

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING THE HVHZ.
2. WOOD FRAMING, METAL STRUCTURE 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. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
4. SCREEN MATERIAL: POLYPROPYLENE.
5. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
6. FOR ANCHORING INFORMATION AND DETAILS REFER TO SHEET 4 THROUGH 7
7. ALL FASTENERS TO BE CORROSION RESISTANT.
8. 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:
- 8.1. WOOD: MINIMUM SPECIFIC GRAVITY OF G=0.42
- 8.2. CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.
- 8.3. MASONRY: HOLLOW/FILLED BLOCK PER ASTM C90 WITH Fm=2,000PSI MINIMUM.
- 8.4. METAL STRUCTURE: STEEL 3/32” MINIMUM THICKNESS FY=33KSI/FU=52KSI OR ALUMINUM 6063-T5 FU=30KSI 3/16” THICK MINIMUM

SIGNED: 10/14/2025

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CM Services Sales and Marketing Group Inc.
611 S FORT HARRISON AVE #106
CLEARWATER, FL 33756

HURRICANE SCREEN PROTECTION
IMPACT HVHZ
NOTES

DRAWN:
R.L.

DWG NO.
08-04153

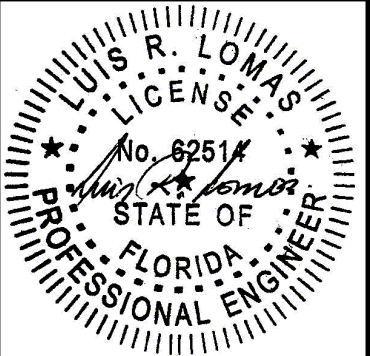
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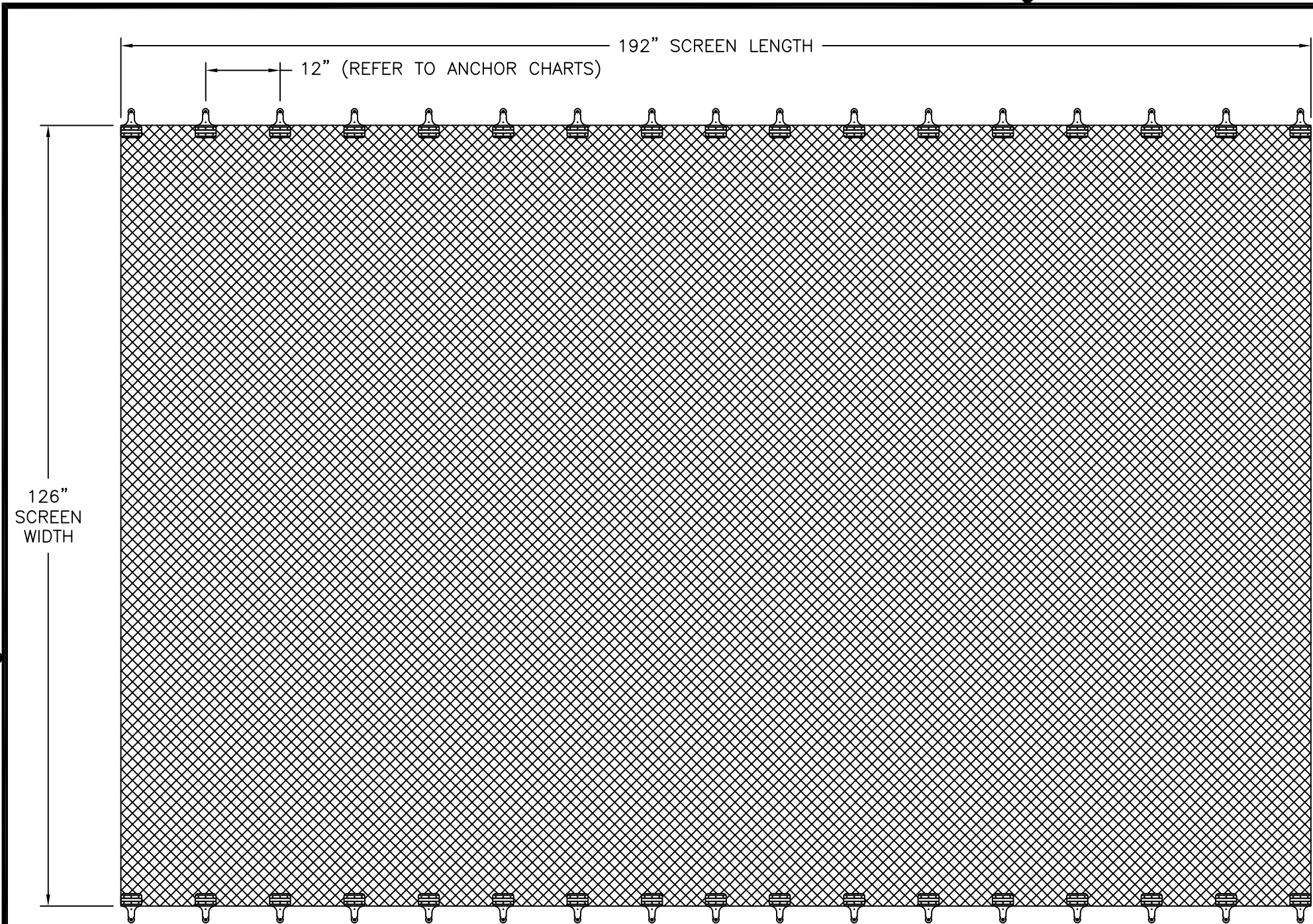
DATE 08/24/25

SHEET 1 OF 8

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



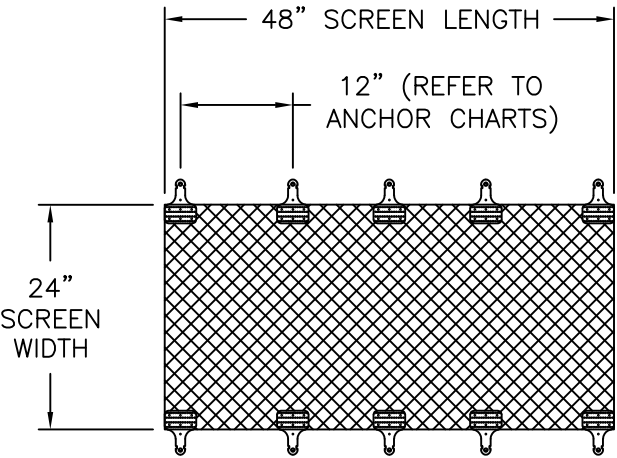
SCREEN PROTECTION

DESIGN PRESSURE RATING	IMPACT RATING
±70.0PSF	LARGE & SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ
FOR ADDITIONAL SIZES SEE CHART #1

192" AND 48" WIDE UNITS SHOWN, UNLIMITED LENGTH IS QUALIFIED
AS LONG AS ANCHORS ARE LOCATED AS SHOWN HEREIN.

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SCREEN PROTECTION

DESIGN PRESSURE RATING	IMPACT RATING
±90.0PSF	LARGE & SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4 AND HVHZ
FOR ADDITIONAL SIZES SEE CHART #1

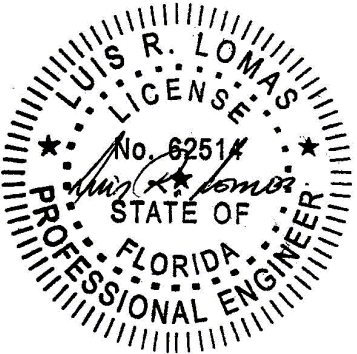
SIGNED: 10/14/2025

CM Services Sales and Marketing Group Inc.
611 S FORT HARRISON AVE #106
CLEARWATER, FL 33756

HURRICANE SCREEN PROTECTION
IMPACT HVHZ
ELEVATIONS

DRAWN: R.L.	DWG NO. 08-04153	REV -
SCALE NTS	DATE 08/24/25	SHEET 2 OF 8

L. ROBERTO LOMAS P.E.
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REVISIONS			
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Chart #1
Rating (psf)

Screen span (in)	Anchor spacing (in)						
	6.00	8.00	10.00	12.00	14.00	16.00	18.00
24.00	90.0	90.0	90.0	90.0	89.2	88.4	87.6
36.00	90.0	90.0	88.8	87.6	86.5	85.3	84.1
48.00	90.0	88.4	86.9	85.3	83.7	82.2	80.6
60.00	88.8	86.9	84.9	82.9	81.0	79.0	77.1
72.00	87.6	85.3	82.9	80.6	78.2	75.9	73.5
84.00	86.5	83.7	81.0	78.2	75.5	72.7	70.0
96.00	85.3	82.2	79.0	75.9	72.7	68.9	59.3
108.00	84.1	80.6	77.1	73.5	70.0	58.7	43.2
120.00	82.9	79.0	75.1	71.2	63.0	43.8	32.8
126.00	82.4	78.2	74.1	70.0	60.0	38.3	29.0
132.00	81.8	77.5	73.1	66.8	57.3	33.8	25.8
144.00	80.6	75.9	71.2	57.6	37.3	27.0	21.0
156.00	79.4	74.3	65.4	45.2	30.0	22.2	17.5
168.00	78.2	72.7	50.0	36.3	24.8	18.7	-
180.00	77.1	71.2	39.2	29.9	20.9	16.0	-
192.00	75.9	68.9	31.7	25.2	18.0	-	-
204.00	74.7	64.9	26.3	21.6	15.7	-	-
216.00	73.5	56.2	22.4	18.8	-	-	-
228.00	72.4	46.9	19.4	16.6	-	-	-
240.00	71.2	39.7	17.0	-	-	-	-

Chart #2
Separation from glass, for HVHZ (in)

Screen span (in)	Anchor spacing (in)						
	6.00	8.00	10.00	12.00	14.00	16.00	18.00
24.00	2.75	2.75	2.75	2.75	2.74	2.73	2.72
36.00	4.29	4.29	4.26	4.23	4.20	4.17	4.14
48.00	5.83	5.77	5.70	5.64	5.57	5.50	5.44
60.00	7.31	7.20	7.08	6.97	6.86	6.74	6.63
72.00	8.75	8.57	8.40	8.23	8.06	7.89	7.71
84.00	10.15	9.90	9.66	9.42	9.17	8.93	8.69
96.00	11.51	11.19	10.86	10.53	10.21	9.81	8.81
108.00	12.84	12.42	12.00	11.57	11.15	9.80	7.95
120.00	14.13	13.60	13.07	12.54	11.44	8.84	7.36
126.00	14.76	14.18	13.59	13.00	11.57	8.47	7.14
132.00	15.39	14.74	14.09	13.14	11.70	8.16	6.96
144.00	16.61	15.83	15.04	12.79	9.42	7.71	6.71
156.00	17.79	16.86	15.24	11.58	8.82	7.40	6.55
168.00	18.94	17.85	13.37	10.67	8.40	7.20	-
180.00	20.04	18.79	12.00	10.02	8.11	7.06	-
192.00	21.12	19.53	11.04	9.56	7.91	-	-
204.00	22.15	19.75	10.36	9.22	7.78	-	-
216.00	23.15	18.66	9.91	8.97	-	-	-
228.00	24.12	17.13	9.58	8.81	-	-	-
240.00	25.05	15.91	9.33	-	-	-	-

FOR DESIGN PRESSURES REFER TO CHART #1

Chart #3
Applied horizontal load F_h (lbs)

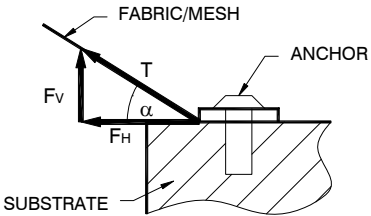
Screen span (in)	Anchor spacing (in)						
	6.00	8.00	10.00	12.00	14.00	16.00	18.00
24.00	98.2	130.9	163.6	196.4	227.8	258.9	289.6
36.00	141.5	188.7	234.5	279.8	324.4	368.5	411.9
48.00	185.1	245.3	304.7	363.2	420.9	477.7	533.5
60.00	227.9	301.8	374.6	446.3	516.7	585.9	653.7
72.00	270.6	358.1	444.2	528.8	611.7	692.8	772.1
84.00	313.2	414.2	513.4	610.6	705.6	798.2	888.3
96.00	355.6	470.1	582.2	691.7	798.3	899.4	969.7
108.00	398.0	525.6	650.4	771.9	889.8	970.3	990.8
120.00	440.2	580.9	718.1	851.2	963.9	990.5	1003.0
126.00	461.2	608.4	751.7	890.5	1000.4	996.9	1007.1
132.00	482.2	635.9	785.2	923.2	1036.6	1001.9	1009.3
144.00	524.1	690.5	851.7	972.9	998.2	1009.2	1014.2
156.00	565.8	744.7	906.3	989.8	1006.4	1014.1	1016.6
168.00	607.4	798.6	916.2	1000.2	1012.3	1018.0	-
180.00	648.7	852.1	919.1	1007.2	1015.3	1019.3	-
192.00	689.9	903.4	918.9	1012.5	1018.9	-	-
204.00	730.9	948.8	916.8	1015.8	1020.5	-	-
216.00	771.7	975.6	915.7	1018.1	-	-	-
228.00	812.2	988.4	914.1	1020.5	-	-	-
240.00	852.6	997.9	911.2	-	-	-	-

FOR DESIGN PRESSURES REFER TO CHART #1

Chart #4
Applied vertical load F_v (lbs)

Screen span (in)	Anchor spacing (in)						
	6.00	8.00	10.00	12.00	14.00	16.00	18.00
24.00	45.0	60.0	75.0	90.0	104.1	117.9	131.5
36.00	67.5	90.0	111.0	131.5	151.3	170.6	189.3
48.00	90.0	117.9	144.8	170.6	195.4	219.1	241.8
60.00	111.0	144.8	176.9	207.4	236.2	263.4	289.0
72.00	131.5	170.6	207.4	241.8	273.8	303.5	330.9
84.00	151.3	195.4	236.2	273.8	308.3	339.5	367.5
96.00	170.6	219.1	263.4	303.5	339.5	367.5	355.8
108.00	189.3	241.8	289.0	330.9	367.5	352.2	291.6
120.00	207.4	263.4	312.9	355.9	367.5	292.0	246.0
126.00	216.2	273.8	324.3	367.5	367.5	268.1	228.4
132.00	224.9	284.0	335.2	367.5	367.5	247.9	212.9
144.00	241.8	303.5	355.9	345.6	261.1	216.0	189.0
156.00	258.1	322.0	354.3	293.8	227.5	192.4	170.6
168.00	273.8	339.5	291.7	254.1	202.5	174.5	-
180.00	289.0	355.9	245.0	224.3	182.9	160.0	-
192.00	303.5	367.5	211.3	201.6	168.0	-	-
204.00	317.5	367.5	186.3	183.6	155.7	-	-
216.00	330.9	337.2	168.0	169.2	-	-	-
228.00	343.7	297.0	153.6	157.7	-	-	-
240.00	355.9	264.7	141.7	-	-	-	-

FOR DESIGN PRESSURES REFER TO CHART #1



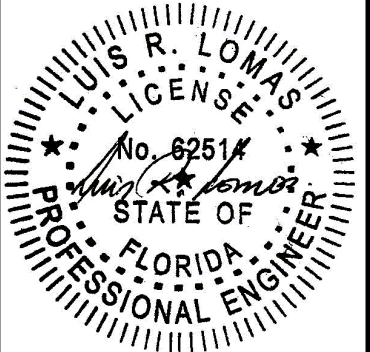
CM Services Sales and Marketing Group Inc.
611 S FORT HARRISON AVE #106
CLEARWATER, FL 33756

HURRICANE SCREEN PROTECTION
IMPACT HVHZ
RATING CHARTS & LOAD CHARTS

DRAWN: R.L.	DWG NO. 08-04153	REV -
SCALE NTS	DATE 08/24/25	SHEET 3 OF 8

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SIGNED: 10/14/2025



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

Chart #5

5/16" lag screw into wood rating (psf)

Screen span (in)	Anchor spacing (in)						
	6.00	8.00	10.00	12.00	14.00	16.00	18.00
24.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
36.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
48.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
60.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
72.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
84.00	90.0	90.0	90.0	90.0	90.0	88.3	76.1
96.00	90.0	90.0	90.0	90.0	89.7	75.1	59.2
108.00	90.0	90.0	90.0	90.0	78.2	59.3	41.6
120.00	90.0	90.0	90.0	84.0	65.1	42.8	30.9
126.00	90.0	90.0	90.0	79.2	59.8	37.0	27.0
132.00	90.0	90.0	90.0	73.0	55.2	32.3	23.9
144.00	90.0	90.0	85.2	59.6	36.5	25.4	19.2
156.00	90.0	90.0	73.7	45.6	28.9	20.7	15.9
168.00	90.0	90.0	55.2	35.9	23.6	17.3	-
180.00	90.0	86.4	42.7	29.2	19.7	14.7	-
192.00	90.0	79.1	34.3	24.3	16.9	-	-
204.00	90.0	70.9	28.3	20.7	14.6	-	-
216.00	90.0	59.6	24.0	17.9	-	-	-
228.00	90.0	48.8	20.8	15.8	-	-	-
240.00	87.6	40.7	18.2	-	-	-	-

Chart #6

1/4" panel mate pro into wood rating (psf)

Screen span (in)	Anchor spacing (in)						
	6.00	8.00	10.00	12.00	14.00	16.00	18.00
24.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
36.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
48.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
60.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
72.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
84.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
96.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
108.00	90.0	90.0	90.0	90.0	90.0	90.0	85.4
120.00	90.0	90.0	90.0	90.0	90.0	87.9	63.4
126.00	90.0	90.0	90.0	90.0	90.0	76.0	55.5
132.00	90.0	90.0	90.0	90.0	90.0	66.4	49.1
144.00	90.0	90.0	90.0	90.0	74.9	52.2	39.5
156.00	90.0	90.0	90.0	90.0	59.3	42.5	32.7
168.00	90.0	90.0	90.0	73.8	48.4	35.5	-
180.00	90.0	90.0	87.7	59.9	40.5	30.2	-
192.00	90.0	90.0	70.4	50.0	34.6	-	-
204.00	90.0	90.0	58.1	42.5	30.1	-	-
216.00	90.0	90.0	49.3	36.8	-	-	-
228.00	90.0	90.0	42.6	32.3	-	-	-
240.00	90.0	83.6	37.4	-	-	-	-

Chart #7

1/4" Panel mate insert into wood rating (psf)

Screen span (in)	Anchor spacing (in)						
	6.00	8.00	10.00	12.00	14.00	16.00	18.00
24.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
36.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
48.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
60.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
72.00	90.0	90.0	90.0	90.0	90.0	90.0	79.3
84.00	90.0	90.0	90.0	90.0	90.0	77.5	66.7
96.00	90.0	90.0	90.0	90.0	78.7	65.9	51.9
108.00	90.0	90.0	90.0	83.3	68.6	52.0	36.5
120.00	90.0	90.0	90.0	73.7	57.1	37.6	27.1
126.00	90.0	90.0	87.5	69.5	52.5	32.5	23.7
132.00	90.0	90.0	82.9	64.0	48.4	28.4	21.0
144.00	90.0	90.0	74.7	52.3	32.0	22.3	16.9
156.00	90.0	89.9	64.6	40.0	25.3	18.1	14.0
168.00	90.0	82.4	48.4	31.5	20.7	15.2	-
180.00	90.0	75.8	37.5	25.6	17.3	12.9	-
192.00	90.0	69.3	30.1	21.3	14.8	-	-
204.00	90.0	62.2	24.8	18.2	12.8	-	-
216.00	87.3	52.2	21.1	15.7	-	-	-
228.00	81.8	42.8	18.2	13.8	-	-	-
240.00	76.8	35.7	16.0	-	-	-	-

Chart #8

5/16" Ultracon rating into masonry/concrete (psf)

Screen span (in)	Anchor spacing (in)						
	6.00	8.00	10.00	12.00	14.00	16.00	18.00
24.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
36.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
48.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
60.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
72.00	90.0	90.0	90.0	90.0	90.0	90.0	89.1
84.00	90.0	90.0	90.0	90.0	90.0	87.0	75.0
96.00	90.0	90.0	90.0	90.0	88.4	74.0	58.3
108.00	90.0	90.0	90.0	90.0	77.0	58.4	41.0
120.00	90.0	90.0	90.0	82.8	64.2	42.2	30.4
126.00	90.0	90.0	90.0	78.0	58.9	36.4	26.6
132.00	90.0	90.0	90.0	71.9	54.4	31.8	23.5
144.00	90.0	90.0	83.9	58.7	35.9	25.0	19.0
156.00	90.0	90.0	72.5	44.9	28.4	20.4	15.7
168.00	90.0	90.0	54.3	35.4	23.2	17.0	-
180.00	90.0	85.1	42.1	28.7	19.4	14.5	-
192.00	90.0	77.9	33.8	24.0	16.6	-	-
204.00	90.0	69.8	27.9	20.4	14.4	-	-
216.00	90.0	58.7	23.7	17.7	-	-	-
228.00	90.0	48.1	20.5	15.5	-	-	-
240.00	86.2	40.1	17.9	-	-	-	-

REVISIONS			
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Chart #9

3/8" hilti Kwik Bolt into masonry/concrete rating (psf)

Screen span (in)	Anchor spacing (in)						
	6.00	8.00	10.00	12.00	14.00	16.00	18.00
24.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
36.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
48.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
60.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
72.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
84.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
96.00	90.0	90.0	90.0	90.0	90.0	90.0	78.5
108.00	90.0	90.0	90.0	90.0	90.0	78.7	55.2
120.00	90.0	90.0	90.0	90.0	86.4	56.8	41.0
126.00	90.0	90.0	90.0	90.0	79.4	49.1	35.9
132.00	90.0	90.0	90.0	90.0	73.2	42.9	31.7
144.00	90.0	90.0	90.0	79.1	48.4	33.7	25.5
156.00	90.0	90.0	90.0	60.5	38.3	27.4	21.1
168.00	90.0	90.0	73.2	47.7	31.3	22.9	-
180.00	90.0	90.0	56.7	38.7	26.2	19.5	-
192.00	90.0	90.0	45.5	32.3	22.4	-	-
204.00	90.0	90.0	37.6	27.5	19.4	-	-
216.00	90.0	79.0	31.9	23.8	-	-	-
228.00	90.0	64.8	27.6	20.9	-	-	-
240.00	90.0	54.1	24.1	-	-	-	-

Chart #10

3/8" drop in expansion anchor into masonry/concrete rating (psf)

Screen span (in)	Anchor spacing (in)						
	6.00	8.00	10.00	12.00	14.00	16.00	18.00
24.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
36.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
48.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
60.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
72.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
84.00	90.0	90.0	90.0	90.0	90.0	89.7	77.3
96.00	90.0	90.0	90.0	90.0	90.0	76.3	60.1
108.00	90.0	90.0	90.0	90.0	79.4	60.2	42.3
120.00	90.0	90.0	90.0	85.3	66.1	43.5	31.3
126.00	90.0	90.0	90.0	80.5	60.8	37.6	27.5
132.00	90.0	90.0	90.0	74.1	56.0	32.8	24.3
144.00	90.0	90.0	86.5	60.5	37.0	25.8	19.5
156.00	90.0	90.0	74.8	46.3	29.3	21.0	16.2
168.00	90.0	90.0	56.0	36.5	23.9	17.5	-
180.00	90.0	87.7	43.4	29.6	20.0	14.9	-
192.00	90.0	80.3	34.8	24.7	17.1	-	-
204.00	90.0	72.0	28.7	21.0	14.9	-	-
216.00	90.0	60.5	24.4	18.2	-	-	-
228.00	90.0	49.6	21.1	16.0	-	-	-
240.00	88.9	41.4	18.5	-	-	-	-

CM Services Sales and Marketing Group Inc.
611 S FORT HARRISON AVE #106
CLEARWATER, FL 33756

HURRICANE SCREEN PROTECTION
IMPACT HVHZ
ABCHOR RATING CHARTS

DRAWN:
R.L.

DWG NO.
08-04153

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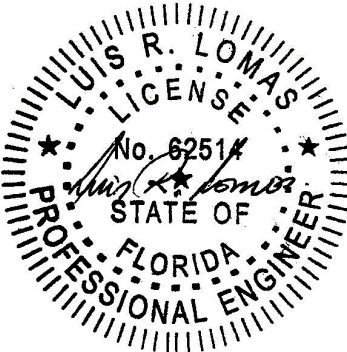
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08/24/25

SHEET
4 OF 8

L. ROBERTO LOMAS P.E.
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SIGNED: 10/14/2025



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

															REVISIONS				
															REV	DESCRIPTION		DATE	APPROVED
Chart #11 1/4" panel mate pro into masonry/concrete rating (psf0)										Chart #12 1/4" panel mate insert into masonry/concrete rating (psf)									
Screen span (in)	Anchor spacing (in)							Screen span (in)	Anchor spacing (in)										
	6.00	8.00	10.00	12.00	14.00	16.00	18.00		6.00	8.00	10.00	12.00	14.00	16.00	18.00				
24.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0	24.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0			
36.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0	36.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0			
48.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0	48.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0			
60.00	90.0	90.0	90.0	90.0	90.0	85.2	74.2	60.00	90.0	90.0	90.0	90.0	90.0	90.0	84.7				
72.00	90.0	90.0	90.0	90.0	83.1	70.9	61.5	72.00	90.0	90.0	90.0	90.0	90.0	81.0	70.2				
84.00	90.0	90.0	90.0	85.0	70.7	60.1	51.8	84.00	90.0	90.0	90.0	90.0	80.8	68.6	59.1				
96.00	90.0	90.0	90.0	73.7	61.0	51.1	40.2	96.00	90.0	90.0	90.0	84.2	69.7	58.3	46.0				
108.00	90.0	90.0	80.6	64.6	53.2	40.3	28.3	108.00	90.0	90.0	90.0	73.8	60.7	46.1	32.3				
120.00	90.0	90.0	71.7	57.1	44.3	29.1	21.0	120.00	90.0	90.0	81.9	65.3	50.6	33.3	24.0				
126.00	90.0	88.8	67.8	53.9	40.7	25.2	18.4	126.00	90.0	90.0	77.5	61.5	46.5	28.7	21.0				
132.00	90.0	84.3	64.3	49.7	37.5	22.0	16.3	132.00	90.0	90.0	73.4	56.7	42.9	25.1	18.6				
144.00	90.0	76.5	57.9	40.5	24.8	17.3	13.1	144.00	90.0	87.3	66.2	46.3	28.3	19.7	14.9				
156.00	90.0	69.7	50.1	31.0	19.6	14.1	10.8	156.00	90.0	79.6	57.2	35.4	22.4	16.1	12.4				
168.00	90.0	63.9	37.5	24.4	16.0	11.7	-	168.00	90.0	72.9	42.8	27.9	18.3	13.4	-				
180.00	83.8	58.7	29.0	19.8	13.4	10.0	-	180.00	90.0	67.1	33.2	22.7	15.3	11.4	-				
192.00	77.8	53.8	23.3	16.6	11.5	-	-	192.00	88.9	61.4	26.6	18.9	13.1	-	-				
204.00	72.5	48.2	19.3	14.1	10.0	-	-	204.00	82.8	55.1	22.0	16.1	11.4	-	-				
216.00	67.7	40.5	16.3	12.2	-	-	-	216.00	77.3	46.3	18.7	13.9	-	-	-				
228.00	63.4	33.2	14.1	10.7	-	-	-	228.00	72.4	37.9	16.1	12.2	-	-	-				
240.00	59.5	27.7	12.4	-	-	-	-	240.00	68.0	31.6	14.1	-	-	-	-				
Chart #13 1/4" panel mate female into masonry/concrete rating (psf)										Chart #14 5/16" bolt into metal structure rating (psf)									
Screen span (in)	Anchor spacing (in)							Screen span (in)	Anchor spacing (in)										
	6.00	8.00	10.00	12.00	14.00	16.00	18.00		6.00	8.00	10.00	12.00	14.00	16.00	18.00				
24.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0	24.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0			
36.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0	36.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0			
48.00	90.0	90.0	90.0	90.0	90.0	84.3	73.8	48.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0			
60.00	90.0	90.0	90.0	90.0	80.3	68.9	60.0	60.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0			
72.00	90.0	90.0	90.0	80.3	67.2	57.4	49.7	72.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0			
84.00	90.0	90.0	84.9	68.8	57.2	48.6	41.9	84.00	90.0	90.0	90.0	90.0	90.0	90.0	82.7				
96.00	90.0	90.0	74.0	59.6	49.4	41.3	32.6	96.00	90.0	90.0	90.0	90.0	90.0	81.6	64.3				
108.00	90.0	84.7	65.2	52.3	43.0	32.6	22.9	108.00	90.0	90.0	90.0	90.0	85.0	64.5	45.2				
120.00	90.0	75.7	58.0	46.2	35.8	23.6	17.0	120.00	90.0	90.0	90.0	90.0	70.8	46.5	33.5				
126.00	90.0	71.8	54.9	43.6	32.9	20.4	14.9	126.00	90.0	90.0	90.0	86.1	65.0	40.2	29.4				
132.00	90.0	68.2	52.0	40.2	30.4	17.8	13.1	132.00	90.0	90.0	90.0	79.4	60.0	35.1	26.0				
144.00	86.8	61.9	46.9	32.8	20.1	14.0	10.6	144.00	90.0	90.0	90.0	64.8	39.6	27.6	20.9				
156.00	79.6	56.4	40.5	25.1	15.9	11.4	8.8	156.00	90.0	90.0	80.0	49.5	31.4	22.5	17.3				
168.00	73.3	51.7	30.3	19.8	13.0	9.5	-	168.00	90.0	90.0	59.9	39.0	25.6	18.8	-				
180.00	67.8	47.5	23.5	16.1	10.8	8.1	-	180.00	90.0	90.0	46.4	31.7	21.4	16.0	-				
192.00	63.0	43.5	18.9	13.4	9.3	-	-	192.00	90.0	85.9	37.2	26.5	18.3	-	-				
204.00	58.6	39.0	15.6	11.4	8.1	-	-	204.00	90.0	77.0	30.8	22.5	15.9	-	-				
216.00	54.8	32.8	13.2	9.9	-	-	-	216.00	90.0	64.7	26.1	19.5	-	-	-				
228.00	51.3	26.8	11.4	8.7	-	-	-	228.00	90.0	53.0	22.6	17.1	-	-	-				
240.00	48.2	22.4	10.0	-	-	-	-	240.00	90.0	44.3	19.8	-	-	-	-				
CM Services Sales and Marketing Group Inc. 611 S FORT HARRISON AVE #106 CLEARWATER, FL 33756															HURRICANE SCREEN PROTECTION IMPACT HVHZ ANCHOR RATING CHARTS				
DRAWN: R.L.					DWG NO. 08-04153					REV -									
SCALE NTS					DATE 08/24/25					SHEET 5 OF 8					L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com				
SIGNED: 10/14/2025																			
L. R. LOMAS LICENSE No. 62514 STATE OF FLORIDA PROFESSIONAL ENGINEER Luis R. Lomas P.E. FL No.: 62514																			

Chart #17

CM Services 1/4" threaded anchor into masonry/concrete rating (psf)

Screen span (in)	Anchor spacing (in)						
	6.00	8.00	10.00	12.00	14.00	16.00	18.00
24.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
36.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
48.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
60.00	90.0	90.0	90.0	90.0	90.0	85.2	74.2
72.00	90.0	90.0	90.0	90.0	83.1	70.9	61.5
84.00	90.0	90.0	90.0	85.0	70.7	60.1	51.8
96.00	90.0	90.0	90.0	73.7	61.0	51.1	40.2
108.00	90.0	90.0	80.6	64.6	53.2	40.3	28.3
120.00	90.0	90.0	71.7	57.1	44.3	29.1	21.0
126.00	90.0	88.8	67.8	53.9	40.7	25.2	18.4
132.00	90.0	84.3	64.3	49.7	37.5	22.0	16.3
144.00	90.0	76.5	57.9	40.5	24.8	17.3	13.1
156.00	90.0	69.7	50.1	31.0	19.6	14.1	10.8
168.00	90.0	63.9	37.5	24.4	16.0	11.7	-
180.00	83.8	58.7	29.0	19.8	13.4	10.0	-
192.00	77.8	53.8	23.3	16.6	11.5	-	-
204.00	72.5	48.2	19.3	14.1	10.0	-	-
216.00	67.7	40.5	16.3	12.2	-	-	-
228.00	63.4	33.2	14.1	10.7	-	-	-
240.00	59.5	27.7	12.4	-	-	-	-

Chart #18

CM Services 1/4" anchor insert into masonry/concrete rating (psf)

Screen span (in)	Anchor spacing (in)						
	6.00	8.00	10.00	12.00	14.00	16.00	18.00
24.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
36.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
48.00	90.0	90.0	90.0	90.0	90.0	90.0	90.0
60.00	90.0	90.0	90.0	90.0	90.0	90.0	84.7
72.00	90.0	90.0	90.0	90.0	90.0	81.0	70.2
84.00	90.0	90.0	90.0	90.0	80.8	68.6	59.1
96.00	90.0	90.0	90.0	84.2	69.7	58.3	46.0
108.00	90.0	90.0	90.0	73.8	60.7	46.1	32.3
120.00	90.0	90.0	81.9	65.3	50.6	33.3	24.0
126.00	90.0	90.0	77.5	61.5	46.5	28.7	21.0
132.00	90.0	90.0	73.4	56.7	42.9	25.1	18.6
144.00	90.0	87.3	66.2	46.3	28.3	19.7	14.9
156.00	90.0	79.6	57.2	35.4	22.4	16.1	12.4
168.00	90.0	72.9	42.8	27.9	18.3	13.4	-
180.00	90.0	67.1	33.2	22.7	15.3	11.4	-
192.00	88.9	61.4	26.6	18.9	13.1	-	-
204.00	82.8	55.1	22.0	16.1	11.4	-	-
216.00	77.3	46.3	18.7	13.9	-	-	-
228.00	72.4	37.9	16.1	12.2	-	-	-
240.00	68.0	31.6	14.1	-	-	-	-

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

CM Services Sales and Marketing Group Inc.
611 S FORT HARRISON AVE #106
CLEARWATER, FL 33756

HURRICANE SCREEN PROTECTION
IMPACT HVHZ
ANCHOR RATING CHARTS

DRAWN:
R.L.

DWG NO.
08-04153

REV
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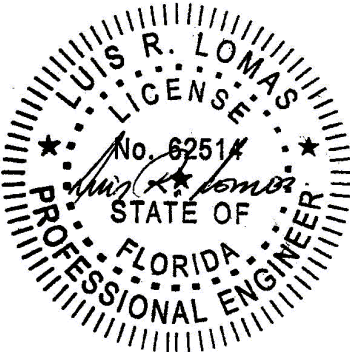
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DATE
08/24/25

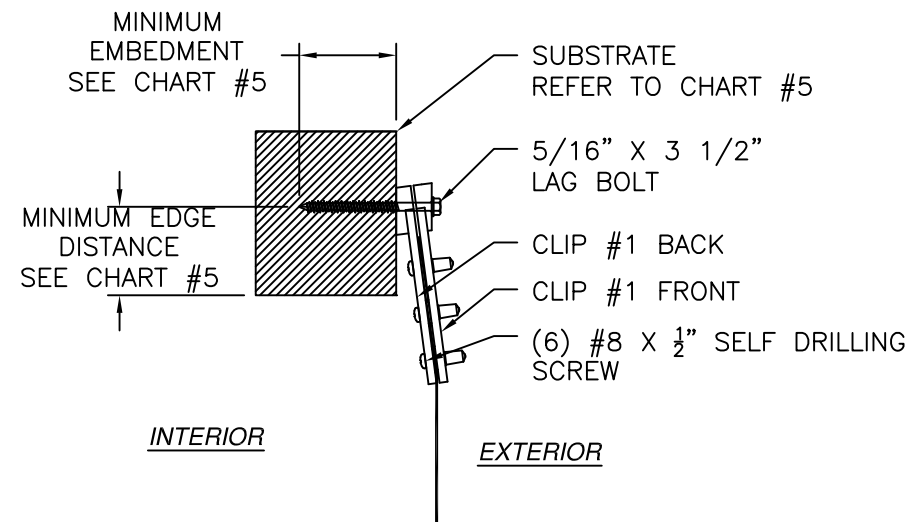
SHEET
6 OF 8

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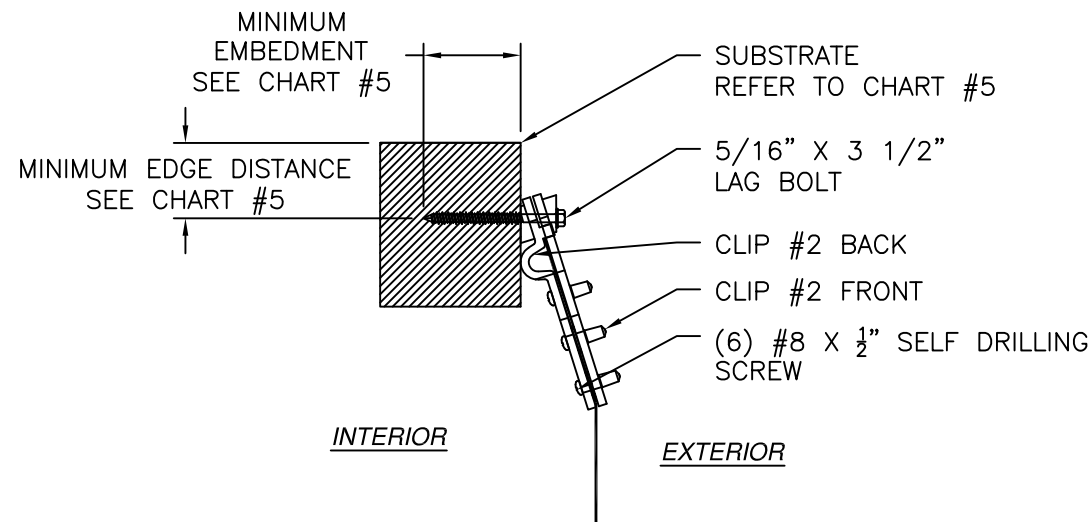
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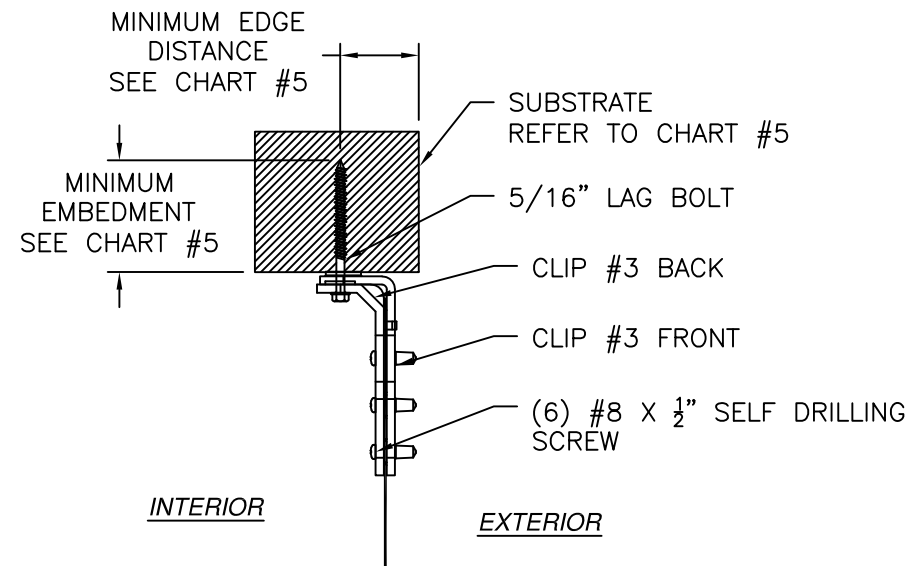
Luis R. Lomas P.E.
FL No.: 62514



CLIP #1
WITH 5/16" LAG BOLT SHOWN
 OTHER ANCHORS SIMILAR



CLIP #2
WITH 5/16" LAG BOLT SHOWN
 OTHER ANCHORS SIMILAR



CLIP #3
WITH 5/16" LAG BOLT SHOWN
 OTHER ANCHORS SIMILAR

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

- NOTES:
- SCREEN MATERIAL MAY BE FOLDED INSIDE CLIPS BEFORE CLAMPING.

Chart #19

SUBSTRATE	ANCHOR	MINIMUM EDGE DISTANCE (IN)	MINIMUM EMBEDMENT (IN)
WOOD	5/16" LAG SCREW	1 1/4"	1 3/4"
	1/4" PANEL MATE PRO	3/4"	2"
	1/4" PANEL MATE INSERT	3/4"	1 5/8"
	CM Services 1/4" threaded anchor	3/4"	1 5/8"
	CM Services 1/4" anchor insert	3/4"	1 5/8"
CONCRETE	5/16" ULTRACON	3 1/8"	1 3/4"
	3/8" HILTI KWIK BOLT 3	4 1/2"	2 1/2"
	3/8" DROPIN EXPANSION ANCHOR	4 1/2"	2"
	1/4" PANEL MATE PRO	2 1/2"	2"
	1/4" PANEL MATE INSERT	4"	1 5/8"
	1/4" PANEL MATE FEMALE	2 1/2"	1 3/4"
	CM Services 1/4" threaded anchor	2 1/2"	2"
	CM Services 1/4" anchor insert	4"	1 5/8"
METAL	5/16" BOLT	1 1/4"	1"

Minimum embedment distance does not include any surface finish or stucco
 Minimum edge distance does not include any surface finish or stucco

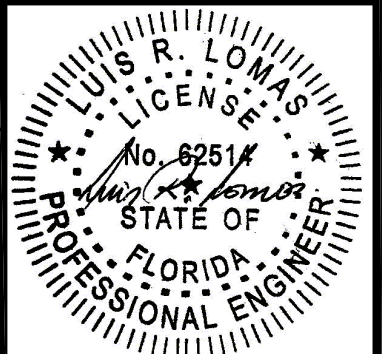
CM Services Sales and Marketing Group Inc.
 611 S FORT HARRISON AVE #106
 CLEARWATER, FL 33756

HURRICANE SCREEN PROTECTION
 IMPACT HVHZ
 INSTALLATION DETAILS

DRAWN: R.L.	DWG NO. 08-04153	REV -
SCALE NTS	DATE 08/24/25	SHEET 7 OF 8

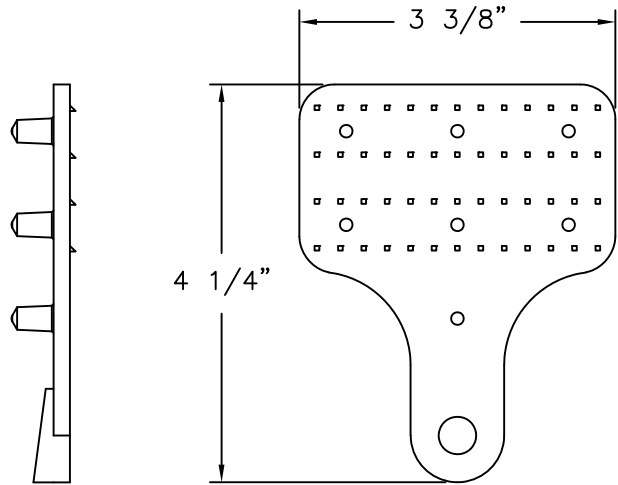
L. ROBERTO LOMAS P.E.
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SIGNED: 10/14/2025

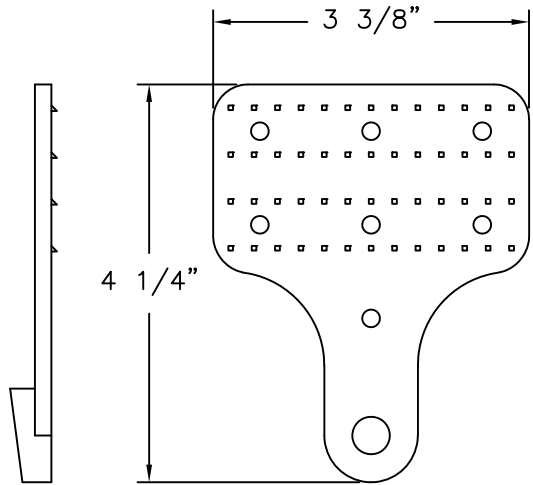


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 FL No.: 62514

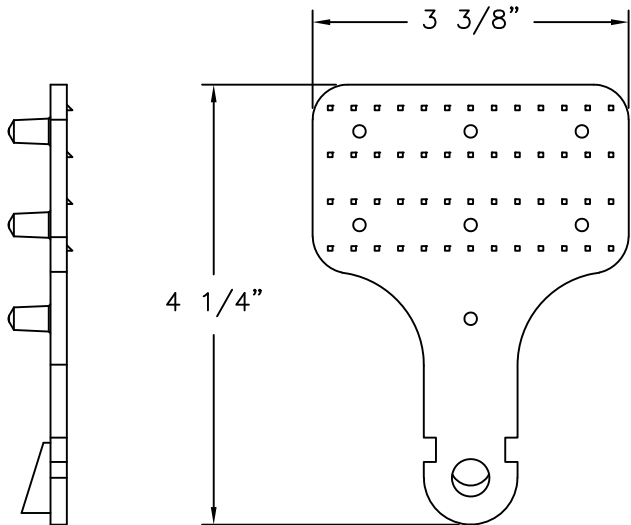
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



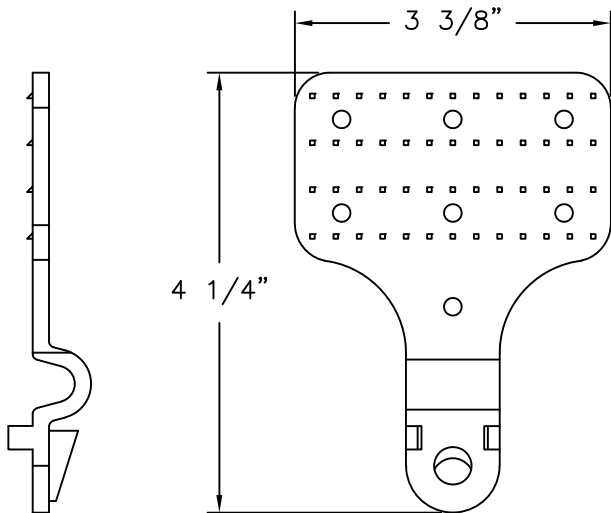
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PVC .175" THICK



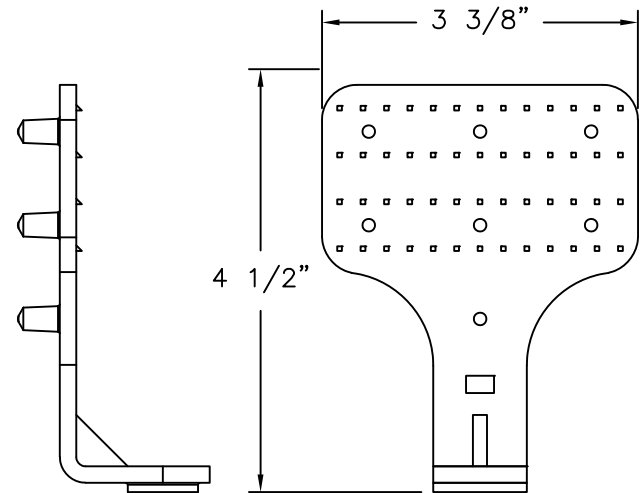
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PVC .175" THICK



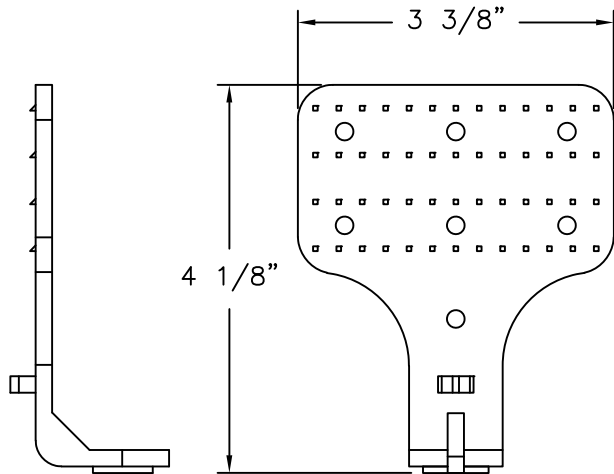
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PVC .175" THICK



CLIP #2 BACK
PVC .175" THICK



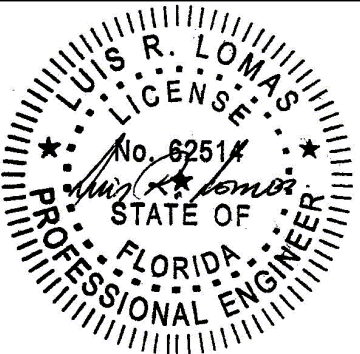
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PVC .175" THICK



CLIP #3 BACK
PVC .175" THICK

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HURRICANE SCREEN PROTECTION IMPACT HVHZ COMPONENTS		
DRAWN: R.L.	DWG NO. 08-04153	REV -
SCALE NTS	DATE 08/24/25	SHEET 8 OF 8
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

SIGNED: 10/14/2025



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