

LINEA ROSSA LLC

SERIES "LR-230" ALUMINUM SLIDING GLASS DOOR - L.M.I & S.M.I

GENERAL NOTES:

- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 7TH EDITION OF FLORIDA BUILDING CODE 2020 INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
- WINDOWS RATED FOR LARGE MISSILE IMPACT. LMI SYSTEM TO BE USED FOR INSTALLATIONS UP TO 30 FT OF GRADE. IMPACT SHUTTERS ARE NOT REQUIRED.
- THESE WINDOWS ARE APPROVED FOR AIR AND WATER INFILTRATION.
- ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS. ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
- ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
- MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/ METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 7TH EDITION OF FLORIDA BUILDING CODE 2020 SECTION AS APPLICABLE.
- METAL STRUCTURES BY OTHERS TO BE DESIGNED TO SUPPORT THE LOADS IMPOSED BY THIS GLAZING SYSTEM AND TO TRANSFER SUCH LOADS TO THE BUILDING MAIN STRUCTURE.
- ULTIMATE LOAD OBTAINED FROM ASCE 7-16, MULTIPLY BY 0.6 SHALL BE LESS THAN OR EQUAL TO MAX. DESIGN LOAD IN THIS DOCUMENT. THE DESIGN LOADS SHOWN IN THIS DOCUMENT ARE ALLOWABLE DESIGN LOADS.
- SEALANT:
ALL FRAME CORNERS, JOINTS, MULLION SEAMS AND PERIMETER GLAZING BEAD TO FRAME INSTALLATION FASTENERS SEALED WITH SILICON SEALANT.

USE CHARTS AS FOLLOWS.

- STEP 1: DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7-16 STANDARD OR WIND TUNNEL REPORTS.
- STEP 2: SEE SHEET E1 FOR APPROVED TYPICAL ELEVATION & CONFIGURATION.
- STEP 3: SEE SHEET G1 FOR ALLOWED WINDOW SIZE AND APPROVED DESIGN LOAD WITH APPROVED GLASS OPTIONS.
- STEP 4: ANCHOR OPTION SEE SHEET D2. ANCHOR LAYOUT SEE SHEET E1.
- STEP 5: THE LOWEST VALUE RESULTING FROM STEPS 2,3 & 4 THAT EXCEED THE DESIGN WIND PRESSURES DETERMINED THRU STEP 1 SHALL APPLY TO ENTIRE SYSTEM.

LIMITATIONS OF USE

A- THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, I.E. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.

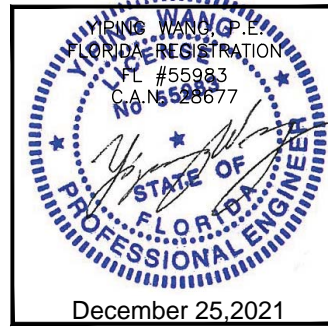
B- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.

C- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

D- 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.

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

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FL#38755

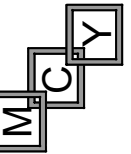


ABBREVIATIONS AND SYMBOLS	
G.B. - GLASS BITE	
D.L.O. - DAYLITE OPENING	
F.H. - FRAME HEIGHT	
F.W. - FRAME WIDTH	
W/ - WITH	
W/O - WITHOUT	
O.C. - ON CENTER	

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Rev. No.	Date	Drawn By	Description																
1.	11.03.2021	JAMES WANG	FBC UPDATE																
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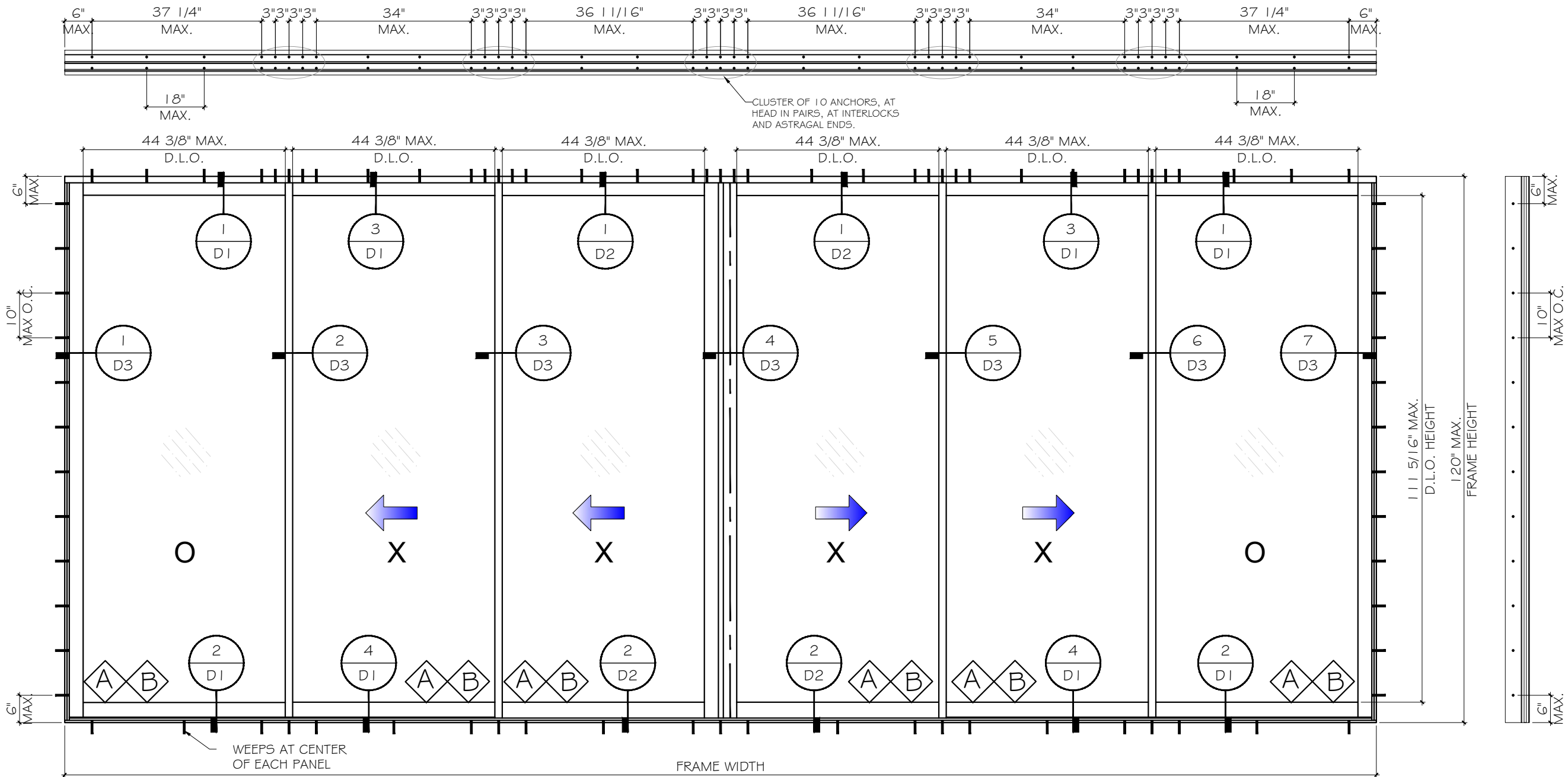
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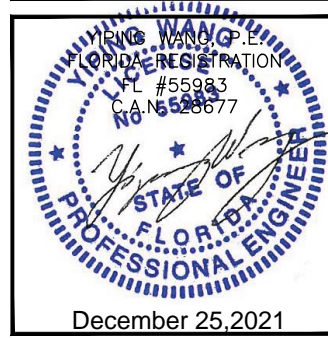
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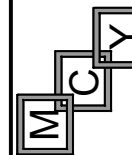
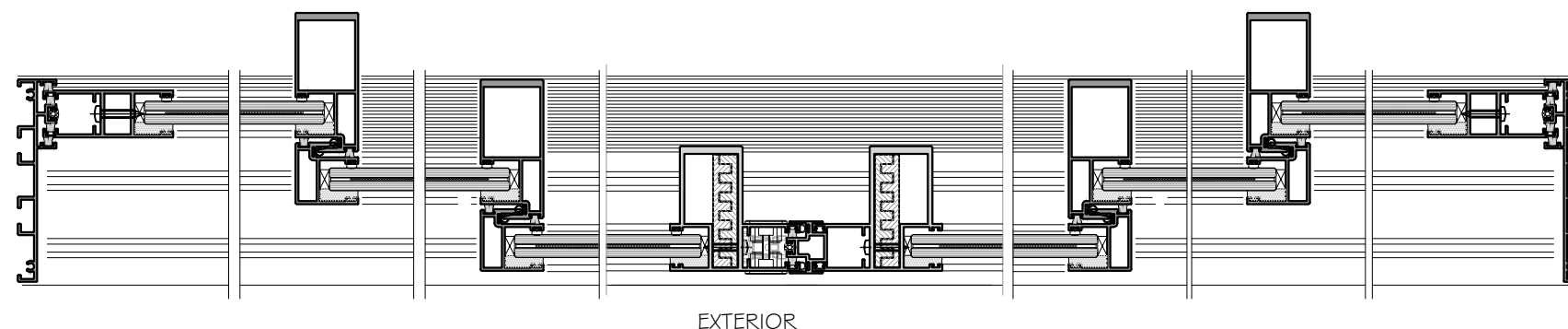
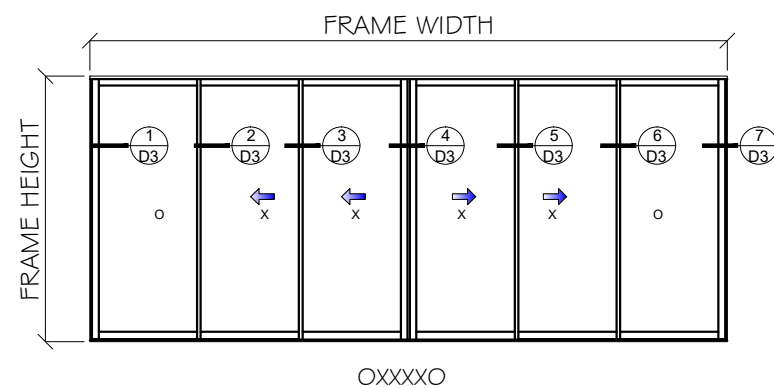
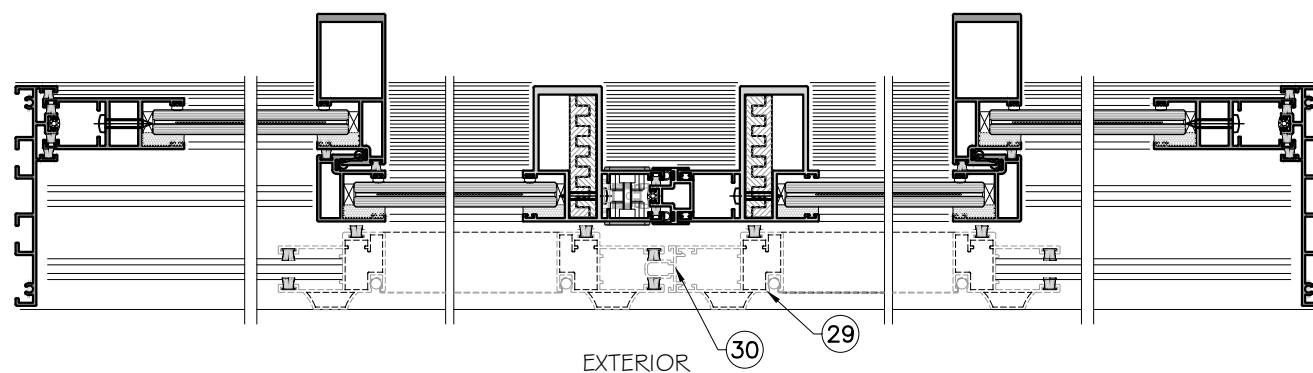
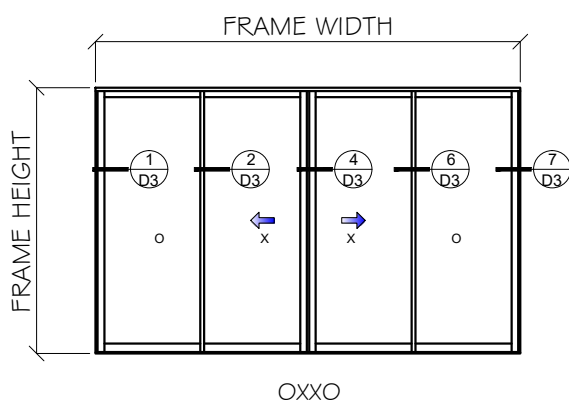
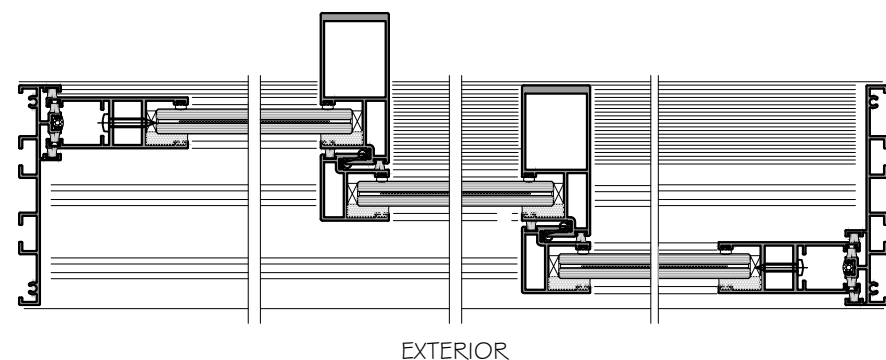
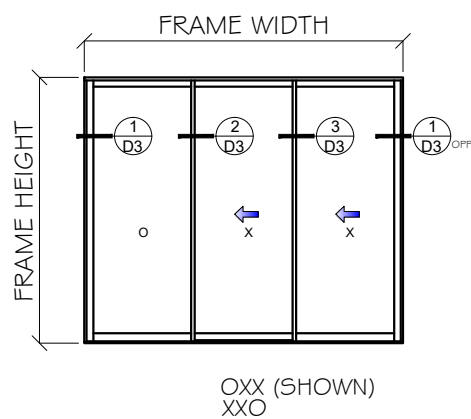
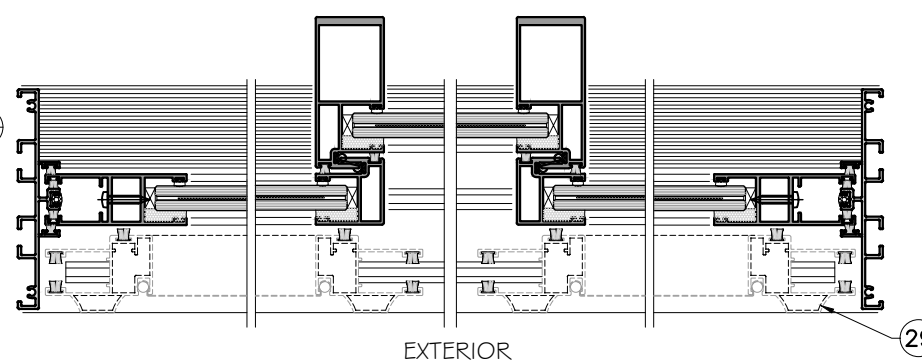
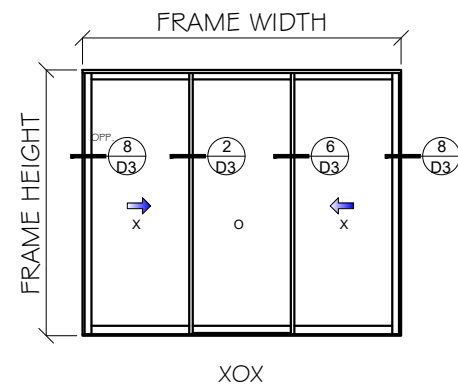
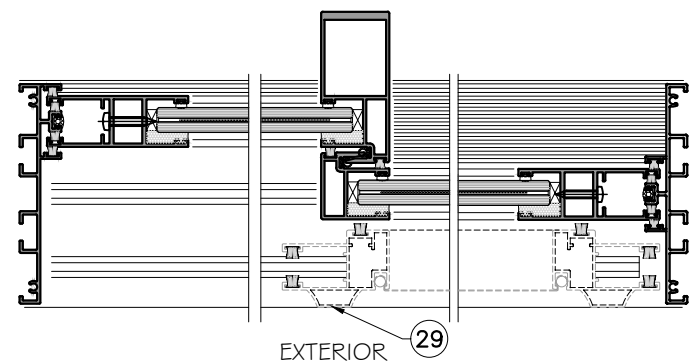
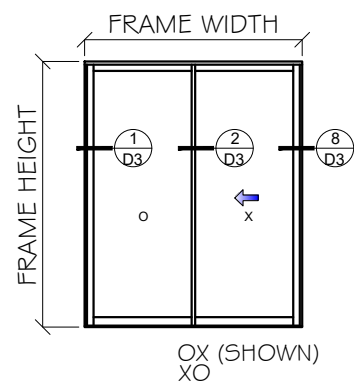
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TYPICAL EXTERIOR ELEVATION E1 (OXXXXO)

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REGISTERED PROFESSIONAL ENGINEER
FL #55983
CA #5528677

December 25, 2021

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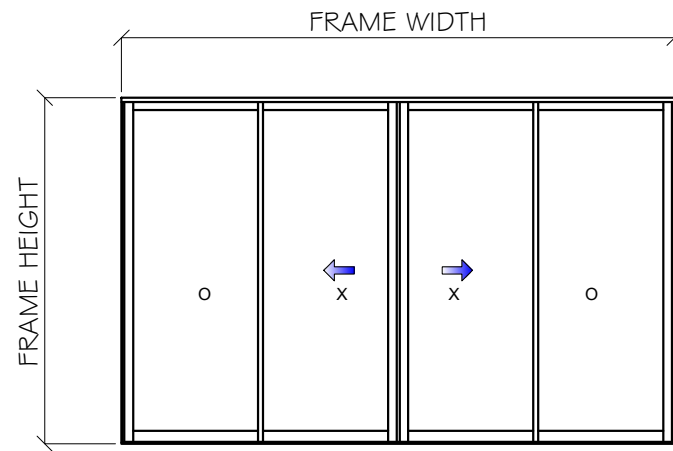
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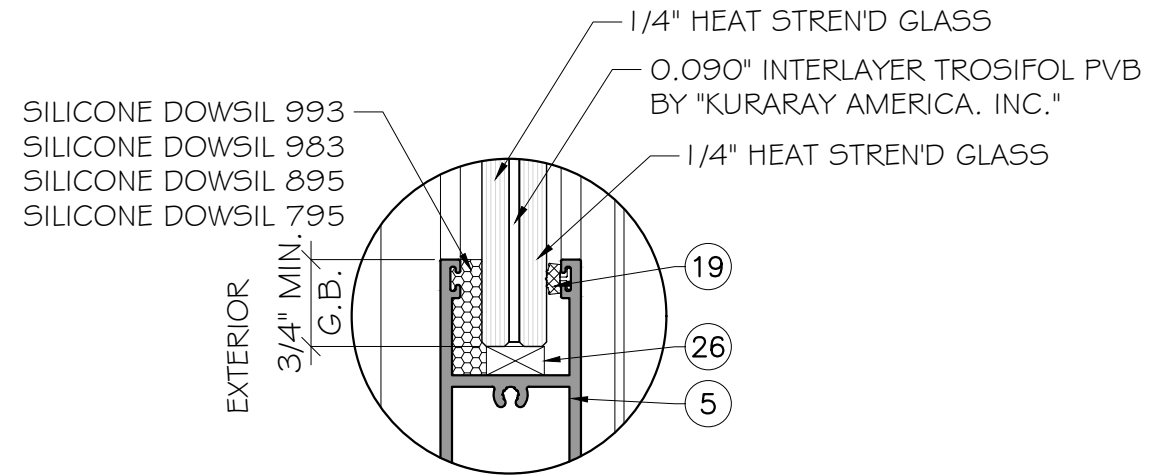
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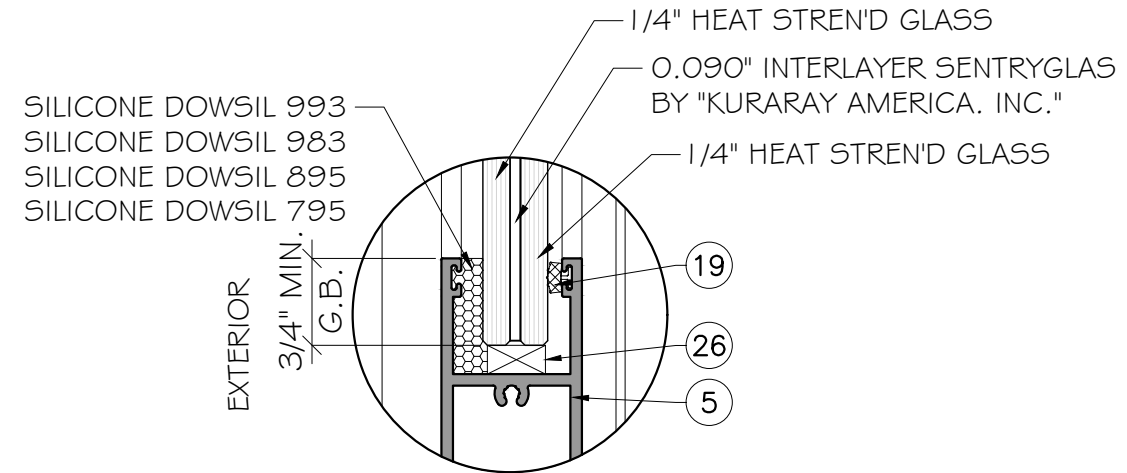
DESIGN LOAD CAPACITY - PSF		
PANEL DIMS.		GLASS TYPE
FRAME HEIGHT	AVE. PANEL WIDTH	'A' # 'B'
(IN)	(IN)	(+)/(-)
84.0	24.0	90.0
	30.0	90.0
	36.0	90.0
	42.0	90.0
	48.0	90.0
	54.0	90.0
90.0	24.0	90.0
	30.0	90.0
	36.0	90.0
	42.0	90.0
	48.0	90.0
	54.0	90.0
96.0	24.0	90.0
	30.0	90.0
	36.0	90.0
	42.0	90.0
	48.0	90.0
	54.0	90.0
102.0	24.0	90.0
	30.0	90.0
	36.0	90.0
	42.0	90.0
	48.0	90.0
	54.0	90.0
108.0	24.0	90.0
	30.0	90.0
	36.0	90.0
	42.0	90.0
	48.0	90.0
	54.0	90.0
114.0	24.0	90.0
	30.0	90.0
	36.0	90.0
	42.0	90.0
	48.0	90.0
	54.0	90.0
120.0	24.0	90.0
	30.0	90.0
	36.0	90.0
	42.0	90.0
	48.0	90.0
	54.0	90.0



$$\text{AVERG. PANEL WIDTH} = \frac{\text{FRAME WIDTH}}{\text{NO. OF PANELS}}$$



A GLASS TYPE 'A'
9/16" NOMINAL OVERALL



B GLASS TYPE 'B'
9/16" NOMINAL OVERALL

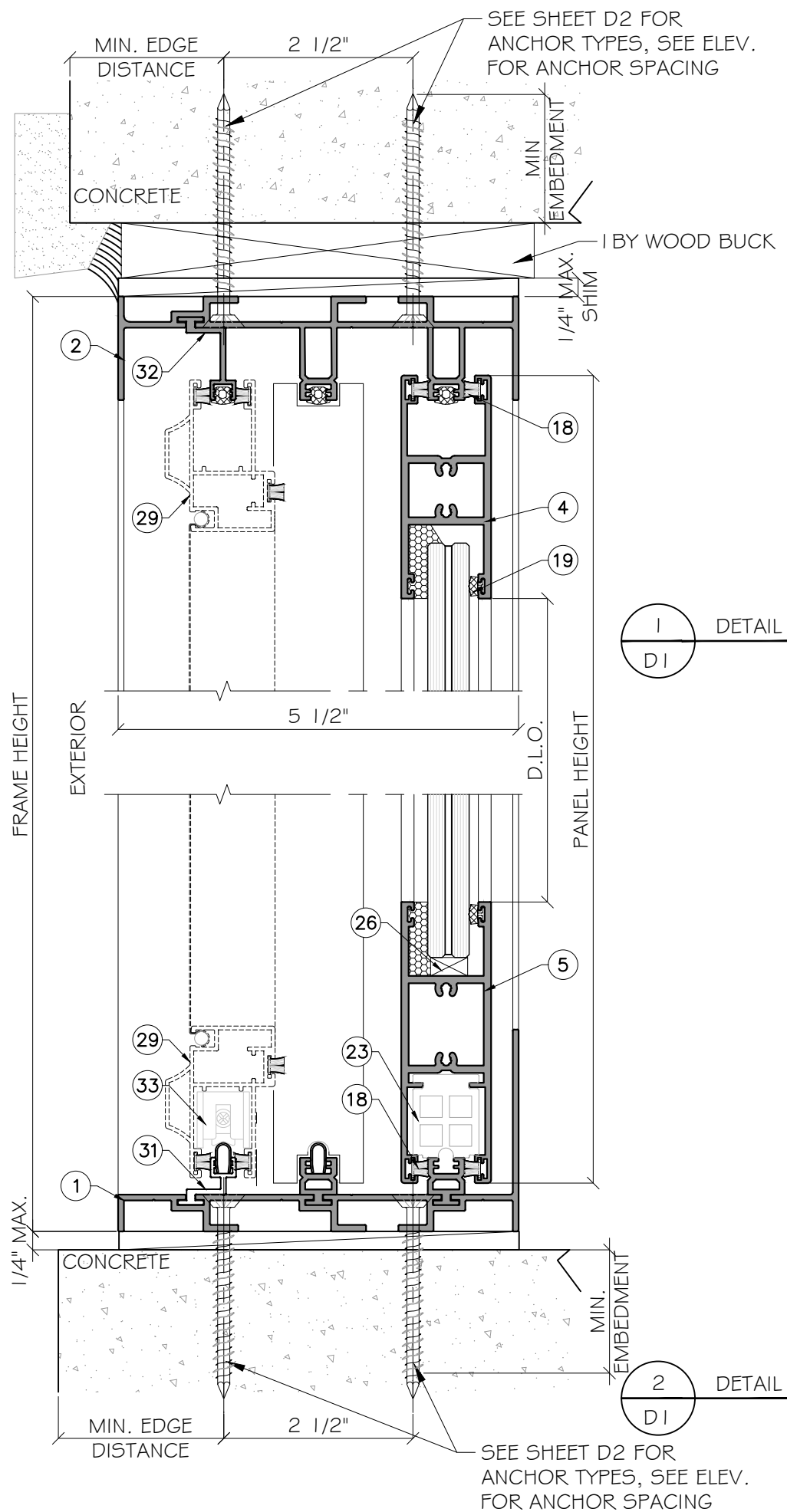
NOTE:
GLASS COMPLIES WITH ASTM E1300-09
(3 SEC. GUSTS).

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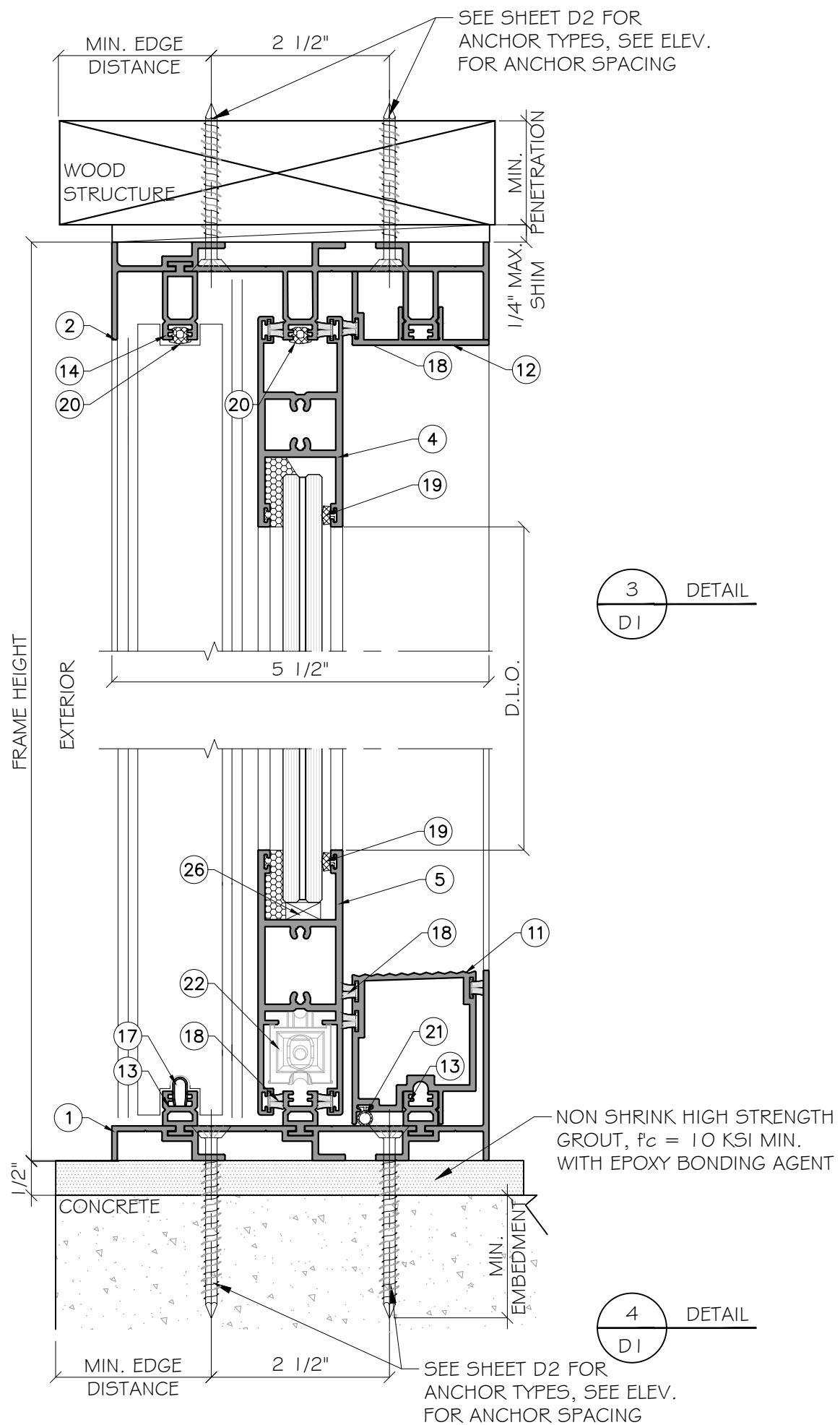
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1
DI
DETAIL

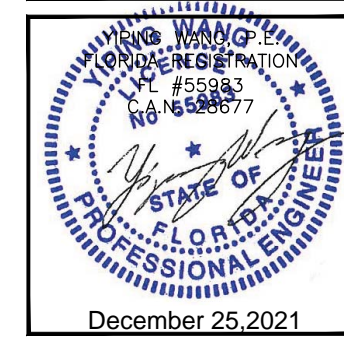
2
DI
DETAIL



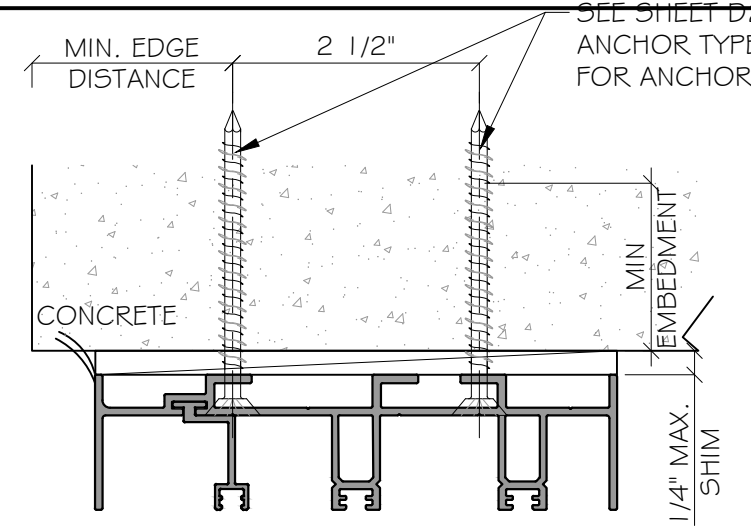
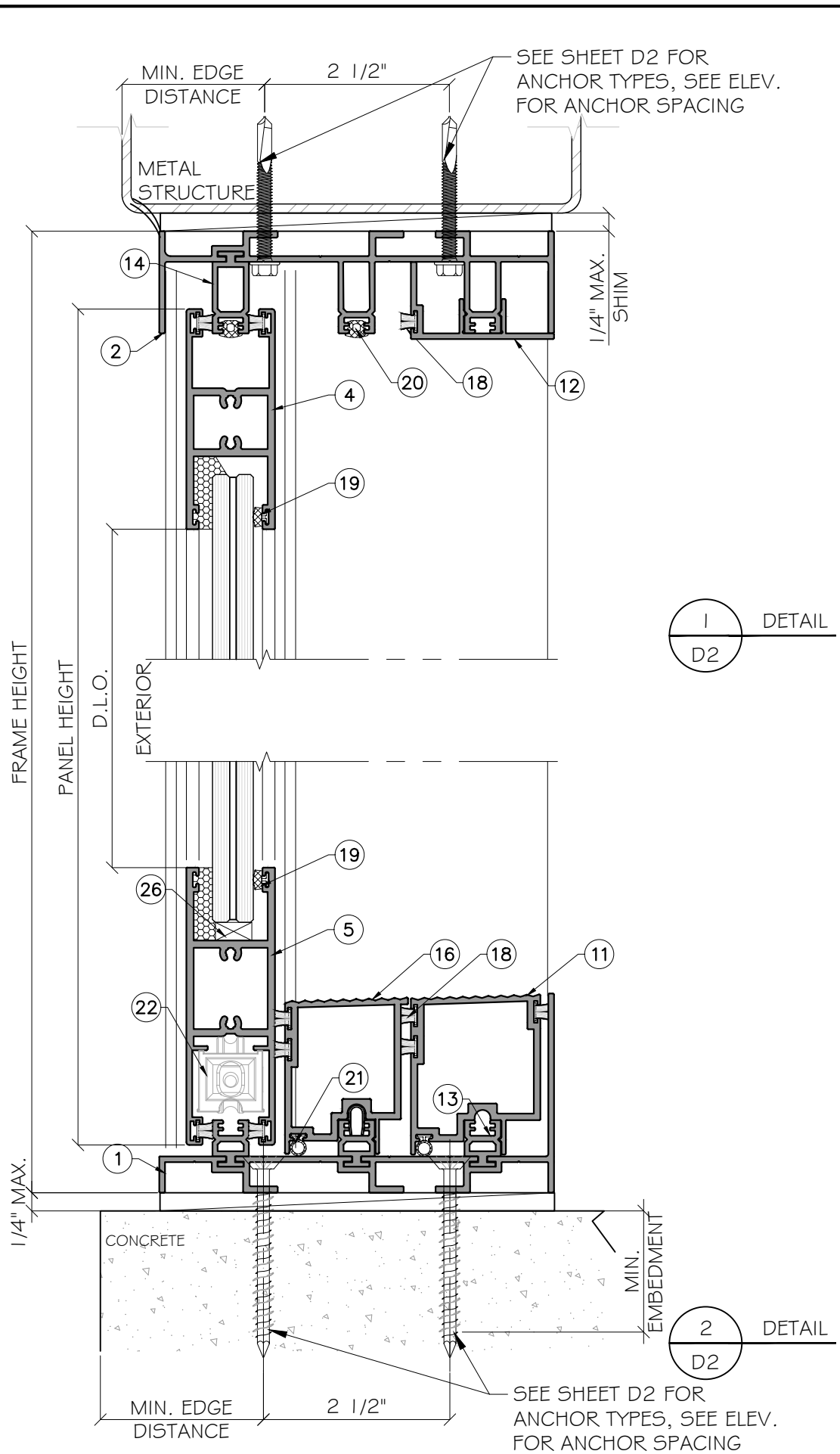
3
DI
DETAIL

4
DI
DETAIL

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SERIES LR-230 ALUMINUM SLIDING GLASS DOOR - L.M.I.	
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WOOD BUCKS AND METAL STRUCTURE (NOT BY LINEA ROSSA LLC.) MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSOM THEM TO THE BUILDING STRUCTURE.

ANCHOR TYPES: (SEE ELEVATIONS FOR SPACING)

TYPE 'A' -- 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)
 INTO 2 BY WOOD BUCKS OR WOOD STRUCTURES.
 | 1/2" MIN. PENETRATION INTO WOOD

THRU 1 BY BUCKS INTO CONCRETE OR BLOCKS
 | 3/4" MIN. EMBED INTO CONCRETE
 | 3/4" MIN. EMBED IN TO BLOCKS (JAMB ONLY)

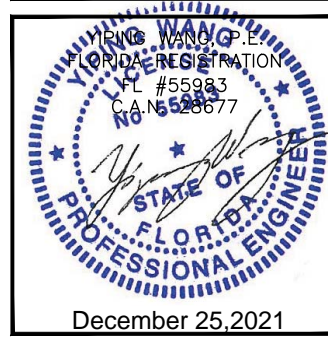
DIRECTLY INTO CONCRETE OR BLOCKS
 | 3/4" MIN. EMBED INTO CONCRETE
 | 3/4" MIN. EMBED INTO HOLLOW /GROUT FILLED BLOCK (JAMB ONLY)

TYPE 'B' -- 1/4" DIA. DRILL FLEX -TEKS (GRADE 5) (Fu=120 KSI, Fy=92 KSI)
 INTO FBC APPROVED MULLIONS (1/8" THK. MIN.) (6063-T6 MIN)
 OR INTO METAL STRUCTURES, STEEL: 1/8" THK. MIN. (Fy=36 KSI MIN.)
 (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

MIN. EDGE DISTANCES:

INTO CONCRETE = 2-1/2" MIN.
 INTO METAL STRUCTURE = 3/4" MIN.
 INTO WOOD STRUCTURE = 1" MIN.
 WOOD AT HEAD OR JAMBS SG = 0.55 MIN.
 CONCRETE AT HEAD, SILL OR JAMB f'c=3000PSI MIN.
 C-90 HOLLOW/ FILLED BLOCK AT JAMBS fm=2000 PSI MIN.

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LINEA ROSSA DESIGN

SERIES LR-230 ALUMINUM SLIDING GLASS DOOR - L.M.I

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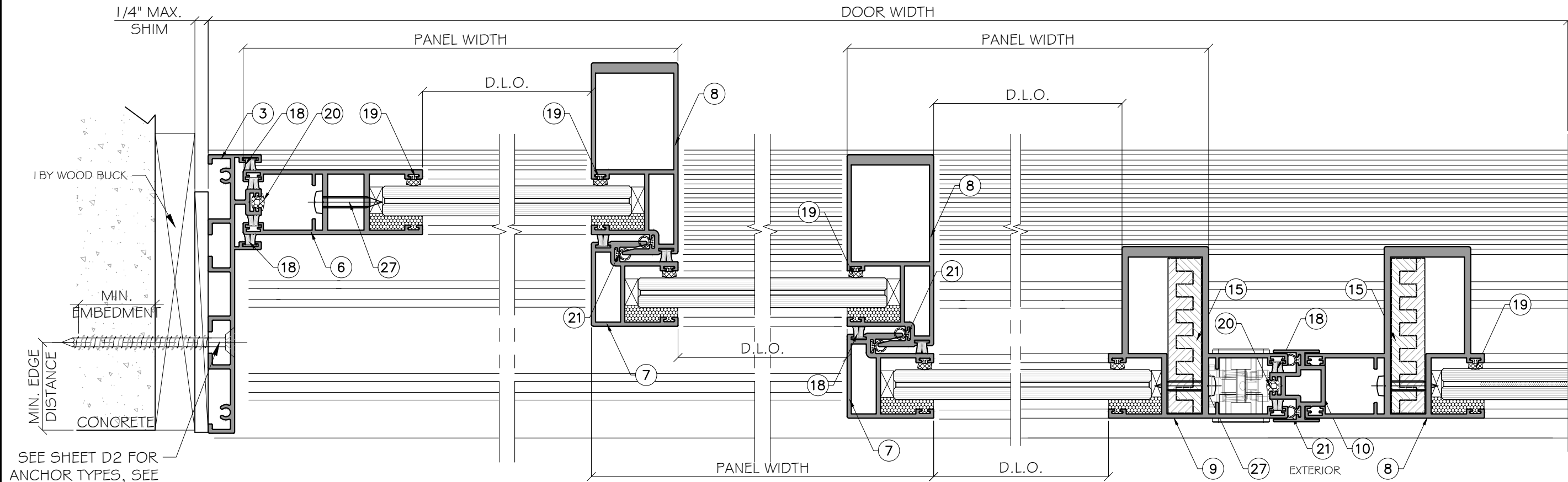
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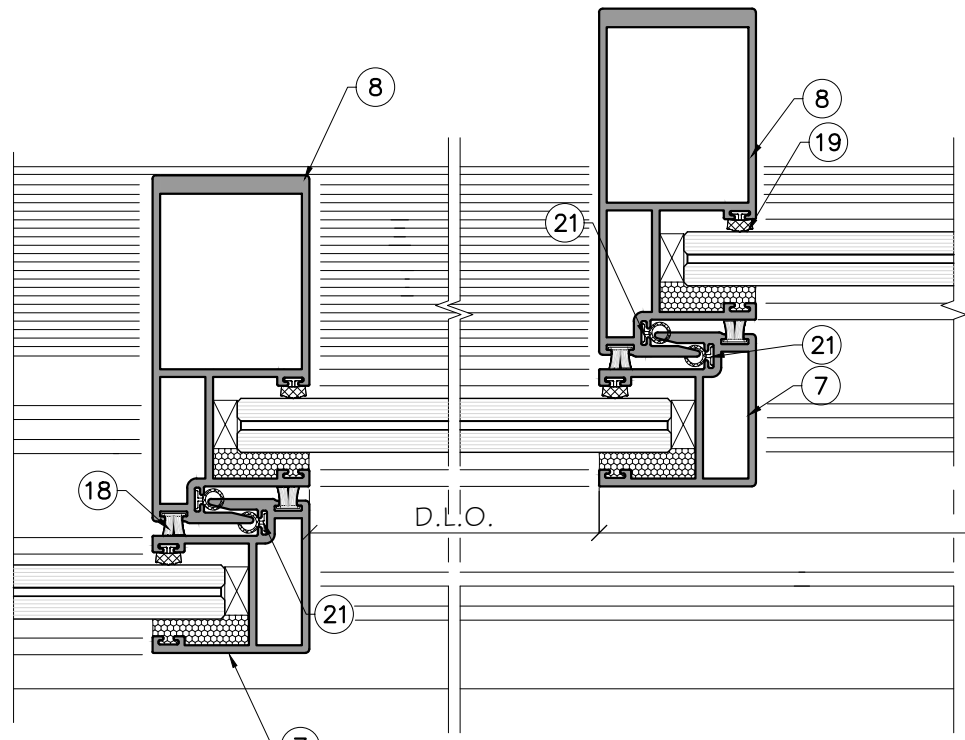
SEE SHEET D2 FOR ANCHOR TYPES, SEE ELEV. FOR ANCHOR SPACING

1
D3
DETAIL

2
D3
DETAIL

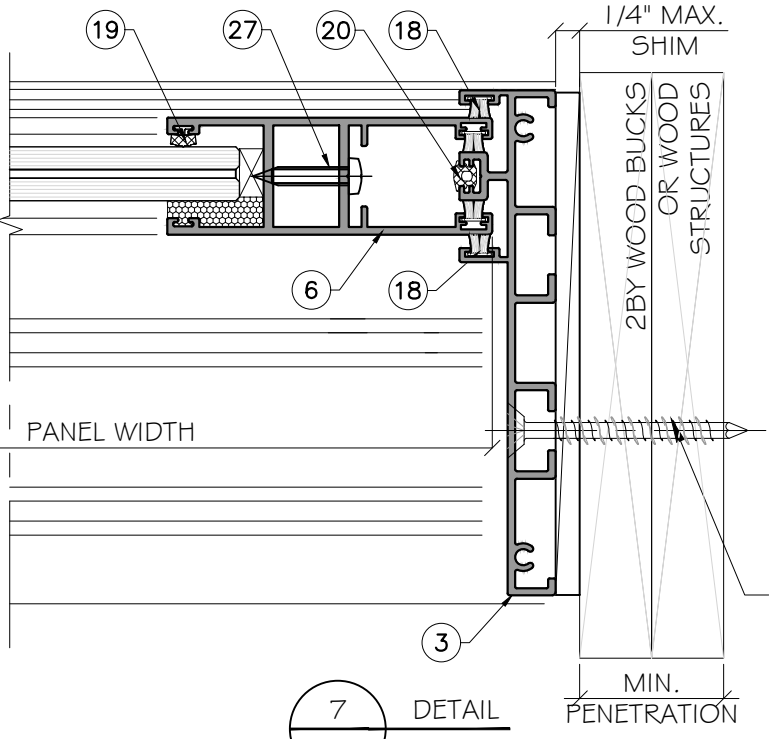
3
D3
DETAIL

4
D3
DETAIL



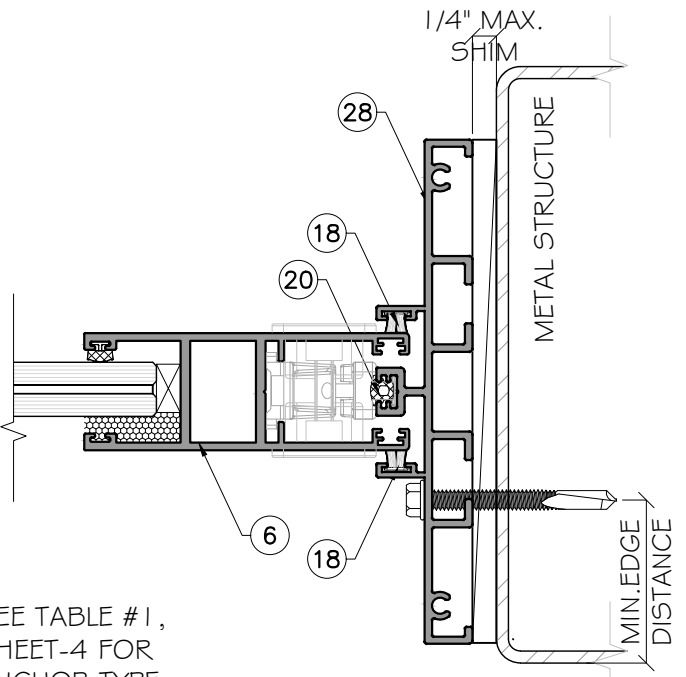
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D3
DETAIL

6
D3
DETAIL



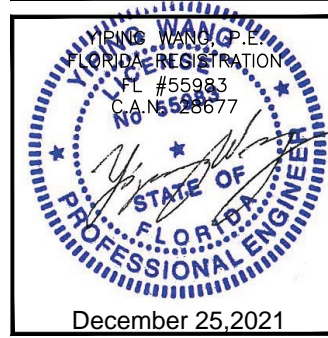
7
D3
DETAIL

SEE TABLE # 1, SHEET-4 FOR ANCHOR TYPE. SEE ELEV. FOR SPACING

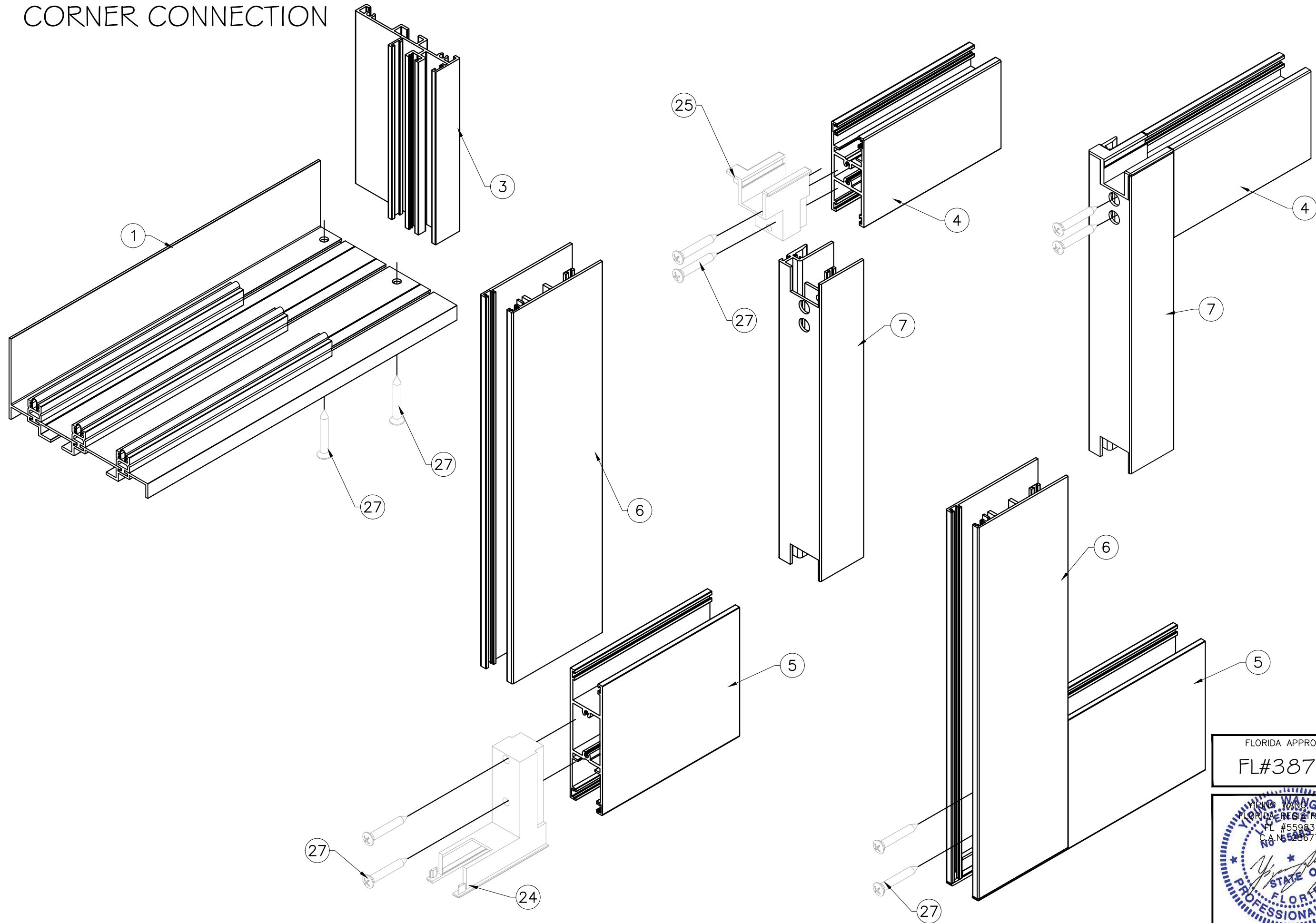


8
D3
DETAIL

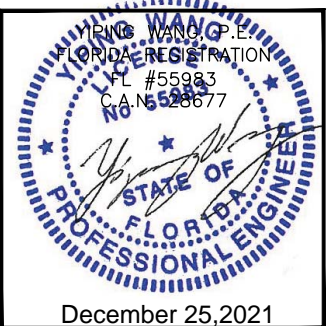
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CORNER CONNECTION



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LINEA ROSSA
DESIGN

SERIES LR-230 ALUMINUM SLIDING GLASS DOOR - L.M.I

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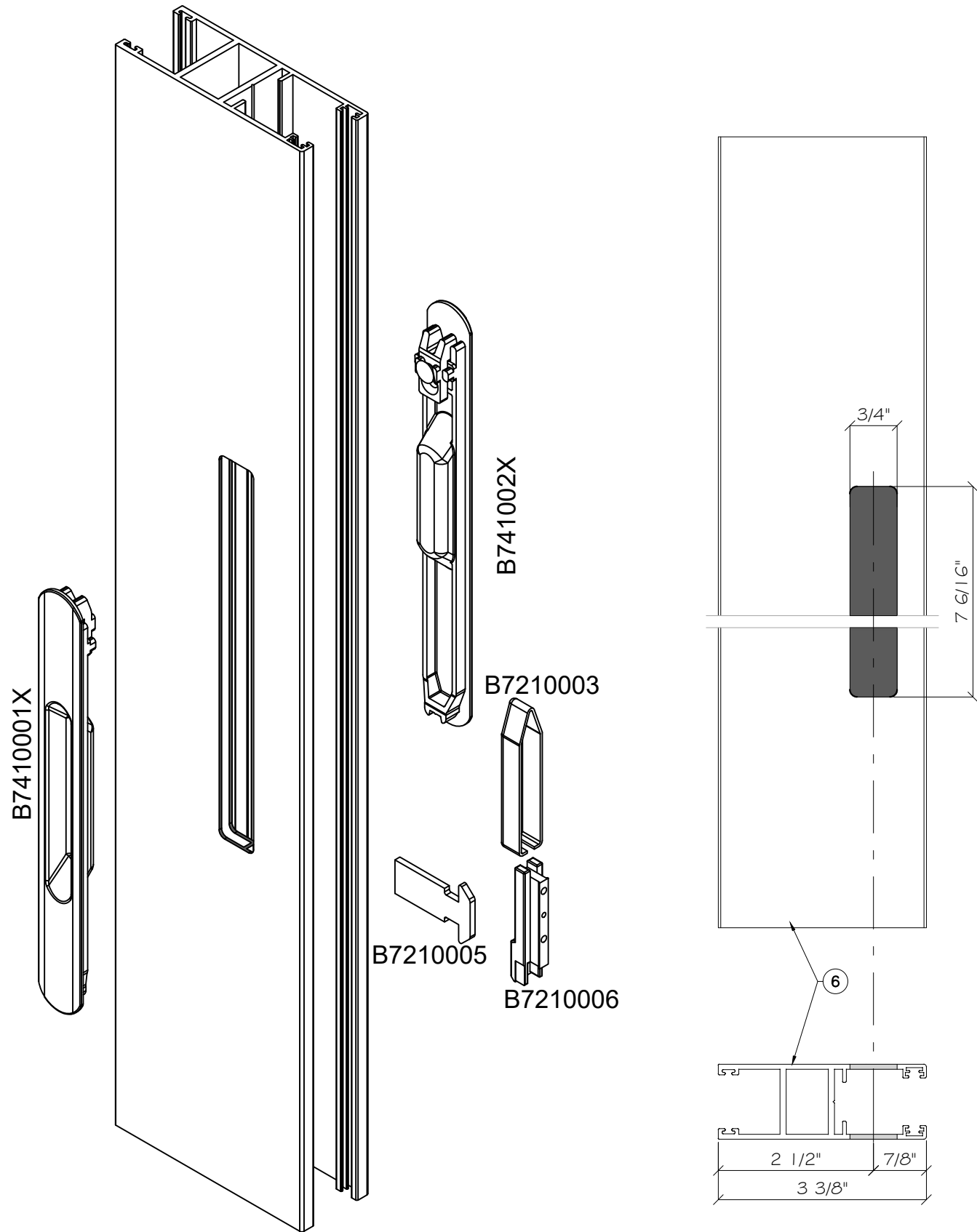
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ASSEMBLY

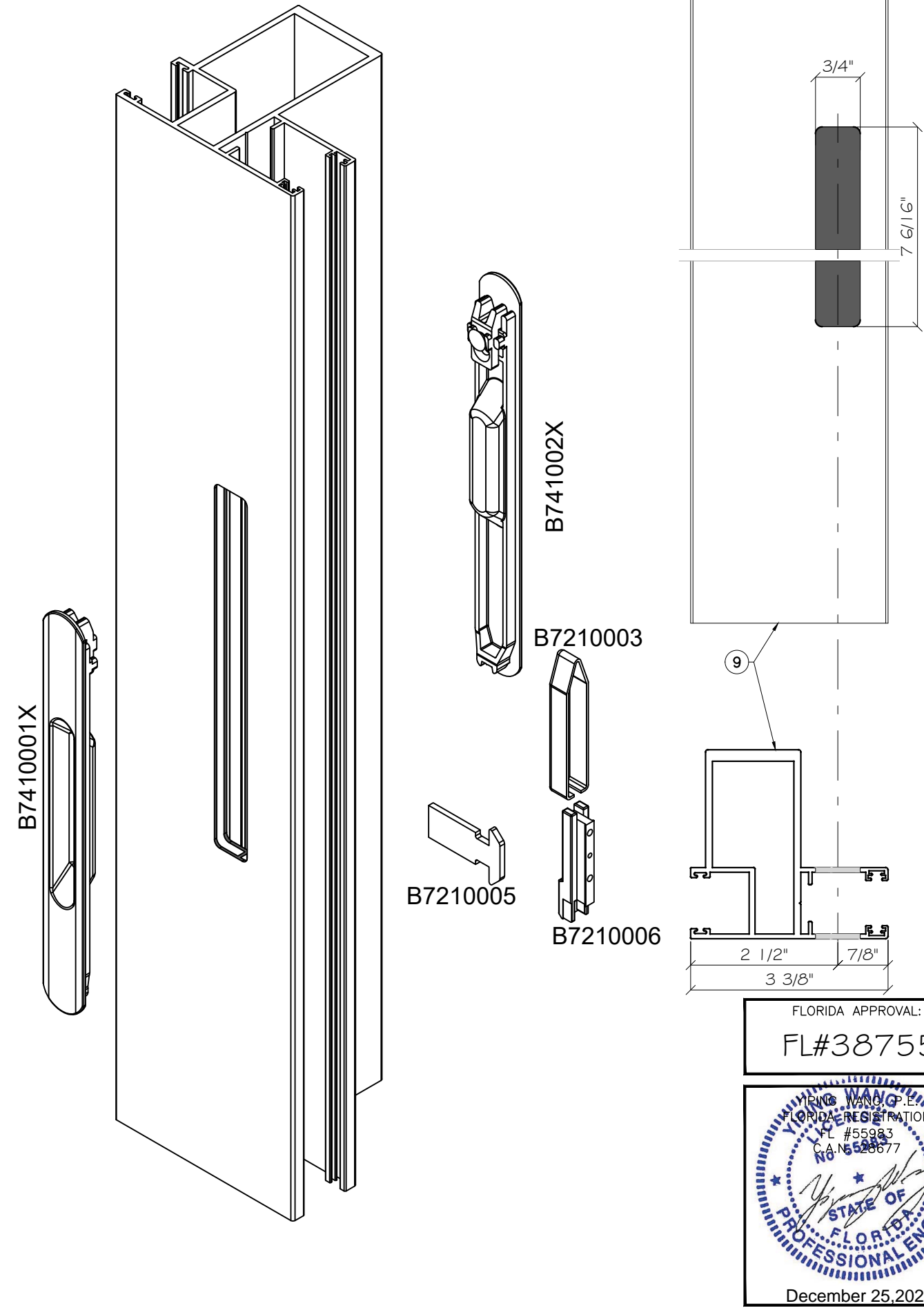
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LOCKING DETAILS



LOCKING DETAILS



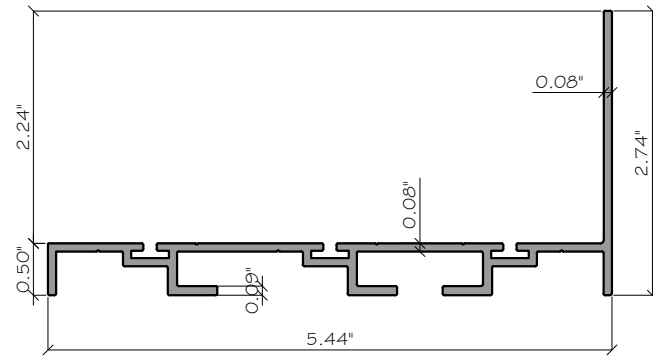
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YONG WANG
 P.E.
 FLORIDA REGISTRATION
 FL #55983
 CA #5528677
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 December 25, 2021

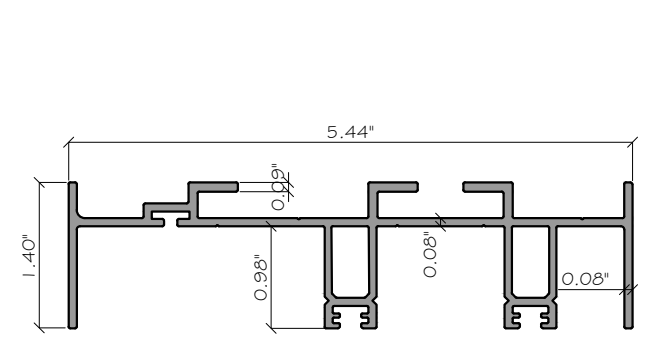
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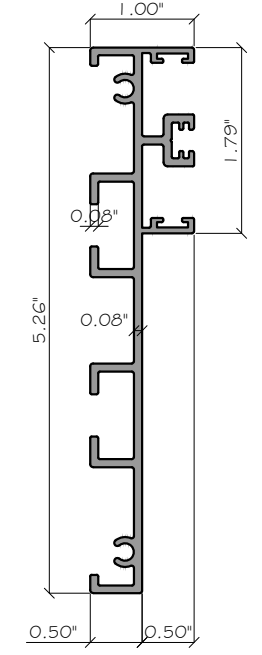
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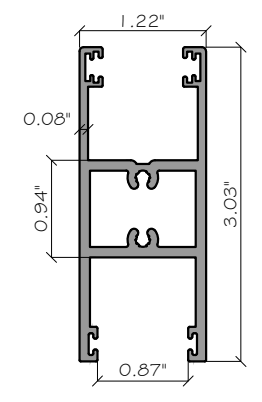
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LR230-05 ALUM. 6063-T6



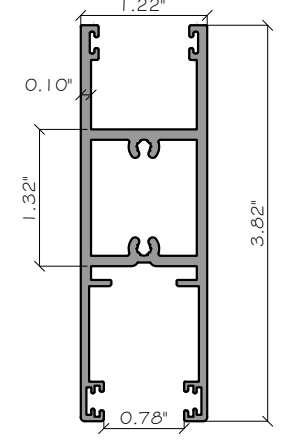
② 3 TRACK FRAME HEAD
LR230-06 ALUM. 6063-T6



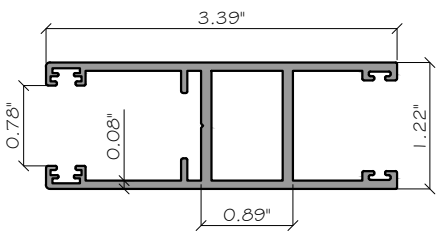
③ 3 TRACK FRAME JAMB
LR230-08 ALUM. 6063-T6



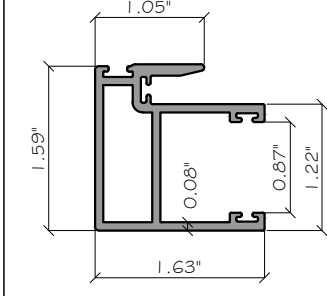
④ TOP SASH
LR230-10 ALUM. 6063-T6



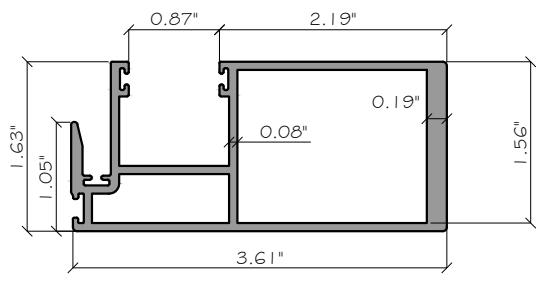
⑤ BOTTOM SASH
LR230-11 ALUM. 6063-T6



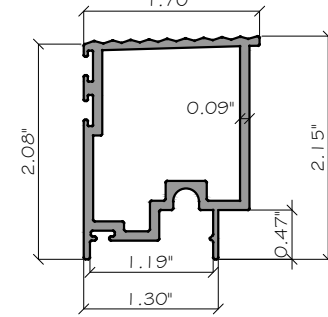
⑥ JAMB/ LOCK SASH
LR230-12 ALUM. 6063-T6



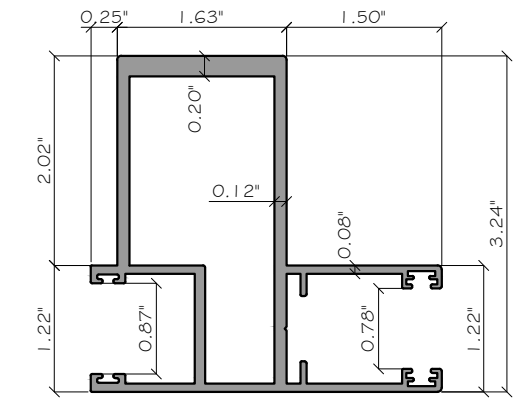
⑦ INTERLOCK STILE
LR230-13 ALUM. 6063-T6



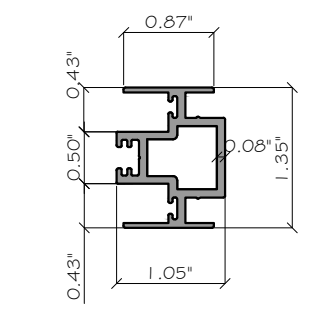
⑧ H.D. INTERLOCK STILE
LR230-14 ALUM. 6063-T6



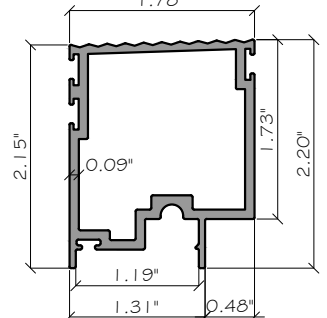
⑩ COVER PROFILE
LR230-25 ALUM. 6063-T6



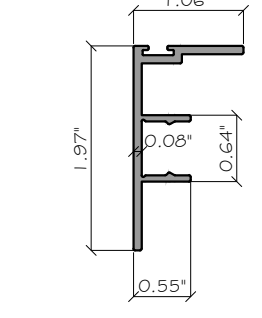
⑨ HEAVY LOCK STILE
LR230-23 ALUM. 6063-T6



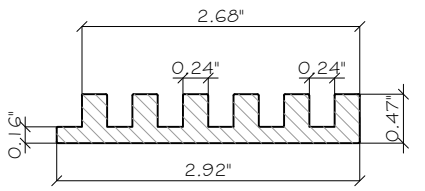
⑩ ASTRAGAL STILE
LR230-19 ALUM. 6063-T6



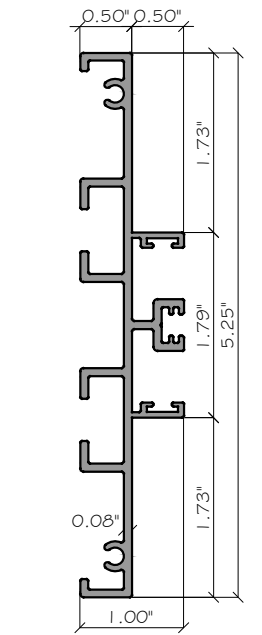
⑪ COVER PROFILE
LR230-09 ALUM. 6063-T6



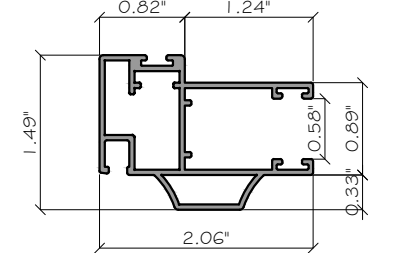
⑫ COVER PROFILE
LR230-04 ALUM. 6063-T6



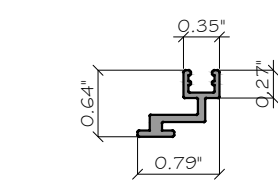
⑬ REINFORCEMENT INTERLOCKED (FULL LENGTH)
LR230-24 ALUM. 6063-T6



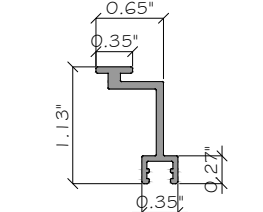
⑭ 3-TRACK FRAME JAMB
LR230-07 ALUM. 6063-T6



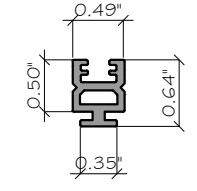
⑮ FLY SCREEN SASH
LR230-21 ALUM. 6063-T6



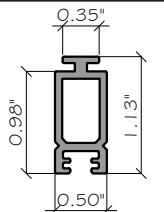
⑯ BOTTOM FLYSCREEN RAIL
LR3130 ALUM. 6063-T6



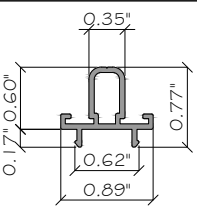
⑰ TOP FLYSCREEN RAIL
LR3130 ALUM. 6063-T6



⑱ BOTTOM RAIL PROFILE
LR230-15 ALUM. 6063-T6

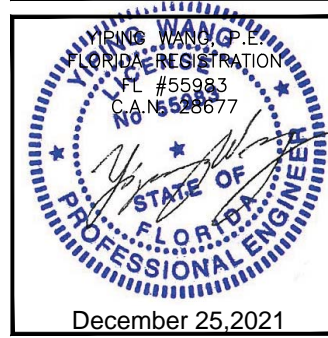


⑲ TOP RAIL PROFILE
LR230-17 ALUM. 6063-T6



⑳ FLYSCREEN ASTRAGAL STILE
LR3130 ALUM. 6063-T6

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BILL OF MATERIAL

ITEM #	PART #	DESCRIPTION	MATERIAL	MANF. / REMARKS
1	LR230-05	3 TRACK FRAME SILL	6063-T6	LINEA ROSSA
2	LR230-06	3 TRACK FRAME HEAD	6063-T6	LINEA ROSSA
3	LR230-08	3 TRACK FRAME JAMB	6063-T6	LINEA ROSSA
4	LR230-10	TOP SASH	6063-T6	LINEA ROSSA
5	LR230-11	BOTTOM SASH	6063-T6	LINEA ROSSA
6	LR230-12	JAMB / LOCK SASH	6063-T6	LINEA ROSSA
7	LR230-13	INTERLOCK STILE	6063-T6	LINEA ROSSA
8	LR230-14	H.D. INTERLOCK STILE	6063-T6	LINEA ROSSA
9	LR230-23	HEAVY LOCK STILE	6063-T6	LINEA ROSSA
10	LR230-19	ASTRAGAL STILE	6063-T6	LINEA ROSSA
11	LR230-09	COVER PROFILE	6063-T6	LINEA ROSSA
12	LR230-04	COVER PROFILE	6063-T6	LINEA ROSSA
13	LR230-15	BOTTOM RAIL PROFILE	6063-T6	LINEA ROSSA
14	LR230-17	TOP RAIL PROFILE	6063-T6	LINEA ROSSA
15	LR230-24	REINFORCEMENT INTERLOCKED (FULL LENGTH)	6063-T6	LINEA ROSSA
16	LR230-25	COVER PROFILE	6063-T6	LINEA ROSSA
17	B5611214	STAINLESS STEEL DRIVER	STAINLESS STEEL	LINEA ROSSA
18	B4711006	67X600 SEALING BRUSH TRI-FIN	POLYPROPYLENE	LINEA ROSSA
19	B5410091	GLAZING GASKET	EPDM	LINEA ROSSA
20	B4310022	GASKET FOR FRAME RAILS	EPDM	LINEA ROSSA
21	B4510092	SASH GASKET	EPDM	LINEA ROSSA
22	B1110205	SLIDING AND AD. CARRIAGE	ALUMINUM	LINEA ROSSA
23	B5410230	SASH FIXING PART	PVC	LINEA ROSSA
24	B2610230	90° W. CORNER WIDE JOINTS	PVC	LINEA ROSSA
25	B2610231	90° W. CORNER NARROW JOINTS	PVC	LINEA ROSSA
26	B2410003	SETTING BLOCK, @ ¼ POINTS	EPDM	LINEA ROSSA
27		#10 X 1" PHP. PH. SMS. FRAME & PANEL ASSY SCREW.	STAINLESS STEEL	LINEA ROSSA
28	LR230-07	3 TRACK FRAME JAMB	6063-T6	LINEA ROSSA
29	LR230-21	FLY SCREEN SASH	6063-T6	LINEA ROSSA
30	LR3130	FLYSCREEN ASTRAGAL STILE	6063-T6	LINEA ROSSA
31	LR230-16	BOTTOM FLYSCREEN RAIL	6063-T6	LINEA ROSSA
32	LR230-18	TOP FLYSCREEN RAIL	6063-T6	LINEA ROSSA
33	B1120206	SINGLE FLYSCREEN ROLLER	PVC	LINEA ROSSA

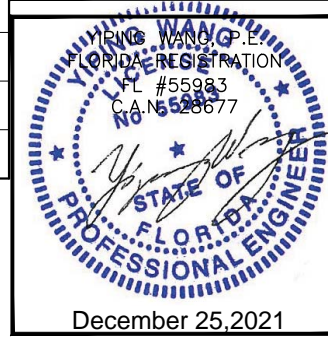


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Drawn Date	10/12/2021	Scale	
Drawn By	JAMES	Date	11.03.2021
Rev. No.	1.	Description	FBC UPDATE

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FL#38755



DRAWING NO.
AD21-37
 BOM
 Sheet No.
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