

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 TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 3. ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
- 4. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS UP TO WIND ZONE 3.
- 5. DESIGN PRESSURE AND INSTALLATION DETAILS SHOWN IN THIS DOCUMENT APPLY ONLY TO MULLION. DOORS AND TRANSOMS MUST BE APPROVED UNDER SEPARATE APPROVAL.
- 6. DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL DOOR AND TRANSOM UNIT.

ANCHORING NOTES:

- 1. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #12 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS.
- 2. FOR ANCHORING INTO CONCRETE USE 1/4" ELCO CRETE-FLEX TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT WITH 1 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS.
- 3. FOR ANCHORING INTO METAL STRUCTURE USE #12 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.
- 4. FOR ATTACHING DOOR AND TRANSOM FRAME TO MULLION USE #10 SMS OR SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL. LOCATE SCREWS IN ACCORDANCE WITH DOOR AND TRANSOM FRAME ANCHORING SCHEDULE AS SHOWN IN DOOR AND TRANSOM FRAME SEPARATE APPROVAL.
- 5. ALL FASTENERS TO BE CORROSION RESISTANT.
- 6. 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 3,200 PSI.
 - C. MASONRY – STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).
 - D. METAL STRUCTURE: STEEL 18GA (.048") FY=33KSI/FU=52KSI OR ALUMINUM 6063-T5 FU=30KSI 1/8" THICK MINIMUM

SIGNED: 09/02/2026

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THE MUHLER COMPANY

630 SKYLARK DRIVE, SUITE U

NORTH CHARLESTON, SC 29407

ALUMINUM HORIZONTAL

MULLIONS

NOTES

DRAWN: A.R.

DWG NO. 08-03188

REV -

SCALE NTS

DATE 10/18/17

SHEET 1 OF 7

L. ROBERTO LOMAS P.E.

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LUIS R. LOMAS

LICENS. E. S.

No. 62514

STATE OF FLORIDA

PROFESSIONAL ENGINEER

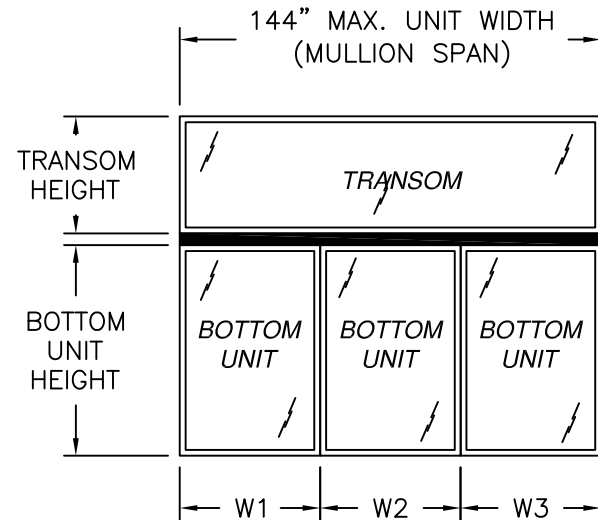
Luis R. Lomas P.E.

FL No.: 62514

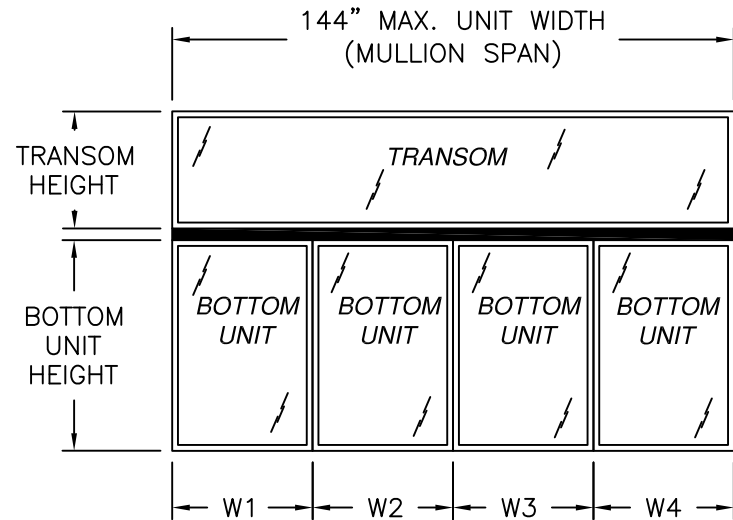
1 X 5 X 1/8 HORIZONTAL MULLION

APPROVED CONFIGURATIONS: OXO/O, XXO/O, OXX/O, XXX/O, OXXO/O, OXXX/O, XXXO/O, XXXX/O

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SINGLE DOOR WITH SIDELITES AND TRANSOM CONFIGURATION



DOUBLE DOOR WITH SIDELITES AND TRANSOM CONFIGURATION

- DESIGN PRESSURE TABLE INSTRUCTIONS:
1. DEFINE REQUIRED DESIGN LOAD PER FLORIDA BUILDING CODE CHAPTER 16.
 2. DETERMINE MULLION SPAN BASED ON PRODUCT TO BE INSTALLED.
 3. LOCATE MULLION SPAN (UNIT WIDTH) AND DOOR AND TRANSOM HEIGHT. AT THE INTERSECTION OF ROW AND COLUMN CONTAINING THE MULLION SPAN AND DOOR AND TRANSOM HEIGHT 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.

CHART #1

Design pressure for units with 18in transom (psf)															
Height (in)		Horizontal Mullion Span (in)													
Door	Transom	66.00	72.00	78.00	84.00	90.00	96.00	102.00	108.00	114.00	120.00	126.00	132.00	138.00	144.00
80.00	18.00	75.4	63.3	54.0	46.5	40.5	35.6	31.6	28.1	25.3	22.8	20.7	18.8	17.2	15.8
84.00	18.00	72.4	60.8	51.8	44.7	38.9	34.2	30.3	27.0	24.3	21.9	19.9	18.1	16.6	15.2
88.00	18.00	69.7	58.6	49.9	43.0	37.5	32.9	29.2	26.0	23.4	21.1	19.1	17.4	15.9	-
92.00	18.00	67.1	56.4	48.1	41.5	36.1	31.7	28.1	25.1	22.5	20.3	18.4	16.8	15.4	-
96.00	18.00	64.8	54.4	46.4	40.0	34.8	30.6	27.1	24.2	21.7	19.6	17.8	16.2	-	-

IMPACT RATED UP TO WIND ZONE 3

CHART #2

Design pressure for units with 24in transom (psf)														
Height (in)		Horizontal Mullion Span (in)												
Door	Transom	66.00	72.00	78.00	84.00	90.00	96.00	102.00	108.00	114.00	120.00	126.00	132.00	138.00
80.00	24.00	71.0	59.7	50.9	43.8	38.2	33.6	29.7	26.5	23.8	21.5	19.5	17.8	16.2
84.00	24.00	68.4	57.5	49.0	42.2	36.8	32.3	28.6	25.5	22.9	20.7	18.8	17.1	15.6
88.00	24.00	66.0	55.4	47.2	40.7	35.5	31.2	27.6	24.6	22.1	20.0	18.1	16.5	15.1
92.00	24.00	63.7	53.5	45.6	39.3	34.2	30.1	26.7	23.8	21.3	19.3	17.5	15.9	-
96.00	24.00	61.6	51.7	44.1	38.0	33.1	29.1	25.8	23.0	20.6	18.6	16.9	15.4	-

IMPACT RATED UP TO WIND ZONE 3

CHART #3

Design pressure for units with 30in transom (psf)														
Height (in)		Horizontal Mullion Span (in)												
Door	Transom	66.00	72.00	78.00	84.00	90.00	96.00	102.00	108.00	114.00	120.00	126.00	132.00	
80.00	30.00	67.1	56.4	48.1	41.5	36.1	31.7	28.1	25.1	22.5	20.3	18.4	16.8	
84.00	30.00	64.8	54.4	46.4	40.0	34.8	30.6	27.1	24.2	21.7	19.6	17.8	16.2	
88.00	30.00	62.6	52.6	44.8	38.6	33.7	29.6	26.2	23.4	21.0	18.9	17.2	15.6	
92.00	30.00	60.5	50.9	43.3	37.4	32.6	28.6	25.3	22.6	20.3	18.3	16.6	15.1	
96.00	30.00	58.6	49.3	42.0	36.2	31.5	27.7	24.5	21.9	19.6	17.7	16.1	-	

IMPACT RATED UP TO WIND ZONE 3

CHART #4

Design pressure for units with 36in transom (psf)														
Height (in)		Horizontal Mullion Span (in)												
Door	Transom	66.00	72.00	78.00	84.00	90.00	96.00	102.00	108.00	114.00	120.00	126.00	132.00	
80.00	36.00	63.7	53.5	45.6	39.3	34.2	30.1	26.7	23.8	21.3	19.3	17.5	15.9	
84.00	36.00	61.6	51.7	44.1	38.0	33.1	29.1	25.8	23.0	20.6	18.6	16.9	15.4	
88.00	36.00	59.6	50.1	42.6	36.8	32.0	28.2	24.9	22.2	20.0	18.0	16.3	-	
92.00	36.00	57.7	48.5	41.3	35.6	31.0	27.3	24.2	21.6	19.3	17.5	15.8	-	
96.00	36.00	56.0	47.0	40.1	34.5	30.1	26.4	23.4	20.9	18.8	16.9	15.4	-	

IMPACT RATED UP TO WIND ZONE 3

THE MUHLER COMPANY

630 SKYLARK DRIVE, SUITE U

NORTH CHARLESTON, SC 29407

ALUMINUM HORIZONTAL MULLIONS

SINGLE/DOUBLE DOOR W/SIDELITES & TRANSOM

DRAWN: A.R.

DWG NO. 08-03188

REV -

SCALE NTS

DATE 10/18/17

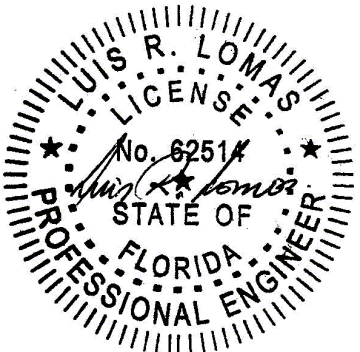
SHEET 2 OF 7

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SIGNED: 09/02/2026

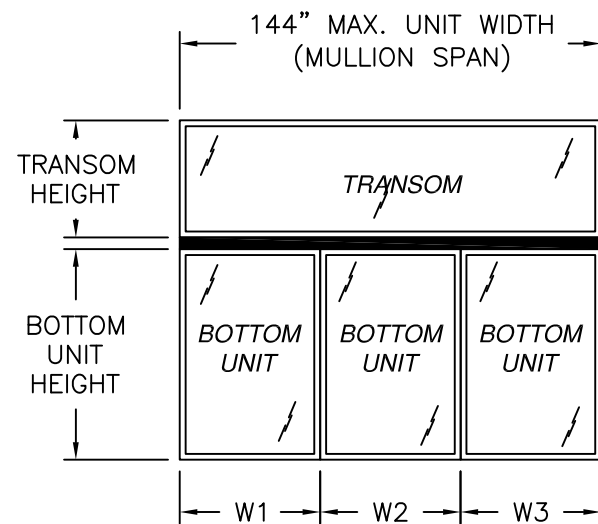


Luis R. Lomas P.E.
FL No.: 62514

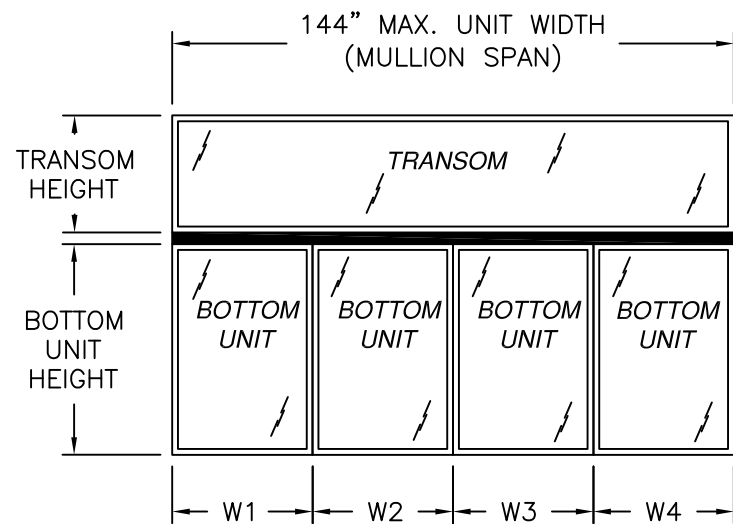
2 X 6 X 1/8 HORIZONTAL MULLION

APPROVED CONFIGURATIONS: OXO/O, XXO/O, OXX/O, XXX/O, OXXO/O, OXXX/O, XXXO/O, XXXX/O

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SINGLE DOOR WITH SIDELITES AND TRANSOM CONFIGURATION



DOUBLE DOOR WITH SIDELITES AND TRANSOM CONFIGURATION

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CHART #5

Design pressure for units with 18in transom (psf)															
Height (in)		Horizontal Mullion Span (in)													
Door	Transom	66.00	72.00	78.00	84.00	90.00	96.00	102.00	108.00	114.00	120.00	126.00	132.00	138.00	144.00
80.00	18.00	120.0	118.9	101.3	87.4	76.1	66.9	59.3	52.8	47.4	42.8	38.8	35.4	32.4	29.7
84.00	18.00	120.0	114.2	97.3	83.9	73.1	64.3	56.9	50.8	45.6	41.1	37.3	34.0	31.1	28.6
88.00	18.00	120.0	109.9	93.7	80.8	70.4	61.8	54.8	48.9	43.9	39.6	35.9	32.7	29.9	27.5
92.00	18.00	120.0	105.9	90.3	77.8	67.8	59.6	52.8	47.1	42.3	38.1	34.6	31.5	28.8	26.5
96.00	18.00	120.0	102.2	87.1	75.1	65.4	57.5	50.9	45.4	40.8	36.8	33.4	30.4	27.8	25.6

IMPACT RATED UP TO WIND ZONE 3

CHART #6

Design pressure for units with 24in transom (psf)															
Height (in)		Horizontal Mullion Span (in)													
Door	Transom	66.00	72.00	78.00	84.00	90.00	96.00	102.00	108.00	114.00	120.00	126.00	132.00	138.00	144.00
80.00	24.00	120.0	112.1	95.5	82.3	71.7	63.0	55.8	49.8	44.7	40.3	36.6	33.3	30.5	28.0
84.00	24.00	120.0	107.9	91.9	79.3	69.1	60.7	53.8	48.0	43.0	38.8	35.2	32.1	29.4	27.0
88.00	24.00	120.0	104.0	88.7	76.4	66.6	58.5	51.8	46.2	41.5	37.5	34.0	31.0	28.3	26.0
92.00	24.00	119.6	100.5	85.6	73.8	64.3	56.5	50.1	44.6	40.1	36.2	32.8	29.9	27.3	25.1
96.00	24.00	115.6	97.1	82.7	71.3	62.2	54.6	48.4	43.2	38.7	35.0	31.7	28.9	26.4	24.3

IMPACT RATED UP TO WIND ZONE 3

CHART #7

Design pressure for units with 30in transom (psf)															
Height (in)		Horizontal Mullion Span (in)													
Door	Transom	66.00	72.00	78.00	84.00	90.00	96.00	102.00	108.00	114.00	120.00	126.00	132.00	138.00	144.00
80.00	30.00	120.0	105.9	90.3	77.8	67.8	59.6	52.8	47.1	42.3	38.1	34.6	31.5	28.8	26.5
84.00	30.00	120.0	102.2	87.1	75.1	65.4	57.5	50.9	45.4	40.8	36.8	33.4	30.4	27.8	25.6
88.00	30.00	117.5	98.8	84.1	72.6	63.2	55.6	49.2	43.9	39.4	35.6	32.2	29.4	26.9	24.7
92.00	30.00	113.7	95.5	81.4	70.2	61.1	53.7	47.6	42.5	38.1	34.4	31.2	28.4	26.0	23.9
96.00	30.00	110.1	92.5	78.8	67.9	59.2	52.0	46.1	41.1	36.9	33.3	30.2	27.5	25.2	23.1

IMPACT RATED UP TO WIND ZONE 3

CHART #8

Design pressure for units with 36in transom (psf)															
Height (in)		Horizontal Mullion Span (in)													
Door	Transom	66.00	72.00	78.00	84.00	90.00	96.00	102.00	108.00	114.00	120.00	126.00	132.00	138.00	144.00
80.00	36.00	119.6	100.5	85.6	73.8	64.3	56.5	50.1	44.6	40.1	36.2	32.8	29.9	27.3	25.1
84.00	36.00	115.6	97.1	82.7	71.3	62.2	54.6	48.4	43.2	38.7	35.0	31.7	28.9	26.4	24.3
88.00	36.00	111.8	94.0	80.1	69.0	60.1	52.9	46.8	41.8	37.5	33.8	30.7	28.0	25.6	23.5
92.00	36.00	108.3	91.0	77.6	66.9	58.3	51.2	45.4	40.5	36.3	32.8	29.7	27.1	24.8	22.8
96.00	36.00	105.1	88.3	75.2	64.9	56.5	49.7	44.0	39.2	35.2	31.8	28.8	26.3	24.0	22.1

IMPACT RATED UP TO WIND ZONE 3

SIGNED: 09/02/2026

THE MUHLER COMPANY

630 SKYLARK DRIVE, SUITE U

NORTH CHARLESTON, SC 29407

ALUMINUM HORIZONTAL MULLIONS

SINGLE/DOUBLE DOOR W/SIDELITES & TRANSOM

DRAWN: A.R.

DWG NO. 08-03188

REV -

SCALE NTS

DATE 10/18/17

SHEET 3 OF 7

L. ROBERTO LOMAS P.E.

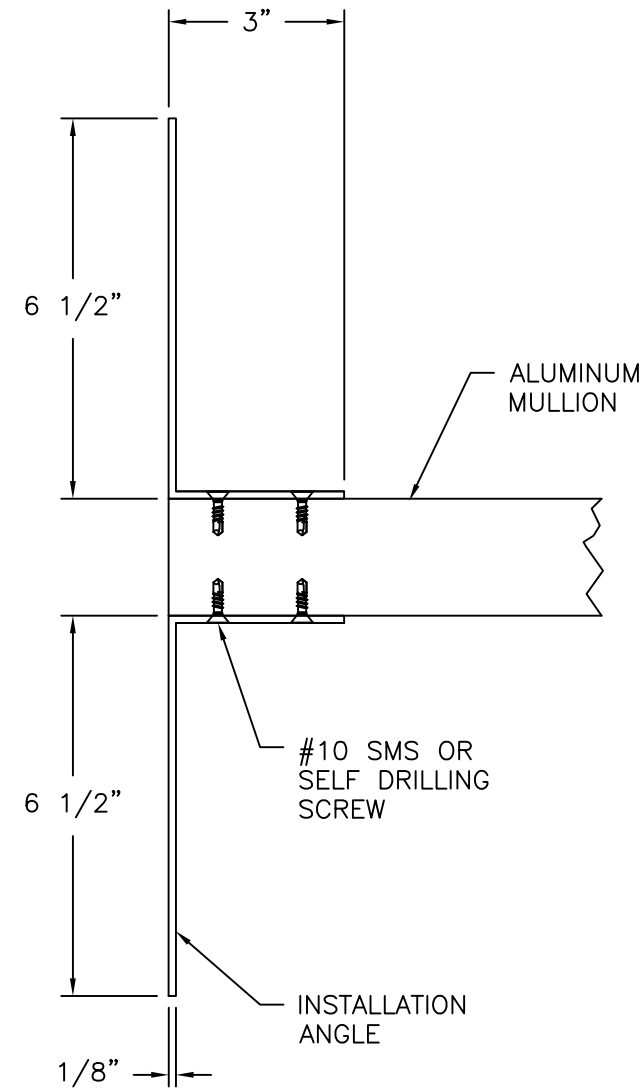
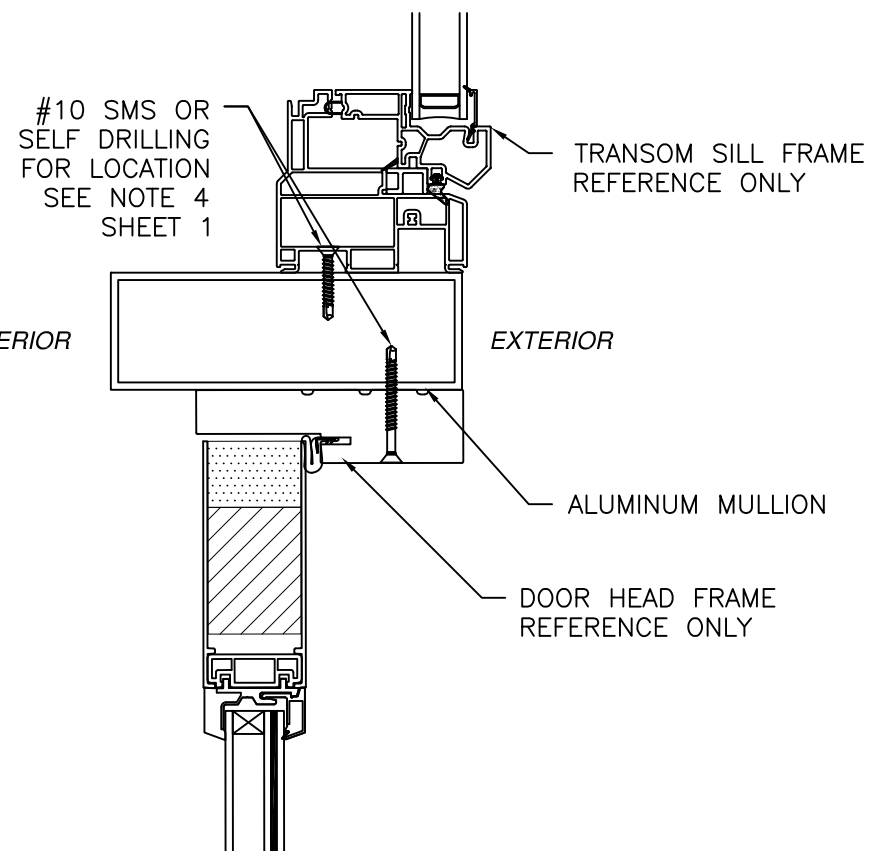
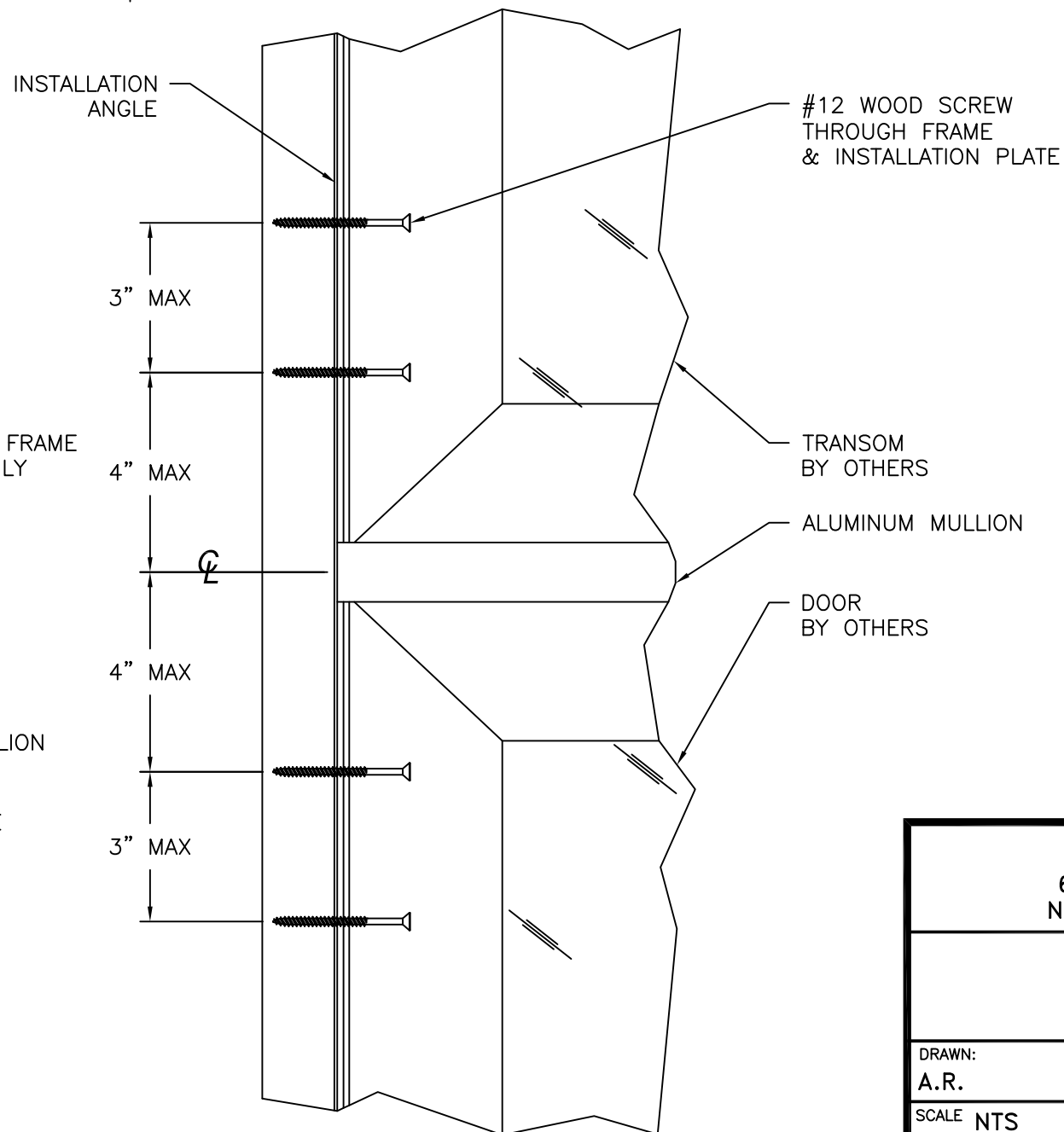
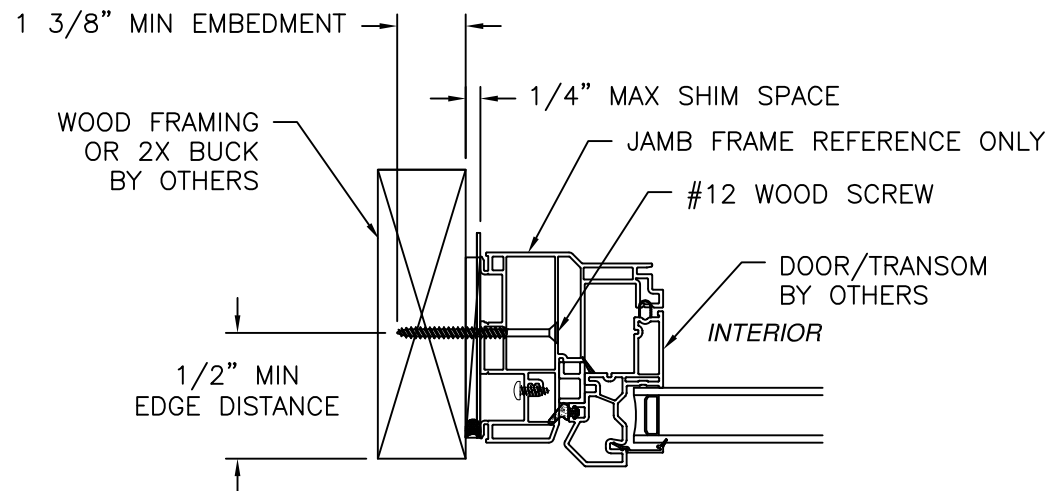
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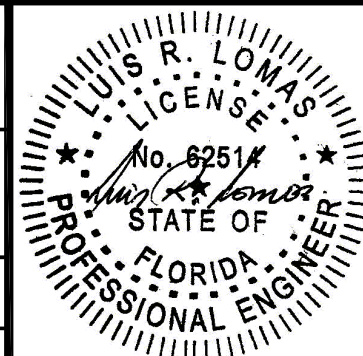


MULLION CONECTION

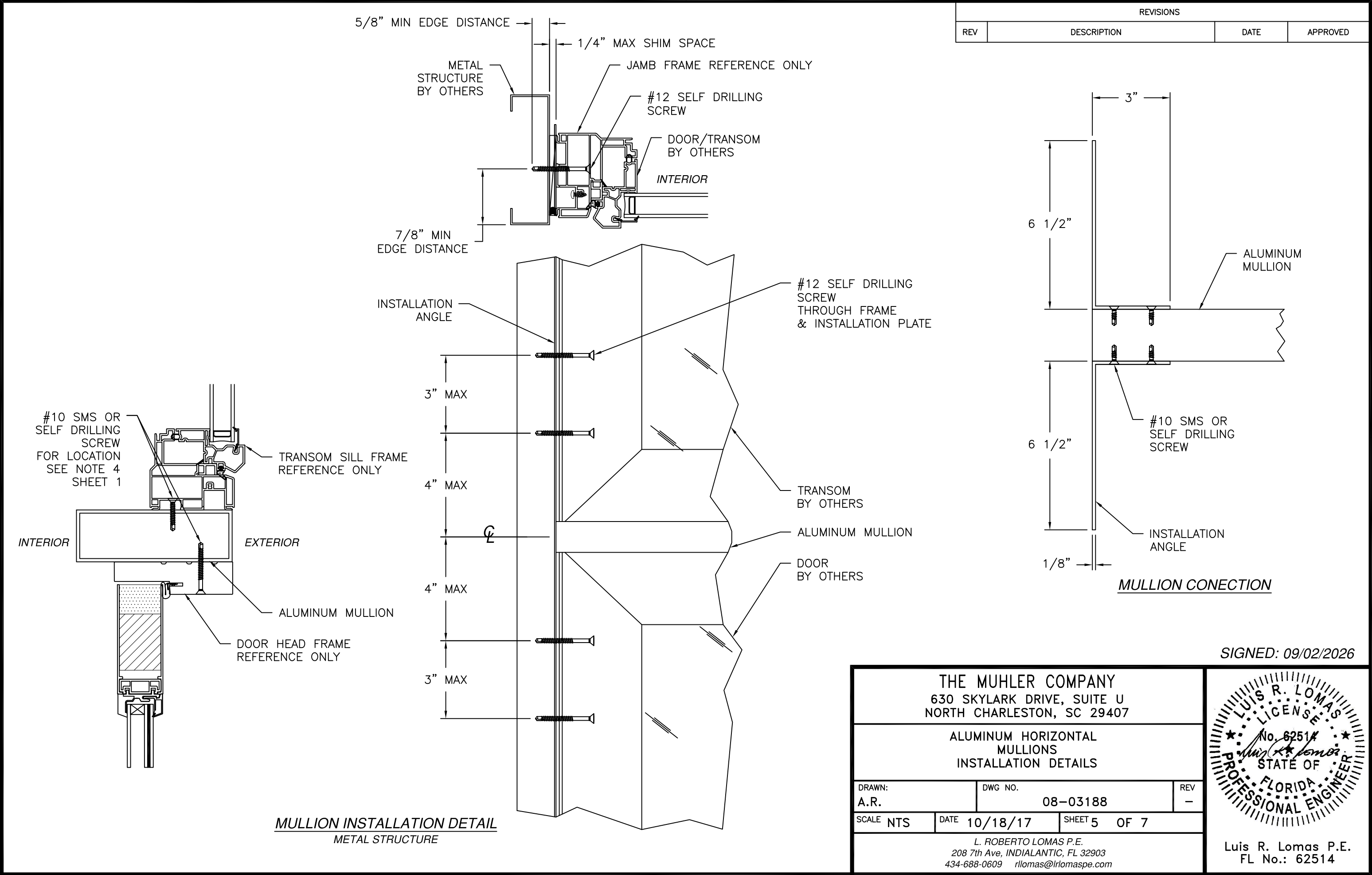
MULLION INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK SUBSTRATE

SIGNED: 09/02/2026

THE MUHLER COMPANY 630 SKYLARK DRIVE, SUITE U NORTH CHARLESTON, SC 29407		
ALUMINUM HORIZONTAL MULLIONS INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-03188	REV -
SCALE NTS	DATE 10/18/17	SHEET 4 OF 7
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



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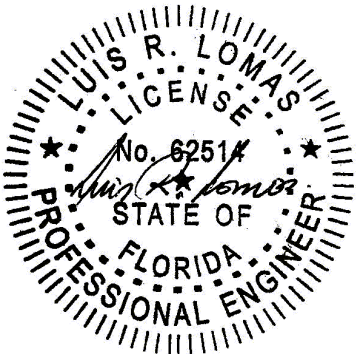
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THE MUHLER COMPANY
630 SKYLARK DRIVE, SUITE U
NORTH CHARLESTON, SC 29407

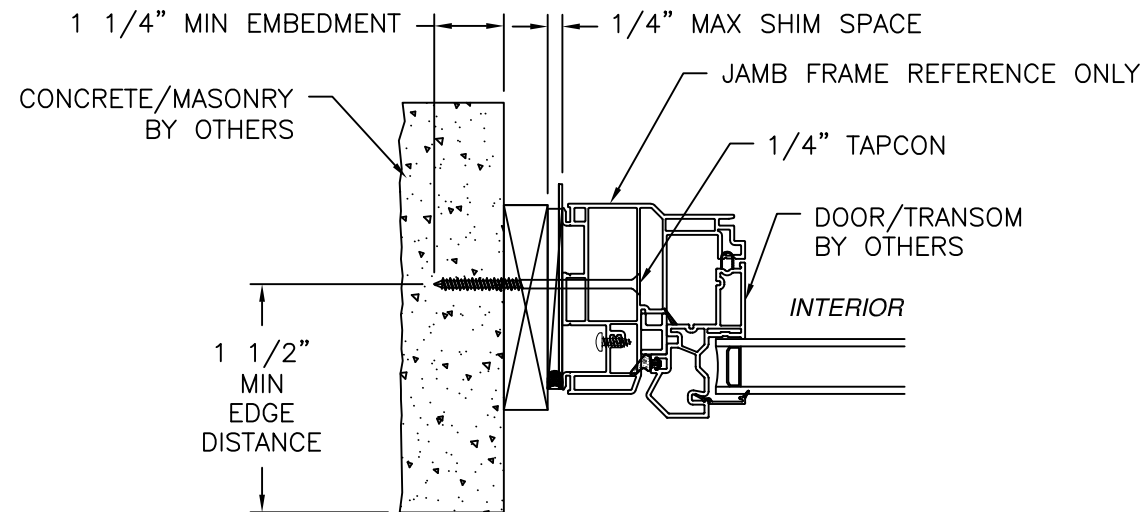
ALUMINUM HORIZONTAL
MULLIONS
INSTALLATION DETAILS

DRAWN: A.R.	DWG NO. 08-03188	REV -
SCALE NTS	DATE 10/18/17	SHEET 5 OF 7

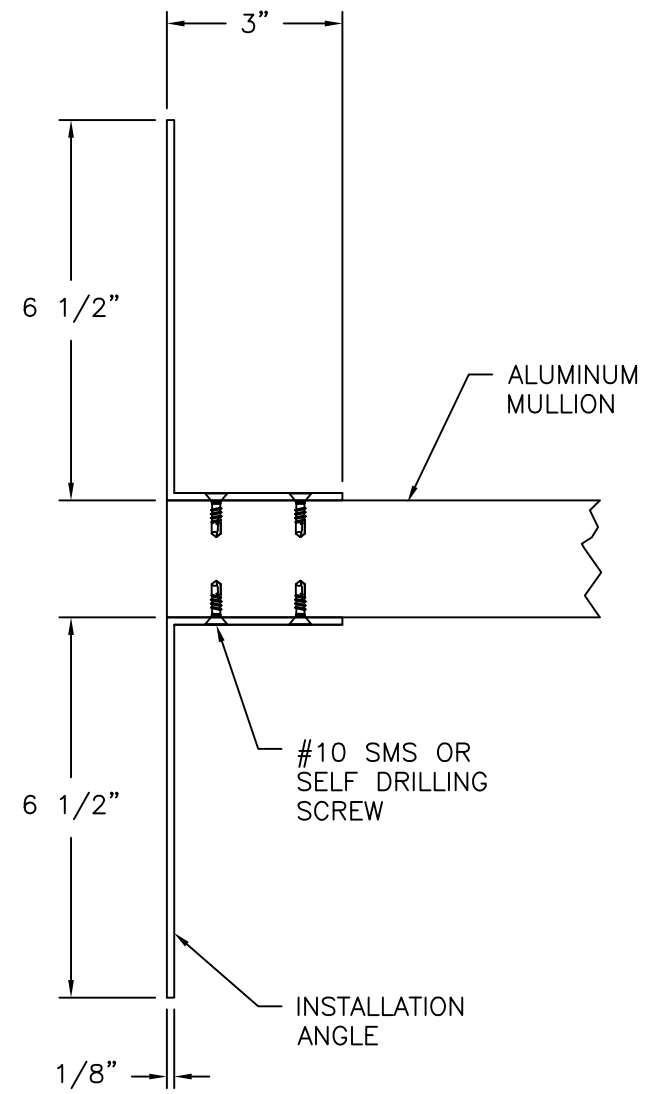
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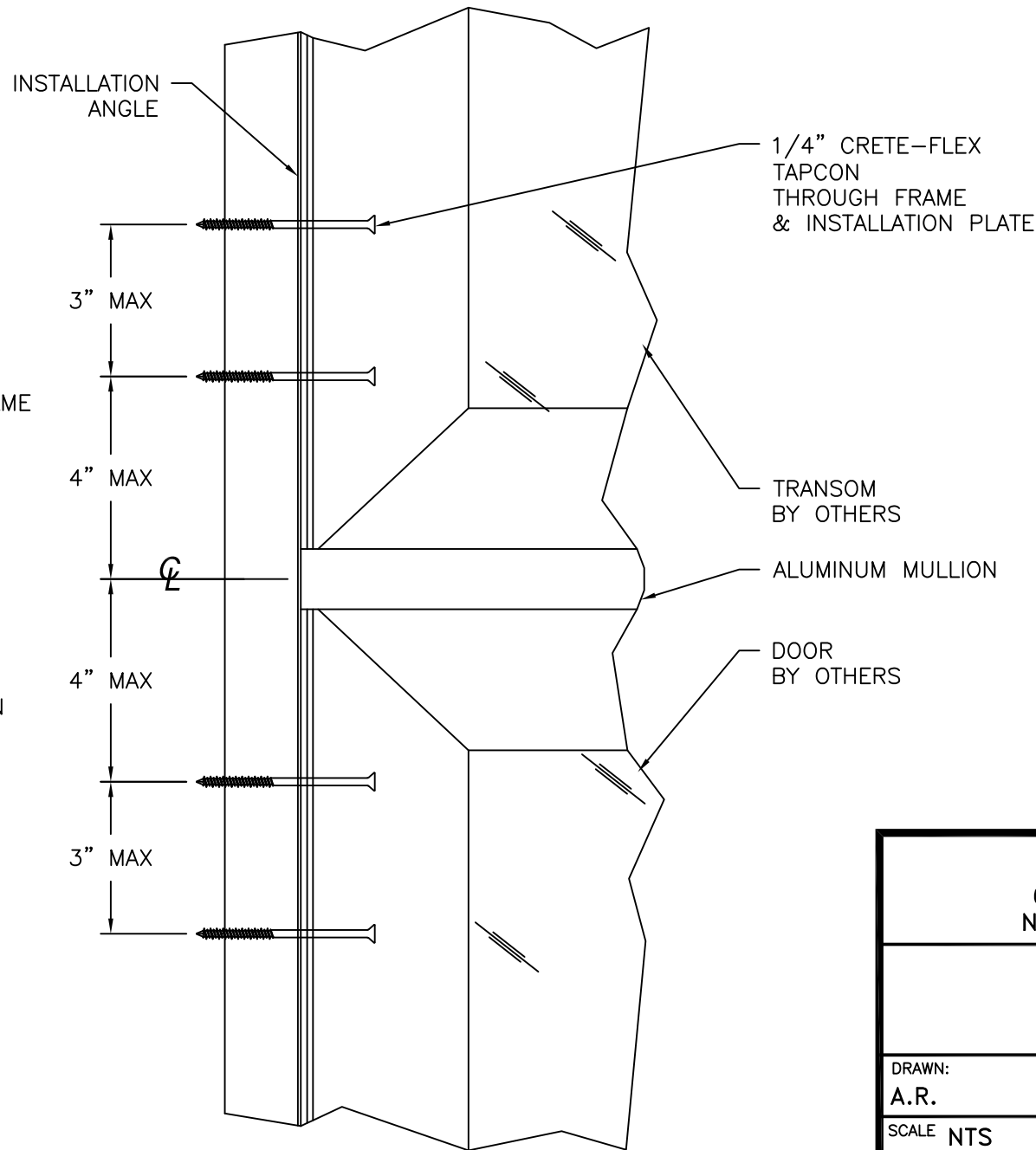
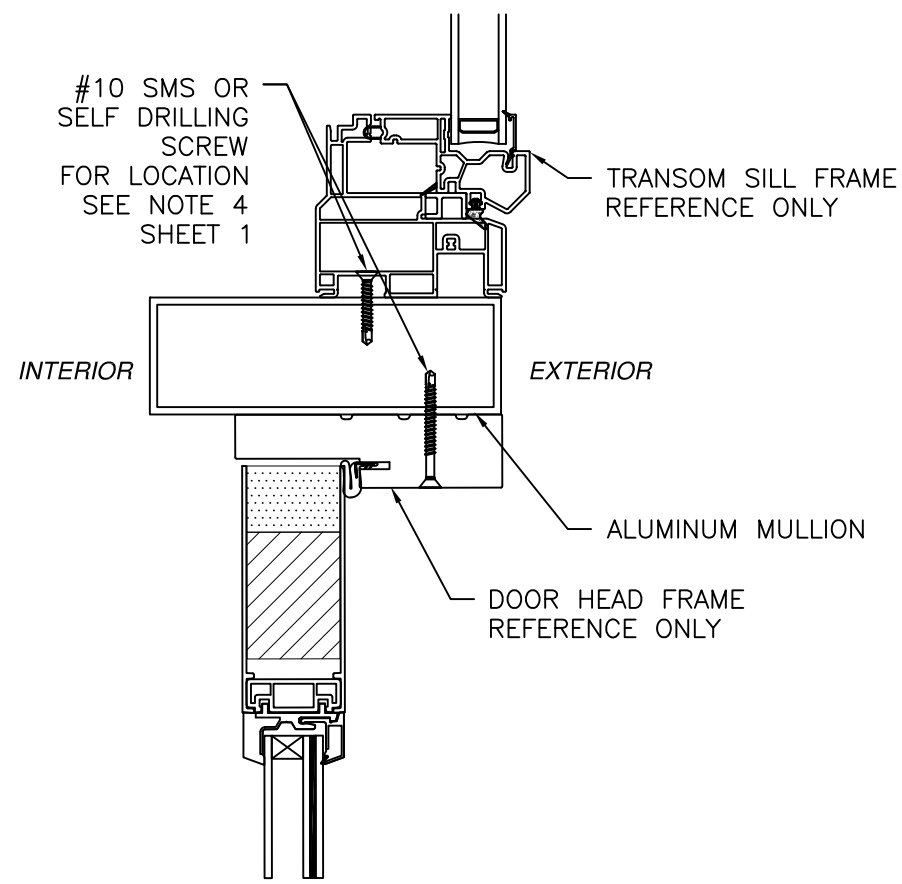
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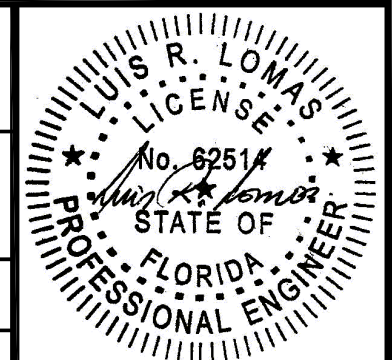
MULLION CONECTION



MULLION INSTALLATION DETAIL
MASONRY/CONCRETE

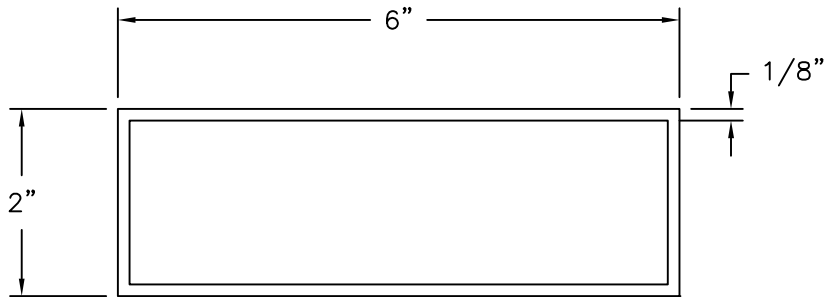
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THE MUHLER COMPANY 630 SKYLARK DRIVE, SUITE U NORTH CHARLESTON, SC 29407		
ALUMINUM HORIZONTAL MULLIONS INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-03188	REV -
SCALE NTS	DATE 10/18/17	SHEET 6 OF 7
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

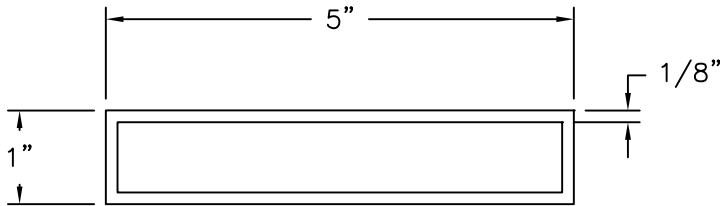


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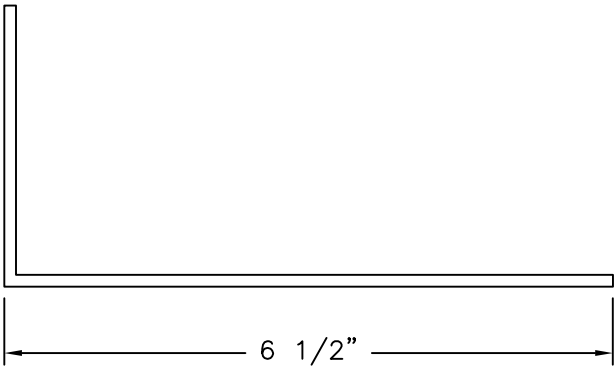
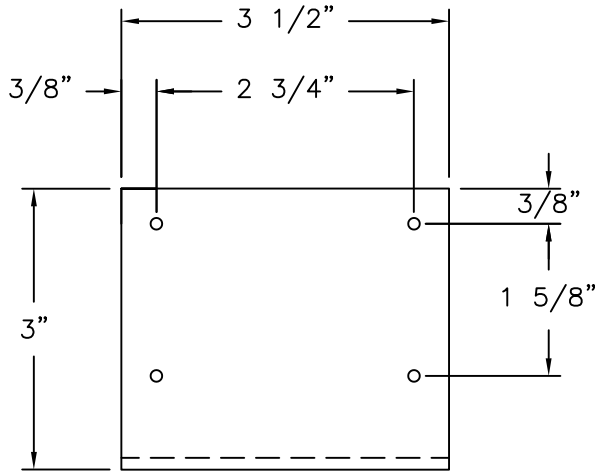
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



2 x 6 x 1/8
ALUMINUM MULLION 6063-75



1 x 5 x 1/8
ALUMINUM MULLION 6063-T5



INSTALLATION ANGLE
GALVANIZED STEEL .058 THICK

SIGNED: 09/02/2026

THE MUHLER COMPANY 630 SKYLARK DRIVE, SUITE U NORTH CHARLESTON, SC 29407		
ALUMINUM HORIZONTAL MULLIONS COMPONENTS		
DRAWN: A.R.	DWG NO. 08-03188	REV -
SCALE NTS	DATE 10/18/17	SHEET 7 OF 7
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

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