

ATRIUM CORPORATION

SERIES 130 1.25" TUBE MULLION (NON IMPACT RATED)



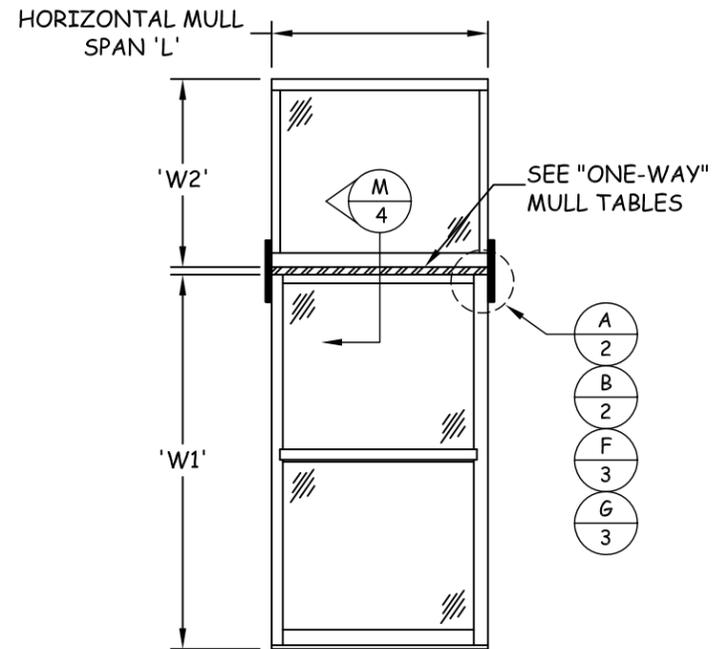
9001 AMBASSADOR ROW
DALLAS, TEXAS 75247
PH: (214) 637-2696 FX: (214) 424-6734

GENERAL NOTES:

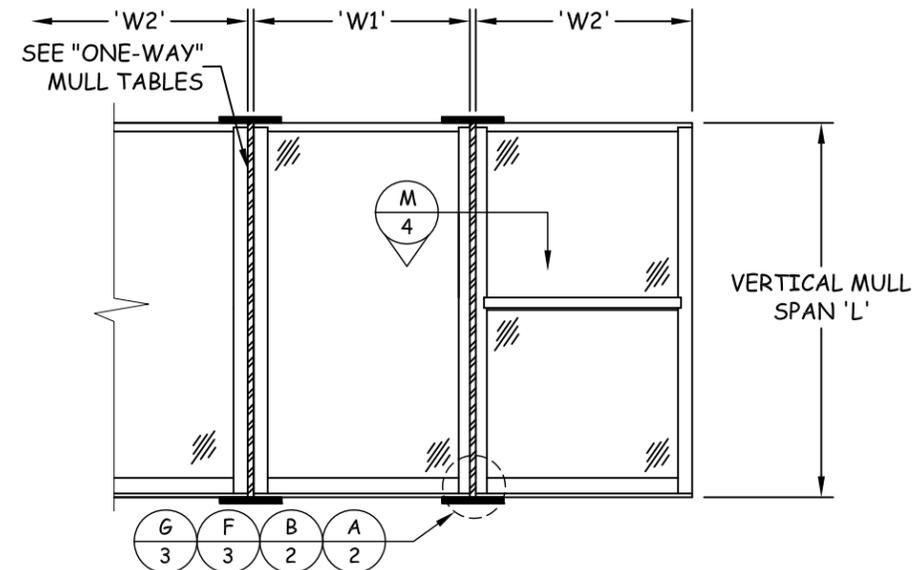
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE (2006) INTERNATIONAL BUILDING CODE (IBC), (2006) INTERNATIONAL RESIDENTIAL CODE (IRC), AND TEXAS REVISIONS.
2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY AND 2X FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE 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.
3. 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.
4. 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.
5. APPROVED IMPACT PROTECTIVE SYSTEM **IS REQUIRED** ON THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
6. MULLION & CLIP MATERIAL: ALUMINUM 6063-T6
7. SEE SHEETS 5-7 FOR INSTALLATION ANCHOR REQUIREMENTS FOR SPECIFIC MULLION CONFIGURATIONS AND DESIGN LOAD CAPACITIES.
8. DISSIMILAR METALS INCLUDING FASTENERS THAT MAY COME INTO CONTACT WITH ALUMINUM UNIT FRAMING SHALL BE PROTECTED AS DEFINED IN THE IBC.
9. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
 - A. WOOD - MINIMUM SPECIFIC GRAVITY OF 0.42.
 - B. CONCRETE -MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
 - C. GROUT-FILLED CMU- UNIT STRENGTH CONFORMS TO ASTM C-90 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AND GROUT CONFORMS TO ASTM C 476, MINIMUM GROUT COMPRESSIVE STRENGTH OF 2000 PSI.
 - D. HOLLOW BLOCK CMU - UNIT STRENGTH CONFORMS TO ASTM C-90 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.
 - E. STEEL - MINIMUM YIELD STRENGTH OF 33 KSI. MINIMUM 18 GA. WALL THICKNESS.

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

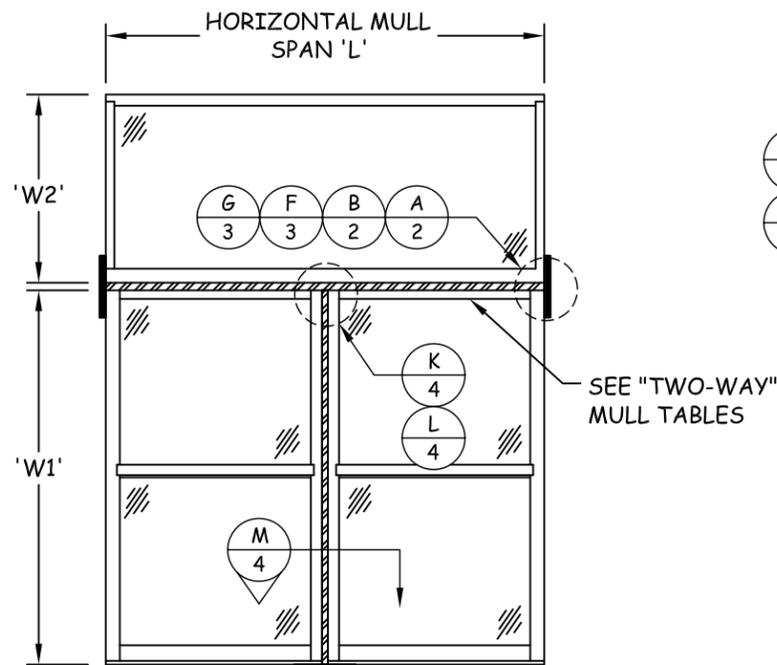
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7	A	TWO-WAY MULL TABLES (TAPCONS ONLY)
8	A	TWO-WAY MULL TABLES (ALL OTHER ANCHORS)
9	A	BOM & COMPONENTS



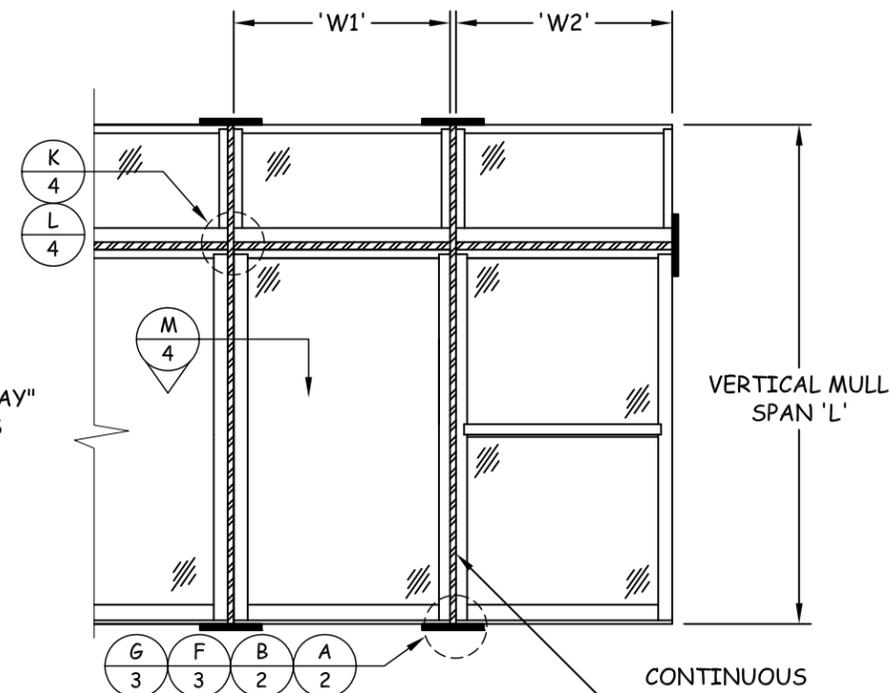
HORIZONTAL SPAN



VERTICAL SPAN



HORIZONTAL "T" MULL SPAN



VERTICAL SPAN

CONTINUOUS VERTICAL MULL
SEE "TWO-WAY"
MULL TABLES

TITLE: 130 1.25" TUBE MULLION
VERTICAL & HORIZONTAL
GENERAL AND
INSTALLATION NOTES

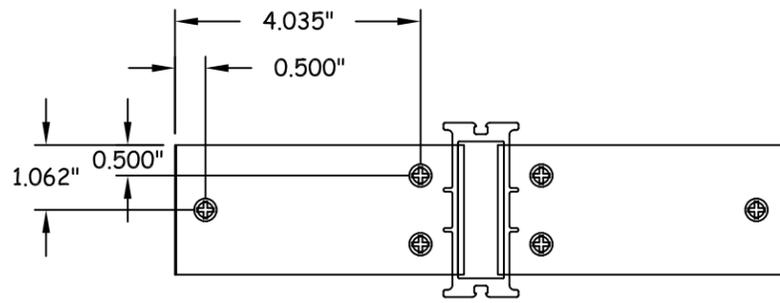
PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478 FX: (954) 744-4738

REVISIONS	DESCRIPTION	NO.	BY	DATE
		A		

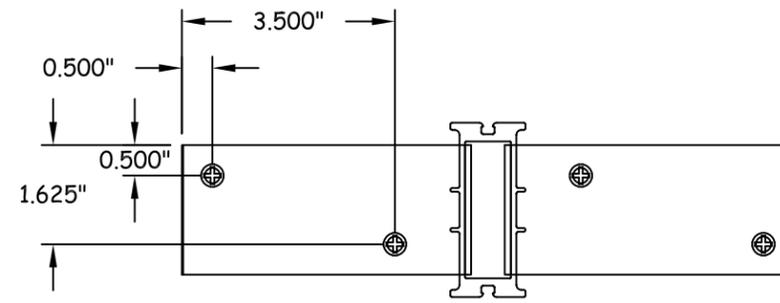


DATE: 01.29.16
DWN BY: LMS
CHK BY: HFN
SCALE: NTS

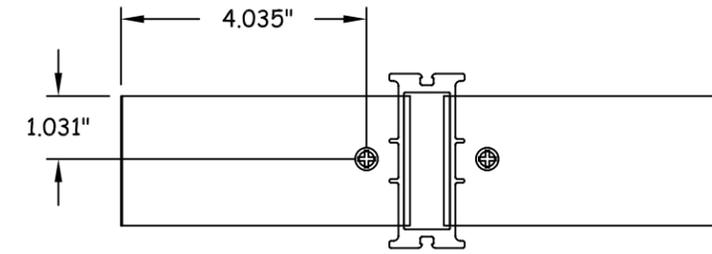
DWG #: **ATRO93**
SHEET: **1 OF 9**



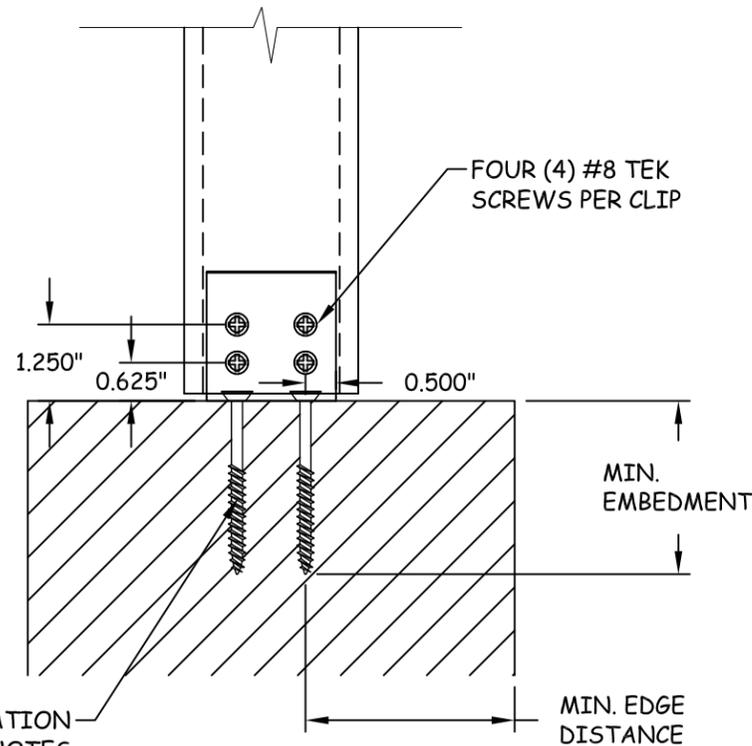
C
2 **TOP VIEW**
END CLIP DETAIL WITH HOLE LAYOUT
WOOD OR STEEL STUD INSTALLATION



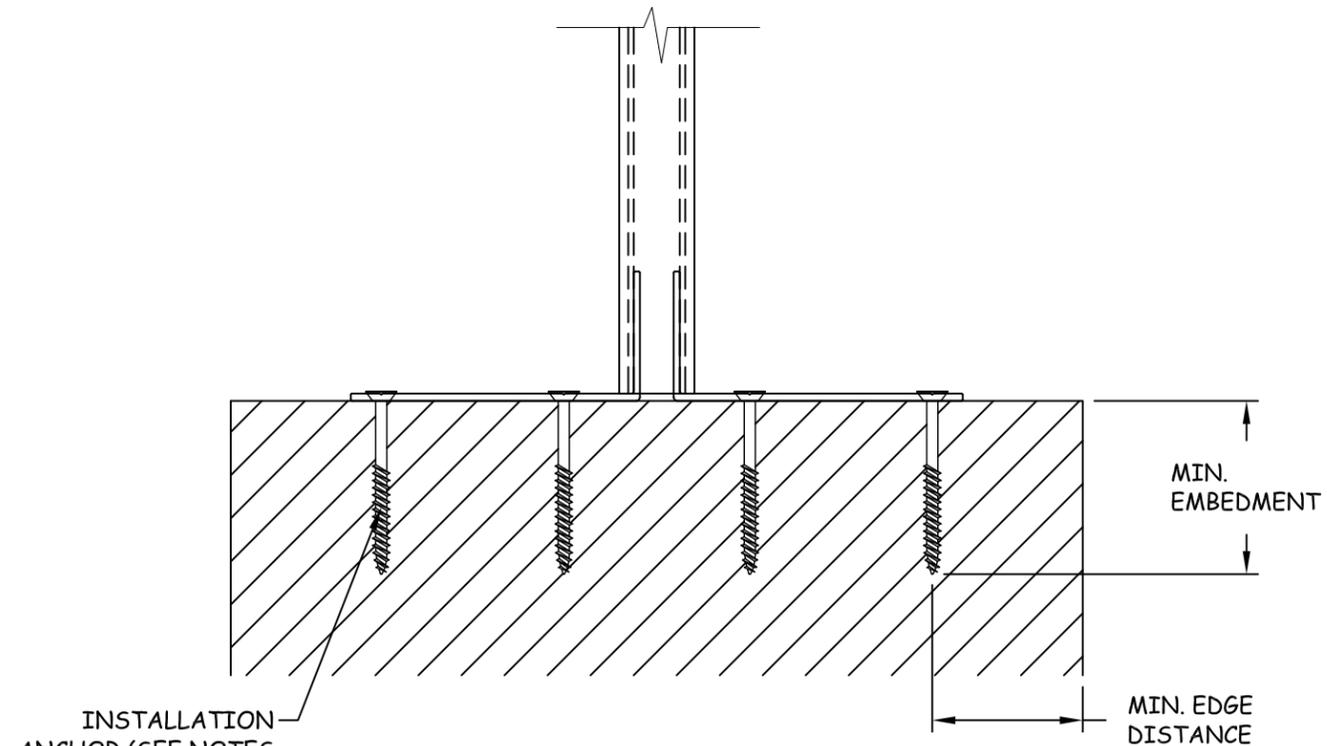
D
2 **TOP VIEW**
END CLIP DETAIL WITH HOLE LAYOUT
ITW TAPCONS INTO CONCRETE/MASONRY



E
2 **TOP VIEW**
END CLIP DETAIL WITH HOLE LAYOUT
HILTI KWIK BOLTS INTO CONCRETE/MASONRY



A
2 **SIDE VIEW**
MULLION W/ END CLIPS (ONE OR TWO WAY)
STANDARD CLIP



B
2 **FRONT VIEW**
MULLION W/ END CLIPS (ONE OR TWO WAY)
STANDARD CLIP

TITLE: 130 1.25" TUBE MULLION
VERTICAL & HORIZONTAL
MULLION DETAILS
(STANDARD CLIP)

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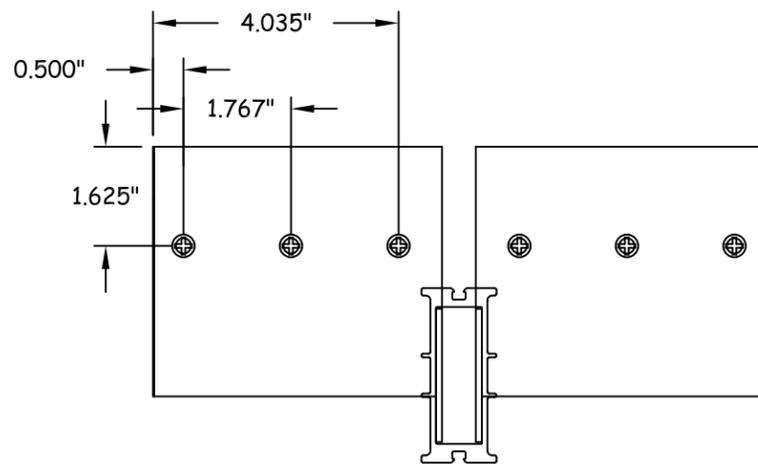
REVISIONS

NO.	DESCRIPTION	BY	DATE
A			

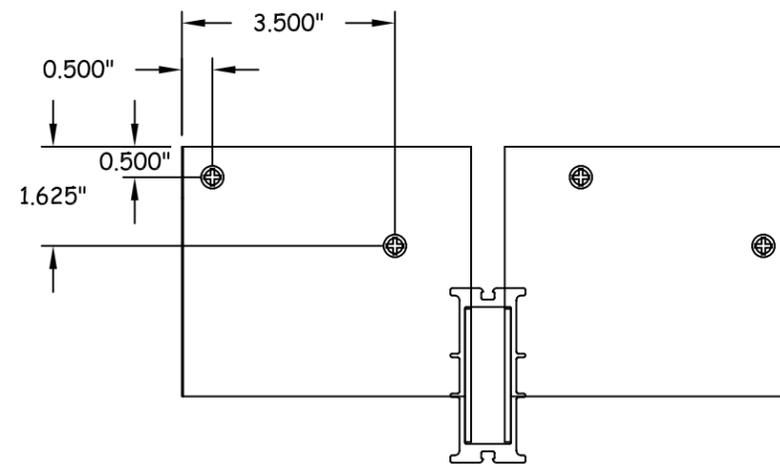


DATE: 01.29.16	DWN BY: LMS	CHK BY: HFN	SCALE: NTS
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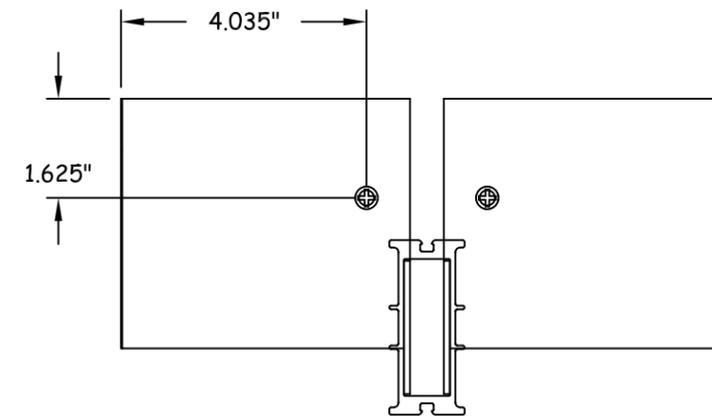
DWG #:
ATR093
SHEET: **2 OF 9**



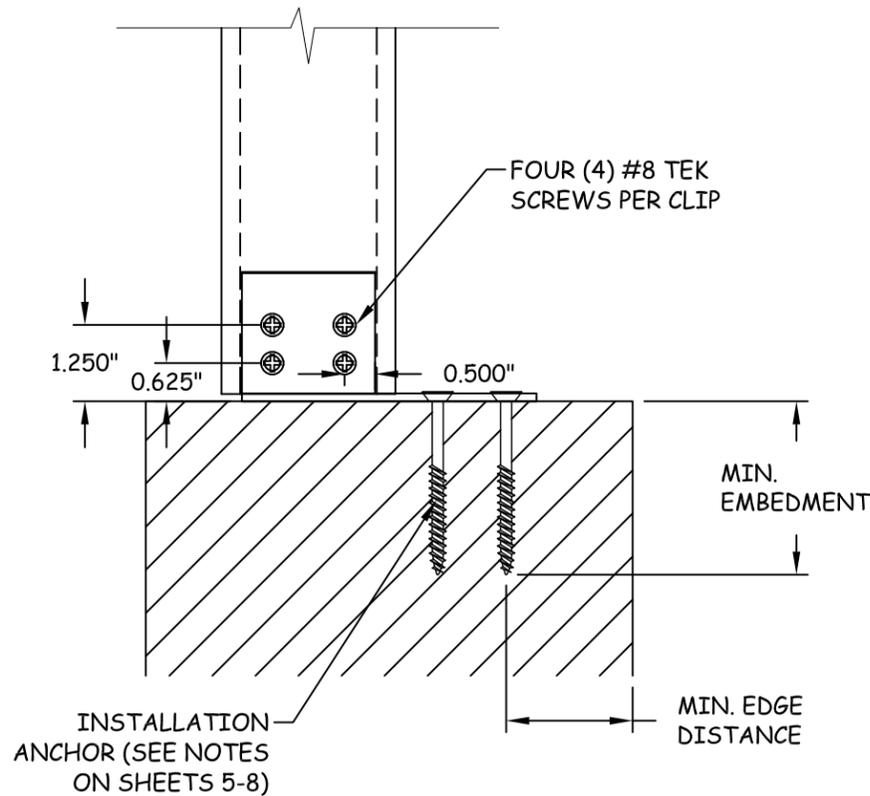
H
3 **TOP VIEW**
END CLIP DETAIL WITH HOLE LAYOUT
WOOD OR STEEL STUD INSTALLATION



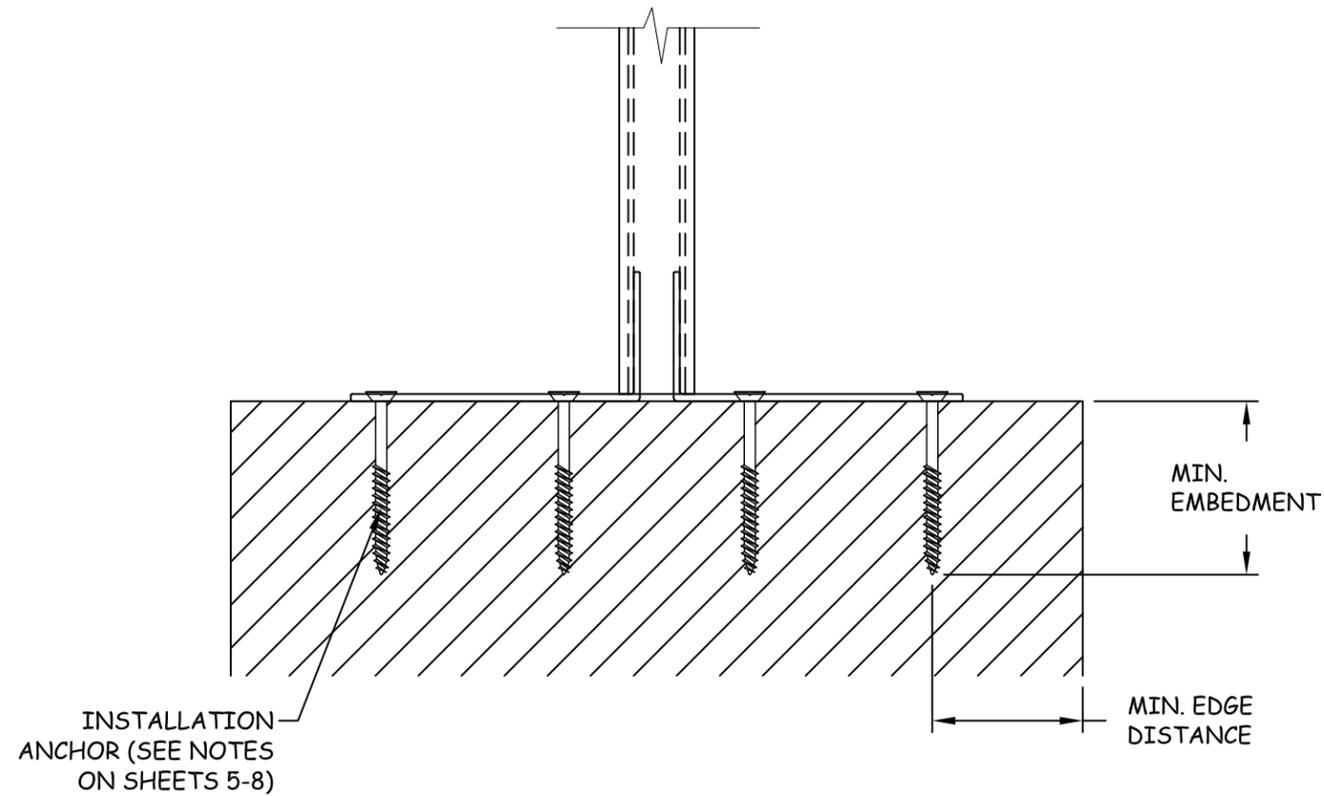
I
3 **TOP VIEW**
END CLIP DETAIL WITH HOLE LAYOUT
ITW TAPCONS INTO CONCRETE/MASONRY



J
3 **TOP VIEW**
END CLIP DETAIL WITH HOLE LAYOUT
HILTI KWIK BOLTS INTO CONCRETE/MASONRY



F
3 **SIDE VIEW**
MULLION W/ END CLIPS (ONE OR TWO WAY)
OFFSET CLIP



G
3 **FRONT VIEW**
MULLION W/ END CLIPS (ONE OR TWO WAY)
OFFSET CLIP

TITLE: 130 1.25" TUBE MULLION
VERTICAL & HORIZONTAL
MULLION DETAILS
(OFFSET CLIP)

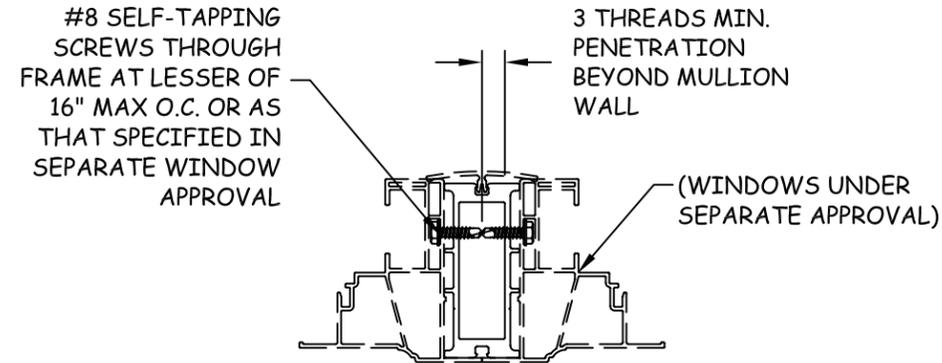
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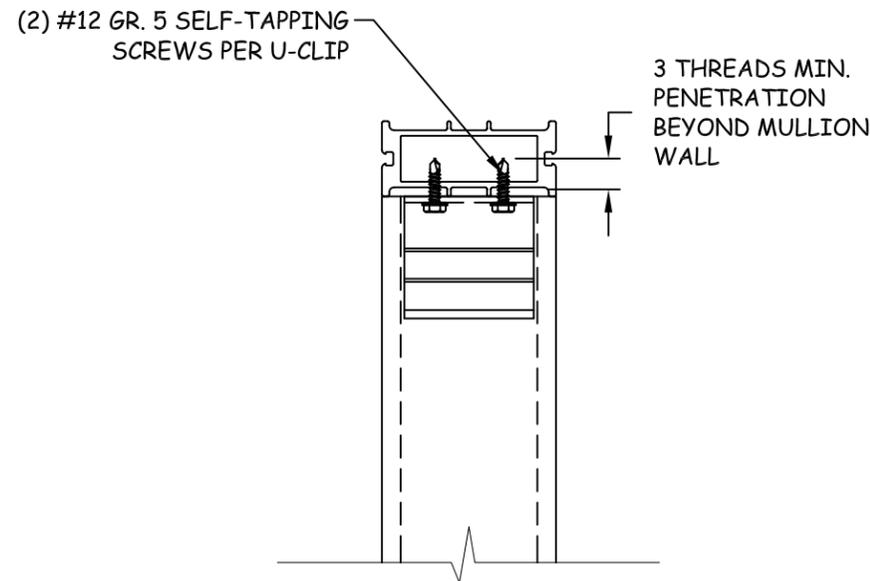


DATE:	01.29.16	DWN BY:	LMS	CHK BY:	HFN	SCALE:	NTS
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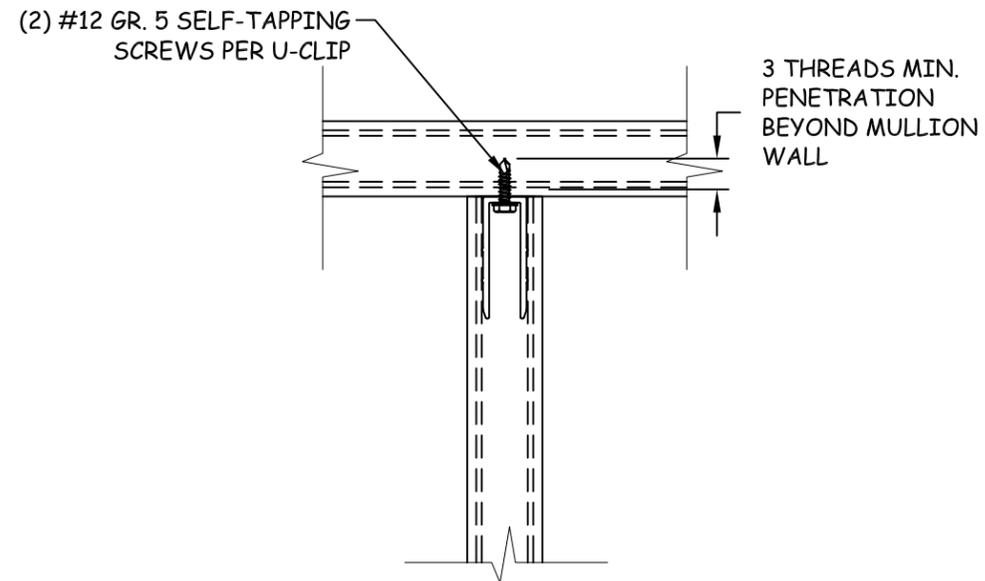
DWG #:
ATR093
SHEET: **3 OF 9**



M
4 **HORIZONTAL SECTION**
FRAME CONNECTION TO MULLION
TYPICAL



K
4 **SIDE VIEW**
MULLION WITH U-CLIP (TWO WAY)
TYPICAL



L
4 **FRONT VIEW**
MULLION WITH U-CLIP (TWO WAY)
TYPICAL

TITLE: 130 1.25" TUBE MULLION
VERTICAL & HORIZONTAL
TWO-WAY DETAILS &
FRAME DETAIL

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REVISIONS

NO.	DESCRIPTION	BY	DATE
A			



DATE: 01.29.16
DWN BY: LMS
CHK BY: HFN
SCALE: NTS

DWG #: **ATRO93**
SHEET: **4 OF 9**

**Maximum design pressure capacity chart (psf)
One-Way Mullions (Tapcons only)**

L - Mull Length (in)	W - Tributary Width (in)													
	18.0	21.0	24.0	27.0	30.0	33.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0
24.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
30.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
36.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
42.0	150.0	150.0	143.7	134.5	127.8	123.0	119.8	117.3	117.3	117.3	117.3	117.3	117.3	117.3
48.0	147.4	131.4	119.8	111.1	104.5	99.6	95.8	91.3	89.8	89.8	89.8	89.8	89.8	89.8
54.0	127.8	113.3	102.7	94.6	88.5	83.6	79.9	74.7	71.9	71.0	71.0	71.0	71.0	71.0
60.0	112.7	99.6	89.8	82.4	76.7	72.1	68.4	63.2	59.9	58.1	57.5	57.5	57.5	57.5
66.0	100.9	88.8	79.9	73.0	67.6	63.4	59.9	54.8	51.3	49.1	47.9	47.5	47.5	47.5
72.0	91.3	80.1	71.9	65.5	60.5	56.5	53.2	48.3	44.9	42.6	41.1	40.2	39.9	39.9
78.0	83.3	73.0	65.1	58.4	53.2	49.0	45.5	40.3	36.6	34.0	32.2	31.0	30.3	30.1
84.0	68.0	58.7	51.8	46.5	42.2	38.8	36.0	31.7	28.7	26.5	24.9	23.7	23.0	22.5
90.0	55.2	47.6	41.9	37.6	34.1	31.3	29.0	25.5	22.9	21.0	19.6	18.6	17.9	17.4
96.0	45.4	39.1	34.4	30.8	28.0	25.6	23.7	20.8	18.6	17.0	15.8	-	-	-

NOTES:

- MULLION CHART APPLIES TO MULLION ASSEMBLIES WHEN USED TO MULL WINDOWS IN ONE-WAY CONFIGURATIONS SHOWN ON SHEET 1 USING ITW TAPCON ANCHORS ONLY. SEE DETAILS D/2 & I/3.
- DESIGN PRESSURE VALUES ARE POSITIVE AND NEGATIVE IN PSF.
- MAXIMUM DEFLECTION HAS BEEN LIMITED TO L/175.
- DESIGN PRESSURE OF ASSEMBLY IS LIMITED TO THE LESSER DESIGN PRESSURE OF THE MULLION ASSEMBLY OR THE INDIVIDUAL WINDOW UNITS OF INSTALLATION UNDER SEPARATE APPROVAL.
- FOR CONCRETE/MASONRY INSTALLATION USE TWO (2) 1/4" DIAMETER ITW TAPCON SCREWS AT EACH ANCHOR CLIP. TAPCONS SHALL BE OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM 1-1/4" EMBEDMENT AND MINIMUM 2-1/2" EDGE DISTANCE. SEE DETAILS D/2 & I/3.



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TITLE: 130 1.25" TUBE MULLION
VERTICAL & HORIZONTAL
ONE-WAY MULL TABLES
(TAPCONS ONLY)

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

NO.	DESCRIPTION	REVISIONS	
		BY	DATE
A			



DATE: 01.29.16
DWN BY: LMS
CHK BY: HFN
SCALE: NTS

DWG #: **ATRO93**
SHEET: **5 OF 9**

**Maximum design pressure capacity chart (psf)
One-Way Mullions (All other anchors)**

L - Mull Length (in)	W - Tributary Width (in)													
	18.0	21.0	24.0	27.0	30.0	33.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0
24.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
30.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
36.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
42.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
48.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	148.3	148.3	148.3	148.3	148.3	148.3
54.0	150.0	150.0	150.0	150.0	146.0	138.0	131.8	123.2	118.6	117.1	117.1	117.1	117.1	117.1
60.0	150.0	150.0	146.8	132.8	121.9	113.3	106.4	96.5	90.4	87.1	86.0	86.0	86.0	86.0
66.0	142.0	123.1	109.1	98.4	90.0	83.3	77.9	69.9	64.6	61.2	59.4	58.7	58.7	58.7
72.0	108.8	94.2	83.3	74.9	68.4	63.1	58.8	52.3	47.9	44.9	42.9	41.8	41.5	41.5
78.0	85.2	73.7	65.1	58.4	53.2	49.0	45.5	40.3	36.6	34.0	32.2	31.0	30.3	30.1
84.0	68.0	58.7	51.8	46.5	42.2	38.8	36.0	31.7	28.7	26.5	24.9	23.7	23.0	22.5
90.0	55.2	47.6	41.9	37.6	34.1	31.3	29.0	25.5	22.9	21.0	19.6	18.6	17.9	17.4
96.0	45.4	39.1	34.4	30.8	28.0	25.6	23.7	20.8	18.6	17.0	15.8	-	-	-

NOTES:

- MULLION CHART APPLIES TO MULLION ASSEMBLIES WHEN USED TO MULL WINDOWS IN ONE-WAY CONFIGURATIONS SHOWN ON SHEET 1 USING ALL OTHER ANCHOR OPTIONS. SEE DETAILS C/2, E/2, H/3, & J/3.
- DESIGN PRESSURE VALUES ARE POSITIVE AND NEGATIVE IN PSF.
- MAXIMUM DEFLECTION HAS BEEN LIMITED TO L/175.
- DESIGN PRESSURE OF ASSEMBLY IS LIMITED TO THE LESSER DESIGN PRESSURE OF THE MULLION ASSEMBLY OR THE INDIVIDUAL WINDOW UNITS OF INSTALLATION UNDER SEPARATE APPROVAL.
- FOR WOOD FRAME INSTALLATION USE THREE (3) #14 WOOD SCREWS AT EACH ANCHOR CLIP. WOOD SCREWS SHALL BE OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM 1-1/2" EMBEDMENT AND MINIMUM 3/4" EDGE DISTANCE. SEE DETAILS C/2 & H/3.
- FOR STEEL STUD INSTALLATION USE THREE (3) 1/4" TEK SCREWS AT EACH ANCHOR CLIP. TEK SCREWS SHALL BE OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM OF 3 THREADS PENETRATION BEYOND STEEL STRUCTURE EMBEDMENT AND MINIMUM 1/2" EDGE DISTANCE. SEE DETAILS C/2 & H/3.
- FOR CONCRETE INSTALLATION USE ONE (1) 3/8" DIAMETER HILTI KWIK BOLT III EXPANSION ANCHOR AT EACH ANCHOR CLIP. BOLTS SHALL BE OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM 2-1/2" EMBEDMENT AND MINIMUM 2-1/2" EDGE DISTANCE. SEE DETAILS E/2 & J/3.
- FOR GROUT-FILLED CMU INSTALLATION USE ONE (1) 3/8" DIAMETER HILTI KWIK BOLT III EXPANSION ANCHOR AT EACH ANCHOR CLIP. BOLTS SHALL BE OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM 2-1/2" EMBEDMENT AND MINIMUM 3-1/2" EDGE DISTANCE. SEE DETAILS E/2 & J/3



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VERTICAL & HORIZONTAL
ONE-WAY MULL TABLES
(ALL OTHER ANCHORS)

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NO.	DESCRIPTION	BY	DATE



DATE: 01.29.16
DWN BY: LMS
CHK BY: HFN
SCALE: NTS

DWG #: **ATRO93**
SHEET: **6 OF 9**

Maximum design pressure capacity chart (psf) Two-Way Mullions (Tapcons Only)

L - Mull Length (in)	W - Tributary Width (in)														
	18.0	21.0	24.0	27.0	30.0	33.0	36.0	42.0	48.0	54.0	55.0	60.0	66.0	72.0	78.0
24.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	143.7	130.7	119.8	110.6
30.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	143.7	127.8	125.4	115.0	104.5	95.8	88.5
36.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	136.9	119.8	106.5	104.5	95.8	87.1	79.9	73.7
42.0	150.0	150.0	150.0	150.0	150.0	149.3	136.9	117.3	102.7	91.3	89.6	82.1	74.7	68.4	63.2
48.0	150.0	150.0	150.0	150.0	143.7	130.7	119.8	102.7	89.8	79.9	78.4	71.9	65.3	59.9	55.3
54.0	150.0	150.0	150.0	142.0	127.8	116.2	106.5	91.3	79.9	71.0	69.7	63.9	58.1	53.2	49.1
60.0	150.0	150.0	137.5	122.2	110.0	100.0	91.7	78.6	68.8	61.1	60.0	55.0	50.0	45.8	42.3
66.0	137.8	118.1	103.3	91.8	82.7	75.1	68.9	59.0	51.7	45.9	45.1	41.3	37.6	34.4	31.8
72.0	106.1	91.0	79.6	70.7	63.7	57.9	53.1	45.5	39.8	35.4	34.7	31.8	28.9	26.5	24.5
74.0	97.7	83.8	73.3	65.2	58.6	53.3	48.9	41.9	36.7	32.6	32.0	29.3	26.7	24.4	22.6
78.0	83.5	71.5	62.6	55.6	50.1	45.5	41.7	35.8	31.3	27.8	27.3	25.0	22.8	20.9	19.3
84.0	66.8	57.3	50.1	44.6	40.1	36.5	33.4	28.6	25.1	22.3	21.9	20.0	18.2	16.7	15.4
90.0	54.3	46.6	40.7	36.2	32.6	29.6	27.2	23.3	20.4	18.1	17.8	16.3	-	-	-
96.0	44.8	38.4	33.6	29.8	26.9	24.4	22.4	19.2	16.8	-	-	-	-	-	-

NOTES:

- MULLION CHART APPLIES TO MULLION ASSEMBLIES WHEN USED TO MULL WINDOWS IN TWO-WAY CONFIGURATIONS SHOWN ON SHEET 1 USING ITW TAPCON ANCHORS ONLY. SEE DETAILS D/2, I/3, K/4 & L/4.
- DESIGN PRESSURE VALUES ARE POSITIVE AND NEGATIVE IN PSF.
- MAXIMUM DEFLECTION HAS BEEN LIMITED TO L/175.
- DESIGN PRESSURE OF ASSEMBLY IS LIMITED TO THE LESSER DESIGN PRESSURE OF THE MULLION ASSEMBLY OR THE INDIVIDUAL WINDOW UNITS OF INSTALLATION
- FOR CONCRETE/MASONRY INSTALLATION USE TWO (2) 1/4" DIAMETER ITW TAPCON SCREWS AT EACH ANCHOR CLIP. TAPCONS SHALL BE OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM 1-1/4" EMBEDMENT AND MINIMUM 2-1/2" EDGE DISTANCE. SEE DETAILS D/2 & I/3.
- FOR TWO-WAY CONNECTION OF U-CLIP TO MULLION USE TWO (2) 1/4" TEK SCREWS AT EACH ANCHOR CLIP. TEK SCREWS SHALL BE OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM OF 3 THREADS PENETRATION BEYOND ALUMINUM MULLION STRUCTURE. SEE DETAILS K/4 & L/4.



9001 AMBASSADOR ROW
DALLAS, TEXAS 75247
PH: (214) 637-2696 FX: (214) 424-6734

TITLE: 130 1.25" TUBE MULLION
VERTICAL & HORIZONTAL
TWO-WAY MULL TABLES
(TAPCONS ONLY)

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

NO.	DESCRIPTION	BY	DATE



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DWN BY: LMS
CHK BY: HFN
SCALE: NTS

DWG #: **ATR093**
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Maximum design pressure capacity chart (psf) Two-Way Mullions (All other anchors)

L - Mull Length (in)	W - Tributary Width (in)														
	18.0	21.0	24.0	27.0	30.0	33.0	36.0	42.0	48.0	54.0	55.0	60.0	66.0	72.0	78.0
24.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
30.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	146.0
36.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	143.8	131.8	121.6
42.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	143.1	140.5	128.8	117.1	107.3	99.1
48.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	140.9	123.3	109.6	107.6	98.6	89.7	82.2	75.9
54.0	150.0	150.0	150.0	150.0	150.0	137.2	125.8	107.8	94.3	83.8	82.3	75.5	68.6	62.9	58.0
60.0	150.0	150.0	137.5	122.2	110.0	100.0	91.7	78.6	68.8	61.1	60.0	55.0	50.0	45.8	42.3
66.0	137.8	118.1	103.3	91.8	82.7	75.1	68.9	59.0	51.7	45.9	45.1	41.3	37.6	34.4	31.8
72.0	106.1	91.0	79.6	70.7	63.7	57.9	53.1	45.5	39.8	35.4	34.7	31.8	28.9	26.5	24.5
74.0	97.7	83.8	73.3	65.2	58.6	53.3	48.9	41.9	36.7	32.6	32.0	29.3	26.7	24.4	22.6
78.0	83.5	71.5	62.6	55.6	50.1	45.5	41.7	35.8	31.3	27.8	27.3	25.0	22.8	20.9	19.3
84.0	66.8	57.3	50.1	44.6	40.1	36.5	33.4	28.6	25.1	22.3	21.9	20.0	18.2	16.7	15.4
90.0	54.3	46.6	40.7	36.2	32.6	29.6	27.2	23.3	20.4	18.1	17.8	16.3	-	-	-
96.0	44.8	38.4	33.6	29.8	26.9	24.4	22.4	19.2	16.8	-	-	-	-	-	-

NOTES:

- MULLION CHART APPLIES TO MULLION ASSEMBLIES WHEN USED TO MULL WINDOWS IN TWO-WAY CONFIGURATIONS SHOWN ON SHEET 1 USING ALL OTHER ANCHOR OPTIONS. SEE DETAILS C/2, E/2, H/3, J/3, K/4, & L/4.
- DESIGN PRESSURE VALUES ARE POSITIVE AND NEGATIVE IN PSF.
- MAXIMUM DEFLECTION HAS BEEN LIMITED TO L/175.
- DESIGN PRESSURE OF ASSEMBLY IS LIMITED TO THE LESSER DESIGN PRESSURE OF THE MULLION ASSEMBLY OR THE INDIVIDUAL WINDOW UNITS OF INSTALLATION UNDER SEPARATE APPROVAL.
- FOR WOOD FRAME INSTALLATION USE THREE (3) #14 WOOD SCREWS AT EACH ANCHOR CLIP. WOOD SCREWS SHALL BE OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM 1-1/2" EMBEDMENT AND MINIMUM 3/4" EDGE DISTANCE. SEE DETAILS C/2 & H/3.
- FOR STEEL STUD INSTALLATION USE THREE (3) 1/4" TEK SCREWS AT EACH ANCHOR CLIP. TEK SCREWS SHALL BE OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM OF 3 THREADS PENETRATION BEYOND STEEL STRUCTURE EMBEDMENT AND MINIMUM 1/2" EDGE DISTANCE. SEE DETAILS C/2 & H/3.
- FOR CONCRETE INSTALLATION USE ONE (1) 3/8" DIAMETER HILTI KWIK BOLT III EXPANSION ANCHOR AT EACH ANCHOR CLIP. BOLTS SHALL BE OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM 2-1/2" EMBEDMENT AND MINIMUM 2-1/2" EDGE DISTANCE. SEE DETAILS E/2 & J/3.
- FOR GROUT-FILLED CMU INSTALLATION USE ONE (1) 3/8" DIAMETER HILTI KWIK BOLT III EXPANSION ANCHOR AT EACH ANCHOR CLIP. BOLTS SHALL BE OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM 2-1/2" EMBEDMENT AND MINIMUM 3-1/2" EDGE DISTANCE. SEE DETAILS E/2 & J/3.
- FOR TWO-WAY CONNECTION OF U-CLIP TO MULLION USE TWO (2) 1/4" TEK SCREWS AT EACH ANCHOR CLIP. TEK SCREWS SHALL BE OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM OF 3 THREADS PENETRATION BEYOND ALUMINUM MULLION STRUCTURE. SEE DETAILS K/4 & L/4.



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TITLE: 130 1.25" TUBE MULLION
VERTICAL & HORIZONTAL
TWO-WAY MULL TABLES
(ALL OTHER ANCHORS)

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398 E. DANIA BEACH BLVD. STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478 FX: (954) 744-4738

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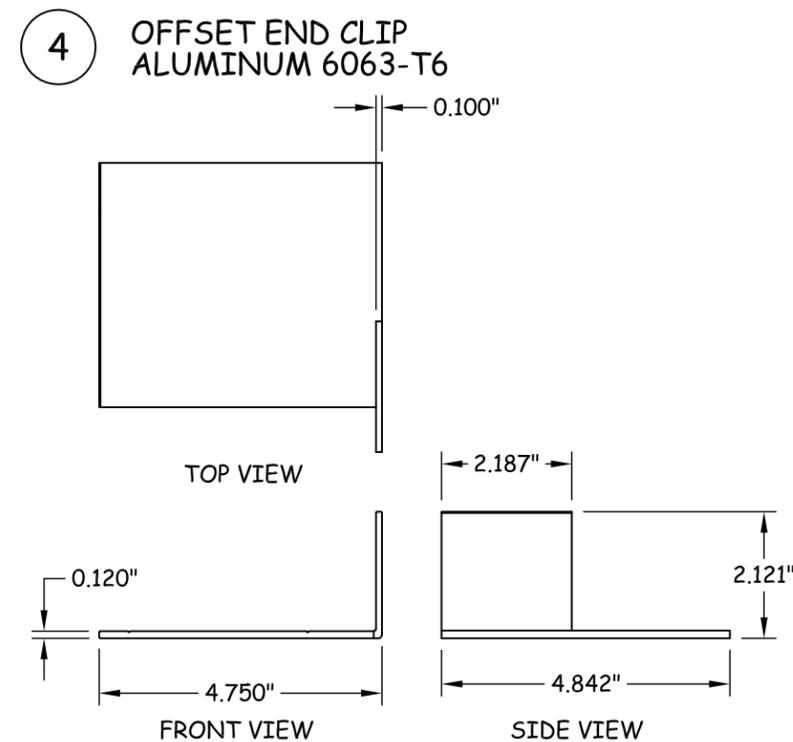
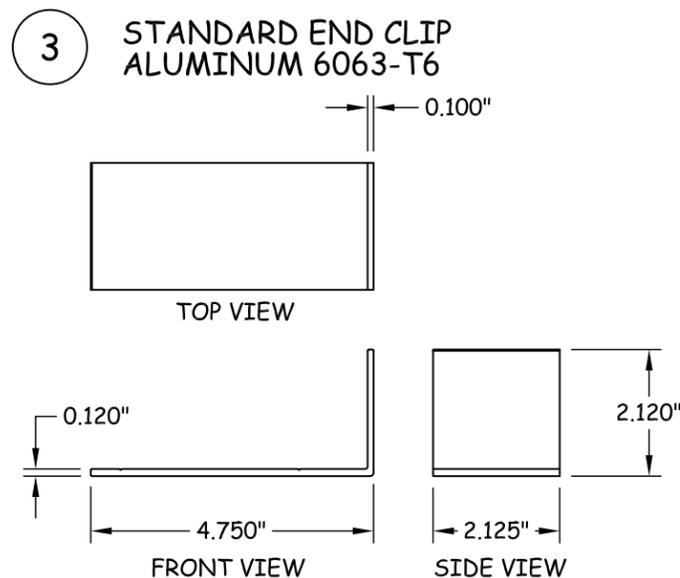
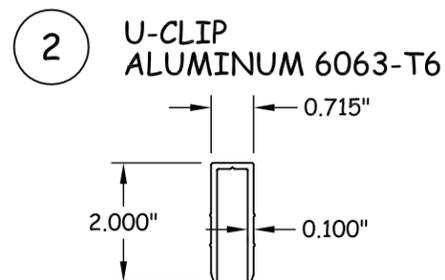
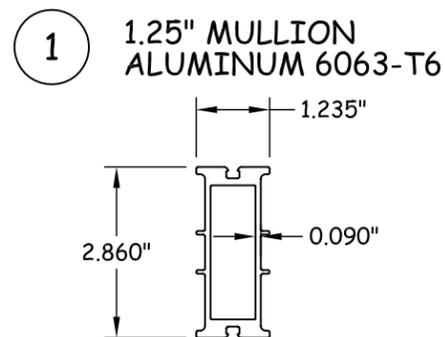


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BILL OF MATERIALS

NO.	DESCRIPTION	MATERIAL	MANUFACTURER
1	1.25" MULLION	ALUMINUM 6063-T6	ATRIUM
2	U-CLIP	ALUMINUM 6063-T6	ATRIUM
3	STANDARD END CLIP	ALUMINUM 6063-T6	ATRIUM
4	OFFSET END CLIP	ALUMINUM 6063-T6	ATRIUM



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TITLE: 130 1.25" TUBE MULLION
VERTICAL & HORIZONTAL
BOM & COMPONENTS

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DATE: 01.29.16
DWN BY: LMS
CHK BY: HFN
SCALE: NTS

DWG #: **ATR093**
SHEET: **9 OF 9**