

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF H.R./H.R. OR HORIZ. SLIDING 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.

TYPICAL ELEVATIONS

MAXIMUM DESIGN LOAD RATING = + 80.0 PSF (FOR SIZES SHOWN OR SMALLER) 110.0 PSF

ALTERNATE SIZES CAN NOT EXCEED VENT OR FIXED SIZES OF SHOWN ELEVATIONS.

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

THESE WINDOWS 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.

FLUSH FRAME INTERIOR FRAME WIDTH

FLANGE FRAME

INTERIOR FRAME WIDTH

Sealed: 10/20/2023

- 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
- 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.

FL #20383



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drawing

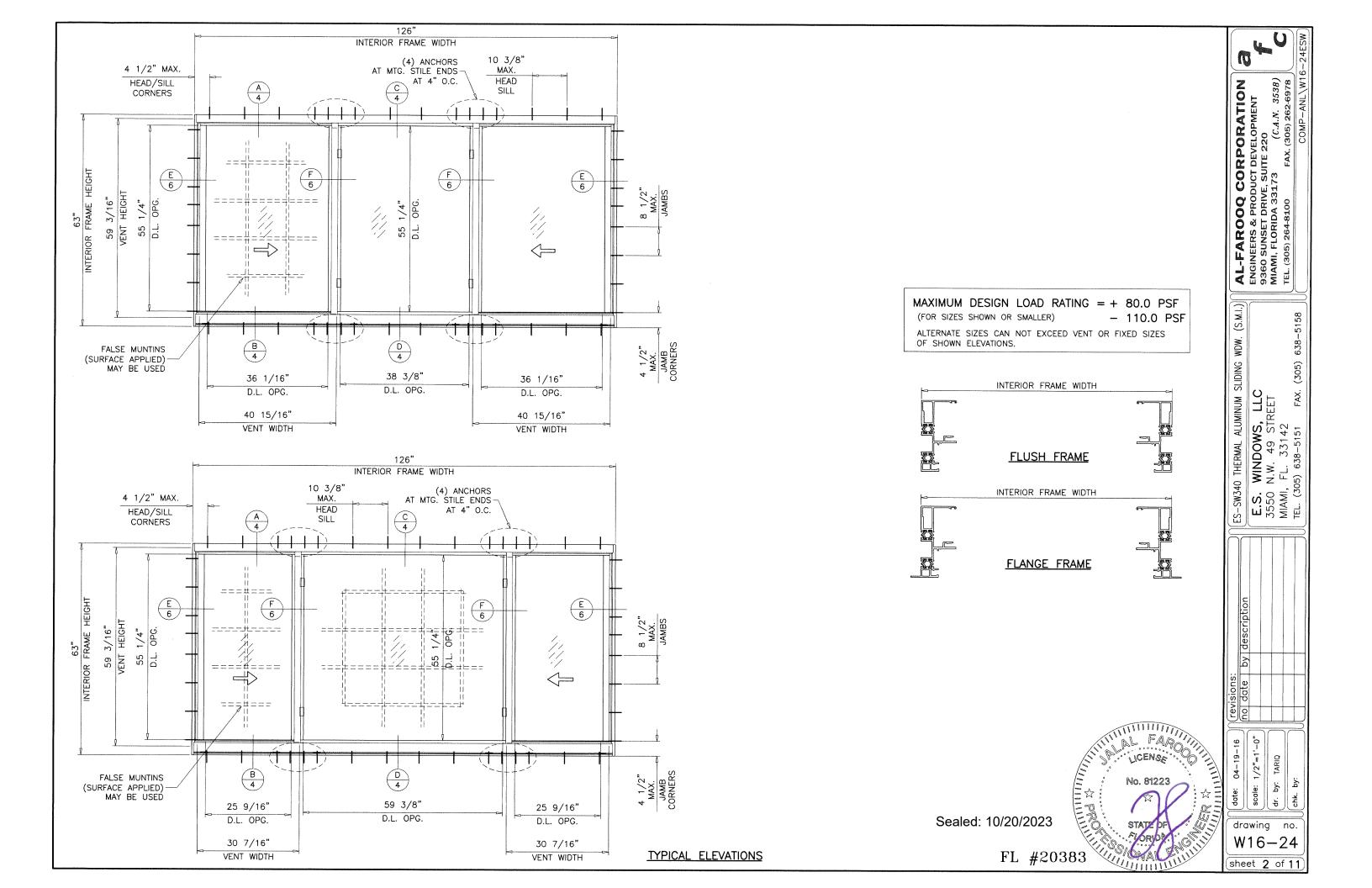
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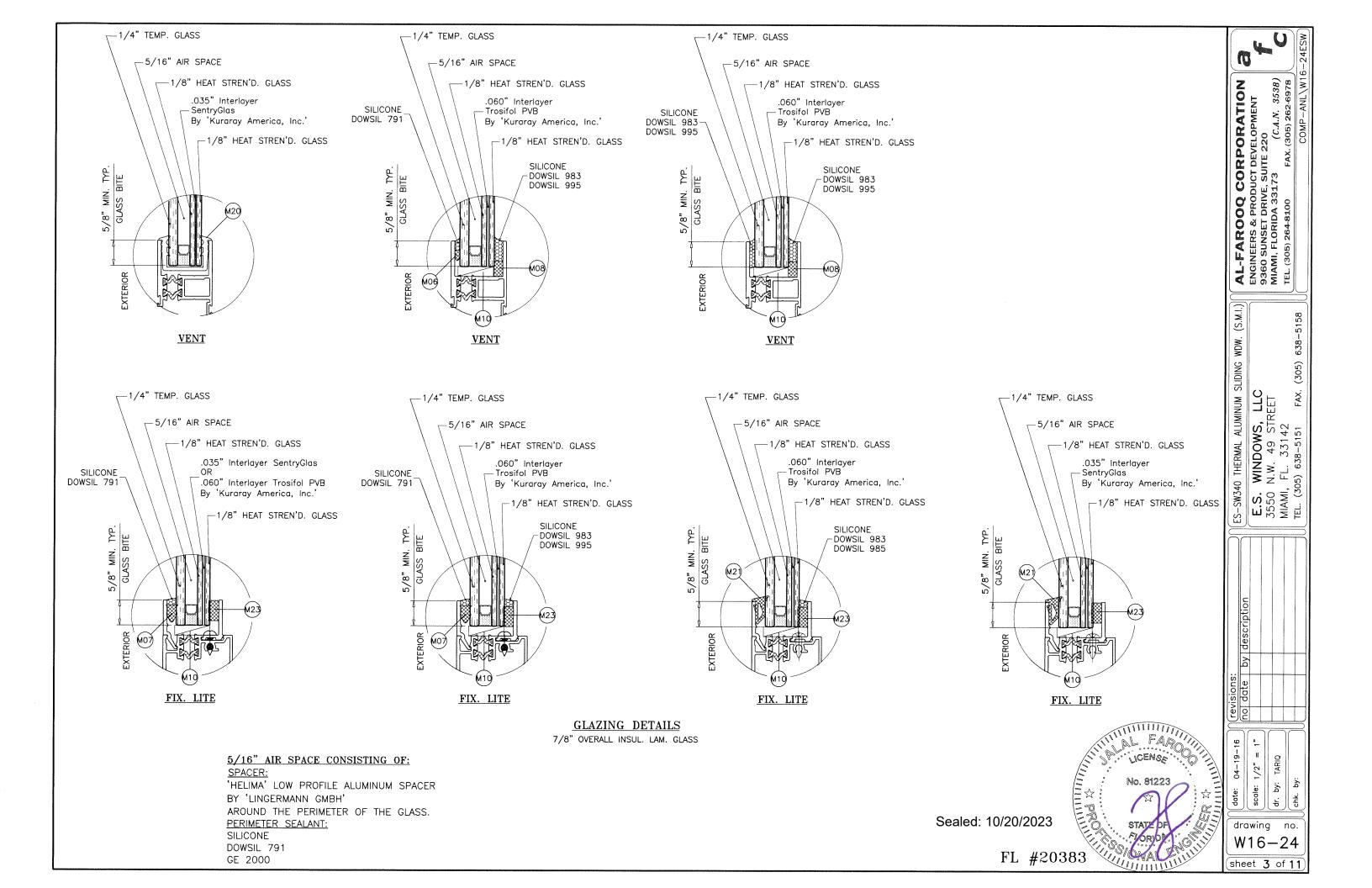
ES-SW340 THERMAL ALUMINUM SLIDING WINDOWS, LLC N.W. 49 STREET FL. 33142 (55) 638–5151 FAX. 9 **E.S.** 3550 MIAMI, TEL. (30

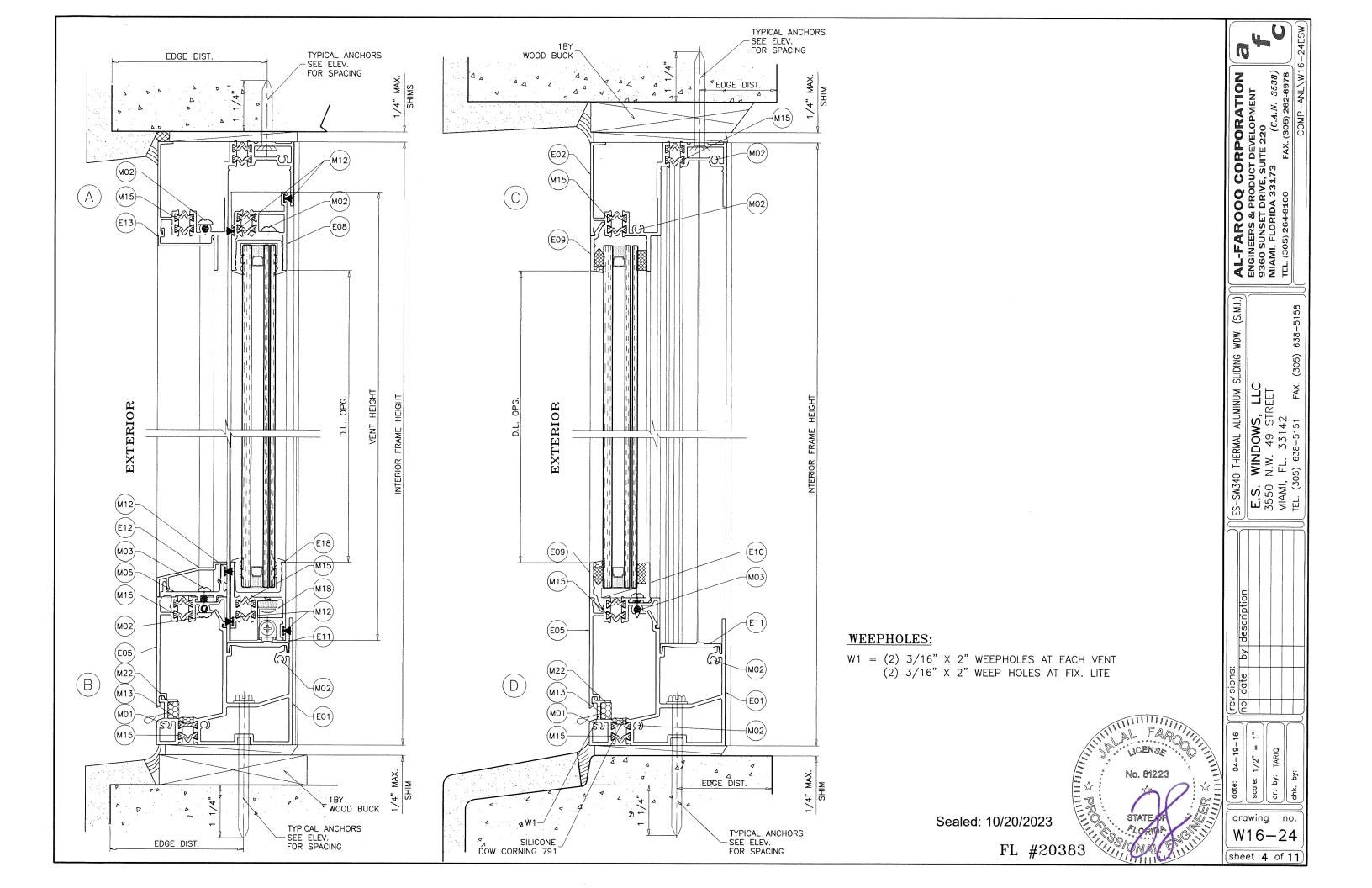
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description
UPDATED TO 2017
UPDATED TO 2020
UPDATED TO 2023

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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. 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)

1-1/4" MIN. EMBED INTO CONC. OR BLOCKS (JAMBS)

DIRECTLY INTO CONC. OR BLOCKS

1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL)

1-1/4" MIN. EMBED INTO CONC. OR BLOCKS (JAMBS)

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

1-1/4" MIN. EMBED INTO CONC. OR GROUT-FILLED BLOCKS (JAMBS)

DIRECTLY INTO CONC. OR BLOCKS

1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL)

1-1/4" MIN. EMBED INTO CONC. OR GROUT-FILLED BLOCKS (JAMBS)

1/4" DIA. BI-FLEX 300 SELF DRILLING SCREWS BY 'DEWALT' (Fu=96 KSI, Fy=57 KSI)

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

INTO F.B.C. APPROVED MULLIONS

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)

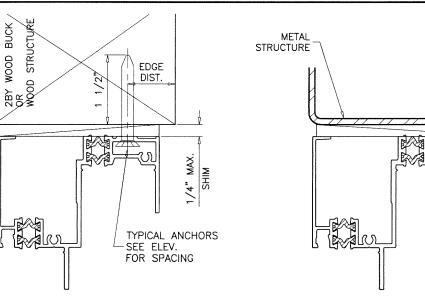
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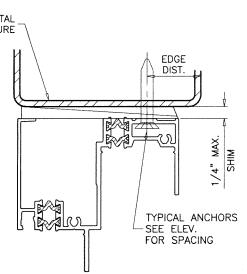
INTO CONCRETE AND BLOCKS = 2-1/2" MIN.

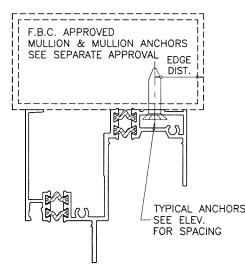
INTO WOOD STRUCTURE = 1" MIN.

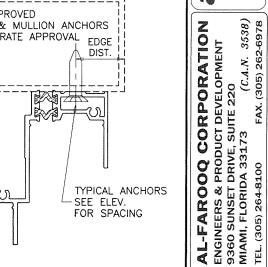
INTO METAL STRUCTURE = 3/4" MIN.

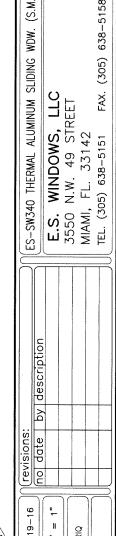
WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN. CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN. C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.







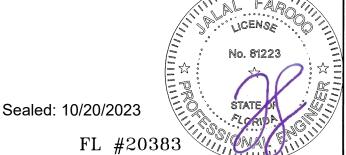


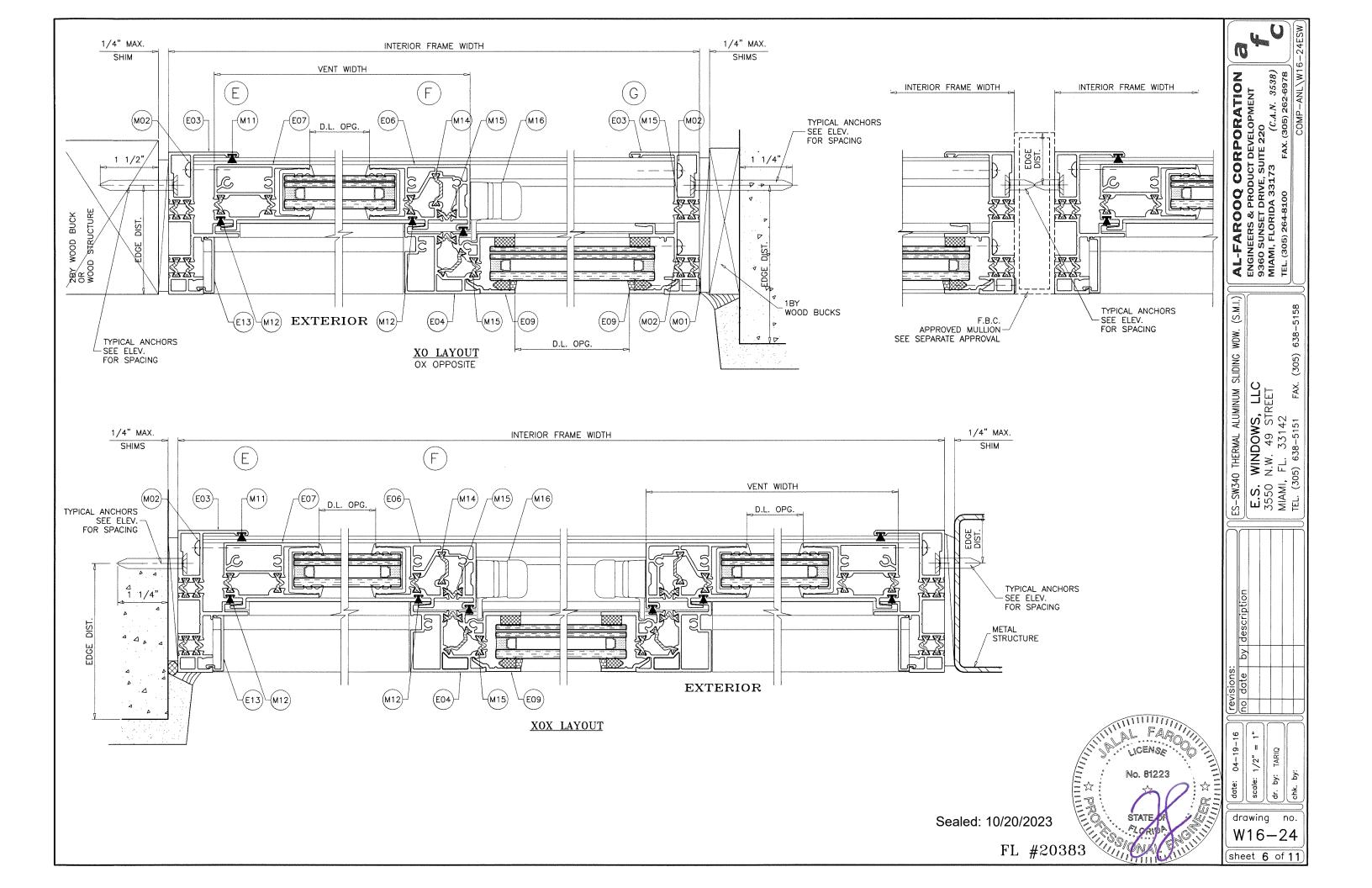


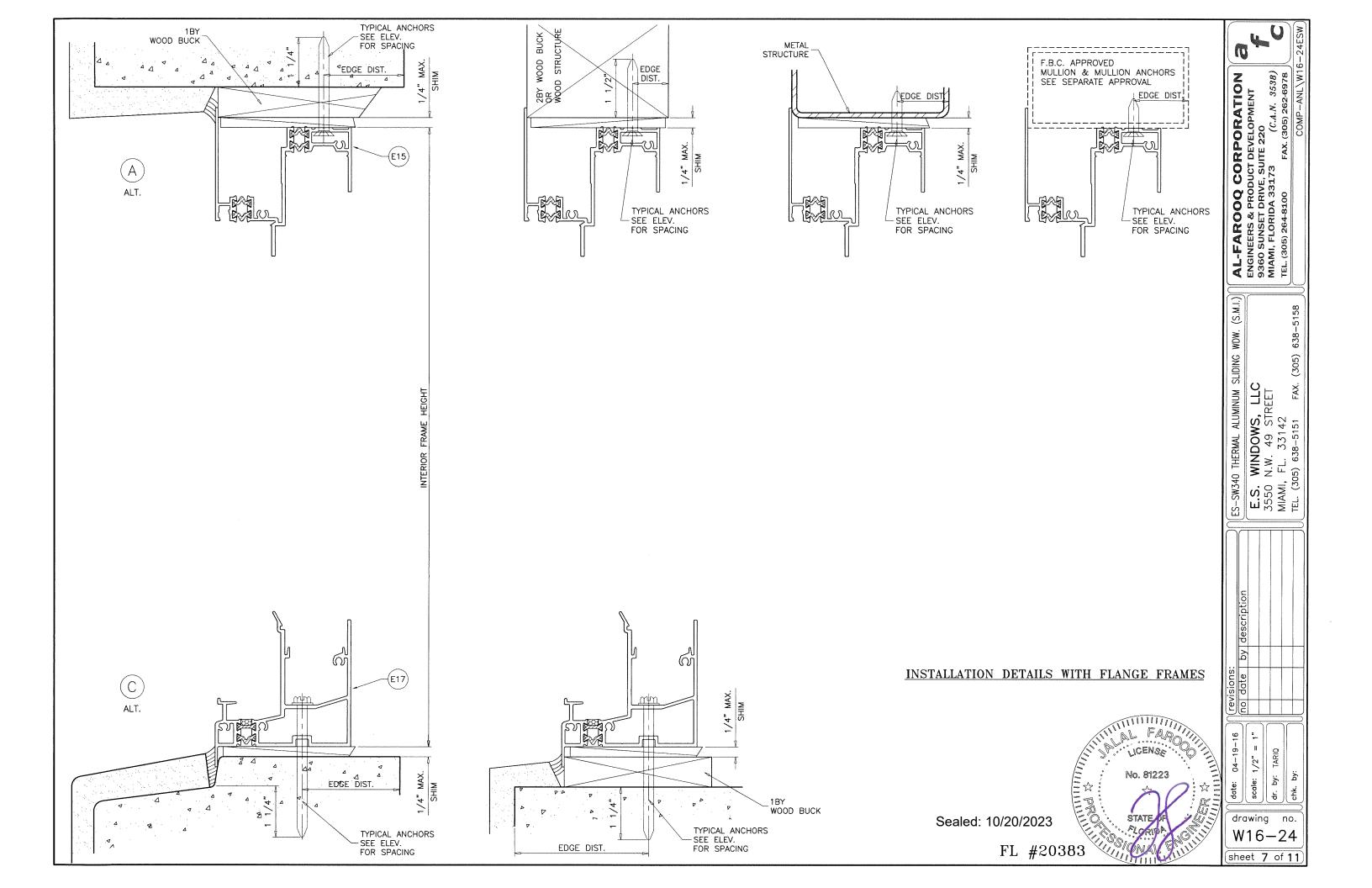
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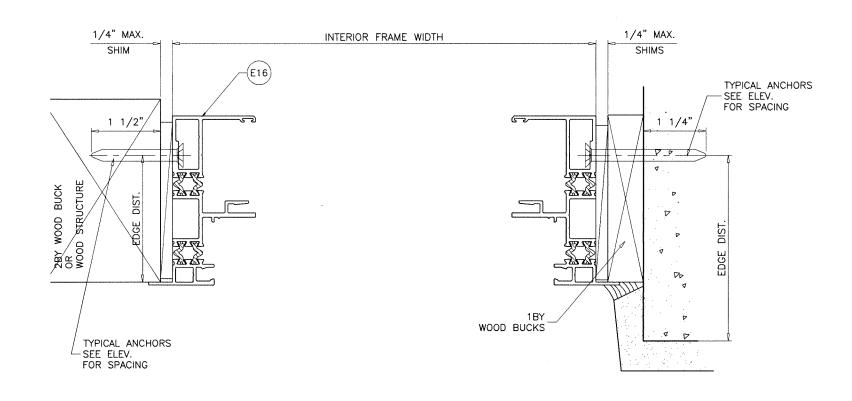
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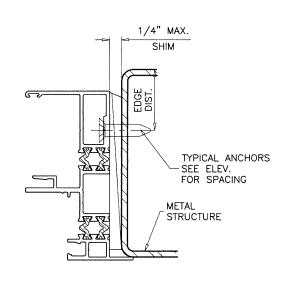
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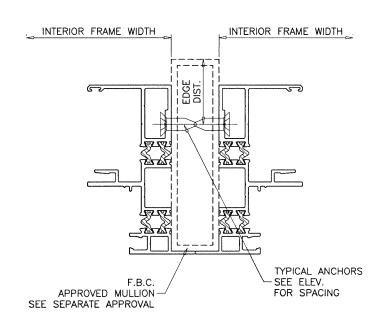












INSTALLATION DETAILS WITH FLANGE FRAMES

Sealed: 10/20/2023

FL #20383

## 1/2" = 1" TARIQ Page Page	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	
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ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
E01	ES-SW340-501	1	FRAME SILL FLUSH	6063-T6	_
E02	ES-H340-505	1	FRAME HEAD FLUSH	6063-T6	_
E03	ES-SW340-502	2	FRAME JAMB FLUSH	6063-T6	_
E04	ES-H340-507	AS REQD.	FIX. MEETING RAIL	6063-T6	_
E05	ES-SW340-503	-	FIXED BOTTOM	6063-T6	-
E06	ES-H340-508	-	VENT SIDE RAIL	6063-T6	_
E07	ES-SW340-504	2/ VENT	VERTICAL RAIL	6063-T6	_
E08	ES-H340-510	1/ VENT	VENT TOP RAIL	6063-T6	_
E09	ES-H340-003	4/ LITE	GLASS STOP	6063-T6	_
E10	ES-SW340-005	4/ LITE	HORIZONTAL FIXED GLASS STOP	6063-T5	
E11	ES-SW340-006	1/ VENT	TRACK	6063-T6	_
E12	ES-SW340-007		COVER	6005-T5	_
E13	ES-H340-021	_	HORIZONTAL/VERTICAL TRIM	6063-T5	-
E14	ES-H340-007		TRIM FOR SCREEN	6063-T5	_
E15	ES-H340-506	1	FRAME HEAD FLANGE	6063-T6	_
E16	ES-SW340-506	2	FRAME JAMB FLANGE	6063-T6	_
E17	ES-SW340-505	1	FRAME SILL FLANGE	6063-T6	_
E18	ES-SW340-507	1/ VENT	VENT BOTTOM RAIL	6063-T6	_
MO1	#10 X 1-1/2" FH	AS REQD.	FRAME ASSEMBLY FASTENER	ST/ST	_
M02	#10 X 1" PH	_	FRAME AND FIX. PANEL FASTENERS	ST/ST	_
м03	#8 X 1/2" PH	_	FOR ROLLER, PLASTIC PROFILE AND GLASS STOP	ST/ST	SPACED AT 10" O.C.
M04	#8 X 3/4" FH SMS	_	SWEEP LOCK FASTENER	_	_
М05	ES-SW340-301	_	PLASTIC EXTRUSION	RIGID PVC	
М06	ES-H340-G05	AS REQD.	GLAZING GASKET	SILICONE	DUROMETER 70±5 SHORE A
М07	ES-H340-G02	AS REQD.	GLAZING GASKET	SILICONE	DUROMETER 70±5 SHORE A
М08	V2200	AS REQD.	GLAZING TAPE (3/16" X 3/8")	FOAM	_
M10	ES-21-B04A	2 LITE	SETTING BLOCKS	SILICONE	DUROMETER 80±5 SHORE A
M11	W23212NK	AS REQD.	WEATHERSTRIP	-	ULTRAFAB
M12	W23202NK	AS REQD.	WEATHERSTRIP		ULTRAFAB
м13	1142	AS REQD.	INSULBAR 12 MM FLAT	POLYAMIDE	ENSINGER
M14	2479	AS REQD.	INSULBAR 20 MM OFFSET	POLYAMIDE	ENSINGER
M15	2531	AS REQD.	INSULBAR 12 MM OFFSET	POLYAMIDE	ENSINGER
M16	3032	1/ VENT	SWEEP LOCK	DIE CAST ALUM	AT 13" FROM EACH END
M17	ES1050-PL1		FLAT BOLT	ST/ST	_
M18	RU-340-IR	2/ VENT	TANDEM ROLLER	ST/ST	AT 5" FROM EACH END
M20	ES-H340-G01	-	GLAZING GASKET	SILICONE	DUROMETER 70±5 SHORE A
M21	PS-1127E	_	GLAZING GASKET	SILICONE	DUROMETER 70±5 SHORE A
M22	ES-SD450-F01	AS REQD.	RETICULATED FOAM (5/8" X 5/8" X 2")	FOAM	_
M23	80-378A	_	GLAZING GASKET	EPDM	DUROMETER 80±5 SHORE A

SEALANTS:

FRAME AND VENT CORNERS AND INSTALLATION SCREWS AT SILL SEALED WITH 'ACCURA' ARCYLIC LATEX SEALANT BY 'M-D BUILDING PRODUCTS'.

