

ATRIUM CORPORATION

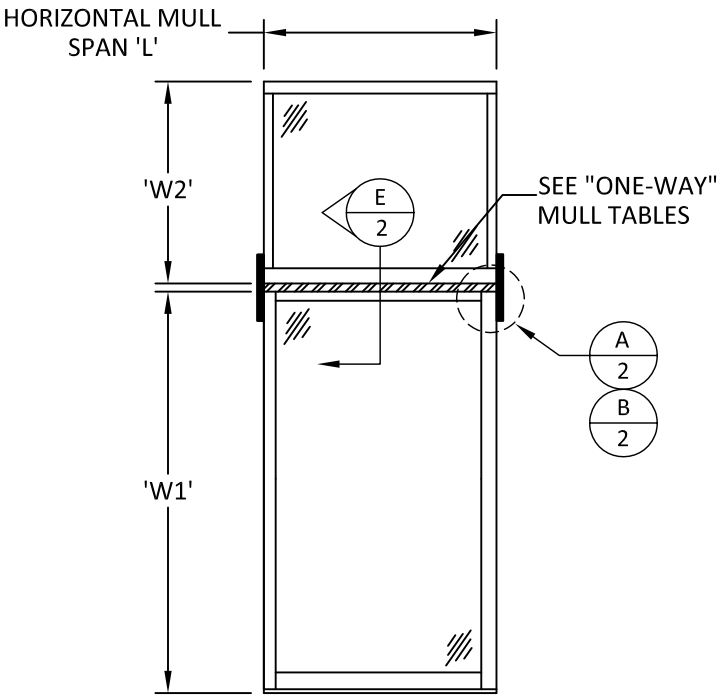
SERIES 150/160 MULLION (NON IMPACT RATED)

GENERAL NOTES:

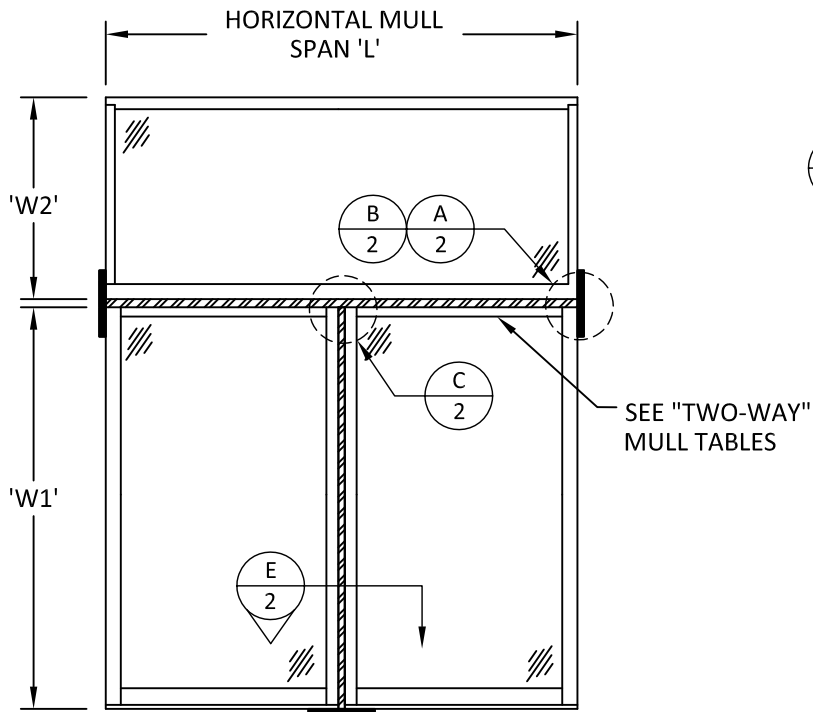
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT FLORIDA BUILDING CODE (FBC), EXCLUDING HVHZ, AND HAS BEEN EVALUATED TO SECTION 1709.8.
2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY AND 2X FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING 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 IN NON-HVHZ AREAS.
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 3-4 FOR INSTALLATION ANCHOR REQUIREMENTS FOR SPECIFIC MULLION CONFIGURATIONS AND DESIGN LOAD CAPACITIES.
8. IN ACCORDANCE WITH THE CURRENT FBC, DISSIMILAR METALS INCLUDING FASTENERS THAT MAY COME INTO CONTACT WITH ALUMINUM UNIT FRAMING SHALL BE PROTECTED AS DEFINED IN SEC 2003.
9. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
 - A. WOOD - MINIMUM SPECIFIC GRAVITY OF 0.55.
 - 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.

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

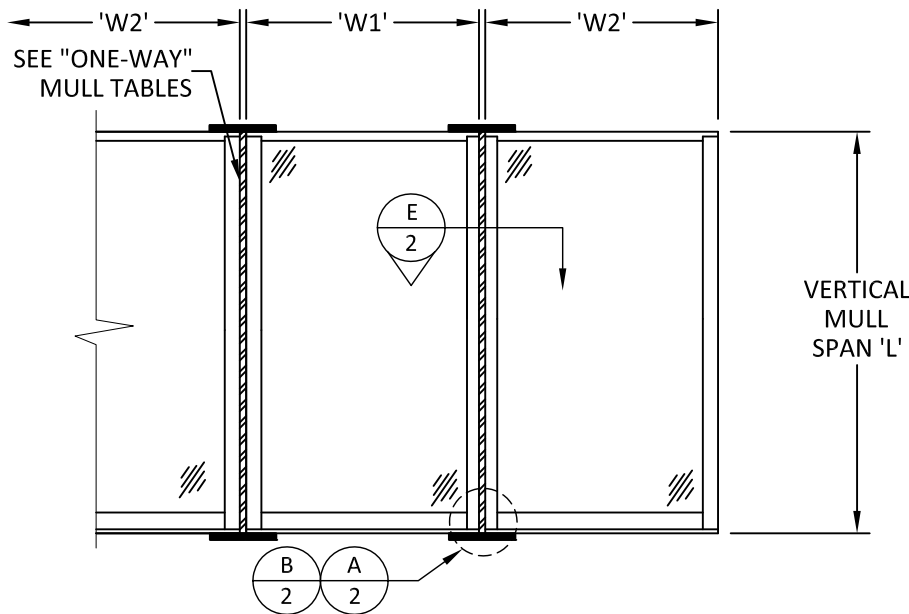
TABLE OF CONTENTS		
SHEET	REVISION	SHEET DESCRIPTION
1	A	INSTALLATION & GENERAL NOTES AND ELEVATIONS
2	A	MULLION & FRAME DETAILS
3	A	ONE-WAY MULL TABLES
4	A	TWO-WAY MULL TABLES



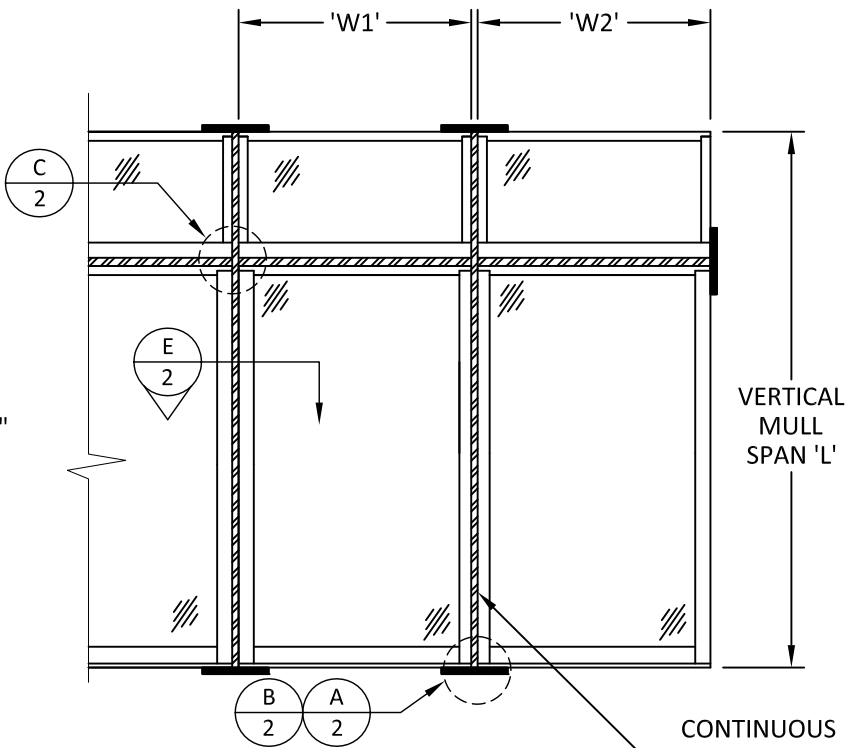
HORIZONTAL SPAN



HORIZONTAL "T" MULL SPAN



VERTICAL SPAN



VERTICAL SPAN

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TITLE: **SERIES 150 / 160 MULLION
NON IMPACT RATED**
GENERAL AND
INSTALLATION NOTES
PREPARED BY: **BUILDING DROPS, INC.**
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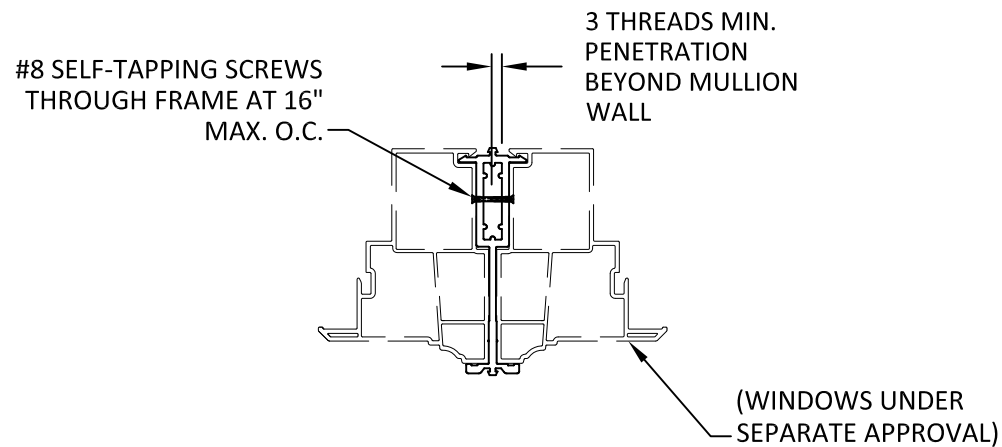
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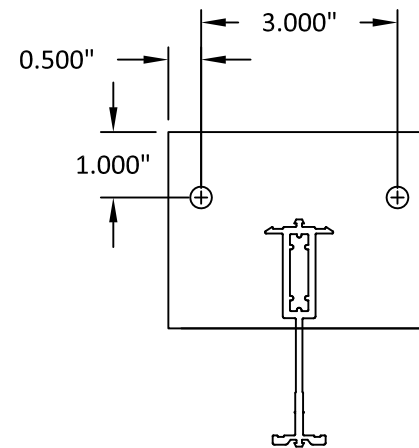
Digitally signed by Hermes F. Norero, P.E.
Reason: I am approving this document
Date: 2017.10.22 09:04:47 -0400

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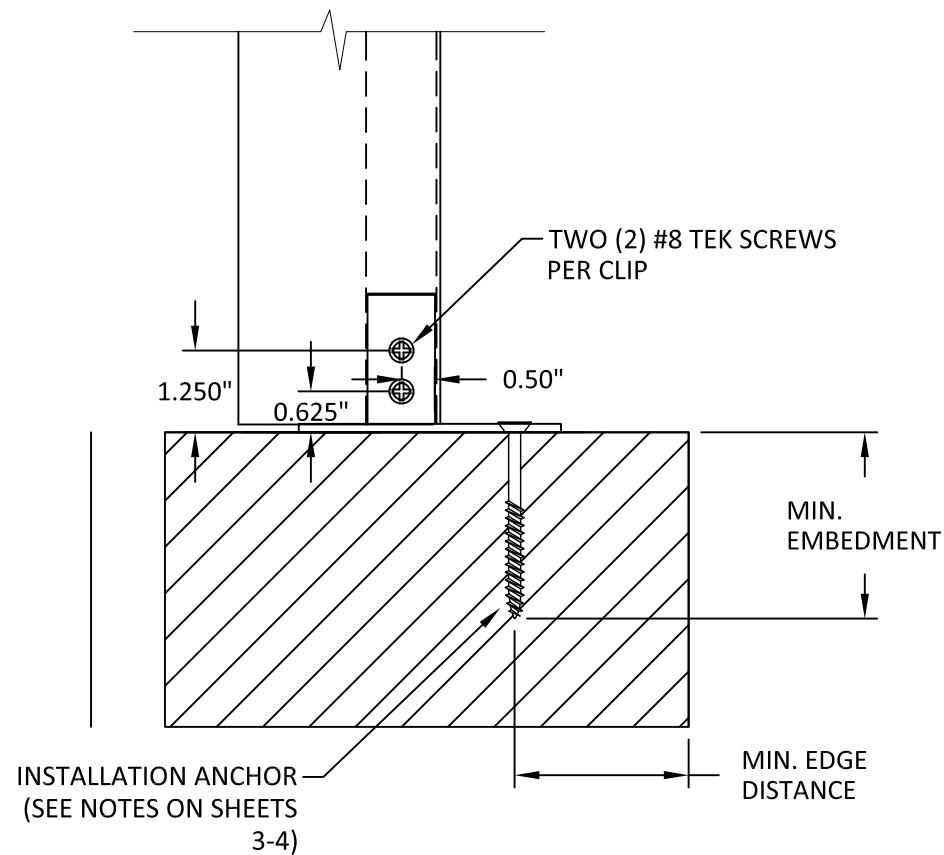
FL #: **FL16972**
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SCALE: **NTS**
DWG. #: **ATR111**
SECTION: **1**
OF 4



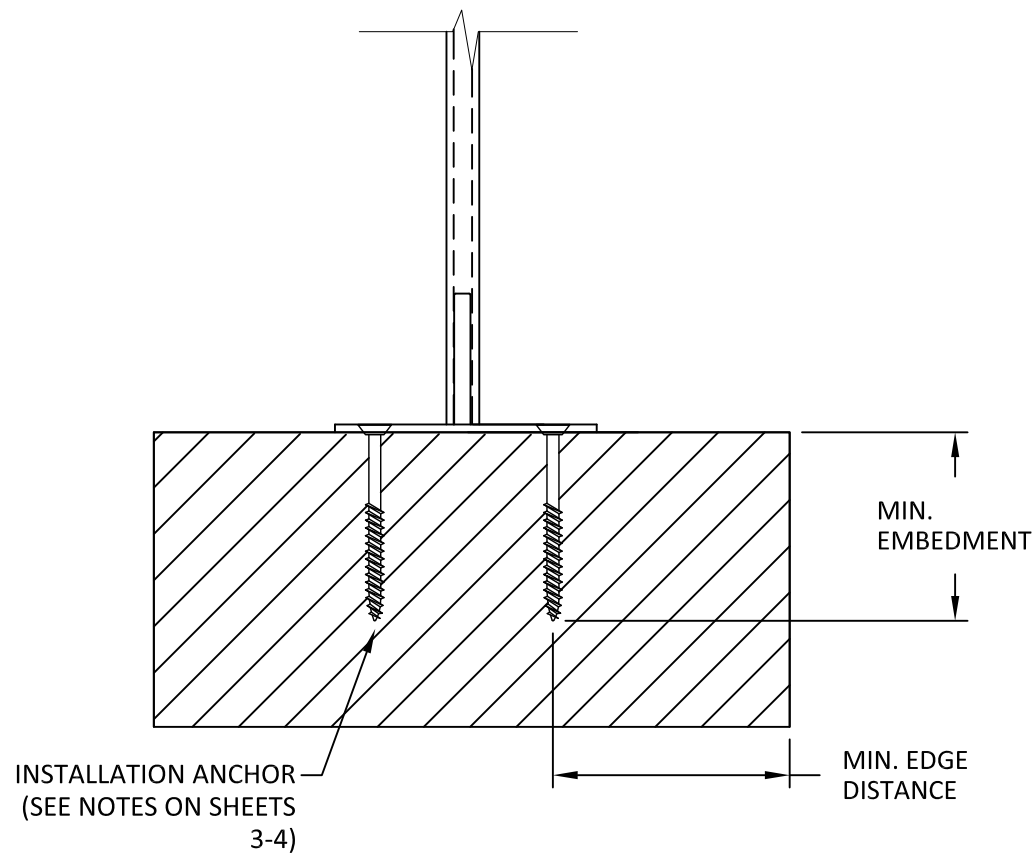
E
2 **HORIZONTAL SECTION**
FRAME CONNECTION TO MULLION
TYPICAL



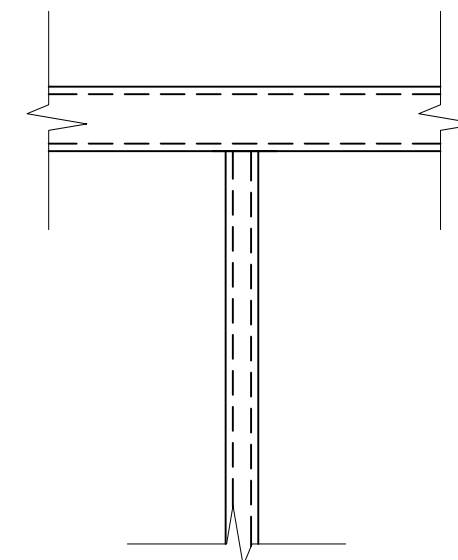
D
2 **TOP VIEW**
END CLIP DETAIL WITH HOLE LAYOUT
WOOD, STEEL STUD, OR
CONCRETE/MASONRY INSTALLATION



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



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



C
2 **FRONT VIEW**
MULLION (TWO WAY)
TYPICAL

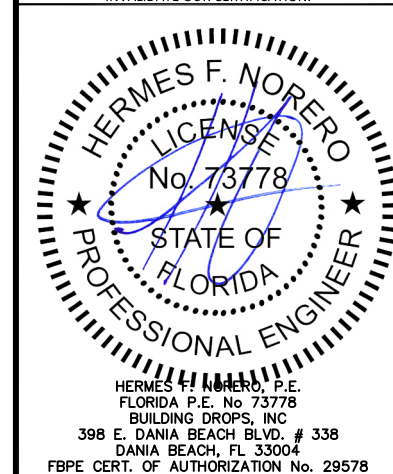
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TITLE:
SERIES 150 / 160 MULLION
NON IMPACT RATED
MULLION DETAILS

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DWG. #:	ATR111
SECTION:	2

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Maximum design pressure capacity chart (PSF) One-Way Mullions											
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
24.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
30.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
36.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
42.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
48.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
54.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
60.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	48.8	48.3
66.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	46.0	43.1	41.3	40.2
72.0	50.0	50.0	50.0	50.0	50.0	47.4	44.7	40.6	37.7	35.8	34.5
74.0	50.0	50.0	50.0	50.0	49.1	45.8	43.1	39.0	35.7	33.4	31.8
78.0	50.0	50.0	50.0	47.8	43.5	40.1	37.3	33.0	30.0	27.8	26.3
84.0	50.0	48.1	42.4	38.0	34.6	31.8	29.5	26.0	23.5	21.6	20.3

NOTES:

1. MULLION CHART APPLIES TO MULLION ASSEMBLIES WHEN USED TO MULL WINDOWS IN ONE-WAY CONFIGURATIONS SHOWN ON SHEET 1. SEE DETAIL D/2.
2. DESIGN PRESSURE VALUES ARE POSITIVE AND NEGATIVE IN PSF.
3. MAXIMUM DEFLECTION HAS BEEN LIMITED TO L/175.
4. 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.
5. FOR WOOD FRAME INSTALLATION USE THREE (2) #12 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.
6. FOR STEEL STUD INSTALLATION USE THREE (2) #12 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.
7. 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.
8. FOR GROUT-FILLED CMU INSTALLATION USE TWO (2) 1/4" DIAMETER ITW TAPCON SCREWS AT EACH ANCHOR CLIP. TAPCONS SHALL BE OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM 2-1/2" EMBEDMENT AND MINIMUM 3-1/2" EDGE DISTANCE.

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TITLE:
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ONE-WAY MULL TABLES

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3
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Maximum design pressure capacity chart (PSF) Two-Way Mullions											
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
24.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
30.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
36.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
42.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
48.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
54.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	47.3
60.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	47.9	42.5	38.3
66.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	45.2	39.5	35.2	31.6
72.0	50.0	50.0	50.0	50.0	50.0	47.4	43.4	37.2	32.6	28.9	26.0
74.0	50.0	50.0	50.0	50.0	48.0	43.6	40.0	34.3	30.0	26.7	24.0
78.0	50.0	50.0	50.0	45.5	41.0	37.2	34.1	29.3	25.6	22.8	20.5
84.0	50.0	46.9	41.0	36.5	32.8	29.8	27.3	23.4	20.5	18.2	16.4

NOTES:

- MULLION CHART APPLIES TO MULLION ASSEMBLIES WHEN USED TO MULL WINDOWS IN TWO-WAY CONFIGURATIONS SHOWN ON SHEET 1. SEE DETAIL D/2.
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