

10/19/2023 5:03 PM

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INSTALLATION NOTES:

1. *ONE (1)* INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN, UNLESS OTHERWISE STATED.
2. THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION.
3. INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF ±1/2 INCH OF THE DEPICTED LOCATION IN THE ANCHOR LAYOUT DETAIL (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
4. FOR INSTALLATION THROUGH 1X BUCK TO CONCRETE/MASONRY, OR DIRECTLY INTO CONCRETE/MASONRY, USE 1/4" ELCO ULTRACON ANCHORS. INSTALLATION SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

4.1. MINIMUM EMBEDMENT OF 1-3/8" WHEN INTO CMU

4.2. MINIMUM EMBEDMENT OF 1-3/8" WHEN INTO CONCRETE

4.3. MINIMUM EDGE DISTANCE OF 2 1/2" WHEN INTO CONCRETE

4.4. MINIMUM EDGE DISTANCE OF 2 1/2" WHEN INTO CMU

4.5. MINIMUM O.C. DISTANCE OF 3"
5. FOR INSTALLATION THROUGH 2X BUCK USE #12 SMS OR WOOD SCREWS. INSTALLATION SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

5.1. MINIMUM EMBEDMENT OF 1-1/2" INTO WOOD

5.2. MINIMUM EDGE DISTANCE OF 3/4"

5.3. MINIMUM O.C. DISTANCE OF 3/4"
6. FOR INSTALLATION THROUGH METAL FRAME USE #12 SMS OR SELF-DRILLING, SAE GR. 5, TYPE SCREWS. INSTALLATION SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.

6.1. THREE (3) THREADS MINIMUM PENETRATION BEYOND METAL FRAME WALL.

6.2. MINIMUM EDGE DISTANCE OF 1/2"

6.3. MINIMUM O.C. DISTANCE OF 3/4"
7. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
8. #12 WOOD SCREWS THROUGH UNIT FRAMES SHALL BE OF SUFFICIENT LENGTH TO FULLY PENETRATE LVL MULLION AND INTO ADJACENT FRAME. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR SPECIFIC LENGTHS.
9. INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
10. FOR HOLLOW BLOCK AND GROUT FILLED BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS.EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.
11. 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 BY THE ANCHOR MANUFACTURER.
12. 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 WALL THICKNESS OF 75 MILS (14 GA.) WHEN THROUGH GUSSET INSTALLATION. MINIMUM WALL THICKNESS OF 48 MILS (18 GA.) WHEN THROUGH L-BRACKET INSTALLATION. MINIMUM YIELD STRENGTH OF 36 KSI.

F. ALUMINUM - 1/8" MINIMUM THICKNESS (6063-T5)

GENERAL NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT FLORIDA BUILDING CODE (FBC) INCLUDING HVHZ. ALL PRODUCTS UNDER THE SCOPE OF THIS DOCUMENT HAVE BEEN EVALUATED ACCORDING TO SECTION 1709.8 OF THE CURRENT EDITION FBC AND THE FOLLOWING:

TAS 201-94

TAS 202-94

TAS 203-94
2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY, 2X AND METAL STUD 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. IN HVHZ AREAS, ONE TIME PRODUCT APPROVAL TO BE OBTAINED FROM MIAMI-DADE PERA OR AHJ.
5. APPROVED IMPACT PROTECTIVE SYSTEM **IS NOT REQUIRED** TO PROTECT THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
6. DOOR FRAME MATERIAL: *PONDEROSA PINE OR EQUIVALENT (S.G.=0.55).*
7. IN ACCORDANCE WITH CURRENT FBC, WOOD COMPONENTS SHALL HAVE BEEN PRESERVATIVE TREATED OR SHALL BE OF A DURABLE SPECIES AS DEFINED IN CHAPTER 23.
8. LVL MULLION COMPLIES WITH APPLICABLE STANDARDS SET FORTH IN THE CURRENT FBC, AS PRESCRIBED IN CHAPTER 23.
9. 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 CHAPTER 20.
- 10.DESIGNATIONS "X" AND "O" STAND FOR THE FOLLOWING:

X: OPERABLE PANEL

O: FIXED PANEL
- 11.CUSTOM SIZES AVAILABLE UPON REQUEST. CUSTOM DESIGN PRESSURE WILL BE ASSIGNED EQUAL TO NEXT LARGER STANDARD SIZE.
- 12.MULL ASSEMBLIES ARE QUALIFIED FOR TWO OR MORE UNITS PER OPENING IN THE FOLLOWING CONFIGURATIONS:

"ONE WAY" - RIBBON OR STACKED MULLIONS

"TWO WAY" - 'X' OR 'T' MULLIONS

ANDERSEN CORPORATION

ALUMINUM REINFORCED
MULLION SYSTEM
(HVHZ) (IMPACT)

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SHEET	SHEET DESCRIPTION
1	GENERAL AND INSTALLATION NOTES
2	MULL ASSEMBLY SECTIONS 1
3	MULL ASSEMBLY SECTIONS 2
4	MULLION CONNECTION DETAILS
5	ALUMINUM MULLION ONE-WAY LOAD TABLE
6	ALUMINUM MULLION TWO-WAY LOAD TABLE

MULLING INSTRUCTIONS:

- STEP 1: ESTABLISH MULL ASSEMBLY FRAME TYPES AND MULL CONFIGURATION.

STEP 2: DETERMINE MULL ASSEMBLY GROUP NUMBER FROM SHEETS 2 & 3 (REFER TO ABBREVIATION TABLE ABOVE).

STEP 3: DETERMINE ALLOWABLE LOAD OF MULL ASSEMBLY FROM APPLICABLE LOAD TABLE BASED ON MULL GROUP NUMBER, REFER TO SHEETS 5-6.

STEP 4: INSTALL MULLION BASED ON APPLICABLE SPECIFICATIONS SHOWN ON SHEET 4.

MISSILE IMPACT RATING
SMALL AND LARGE MISSILE IMPACT RATED



100 FOURTH AVE NORTH
BAYPORT, MN 55003-1096
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TITLE: ALUMINUM REINFORCED
MULLION SYSTEM
(HVHZ)(IMPACT)

GENERAL AND INSTALLATION NOTES

PREPARED BY:

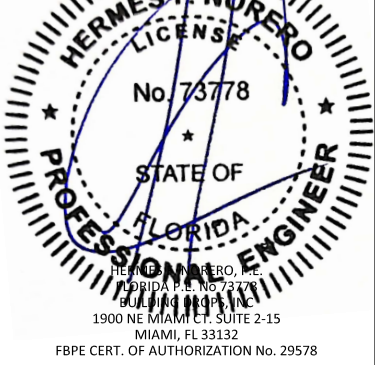
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com



REMARKS	BY	DATE
6TH FBC CODE CHANGE	RV	10/17
7TH CODE CHANGE	YC	10/20
2023 CODE CHANGE	MS	10/19/23

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Digitally signed by Hermes F. Norero, P.E.
Reason: I am approving this document
Date: 2023.10.20 08:58:03 -0400



FL #:

FL15922

DATE: 10.19.17

DWG. BY:
RV

CHK. BY:
HFN

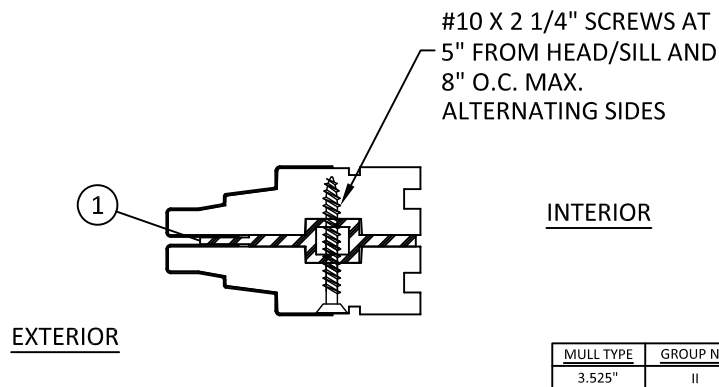
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DWG. #: AWD228

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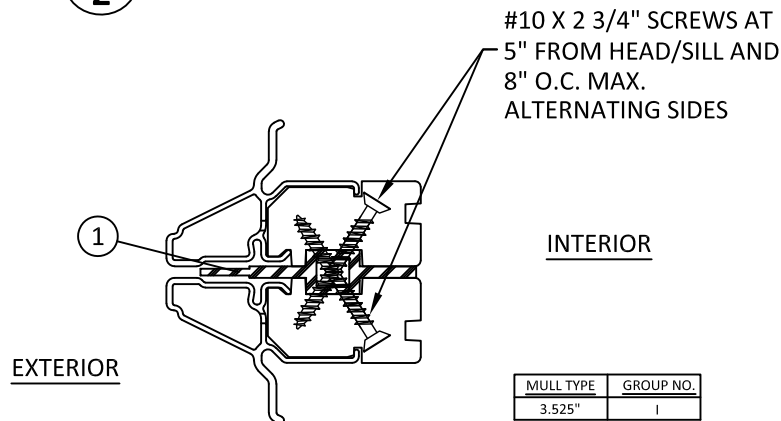
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OF 6

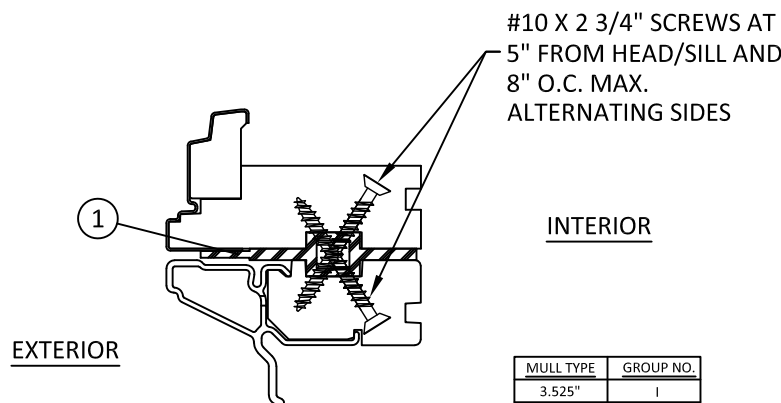


A
2 CASEMENT TO CASEMENT
VERTICAL MULL

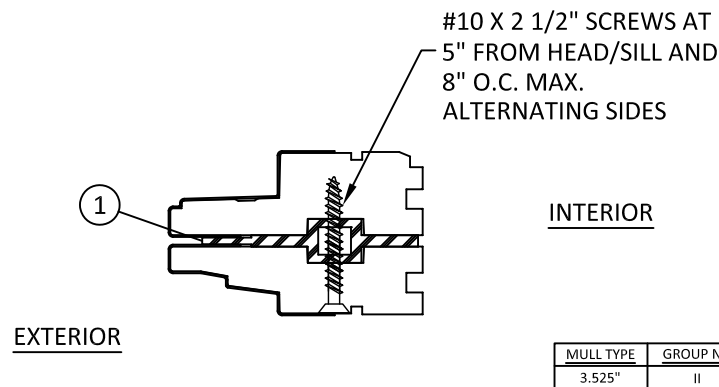
B
2 AWNING TO AWNING
HORIZONTAL MULL



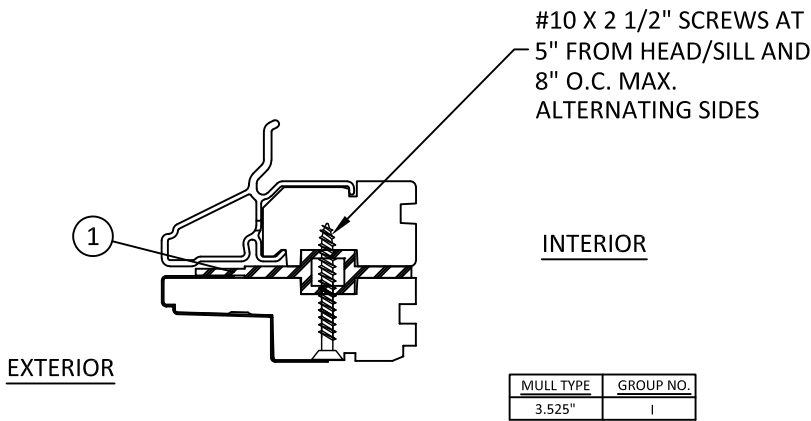
F
2 FLEXIFRAME TO FLEXIFRAME
VERTICAL OR HORIZONTAL MULL



K
2 FLEXIFRAME TO CIRCLE TOP/ QUARTER
VERTICAL OR HORIZONTAL MULL

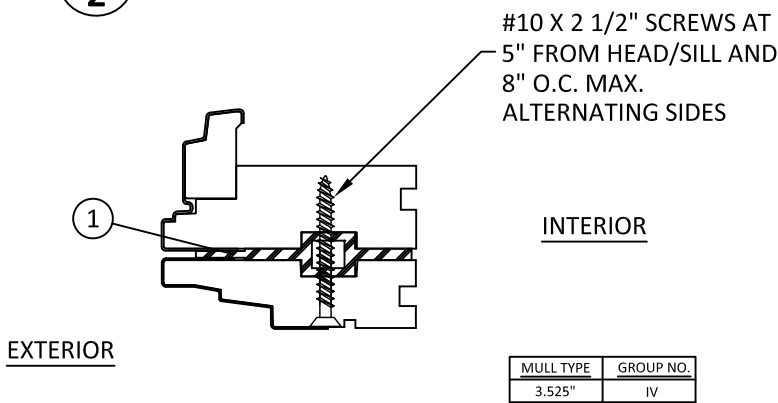


C
2 CASEMENT TO AWNING
VERTICAL OR HORIZONTAL MULL

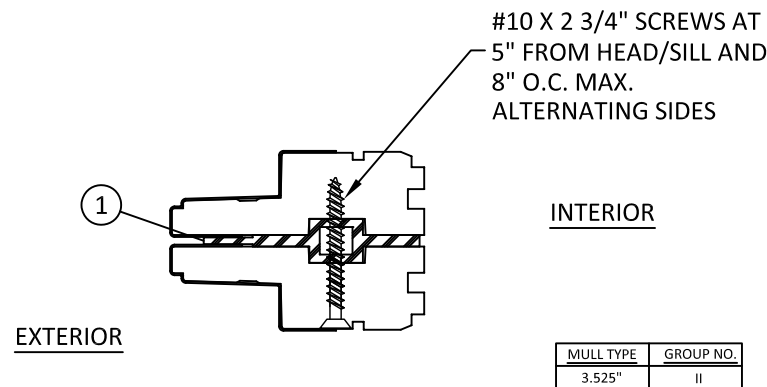


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2 CASEMENT TO FLEXIFRAME
HORIZONTAL MULL

H
2 AWNING TO FLEXIFRAME
VERTICAL MULL

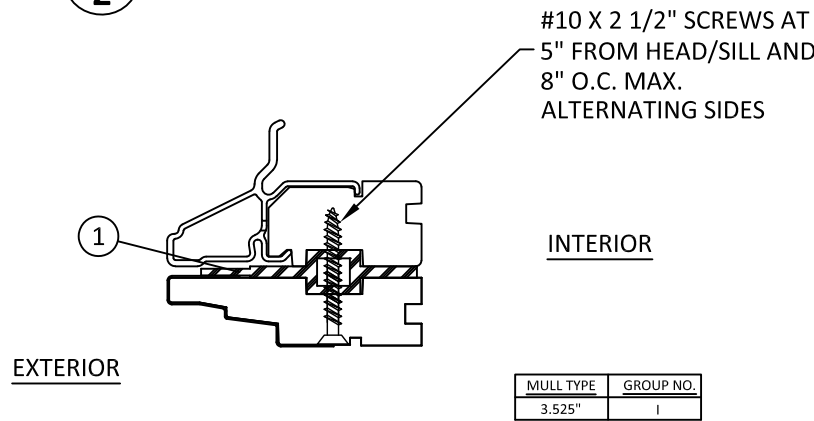


L
2 CIRCLE TOP TO AWNING
HORIZONTAL MULL



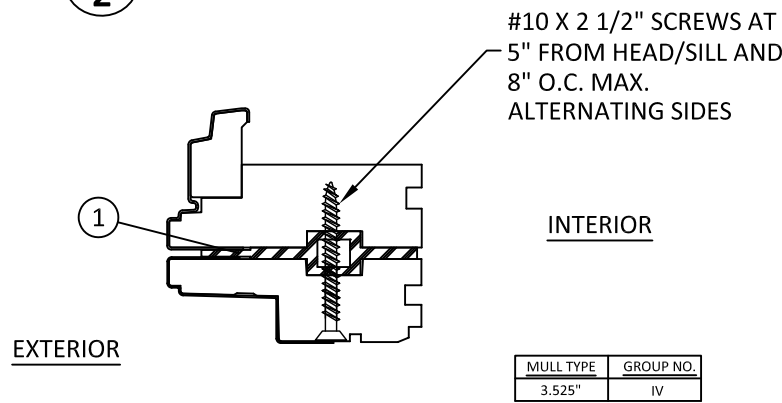
D
2 CASEMENT TO CASEMENT
HORIZONTAL MULL

E
2 AWNING TO AWNING
VERTICAL MULL



I
2 CASEMENT TO FLEXIFRAME
VERTICAL MULL

J
2 AWNING TO FLEXIFRAME
HORIZONTAL MULL



M
2 CIRCLE TOP TO CASEMENT
HORIZONTAL MULL

NOTE:
1- TYPICAL ANDERSEN FRAME MEMBERS FOR DOORS, TRANSOMS
AND SIDELITES UNDER SEPARATE APPROVAL.
2- MULLION SYSTEM CAN BE USED WITH ALL F.B.C.
APPROVED IMPACT AND NON-IMPACT RESISTANT PRODUCTS.



100 FOURTH AVE NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE: ALUMINUM REINFORCED
MULLION SYSTEM
(HVHZ)/(IMPACT)

MULL ASSEMBLY SECTIONS 1

PREPARED BY:

BUILDING DROPS, INC.

1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132

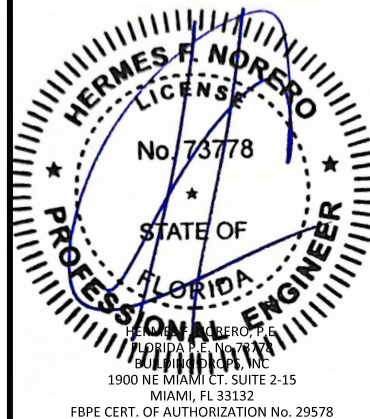
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WEB: www.buildingdrops.com

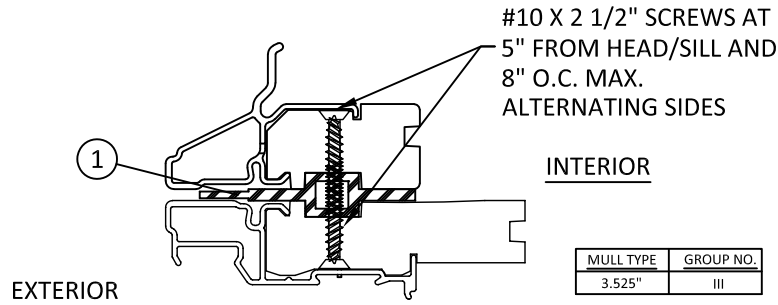


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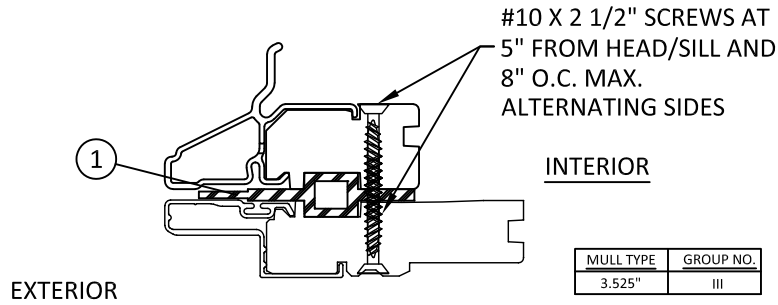
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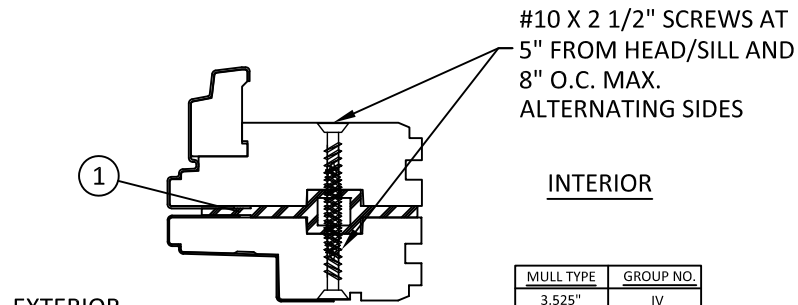
FL #:	FL15922
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CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD228
SHEET:	



A3 FLEXIFRAME/ARCH/SPRINGLINE TO FWH DOOR
HORIZONTAL MULL

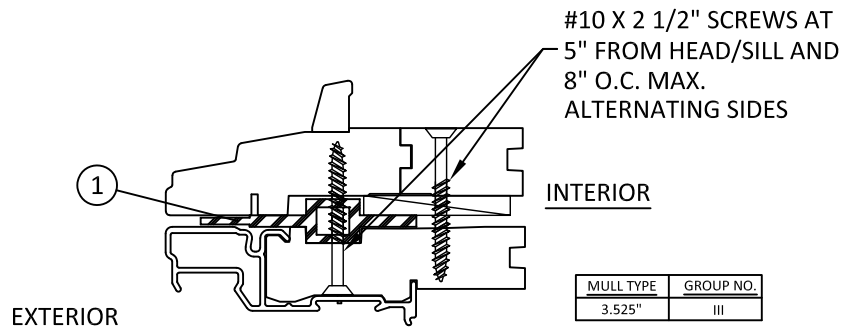


B3 FLEXIFRAME/ARCH/SPRINGLINE TO FWO DOOR
HORIZONTAL MULL

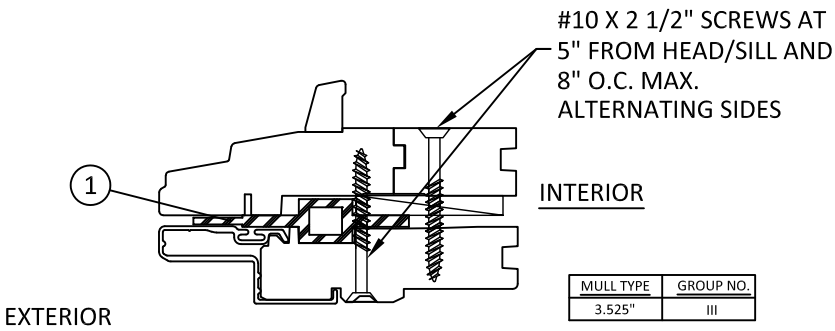


C3 CASEMENT PICTURE WDW TO AWNING
HORIZONTAL MULL

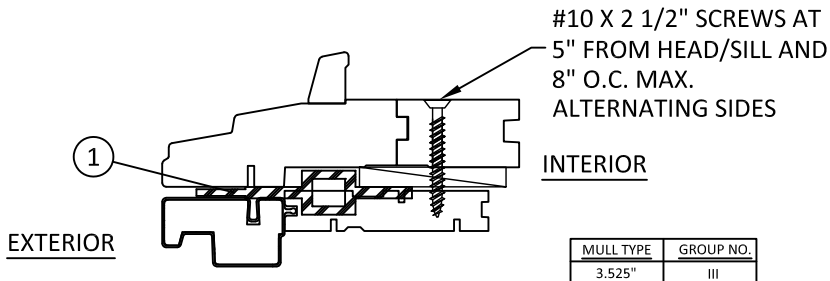
D3 CASEMENT PICTURE WDW TO CASEMENT
HORIZONTAL MULL



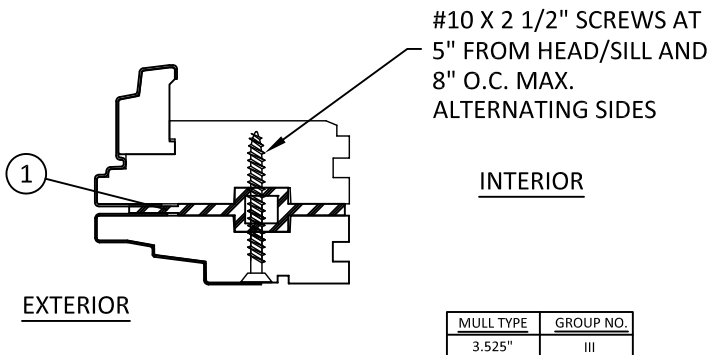
E3 ELLIPTICAL TO FWH DOOR
HORIZONTAL MULL



F3 ELLIPTICAL TO FWO DOOR
HORIZONTAL MULL

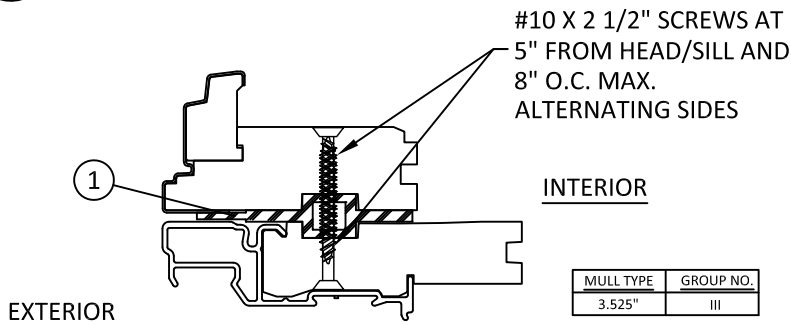


G3 ELLIPTICAL TO FW GLIDING DOOR
HORIZONTAL MULL

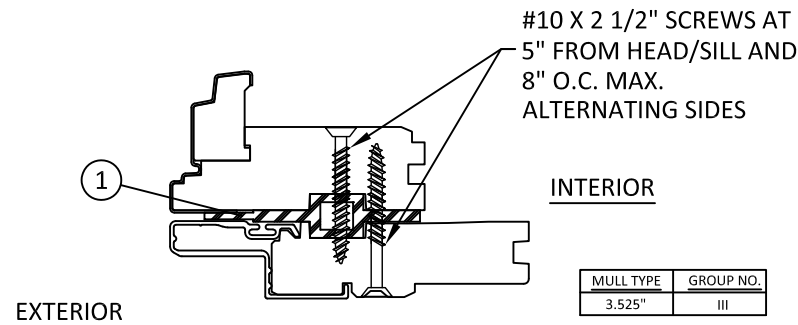


H3 CASEMENT PICTURE WDW TO AWNING
HORIZONTAL MULL

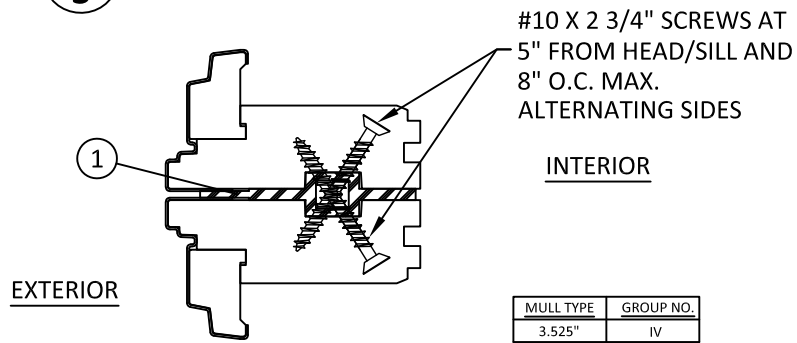
I3 CASEMENT PICTURE WDW TO CASEMENT
VERTICAL MULL



J3 PSCA PICTURE WDW TO FWH DOOR
HORIZONTAL MULL



K3 PSCA PICTURE WDW TO FWO DOOR
HORIZONTAL MULL



L3 CASEMENT PICTURE TO CASEMENT PICTURE
HORIZONTAL MULL

NOTE:
1- TYPICAL ANDERSEN FRAME MEMBERS FOR DOORS, TRANSOMS AND SIDELITES UNDER SEPARATE APPROVAL.
2- MULLION SYSTEM CAN BE USED WITH ALL F.B.C. APPROVED IMPACT AND NON-IMPACT RESISTANT PRODUCTS.

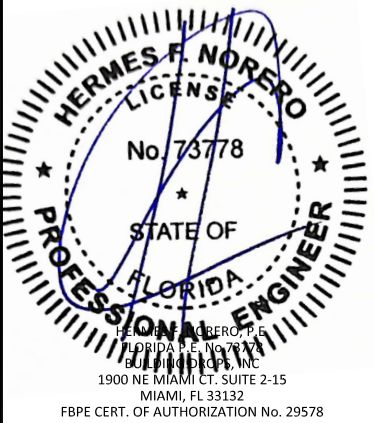


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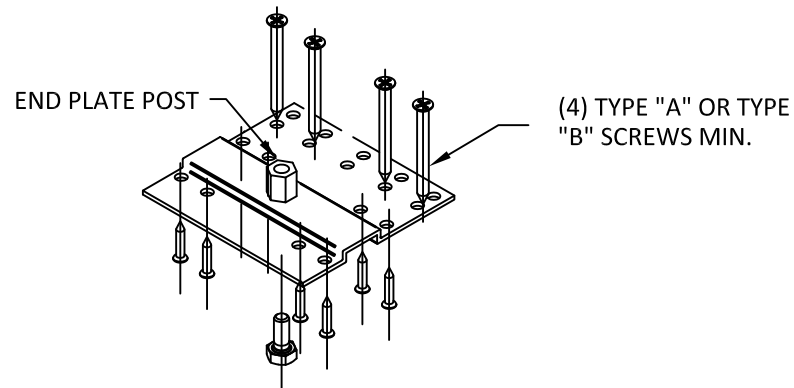
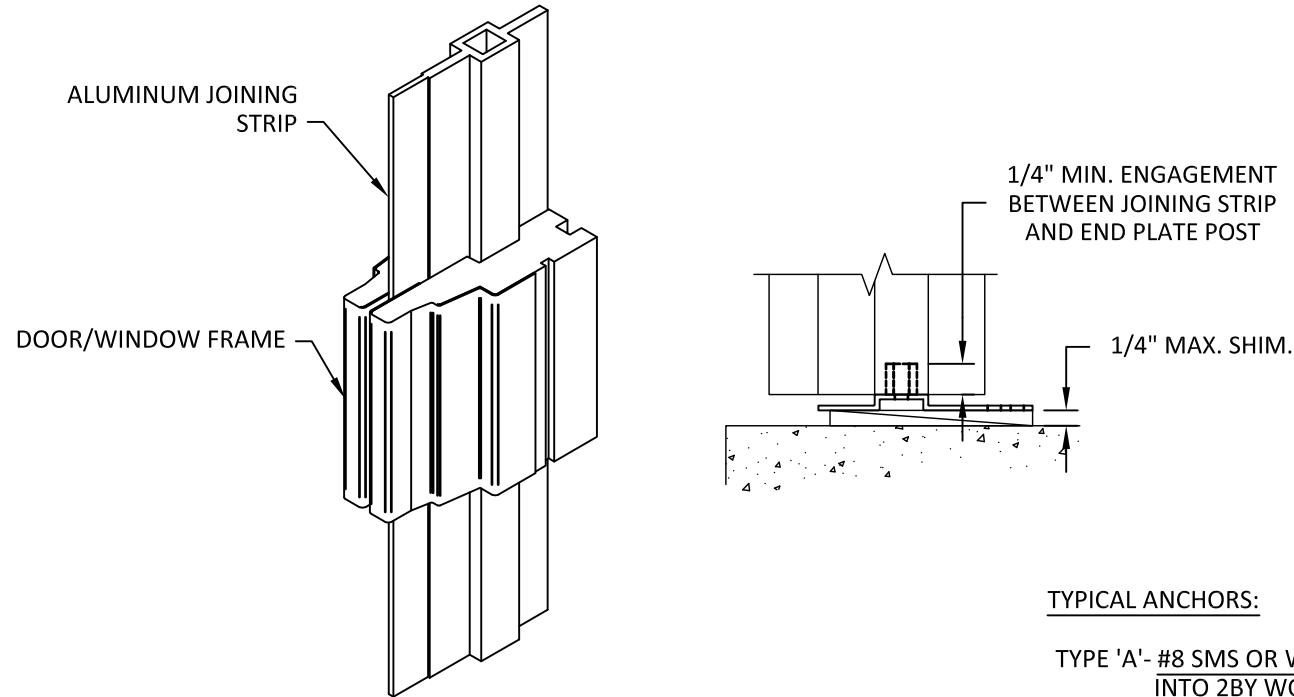
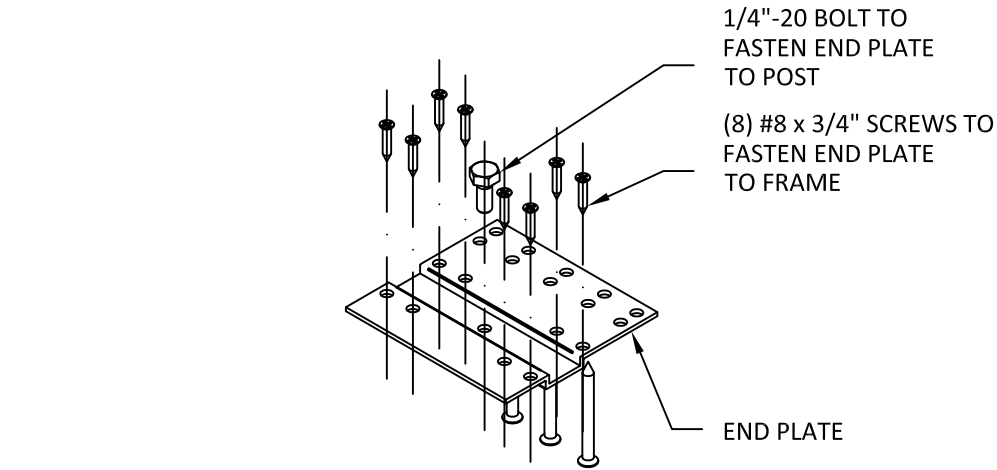
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MULLION SYSTEM
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MULL ASSEMBLY SECTIONS 2
PREPARED BY: BUILDING DROPS, INC.
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SCALE:	NTS
DWG. #:	AWD228
SHEET:	3
	OF 6



A
5 **VERTICAL OR HORIZONTAL**
MULLION CONNECTION DETAIL

TYPICAL ANCHORS:

TYPE 'A'- #8 SMS OR WOOD SCREWS (GRADE 2 CRS)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1 1/2" MIN. PENETRATION INTO WOOD

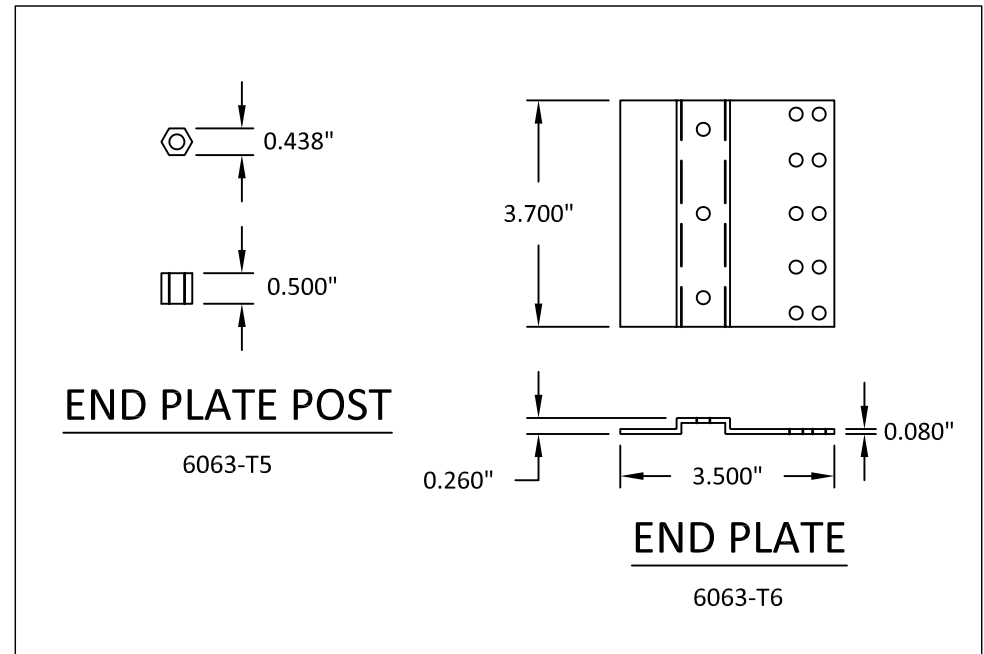
TYPE 'B'- 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
THRU 1BY WOOD BUCKS INTO CONCRETE OR MASONRY
1-3/8" MIN. EMBED INTO CONCRETE OR MASONRY
DIRECTLY INTO CONCRETE OR MASONRY
1-1/4" MIN. EMBED INTO CONCRETE OR MASONRY

TYPICAL EDGE DISTANCE
INTO CONCRETE = 2 1/2" MIN.
INTO MASONRY = 2 1/2" MIN.
INTO WOOD STRUCTURE = 3/4" MIN.

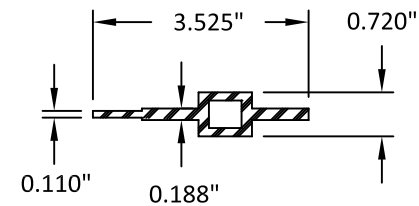
ANCHORS ̸ TO ̸ DISTANCES

ANCHORS INTO CONCRETE AND MASONRY = 3" MIN.
INTO WOOD STRUCTURE = 3/4" MIN.

CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
C-90 HOLLOW-FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.



1 **3.525" MULLION**
ALUMINUM



MULL TYPE	'Ix' in^4	'Sx' in^3
4"	0.5899	0.299



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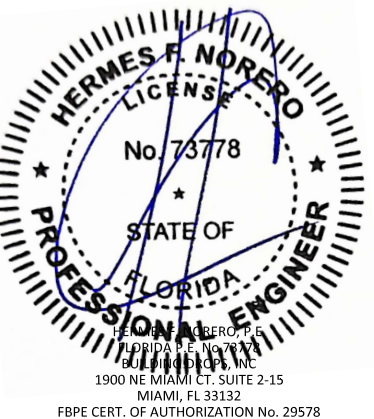
MULLION CONNECTION DETAILS

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FL #:
FL15922

DATE: **10.19.17**

DWG. BY: **RV** CHK. BY: **HFN**

SCALE: **NTS**

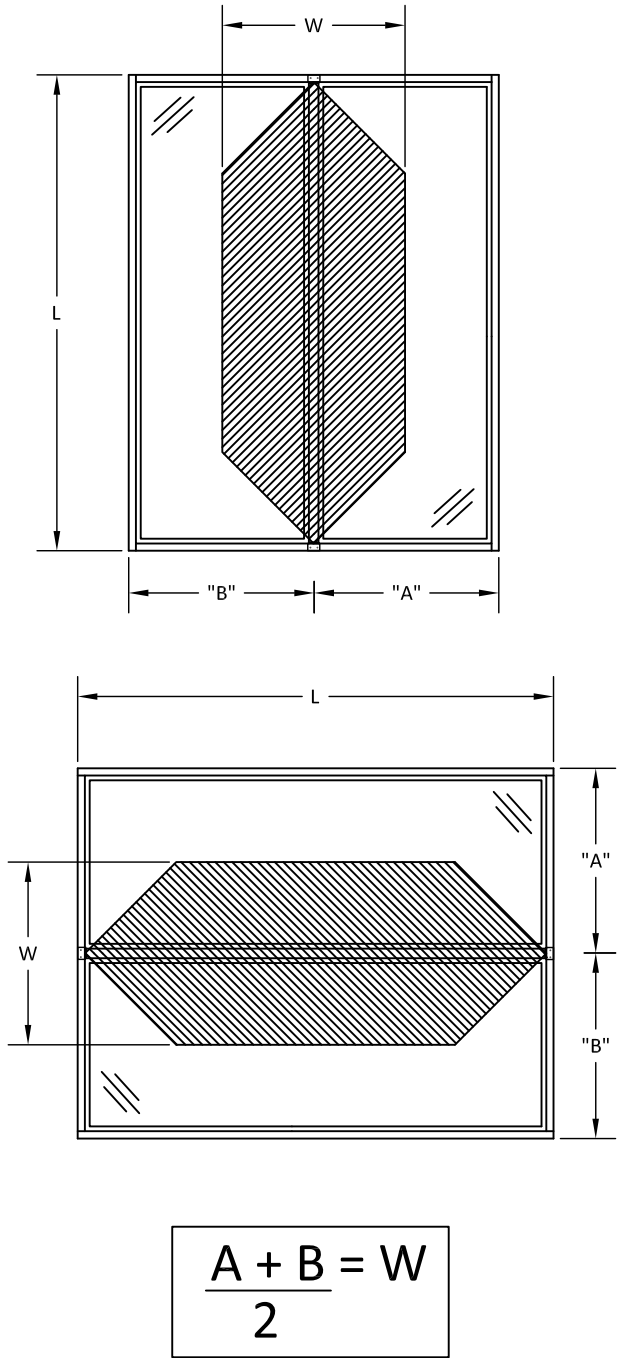
DWG. #: **AWD228**

SHEET:
4

DESIGN LOAD CAPACITY - PSF NARROW EXTRUDED ALUMINUM - ONE WAY					
WINDOW DIMS.		WITHOUT INTERMEDIATE HORIZONTALS			
WIDTH (W) (INCHES)	MULL SPAN	GROUP #1	GROUP #2	GROUP #3	GROUP #4
12.0	24.0	100.0	100.0	100.0	100.0
15.0		100.0	100.0	100.0	100.0
18.0		100.0	100.0	100.0	100.0
21.0		100.0	100.0	100.0	100.0
24.0		100.0	100.0	100.0	100.0
27.0		100.0	100.0	100.0	100.0
30.0		100.0	100.0	100.0	100.0
33.0		100.0	100.0	100.0	100.0
36.0		100.0	100.0	100.0	100.0
39.0		100.0	100.0	100.0	100.0
42.0		100.0	100.0	100.0	100.0
45.0		100.0	100.0	100.0	100.0
48.0		100.0	100.0	100.0	100.0
12.0	30.0	100.0	100.0	100.0	100.0
15.0		100.0	100.0	100.0	100.0
18.0		100.0	100.0	100.0	100.0
21.0		100.0	100.0	100.0	100.0
24.0		100.0	100.0	100.0	100.0
27.0		100.0	100.0	100.0	100.0
30.0		100.0	100.0	100.0	100.0
33.0		100.0	100.0	100.0	100.0
36.0		100.0	100.0	100.0	100.0
39.0		100.0	100.0	100.0	100.0
42.0		100.0	100.0	100.0	100.0
45.0		100.0	100.0	100.0	100.0
48.0		100.0	100.0	100.0	100.0
12.0	36.0	100.0	100.0	100.0	100.0
15.0		100.0	100.0	100.0	100.0
18.0		100.0	100.0	100.0	100.0
21.0		100.0	100.0	100.0	100.0
24.0		100.0	100.0	100.0	100.0
27.0		100.0	100.0	100.0	100.0
30.0		100.0	100.0	100.0	100.0
33.0		100.0	100.0	100.0	100.0
36.0		100.0	100.0	100.0	100.0
39.0		100.0	100.0	100.0	100.0
42.0		100.0	100.0	100.0	100.0
45.0		100.0	100.0	100.0	100.0
48.0		100.0	100.0	100.0	100.0
12.0	42.0	100.0	100.0	100.0	100.0
15.0		100.0	100.0	100.0	100.0
18.0		100.0	100.0	100.0	100.0
21.0		100.0	100.0	100.0	100.0
24.0		100.0	100.0	100.0	100.0
27.0		100.0	100.0	100.0	100.0
30.0		100.0	100.0	100.0	100.0
33.0		100.0	100.0	100.0	100.0
36.0		100.0	100.0	100.0	100.0
39.0		98.5	98.5	98.5	98.5
42.0		98.0	98.0	98.0	98.0
45.0		98.0	98.0	98.0	98.0
48.0		98.0	98.0	98.0	98.0

DESIGN LOAD CAPACITY - PSF NARROW EXTRUDED ALUMINUM - ONE WAY					
WINDOW DIMS.		WITHOUT INTERMEDIATE HORIZONTALS			
WIDTH (W) (INCHES)	MULL SPAN	GROUP #1	GROUP #2	GROUP #3	GROUP #4
12.0	48	100.0	100.0	100.0	100.0
15.0		100.0	100.0	100.0	100.0
18.0		100.0	100.0	100.0	100.0
21.0		100.0	100.0	100.0	100.0
24.0		100.0	100.0	100.0	100.0
27.0		92.8	92.8	92.8	92.8
30.0		87.3	87.3	87.3	87.3
33.0		83.1	83.1	83.1	83.1
36.0		80.0	80.0	80.0	80.0
39.0		77.7	77.7	77.7	77.7
42.0		76.2	76.2	76.2	76.2
45.0		75.3	75.3	75.3	75.3
48.0		75.0	75.0	75.0	75.0
12.0	54.0	100.0	100.0	100.0	100.0
15.0		100.0	100.0	100.0	100.0
18.0		100.0	100.0	100.0	100.0
21.0		94.6	94.6	94.6	94.6
24.0		85.7	85.7	85.7	85.7
27.0		79.0	79.0	79.0	79.0
30.0		73.8	73.8	73.8	73.8
33.0		69.8	69.8	69.8	69.8
36.0		66.7	66.7	66.7	66.7
39.0		64.2	64.2	64.2	63.5
42.0		62.3	62.3	62.3	61.0
45.0		61.0	61.0	61.0	59.2
48.0		60.0	60.0	60.0	57.9
12.0	60.0	100.0	100.0	100.0	100.0
15.0		100.0	100.0	100.0	100.0
18.0		94.1	94.1	94.1	94.1
21.0		83.1	83.1	83.1	82.3
24.0		75.0	75.0	75.0	73.0
27.0		68.8	68.8	68.8	65.8
30.0		64.0	64.0	64.0	60.3
33.0		60.2	60.2	60.2	55.8
36.0		57.1	57.1	57.1	52.3
39.0		54.7	54.7	54.7	49.5
42.0		52.7	52.7	52.7	47.2
45.0		51.2	51.2	51.2	45.3
48.0		50.0	50.0	50.0	43.9
12.0	66.0	100.0	100.0	100.0	100.0
15.0		98.5	98.5	98.5	93.0
18.0		84.2	84.2	84.2	78.1
21.0		74.1	74.1	74.1	67.5
24.0		66.7	66.7	66.7	59.7
27.0		61.0	61.0	61.0	53.7
30.0		56.5	56.5	56.5	49.0
33.0		52.9	52.9	52.9	45.3
36.0		50.0	50.0	50.0	42.2
39.0		47.6	47.6	47.6	39.7
42.0		45.7	45.7	45.7	37.7
45.0		44.1	44.1	44.1	36.0
48.0		42.9	42.9	42.9	34.6

DESIGN LOAD CAPACITY - PSF NARROW EXTRUDED ALUMINUM - ONE WAY					
WINDOW DIMS.		WITHOUT INTERMEDIATE HORIZONTALS			
WIDTH (W) (INCHES)	MULL SPAN	GROUP #1	GROUP #2	GROUP #3	GROUP #4
12.0	72	100.0	100.0	100.0	96.9
15.0		89.3	89.3	89.3	77.9
18.0		76.2	76.2	76.2	65.3
21.0		66.9	66.9	66.9	56.4
24.0		60.0	60.0	60.0	49.8
27.0		54.7	54.7	54.7	44.7
30.0		50.5	50.5	50.5	40.7
33.0		47.2	47.2	47.2	37.5
36.0		44.4	44.4	44.4	34.9
39.0		42.2	42.2	42.2	32.7
42.0		40.3	40.3	40.3	30.9
45.0		38.8	38.8	38.8	29.4
48.0		37.5	37.5	37.5	28.1
12.0	78.0	100.0	100.0	100.0	82.4
15.0		81.7	81.7	81.7	66.2
18.0		69.6	69.6	69.6	55.5
21.0		61.0	61.0	61.0	47.9
24.0		54.5	54.5	54.5	42.2
27.0		49.6	49.6	49.6	37.8
30.0		45.7	45.7	45.7	34.4
33.0		42.6	42.6	42.6	31.6
36.0		40.0	40.0	40.0	29.3
39.0		37.9	37.9	37.9	27.4
42.0		36.1	36.1	36.1	25.8
45.0		34.6	34.6	34.6	24.5
48.0		33.3	33.3	33.0	23.4
12.0	84.0	92.3	92.3	92.3	71.0
15.0		75.3	75.3	75.3	57.0
18.0		64.0	64.0	64.0	47.7
21.0		56.0	56.0	56.0	41.2
24.0		50.0	50.0	50.0	36.2
27.0		45.4	45.4	45.4	32.5
30.0		41.7	41.7	41.6	29.4
33.0		38.8	38.8	38.2	27.0
36.0		36.4	36.4	35.4	25.0
39.0		34.3	34.3	33.0	23.4
42.0		32.7	32.7	31.0	22.0
45.0		31.2	31.2	29.4	20.8
48.0		30.0	30.0	27.9	19.8



NOTE:

- 1) MULLION CHART APPLIES TO NARROW EXTRUDED ALUMINUM MULLION ASSEMBLIES, WHEN MULLED IN ONE-WAY, STACK OR RIBBON, CONFIGURATIONS.
- 2) DESIGN PRESSURE VALUES ARE POSITIVE AND NEGATIVE IN PSF.
- 3) MAXIMUM DEFLECTION HAS BEEN LIMITED TO L/180.
- 4) DESIGN PRESSURE OF ASSEMBLY IS LIMITED TO THE LESSER DESIGN PRESSURE OF THE MULLION ASSEMBLY OR THE INDIVIDUAL UNIT OF INSTALLATION. ADJACENT WINDOWS OR DOORS SHALL BE UNDER SEPARATE FL OR MIAMI-DADE APPROVAL.
- 5) MULLION CHART APPLIES TO THE FOLLOWING INSTALLATION CONDITIONS:
 - END PLATE INSTALLATION TO WOOD, MASONRY, CONCRETE, OR METAL STUD
- 6) TRIBUTARY WIDTH = W = (A+B)/2

100 FOURTH AVE NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE: ALUMINUM REINFORCED
MULLION SYSTEM
(HVHZ)/(IMPACT)

ALUMINUM MULLION ONE WAY
LOAD TABLE

PREPARED BY:
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
6TH FBC CODE CHANGE	RV	10/17
7TH CODE CHANGE	YC	10/20
2023 CODE CHANGE	MS	10/19/23
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.		

HERMES F. NORENO
LICENSE
No. 73778
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
HERMES F. NORENO, P.E.
FLORIDA P.E. NO. 73778
BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:

FL15922

DATE:

10.19.17

DWG. BY:

RV

CHK. BY:

HFN

SCALE:

NTS

DWG. #:

AWD228

SHEET:

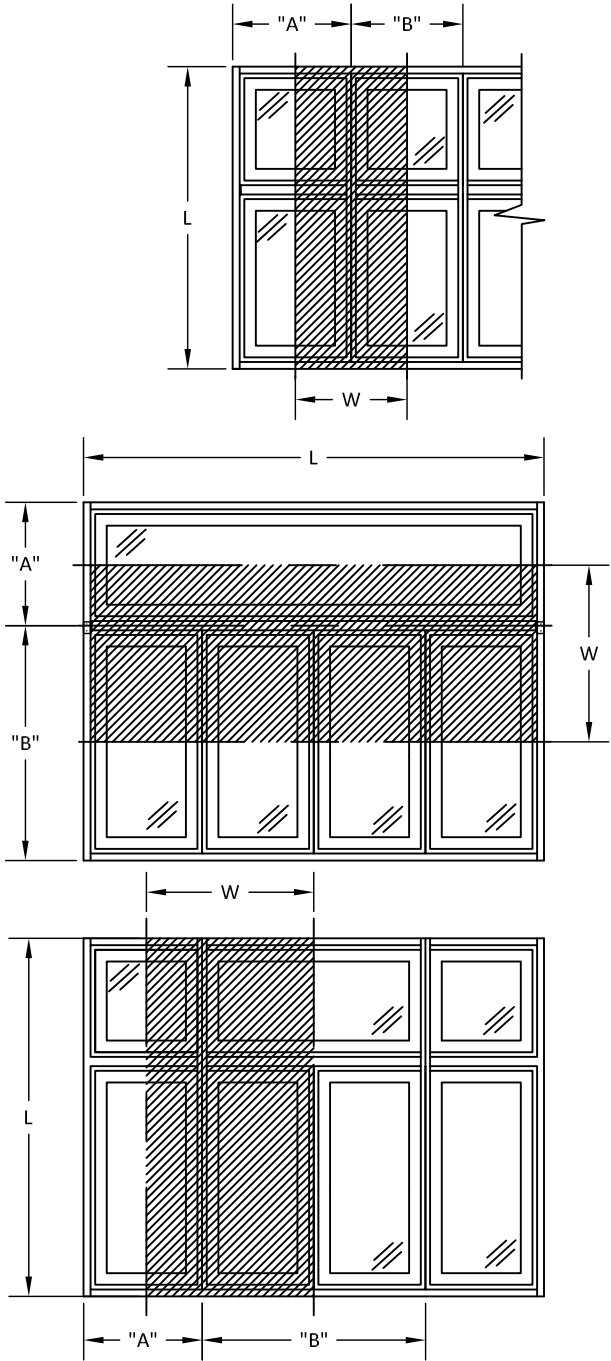
5

OF 6

DESIGN LOAD CAPACITY - PSF NARROW EXTRUDED ALUMINUM - TWO WAY					
WINDOW DIMS.		WITH INTERMEDIATE HORIZONTALS			
WIDTH (W) (INCHES)	MULL SPAN	GROUP #1	GROUP #2	GROUP #3	GROUP #4
12.0	36.0	100.0	100.0	100.0	100.0
15.0		100.0	100.0	100.0	100.0
18.0		100.0	100.0	100.0	100.0
21.0		100.0	100.0	100.0	100.0
24.0		100.0	100.0	100.0	100.0
27.0		88.9	88.9	88.9	88.9
30.0		80.0	80.0	80.0	80.0
33.0		72.7	72.7	72.7	72.7
36.0		66.7	66.7	66.7	66.7
39.0		61.5	61.5	61.5	61.5
42.0	42.0	57.1	57.1	57.1	57.1
45.0		53.3	53.3	53.3	53.3
48.0		50.0	50.0	50.0	50.0
12.0		100.0	100.0	100.0	100.0
15.0		100.0	100.0	100.0	100.0
18.0		100.0	100.0	100.0	100.0
21.0		98.0	98.0	98.0	98.0
24.0		85.7	85.7	85.7	85.7
27.0		76.2	76.2	76.2	76.2
30.0		68.6	68.6	68.6	68.6
33.0	48.0	62.3	62.3	62.3	62.3
36.0		57.1	57.1	57.1	57.1
39.0		52.7	52.7	52.7	52.7
42.0		49.0	49.0	49.0	49.0
45.0		45.7	45.7	45.7	45.7
48.0		42.9	42.9	42.9	42.9
12.0		100.0	100.0	100.0	100.0
15.0		100.0	100.0	100.0	100.0
18.0		100.0	100.0	100.0	100.0
21.0		85.7	85.7	85.7	85.7

DESIGN LOAD CAPACITY - PSF NARROW EXTRUDED ALUMINUM - TWO WAY					
WINDOW DIMS.		WITH INTERMEDIATE HORIZONTALS			
WIDTH (W) (INCHES)	MULL SPAN	GROUP #1	GROUP #2	GROUP #3	GROUP #4
12.0	54.0	100.0	100.0	100.0	100.0
15.0		100.0	100.0	100.0	100.0
18.0		88.9	88.9	88.9	88.9
21.0		76.2	76.2	76.2	76.2
24.0		66.7	66.7	66.7	66.7
27.0		59.3	59.3	59.3	59.3
30.0		53.3	53.3	53.3	53.3
33.0		48.5	48.5	48.5	48.5
36.0		44.4	44.4	44.4	44.4
39.0		41.0	41.0	41.0	41.0
42.0	60.0	38.1	38.1	38.1	38.1
45.0		35.6	35.6	35.6	35.6
48.0		33.3	33.3	33.3	33.3
12.0		100.0	100.0	100.0	100.0
15.0		96.0	96.0	96.0	96.0
18.0		80.0	80.0	80.0	80.0
21.0		68.6	68.6	68.6	68.6
24.0		60.0	60.0	60.0	60.0
27.0		53.3	53.3	53.3	53.3
30.0		48.0	48.0	48.0	48.0
33.0	66.0	43.6	43.6	43.6	43.6
36.0		40.0	40.0	40.0	40.0
39.0		36.9	36.9	36.9	36.9
42.0		34.3	34.3	34.3	34.3
45.0		32.0	32.0	32.0	32.0
48.0		30.0	30.0	30.0	30.0
12.0		100.0	100.0	100.0	100.0
15.0		87.3	87.3	87.3	87.3
18.0		72.7	72.7	72.7	72.7
21.0		62.3	62.3	62.3	62.3

DESIGN LOAD CAPACITY - PSF NARROW EXTRUDED ALUMINUM - TWO WAY					
WINDOW DIMS.		WITH INTERMEDIATE HORIZONTALS			
WIDTH (W) (INCHES)	MULL SPAN	GROUP #1	GROUP #2	GROUP #3	GROUP #4
12.0	72.0	100.0	100.0	100.0	95.9
15.0		80.0	80.0	80.0	76.8
18.0		66.7	66.7	66.7	64.0
21.0		57.1	57.1	57.1	54.8
24.0		50.0	50.0	50.0	48.0
27.0		44.4	44.4	44.4	42.6
30.0		40.0	40.0	40.0	38.4
33.0		36.4	36.4	36.4	34.9
36.0		33.3	33.3	33.3	32.0
39.0		30.8	30.8	30.8	29.5
42.0	78.0	28.6	28.6	28.6	27.4
45.0		26.7	26.7	26.7	25.6
48.0		25.0	25.0	25.0	24.0
12.0		92.3	92.3	92.3	81.8
15.0		73.8	73.8	73.8	65.4
18.0		61.5	61.5	61.5	54.5
21.0		52.7	52.7	52.7	46.7
24.0		46.2	46.2	46.2	40.9
27.0		41.0	41.0	41.0	36.3
30.0		36.9	36.9	36.9	32.7
33.0	84.0	33.6	33.6	33.6	29.7
36.0		30.8	30.8	30.8	27.3
39.0		28.4	28.4	28.4	25.2
42.0		26.4	26.4	26.4	23.4
45.0		24.6	24.6	24.6	21.8
48.0		23.1	23.1	23.1	20.4
12.0		85.7	85.7	85.7	70.5
15.0		68.6	68.6	68.6	56.4
18.0		57.1	57.1	57.1	47.0
21.0		49.0	49.0	49.0	40.3



$$\frac{A + B}{2} = W$$

NOTE:

- 1) MULLION CHART APPLIES TO NARROW EXTRUDED ALUMINUM MULLION ASSEMBLIES, WHEN MULLED IN TWO-WAY, 'X' OR 'T', CONFIGURATIONS.
- 2) DESIGN PRESSURE VALUES ARE POSITIVE AND NEGATIVE IN PSF.
- 3) MAXIMUM DEFLECTION HAS BEEN LIMITED TO L/180.
- 4) DESIGN PRESSURE OF ASSEMBLY IS LIMITED TO THE LESSER DESIGN PRESSURE OF THE MULLION ASSEMBLY OR THE INDIVIDUAL UNIT OF INSTALLATION. ADJACENT WINDOWS OR DOORS SHALL BE UNDER SEPARATE FL OR MIAMI-DADE APPROVAL.
- 5) MULLION CHART APPLIES TO THE FOLLOWING INSTALLATION CONDITIONS:
 - END PLATE INSTALLATION TO WOOD, MANSONRY, CONCRETE, OR STEEL STUD.
- 6) TRIBUTARY WIDTH = W = (A+B)/2

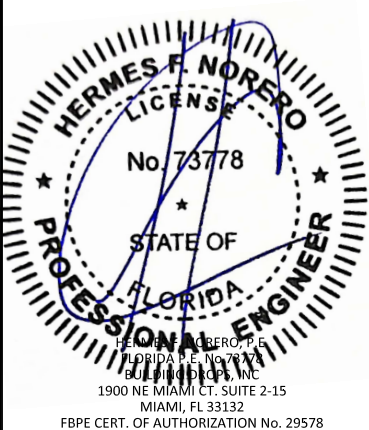


100 FOURTH AVE NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE: ALUMINUM REINFORCED
MULLION SYSTEM
(HVHZ)/(IMPACT)
ALUMINUM MULLION TWO WAY
LOAD TABLE
PREPARED BY: BUILDING DROPS, INC.
1900 NE MIAMI CT, SUITE 2-15
MIAMI, FL 33132
PH: (954)399-8478
FAX: (954)744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
6TH FBC CODE CHANGE	RV	10/17
7TH CODE CHANGE	YC	10/20
2023 CODE CHANGE	MS	10/19/23

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FL #: FL15922

DATE: 10.19.17

DWG. BY: RV
CHK. BY: HFN

SCALE: NTS

DWG. #: AWD228

SHEET:
6