

LINEA ROSSA LLC

SERIES "LR-210" ALUMINUM SINGLE HUNG WINDOWS W/WO INTEGRAL MULLION LARGE MISSILE IMPACT

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 SILICONE 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 E I FOR APPROVED TYPICAL ELEVATION & CONFIGURATION.
- STEP 3: SEE SHEET G I FOR ALLOWED WINDOW SIZE AND APPROVED DESIGN LOAD.
- STEP 4: ANCHOR TYPE SEE SHEET D I. ANCHOR LAYOUT SEE SHEET E I.
- 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.

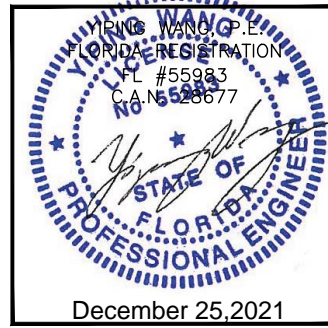
B- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.

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.

FLORIDA APPROVAL:
FL#39251



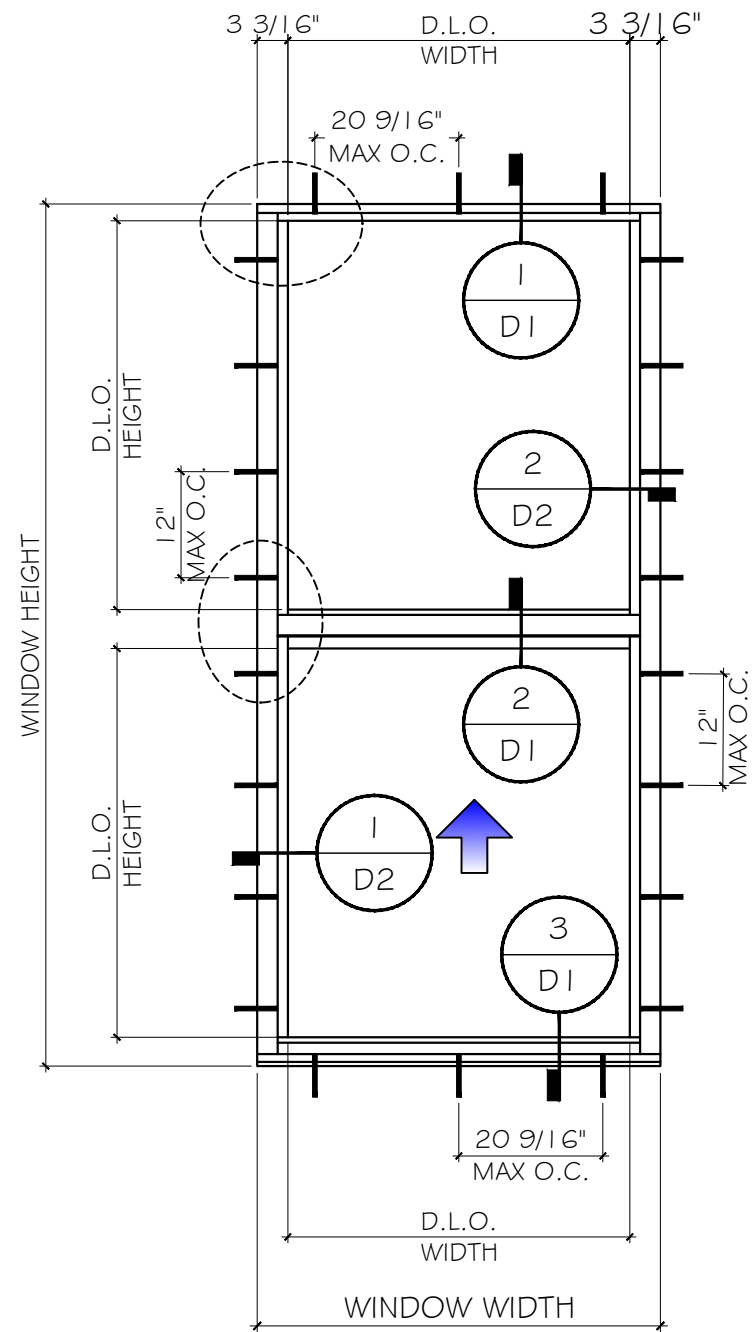
ABBREVIATIONS AND SYMBOLS	
G.B. - GLASS BITE	
D.L.O. - DAYLITE OPENING	
F.H. - FRAME HEIGHT	
F.W. - FRAME WIDTH	
W/ - WITH	
W/O - WITHOUT	
O.C. - ON CENTER	

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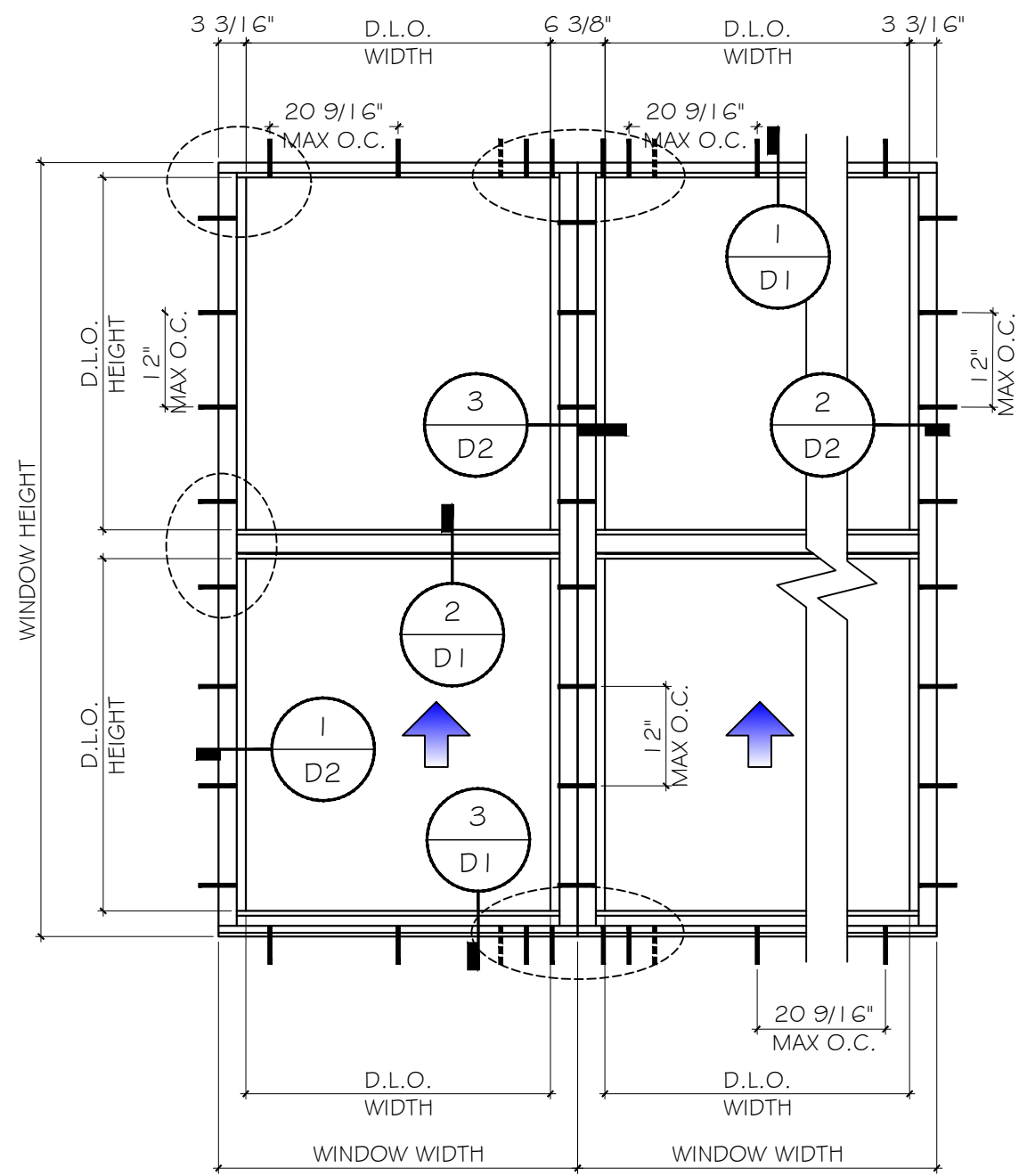
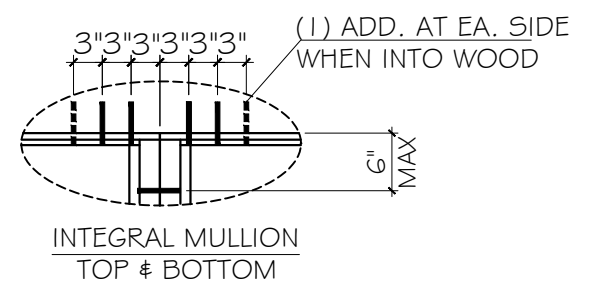
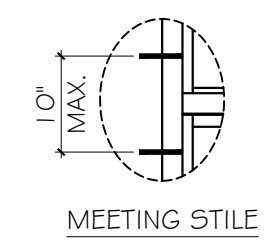
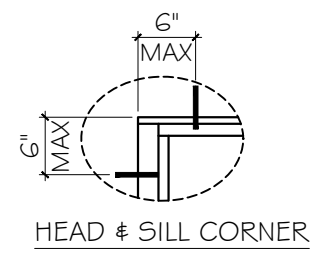
Rev. No.	Date	Drawn By	Description
1.	11.03.2021	JAMES WANG	FBC UPDATE
Drawn Date: 10/12/2021 Scale:			
DRAWING NO. AD21-35			
COVER			
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1.	11.03.2021	JAMES	FBC UPDATE

Drawn Date	Scale
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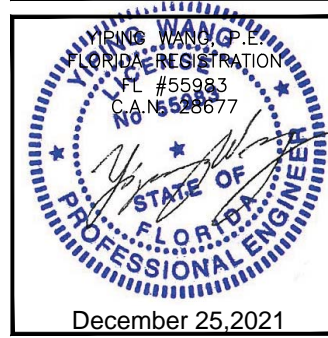


TYPICAL EXTERIOR ELEVATION



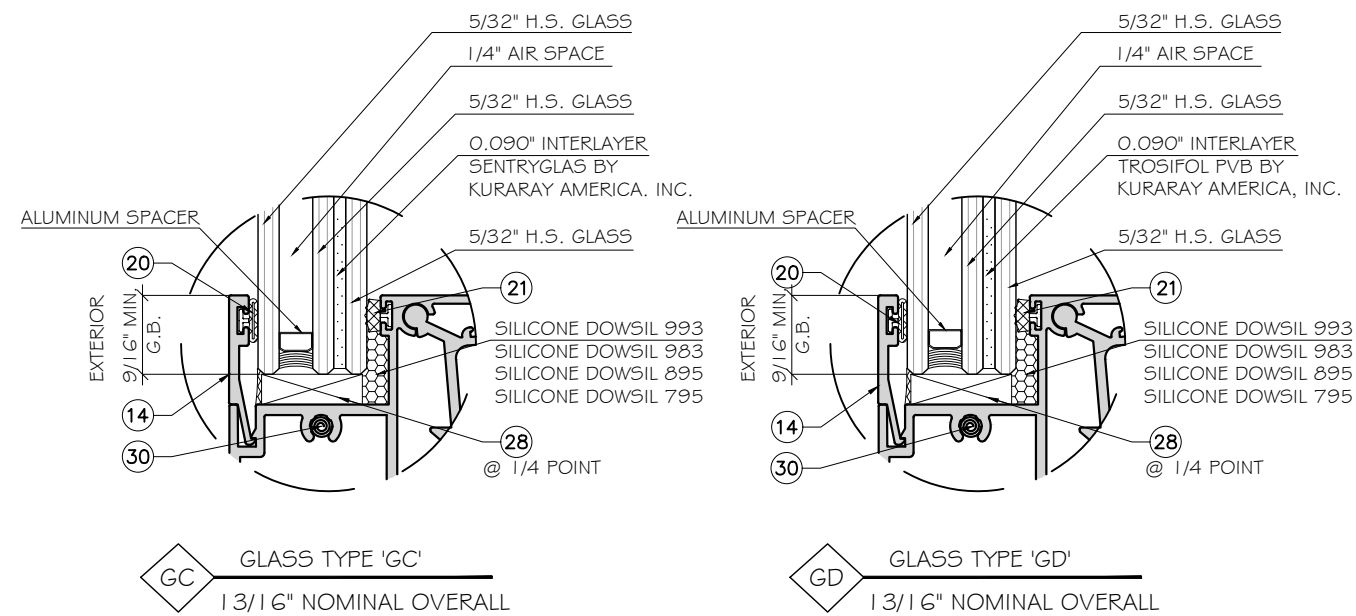
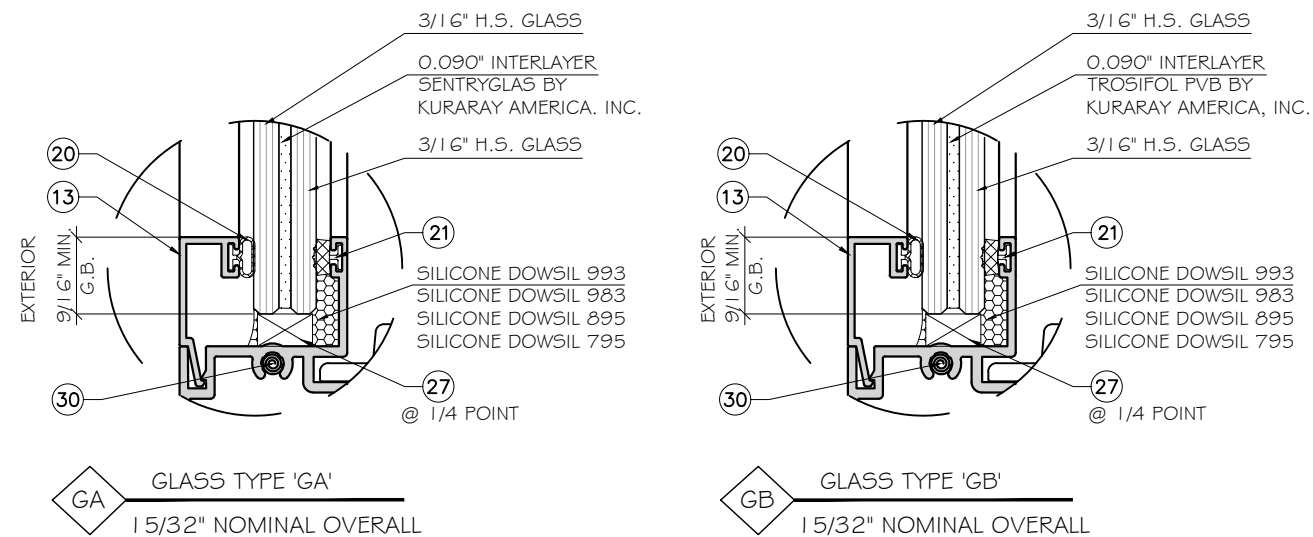
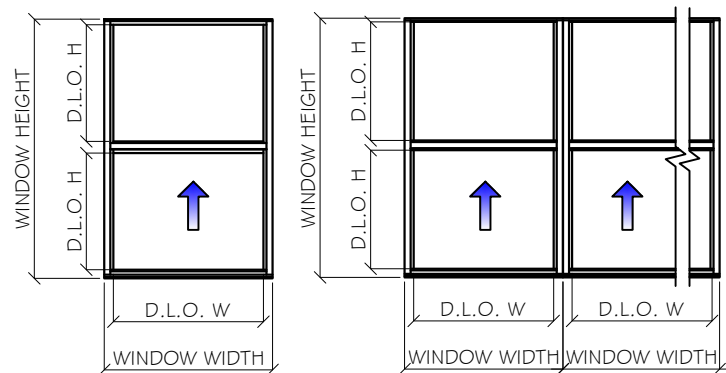
TYPICAL EXTERIOR ELEVATION

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ALLOW. DESIGN LOAD CAPACITY - PSF					
WINDOW DIMS.		GLASS TYPE			
HEIGHT	WIDTH	'GA' & 'GB'	'GC' & 'GD'		
INCH	INCH	(+) / (-)			
42	24	90			
	30	90			
	36	90			
	42	90			
	48	83.4			
	54	57.6			
48	24	90			
	30	90			
	36	90			
	42	90			
	48	74.8			
	54	51.4			
54	24	90			
	30	90			
	36	90			
	42	90			
	48	68.4			
	54	46.7			
60	24	90			
	30	90			
	36	90			
	42	90			
	48	63.6			
	54	43.1			
66	24	90			
	30	90			
	36	90			
	42	90			
	48	59.9			
	54	40.3			
72	24	90			
	30	90			
	36	90			
	42	90			
	48	57.2			
	78	24	90		
30		90			
36		90			
42		90			
48		55.2			
84		24	90		
	30	90			
	36	90			
	42	90			
	90	24	90		
		30	90		
36		90			
42		90			

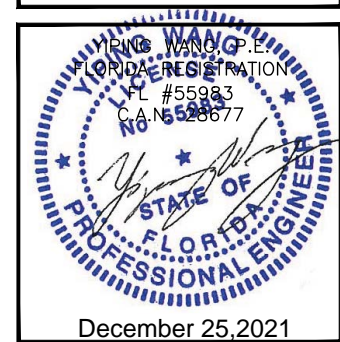
ALLOW. DESIGN LOAD CAPACITY - PSF				
WINDOW DIMS.		GLASS TYPE		
HEIGHT	WIDTH	'GA' & 'GB'	'GC' & 'GD'	
INCH	INCH	(+) / (-)		
26	26.5	90		
	37	90		
	53.12	90		
	74	34.4		
38.375	26.5	90		
	37	90		
	53.12	65.7		
	74	23.7		
50.625	26.5	90		
	37	90		
	53.12	51.8		
	74	43.9		
63	26.5	90		
	37	90		
	53.12	43.9		
76	26.5	90		
	37	90		



MAX. DLO AREA = $35 \frac{5}{8} \times 41 \frac{1}{8} = 10.17 \text{ FT}^2$

NOTE:
GLASS COMPLIES WITH ASTM E I 300-09
(3 SEC. GUSTS).

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LINEA ROSSA
DESIGN

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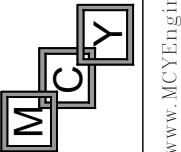
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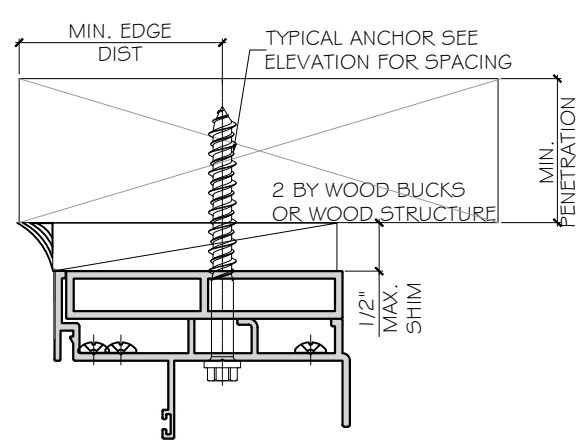
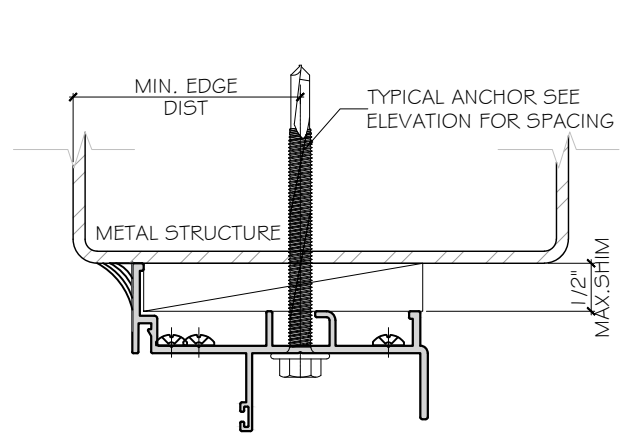
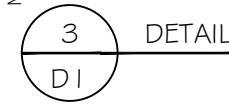
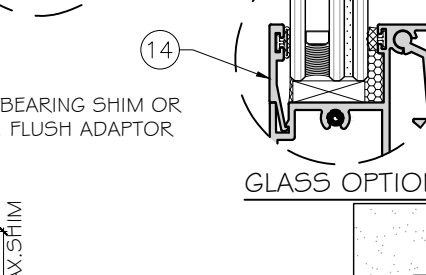
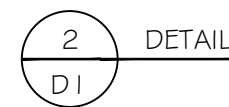
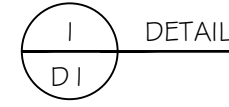
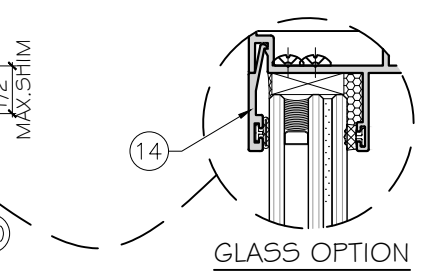
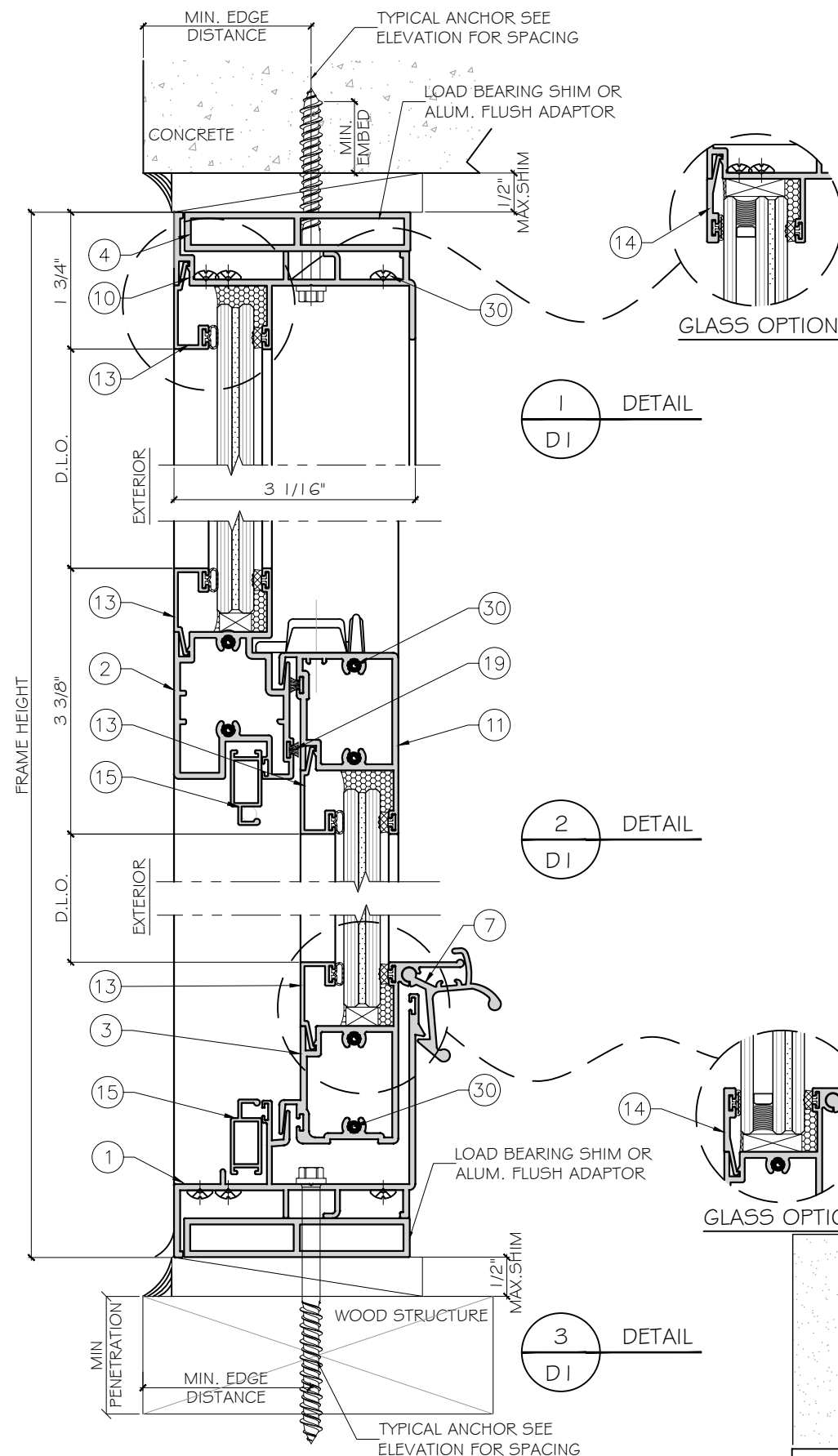
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WOOD BUCKS AND METAL STRUCTURE (NOT BY LINEA ROSSA LLC.) MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSOM THEM TO THE BUILDING STRUCTURE.

ANCHOR TYPES: (SEE ELEVATIONS FOR SPACING)

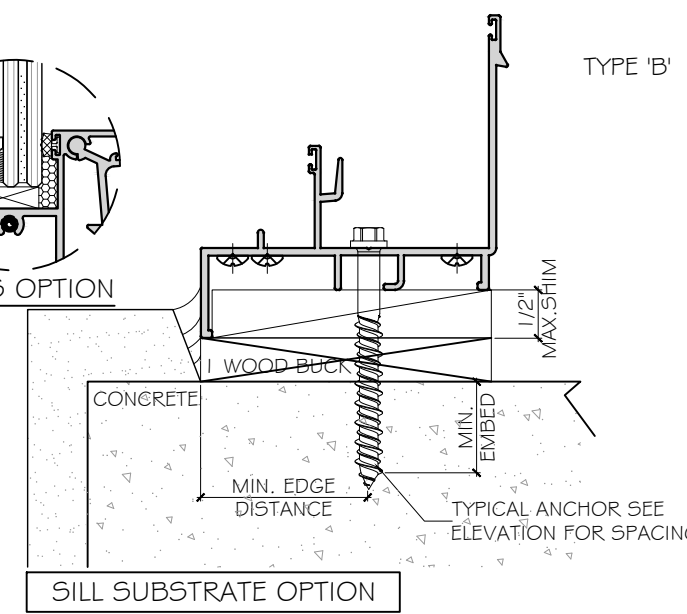
TYPE 'A' -- 5/16" DIA. ULTRACON BY 'DEWALT' (Fu=177 KSI, Fy=155 KSI)
INTO 2 BY WOOD BUCKS OR WOOD STRUCTURES.
1 1/2" MIN. PENETRATION INTO WOOD

THRU 1 BY BUCKS INTO CONCRETE OR BLOCKS
1 3/4" MIN. EMBED INTO CONCRETE
1 3/4" MIN. EMBED INTO HOLLOW OR GROUT FILLED BLOCK (JAMB ONLY)

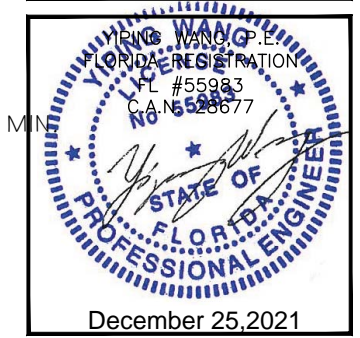
DIRECTLY INTO CONCRETE OR BLOCKS
1 3/4" MIN. EMBED INTO CONCRETE
1 3/4" MIN. EMBED INTO HOLLOW OR GROUT FILLED BLOCK (JAMB ONLY)

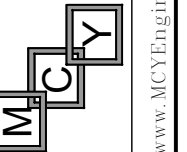
TYPE 'B' -- 5/16" DIA. TEKS/SELF-DRILLING SCREW, GRADE 5 (Fu=120 KSI, Fy=92 KSI)
INTO FBC APPROVED MULLIONS (1/8" THK. MIN.) (6063-T5 MIN)
OR INTO METAL STRUCTURES, STEEL: 1/8" THK. MIN. (Fy=36 KSI MIN.)
(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

CRITICAL EDGE DISTANCE
INTO CONCRETE = 2-1/2" MIN.
INTO BLOCKS = 3 1/8" MIN.
INTO METAL STRUCTURE = 3/4" MIN.
INTO WOOD STRUCTURE = 1 1/4" MIN.
WOOD AT HEAD OR JAMBS SG = 0.55 MIN.
CONCRETE AT HEAD, SILL OR JAMB f'c=3000PSI MIN.
C-90 HOLLOW/ GROUT FILLED BLOCK AT JAMBS fm=2000 PSI MIN.



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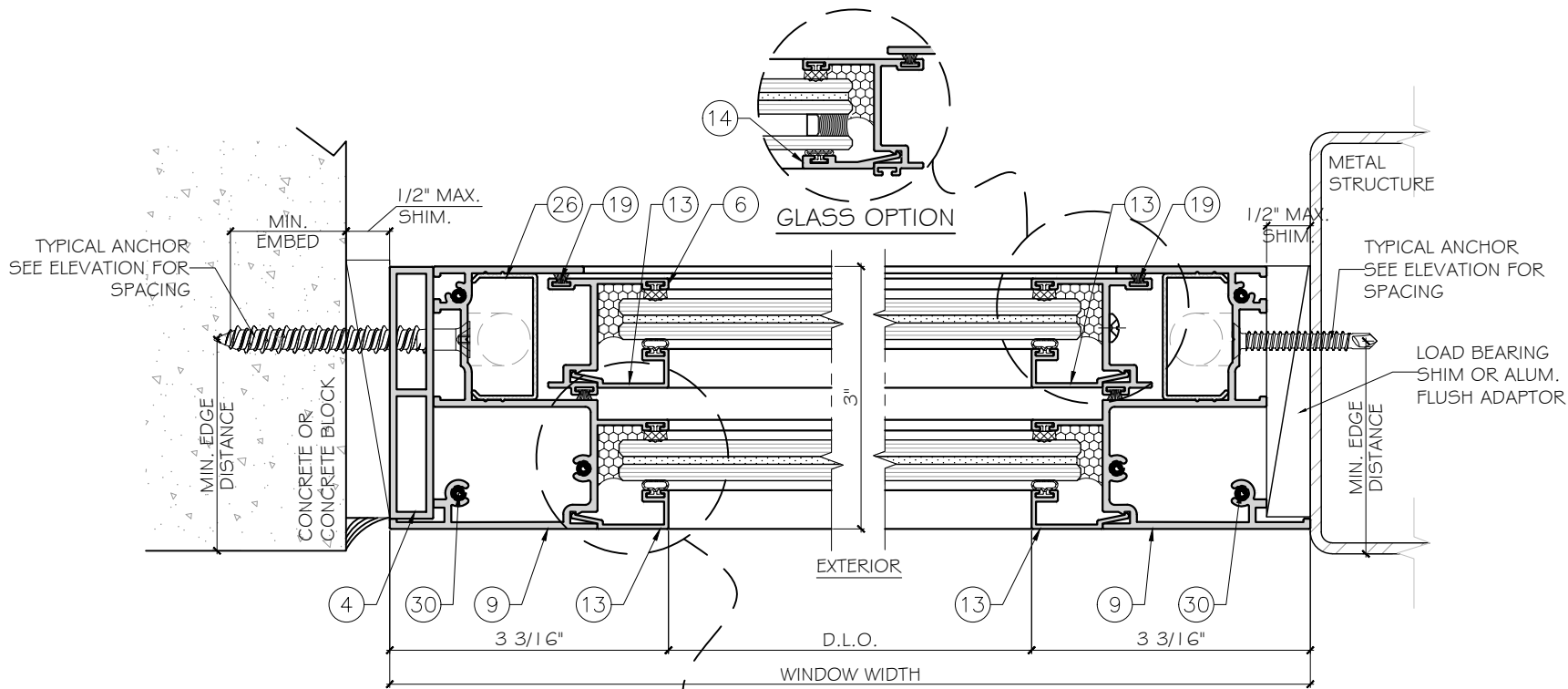
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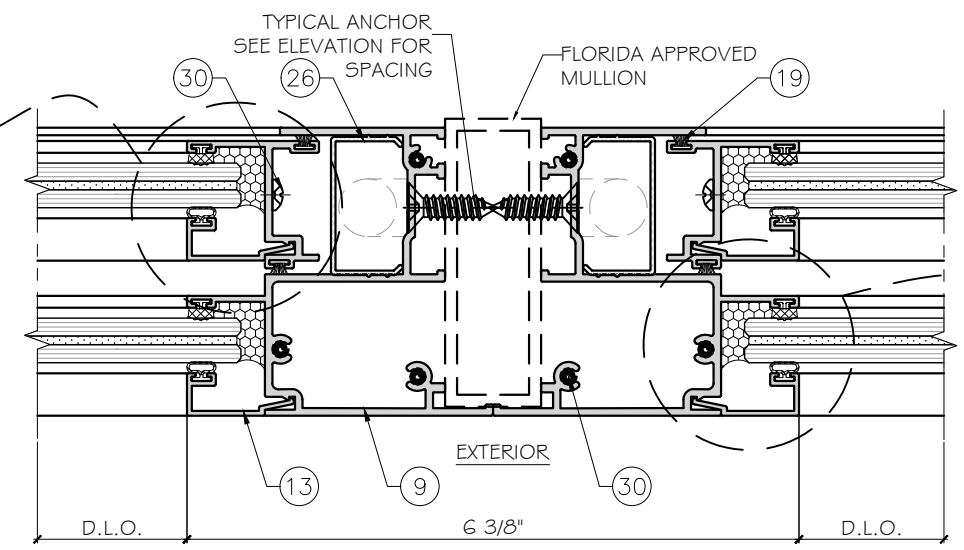
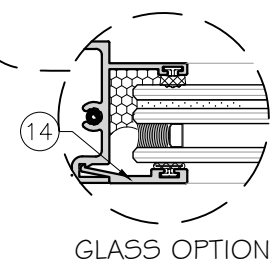
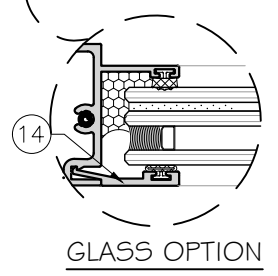
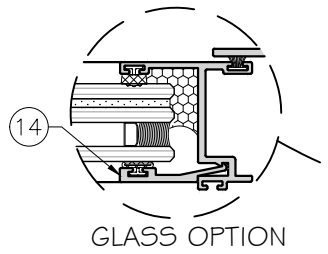
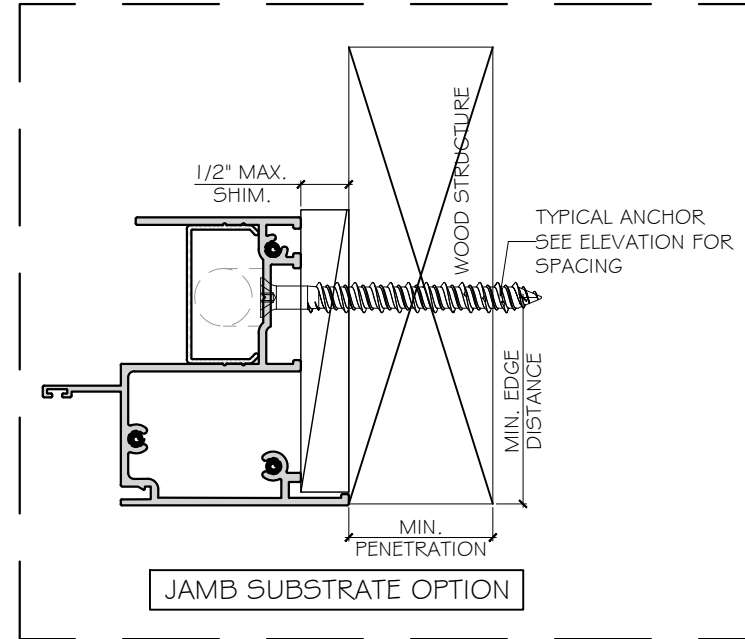
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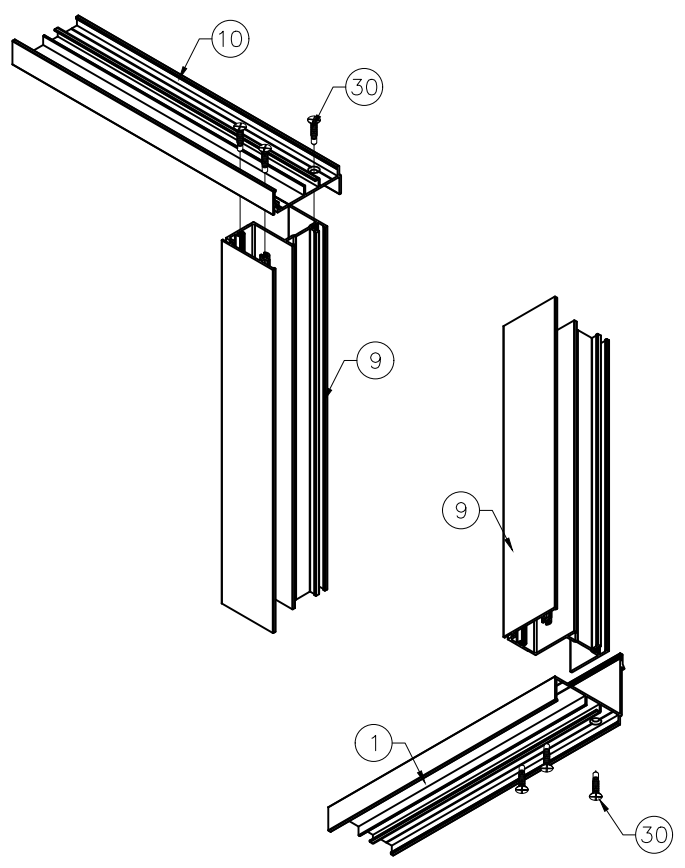


1
D2
DETAIL

2
D2
DETAIL

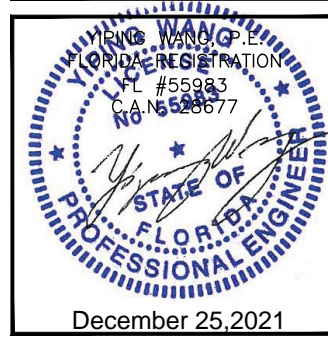


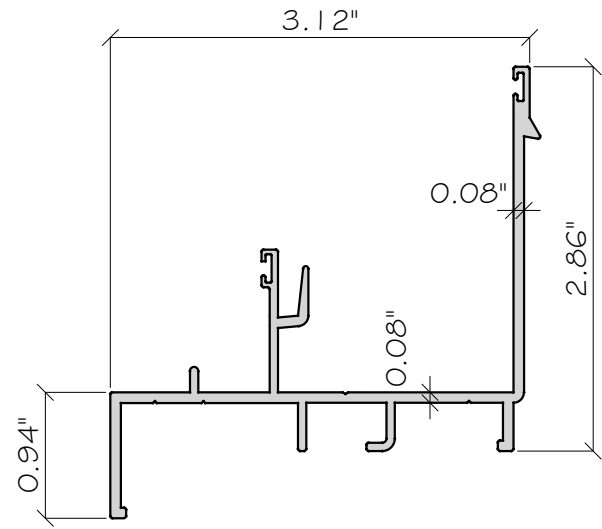
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D2
DETAIL



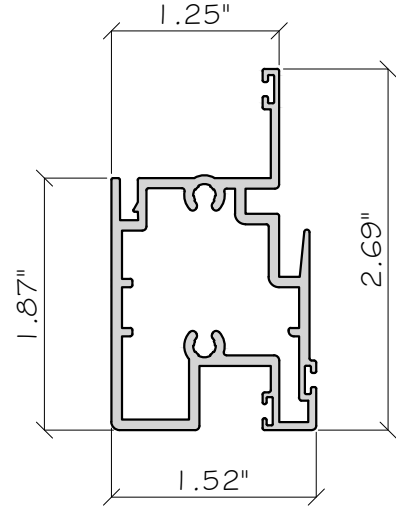
FRAME CORNER ASSEMBLY

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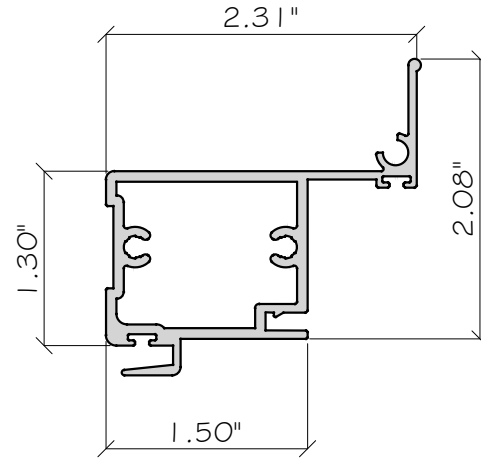




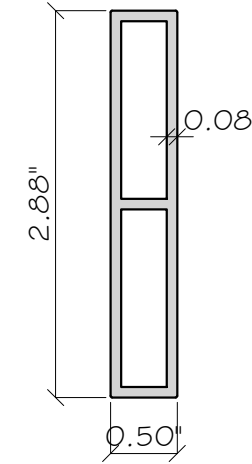
① LR210-01 FRAME SILL
ALUM. 6063-T6



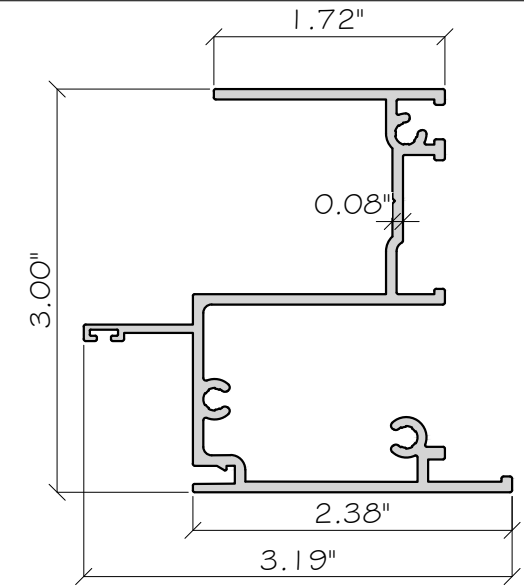
② LR220-05 FIXED MTG. STILE
ALUM. 6063-T6



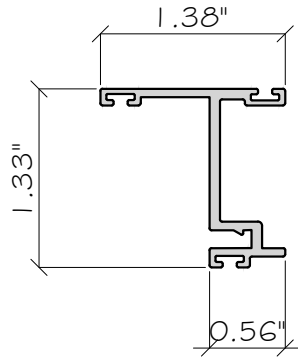
③ LR210-02 VENT JAMB STILE
ALUM. 6063-T6



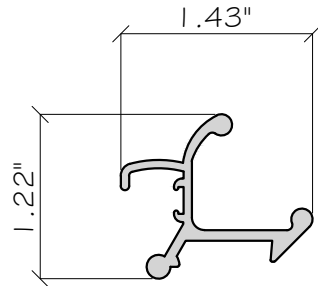
④ LR220-08 TUBE PROFILE
ALUM. 6063-T6



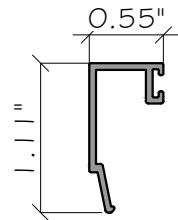
⑨ LR220-15 FRAME JAMB
ALUM. 6063-T6



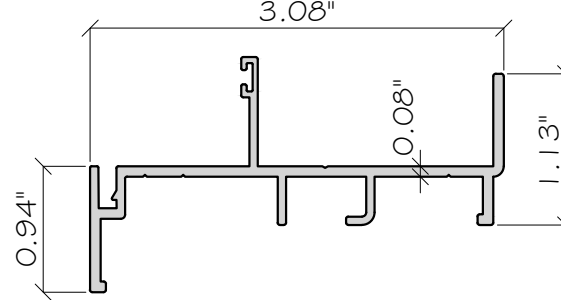
⑥ LR220-10 VENT TOP-BOTTOM RAIL
ALUM. 6063-T6



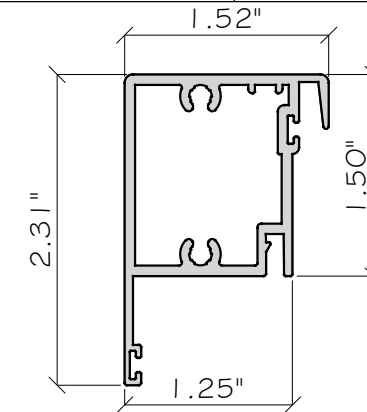
⑦ LR220-11 SPRING LATCH
ALUM. 6063-T6



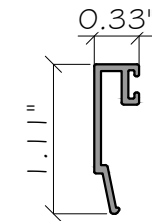
⑧ LR220-14 GLAZING BEAD
ALUM. 6063-T6



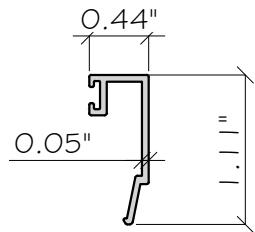
⑩ LR220-16 FRAME HEAD
ALUM. 6063-T6



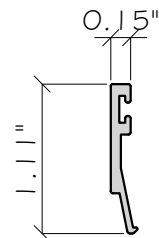
⑪ LR220-17 MEETING STILE
ALUM. 6063-T6



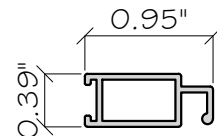
⑫ LR220-18 GLAZING BEAD
ALUM. 6063-T6



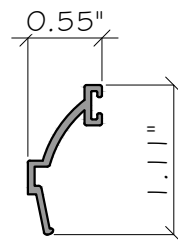
⑬ LR220-19 GLAZING BEAD
ALUM. 6063-T6



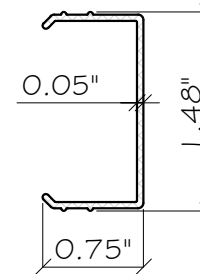
⑭ 5000-08 GLAZING BEAD
ALUM. 6063-T6



⑮ LR420-04 FLYSCREEN
ALUM. 6063-T6

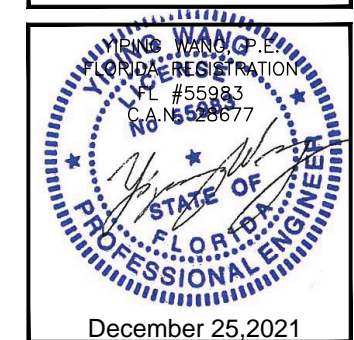


⑯ LR220-09 GLAZING BEAD
ALUM. 6063-T6



⑳ B5110350 COVER FOR FRAME
PVC

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SERIES LR-210 ALUMINUM SINGLE HUNG WINDOWS

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PART
Sheet No. 6 OF 7

BILL OF MATERIALS

ITEM #	PROFILE	DESCRIPTION	MATERIAL	MANUFACTURER/REMARKS
1	LR210-01	FRAME SILL	6063-T6	LINEA ROSSA
2	LR220-05	FIXED MEETING RAIL	6063-T6	LINEA ROSSA
3	LR210-02	VENT BOTTOM RAIL	6063-T6	LINEA ROSSA
4	LR220-08	TUBE PROFILE (FLUSH ADAPER)	6063-T6	LINEA ROSSA
5	LR220-09	GLAZING BEAD	6063-T6	LINEA ROSSA
6	LR220-10	VENT SIDE RAIL	6063-T6	LINEA ROSSA
7	LR220-11	LR220-11	6063-T6	LINEA ROSSA
8	LR220-14	GLAZING BEAD	6063-T6	LINEA ROSSA
9	LR220-15	FRAME JAMB	6063-T6	LINEA ROSSA
10	LR220-16	FRAME HEAD	6063-T6	LINEA ROSSA
11	LR220-17	MEETING STILE	6063-T6	LINEA ROSSA
12	LR220-18	GLAZING BEAD	6063-T6	LINEA ROSSA
13	LR220-19	GLAZING BEAD	6063-T6	LINEA ROSSA
14	5000-08	GLAZING BEAD	6063-T6	LINEA ROSSA
15	LR420-04	FLYSCREEN	6063-T6	LINEA ROSSA
16	LR220-09	GLAZING BEAD	6063-T6	LINEA ROSSA
17	NOT USED			
18	NOT USED			
19	B4613003	FIN SEAL W/STRIPPING	-	LINEA ROSSA
20	B4510092	EXTERIOR GLASS GASKET	EPDM DUROMETER 80± SHORE A	LINEA ROSSA
21	B4510090	INTERIOR GLASS GASKET	EPDM DUROMETER 80± SHORE A	LINEA ROSSA
22	NOT USED			
23	B7410078	SWEEP LATCH	ZAMAK	AZURPASS
24	B2510752	WEEP COVER	NYLON	AZURPASS
25	B7810018	SPIRAL BALANCE	---	AZURPASS
26	B5110350	COVER FOR FRAME	PVC	AZURPASS
27	B2410003	3/8" X 1/4" SETTING BLOCK	EPDM DUROMETER 80± SHORE A	-
28		3/4" X 1/4" SETTING BLOCK	EPDM DUROMETER 80± SHORE A	-
29	NOT USED			
30		#10x1-1/2" PAN HEAD SCREW, FRAME-VENT ASSEMBLY SCREWS	STEEL	P.H.SMS



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1.	11.03.2021	JAMES	FBC UPDATE

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