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# WINDSOR WINDOWS & DOORS

## PINNACLE CLAD STEEL MULLION

### (WZ3)(IMPACT)


INSTALLATION NOTES:

- ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN.
- THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION OF THE MAXIMUM SIZE LISTED.
- INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF ±1/2 INCH (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
- SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM(S). MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER.
- REFER TO SHEETS 2 & 3 FOR INSTALLATION DETAILS, ANCHOR SELECTION, AND ANCHOR REQUIREMENTS.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
- INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
- 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.
- 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.
- INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
  - WOOD - MINIMUM SPECIFIC GRAVITY OF 0.55.
  - CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
  - GROUT-FILLED CMU-UNIT STRENGTH CONFORMS TO ASTM C-90 WIT MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AND GROUT CONFORMS TO ASTM C476, MINIMUM GROUT COMPRESSIVE STRENGTH OF 2000 PSI.
  - STEEL - MINIMUM YIELD STRENGTH OF 33 KSI. MINIMUM 18 GA. WALL THICKNESS.
  - ALUMINUM- MINIMUM THICKNESS 1/8". MIN. 6063-T5

GENERAL NOTES:

- THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE (FBC) AND INTERNATIONAL BUILDING CODE (IBC), EXCLUDING HVHZ AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
  - AAMA/WDMA/CSA 101/I.S.2/A440-11
  - AAMA 506-16
  - ASTM E1886-13
  - ASTM E1996-14
- 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.
- 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.
- 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.
- APPROVED IMPACT PROTECTIVE SYSTEM **IS NOT REQUIRED** FOR THIS PRODUCT IN **ZONE 3 OR LESS**. INDIVIDUAL WINDOW UNITS MUST BE IMPACT RATED WHERE APPLICABLE.
- APPROVED IMPACT PROTECTIVE SYSTEM **IS REQUIRED** FOR THIS PRODUCT IN **WIND ZONE 4**.
- MULLION MATERIAL: A36 STEEL

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WINDSOR WINDOWS & DOORS  
A Woodgrain Millwork Company

WINDSOR WINDOWS & DOORS  
900 S. 19TH STREET.  
WEST DES MOINES, IA 50265  
PH: (515)223-6660 FAX: (515)224-1938

TITLE: PINNACLE CLAD STEEL MULLION (WZ3)(IMPACT)

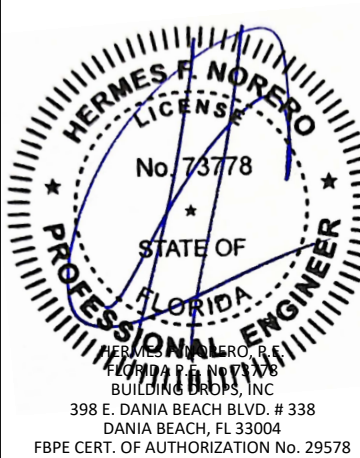
INSTALLATION & GENERAL NOTES

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



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FLORIDA PROFESSIONAL ENGINEER  
LICENSE No. 73778  
STATE OF FLORIDA  
BUILDING DROPS, INC.  
398 E. DANIA BEACH BLVD. # 338  
DANIA BEACH, FL 33004  
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:

FL21905

DATE: 06.12.20

DWG. BY: YC

CHK. BY: HFN

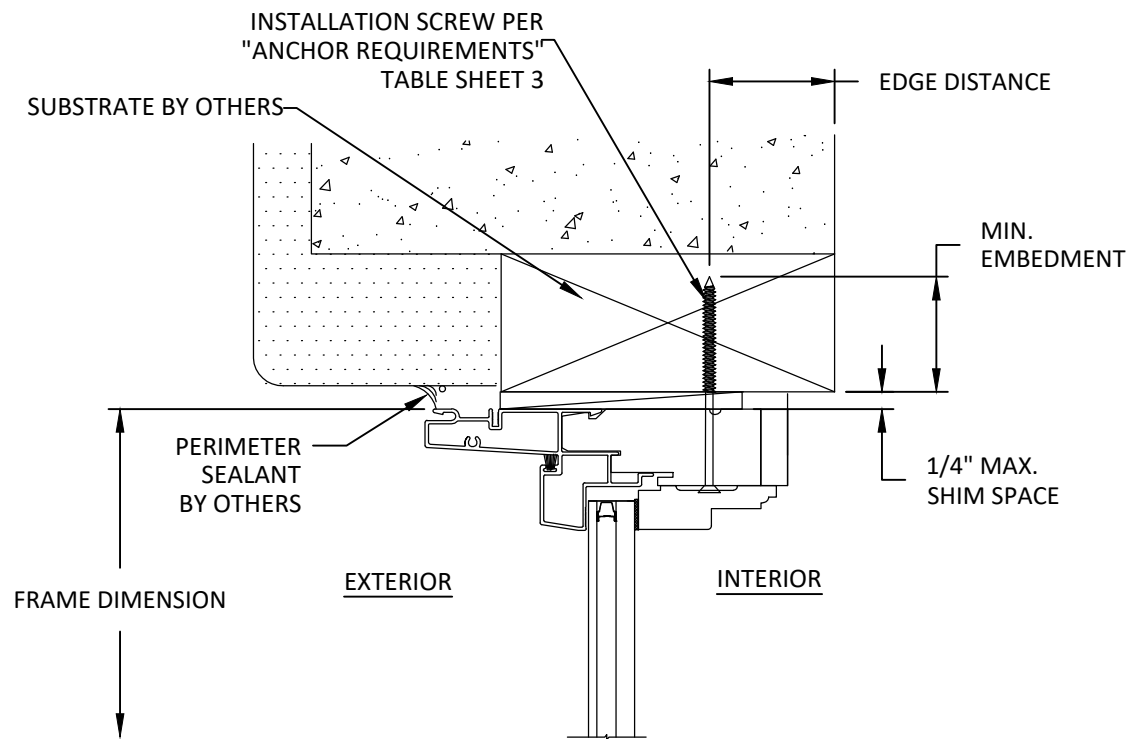
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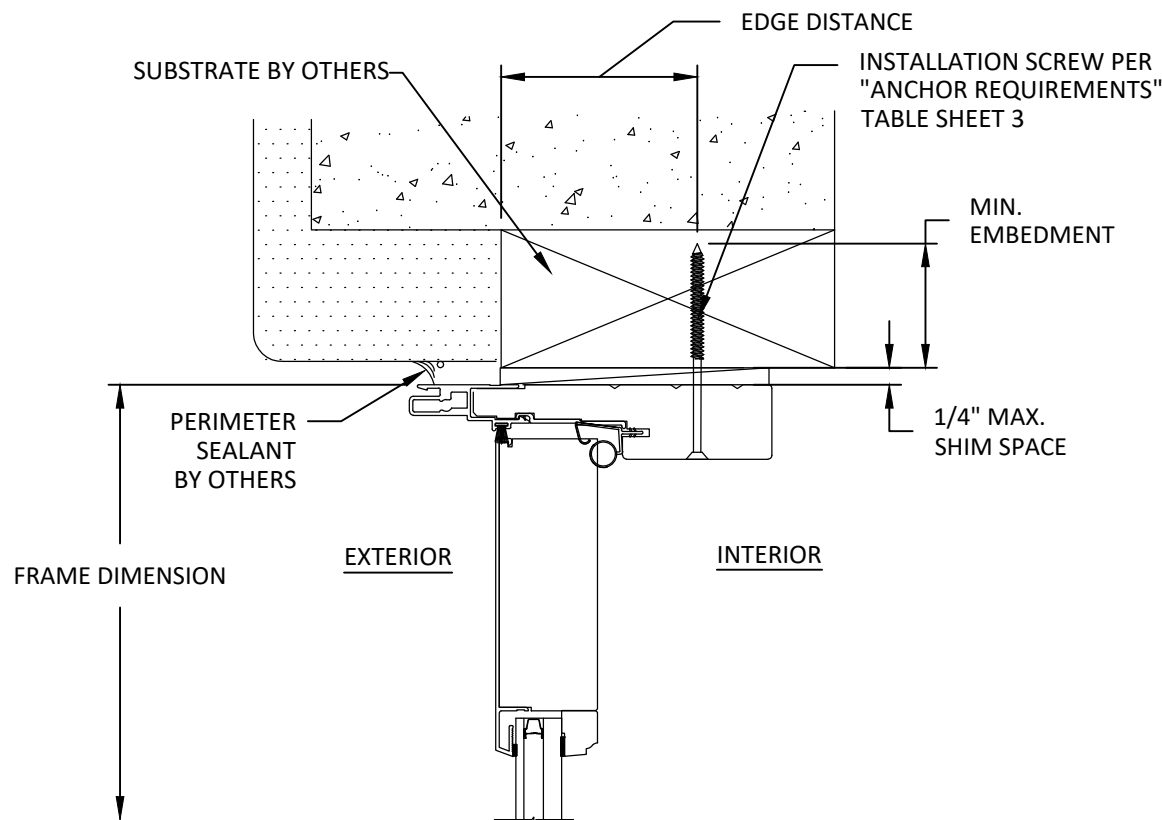
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OF 9

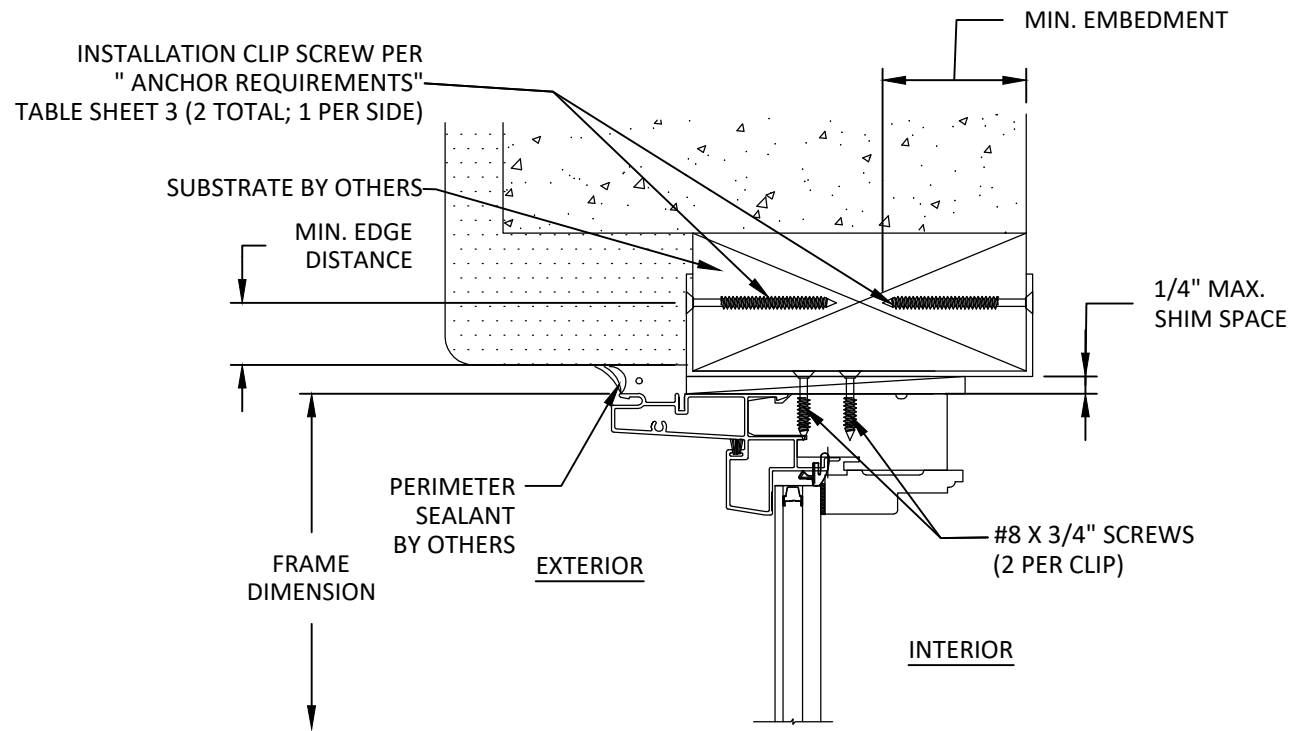
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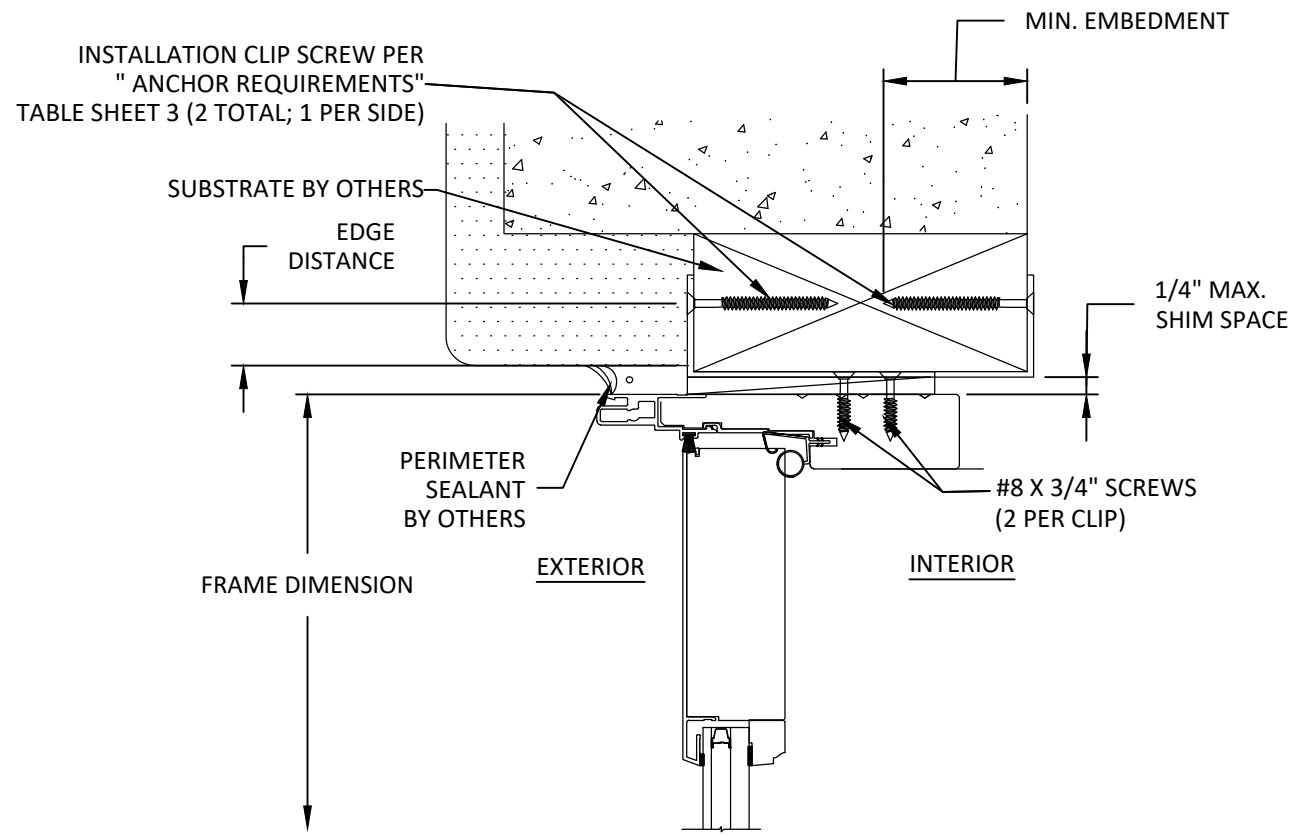
**A**  
**2**  
**HEAD SECTION**  
THROUGH FRAME INSTALLATION  
(SILL & SIDES ARE INSTALLED THE SAME)



**C**  
**2**  
**HEAD SECTION**  
THROUGH FRAME INSTALLATION  
(SILL & JAMB SIMILAR-WHERE APPLICABLE)



**B**  
**2**  
**HEAD SECTION**  
STRAP INSTALLATION  
(SILL & JAMB SIMILAR)



**D**  
**2**  
**HEAD SECTION**  
STRAP INSTALLATION  
(SILL & JAMB SIMILAR-WHERE APPLICABLE)



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& DOORS**  
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WEST DES MOINES, IA 50265  
PH: (515)223-6660 FAX: (515)224-1938

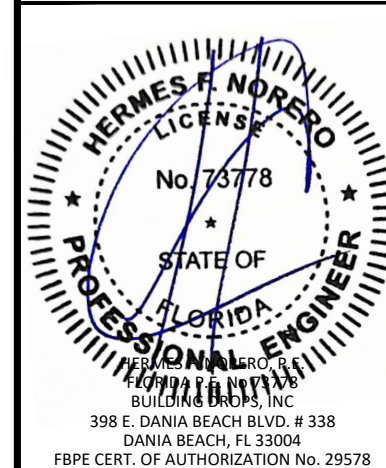
TITLE:  
PINNACLE CLAD  
STEEL MULLION  
(WZ3)(IMPACT)  
VERTICAL SECTIONS

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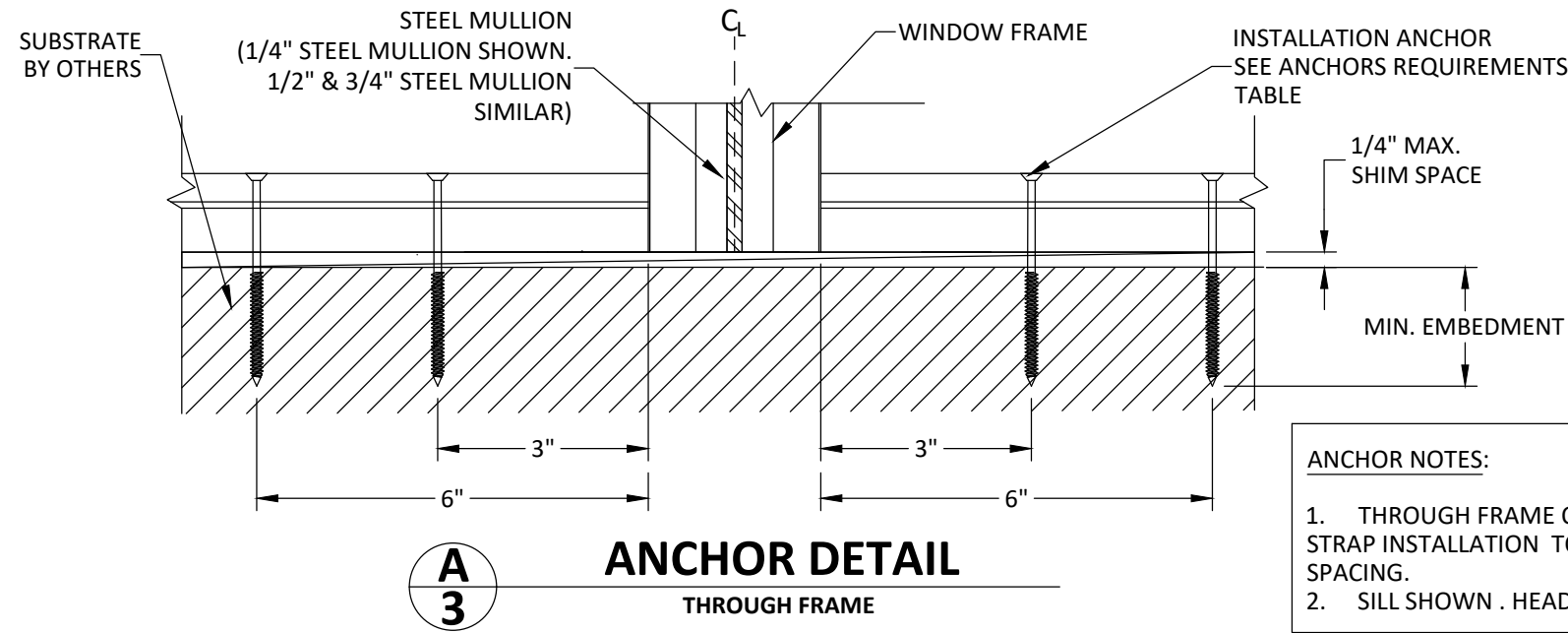
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SCALE: **NTS**

DWG. #: **WWD055**

SHEET:  
**2**

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- ANCHOR NOTES:
- THROUGH FRAME OPTION SHOWN. STRAP INSTALLATION TO FOLLOW SAME LAYOUT AND SPACING.
  - SILL SHOWN . HEAD AND JAMBS SIMILAR

ANCHOR REQUIREMENTS			
ANCHOR SCHEDULE	SUBSTRATE	MIN EMBEDMENT	MIN. EDGE DISTANCE
#10 WOOD	WOOD: MIN. SG=0.55	1 1/4"	3/4"
#10 SELF-TAPPING OR SELF DRILLING SCREW	METAL: MIN. 18GAUGE STEEL , FY=33KSI	3 THREADS MIN. OF PENETRATION BEYOND METAL	1/2"
	METAL: MIN. 1/8" THICK ALUMINUM. 6063-T5 MIN.		
1/4" ELCO ULTRACON	CONCRETE: MIN. F'c=3000 PSI	1 1/4"	2 1/4"
1/4" ELCO ULTRACON	MASONRY: CMU PER ASTM C-90 MIN. 2000 PSI	1"	4"

- MULLION NOTES:
- WINDOW UNIT SHOWN ON THIS SHEET IS TYPICAL AND SHALL BE USED FOR DIAGRAMMATIC PURPOSES ONLY. ALL WINDOW AND DOOR PRODUCTS TO BE MULLED TO MULLION SHALL BE UNDER SEPARATE FL APPROVAL.
  - MULLION SHOWN HEREIN MAY BE USED WITH APPROVED WINDOW OR DOOR PRODUCTS WHICH ARE COMPATIBLE WITH MULLION (E.G. WINDSOR WINDOWS PINNACLE CLAD SERIES PRODUCTS)
  - INSTALLATION SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR SEALING & ASSEMBLY. SHOULD MANUFACTURER'S INSTALLATION INSTRUCTION AND THOSE SHOWN HEREIN DEVIATE, THE DRAWINGS HEREIN SHALL GOVERN.
  - TWO ANCHORS CLUSTERED TO EACH SIDE OF MULLION, SPACED 3" & 6" AWAY FROM MULLION AT BOTH ENDS.



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WEST DES MOINES, IA 50265  
PH: (515)223-6660 FAX: (515)224-1938

TITLE: PINNACLE CLAD STEEL MULLION (WZ3)(IMPACT)

MULLION NOTES, ANCHOR REQUIREMENTS AND LAYOUTS

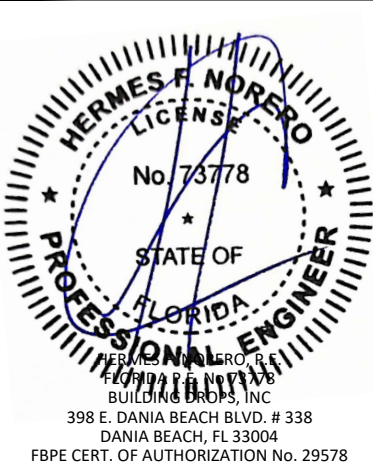
PREPARED BY:

BUILDING DROPS, INC.  
398 E. DANIA BEACH BLVD., STE. 338  
DANIA BEACH, FL 33004  
PH: (954)395-8478  
FAX: (954)744-4738  
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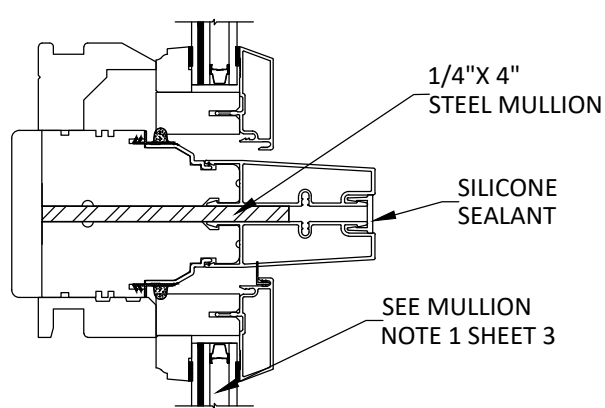
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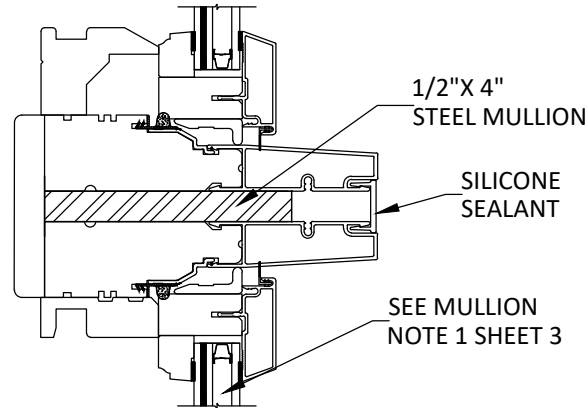
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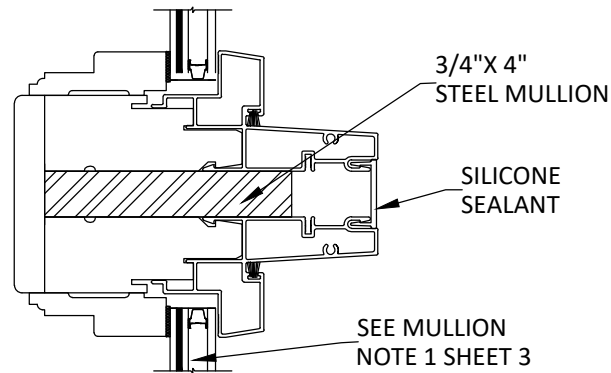
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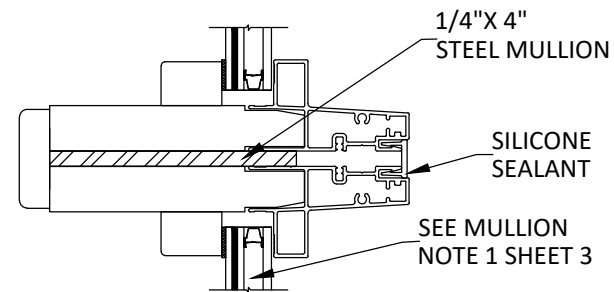
**A**  
**4** **DUAL CASEMENT OP**  
HORIZONTAL MULLION



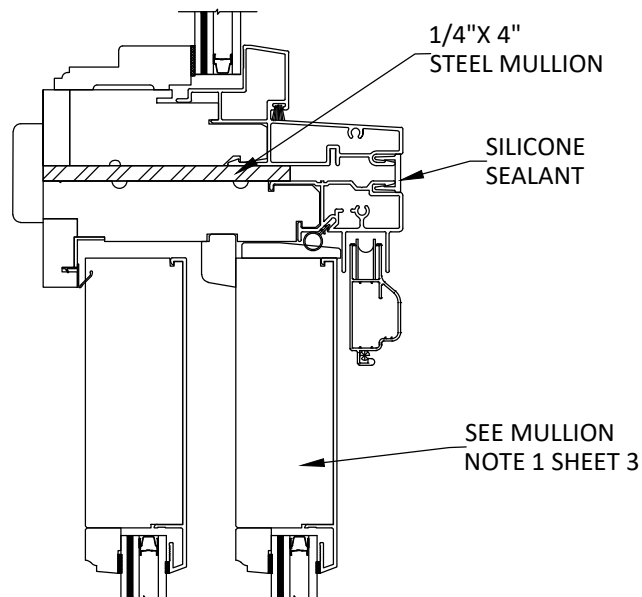
**B**  
**4** **DUAL CASEMENT PIC**  
HORIZONTAL MULLION



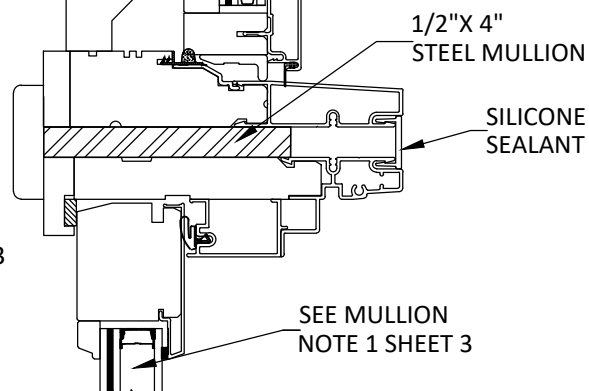
**C**  
**4** **DUAL DIRECT SET**  
HORIZONTAL MULLION



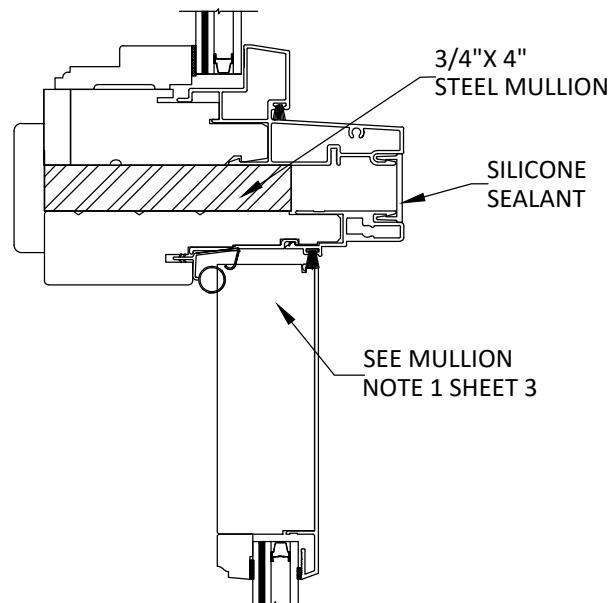
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**4** **DUAL RADIUS**  
HORIZONTAL MULLION



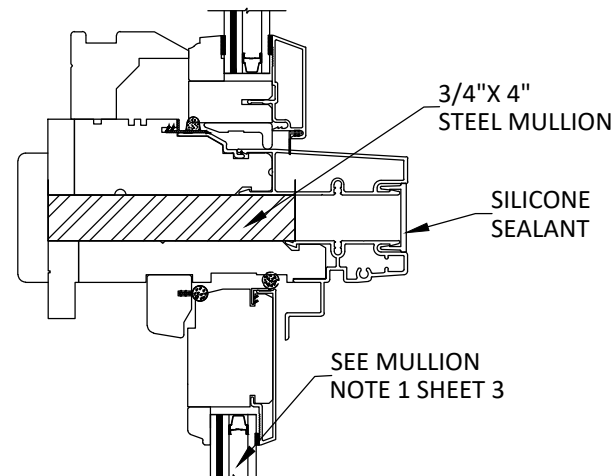
**E**  
**4** **SLIDING - DIRECT SET**  
HORIZONTAL MULLION



**F**  
**4** **DH PIC - CASEMENT OP**  
HORIZONTAL MULLION



**G**  
**4** **OUTSWING-CASEMENT OP**  
HORIZONTAL MULLION



**H**  
**4** **DH OP - CASEMENT OP**  
HORIZONTAL MULLION



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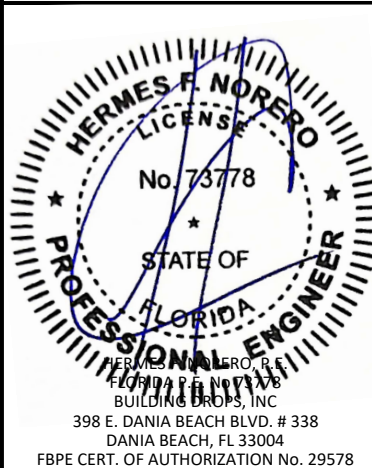
TITLE:  
PINNACLE CLAD  
STEEL MULLION  
(WZ3)(IMPACT)  
HORIZONTAL MULLION  
SECTIONS

PREPARED BY:  
BUILDING DROPS, INC.  
398 E. DANIA BEACH BLVD., STE. 338  
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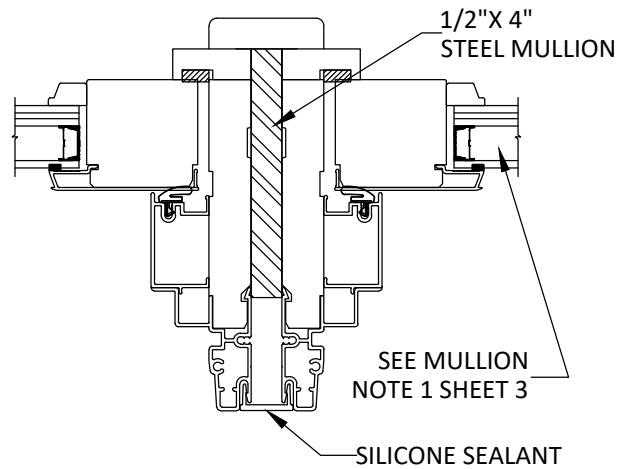
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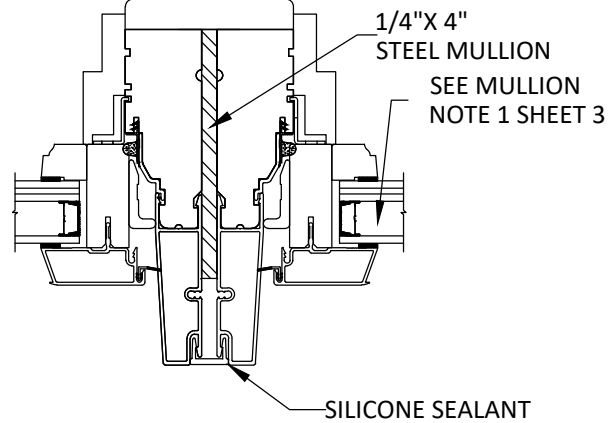


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DATE:	<b>06.12.20</b>
DWG. BY:	YC
CHK. BY:	HFN
SCALE:	<b>NTS</b>
DWG. #:	<b>WWD055</b>
SHEET:	<b>4</b>
	<b>OF 9</b>

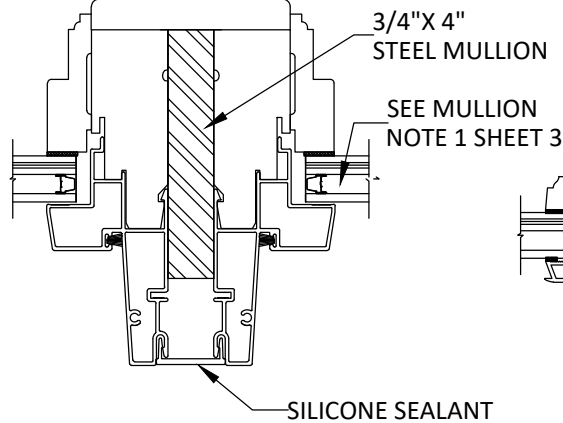
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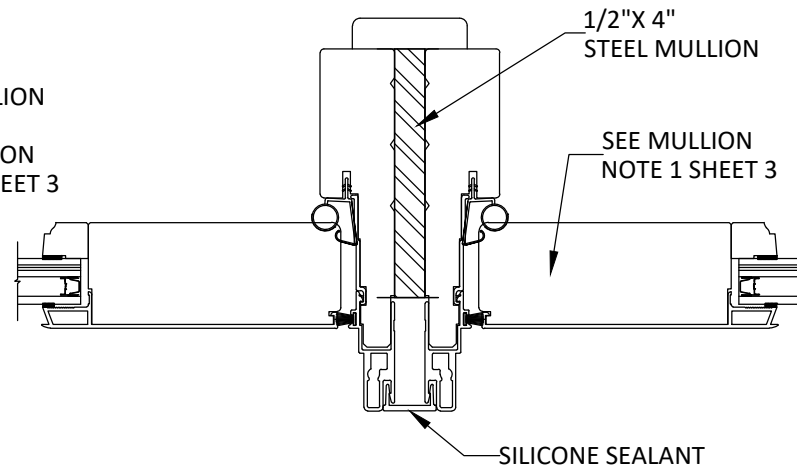
**A**  
**5** **DUAL DOUBLE HUNG PIC.**  
VERTICAL MULLION



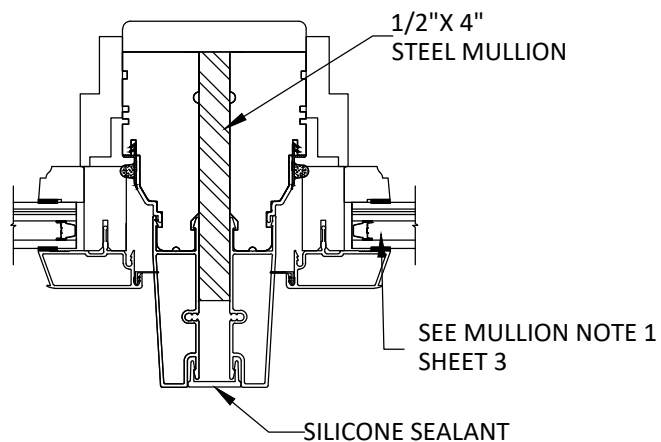
**B**  
**5** **DUAL CASEMENT PICTURE**  
VERTICAL MULLION



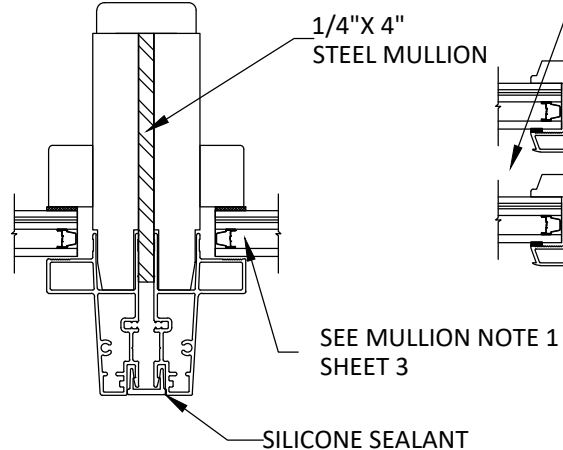
**C**  
**5** **DUAL DIRECT SET**  
VERTICAL MULLION



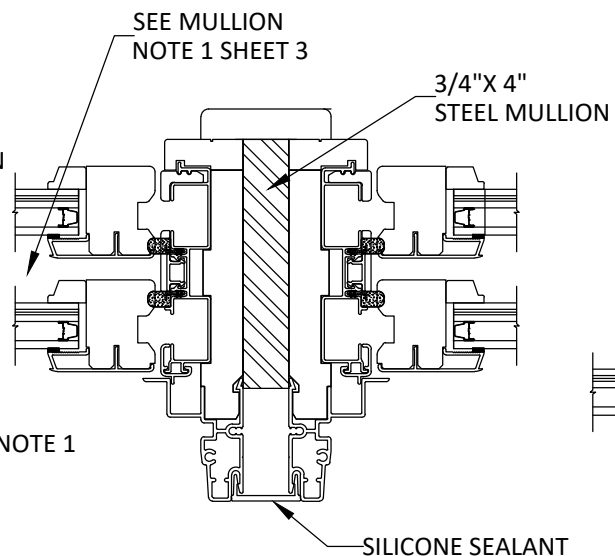
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**5** **DUAL OUTSWING PATIO**  
VERTICAL MULLION



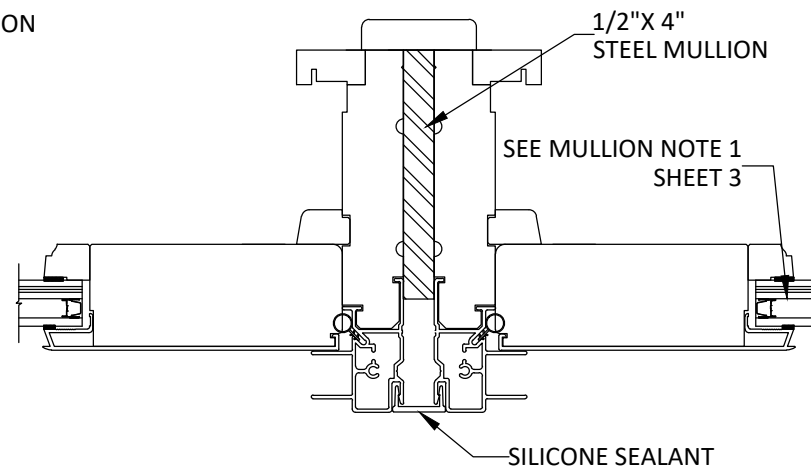
**E**  
**5** **DUAL CASEMENT OP.**  
VERTICAL MULLION



**F**  
**5** **DUAL RADIUS**  
VERTICAL MULLION



**G**  
**5** **DUAL DOUBLE HUNG OP.**  
VERTICAL MULLION



**H**  
**5** **DUAL SLIDING PATIO**  
VERTICAL MULLION



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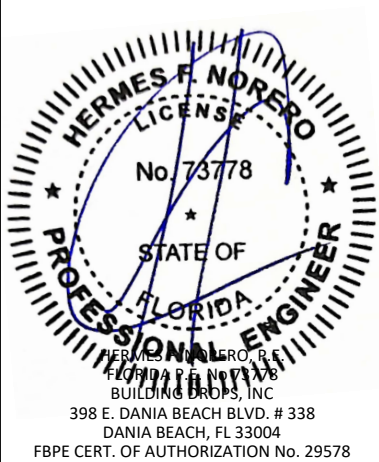
PINNACLE CLAD  
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(WZ3)(IMPACT)  
VERTICAL MULLION  
SECTIONS

TITLE:

PREPARED BY:  
**B.D.**  
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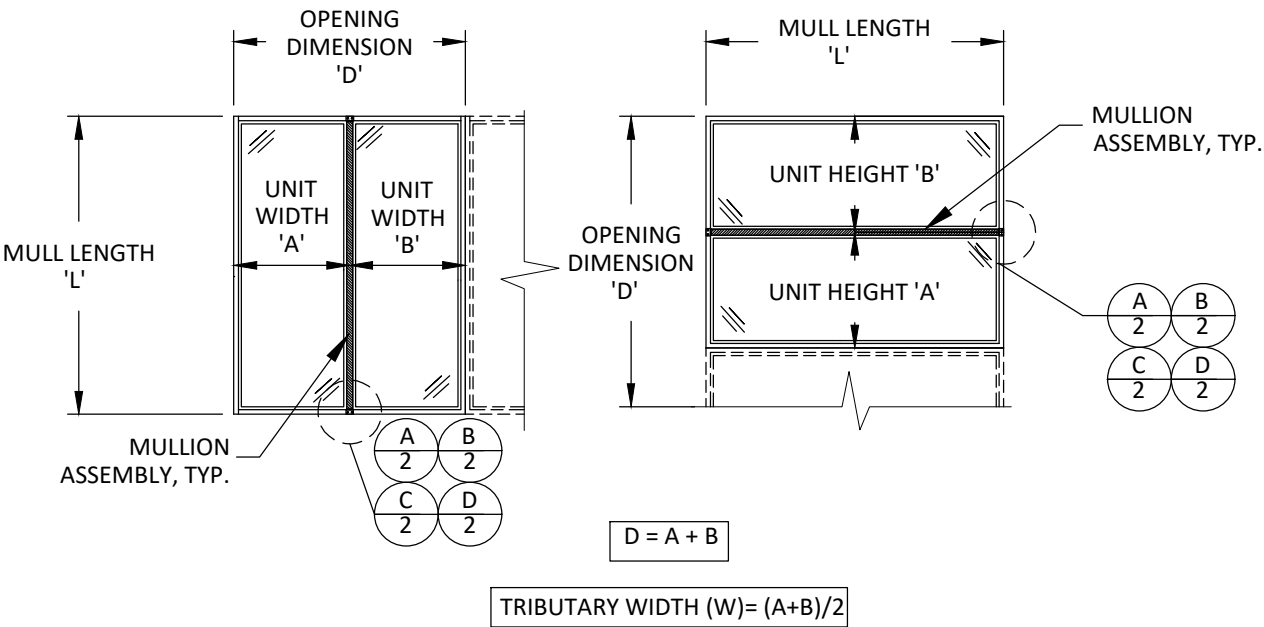
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1/4" STEEL MULLION - THROUGH FRAME & STRAP INSTALLATION

ONE WAY-MAXIMUM DESIGN PRESSURE CAPACITY (PSF): 1/4" STEEL MULLION														
L-MULLION LENGTH (IN)	W- TRIBUTARY WIDTH (IN)													
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0	
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	
48.0	150.0	150.0	142.7	135.9	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8	
60.0	133.8	114.1	101.9	94.1	89.2	86.5	85.6	85.6	85.6	85.6	85.6	85.6	85.6	
72.0	107.0	90.1	79.3	71.9	66.9	63.4	61.1	59.9	59.4	59.4	59.4	59.4	59.4	
84.0	89.2	74.4	64.9	58.2	53.5	50.1	47.6	45.8	44.6	43.9	43.7	43.7	43.7	
96.0	76.4	63.4	54.9	48.9	44.6	41.4	38.9	37.1	35.7	34.7	34.0	33.6	33.4	
108.0	66.9	55.2	47.6	42.2	38.2	35.2	32.9	31.1	29.7	28.6	27.8	27.2	26.8	
120.0	59.4	48.9	42.0	37.1	33.4	30.7	28.5	26.8	25.5	24.4	23.5	22.8	22.3	
132.0	53.5	43.9	37.5	33.1	29.7	27.2	25.2	23.6	22.3	21.2	20.4	19.7	19.1	
144.0	48.6	39.8	34.0	29.8	26.8	24.4	22.5	21.0	19.8	18.8	18.0	17.3	16.6	
156.0	43.7	35.1	29.5	25.5	22.5	20.2	18.4	16.9	15.8	-	-	-	-	
168.0	34.9	28.1	23.5	20.3	17.9	16.1	-	-	-	-	-	-	-	
180.0	28.4	22.8	19.1	16.5	-	-	-	-	-	-	-	-	-	
192.0	23.3	18.7	15.7	-	-	-	-	-	-	-	-	-	-	
204.0	19.5	15.6	-	-	-	-	-	-	-	-	-	-	-	
216.0	16.4	-	-	-	-	-	-	-	-	-	-	-	-	
228.0	-	-	-	-	-	-	-	-	-	-	-	-	-	
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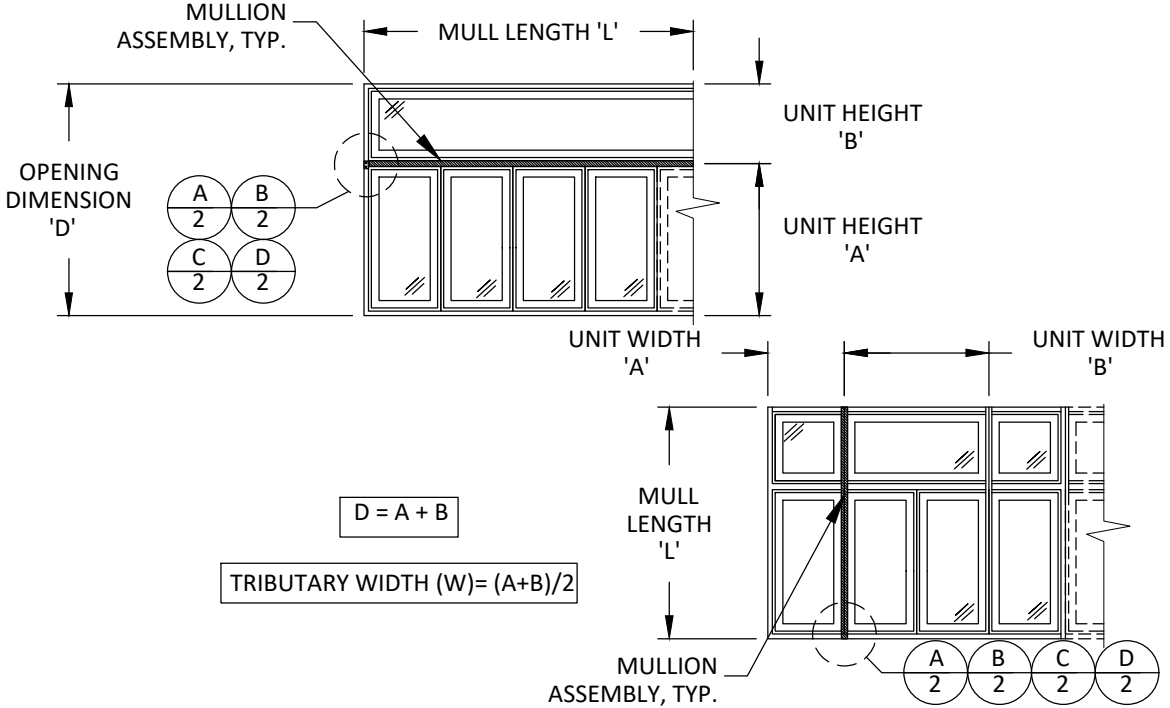
- 'ONE-WAY' MULLIONS REFER TO EITHER VERTICAL SINGLE SPAN OR HORIZONTAL STACKED ASSEMBLIES SIMILAR TO THOSE DIAGRAMMED ON THIS SHEET.
- THE POSITIVE AND NEGATIVE DESIGN PRESSURE CHARTS ARE APPLICABLE FOR INSTALLATION PROCEDURES ON SHEET 3.
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- DESIGN PRESSURES SHALL BE GOVERNED BY THE LESSER OF THE MULLION ASSEMBLY (LISTED IN TABLE) OR INDIVIDUAL WINDOW OR DOOR UNIT UNDER SEPARATE APPROVAL.
- MULLIONS MAY BE USED IN ASSEMBLIES UTILIZING MORE THAN TWO WINDOW OR DOOR UNITS AND CAN BE USED FOR UNLIMITED NUMBER OF PANELS.



TWO WAY-MAXIMUM DESIGN PRESSURE CAPACITY (PSF): 1/4" STEEL MULLION														
L-MULLION LENGTH (IN)	W- TRIBUTARY WIDTH (IN)													
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0	
36.0	150.0	142.7	118.9	101.9	89.2	79.3	71.3	64.9	59.4	54.9	51.0	47.6	44.6	
48.0	133.8	107.0	89.2	76.4	66.9	59.4	53.5	48.6	44.6	41.2	38.2	35.7	33.4	
60.0	107.0	85.6	71.3	61.1	53.5	47.6	42.8	38.9	35.7	32.9	30.6	28.5	26.8	
72.0	89.2	71.3	59.4	51.0	44.6	39.6	35.7	32.4	29.7	27.4	25.5	23.8	22.3	
84.0	76.4	61.1	51.0	43.7	38.2	34.0	30.6	27.8	25.5	23.5	21.8	20.4	19.1	
96.0	66.9	53.5	44.6	38.2	33.4	29.7	26.8	24.3	22.3	20.6	19.1	17.8	16.7	
108.0	59.4	47.6	39.6	34.0	29.7	26.4	23.8	21.6	19.8	18.3	17.0	15.9	-	
120.0	53.5	42.8	35.7	30.6	26.8	23.8	21.4	19.5	17.8	16.5	15.3	-	-	
132.0	48.6	38.9	32.4	27.8	24.3	21.6	19.5	17.7	16.2	-	-	-	-	
144.0	44.6	35.7	29.7	25.5	22.3	19.8	17.8	16.2	-	-	-	-	-	
156.0	41.2	32.9	27.4	23.5	20.6	18.3	16.5	-	-	-	-	-	-	
168.0	34.9	28.0	23.3	20.0	17.5	15.5	-	-	-	-	-	-	-	
180.0	28.4	22.7	18.9	16.2	-	-	-	-	-	-	-	-	-	
192.0	23.4	18.7	15.6	-	-	-	-	-	-	-	-	-	-	
204.0	19.5	15.6	-	-	-	-	-	-	-	-	-	-	-	
216.0	16.4	-	-	-	-	-	-	-	-	-	-	-	-	
228.0	-	-	-	-	-	-	-	-	-	-	-	-	-	
240.0	-	-	-	-	-	-	-	-	-	-	-	-	-	

NOTES:

- 'TWO-WAY' MULLIONS REFER TO EITHER VERTICAL OR HORIZONTAL WITH INTERMEDIATE MEMBERS SIMILAR TO THOSE DIAGRAMMED ON THIS SHEET.
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- DESIGN PRESSURES SHALL BE GOVERNED BY THE LESSER OF THE MULLION ASSEMBLY (LISTED IN TABLE) OR INDIVIDUAL WINDOW OR DOOR UNIT UNDER SEPARATE APPROVAL.
- MULLIONS MAY BE USED IN ASSEMBLIES UTILIZING MORE THAN TWO WINDOW OR DOOR UNITS AND CAN BE USED FOR UNLIMITED NUMBER OF PANELS.



WINDSOR WINDOWS & DOORS

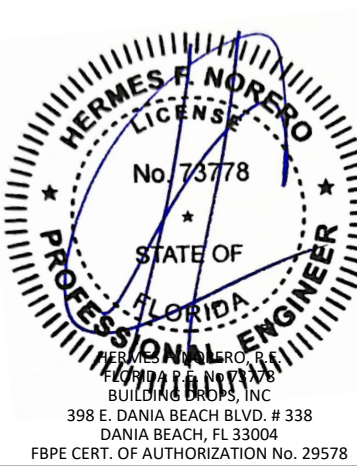
900 S. 19TH STREET.  
WEST DES MOINES, IA 50265  
PH: (515)223-6660 FAX: (515)224-1938

TITLE:  
PINNACLE CLAD  
STEEL MULLION  
(WZ3)(IMPACT)  
DESIGN PRESSURE TABLE  
1/4" STEEL MULLION

PREPARED BY:  
BUILDING DROPS, INC.  
398 E. DANIA BEACH BLVD., STE. 338  
DANIA BEACH, FL 33004  
PH: (954)395-8478  
FAX: (954)744-4738  
WEB: www.buildingdrops.com

REMARKS	BY	DATE
FBC 2023 UPDATE	MG	02/23

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FL #:	FL21905
DATE:	06.12.20
DWG. BY:	YC
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	WWD055
SHEET:	6

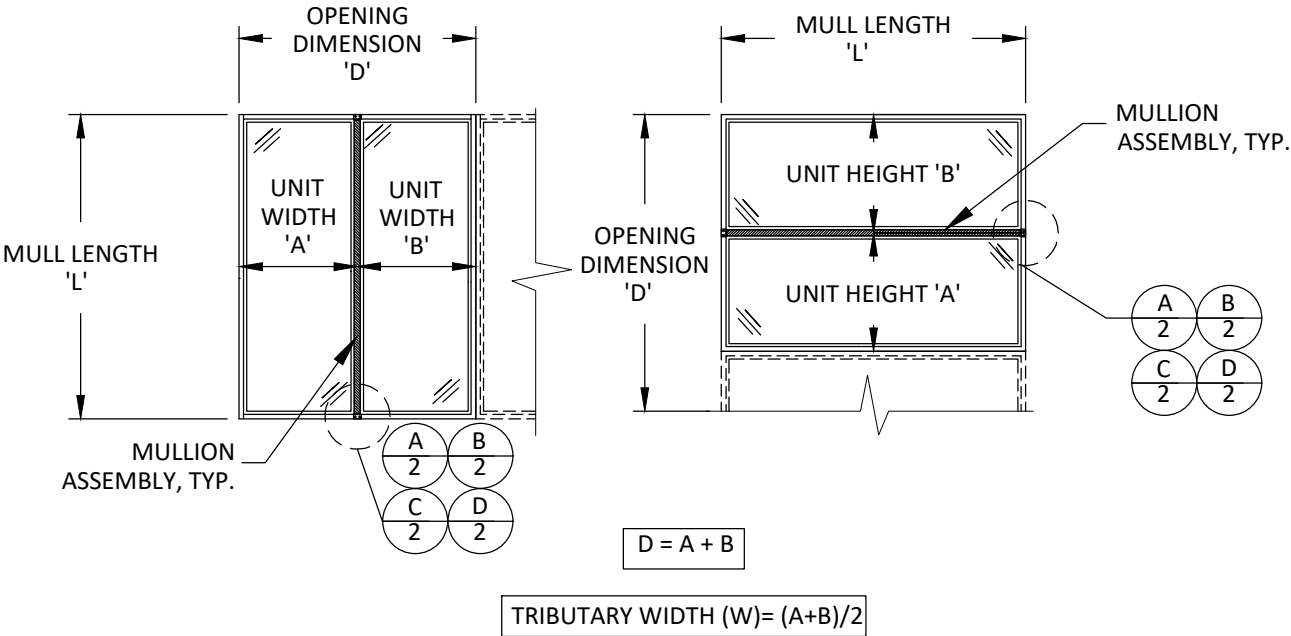
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1/2" STEEL MULLION - THROUGH FRAME & STRAP INSTALLATION

ONE WAY-MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF) 1/2" STEEL MULLION													
L-MULLION LENGTH (IN)	W - TRIBUTARY WIDTH (IN)												
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0
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
48.0	150.0	150.0	142.7	135.9	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8
60.0	133.8	114.1	101.9	94.1	89.2	86.5	85.6	85.6	85.6	85.6	85.6	85.6	85.6
72.0	107.0	90.1	79.3	71.9	66.9	63.4	61.1	59.9	59.4	59.4	59.4	59.4	59.4
84.0	89.2	74.4	64.9	58.2	53.5	50.1	47.6	45.8	44.6	43.9	43.7	43.7	43.7
96.0	76.4	63.4	54.9	48.9	44.6	41.4	38.9	37.1	35.7	34.7	34.0	33.6	33.4
108.0	66.9	55.2	47.6	42.2	38.2	35.2	32.9	31.1	29.7	28.6	27.8	27.2	26.8
120.0	59.4	48.9	42.0	37.1	33.4	30.7	28.5	26.8	25.5	24.4	23.5	22.8	22.3
132.0	53.5	43.9	37.5	33.1	29.7	27.2	25.2	23.6	22.3	21.2	20.4	19.7	19.1
144.0	48.6	39.8	34.0	29.8	26.8	24.4	22.5	21.0	19.8	18.8	18.0	17.3	16.7
156.0	44.6	36.4	31.0	27.2	24.3	22.1	20.4	19.0	17.8	16.9	16.1	15.4	-
168.0	41.2	33.6	28.5	25.0	22.3	20.2	18.6	17.3	16.2	15.3	-	-	-
180.0	38.2	31.1	26.4	23.1	20.6	18.7	17.1	15.9	-	-	-	-	-
192.0	35.7	29.0	24.6	21.5	19.1	17.3	15.9	-	-	-	-	-	-
204.0	32.1	25.7	21.5	18.5	16.3	-	-	-	-	-	-	-	-
216.0	27.0	21.7	18.1	15.6	-	-	-	-	-	-	-	-	-
228.0	22.9	18.4	15.4	-	-	-	-	-	-	-	-	-	-
240.0	19.7	15.8	-	-	-	-	-	-	-	-	-	-	-

NOTES:

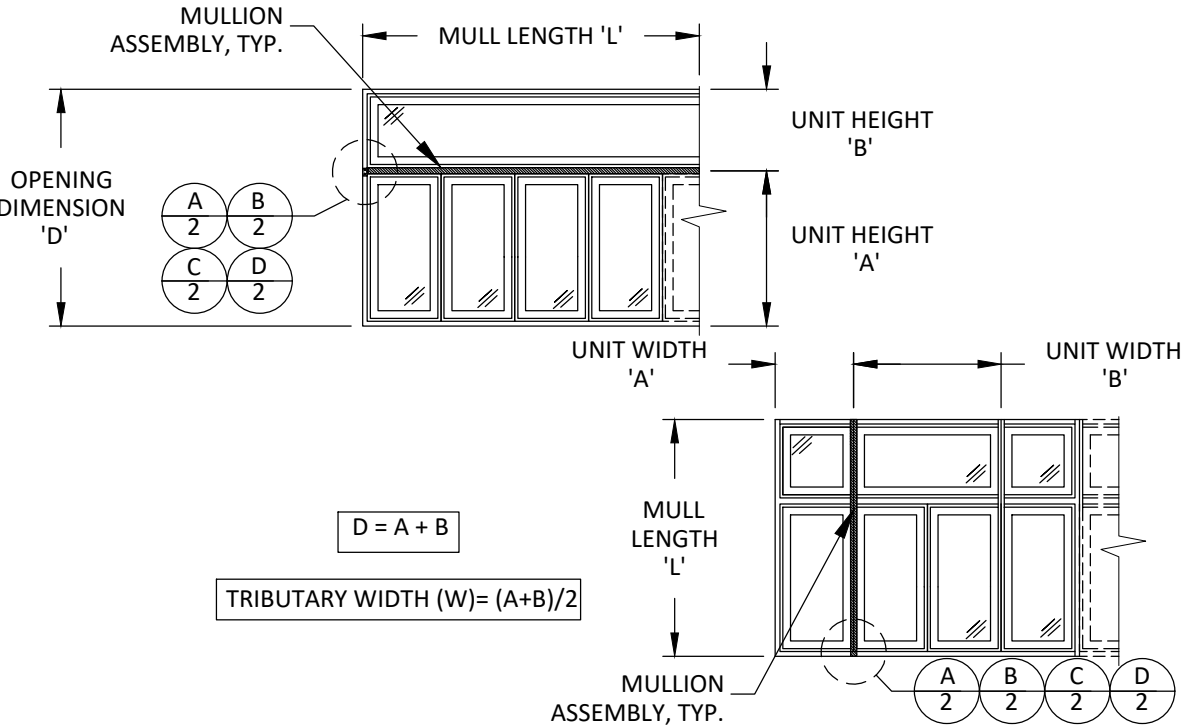
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TWO WAY-MAXIMUM DESIGN PRESSURE CAPACITY (PSF) 1/2" STEEL MULLION													
L-MULLION LENGTH (IN)	W - TRIBUTARY WIDTH (IN)												
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0
36.0	150.0	142.7	118.9	101.9	89.2	79.3	71.3	64.9	59.4	54.9	51.0	47.6	44.6
48.0	133.8	107.0	89.2	76.4	66.9	59.4	53.5	48.6	44.6	41.2	38.2	35.7	33.4
60.0	107.0	85.6	71.3	61.1	53.5	47.6	42.8	38.9	35.7	32.9	30.6	28.5	26.8
72.0	89.2	71.3	59.4	51.0	44.6	39.6	35.7	32.4	29.7	27.4	25.5	23.8	22.3
84.0	76.4	61.1	51.0	43.7	38.2	34.0	30.6	27.8	25.5	23.5	21.8	20.4	19.1
96.0	66.9	53.5	44.6	38.2	33.4	29.7	26.8	24.3	22.3	20.6	19.1	17.8	16.7
108.0	59.4	47.6	39.6	34.0	29.7	26.4	23.8	21.6	19.8	18.3	17.0	15.9	-
120.0	53.5	42.8	35.7	30.6	26.8	23.8	21.4	19.5	17.8	16.5	15.3	-	-
132.0	48.6	38.9	32.4	27.8	24.3	21.6	19.5	17.7	16.2	-	-	-	-
144.0	44.6	35.7	29.7	25.5	22.3	19.8	17.8	16.2	-	-	-	-	-
156.0	41.2	32.9	27.4	23.5	20.6	18.3	16.5	-	-	-	-	-	-
168.0	38.2	30.6	25.5	21.8	19.1	17.0	15.3	-	-	-	-	-	-
180.0	35.7	28.5	23.8	20.4	17.8	15.9	-	-	-	-	-	-	-
192.0	33.4	26.8	22.3	19.1	16.7	-	-	-	-	-	-	-	-
204.0	31.5	25.2	21.0	18.0	15.7	-	-	-	-	-	-	-	-
216.0	27.1	21.7	18.1	15.5	-	-	-	-	-	-	-	-	-
228.0	23.0	18.4	15.4	-	-	-	-	-	-	-	-	-	-
240.0	19.8	15.8	-	-	-	-	-	-	-	-	-	-	-

NOTES:

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WINDSOR WINDOWS & DOORS

900 S. 19TH STREET.  
WEST DES MOINES, IA 50265  
PH: (515)223-6660 FAX: (515)224-1938

TITLE:

PINNACLE CLAD  
STEEL MULLION  
(WZ3)(IMPACT)

DESIGN PRESSURE TABLE  
1/2" STEEL MULLION

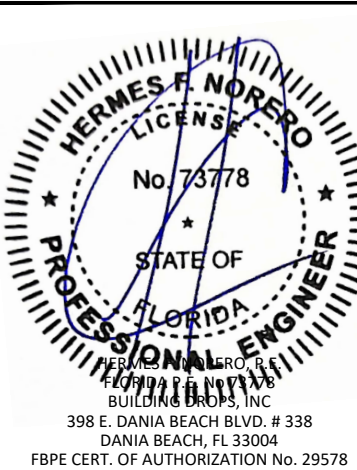
PREPARED BY:

BUILDING DROPS, INC.  
398 E. DANIA BEACH BLVD., STE. 338  
DANIA BEACH, FL 33004  
PH: (954)395-8478  
FAX: (954)744-4738  
WEB: www.buildingdrops.com

BUILDING DROPS

REMARKS	BY	DATE
FBC 2023 UPDATE	MG	02/23

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FL #:

FL21905

DATE:

06.12.20

DWG. BY:

YC

CHK. BY:

HFN

SCALE:

NTS

DWG. #:

WWD055

SHEET:

7

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3/4" STEEL MULLION - THROUGH FRAME & STRAP INSTALLATION

L-MULLION LENGTH (IN)	ONE WAY-MAXIMUM DESIGN PRESSURE CAPACITY (PSF) 3/4" STEEL MULLION												
	W - TRIBUTARY WIDTH (IN)												
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0
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
48.0	150.0	150.0	142.7	135.9	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8	133.8
60.0	133.8	114.1	101.9	94.1	89.2	86.5	85.6	85.6	85.6	85.6	85.6	85.6	85.6
72.0	107.0	90.1	79.3	71.9	66.9	63.4	61.1	59.9	59.4	59.4	59.4	59.4	59.4
84.0	89.2	74.4	64.9	58.2	53.5	50.1	47.6	45.8	44.6	43.9	43.7	43.7	43.7
96.0	76.4	63.4	54.9	48.9	44.6	41.4	38.9	37.1	35.7	34.7	34.0	33.6	33.4
108.0	66.9	55.2	47.6	42.2	38.2	35.2	32.9	31.1	29.7	28.6	27.8	27.2	26.8
120.0	59.4	48.9	42.0	37.1	33.4	30.7	28.5	26.8	25.5	24.4	23.5	22.8	22.3
132.0	53.5	43.9	37.5	33.1	29.7	27.2	25.2	23.6	22.3	21.2	20.4	19.7	19.1
144.0	48.6	39.8	34.0	29.8	26.8	24.4	22.5	21.0	19.8	18.8	18.0	17.3	16.7
156.0	44.6	36.4	31.0	27.2	24.3	22.1	20.4	19.0	17.8	16.9	16.1	15.4	-
168.0	41.2	33.6	28.5	25.0	22.3	20.2	18.6	17.3	16.2	15.3	-	-	-
180.0	38.2	31.1	26.4	23.1	20.6	18.7	17.1	15.9	-	-	-	-	-
192.0	35.7	29.0	24.6	21.5	19.1	17.3	15.9	-	-	-	-	-	-
204.0	33.4	27.2	23.0	20.0	17.8	16.1	-	-	-	-	-	-	-
216.0	31.5	25.6	21.6	18.8	16.7	15.1	-	-	-	-	-	-	-
228.0	29.7	24.1	20.4	17.7	15.7	-	-	-	-	-	-	-	-
240.0	27.4	22.0	18.4	15.8	-	-	-	-	-	-	-	-	-

NOTES:

1.

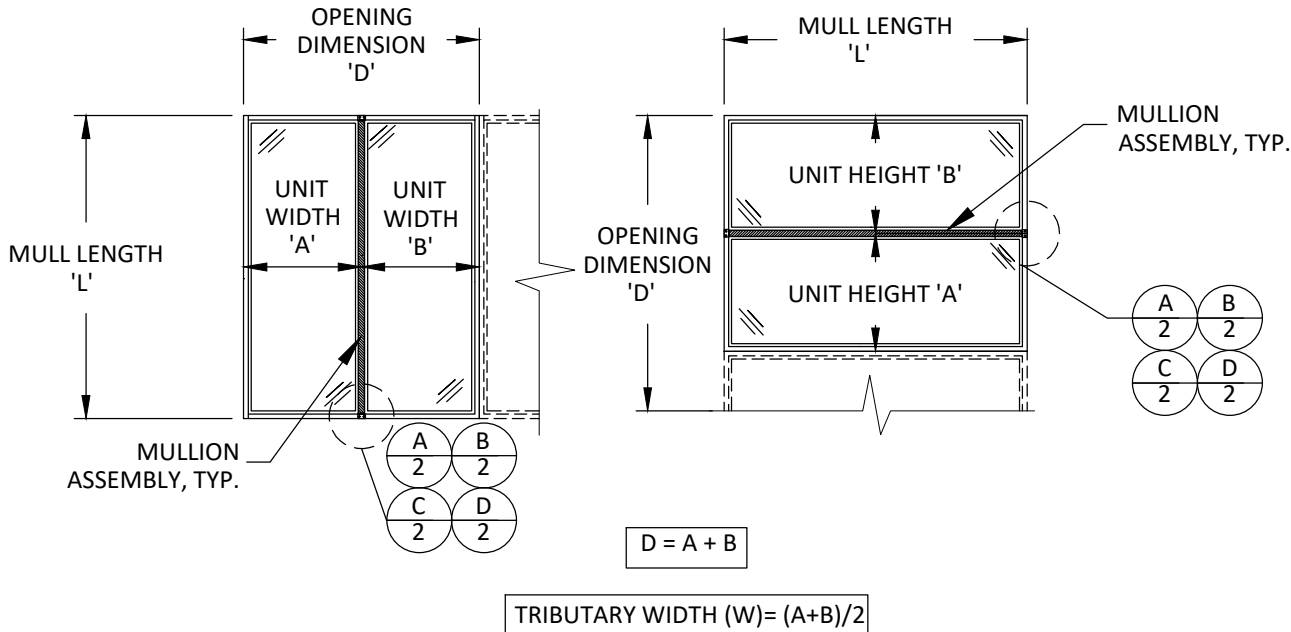
'ONE-WAY' MULLIONS REFER TO EITHER VERTICAL SINGLE SPAN OR HORIZONTAL STACKED ASSEMBLIES SIMILAR TO THOSE DIAGRAMMED ON THIS SHEET.
2.

THE POSITIVE AND NEGATIVE DESIGN PRESSURE CHARTS ARE APPLICABLE FOR INSTALLATION PROCEDURES ON SHEET 3.
3.

WINDOW OR DOORS SHALL BE UNDER SEPARATE APPROVAL.
4.

DESIGN PRESSURES SHALL BE GOVERNED BY THE LESSER OF THE MULLION ASSEMBLY (LISTED IN TABLE) OR INDIVIDUAL WINDOW OR DOOR UNIT UNDER SEPARATE APPROVAL.
5.

MULLIONS MAY BE USED IN ASSEMBLIES UTILIZING MORE THAN TWO WINDOW OR DOOR UNITS AND CAN BE USED FOR UNLIMITED NUMBER OF PANELS.



L-MULLION LENGTH (IN)	TWO WAY-MAXIMUM DESIGN PRESSURE CAPACITY (PSF) 3/4" STEEL MULLION												
	W - TRIBUTARY WIDTH (IN)												
	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0
36.0	150.0	142.7	118.9	101.9	89.2	79.3	71.3	64.9	59.4	54.9	51.0	47.6	44.6
48.0	133.8	107.0	89.2	76.4	66.9	59.4	53.5	48.6	44.6	41.2	38.2	35.7	33.4
60.0	107.0	85.6	71.3	61.1	53.5	47.6	42.8	38.9	35.7	32.9	30.6	28.5	26.8
72.0	89.2	71.3	59.4	51.0	44.6	39.6	35.7	32.4	29.7	27.4	25.5	23.8	22.3
84.0	76.4	61.1	51.0	43.7	38.2	34.0	30.6	27.8	25.5	23.5	21.8	20.4	19.1
96.0	66.9	53.5	44.6	38.2	33.4	29.7	26.8	24.3	22.3	20.6	19.1	17.8	16.7
108.0	59.4	47.6	39.6	34.0	29.7	26.4	23.8	21.6	19.8	18.3	17.0	15.9	-
120.0	53.5	42.8	35.7	30.6	26.8	23.8	21.4	19.5	17.8	16.5	15.3	-	-
132.0	48.6	38.9	32.4	27.8	24.3	21.6	19.5	17.7	16.2	-	-	-	-
144.0	44.6	35.7	29.7	25.5	22.3	19.8	17.8	16.2	-	-	-	-	-
156.0	41.2	32.9	27.4	23.5	20.6	18.3	16.5	-	-	-	-	-	-
168.0	38.2	30.6	25.5	21.8	19.1	17.0	15.3	-	-	-	-	-	-
180.0	35.7	28.5	23.8	20.4	17.8	15.9	-	-	-	-	-	-	-
192.0	33.4	26.8	22.3	19.1	16.7	-	-	-	-	-	-	-	-
204.0	31.5	25.2	21.0	18.0	15.7	-	-	-	-	-	-	-	-
216.0	29.7	23.8	19.8	17.0	-	-	-	-	-	-	-	-	-
228.0	28.2	22.5	18.8	16.1	-	-	-	-	-	-	-	-	-
240.0	26.8	21.4	17.8	15.3	-	-	-	-	-	-	-	-	-

NOTES:

1.

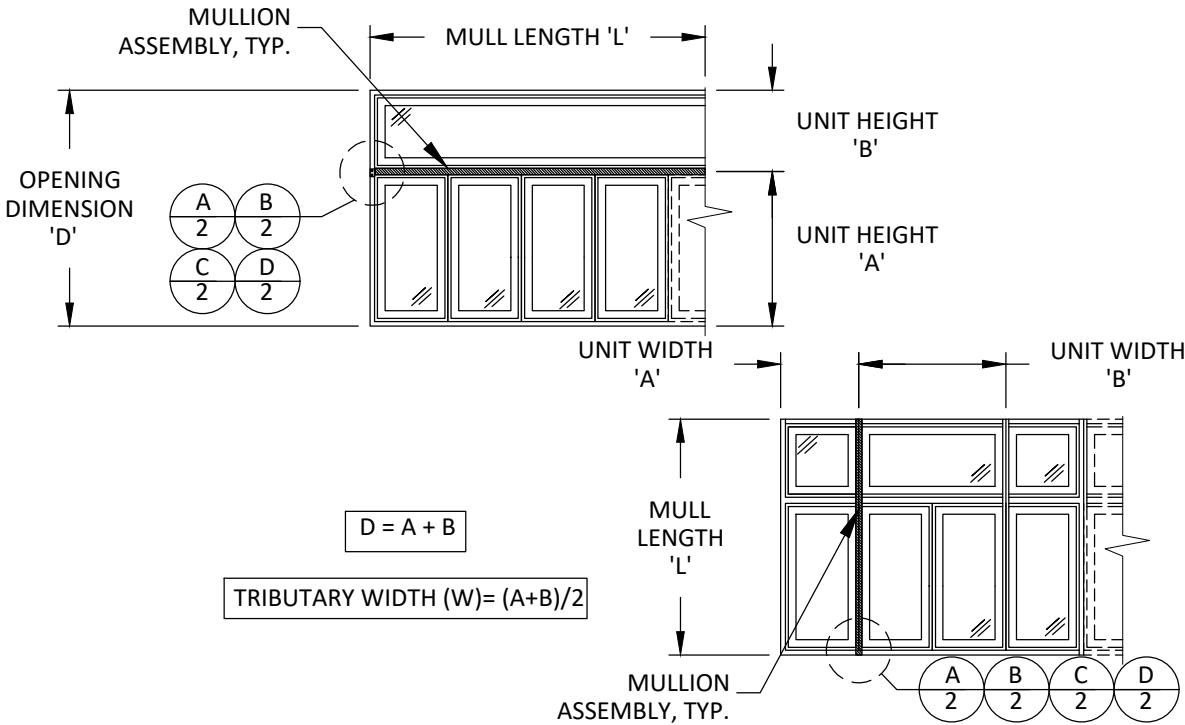
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5.

MULLIONS MAY BE USED IN ASSEMBLIES UTILIZING MORE THAN TWO WINDOW OR DOOR UNITS AND CAN BE USED FOR UNLIMITED NUMBER OF PANELS.



WINDSOR WINDOWS & DOORS

900 S. 19TH STREET.  
WEST DES MOINES, IA 50265  
PH: (515)223-6660 FAX: (515)224-1938

TITLE:

PINNACLE CLAD  
STEEL MULLION  
(WZ3)(IMPACT)

DESIGN PRESSURE TABLE  
3/4" STEEL MULLION

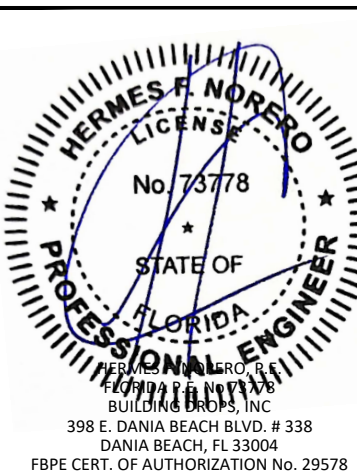
PREPARED BY:

BUILDING DROPS, INC.  
398 E. DANIA BEACH BLVD., STE. 338  
DANIA BEACH, FL 33004  
PH: (954)395-8478  
FAX: (954)744-4738  
WEB: www.buildingdrops.com

BUILDING DROPS

REMARKS	BY	DATE
FBC 2023 UPDATE	MG	02/23

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.



FL #:

FL21905

DATE:

06.12.20

DWG. BY:

YC

CHK. BY:

HFN

SCALE:

NTS

DWG. #:

WWD055

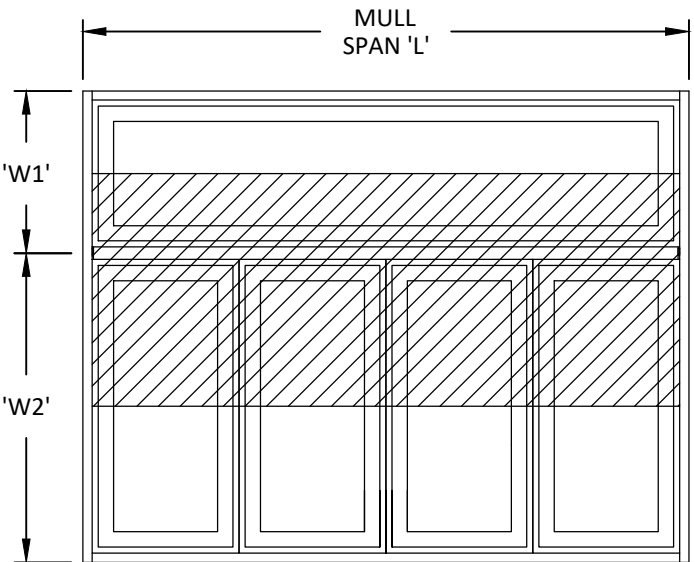
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8

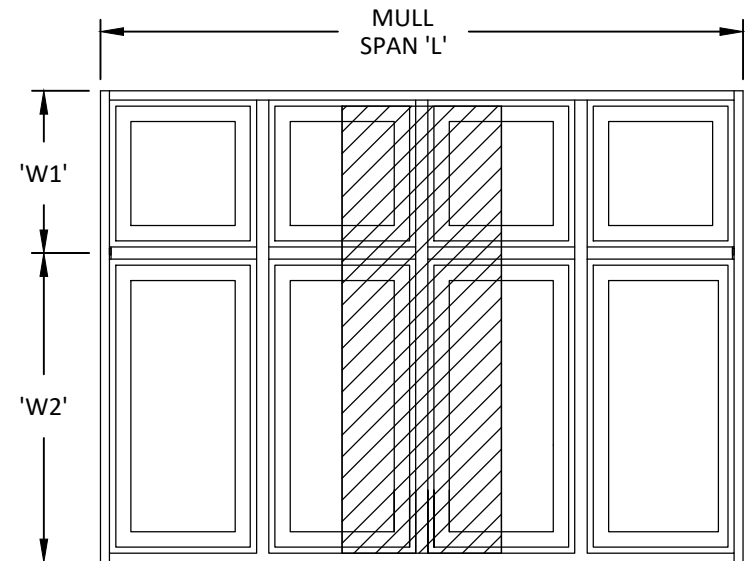
OF 9

6/5/2023 1:37 PM  
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EXAMPLES OF TWO-WAY MULLION ASSEMBLIES



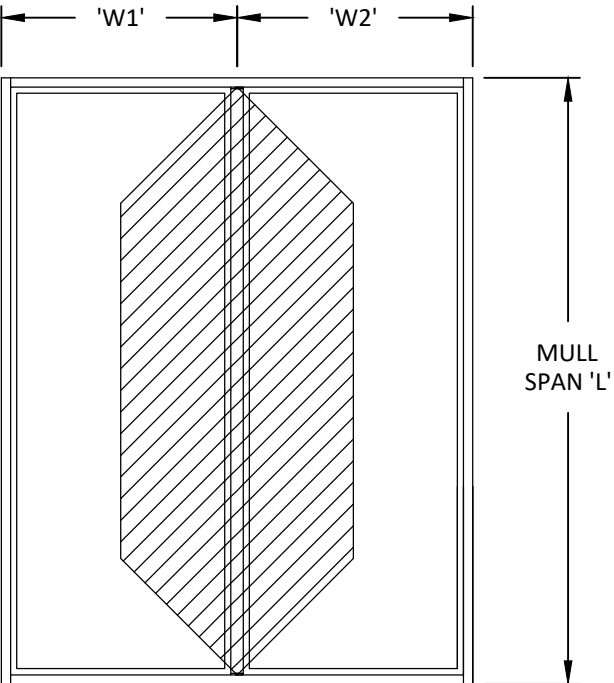
HORIZONTAL MULLION  
TRANSOM OVER MULTIPLE UNITS



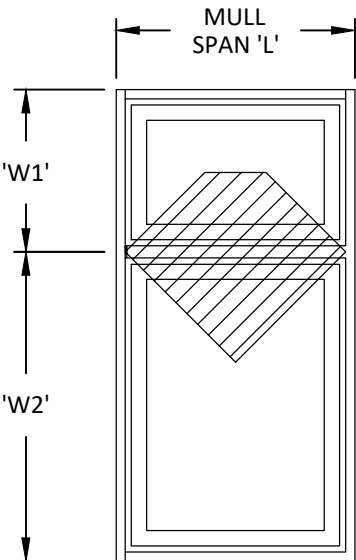
VERTICAL MULLION  
TRANSOM OVER MULTIPLE UNITS

- 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.

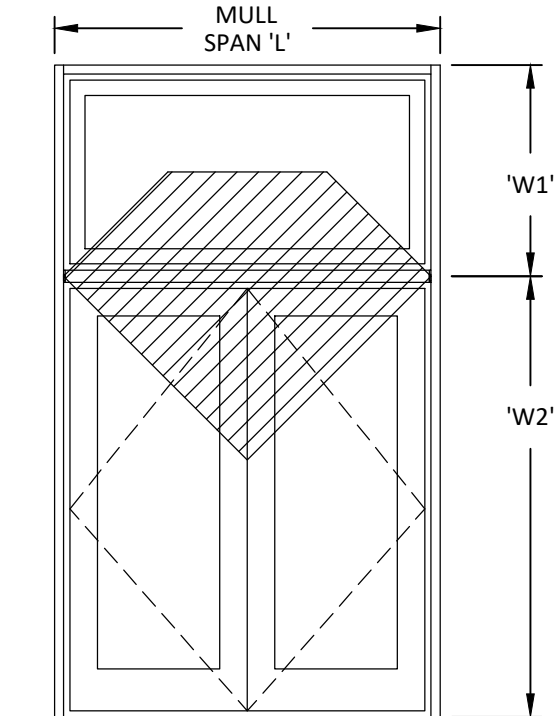
EXAMPLES OF ONE-WAY MULLION ASSEMBLIES



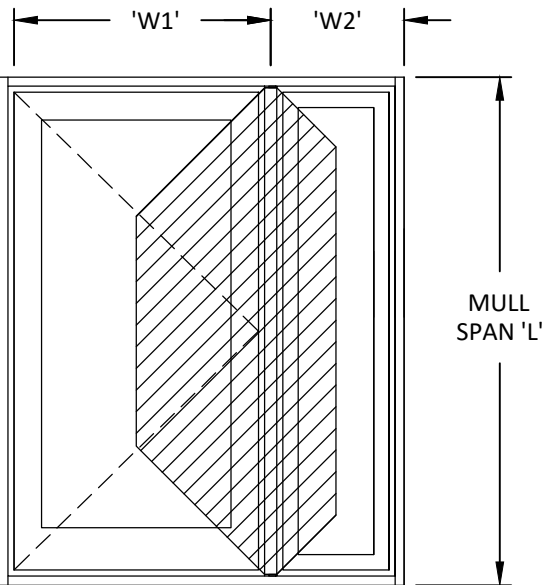
VERTICAL MULLION



HORIZONTAL MULLION



HORIZONTAL MULLION



VERTICAL MULLION  
PIVOT DOOR W/ SIDELITE



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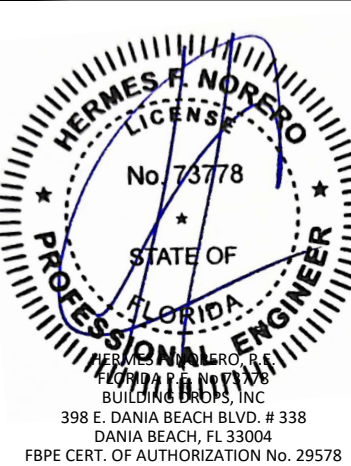
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