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EURO-WALL SYSTEMS

ALUMINUM TUBE MULLION

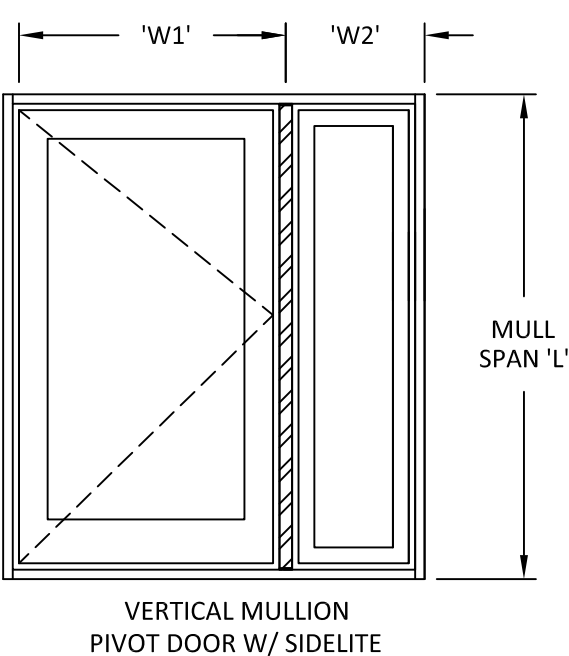
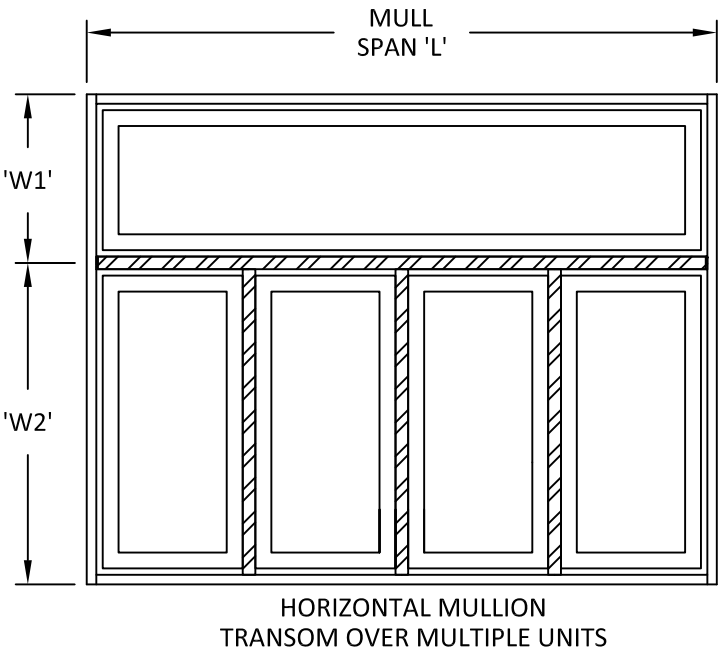
GENERAL NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT FLORIDA BUILDING CODE EXCLUDING HVHZ.
2. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS IN WIND ZONE 3 OR LESS . INDIVIDUAL UNITS ATTACHED TO MULLIONS MUST BE IMPACT RATED .
3. APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS IN WIND ZONE 4 . INDIVIDUAL UNITS ATTACHED TO MULLIONS MUST BE IMPACT RATED.
4. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY AND 2X FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
5. 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
6. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT IN NON-HVHZ AREAS.
7. MULLION & CLIP MATERIAL: ALUMINUM 6005-T5, 6063-T6, MINIMUM A36 STEEL (AS NOTED)
8. MULLIONS MAY BE USED WITH ANY APPROVED FENESTRATION PRODUCT, UNDER SEPARATE APPROVAL.
9. SEE SHEETS 5-9 FOR INSTALLATION ANCHOR REQUIREMENTS FOR SPECIFIC ANCHORING REQUIREMENTS, MULLION CONFIGURATIONS, AND DESIGN LOAD CAPACITIES.
10. IN ACCORDANCE WITH THE CURRENT FLORIDA BUILDING CODE, DISSIMILAR METALS INCLUDING FASTENERS THAT MAY COME INTO CONTACT WITH ALUMINUM UNIT FRAMING SHALL BE PROTECTED AS DEFINED IN CHAPTER 16.

INSTRUCTIONS:

1. DETERMINE REQUIRED DESIGN PRESSURE FOR OPENING.
2. CHOOSE A MULLION THAT PROPERLY FITS THE FENESTRATION PRODUCT.
3. DETERMINE WHETHER ASSEMBLY REQUIRES ONE-WAY OR TWO-WAY MULLIONS:
 - ASSEMBLIES CONSISTING OF STACKED OR SIDE-BY-SIDE UNITS REQUIRE USE OF ONE-WAY MULLIONS.
 - ASSEMBLIES CONSISTING OF MULTIPLE UNITS MULLED TOGETHER WITH MULTIPLE MULLIONS REQUIRE USE OF TWO-WAY MULLIONS.
 - SEE SHEET 10 FOR ASSEMBLY AND LOAD EXAMPLES.
 - IF ASSEMBLY TYPE CANNOT BE DETERMINED USE TWO-WAY MULLION CHART.
4. VERIFY THAT MULLION DESIGN PRESSURE MEETS OR EXCEEDS REQUIRED DESIGN PRESSURE OF OPENING USING CHARTS ON SHEETS 5-9.
5. QUALIFIED CLIP TYPES APPEAR ON SHEET 2. MULTIPLE ANCHOR TYPE/SUBSTRATE/CLIP COMBINATIONS WITHIN AN OPENING ARE ALLOWED.
6. THE LESSER DESIGN PRESSURE OR MULLION OR FENESTRATION PRODUCT WILL GOVERN OVERALL ASSEMBLY DESIGN PRESSURE RATING.

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SHEET	REVISION	SHEET DESCRIPTION
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2	-	MULLIONS AND CLIPS
3	-	MULLIONS AND CLIPS
4	-	VERTICAL & HORIZONTAL SECTIONS
5	-	MULLION TABLES
6	-	MULLION TABLES
7	-	MULLION TABLES
8	-	MULLION TABLES
9	-	MULLION TABLES
10	-	MULLION ASSEMBLIES



euro-wall®
SUPERIOR BY DESIGN

EURO-WALL SYSTEMS, LLC
24100 TISEO BOULEVARD
PORT CHARLOTTE, FL 33980
PH: 888-989-3876

TITLE: ALUMINUM TUBE MULLION
INSTALLATION & GENERAL NOTES

PREPARED BY:
BUILDING DROPS, INC.
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DANIA BEACH, FL 33004
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FBPE CERT. OF AUTHORIZATION No. 29578

FL #: FL26891

DATE: 03.28.17

DWG. BY: AR/EG
CHK. BY: HFN

SCALE: NTS

DWG. #: EWS007

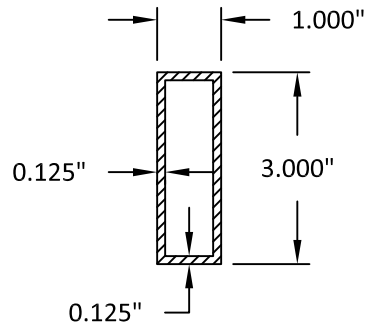
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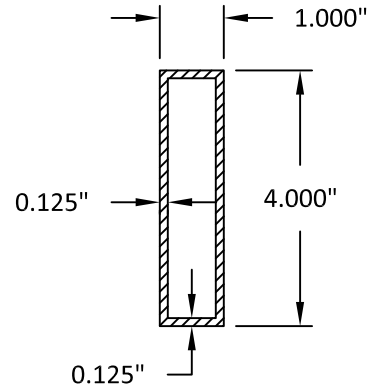
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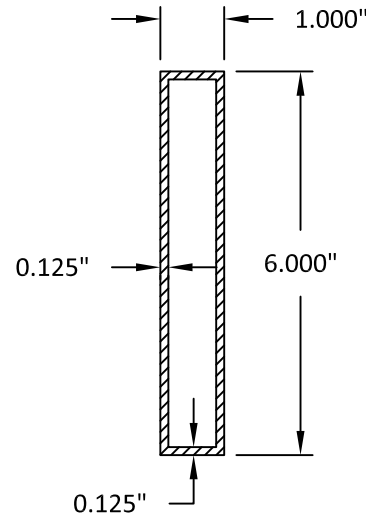
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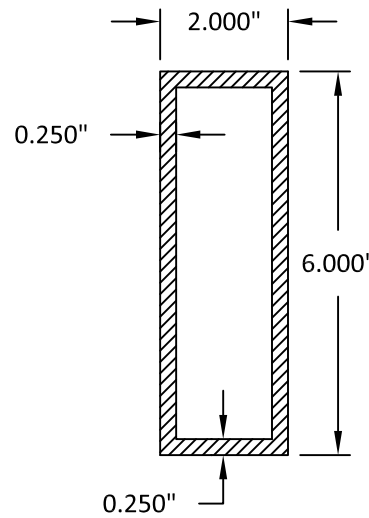
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MULLION
6063-T6**



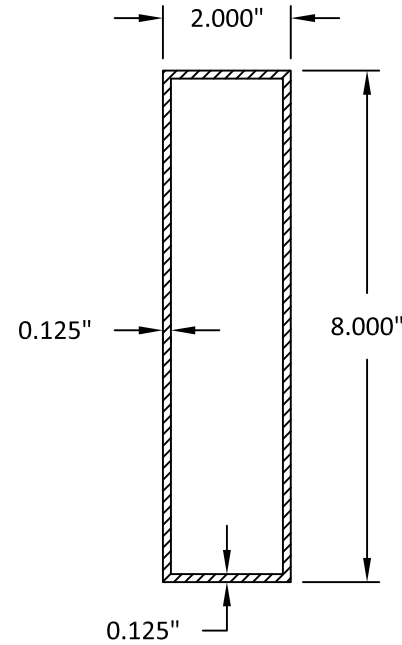
**1" X 4"
MULLION
6063-T6**



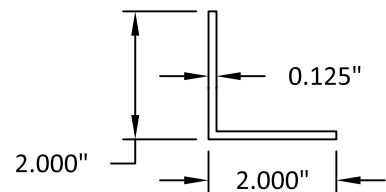
**1" X 6"
MULLION
6063-T6**



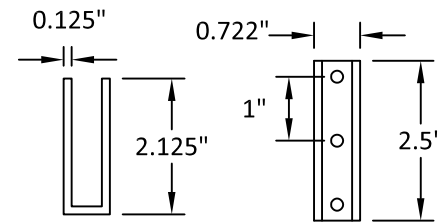
**2" X 6"
MULLION
6063-T6**



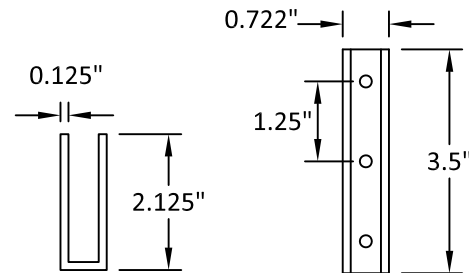
**2" X 8"
MULLION
6063-T6**



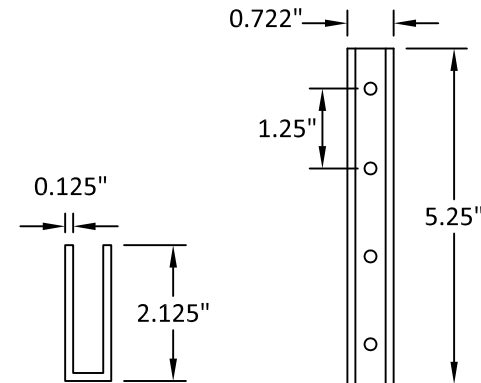
**ANGLE CLIP
6063-T5**



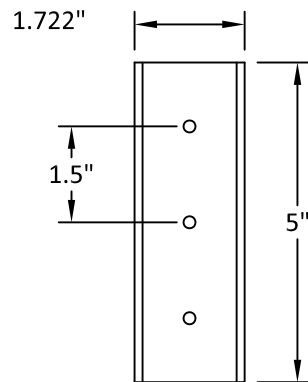
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ALUMINUM 6005-T5
FOR USE WITH 1"X3" MULLION ONLY**



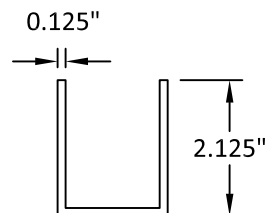
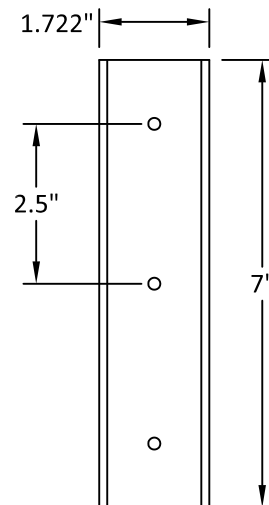
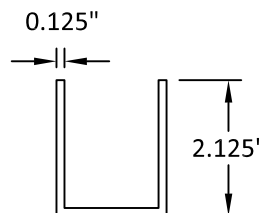
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ALUMINUM 6005-T5
FOR USE WITH 1"X4" MULLION ONLY**



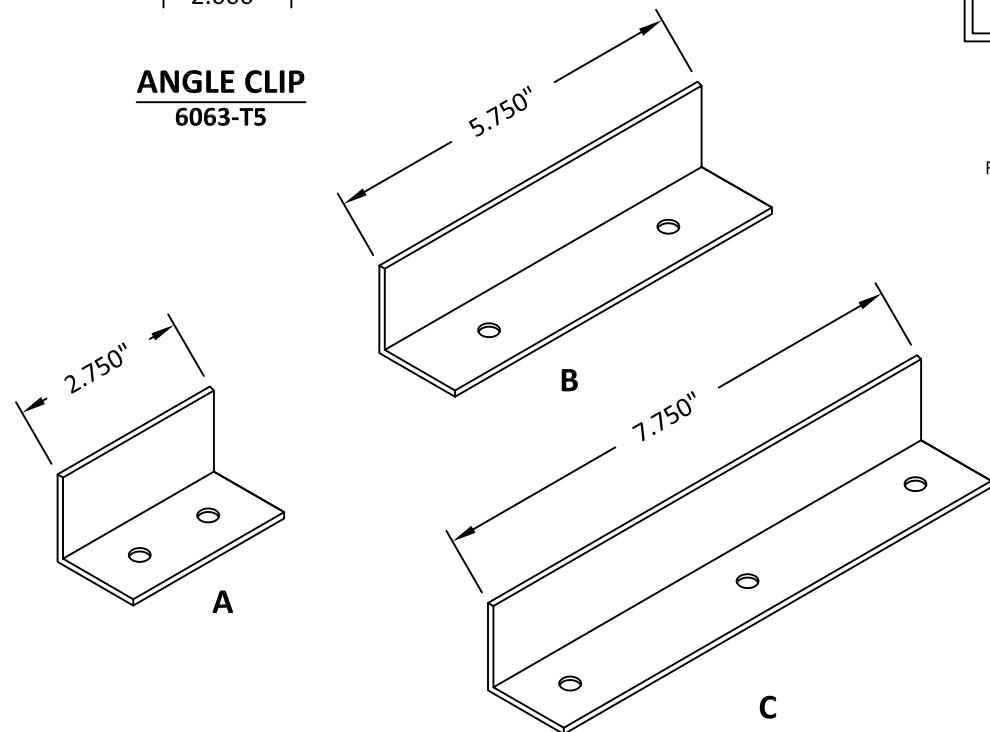
**5 1/4" U-CLIP
ALUMINUM 6005-T5
FOR USE WITH 1"X6" MULLION ONLY**



**5" U-CLIP
ALUMINUM 6005-T5
FOR USE WITH 2"X6" MULLION ONLY**



**7" U-CLIP
ALUMINUM 6005-T5
FOR USE WITH 2"X8" MULLION ONLY**



U-CLIP FOR USE ONLY IN
MULLION-TO-MULLION
CONNECTIONS

eurowall
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EURO-WALL SYSTEMS, LLC
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PORT CHARLOTTE, FL 33980
PH: 888-989-3876

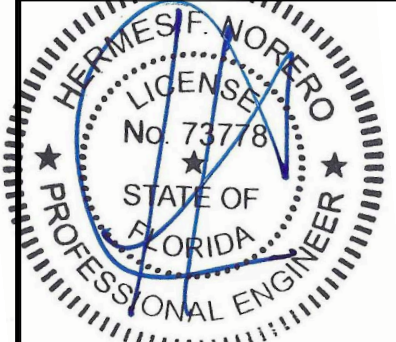
TITLE: ALUMINUM TUBE MULLION
MULLIONS & CLIPS

PREPARED BY:
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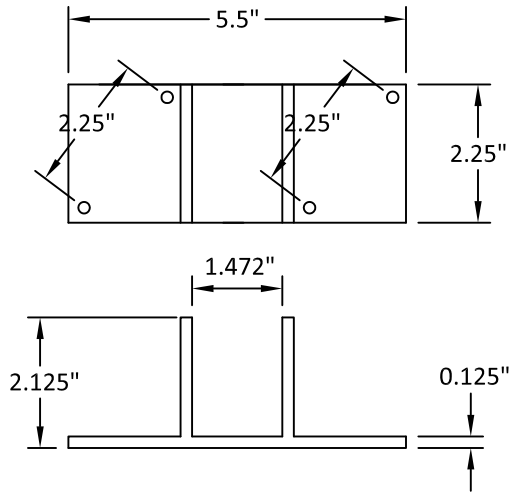


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398 E. DANIA BEACH BLVD. # 338
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FBPE CERT. OF AUTHORIZATION No. 29578

FL #:	FL26891
DATE:	03.28.17
DWG. BY:	AR/EG
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	EWS007
SHEET:	2

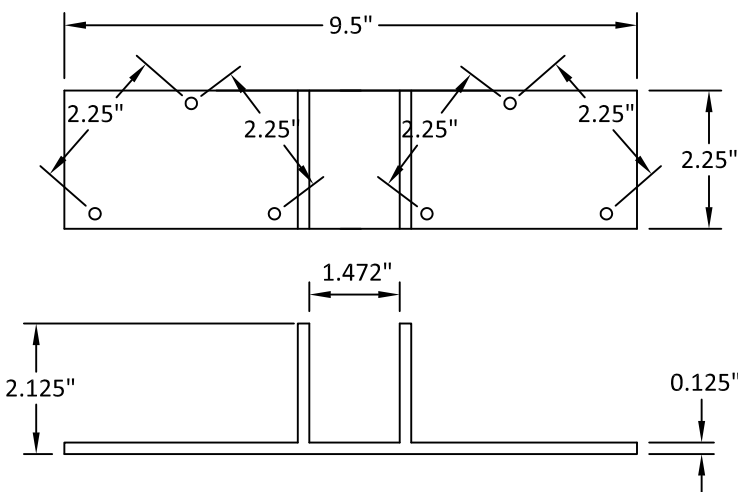
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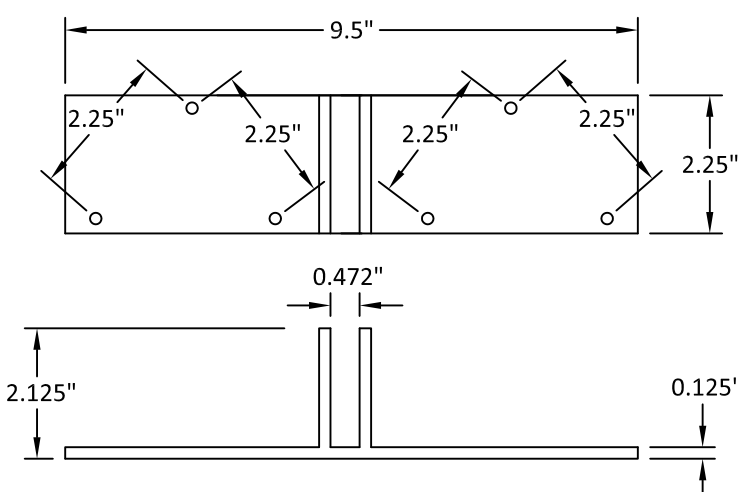
5 1/2" X 2 1/4" H-CLIP

ALUMINUM 6063-T6
FOR USE WITH 1"X3" AND 1"X4" MULLIONS ONLY



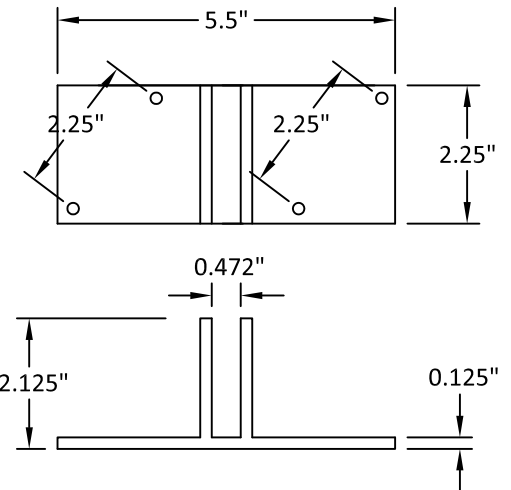
9 1/2" X 2 1/4" H-CLIP

ALUMINUM 6063-T6
FOR USE WITH 1"X3" AND 1"X4" MULLIONS ONLY



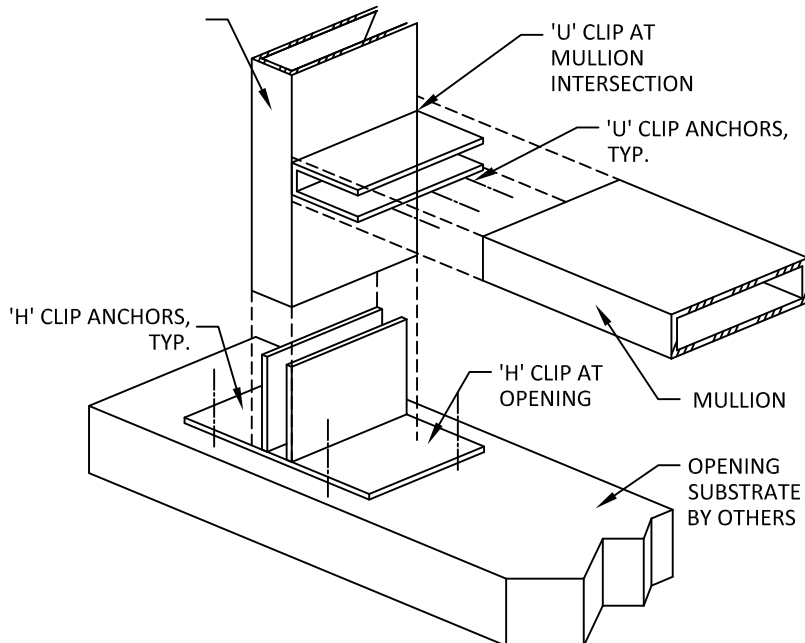
9 1/2" X 2 1/4" H-CLIP

ALUMINUM 6063-T6
FOR USE WITH 1"X3" AND 1"X4" MULLIONS ONLY



5 1/2" X 2 1/4" H-CLIP

ALUMINUM 6063-T6
FOR USE WITH 1"X3" AND 1"X4" MULLIONS ONLY



MULLION & CLIP ASSEMBLY (TYP.)

NOTE: ASSEMBLY SHOWN ABOVE IS
DIAGRAMMATIC IN SCOPE. OTHER CLIP & MULLION
ASSEMBLIES ARE ALLOWED, SEE SPECIFIC MULLION
SHEET 2 FOR DETAILS.

NOTE: INSTALLATION DETAIL SECTIONS SHOW
VERTICAL MULLION CONDITION. HORIZONTAL
MULLIONS QUALIFIED FOR USE, RESULTING
HORIZONTAL SECTIONS WOULD BE TYPICAL FOR
VERTICAL SECTIONS.



EURO-WALL SYSTEMS, LLC
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TITLE: ALUMINUM TUBE MULLION
MULLIONS & CLIPS

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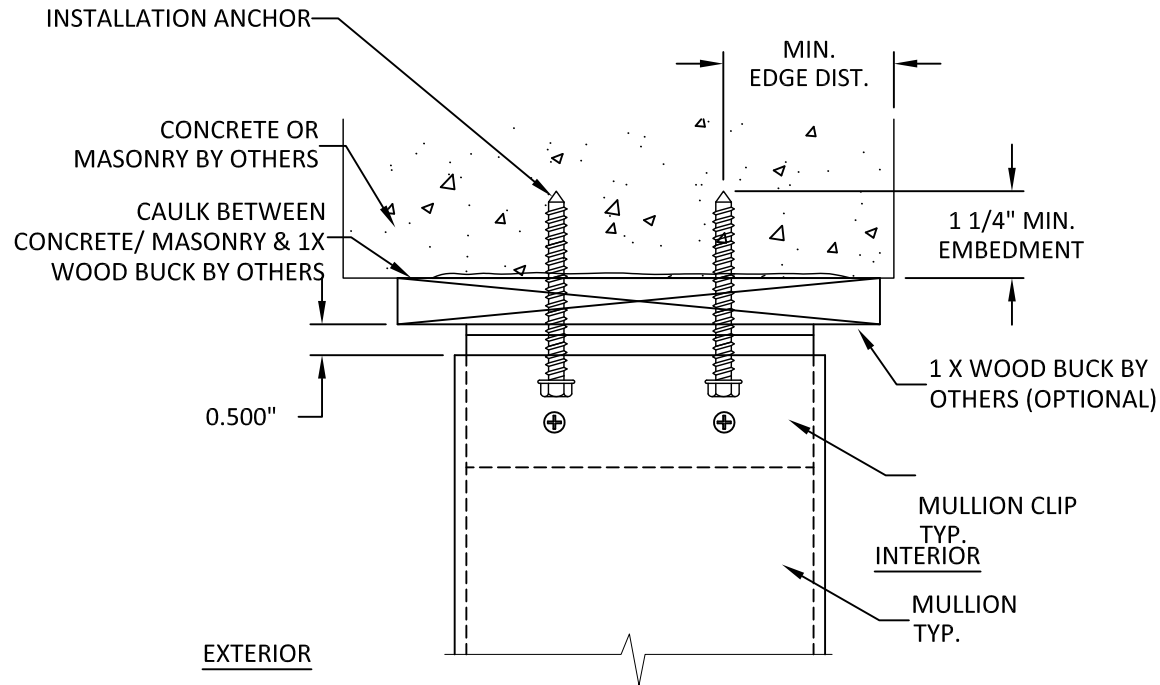


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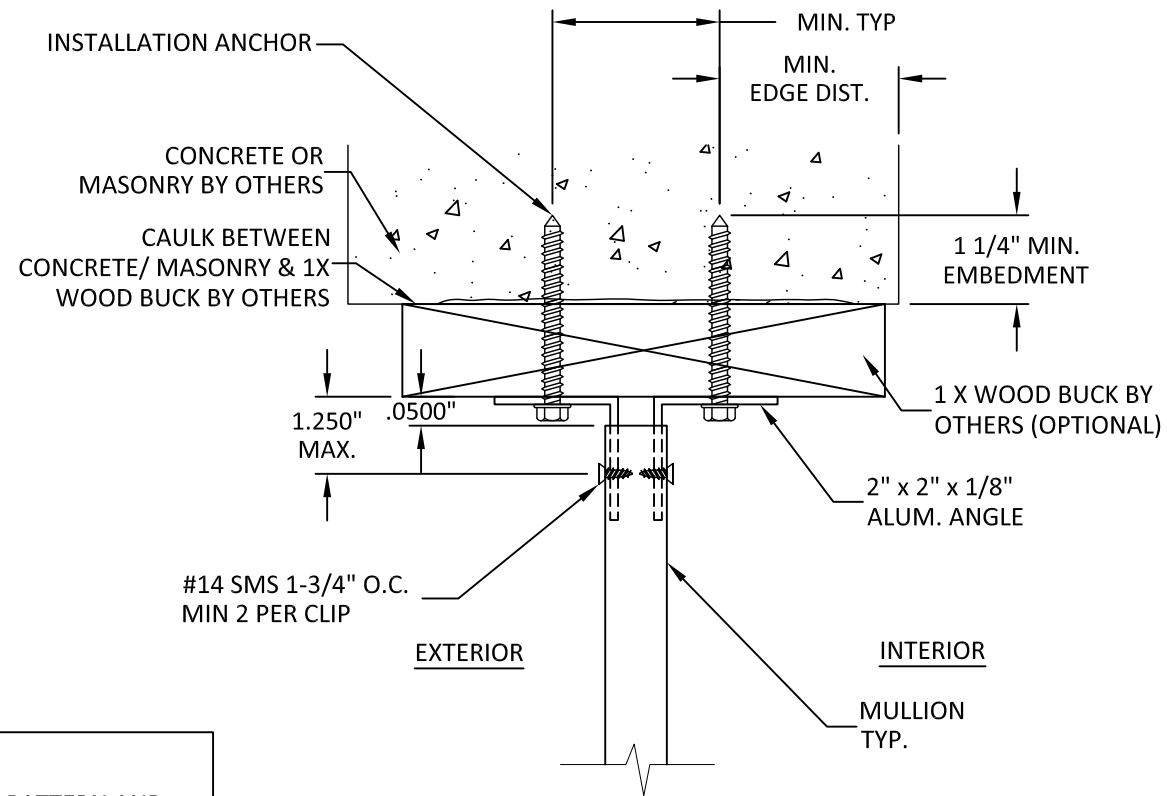
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CHK. BY:	HFN
SCALE:	NTS
DWG. #:	EWS007
SHEET:	3

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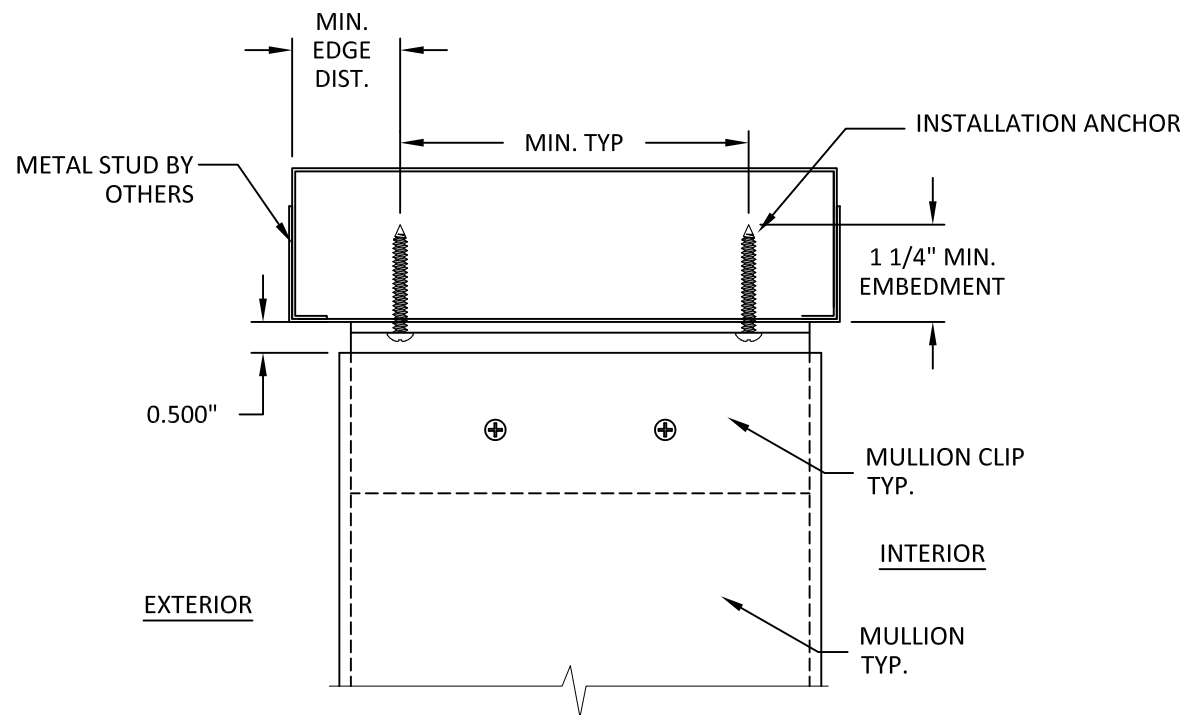


A
3 VERTICAL SECTION
HEAD - CONCRETE/MASONRY
SIDE VIEW-VERTICAL

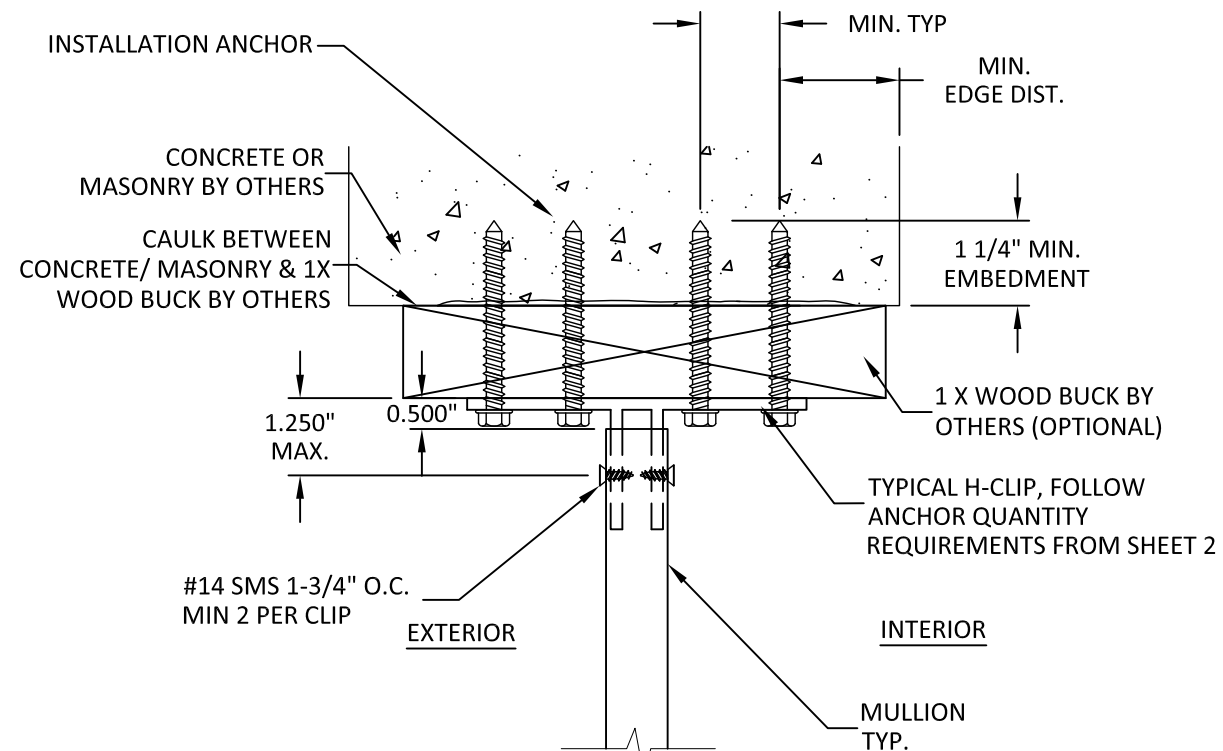


C
3 VERTICAL SECTION
HEAD - CONCRETE/MASONRY
FRONT VIEW-VERTICAL

NOTE:
SEE SHEET 2 FOR ANCHOR PATTERN AND SPACING



B
3 VERTICAL SECTION
HEAD - CONCRETE/MASONRY
SIDE VIEW-VERTICAL



D
3 VERTICAL SECTION
HEAD - CONCRETE/MASONRY
FRONT VIEW-VERTICAL

euro-wall
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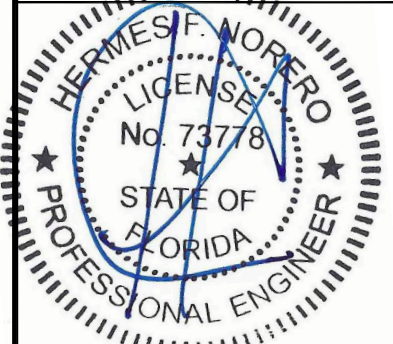
EURO-WALL SYSTEMS, LLC
24100 TISEO BOULEVARD
PORT CHARLOTTE, FL 33980
PH: 888-989-3876

TITLE:
ALUMINUM TUBE MULLION
VERTICAL &
HORIZONTAL SECTIONS

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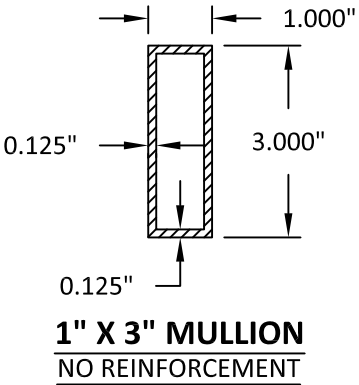
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DATE:	03.28.17
DWG. BY:	AR/EG
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	EWS007
SHEET:	4

DESIGN PRESSURE LIMITS (PSF) FOR MULLION: 1" x 3" - ONE-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	148.4	137.7	133.0	132.7	132.7	132.7	132.7
58.0	138.9	115.7	101.3	92.3	87.0	84.3	83.7	83.7	83.7
63.0	107.2	88.7	77.1	69.5	64.7	61.7	60.4	60.2	60.2
72.0	70.8	58.2	50.0	44.5	40.8	38.2	36.5	35.6	35.3
84.0	44.1	35.9	30.6	27.0	24.4	22.5	21.1	20.2	19.5
96.0	29.3	23.8	20.2	17.7	15.8	-	-	-	-
108.0	20.5	16.6	-	-	-	-	-	-	-
120.0	-	-	-	-	-	-	-	-	-
132.0	-	-	-	-	-	-	-	-	-
144.0	-	-	-	-	-	-	-	-	-

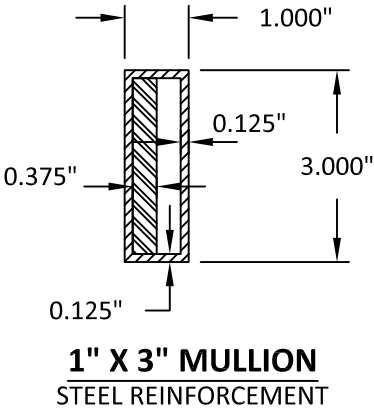
DESIGN PRESSURE LIMITS (PSF) FOR MULLION WITH STEEL REINFORCEMENT: 1" x 3" - ONE-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
58.0	150.0	150.0	150.0	136.0	127.3	122.9	122.0	122.0	122.0
63.0	150.0	144.1	124.5	111.7	103.2	98.0	95.5	95.2	95.2
72.0	132.4	108.3	92.7	82.2	74.8	69.7	66.4	64.4	63.8
84.0	96.3	78.3	66.5	58.4	52.5	48.3	45.1	42.9	41.4
96.0	72.5	58.9	49.9	43.7	39.1	35.6	33.0	30.9	29.4
108.0	50.6	41.0	34.6	30.2	26.9	24.5	22.6	21.1	19.9
120.0	36.8	29.7	25.0	21.7	19.3	17.5	16.0	-	-
132.0	27.5	22.2	18.7	16.2	-	-	-	-	-
144.0	21.2	17.0	-	-	-	-	-	-	-

DESIGN PRESSURE LIMITS (PSF) FOR MULLION: 1" x 3" - TWO-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	140.4	126.3	114.8	105.3
50.0	150.0	147.4	122.9	105.3	92.1	81.9	73.7	67.0	61.4
58.0	129.5	103.6	86.3	74.0	64.8	57.6	51.8	47.1	43.2
63.0	101.1	80.8	67.4	57.7	50.5	44.9	40.4	36.7	33.7
72.0	67.7	54.2	45.1	38.7	33.9	30.1	27.1	24.6	22.6
84.0	42.6	34.1	28.4	24.4	21.3	18.9	17.1	15.5	-
96.0	28.6	22.9	19.0	16.3	-	-	-	-	-
108.0	20.1	16.0	-	-	-	-	-	-	-
120.0	-	-	-	-	-	-	-	-	-
132.0	-	-	-	-	-	-	-	-	-
144.0	-	-	-	-	-	-	-	-	-

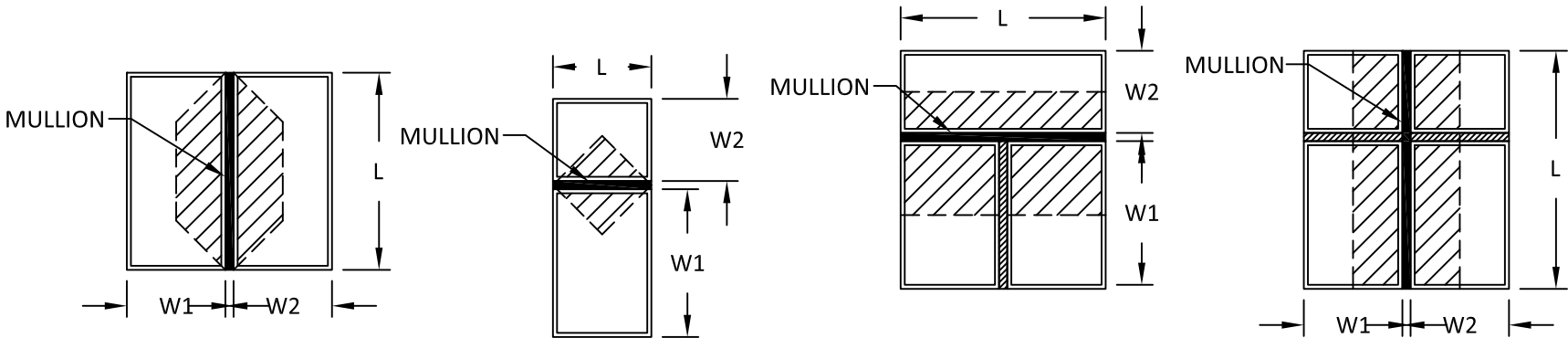
DESIGN PRESSURE LIMITS (PSF) FOR MULLION WITH STEEL REINFORCEMENT: 1" x 3" - TWO-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	132.2	117.5	105.8	96.2	88.1
58.0	150.0	150.0	131.0	112.3	98.3	87.3	78.6	71.5	65.5
63.0	150.0	133.3	111.0	95.2	83.3	74.0	66.6	60.6	55.5
72.0	127.5	102.0	85.0	72.9	63.8	56.7	51.0	46.4	42.5
84.0	93.7	75.0	62.5	53.5	46.8	41.6	37.5	34.1	31.2
96.0	70.7	56.6	47.1	40.4	35.4	31.4	28.3	25.7	23.6
108.0	49.7	39.7	33.1	28.4	24.8	22.1	19.9	18.1	16.6
120.0	36.2	29.0	24.1	20.7	18.1	16.1	-	-	-
132.0	27.2	21.8	18.1	15.5	-	-	-	-	-
144.0	20.9	16.8	-	-	-	-	-	-	-



1" X 3" MULLION
NO REINFORCEMENT



1" X 3" MULLION
STEEL REINFORCEMENT



ONE-WAY MULLION DIAGRAMS

TWO-WAY MULLION DIAGRAMS

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

TABLE NOTES:

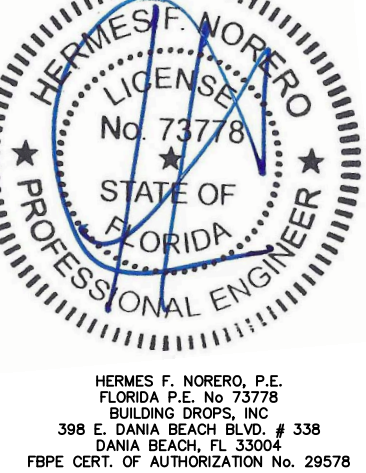
- SEE SHEET 1 FOR INSTRUCTIONS ON USING TABLES. SEE SHEETS 3 AND 4 FOR TYPICAL INSTALLATION METHODS & CLIP DETAILS.
- LINEAR INTERPOLATION BETWEEN LISTED WIDTHS AND SPANS IS ALLOWED.
- SEE THIS SHEET FOR SPECIFIC MULLION DIMENSIONS.
- SEE SHEET 2 FOR SPECIFIC CLIP DIMENSIONS.
- ANCHOR REQUIREMENTS:
 - WOOD: #14 WOOD SCREWS
 - CMU: 1/4" ITW TAPCONS
 - CONCRETE: 1/4" ITW TAPCONS
 - METAL: 1/4" SELF-DRILLING SCREWS (GRADE 5)
- INSTALLATION SUBSTRATES:
 - WOOD ANCHORS SHALL HAVE A MIN. EMBEDMENT OF 1-1/2" & EDGE DISTANCE OF 1". WOOD SHALL BE MIN. S.G.=0.55.
 - HOLLOW CMU ANCHORS SHALL HAVE A MIN. EMBEDMENT OF 1-1/4" & EDGE DISTANCE OF 2-1/2". HOLLOW CMU SHALL BE MEDIUM WEIGHT CONFORMING TO ASTM C 90.
 - CONCRETE ANCHORS SHALL HAVE A MIN. EMBEDMENT OF 1-1/4" & EDGE DISTANCE OF 2-1/2". CONCRETE SHALL BE MIN. 4000 PSI.
 - METAL ANCHORS SHALL HAVE A MIN. (3) THREADS PENETRATION BEYOND METAL STRUCTURE. STEEL SHALL BE MIN. 18 GA. (0.045" THICK) 33 KSI YIELD. ALUMINUM SHALL BE MIN. 1/8" THICK ALUMINUM 6063-T5.

TITLE: ALUMINUM TUBE MULLION
MULLION TABLES

PREPARED BY: BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE

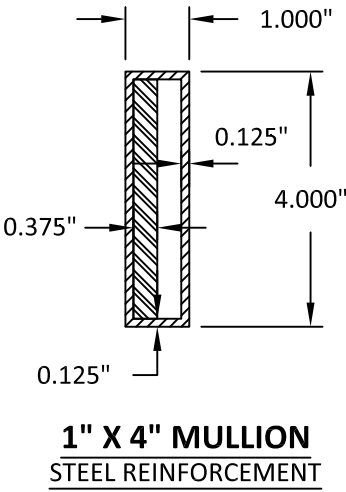
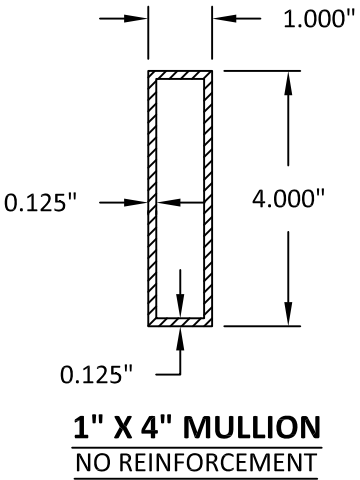
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FL #:	FL26891
DATE:	03.28.17
DWG. BY:	AR/EG
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	EWS007
SHEET:	5

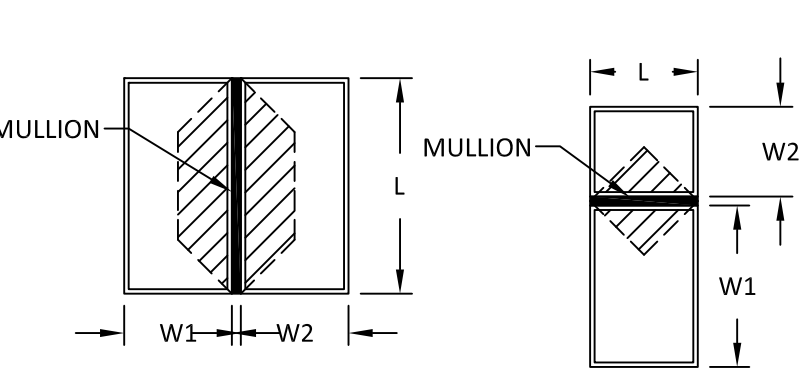
DESIGN PRESSURE LIMITS (PSF) FOR MULLION: 1" x 4" - ONE-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
58.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
63.0	150.0	150.0	150.0	149.1	138.6	132.4	129.4	129.0	129.0
72.0	150.0	124.7	107.2	95.5	87.4	81.9	78.3	76.3	75.6
84.0	94.5	77.0	65.7	57.9	52.3	48.2	45.3	43.3	41.9
96.0	62.8	51.0	43.2	37.8	33.9	31.0	28.8	27.1	25.9
108.0	43.9	35.5	30.0	26.1	23.3	21.2	19.5	18.3	17.3
120.0	31.8	25.7	21.7	18.8	16.7	15.1	-	-	-
132.0	23.9	19.2	16.2	-	-	-	-	-	-
144.0	18.3	-	-	-	-	-	-	-	-

DESIGN PRESSURE LIMITS (PSF) FOR MULLION: 1" x 4" - TWO-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	140.4	126.3	114.8	105.3
50.0	150.0	150.0	150.0	137.1	120.0	106.7	96.0	87.3	80.0
58.0	150.0	150.0	137.9	118.2	103.4	92.0	82.8	75.2	69.0
63.0	150.0	150.0	127.0	108.8	95.2	84.7	76.2	69.3	63.5
72.0	145.1	116.1	96.8	82.9	72.6	64.5	58.1	52.8	48.4
84.0	91.4	73.1	60.9	52.2	45.7	40.6	36.6	33.2	30.5
96.0	61.2	49.0	40.8	35.0	30.6	27.2	24.5	22.3	20.4
108.0	43.0	34.4	28.7	24.6	21.5	19.1	17.2	15.6	-
120.0	31.4	25.1	20.9	17.9	15.7	-	-	-	-
132.0	23.6	18.8	15.7	-	-	-	-	-	-
144.0	18.1	-	-	-	-	-	-	-	-



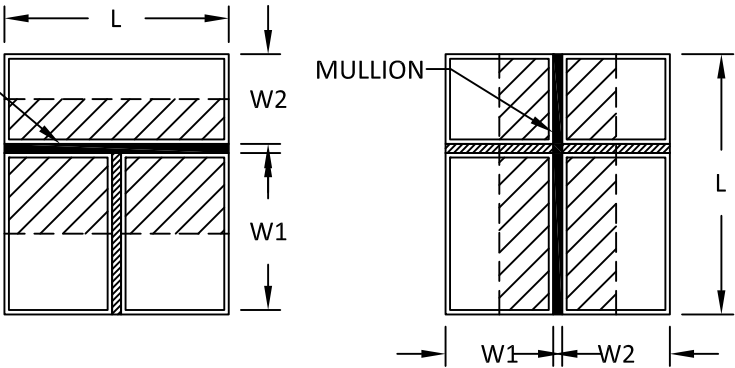
DESIGN PRESSURE LIMITS (PSF) FOR MULLION WITH STEEL REINFORCEMENT: 1" x 4" - ONE-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
58.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
63.0	150.0	150.0	150.0	150.0	150.0	148.1	145.5	145.1	145.1
72.0	150.0	150.0	148.1	134.5	125.0	118.5	114.3	111.9	111.1
84.0	150.0	139.1	121.2	108.8	100.0	93.6	88.9	85.6	83.3
96.0	142.9	118.5	102.6	91.4	83.3	77.3	72.7	69.3	66.7
108.0	125.0	102.5	86.6	75.5	67.3	61.2	56.4	52.7	49.8
120.0	92.0	74.3	62.6	54.4	48.3	43.7	40.1	37.3	35.0
132.0	68.9	55.5	46.7	40.5	35.9	32.4	29.6	27.4	25.6
144.0	52.9	42.6	35.8	31.0	27.4	24.7	22.5	20.8	19.4

DESIGN PRESSURE LIMITS (PSF) FOR MULLION WITH STEEL REINFORCEMENT: 1" x 4" - TWO-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	140.4	126.3	114.8	105.3
50.0	150.0	150.0	150.0	137.1	120.0	106.7	96.0	87.3	80.0
58.0	150.0	150.0	137.9	118.2	103.4	92.0	82.8	75.2	69.0
63.0	150.0	150.0	127.0	108.8	95.2	84.7	76.2	69.3	63.5
72.0	150.0	133.3	111.1	95.2	83.3	74.1	66.7	60.6	55.6
84.0	142.9	114.3	95.2	81.6	71.4	63.5	57.1	51.9	47.6
96.0	125.0	100.0	83.3	71.4	62.5	55.6	50.0	45.5	41.7
108.0	111.1	88.9	74.1	63.5	55.6	49.4	44.4	40.4	37.0
120.0	90.5	72.4	60.4	51.7	45.3	40.2	36.2	32.9	30.2
132.0	68.0	54.4	45.4	38.9	34.0	30.2	27.2	24.7	22.7
144.0	52.4	41.9	34.9	29.9	26.2	23.3	21.0	19.1	17.5



ONE-WAY MULLION DIAGRAMS

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



TWO-WAY MULLION DIAGRAMS

TABLE NOTES:

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euro-wall®
SUPERIOR BY DESIGN

EURO-WALL SYSTEMS, LLC
24100 TISEO BOULEVARD
PORT CHARLOTTE, FL 33980
PH: 888-989-3876

TITLE: ALUMINUM TUBE MULLION
MULLION TABLES

PREPARED BY: BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954)399-8478
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HERMES F. NORERO
LICENSED PROFESSIONAL ENGINEER
No. 73778
STATE OF FLORIDA

HERMES F. NORERO, P.E.
FLORIDA P.E. No. 73778
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. # 338
DANIA BEACH, FL 33004
FBPE CERT. OF AUTHORIZATION No. 29578

FL #: FL26891

DATE: 03.28.17

DWG. BY: AR/EG
CHK. BY: HFN

SCALE: NTS

DWG. #: EWS007

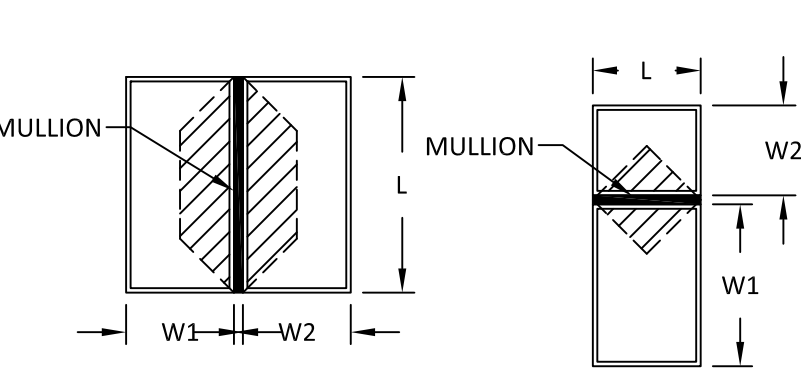
SHEET: 6

DESIGN PRESSURE LIMITS (PSF) FOR MULLION: 1" x 6" - ONE-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
58.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
63.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
72.0	150.0	150.0	150.0	150.0	150.0	150.0	148.9	144.5	143.1
84.0	150.0	150.0	149.2	131.0	117.9	108.3	101.3	96.2	92.8
96.0	150.0	133.1	112.6	98.2	87.8	79.9	74.0	69.4	66.0
108.0	129.3	104.4	88.0	76.5	68.0	61.6	56.7	52.8	49.7
120.0	94.7	76.5	64.5	56.0	49.8	45.0	41.3	38.4	36.1
132.0	70.9	57.2	48.1	41.7	37.0	33.3	30.5	28.2	26.4
144.0	54.5	43.9	36.9	31.9	28.2	25.4	23.2	21.4	19.9

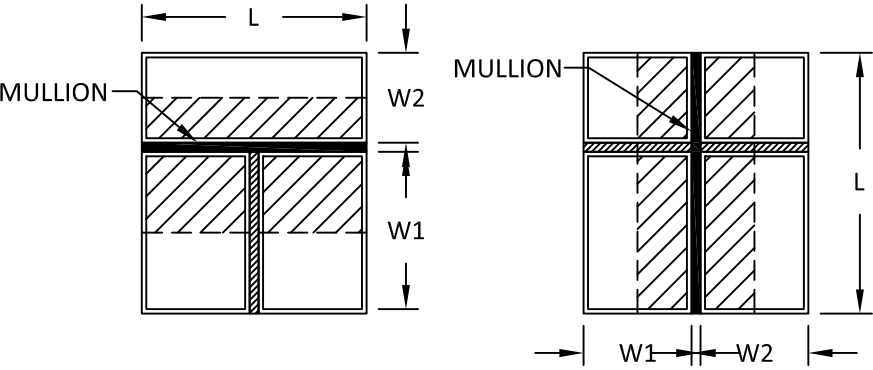
DESIGN PRESSURE LIMITS (PSF) FOR MULLION: 1" x 6" - TWO-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	150.0	150.0	144.0	130.9	120.0
58.0	150.0	150.0	150.0	150.0	150.0	137.9	124.1	112.9	103.4
63.0	150.0	150.0	150.0	150.0	142.9	127.0	114.3	103.9	95.2
72.0	150.0	150.0	150.0	142.9	125.0	111.1	100.0	90.9	83.3
84.0	150.0	150.0	140.1	120.1	105.1	93.4	84.1	76.4	70.1
96.0	150.0	128.7	107.3	92.0	80.5	71.5	64.4	58.5	53.6
108.0	127.2	101.7	84.8	72.7	63.6	56.5	50.9	46.2	42.4
120.0	94.2	75.3	62.8	53.8	47.1	41.8	37.7	34.2	31.4
132.0	70.7	56.6	47.2	40.4	35.4	31.4	28.3	25.7	23.6
144.0	54.5	43.6	36.3	31.1	27.2	24.2	21.8	19.8	18.2

DESIGN PRESSURE LIMITS (PSF) FOR MULLION WITH STEEL REINFORCEMENT: 1" x 6" - ONE-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
58.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
63.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
72.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
84.0	150.0	150.0	150.0	150.0	150.0	140.4	133.3	128.3	125.0
96.0	150.0	150.0	150.0	137.1	125.0	115.9	109.1	103.9	100.0
108.0	150.0	150.0	133.3	118.2	107.1	98.8	92.3	87.3	83.3
120.0	150.0	137.1	117.6	103.9	93.8	86.0	80.0	75.2	70.7
132.0	150.0	123.1	105.3	91.2	80.7	72.6	66.2	61.2	57.0
144.0	130.9	105.2	88.3	76.2	67.3	60.4	55.0	50.7	47.1

DESIGN PRESSURE LIMITS (PSF) FOR MULLION WITH STEEL REINFORCEMENT: 1" x 6" - TWO-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	150.0	150.0	144.0	130.9	120.0
58.0	150.0	150.0	150.0	150.0	150.0	137.9	124.1	112.9	103.4
63.0	150.0	150.0	150.0	150.0	142.9	127.0	114.3	103.9	95.2
72.0	150.0	150.0	150.0	142.9	125.0	111.1	100.0	90.9	83.3
84.0	150.0	150.0	142.9	122.4	107.1	95.2	85.7	77.9	71.4
96.0	150.0	150.0	125.0	107.1	93.8	83.3	75.0	68.2	62.5
108.0	150.0	133.3	111.1	95.2	83.3	74.1	66.7	60.6	55.6
120.0	150.0	120.0	100.0	85.7	75.0	66.7	60.0	54.5	50.0
132.0	136.4	109.1	90.9	77.9	68.2	60.6	54.5	49.6	45.5
144.0	125.0	100.0	83.3	71.4	62.5	55.6	50.0	45.5	41.7

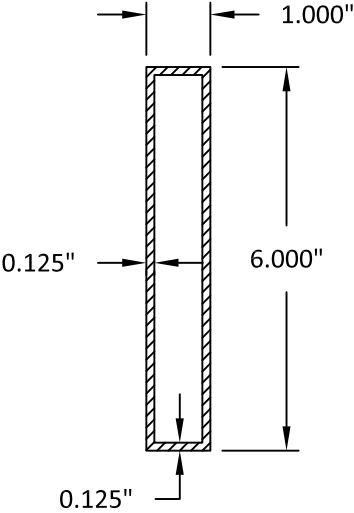


ONE-WAY MULLION DIAGRAMS

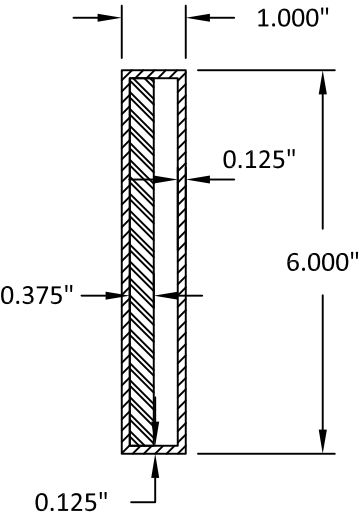


TWO-WAY MULLION DIAGRAMS

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



1" X 6" MULLION
NO REINFORCEMENT



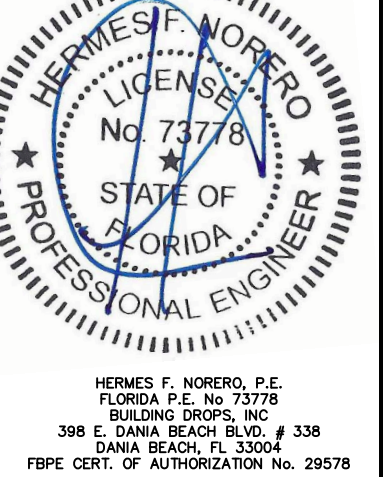
1" X 6" MULLION
STEEL REINFORCEMENT

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 - CONCRETE: 1/4" ITW TAPCONS
 - METAL: 1/4" SELF-DRILLING SCREWS (GRADE 5)
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 - CONCRETE ANCHORS SHALL HAVE A MIN. EMBEDMENT OF 1-1/4" & EDGE DISTANCE OF 2-1/2". CONCRETE SHALL BE MIN. 4000 PSI.
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TITLE: ALUMINUM TUBE MULLION MULLION TABLES	PREPARED BY: BUILDING DROPS, INC. 398 E. DANIA BEACH BLVD., STE. 338 DANIA BEACH, FL 33004 PH: (954)399-8478 FAX: (954)744-4738 WEB: www.buildingdrops.com	
	REMARKS	BY DATE

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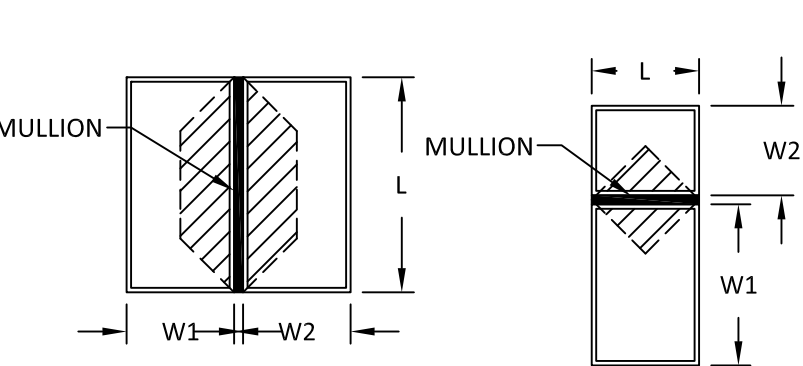
FL #:	FL26891
DATE:	03.28.17
DWG. BY:	CHK. BY:
AR/EG	HFN
SCALE:	NTS
DWG. #:	EWS007
SHEET:	7

DESIGN PRESSURE LIMITS (PSF) FOR MULLION: 2" x 6" - ONE-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
58.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
63.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
72.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
84.0	150.0	150.0	150.0	150.0	150.0	140.4	133.3	128.3	125.0
96.0	150.0	150.0	150.0	137.1	125.0	115.9	109.1	103.9	100.0
108.0	150.0	144.2	121.9	106.2	94.7	86.0	79.4	74.2	70.1
120.0	129.4	104.5	88.1	76.5	68.0	61.5	56.5	52.5	49.3
132.0	96.9	78.1	65.7	57.0	50.5	45.5	41.7	38.6	36.1
144.0	74.5	60.0	50.4	43.6	38.6	34.7	31.7	29.2	27.2

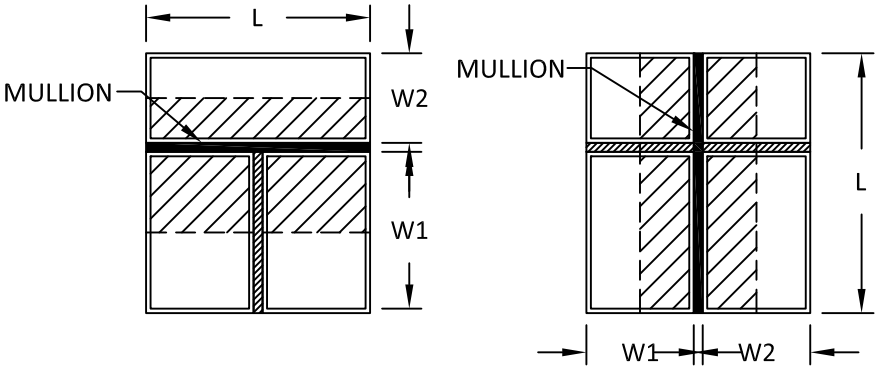
DESIGN PRESSURE LIMITS (PSF) FOR MULLION: 2" x 6" - TWO-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	150.0	150.0	144.0	130.9	120.0
58.0	150.0	150.0	150.0	150.0	150.0	137.9	124.1	112.9	103.4
63.0	150.0	150.0	150.0	150.0	142.9	127.0	114.3	103.9	95.2
72.0	150.0	150.0	150.0	142.9	125.0	111.1	100.0	90.9	83.3
84.0	150.0	150.0	142.9	122.4	107.1	95.2	85.7	77.9	71.4
96.0	150.0	150.0	125.0	107.1	93.8	83.3	75.0	68.2	62.5
108.0	150.0	133.3	111.1	95.2	83.3	74.1	66.7	60.6	55.6
120.0	127.4	101.9	84.9	72.8	63.7	56.6	50.9	46.3	42.5
132.0	95.7	76.6	63.8	54.7	47.8	42.5	38.3	34.8	31.9
144.0	73.7	59.0	49.1	42.1	36.9	32.8	29.5	26.8	24.6

DESIGN PRESSURE LIMITS (PSF) FOR MULLION WITH STEEL REINFORCEMENT: 2" x 6" - ONE-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
58.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
63.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
72.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
84.0	150.0	150.0	150.0	150.0	150.0	140.4	133.3	128.3	125.0
96.0	150.0	150.0	150.0	137.1	125.0	115.9	109.1	103.9	100.0
108.0	150.0	150.0	133.3	118.2	107.1	98.8	92.3	87.3	83.3
120.0	150.0	137.1	117.6	103.9	93.8	86.0	80.0	75.2	71.4
132.0	150.0	123.1	105.3	92.7	83.3	76.2	70.6	66.1	62.5
144.0	136.4	111.6	95.2	83.6	75.0	68.4	63.2	59.0	55.6

DESIGN PRESSURE LIMITS (PSF) FOR MULLION WITH STEEL REINFORCEMENT: 2" x 6" - TWO-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	150.0	150.0	144.0	130.9	120.0
58.0	150.0	150.0	150.0	150.0	150.0	137.9	124.1	112.9	103.4
63.0	150.0	150.0	150.0	150.0	142.9	127.0	114.3	103.9	95.2
72.0	150.0	150.0	150.0	142.9	125.0	111.1	100.0	90.9	83.3
84.0	150.0	150.0	142.9	122.4	107.1	95.2	85.7	77.9	71.4
96.0	150.0	150.0	125.0	107.1	93.8	83.3	75.0	68.2	62.5
108.0	150.0	133.3	111.1	95.2	83.3	74.1	66.7	60.6	55.6
120.0	150.0	120.0	100.0	85.7	75.0	66.7	60.0	54.5	50.0
132.0	136.4	109.1	90.9	77.9	68.2	60.6	54.5	49.6	45.5
144.0	125.0	100.0	83.3	71.4	62.5	55.6	50.0	45.5	41.7

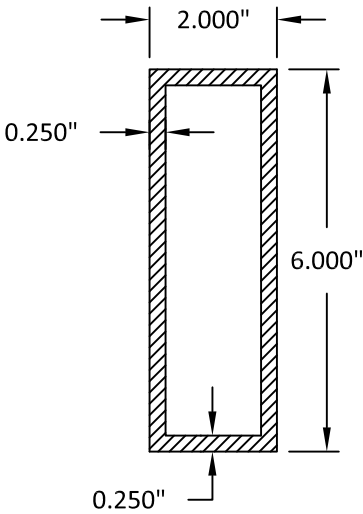


ONE-WAY MULLION DIAGRAMS

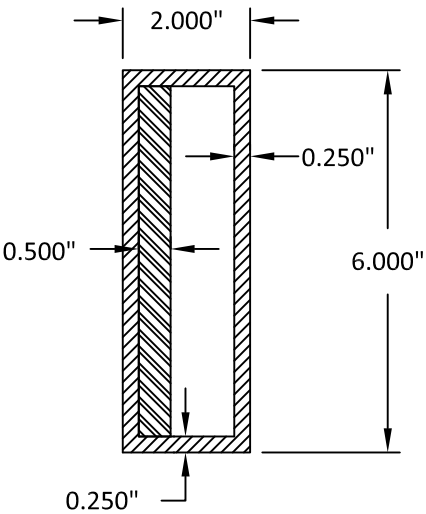


TWO-WAY MULLION DIAGRAMS

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



2 X 6" MULLION
NO REINFORCEMENT



2" X 6" MULLION
STEEL REINFORCEMENT

TABLE NOTES:

- SEE SHEET 1 FOR INSTRUCTIONS ON USING TABLES. SEE SHEETS 3 AND 4 FOR TYPICAL INSTALLATION METHODS & CLIP DETAILS.
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- SEE THIS SHEET FOR SPECIFIC MULLION DIMENSIONS.
- SEE SHEET 2 FOR SPECIFIC CLIP DIMENSIONS.
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 - WOOD: #14 WOOD SCREWS
 - CMU: 1/4" ITW TAPCONS
 - CONCRETE: 1/4" ITW TAPCONS
 - METAL: 1/4" SELF-DRILLING SCREWS (GRADE 5)
- INSTALLATION SUBSTRATES:
 - WOOD ANCHORS SHALL HAVE A MIN. EMBEDMENT OF 1-1/2" & EDGE DISTANCE OF 1". WOOD SHALL BE MIN. S.G.=0.55.
 - HOLLOW CMU ANCHORS SHALL HAVE A MIN. EMBEDMENT OF 1-1/4" & EDGE DISTANCE OF 2-1/2". HOLLOW CMU SHALL BE MEDIUM WEIGHT CONFORMING TO ASTM C 90.
 - CONCRETE ANCHORS SHALL HAVE A MIN. EMBEDMENT OF 1-1/4" & EDGE DISTANCE OF 2-1/2". CONCRETE SHALL BE MIN. 4000 PSI.
 - METAL ANCHORS SHALL HAVE A MIN. (3) THREADS PENETRATION BEYOND METAL STRUCTURE. STEEL SHALL BE MIN. 18 GA. (0.045" THICK) 33 KSI YIELD. ALUMINUM SHALL BE MIN. 1/8" THICK ALUMINUM 6063-T5.

TITLE: ALUMINUM TUBE MULLION
MULLION TABLES

PREPARED BY: BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
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FAX: (954)744-4738
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HERMES F. NORERO
LICENSED PROFESSIONAL ENGINEER
No. 73778
STATE OF FLORIDA

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FLORIDA P.E. No. 73778
BUILDING DROPS, INC.
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DANIA BEACH, FL 33004
FBPE CERT. OF AUTHORIZATION No. 29578

FL #: FL26891

DATE: 03.28.17

DWG. BY: AR/EG
CHK. BY: HFN

SCALE: NTS

DWG. #: EWS007

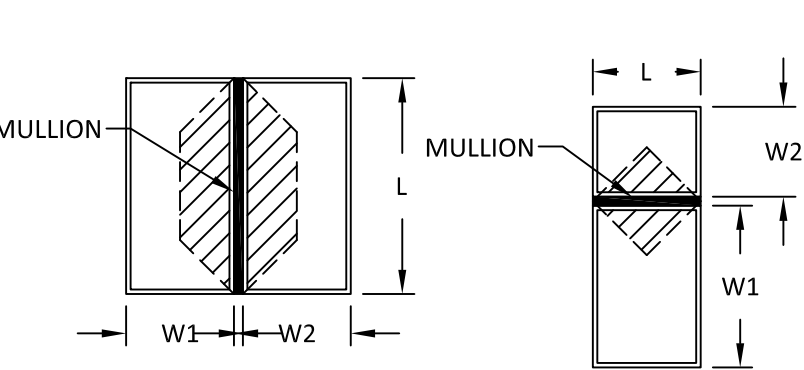
SHEET: 8

DESIGN PRESSURE LIMITS (PSF) FOR MULLION: 2" x 8" - ONE-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
58.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
63.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
72.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
84.0	150.0	150.0	150.0	150.0	150.0	140.4	133.3	128.3	125.0
96.0	150.0	150.0	150.0	137.1	125.0	115.9	109.1	103.9	100.0
108.0	150.0	150.0	133.3	118.2	107.1	98.8	92.3	87.3	83.3
120.0	150.0	137.1	117.6	103.9	93.8	86.0	80.0	75.2	71.4
132.0	150.0	123.1	105.3	92.7	83.3	76.2	70.6	66.1	62.5
144.0	136.4	111.6	95.2	83.6	75.0	68.4	63.2	59.0	55.6

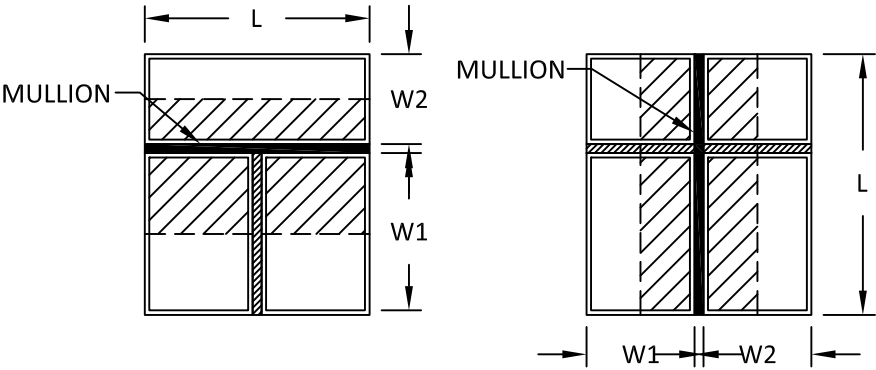
DESIGN PRESSURE LIMITS (PSF) FOR MULLION: 2" x 8" - TWO-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	150.0	150.0	144.0	130.9	120.0
58.0	150.0	150.0	150.0	150.0	150.0	137.9	124.1	112.9	103.4
63.0	150.0	150.0	150.0	150.0	142.9	127.0	114.3	103.9	95.2
72.0	150.0	150.0	150.0	142.9	125.0	111.1	100.0	90.9	83.3
84.0	150.0	150.0	142.9	122.4	107.1	95.2	85.7	77.9	71.4
96.0	150.0	150.0	125.0	107.1	93.8	83.3	75.0	68.2	62.5
108.0	150.0	133.3	111.1	95.2	83.3	74.1	66.7	60.6	55.6
120.0	150.0	120.0	100.0	85.7	75.0	66.7	60.0	54.5	50.0
132.0	136.4	109.1	90.9	77.9	68.2	60.6	54.5	49.6	45.5
144.0	125.0	100.0	83.3	71.4	62.5	55.6	50.0	45.5	41.7

DESIGN PRESSURE LIMITS (PSF) FOR MULLION WITH STEEL REINFORCEMENT: 2" x 8" - ONE-WAY MULLIONS									
L - Mull Length (in)	W - Tributary Width (in)								
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
38.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
58.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
63.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
72.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
84.0	150.0	150.0	150.0	150.0	150.0	140.4	133.3	128.3	125.0
96.0	150.0	150.0	150.0	137.1	125.0	115.9	109.1	103.9	100.0
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132.0	150.0	123.1	105.3	92.7	83.3	76.2	70.6	66.1	62.5
144.0	136.4	111.6	95.2	83.6	75.0	68.4	63.2	59.0	55.6

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	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
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50.0	150.0	150.0	150.0	150.0	150.0	150.0	144.0	130.9	120.0
58.0	150.0	150.0	150.0	150.0	150.0	137.9	124.1	112.9	103.4
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72.0	150.0	150.0	150.0	142.9	125.0	111.1	100.0	90.9	83.3
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96.0	150.0	150.0	125.0	107.1	93.8	83.3	75.0	68.2	62.5
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120.0	150.0	120.0	100.0	85.7	75.0	66.7	60.0	54.5	50.0
132.0	136.4	109.1	90.9	77.9	68.2	60.6	54.5	49.6	45.5
144.0	125.0	100.0	83.3	71.4	62.5	55.6	50.0	45.5	41.7



ONE-WAY MULLION DIAGRAMS



TWO-WAY MULLION DIAGRAMS

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

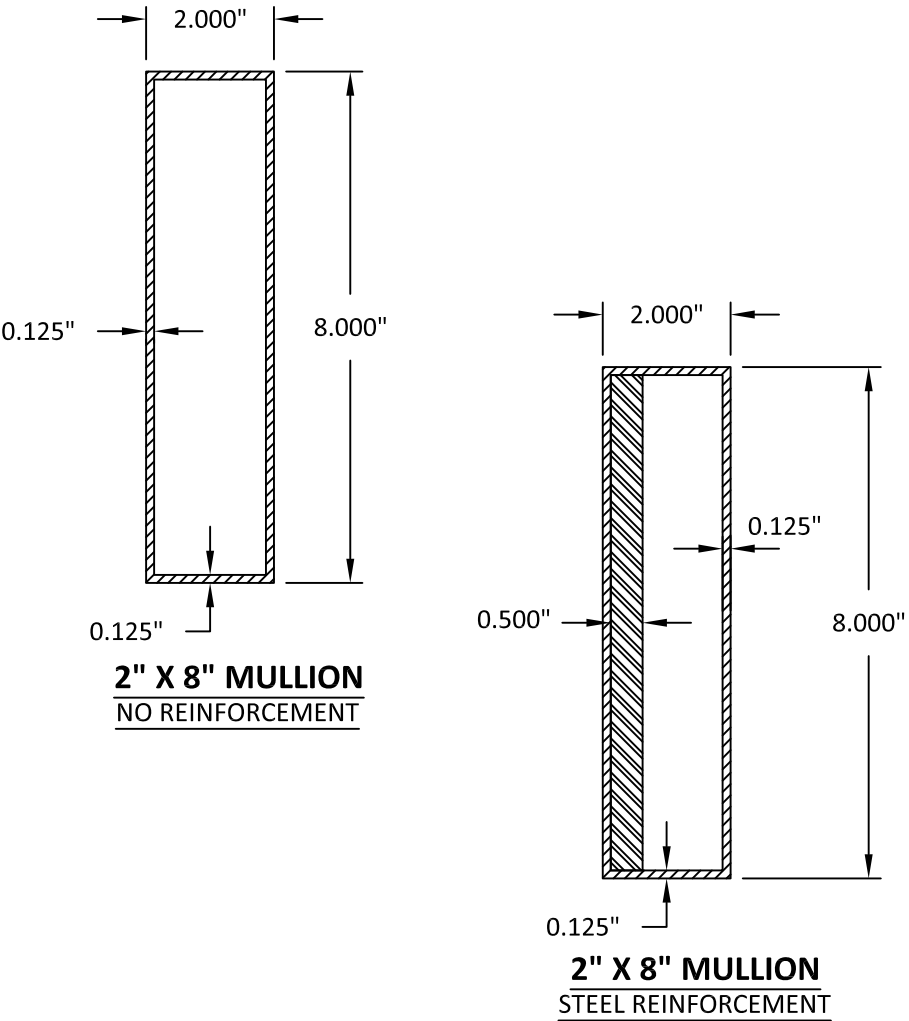


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 - CMU: 1/4" ITW TAPCONS
 - CONCRETE: 1/4" ITW TAPCONS
 - METAL: 1/4" SELF-DRILLING SCREWS (GRADE 5)
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 - WOOD ANCHORS SHALL HAVE A MIN. EMBEDMENT OF 1-1/2" & EDGE DISTANCE OF 1". WOOD SHALL BE MIN. S.G.=0.55.
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euro-wall
SUPERIOR BY DESIGN

EURO-WALL SYSTEMS, LLC
24100 TISEO BOULEVARD
PORT CHARLOTTE, FL 33980
PH: 888-989-3876

TITLE: ALUMINUM TUBE MULLION
MULLION TABLES

PREPARED BY: BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
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FAX: (954)744-4738
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FBPE CERT. OF AUTHORIZATION No. 29578

FL #: FL26891

DATE: 03.28.17

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CHK. BY: HFN

SCALE: NTS

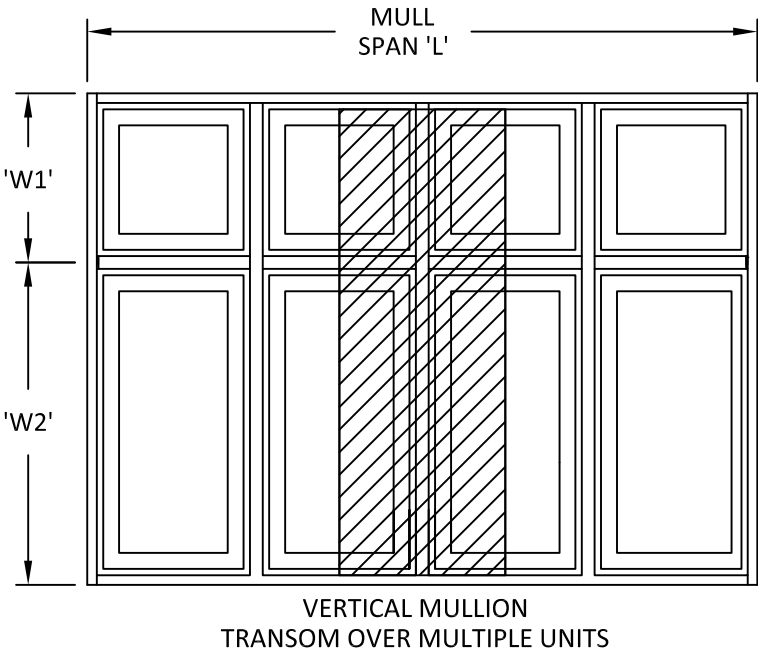
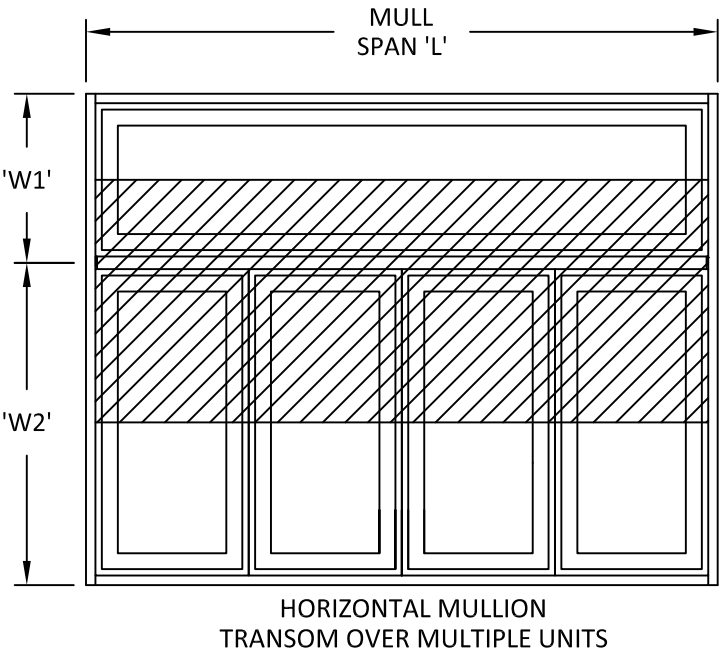
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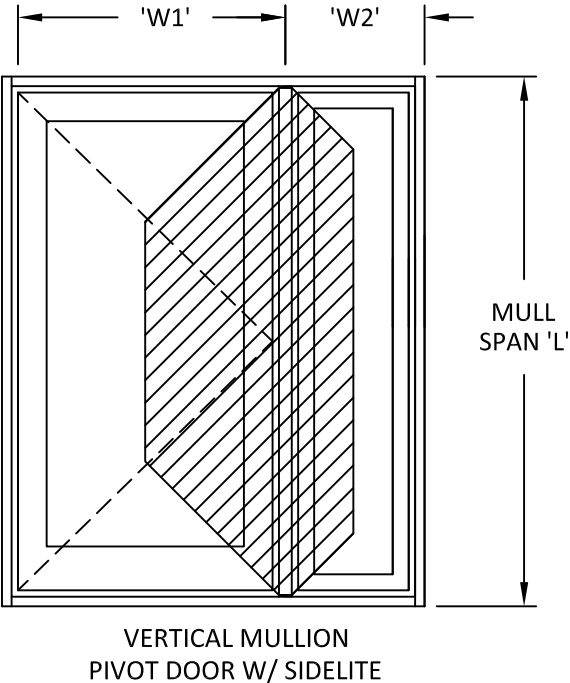
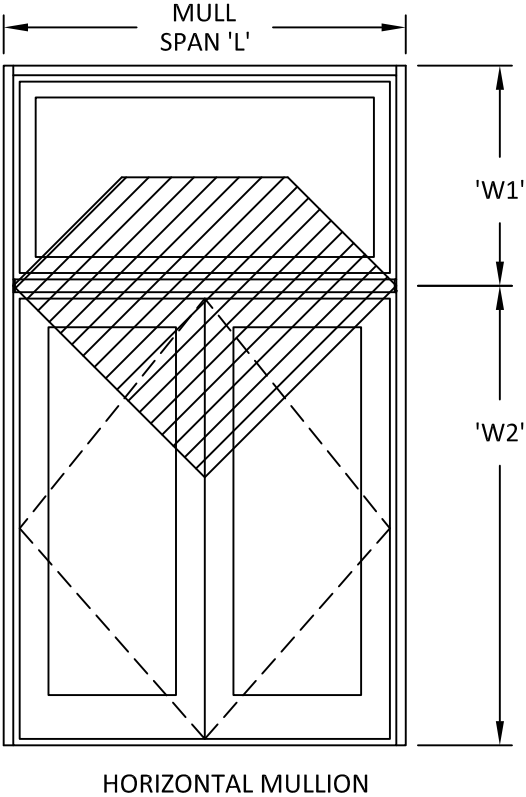
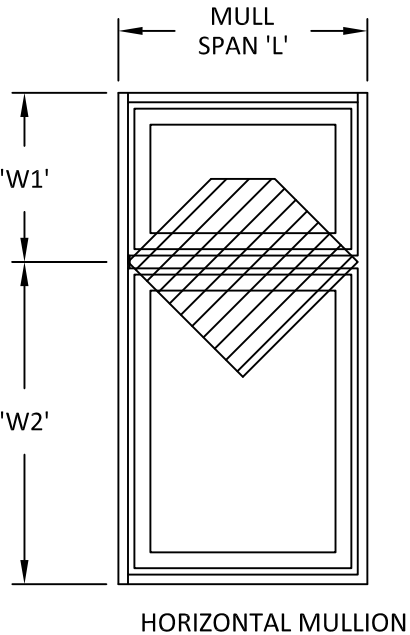
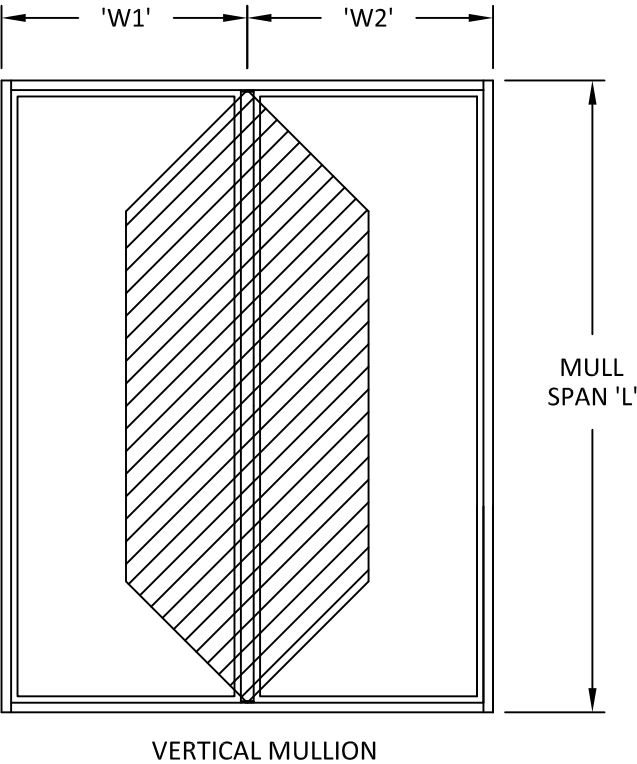
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EXAMPLES OF TWO-WAY MULLION ASSEMBLIES



EXAMPLES OF ONE-WAY MULLION ASSEMBLIES



- NOTES:
1. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND CONFIGURATIONS NOT SPECIFICALLY SHOWN MAY BE EXTRAPOLATED FROM THOSE SHOWN.
 2. IF THE LOADING TYPE CANNOT BE DETERMINED, USE TWO-WAY ASSEMBLY CONFIGURATION VALUES.
 3. FENESTRATION PRODUCTS SHALL BE ANCHORED AS PER SEPARATE APPROVAL.

TITLE: ALUMINUM TUBE MULLION
MULLION ASSEMBLIES

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