


LINEA ROSSA LLC SERIES "LR-420F" ALUMINUM FIX CASEMENT WITH AND WITHOUT 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 NOT CONTINENTAL GLASS SYSTEM 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 AND PANEL JOINT, INSTALLATION SCREWS AND HEAD OF ANCHOR SCREWS TO BE SEALED WITH DOW CORNING 899 SILICONE BUILDING 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 OPTION 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. WHEN USE SYSTEM WITH DOOR, THE LOWER VALUE OF THE DESIGN PRESSURE RATING FOR THE SYSTEM AND THE DOOR SHALL APPLY.

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

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.

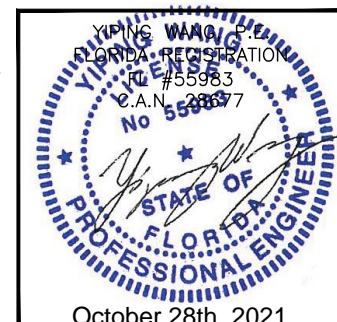
B- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED. HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.

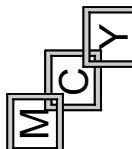
C- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

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#34543



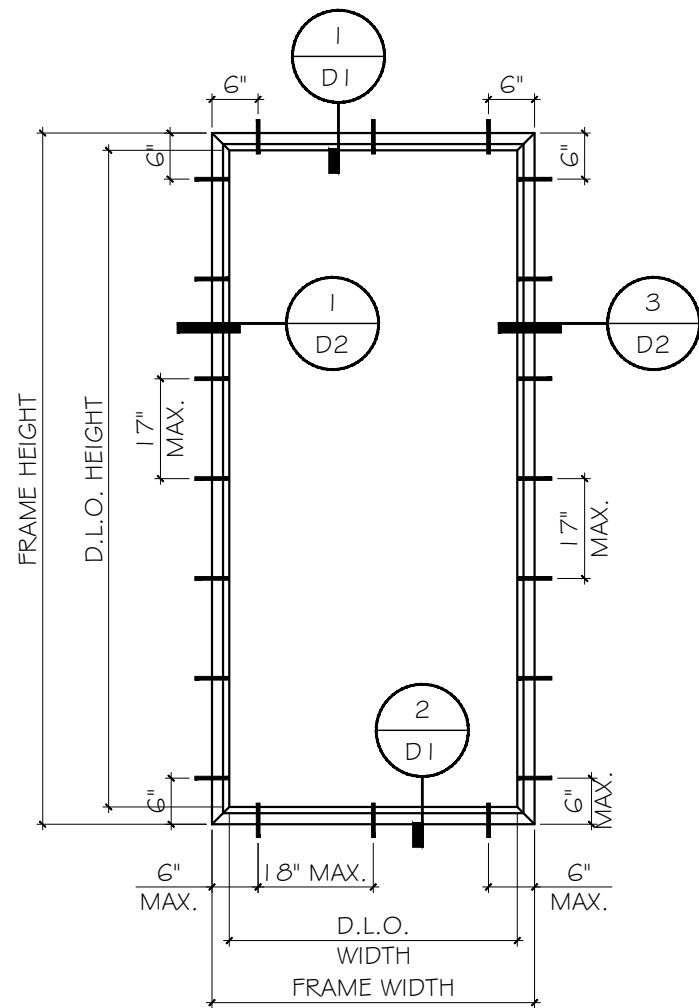


MCY ENGINEERING, INC.
GLAZING CONSULTANTS
12781 MIRAMAR PKWY. STE. 301
MIRAMAR, FL 33027 P: 305.271.0117
www.MCYEngineering.com mcy@mcyengineering.com

SERIES LR-420F ALUMINUM FIX CASEMENT WITH AND WITHOUT INTEGRAL MULLION - L.M.I.

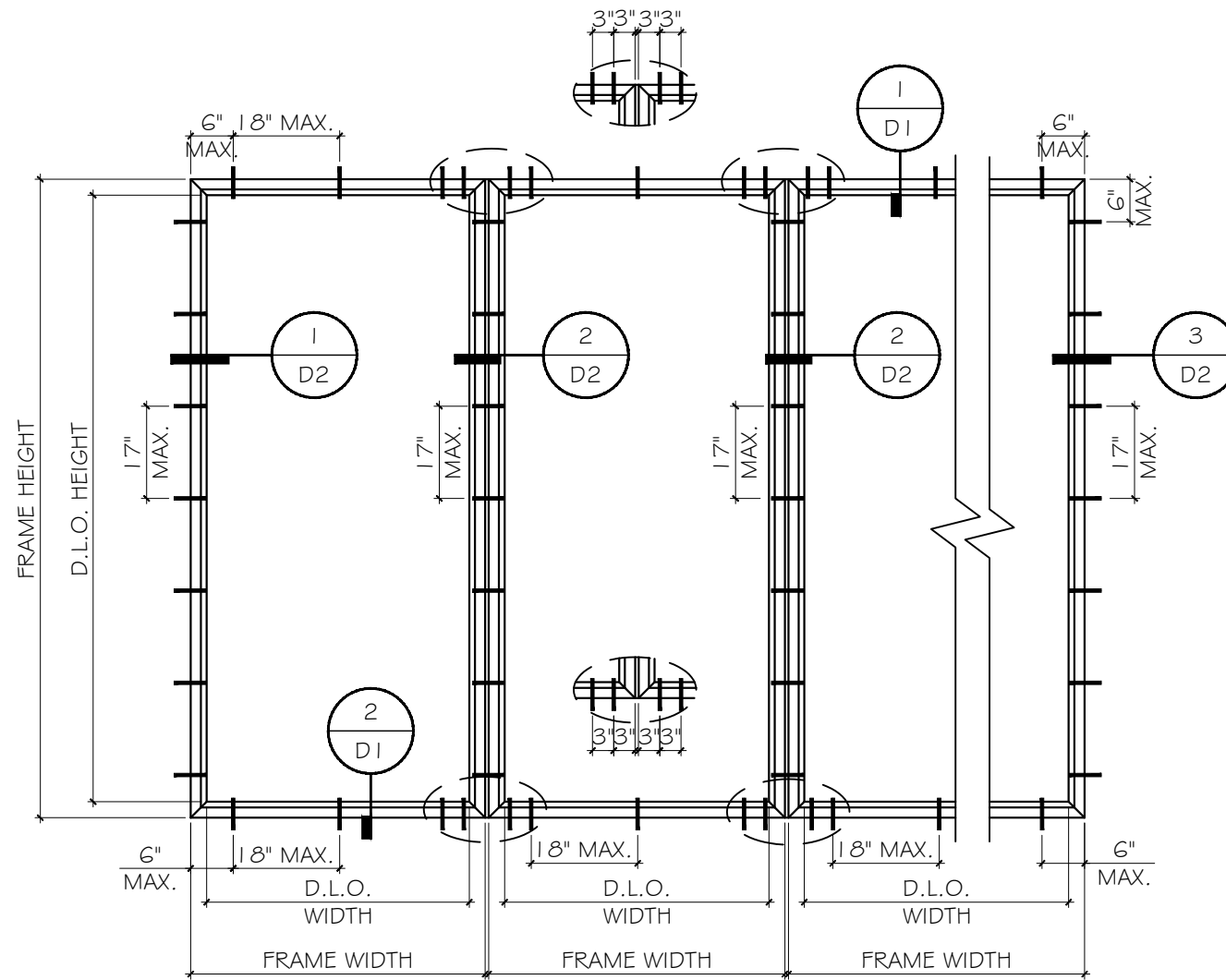
LINEA ROSSA LLC
1850 NW 84TH. AVENUE
SUITE 114, DORAL, FL 33126
TEL: 786-930-7521 info@linearossadesign.com

Rev. No.	Date	Drawn By	Description
1.	10.12.2021	JAMES WANG	RBC UPDATE
Drawn Date		Scale	
10/12/2021			
DRAWING NO.			
AD21-30			
COVER			
Sheet No.			
1 OF 7			



TYPICAL EXTERIOR ELEVATION

DESIGN LOAD
FOR SIZE SHOWN ABOVE OR SMALLER AS PERMITTED BY FBC
+90 PSF -90 PSF



TYPICAL EXTERIOR ELEVATION

DESIGN LOAD
FOR SIZE SHOWN ABOVE OR SMALLER AS PERMITTED BY FBC
+90 PSF -90 PSF

FLORIDA APPROVAL:
FL#34543

YIN WANG
FLORIDA REGISTRATION
#55983
C.A.N. 2887
No. 55983
STATE OF FLORIDA
PROFESSIONAL ENGINEER
October 28th, 2021

SERIES LR-420F ALUMINUM FIX CASEMENT WITH AND WITHOUT INTEGRAL MULLION - L.M.I.

LINEA ROSSA LLC
1850 NW 84TH AVENUE
SUITE 114, DORAL, FL 33126
TEL. 786-930-7521 info@linearossadesign.com



MCY ENGINEERING, INC.
GLAZING CONSULTANTS
12781 MIRAMAR PKWY. STE. 301
MIRAMAR, FL 33027 P: 305.271.0117
www.MCYEngineering.com mcy@mcyengineering.com

Rev. No.	Date	Drawn By	Description
1.	10.12.2021	JAMES	FBC UPDATE

Drawn Date: 10/12/2021

Scale:

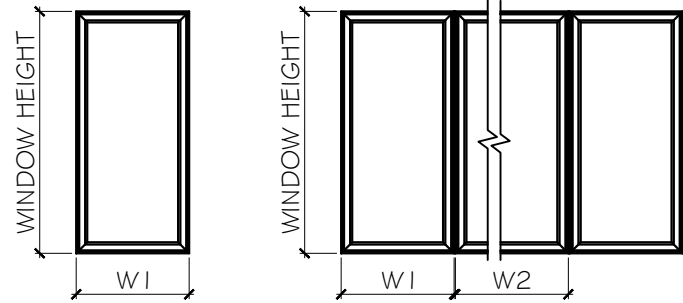
DRAWING NO. AD21-30

Sheet No. E1

2 OF 7

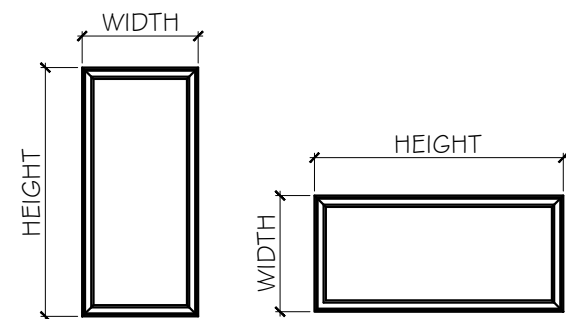
DESIGN LOAD CAPACITY - PSF		
WINDOW DIMS.		GLASS TYPE
HEIGHT	WIDTH	'A' & 'B' & 'C' & 'D'
INCH	INCH	(+)/(-)
42	24	90
	30	90
	36	90
	42	90
	48	90
48	24	90
	30	90
	36	90
	42	90
	48	90
54	24	90
	30	90
	36	90
	42	90
	48	79
60	24	90
	30	90
	36	90
	42	90
	48	79
66	24	90
	30	90
	36	90
	42	90
	48	79
72	24	90
	30	90
	36	90
	42	90
	48	79
78	24	90
	30	90
	36	90
	42	90
	48	79
84	24	90
	30	90
	36	90
	42	90
	48	79
90	24	90
	30	90
	36	90
	42	90

DESIGN LOAD CAPACITY - PSF		
WINDOW DIMS.		GLASS TYPE
HEIGHT	WIDTH	'A' & 'B' & 'C' & 'D'
INCH	INCH	(+)/(-)
26	26.5	90
	37	90
	53.125	90
38.375	26.5	90
	37	90
	53.125	90
50.625	26.5	90
	37	90
	53.125	75
63	26.5	90
	37	90
	53.125	71
76	26.5	90
	37	90



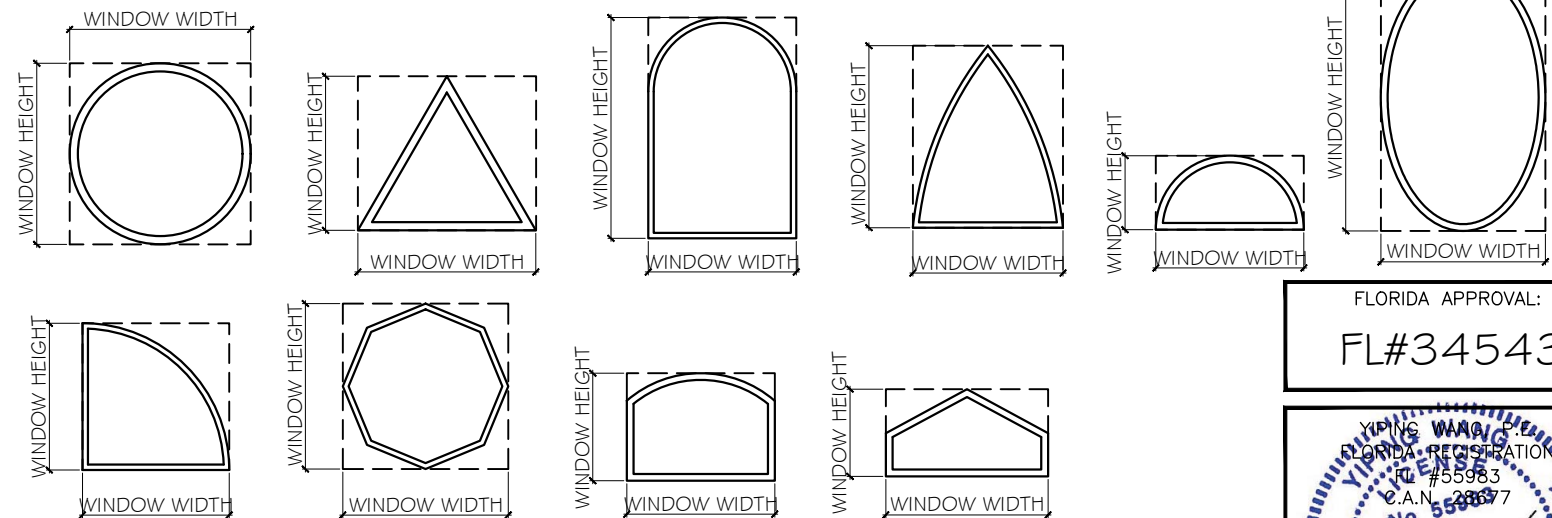
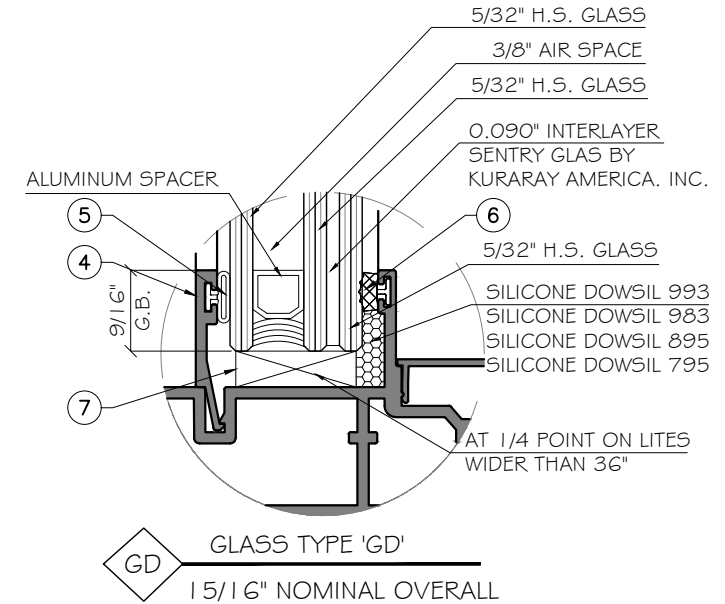
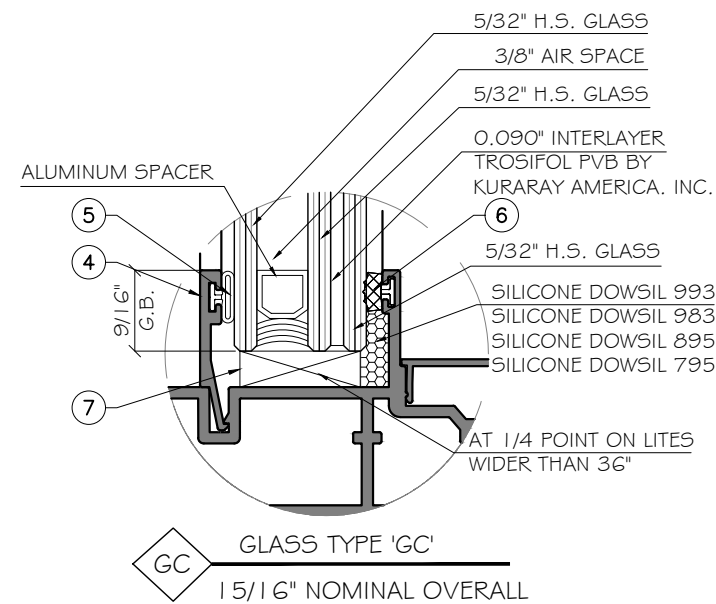
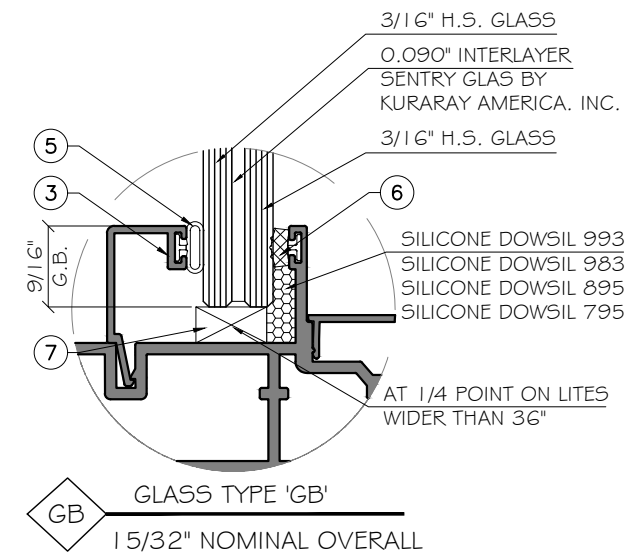
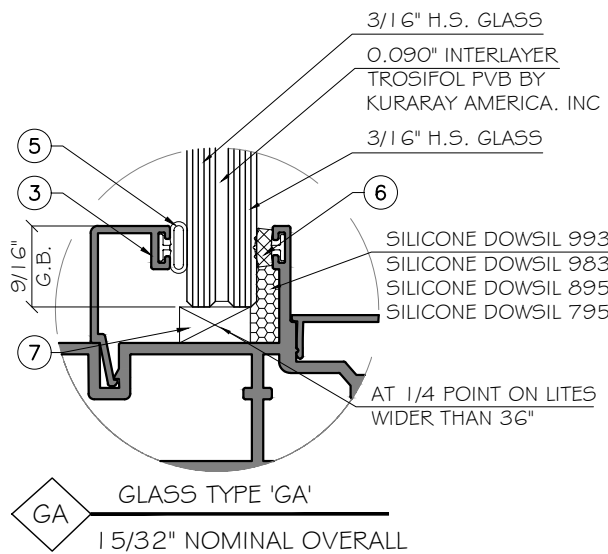
WIDTH (W) = W1 WIDTH (W) = $\frac{W1+W2}{2}$

GLASS D.L.O. DIMS.
D.L.O. HEIGHT = WINDOW HEIGHT - 4.5"
D.L.O. WIDTH = WINDOW WIDTH - 4.5"



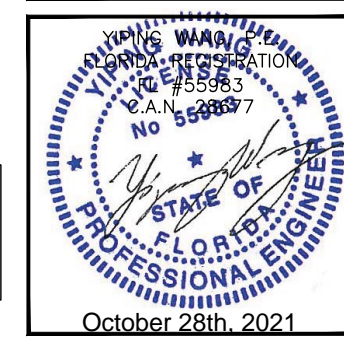
NOTE:
WIDTH AND LENGTH DIMENSION CAN BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE.

NOTE:
GLASS COMPLIES WITH ASTM E 1300-09 (3 SEC. GUSTS).



ALLOWABLE LOAD FOR ALTERNATE SHAPES AS SHOWN ABOVE OR SIMILAR CAN BE VERIFIED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN SQUARE OR RECTANGLE AS SHOWN IN DOTTED LINES AND OBTAINING ALLOWABLE LOADS FROM THOSE SHAPES.

FLORIDA APPROVAL:
FL#34543



MCY ENGINEERING, INC.
GLAZING CONSULTANTS
12781 MIRAMAR PKWY., STE. 301
MIRAMAR, FL 33027 P: 305.271.0117
www.MCYEngineering.com mcy@mcyengineering.com

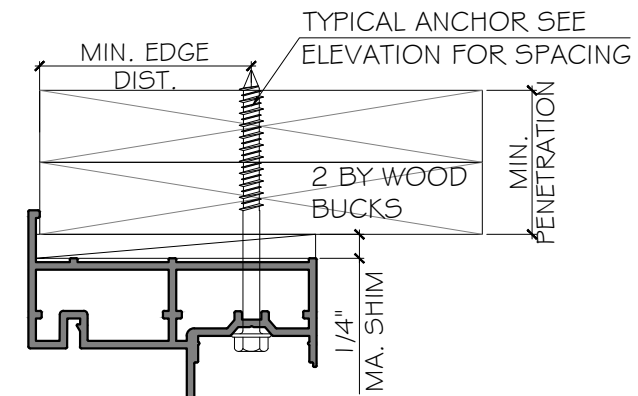
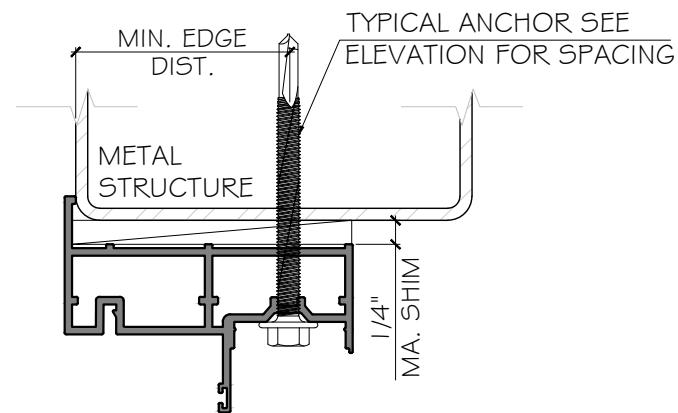
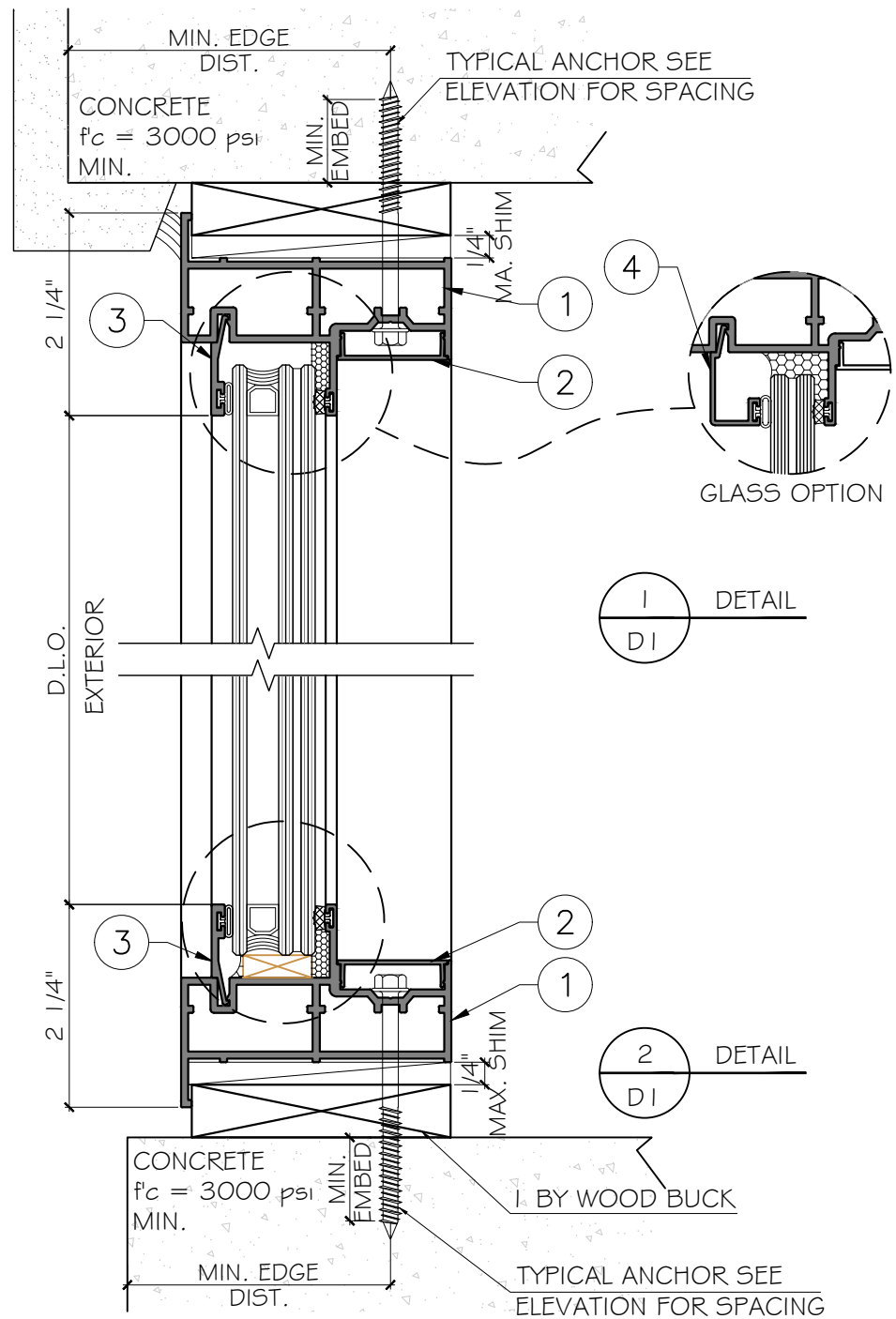
LINEA ROSSA LLC
1850 NW 84TH AVENUE
SUITE 114, DORAL, FL 33126
TEL: 786-930-7521 info@linearssadesign.com

SERIES LR-420F ALUMINUM FIX CASEMENT WITH AND WITHOUT INTEGRAL MULLION - L.M.I.

Drawn Date	10/12/2021	Scale	
Drawn By	JAMES	Rev. No.	1.
Date	10.12.2021	Description	FBC UPDATE

DRAWING NO. **AD21-30**

Sheet No. **3 OF 7**



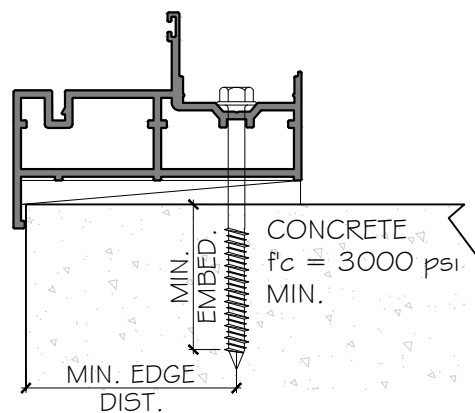
ANCHOR TYPES: (SEE ELEVATIONS FOR SPACING)

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

THRU 1 BY BUCKS INTO CONCRETE OR BLOCKS
 1 3/4" MIN. EMBED INTO CONCRETE (HEAD/ SILL/ JAMBS)
 1 3/4" MIN. EMBED IN TO BLOCKS (JAMBS)

DIRECTLY INTO CONCRETE OR BLOCKS
 1 3/4" MIN. EMBED IN TO CONCRETE (HEAD/ SILL/ JAMBS)
 1 3/4" MIN. EMBED IN TO BLOCKS (JAMBS)

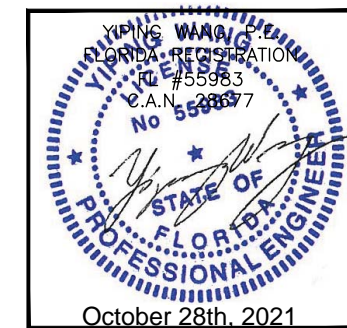
TYPE 'B' -- #14 SMS OR SELF-DRILLING SCREWS: (GRADE 2 CRS) INTO FBC APPROVED MULLIONS (1/8" THK. MIN.) OR INTO METAL STRUCTURES, STEEL: 1/8" THK. MIN. (A36 MIN.) (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)



TYPICAL EDGE DISTANCE

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

FLORIDA APPROVAL:
FL#34543



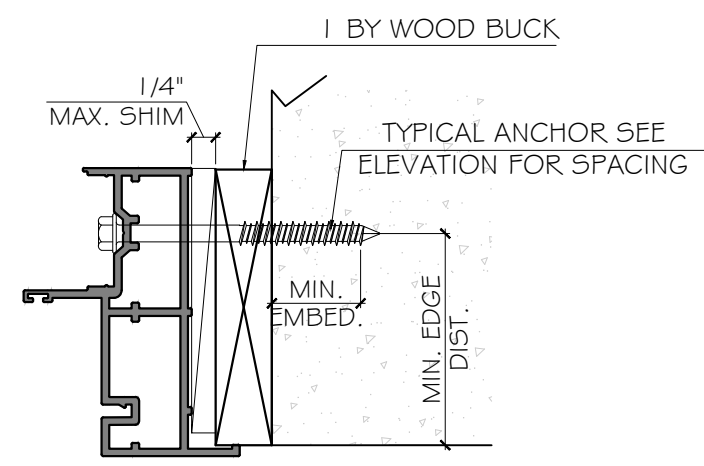
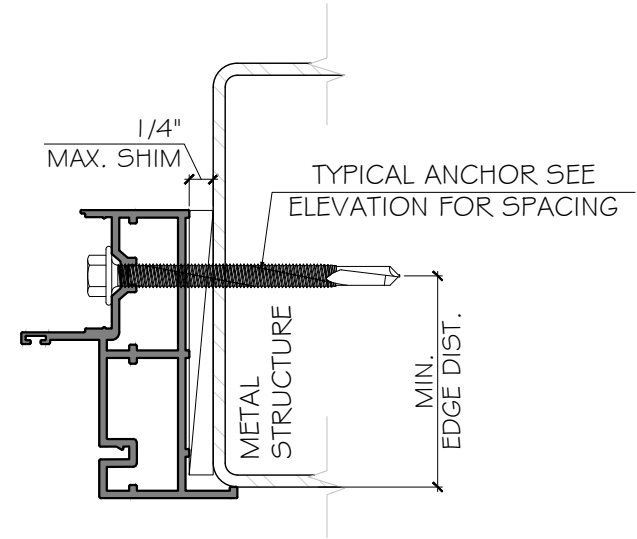
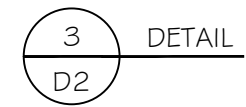
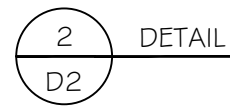
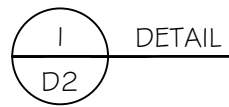
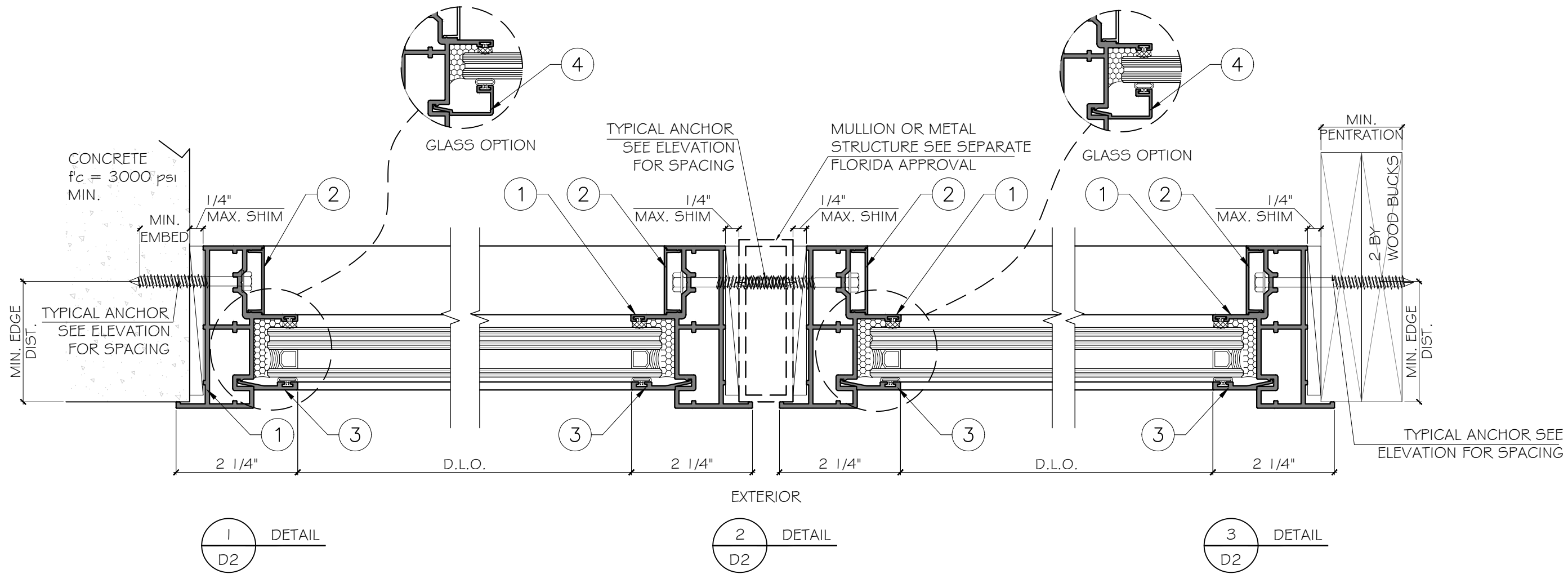
SERIES LR-420F ALUMINUM FIX CASEMENT WITH AND WITHOUT INTEGRAL MULLION - L.M.I.

LINEA ROSSA LLC
 1850 NW 84TH. AVENUE
 SUITE 114, DORAL, FL 33126

TEL. 786-930-7521 info@linearssadesign.com

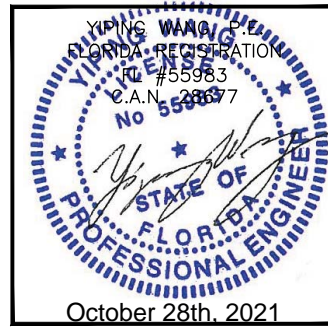
MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 12781 MIRAMAR PKWY. STE. 301
 MIRAMAR, FL 33027 P: 305.271.0117
 www.MCYEngineering.com mcy@mcyengineering.com

Drawn Date	Scale
10/12/2021	
Drawn By	Description
JAMES	FBC UPDATE
Date	
10.12.2021	
Rev. No.	
1.	
DRAWING NO.	
AD21-30	
Sheet No.	
D1	
4 OF 7	



JAMB SUBSTRATE OPTION

FLORIDA APPROVAL:
FL#34543



MCY ENGINEERING, INC.
GLAZING CONSULTANTS
12781 MIRAMAR PKWY. STE. 301
MIRAMAR, FL 33027 P: 305.271.0117
www.MCYEngineering.com mcy@mcyengineering.com

SERIES LR-420F ALUMINUM FIX CASEMENT
WITH AND WITHOUT INTEGRAL MULLION - L.M.I.
LINEA ROSSA LLC
1850 NW 84TH AVENUE
SUITE 114, DORAL, FL 33126
TEL. 786-930-7521 info@linearossadesign.com

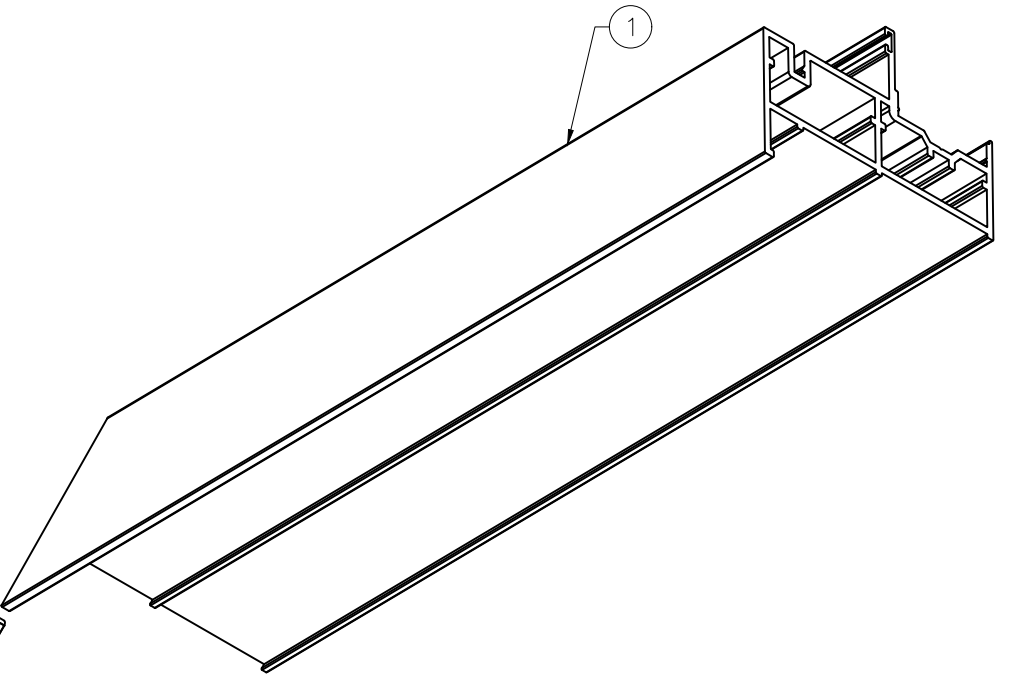
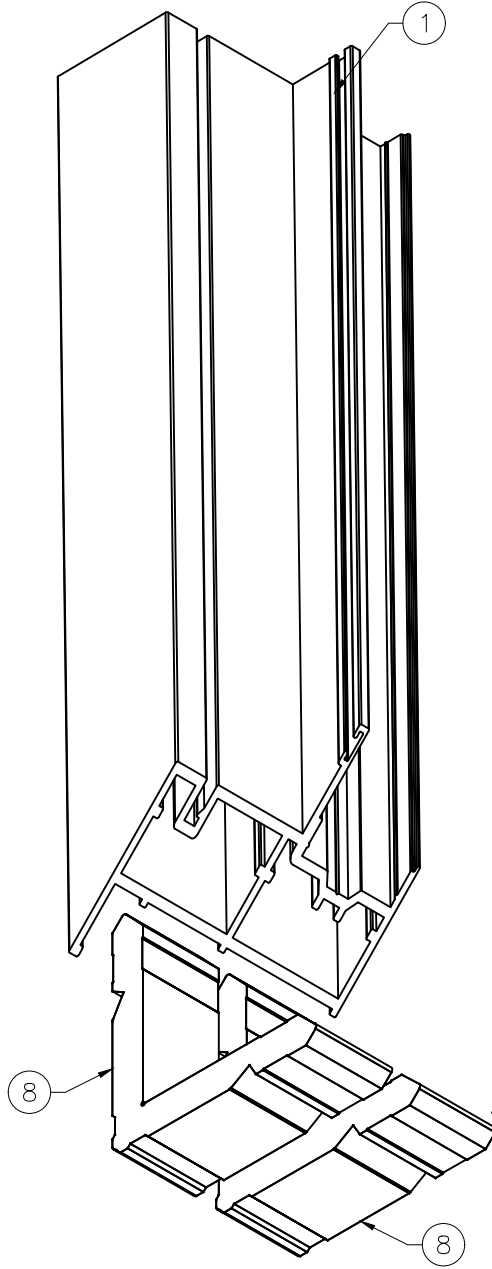
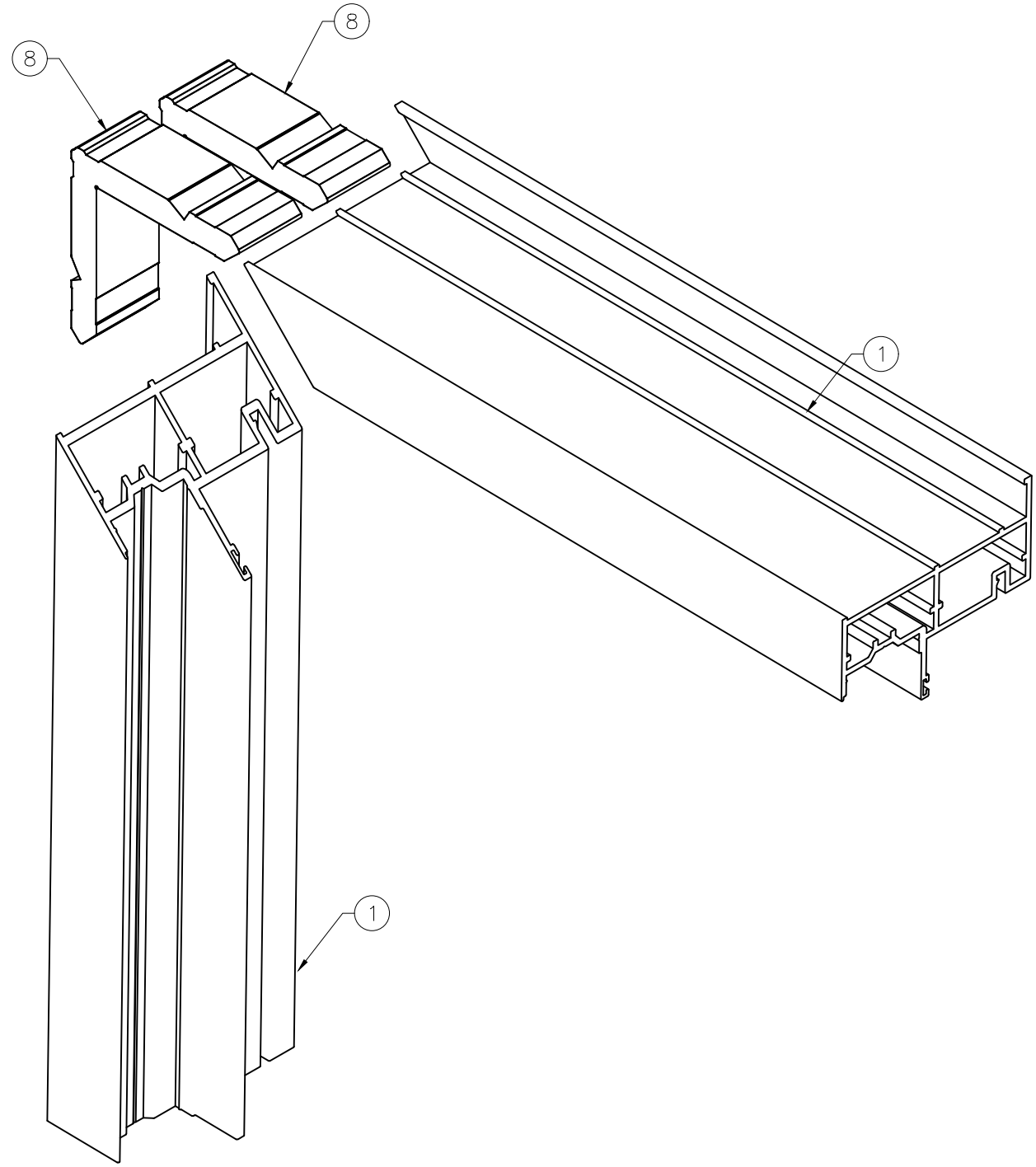
Rev. No.	Date	Drawn By	Description
1.	10.12.2021	JAMES	FBC UPDATE

Drawn Date: 10/12/2021 Scale:

DRAWING NO. AD21-30

Sheet No. D2

5 OF 7



CORNER CONNECTION

FLORIDA APPROVAL:
FL#34543

October 28th, 2021

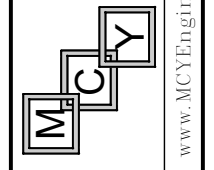
Rev. No.	Date	Drawn By	Description
1.	10.12.2021	JAMES	FBC UPDATE

Drawn Date: 10/12/2021
Scale:

DRAWING NO.
AD21-30

ISO
Sheet No.
6 OF 7

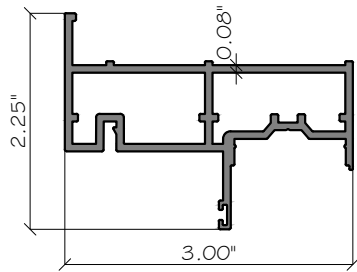
SERIES LR-420F ALUMINUM FIX CASEMENT
WITH AND WITHOUT INTEGRAL MULLION - L.M.I.
LINEA ROSSA LLC
1850 NW 84TH AVENUE
SUITE 114, DORAL, FL 33126
TEL. 786-930-7521 info@linearossadesign.com



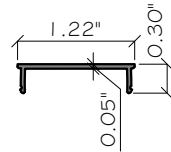
MCY ENGINEERING, INC.
GLAZING CONSULTANTS
12781 MIRAMAR PKWY. STE. 301
MIRAMAR, FL 33027 P: 305.271.0117
www.MCYEngineering.com mcy@mcyengineering.com

BILL OF MATERIALS

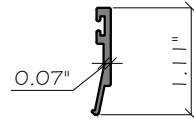
ITEM #	PROFILE	DESCRIPTION	MATERIAL	MANUFACTURER/REMARKS
1	LR420-14	FRAME	6063-T6	LINEA ROSSA
2	LR420-15	COVER	6063-T6	LINEA ROSSA
3	LR220-14	GLAZING BEAD	6063-T5	LINEA ROSSA
4	5000-08	GLAZING BEAD	6063-T5	LINEA ROSSA
5	B4510092	EXTERIOR GLASS GASKET	EPDM DUROMETER 60±5 SHORE A	LINEA ROSSA
6	B4510090	INTERIOR GLASS GASKET	EPDM DUROMETER 60±5 SHORE A	LINEA ROSSA
7	B2410003	SETTING BLOCK	EPDM DUROMETER 80±5 SHORE A	-
8	B3111348	CORNER CLEAT	6063-T6	LINEA ROSSA
9	-	SILICONE SEALANT DOWSIL 993/ 983/ 895/ 795	SILICONE	DOWSIL
10	-	DIM. 1/4" X 1 1/4" FRAME VENT ASSEMBLY SCREWS	STEEL	-



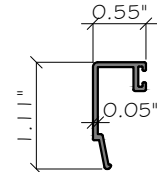
① FRAME LR420-14
ALUM. 6063-T6



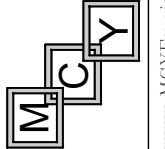
② COVER LR420-15
ALUM. 6063-T6



③ GLAZING BEAD LR220-14
ALUM. 6063-T5



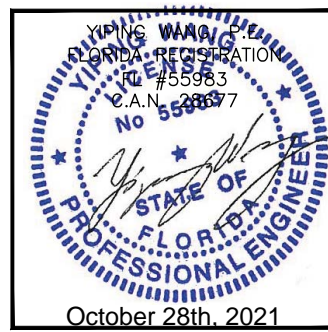
④ GLAZING BEAD 5000-08
ALUM. 6063-T5



MCY ENGINEERING, INC.
GLAZING CONSULTANTS
12781 MIRAMAR PKWY. STE. 301
MIRAMAR, FL 33027 P: 305.271.0117
www.MCYEngineering.com mcy@mcyengineering.com

SERIES LR-420F ALUMINUM FIX CASEMENT
WITH AND WITHOUT INTEGRAL MULLION - L.M.I.
LINEA ROSSA LLC
1850 NW 84TH. AVENUE
SUITE 114, DORAL, FL 33126
TEL. 786-930-7521 info@linearossadesign.com

FLORIDA APPROVAL:
FL#34543



Rev. No.	Date	Drawn By	Description
1.	10.12.2021	JAMES	FBC UPDATE

Drawn Date: 10/12/2021 Scale:

DRAWING NO. AD21-30

PARTS

Sheet No. 7 OF 7