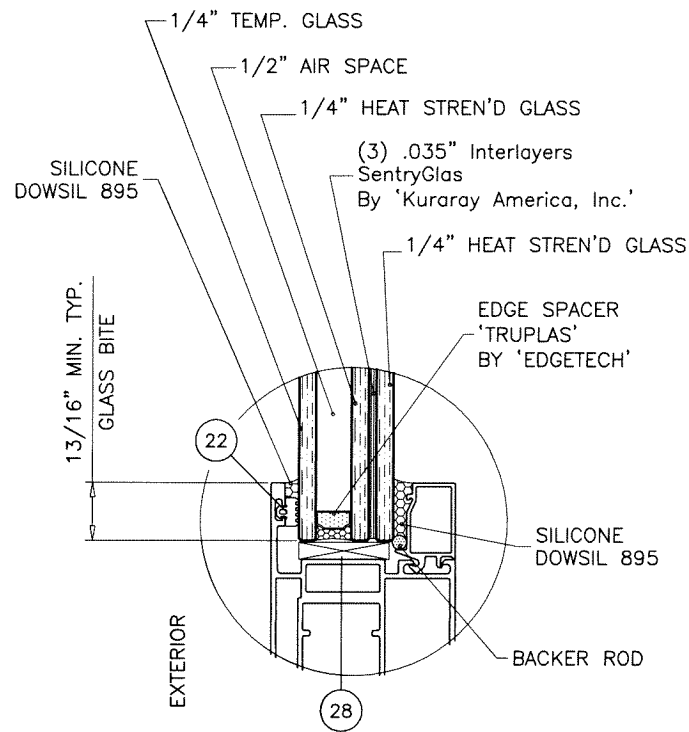




GLAZING DETAIL

1-5/16" OVERALL INSUL. LAM. GLASS

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

ES-LS7035

LIFT & SLIDE ALUMINUM GLASS DOOR (L.M.I.)

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).

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.

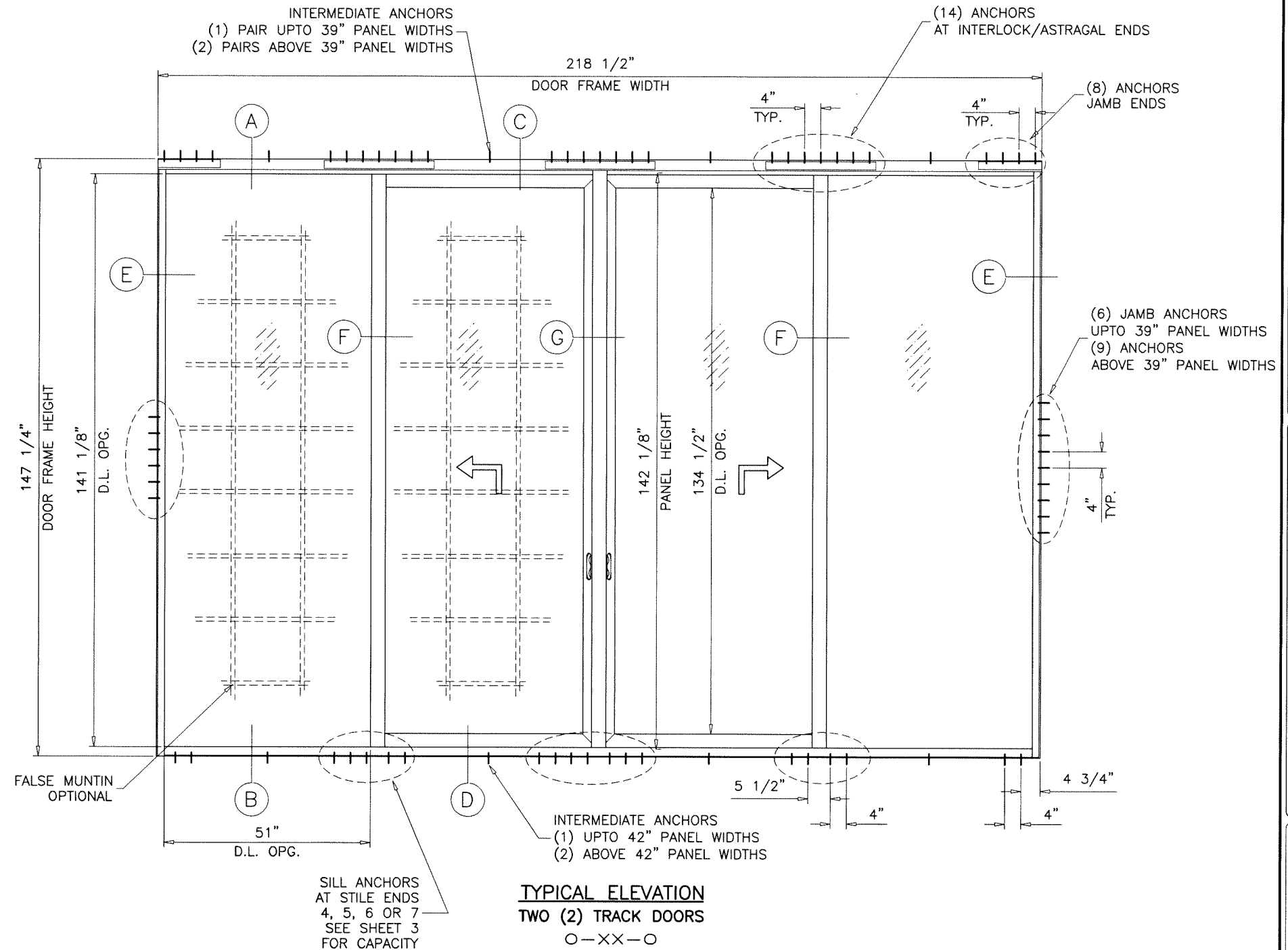
ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

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.



INSTRUCTIONS:

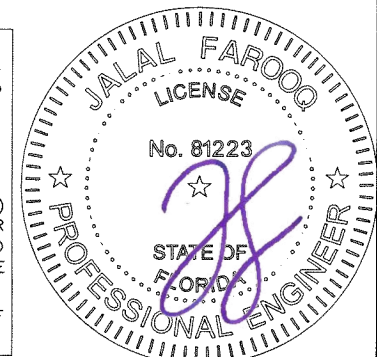
USE CHARTS AS FOLLOWS.

- STEP 1** DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2** DETERMINE DOOR CAPACITY FROM TABLE ON SHEET 4 FOT TWO TRACK AND THREE TRACK DOORS.
- STEP 3** USING CHARTS ON SHEET 4 SELECT SILL ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE FOR TWO TRACKS DOORS ONLY.
- STEP 4** THE LOWEST VALUE RESULTING FROM STEPS 2 AND 3 SHALL APPLY TO TWO TRACK DOOR SYSTEM. THE VALUE FROM STEP 2 SHALL APPLY TO THREE TRACK DOOR SYSTEM.

- A- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIAE 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.

Sealed: 6/20/2025

FL #22232



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
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TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL\W16-77ES

ES-LS7035 LIFT & SLIDE ALUM GLASS DOOR (L.M.I.)

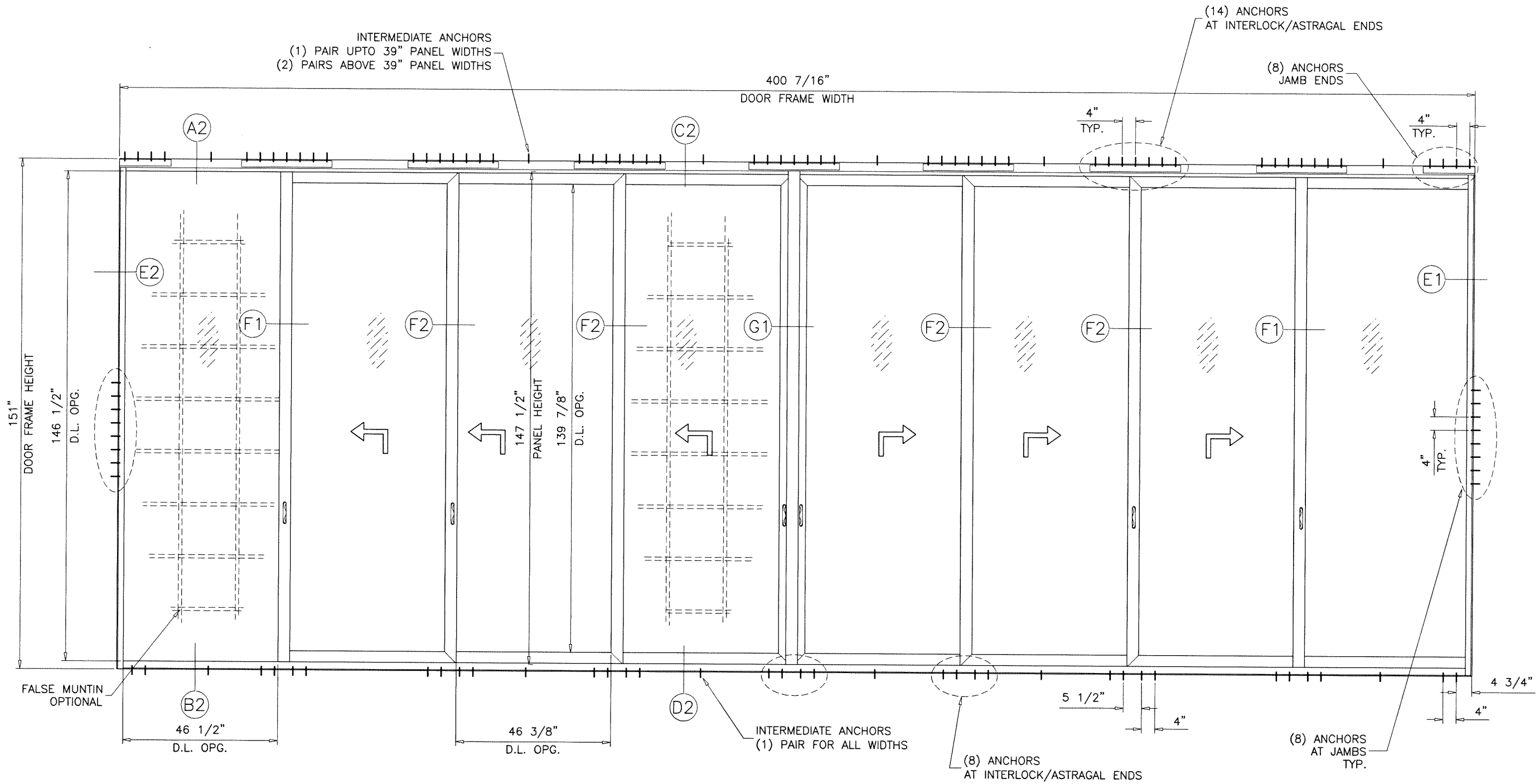
E.S. WINDOWS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:	no	date	by	description
	A	03.08.18		UPDATED TO 2017 FBC
	B	12.07.20		UPDATED TO 2020 FBC
	C	09.27.23		UPDATED TO 2023 FBC
	D	02.18.25		PRODUCT SERIES REVISED
		06.19.25		ALT. JAMB ADDED

date: 12-05-16
scale: 3/8"=1'-0"
dr. by: TARIQ
chk. by:

drawing no.
W16-77

sheet 1 of 12



TYPICAL ELEVATION
FOUR (4) TRACK DOORS
 O-XXXXXX-O

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 (C.A.N. 3538)
 COMP-ANL W16-77ES

ES-LS7035 LIFT & SLIDE ALUM GLASS DOOR (L.M.I.)

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revisions:

no	date	by	description

date: 12-05-16
 scale: 3/8"=1'-0"
 dr. by: TARIQ
 chk. by:

drawing no.
W16-77
 sheet 3 of 12

GLASS LOAD CAPACITY - PSF (2 TRACK & 3 TRACK DOORS)			
AVERAGE PANEL WIDTH INCHES	DOOR FRAME HEIGHT INCHES	1-5/16" OVERALL INSUL. LAM. GLASS	
		EXT.(+)	INT.(-)
30	96	77.0	122.0
36		77.0	122.0
42		77.0	122.0
48		77.0	122.0
54		77.0	122.0
60		70.1	111.1
30	108	77.0	122.0
36		77.0	122.0
42		77.0	122.0
48		77.0	122.0
54		77.0	122.0
60		70.1	111.1
30	120	77.0	122.0
36		77.0	122.0
42		77.0	122.0
48		77.0	122.0
54		77.0	122.0
60		70.1	111.1
30	132	77.0	122.0
36		77.0	122.0
42		77.0	122.0
48		77.0	122.0
54		77.0	122.0
60		70.1	111.1
30	144	77.0	122.0
36		77.0	122.0
42		77.0	122.0
48		77.0	122.0
54		77.0	122.0
		77.0	122.0
30	147-1/4	77.0	122.0
36		77.0	122.0
42		77.0	122.0
48		77.0	122.0
54		77.0	122.0
		77.0	122.0

GLASS LOAD CAPACITY - PSF (4 TRACK DOORS)			
AVERAGE PANEL WIDTH INCHES	DOOR FRAME HEIGHT INCHES	1-5/16" OVERALL INSUL. LAM. GLASS	
		EXT.(+)	INT.(-)
30	96	122.0	122.0
36		122.0	122.0
42		122.0	122.0
48		122.0	122.0
54		113.1	113.1
60		101.8	101.8
30	108	122.0	122.0
36		122.0	122.0
42		122.0	122.0
48		122.0	122.0
54		113.1	113.1
60		101.8	101.8
30	120	122.0	122.0
36		122.0	122.0
42		122.0	122.0
48		122.0	122.0
54		113.1	113.1
60		101.8	101.8
30	132	122.0	122.0
36		122.0	122.0
42		122.0	122.0
48		122.0	122.0
54		113.1	113.1
		122.0	122.0
30	144	122.0	122.0
36		122.0	122.0
42		122.0	122.0
48		122.0	122.0
50		122.0	122.0
		122.0	122.0
30	147-1/4	122.0	122.0
36		122.0	122.0
42		122.0	122.0
48		122.0	122.0
50		122.0	122.0
		122.0	122.0
30	151	122.0	122.0
36		122.0	122.0
42		122.0	122.0
48		122.0	122.0
50		122.0	122.0
		122.0	122.0

SILL ANCHOR LOAD CAPACITY - PSF (2 TRACK DOORS ONLY)					
AVERAGE PANEL WIDTH INCHES	DOOR FRAME HEIGHT INCHES	4 ANCHORS AT MTG. STILE ENDS	5 ANCHORS AT MTG. STILE ENDS	6 ANCHORS AT MTG. STILE ENDS	7 ANCHORS AT MTG. STILE ENDS
		EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)	EXT. (+) INT. (-)
30	96	122.0	122.0	122.0	122.0
36		122.0	122.0	122.0	122.0
42		122.0	122.0	122.0	122.0
48		122.0	122.0	122.0	122.0
54		122.0	122.0	122.0	122.0
60		121.2	122.0	122.0	122.0
30	108	122.0	122.0	122.0	122.0
36		122.0	122.0	122.0	122.0
42		122.0	122.0	122.0	122.0
48		119.0	122.0	122.0	122.0
54		109.7	122.0	122.0	122.0
60		102.5	122.0	122.0	122.0
30	120	122.0	122.0	122.0	122.0
36		122.0	122.0	122.0	122.0
42		115.4	122.0	122.0	122.0
48		104.2	122.0	122.0	122.0
54		95.6	119.5	122.0	122.0
60		88.9	111.1	122.0	122.0
30	132	122.0	122.0	122.0	122.0
36		116.9	122.0	122.0	122.0
42		102.9	122.0	122.0	122.0
48		92.6	115.7	122.0	122.0
54		84.6	105.8	122.0	122.0
60		78.4	98.0	117.6	122.0
30	144	122.0	122.0	122.0	122.0
36		105.8	122.0	122.0	122.0
42		92.9	116.1	122.0	122.0
48		83.3	104.2	122.0	122.0
54		76.0	95.0	113.9	122.0
30	147-1/4	121.0	122.0	122.0	122.0
36		103.1	122.0	122.0	122.0
42		90.5	113.1	122.0	122.0
48		81.1	101.4	121.7	122.0
54		73.9	92.4	110.9	122.0

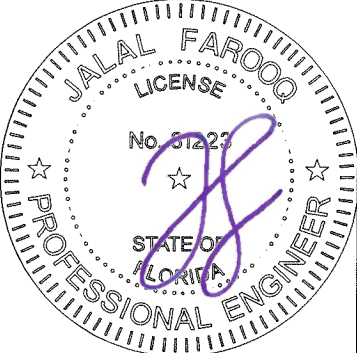
HEAD ANCHORS:
14 ANCHORS REQD. AT FRAME HEAD MTG. STILE LOCATIONS
MAX. LOAD CAPACITY = 122 PSF

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

AVERAGE PANEL WIDTH = $\frac{\text{DOOR FRAME WIDTH}}{\text{NUMBER OF PANELS}}$

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

Sealed: 6/20/2025



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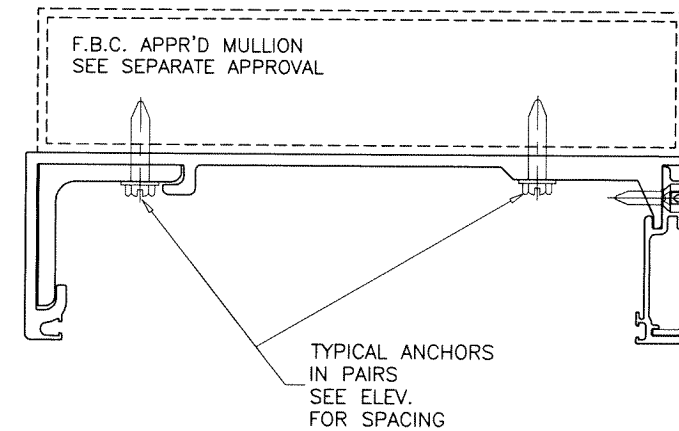
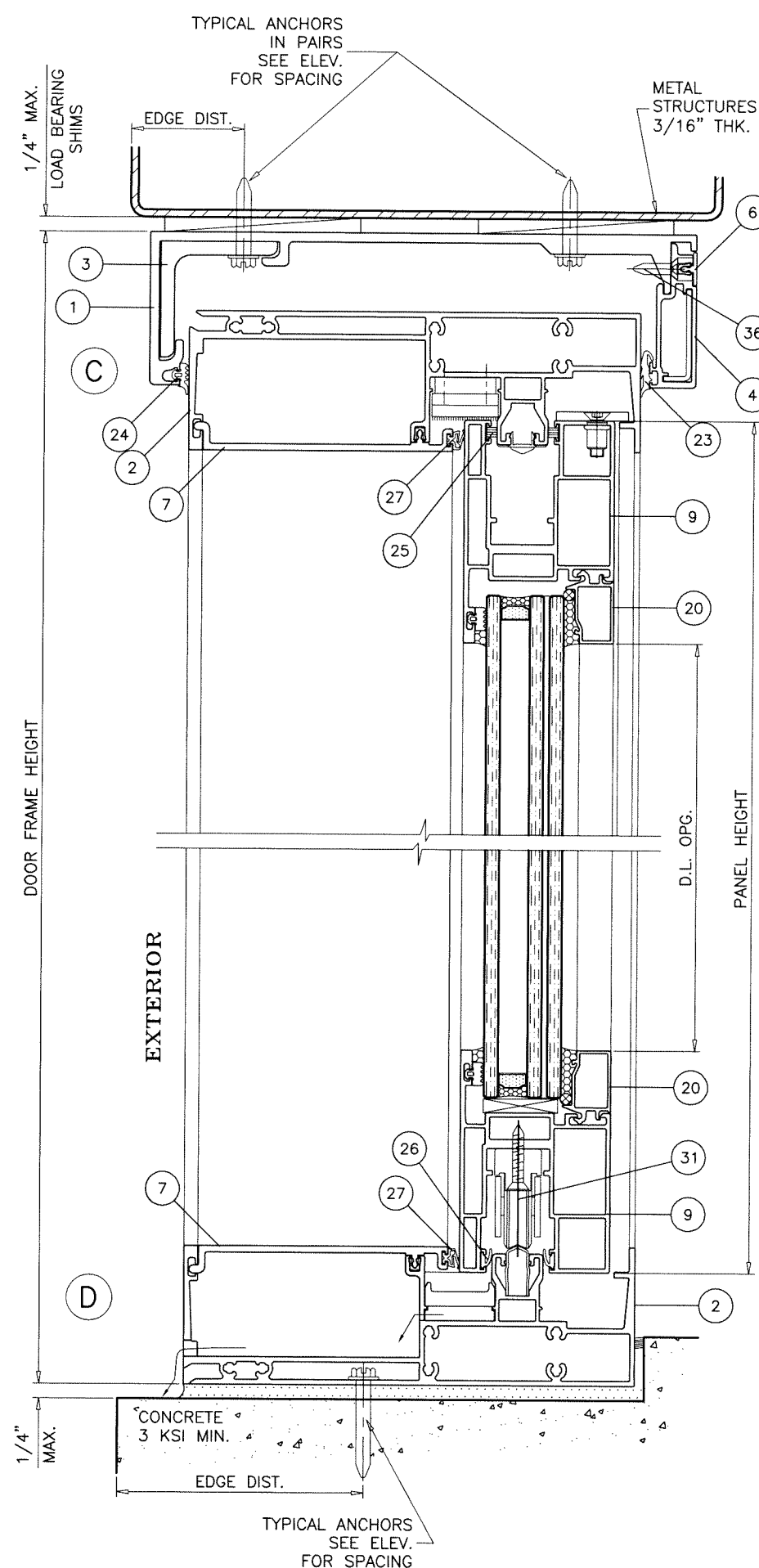
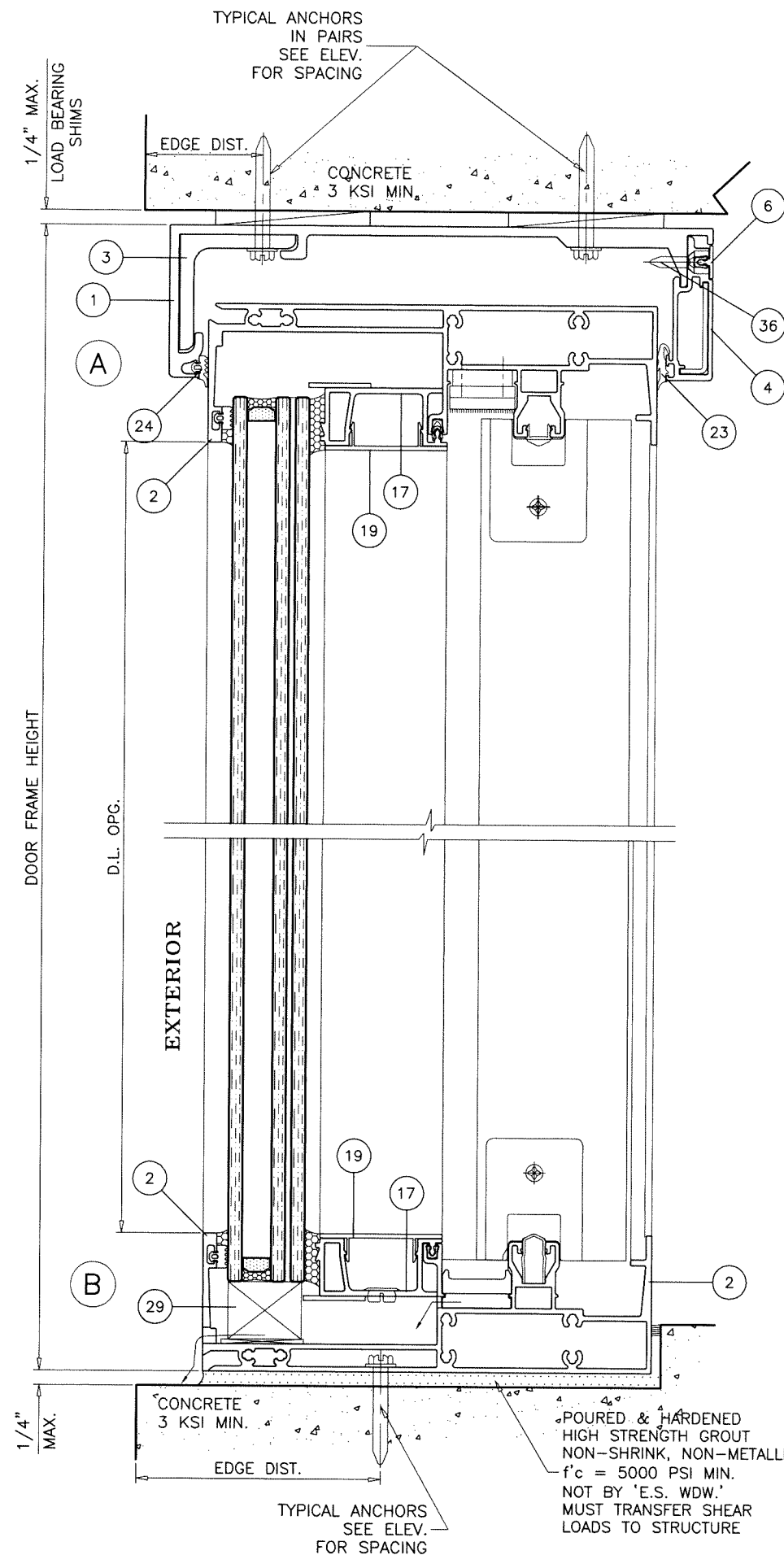
ES-LS7035 LIFT & SLIDE ALUM GLASS DOOR (L.M.I.)
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revisions:
no. date by description

date: 12-05-16
scale: -
dr. by: TARIQ
chk. by:

drawing no.
W16-77
sheet **4** of **12**

COMP-ANL W16-77ES



DOOR OPENINGS AND METAL STRUCTURE NOT BY 'E.S. WDW.' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING AT TWO (2) AND THREE (3) TRACK DOORS

1/4" DIA. ULTRACON+ BY 'DEWALT' ($F_u=164$ KSI, $F_y=148$ KSI) DIRECTLY INTO CONCRETE OR BLOCKS
1-3/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1-3/4" MIN. EMBED INTO BLOCKS (JAMBS)

1/4" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS) INTO F.B.C. APPROVED MULLIONS OR INTO METAL STRUCTURES (HEAD)
ALUMINUM: 3/16" THK. MIN. (6063-T5 MIN.)
STEEL: 3/16" THK. MIN. ($F_y = 36$ KSI MIN.) INTO METAL STRUCTURES (JAMBS)
ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
STEEL: 1/8" THK. MIN. ($F_y = 36$ KSI MIN.) (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

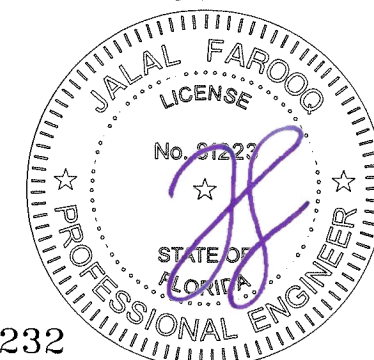
TYPICAL EDGE DISTANCE

INTO CONCRETE = 1-1/2" MIN. (HEAD)
INTO CONCRETE = 2-1/2" MIN. (SILL)
INTO CONCRETE AND BLOCKS = 2-1/2" MIN. (JAMBS)
INTO METAL STRUCTURE = 3/4" 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 = 1/4" X 1" LONG WEEP HOLES AT 6" FROM EACH END AND 12" O.C.
W2 = 1-1/2" LONG WEEP NOTCH AT 6" FROM EACH END AND 12" O.C.



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TWO (2) TRACK DOOR DETAILS

FL #22232

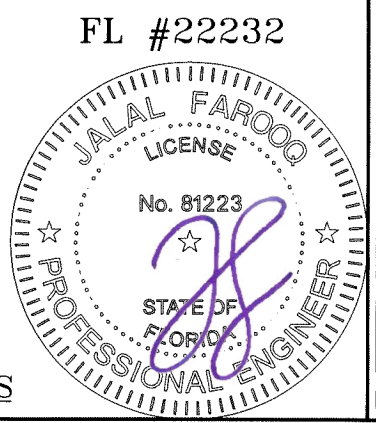
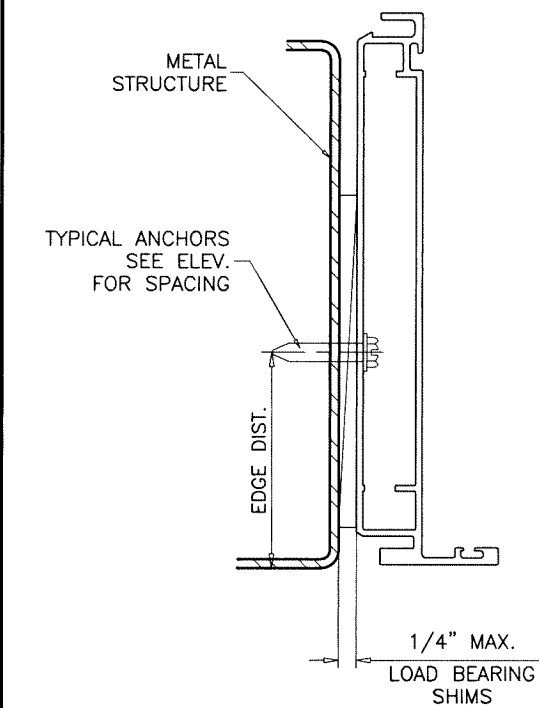
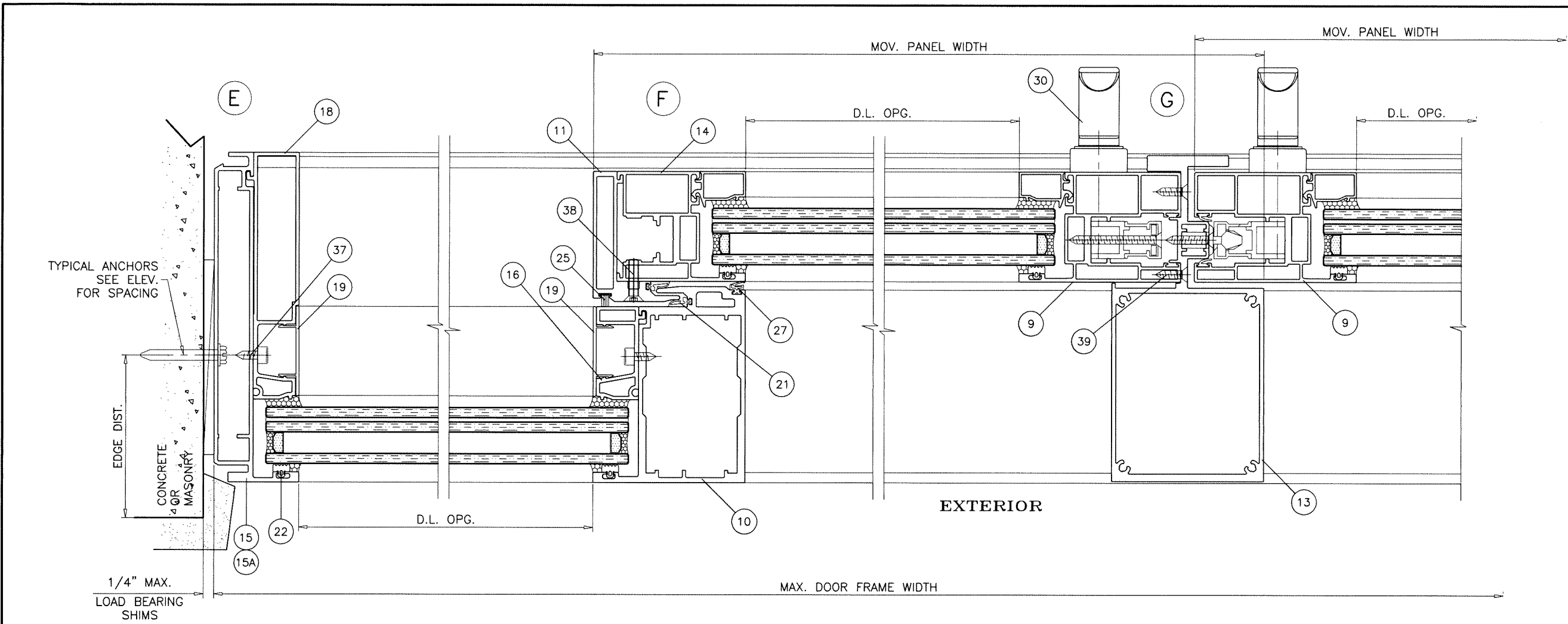
AL-FAROOQ CORPORATION
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revisions:	no	date	by	description
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scale:	3/8" = 1"			
dr. by:	TARIQ			
chk. by:				
drawing no.	W16-77			
sheet	5 of 12			

COMP-ANL W16-77ES



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TWO (2) TRACK DOOR DETAILS

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ES-LS7035 LIFT & SLIDE ALUM GLASS DOOR (L.M.I.)

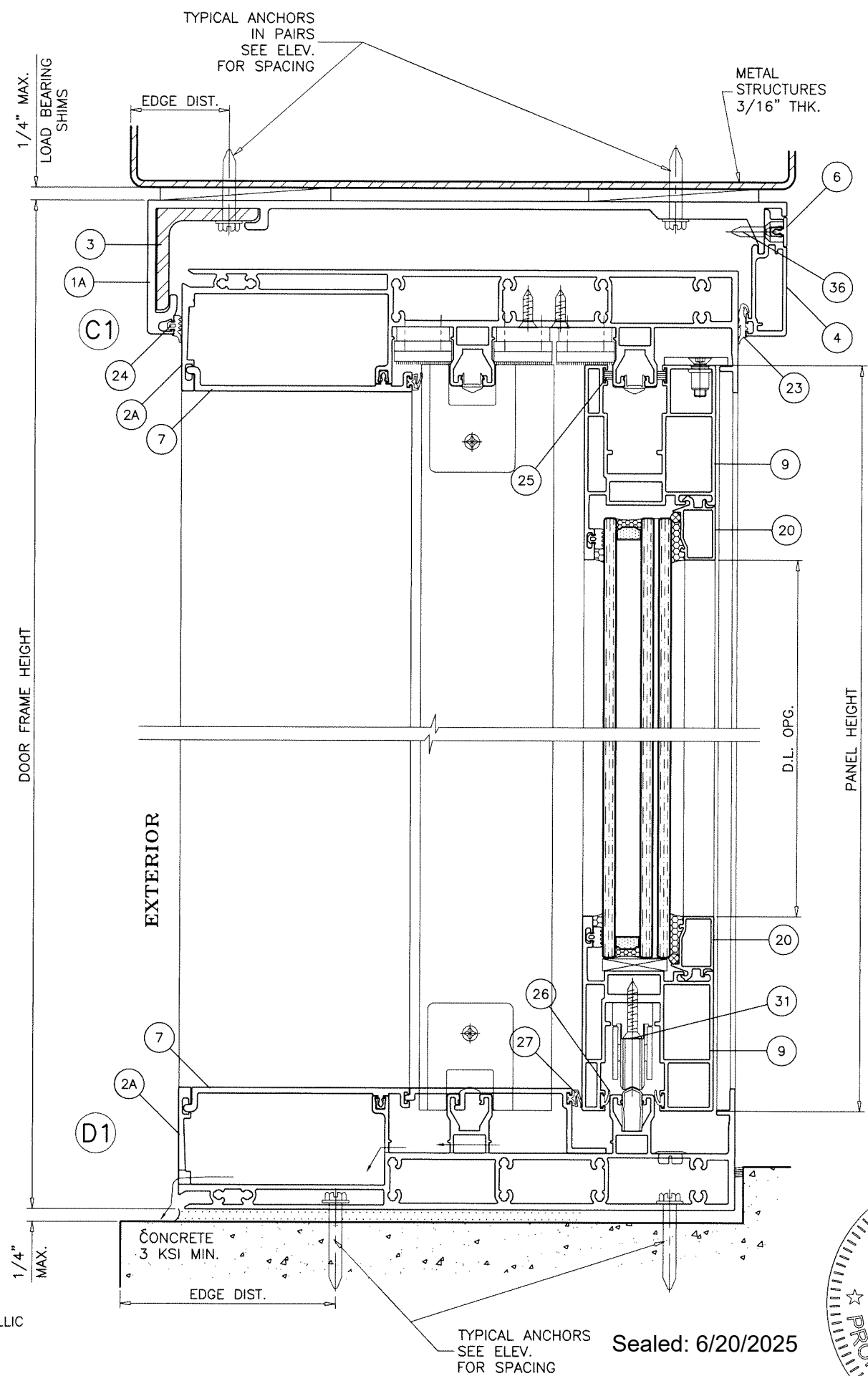
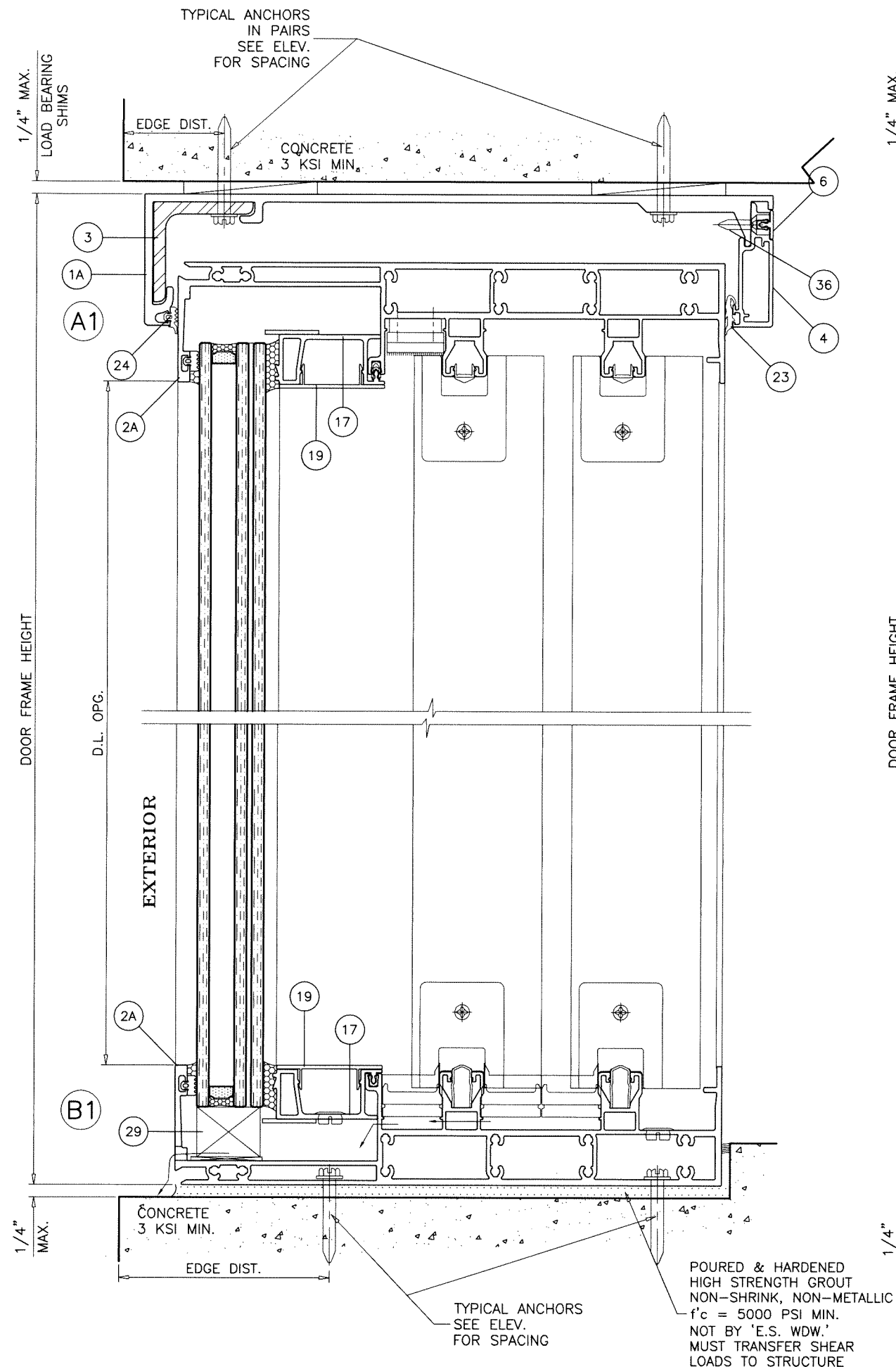
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revisions:

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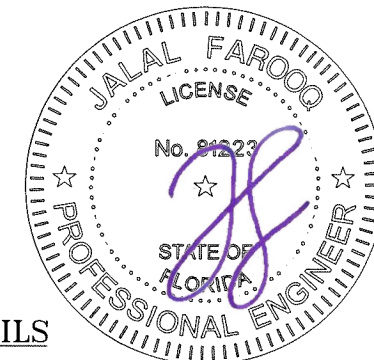
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chk. by:

drawing no.
W16-77
sheet 6 of 12



Sealed: 6/20/2025

THREE (3) TRACK DOOR DETAILS

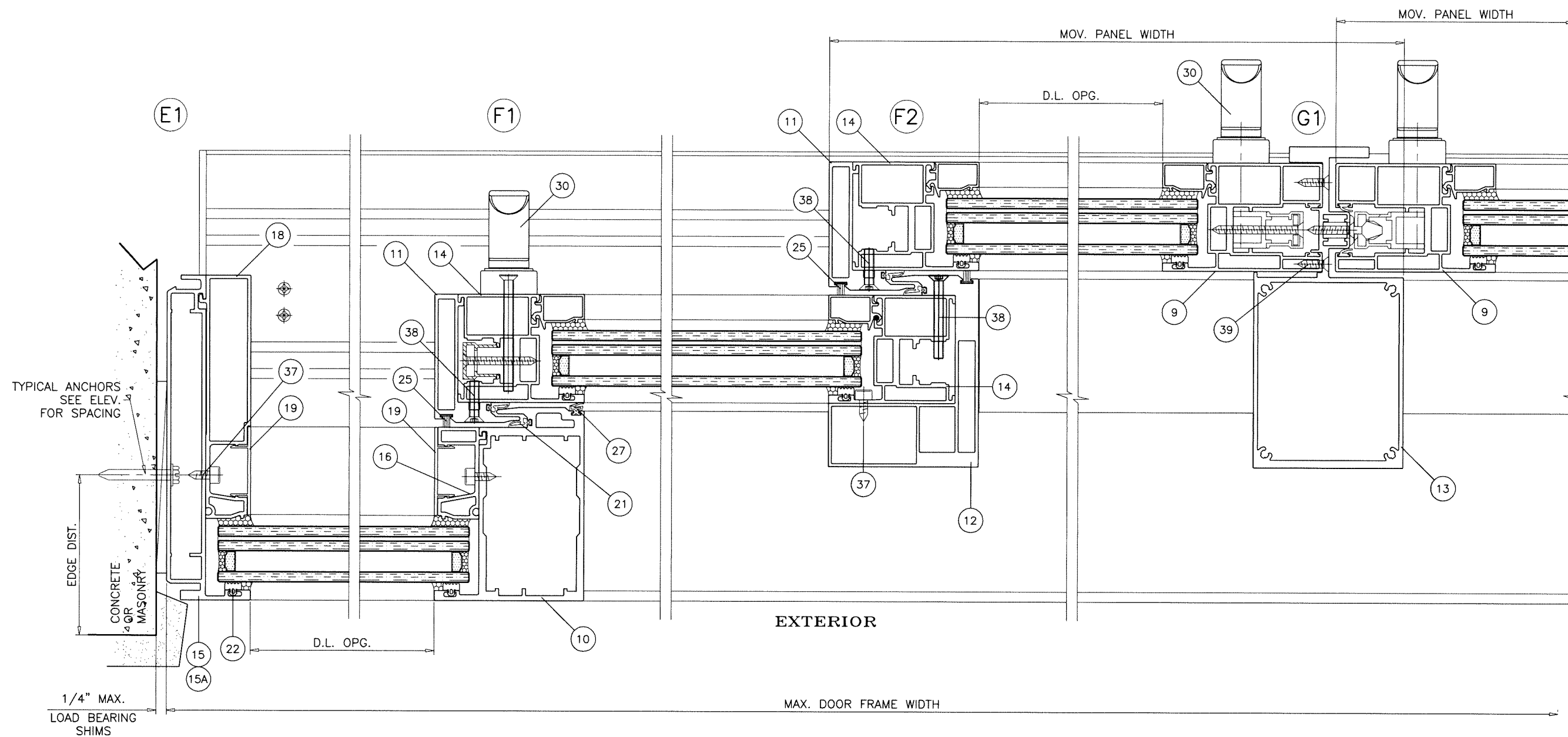


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dr. by:	TARIQ	chk. by:	
drawing no.		W16-77	
sheet		7 of 12	

COMP-ANL W16-77ES



EDGE DIST

CONCRETE
MASONRY

1/4" MAX.

LOAD BEARING SHIMS

EXTERIOR

MAX. DOOR FRAME WIDTH

FL #22232

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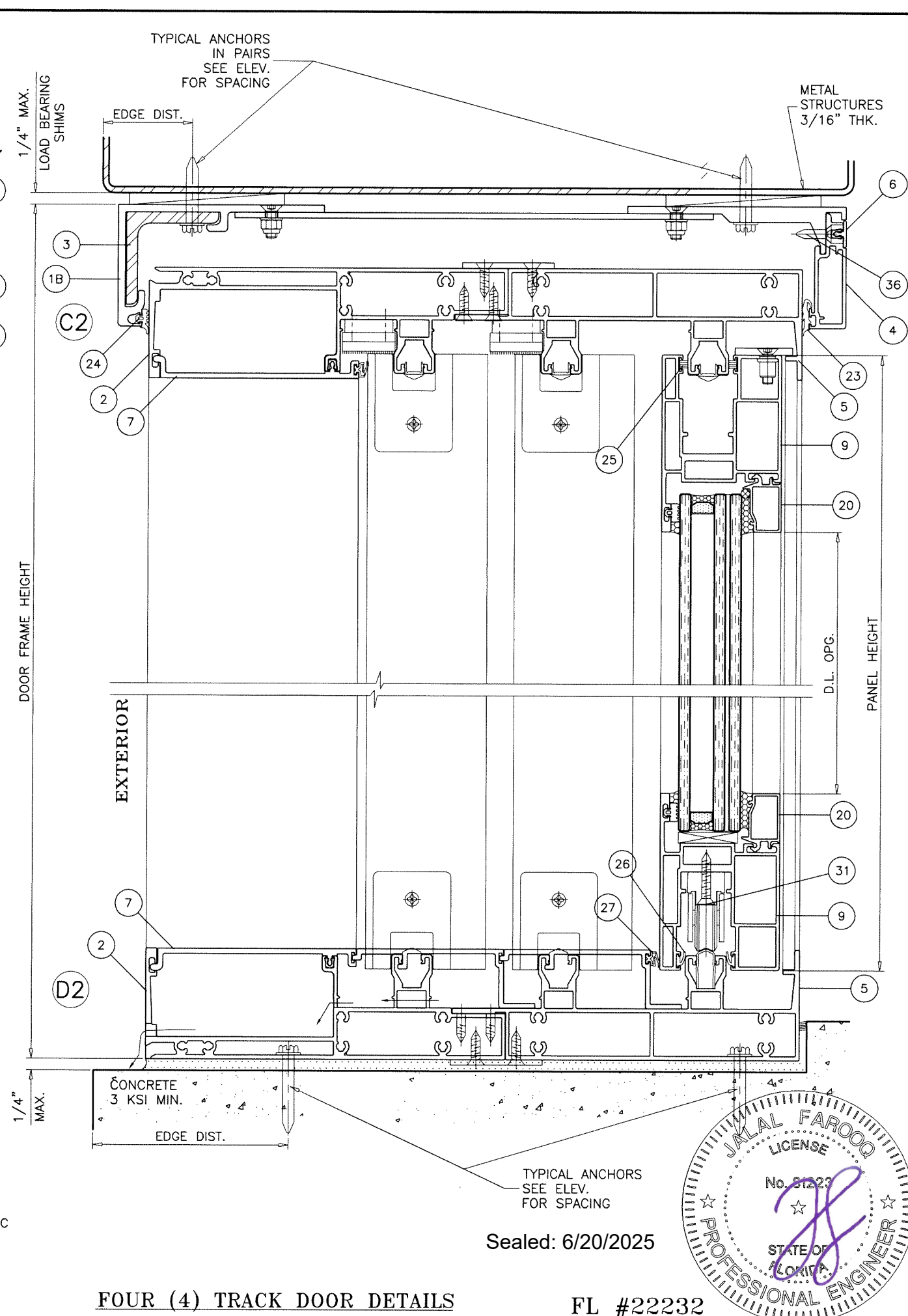
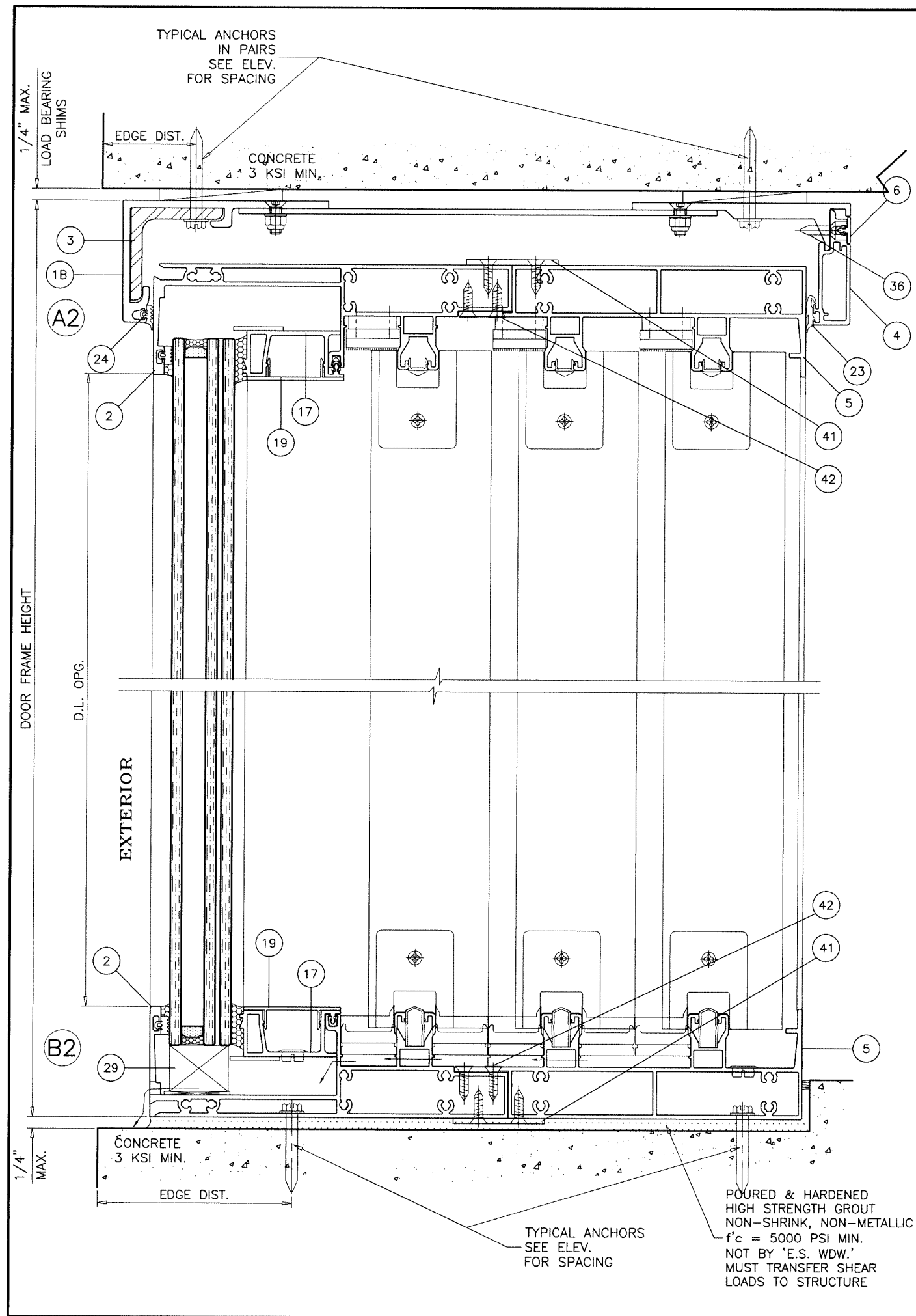
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chk. by:

drawing no.

W16-77

sheet 8 of 12

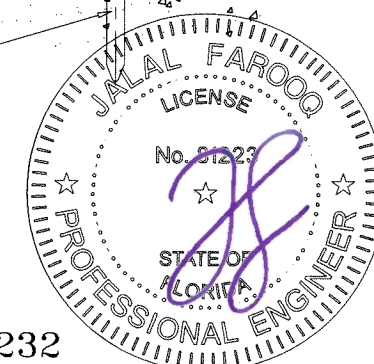
COMP-ANL\W16-77ES



FOUR (4) TRACK DOOR DETAILS

FL #22232

Sealed: 6/20/2025

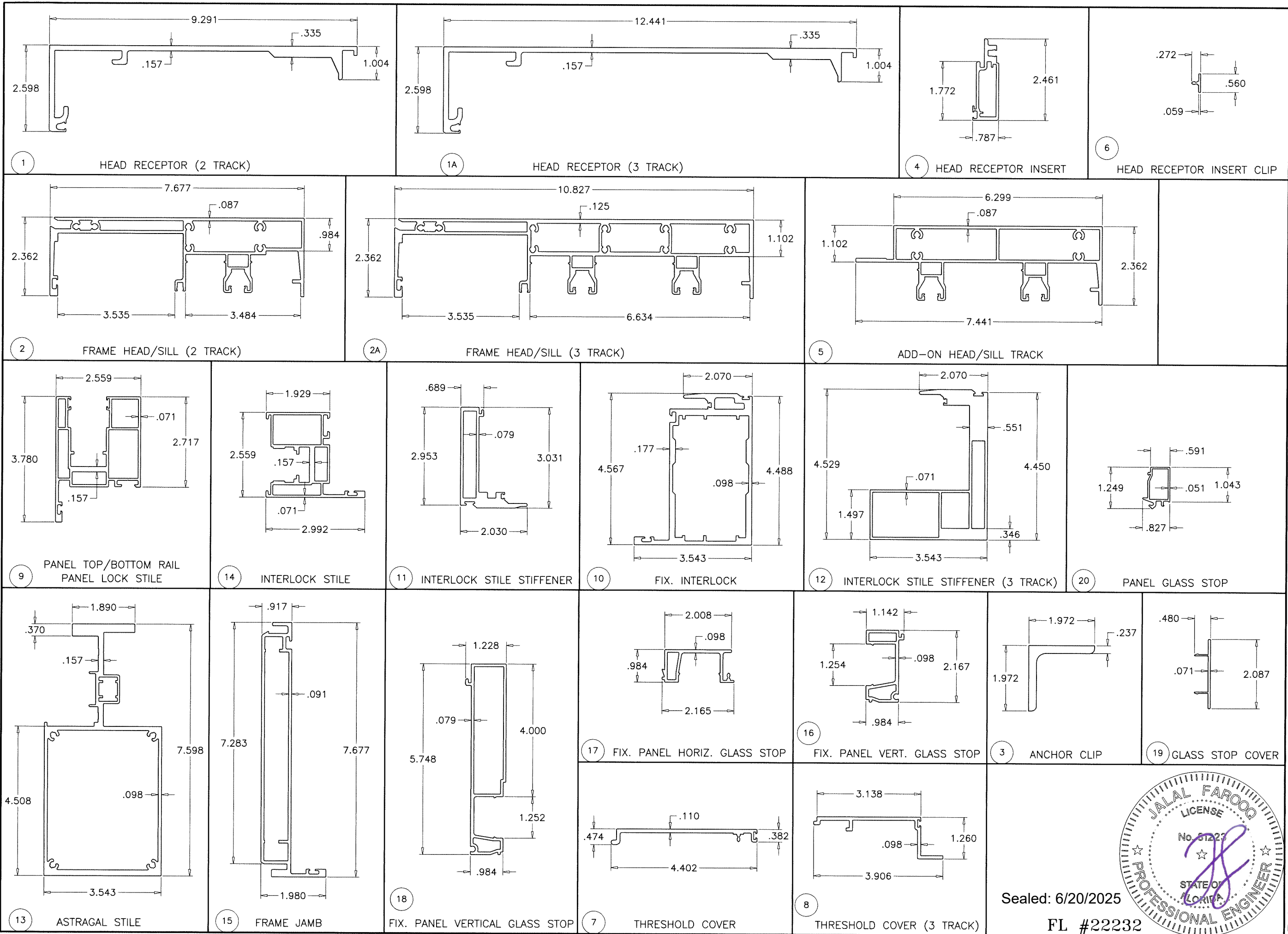


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drawing no.	W16-77		
sheet	9 of 12		

COMP-ANL\W16-77ES



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sheet 12 of 12

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FL #22232