

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
2. WOOD FRAMING, METAL 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. THESE INSTALLATION INSTRUCTIONS ARE FOR THE MUHLER STORM TRIM SYSTEM ONLY. FENESTRATION OR OTHER PROTECTIVE SYSTEMS MUST HAVE THEIR OWN SEPARATE APPROVAL.
4. STORM TRIM SYSTEM MUST BE INSTALLED AS SHOWN HEREIN AND IN ACCORDANCE WITH THE MANUFACTURER’S INSTALLATION INSTRUCTIONS.
5. SELECTION OF FENESTRATION AND PROTECTIVE SYSTEMS IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
6. STORM TRIM SYSTEM IS IMPACT RATED AND DOES NOT REQUIRE IMPACT PROTECTION IN WIND BORNE DEBRIS REGIONS.
7. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
8. STORM TRIM MATERIAL: EXTRUDED RIGID PVC.
9. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4” MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
10. FOR ANCHORING INTO METAL STRUCTURE USE #10 SMS OR SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
11. FOR ANCHORING INTO MASONRY/CONCRETE USE 3/16” TAPCONS 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.
12. FOR ANCHORING THROUGH STUDDED ANGLE INTO WOOD FRAMING OR 2X BUCK USE #14 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 1 3/8” MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
13. FOR ANCHORING THROUGH STUDDED ANGLE INTO METAL STRUCTURE USE #14 SMS OR SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
13. FOR ANCHORING THROUGH STUDDED ANGLE INTO MASONRY/CONCRETE USE 1/4” TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8” MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
14. ALL FASTENERS TO BE CORROSION RESISTANT.
15. 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:

A. WOOD: MINIMUM SPECIFIC GRAVITY OF G=0.42

B. CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.

C. MASONRY: HOLLOW/FILLED BLOCK PER ASTM C90 WITH Fm=2,000 PSI MINIMUM.

B. METAL STRUCTURE: STEEL 18GA (.048”) FY=33KSI/FU=52KSI OR ALUMINUM 6063-T5 FU=30KSI .048” THICK MINIMUM

SIGNED: 09/02/2026

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THE MUHLER COMPANY
630 SKYLARK DRIVE SUITE U
CHARLESTON , SC 29407

STORM TRIM
LARGE AND SMALL MISSILE IMPACT
NOTES

DRAWN:
G.R.

DWG NO.
08-03054

REV
-

SCALE NTS

DATE 02/27/2017

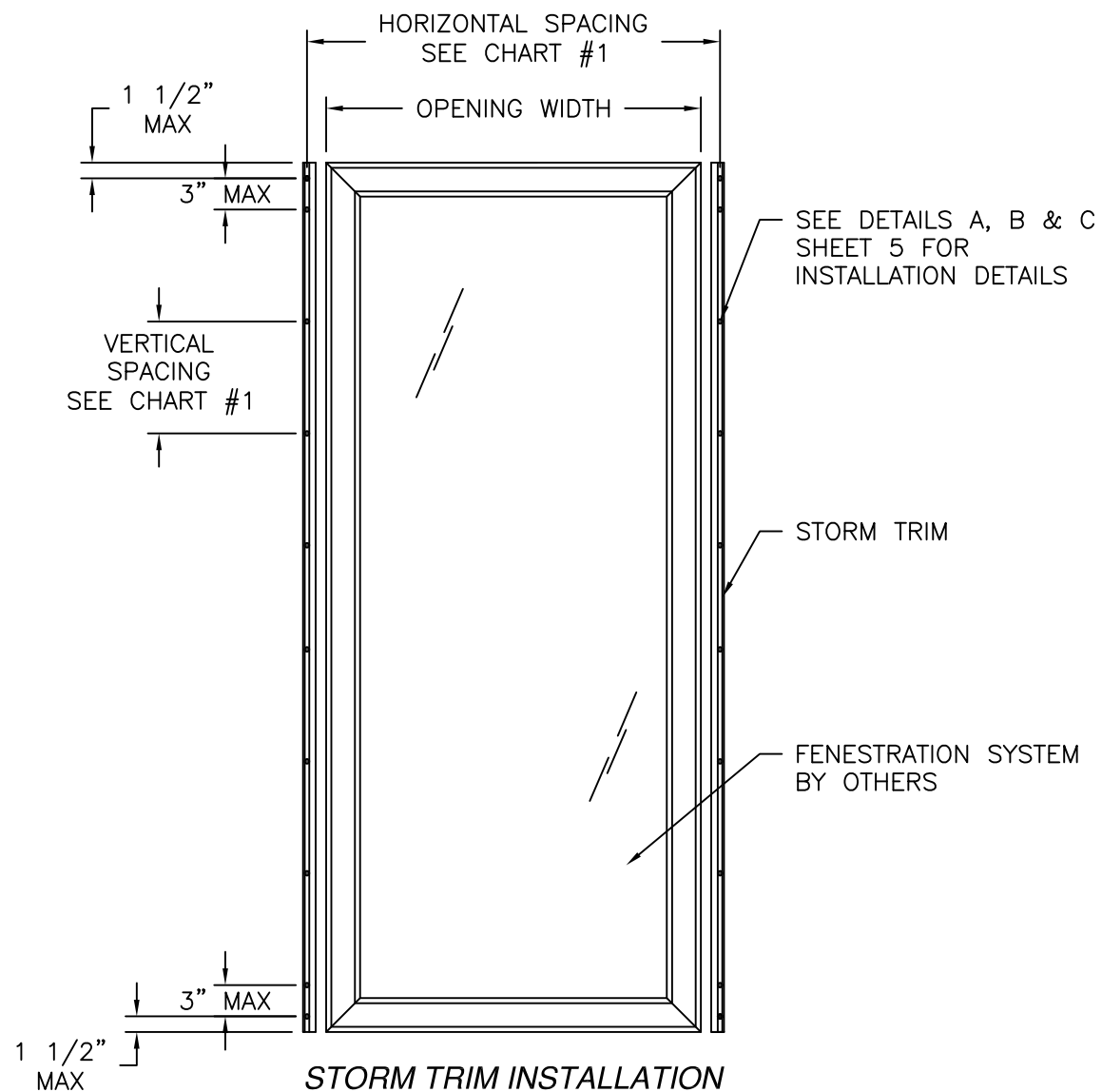
SHEET 1 OF 12

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LUIS R. LOMAS
P.E.
No. 62514
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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

REVISIONS			
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SIDES INSTALLATION, SEE CHART #1 FOR RATINGS.

Chart #1

Maximum design pressure (psf)

Vertical spacing (in)	Horizontal spacing (in)																							
	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0	45.0	48.0	51.0	54.0	57.0	60.0	63.0	66.0	69.0	72.0	75.0	78.0	81.0	84.0	87.0	90.0
4.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	72.5	69.8	67.3	65.0	62.8
5.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	71.8	68.5	65.5	62.8	60.3	58.0	55.8	53.8	52.0	50.2
6.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	73.9	69.8	66.1	62.8	59.8	57.1	54.6	52.3	50.2	48.3	46.5	44.9	43.3	41.9
9.0	75.0	75.0	75.0	75.0	75.0	69.8	64.4	59.8	55.8	52.3	49.3	46.5	44.1	41.9	39.9	38.1	36.4	34.9	33.5	32.2	31.0	29.9	28.9	27.9
12.0	75.0	75.0	69.8	62.8	57.1	52.3	48.3	44.9	41.9	39.3	36.9	34.9	33.1	31.4	29.9	28.5	27.3	26.2	25.1	24.2	23.3	22.4	21.7	20.9
15.0	71.8	62.8	55.8	50.2	45.7	41.9	38.7	35.9	33.5	31.4	29.6	27.9	26.4	25.1	23.9	22.8	21.8	20.9	20.1	19.3	18.6	17.9	17.3	16.7
18.0	59.8	52.3	46.5	41.9	38.1	34.9	32.2	29.9	27.9	26.2	24.6	23.3	22.0	20.9	19.9	19.0	18.2	17.4	16.7	16.1	15.5	-	-	-
21.0	51.3	44.9	39.9	35.9	32.6	29.9	27.6	25.6	23.9	22.4	21.1	19.9	18.9	17.9	17.1	16.3	15.6	-	-	-	-	-	-	-
24.0	44.9	39.3	34.9	31.4	28.5	26.2	24.2	22.4	20.9	19.6	18.5	17.4	16.5	15.7	-	-	-	-	-	-	-	-	-	-

THE MUHLER COMPANY

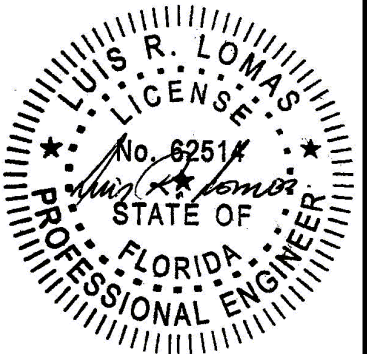
630 SKYLARK DRIVE SUITE U
CHARLESTON , SC 29407

STORM TRIM
LARGE AND SMALL MISSILE IMPACT
ELEVATION TWO SIDES INSTALLATION

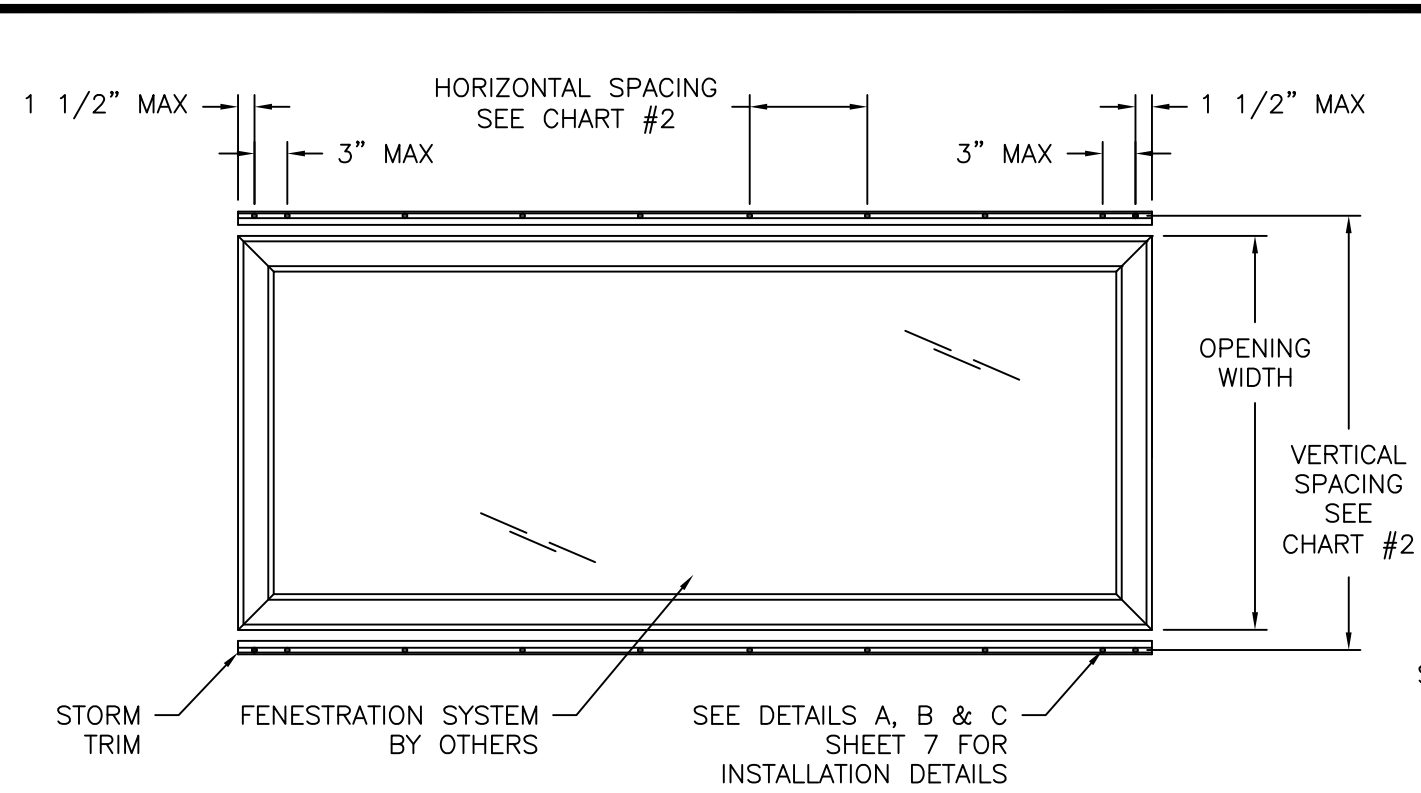
DRAWN: G.R.	DWG NO. 08-03054	REV -
SCALE NTS	DATE 02/27/2017	SHEET 2 OF 12

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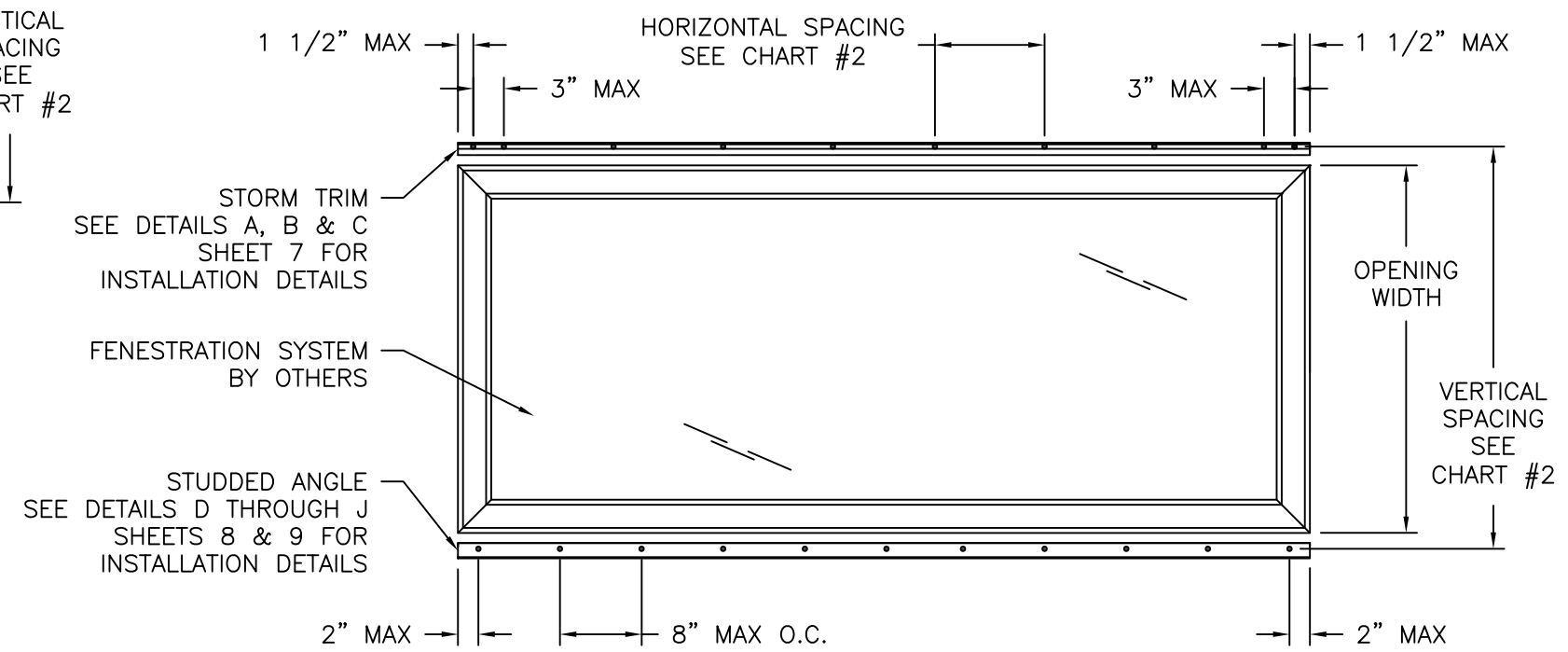
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Luis R. Lomas P.E.
FL No.: 62514



STORM TRIM INSTALLATION
EXTERIOR VIEW
HEAD AND SILL INSTALLATION, SEE CHART #2 FOR RATINGS.



STORM TRIM W/STUDDED ANGLE INSTALLATION
EXTERIOR VIEW
HEAD AND SILL INSTALLATION, SEE CHART #2 FOR RATINGS.

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Chart #2

Maximum design pressure (psf)

Horizontal spacing (in)	Vertical spacing (in)																							
	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0	45.0	48.0	51.0	54.0	57.0	60.0	63.0	66.0	69.0	72.0	75.0	78.0	81.0	84.0	87.0	90.0
4.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	72.5	69.8	67.3	65.0	62.8
5.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	71.8	68.5	65.5	62.8	60.3	58.0	55.8	53.8	52.0	50.2
6.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	73.9	69.8	66.1	62.8	59.8	57.1	54.6	52.3	50.2	48.3	46.5	44.9	43.3	41.9
9.0	75.0	75.0	75.0	75.0	75.0	69.8	64.4	59.8	55.8	52.3	49.3	46.5	44.1	41.9	39.9	38.1	36.4	34.9	33.5	32.2	31.0	29.9	28.9	27.9
12.0	75.0	75.0	69.8	62.8	57.1	52.3	48.3	44.9	41.9	39.3	36.9	34.9	33.1	31.4	29.9	28.5	27.3	26.2	25.1	24.2	23.3	22.4	21.7	20.9
15.0	71.8	62.8	55.8	50.2	45.7	41.9	38.7	35.9	33.5	31.4	29.6	27.9	26.4	25.1	23.9	22.8	21.8	20.9	20.1	19.3	18.6	17.9	17.3	16.7
18.0	59.8	52.3	46.5	41.9	38.1	34.9	32.2	29.9	27.9	26.2	24.6	23.3	22.0	20.9	19.9	19.0	18.2	17.4	16.7	16.1	15.5	-	-	-
21.0	51.3	44.9	39.9	35.9	32.6	29.9	27.6	25.6	23.9	22.4	21.1	19.9	18.9	17.9	17.1	16.3	15.6	-	-	-	-	-	-	-
24.0	44.9	39.3	34.9	31.4	28.5	26.2	24.2	22.4	20.9	19.6	18.5	17.4	16.5	15.7	-	-	-	-	-	-	-	-	-	-

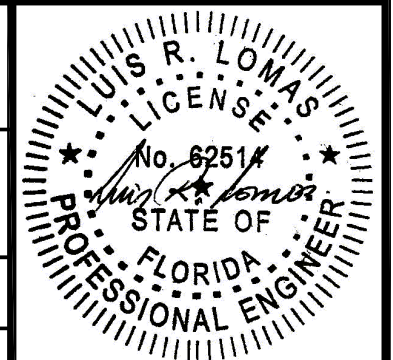
THE MUHLER COMPANY
630 SKYLARK DRIVE SUITE U
CHARLESTON , SC 29407

STORM TRIM
LARGE AND SMALL MISSILE IMPACT
ELEVATION TOP AND BOTTOM INSTALLATION

DRAWN: G.R.	DWG NO. 08-03054	REV -
SCALE NTS	DATE 02/27/2017	SHEET 3 OF 12

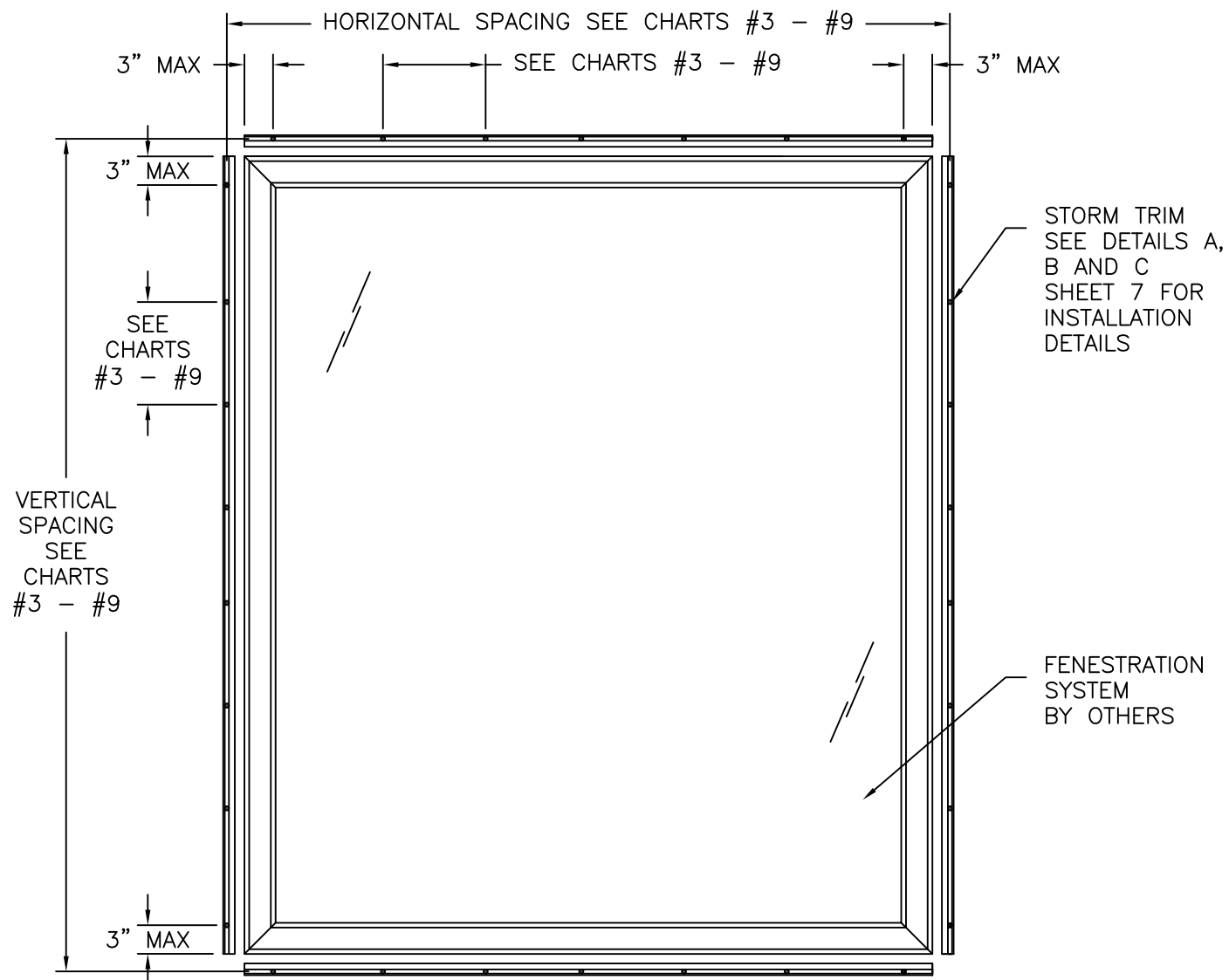
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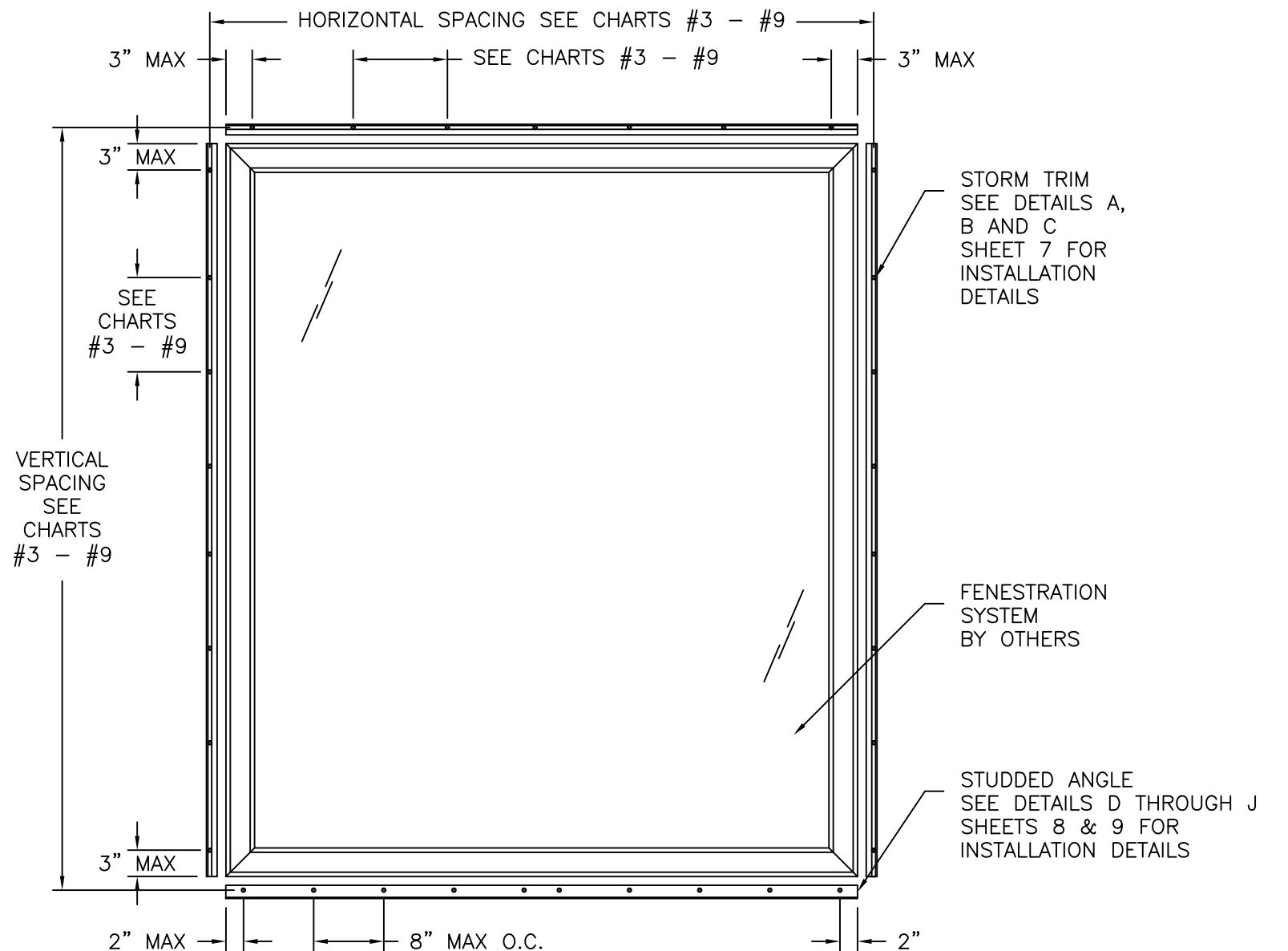


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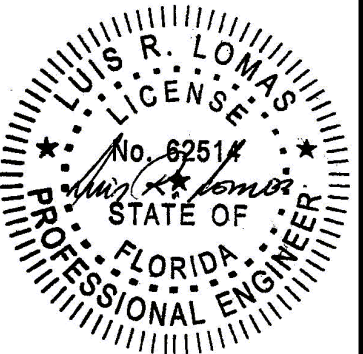
STORM TRIM INSTALLATION
EXTERIOR VIEW
SEE CHARTS #3 - #9 FOR RATINGS.



STORM TRIM INSTALLATION W/STUDED ANGLE
EXTERIOR VIEW
SEE CHARTS #3 - #9 FOR RATINGS.

SIGNED: 09/02/2026

THE MUHLER COMPANY 630 SKYLARK DRIVE SUITE U CHARLESTON , SC 29407		
STORM TRIM LARGE AND SMALL MISSILE IMPACT ELEVATION FOUR SIDES INSTALLATION		
DRAWN: G.R.	DWG NO. 08-03054	REV -
SCALE NTS	DATE 02/27/2017	SHEET 4 OF 12
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CHART #3																	
Vertical spacing (in)	Design pressure for units anchored with anchor located 3" from each end and 6" max O.C. thereafter (PSF)																
	Horizontal spacing (in)																
	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0	102.0	108.0	114.0	120.0	126.0	132.0	138.0	144.0
48.00	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
54.00	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
60.00	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
66.00	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	74.1
72.00	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	74.8	73.3	72.0	70.8	69.8
78.00	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	73.4	71.6	70.0	68.6	67.3	66.3
84.00	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	73.4	71.0	69.0	67.3	65.8	64.5	63.3
90.00	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	74.9	71.8	69.2	67.0	65.1	63.5	62.1	60.9
96.00	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	74.1	70.7	67.8	65.4	63.4	61.7	60.2	58.9
102.00	75.0	75.0	75.0	75.0	75.0	75.0	75.0	74.9	74.1	73.9	70.0	66.9	64.3	62.1	60.2	58.6	57.2
108.00	75.0	75.0	75.0	75.0	75.0	75.0	73.4	71.8	70.7	70.0	69.8	66.3	63.4	61.1	59.1	57.3	55.8
114.00	75.0	75.0	75.0	75.0	75.0	73.4	71.0	69.2	67.8	66.9	66.3	66.1	63.0	60.4	58.2	56.3	54.7
120.00	75.0	75.0	75.0	75.0	74.8	71.6	69.0	67.0	65.4	64.3	63.4	63.0	62.8	60.0	57.6	55.6	53.8
126.00	75.0	75.0	75.0	75.0	73.3	70.0	67.3	65.1	63.4	62.1	61.1	60.4	60.0	59.8	57.2	55.0	53.2
132.00	75.0	75.0	75.0	75.0	72.0	68.6	65.8	63.5	61.7	60.2	59.1	58.2	57.6	57.2	57.1	54.7	52.7
138.00	75.0	75.0	75.0	75.0	70.8	67.3	64.5	62.1	60.2	58.6	57.3	56.3	55.6	55.0	54.7	54.6	52.4
144.00	75.0	75.0	75.0	74.1	69.8	66.3	63.3	60.9	58.9	57.2	55.8	54.7	53.8	53.2	52.7	52.4	52.3

CHART #4																	
Vertical spacing (in)	Design pressure for units anchored with anchor located 3" from each end and 9" max O.C. thereafter (PSF)																
	Horizontal spacing (in)																
	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0	102.0	108.0	114.0	120.0	126.0	132.0	138.0	144.0
48.00	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	72.0	72.0	72.0	68.0	68.0	68.0	65.4	65.4	65.4
54.00	75.0	75.0	75.0	75.0	75.0	73.9	73.5	73.1	66.8	66.8	66.8	62.6	62.6	62.6	59.8	59.8	59.8
60.00	75.0	75.0	75.0	75.0	75.0	70.7	69.8	69.1	62.8	62.8	62.8	58.3	58.3	58.3	55.4	55.4	55.4
66.00	75.0	75.0	75.0	75.0	75.0	68.5	67.2	66.1	59.8	59.6	59.4	55.0	55.0	55.0	51.9	51.9	51.9
72.00	75.0	75.0	75.0	75.0	75.0	67.3	65.4	64.0	57.6	57.1	56.7	52.3	52.3	52.3	49.1	49.1	49.1
78.00	75.0	73.9	70.7	68.5	67.3	66.9	64.4	62.5	55.9	55.2	54.6	50.2	50.1	50.0	46.8	46.8	46.8
84.00	75.0	73.5	69.8	67.2	65.4	64.4	64.1	61.7	54.8	53.8	53.0	48.6	48.3	48.1	44.9	44.9	44.9
90.00	75.0	73.1	69.1	66.1	64.0	62.5	61.7	61.4	54.2	52.9	51.8	47.3	46.9	46.5	43.3	43.2	43.1
96.00	72.0	66.8	62.8	59.8	57.6	55.9	54.8	54.2	54.0	52.3	51.0	46.4	45.8	45.3	42.1	41.9	41.7
102.00	72.0	67.0	62.8	59.6	57.1	55.2	53.8	52.9	52.3	52.2	50.6	45.7	45.0	44.3	41.1	40.8	40.5
108.00	72.0	67.2	62.8	59.4	56.7	54.6	53.0	51.8	51.0	50.6	50.4	45.4	44.4	43.6	40.3	39.9	39.5
114.00	68.0	62.6	58.3	55.0	52.3	50.2	48.6	47.3	46.4	45.7	45.4	45.2	44.1	43.1	39.7	39.2	38.8
120.00	68.0	63.0	58.6	55.1	52.3	50.1	48.3	46.9	45.8	45.0	44.4	44.1	44.0	42.8	39.3	38.7	38.1
126.00	68.0	63.4	58.9	55.3	52.3	50.0	48.1	46.5	45.3	44.3	43.6	43.1	42.8	42.7	39.0	38.3	37.7
132.00	65.4	59.8	55.4	51.9	49.1	46.8	44.9	43.3	42.1	41.1	40.3	39.7	39.3	39.0	38.9	38.1	37.3
138.00	65.4	60.4	55.8	52.2	49.3	46.9	44.9	43.2	41.9	40.8	39.9	39.2	38.7	38.3	38.1	38.0	37.1
144.00	65.4	60.8	56.2	52.5	49.4	46.9	44.9	43.1	41.7	40.5	39.5	38.8	38.1	37.7	37.3	37.1	37.1

CHART #5																	
Vertical spacing (in)	Design pressure for units anchored with anchor located 3" from each end and 12" max O.C. thereafter (PSF)																
	Horizontal spacing (in)																
	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0	102.0	108.0	114.0	120.0	126.0	132.0	138.0	144.0
48.00	75.0	75.0	75.0	67.3	67.3	61.1	61.1	57.1	57.1	54.4	54.4	52.3	52.3	50.8	50.8	49.6	49.6
54.00	75.0	75.0	75.0	64.4	64.4	57.5	57.5	53.2	53.2	50.2	50.2	48.1	48.1	46.5	46.5	45.3	45.3
60.00	75.0	75.0	75.0	62.8	62.8	55.0	55.0	50.2	50.2	47.1	47.1	44.9	44.9	43.2	43.2	41.9	41.9
66.00	67.3	64.4	62.8	62.3	61.5	53.3	53.3	48.1	48.1	44.7	44.7	42.3	42.3	40.5	40.5	39.2	39.2
72.00	67.3	65.1	62.8	61.5	61.1	52.3	52.3	46.5	46.5	42.8	42.8	40.3	40.3	38.4	38.4	36.9	36.9
78.00	61.1	57.5	55.0	53.3	52.3	52.0	51.5	45.5	45.5	41.4	41.4	38.7	38.7	36.7	36.7	35.1	35.1
84.00	61.1	58.8	55.8	53.7	52.3	51.5	51.3	44.9	44.9	40.4	40.4	37.4	37.4	35.2	35.2	33.6	33.6
90.00	57.1	53.2	50.2	48.1	46.5	45.5	44.9	44.7	44.3	39.7	39.7	36.4	36.4	34.1	34.1	32.4	32.4
96.00	57.1	54.6	51.4	48.9	47.1	45.8	44.9	44.3	44.2	39.3	39.3	35.7	35.7	33.2	33.2	31.4	31.4
102.00	54.4	50.2	47.1	44.7	42.8	41.4	40.4	39.7	39.3	39.1	38.9	35.2	35.2	32.5	32.5	30.6	30.6
108.00	54.4	51.7	48.3	45.7	43.6	42.0	40.8	39.9	39.3	38.9	38.8	34.9	34.9	32.0	32.0	29.9	29.9
114.00	52.3	48.1	44.9	42.3	40.3	38.7	37.4	36.4	35.7	35.2	34.9	34.8	34.6	31.6	31.6	29.4	29.4
120.00	52.3	49.5	46.1	43.3	41.1	39.4	38.0	36.8	36.0	35.3	34.9	34.6	34.5	31.4	31.4	29.0	29.0
126.00	50.8	46.5	43.2	40.5	38.4	36.7	35.2	34.1	33.2	32.5	32.0	31.6	31.4	31.3	31.2	28.7	28.7
132.00	50.8	47.9	44.3	41.5	39.3	37.4	35.9	34.7	33.6	32.8	32.2	31.7	31.4	31.2	31.1	28.5	28.5
138.00	49.6	45.3	41.9	39.2	36.9	35.1	33.6	32.4	31.4	30.6	29.9	29.4	29.0	28.7	28.5	28.5	28.4
144.00	49.6	46.5	43.0	40.1	37.8	35.9	34.3	33.0	31.9	31.0	30.2	29.6	29.2	28.8	28.5	28.4	28.4

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

CHART #6																	
Vertical spacing (in)	Design pressure for units anchored with anchor located 3" from each end and 15" max O.C. thereafter (PSF)																
	Horizontal spacing (in)																
	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0	102.0	108.0	114.0	120.0	126.0	132.0	138.0	144.0
48.00	75.0	75.0	65.4	56.1	56.1	52.3	52.3	50.0	45.8	45.8	44.9	44.9	44.2	41.6	41.6	41.3	41.3
54.00	75.0	75.0	63.4	53.7	53.7	49.3	49.3	46.5	42.5	42.5	41.4	41.4	40.5	38.1	38.1	37.7	37.7
60.00	65.4	63.4	62.8	52.3	52.3	47.1	47.1	44.0	40.0	40.0	38.7	38.7	37.7	35.3	35.3	34.9	34.9
66.00	56.1	53.7	52.3	51.9	51.9	45.7	45.7	42.1	38.1	38.1	36.5	36.5	35.4	33.2	33.2	32.6	32.6
72.00	56.1	55.8	53.8	51.9	51.9	44.9	44.9	40.7	36.6	36.6	34.9	34.9	33.6	31.4	31.4	30.8	30.8
78.00	52.3	49.3	47.1	45.7	44.9	44.6	44.6	39.8	35.6	35.6	33.6	33.6	32.2	30.0	30.0	29.3	29.3
84.00	52.3	51.4	48.9	47.0	45.8	44.6	44.6	39.3	34.9	34.9	32.6	32.6	31.1	28.8	28.8	28.0	28.0
90.00	50.0	46.5	44.0	42.1	40.7	39.8	39.3	39.1	34.5	34.5	31.9	31.9	30.1	27.9	27.9	27.0	27.0
96.00	45.8	42.5	40.0	38.1	36.6	35.6	34.9	34.5	34.3	34.3	31.4	31.4	29.4	27.2	27.2	26.2	26.2
102.00	45.8	44.7	41.9	39.7	38.1	36.8	35.9	35.3	34.3	34.3	31.1	31.1	28.9	26.6	26.6	25.5	25.5
108.00	44.9	41.4	38.7	36.5	34.9	33.6	32.6	31.9	31.4	31.1	31.0	31.0	28.5	26.2	26.2	24.9	24.9
114.00	44.9	43.3	40.4	38.1	36.2	34.8	33.6	32.8	32.1	31.7	31.0	31.0	28.3	25.9	25.9	24.5	24.5
120.00	44.2	40.5	37.7	35.4	33.6	32.2	31.1	30.1	29.4	28.9	28.5	28.3	28.3	25.7	25.7	24.2	24.2
126.00	41.6	38.1	35.3	33.2	31.4	30.0	28.8	27.9	27.2	26.6	26.2	25.9	25.7	25.6	25.6	23.9	23.9
132.00	41.6	39.9	36.9	34.6	32.7	31.2	29.9	28.9	28.0	27.4	26.8	26.4	26.2	25.6	25.6	23.8	23.8
138.00	41.3	37.7	34.9	32.6	30.8	29.3	28.0	27.0	26.2	25.5	24.9	24.5	24.2	23.9	23.8	23.7	23.7
144.00	41.3	39.4	36.4	34.0	32.0	30.4	29.0	27.9	27.0	26.2	25.6	25.1	24.7	24.4	24.2	23.7	23.7

CHART #7																	
Vertical spacing (in)	Design pressure for units anchored with anchor located 3" from each end and 18" max O.C. thereafter (PSF)																
	Horizontal spacing (in)																
	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0	102.0	108.0	114.0	120.0	126.0	132.0	138.0	144.0
48.00	75.0	62.8	52.3	52.3	49.1	43.6	43.6	42.8	39.3	39.3	39.3	36.6	36.6	36.6	34.9	34.9	34.9
54.00	62.8	62.0	50.8	50.8	46.5	41.1	41.1	39.9	36.4	36.4	36.2	33.7	33.7	33.7	31.9	31.9	31.9
60.00	52.3	50.8	50.2	50.2	44.9	39.3	39.3	37.7	34.3	34.3	33.8	31.4	31.4	31.4	29.6	29.6	29.6
66.00	52.3	52.3	50.2	50.2	43.9	38.1	38.1	36.1	32.6	32.6	32.0	29.6	29.6	29.5	27.7	27.7	27.7
72.00	49.1	46.5	44.9	43.9	43.6	37.4	37.4	34.9	31.4	31.4	30.5	28.2	28.2	27.9	26.2	26.2	26.2
78.00	43.6	41.1	39.3	38.1	37.4	37.2	37.2	34.1	30.5	30.5	29.4	27.1	27.1	26.7	24.9	24.9	24.8
84.00	43.6	43.6	41.9	40.3	39.3	37.2	37.2	33.6	29.9	29.9	28.5	26.2	26.2	25.6	23.9	23.9	23.8
90.00	42.8	39.9	37.7	36.1	34.9	34.1	33.6	33.5	29.6	29.6	27.9	25.5	25.5	24.8	23.1	23.1	22.8
96.00	39.3	36.4	34.3	32.6	31.4	30.5	29.9	29.6	29.4	29.4	27.5	25.0	25.0	24.2	22.4	22.4	22.1
102.00	39.3	39.1	36.6	34.8	33.3	32.2	31.4	30.9	29.4	29.4	27.2	24.6	24.6	23.6	21.9	21.9	21.5
108.00	39.3	36.2	33.8	32.0	30.5	29.4	28.5	27.9	27.5	27.2	27.1	24.4	24.4	23.3	21.5	21.5	20.9
114.00	36.6	33.7	31.4	29.6	28.2	27.1	26.2	25.5	25.0	24.6	24.4	24.4	24.4	23.0	21.2	21.2	20.5
120.00	36.6	36.0	33.5	31.5	29.9	28.6	27.6	26.8	26.2	25.7	25.4	24.4	24.4	22.8	20.9	20.9	20.2
126.00	36.6	33.8	31.4	29.5	27.9	26.7	25.6	24.8	24.2	23.6	23.3	23.0	22.8	22.8	20.8	20.8	19.9
132.00	34.9	31.9	29.6	27.7	26.2	24.9	23.9	23.1	22.4	21.9	21.5	21.2	20.9	20.8	20.8	20.8	19.8
138.00	34.9	34.0	31.4	29.4	27.7	26.4	25.2	24.3	23.6	22.9	22.4	22.0	21.7	21.5	20.8	20.8	19.7
144.00	34.9	32.2	29.8	27.8	26.2	24.8	23.8	22.8	22.1	21.5	20.9	20.5	20.2	19.9	19.8	19.7	19.6

CHART #8																	
Vertical spacing (in)	Design pressure for units anchored with anchor located 3" from each end and 21" max O.C. thereafter (PSF)																
	Horizontal spacing (in)																
	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0	102.0	108.0	114.0	120.0	126.0	132.0	138.0	144.0
48.00	58.9	58.9	52.3	44.9	44.9	43.6	39.3	35.7	35.7	35.7	33.6	33.6	33.6	32.3	30.5	30.5	30.5
54.00	58.9	58.9	50.8	42.9	42.9	41.1	36.7	33.2	33.2	33.2	31.0	31.0	31.0	29.6	27.9	27.9	27.9
60.00	52.3	50.8	50.2	41.9	41.9	39.3	34.9	31.4	31.4	31.4	29.0	29.0	29.0	27.5	25.9	25.9	25.9
66.00	44.9	42.9	41.9	41.5	41.5	38.1	33.6	30.1	30.1	29.8	27.4	27.4	27.4	25.8	24.2	24.2	24.2
72.00	44.9	44.9	44.9	41.5	41.5	37.4	32.7	29.1	29.1	28.5	26.2	26.2	26.2	24.4	22.9	22.9	22.9
78.00	43.6	41.1	39.3	38.1	37.4	37.2	32.2	28.4	28.4	27.6	25.2	25.2	25.1	23.3	21.8	21.8	21.8
84.00	39.3	36.7	34.9	33.6	32.7	32.2	32.0	28.0	28.0	26.9	24.5	24.5	24.2	22.4	20.9	20.9	20.9
90.00	35.7	33.2	31.4	30.1	29.1	28.4	28.0	27.9	27.9	26.4	23.9	23.9	23.4	21.7	20.2	20.2	20.2
96.00	35.7	35.7	34.3	32.6	31.4	30.5	29.9	27.9	27.9	26.2	23.6	23.6	22.9	21.1	19.6	19.6	19.6
102.00	35.7	33.5	31.4	29.8	28.5	27.6	26.9	26.4	26.2	26.1	23.3	23.3	22.5	20.7	19.2	19.2	19.1
108.00	33.6	31.0	29.0	27.4	26.2	25.2	24.5	23.9	23.6	23.3	23.3	23.3	22.2	20.4	18.8	18.8	18.6
114.00	33.6	33.6	31.4	29.6	28.2	27.1	26.2	25.5	25.0	24.6	23.3	23.3	22.0	20.1	18.5	18.5	18.2
120.00	33.6	31.5	29.3	27.6	26.2	25.1	24.2	23.4	22.9	22.5	22.2	22.0	22.0	20.0	18.3	18.3	17.9
126.00	32.3	29.6	27.5	25.8	24.4	23.3	22.4	21.7	21.1	20.7	20.4	20.1	20.0	19.9	18.2	18.2	17.7
132.00	30.5	27.9	25.9	24.2	22.9	21.8	20.9	20.2	19.6	19.2	18.8	18.5	18.3	18.2	18.2	18.2	17.6
138.00	30.5	30.2	27.9	26.1	24.6	23.4	22.4	21.6	20.9	20.4	19.9	19.6	19.3	19.1	18.2	18.2	17.5
144.00	30.5	28.6	26.4	24.7	23.3	22.1	21.1	20.3	19.6	19.1	18.6	18.2	17.9	17.7	17.6	17.5	17.4

CHART #9																	
Vertical spacing (in)	Design pressure for units anchored with anchor located 3" from each end and 24" max O.C. thereafter (PSF)																
	Horizontal spacing (in)																
	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0	102.0	108.0	114.0	120.0	126.0	132.0	138.0	144.0
48.00	58.9	47.1	47.1	44.9	39.3	34.9	34.9	34.9	32.7	30.2	30.2	30.2	29.4	27.7	27.7	27.7	27.5
54.00	47.1	46.5	46.5	42.9	37.2	32.8	32.8	32.8	30.3	27.9	27.9	27.9	27.0	25.4	25.4	25.4	25.1
60.00	47.1	46.5	46.5	41.9	35.9	31.4	31.4	31.4	28.5	26.2	26.2	26.2	25.1	23.6	23.6	23.6	23.1
66.00	44.9	42.9	41.9	41.5	35.1	30.5	30.5	30.1	27.2	24.8	24.8	24.8	23.6	22.1	22.1	22.1	21.6
72.00	39.3	37.2	35.9	35.1	34.9	29.9	29.9	29.1	26.2	23.8	23.8	23.8	22.4	20.9	20.9	20.9	20.4
78.00	34.9	32.8	31.4	30.5	29.9	29.7	29.7	28.4	25.4	23.0	23.0	23.0	21.5	20.0	20.0	20.0	19.3
84.00	34.9	34.9	34.9	33.6	32.7	29.7	29.7	28.0	24.9	22.4	22.4	22.4	20.7	19.2	19.2	19.2	18.5
90.00	34.9	33.2	31.4	30.1	29.1	28.4	28.0	27.9	24.6	22.0	22.0	21.8	20.1	18.6	18.6	18.6	17.8
96.00	32.7	30.3	28.5	27.2	26.2	25.4	24.9	24.6	24.5	21.8	21.8	21.4	19.6	18.1	18.1	18.1	17.2
102.00	30.2	27.9	26.2	24.8	23.8	23.0	22.4	22.0	21.8	21.7	21.7	21.1	19.3	17.7	17.7	17.7	16.7
108.00	30.2	30.2	29.0	27.4	26.2	25.2	24.5	23.9	23.6	21.7	21.7	20.9	19.0	17.4	17.4	17.4	16.3
114.00	30.2	28.9	26.9	25.4	24.2	23.2	22.4	21.8	21.4	21.1	20.9	20.9	18.9	17.2	17.2	17.1	16.0
120.00	29.4	27.0	25.1	23.6	22.4	21.5	20.7	20.1	19.6	19.3	19.0	18.9	18.8	17.1	17.1	16.9	15.7
126.00	27.7	25.4	23.6	22.1	20.9	20.0	19.2	18.6	18.1	17.7	17.4	17.2	17.1	17.1	17.1	16.7	15.5
132.00	27.7	27.7	25.9	24.2	22.9	21.8	20.9	20.2	19.6	19.2	18.8	18.5	18.3	17.1	17.1	16.7	15.4
138.00	27.7	26.4	24.4	22.8	21.6	20.5	19.6	18.9	18.3	17.8	17.4	17.1	16.9	16.7	16.7	16.6	15.3
144.00	27.5	25.1	23.1	21.6	20.4	19.3	18.5	17.8	17.2	16.7	16.3	16.0	15.7	15.5	15.4	15.3	15.3

THE MUHLER COMPANY
630 SKYLARK DRIVE SUITE U
CHARLESTON , SC 29407

STORM TRIM
LARGE AND SMALL MISSILE IMPACT
CHARTS

DRAWN:
G.R.

DWG NO.
08-03054

REV
-

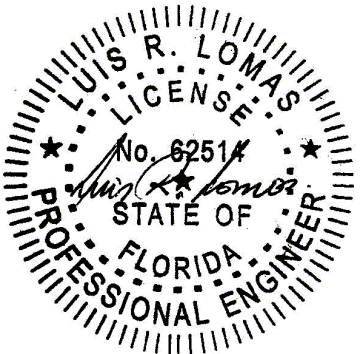
SCALE
NTS

DATE
02/27/2017

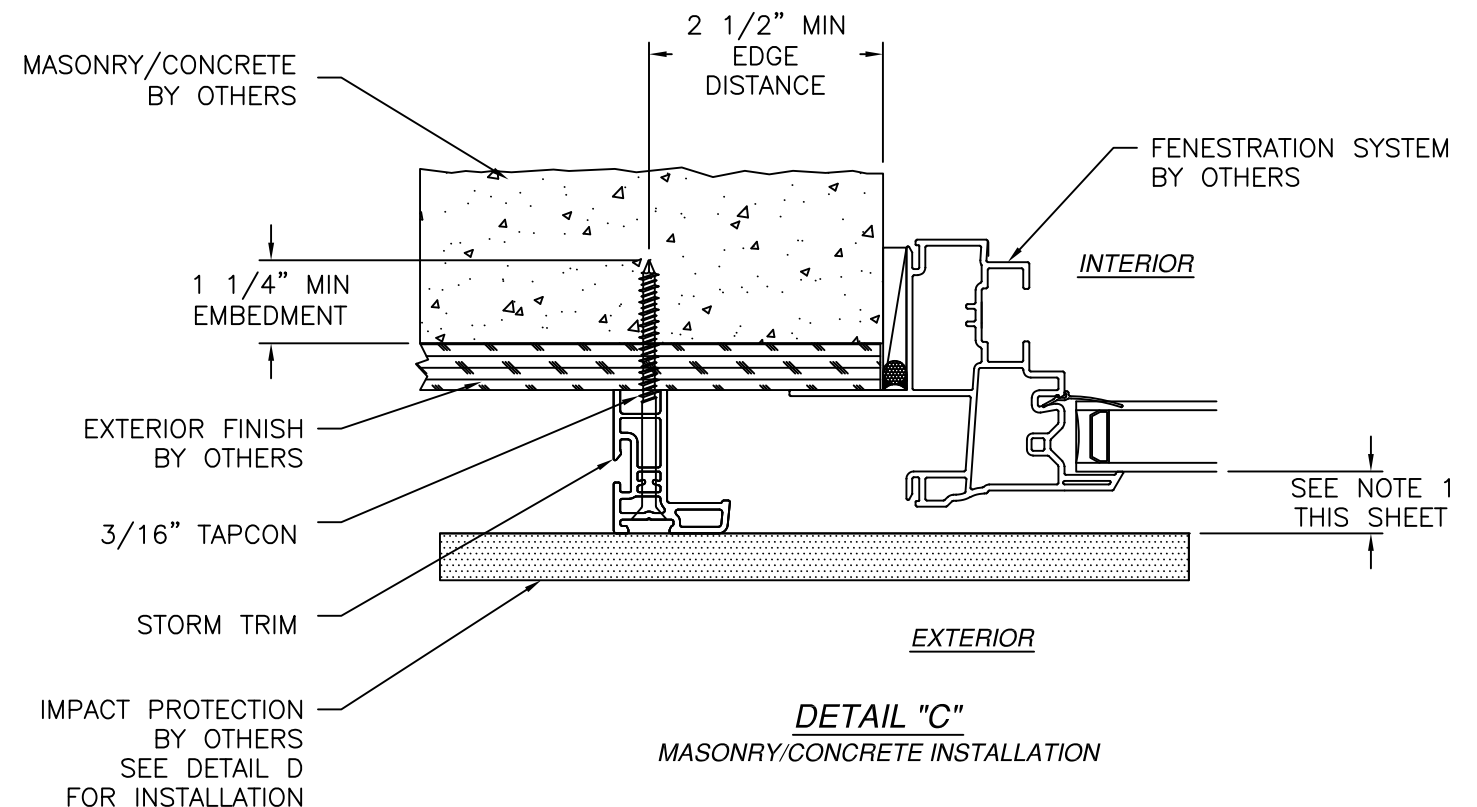
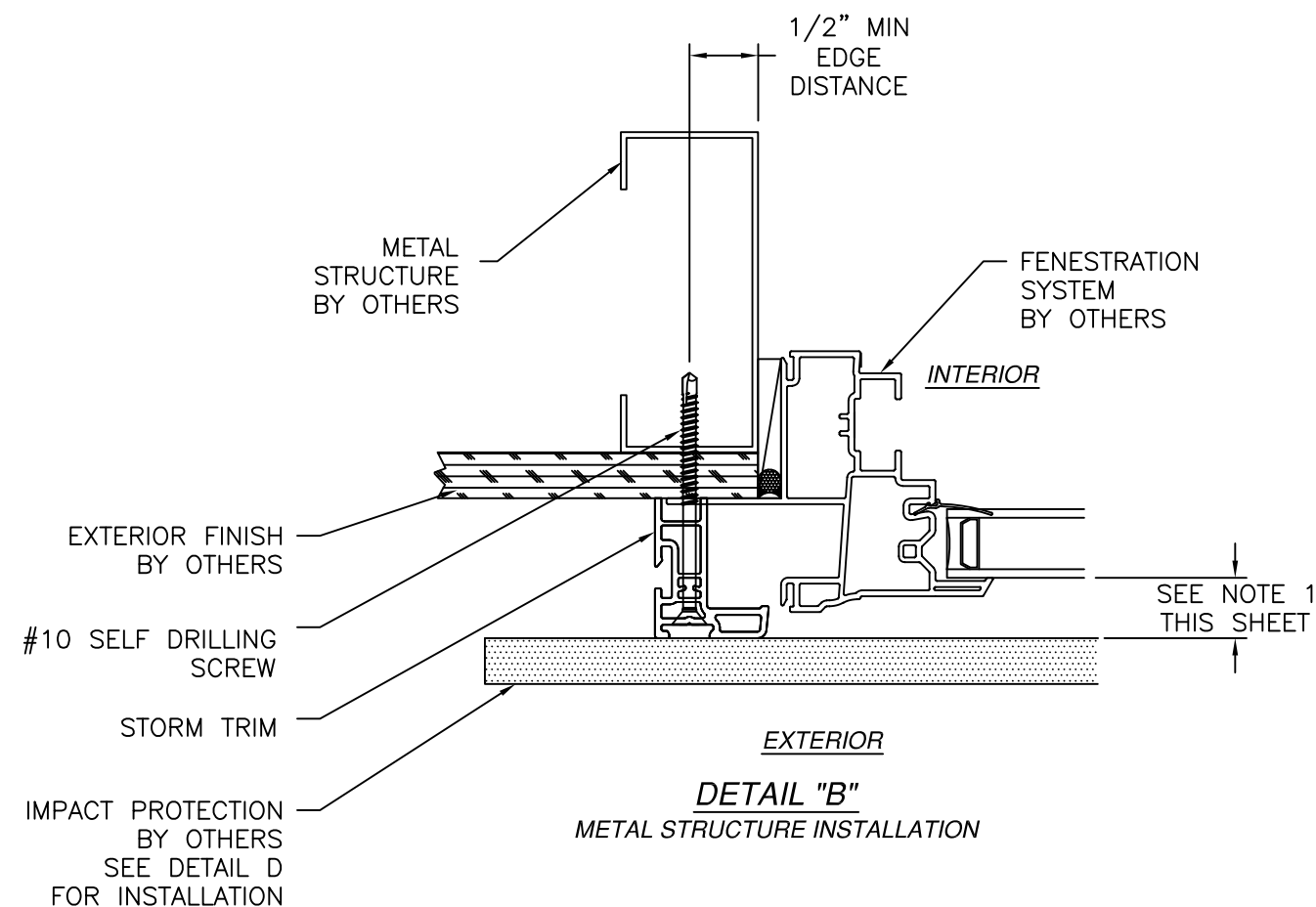
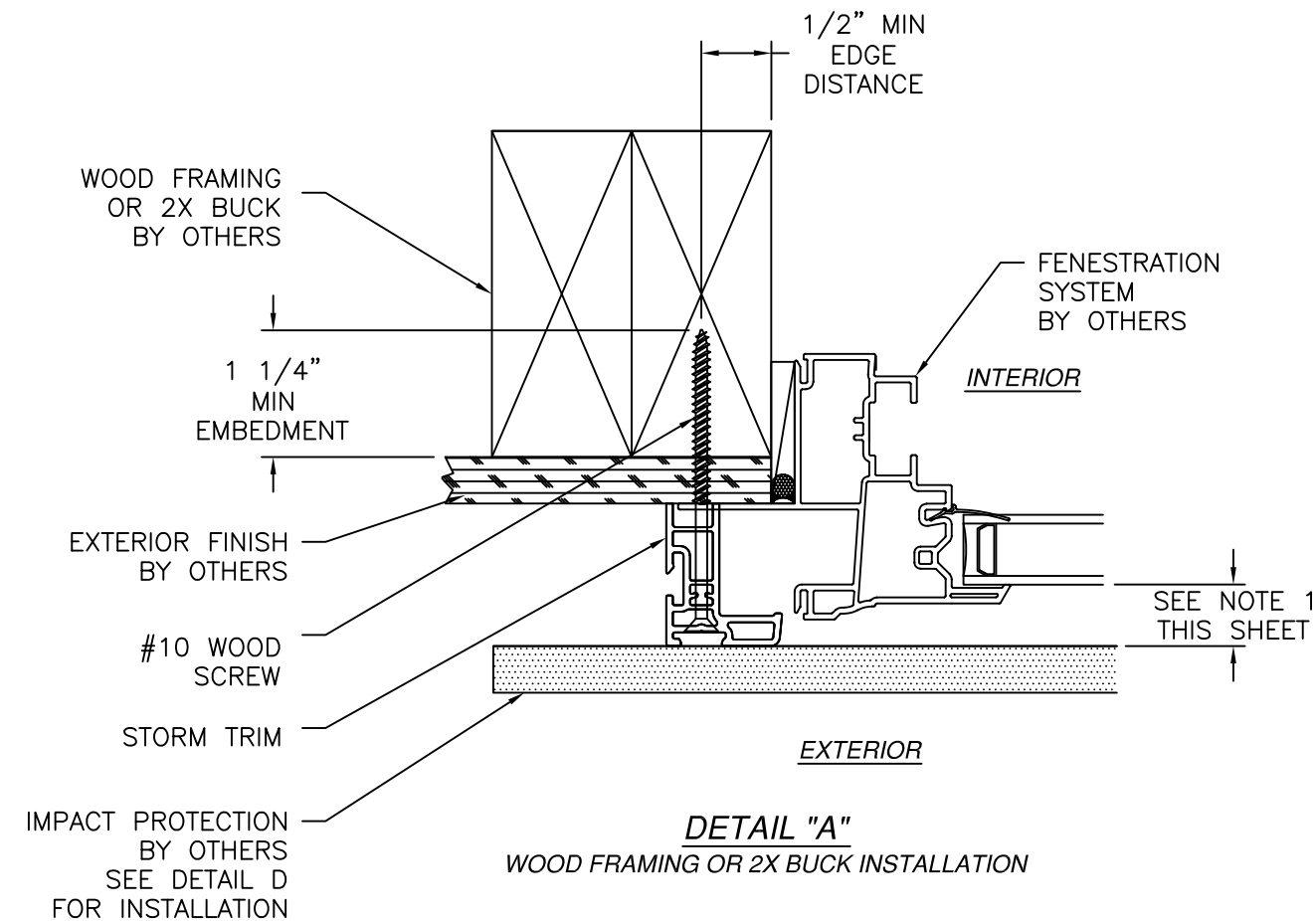
SHEET
6 OF 12

L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

SIGNED: 09/02/2026



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

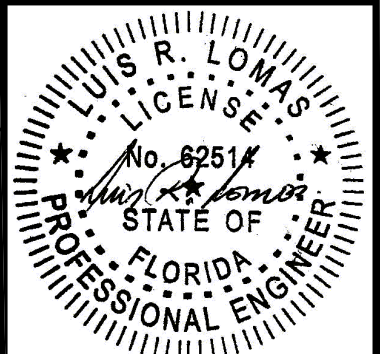


NOTES:

1. SEPARATION BETWEEN FENESTRATION GLASS AND IMPACT PROTECTIVE SYSTEM TO BE IN ACCORDANCE WITH PROTECTIVE SYSTEM APPROVAL AND LIMITATIONS.

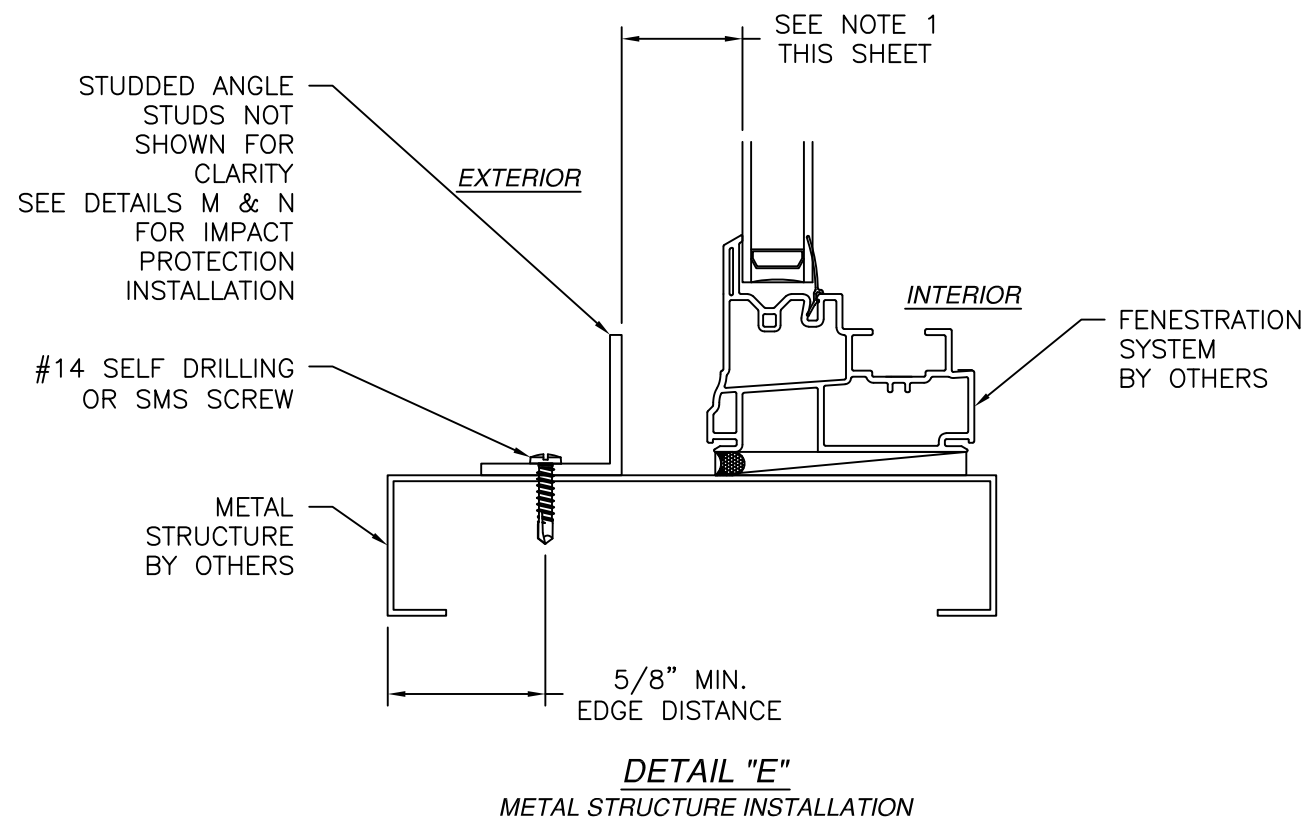
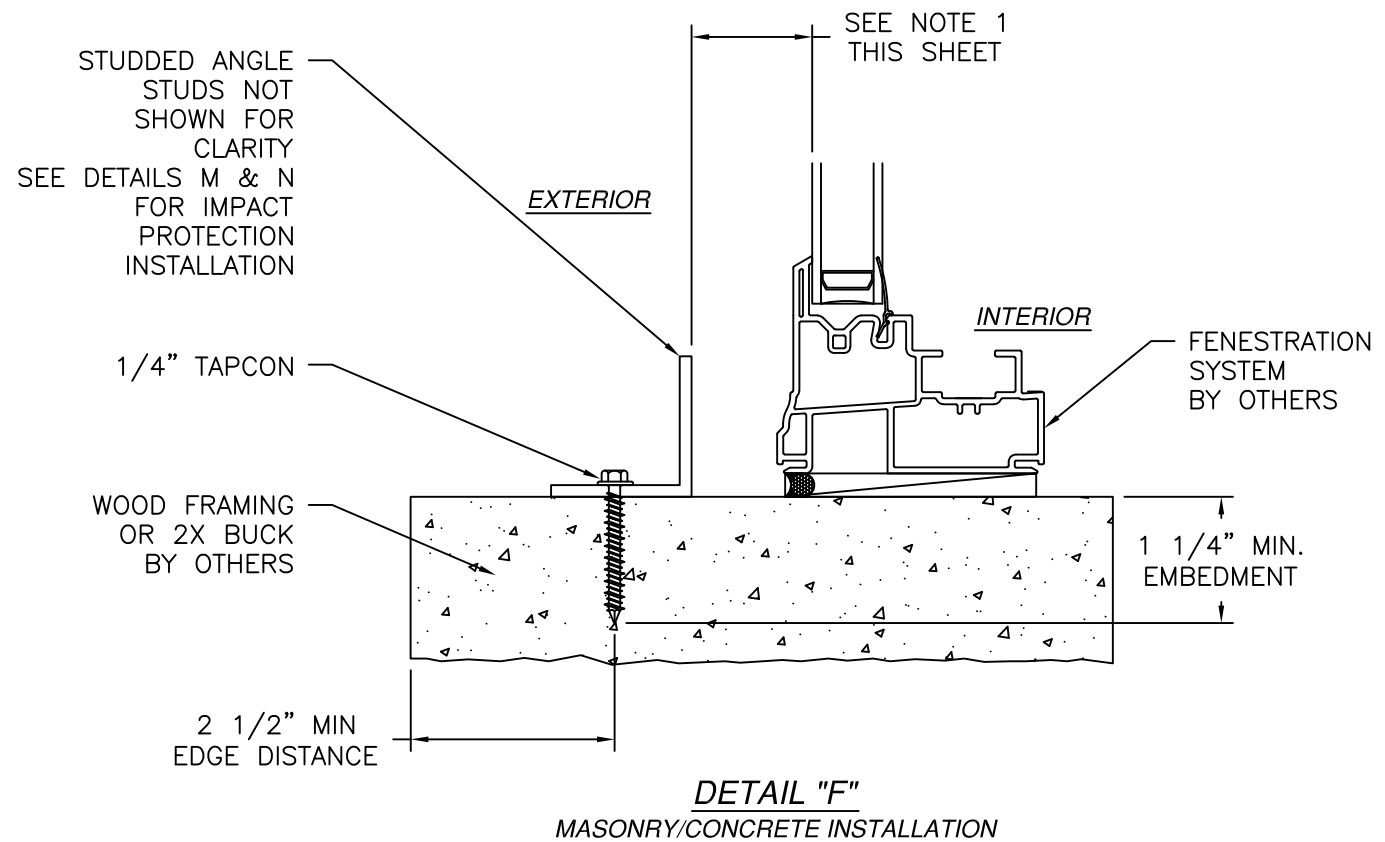
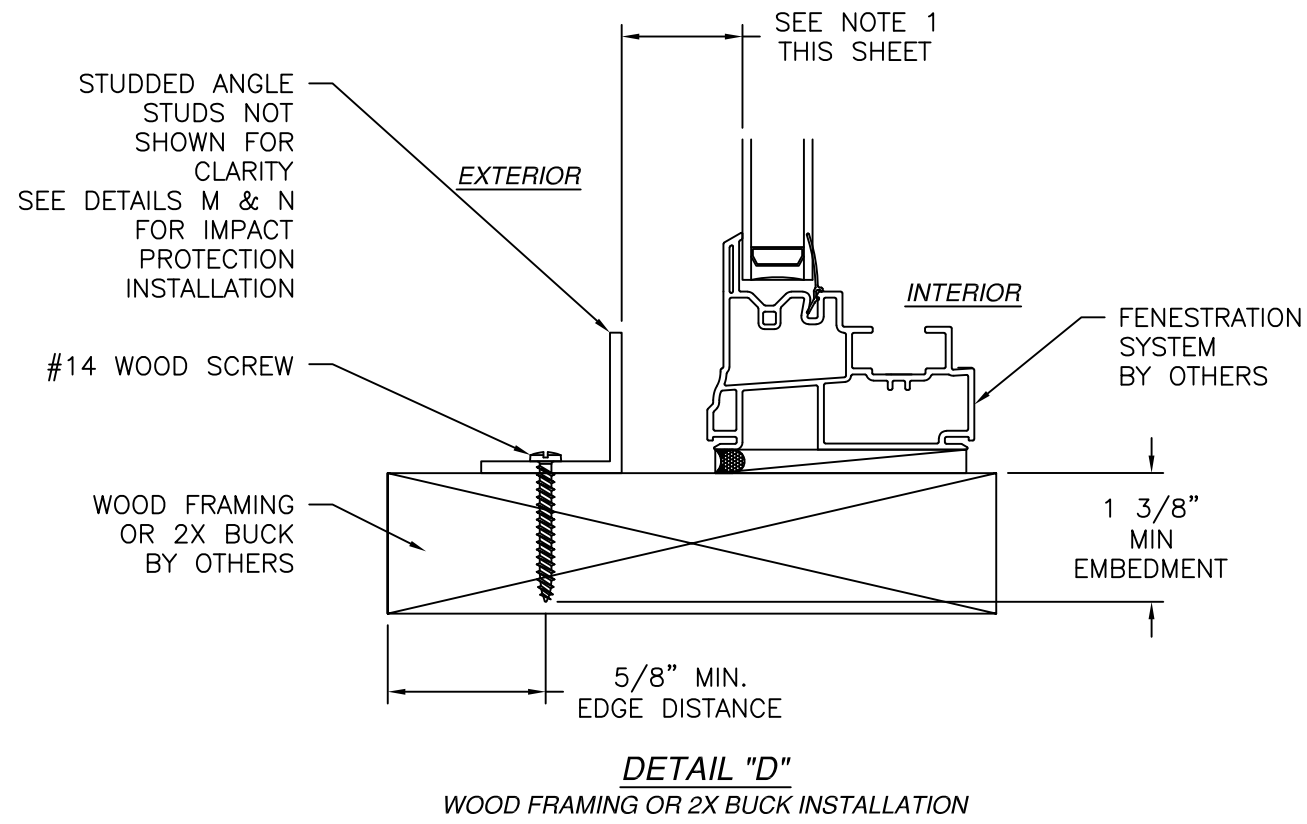
SIGNED: 09/02/2026

THE MUHLER COMPANY 630 SKYLARK DRIVE SUITE U CHARLESTON , SC 29407		
STORM TRIM LARGE AND SMALL MISSILE IMPACT STORM TRIM INSTALLATION DETAILS		
DRAWN: G.R.	DWG NO. 08-03054	REV -
SCALE NTS	DATE 02/27/2017	SHEET 7 OF 12
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

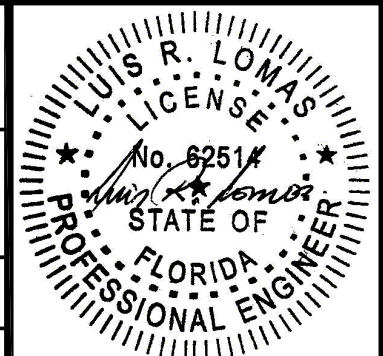
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



- NOTES:
1. SEPARATION BETWEEN FENESTRATION GLASS AND IMPACT PROTECTIVE SYSTEM TO BE IN ACCORDANCE WITH PROTECTIVE SYSTEM APPROVAL AND LIMITATIONS.

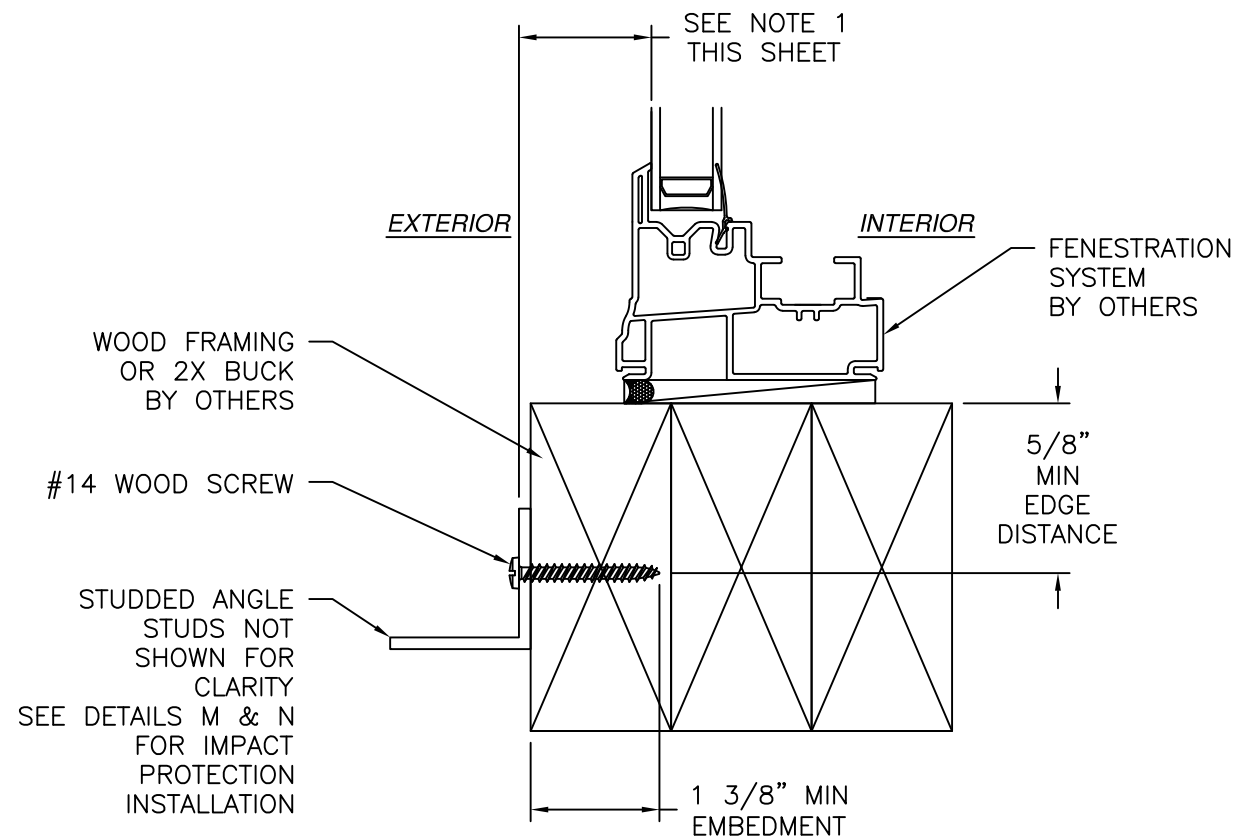
SIGNED: 09/02/2026

THE MUHLER COMPANY 630 SKYLARK DRIVE SUITE U CHARLESTON , SC 29407		
STORM TRIM LARGE AND SMALL MISSILE IMPACT STUDDED ANGLE INSTALLATION DETAILS		
DRAWN: G.R.	DWG NO. 08-03054	REV -
SCALE NTS	DATE 02/27/2017	SHEET 8 OF 12
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

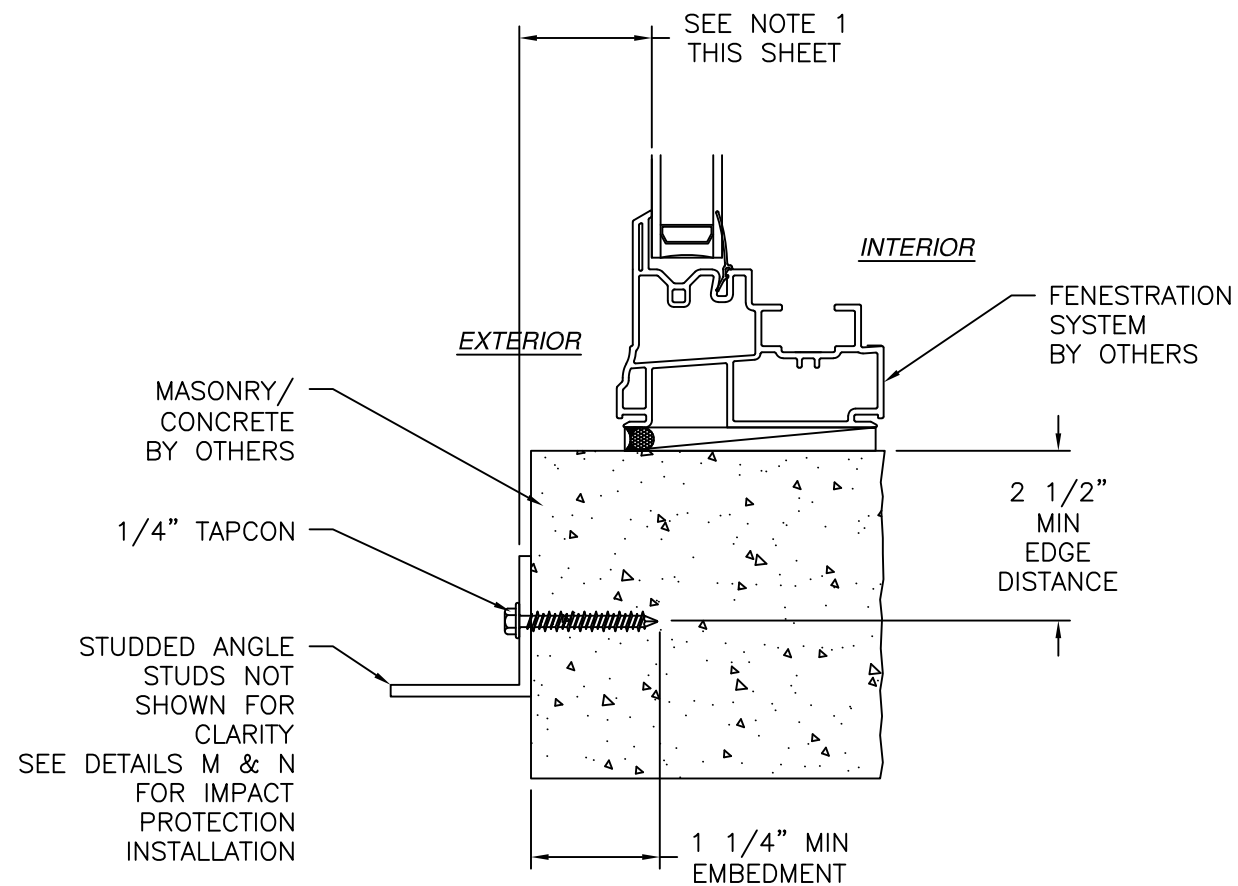


Luis R. Lomas P.E.
FL No.: 62514

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

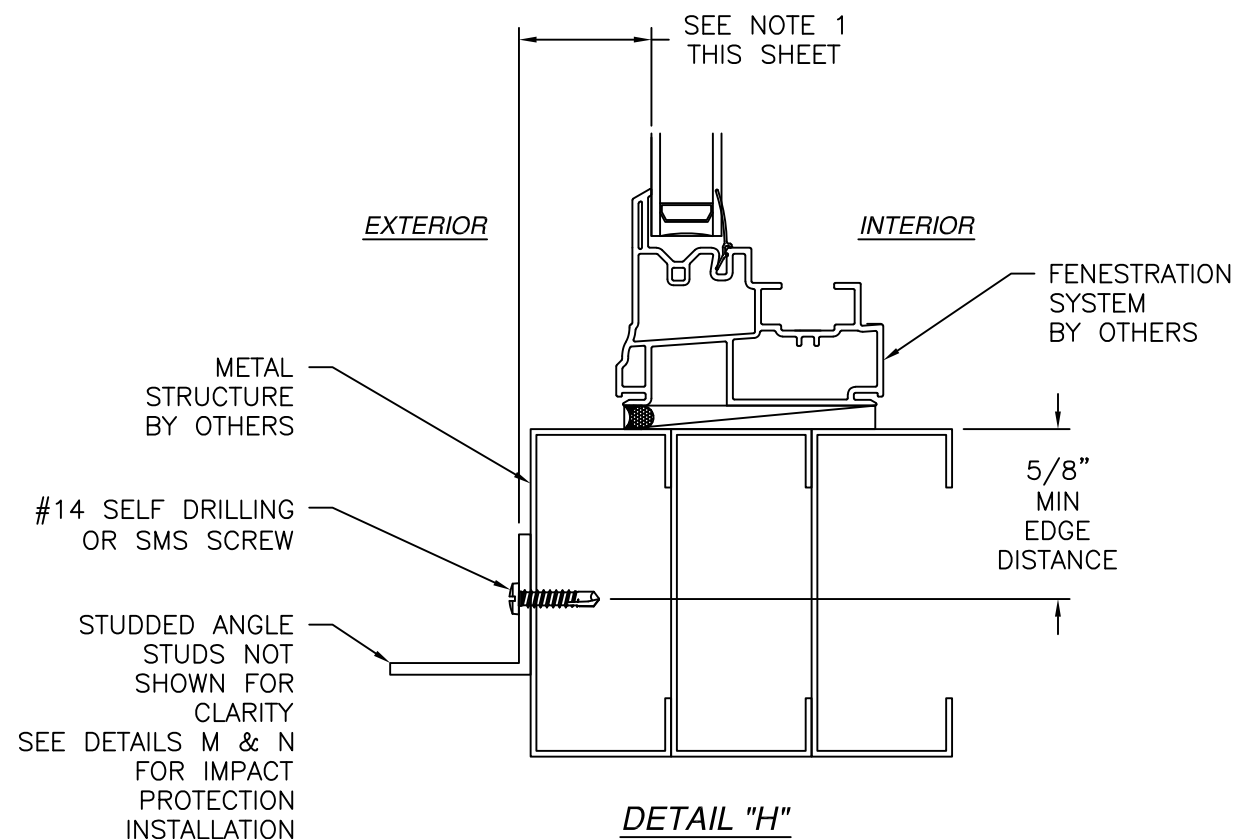


DETAIL "G"
WOOD FRAMING OR 2X BUCK INSTALLATION



DETAIL "J"
MASONRY/CONCRETE INSTALLATION

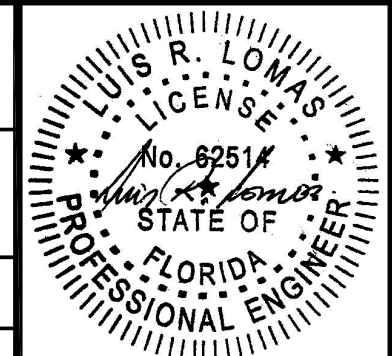
- NOTES:
- SEPARATION BETWEEN FENESTRATION GLASS AND IMPACT PROTECTIVE SYSTEM TO BE IN ACCORDANCE WITH PROTECTIVE SYSTEM APPROVAL AND LIMITATIONS.



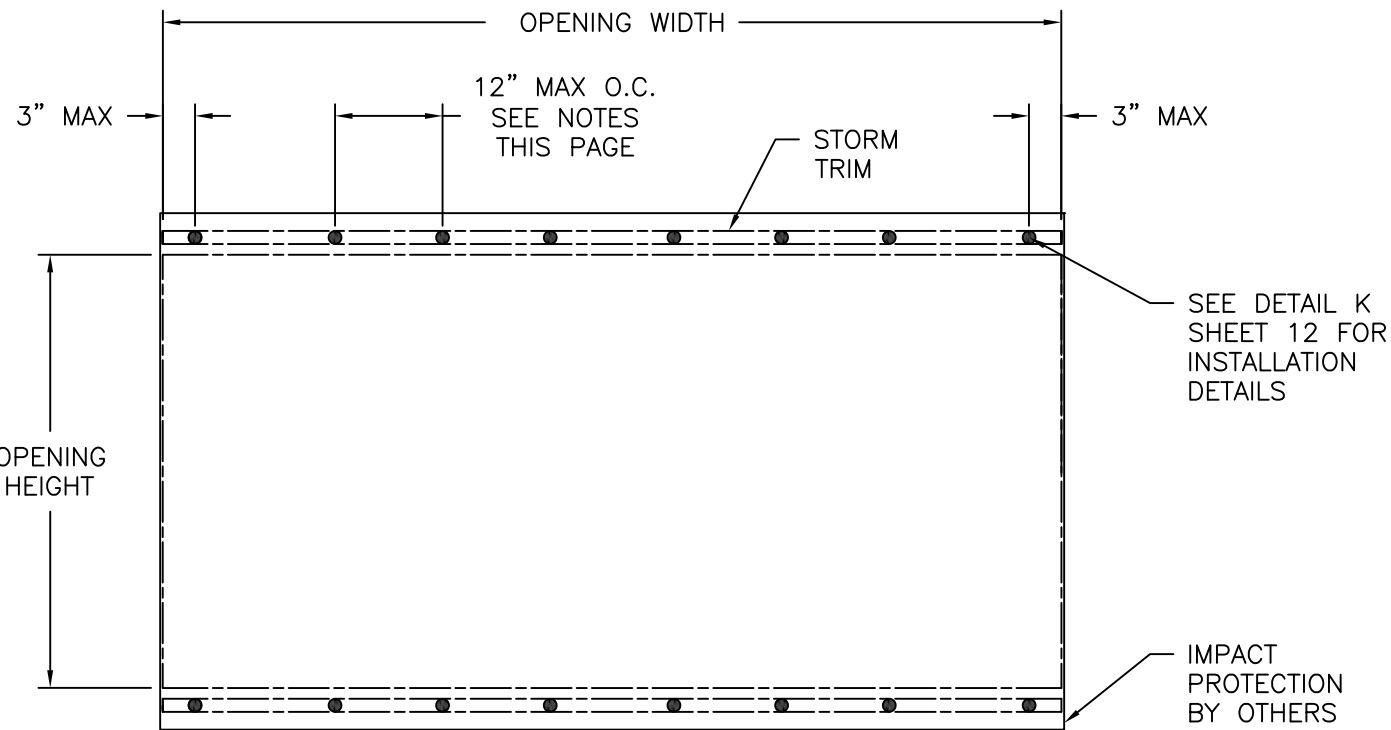
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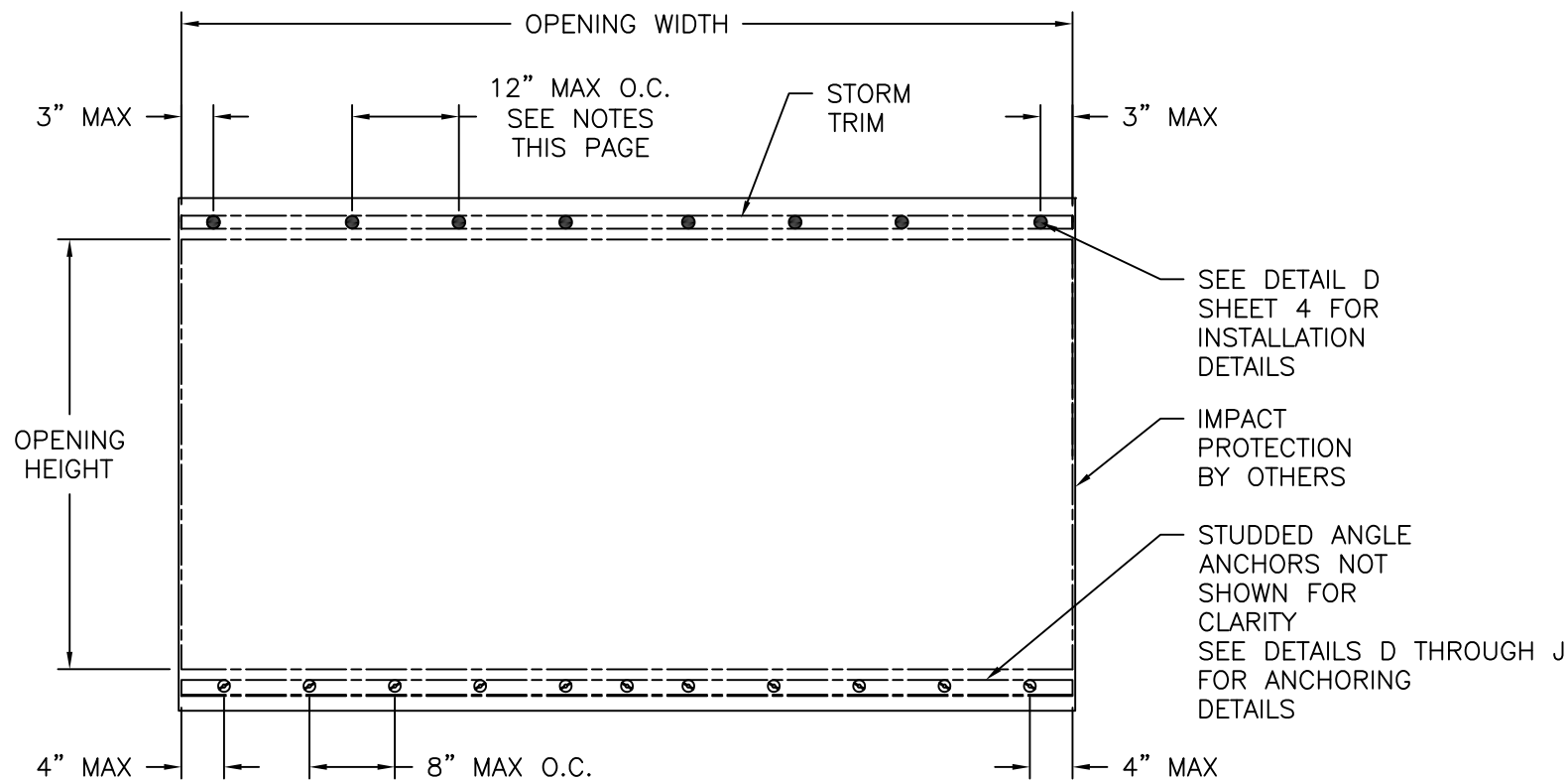
THE MUHLER COMPANY 630 SKYLARK DRIVE SUITE U CHARLESTON , SC 29407		
STORM TRIM LARGE AND SMALL MISSILE IMPACT INSTALLATION DETAILS		
DRAWN: G.R.	DWG NO. 08-03054	REV -
SCALE NTS	DATE 02/27/2017	SHEET 9 OF 12
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



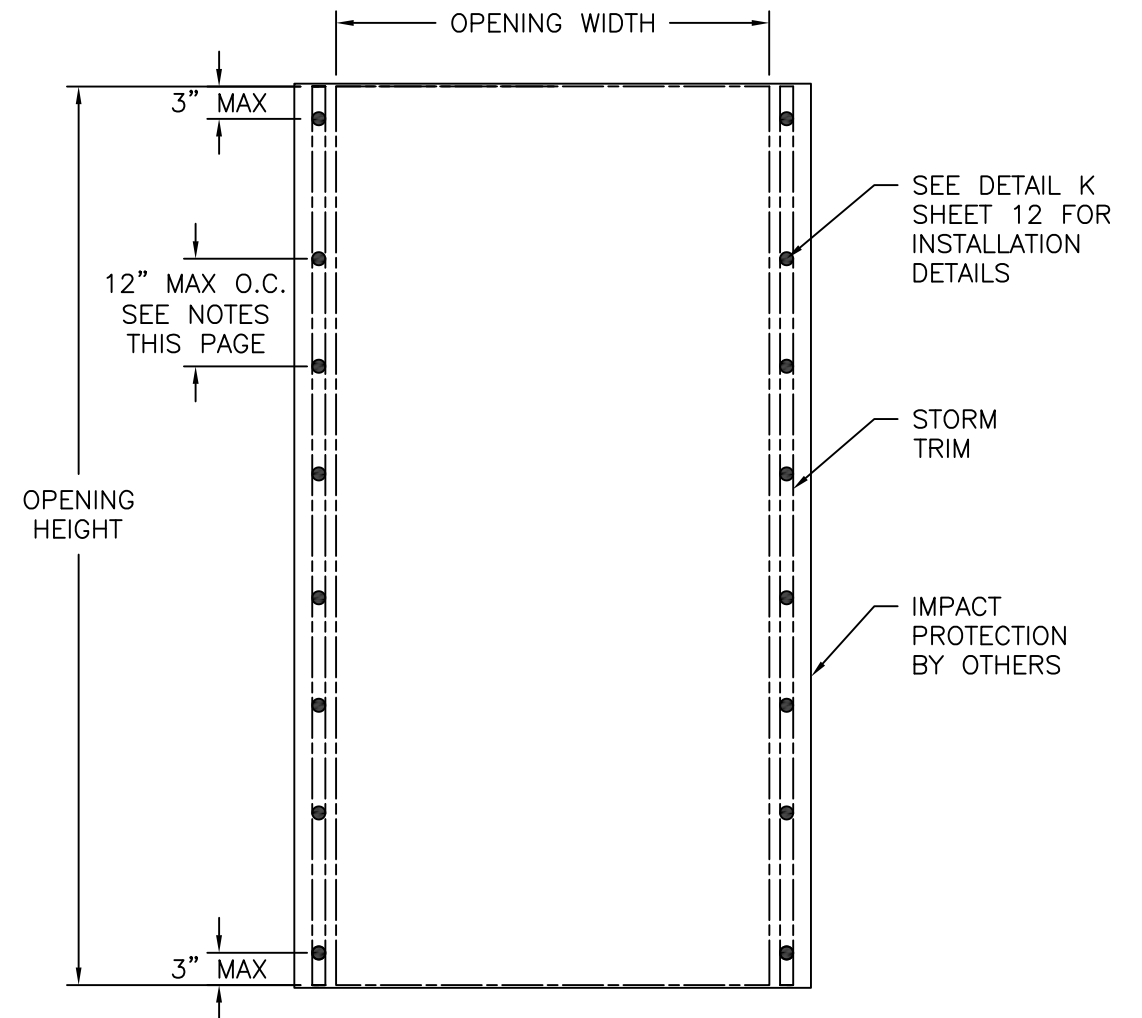
Luis R. Lomas P.E.
FL No.: 62514



STORM TRIM WITH PROTECTION
 EXTERIOR VIEW
 REFER TO SHEETS 2 & 3 FOR RATINGS AND SPACINGS



STORM TRIM WITH PROTECTION
 EXTERIOR VIEW
 REFER TO SHEETS 2 & 3 FOR RATINGS AND SPACINGS

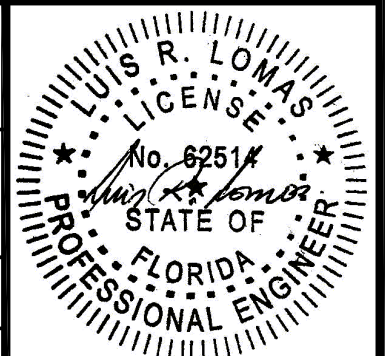


STORM TRIM WITH PROTECTION
 EXTERIOR VIEW
 REFER TO SHEETS 2 & 3 FOR RATINGS AND SPACINGS

- NOTES:
1. MAXIMUM O.C. SPACING MUST NOT EXCEED 12"
 2. MAXIMUM O.C. SPACING TO BE IN ACCORDANCE WITH IMPACT PROTECTION SYSTEM APPROVED ANCHORING

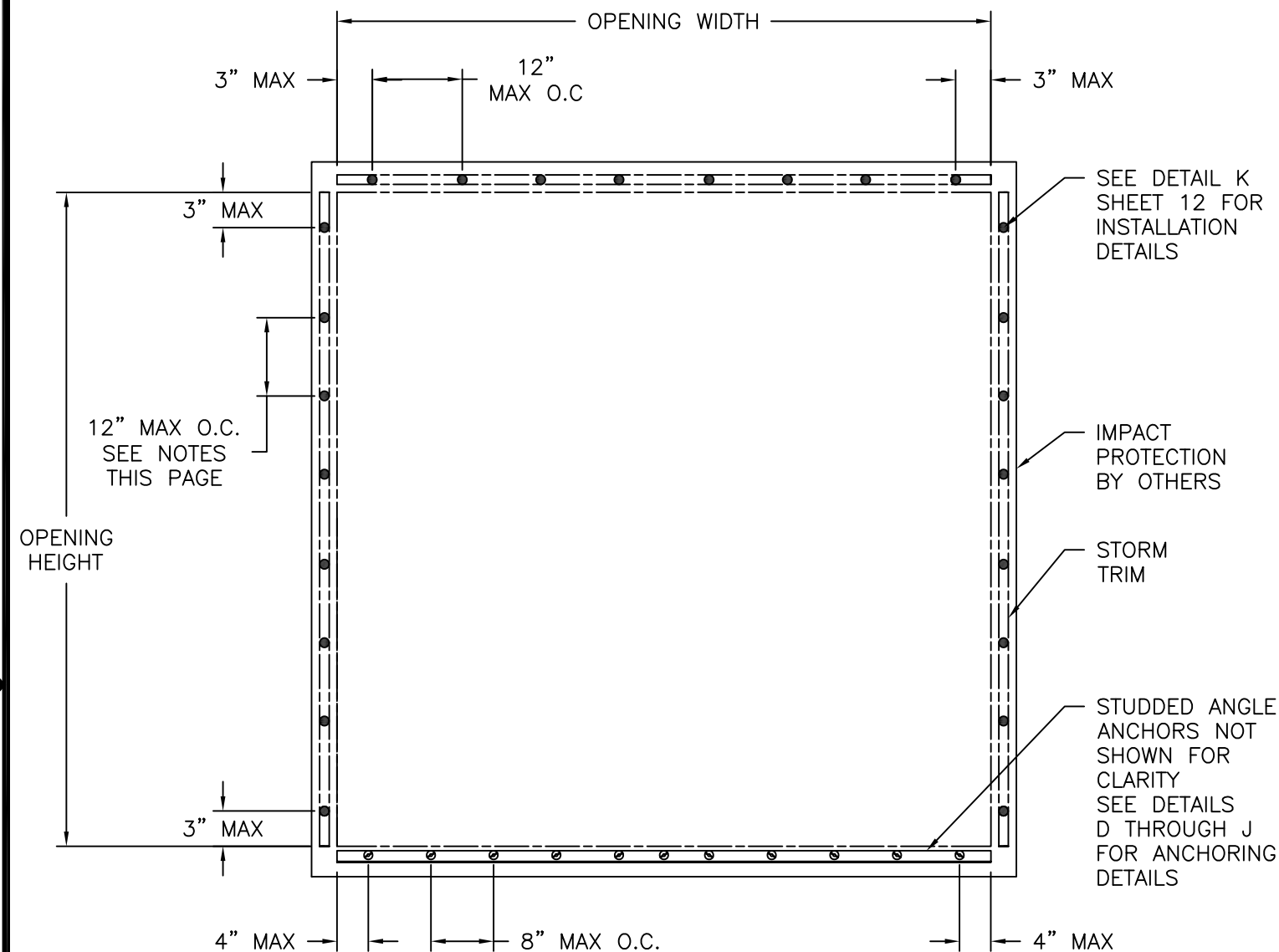
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STORM TRIM LARGE AND SMALL MISSILE IMPACT IMPACT PROTECTION INSTALLATION DETAILS		
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SCALE NTS	DATE 02/27/2017	SHEET 10 OF 12
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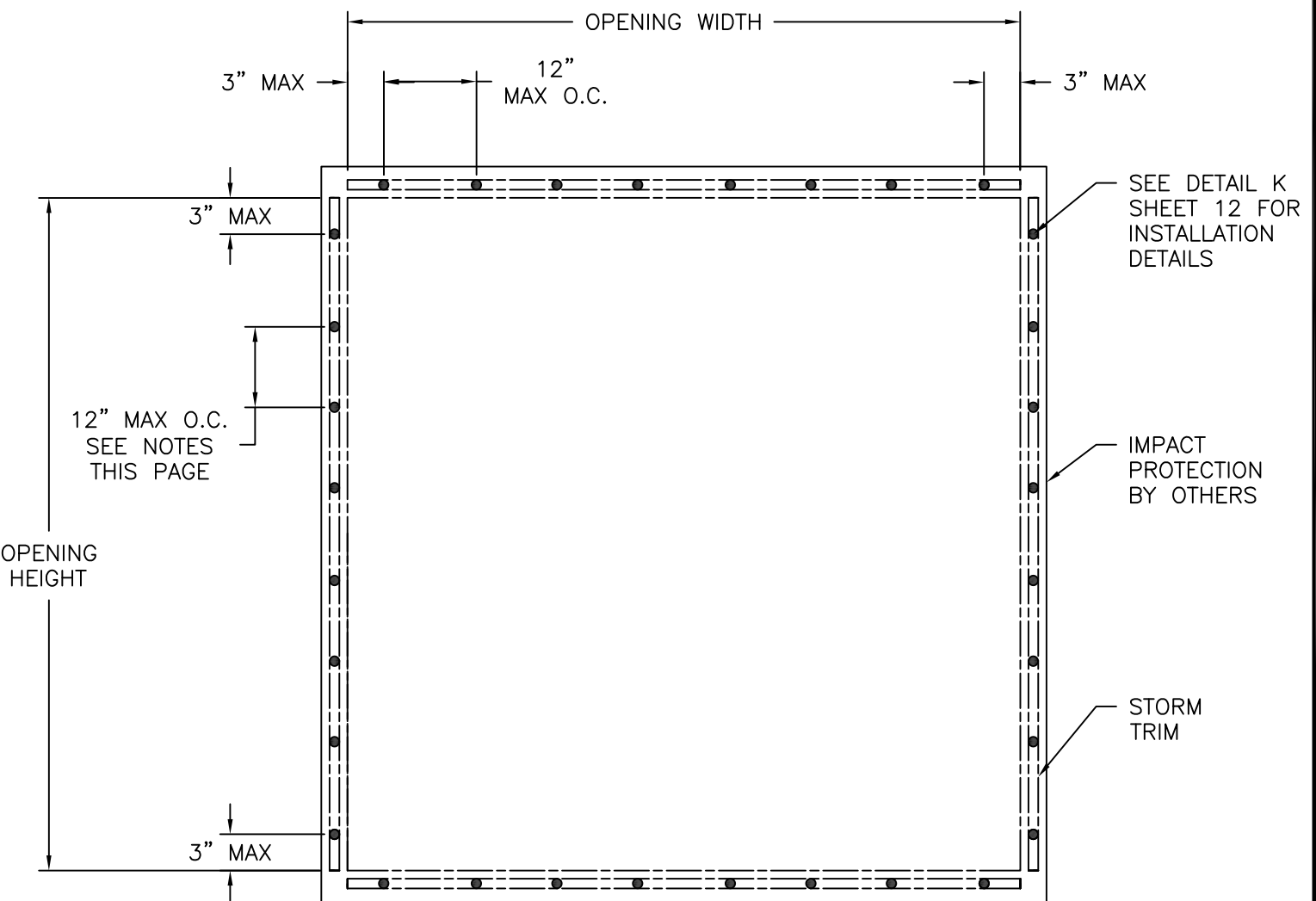


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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



STORM TRIM WITH PROTECTION
EXTERIOR VIEW
REFER TO SHEETS 5 & 6 FOR RATINGS AND SPACINGS



STORM TRIM WITH PROTECTION
EXTERIOR VIEW
REFER TO SHEETS 5 & 6 FOR RATINGS AND SPACINGS

- NOTES:
1. MAXIMUM O.C. SPACING MUST NOT EXCEED 12"
 2. MAXIMUM O.C. SPACING TO BE IN ACCORDANCE WITH IMPACT PROTECTION SYSTEM APPROVED ANCHORING

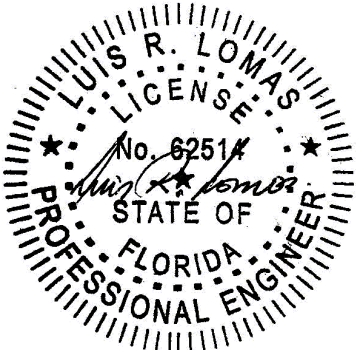
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THE MUHLER COMPANY
630 SKYLARK DRIVE SUITE U
CHARLESTON , SC 29407

STORM TRIM
LARGE AND SMALL MISSILE IMPACT
IMPACT PROTECTION INSTALLATION DETAILS

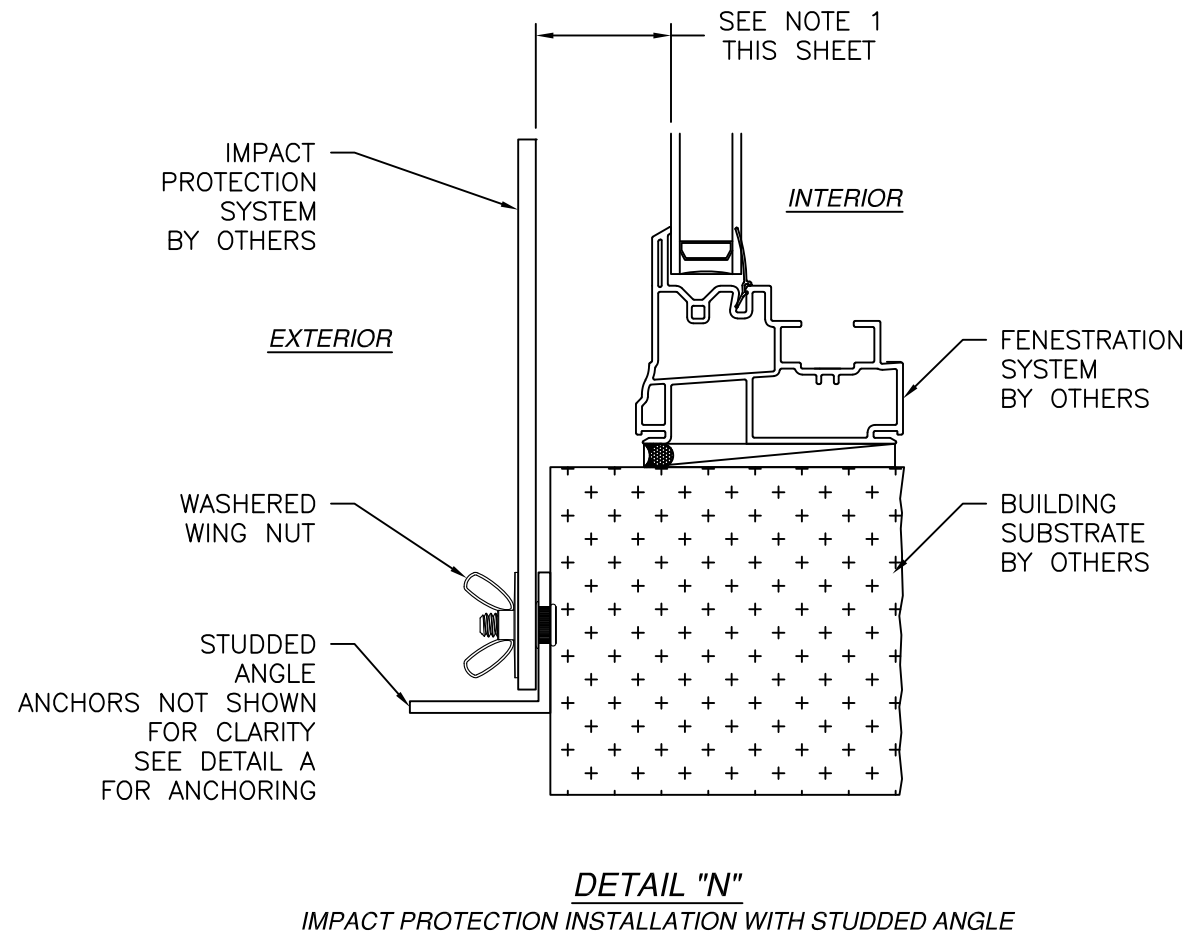
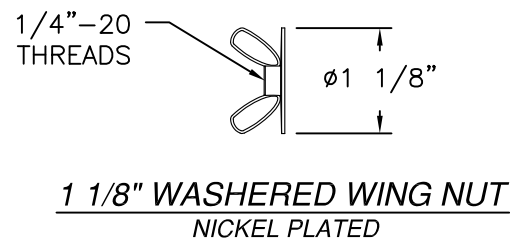
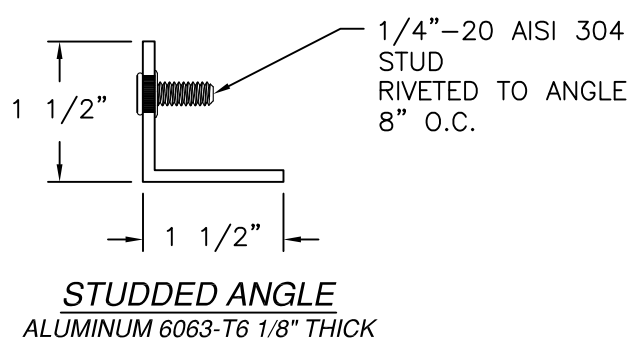
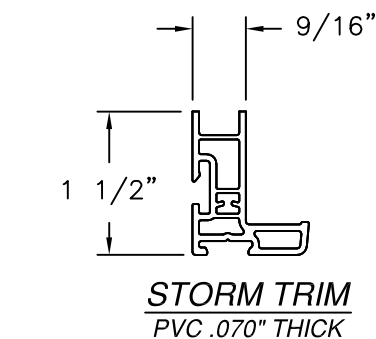
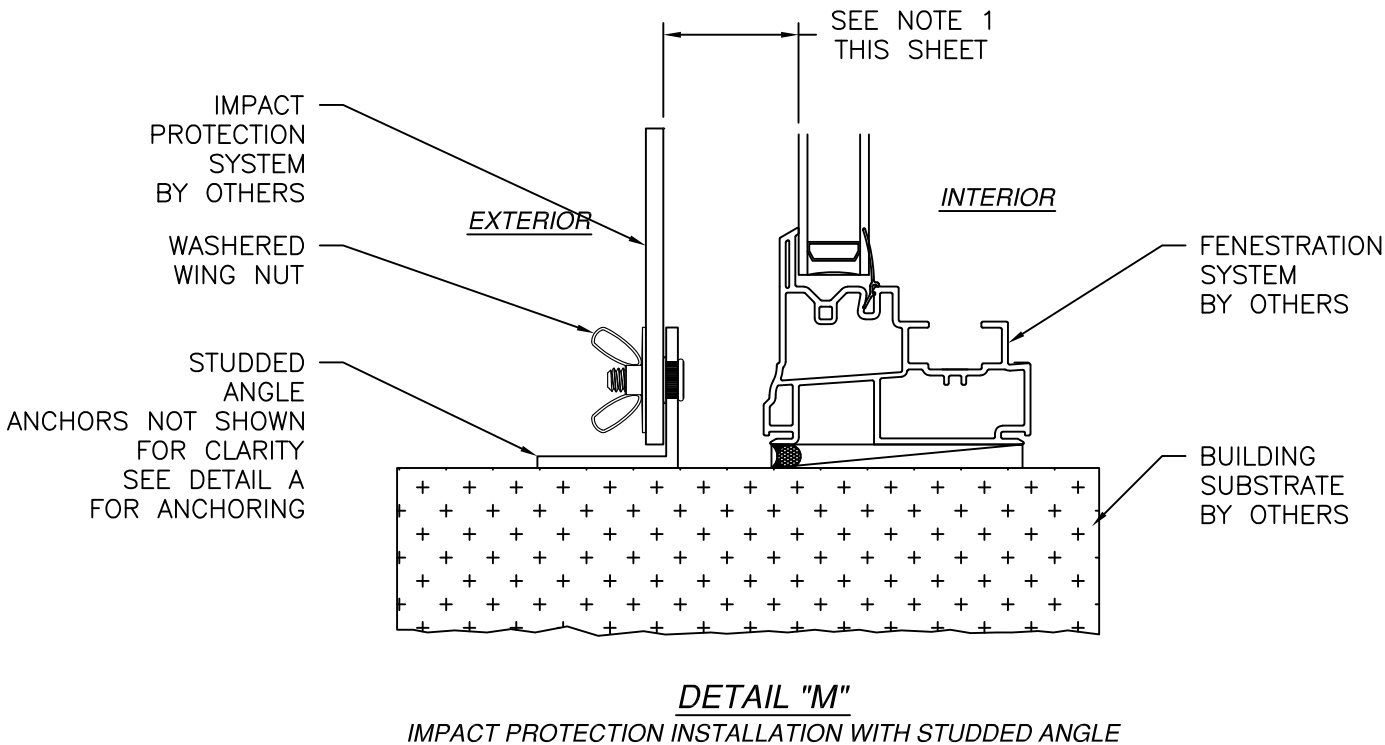
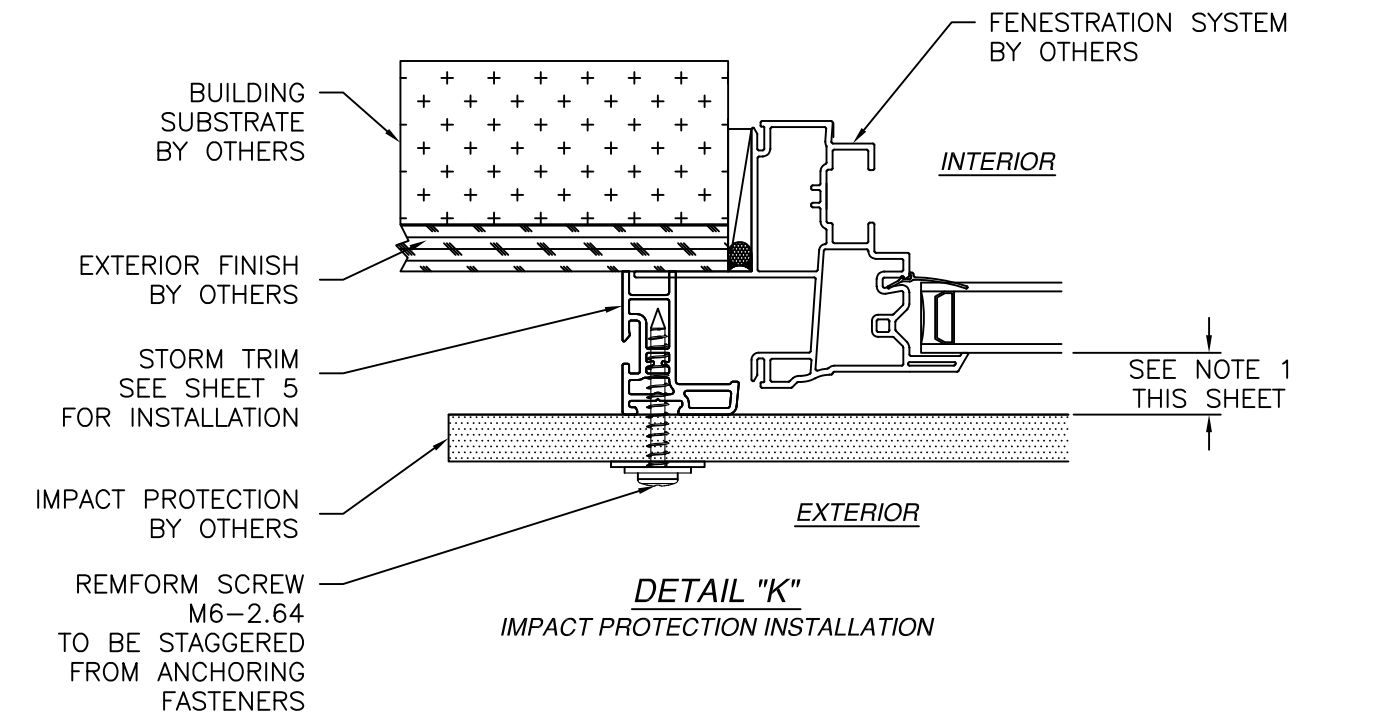
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SCALE NTS	DATE 02/27/2017	SHEET 11 OF 12

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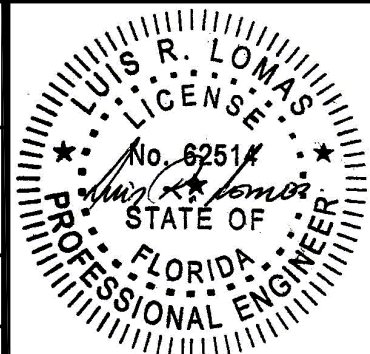
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



- NOTES:
1. SEPARATION BETWEEN FENESTRATION GLASS AND IMPACT PROTECTIVE SYSTEM TO BE IN ACCORDANCE WITH PROTECTIVE SYSTEM APPROVAL AND LIMITATIONS.

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THE MUHLER COMPANY 630 SKYLARK DRIVE SUITE U CHARLESTON , SC 29407		
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SCALE NTS	DATE 02/27/2017	SHEET 12 OF 12
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