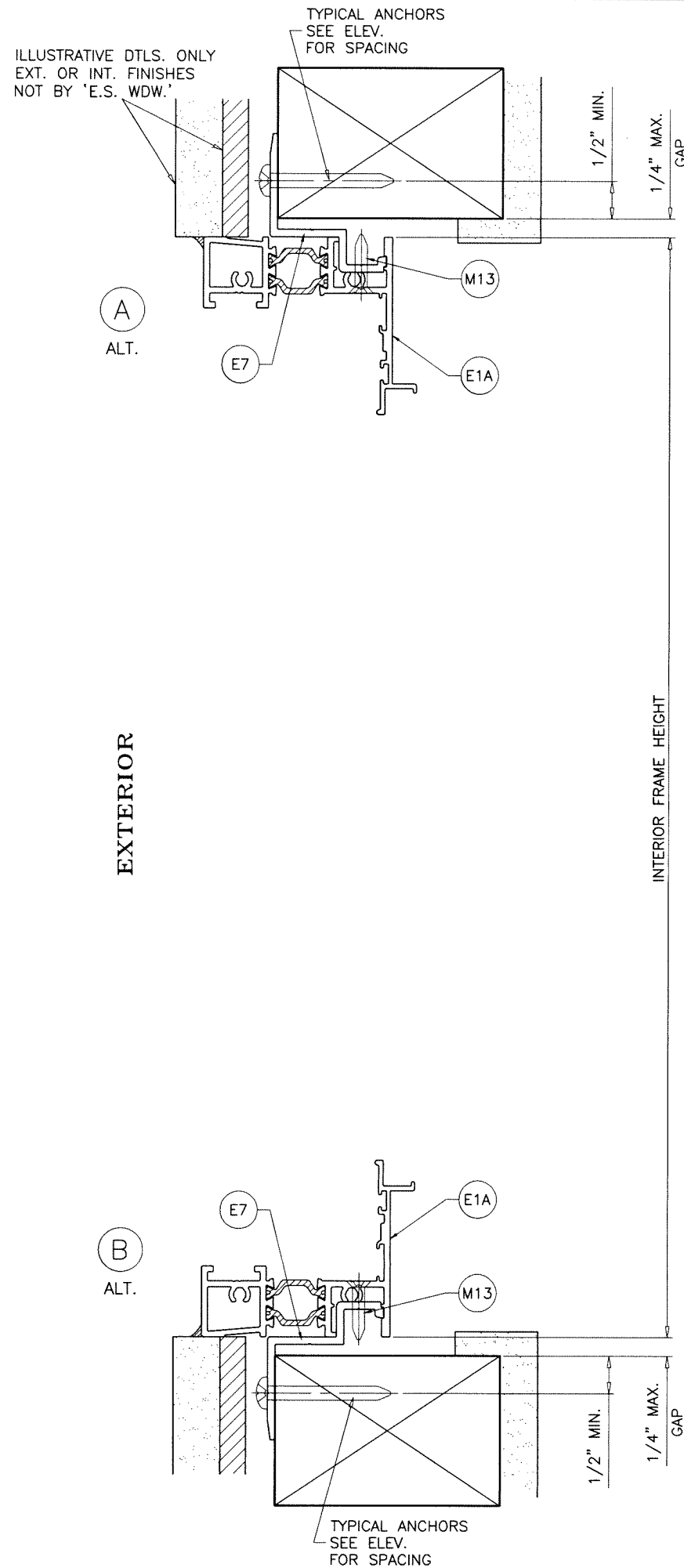
ES-P252 THERMAL ALUMINUM AWNING WDW. (L.M.I.)

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MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

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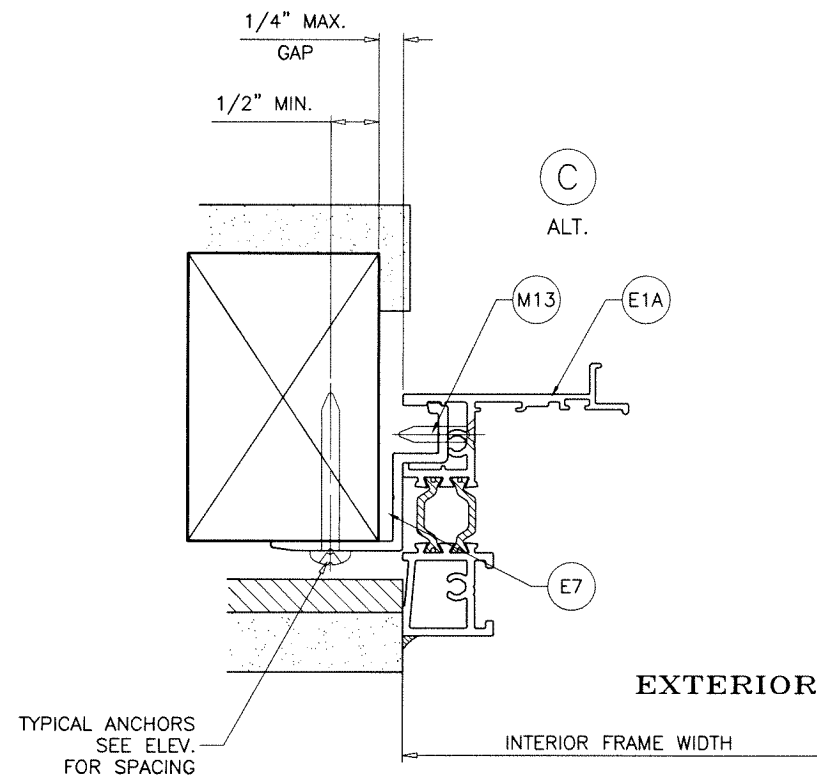
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drawing no.
21-59F
sheet 5 of 11



TYPICAL ANCHORS: SEE ELEV. FOR SPACING

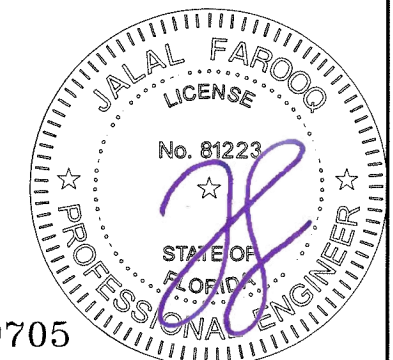
#12 SMS OR WOOD SCREWS (GRADE 2 CRS)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1-1/4" MIN. PENETRATION INTO WOOD



INSTALLATION DETAILS ANCHORS THRU NAIL FIN
SEE SHEETS 3 & 4 FOR WINDOW DETAILS

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FL #39705



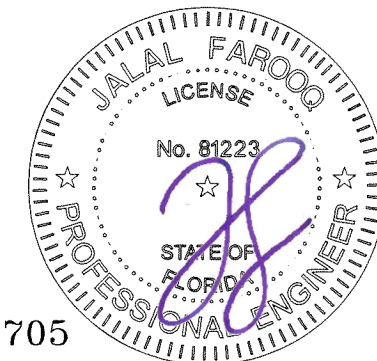
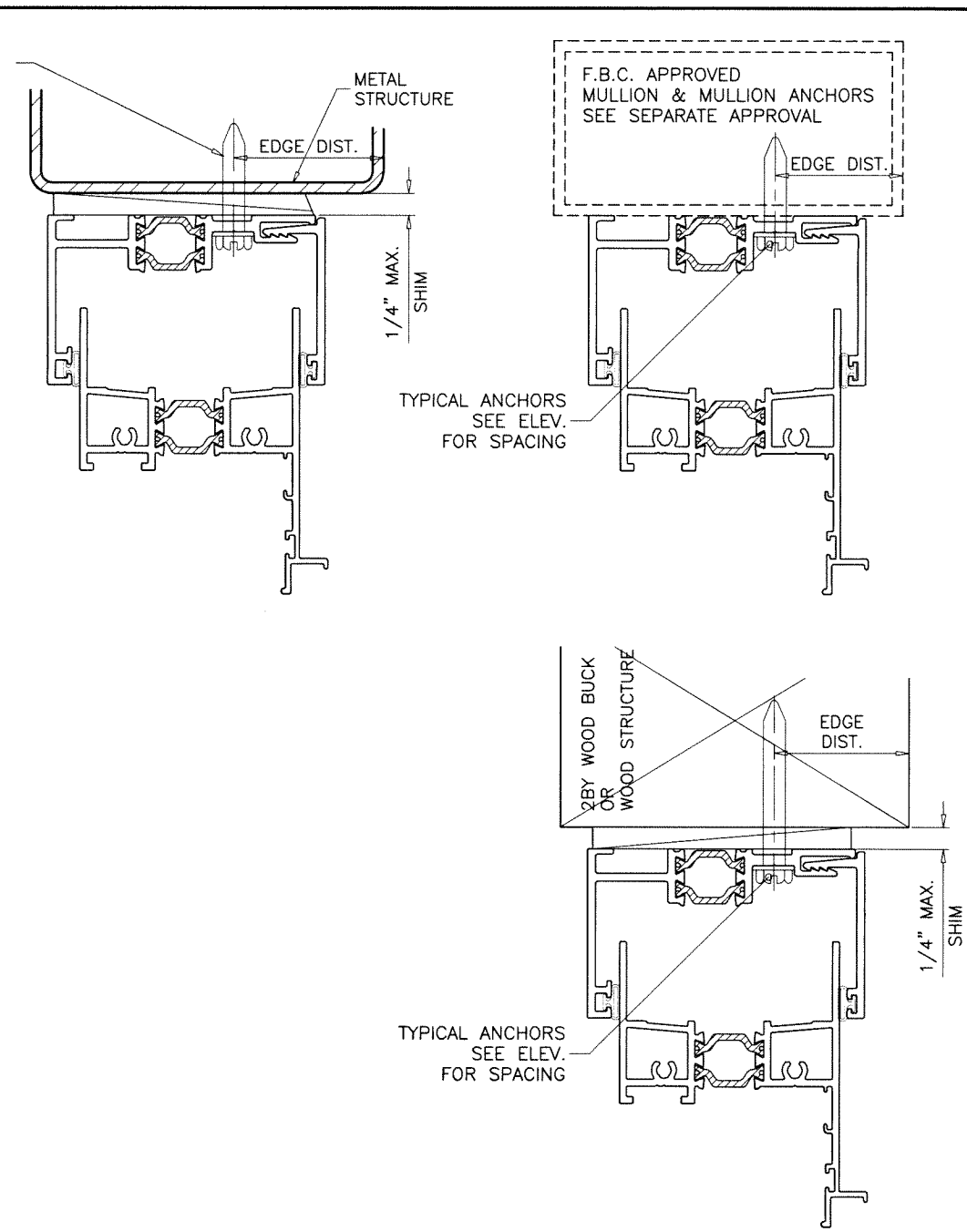
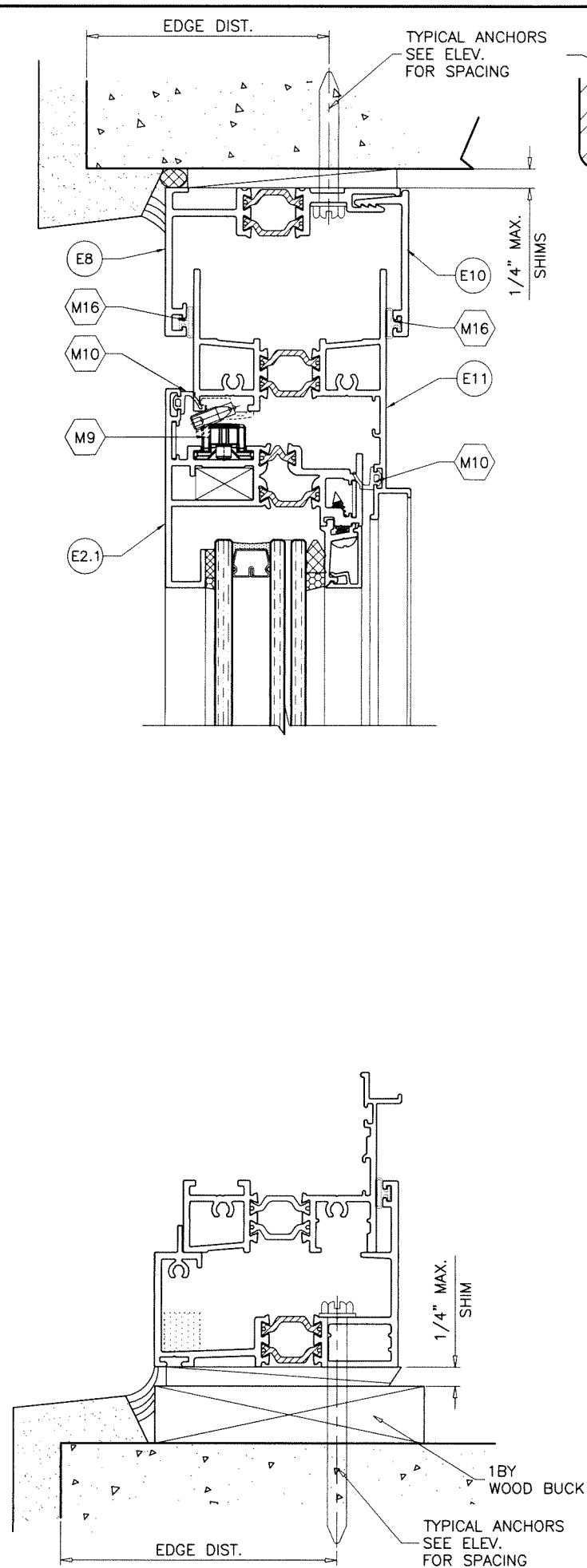
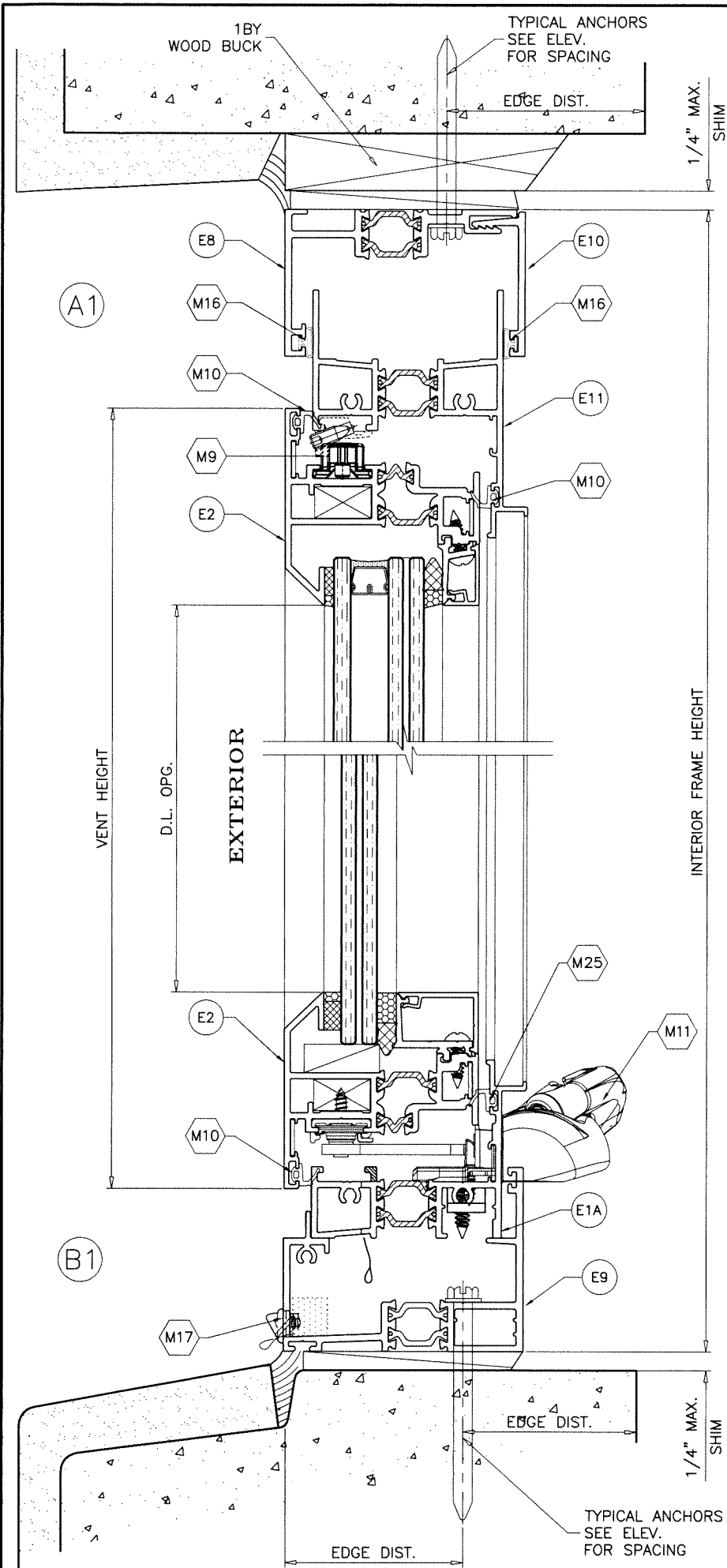
AL-FAROOQ CORPORATION
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MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
(C.A.N. 3538)

COMP-ANL\21-59F-ES

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date: 08-09-21
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drawing no.
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sheet 6 of 11



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FL #39705

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COMP-ANL 21-59F-ES

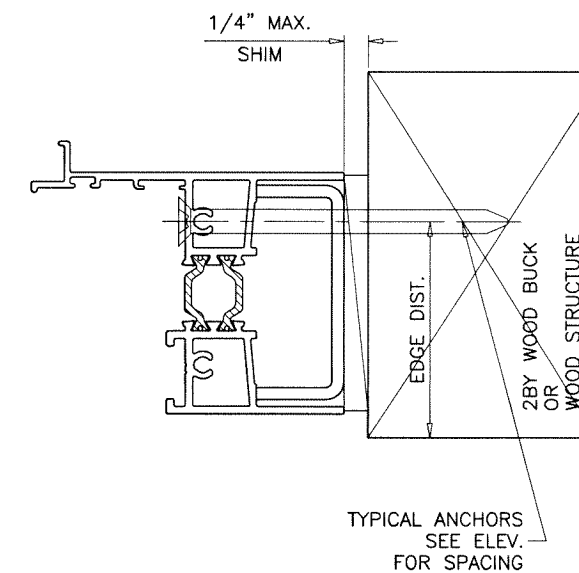
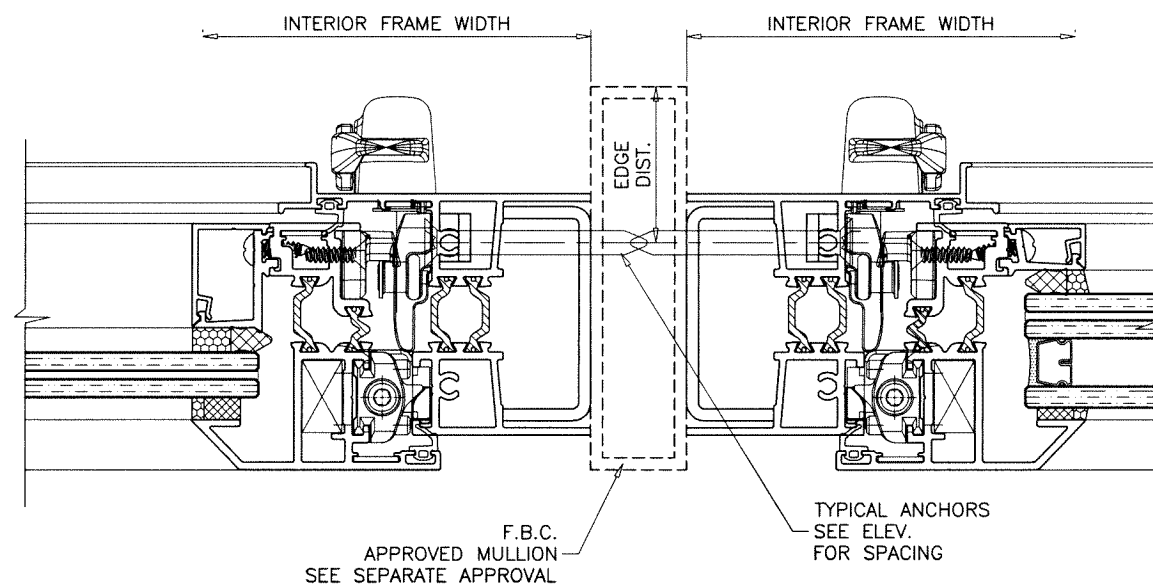
ES-P252 THERMAL ALUMINUM AWNING WDW. (L.M.I.)

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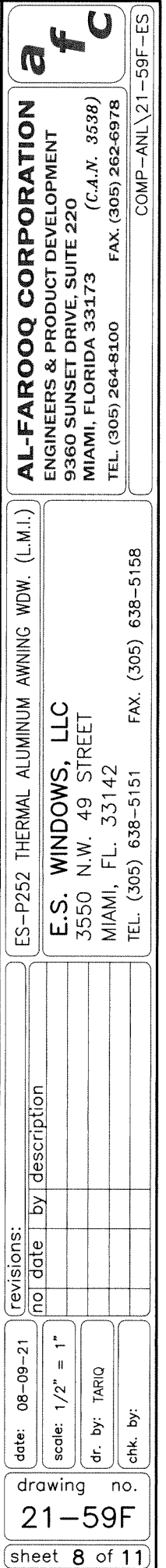
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chk. by:

drawing no.
21-59F
sheet 7 of 11



FL #39705



ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
E1	ES-P252-518	4	FLUSH FRAME HEAD/SILL/JAMB	6063-T6	-
E1.1	ES-P252-514	4	FLANGE FRAME HEAD/SILL/JAMB	6063-T6	-
E1A	ES-P252-508	4	FIN FRAME HEAD/SILL/JAMB	6063-T6	-
E2	ES-P252-509A	4	VENT	6063-T6	-
E2.1	ES-P252-026/P250-003	4	ALT. VENT	6063-T6	-
E3	ES-P252-029	4/ VENT	GLASS STOP (LAM. GLASS)	6063-T6	-
E3A	ES-P252-004	4/ VENT	GLASS STOP (INSUL. LAM. GLASS)	6063-T6	-
E4	ES-P252-030	4/ VENT	COVER IMPACT (LAM. GLASS)	6063-T6	-
E4A	ES-P252-003	4/ VENT	COVER IMPACT (INSUL. LAM. GLASS)	6063-T6	-
E6	AAC-A-1356	1/ CORNER	FRAME ATTACHMENT ANGLE	6063-T6	-
E7	TBA-001	AS REQD.	NAIL FIN	6063-T6	-
E8	ES-P250-010/P251-013	AS REQD.	RECEPTOR HEAD	6063-T6	-
E9	ES-P251-016/032	1	RECEPTOR SILL	6063-T6	-
E10	ES-P251-014	1	RECEPTOR STOP	6063-T6	-
E11	ES-P250-017/P252-012	-	EQUAL LEG FRAME HEAD/JAMB	6063-T6	-
E12	-	AS REQD.	JAMB REINF. CHANNEL	6063-T6	-
M1	ES-H340-G02	4/ LITE	GLAZING WEDGE	EPDM	DUROMETER 60±5 SHORE A
M2	T-BOND V2200	4/ LITE	GLAZING TAPE (1/8" X 3/8")	POLYURETHANE	-
M2A	T-BOND V2208	4/ LITE	GLAZING TAPE (1/4" X 3/8")	POLYURETHANE	-
M3	NS-25-B03A	2/ LITE	SETTING BLOCK	SILICONE	DUROMETER 85±5 SHORE A
M4	0423	4/ VENT	CORNER LOCK	DIE CAST ALUM.	-
M5	#10 X 3/4" PH	2/ CORNER	FRAME CORNER ANGLE FASTENER	ST. STEEL	-
M6	PJS-43-SS	AS REQD.	CORNER KEY	ST. STEEL	-
M7	#8 X 1/2" PH	AS REQD.	END DAM FASTENER	ST. STEEL	-
M8	#10 X 2" FH	2/ CORNER	FRAME CORNER FASTENER	ST. STEEL	-
M9	LM4200857052	2	SNUBBER	ZAMAK	-
M10	ES-EL300-G01	AS REQD.	INTERIOR VENT GASKET	EPDM	DUROMETER 70±5 SHORE A
M11	C011-0453-085	1	AWNING OPERATOR	ST. STEEL	-
M12	#8 X 5/8" PH SMS	AS REQD.	GLASS STOP FASTENER	ST. STEEL	AT 4" FROM ENDS & 8-1/4" O.C.
M13	#10 X 3/4"	AS REQD.	NAIL FIN FASTENERS AT 3" FROM ENDS & 12" O.C.	ST. STEEL	FH SMS
M14	1208	2	HINGES	ST. STEEL	FAPIM
M15	-	2	MULTIPOINT LOCK	-	-
M16	ES5008A	AS REQD.	RECEPTOR W'STRIPPING	SILICONE	DUROMETER 65±5 SHORE A
M17	WA2L	-	WEEP HOLE COVER	-	PREFERRED
-	-	-	-	-	-

SEALANTS:

ALL FRAME AND VENT CORNERS AND INSTALLATION SCREWS SEALED WITH CLEAR/ALUMINUM COLORED SEALANT.

LOCKS:

SURFACE MOUNT METALLIC FOUR POINT LOCK SYSTEM WITH ACTIVATING LEVER TYPE CAM LOCKS LOCATED AT 10" FROM BOTTOM AT FRAME JAMBS FASTENED WITH (2) #8-32 X 1/2" PH SMS

SURFACE MOUNT NYLON KEEPERS LOCATED AT 3-1/2", 15-1/2", 27-3/4" AND 40-1/4" FROM BOTTOM AT VENT JAMB RAILS EACH FASTENED WITH (2) #8 X 5/8" FH SMS

HINGES:

SURFACE MOUNT METALLIC HINGES BY 'FAPIM' LOCATED AT WINDOW FRAME UPPER CORNERS FASTENED TO FRAME WITH (3) #10 X 1/2" PH SMS FASTENED TO VENT WITH (4) #10 X 1/2" PH SMS

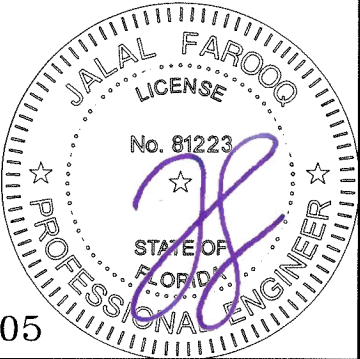
SNUBBERS:

SNUBBERS AT FRAME HEAD AND VENT TOP RAIL LOCATED AT 11-1/2" FROM EACH END FASTENED WITH (2) #8 X 1/2" FPH SMS

OPERATOR:

SURFACE MOUNT METALLIC ROTO OPERATOR LOCATED AT MIDSPAN OF FRAME SILL FASTENED WITH (6) #8 X 3/4" FH SMS

SURFACE MOUNT 2-3/8" LONG ST. STEEL BRACKET LOCATED AT MIDSPAN OF BOTTOM RAIL FASTENED WITH (2) #8 X 1/2" FH SMS



Sealed: 7/19/2023

FL #39705

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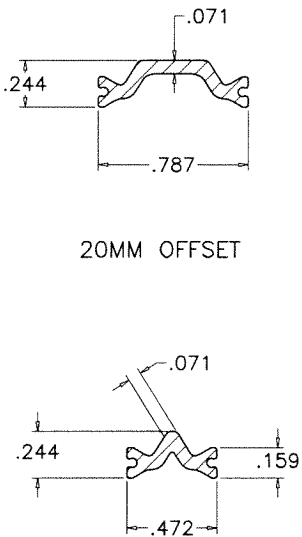
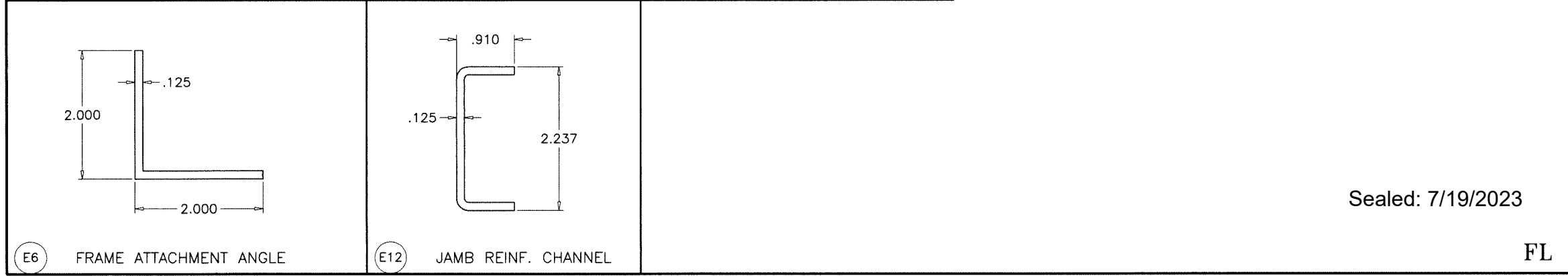
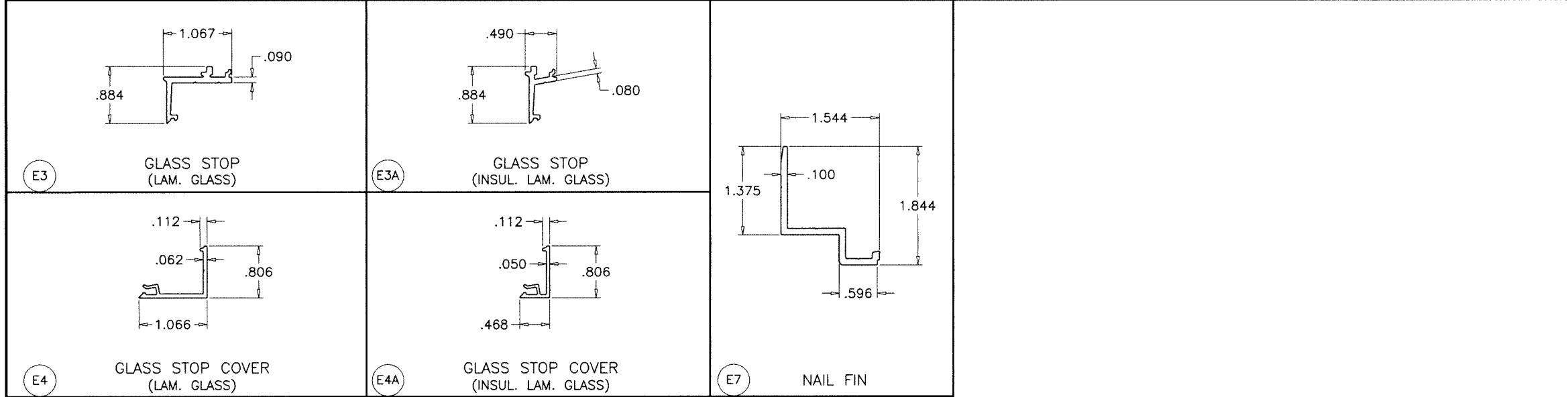
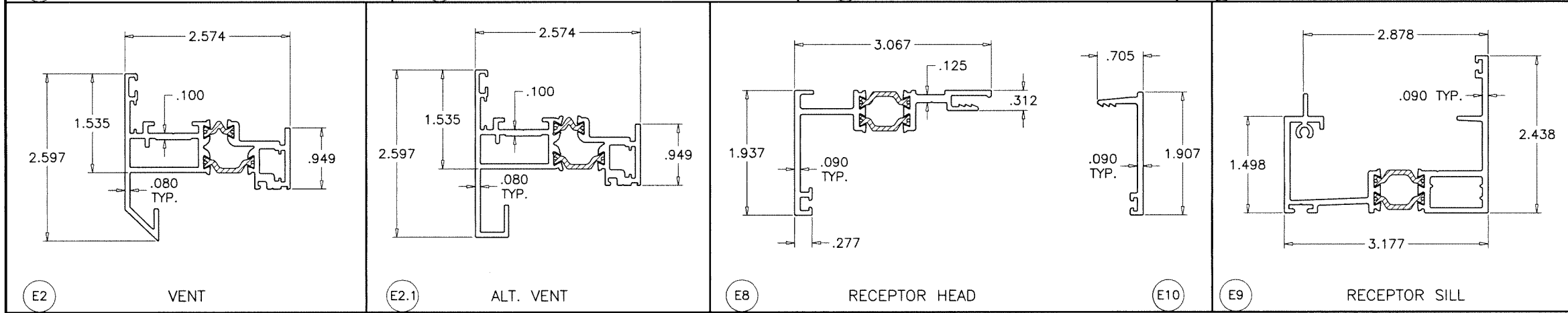
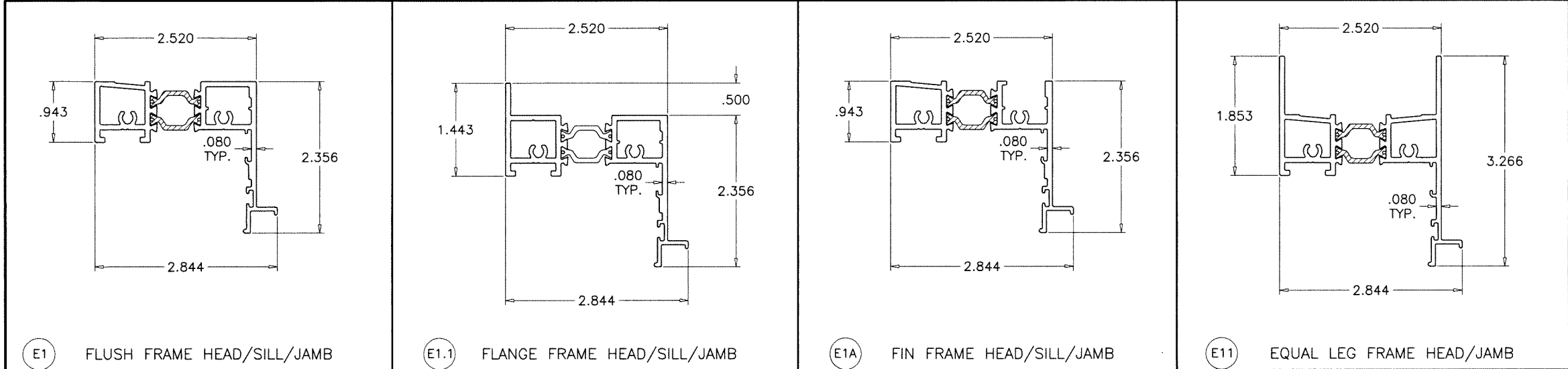
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100
FAX. (305) 262-6978
(C.A.N. 3538)

COMP-ANL\21-59F-ES

ES-P252 THERMAL ALUMINUM AWNING WDW. (L.M.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	
date: 08-09-21	scale: 1/2" = 1"
dr. by: TARIQ	chk. by:
drawing no.	
21-59F	
sheet 9 of 11	

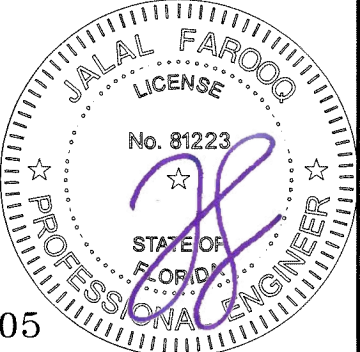


TECATHERM® 66 GF INSULBARS
SCALE 1:1

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

Sealed: 7/19/2023

FL #39705



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
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revisions:	
no	date

date: 08-09-21

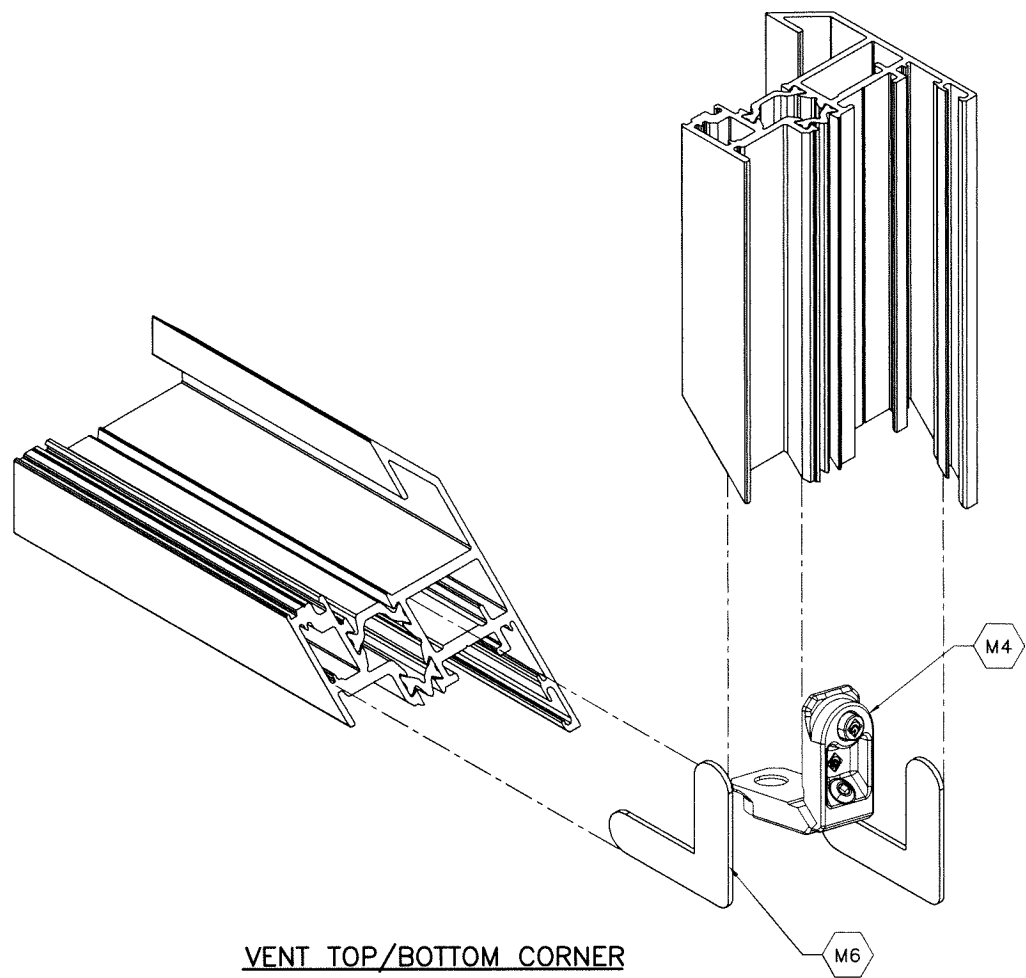
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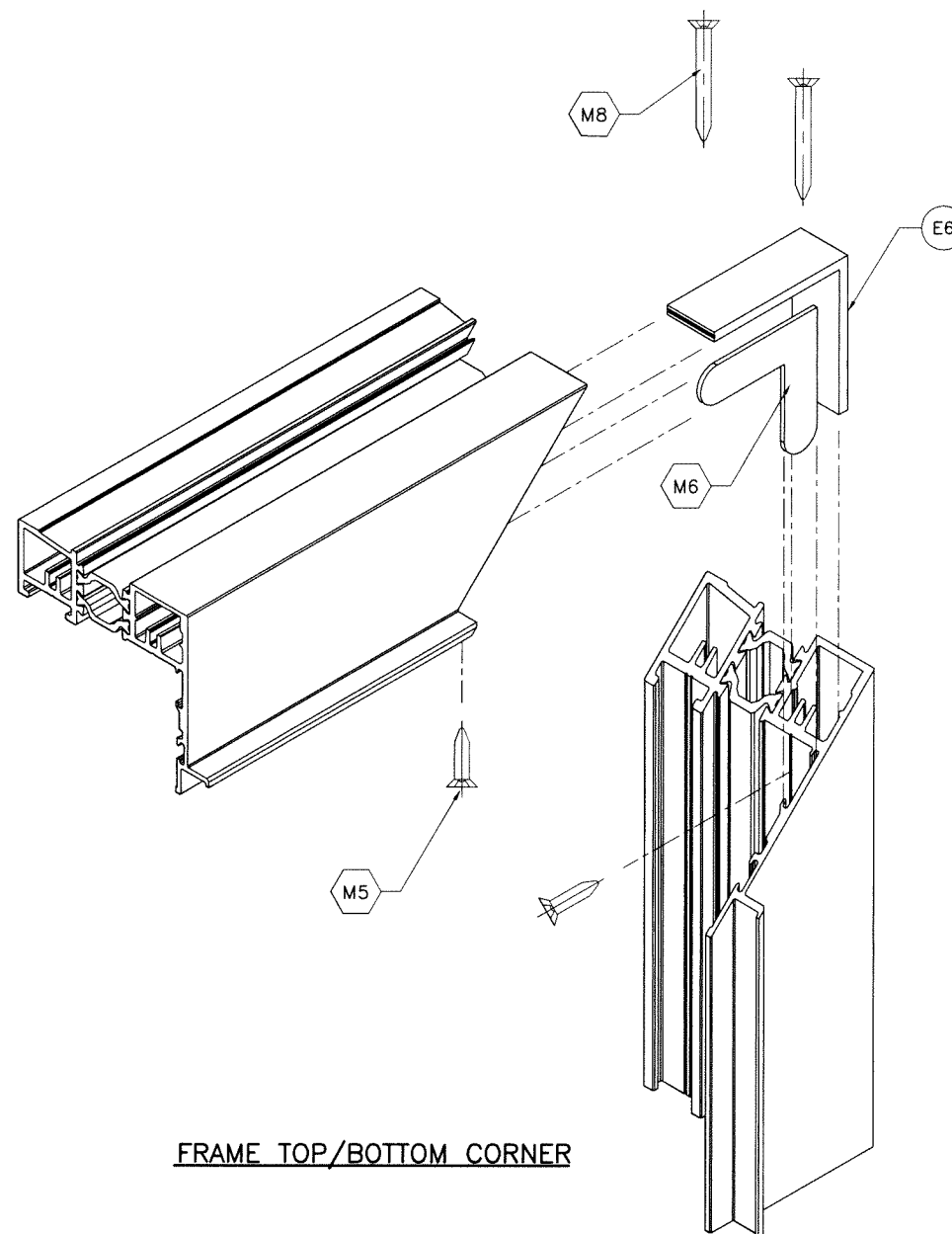
chk. by:

drawing no.
21-59F

sheet 10 of 11



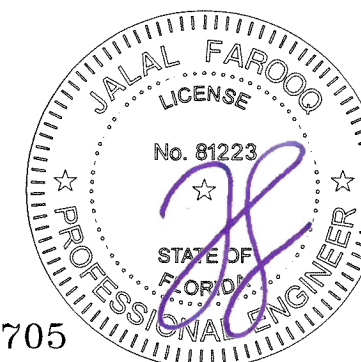
VENT TOP/BOTTOM CORNER



FRAME TOP/BOTTOM CORNER

Sealed: 7/19/2023

FL #39705



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\21-59F-ES	
ES-P252 THERMAL ALUMINUM AWNING WDW. (L.M.I.)		E.S. WINDOWS, LLC 3550 N.W. 49 STREET MIAMI, FL. 33142 TEL. (305) 638-5151 FAX. (305) 638-5158	
date: 08-09-21 scale: 1/2" = 1" dr. by: TARIQ chk. by:	revisions: no date by description	drawing no. 21-59F sheet 11 of 11	