

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISE PER NEW CODE	11/29/2023	R.L.

- NOTES:
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
 2. WOOD FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
 3. WHERE SHIM OR BUCK THICKNESS IS LESS THAN 1–1/2” UNITS MUST BE ANCHORED THROUGH THE FRAME IN ACCORDANCE WITH MANUFACTURER’S PUBLISHED INSTALLATION INSTRUCTIONS. ANCHORS SHALL BE SECURELY FASTENED DIRECTLY INTO MASONRY, CONCRETE OR OTHER STRUCTURAL SUBSTRATE MATERIAL.
 4. WHERE WOOD BUCK THICKNESS IS 1–1/2” OR GREATER, BUCK SHALL BE SECURELY FASTENED TO MASONRY, CONCRETE OR OTHER STRUCTURAL SUBSTRATE. UNITS MAY BE ANCHORED THROUGH FRAME TO SECURED WOOD BUCK IN ACCORDANCE WITH MANUFACTURER’S PUBLISHED INSTALLATION INSTRUCTIONS.
 5. WHERE 1X BUCK IS NOT USED DISSIMILAR MATERIALS MUST BE SEPARATED WITH APPROVED COATING OR MEMBRANE. SELECTION OF COATING OR MEMBRANE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
 6. BUCKS SHALL EXTEND BEYOND UNIT FRAME INTERIOR FACE SO THAT FULL FRAME SUPPORT IS PROVIDED.
 7. SHIM AS REQUIRED AT EACH ANCHOR LOCATION WITH LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16” OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4”.
 8. SHIMS SHALL BE LOCATED, APPLIED AND MADE FROM MATERIALS AND THICKNESS CAPABLE OF SUSTAINING APPLICABLE LOADS.
 9. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
 10. FRAME MATERIAL: ALUMINUM 6063–T6.
 11. UNITS MUST BE GLAZED PER ASTM E1300, WITH SAFETY GLAZING, FOR NON–IMPACT LOCATIONS AND ACCORDING TO DETAIL IN SHEET 10 FOR IMPACT LOCATIONS.
 12. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS UP TO WIND ZONE 3.

13. FOR ANCHORING THROUGH FRAME INTO WOOD FRAMING OR 2X BUCK USE UNIVERSAL ANCHOR SF COUNTERSINK D7.5MM WITH SUFFICIENT LENGTH TO ACHIEVE A 1 7/16” MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
14. FOR ANCHORING THROUGH FRAME INTO MASONRY/CONCRETE USE UNIVERSAL ANCHOR SF COUNTERSINK D7.5MM WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4” MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 1/2” MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
15. FOR ANCHORING THROUGH FRAME INTO METAL STRUCTURE USE UNIVERSAL ANCHOR SF COUNTERSINK D6MM WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
16. ALL FASTENERS TO BE CORROSION RESISTANT.
17. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER’S INSTALLATION INSTRUCTIONS AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BELOW:
 - 17.1. WOOD: MINIMUM SPECIFIC GRAVITY OF G=0.42
 - 17.2. CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.
 - 17.3. MASONRY: HOLLOW/FILLED BLOCK PER ASTM C90 WITH Fm=2,000PSI MINIMUM.
 - 17.4. METAL STRUCTURE: STEEL 3/16” THICK MINIMUM FY=33KSI/FU=52KSI OR ALUMINUM 6063–T5 FU=30KSI 1/4” THICK MINIMUM

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	NOTES
2	ELEVATION
3 – 5	CROSS SECTIONS AND DESIGN PRESSURE CHARTS
6 – 8	INSTALLATION DETAILS
9	COMPONENTS
10	CONNECTION DETAIL

SKY–FRAME, INC.
LANGFELDSTRASSE 111
FRAUENFELD, SWITZERLAND CH–8500

SF2 INLINE SYSTEM 66, 90, 110
MULLION
NOTES

DRAWN:
A.R.

DWG NO.
08–03377

REV
A

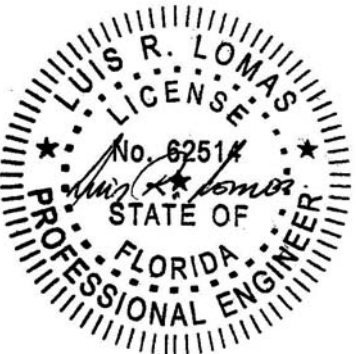
SCALE NTS

DATE 01/09/19

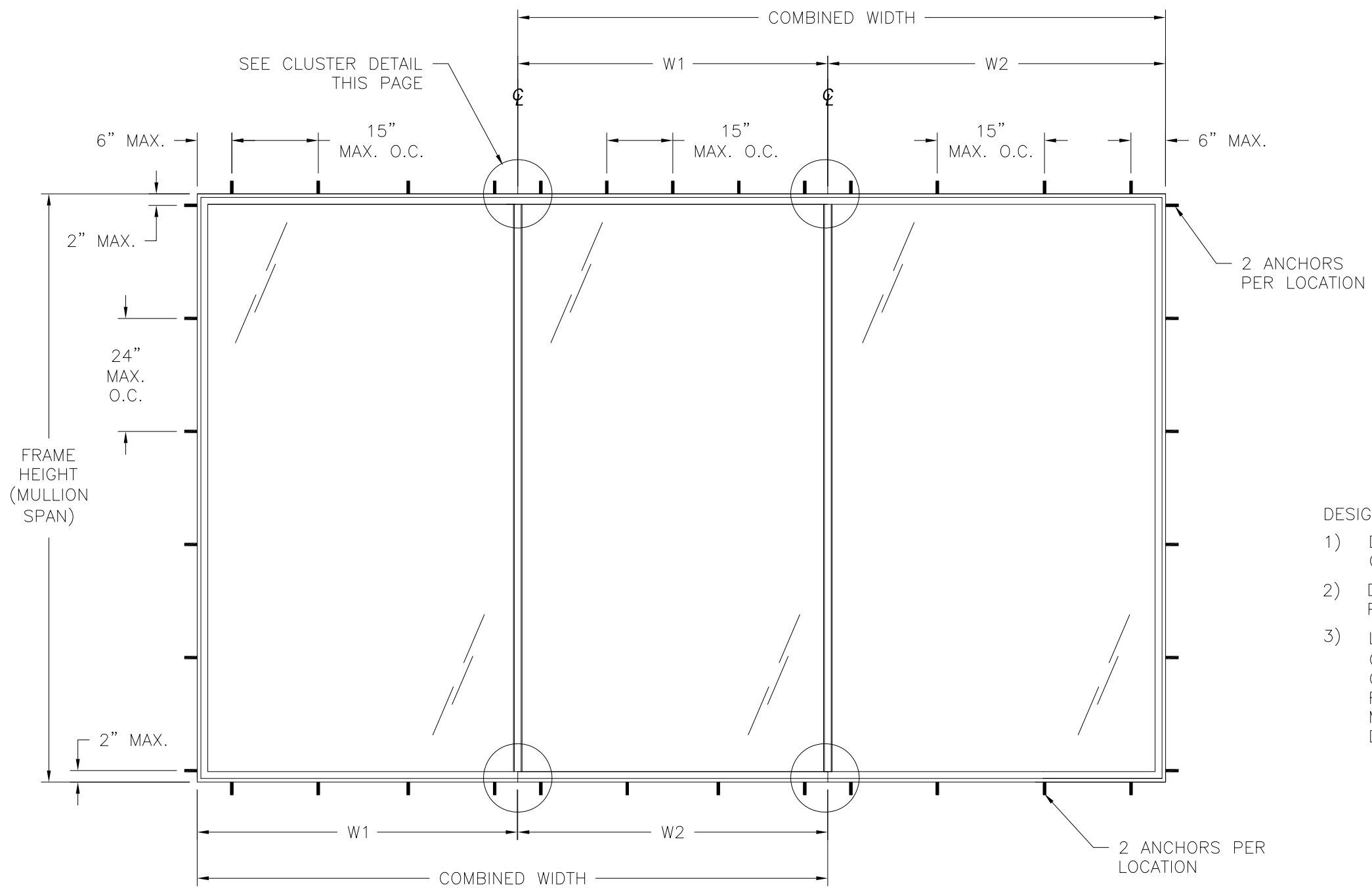
SHEET 1 OF 10

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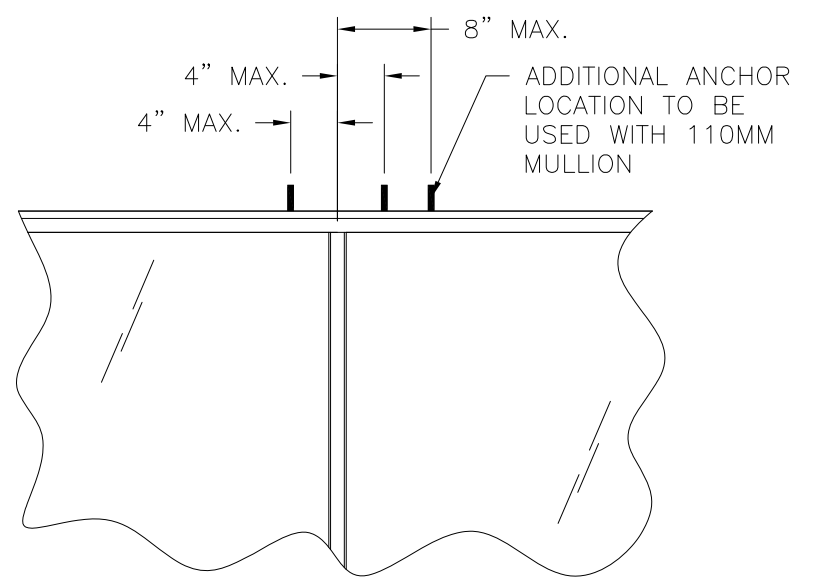


Luis R. Lomas P.E.
FL No.: 62514



SF2 INLINE MULLION SYSTEM
EXTERIOR VIEW
THREE PANELS SHOWN, MULTIPLE PANELS ARE APPROVED REFER
TO CHARTS #1, #2 AND #3 FOR TRIBUTARY WIDTHS

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CLUSTER DETAIL
FOR 66MM, 90MM AND 110MM

- DESIGN PRESSURE TABLE INSTRUCTIONS:
- 1) DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
 - 2) DETERMINE TRIBUTARY WIDTH AND MULLION SPAN BASED ON PRODUCT TO BE INSTALLED. SEE FORMULA FOR TRIBUTARY WIDTH.
 - 3) LOCATE MULLION SPAN (UNIT HEIGHT) AND TRIBUTARY WIDTH IN CHARTS #1, #2 AND #3. AT THE INTERSECTION OF ROW AND COLUMN CONTAINING THE MULLION SPAN AND TRIBUTARY WIDTH RESPECTIVELY IS THE MULLION RATING FOR PRODUCT IN STEP 2. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.

TRIBUTARY WIDTH = $\frac{W1 + W2}{2}$

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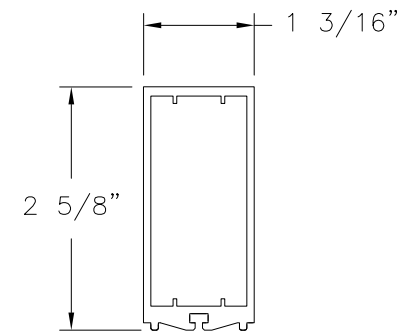
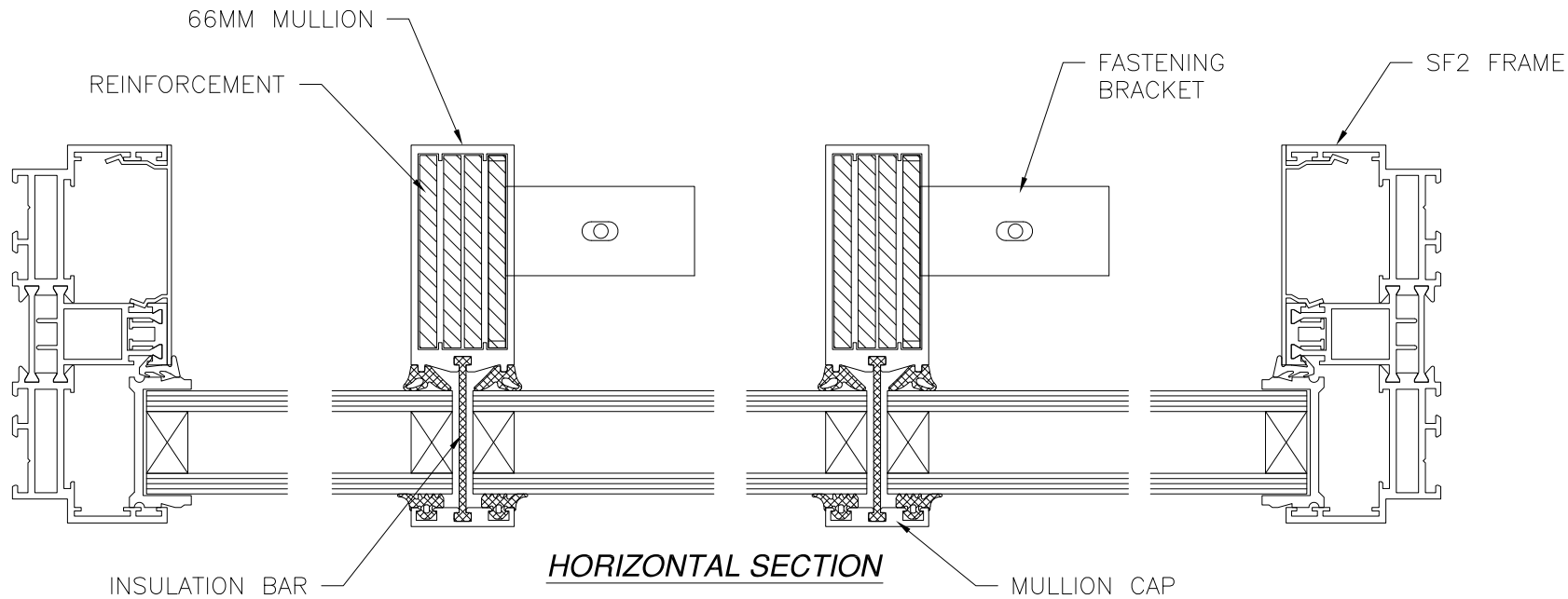
SKY-FRAME, INC.
LANGFELDSTRASSE 111
FRAUENFELD, SWITZERLAND CH-8500

SF2 INLINE SYSTEM 66, 90, 110
MULLION
ELEVATION

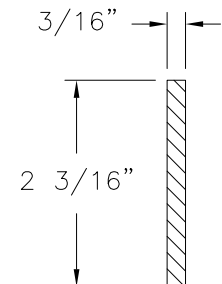
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SCALE NTS	DATE 01/09/19	SHEET 2 OF 10

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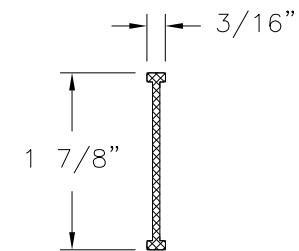
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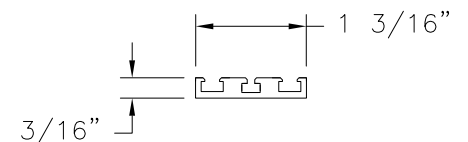
66MM MULLION
ALUMINUM 6063-T6



MULLION REINFORCEMENT
STAINLESS STEEL



INSULATION BAR
PA 6.6 GF25



MULLION CAP
ALUMINUM 6063-T6

CHART #1

Design pressure rating (psf)								
Mullion span (in)	Tributary width (in)							
	120.00	132.00	144.00	156.00	168.00	180.00	192.00	
48.00	69.7	68.1	66.9	65.9	65.0	64.3	63.7	
54.00	63.9	62.3	61.0	59.9	59.0	58.3	57.6	
60.00	59.4	57.7	56.3	55.2	54.3	53.5	52.8	
66.00	55.9	54.0	52.6	51.4	50.4	49.6	48.9	
72.00	53.1	51.1	49.5	48.3	47.3	46.4	45.7	
78.00	50.8	48.7	47.0	45.7	44.7	43.8	43.0	
84.00	49.0	46.7	45.0	43.6	42.5	41.5	40.8	
90.00	47.6	45.1	43.2	41.8	40.6	39.6	38.8	
96.00	40.9	40.9	40.9	40.2	39.0	38.0	37.2	
102.00	34.1	34.1	34.1	34.1	34.1	34.1	34.1	
108.00	28.7	28.7	28.7	28.7	28.7	28.7	28.7	
114.00	24.4	24.4	24.4	24.4	24.4	24.4	24.4	
120.00	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
126.00	16.5	16.4	16.4	16.4	16.4	16.4	16.4	

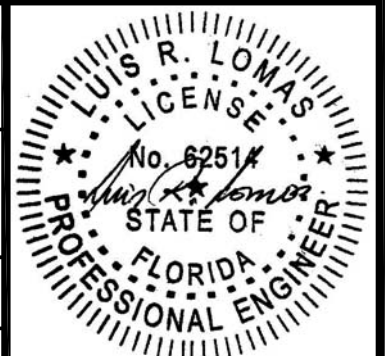
LARGE MISSILE IMPACT UP TO WIND ZONE 3
FOR DETERMINING TRIBUTARY WIDTH SEE PAGE 2

SKY-FRAME, INC.
LANGFELDSTRASSE 111
FRAUENFELD, SWITZERLAND CH-8500

SF2 INLINE SYSTEM 66, 90, 110
MULLION
66MM MULLION

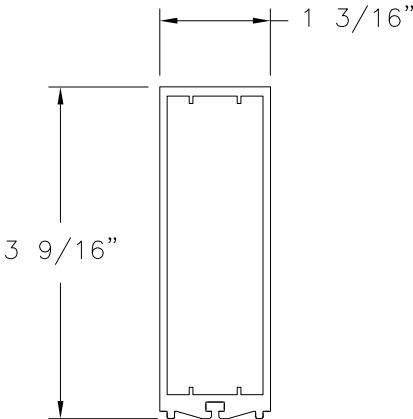
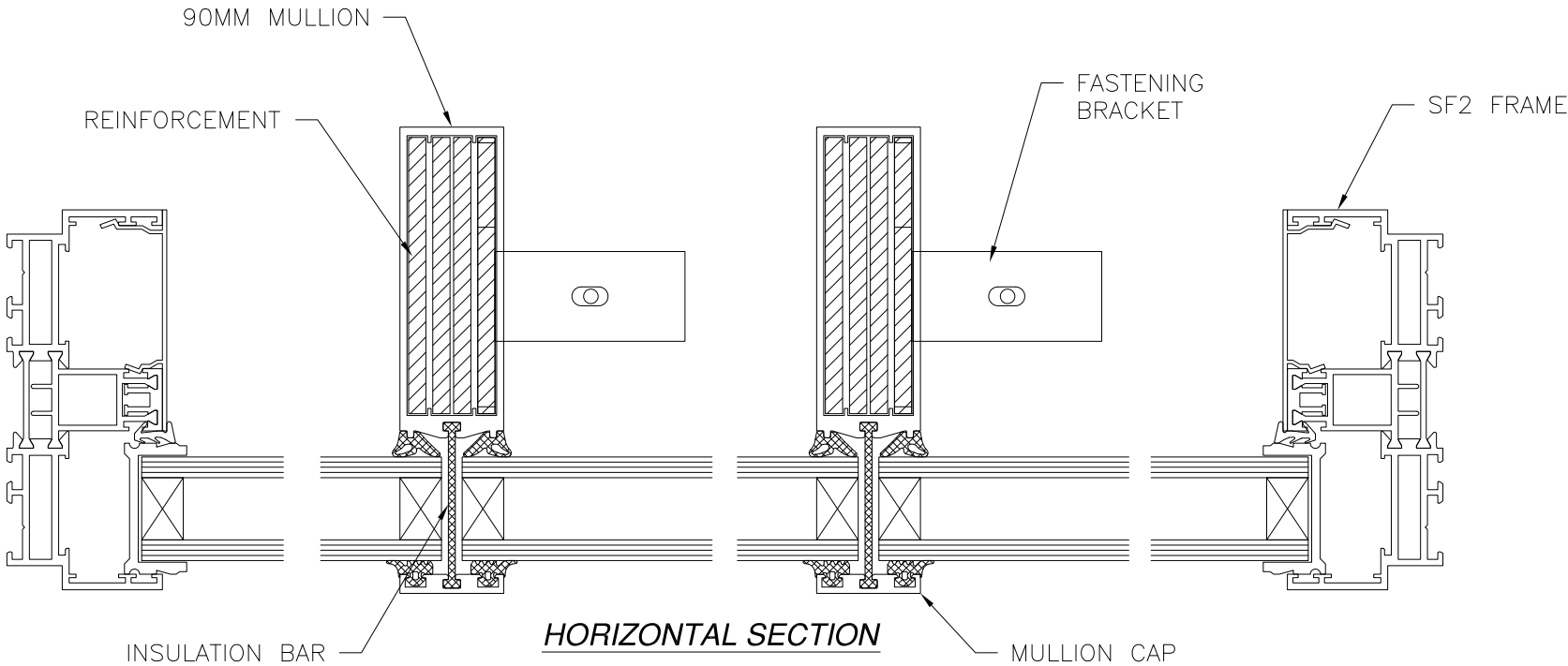
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SCALE NTS	DATE 01/09/19	SHEET 3 OF 10
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

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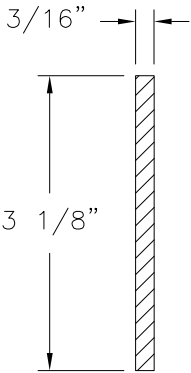


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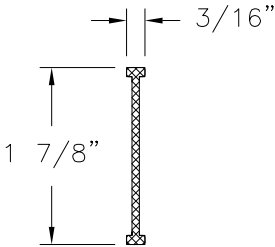
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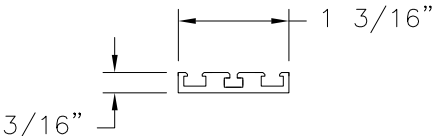
90MM MULLION
ALUMINUM 6063-T6



MULLION REINFORCEMENT
STAINLESS STEEL



INSULATION BAR
PA 6.6 GF25



MULLION CAP
ALUMINUM 6063-T6

CHART #2

Design pressure rating (psf)							
Mullion span (in)	Tributary width (in)						
	120.00	132.00	144.00	156.00	168.00	180.00	192.00
48.00	69.7	68.1	66.9	65.9	65.0	64.3	63.7
54.00	63.9	62.3	61.0	59.9	59.0	58.3	57.6
60.00	59.4	57.7	56.3	55.2	54.3	53.5	52.8
66.00	55.9	54.0	52.6	51.4	50.4	49.6	48.9
72.00	53.1	51.1	49.5	48.3	47.3	46.4	45.7
78.00	50.8	48.7	47.0	45.7	44.7	43.8	43.0
84.00	49.0	46.7	45.0	43.6	42.5	41.5	40.8
90.00	47.6	45.1	43.2	41.8	40.6	39.6	38.8
96.00	46.4	43.8	41.8	40.2	39.0	38.0	37.2
102.00	45.6	42.7	40.6	39.0	37.7	36.6	35.7
108.00	45.0	41.9	39.6	37.9	36.5	35.4	34.5
114.00	44.7	41.3	38.8	37.0	35.5	34.3	33.4
120.00	40.3	40.3	38.2	36.2	34.7	33.4	32.4
126.00	34.9	34.8	34.8	34.8	34.0	32.7	31.6
132.00	30.7	30.3	30.3	30.3	30.3	30.3	30.3
138.00	26.2	25.7	25.6	25.6	25.6	25.6	25.6
144.00	22.4	21.8	21.6	21.6	21.6	21.6	21.6

LARGE MISSILE IMPACT UP TO WIND ZONE 3
FOR DETERMINING TRIBUTARY WIDTH SEE PAGE 2

SKY-FRAME, INC.

LANGFELDSTRASSE 111
FRAUENFELD, SWITZERLAND CH-8500

SF2 INLINE SYSTEM 66, 90, 110

MULLION

90MM MULLION

DRAWN: A.R.

DWG NO. 08-03377

REV A

SCALE NTS

DATE 01/09/19

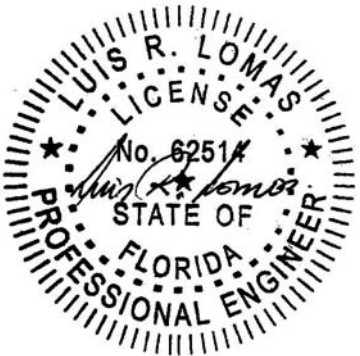
SHEET 4 OF 10

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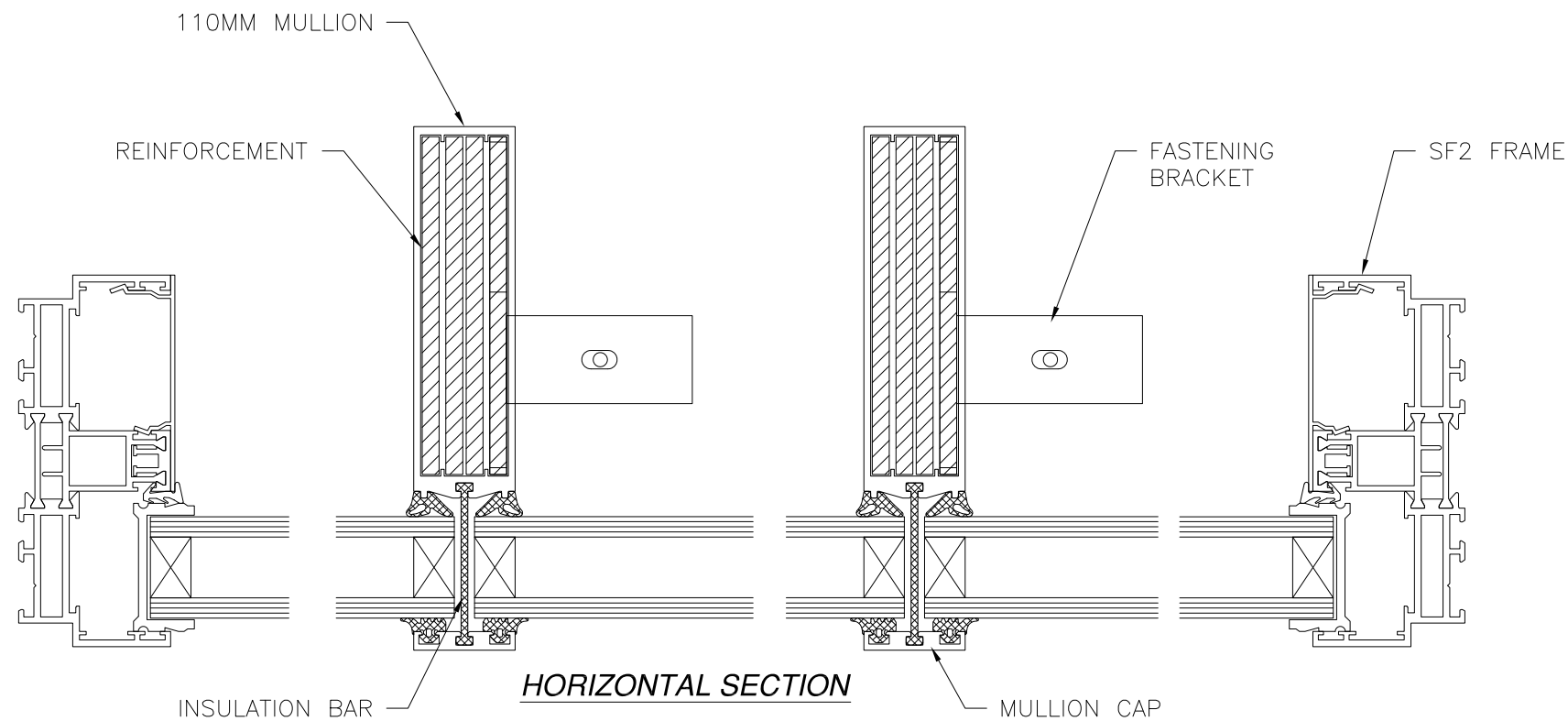
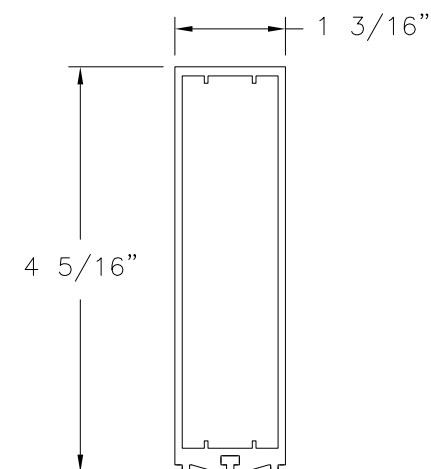


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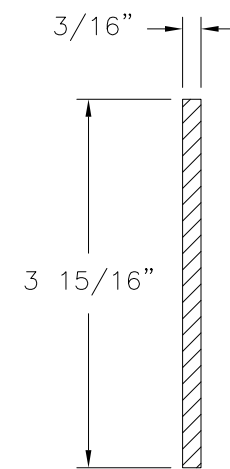
Mullion span (in)	Design pressure rating (psf)						
	Tributary width (in)						
	120.00	132.00	144.00	156.00	168.00	180.00	192.00
48.00	69.7	68.1	66.9	65.9	65.0	64.3	63.7
54.00	63.9	62.3	61.0	59.9	59.0	58.3	57.6
60.00	59.4	57.7	56.3	55.2	54.3	53.5	52.8
66.00	55.9	54.0	52.6	51.4	50.4	49.6	48.9
72.00	53.1	51.1	49.5	48.3	47.3	46.4	45.7
78.00	50.8	48.7	47.0	45.7	44.7	43.8	43.0
84.00	49.0	46.7	45.0	43.6	42.5	41.5	40.8
90.00	47.6	45.1	43.2	41.8	40.6	39.6	38.8
96.00	46.4	43.8	41.8	40.2	39.0	38.0	37.2
102.00	45.6	42.7	40.6	39.0	37.7	36.6	35.7
108.00	45.0	41.9	39.6	37.9	36.5	35.4	34.5
114.00	44.7	41.3	38.8	37.0	35.5	34.3	33.4
120.00	44.6	40.9	38.2	36.2	34.7	33.4	32.4
126.00	42.6	40.6	37.7	35.6	34.0	32.7	31.6
132.00	40.9	40.5	37.4	35.1	33.4	32.0	30.9
138.00	39.4	38.8	37.2	34.8	32.9	31.4	30.3
144.00	38.2	37.0	36.7	34.5	32.5	31.0	29.7

LARGE MISSILE IMPACT UP TO WIND ZONE 3
FOR DETERMINING TRIBUTARY WIDTH SEE PAGE 2

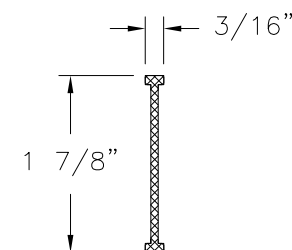
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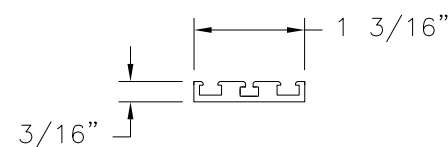
110MM MULLION
ALUMINUM 6063-T6



MULLION REINFORCEMENT
STAINLESS STEEL



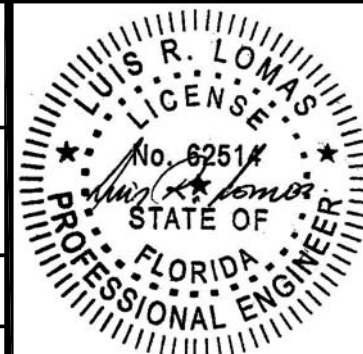
INSULATION BAR
PA 6.6 GF25



MULLION CAP
ALUMINUM 6063-T6

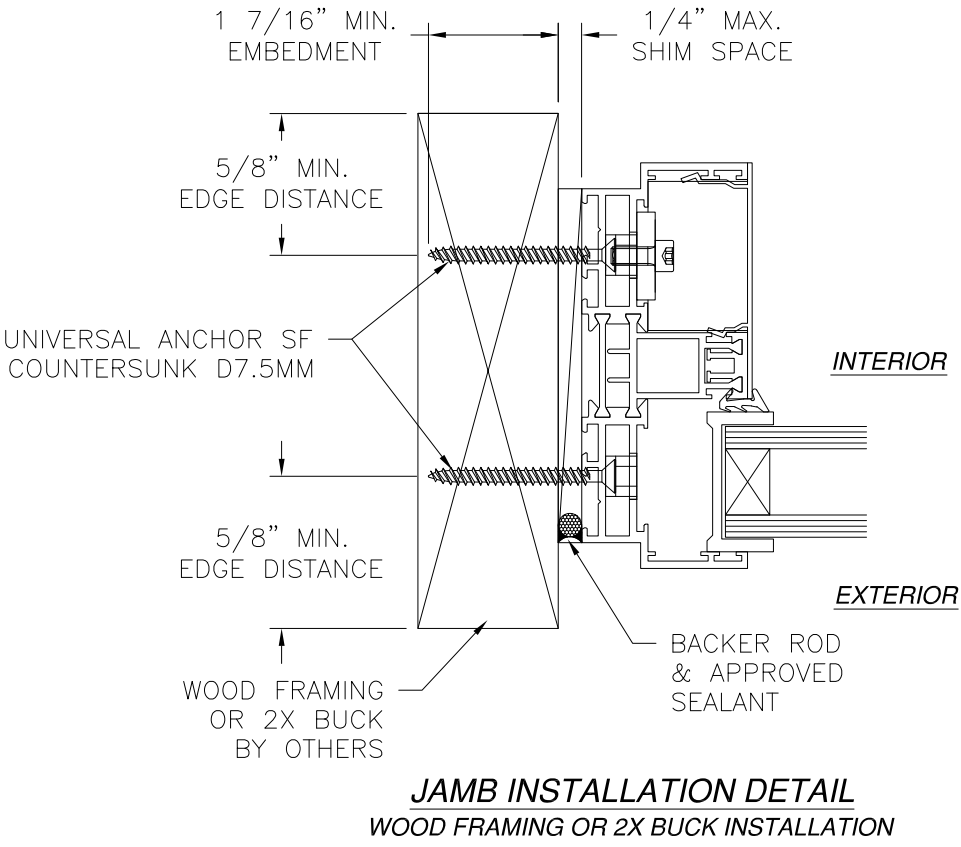
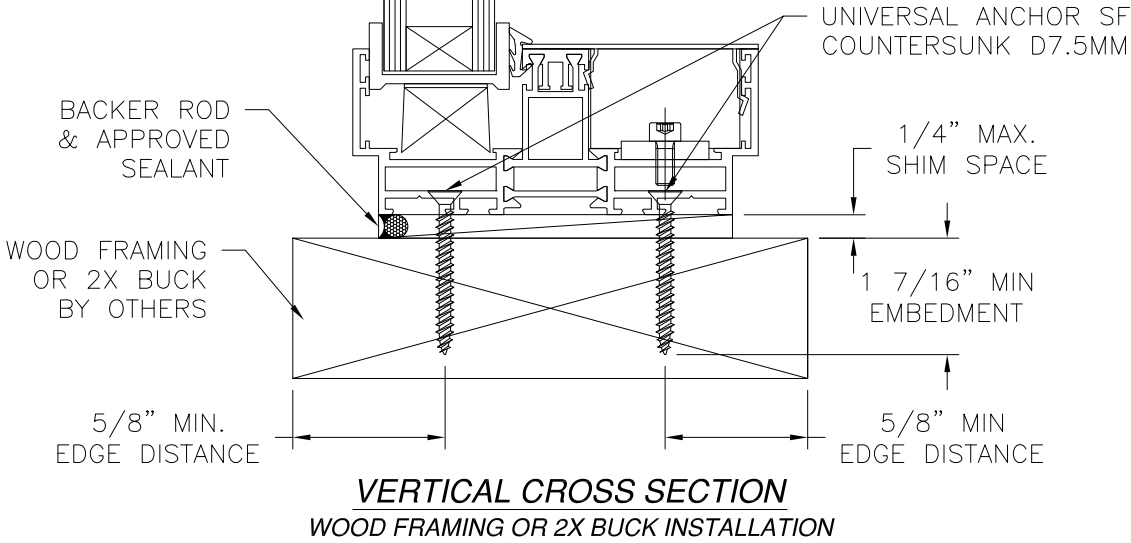
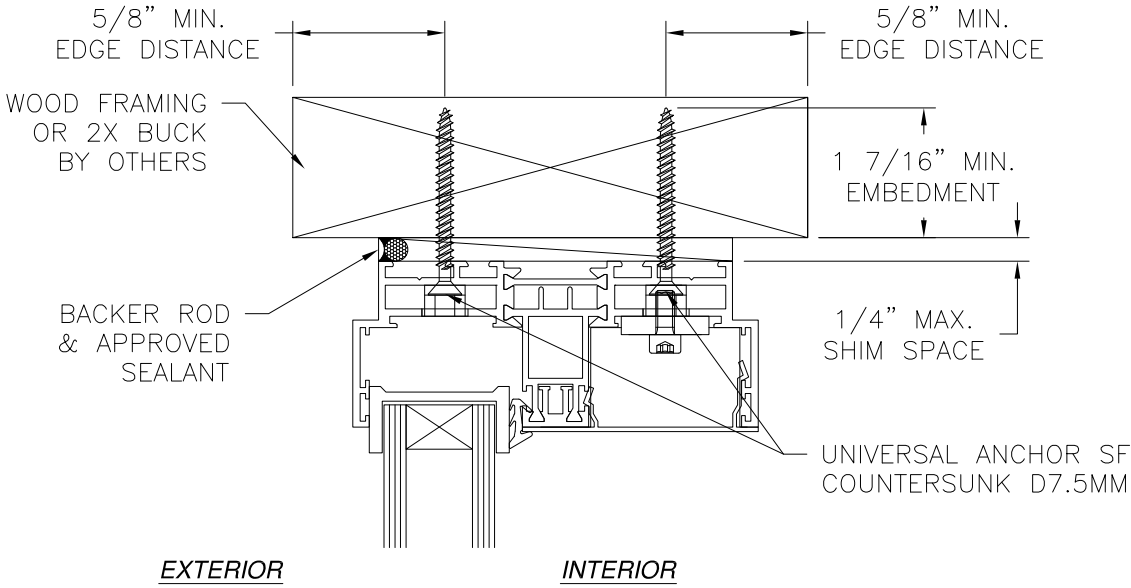
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SKY-FRAME, INC. LANGFELDSTRASSE 111 FRAUENFELD, SWITZERLAND CH-8500		
SF2 INLINE SYSTEM 66, 90, 110 MULLION 110MM MULLION		
DRAWN: A.R.	DWG NO. 08-03377	REV A
SCALE NTS	DATE 01/09/19	SHEET 5 OF 10
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



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- NOTES:
1. INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.
 2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

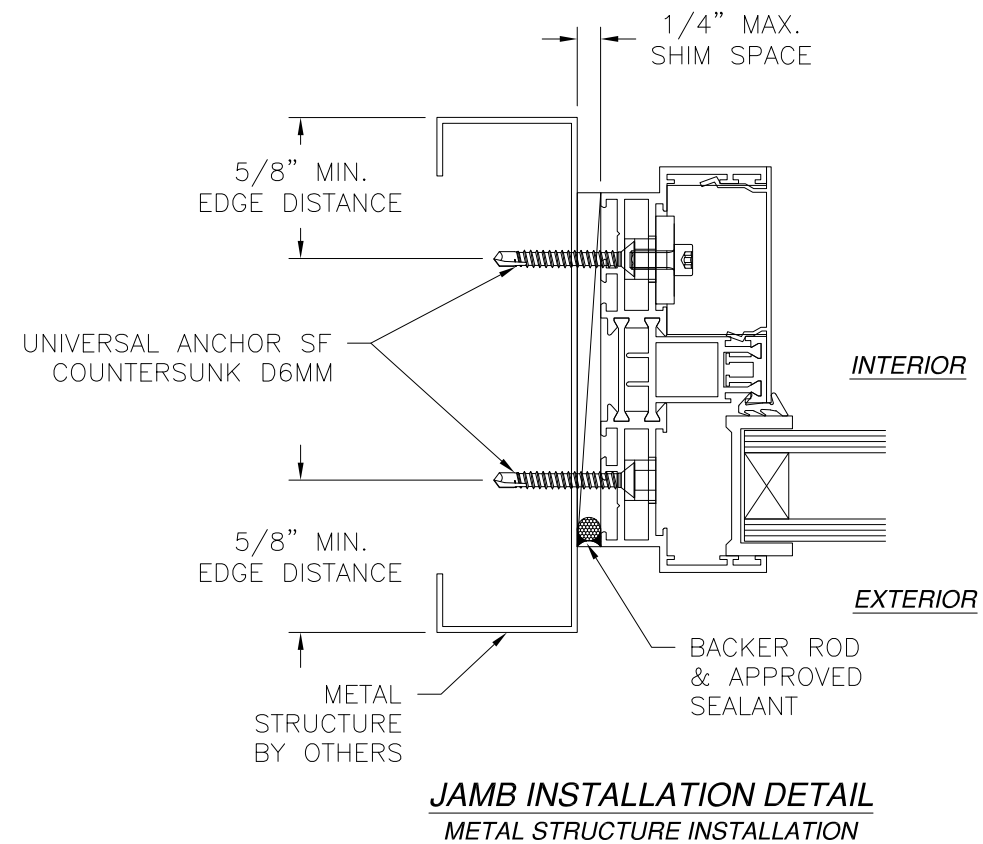
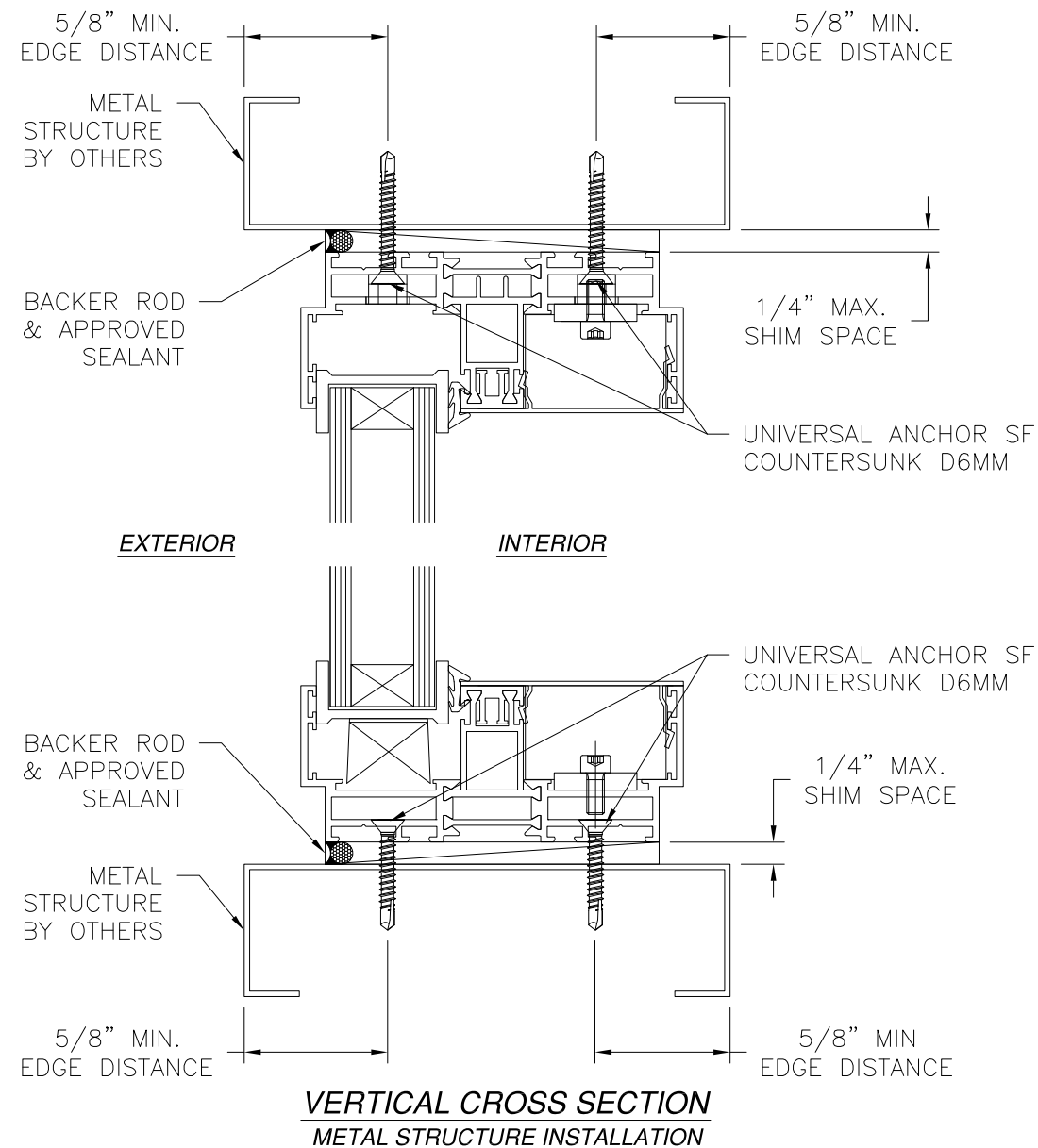
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SKY-FRAME, INC. LANGFELDSTRASSE 111 FRAUENFELD, SWITZERLAND CH-8500		
SF2 INLINE SYSTEM 66, 90, 110 MULLION INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-03377	REV A
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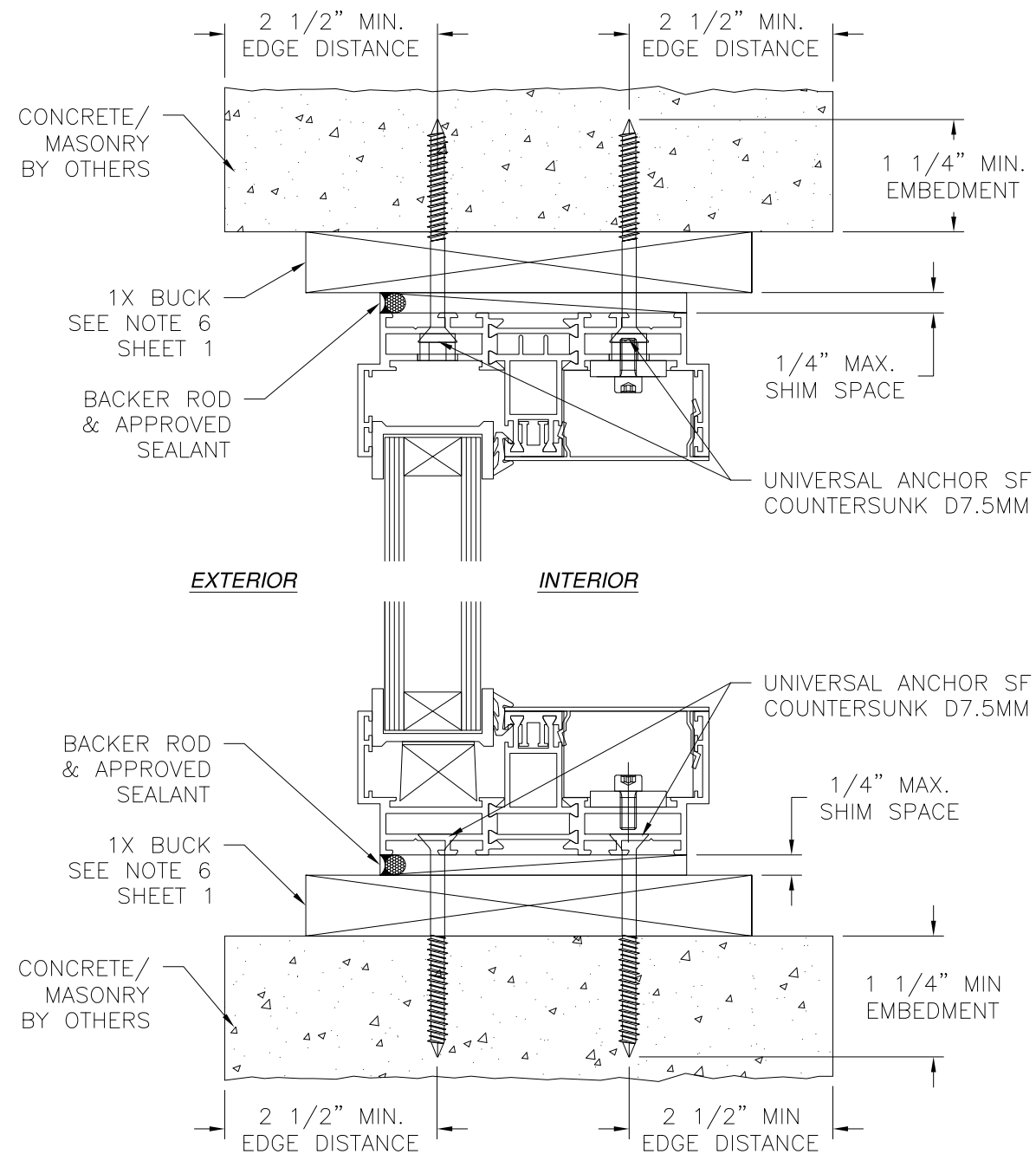
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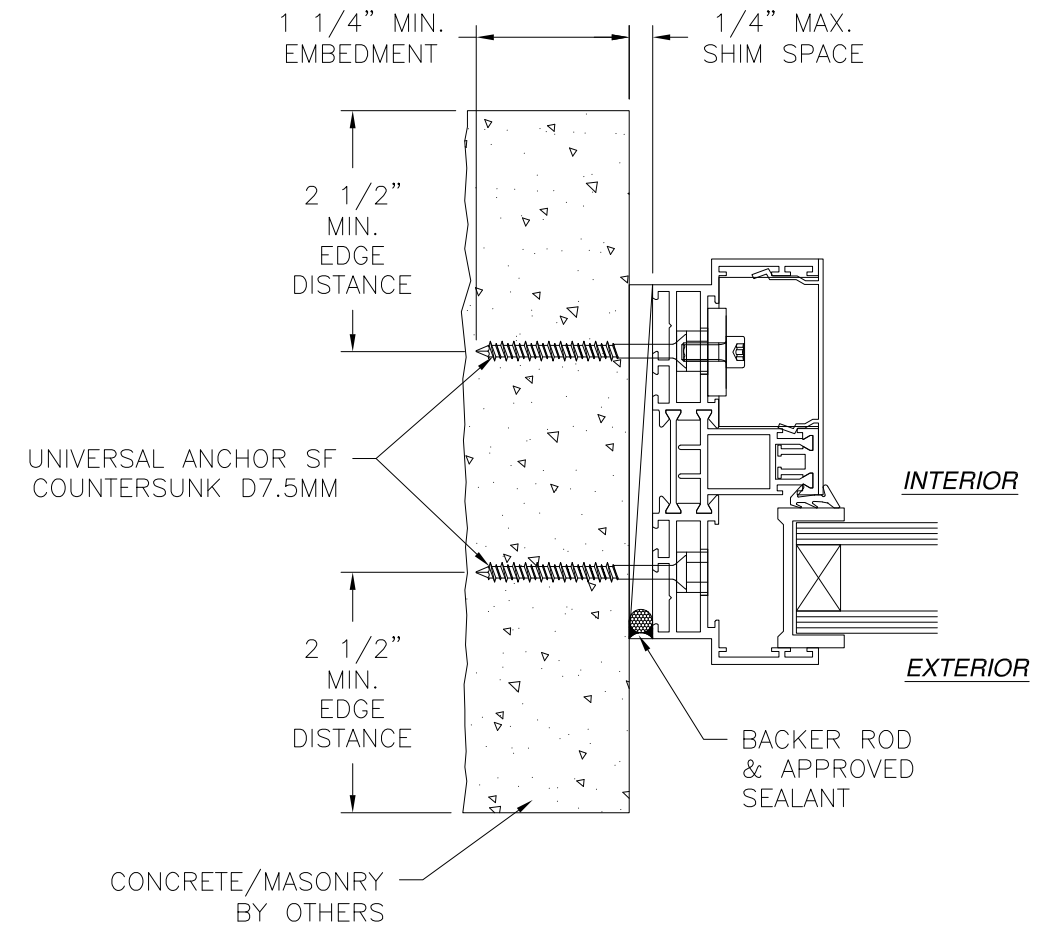
SKY-FRAME, INC. LANGFELDSTRASSE 111 FRAUENFELD, SWITZERLAND CH-8500		
SF2 INLINE SYSTEM 66, 90, 110 MULLION INSTALLATION DETAILS		
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VERTICAL CROSS SECTION
CONCRETE/MASONRY WITH 1X BUCK INSTALLATION
FOR CONCRETE/MASONRY WITHOUT 1X BUCK REFER TO
JAMB INSTALLATION DETAIL

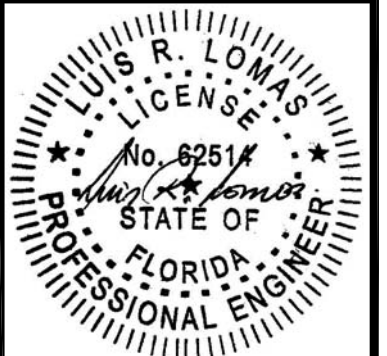


JAMB INSTALLATION DETAIL
CONCRETE/MASONRY WITHOUT 1X BUCK INSTALLATION
FOR CONCRETE/MASONRY INSTALLATION WITH 1X BUCK REFER TO
HEAD AND SILL INSTALLATION DETAILS

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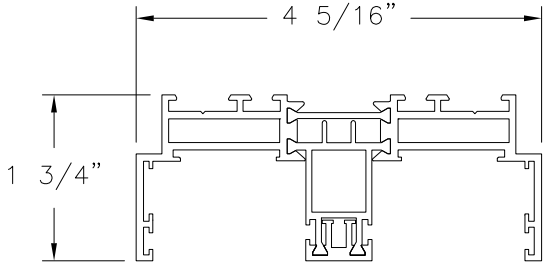
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SCALE NTS	DATE 01/09/19	SHEET 8 OF 10
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

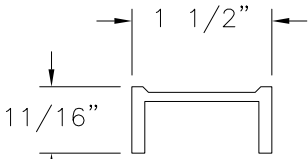


Luis R. Lomas P.E.
FL No.: 62514

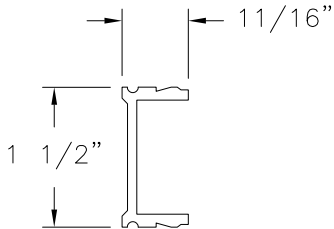
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISE PER NEW CODE	11/29/2023	R.L.



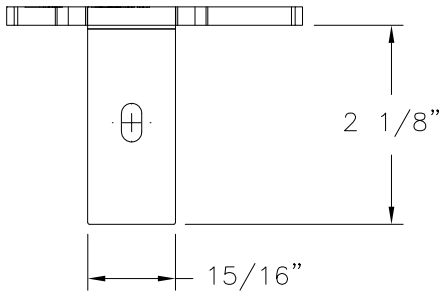
MAIN FRAME
ALUMINUM 6060-T64



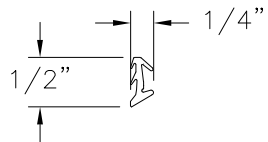
GRP HORIZONTAL
FIBERGLASS



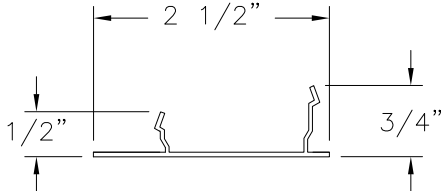
GRP VERTICAL
FIBERGLASS



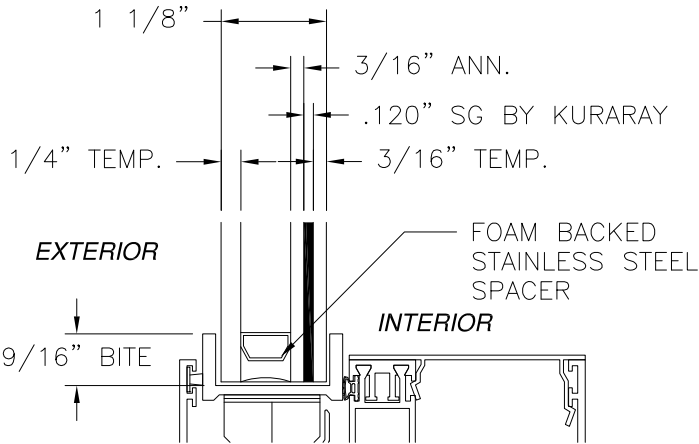
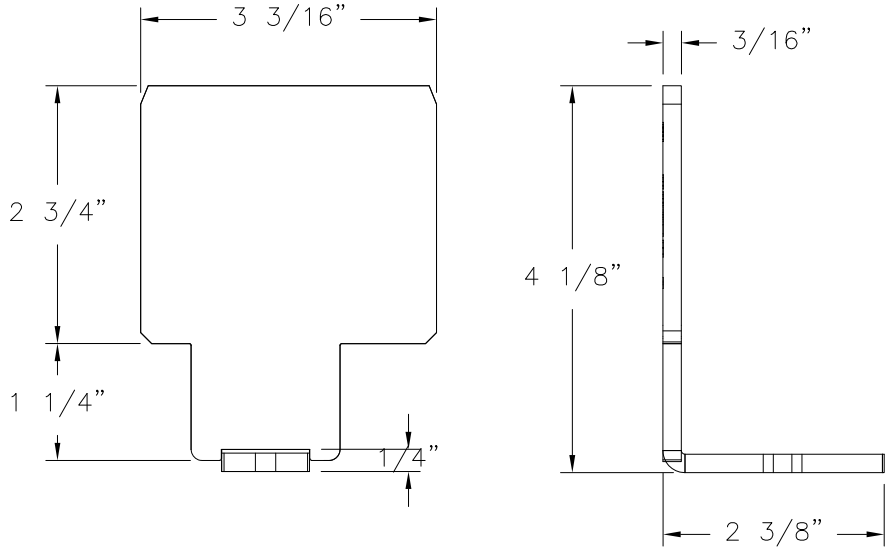
FASTENING BRACKET
ALUMINUM 6060-T66 .1875" THICK



RUBBER GASKET



COPING
ALUMINUM 6060-T66



GLAZING DETAIL
SEE NOTE 12, SHEET 1

SKY-FRAME, INC.

LANGFELDSTRASSE 111

FRAUENFELD, SWITZERLAND CH-8500

SF2 INLINE SYSTEM 66, 90, 110

MULLION

COMPONENTS

DRAWN:

A.R.

DWG NO.

08-03377

REV

A

SCALE

NTS

DATE

01/09/19

SHEET

9

OF

10

L. ROBERTO LOMAS P.E.

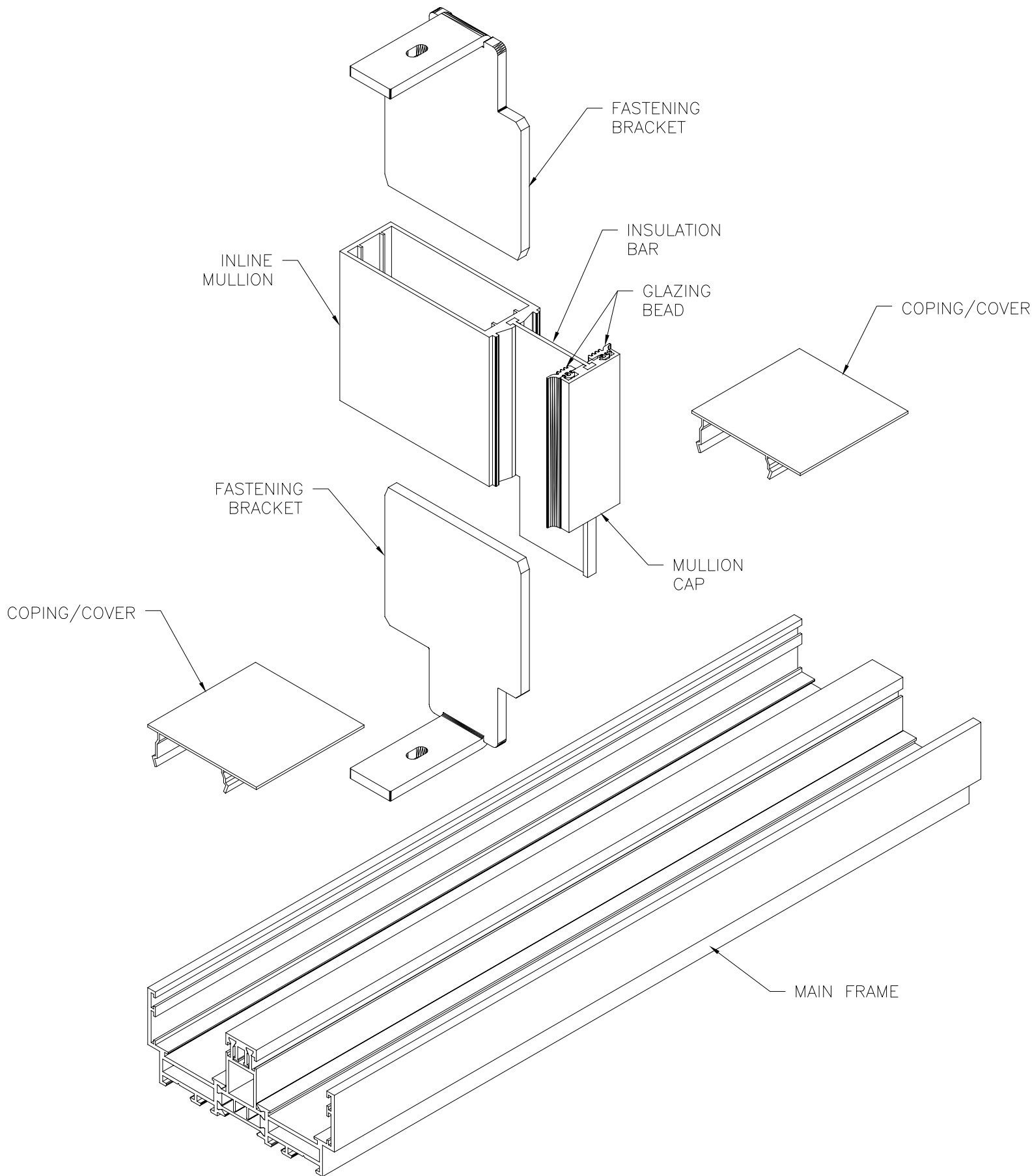
208 7th Ave, INDIALANTIC, FL 32903

434-688-0609 rllomas@lrlomaspe.com

SIGNED: 11/29/2023



Luis R. Lomas P.E.
FL No.: 62514



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISE PER NEW CODE	11/29/2023	R.L.

INLINE MULLION TO FRAME CONNECTION
90MM MULLION SHOWN, 66MM AND 110MM MULLION SIMILAR

SKY-FRAME, INC.
LANGFELDSTRASSE 111
FRAUENFELD, SWITZERLAND CH-8500

SF2 INLINE SYSTEM 66, 90, 110
MULLION
CONNECTION DETAIL

DRAWN:
A.R.

DWG NO.
08-03377

REV
A

SCALE NTS

DATE 01/09/19

SHEET 10 OF 10

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