

- NOTES:
- 1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING THE HVHZ.
 - 2. 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. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
 - 4. VS1 MULLION MATERIAL: EXTRUDED ALUMINUM 6005A-T5.
 - 5. UNITS MUST BE GLAZED PER ASTM E1300, SEE SHEET 4 FOR GLASS DETAILS.
 - 6. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
 - 7. FOR ANCHORING UNIT TO BUILDING REFER TO SHEETS 4 THROUGH 6.
 - 8. ALL FASTENERS TO BE CORROSION RESISTANT ACCORDING WITH CHAPTER 17 OF THE FBC.
 - 9. 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:
 - 9.A. CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.
 - 9.B. MASONRY: HOLLOW/FILLED BLOCK PER ASTM C90 WITH Fm=2,000PSI MINIMUM.
 - 9.C. METAL STRUCTURE: STEEL 1/4" MINIMUM THICKNESS, FY=33KSI/FU=52KSI

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REVISIONS

REV	DESCRIPTION	DATE

INNOVATION GLASS LLC
40 LANGRIDGE ROAD
TIVOLI, NY 12583

VS-1 GLAZED WALL SYSTEM
IMPACT HVHZ
NOTES

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DWG NO.
08-04192

SHEET
1 OF 7

SCALE NTS

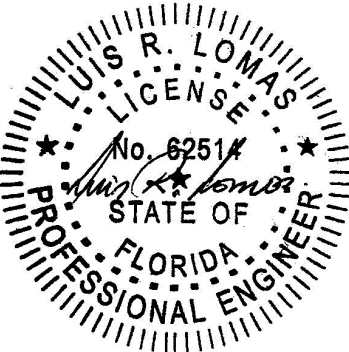
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FPA —

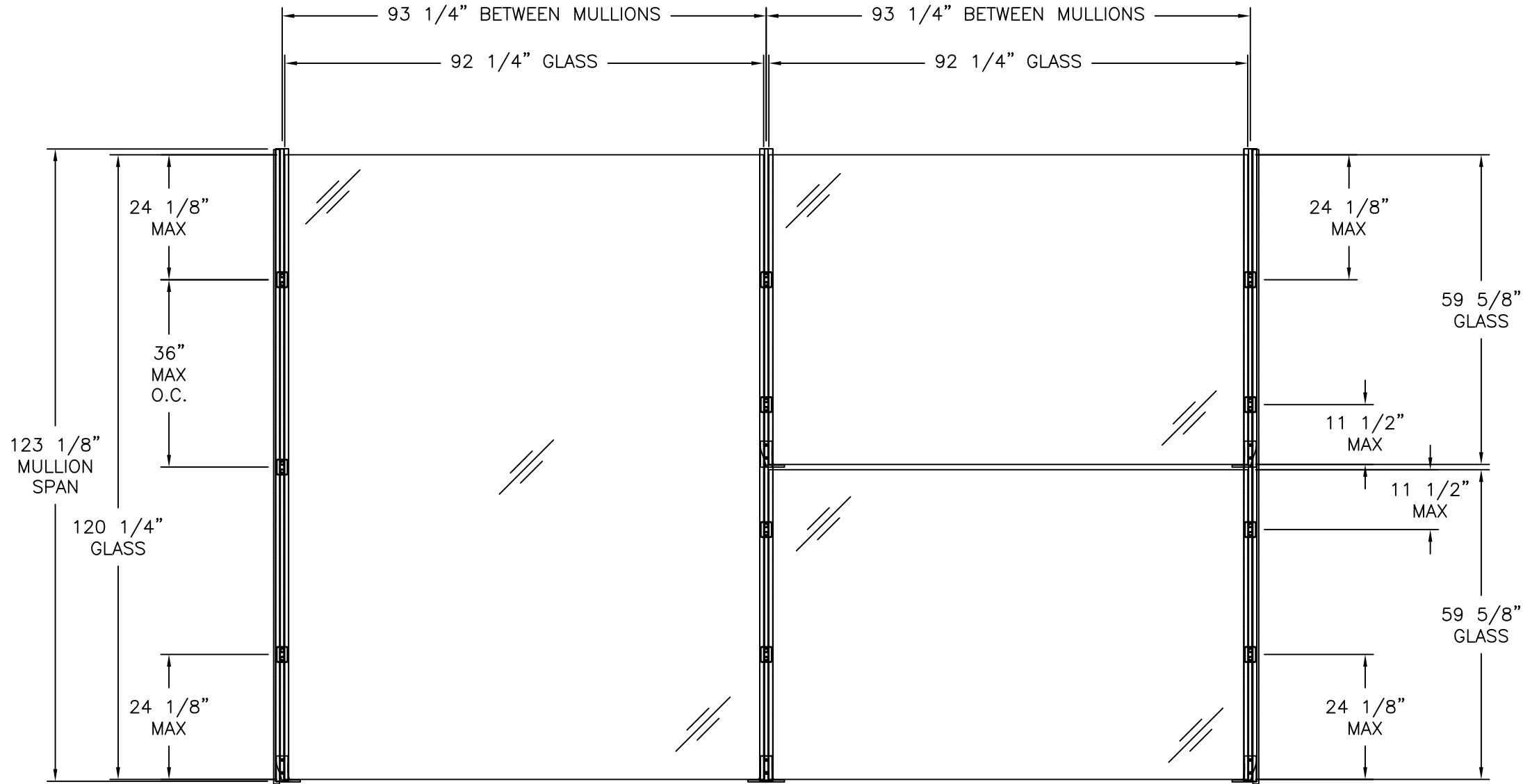
DRAWN R.L.

DATE: 04/01/26

SIGNED: 06/08/2026



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



VS-1 GLAZED WALL SYSTEM

DESIGN PRESSURE RATING	IMPACT RATING
±67.0PSF	LARGE MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ
FOR ADDITIONAL SIZES SEE CHART

REV	DESCRIPTION	DATE

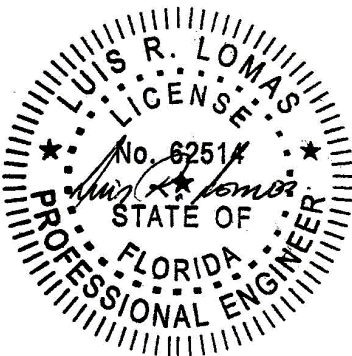
INNOVATION GLASS LLC
40 LANGRIDGE ROAD
TIVOLI, NY 12583

VS-1 GLAZED WALL SYSTEM
IMPACT HVHZ
ELEVATION

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DWG NO. 08-04192	SHEET 2 OF 7
SCALE NTS	REV - FPA -
DRAWN R.L.	DATE: 04/01/26

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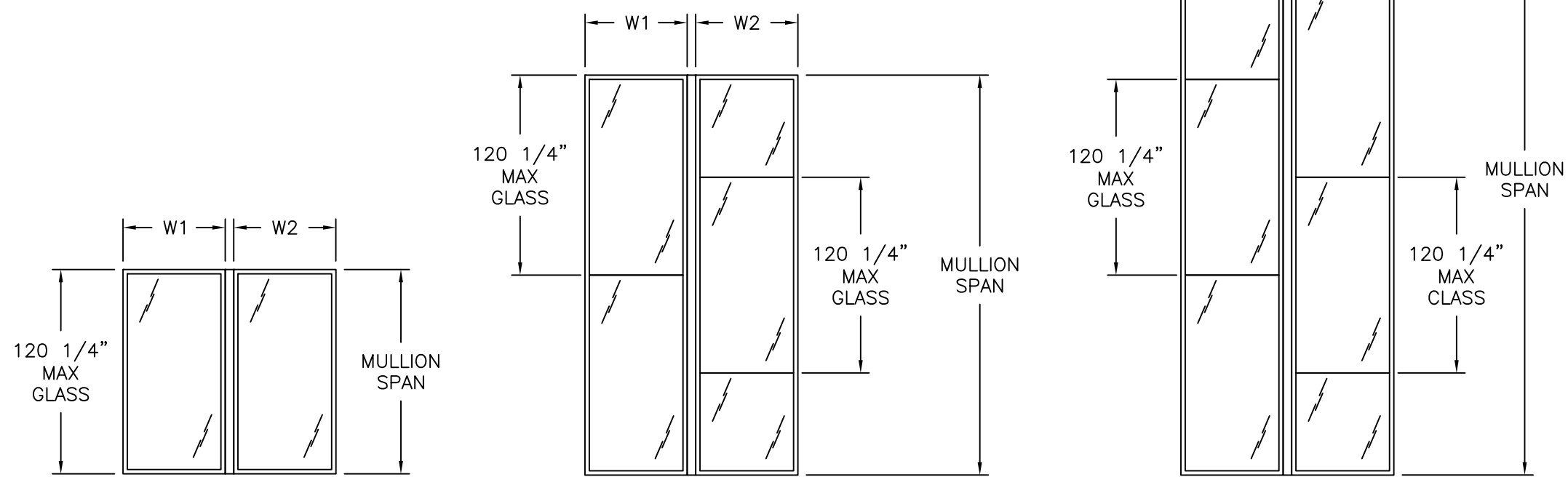


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Chart #1
Design pressure rating (psf)

Mullion span (in)	Tributary width (in)																					
	36.00		42.00		48.00		54.00		60.00		66.00		72.00		78.00		84.00		90.00		93.25	
120.00	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0
132.00	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	65.3
144.00	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	66.4	55.0	62.0	55.0	59.8
156.00	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	66.0	55.0	61.3	55.0	57.2	55.0	55.2
168.00	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	66.4	55.0	61.3	55.0	56.9	53.1	53.1	51.3	51.3
180.00	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	62.0	55.0	57.2	53.1	53.1	49.6	49.6	47.9	47.9
192.00	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	63.4	55.0	58.1	53.7	53.7	49.8	49.8	46.5	46.5	44.9	44.9
204.00	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	65.6	55.0	59.7	54.7	54.7	50.5	50.5	46.9	46.9	43.8	43.8	42.2	42.2
216.00	55.0	67.0	55.0	67.0	55.0	67.0	55.0	67.0	55.0	62.0	55.0	56.4	51.7	51.7	47.7	47.7	44.3	44.3	41.3	41.3	39.9	39.9
228.00	55.0	67.0	55.0	67.0	55.0	67.0	55.0	61.9	55.0	55.7	50.7	50.7	46.4	46.4	42.9	42.9	39.8	39.8	37.1	37.1	35.9	35.9
240.00	55.0	67.0	55.0	67.0	55.0	59.7	53.1	53.1	47.8	47.8	43.4	43.4	39.8	39.8	36.7	36.7	34.1	34.1	31.8	31.8	30.7	30.7
252.00	55.0	67.0	55.0	59.0	51.6	51.6	45.9	45.9	41.3	41.3	37.5	37.5	34.4	34.4	31.7	31.7	29.5	29.5	27.5	27.5	26.6	26.6
264.00	55.0	59.8	51.3	51.3	44.9	44.9	39.9	39.9	35.9	35.9	32.6	32.6	29.9	29.9	27.6	27.6	25.6	25.6	23.9	23.9	23.1	23.1
276.00	52.4	52.4	44.9	44.9	39.3	39.3	34.9	34.9	31.4	31.4	28.6	28.6	26.2	26.2	24.2	24.2	22.4	22.4	20.9	20.9	20.2	20.2
288.00	46.1	46.1	39.5	39.5	34.6	34.6	30.7	30.7	27.6	27.6	25.1	25.1	23.0	23.0	21.3	21.3	19.7	19.7	18.4	18.4	17.8	17.8
300.00	40.8	40.8	34.9	34.9	30.6	30.6	27.2	27.2	24.5	24.5	22.2	22.2	20.4	20.4	18.8	18.8	17.5	17.5	16.3	16.3	15.7	15.7
312.00	36.2	36.2	31.1	31.1	27.2	27.2	24.2	24.2	21.7	21.7	19.8	19.8	18.1	18.1	16.7	16.7	15.5	15.5	-	-	-	-
324.00	32.4	32.4	27.7	27.7	24.3	24.3	21.6	21.6	19.4	19.4	17.7	17.7	16.2	16.2	-	-	-	-	-	-	-	-
336.00	29.0	29.0	24.9	24.9	21.8	21.8	19.3	19.3	17.4	17.4	15.8	15.8	-	-	-	-	-	-	-	-	-	-
348.00	26.1	26.1	22.4	22.4	19.6	19.6	17.4	17.4	15.7	15.7	-	-	-	-	-	-	-	-	-	-	-	-
360.00	23.6	23.6	20.2	20.2	17.7	17.7	15.7	15.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LARGE MISSILE LEVEL D, WIND ZONE 4 AND HVHZ



APPROVED CONFIGURATIONS
TWIN UNITS ARE SHOWN. UNLIMITED NUMBER OF UNITS MAY BE MULLED TOGETHER AS LONG AS GLASS SIZE DOES NOT EXCEED SIZE SHOWN HEREIN AND MULLION IS ANCHORED AS SHOWN IN INSTALLATION DETAILS

- 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 PANEL HEIGHT AND TRIBUTARY WIDTH. AT THE INTERSECTION OF ROW AND COLUMN CONTAINING PANEL HEIGHT AND TRIBUTARY WIDTH RESPECTIVELY IS THE RATING FOR PRODUCT IN STEP 2. MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.

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

REVIEWS

DATE							
DESCRIPTION							
REV							

INNOVATION GLASS LLC
40 LANGRIDGE ROAD
TIVOLI, NY 12583

VS-1 GLAZED WALL SYSTEM
IMPACT HVHZ
APPROVED CONFIGURATION AND RATING CHART

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DWG NO.
08-04192

SHEET
3 OF 7

SCALE NTS

REV -

FPA -

DRAWN R.L.

DATE: 04/01/26

SIGNED: 06/08/2026

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

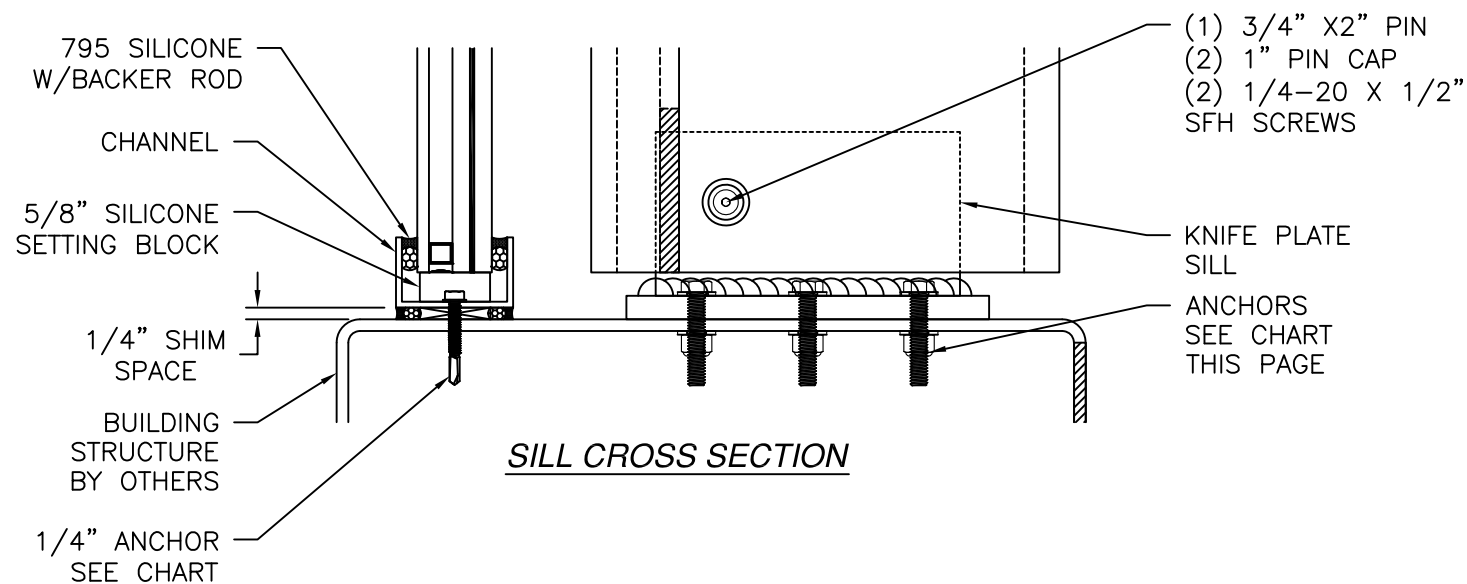
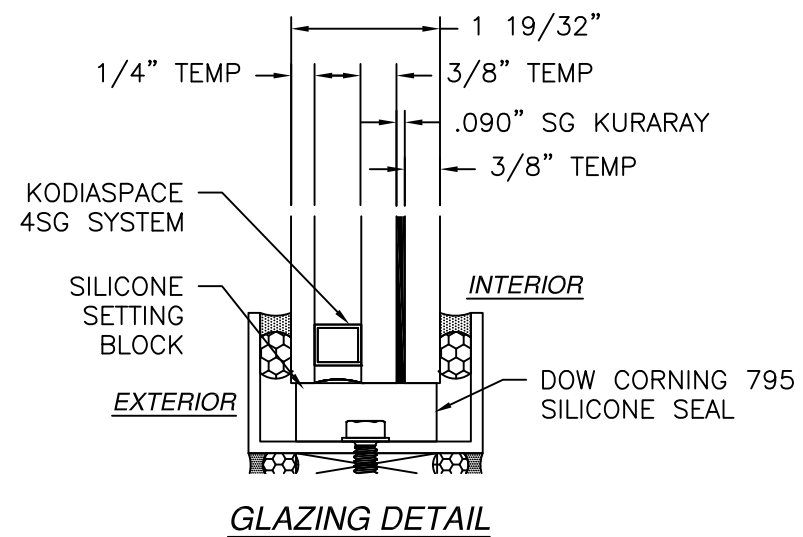
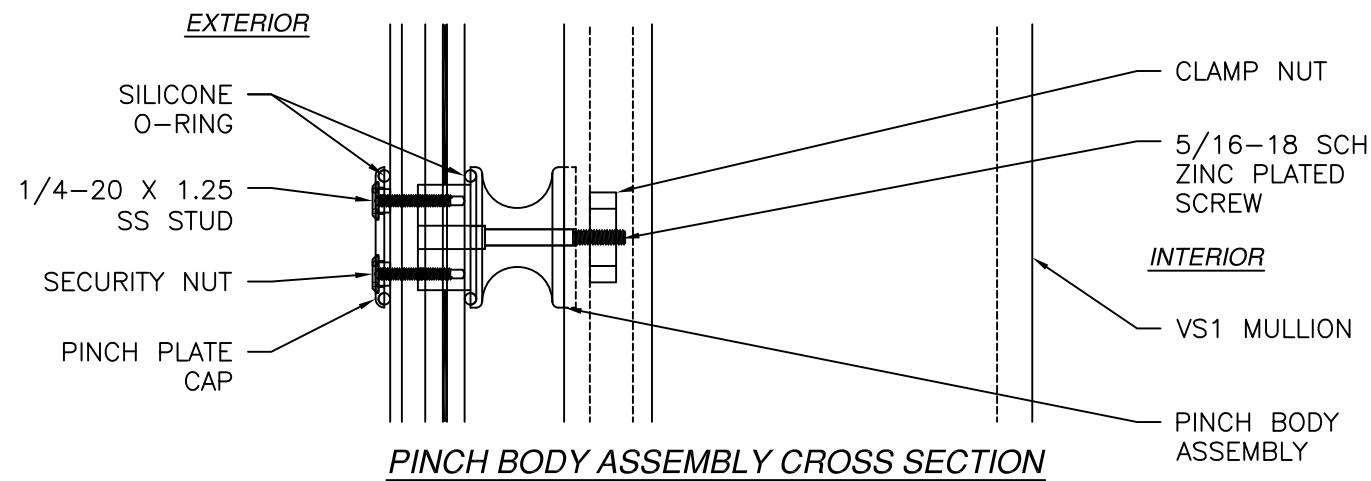
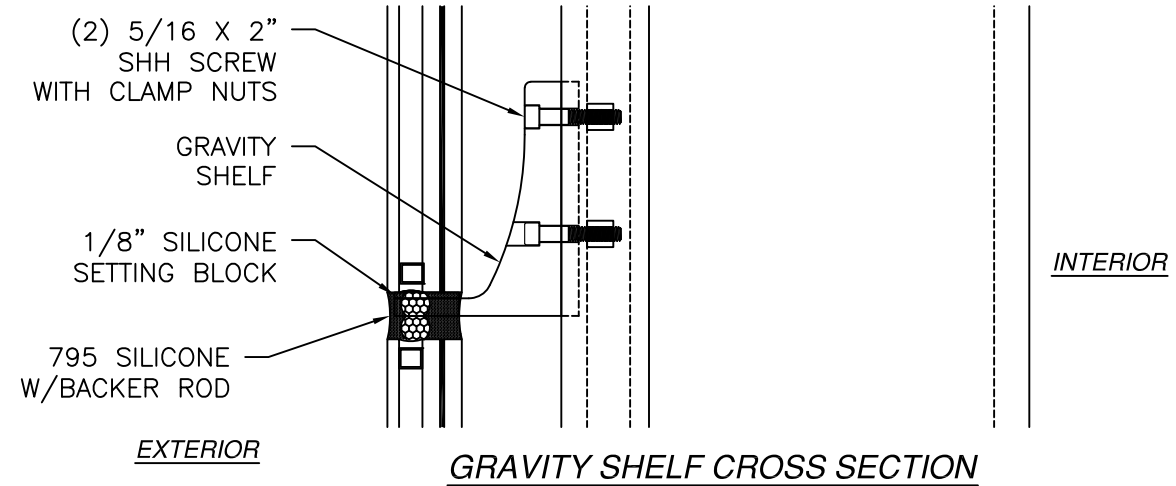
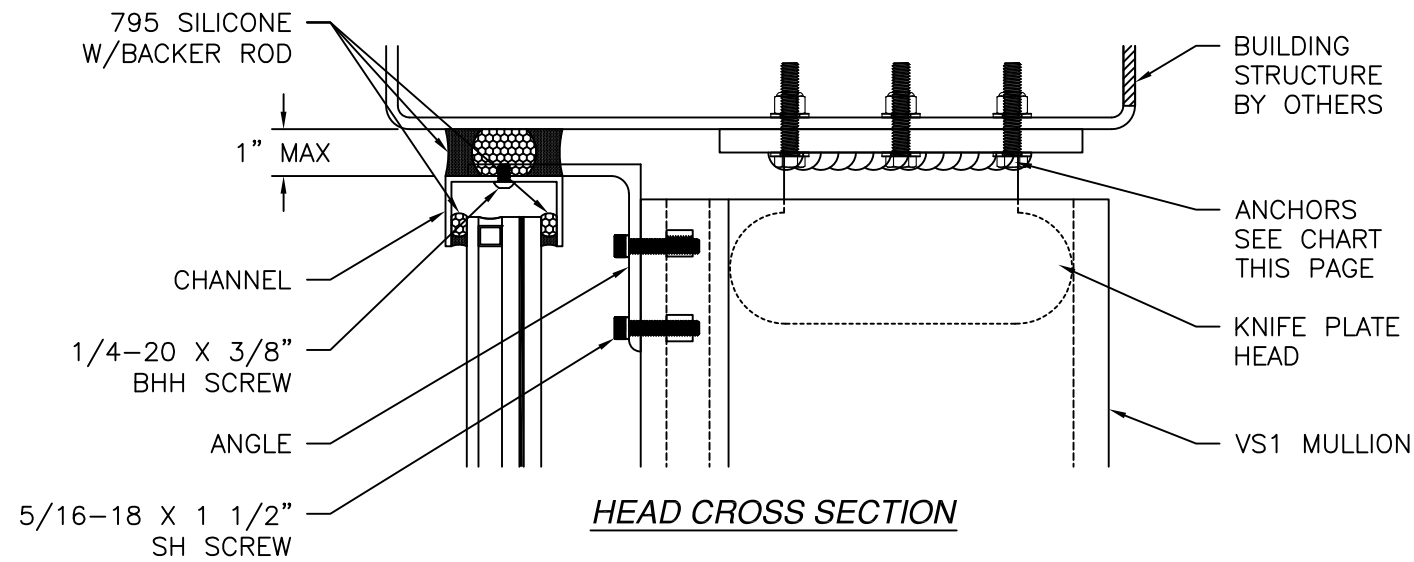


**CHART #2
ANCHOR INFORMATION**

SUBSTRATE	ANCHOR	MINIMUM EDGE DISTANCE	MINIMUM EMBEDMENT
METAL	3/8"-16 HH BOLTS W/WASHER & LOCKING NUT	1"	N/A
	3/8"-16 HH BOLTS	1"	1"
CONCRETE	3/8" WEDGE BOLTS	4"	2"
	3/8" POWER BOLT	4"	2"
	3/8" HILTI KWIKBOLT 3	4"	2"
METAL	1/4" SMS OR SELF DRILLING SCREW	1/2"	THREE THREADS MINIMUM BEYOND INTERIOR WALL
CONCRETE	1/4" TAPCON	2"	1 3/4"

REVISIONS		DATE
REV	DESCRIPTION	

INNOVATION GLASS LLC
40 LANGRIDGE ROAD
TIVOLI, NY 12583

**VS-1 GLAZED WALL SYSTEM
IMPACT HVHZ
INSTALLATION DETAILS**

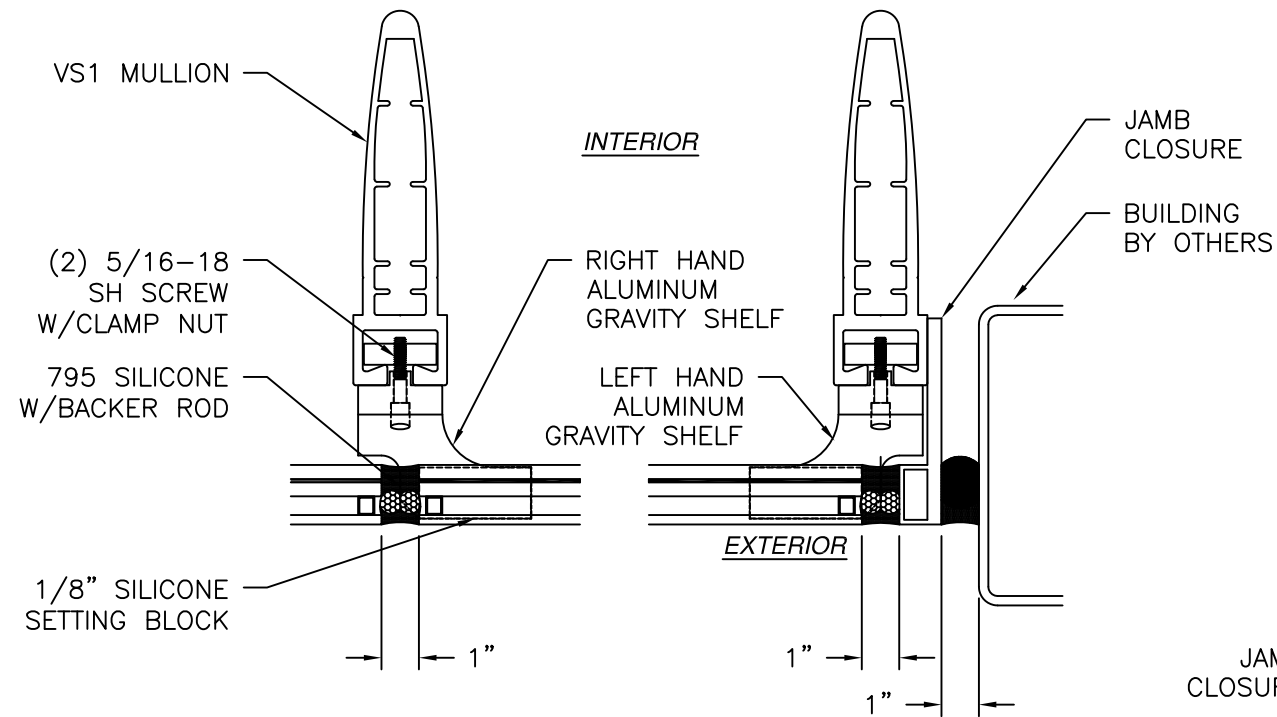
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DWG NO. 08-04192	SHEET 4 OF 7
SCALE NTS	REV - FPA -
DRAWN R.L.	DATE: 04/01/26

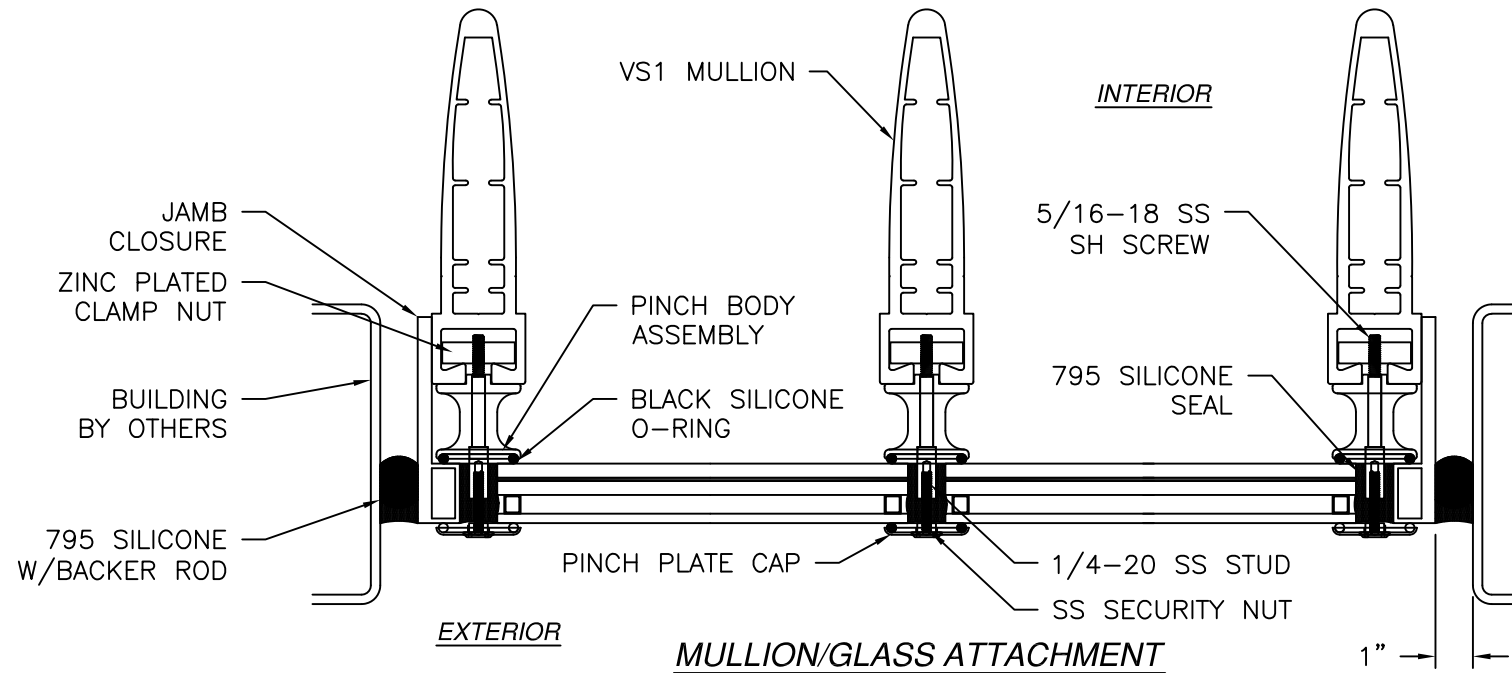
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PROFESSIONAL ENGINEER

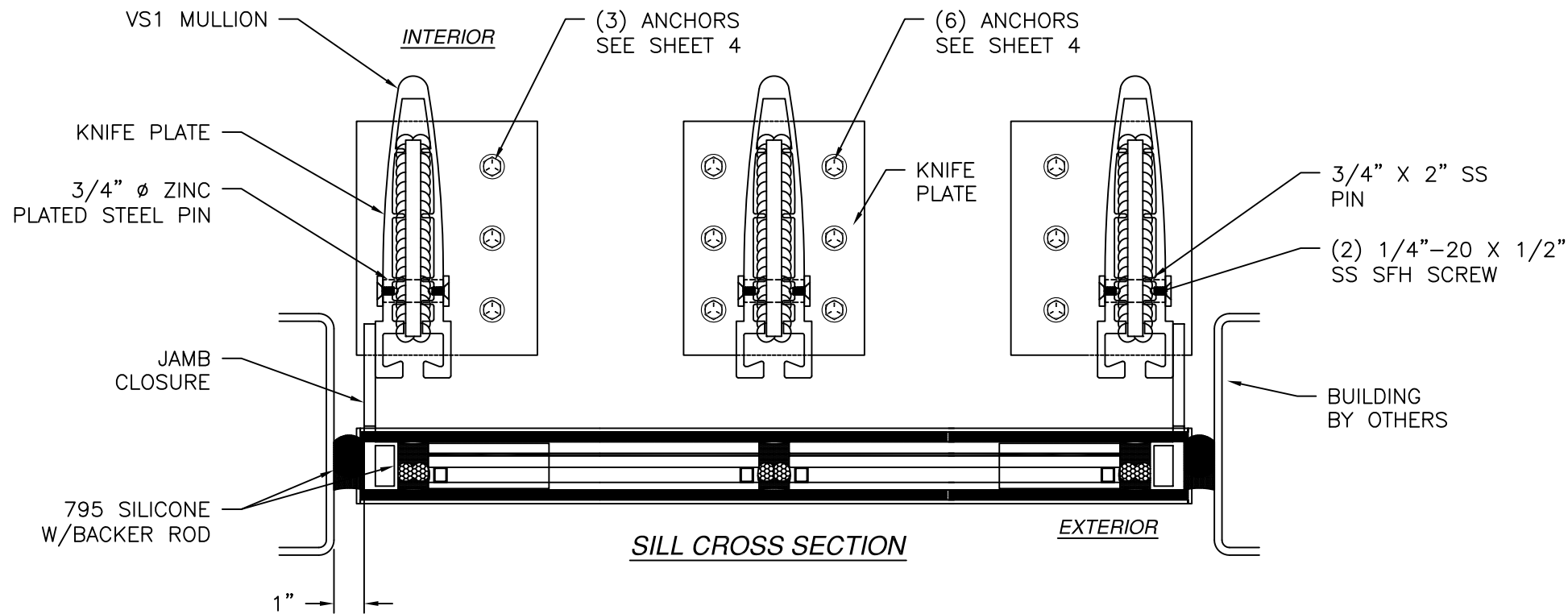
Luis R. Lomas P.E.
FL No.: 62514



GRAVITY SHELVES CROSS SECTION



MULLION/GLASS ATTACHMENT



SILL CROSS SECTION

REV	DESCRIPTION	DATE

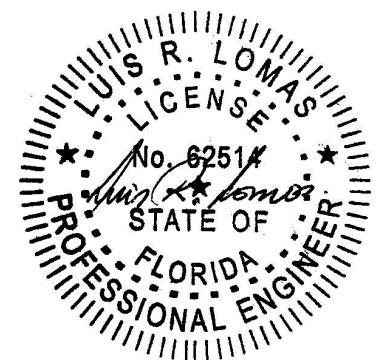
INNOVATION GLASS LLC
40 LANGRIDGE ROAD
TIVOLI, NY 12583

VS-1 GLAZED WALL SYSTEM
IMPACT HVHZ
INSTALLATION DETAILS

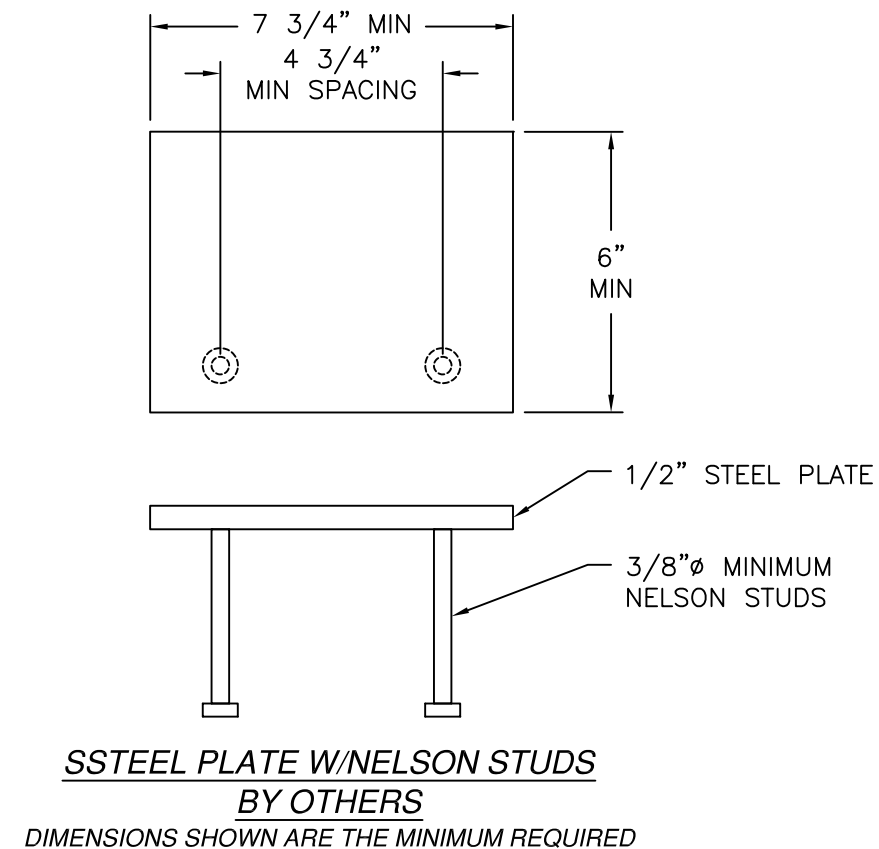
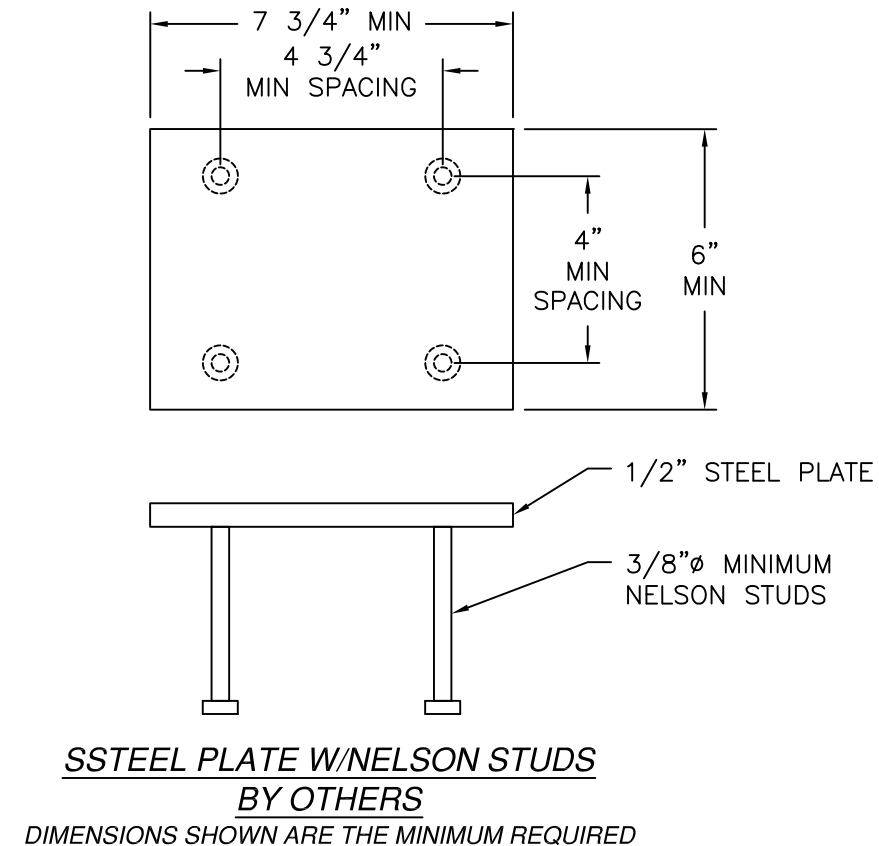
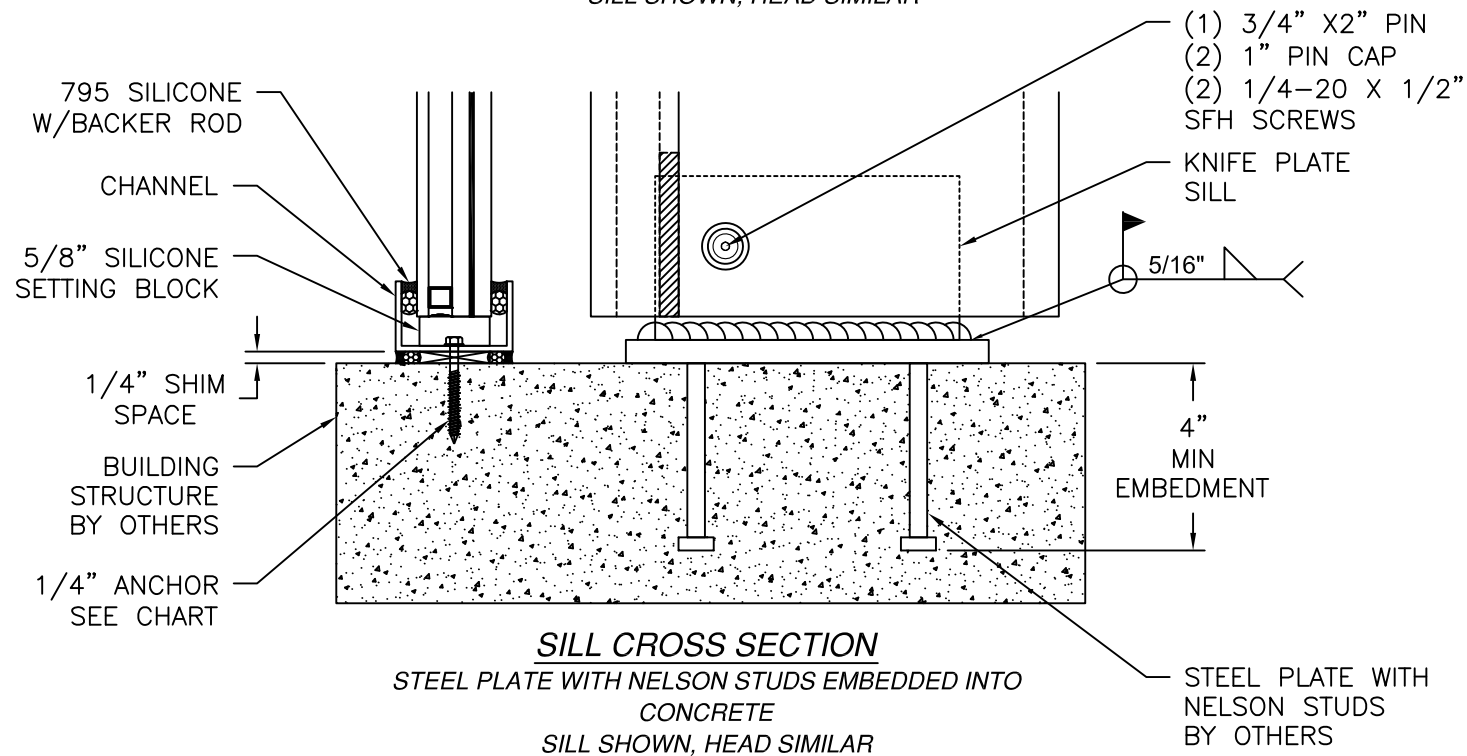
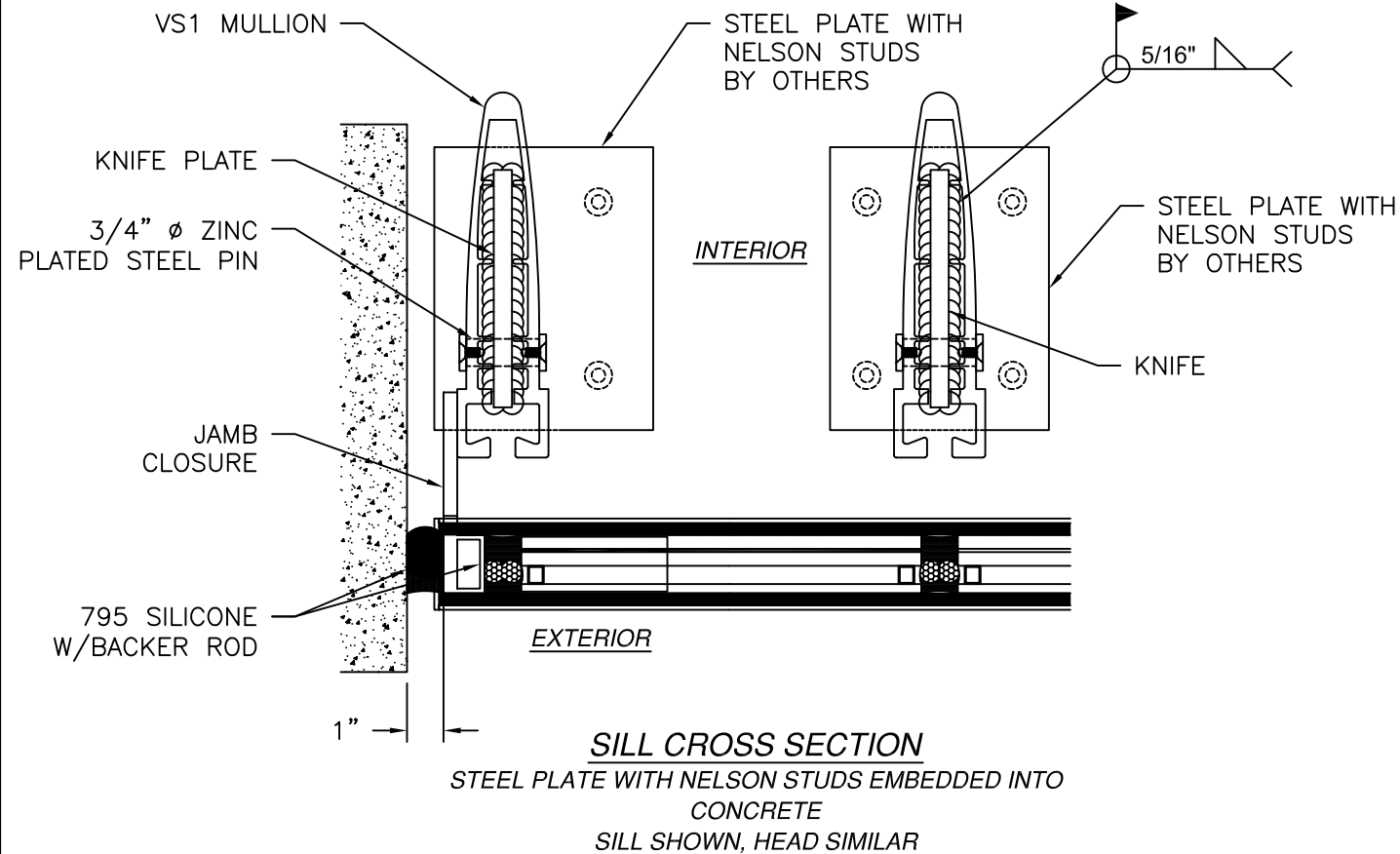
L. ROBERTO LOMAS P.E.
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434-688-0609 rllomas@rlomaspe.com

DWG NO. 08-04192	SHEET 5 OF 7
SCALE NTS	REV - FPA -
DRAWN R.L.	DATE: 04/01/26

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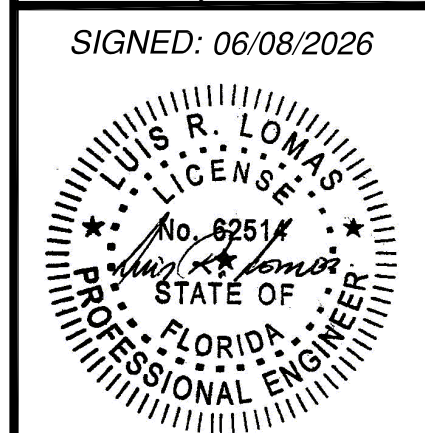
Luis R. Lomas P.E.
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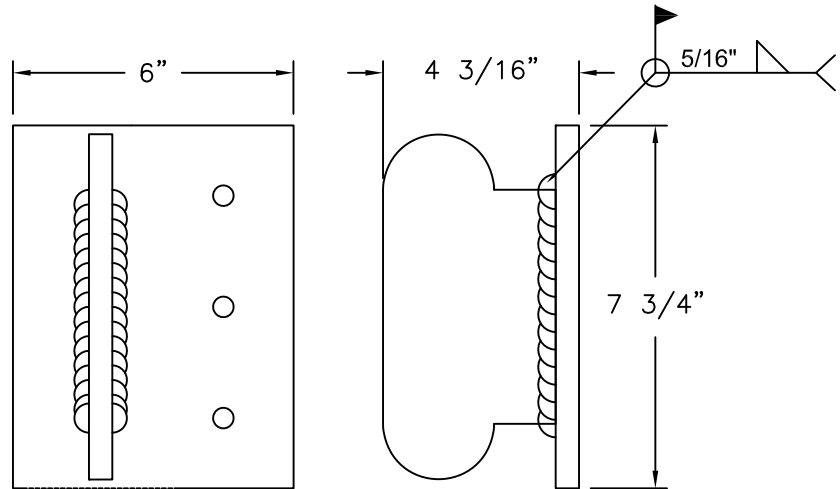
REV	DESCRIPTION	DATE

INNOVATION GLASS LLC 40 LANGRIDGE ROAD TIVOLI, NY 12583			VS-1 GLAZED WALL SYSTEM IMPACT HVHZ INSTALLATION DETAILS			L. ROBERTO LOMAS P.E. 208 7th Ave, INDIANLANTIC, FL 32903 434-688-0609 rllomas@rlomaspe.com		
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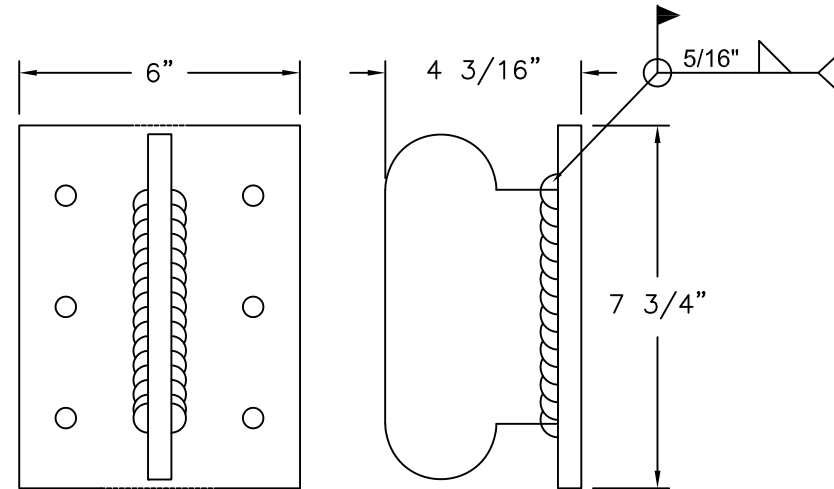
DWG NO.	08-04192		SHEET	6 OF 7	
SCALE	NTS	REV	—	FPA	—
DRAWN	R.L.	DATE:	04/01/26		



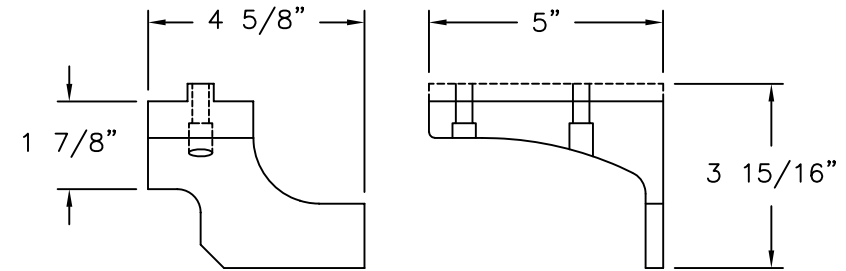
Luis R. Lomas P.E.
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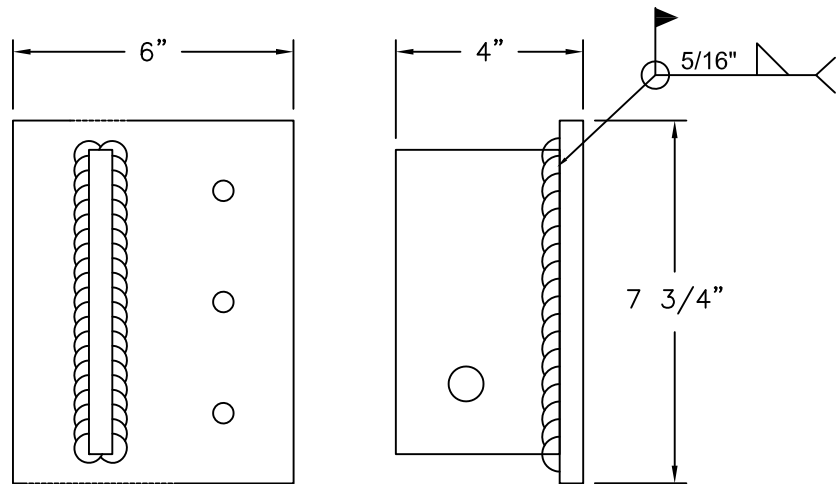
KNIFE PLATE, HEAD
1/2" A36 STEEL



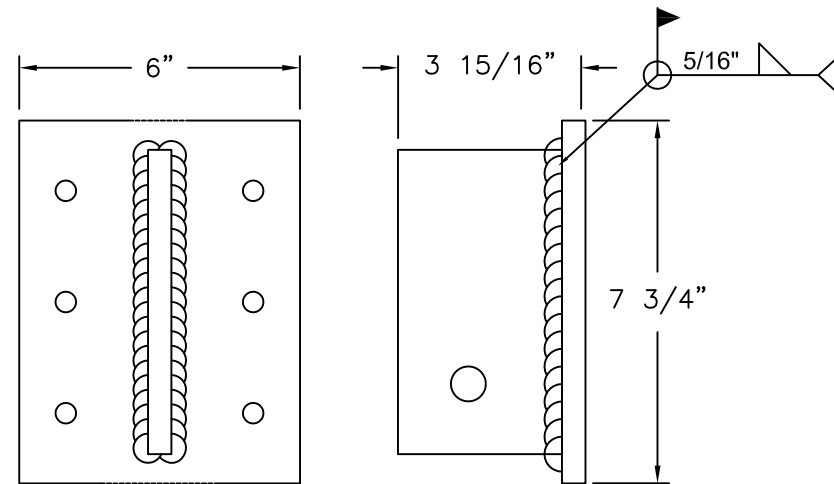
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1/2" A36 STEEL



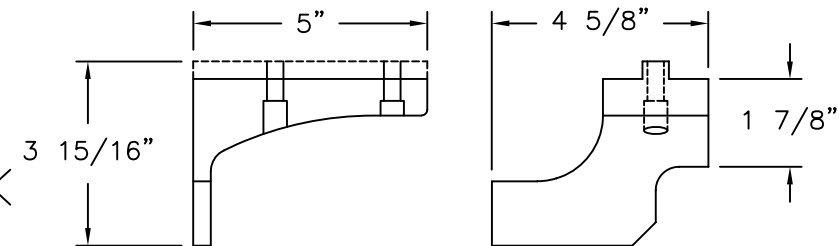
RIGHT GRAVITY SHELF
ALUMINUM 6061-T6



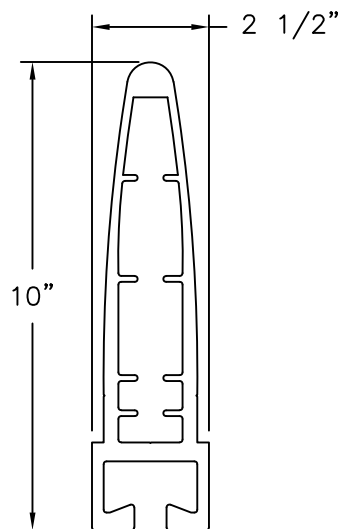
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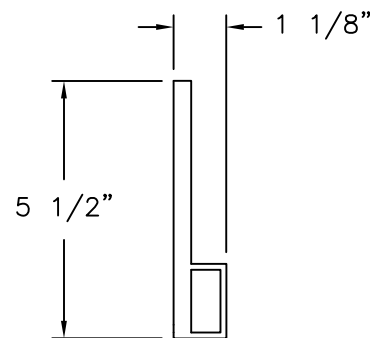
KNIFE PLATE, SILL
1/2" A36 STEEL



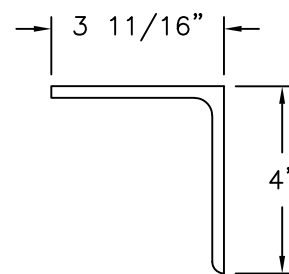
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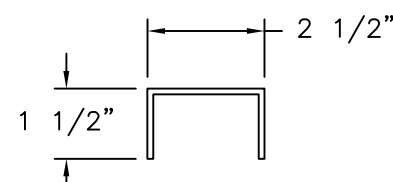
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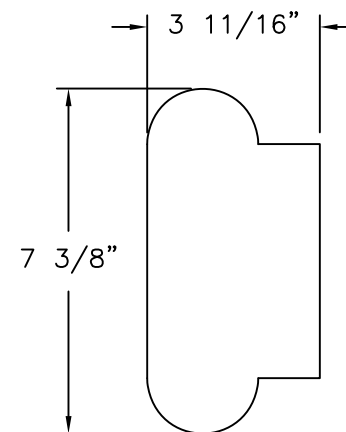
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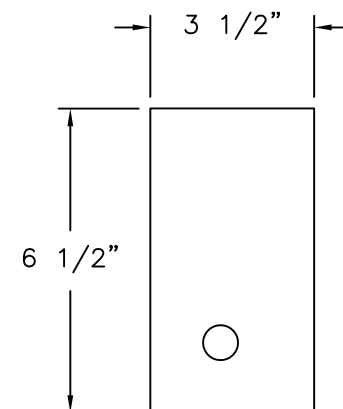
ANGLE
ALUMINUM 6005-T5



CHANNEL
ALUMINUM 6005-T5



KNIFE PLATE, HEAD
1/2" A36 STEEL
WHEN PLATE WITH NELSON STUDS IS USED



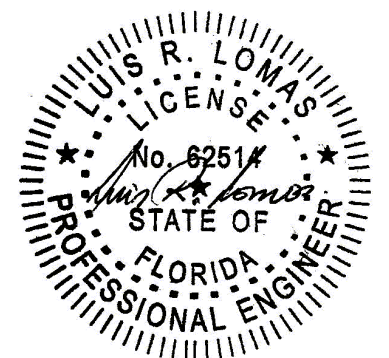
KNIFE PLATE, SILL
1/2" A36 STEEL
WHEN PLATE WITH NELSON STUDS IS USED

REVISIONS		DATE
REV	DESCRIPTION	

INNOVATION GLASS LLC 40 LANGRIDGE ROAD TIVOLI, NY 12583		VS-1 GLAZED WALL SYSTEM IMPACT HVHZ COMPONENTS	L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rilomas@rilomaspe.com
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DWG NO. 08-04192	SHEET 7 OF 7	
SCALE NTS	REV -	FPA -
DRAWN R.L.	DATE: 04/01/26	

SIGNED: 06/08/2026



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