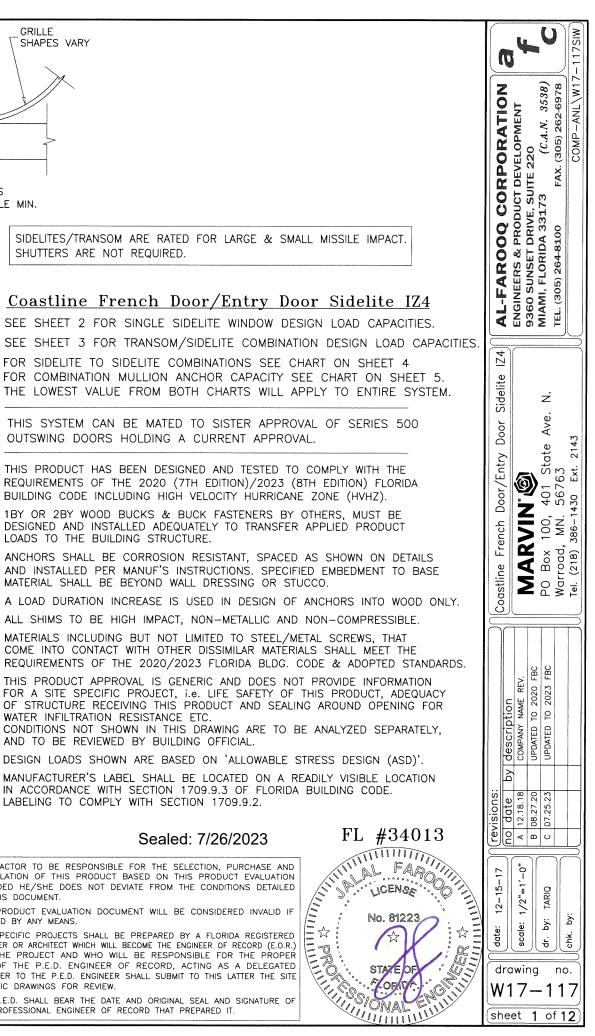
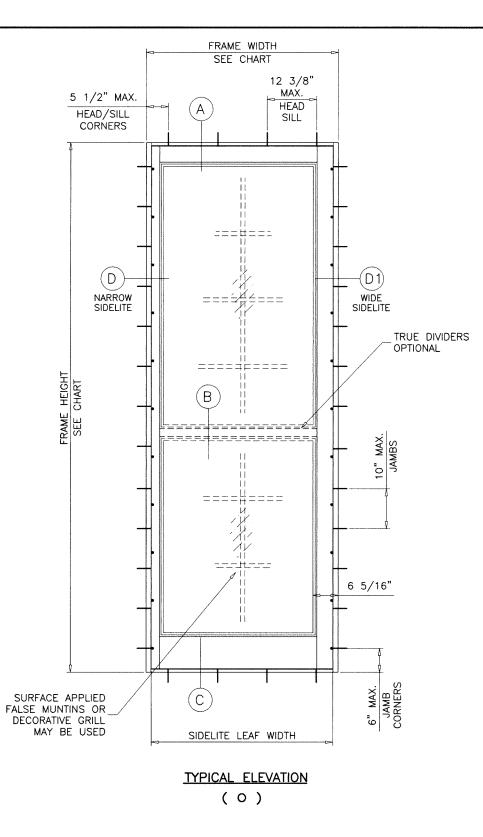


GLASS CAPACITIES ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS).

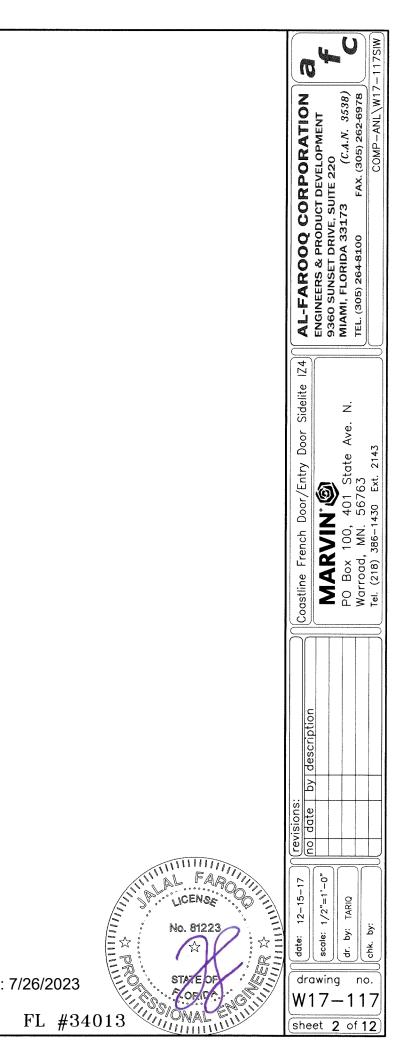
D- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

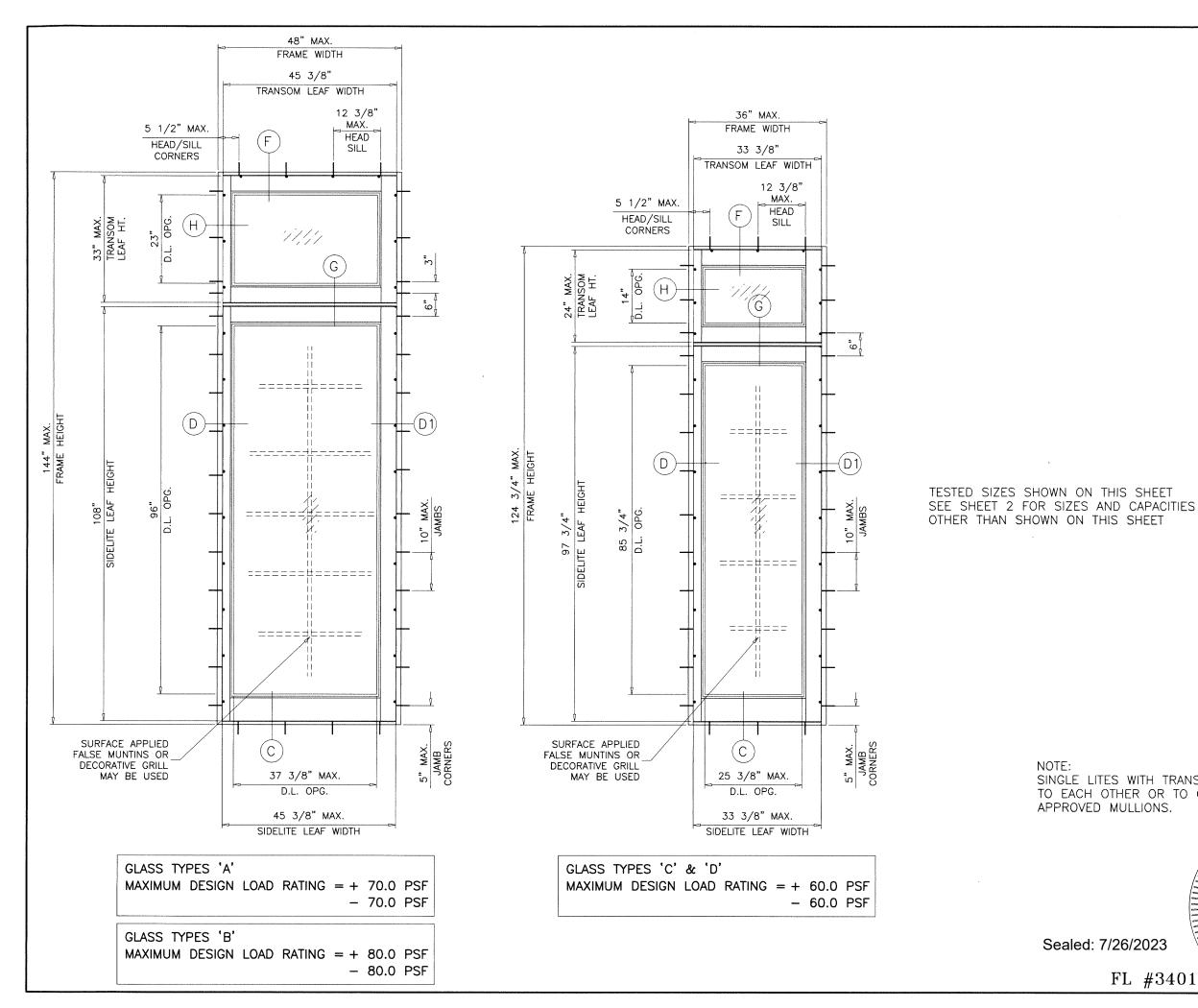


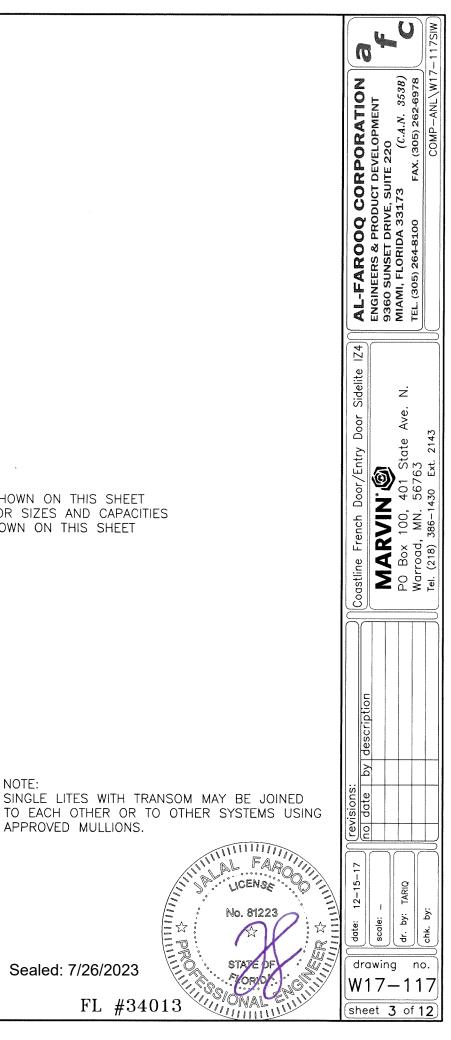
FRAME WIDTH INCHES 30 36 42 46-7/8 48 52 54 54 56	FRAME HEIGHT INCHES	• EXT.(+)							
30 36 42 46-7/8 48 52 54	INCHES		GLASS TYPE GLASS TYPE 'A' 'B'				GLASS TYPES 'C' & 'D'		
36 42 46-7/8 48 52 54		30.0	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)		
42 46-7/8 48 52 54		70.0	70.0	80.0	80.0	60.0	60.0		
46-7/8 48 52 54		70.0	70.0	80.0	80.0	60.0	60.0		
48 52 54		70.0	70.0	80.0	80.0	60.0	60.0		
52 54		70.0	70.0	80.0	80.0		-		
54	80	70.0	70.0	80.0	80.0		-		
		70.0	70.0	73.8	73.8	-	-		
56		70.0	70.0	71.1	71.1	-	-		
		68.6	68.6	68.6	68.6	-	-		
60		64.0	64.0	64.0	64.0		-		
30		70.0	70.0	80.0	80.0	60.0	60.0		
36		70.0	70.0	80.0	80.0	60.0	60.0		
42		70.0	70.0	80.0	80.0	60.0	60.0		
46-7/8		70.0	70.0	80.0	80.0	-	-		
48	84	70.0	70.0	80.0	80.0	_	_		
52		70.0	70.0	73.8	73.8	-	_		
54		70.0	70.0	71.1	71.1	-	_		
56		68.6	68.6	68.6	68.6		-		
60		64.0	64.0	64.0	64.0		-		
30		70.0	70.0	80.0	80.0	60.0	60.0		
36		70.0	70.0	80.0	80.0	60.0	60.0		
42		70.0	70.0	80.0	80.0	_	_		
46-7/8		70.0	70.0	80.0	80.0		_		
48	90	70.0	70.0	80.0	80.0		_		
52		70.0	70.0	73.8	73.8		_		
54		70.0	70.0	71.1	71.1				
56		68.6	68.6	68.6	68.6	_	_		
30		70.0	70.0	80.0	80.0	60.0	60.0		
36		70.0	70.0	80.0	80.0	60.0	60.0		
42		70.0	70.0	80.0	80.0	-			
46-7/8	96	70.0	70.0	80.0	80.0	-			
48		70.0	70.0	80.0	80.0				
52		70.0	70.0	73.8	73.8	_			
54		70.0	70.0	71.1	71.1	_	_		
30		70.0	70.0	80.0	80.0	60.0	60.0		
36		70.0	70.0	80.0	80.0	60.0	60.0		
42		70.0	70.0	80.0	80.0	_	-		
46-7/8	97-3/4	70.0	70.0	80.0	80.0	_			
48		70.0	70.0	80.0	80.0	_	_		
52		70.0	70.0	73.8	73.8	-			
30		70.0	70.0	80.0	80.0				
36		70.0	70.0	80.0	80.0	_			
42	102"	70.0	70.0	80.0	80.0	_	_		
46-7/8	102	70.0	70.0	80.0	80.0	_	-		
48		70.0	70.0	80.0	80.0	_			
30		70.0	70.0	80.0	80.0	_	_		
36		70.0	70.0	80.0	80.0		-		
42	108"	70.0	70.0	80.0					
42 46-7/8	100	70.0	70.0		80.0				
40-770		70.0	70.0	80.0 80.0	80.0 80.0				



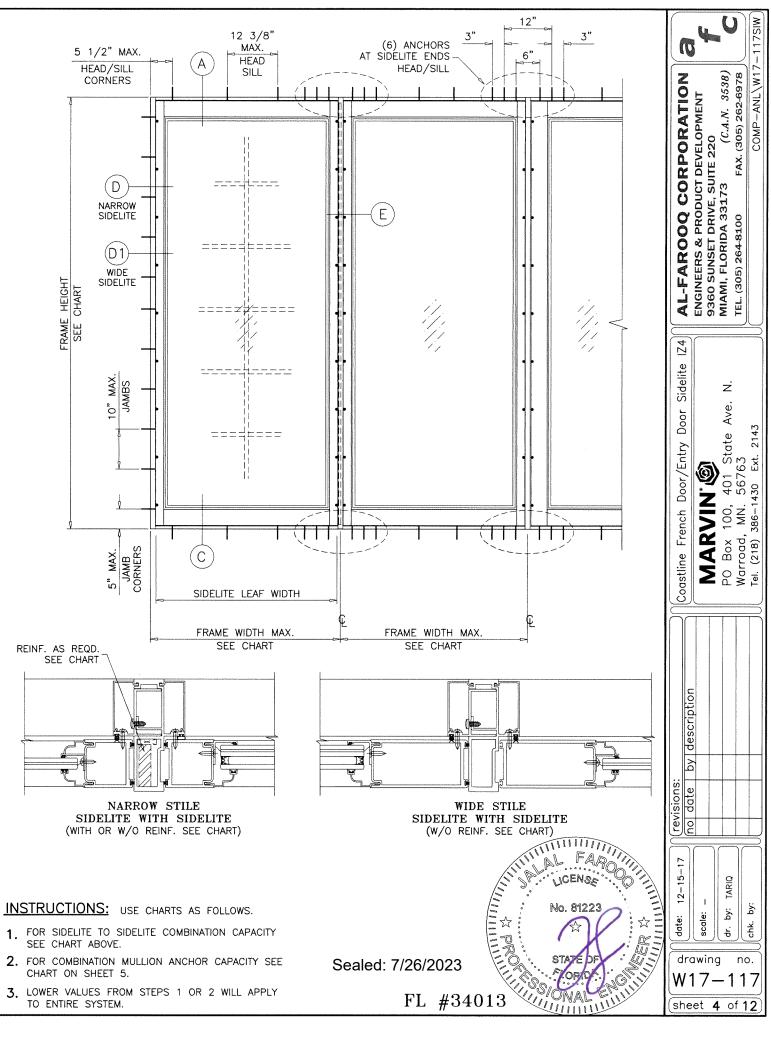
GLASS D.L.O. FORMULAE: D.L.O. WIDTH = FRAME WIDTH - 8.625" (NARROW STILES) = (FRAME WIDTH - 12.625") (WIDE STILES) D.L.O. HEIGHT = FRAME HEIGHT - 11.875" (4" BOTTOM RAIL) = FRAME HEIGHT - 13.875" (6" BOTTOM RAIL) = FRAME HEIGHT - 15.875" (8" BOTTOM RAIL)







DESIGN LOAD CAPACITY - PSF								PACITY	– PSF						
		GLASS TYPE 'A' GLASS TYPE 'B'						GLASS 'C' & 'D'							
FRAME WIDTH	FRAME HEIGHT	NARROV SIDE W/O I	LITE		W STILE CLITE REINF.	SIDE	STILE CLITE REINF.	NARROV SIDE W/O I		NARROV SIDE WITH	LITE	SIDE W/O	STILE LITE REINF.	1	STILE LITE
INCHES	INCHES	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)		EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
30		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	60.0	60.0
36		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	60.0	60.0
42		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	60.0	60.0
46-7/8		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	-	
48	80	70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	-	-
52		70.0	70.0	70.0	70.0	70.0	70.0	73.8	73.8	73.8	73.8	73.8	73.8		-
54		70.0	70.0	70.0	70.0	70.0	70.0	71.1	71.1	71.1	71.1	71.1	71.1	-	-
56		68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	-	-
60		64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0		-
30		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	60.0	60.0
36		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	60.0	60.0
42		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	60.0	60.0
46-7/8		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	-	-
48	84	70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	- 1	-
52		70.0	70.0	70.0	70.0	70.0	70.0	73.8	73.8	73.8	73.8	73.8	73.8	-	-
54		70.0	70.0	70.0	70.0	70.0	70.0	71.1	71.1	71.1	71.1	71.1	71.1	-	
56		68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	_	-
60		64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	-	-
30		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	60.0	60.0
36		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	60.0	60.0
42		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	-	-
46-7/8		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	-	-
48	90	70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	-	-
52		70.0	70.0	70.0	70.0	70.0	70.0	73.8	73.8	73.8	73.8	73.8	73.8	-	-
54		70.0	70.0	70.0	70.0	70.0	70.0	71.1	71.1	71.1	71.1	71.1	71.1	-	_
56		68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	68.6	-	-
30		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	60.0	60.0
36		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	60.0	60.0
42		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	-	-
46-7/8	96	70.0	70.0	70.0	70.0	70.0	70.0	75.4	75.4	80.0	80.0	80.0	80.0	-	-
48		70.0	70.0	70.0	70.0	70.0	70.0	74.7	74.7	80.0	80.0	80.0	80.0	-	-
52		70.0	70.0	70.0	70.0	70.0	70.0	70.3	70.3	73.8	73.8	73.8	73.8	-	-
54		68.4	68.4	70.0	70.0	70.0	70.0	68.4	68.4	71.1	71.1	71.1	71.1	-	-
30		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	60.0	60.0
36		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0	60.0	60.0
42		70.0	70.0	70.0	70.0	70.0	70.0	78.7	78.7	80.0	80.0	80.0	80.0	-	
46-7/8	97-3/4	70.0	70.0	70.0	70.0	70.0	70.0	71.9	71.9	80.0	80.0	80.0	80.0	-	_
48		70.0	70.0	70.0	70.0	70.0	70.0	70.5	70.5	80.0	80.0	80.0	80.0	-	-
52		66.3	66.3	70.0	70.0	70.0	70.0	66.3	66.3	73.8	73.8	73.8	73.8	-	
30		70.0	70.0	70.0	70.0	70.0	70.0	80.0	80.0	80.0	80.0	80.0	80.0		-
36		70.0	70.0	70.0	70.0	70.0	70.0	78.8	78.8	80.0	80.0	80.0	80.0		_
42	102"	68.8	68.8	70.0	70.0	70.0	70.0	68.8	68.8	78.3	78.3	80.0	80.0	_	_
46-7/8		62.8	62.8	70.0	70.0	70.0	70.0	62.8	62.8	71.4	71.4	80.0	80.0	-	_
48		61.6	61.6	70.0	70.0	70.0	70.0	61.6	61.6	70.1	70.1	79.2	79.2	_	_
30		70.0	70.0	70.0	70.0	70.0	70.0	78.1	78.1	80.0	80.0	80.0	80.0		
36		66.0	66.0	70.0	70.0	70.0	70.0	66.0	66.0	75.2	75.2	80.0	80.0		
42	108"	57.5	57.5	65.5	65.5	70.0	70.0	57.5	57.5	65.5	65.5	74.0	74.0		_
46-7/8	. ==	52.4	52.4	59.6	59.6	67.3	67.3	52.4	52.4	59.6	59.6	67.3	67.3		_
48		51.3	51.3	58.4	58.4	66.0	66.0	51.3	51.3	58.4	58.4	66.0	66.0		
-10			01.0	00.7	00.4	00.0	00.0	51.5	51.5	50.4	50.4	00.0	00.0		



INSTRUCTIONS: USE CHARTS AS FOLLOWS.

- 2. FOR COMBINATION MULLION ANCHOR CAPACITY SEE CHART ON SHEET 5.
- 3. LOWER VALUES FROM STEPS 1 OR 2 WILL APPLY TO ENTIRE SYSTEM.

MULLION	ANCHORS	5 DESIGN LO	DAD CAPACITY		
		ANCHOR TYPE	ANCHOR TYPES		
FRAME	FRAME	' A'	'B' & 'C'		
WIDTH INCHES	HEIGHT INCHES	EXT.(+) INT.(-)	EXT.(+) INT.(-)		
30		80.0	80.0		
36		80.0	80.0		
42		80.0	80.0		
46-7/8		76.7	80.0		
48	80	74.9	80.0		
52		69.1	80.0		
54		66.5	80.0		
56		64.2	80.0		
60		59.9	80.0		
30		80.0	80.0		
36		80.0	80.0		
42		80.0	80.0		
46-7/8	-	73.0	80.0		
48	84	71.3	80.0		
52	0.	65.8	80.0		
54		63.4	80.0		
56		61.1	80.0		
60		57.0	78.1		
30		80.0	80.0		
36		80.0			
		76.1	80.0		
42	·	68.1	80.0		
46-7/8	90	66.5	80.0		
48	90	61.4	80.0 80.0		
52		59.2			
54	-		80.0		
56 30		57.0 80.0	78.1 80.0		
36		80.0	80.0		
42		71.3			
	96	63.9	80.0		
46-7/8 48	90	62.4	80.0		
52		57.6	78.8		
54	├	55.5	75.9		
30 36		80.0	80.0		
36 42		70.2	80.0		
42 46-7/8	97-3/4	62.9	80.0		
48		61.4	80.0		
52		56.7	77.6		
30		80.0	80.0		
36	102"	78.3	80.0		
42 46-7/8		67.1 60.1	80.0 80.0		
			80.0		
48		58.7			
30		80.0	80.0		
36	100"	73.9	80.0		
42	108"	63.4	80.0		
46-7/8	-	56.8	77.7		
48	L	55.5	75.9		

	TYPICAL ANCHORS AT MULLION ENDS: SEE SHEET 4 FOR SPACING							
			۲A ا	r head	AT SILL			
	ANCHORS TYPE	SUBSTRATE	MIN. LENGTH	MIN. EDGE DIST.	MIN. LENGTH	MIN. EDGE DIST.		
ANCHOR	1/4" DIA. ULTRACON+ BY 'DEWALT'	WOOD	2-3/4"	1"	N.A.	N.A.		
TYPE 'A'	(Fu=164 KSI, Fy=148 KSI)	CONCRETE	2-3/4"	2-1/2"	2-3/4"	2-1/2"		
ANCHOR	5/16" DIA. ULTRACON BY 'DEWALT'	WOOD	2-3/4"	1 "	N.A.	N.A.		
TYPE 'B'	(Fu=177 KSI, Fy=155 KSI)	CONCRETE	2-3/4"	2-1/2"	2-3/4"	2-1/2"		
ANCHOR TYPE 'C'	1/4" DIA. SELF DRILLING SCREWS (GRADE 5 CRS)	METAL	3/4"	3/4"	N.A.	N.A.		

FOR ALL OTHER PERIMETER ANCHORS SEE SHEET 6 ANCHORS TYPE 'B' REQD. AT MULLION ENDS ONLY

WOOD = 2BY WOOD BUCKS OR WOOD STRUCTURE S.G. = 0.55 MIN.

MASONRY = C-90 HOLLOW/FILLED NORMAL WEIGHT BLOCK f'm = 2000 PSI MIN.

CONCRETE = f'c = 3000 PSI MIN.

METAL = 1/8" MIN. THK. STEEL Fy = 36 KSI MIN.

F.B.C. APPROVED MULLION 1/8" MIN. THK.

PROPERLY SECURED IBY OR 2BY WOOD BUCKS AND METAL STRUCTURES NOT BY 'MARVIN' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO BUILDING STRUCTURE.

ANCHORS MAY BE HEX OR FLAT HEAD.

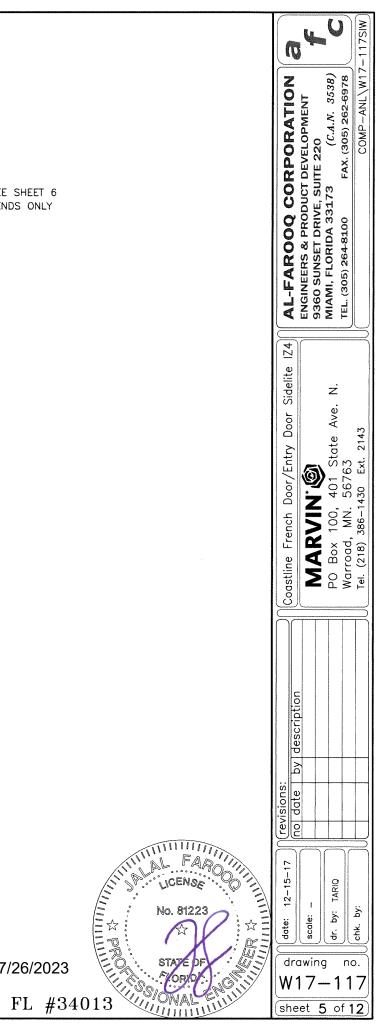
INSTRUCTIONS: USE CHARTS AS FOLLOWS.

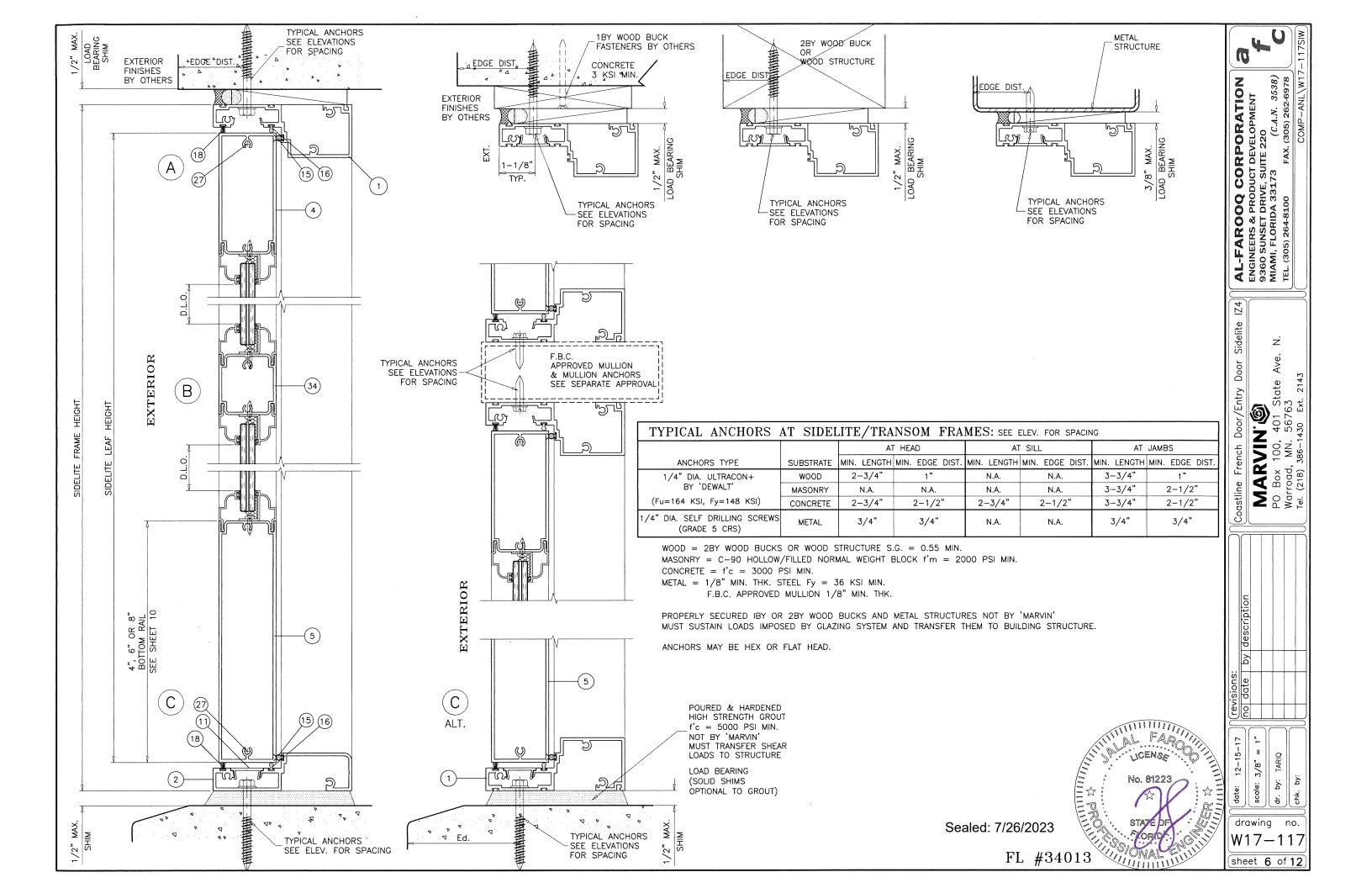
1. FOR SIDELITE TO SIDELITE COMBINATION CAPACITY SEE CHART ON SHEET 4.

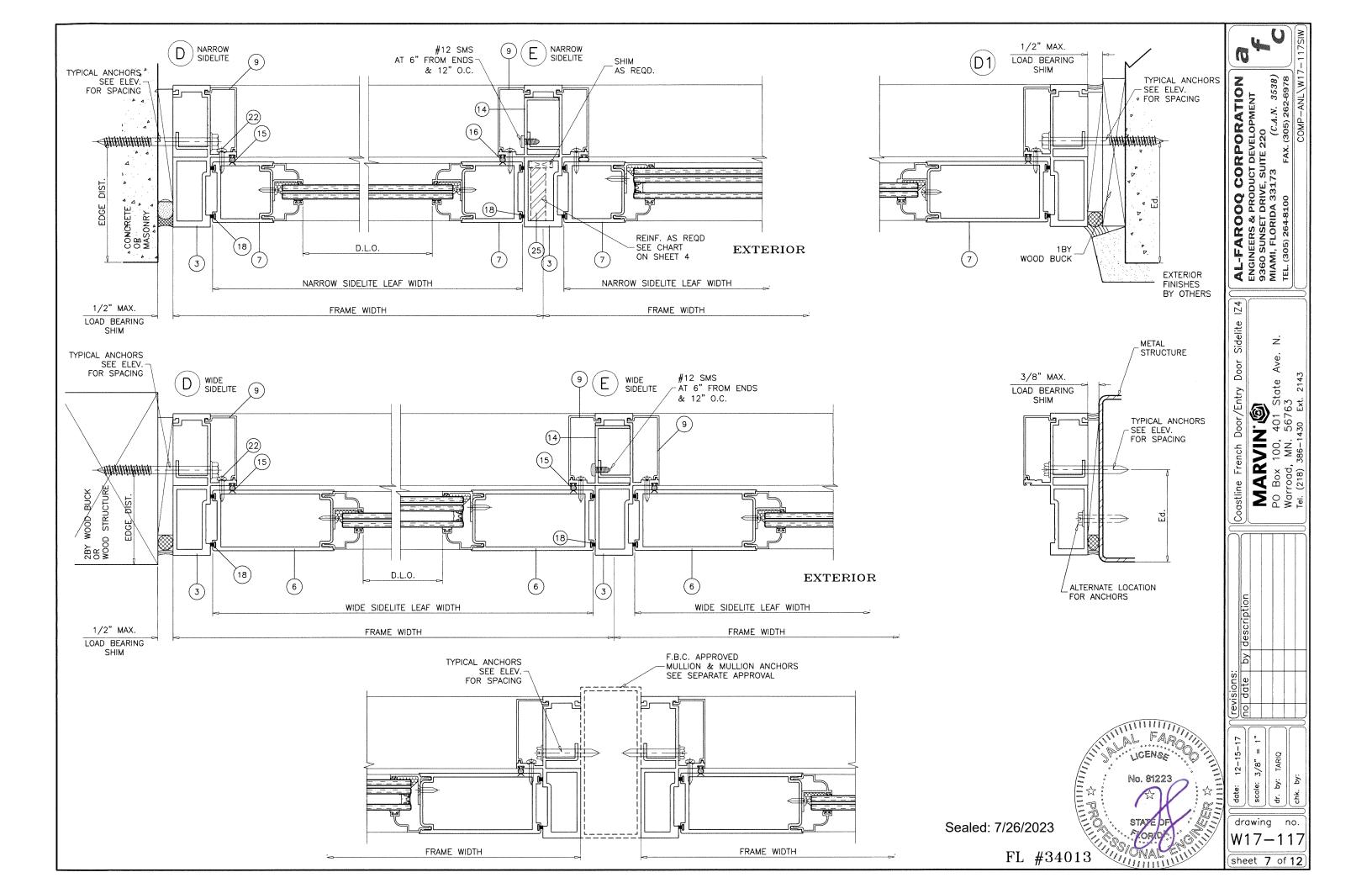
2. FOR COMBINATION MULLION ANCHOR CAPACITY SEE CHART ABOVE.

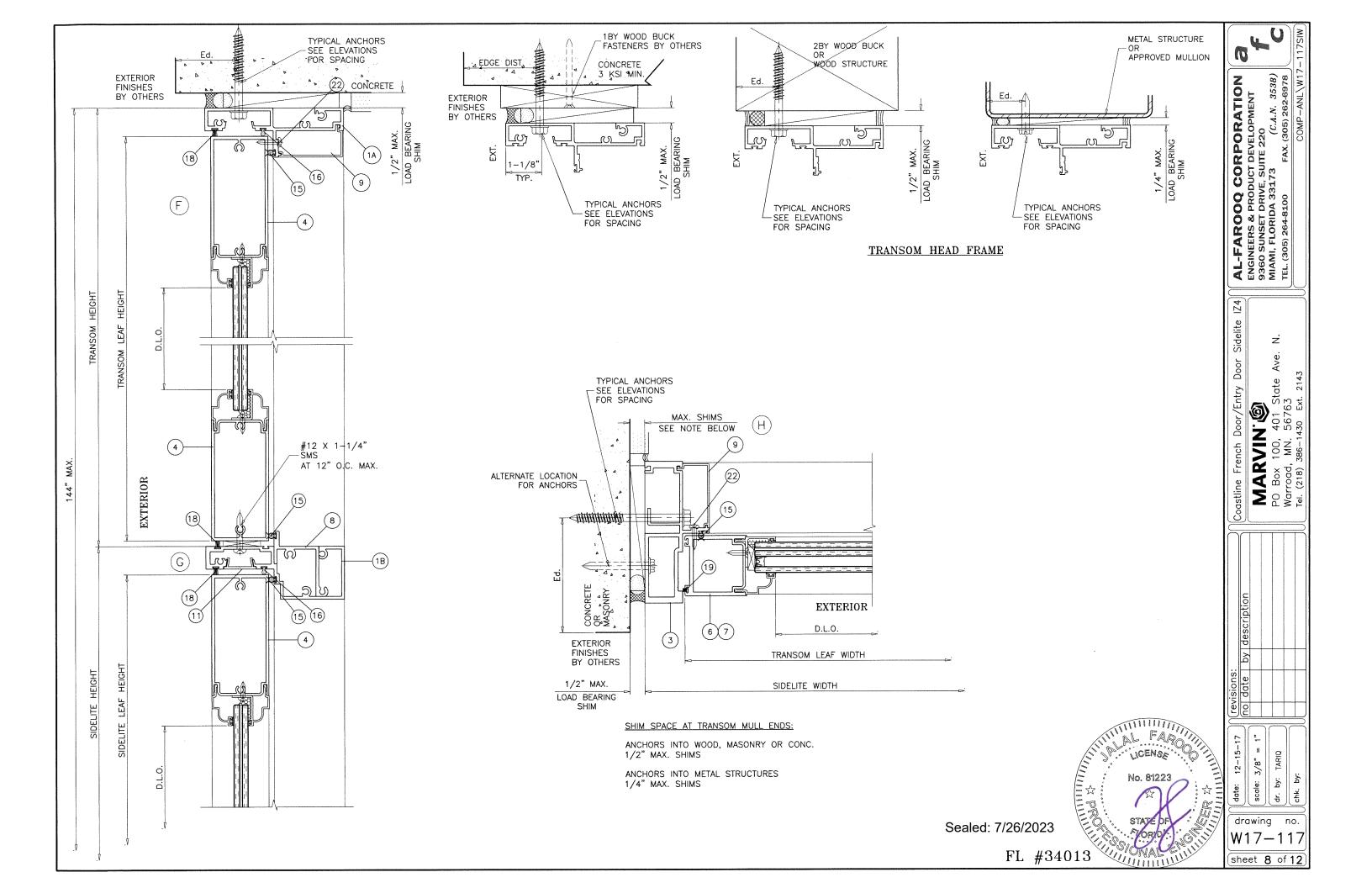
3. LOWER VALUES FROM STEPS 1 OR 2 WILL APPLY TO ENTIRE SYSTEM.

Sealed: 7/26/2023





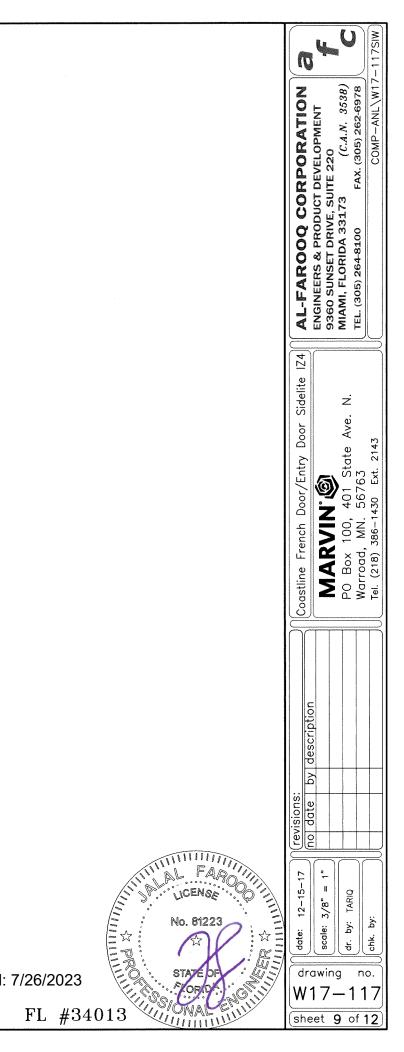


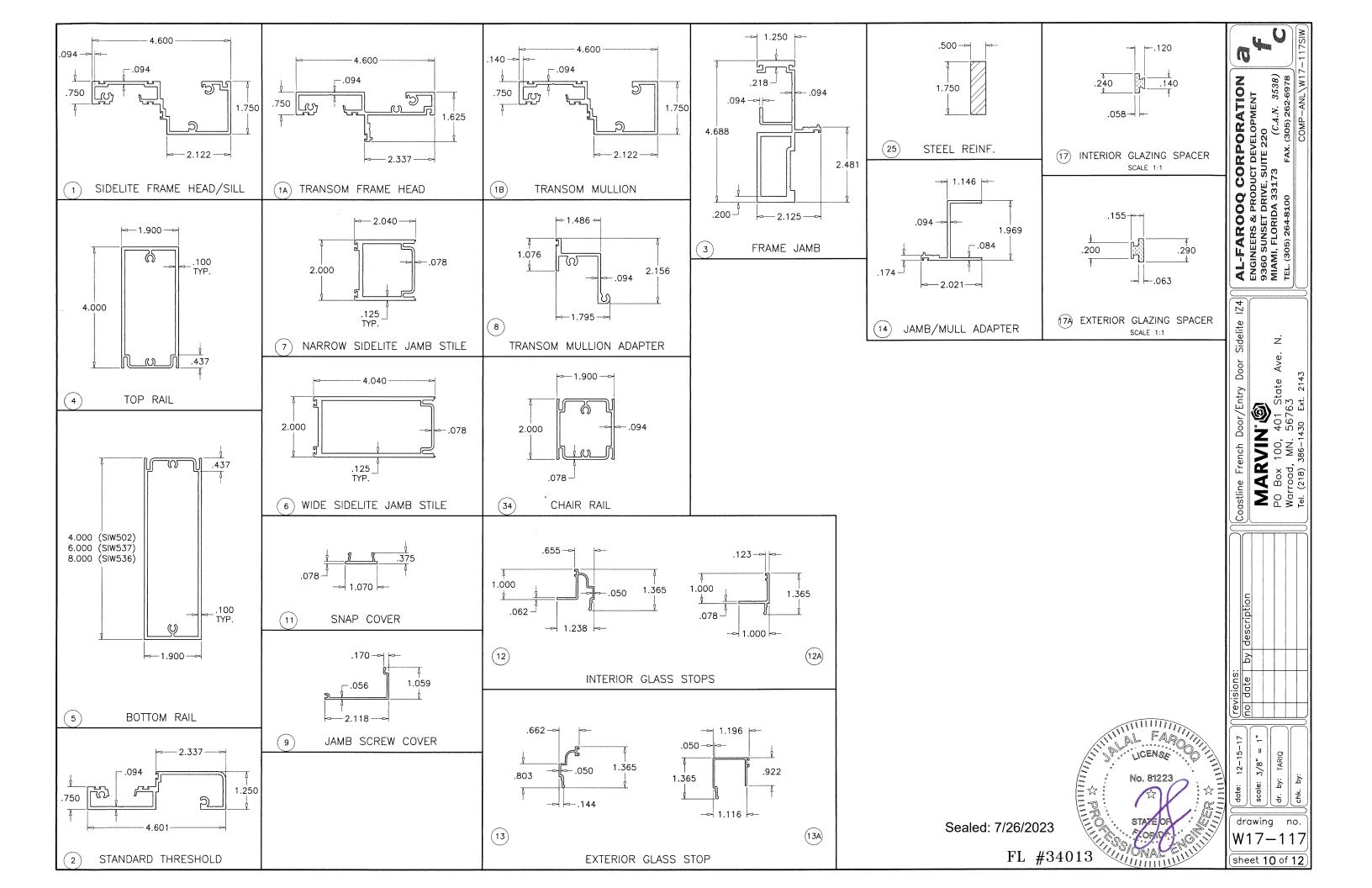


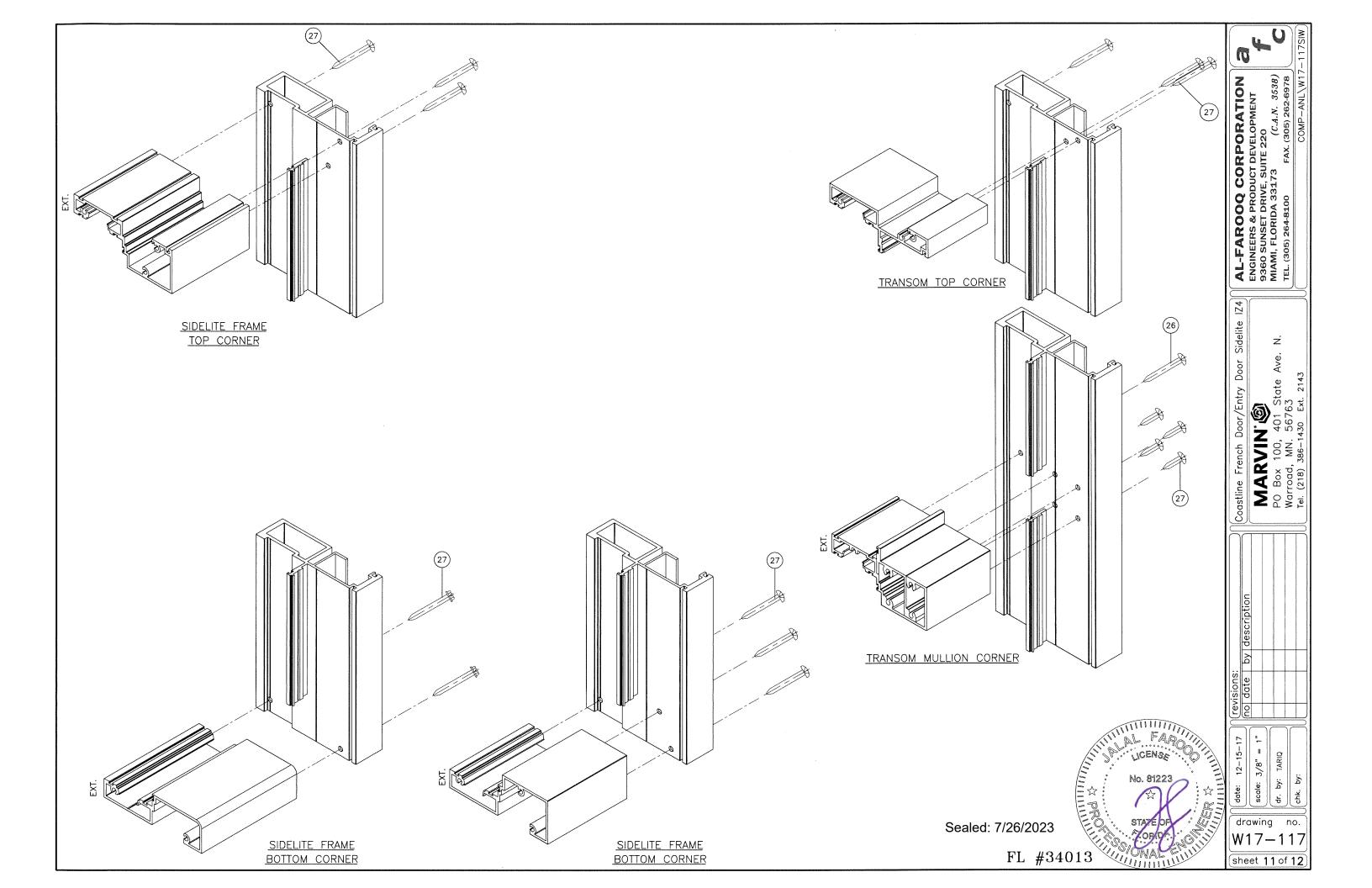
ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	SIW505	1	SIDELITE FRAME HEAD	6063-T6	
1A	SIW523	1	TRANSOM FRAME HEAD	6063-T6	
1B	SIW505B	1	TRANSOM MULLION	6063-T6	
2	SIW515	1	STANDARD THRESHOLD	6063-T6	
3	SIW506	2/DOOR	FRAME JAMB	6063-T6	-
4	SIW502	1/ LEAF	DOOR TOP RAIL	6063-T6	-
5	SEE SHEET 10	1/ LEAF	DOOR BOTTOM RAIL	6063-T6	-
6	SIW503	2/ LEAF	WIDE SIDELITE JAMB STILE	6063-T6	-
7	SIW507	2/ LEAF	NARROW SIDELITE JAMB STILE	6063-T6	-
8	SIW542	AS REQD.	TRANSOM MULLION ADAPTER	6063-T6	-
9	SIW511	AS REQD.	JAMB SCREW COVER	6063-T6	-
10	_			-	-
11	SIW510	AS REQD.	SNAP COVER	6063-T5	-
12	SIW512	AS REQD.	INTERIOR GLASS STOP (LAM. GLASS)	6063-T5	-
12A	SIW520	AS REQD.	INTERIOR GLASS STOP (INSUL. LAM. GLASS)	6063-T5	-
13	SIW513	AS REQD.	EXTERIOR GLASS STOP	6063-T6	-
1 3 A	SIW533	AS REQD.	EXTERIOR GLASS STOP	6063-T6	-
14	SIW504	AS REQD.	MULL ADAPTER	6063-T6	-
15	9016E		BULB W'STRIPPING	VINYL	CENTRAL PLSTICS
16	U4513	-	Q-LON W'STRIPPING	VINYL	SCHLEGEL
17	5530	AS REQD.	INTERIOR GLAZING SPACER, DUROMETER 70±5 SHORE A	TPE	ULTRAFAB
17A	5531	AS REQD.	EXTERIOR GLAZING SPACER, DUROMETER 70 ± 5 SHORE A	SANTOPRENE	CENTRAL PLASTICS
18	W23201NW0020	AS RQD.	FINSEAL PILE W'STRIPPING		ULTRAFAB
20	-	-	-	_	_
21	#8 X 1/2"	AS REQD.	GLASS STOP SCREWS SELF DRILLING	-	AT 8" FROM ENDS & 15" O.C. MAX.
22	#12 X 1-1/4"	-	FIX. PANEL SCREWS PH SMS	-	AT 6" FROM ENDS & 12" O.C. MAX.
25	-	AS REQD.	MULLION REINFORCING	STEEL	
27	#12 X 2"	1/ CORNER	FRAME AND LEAF ASSEMBLY SCREWS	ST. STEEL	PH SMS
28			-	_	-
34	SIW539		2" CHAIR RAIL	6063-T6	
35		2/ LITE	SETTING BLOCK, DUROMETER 85±5 SHORE A	EPDM	-

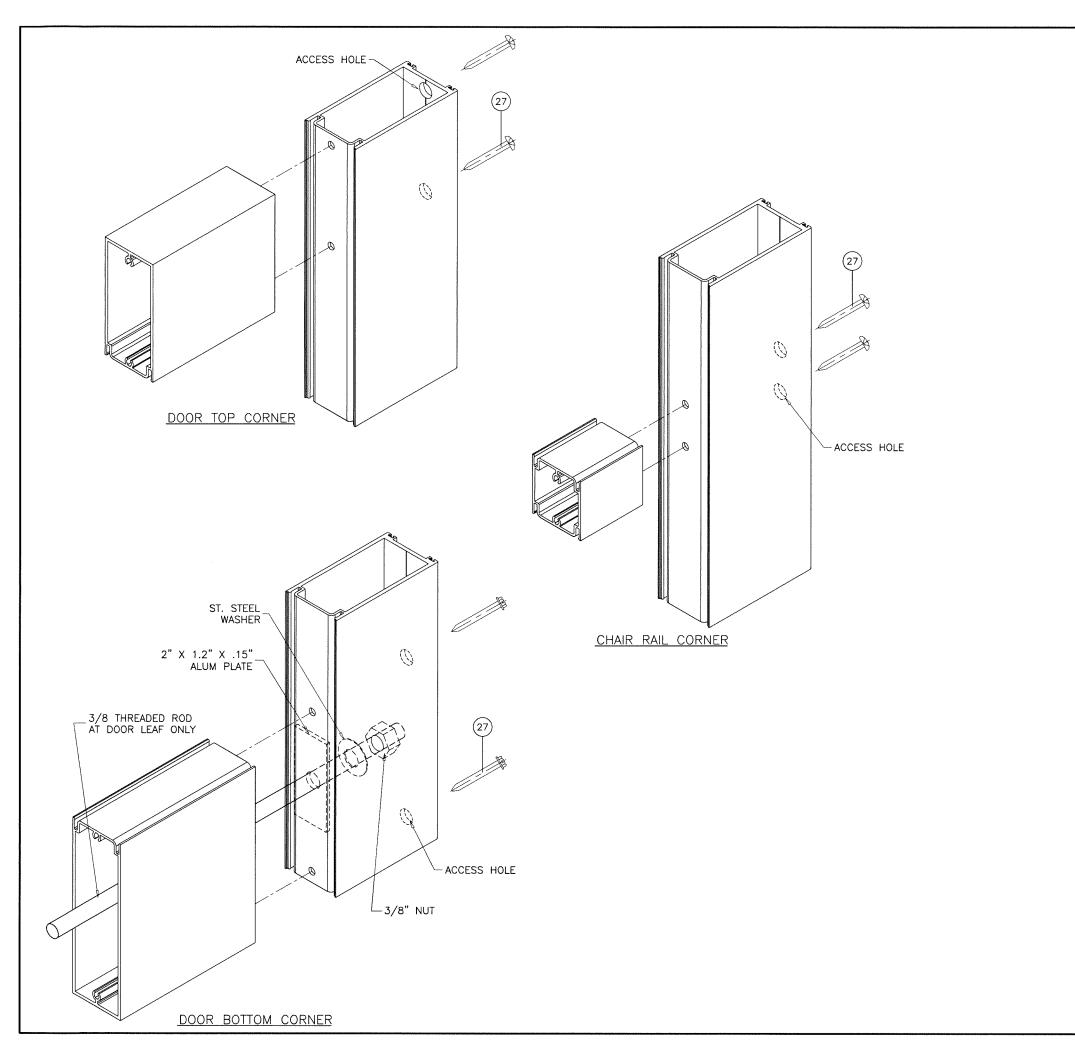
SEALANTS:

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH SMALL JOINT SEALER.









Sealed: 7/26/2023

