

SERIES FD450 IMPACT-RESISTANT, INSWING & OUTSWING, FRENCH DOOR W/VO TRANSOM OR SIDELITES

- 1) THIS PRODUCT HAS BEEN DESIGNED & TESTED TO COMPLY WITH THE REQUIREMENTS OF THE CURRENT FLORIDA BUILDING CODE, (FBC), INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- 2) SHUTTERS ARE NOT REQUIRED WHEN USED IN WIND-BORNE DEBRIS REGIONS.
- 3) MASONRY ANCHORS MAY BE USED INTO WOOD AS PER TABLE A. ALL WOOD BUCKS LESS THAN 1-1/2" THICK ARE TO BE CONSIDERED 1X INSTALLATIONS. 1X WOOD BUCKS ARE OPTIONAL IF UNIT IS INSTALLED DIRECTLY TO SUBSTRATE. WOOD BUCKS DEPICTED AS 2X ARE 1-1/2" THICK OR GREATER. 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED TO PROPERLY TRANSFER LOADS TO THE STRUCTURE. WOOD BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD.
- 4) ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO. USE ANCHORS OF SUFFICIENT LENGTH. OVERALL SEALING/FLASHING STRATEGY FOR WATER RESISTANCE OF INSTALLATION SHALL BE DONE BY OTHERS AND IS BEYOND THE SCOPE OF THESE INSTRUCTIONS.
- 5) SHIMS ARE REQUIRED AT EACH ANCHOR LOCATIONS WHERE THE PRODUCT IS NOT FLUSH TO THE SUBSTRATE. USE SHIMS CAPABLE OF TRANSFERRING APPLIED LOADS. WOOD BUCKS, BY OTHERS, MUST BE SUFFICIENTLY ANCHORED TO RESIST LOADS IMPOSED ON THEM BY THE DOOR.
- 6) THE ANCHORAGE METHODS SHOWN HAVE BEEN DESIGNED TO RESIST THE WIND LOADS CORRESPONDING TO THE REQUIRED DESIGN PRESSURE. THE 33-1/3% STRESS INCREASE HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. THE 1.6 LOAD DURATION FACTOR WAS USED FOR THE EVALUATION OF ANCHORS INTO WOOD. ANCHORS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE FOR CORROSION RESISTANCE.
- 7) DOOR SIZES MUST BE VERIFIED FOR COMPLIANCE WITH EGRESS REQUIREMENTS OF THE FBC, AS APPLICABLE. ALL CONFIGURATIONS SHOWN ARE AVAILABLE AS MULTIPLE PANELS. MAXIMUM OVERALL FRAME SQUARE FOOTAGE FOR VERTICAL, SELF-MULLING SYSTEMS IS 125 FT². FOR SYSTEMS USING A TRANSOM, SEE SHEET 4 FOR LIMITATIONS. FOR LARGER AREAS USE STRUCTURAL MULLIONS FROM SEPARATE APPROVAL.

TABLE A:

Anchor Group	Anchor Type	Substrate	Anchor Location	Min. Embedment	Min. Edge Distance
A	1/4" DeWalt UltraCon+	Southern Pine (SG = 0.55)	Head & Jamb	1-3/8"	1"
		Hollow or Grout-filled CMU (ASTM C90)		1-1/4"	2-1/2"
		Concrete (min. 3.0 ksi)		1-1/4"	2-1/2"
	#14 Steel SMS (Gr. 5) (Min. of 3 threads beyond substrate.)	Aluminum, 6063-T5		1/8"	1"
		Steel, A36		0.071" (14 Ga)	1"
		Steel Stud, A653 Gr. 33		0.071" (14 Ga)	1"
B	1/4" DeWalt Ultracon+	Concrete (min. 3.0 ksi)	Head & Sill	1-3/4"	2-1/2"
C	5/16" DeWalt UltraCon	Concrete (min. 3.0 ksi)	ADA Sill (P# 9)	1-3/4"	3-1/8"
D	#14 Steel SMS (Gr. 5)	Southern Pine (SG = 0.55)	Sills (P# 5 or 10)	1-3/8"	1"

- 1) ALL ANCHOR HEAD TYPES ARE APPLICABLE, FLATHEAD RECOMMENDED FOR ADA SILL.

TABLE 1:

Lock Design Pressures, PSF									
Lock Type	Description	Door Frame Height							
		84-3/4"		96-3/4"		108-3/4"		120-3/4"	
		(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)
1	Copper Creek with 3-Point Lock	90.0	90.0	90.0	90.0	-	-	-	-
2	Baldwin with 3-Point Lock	100.0	110.0	100.0	110.0	100.0	110.0	70.0	70.0
3	Regent Commercial with 3-Point Lock	100.0	110.0	100.0	110.0	100.0	110.0	70.0	70.0
4	Baldwin Single Point Lock	65.0	65.0	65.0	65.0	-	-	-	-
5	Copper Creek Single Point Lock	65.0	65.0	65.0	65.0	-	-	-	-
6	Door-O-Matic, Series 1690	80.0	80.0	70.0	70.0	-	-	-	-
7	Jackson, Series 2065/2085	80.0	80.0	70.0	70.0	-	-	-	-
8	Surface Mounted Lock	100.0	110.0	90.0	90.0	90.0	90.0	70.0	70.0

- 1) LOCK TYPES 6 & 7 ARE NOT AVAILABLE FOR INSWING CONFIGURATIONS.
- 2) LADDER PULL HANDLE MAY BE USED WITH LOCK TYPES 2 OR 3.

FLORIDA PRODUCT APPROVAL #29783

DESIGN PRESSURE RATING	IMPACT RATING
VARIES WITH OPTIONS, SEE TABLES 1 - 7	RATED FOR LARGE & SMALL MISSILE IMPACT RESISTANCE

INSTRUCTIONS TO USING THE TABLES:

- 1) FOR YOUR STRUCTURE AND PRODUCT OPTIONS, DETERMINE THE MINIMUM DESIGN PRESSURE REQUIRED BASED ON PROVISIONS OF THE CURRENT FLORIDA BUILDING CODE (FBC).
- 2) CHECK THE ALLOWABLE EXTERIOR AND INTERIOR DESIGN PRESSURES FROM APPROPRIATE TABLES ON THE FOLLOWING SHEETS. THE DESIGN PRESSURE FROM SEVERAL DIFFERENT PARTS MUST FIRST BE ASCERTAINED, AND THEN THE LOWEST VALUE USED AS THE FINAL, OVERALL DESIGN PRESSURE.
- A) DETERMINE WATER INFILTRATION REQUIREMENTS BASED ON PROVISIONS OF THE FBC AND FIGURES 1 & 2 ON THIS SHEET FOR DOORS. DEPENDING ON YOUR CHOSEN PRODUCT, THIS MAY LIMIT YOUR (+) DESIGN PRESSURE.
- B) FROM TABLE 1, DETERMINE THE DESIGN PRESSURE BASED ON YOUR DOOR LOCK TYPE.
- C) FOR SINGLE DOORS (X) AND STAND-ALONE SIDELITES (O), DETERMINE THE DESIGN PRESSURE BASED ON YOUR GLASS TYPE FROM TABLE 2.
- D) FOR DOUBLE DOORS (XX), DETERMINE THE DESIGN PRESSURE BASED ON YOUR DOOR GLASS TYPE FROM TABLE 4 AND THE DOOR ANCHOR CLUSTER FROM TABLE 5.
- E) IF ATTACHING A SIDELITE (O) TO ANY DOOR, DETERMINE THE DESIGN PRESSURE FOR THE SIDELITE BASED ON GLASS TYPE FROM TABLE 2, ANCHORAGE FROM TABLE 3 AND MULLION CAPACITY FROM TABLE 7.
- F) IF USING A TRANSOM, FROM TABLE 6, DETERMINE THE DESIGN PRESSURE BASED ON YOUR TRANSOM GLASS TYPE.
- THE LOWEST DESIGN PRESSURE FROM A-F ABOVE SHALL CONTROL THE ENTIRE SYSTEM.

FIGURE 1:

OH LENGTH

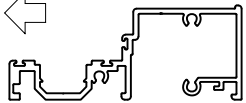
DOOR ASSEMBLIES INSTALLED WHERE THE OVERHANG (OH) LENGTH IS EQUAL TO OR GREATER THAN THE OVERHANG HEIGHT ARE EXEMPTED FROM WATER INFILTRATION RESISTANCE.

DOOR WATER INFILTRATION NOTES:

- 1) IF WATER INFILTRATION RESISTANCE IS REQUIRED, THE STANDARD OUTSWING SILL, FIGURE 2, MUST BE USED.
- 2) IF WATER INFILTRATION RESISTANCE IS NOT REQUIRED OR OVERHANG IS PER FIGURE 1, THE (+) DESIGN PRESSURES SHOWN IN THE TABLES MAY BE USED AND ANY THRESHOLD IS ACCEPTABLE.

FIGURE 2:

EXTERIOR



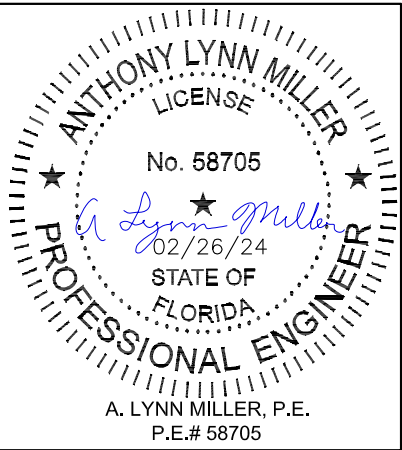
STANDARD OUTSWING SILL

ONLY THIS DOOR SILL, IN AN OUTSWING CONFIGURATION, MAY BE USED WHERE WATER INFILTRATION RESISTANCE IS REQUIRED.

GUIDE TO SHEETS:

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WINDOOR	104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432	ALUMINUM FRENCH DOOR (LM)	GENERAL NOTES	1 OF 21
FD450A	Series	Desc.	Title	Sheet



Rev.	D
Date	02/22/24
NO CHANGES THIS SHEET.	

TABLE 2:

SINGLE DOOR (X) AND/OR SIDELITES (O) DESIGN PRESSURES, PSF DUE TO GLAZING							
SGL DOOR (X) OR SIDELITE WIDTH*	FRAME HEIGHT	GLASS TYPES 1, 2, 3, 4 & COMPOSITE PANELS		GLASS TYPES 6 & 7		GLASS TYPES 5 & 8	
		EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
26-9/16"	82-3/4"	100.0	110.0	70.0	70.0	90.0	90.0
32-9/16"		100.0	110.0	70.0	70.0	90.0	90.0
38-9/16"		100.0	110.0	70.0	70.0	90.0	90.0
44-9/16"		94.2	94.2	70.0	70.0	90.0	90.0
26-9/16"	84-3/4"	100.0	110.0	70.0	70.0	90.0	90.0
32-9/16"		100.0	110.0	70.0	70.0	90.0	90.0
38-9/16"		100.0	110.0	70.0	70.0	90.0	90.0
44-9/16"		94.2	94.2	70.0	70.0	90.0	90.0
26-9/16"	90-3/4"	100.0	110.0	70.0	70.0	90.0	90.0
32-9/16"		100.0	110.0	70.0	70.0	90.0	90.0
38-9/16"		100.0	110.0	70.0	70.0	90.0	90.0
44-9/16"		94.2	94.2	70.0	70.0	90.0	90.0
26-9/16"	96-3/4"	100.0	110.0	70.0	70.0	90.0	90.0
32-9/16"		100.0	110.0	70.0	70.0	90.0	90.0
38-9/16"		100.0	110.0	70.0	70.0	90.0	90.0
44-9/16"		59.9	59.9	59.9	59.9	-	-
26-9/16"	102-3/4"	100.0	110.0	70.0 **	70.0 **	-	-
32-9/16"		100.0	110.0	70.0 **	70.0 **	-	-
38-9/16"		100.0	110.0	70.0 **	70.0 **	-	-
44-9/16"		59.9	59.9	59.9 **	59.9 **	-	-
26-9/16"	108-3/4"	100.0	110.0	70.0 **	70.0 **	-	-
32-9/16"		100.0	110.0	70.0 **	70.0 **	-	-
38-9/16"		100.0	110.0	70.0 **	70.0 **	-	-
26-9/16"	114-3/4"	70.0	70.0	70.0 **	70.0 **	-	-
32-9/16"		70.0	70.0	70.0 **	70.0 **	-	-
38-9/16"		70.0	70.0	70.0 **	70.0 **	-	-
26-9/16"	120-3/4"	70.0	70.0	70.0 **	70.0 **	-	-
32-9/16"		70.0	70.0	70.0 **	70.0 **	-	-
38-9/16"		70.0	70.0	70.0 **	70.0 **	-	-

* NARROW STILE SIDELITES LIMITED TO 18" FRAME WIDTH OR LESS.

** GLASS LIMITED TO 96-3/4" FRAME HEIGHT. TALLER HEIGHTS REQUIRE A TRUE MUNTIN.

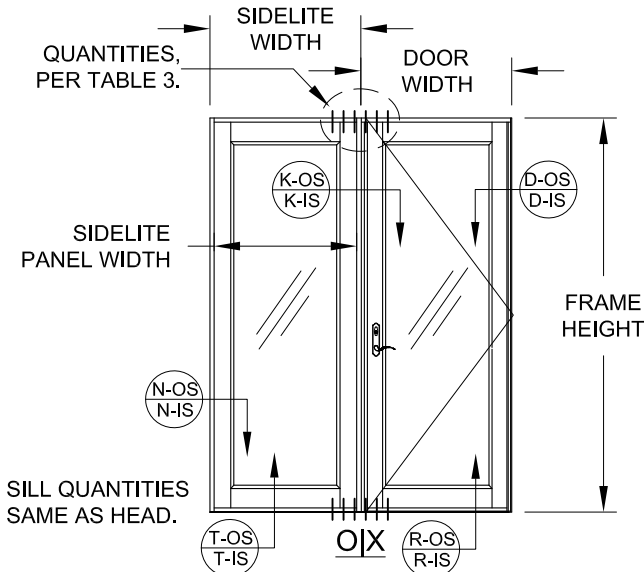
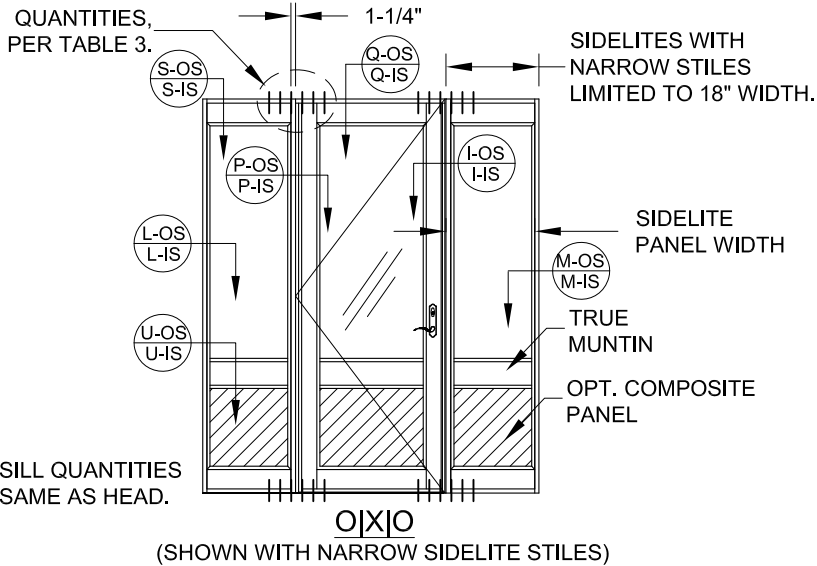
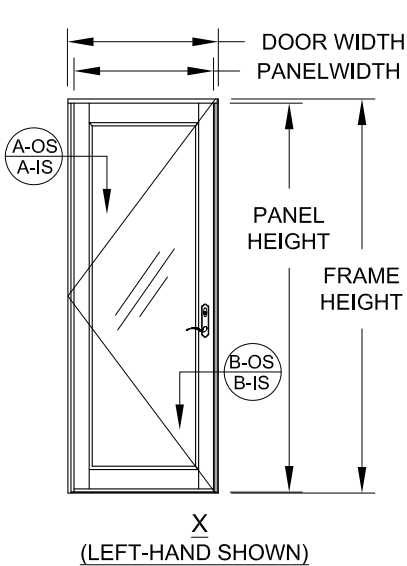


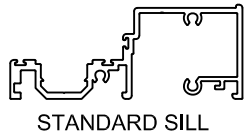
TABLE 3:

DESIGN PRESSURES, PSF AT SIDELITES DUE TO ANCHORAGE TYPE									
ANCHOR TYPE (SEE SHEET 6 FOR LOCATIONS)		A @ HEAD			B @ HEAD, STD. SILL & RES. SILL		B @ HEAD, C @ COM. SILL & D @ STD. & RES. SILLS		
WIDTH "W"	FRAME HEIGHT	3 ANCHORS	4 ANCHORS	6 ANCHORS	3 ANCHORS	4 ANCHORS	3 ANCHORS	4 ANCHORS	
24"	82-3/4"	106.7	110.0	110.0	110.0	110.0	110.0	110.0	
30"		86.2	110.0	110.0	110.0	110.0	110.0	110.0	
36"		72.3	96.4	110.0	109.3	110.0	101.0	110.0	
42"		62.3	83.0	110.0	94.2	110.0	87.0	110.0	
24"	84-3/4"	104.2	110.0	110.0	110.0	110.0	110.0	110.0	
30"		84.2	110.0	110.0	110.0	110.0	110.0	110.0	
36"		70.6	94.1	110.0	106.7	110.0	98.7	110.0	
42"		60.8	81.1	110.0	91.9	110.0	85.0	108.7	
24"	90-3/4"	97.3	110.0	110.0	110.0	110.0	110.0	110.0	
30"		78.6	104.8	110.0	110.0	110.0	109.8	110.0	
36"		65.9	87.9	110.0	99.7	110.0	92.1	110.0	
42"		56.8	75.7	110.0	85.9	110.0	79.4	101.5	
24"	96-3/4"	91.2	110.0	110.0	110.0	110.0	110.0	110.0	
30"		73.7	98.3	110.0	110.0	110.0	103.0	110.0	
36"		61.9	82.5	110.0	93.5	110.0	86.4	110.0	
42"		53.3	71.0	106.5	80.5	107.4	74.4	95.2	
24"	102-3/4"	85.9	110.0	110.0	110.0	110.0	110.0	110.0	
30"		69.4	92.6	110.0	104.9	110.0	97.0	110.0	
36"		58.2	77.7	110.0	88.0	110.0	81.4	104.1	
42"		50.2	66.9	100.3	75.8	101.1	70.1	89.6	
24"	108-3/4"	81.2	108.2	110.0	110.0	110.0	110.0	110.0	
30"		65.6	87.5	110.0	99.2	110.0	91.7	110.0	
36"		55.0	73.4	110.0	83.2	110.0	76.9	98.3	
24"	114-3/4"	76.9	102.6	110.0	110.0	110.0	107.5	110.0	
30"		62.2	82.9	110.0	94.0	110.0	86.9	110.0	
36"		52.2	69.5	104.3	78.8	105.1	72.9	93.2	
24"	120-3/4"	73.1	97.5	110.0	110.0	110.0	102.2	110.0	
30"		59.1	78.8	110.0	89.3	110.0	82.5	105.6	
36"		49.6	66.1	99.1	74.9	99.9	69.2	88.6	

WIDTH "W" = $\frac{\text{PANEL WIDTH} + \text{ADJACENT PANEL WIDTH}}{2} + 1.250$

NOTES:

- 1) CHECK THE ALLOWABLE DESIGN PRESSURES FROM THE APPROPRIATE TABLES OF ALL SHEETS PER THE INSTRUCTIONS ON SHEET 1. THE LOWEST DESIGN PRESSURE FROM ALL SHALL CONTROL THE ENTIRE SYSTEM.
- 2) EXAMPLE CONFIGURATIONS SHOWN. SIMILAR CONFIGURATIONS ALLOWED. DOORS MAY BE LEFT OR RIGHT-HANDED, INSWING OR OUTSWING & USE ANY LOCK FROM TABLE 1.
- 3) "OS" = OUTSWING; "IS" = INSWING; SEE DETAILS ON SHEETS 8-11 & 16 (OUTSWING) & 12-16 (INSWING).
- 4) IF TABLE 3 REQUIRES 3 ANCHORS, INSTALL 1 @ THE DOOR AND 2 @ THE SIDELITE OTHERWISE SPLIT QUANTITY EVENLY.



STANDARD SILL



COMMERCIAL (ADA) SILL



RESIDENTIAL SILL

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12/12/22

ALUMINUM FRENCH DOOR (LM)

JENS ROSOWSKI

DESIGN PRESSURE TABLES

450FPA-LM-1

2 OF 21

FD450A

ANTHONY LYNN MILLER
LICENSE
No. 58705
02/26/24
STATE OF
FLORIDA
A. LYNN MILLER, P.E.
P.E.# 58705

TABLE 4:

DOUBLE DOOR (XX) DESIGN PRESSURES, PSF DUE TO GLAZING							
DBL DOOR, XX WIDTH	FRAME HEIGHT	GLASS TYPES 1, 2, 3, 4 & COMPOSITE PANELS		GLASS TYPES 6 & 7		GLASS TYPES 5 & 8	
		EXT. (+)	INT. (-)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
50-1/2"	82-3/4"	100.0	110.0	70.0	70.0	90.0	90.0
62-1/2"		100.0	110.0	70.0	70.0	90.0	90.0
74-1/2"		100.0	110.0	70.0	70.0	90.0	90.0
86-1/2"		94.2	94.2	70.0	70.0	90.0	90.0
50-1/2"	84-3/4"	100.0	110.0	70.0	70.0	90.0	90.0
62-1/2"		100.0	110.0	70.0	70.0	90.0	90.0
74-1/2"		100.0	110.0	70.0	70.0	90.0	90.0
86-1/2"		94.2	94.2	70.0	70.0	90.0	90.0
50-1/2"	90-3/4"	100.0	110.0	70.0	70.0	90.0	90.0
62-1/2"		100.0	110.0	70.0	70.0	90.0	90.0
74-1/2"		100.0	110.0	70.0	70.0	90.0	90.0
86-1/2"		94.2	94.2	70.0	70.0	90.0	90.0
50-1/2"	96-3/4"	100.0	110.0	70.0	70.0	90.0	90.0
62-1/2"		100.0	110.0	70.0	70.0	90.0	90.0
74-1/2"		100.0	110.0	70.0	70.0	90.0	90.0
86-1/2"		59.9	59.9	59.9	59.9	-	-
50-1/2"	102-3/4"	100.0	110.0	70.0 **	70.0 **	-	-
62-1/2"		100.0	110.0	70.0 **	70.0 **	-	-
74-1/2"		100.0	110.0	70.0 **	70.0 **	-	-
86-1/2"		59.9	59.9	59.9 **	59.9 **	-	-
50-1/2"	108-3/4"	100.0	110.0	70.0 **	70.0 **	-	-
62-1/2"		100.0	110.0	70.0 **	70.0 **	-	-
74-1/2"		100.0	110.0	70.0 **	70.0 **	-	-
50-1/2"	114-3/4"	70.0	70.0	70.0 **	70.0 **	-	-
62-1/2"		70.0	70.0	70.0 **	70.0 **	-	-
74-1/2"		70.0	70.0	70.0 **	70.0 **	-	-
50-1/2"	120-3/4"	70.0	70.0	70.0 **	70.0 **	-	-
62-1/2"		70.0	70.0	70.0 **	70.0 **	-	-
74-1/2"		70.0	70.0	70.0 **	70.0 **	-	-

** GLASS LIMITED TO 96-3/4" FRAME HEIGHT. TALLER HEIGHTS REQUIRE A TRUE MUNTIN.

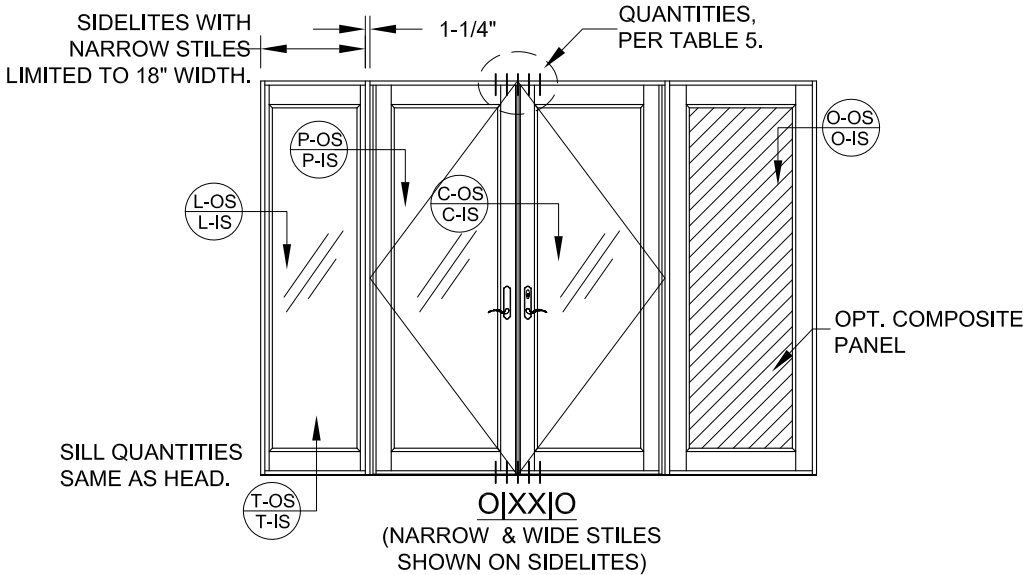
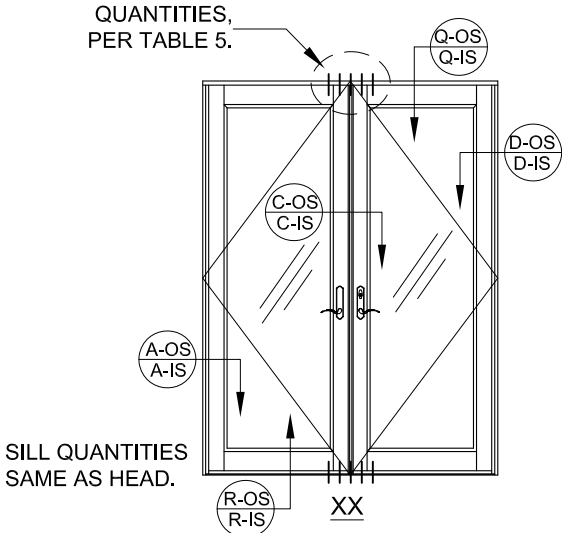
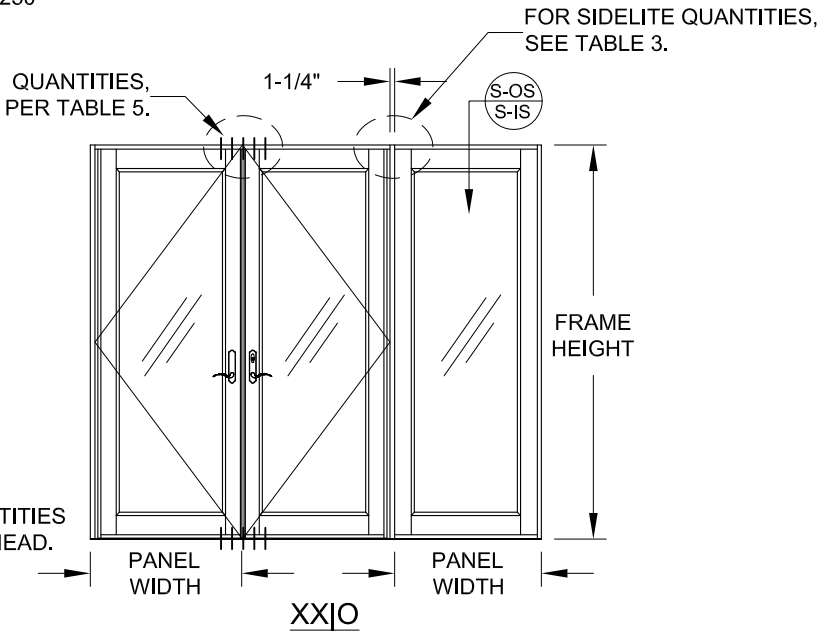


TABLE 5:

DESIGN PRESSURES, PSF @ XX DOOR MEETING STILE DUE TO ANCHORAGE									
ANCHOR TYPE (SEE SHEET 6 FOR LOCATIONS)		A @ HEAD			B @ HEAD, STD. SILL & RES. SILL		B @ HEAD, C @ COM. SILL & D @ STD. & RES. SILLS		
DBL DOOR, XX WIDTH	FRAME HEIGHT	3 ANCHORS	4 ANCHORS	5 ANCHORS	3 ANCHORS	4 ANCHORS	3 ANCHORS	4 ANCHORS	
50-1/2"	82-3/4"	106.7	110.0	110.0	110.0	110.0	110.0	110.0	
62-1/2"		86.2	110.0	110.0	110.0	110.0	100.7	110.0	
74-1/2"		72.3	96.4	110.0	109.3	110.0	84.5	110.0	
86-1/2"		62.3	83.0	103.8	94.2	110.0	72.8	97.0	
50-1/2"	84-3/4"	104.2	110.0	110.0	110.0	110.0	110.0	110.0	
62-1/2"		84.2	110.0	110.0	110.0	110.0	98.4	110.0	
74-1/2"		70.6	94.1	110.0	106.7	110.0	82.5	110.0	
86-1/2"		60.8	81.1	101.4	91.9	110.0	71.1	94.8	
50-1/2"	90-3/4"	97.3	110.0	110.0	110.0	110.0	110.0	110.0	
62-1/2"		78.6	104.8	110.0	110.0	110.0	91.9	110.0	
74-1/2"		65.9	87.9	109.9	99.7	110.0	77.1	102.7	
86-1/2"		56.8	75.7	94.7	85.9	110.0	66.4	88.5	
50-1/2"	96-3/4"	91.2	110.0	110.0	110.0	110.0	106.6	110.0	
62-1/2"		73.7	98.3	110.0	110.0	110.0	86.2	110.0	
74-1/2"		61.9	82.5	103.1	93.5	110.0	72.3	96.4	
86-1/2"		53.3	71.0	88.8	80.5	107.4	62.3	83.0	
50-1/2"	102-3/4"	85.9	110.0	110.0	110.0	110.0	100.4	110.0	
62-1/2"		69.4	92.6	110.0	104.9	110.0	81.1	108.2	
74-1/2"		58.2	77.7	97.1	88.0	110.0	68.1	90.7	
86-1/2"		50.2	66.9	83.6	75.8	101.1	58.6	78.2	
50-1/2"	108-3/4"	81.2	108.2	110.0	110.0	110.0	94.9	110.0	
62-1/2"		65.6	87.5	109.3	99.2	110.0	76.7	102.2	
74-1/2"		55.0	73.4	91.7	83.2	110.0	64.3	85.7	
50-1/2"	114-3/4"	76.9	102.6	110.0	110.0	110.0	89.9	110.0	
62-1/2"		62.2	82.9	103.6	94.0	110.0	72.6	96.9	
74-1/2"		52.2	69.5	86.9	78.8	105.1	60.9	81.3	
50-1/2"	120-3/4"	73.1	97.5	110.0	110.0	110.0	85.4	110.0	
62-1/2"		59.1	78.8	98.5	89.3	110.0	69.0	92.0	
74-1/2"		49.6	66.1	82.6	74.9	99.9	57.9	77.2	

WIDTH "W" = $\frac{\text{PANEL WIDTH} + \text{ADJACENT PANEL WIDTH}}{2} + 1.250$

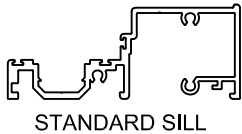


NOTES:

1) CHECK THE ALLOWABLE DESIGN PRESSURES FROM THE APPROPRIATE TABLES OF ALL SHEETS PER THE INSTRUCTIONS ON SHEET 1. THE LOWEST DESIGN PRESSURE FROM ALL SHALL CONTROL THE ENTIRE SYSTEM.

2) EXAMPLE CONFIGURATIONS SHOWN. SIMILAR CONFIGURATIONS ALLOWED. DOORS MAY BE LEFT OR RIGHT-HANDED, INSWING OR OUTSWING & USE ANY LOCK FROM TABLE 1.

3) "OS" = OUTSWING; "IS" = INSWING; SEE DETAILS ON SHEETS 8-11 & 16 (OUTSWING) & 12-16 (INSWING).



STANDARD SILL



COMMERCIAL (ADA) SILL



RESIDENTIAL SILL

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		Date		
		By		
WINDOOR 104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432	ALUMINUM FRENCH DOOR (LM)	DESIGN PRESSURE TABLES	3 OF 21	FD450A

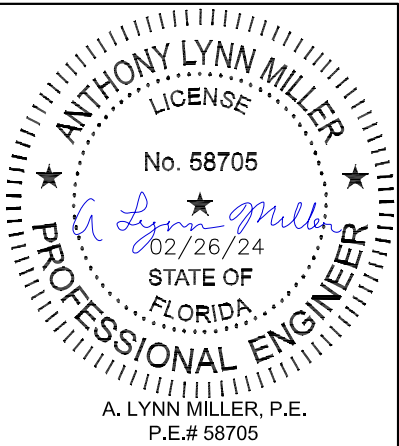


TABLE 6:

TRANSOM DESIGN PRESSURES - PSF DUE TO GLAZING								
TRANSOM FRAME WIDTH	DOOR FRAME HEIGHT	TRANSOM HEIGHT	GLASS TYPES 1, 2, 3, 4 & COMPOSITE PANELS		GLASS TYPES 6 & 7		GLASS TYPES 5 & 8	
			EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
60"	84"	24"	100.0	110.0	70.0	70.0	90.0	90.0
		30"	100.0	110.0	70.0	70.0	90.0	90.0
		36"	100.0	110.0	70.0	70.0	90.0	90.0
		42"	100.0	110.0	70.0	70.0	90.0	90.0
66"		24"	100.0	110.0	70.0	70.0	90.0	90.0
		30"	100.0	109.8	70.0	70.0	90.0	90.0
		36"	100.0	105.4	70.0	70.0	90.0	90.0
74-1/2"		24"	95.6	95.6	70.0	70.0	90.0	90.0
		30"	91.2	91.2	70.0	70.0	90.0	90.0
		36"	87.5	87.5	70.0	70.0	87.5	87.5
60"	96"	24"	100.0	110.0	70.0	70.0	90.0	90.0
		30"	100.0	110.0	70.0	70.0	90.0	90.0
		36"	100.0	110.0	70.0	70.0	90.0	90.0
		42"	100.0	110.0	70.0	70.0	90.0	90.0
66"		24"	100.0	103.2	70.0	70.0	90.0	90.0
		30"	99.0	99.1	70.0	70.0	90.0	90.0
		36"	96.0	95.6	70.0	70.0	90.0	90.0
74-1/2"		24"	86.0	86.0	70.0	70.0	86.0	86.0
		30"	82.5	82.5	70.0	70.0	82.5	82.5
		36"	79.4	79.4	70.0	70.0	79.4	79.4
60"	108"	24"	100.0	110.0	70.0	70.0	90.0	90.0
		30"	100.0	110.0	70.0	70.0	90.0	90.0
		36"	100.0	107.2	70.0	70.0	90.0	90.0
66"		24"	94.0	93.8	70.0	70.0	90.0	90.0
		30"	90.0	90.4	70.0	70.0	90.0	90.0
		36"	87.5	87.5	70.0	70.0	87.5	87.5
74-1/2"		24"	78.2	78.2	70.0	70.0	78.2	78.2
		30"	75.3	75.3	70.0	70.0	75.3	75.3
		36"	72.7	72.7	70.0	70.0	72.7	72.7
60"		120"	24"	100.0	104.9	70.0	70.0	90.0
66"	24"		86.0	86.0	70.0	70.0	86.0	86.0
74-1/2"	24"		71.7	71.7	70.0	70.0	71.7	71.7

NOTES:

1) CHECK THE ALLOWABLE DESIGN PRESSURES FROM THE APPROPRIATE TABLES OF ALL SHEETS PER THE INSTRUCTIONS ON SHEET 1. THE LOWEST DESIGN PRESSURE FROM ALL SHALL CONTROL THE ENTIRE SYSTEM.

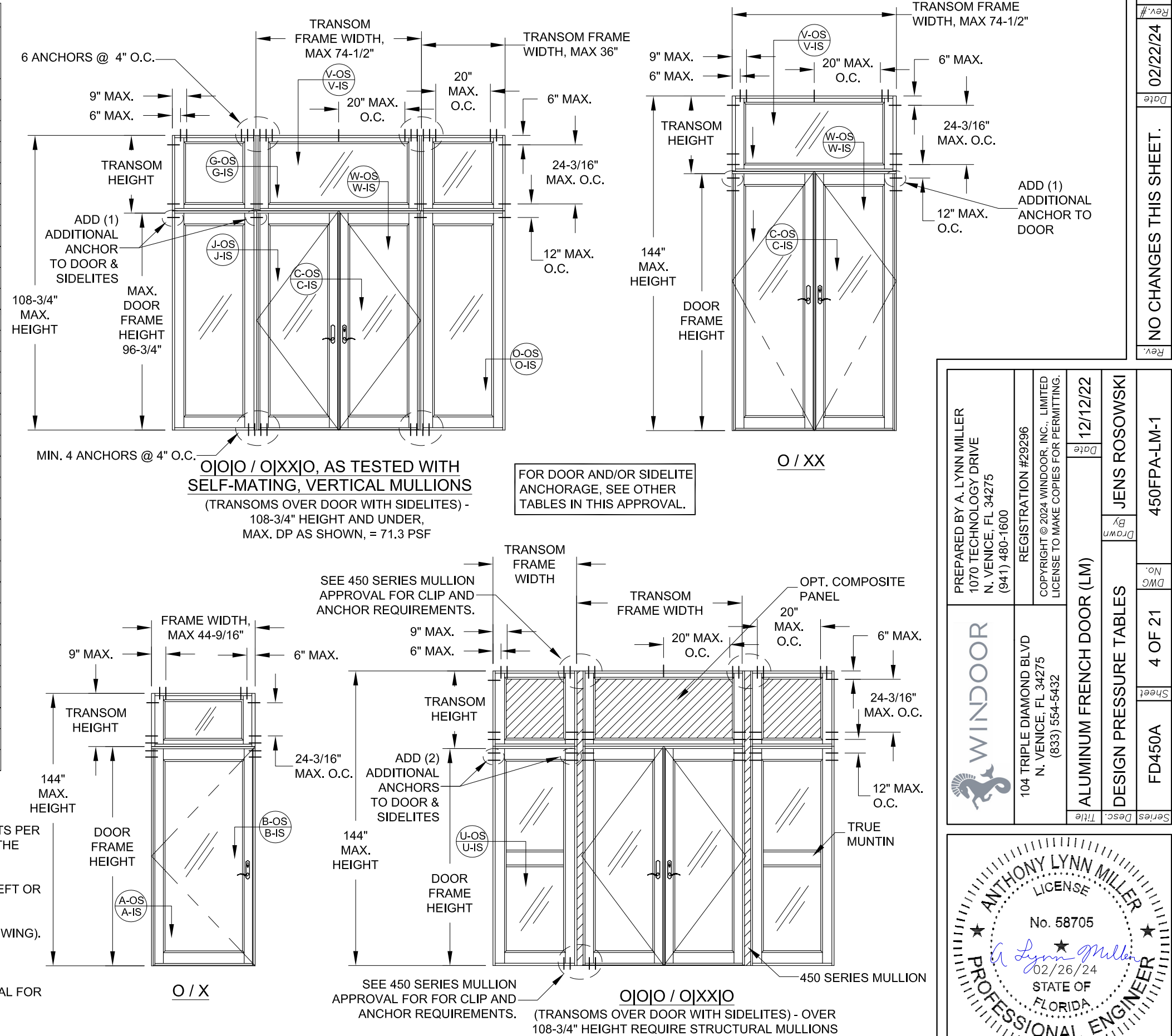
2) EXAMPLE CONFIGURATIONS SHOWN. SIMILAR CONFIGURATIONS ALLOWED. DOORS MAY BE LEFT OR RIGHT-HANDED, INSWING OR OUTSWING & USE ANY LOCK FROM TABLE 1.

3) "OS" = OUTSWING; "IS" = INSWING; SEE DETAILS ON SHEETS 8-11 & 16 (OUTSWING) & 12-16 (INSWING).

4) ANY ANCHOR TYPE FROM TABLE A MAY BE USED.

5) TOTAL HEIGHTS OVER 108-3/4" MUST USE A TUBE MULLION. SEE SEPARATE MULLION APPROVAL FOR SPECIFICS.

TRANSOM DLO WIDTH = TRANSOM FRAME WIDTH - 13-5/8"
TRANSOM DLO HEIGHT = TRANSOM FRAME HEIGHT - 4-5/8"



	104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432			PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600		
	104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432			REGISTRATION #29296		COPYRIGHT © 2024 WINDOOR, INC., LIMITED LICENSE TO MAKE COPIES FOR REPLICATING.
Series	FD450A	Sheet	4 OF 21	No.	DWG	
Desc.	DESIGN PRESSURE TABLES			Drawn	By	12/12/22
Title	ALUMINUM FRENCH DOOR (LM)					
JENS ROSOWSKI						
450FPA-LM-1						

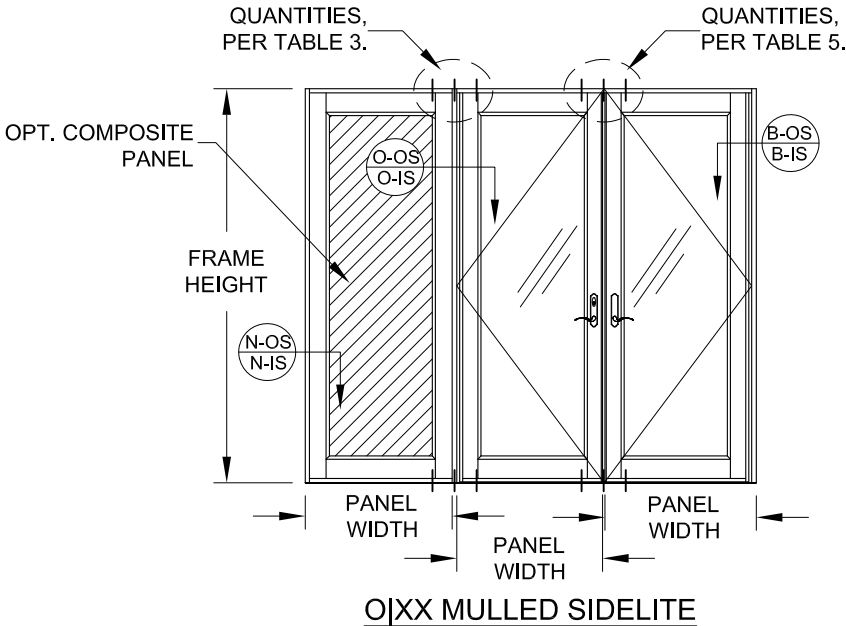
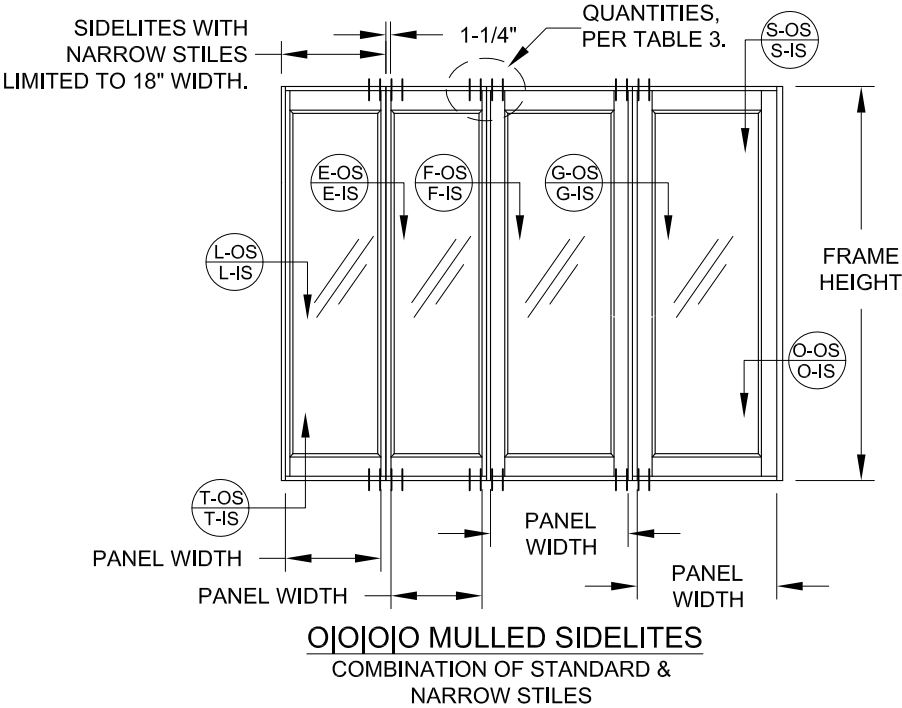
ANTHONY LYNN MILLER
LICENSE
No. 58705
A Lynn Miller
02/26/24
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

A. LYNN MILLER, P.E.
P.E.# 58705

TABLE 7:

MULLION DESIGN PRESSURES - PSF							
WIDTH "W"	FRAME HEIGHT	PANEL STILE TYPES BEING MULLED TOGETHER:					
		WIDE TO WIDE DETAILS G-OS, G-IS, J-OS, J-IS, K-OS & K-IS		WIDE TO NARROW DETAILS F-OS, F-IS, I-OS, I-IS, P-OS & P-IS		NARROW TO NARROW DETAILS E-OS & E-IS	
		EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
18"	82-3/4"	100.0	110.0	100.0	110.0	100.0	110.0
24"		100.0	110.0	100.0	110.0	100.0	110.0
30"		100.0	110.0	100.0	110.0	-	-
36"		100.0	110.0	100.0	110.0	-	-
42"		94.2	94.2	70.0	70.0	-	-
18"	84-3/4"	100.0	110.0	100.0	110.0	100.0	110.0
24"		100.0	110.0	100.0	110.0	100.0	110.0
30"		100.0	110.0	100.0	110.0	-	-
36"		100.0	110.0	100.0	110.0	-	-
42"		94.2	94.2	-	-	-	-
18"	90-3/4"	100.0	110.0	100.0	110.0	100.0	110.0
24"		100.0	110.0	100.0	110.0	70.0	70.0
30"		100.0	110.0	100.0	110.0	-	-
36"		100.0	110.0	70.0	70.0	-	-
42"		94.2	94.2	-	-	-	-
18"	96-3/4"	100.0	110.0	100.0	110.0	100.0	110.0
24"		100.0	110.0	100.0	110.0	70.0	70.0
30"		100.0	110.0	100.0	110.0	-	-
36"		100.0	110.0	-	-	-	-
42"		59.9	59.9	-	-	-	-
18"	102-3/4"	100.0	110.0	100.0	110.0	100.0	110.0
24"		100.0	110.0	100.0	110.0	-	-
30"		100.0	110.0	100.0	100.4	-	-
36"		98.9	98.9	-	-	-	-
42"		59.9	59.9	-	-	-	-
18"	108-3/4"	100.0	110.0	100.0	110.0	100.0	110.0
24"		100.0	110.0	100.0	104.1	-	-
30"		98.1	98.1	70.0	70.0	-	-
36"		82.9	82.9	-	-	-	-
18"	114-3/4"	70.0	70.0	70.0	70.0	100.0	110.0
24"		70.0	70.0	70.0	70.0	-	-
30"		70.0	70.0	-	-	-	-
36"		70.0	70.0	-	-	-	-
18"	120-3/4"	70.0	70.0	70.0	70.0	70.0	70.0
24"		70.0	70.0	70.0	70.0	-	-
30"		70.0	70.0	-	-	-	-
36"		59.9	59.9	-	-	-	-

WIDTH "W" = $\frac{\text{PANEL WIDTH} + \text{ADJACENT PANEL WIDTH}}{2} + 1.250$



NOTES:

1) CHECK THE ALLOWABLE DESIGN PRESSURES FROM THE APPROPRIATE TABLES OF ALL SHEETS PER THE INSTRUCTIONS ON SHEET 1. THE LOWEST DESIGN PRESSURE FROM ALL SHALL CONTROL THE ENTIRE SYSTEM.

2) EXAMPLE CONFIGURATIONS SHOWN. SIMILAR CONFIGURATIONS ALLOWED. DOORS MAY BE LEFT OR RIGHT-HANDED, INSWING OR OUTSWING & USE ANY LOCK FROM TABLE 1.

3) "OS" = OUTSWING; "IS" = INSWING; SEE DETAILS ON SHEETS 8-11 & 16 (OUTSWING) & 12-16 (INSWING).

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600

104 TRIPLE DIAMOND BLVD
N. VENICE, FL 34275
(833) 554-5432

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12/12/22

ALUMINUM FRENCH DOOR (LM)

DESIGN PRESSURE TABLES

FD450A

5 OF 21

450FPA-LM-1

JENS ROSOWSKI

By

DWG No.

Sheet

Series

ANTHONY LYNN MILLER
LICENSE
No. 58705
02/26/24
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 58705

Rev.

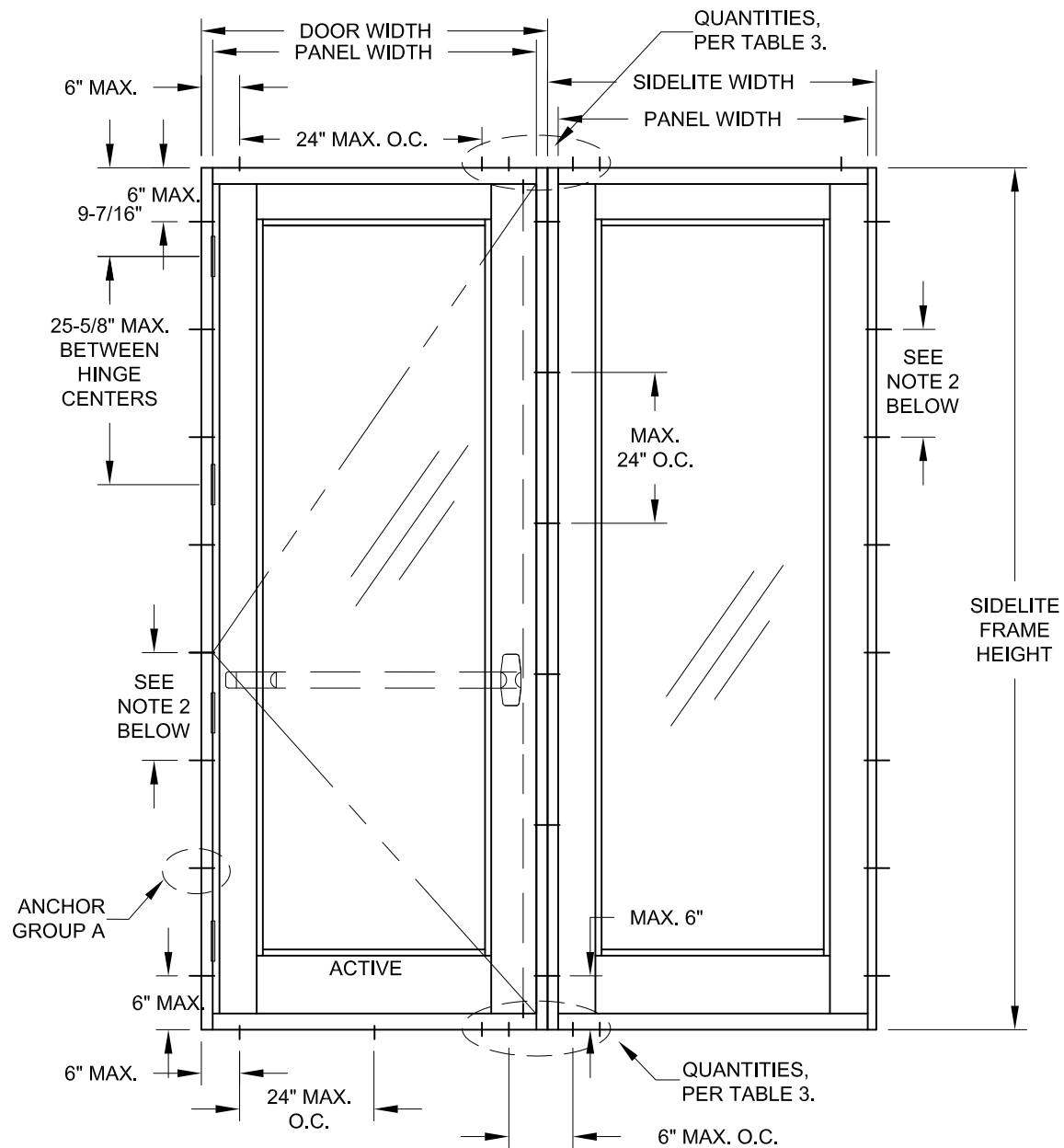
Date

02/22/24

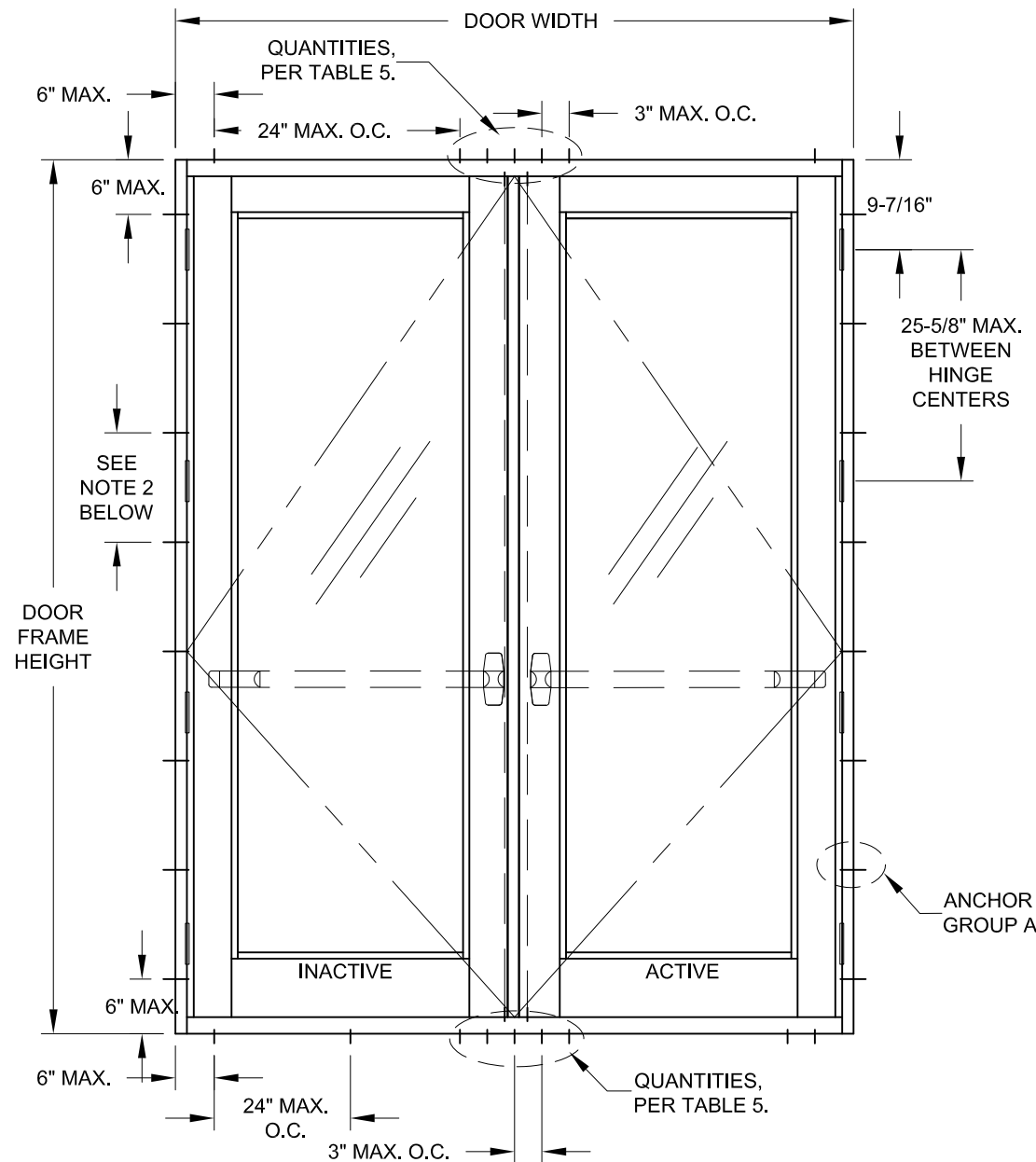
Rev. #

D

NO CHANGES THIS SHEET.



TYPICAL XJO CONFIGURATION ANCHOR LOCATIONS
SHOWN WITH OPT. COMMERCIAL PANIC HARDWARE



TYPICAL XX DOOR ANCHOR LOCATIONS
SHOWN WITH OPT. COMMERCIAL PANIC HARDWARE

NOTES:

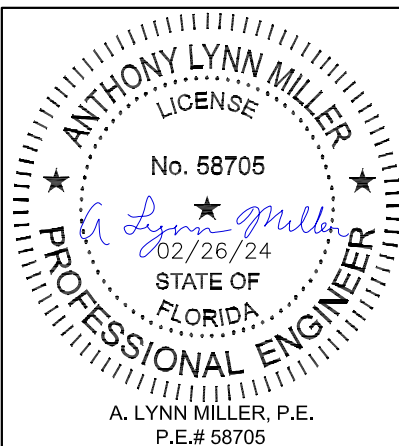
1) EXAMPLE CONFIGURATIONS SHOWN. SIMILAR CONFIGURATIONS ALLOWED. DOORS MAY BE LEFT OR RIGHT-HANDED, INSWING OR OUTSWING & USE ANY LOCK FROM TABLE 1.

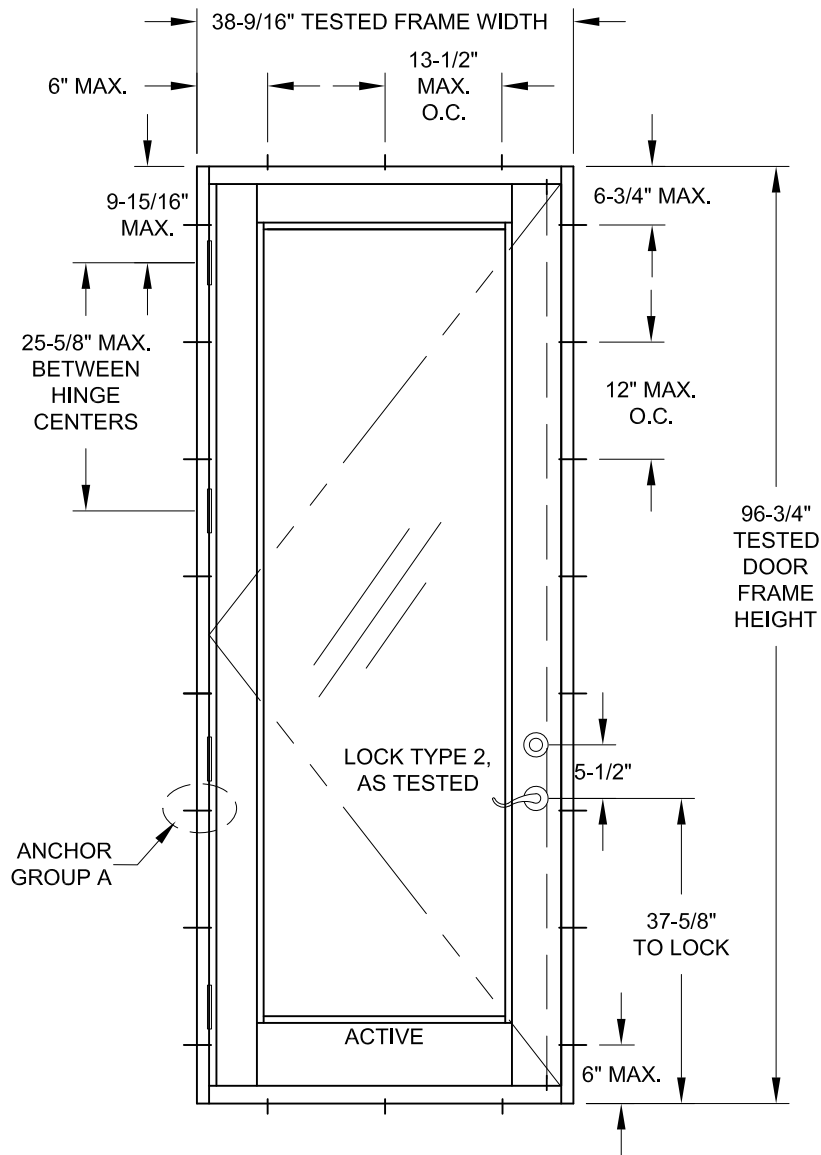
2) ANCHOR GROUP A, JAMB SPACING AS FOLLOWS:
19-3/8" MAX. O.C. FOR DESIGN PRESSURES UP TO 70 PSF
14-1/2" MAX. O.C. FOR DESIGN PRESSURES UP TO 110 PSF
12" MAX. O.C. FOR DESIGN PRESSURES OVER 110 PSF

HINGE LOCATIONS		
MAX. FRAME HEIGHT	NO. REQD.	MAX. SPACING
UP TO 90-3/4"	3	35 1/2"
ABOVE 90-3/4" UPTO 120-3/4"	4	44 1/2"

DOOR/SIDELITE DLO WIDTH = DOOR/SIDELITE PANEL WIDTH - 11"
DOOR/SIDELITE DLO HEIGHT = DOOR/SIDELITE PANEL HEIGHT - 13-1/2"
NARROW STILE SIDELITE DLO WIDTH = SIDELITE PANEL WIDTH - 4"
FRAME HEIGHT = PANEL HEIGHT + 1-7/8" (STD. THRESHOLD)
FRAME HEIGHT = PANEL HEIGHT + 1-5/8" (ADA THRESHOLD)
FRAME WIDTH = PANEL WIDTH + 2-13/16"

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	104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432		ALUMINUM FRENCH DOOR (LM)		By		Date		No.	
	FD450A		6 OF 21		Sheet		Desc.		Title	

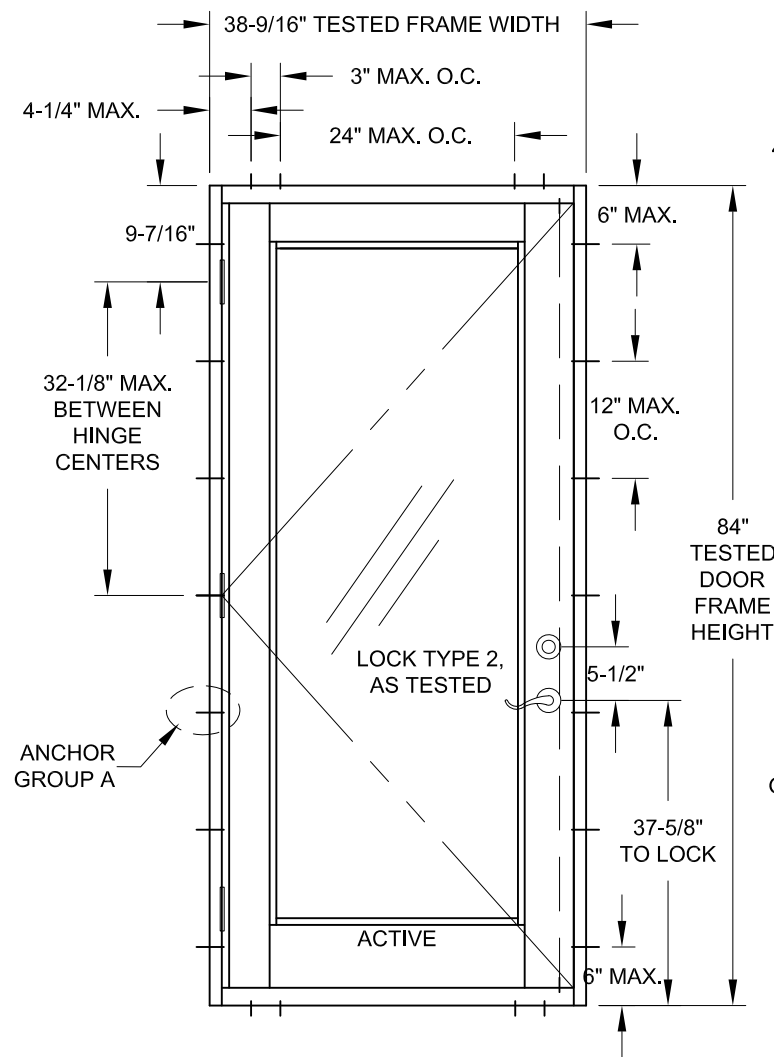




**"AS TESTED" TALL X DOOR
TYP. ANCHOR LOCATIONS**

TESTED DOOR INFORMATION (ABOVE DOOR ONLY):

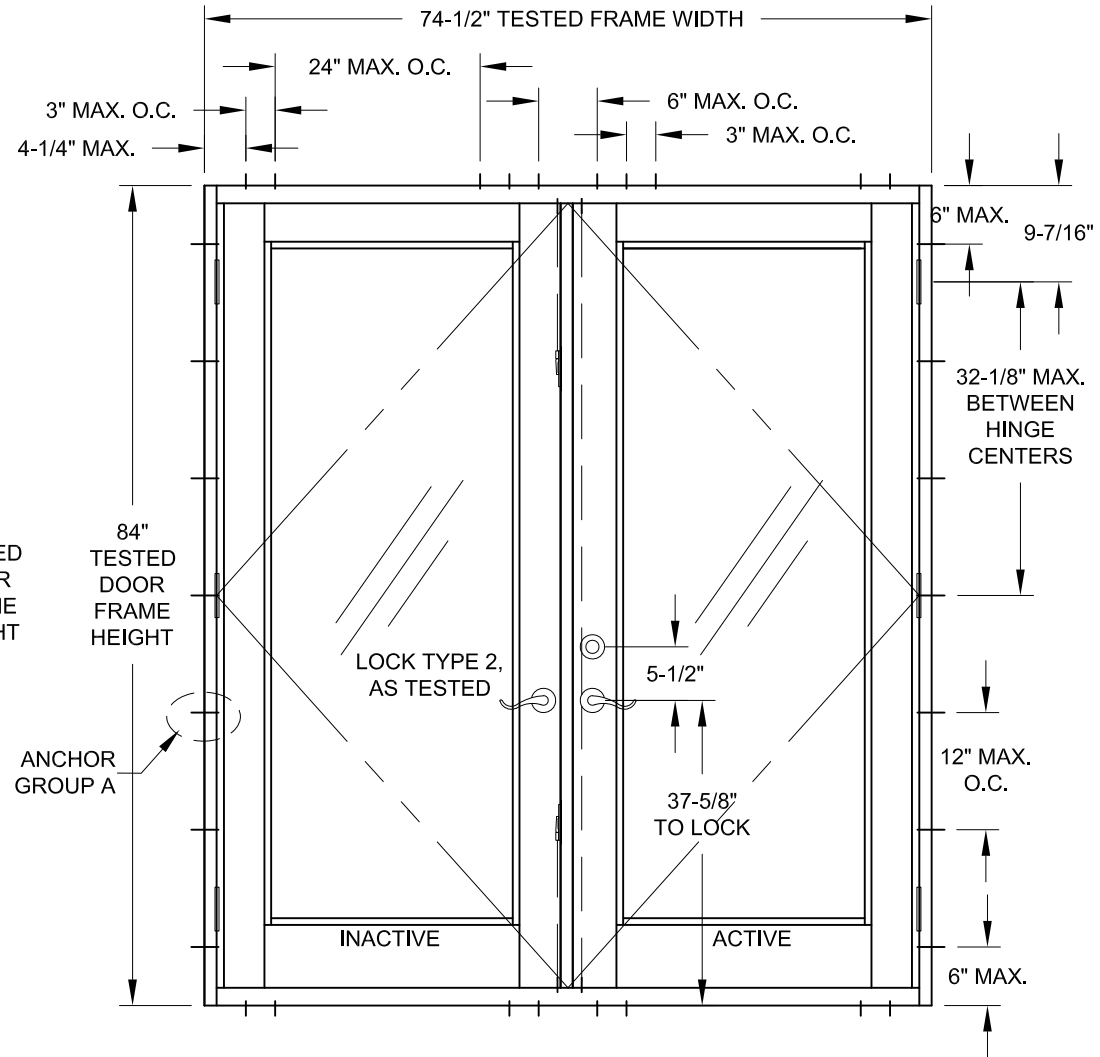
SIZE: 38-9/16" X 96-3/4" (X) W/O SIDELITES OR TRANSOM
ANCHOR GROUP : A
GLASS TYPE: 4
LOCK TYPE: 2, WITH BALDWIN SERIES 8200 DEADBOLT
MAX. (+) DESIGN PRESSURE: 66.0 PSF, LARGE MISSILE
MAX. (-) DESIGN PRESSURE: 124.0 PSF, LARGE MISSILE
OUTSWING USING STANDARD (P# 5) SILL



**"AS TESTED" X DOOR
TYP. ANCHOR LOCATIONS**

TESTED DOOR INFORMATION (ABOVE DOOR ONLY):

SIZE: 38-9/16" X 84" (X) W/O SIDELITES OR TRANSOM
ANCHOR GROUP: A
GLASS TYPES: 1 - 4
LOCK TYPE: 2, WITH BALDWIN SERIES 8200 DEADBOLT
MAX. (+) DESIGN PRESSURE: 100.0 PSF, LARGE MISSILE
MAX. (-) DESIGN PRESSURE: 132.0 PSF, LARGE MISSILE
OUTSWING USING STANDARD (P# 5) SILL



**"AS TESTED" XX DOOR
TYP. ANCHOR LOCATIONS**

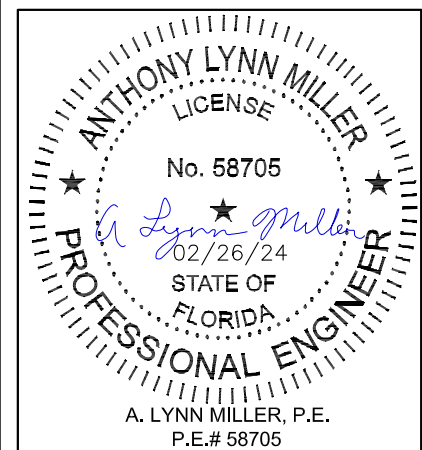
TESTED DOOR INFORMATION (ABOVE DOOR ONLY):

SIZE: 74-1/2" X 84" (XX) W/O SIDELITES OR TRANSOM
ANCHOR GROUP: A
GLASS TYPES: 1 - 4
LOCK TYPE: 2, WITH BALDWIN SERIES 8200 DEADBOLT
MAX. (+) DESIGN PRESSURE: 100.0 PSF, LARGE MISSILE
MAX. (-) DESIGN PRESSURE: 132.0 PSF, LARGE MISSILE
OUTSWING USING STANDARD (P# 5) SILL

NOTES:

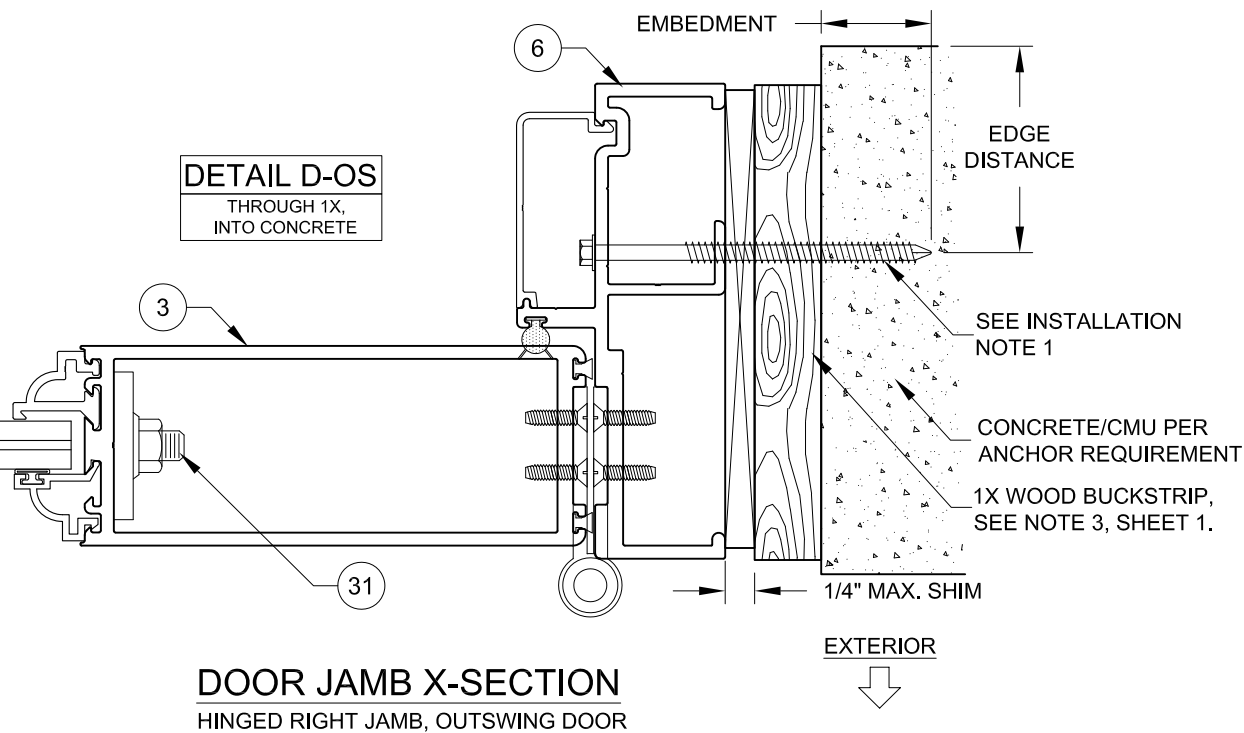
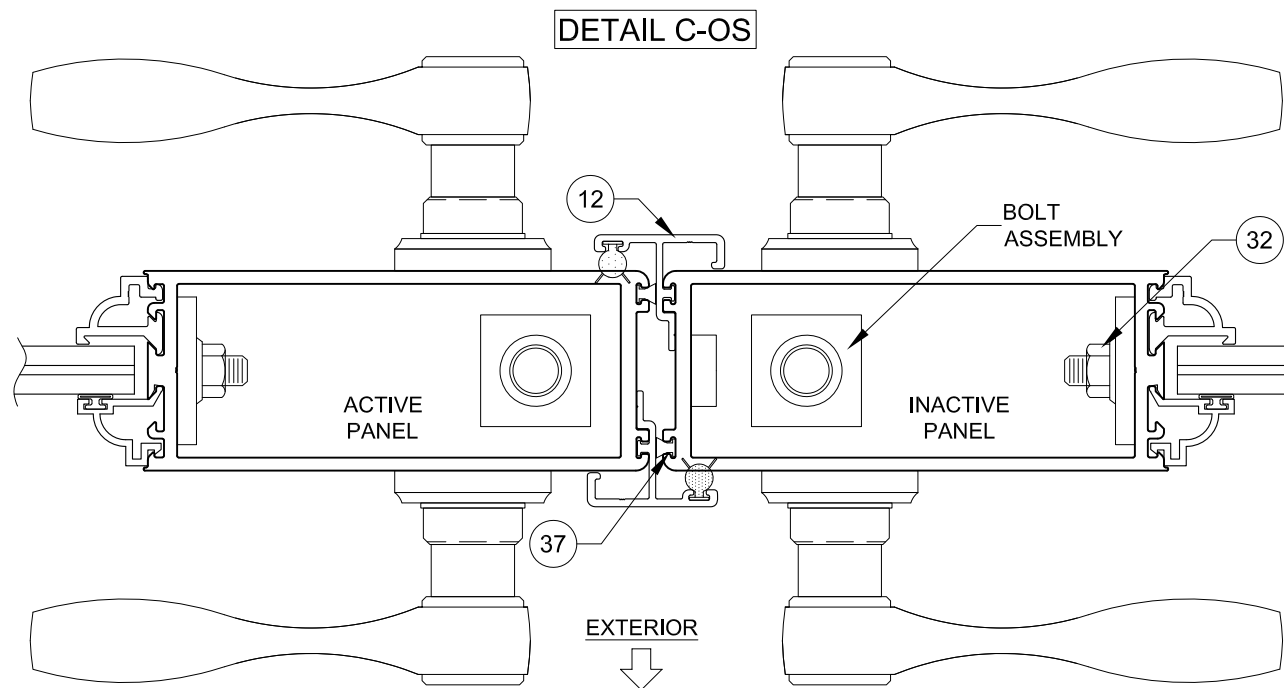
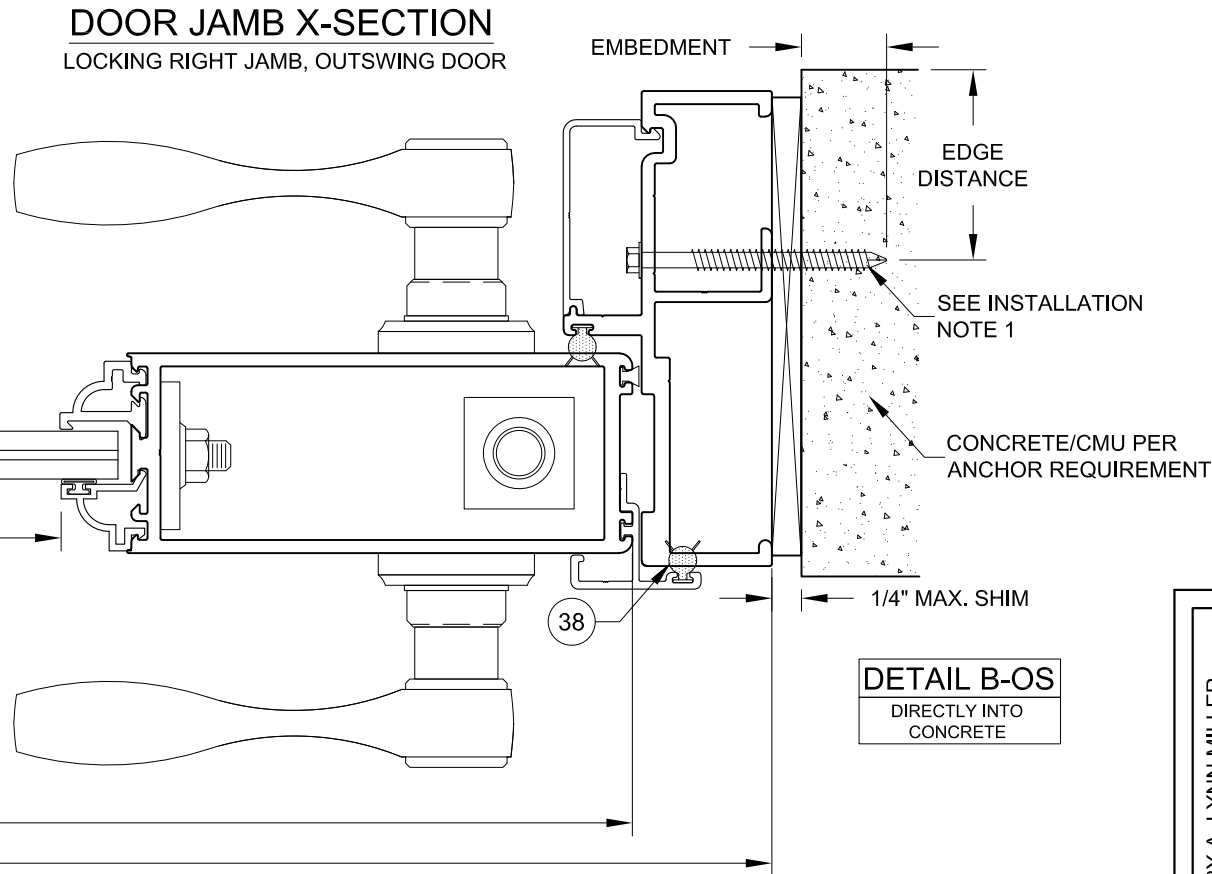
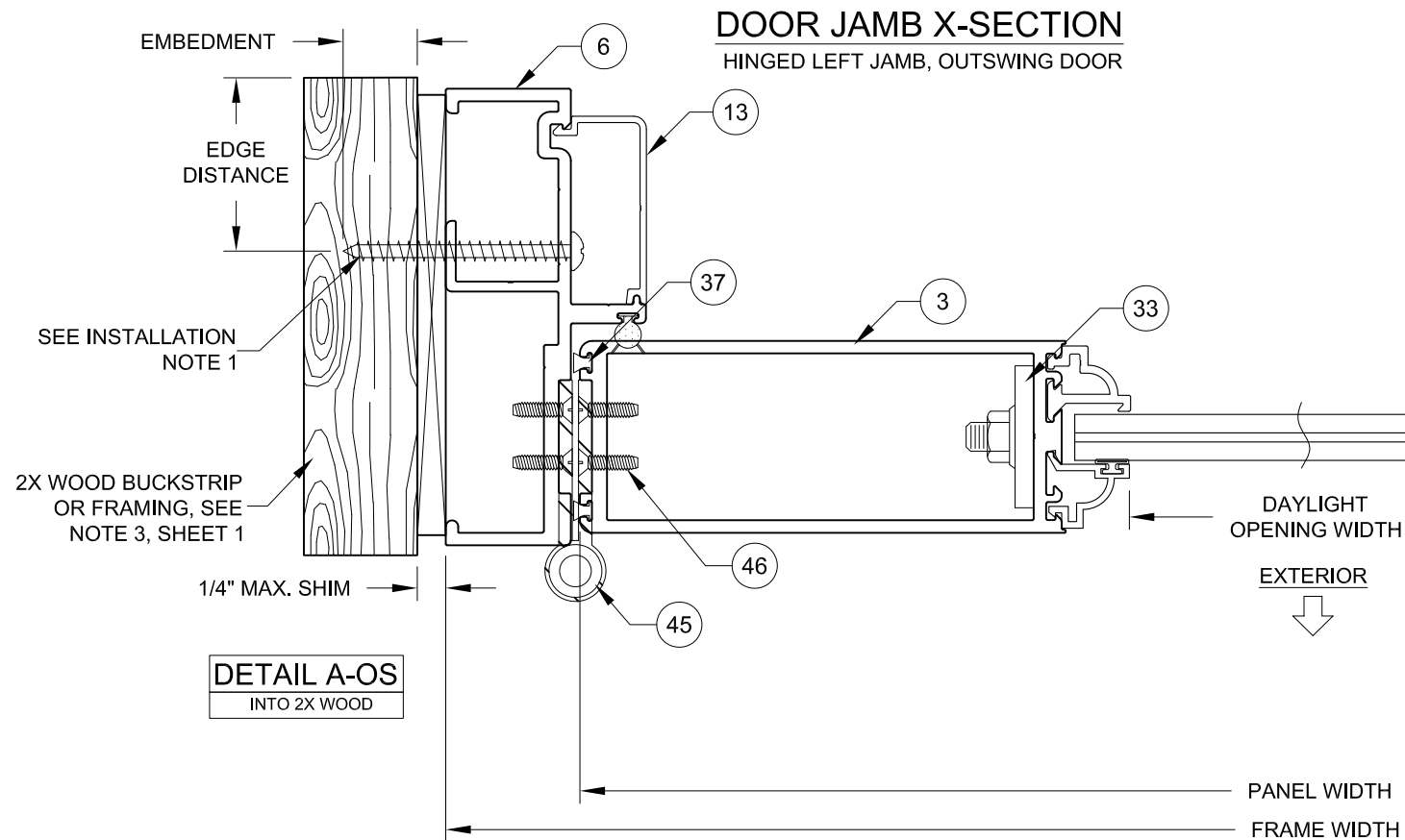
1) EXAMPLE CONFIGURATIONS SHOWN. SIMILAR CONFIGURATIONS
ALLOWED. DOORS MAY BE LEFT OR RIGHT-HANDED.

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	TESTED ANCHOR LOCATIONS		JENS ROSOWSKI	
FD450A	7 OF 21	No. D/M	450FPA-LM-1	
Series	Desc.	Title	By	Date



Rev.	Date	02/22/24	D
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OUTSWING DETAILS



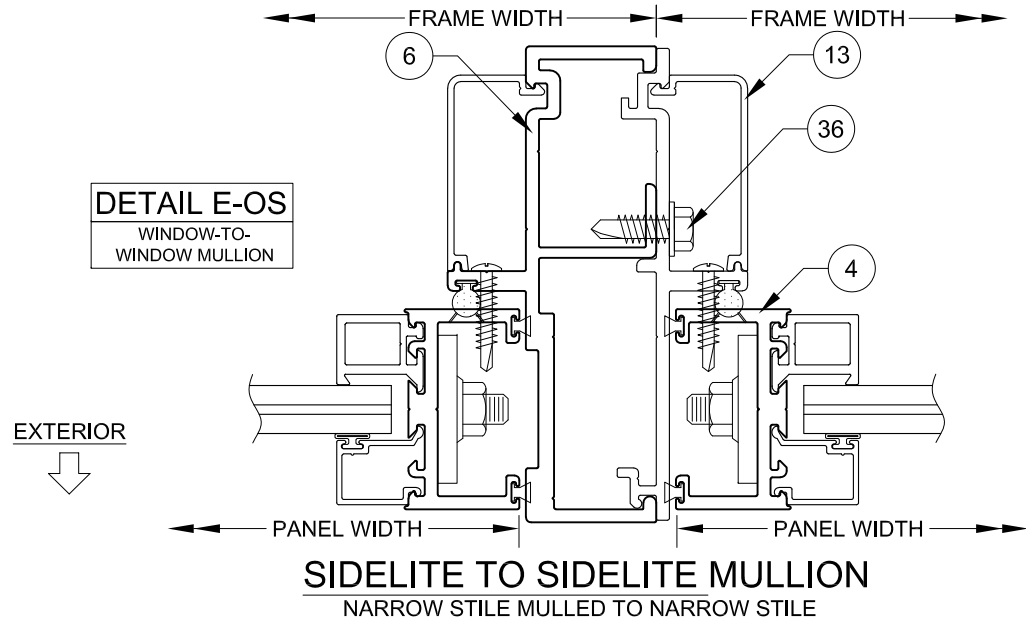
SEE INSTALLATION NOTES, SHEET 11.

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WINDOOR		104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432		ALUMINUM FRENCH DOOR (LM)		X-SECTIONS (OUTSWING)		FD450A	
						8 OF 21		Sheet	
								DWG No.	
								Series Desc.	
								Title	

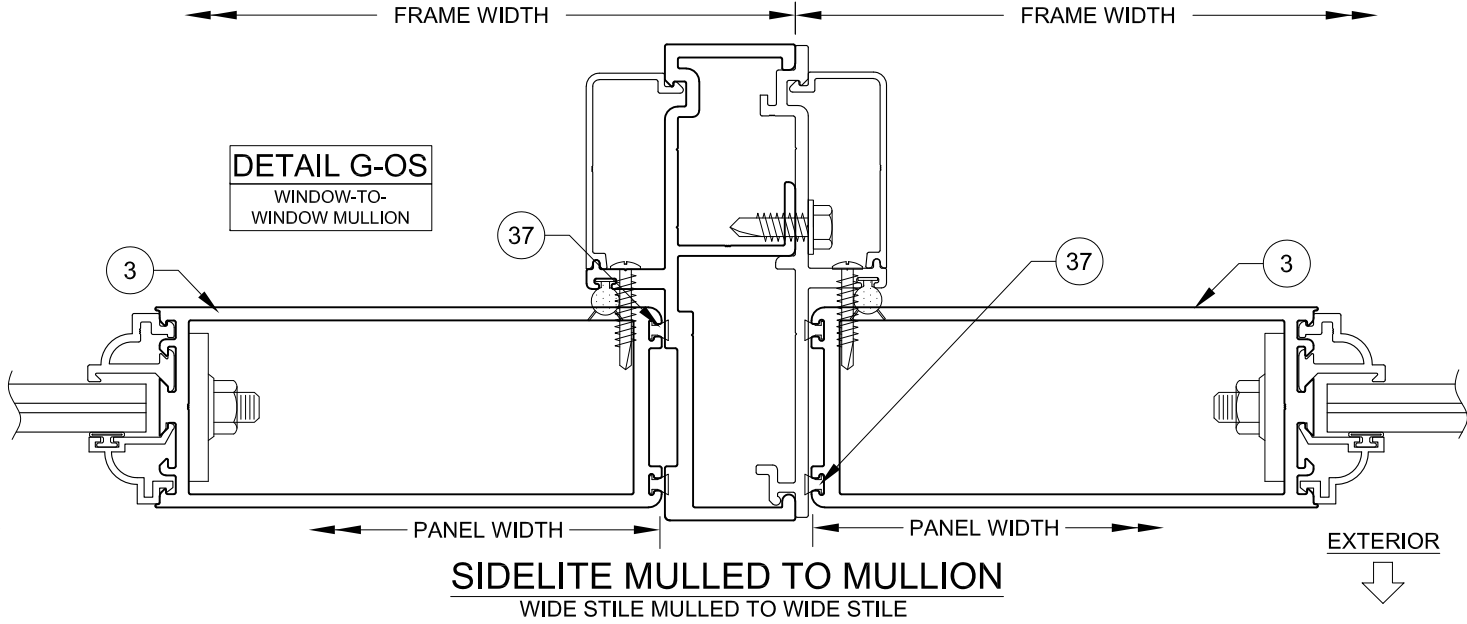
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02/26/24
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 58705

OUTSWING DETAILS

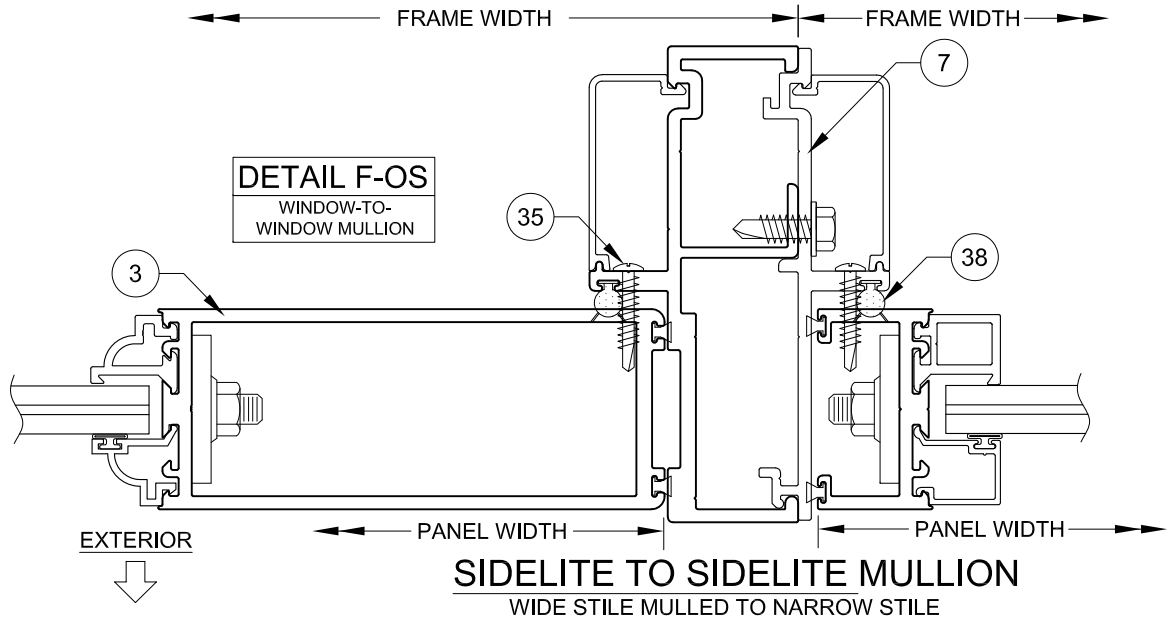
DETAIL E-OS
WINDOW-TO-
WINDOW MULLION



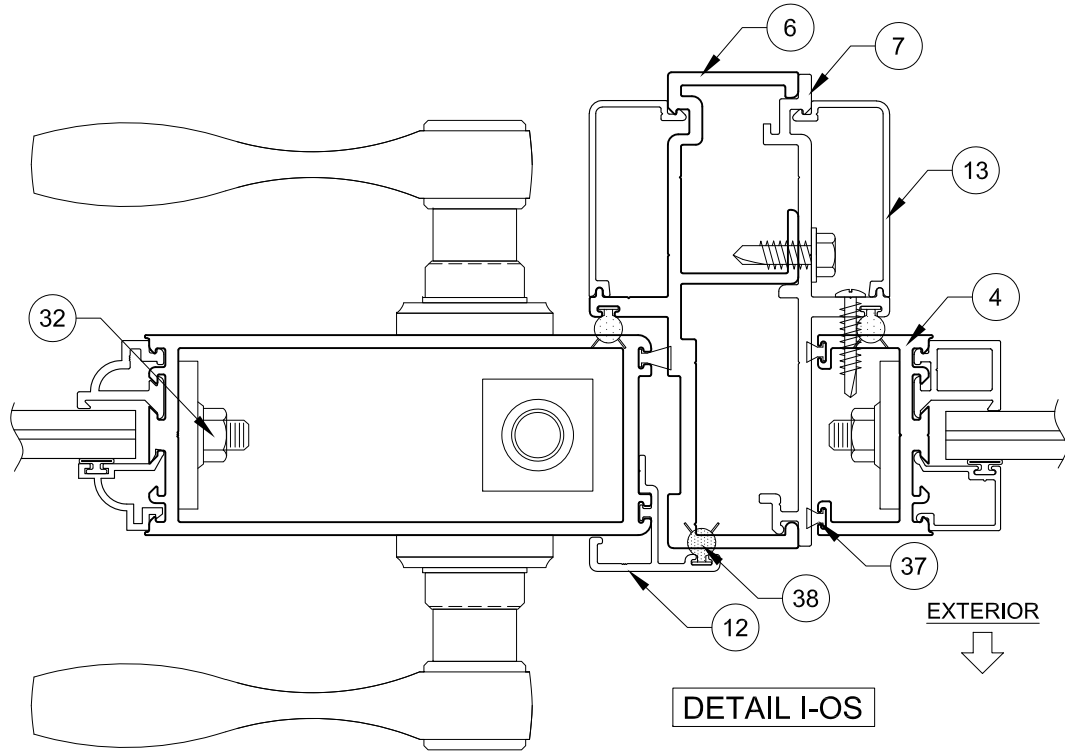
DETAIL G-OS
WINDOW-TO-
WINDOW MULLION



DETAIL F-OS
WINDOW-TO-
WINDOW MULLION

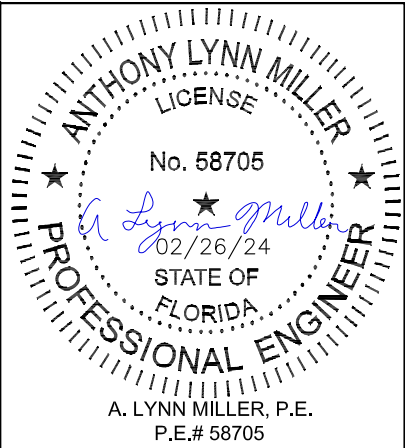


DETAIL I-OS



DOOR TO SIDELITE MULLION
LOCKING RIGHT JAMB TO NARROW STILE
SIDELITE, OUTSWING DOOR

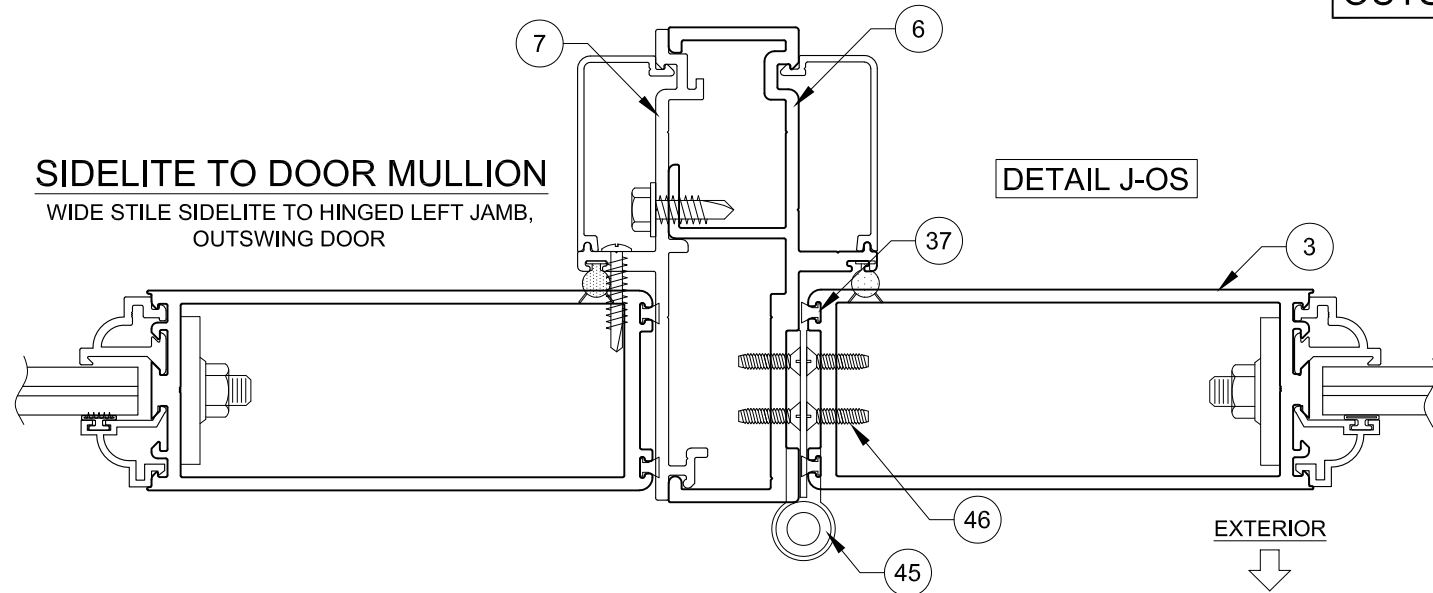
		PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600		
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Title	ALUMINUM FRENCH DOOR (LM)		Date	12/12/22
X-SECTIONS (OUTSWING)		By	JENS ROSOWSKI	
Series	FD450A	Sheet	9 OF 21	DWG No.
		450FPA-LM-1		



Rev.	NO CHANGES THIS SHEET.	Date	02/22/24	Rev.	D
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SIDELITE TO DOOR MULLION

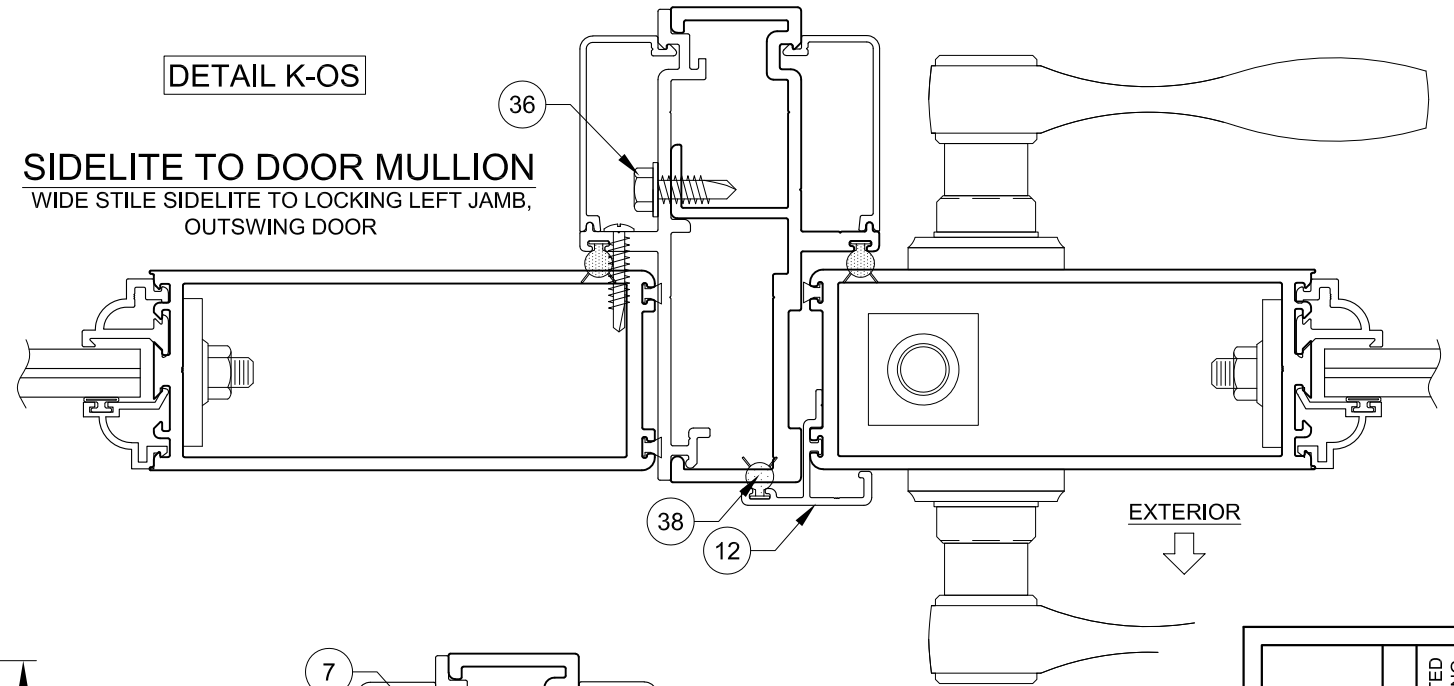
WIDE STILE SIDELITE TO HINGED LEFT JAMB,
OUTSWING DOOR



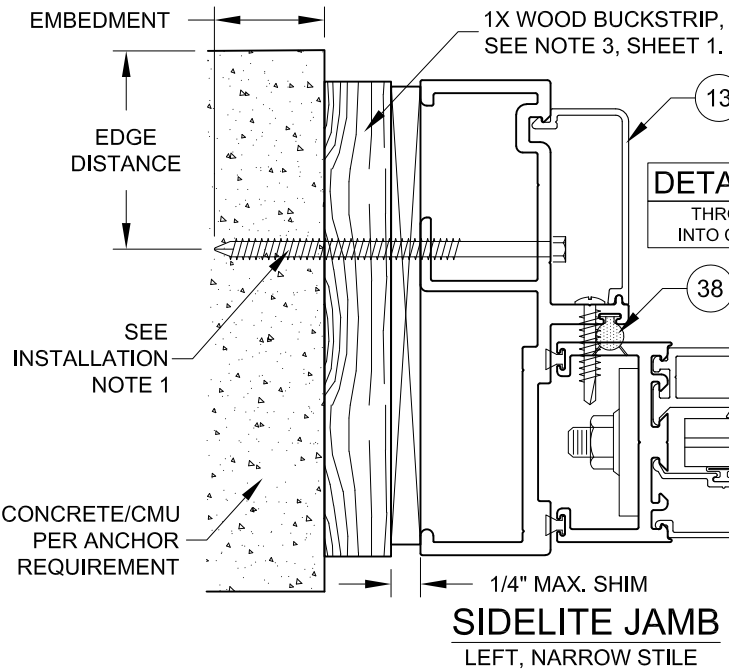
DETAIL J-OS

SIDELITE TO DOOR MULLION

WIDE STILE SIDELITE TO LOCKING LEFT JAMB,
OUTSWING DOOR

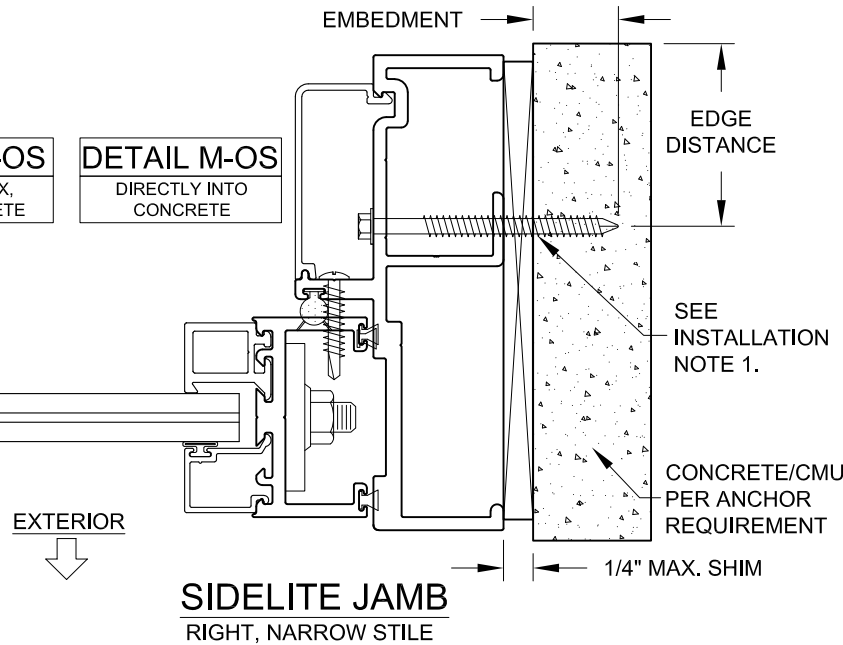


DETAIL K-OS

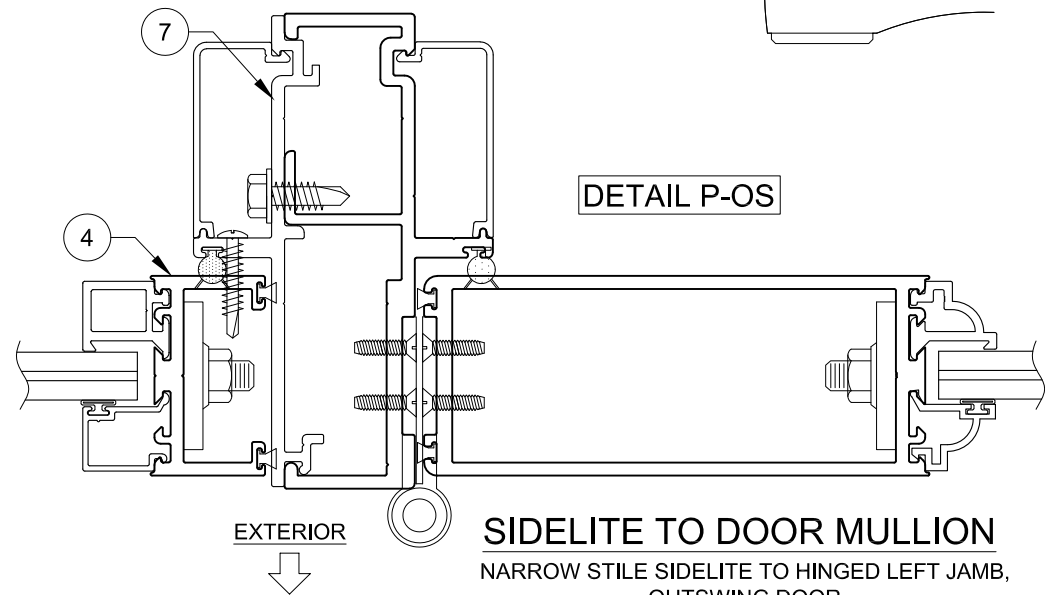


DETAIL L-OS
THROUGH 1X,
INTO CONCRETE

DETAIL M-OS
DIRECTLY INTO
CONCRETE

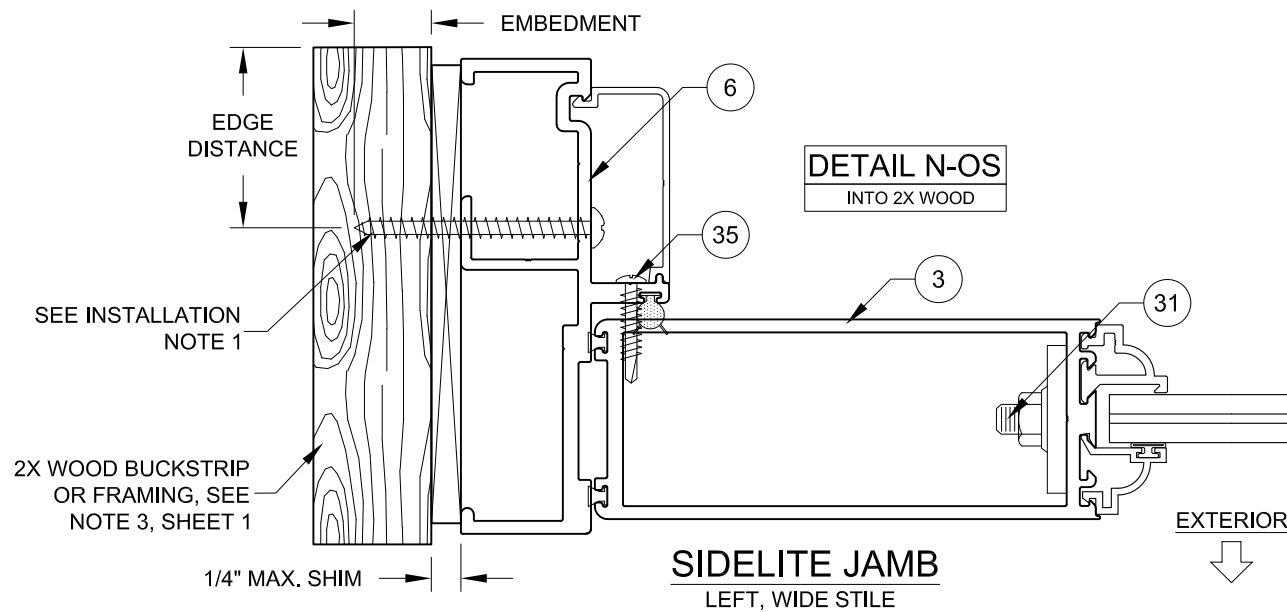


SIDELITE JAMB
RIGHT, NARROW STILE

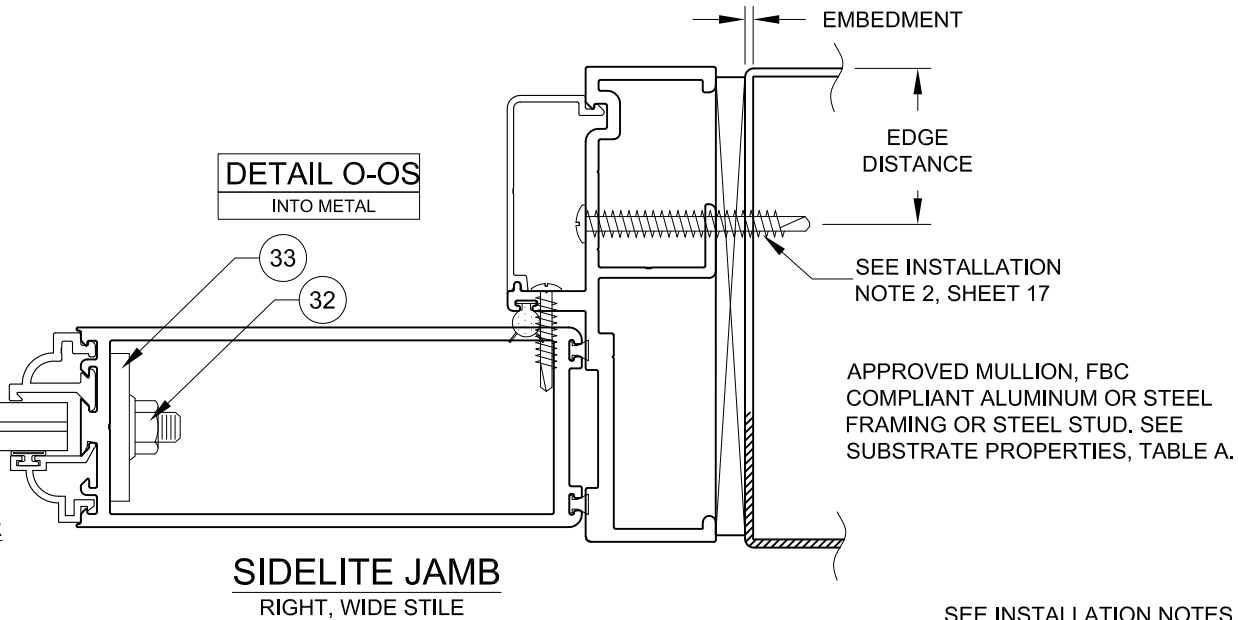


DETAIL P-OS

SIDELITE TO DOOR MULLION
NARROW STILE SIDELITE TO HINGED LEFT JAMB,
OUTSWING DOOR



SIDELITE JAMB
LEFT, WIDE STILE



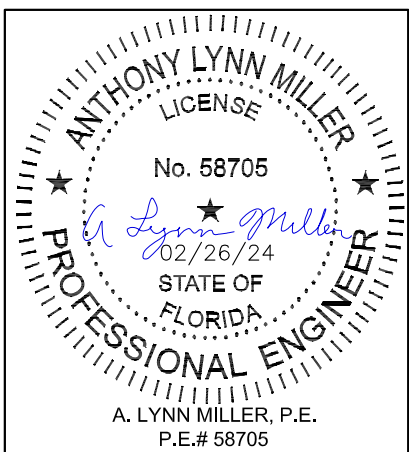
DETAIL O-OS
INTO METAL

DETAIL N-OS
INTO 2X WOOD

SIDELITE JAMB
RIGHT, WIDE STILE

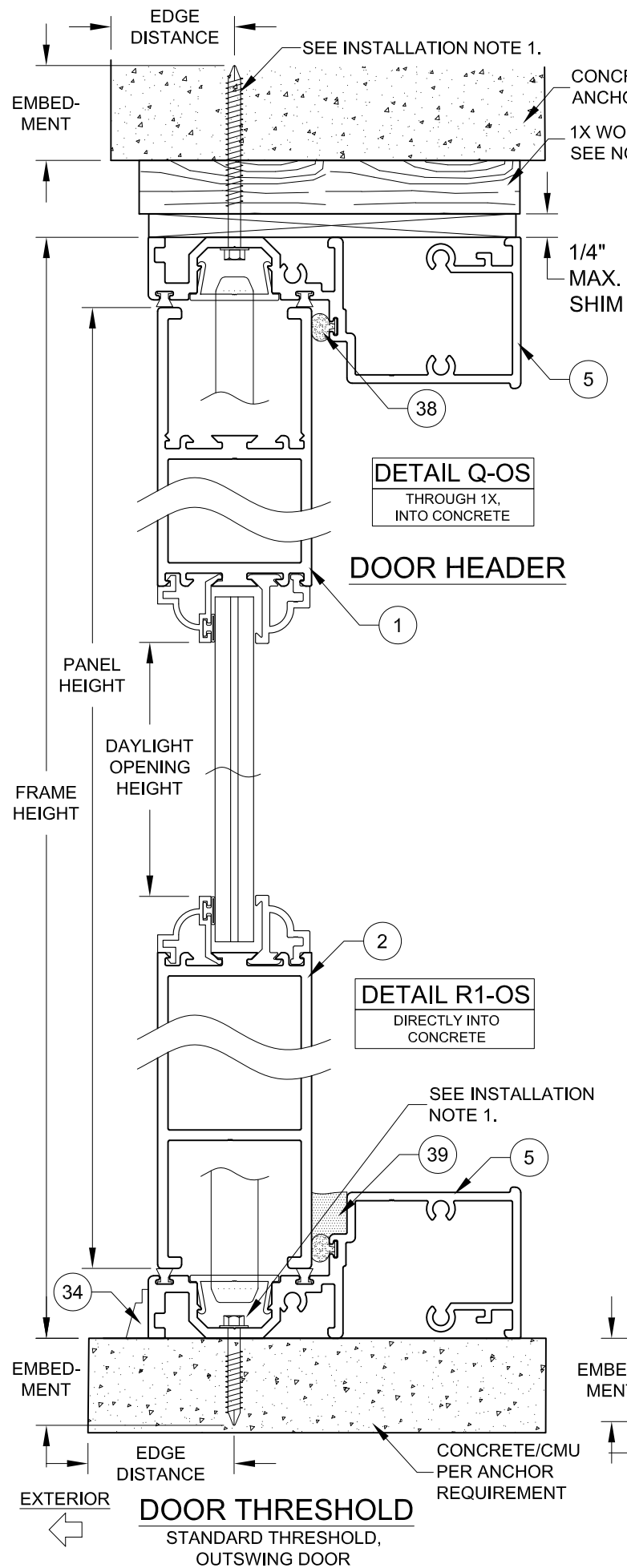
SEE INSTALLATION NOTES, SHEET 11.

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	104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432		ALUMINUM FRENCH DOOR (LM)		JENS ROSOWSKI	
	X-SECTIONS (OUTSWING)		10 OF 21		450FPA-LM-1	
	FD450A		Sheet		NO CHANGES THIS SHEET.	



Rev. #	02/22/24	D
Date		
NO CHANGES THIS SHEET.		

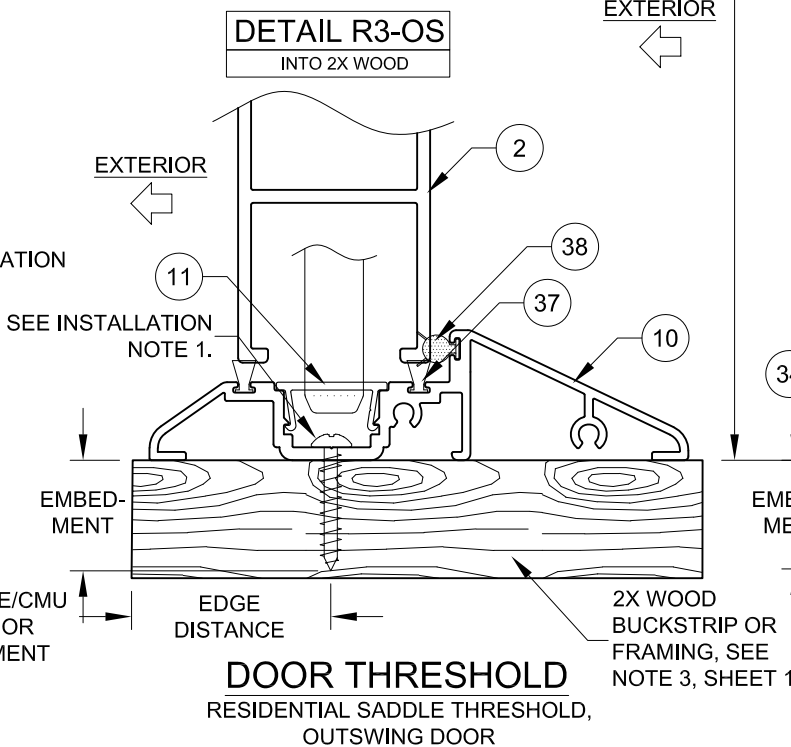
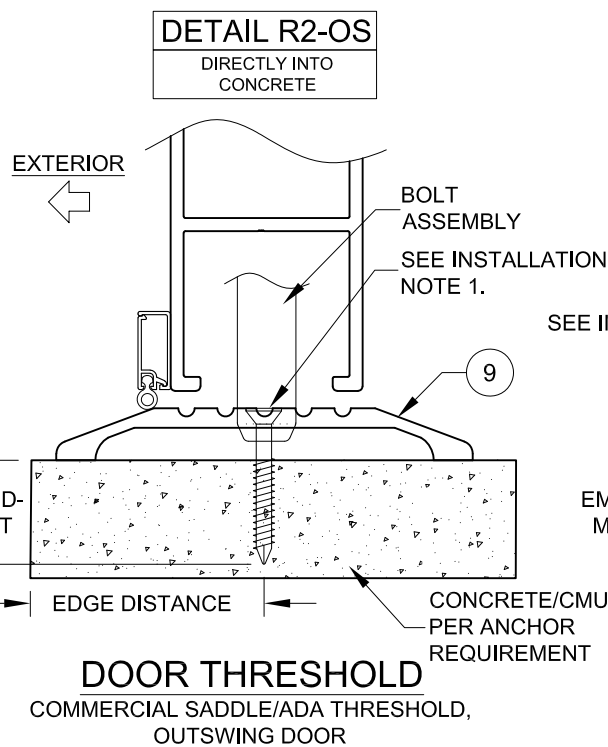
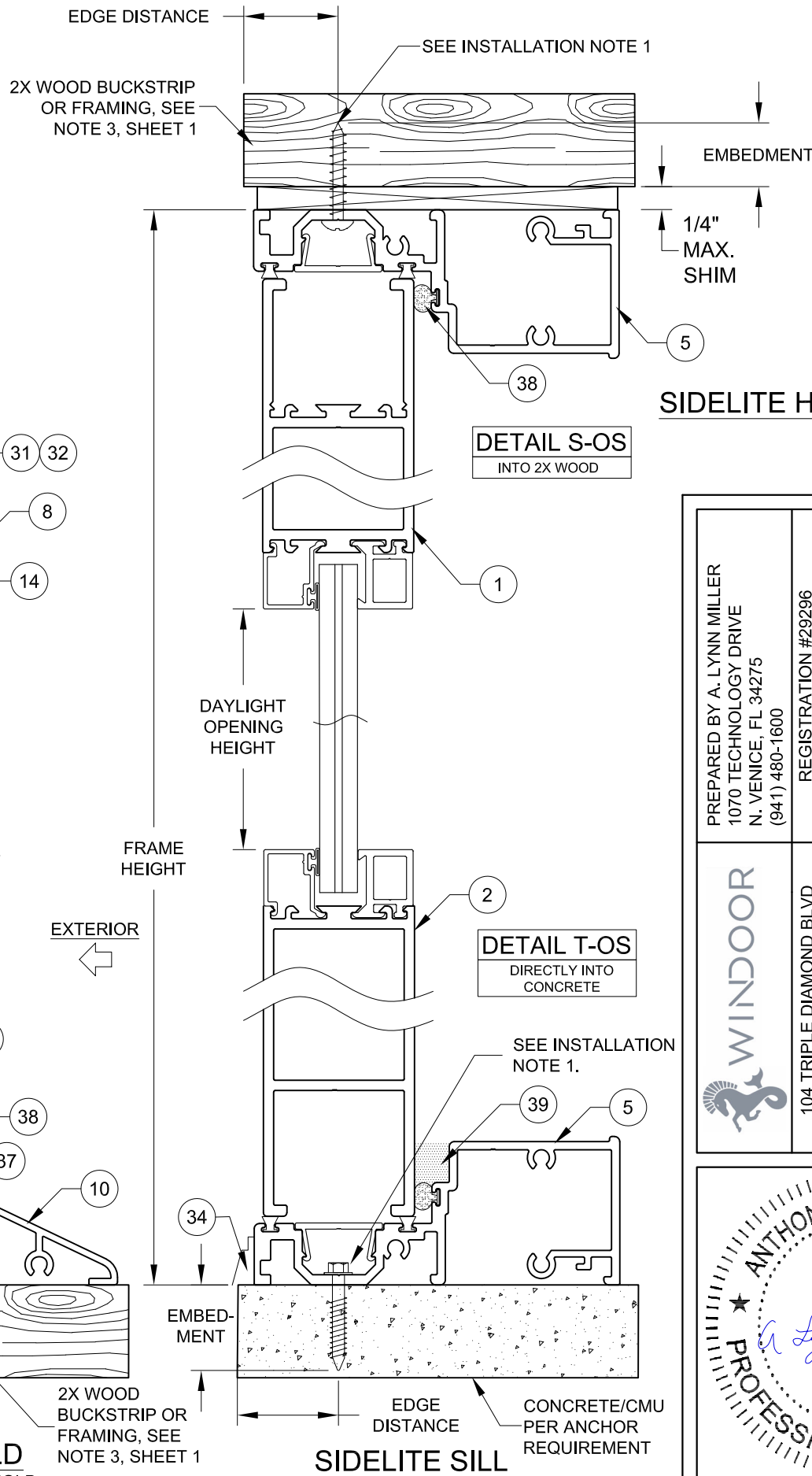
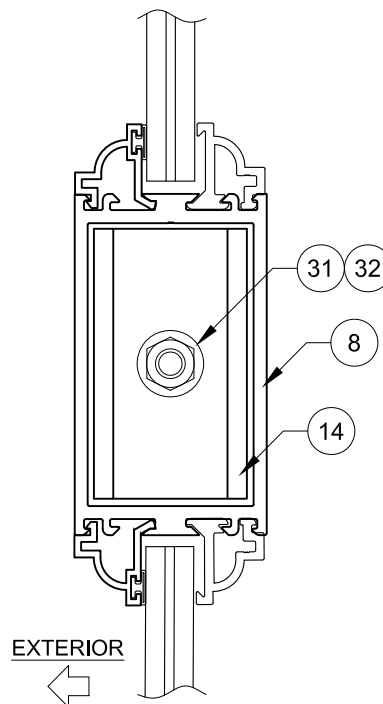
OUTSWING DETAILS



INSTALLATION NOTES:

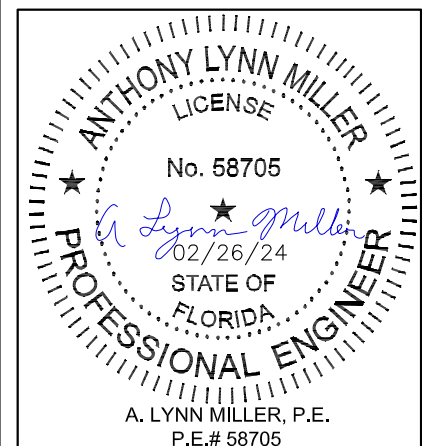
- 1) USE ONLY SUBSTRATE-APPROPRIATE ANCHORS LISTED ON TABLE A. FOLLOW EMBEDMENT AND EDGE DISTANCE LIMITS. ANY INSTALLATION OPTION SHOWN MAY BE USED ON ANY SIDE OF THE DOOR OR SIDELITE.
- 2) SEE SHEET 6 FOR ANCHOR LOCATIONS & SPACING, FOR ANCHOR QUANTITIES, SEE TABLES 3 & 5.
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- 4) IF SILL IS TIGHT TO SUBSTRATE, GROUT OR OTHER MATERIAL IS NOT REQUIRED. IF USED, NON-SHRINK, NON-METALLIC GROUT, MAX. 1/4" THICK & 3400 PSI MIN., (DONE BY OTHERS) MUST FULLY SUPPORT THE ENTIRE LENGTH OF THE SILL THAT IS NOT TIGHT TO THE SUBSTRATE, AND TRANSFER SHEAR LOAD TO SUBSTRATE. IF SUBSTRATE IS WOOD, 30# FELT PAPER OR MASTIC IS REQUIRED BETWEEN THE GROUT AND WOOD SUBSTRATE, OR AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.
- 5) BEADING AND GLASS TYPE SHOWN IN DETAILS MAY VARY FROM ACTUAL. SEE GLAZING DETAILS SHEET FOR FURTHER OPTIONS.

DETAIL U-OS



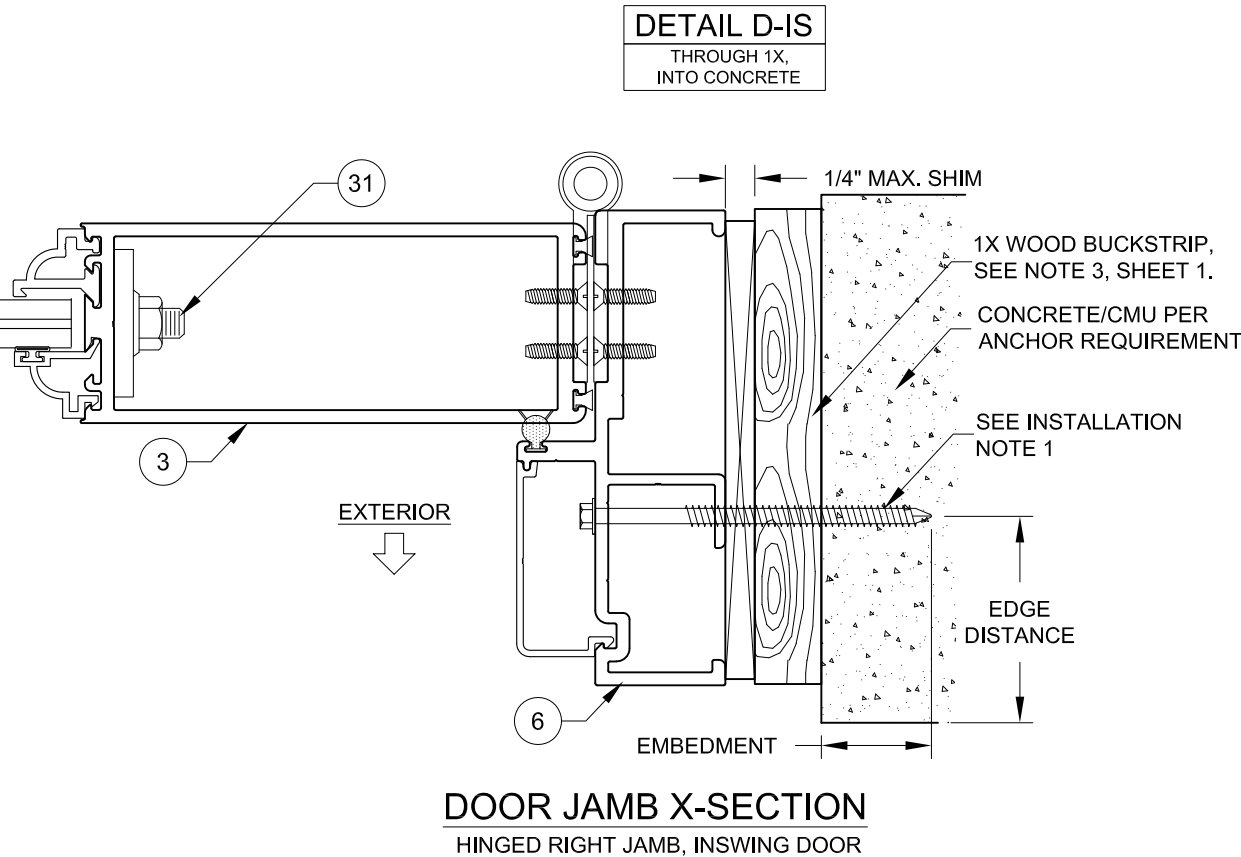
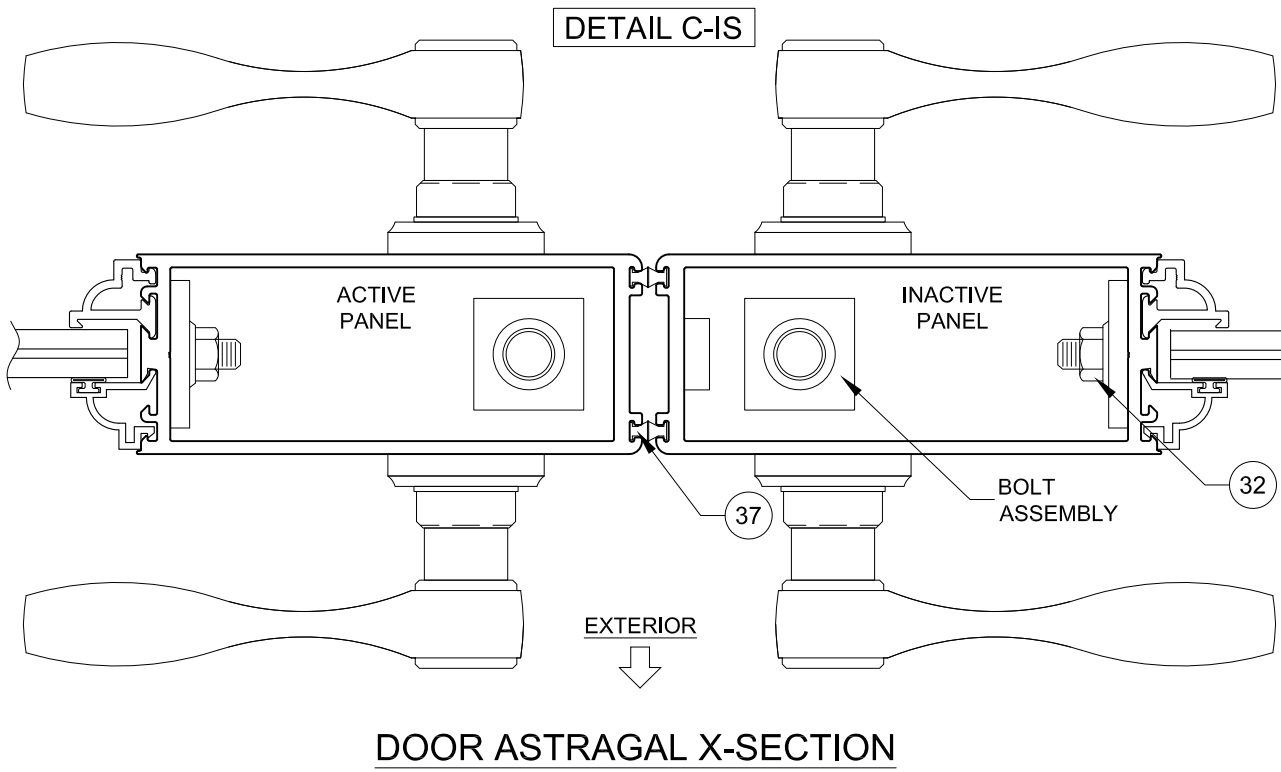
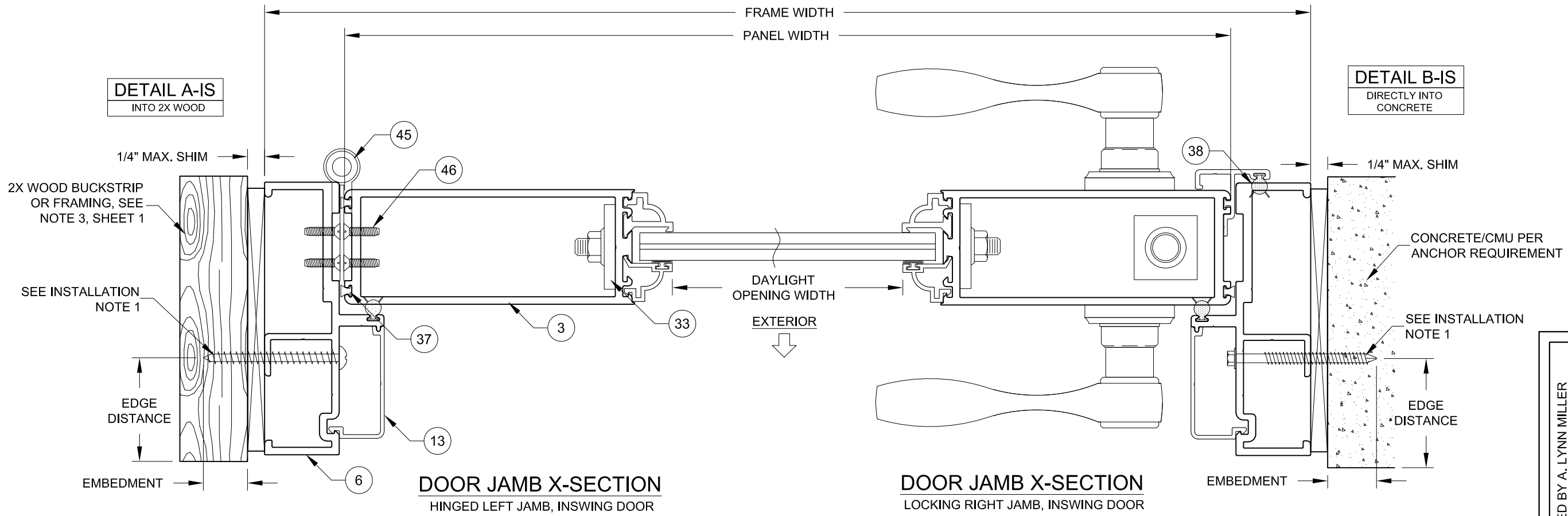
SIDELITE HEADER

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	104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432		ALUMINUM FRENCH DOOR (LM)		X-SECTIONS (OUTSWING)		11 OF 21		FD450A	



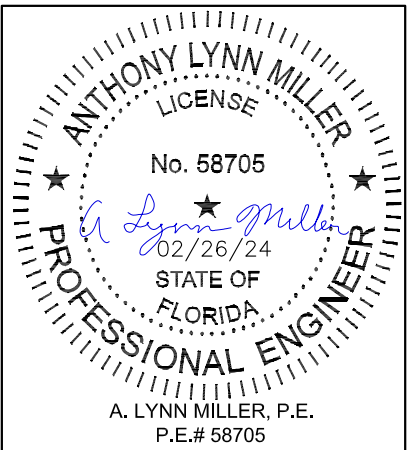
Rev. #	02/22/24
Date	
CORRECTED SIDELITE PROFILES	

INSWING DETAILS



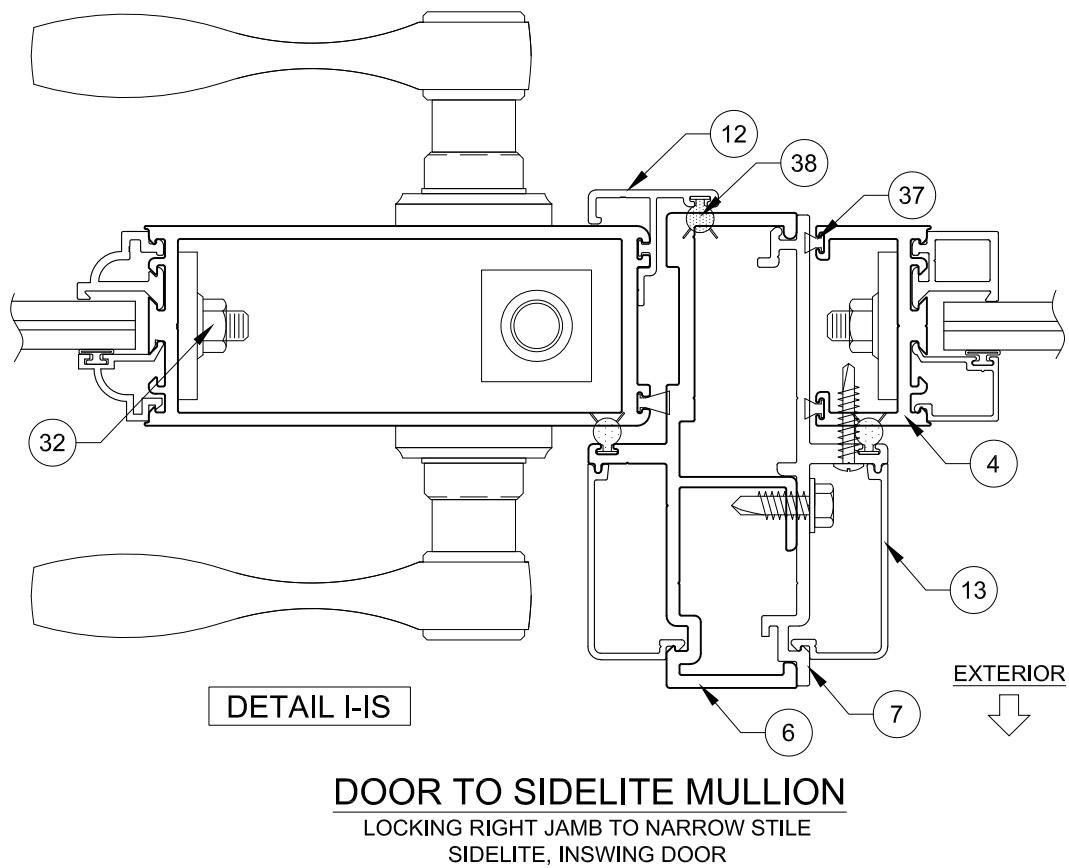
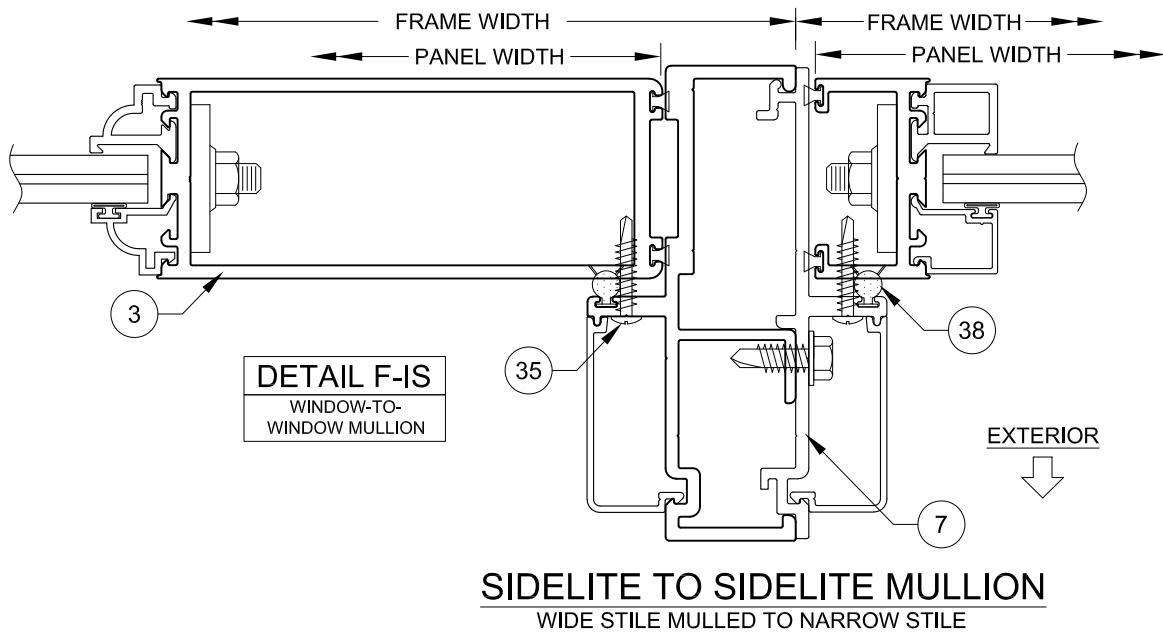
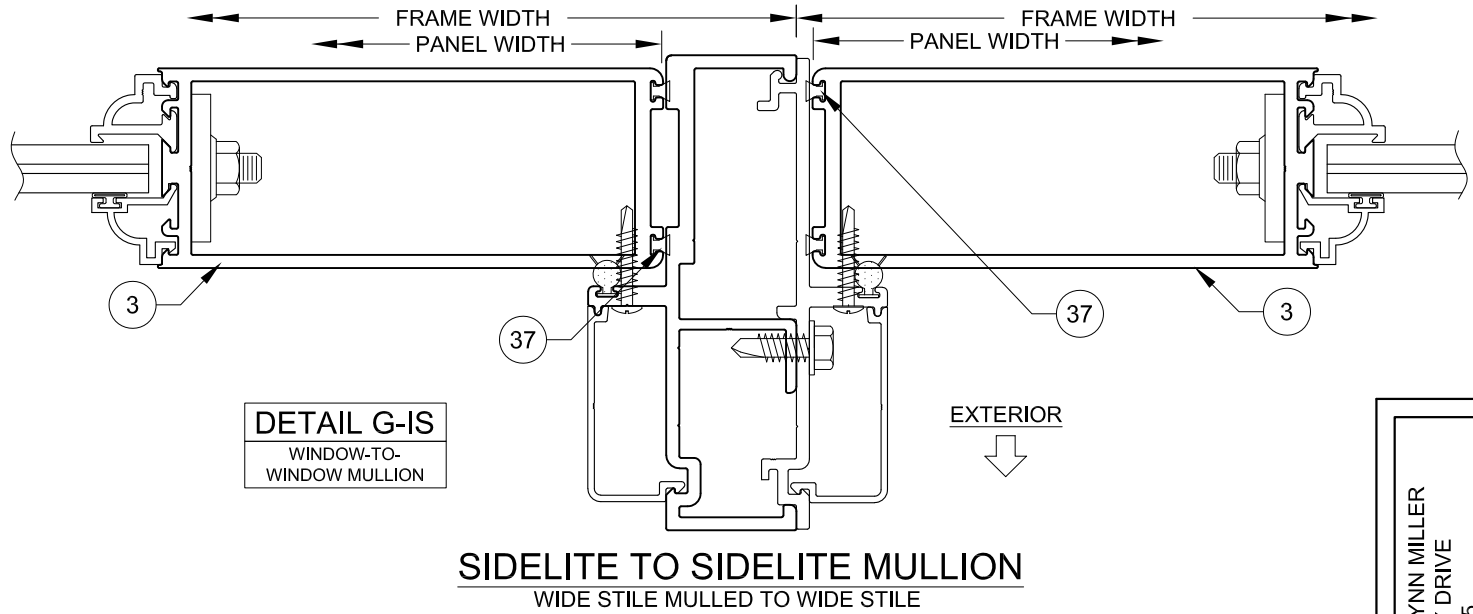
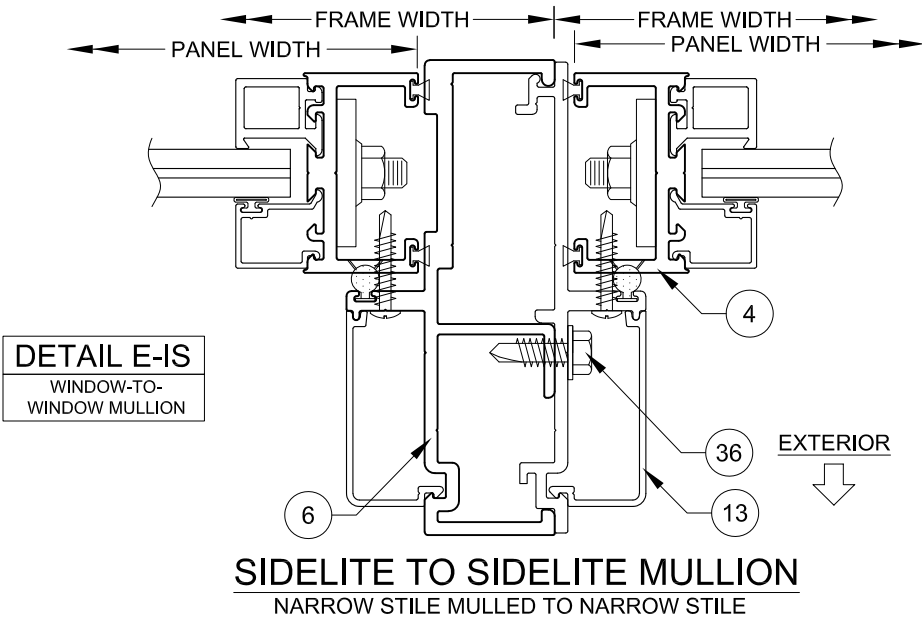
SEE INSTALLATION NOTES, SHEET 15.

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	104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432		ALUMINUM FRENCH DOOR (LM)		12 OF 21
	X-SECTIONS (INSWING)		FD450A		Sheet
	Series		Desc.		Title



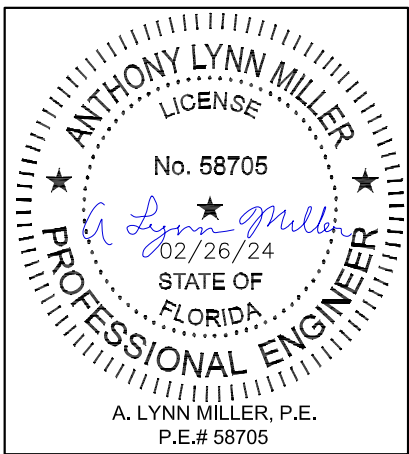
ANTHONY LYNN MILLER
LICENSE
No. 58705
02/26/24
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 58705

INSWING DETAILS

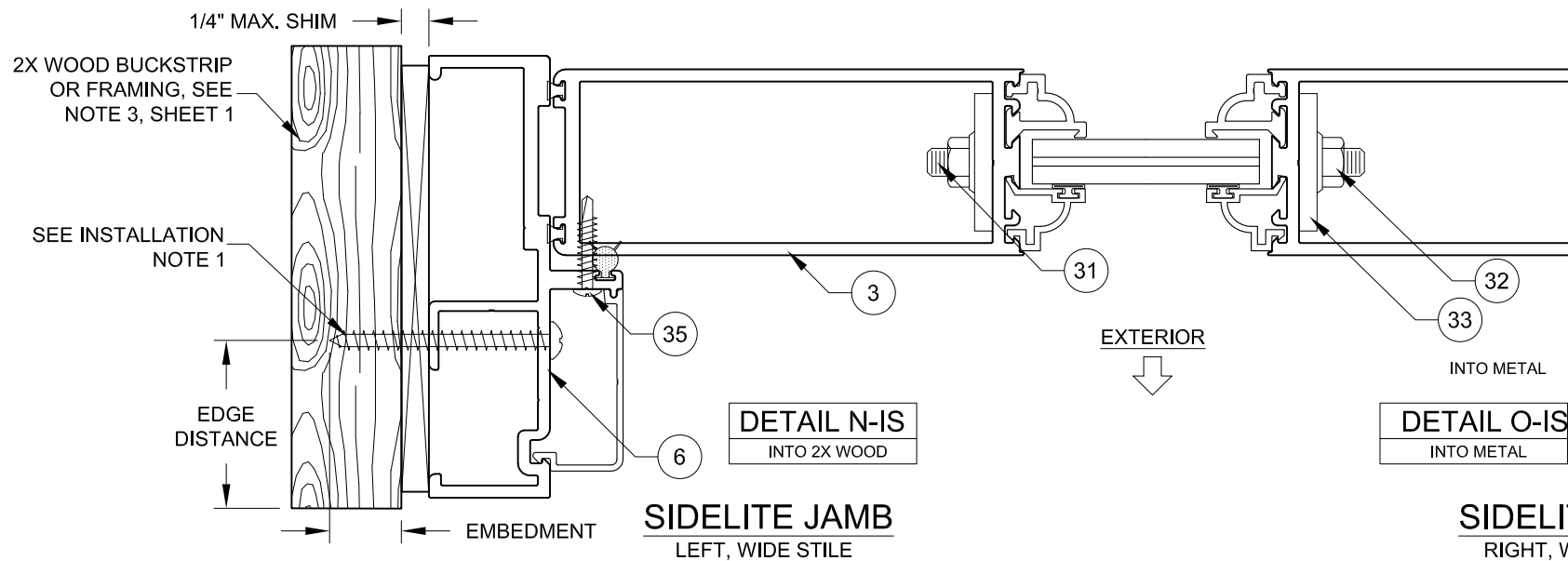
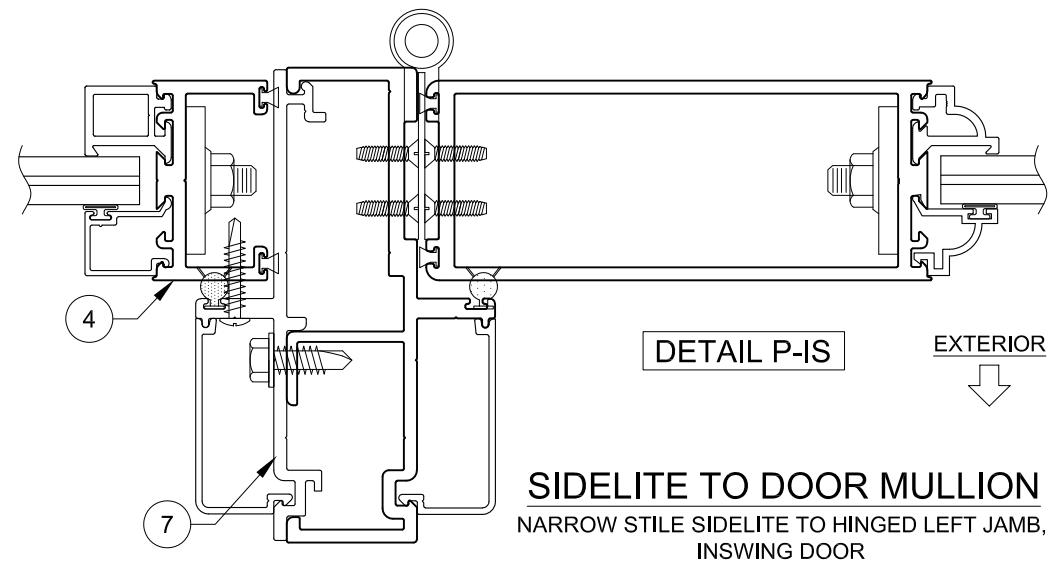
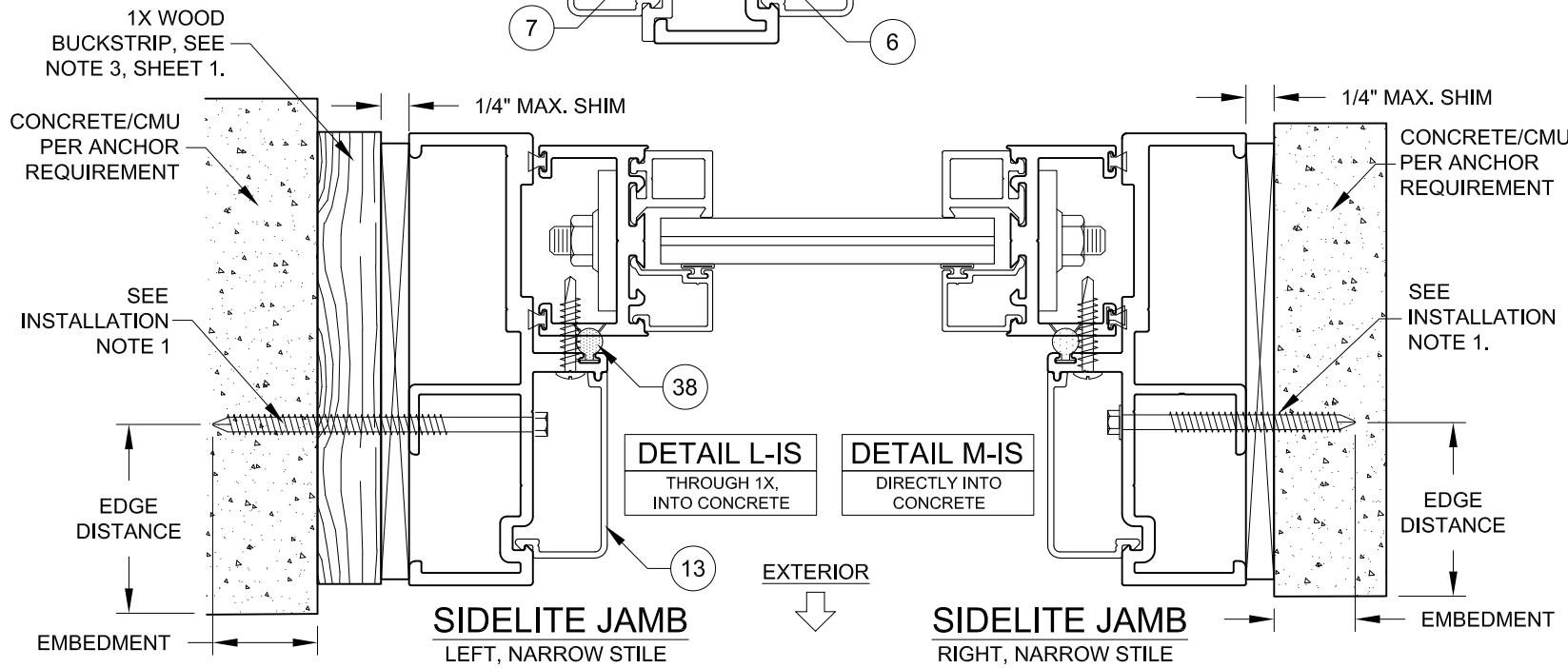
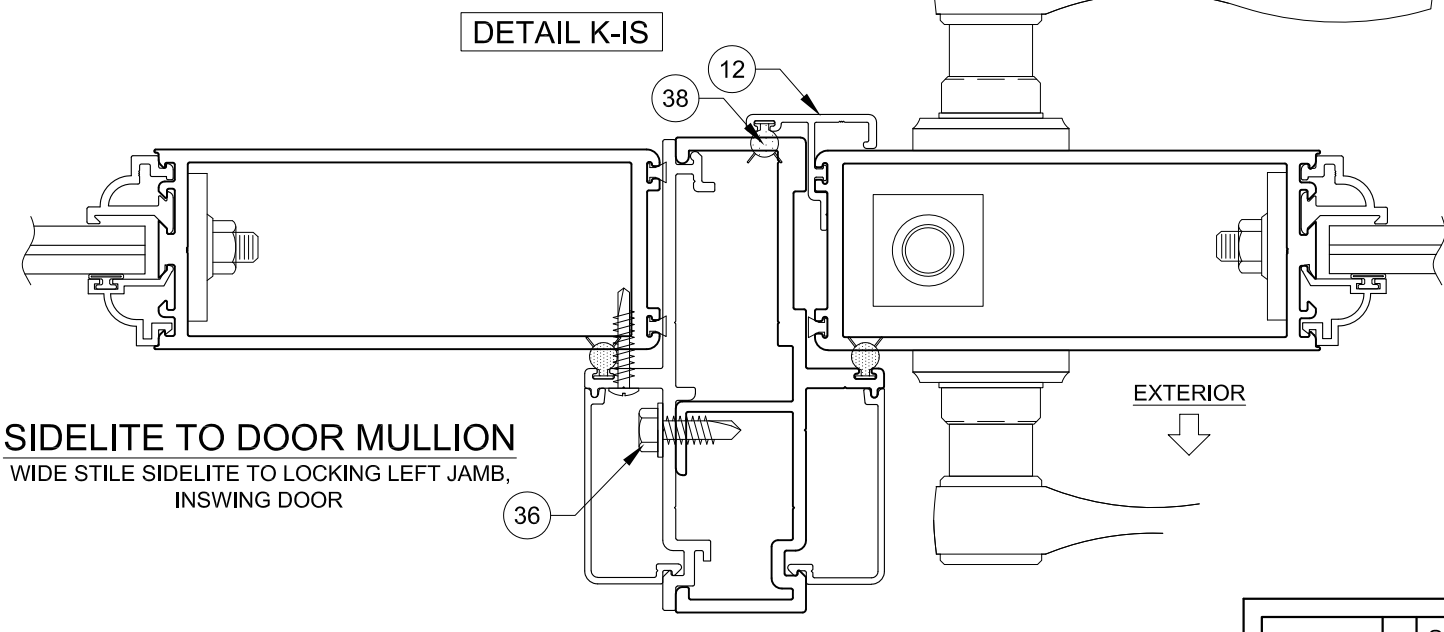
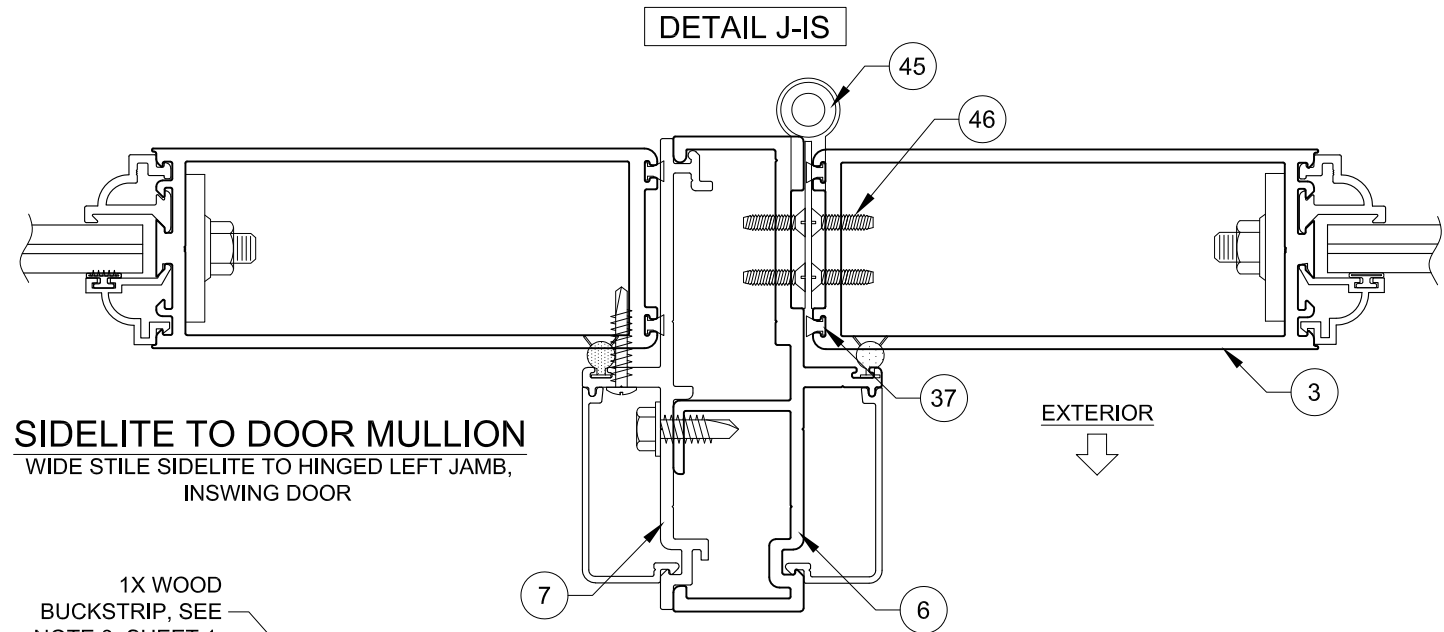


Rev. #	Date	Rev.
D	02/22/24	NO CHANGES THIS SHEET.

 WINDOOR	104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432			PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600		
	ALUMINUM FRENCH DOOR (LM)			REGISTRATION #29296		12/12/22
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Series	FD450A	Sheet	13 OF 21	DWG No.	JENS ROSOWSKI	Date
Desc.	X-SECTIONS (INSWING)			Drawn By		



INSWING DETAILS

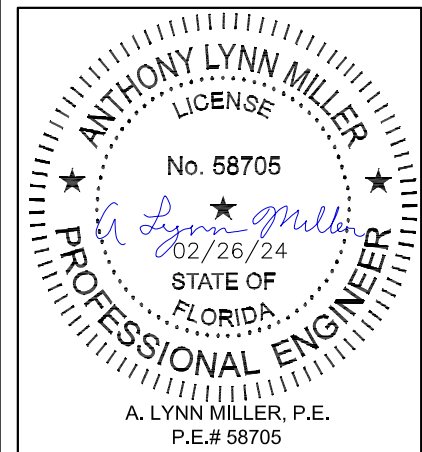


APPROVED MULLION, FBC
COMPLIANT ALUMINUM OR STEEL
FRAMING OR STEEL STUD. SEE
SUBSTRATE PROPERTIES, TABLE A.

SEE INSTALLATION
NOTE 2, SHEET 17

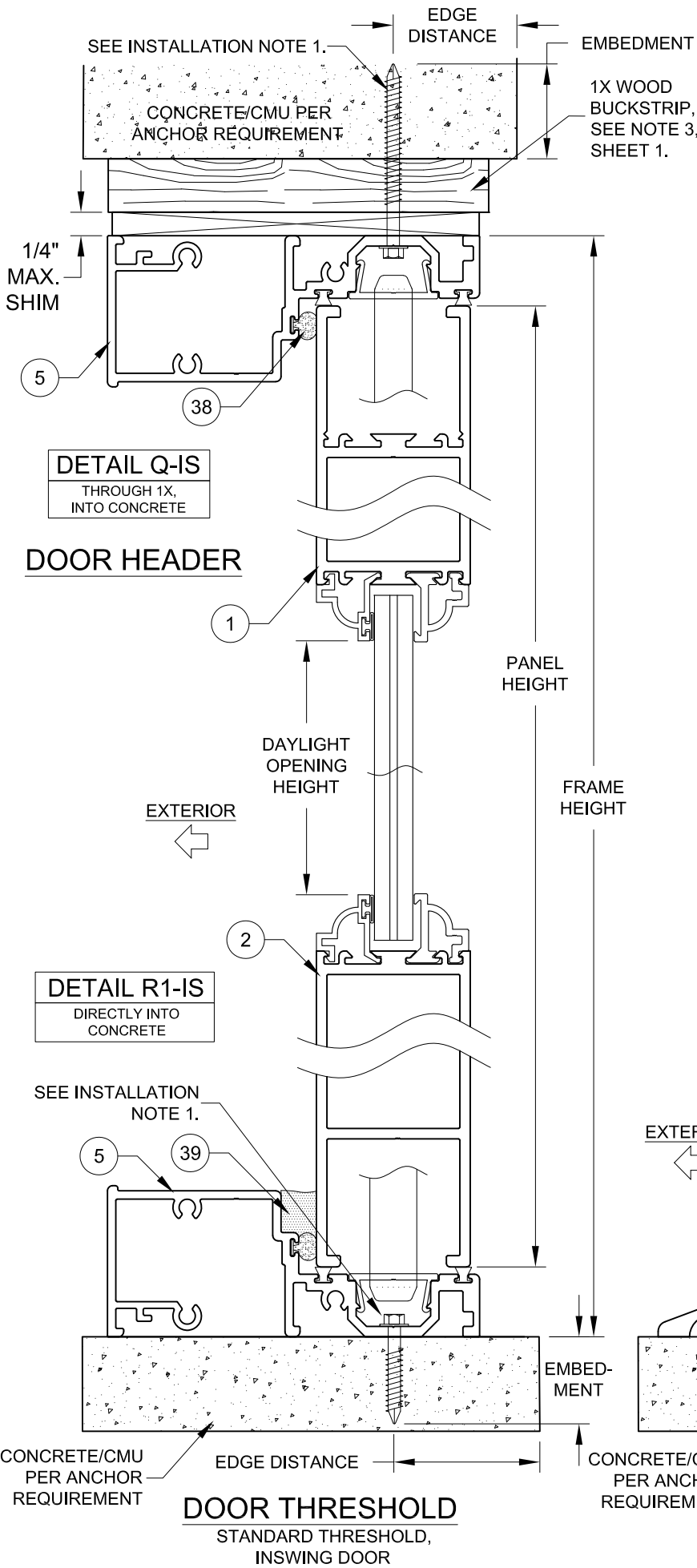
SEE INSTALLATION NOTES, SHEET 15.

 WINDOOR		104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432		PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600			
FD450A		14 OF 21		JENS ROSOWSKI		12/12/22	
						Date	
X-SECTIONS (INSWING)		ALUMINUM FRENCH DOOR (LM)		REGISTRATION #29296		COPYRIGHT © 2024 WINDOOR, INC., LIMITED LICENSE TO MAKE COPIES FOR PERMITTING.	
Sheet		DWG No.		Drawn By			
Series		Desc.		Title			



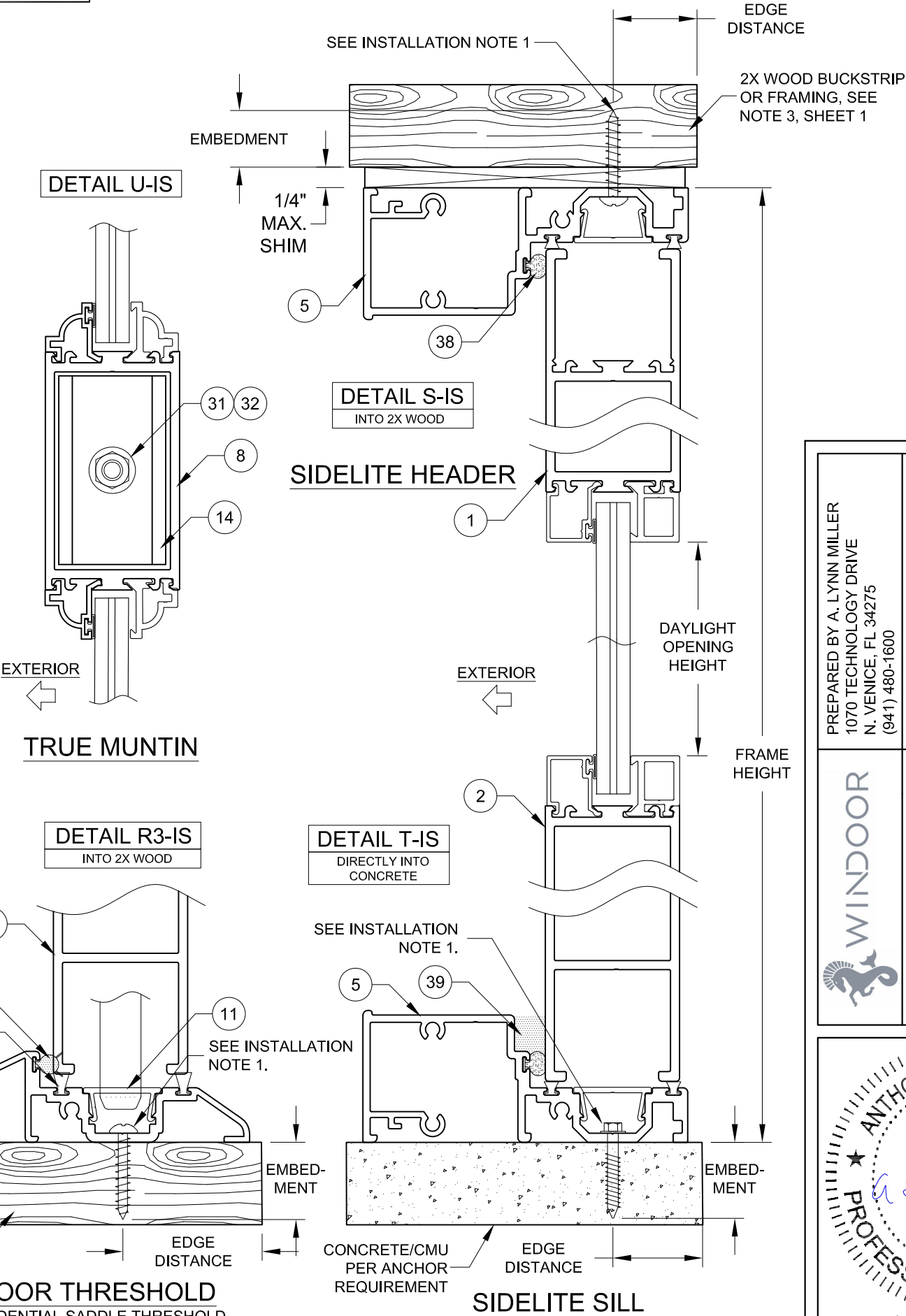
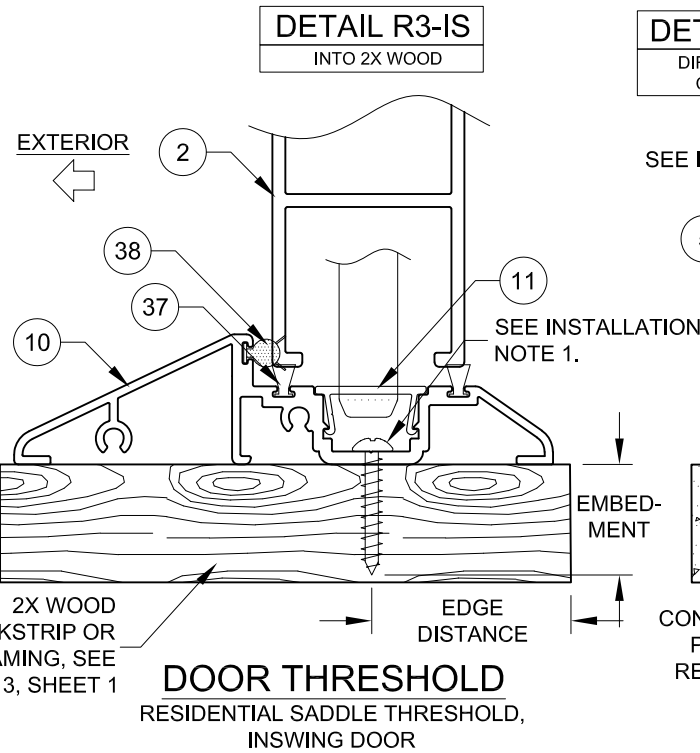
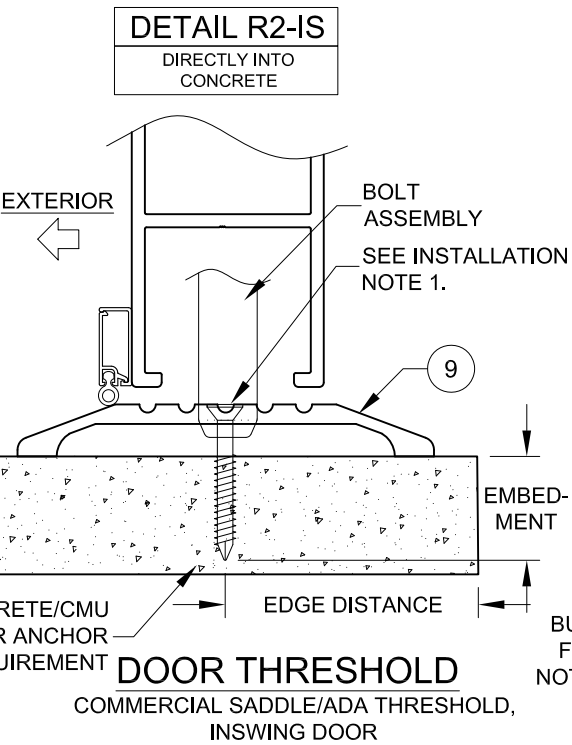
Rev.	02/22/24	D
Date	02/22/24	
NO CHANGES THIS SHEET.		

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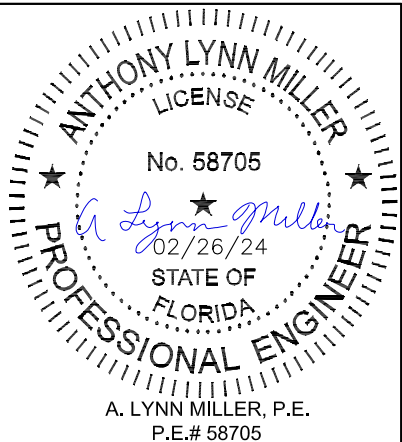


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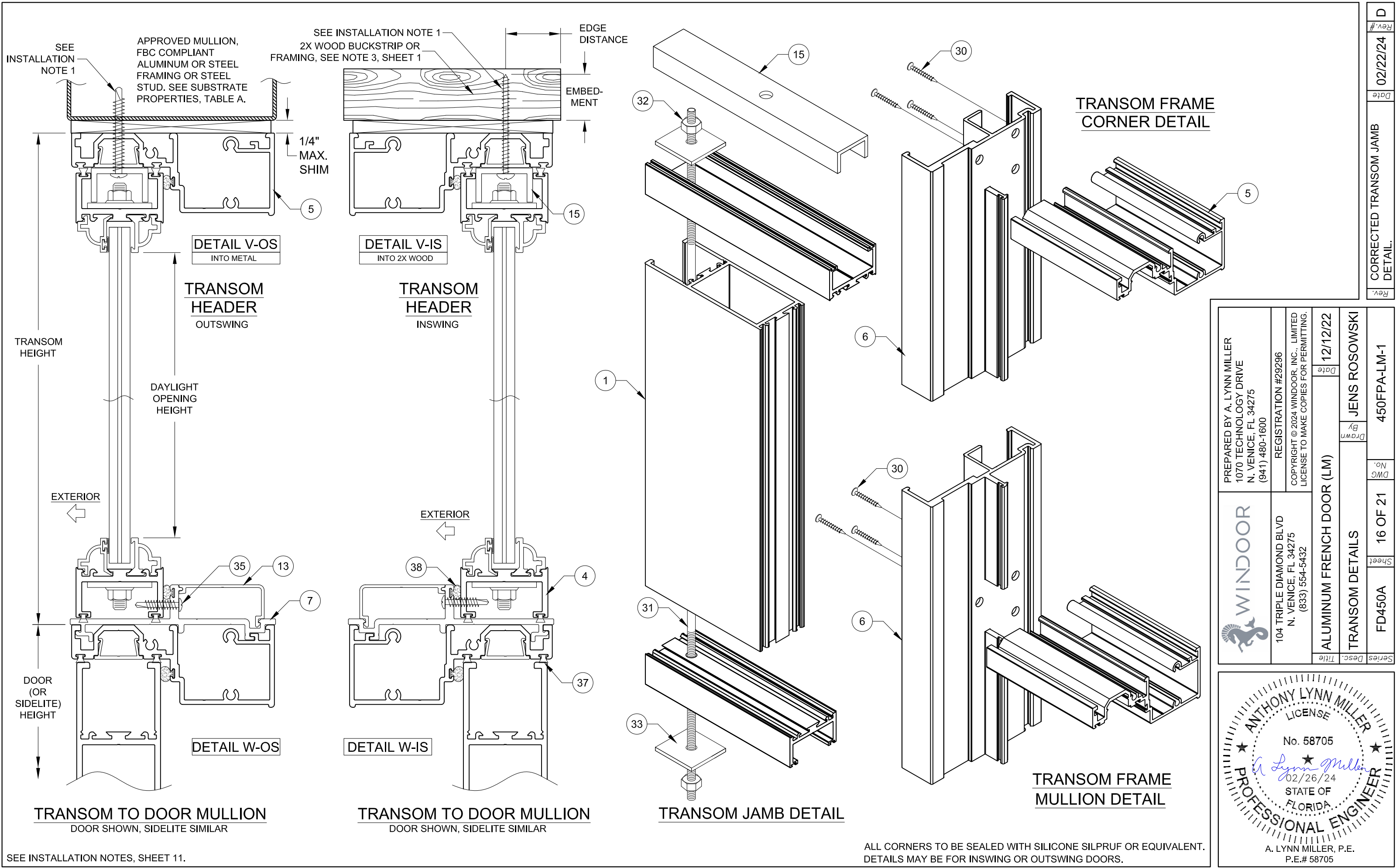
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		104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432		ALUMINUM FRENCH DOOR (LM)		Date					
Series		FD450A		15 OF 21		DWG No.		JENS ROSOWSKI		450FPA-LM-1	
Sheet								Drawn By			
Desc.		X-SECTIONS (INSWING)									
Title											

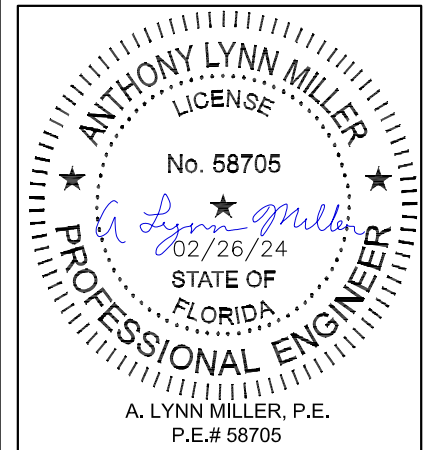


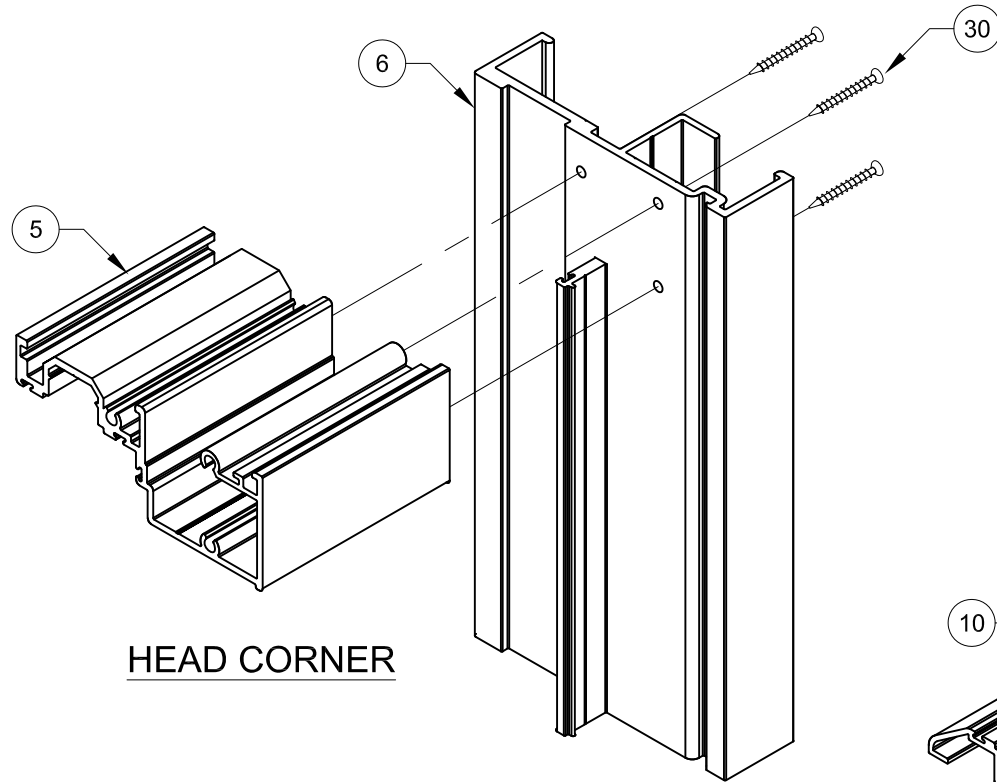
Rev.	02/22/24	D
Date		
CORRECTED SIDELITE PROFILES		



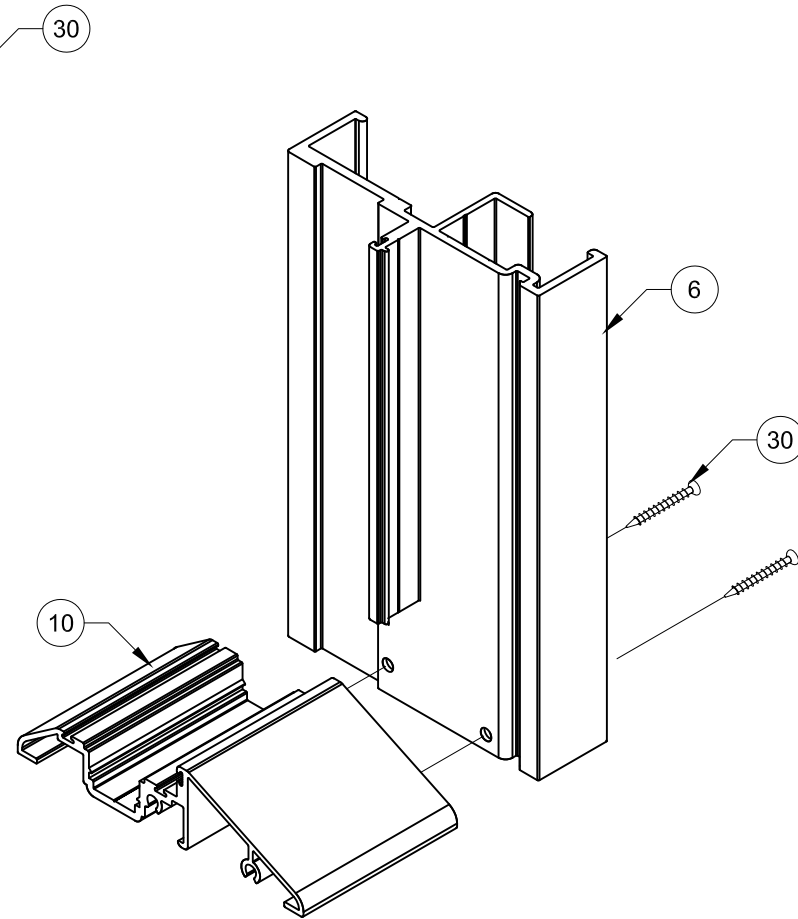
SEE INSTALLATION NOTES, SHEET 11.

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	104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432		ALUMINUM FRENCH DOOR (LM)		TRANSOM DETAILS		FD450A		16 OF 21	

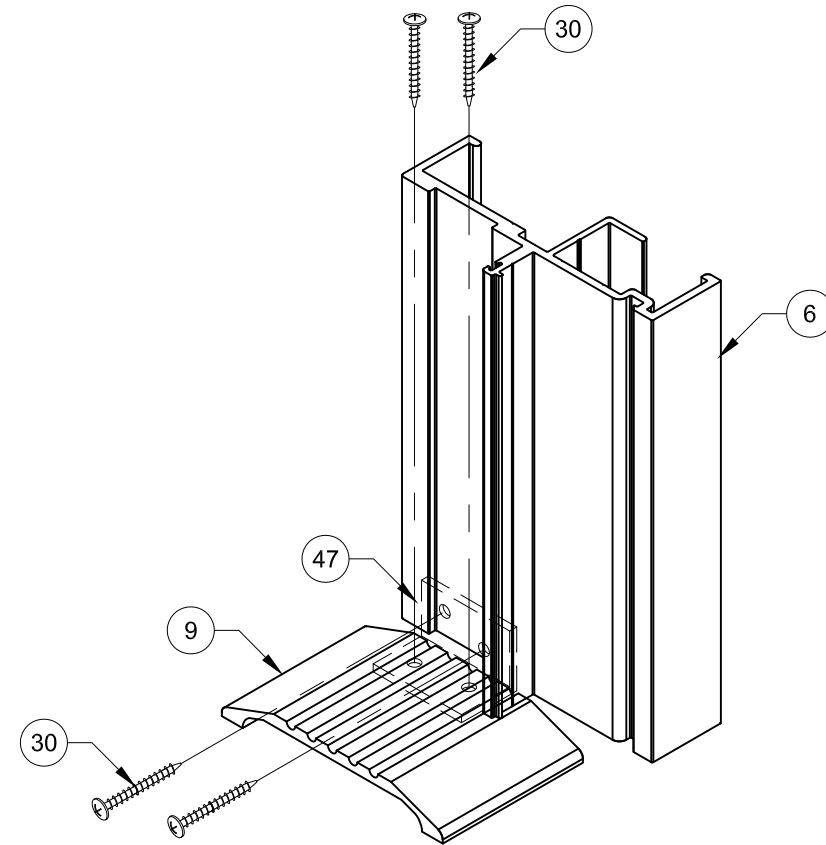




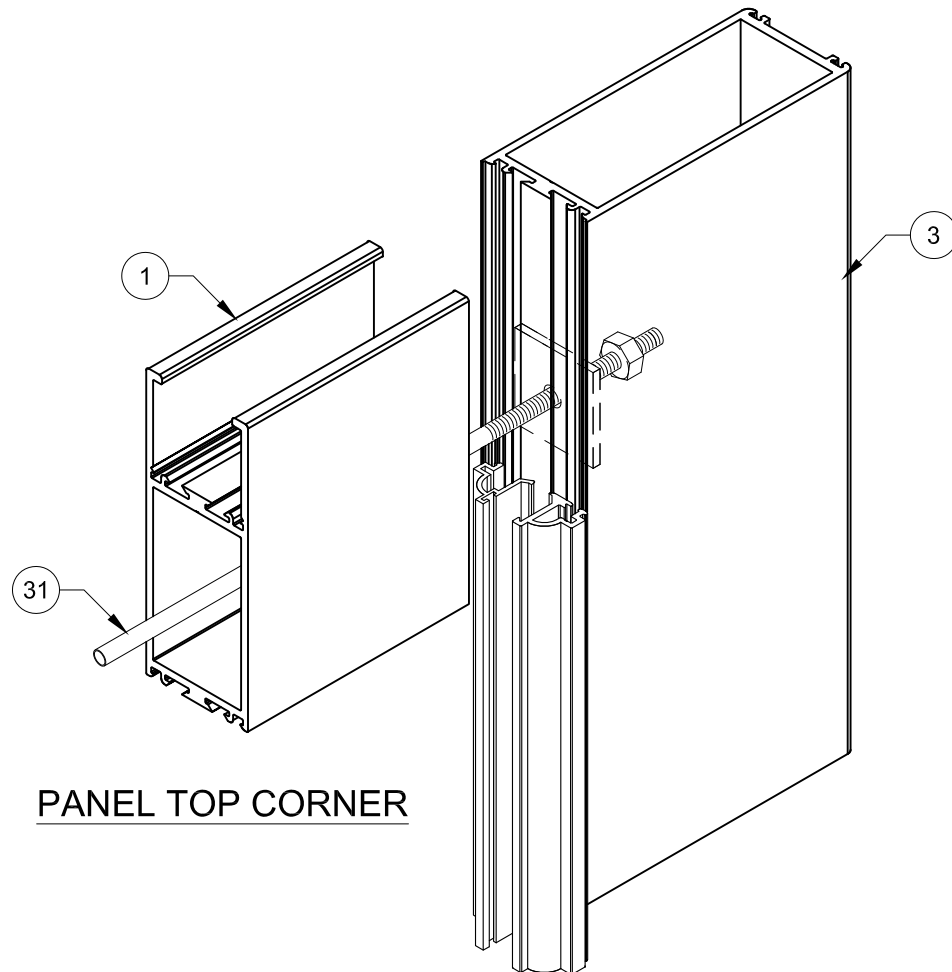
HEAD CORNER



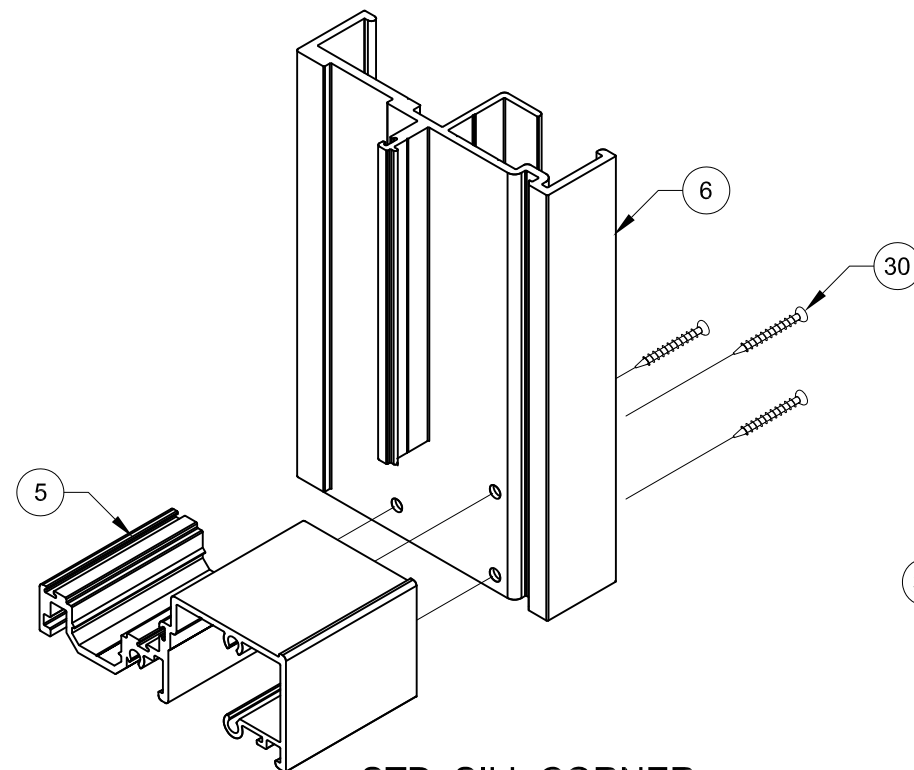
RESIDENTIAL SADDLE SILL



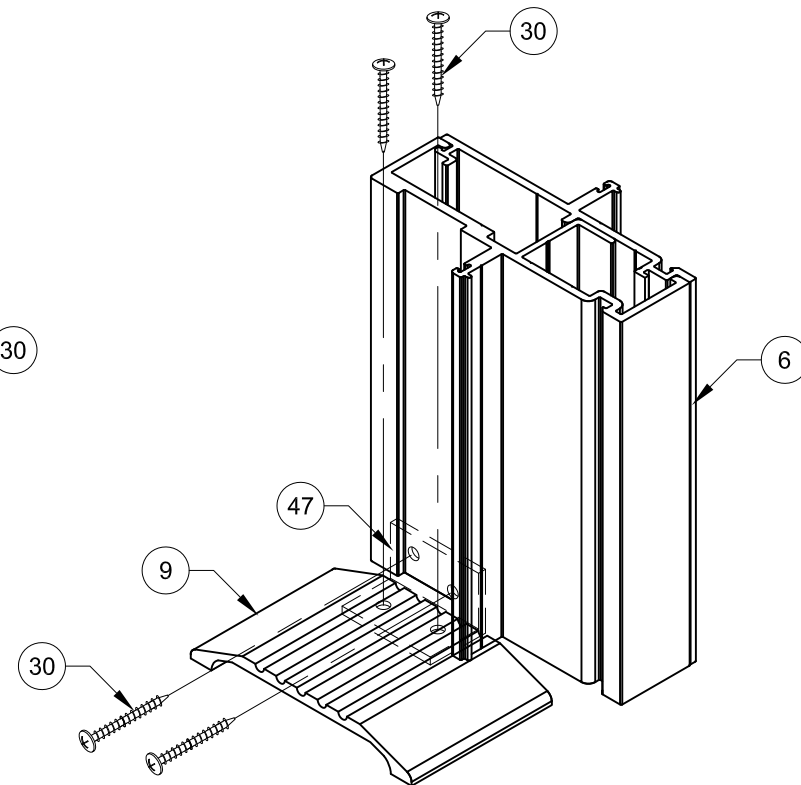
ADA SILL CORNER



PANEL TOP CORNER



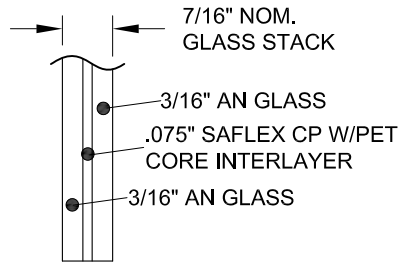
STD. SILL CORNER



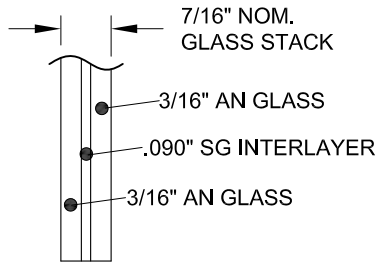
ADA SILL @ MULLION

ALL CORNERS TO BE SEALED WITH SILICONE SILPRUF OR EQUIVALENT.
DETAILS MAY BE FOR INSWING OR OUTSWING DOORS.

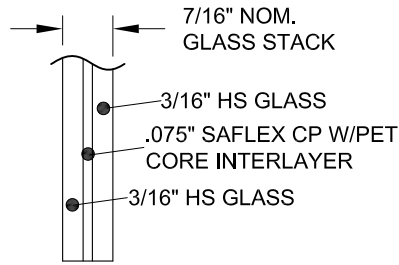
 WINDOOR		PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600		
104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432		REGISTRATION #29296		
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Title	ALUMINUM FRENCH DOOR (LM)		Date	12/12/22
CORNER ASSEMBLY		Drawn By	JENS ROSOWSKI	
Series	FD450A	Sheet	17 OF 21	
		DWG No.	450FPA-LM-1	



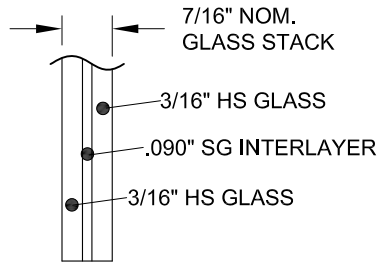
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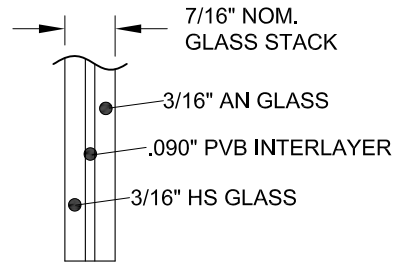
GLASS TYPE 2



GLASS TYPE 3

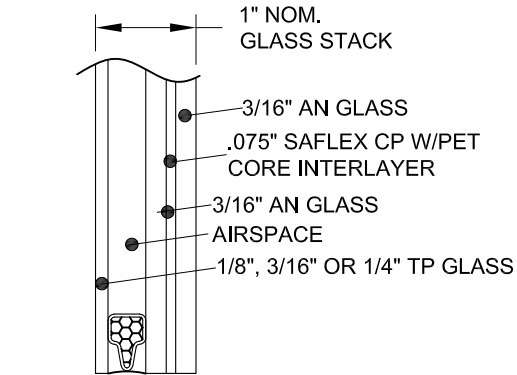


GLASS TYPE 4

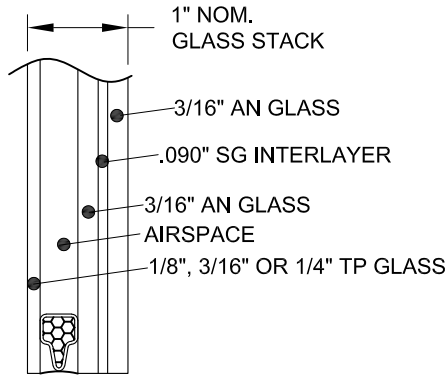


GLASS TYPE 5

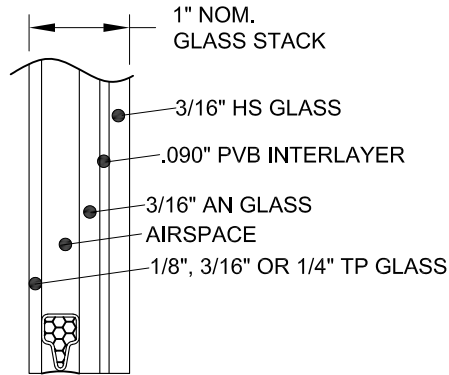
EXTERIOR ← → INTERIOR



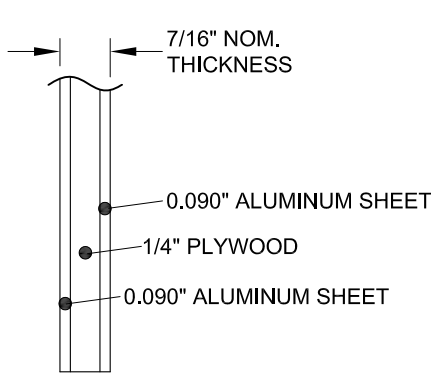
GLASS TYPE 6



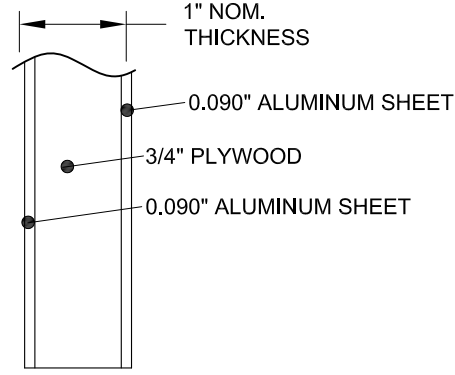
GLASS TYPE 7



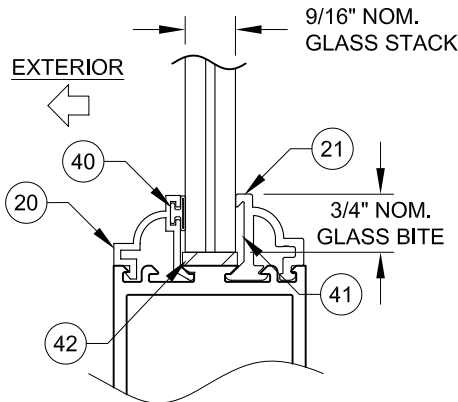
GLASS TYPE 8



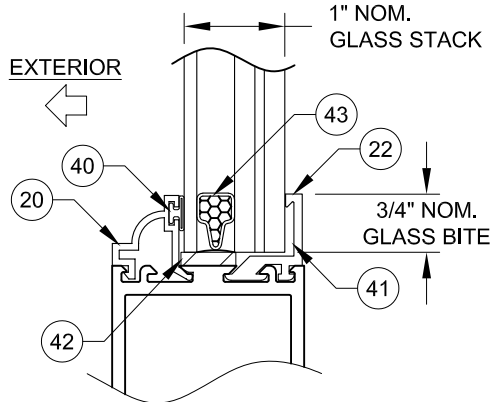
COMPOSITE TYPE 9
ALUM., OPAQUE,
COMPOSITE PANEL



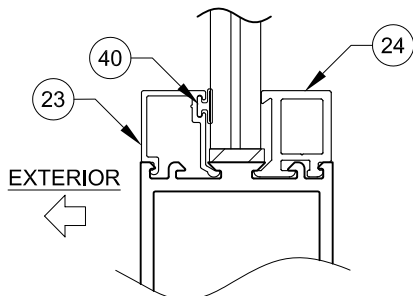
COMPOSITE TYPE 10
ALUM., OPAQUE,
COMPOSITE PANEL



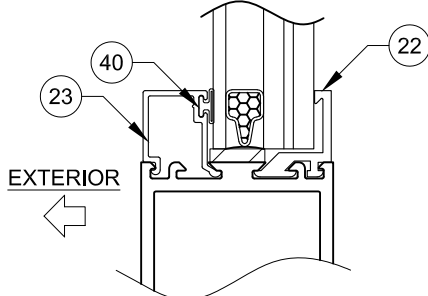
LAMI. GLAZING DETAIL
SHOWN WITH OPT. OGEE BEADING.



LAMI. IG GLAZING DETAIL
SHOWN WITH OPT. OGEE BEADING.



LAMI. GLAZING DETAIL
SHOWN WITH OPT. SQUARE BEADING.



LAMI. IG GLAZING DETAIL
SHOWN WITH OPT. SQUARE BEADING.

TABLE B:

Glazing Type	Description (Listed from Exterior to Interior)
1	7/16" LAMI: 3/16" AN - 0.075" Saflex CP - 3/16" AN
2	7/16" LAMI: 3/16" AN - 0.090" SG - 3/16" AN
3	7/16" LAMI: 3/16" HS - 0.075" Saflex CP - 3/16" HS
4	7/16" LAMI: 3/16" HS - 0.090" SG - 3/16" HS
5	7/16" LAMI: 3/16" AN - 0.090" PVB - 3/16" HS
6	1" LAMI IG: 1/8", 3/16" or 1/4" TP Cap - Airspace - 3/16" AN - 0.075" Saflex CP - 3/16" AN
7	1" LAMI IG: 1/8", 3/16" or 1/4" TP Cap - Airspace - 3/16" AN - 0.090" SG - 3/16" AN
8	1" LAMI IG: 1/8", 3/16" or 1/4" TP Cap - Airspace - 3/16" AN - 0.090" PVB - 3/16" HS
9	7/16" Composite Opaque Panel: 0.090" Aluminum - 1/4" Plywood - 0.090" Aluminum
10	1" Composite Opaque Panel: 0.090" Aluminum - 3/4" Plywood - 0.090" Aluminum

AN = ANNEALED GLASS
HS = HEAT STRENGTHENED GLASS
TP = TEMPERED GLASS

DOORS, SIDELITES & TRANSOMS CAN BE
GLAZED USING SQUARE OR OGEE GLAZING
BEADS AND ANY GLAZING TYPE AND ARE
NOT LIMITED BY BEADING/GLAZING SHOWN
ON CROSS SECTIONS.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600

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12/12/22
Date

By
JENS ROSOWSKI

18 OF 21
Sheet

FD450A
Series

WINDOOR

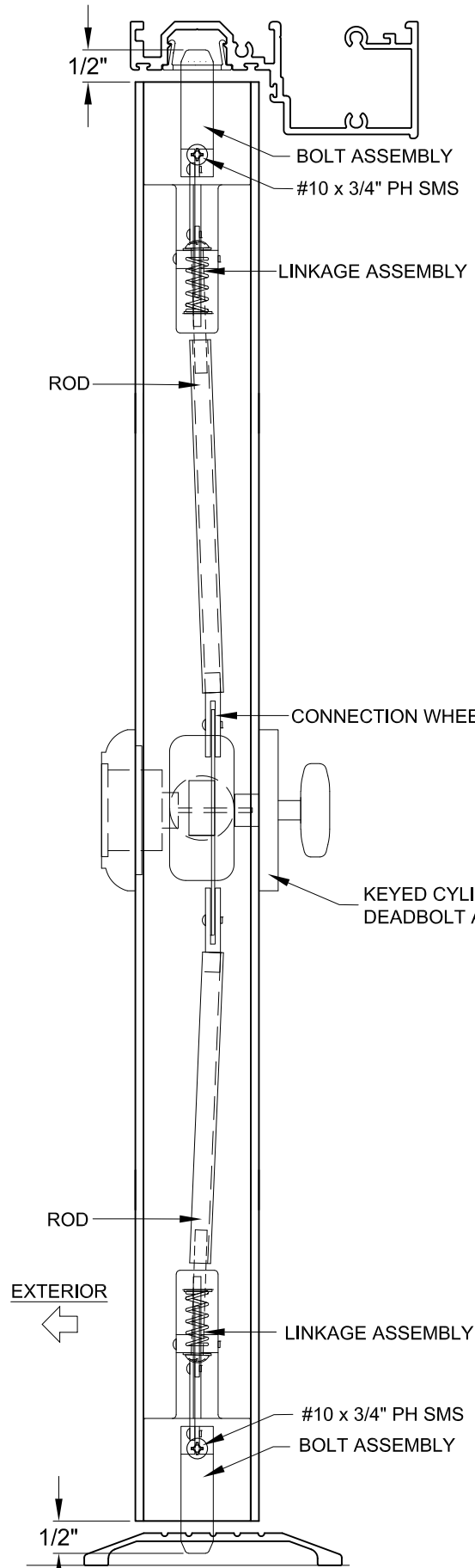
104 TRIPLE DIAMOND BLVD
N. VENICE, FL 34275
(833) 554-5432

ALUMINUM FRENCH DOOR (LM)

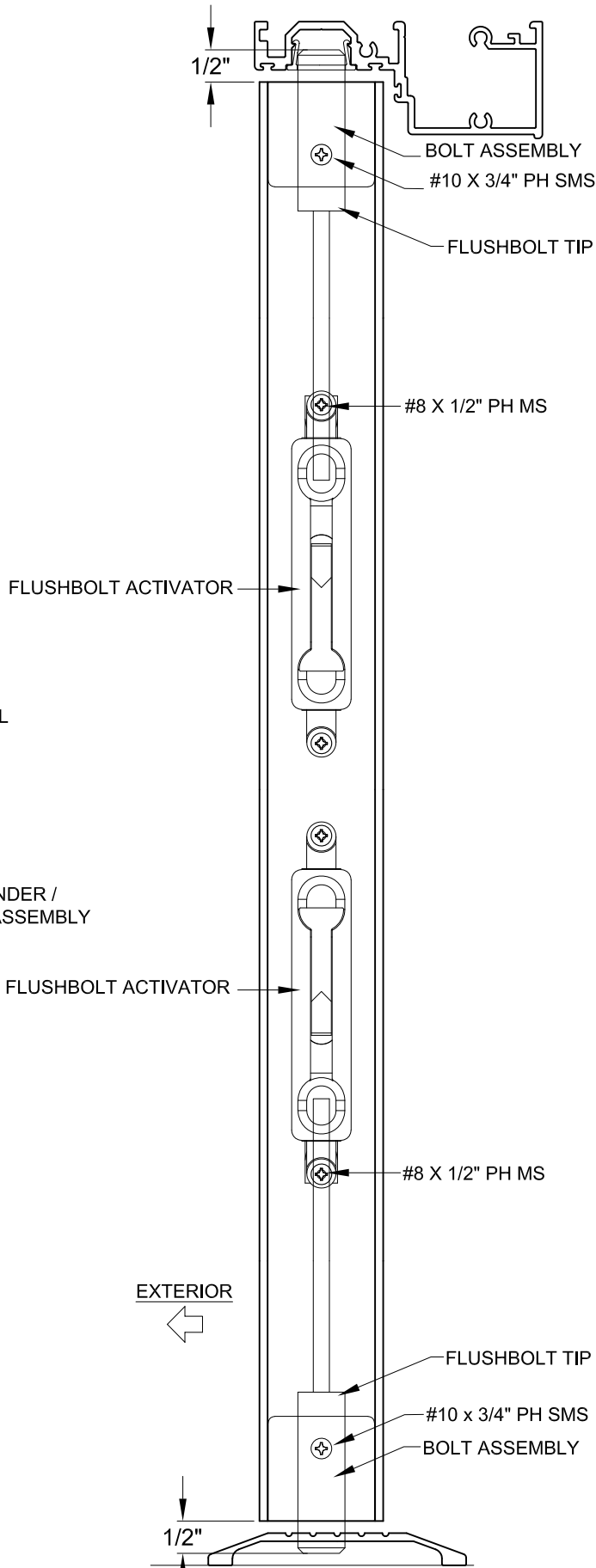
GLAZING DETAILS

450FPA-LM-1

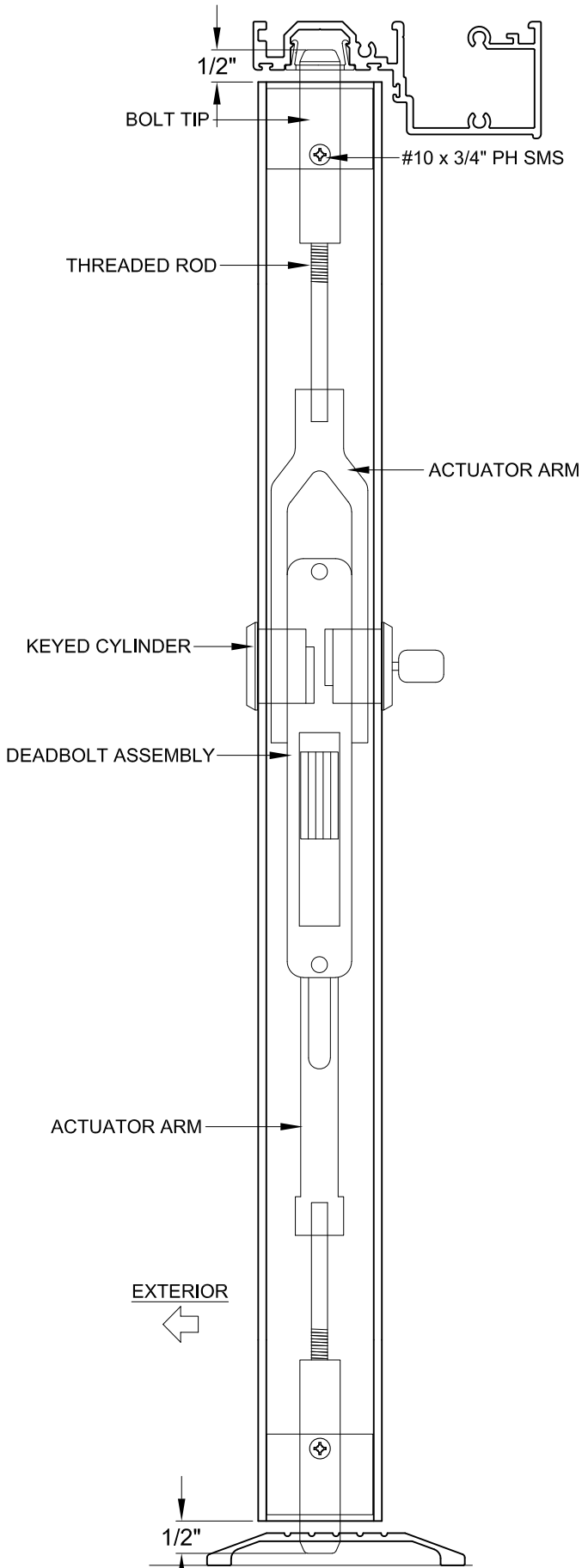
ANTHONY LYNN MILLER
LICENSE
No. 58705
02/26/24
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 58705



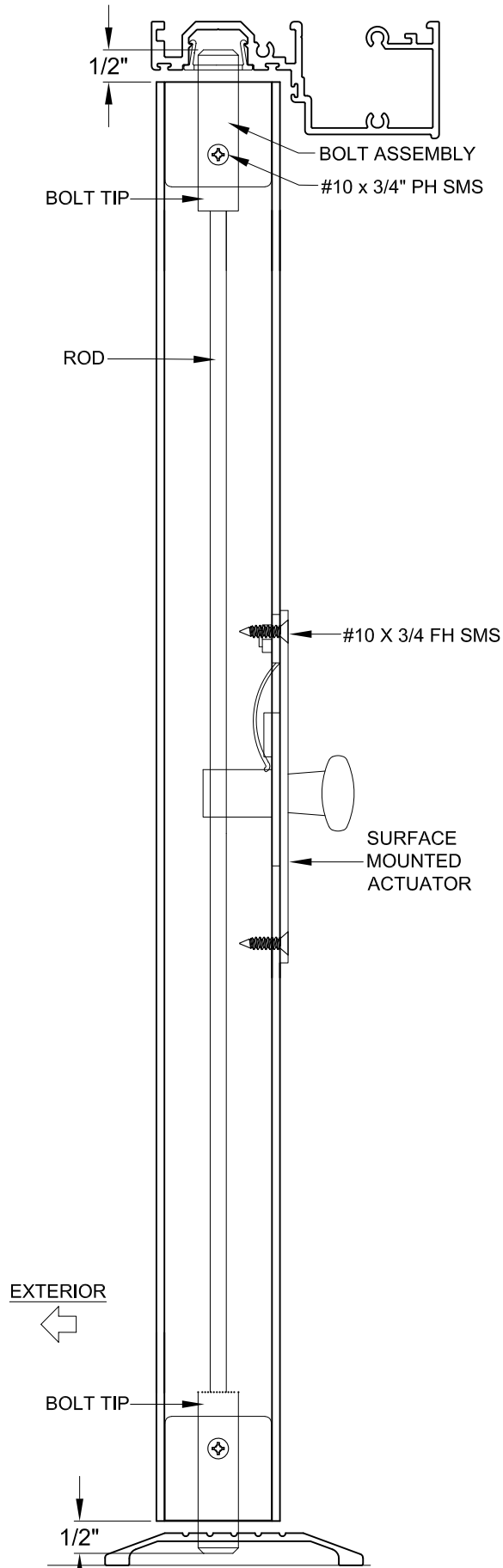
COPPER CREEK W/ 3 POINT LOCK



FLUSHBOLTS (INACTIVE PANEL)

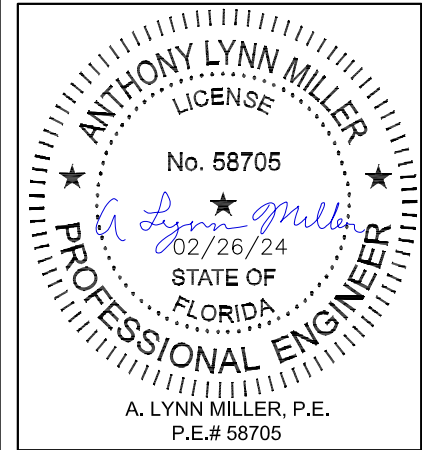


REGENT COMMERCIAL 3 POINT

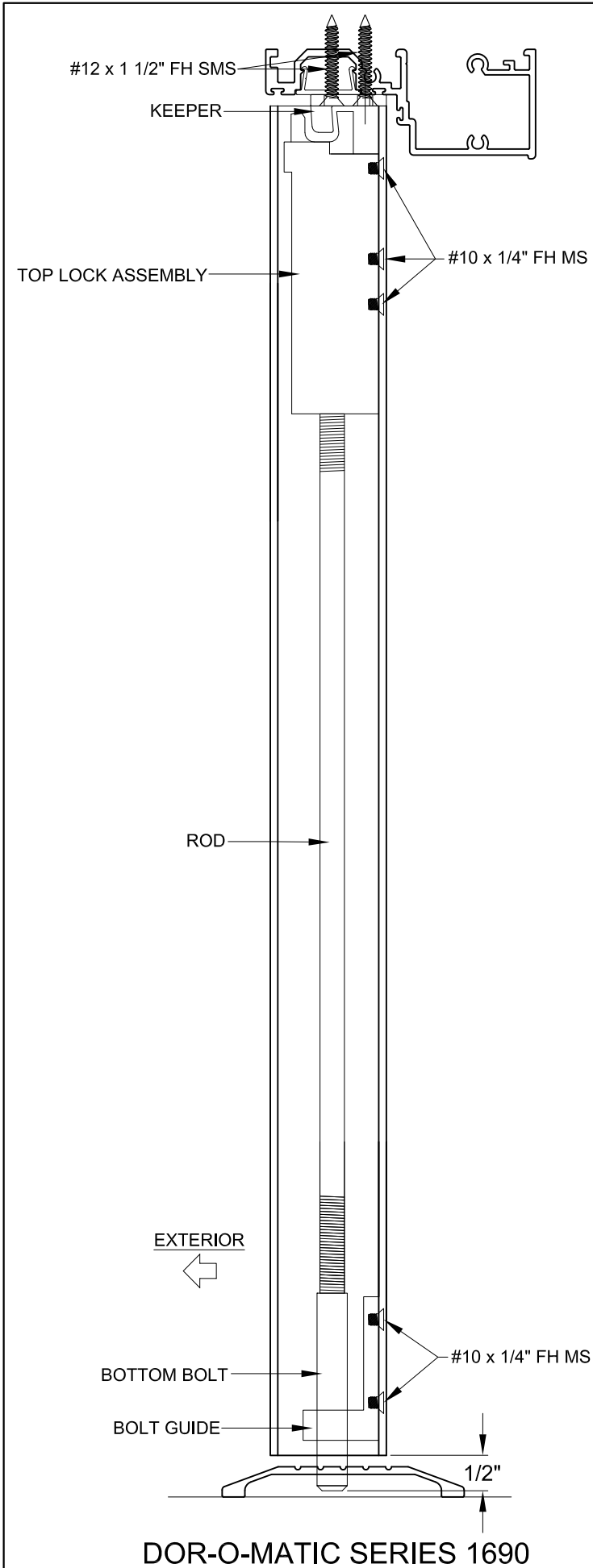


SURFACE MOUNTED LOCK

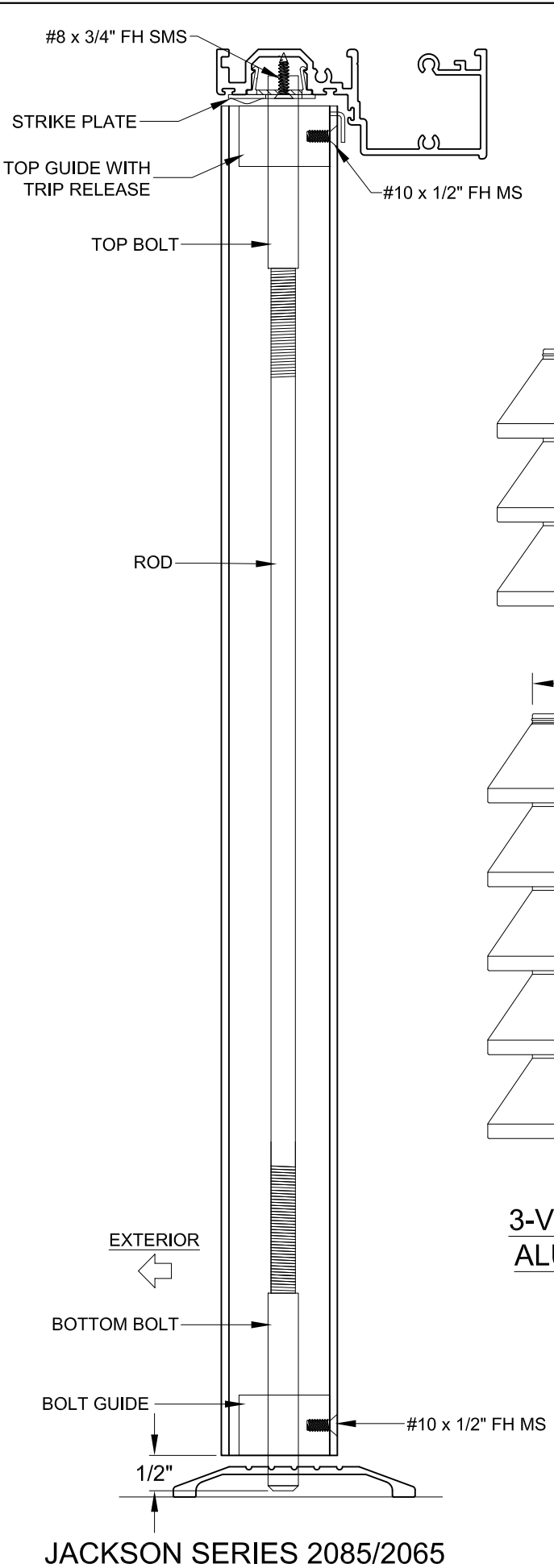
	PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600		REGISTRATION #29296 COPYRIGHT © 2024 WINDOOR, INC., LIMITED LICENSE TO MAKE COPIES FOR PERMITTING.		12/12/22		JENS ROSOWSKI		450FPA-LM-1	
	104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432		ALUMINUM FRENCH DOOR (LM)		By		DWG		19 OF 21	
	HARDWARE		FD450A		Sheet		No.		Date	



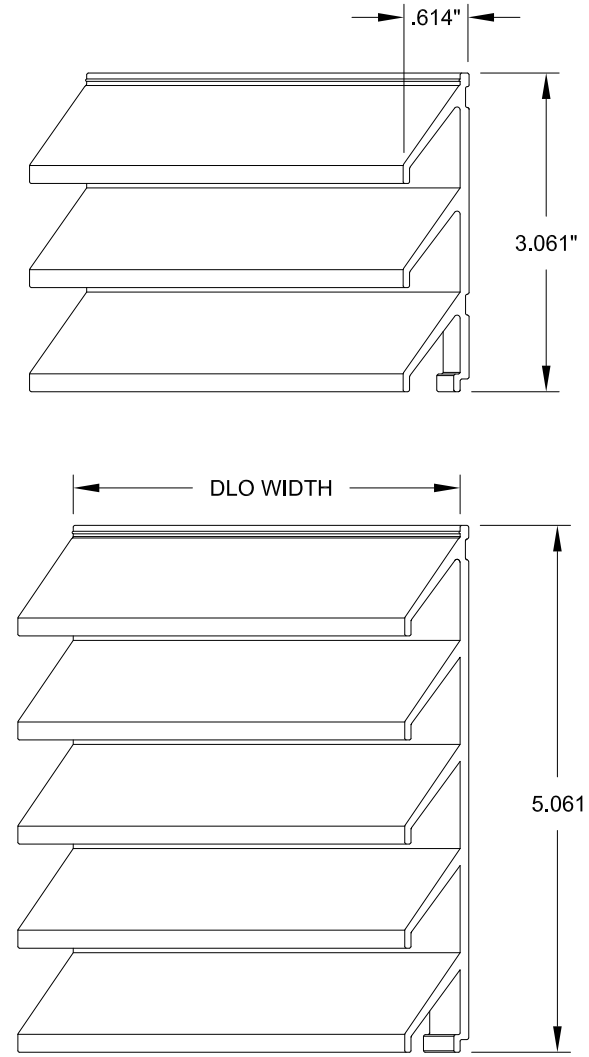
Rev.	02/22/24	D
Date		
NO CHANGES THIS SHEET.		



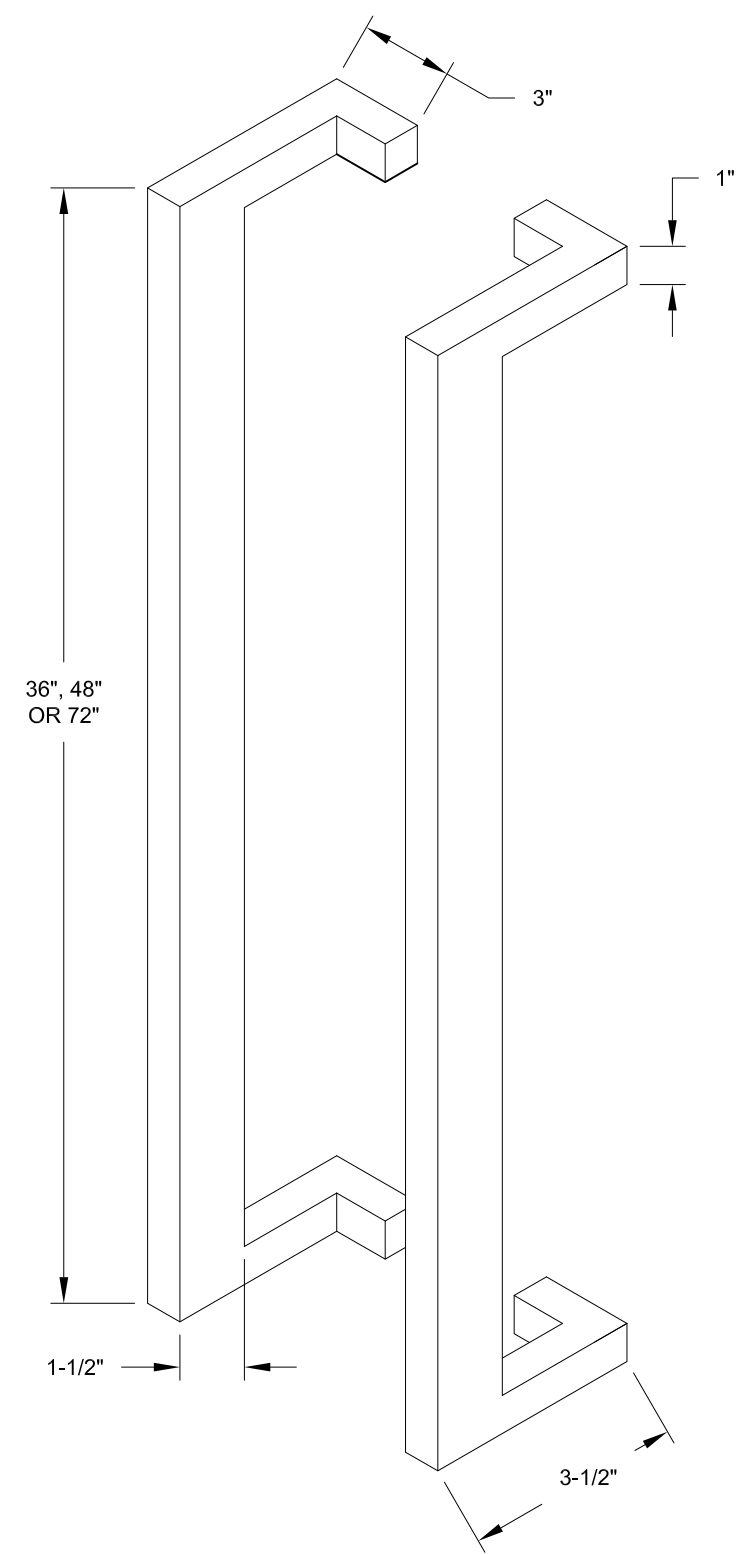
DOR-O-MATIC SERIES 1690



JACKSON SERIES 2085/2065



3-VENT & 5-VENT OPTIONAL
ALUMINUM FAUX LOUVERS
FOR COMPOSITE PANELS ONLY



OPTIONAL LADDER-PULL HANDLE

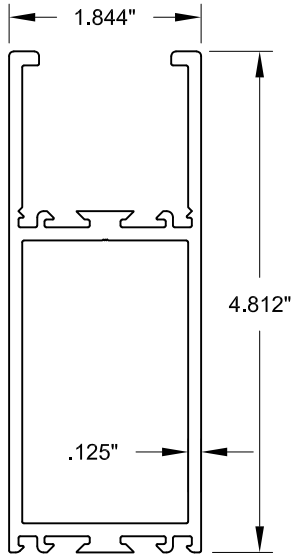
Rev. #		02/22/24		Date		NO CHANGES THIS SHEET.		Rev.	
D									

WINDOOR	PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600		REGISTRATION #29296	COPYRIGHT © 2024 WINDOOR, INC., LIMITED LICENSE TO MAKE COPIES FOR PERMITTING.		12/12/22		JENS ROSOWSKI		450FPA-LM-1	
	104 TRIPLE DIAMOND BLVD N. VENICE, FL 34275 (833) 554-5432		ALUMINUM FRENCH DOOR (LM)		HARDWARE		FD450A		20 OF 21		
Series		Desc.		Title		By		No.		DWG	

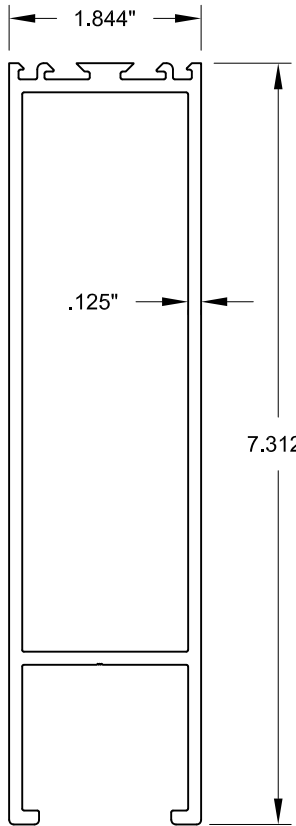
ANTHONY LYNN MILLER
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STATE OF FLORIDA
PROFESSIONAL ENGINEER
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P.E.# 58705

TABLE C:

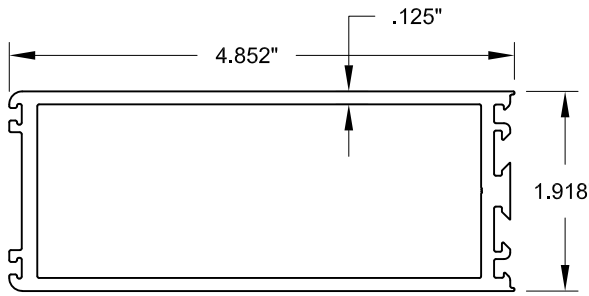
ITEM #	PART #	DESCRIPTION	MATERIAL
1	500a	Top Rail	ALUM. 6063-T6
2	501	Bottom Rail	ALUM. 6063-T6
3	502	Jamb / Lock / Sidelite Stile	ALUM. 6063-T6
4	503	Narrow Sidelite Stile	ALUM. 6063-T6
5	507	Door Frame Head / Sill	ALUM. 6063-T6
6	509	Framb Jamb / Mullion	ALUM. 6063-T6
7	510	Sidelite Mullion	ALUM. 6063-T6
8	514	Horizontal Muntin	ALUM. 6063-T6
9	540	Commercial/ADA Saddle Threshold	ALUM. 6063-T6
10	539	Residential Saddle Threshold	ALUM. 6063-T6
11	508	Frame Cover	ALUM. 6063-T5
12	505	Astragal	ALUM. 6063-T5
13	511	Jamb Cover	ALUM. 6063-T5
14	505	Shear Clip	ALUM. 6063-T5
15	506	Transom Channel	ALUM. 6063-T6
20	375	Mono. / I.G. Ogee Beading	ALUM. 6063-T5
21	504	Monolithic IG Stop	ALUM. 6063-T6
22	515	I.G. Stop	ALUM. 6063-T6
23	396	Mono. / I.G. Square Beading	ALUM. 6063-T5
24	519	Monolithic Square Stop	ALUM. 6063-T6
30		#12 x 1-1/4" Ph. SMS (Frame Assembly)	Stainless Steel
31		3/8"-16 Threaded Rod	Steel
32		3/8"-16 Hex Nut	Steel
33		1-1/2 x 1-1/2" x 3/16" Aluminum Plate	Aluminum
34		Weephole Cover	PVC
35		#10 x 1" Ph. PH SDS (Sidelite Attachment)	Stainless Steel
36		#14 x 3/4" HH SDS (Mullion Assembly)	Stainless Steel
37		0.320" Woolpile (Ultrafab 3032)	-
38		0.350" Foam-filled Bulb (Amesbury 32011)	-
39		1/2" x 1/2" Adhesive Closed Cell Foam Pad	-
40	382	Glazing Bead Vinyl	Vinyl
41		Backbedding, GE-1200, Dow 791, 899, 983, 995	Silicone
42		Setting Block	
43		Insulated Glass Spacer	-
45		Hinge, 4" x 4-1/2"	Stainless Steel
46		12-24 x 1/2" Thread-cutting SMS (Hinge)	Stainless Steel
47		2" x 2" x 1/4" Angle	Aluminum



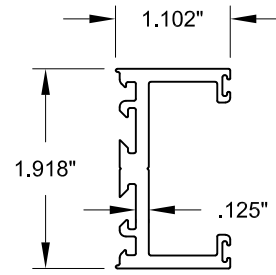
1 TOP RAIL



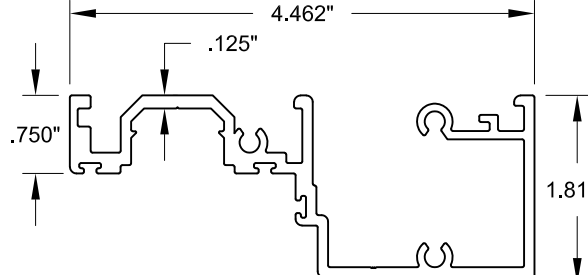
2 BOTTOM RAIL



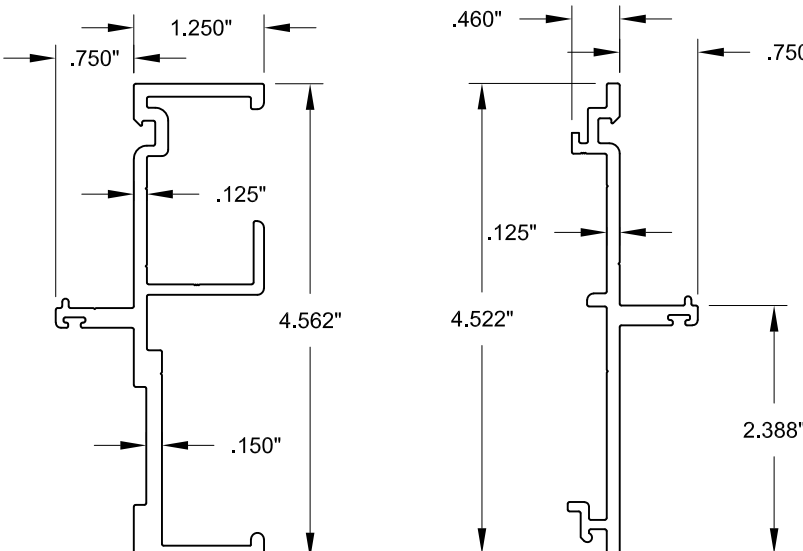
3 JAMB/LOCK/SIDELITE STILE



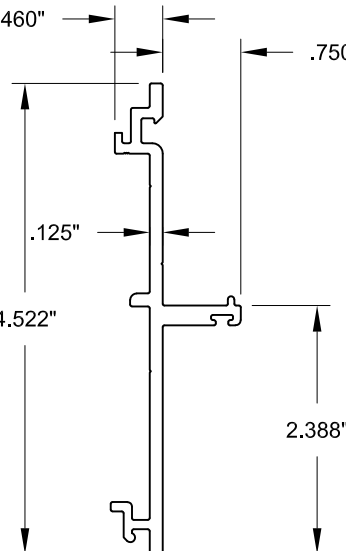
4 NARROW SIDELITE STILE



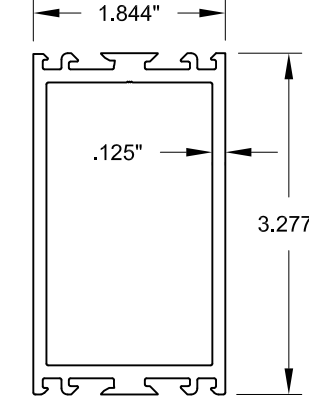
5 DOOR FRAME HEAD/SILL



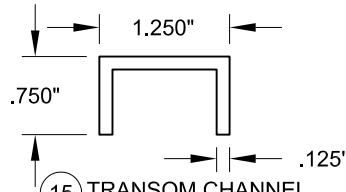
6 FRAME JAMB/MULLION



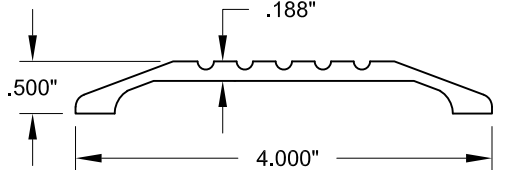
7 SIDELITE MULLION



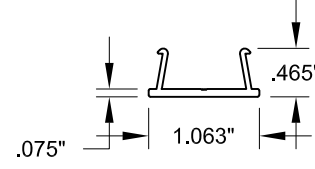
8 HORIZONTAL MUNTIN



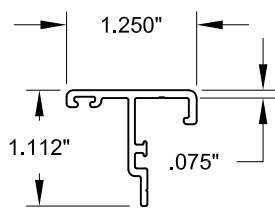
15 TRANSOM CHANNEL



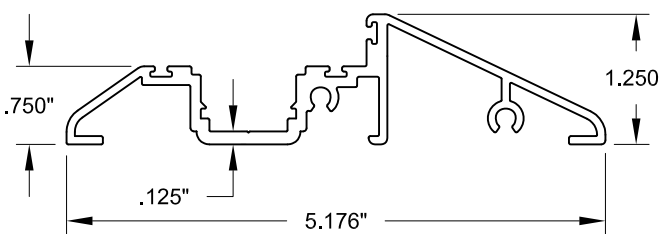
9 COMMERCIAL/ADA SADDLE THRESHOLD



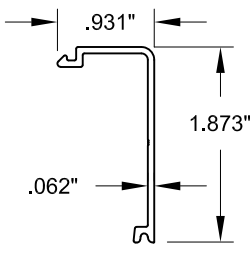
11 FRAME COVER



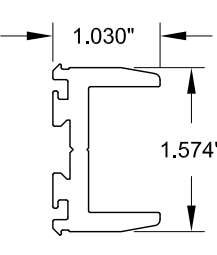
12 ASTRAGAL



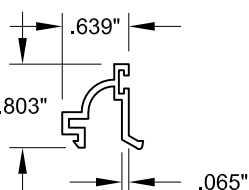
10 RESIDENTIAL SADDLE THRESHOLD



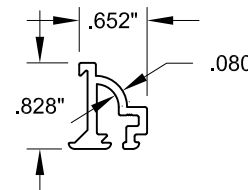
13 JAMB COVER



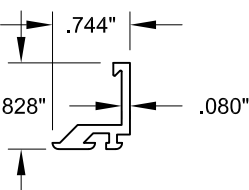
14 SHEAR CLIP



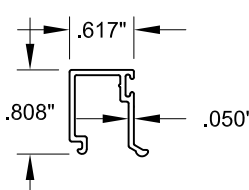
20 MONO. / I.G. OGEE BEADING



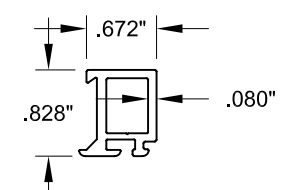
21 MONOLITHIC OGEE STOP



22 I.G. STOP



23 MONO. / I.G. SQUARE BEADING



24 MONOLITHIC SQUARE STOP

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600

104 TRIPLE DIAMOND BLVD
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ALUMINUM FRENCH DOOR (LM)

JENS ROSOWSKI

12/12/22

FD450A

21 OF 21

450FPA-LM-1

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