

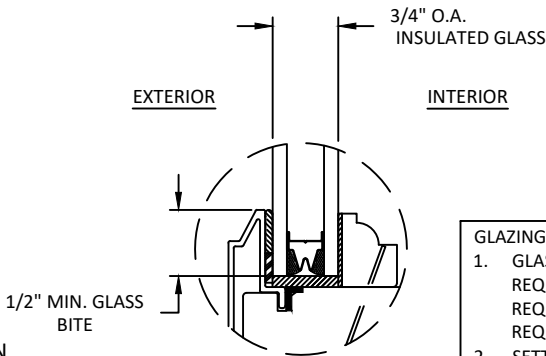
ANDERSEN CORPORATION

E-SERIES CASEMENT WINDOW

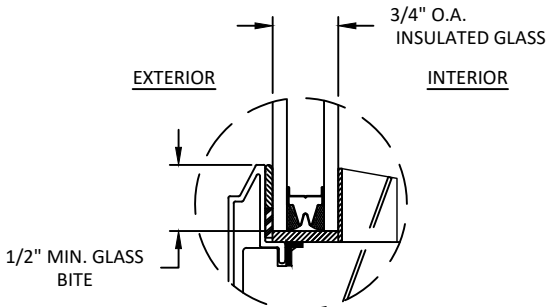
(NON-IMPACT)(NON-HVHZ)

GENERAL NOTES:

- THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT FLORIDA BUILDING CODE (FBC), **EXCLUDING** HVHZ AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
 - AAMA/WDMA/CSA 101/I.S.2/A440-08/11
 - ASTM E330-02
- 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.
- 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.
- APPROVED IMPACT PROTECTIVE SYSTEM **IS REQUIRED** TO PROTECT THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
- WINDOW FRAME MATERIAL: *ALUMINUM CLAD WOOD*.
- MULLION MATERIAL: *LAMINATED VENEER LUMBER*
- GLASS MEETS THE REQUIREMENTS OF ASTM E1300. SEE GLAZING DETAILS ON SHEET 1.
- DESIGNATIONS "X" AND "O" STAND FOR THE FOLLOWING:
X: *OPERABLE PANEL*
O: *FIXED PANEL*
- CUSTOM SIZES AVAILABLE UPON REQUEST. CUSTOM DESIGN PRESSURE WILL BE ASSIGNED EQUAL TO NEXT LARGER STANDARD SIZE.



GLAZING DETAIL G1



GLAZING DETAIL G2

- GLAZING NOTES:
- GLASS TYPE & THICKNESS SHALL COMPLY WITH ASTM E1300 REQUIREMENTS AS WELL AS APPLICABLE SAFETY GLAZING REQUIREMENTS PER THE FBC. TEMPER AND SAFETY GLAZING REQUIREMENTS SHALL BE REVIEWED ON A SITE SPECIFIC BASIS.
 - SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN FBC CHAPTER 24.
 - SETTING BLOCKS TO BE LOCATED AT 1/4 SPAN LENGTH FOR GLASS WIDER THAN 36" AS PER FBC CHAPTER 24.
 - D.L.O. AND DESIGN PRESSURES MAY NOT EXCEED MAX VALUES IN DESIGN PRESSURE TABLES ON SHEET 1.

WINDOW TYPE	CONFIGURATION	OVERALL FRAME SIZE		OVERALL CASEMENT D.L.O. DIMENSION		GLASS TYPE	No. LOCK POINTS	DESIGN PRESSURE (PSF)	
		WIDTH (IN.)	HEIGHT (IN.)	WIDTH (IN.)	HEIGHT (IN.)			POS.	NEG.
SINGLE	X	36.0	72.0	29.87	65.87	G1	3	+70	-70
SINGLE	X	36.0	32.0	29.87	27.87	G1	1	+55	-55
SINGLE	X	36.0	66.0	29.87	59.87	G1	2	+60	-60
SINGLE	X	30.0	72.0	24.87	65.87	G1	3	+55	-55
MULLED	XX	72.0	72.0	29.87	65.87	G1	3	+70*	-70*
MULLED W/FL24230	O/XX	72.0	134.0	29.87	65.87	G1	3	+70*	-70*

- NOTES:
- THE MULLED ASSEMBLY RATING WOULD BE THE LESSER OF THE INDIVIDUAL UNIT RATING OR THE MULLION RATING.
 - NAILING FLANGE INSTALLATIONS ARE LIMITED TO INDIVIDUAL UNITS OR ASSEMBLIES EQUAL TO OR LESS THAN DP50 AND EQUAL TO OR LESS THAN 30 SQUARE FEET.

TABLE OF CONTENTS		
SHEET	REVISION	SHEET DESCRIPTION
1	D	GENERAL NOTES AND GLAZING DETAILS
2	D	ELEVATIONS AND QUALIFIED CONFIGURATIONS
3	D	MULLED ELEVATIONS
4	D	ANCHOR LAYOUTS
5	D	MULLED ANCHOR LAYOUTS
6	D	VERTICAL SECTIONS
7	D	MULLION VERTICAL SECTIONS
8	D	HORIZONTAL SECTIONS
9	D	MULLION HORIZONTAL SECTIONS
10	D	ANCHOR DETAILS
11	D	ZERO MULLION LOADS TABLE - ONE WAY
12	D	ZERO MULLION LOADS TABLE - TWO WAY
13	D	1/2" x 3-1/2" MULLION LOADS TABLE - ONE WAY
14	D	1/2" x 3-1/2" MULLION LOADS TABLE - TWO WAY
15	D	1/2" x 5-3/16" MULLION LOADS TABLE - ONE WAY
16	D	1/2" x 5-3/16" MULLION LOADS TABLE - TWO WAY
17	D	3/4" x 3-1/2" MULLION LOADS TABLE - ONE WAY
18	D	3/4" x 3-1/2" MULLION LOADS TABLE - TWO WAY
19	D	3/4" x 5-3/16" MULLION LOADS TABLE - ONE WAY
20	D	3/4" x 5-3/16" MULLION LOADS TABLE - TWO WAY
21	D	1" x 3-1/2" MULLION LOADS TABLE - ONE WAY
22	D	1" x 3-1/2" MULLION LOADS TABLE - TWO WAY
23	D	1" x 5-3/16" MULLION LOADS TABLE - ONE WAY
24	D	1" x 5-3/16" MULLION LOADS TABLE - TWO WAY
25	D	2" x 3-1/2" MULLION LOADS TABLE - ONE WAY
26	D	2" x 3-1/2" MULLION LOADS TABLE - TWO WAY
27	D	2" x 5-3/16" MULLION LOADS TABLE - ONE WAY
28	D	2" x 5-3/16" MULLION LOADS TABLE - TWO WAY



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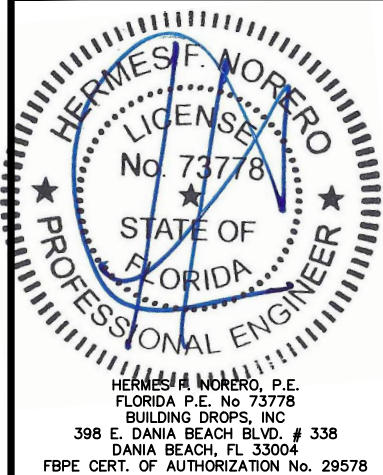
TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)(NON-HVHZ)
GENERAL NOTES & GLAZING DETAIL

PREPARED BY:
BUILDING DROPS, INC.
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REMARKS	BY	DATE
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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FL24226

DATE: **10.07.17**

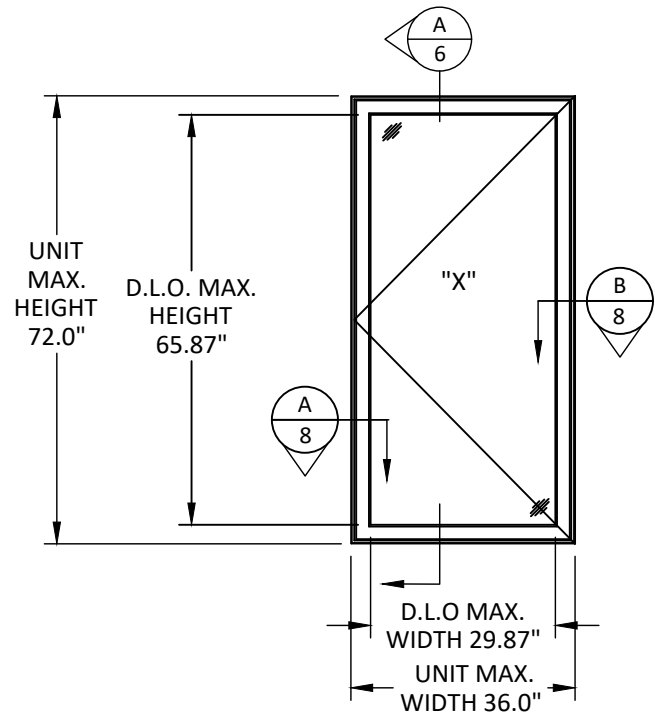
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SCALE: **NTS**

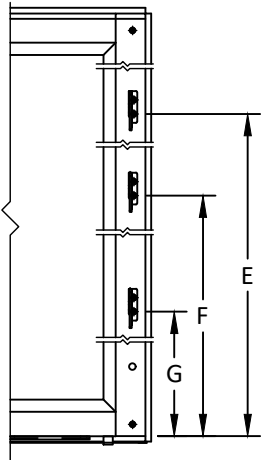
DWG. #: **AWD198**

SHEET

1



ELEVATION
SINGLE UNIT



KEEPER LOCATION			
FRAME HEIGHT	E (IN)	F (IN)	G (IN)
<=32	15.750	-	-
<36	11.500	21.750	-
<=40	11.500	27.750	-
<=48	11.500	33.750	-
<=54	11.500	39.750	-
<=60	11.500	45.750	-
<=66	11.500	51.750	-
72	11.500	34.656	57.812



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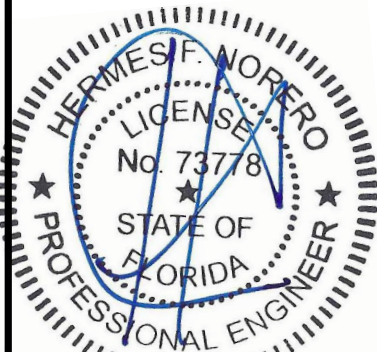
ELEVATIONS

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DANIA BEACH, FL 33004
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:
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CHK. BY: HFN

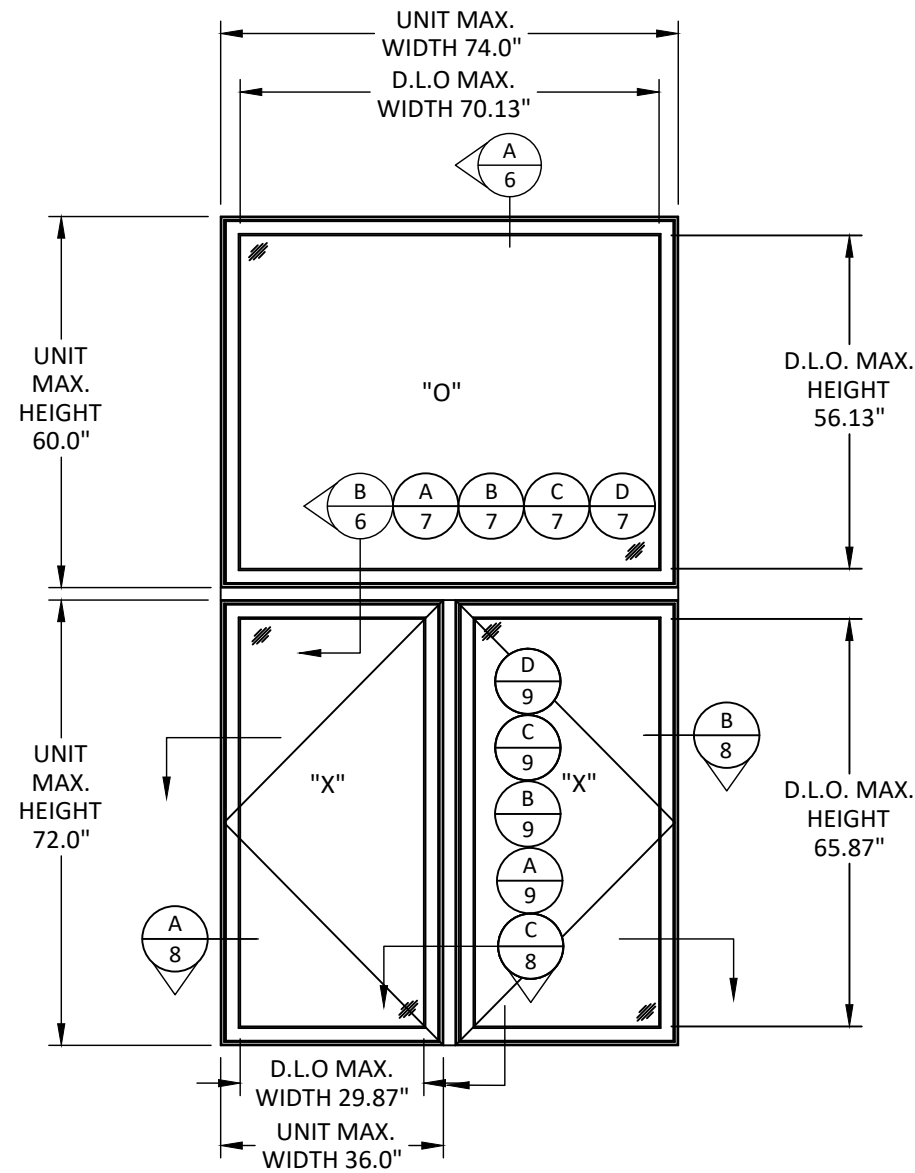
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DWG. #: AWD198

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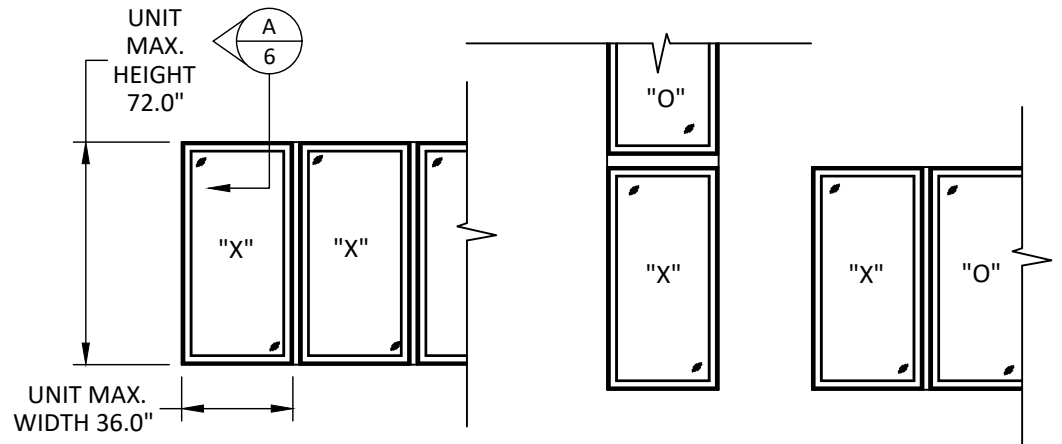
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ELEVATION
MULLED UNITS

NOTE:
REFER TO SHEETS 11-28 FOR DESIGN PRESSURES BASED ON CORRESPONDING MULLION TYPES



QUALIFIED CONFIGURATIONS



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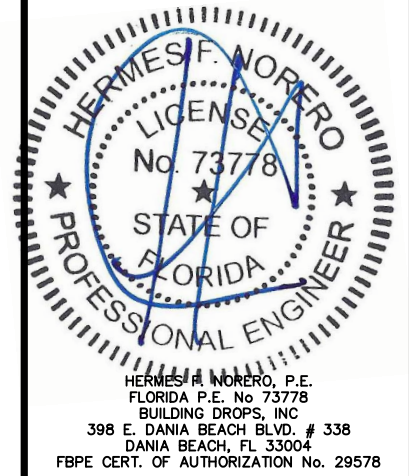
TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
MULLED ELEVATIONS

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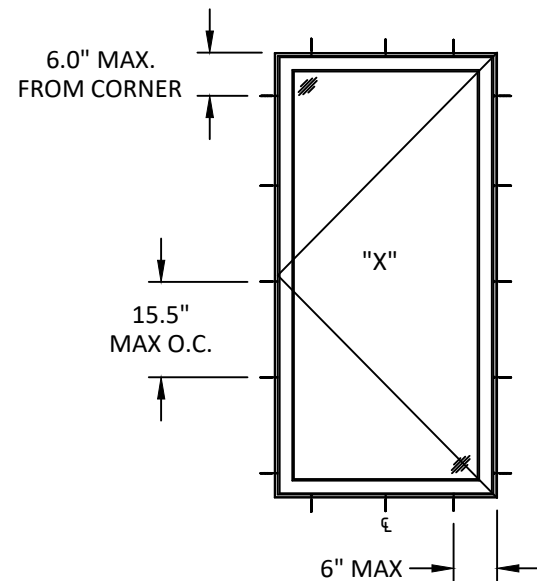
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DWG. #: **AWD198**

SHEET
3
OF 28

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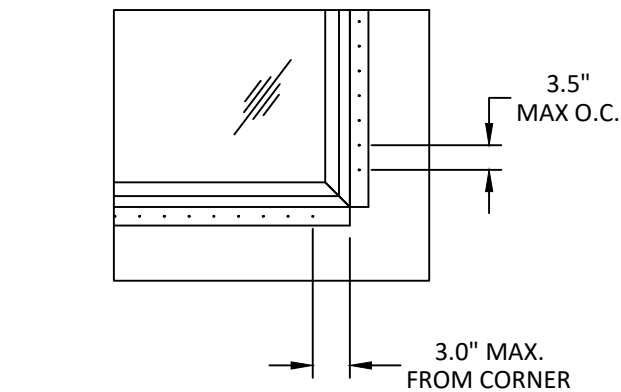
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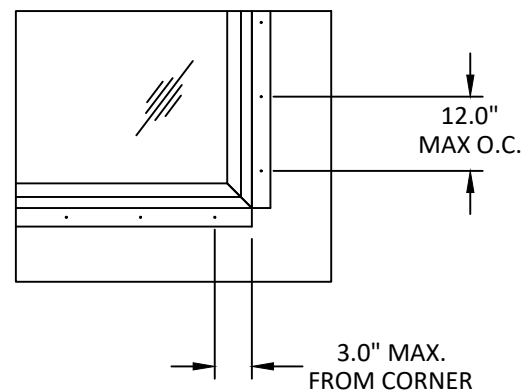
ANCHOR LAYOUT
THROUGH FRAME

NOTE:

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VINYL FIN ANCHORING
SINGLE UNIT



ALUMINUM FIN ANCHORING
SINGLE UNIT

NOTE :

FOR MORE ANCHOR INFORMATION (INSTALLATION TYPE, SPACING, QUANTITY, ANCHOR TYPE, QUALIFIED SUBSTRATES) SEE SHEET 10



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TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)

ANCHOR LAYOUTS

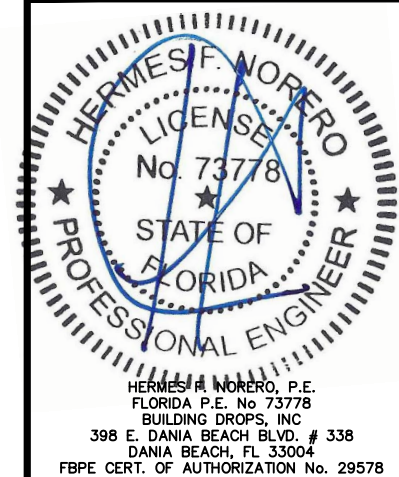
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DATE: 10.07.17

DWG. BY:
RV

CHK. BY:
HFN

SCALE: NTS

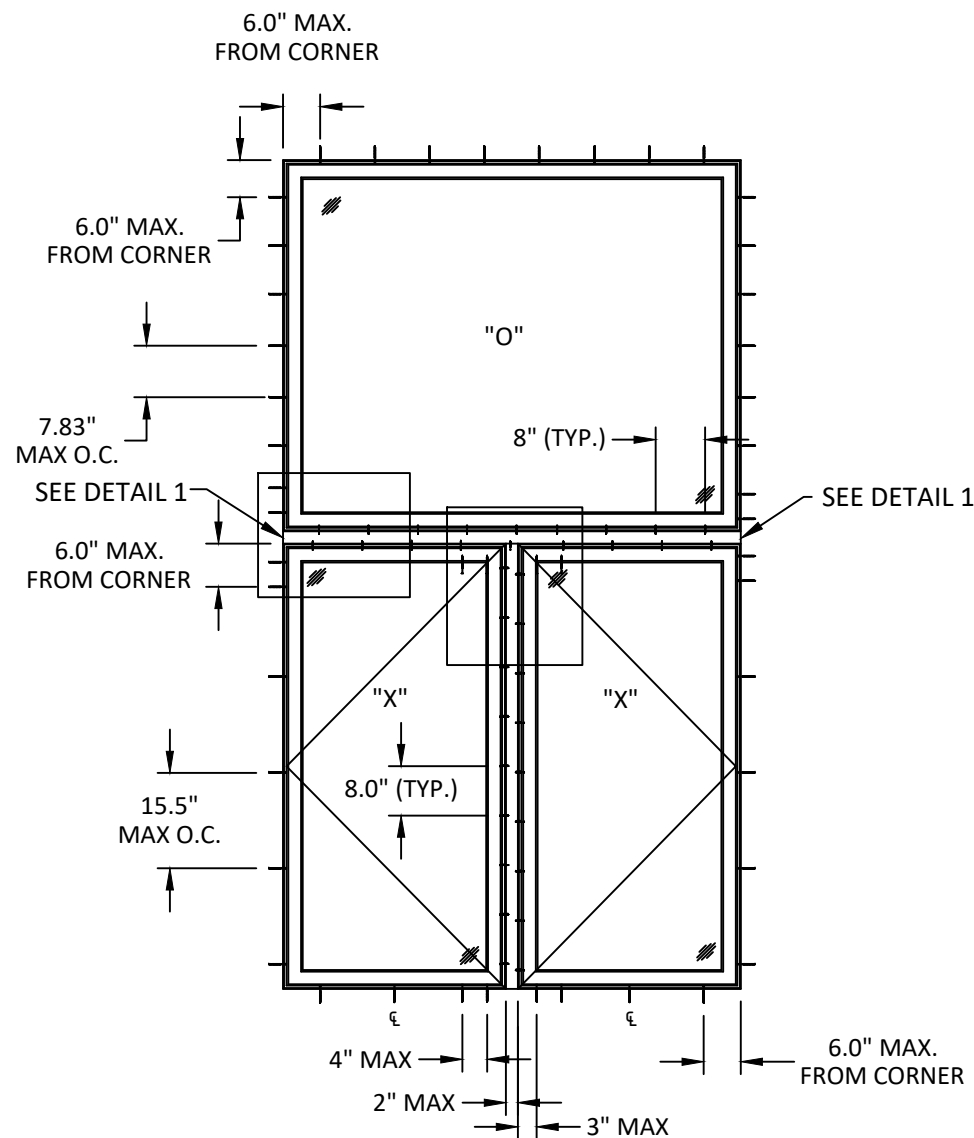
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SHEET

4

OF 28

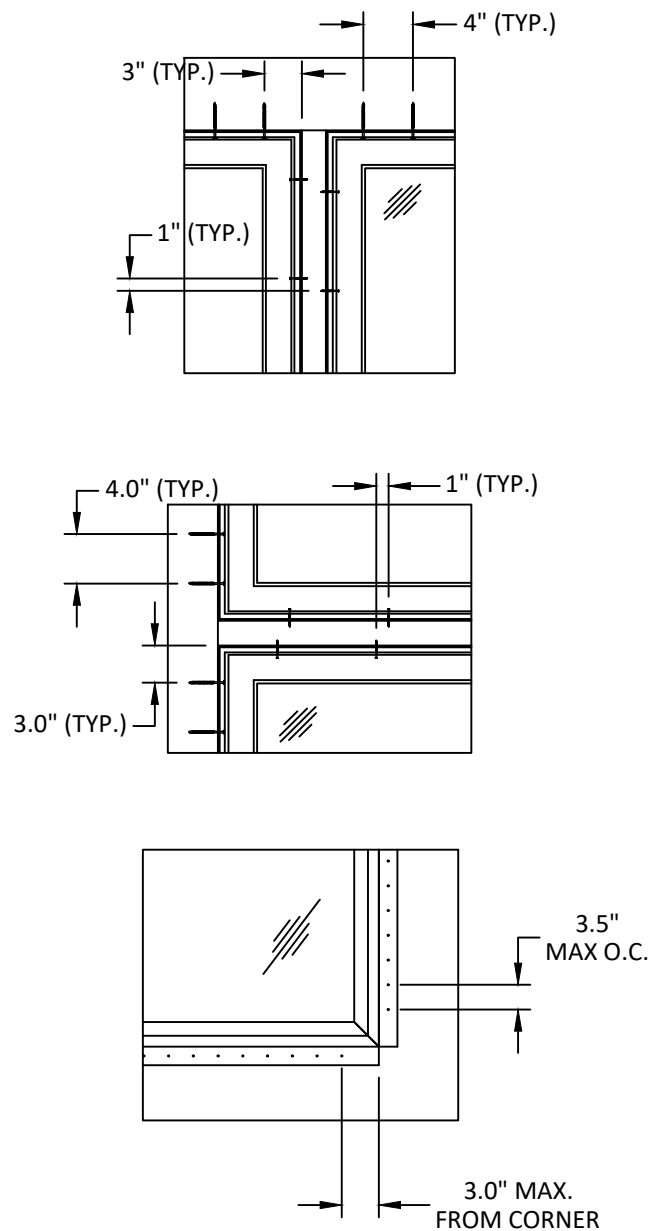
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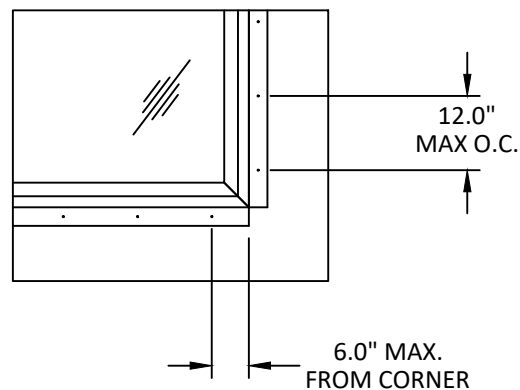
ANCHOR LAYOUT
THROUGH FRAME

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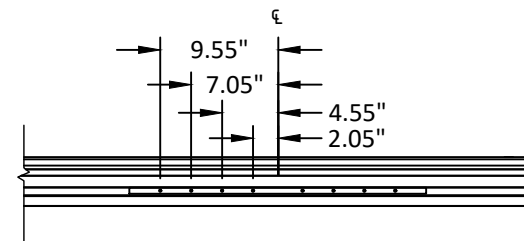
VINYL FIN ANCHORING
SINGLE UNIT



ALUMINUM FIN ANCHORING
SINGLE UNIT

NOTE :

FOR MORE ANCHOR INFORMATION (INSTALLATION TYPE, SPACING, QUANTITY, ANCHOR TYPE, QUALIFIED SUBSTRATES) SEE SHEET 10



DETAIL 1



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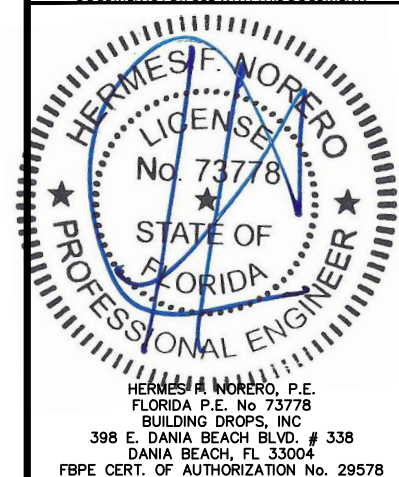
TITLE:
**E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)**
MULLED ANCHOR LAYOUTS

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ADDED 3/4" & 5" MULL	LL	8.13.19

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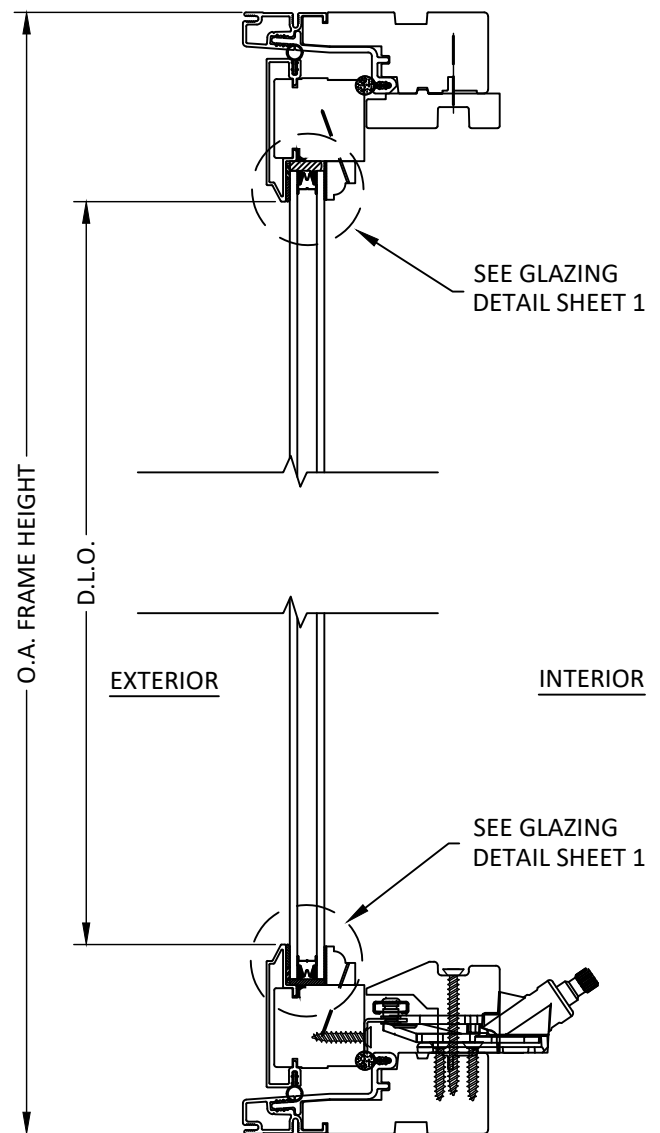
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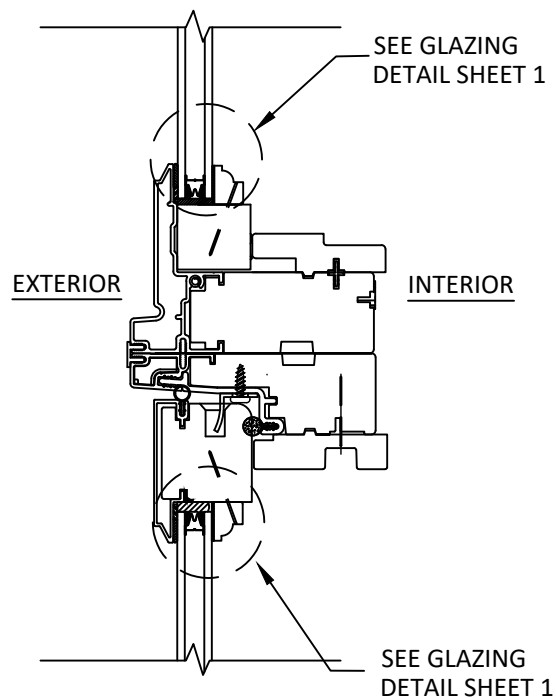
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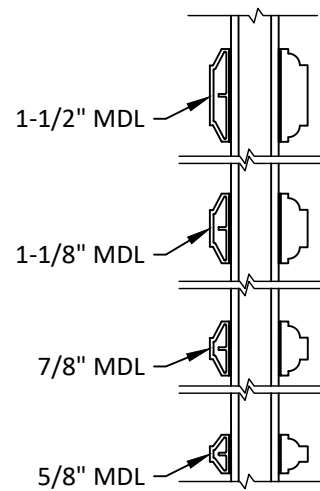
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A
6 **VERTICAL SECTION**
INSULATED GLASS



B
6 **VERTICAL SECTION**
ZERO MULLION



OPTIONAL MUNTIN BAR ATTACHMENT TO GLASS



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TITLE:
**E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)**
HORIZONTAL VERTICAL

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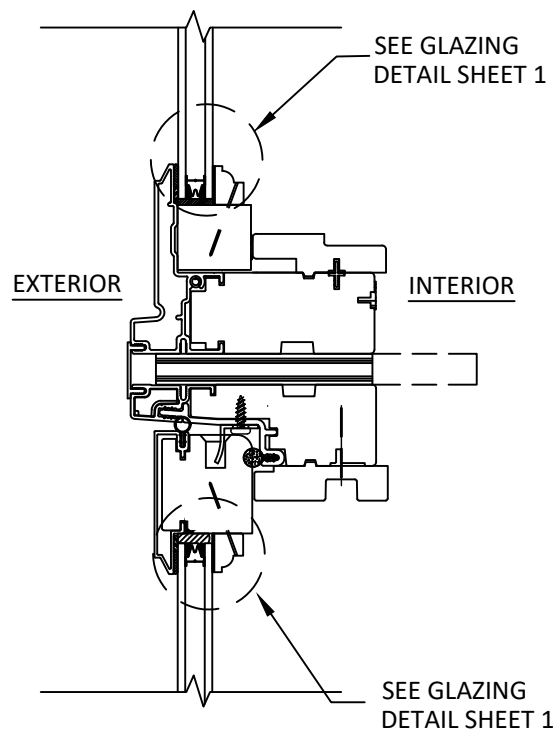
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FBPE CERT. OF AUTHORIZATION No. 29578

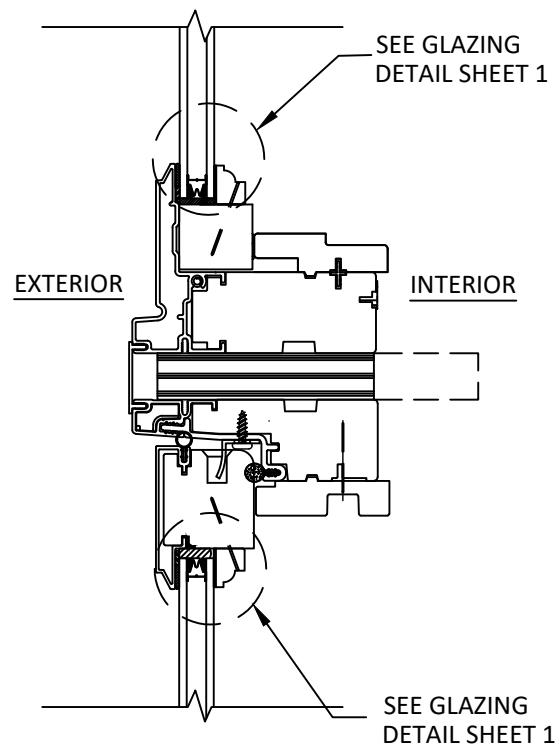
FL #:	FL24226
DATE:	10.07.17
DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD198
SHEET	6

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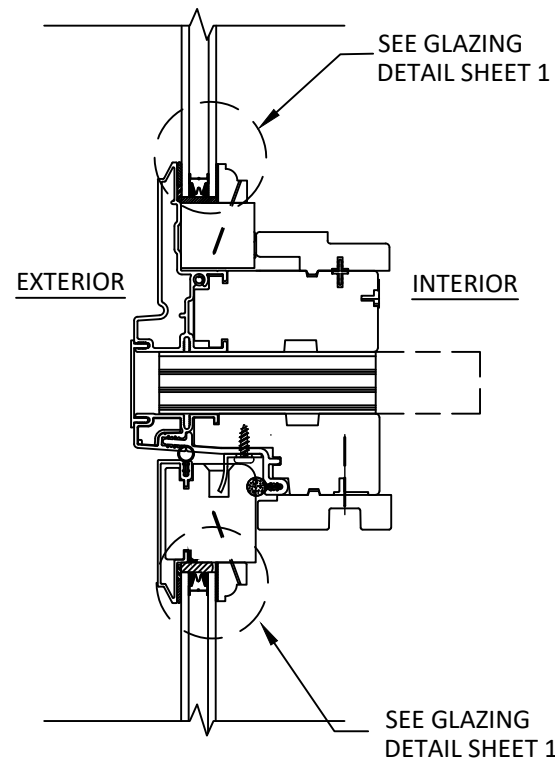
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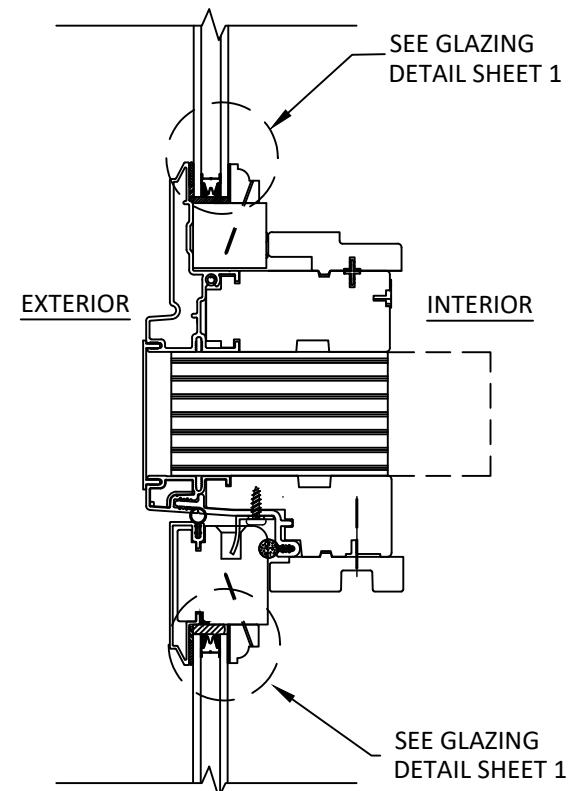
A
7
VERTICAL SECTION
INSULATED GLASS
1/2" X 3-1/2" MULLION
OR 1/2" x 5 3/16"



B
7
VERTICAL SECTION
INSULATED GLASS
3/4" X 3-1/2" MULLION
OR 3/4" x 5 3/16"



C
7
VERTICAL SECTION
INSULATED GLASS
1" X 3-1/2" MULLION
OR 1" x 5 3/16"



D
7
VERTICAL SECTION
INSULATED GLASS
2" X 3-1/2" MULLION
OR 2" x 5 3/16"

NOTE : LVL MULL BETWEEN JAMBS MAY BE
3 1/2" OR 5 3/16" IN DEPTH AS
REPRESENTED BY DASHED LINES



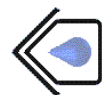
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TITLE:
E-SERIES CASEMENT WINDOW
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MULLED VERTICAL SECTIONS

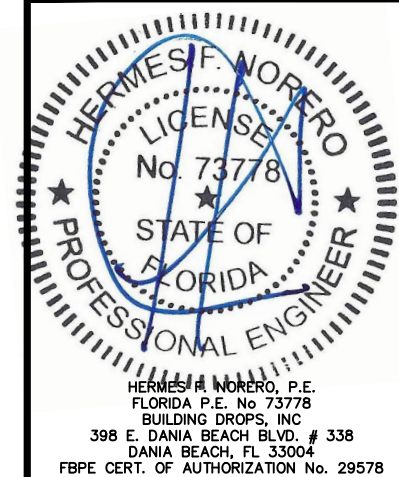
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DOCUMENTS FOR USE WITH THIS DOCUMENT.



FL #:
FL24226

DATE: **10.07.17**

DWG. BY:
RV

CHK. BY:
HFN

SCALE: **NTS**

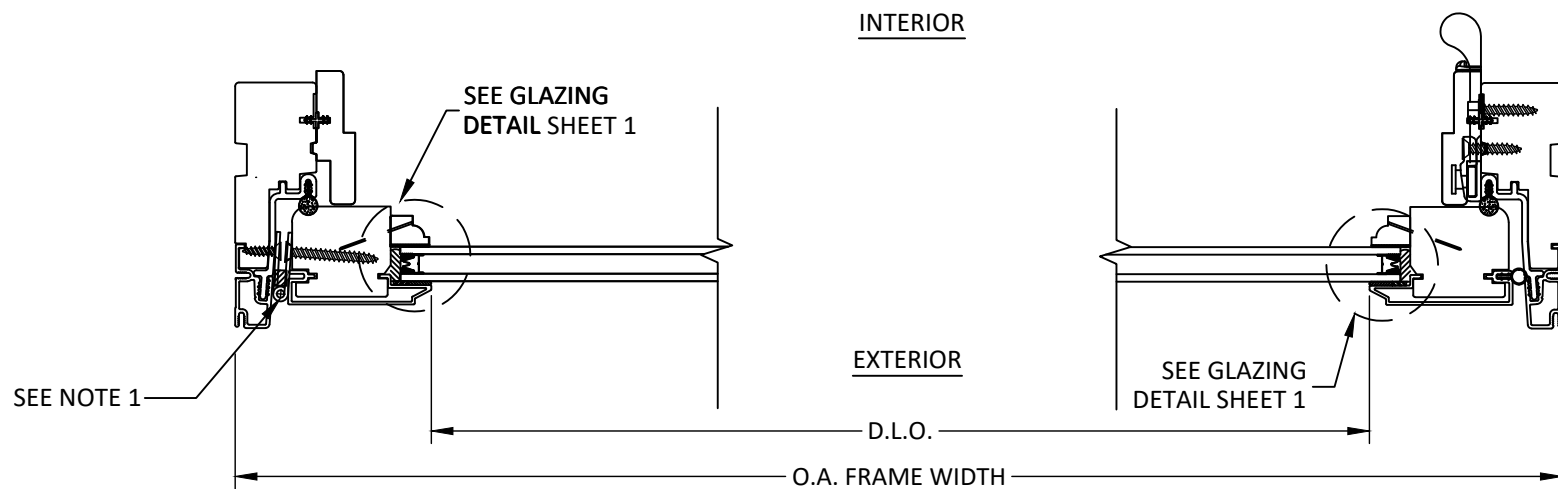
DWG. #: **AWD198**

SHEET

7

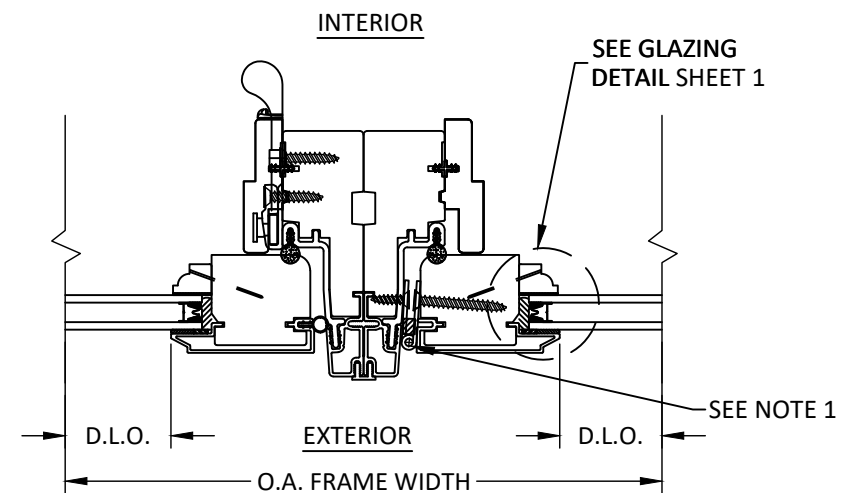
OF 28

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A
8 **HORIZONTAL SECTION**
HINGE JAMB

B
8 **HORIZONTAL SECTION**
LOCK JAMB



C
8 **HORIZONTAL SECTION**
ZERO MULLION



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

TITLE:
**E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)**

HORIZONTAL DETAILS

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
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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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 #:
FL24226

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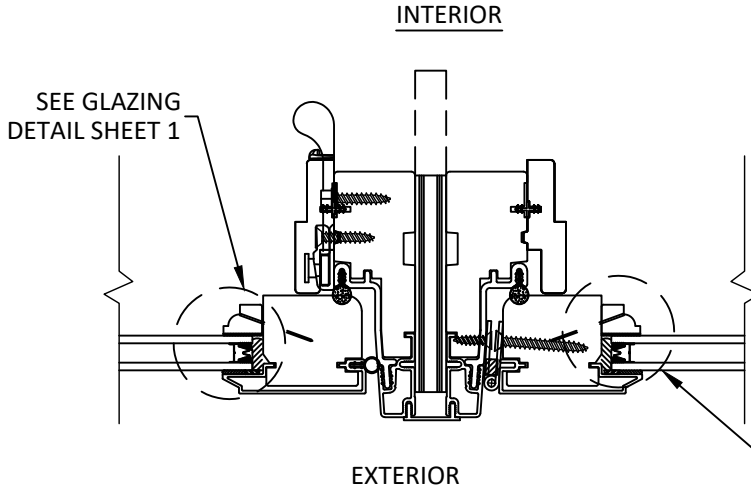
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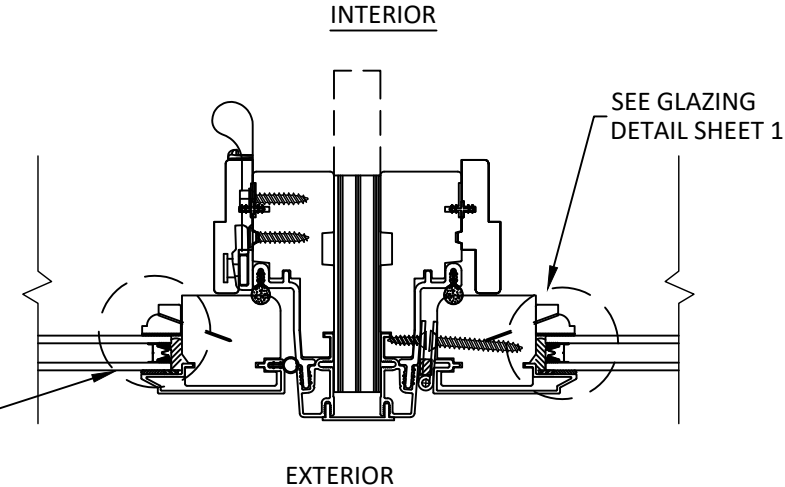
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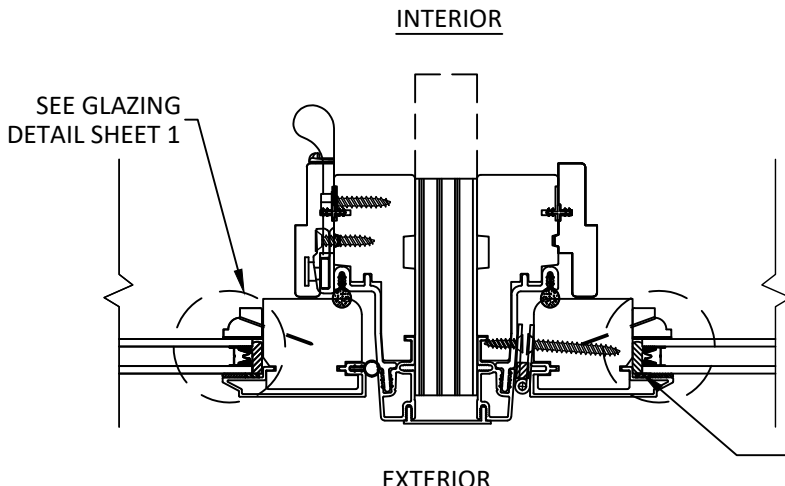
A
9 **HORIZONTAL SECTION**
INSULATED GLASS
1/2" X 3-1/2" MULLION
OR 1/2" x 5 3/16"

SEE GLAZING
DETAILS SHEET 1



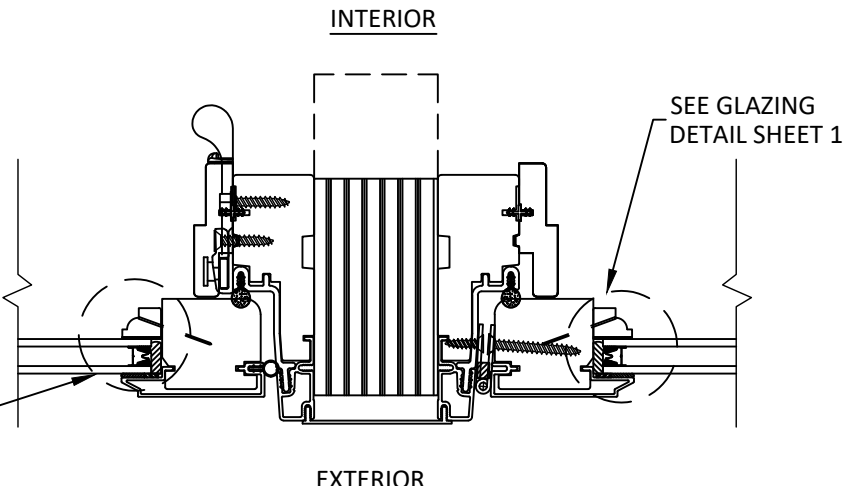
B
9 **HORIZONTAL SECTION**
INSULATED GLASS
3/4" X 3-1/2" MULLION
OR 3/4" x 5 3/16"

NOTE : LVL MULL BETWEEN JAMBS MAY BE
3 1/2" OR 5 3/16" IN DEPTH AS
REPRESENTED BY DASHED LINES



C
9 **INSULATED GLASS**
INSULATED GLASS
1" X 3-1/2" MULLION
OR 1" x 5 3/16"

SEE GLAZING
DETAILS SHEET 1



D
9 **HORIZONTAL SECTION**
INSULATED GLASS
2" X 3-1/2" MULLION
OR 2" x 5 3/16"



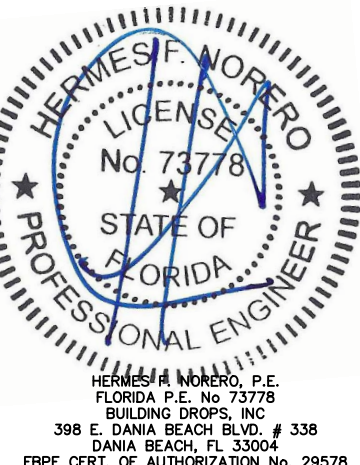
100 FOURTH AVE. NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE:
**E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)**
MULLED HORIZONTAL DETAILS

PREPARED BY:
BUILDING DROPS, INC.
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DANIA BEACH, FL 33004
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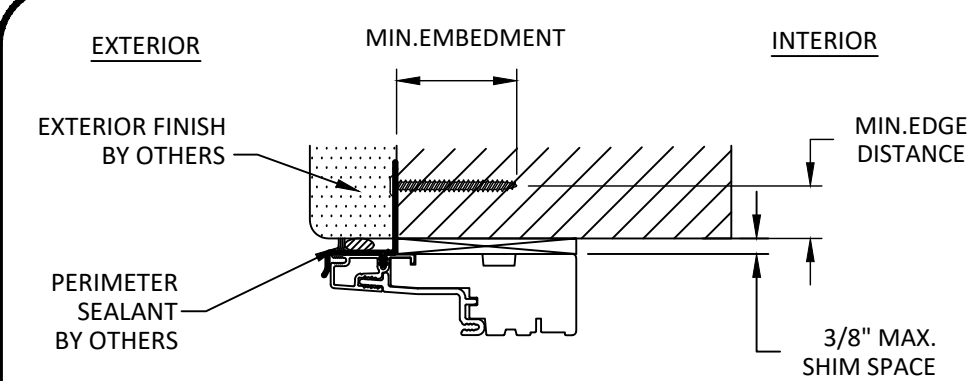
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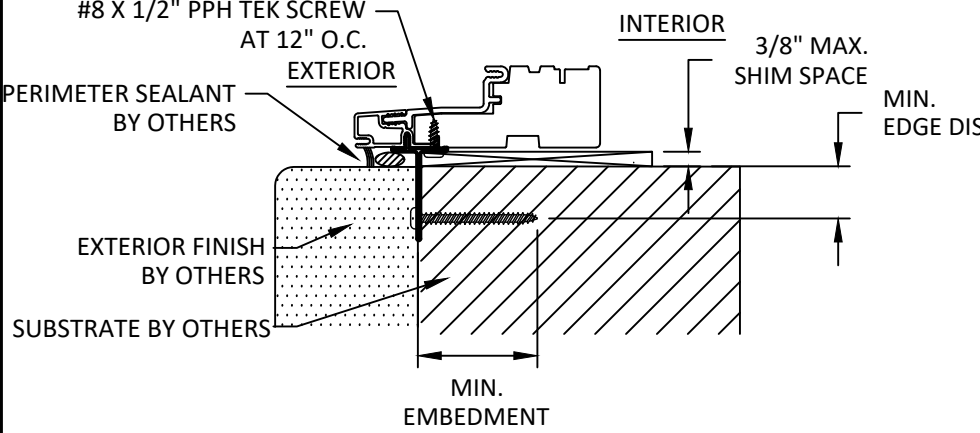
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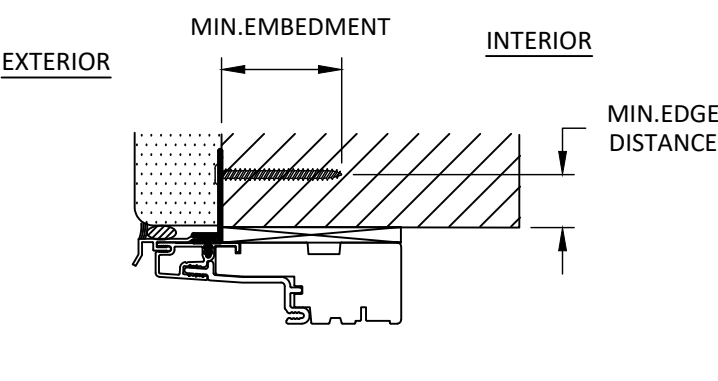
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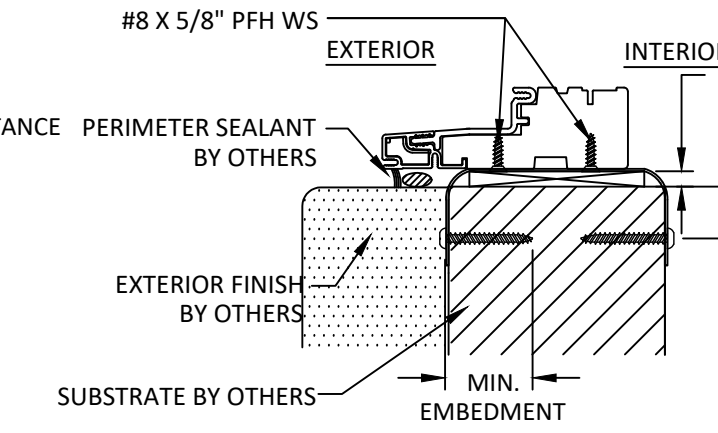
A
10 **ANCHOR DETAILS**
VINYL NAIL FIN
(HEAD ONLY)



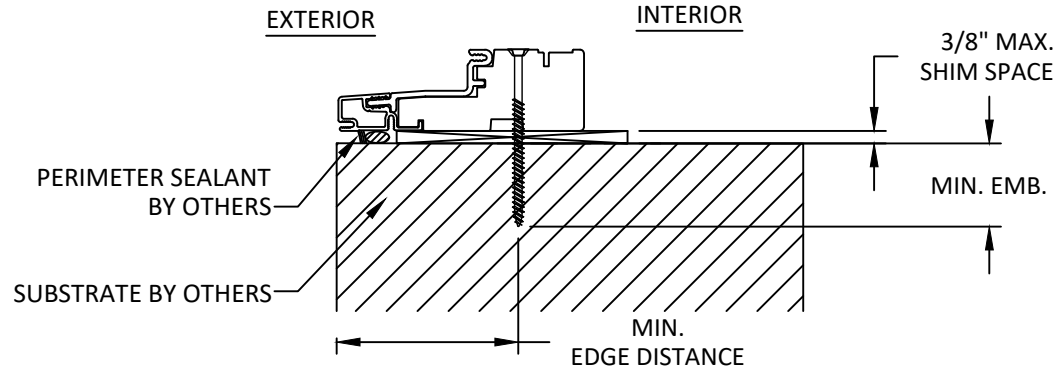
D
10 **ANCHOR DETAIL**
ALUMINUM NAIL FIN
(HEAD, SILL AND JAMB)



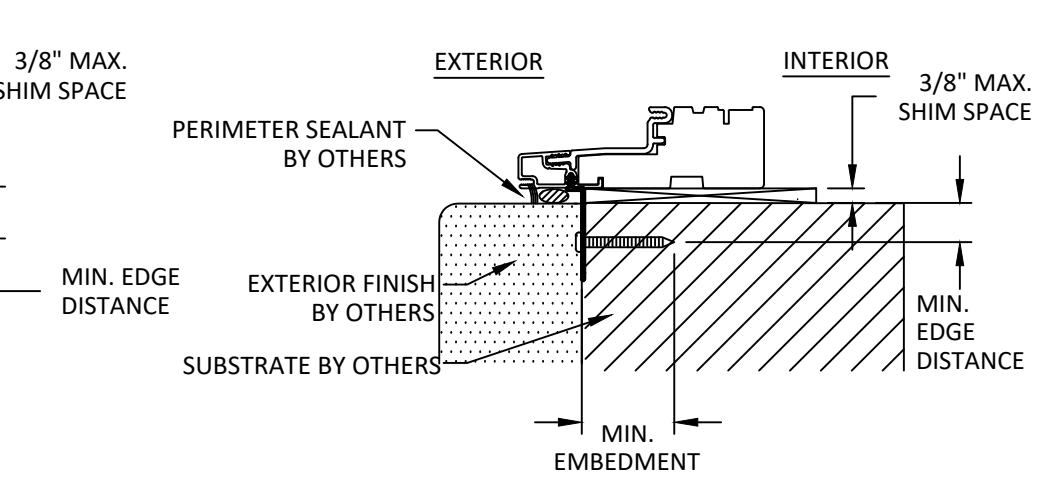
B
10 **ANCHOR DETAILS**
VINYL NAIL FIN
(HEAD ONLY)



E
10 **ANCHOR DETAIL**
STRAP ANCHOR
(HEAD, SILL AND JAMB)



C
10 **ANCHOR DETAIL**
THROUGH FRAME
(HEAD, SILL AND JAMB)



F
10 **ANCHOR DETAIL**
VINYL NAIL FIN
(JAMB ONLY)

INSTALLATION NOTES:

- ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN UNLESS OTHERWISE MENTIONED.
- 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 $\pm 1/2$ INCH THE DEPICTED LOCATION & SPACING IN THE ANCHOR LAYOUT DETAILS (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 3/8 INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER.
- 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.

ANCHOR SCHEDULE					
INSTALLATION TYPE	QTY PER LOCATION	SUBSTRATE	ANCHOR TYPE	EMBEDMENT (IN.)	EDGE DISTANCE (IN.)
STRAP	2	WOOD	#8 WOOD ANCHOR	1.50	0.75
		CONCRETE/MASONRY	3/16" ITW TAPCON	1.25	2.50
		METAL STUD	#8 SELF-TAPPING SCREW	3 THREADS	N/A
THRU FRAME	1	WOOD	#10 WOOD ANCHOR	1.50	0.75
		CONCRETE/MASONRY	3/16" ITW TAPCON	1.25	2.50
		METAL STUD	#10 SELF-TAPPING SCREW	3 THREADS	N/A
ALUMINUM NAILING FLANGE	1	WOOD	11 GA. ROOFING NAIL	1.50	0.75
		WOOD	#8 WOOD ANCHOR	1.50	0.75
		METAL STUD	#8 SELF-TAPPING SCREW	3 THREADS	N/A
VINYL NAILING FLANGE	1	WOOD	11 GA. ROOFING NAIL	1.50	0.75
		WOOD	#8 WOOD ANCHOR	1.50	0.75
		METAL STUD	#8 SELF-TAPPING SCREW	3 THREADS	N/A

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TITLE: E-SERIES CASEMENT WINDOW (NON-IMPACT)/(NON-HVHZ) ANCHOR DETAILS

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DANIA BEACH, FL 33004
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:

FL24226

DATE: **10.07.17**

DWG. BY: **RV**

CHK. BY: **HFN**

SCALE: **NTS**

DWG. #: **AWD198**

SHEET

10

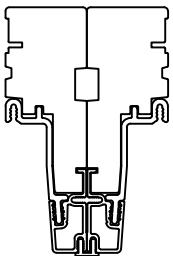
OF 28

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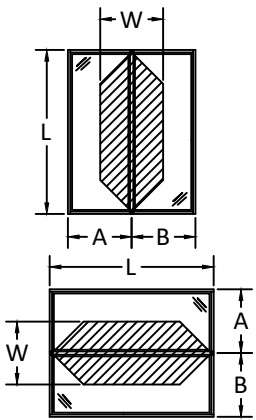
MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
ZERO STRUCTURAL MULLION (ONE-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
30.0	47.60	44.95	44.95	44.95	44.95	44.95	44.95	44.95	44.95	44.95	44.95	44.95	44.95	44.95	44.95
36.0	30.52	26.01	26.01	26.01	26.01	26.01	26.01	26.01	26.01	26.01	26.01	26.01	26.01	26.01	26.01
42.0	21.43	16.87	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38	16.38
48.0	15.96	12.00	10.97	10.97	10.97	10.97	10.97	10.97	10.97	10.97	10.97	10.97	10.97	10.97	10.97
54.0	12.37	9.04	7.85	7.71	7.71	7.71	7.71	7.71	7.71	7.71	7.71	7.71	7.71	7.71	7.71
60.0	9.89	7.09	5.95	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62
66.0	8.10	5.72	4.70	4.27	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22
72.0	6.75	4.73	3.81	3.38	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25
78.0	5.72	3.98	3.17	2.76	2.58	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56
84.0	4.91	3.39	2.68	2.30	2.11	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05
90.0	4.26	2.93	2.30	1.95	1.76	1.68	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
96.0	3.74	2.56	1.99	1.68	1.50	1.40	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
102.0	3.30	2.25	1.75	1.46	1.29	1.20	1.15	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
108.0	2.94	2.00	1.55	1.29	1.13	1.03	0.98	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
114.0	2.63	1.79	1.38	1.14	1.00	0.90	0.85	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
120.0	2.37	1.61	1.24	1.02	0.89	0.80	0.74	0.71	0.70	0.70	0.70	0.70	0.70	0.70	0.70
126.0	2.15	1.46	1.12	0.92	0.79	0.71	0.66	0.62	0.61	0.61	0.61	0.61	0.61	0.61	0.61
132.0	1.96	1.32	1.01	0.83	0.72	0.64	0.59	0.55	0.53	0.53	0.53	0.53	0.53	0.53	0.53
138.0	1.79	1.21	0.92	0.76	0.65	0.58	0.53	0.49	0.47	0.46	0.46	0.46	0.46	0.46	0.46
144.0	1.64	1.11	0.84	0.69	0.59	0.52	0.48	0.44	0.42	0.41	0.41	0.41	0.41	0.41	0.41
150.0	1.51	1.02	0.78	0.63	0.54	0.48	0.43	0.40	0.38	0.37	0.36	0.36	0.36	0.36	0.36
156.0	1.40	0.94	0.72	0.58	0.50	0.44	0.40	0.37	0.34	0.33	0.32	0.32	0.32	0.32	0.32
162.0	1.29	0.87	0.66	0.54	0.46	0.40	0.36	0.33	0.31	0.30	0.29	0.29	0.29	0.29	0.29
168.0	1.20	0.81	0.61	0.50	0.42	0.37	0.33	0.31	0.29	0.27	0.26	0.26	0.26	0.26	0.26
174.0	1.12	0.75	0.57	0.46	0.39	0.34	0.31	0.28	0.26	0.25	0.24	0.23	0.23	0.23	0.23
180.0	1.05	0.70	0.53	0.43	0.37	0.32	0.29	0.26	0.24	0.23	0.22	0.21	0.21	0.21	0.21
186.0	0.98	0.66	0.50	0.40	0.34	0.30	0.27	0.24	0.23	0.21	0.20	0.20	0.19	0.19	0.19
192.0	0.92	0.62	0.47	0.38	0.32	0.28	0.25	0.23	0.21	0.20	0.19	0.18	0.18	0.17	0.17

NOTE:

- 1) MULLION CHART APPLIES TO ZERO MULL ASSEMBLIES, WHEN MULLED IN ONE-WAY CONFIGURATIONS.
- 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 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 AS LISTED ON SHEET 10
- 6) TRIBUTARY WIDTH = $W = (A+B)/2$
- 7) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



ZERO MULLION PROFILE



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



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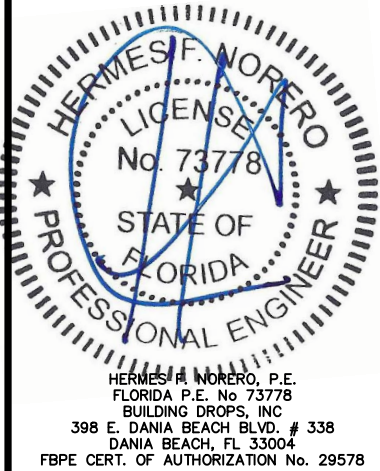
TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
ZERO MULLION LOADS TABLE - ONE WAY

PREPARED BY:
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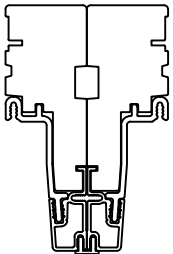
DWG. #: **AWD198**

SHEET

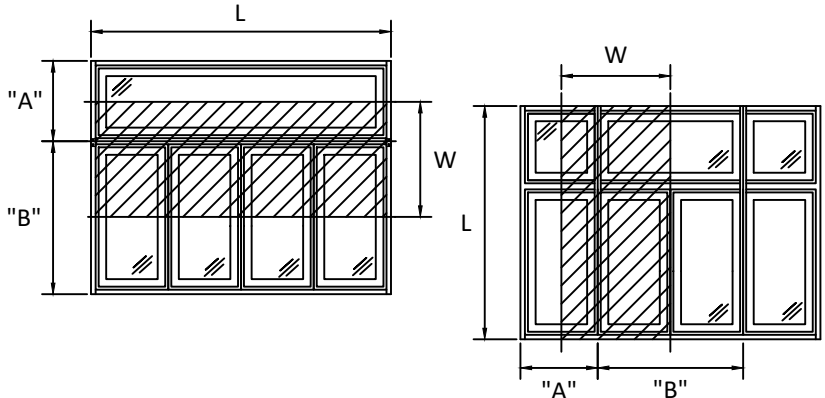
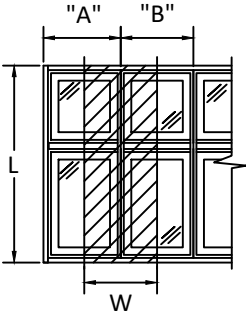
MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)														
ZERO STRUCTURAL MULLION (TWO-WAY) CONFIGURATION														
L - Mull Length (in)	W - Tributary Width (in)													
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0
24.0	58.52	39.02	29.26	23.41	19.51	16.72	14.63	13.01	11.70	10.64	9.75	9.00	8.36	7.80
30.0	37.46	24.97	18.73	14.98	12.49	10.70	9.36	8.32	7.49	6.81	6.24	5.76	5.35	4.99
36.0	26.01	17.34	13.01	10.40	8.67	7.43	6.50	5.78	5.20	4.73	4.34	4.00	3.72	3.47
42.0	19.11	12.74	9.56	7.64	6.37	5.46	4.78	4.25	3.82	3.47	3.19	2.94	2.73	2.55
48.0	14.63	9.75	7.32	5.85	4.88	4.18	3.66	3.25	2.93	2.66	2.44	2.25	2.09	1.95
54.0	11.56	7.71	5.78	4.62	3.85	3.30	2.89	2.57	2.31	2.10	1.93	1.78	1.65	1.54
60.0	9.36	6.24	4.68	3.75	3.12	2.68	2.34	2.08	1.87	1.70	1.56	1.44	1.34	1.25
66.0	7.74	5.16	3.87	3.10	2.58	2.21	1.93	1.72	1.55	1.41	1.29	1.19	1.11	1.03
72.0	6.50	4.34	3.25	2.60	2.17	1.86	1.63	1.45	1.30	1.18	1.08	1.00	0.93	0.87
78.0	5.54	3.69	2.77	2.22	1.85	1.58	1.39	1.23	1.11	1.01	0.92	0.85	0.79	0.74
84.0	4.78	3.19	2.39	1.91	1.59	1.37	1.19	1.06	0.96	0.87	0.80	0.74	0.68	0.64
90.0	4.16	2.77	2.08	1.66	1.39	1.19	1.04	0.92	0.83	0.76	0.69	0.64	0.59	0.55
96.0	3.66	2.44	1.83	1.46	1.22	1.05	0.91	0.81	0.73	0.67	0.61	0.56	0.52	0.49
102.0	3.24	2.16	1.62	1.30	1.08	0.93	0.81	0.72	0.65	0.59	0.54	0.50	0.46	0.43
108.0	2.89	1.93	1.45	1.16	0.96	0.83	0.72	0.64	0.58	0.53	0.48	0.44	0.41	0.39
114.0	2.59	1.73	1.30	1.04	0.86	0.74	0.65	0.58	0.52	0.47	0.43	0.40	0.37	0.35
120.0	2.34	1.56	1.17	0.94	0.78	0.67	0.59	0.52	0.47	0.43	0.39	0.36	0.33	0.31
126.0	2.12	1.42	1.06	0.85	0.71	0.61	0.53	0.47	0.42	0.39	0.35	0.33	0.30	0.28
132.0	1.93	1.29	0.97	0.77	0.64	0.55	0.48	0.43	0.39	0.35	0.32	0.30	0.28	0.26
138.0	1.77	1.18	0.89	0.71	0.59	0.51	0.44	0.39	0.35	0.32	0.30	0.27	0.25	0.24
144.0	1.63	1.08	0.81	0.65	0.54	0.46	0.41	0.36	0.33	0.30	0.27	0.25	0.23	0.22
150.0	1.50	1.00	0.75	0.60	0.50	0.43	0.37	0.33	0.30	0.27	0.25	0.23	0.21	0.20
156.0	1.39	0.92	0.69	0.55	0.46	0.40	0.35	0.31	0.28	0.25	0.23	0.21	0.20	0.18
162.0	1.28	0.86	0.64	0.51	0.43	0.37	0.32	0.29	0.26	0.23	0.21	0.20	0.18	0.17
168.0	1.19	0.80	0.60	0.48	0.40	0.34	0.30	0.27	0.24	0.22	0.20	0.18	0.17	0.16
174.0	1.11	0.74	0.56	0.45	0.37	0.32	0.28	0.25	0.22	0.20	0.19	0.17	0.16	0.15
180.0	1.04	0.69	0.52	0.42	0.35	0.30	0.26	0.23	0.21	0.19	0.17	0.16	0.15	0.14
186.0	0.97	0.65	0.49	0.39	0.32	0.28	0.24	0.22	0.19	0.18	0.16	0.15	0.14	0.13
192.0	0.91	0.61	0.46	0.37	0.30	0.26	0.23	0.20	0.18	0.17	0.15	0.14	0.13	0.12

NOTE:

- 1) MULLION CHART APPLIES TO ZERO MULL ASSEMBLIES, WHEN MULLED IN TWO-WAY CONFIGURATIONS.
- 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 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 AS LISTED ON SHEET 10
- 6) TRIBUTARY WIDTH = $W = (A+B)/2$
- 7) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



ZERO MULLION PROFILE



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



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

TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
ZERO MULLION LOADS TABLE - TWO WAY

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
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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. 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 #:
FL24226

DATE:
10.07.17

DWG. BY:
RV

CHK. BY:
HFN

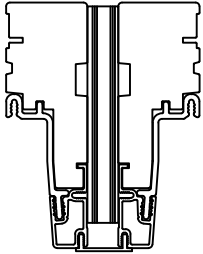
SCALE:
NTS

DWG. #:
AWD198

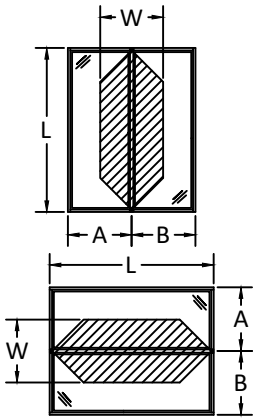
SHEET

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
1/2" X 3-1/2" STRUCTURAL MULLION (ONE-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
30.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
36.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
42.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
48.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
54.0	75.00	75.00	71.41	70.14	70.14	70.14	70.14	70.14	70.14	70.14	70.14	70.14	70.14	70.14	70.14
60.0	75.00	64.52	54.15	51.13	51.13	51.13	51.13	51.13	51.13	51.13	51.13	51.13	51.13	51.13	51.13
66.0	73.68	52.09	42.73	38.89	38.41	38.41	38.41	38.41	38.41	38.41	38.41	38.41	38.41	38.41	38.41
72.0	61.46	43.02	34.71	30.80	29.59	29.59	29.59	29.59	29.59	29.59	29.59	29.59	29.59	29.59	29.59
78.0	48.37	33.86	27.23	23.95	22.56	22.38	22.38	22.38	22.38	22.38	22.38	22.38	22.38	22.38	22.38
84.0	38.52	26.79	21.32	18.48	17.08	16.64	16.64	16.64	16.64	16.64	16.64	16.64	16.64	16.64	16.64
90.0	31.18	21.57	17.03	14.59	13.28	12.70	12.62	12.62	12.62	12.62	12.62	12.62	12.62	12.62	12.62
96.0	25.60	17.63	13.83	11.74	10.56	9.95	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75	9.75
102.0	21.28	14.60	11.40	9.61	8.55	7.96	7.69	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65
108.0	17.88	12.23	9.51	7.97	7.04	6.48	6.19	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09
114.0	15.17	10.35	8.02	6.68	5.87	5.36	5.06	4.92	4.90	4.90	4.90	4.90	4.90	4.90	4.90
120.0	12.98	8.84	6.82	5.67	4.95	4.49	4.20	4.05	3.99	3.99	3.99	3.99	3.99	3.99	3.99
126.0	11.20	7.61	5.86	4.85	4.21	3.80	3.53	3.37	3.30	3.29	3.29	3.29	3.29	3.29	3.29
132.0	9.72	6.60	5.07	4.18	3.62	3.25	3.00	2.85	2.76	2.73	2.73	2.73	2.73	2.73	2.73
138.0	8.50	5.76	4.42	3.63	3.13	2.80	2.57	2.43	2.33	2.29	2.28	2.28	2.28	2.28	2.28
144.0	7.47	5.06	3.87	3.18	2.73	2.43	2.23	2.09	2.00	1.94	1.93	1.93	1.93	1.93	1.93
150.0	6.61	4.46	3.41	2.80	2.40	2.13	1.94	1.81	1.72	1.67	1.64	1.64	1.64	1.64	1.64
156.0	5.87	3.96	3.02	2.47	2.12	1.87	1.70	1.58	1.50	1.44	1.41	1.40	1.40	1.40	1.40
162.0	5.24	3.53	2.69	2.20	1.88	1.66	1.50	1.39	1.31	1.26	1.22	1.21	1.20	1.20	1.20
168.0	4.69	3.16	2.41	1.96	1.67	1.47	1.33	1.23	1.15	1.10	1.07	1.05	1.04	1.04	1.04
174.0	4.22	2.84	2.16	1.76	1.50	1.32	1.19	1.09	1.02	0.97	0.94	0.92	0.91	0.90	0.90
180.0	3.81	2.56	1.95	1.59	1.35	1.18	1.06	0.98	0.91	0.86	0.83	0.81	0.79	0.79	0.79
186.0	3.45	2.32	1.76	1.43	1.22	1.07	0.96	0.88	0.82	0.77	0.74	0.72	0.70	0.69	0.69
192.0	3.14	2.11	1.60	1.30	1.10	0.96	0.86	0.79	0.73	0.69	0.66	0.64	0.62	0.61	0.61

- NOTE:
- 1) MULLION CHART APPLIES TO 1/2" X 3-1/2" MULL ASSEMBLIES, WHEN MULLED IN ONE-WAY CONFIGURATIONS.
 - 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 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 AS LISTED ON SHEET 10
 - 6) TRIBUTARY WIDTH = $W = (A+B)/2$
 - 7) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



1/2" X 3 1/2"
LVL MULL PROFILE



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



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

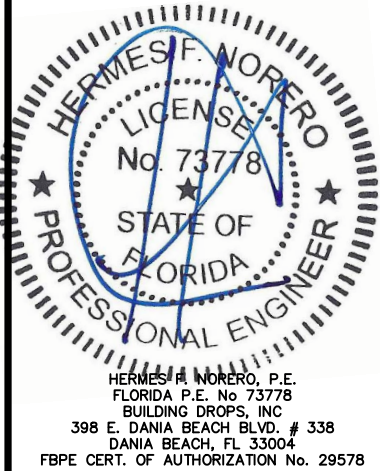
TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
1/2" X 3-1/2" MULLION LOADS TABLE - ONE
WAY

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
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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 #:
FL24226

DATE: 10.07.17

DWG. BY: RV
CHK. BY: HFN

SCALE: NTS

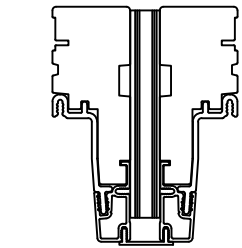
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SHEET
13

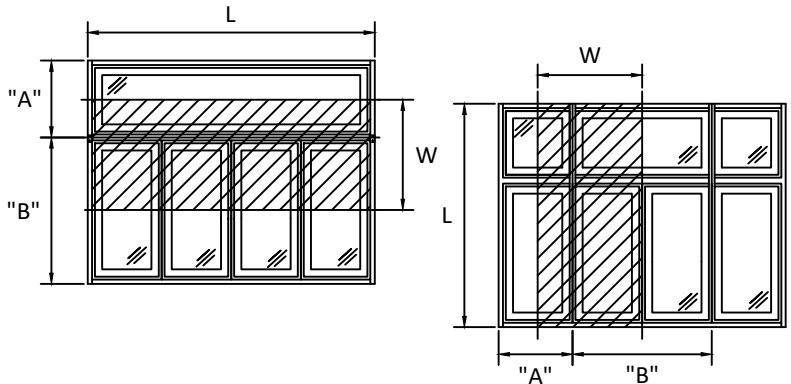
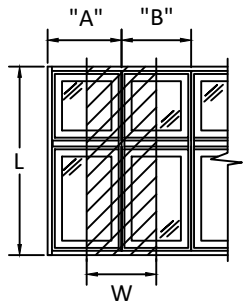
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MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
1/2" X 3-1/2" STRUCTURAL MULLION (TWO-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	66.86	58.50	52.00	46.80	42.55	39.00	36.00	33.43	31.20	29.25
30.0	75.00	75.00	75.00	74.88	62.40	53.49	46.80	41.60	37.44	34.04	31.20	28.80	26.74	24.96	23.40
36.0	75.00	75.00	75.00	62.40	52.00	44.57	39.00	34.67	31.20	28.36	26.00	24.00	22.29	20.80	19.50
42.0	75.00	75.00	66.86	53.49	44.57	38.20	33.43	29.71	26.74	24.31	22.29	20.57	19.10	17.83	16.71
48.0	75.00	75.00	58.50	46.80	39.00	33.43	29.25	26.00	23.40	21.27	19.50	18.00	16.71	15.60	14.63
54.0	75.00	69.33	52.00	41.60	34.67	29.71	26.00	23.11	20.80	18.91	17.33	16.00	14.86	13.87	13.00
60.0	75.00	56.81	42.61	34.09	28.41	24.35	21.30	18.94	17.04	15.49	14.20	13.11	12.17	11.36	10.65
66.0	70.43	46.95	35.21	28.17	23.48	20.12	17.61	15.65	14.09	12.80	11.74	10.83	10.06	9.39	8.80
72.0	59.18	39.45	29.59	23.67	19.73	16.91	14.79	13.15	11.84	10.76	9.86	9.10	8.45	7.89	7.40
78.0	46.55	31.03	23.27	18.62	15.52	13.30	11.64	10.34	9.31	8.46	7.76	7.16	6.65	6.21	5.82
84.0	37.27	24.84	18.63	14.91	12.42	10.65	9.32	8.28	7.45	6.78	6.21	5.73	5.32	4.97	4.66
90.0	30.30	20.20	15.15	12.12	10.10	8.66	7.57	6.73	6.06	5.51	5.05	4.66	4.33	4.04	3.79
96.0	24.97	16.64	12.48	9.99	8.32	7.13	6.24	5.55	4.99	4.54	4.16	3.84	3.57	3.33	3.12
102.0	20.81	13.88	10.41	8.33	6.94	5.95	5.20	4.63	4.16	3.78	3.47	3.20	2.97	2.78	2.60
108.0	17.53	11.69	8.77	7.01	5.84	5.01	4.38	3.90	3.51	3.19	2.92	2.70	2.50	2.34	2.19
114.0	14.91	9.94	7.45	5.96	4.97	4.26	3.73	3.31	2.98	2.71	2.48	2.29	2.13	1.99	1.86
120.0	12.78	8.52	6.39	5.11	4.26	3.65	3.20	2.84	2.56	2.32	2.13	1.97	1.83	1.70	1.60
126.0	11.04	7.36	5.52	4.42	3.68	3.15	2.76	2.45	2.21	2.01	1.84	1.70	1.58	1.47	1.38
132.0	9.60	6.40	4.80	3.84	3.20	2.74	2.40	2.13	1.92	1.75	1.60	1.48	1.37	1.28	1.20
138.0	8.40	5.60	4.20	3.36	2.80	2.40	2.10	1.87	1.68	1.53	1.40	1.29	1.20	1.12	1.05
144.0	7.40	4.93	3.70	2.96	2.47	2.11	1.85	1.64	1.48	1.34	1.23	1.14	1.06	0.99	0.92
150.0	6.54	4.36	3.27	2.62	2.18	1.87	1.64	1.45	1.31	1.19	1.09	1.01	0.93	0.87	0.82
156.0	5.82	3.88	2.91	2.33	1.94	1.66	1.45	1.29	1.16	1.06	0.97	0.90	0.83	0.78	0.73
162.0	5.20	3.46	2.60	2.08	1.73	1.48	1.30	1.15	1.04	0.94	0.87	0.80	0.74	0.69	0.65
168.0	4.66	3.11	2.33	1.86	1.55	1.33	1.16	1.04	0.93	0.85	0.78	0.72	0.67	0.62	0.58
174.0	4.19	2.80	2.10	1.68	1.40	1.20	1.05	0.93	0.84	0.76	0.70	0.65	0.60	0.56	0.52
180.0	3.79	2.52	1.89	1.51	1.26	1.08	0.95	0.84	0.76	0.69	0.63	0.58	0.54	0.50	0.47
186.0	3.43	2.29	1.72	1.37	1.14	0.98	0.86	0.76	0.69	0.62	0.57	0.53	0.49	0.46	0.43
192.0	3.12	2.08	1.56	1.25	1.04	0.89	0.78	0.69	0.62	0.57	0.52	0.48	0.45	0.42	0.39

- NOTE:**
- 1) MULLION CHART APPLIES TO 1/2" X 3-1/2" MULL ASSEMBLIES, WHEN MULLED IN TWO-WAY CONFIGURATIONS.
 - 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 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 AS LISTED ON SHEET 10
 - 6) TRIBUTARY WIDTH = $W = (A+B)/2$
 - 7) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



1/2" X 3 1/2"
LVL MULL PROFILE



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



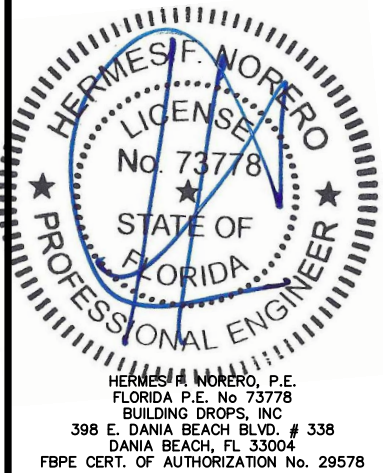
100 FOURTH AVE. NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
1/2" X 3-1/2" MULLION LOADS TABLE - TWO
WAY

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
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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FL #:
FL24226

DATE:
10.07.17

DWG. BY:
RV

CHK. BY:
HFN

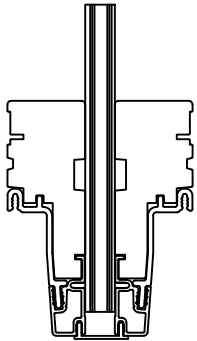
SCALE:
NTS

DWG. #:
AWD198

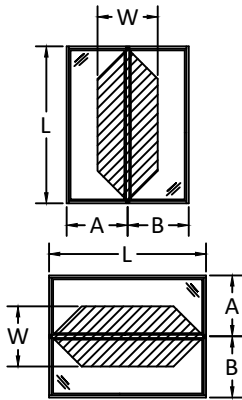
SHEET

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
1/2" X 5-3/16" STRUCTURAL MULLION (ONE-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
30.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
36.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
42.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
48.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
54.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
60.0	75.00	75.00	75.00	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88
66.0	75.00	75.00	66.86	62.40	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88
72.0	75.00	69.33	58.50	53.49	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00
78.0	75.00	62.40	50.78	44.65	42.07	41.73	41.73	41.73	41.73	41.73	41.73	41.73	41.73	41.73	41.73
84.0	71.83	49.95	39.76	34.46	31.85	31.02	31.02	31.02	31.02	31.02	31.02	31.02	31.02	31.02	31.02
90.0	58.14	40.22	31.76	27.21	24.77	23.69	23.54	23.54	23.54	23.54	23.54	23.54	23.54	23.54	23.54
96.0	47.74	32.87	25.80	21.90	19.69	18.56	18.19	18.19	18.19	18.19	18.19	18.19	18.19	18.19	18.19
102.0	39.68	27.23	21.25	17.91	15.95	14.85	14.34	14.27	14.27	14.27	14.27	14.27	14.27	14.27	14.27
108.0	33.34	22.81	17.73	14.85	13.12	12.09	11.54	11.35	11.35	11.35	11.35	11.35	11.35	11.35	11.35
114.0	28.29	19.30	14.95	12.46	10.94	9.99	9.44	9.18	9.15	9.15	9.15	9.15	9.15	9.15	9.15
120.0	24.21	16.48	12.73	10.57	9.22	8.37	7.84	7.55	7.45	7.45	7.45	7.45	7.45	7.45	7.45
126.0	20.88	14.19	10.93	9.04	7.85	7.08	6.59	6.29	6.15	6.13	6.13	6.13	6.13	6.13	6.13
132.0	18.13	12.30	9.45	7.80	6.75	6.06	5.60	5.31	5.14	5.09	5.09	5.09	5.09	5.09	5.09
138.0	15.85	10.74	8.23	6.77	5.84	5.22	4.80	4.52	4.35	4.27	4.26	4.26	4.26	4.26	4.26
144.0	13.94	9.43	7.22	5.92	5.10	4.54	4.15	3.89	3.72	3.63	3.59	3.59	3.59	3.59	3.59
150.0	12.32	8.33	6.36	5.21	4.47	3.97	3.62	3.37	3.21	3.11	3.06	3.05	3.05	3.05	3.05
156.0	10.94	7.39	5.64	4.61	3.95	3.49	3.17	2.95	2.79	2.69	2.63	2.61	2.61	2.61	2.61
162.0	9.76	6.59	5.02	4.10	3.50	3.09	2.80	2.59	2.44	2.34	2.28	2.25	2.24	2.24	2.24
168.0	8.75	5.90	4.49	3.66	3.12	2.75	2.49	2.29	2.15	2.06	1.99	1.95	1.94	1.94	1.94
174.0	7.87	5.30	4.03	3.28	2.80	2.46	2.22	2.04	1.91	1.81	1.75	1.71	1.69	1.69	1.69
180.0	7.11	4.78	3.63	2.96	2.51	2.21	1.98	1.82	1.70	1.61	1.55	1.51	1.48	1.47	1.47
186.0	6.44	4.33	3.29	2.67	2.27	1.99	1.79	1.64	1.52	1.44	1.38	1.33	1.31	1.29	1.29
192.0	5.85	3.93	2.98	2.42	2.05	1.80	1.61	1.47	1.37	1.29	1.23	1.19	1.16	1.14	1.14

- NOTE:
- MULLION CHART APPLIES TO 1/2" X 5-3/16" MULL ASSEMBLIES, WHEN MULLED IN ONE-WAY CONFIGURATIONS.
 - 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 UNIT OF INSTALLATION. ADJACENT WINDOWS OR DOORS SHALL BE UNDER SEPARATE FL OR MIAMI-DADE APPROVAL.
 - MULLION CHART APPLIES TO THE FOLLOWING INSTALLATION CONDITIONS AS LISTED ON SHEET 10
 - TRIBUTARY WIDTH = $W = (A+B)/2$
 - WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



1/2" X 5 3/16"
LVL MULL PROFILE



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



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

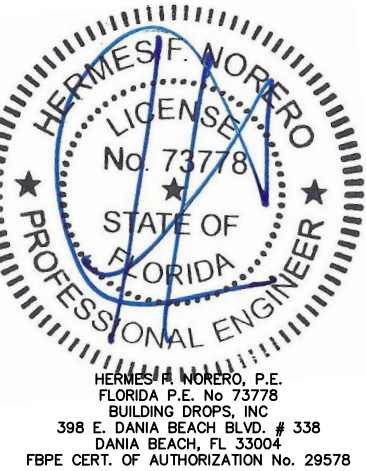
TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
1/2" X 5 3/16" MULLION LOADS TABLE - ONE WAY

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
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REMARKS	BY	DATE
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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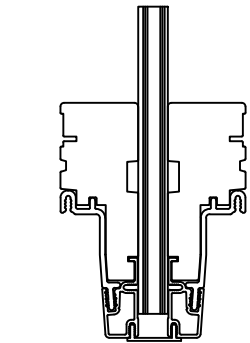


FL #:	FL24226
DATE:	10.07.17
DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD198
SHEET	

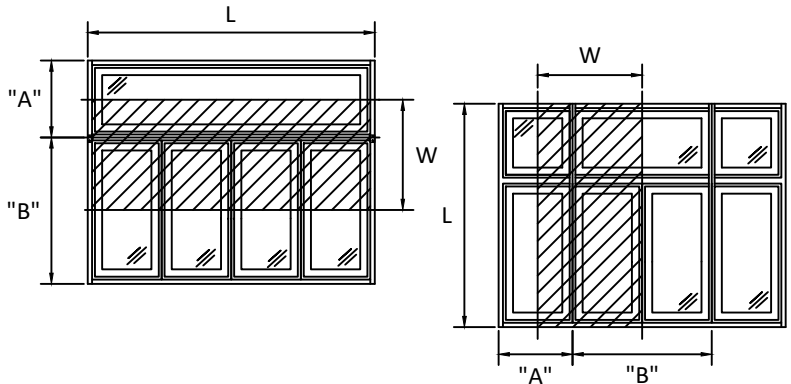
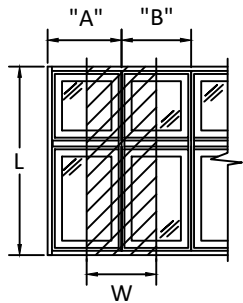
15

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
1/2" X 5-3/16" STRUCTURAL MULLION (TWO-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	66.86	58.50	52.00	46.80	42.55	39.00	36.00	33.43	31.20	29.25
30.0	75.00	75.00	75.00	74.88	62.40	53.49	46.80	41.60	37.44	34.04	31.20	28.80	26.74	24.96	23.40
36.0	75.00	75.00	75.00	62.40	52.00	44.57	39.00	34.67	31.20	28.36	26.00	24.00	22.29	20.80	19.50
42.0	75.00	75.00	66.86	53.49	44.57	38.20	33.43	29.71	26.74	24.31	22.29	20.57	19.10	17.83	16.71
48.0	75.00	75.00	58.50	46.80	39.00	33.43	29.25	26.00	23.40	21.27	19.50	18.00	16.71	15.60	14.63
54.0	75.00	69.33	52.00	41.60	34.67	29.71	26.00	23.11	20.80	18.91	17.33	16.00	14.86	13.87	13.00
60.0	75.00	62.40	46.80	37.44	31.20	26.74	23.40	20.80	18.72	17.02	15.60	14.40	13.37	12.48	11.70
66.0	75.00	56.73	42.55	34.04	28.36	24.31	21.27	18.91	17.02	15.47	14.18	13.09	12.16	11.35	10.64
72.0	75.00	52.00	39.00	31.20	26.00	22.29	19.50	17.33	15.60	14.18	13.00	12.00	11.14	10.40	9.75
78.0	72.00	48.00	36.00	28.80	24.00	20.57	18.00	16.00	14.40	13.09	12.00	11.08	10.29	9.60	9.00
84.0	66.86	44.57	33.43	26.74	22.29	19.10	16.71	14.86	13.37	12.16	11.14	10.29	9.55	8.91	8.36
90.0	56.50	37.67	28.25	22.60	18.83	16.14	14.13	12.56	11.30	10.27	9.42	8.69	8.07	7.53	7.06
96.0	46.56	31.04	23.28	18.62	15.52	13.30	11.64	10.35	9.31	8.46	7.76	7.16	6.65	6.21	5.82
102.0	38.81	25.88	19.41	15.53	12.94	11.09	9.70	8.63	7.76	7.06	6.47	5.97	5.54	5.18	4.85
108.0	32.70	21.80	16.35	13.08	10.90	9.34	8.17	7.27	6.54	5.94	5.45	5.03	4.67	4.36	4.09
114.0	27.80	18.53	13.90	11.12	9.27	7.94	6.95	6.18	5.56	5.05	4.63	4.28	3.97	3.71	3.48
120.0	23.84	15.89	11.92	9.53	7.95	6.81	5.96	5.30	4.77	4.33	3.97	3.67	3.41	3.18	2.98
126.0	20.59	13.73	10.30	8.24	6.86	5.88	5.15	4.58	4.12	3.74	3.43	3.17	2.94	2.75	2.57
132.0	17.91	11.94	8.95	7.16	5.97	5.12	4.48	3.98	3.58	3.26	2.98	2.76	2.56	2.39	2.24
138.0	15.67	10.45	7.84	6.27	5.22	4.48	3.92	3.48	3.13	2.85	2.61	2.41	2.24	2.09	1.96
144.0	13.79	9.20	6.90	5.52	4.60	3.94	3.45	3.07	2.76	2.51	2.30	2.12	1.97	1.84	1.72
150.0	12.20	8.14	6.10	4.88	4.07	3.49	3.05	2.71	2.44	2.22	2.03	1.88	1.74	1.63	1.53
156.0	10.85	7.23	5.42	4.34	3.62	3.10	2.71	2.41	2.17	1.97	1.81	1.67	1.55	1.45	1.36
162.0	9.69	6.46	4.84	3.88	3.23	2.77	2.42	2.15	1.94	1.76	1.61	1.49	1.38	1.29	1.21
168.0	8.69	5.79	4.34	3.47	2.90	2.48	2.17	1.93	1.74	1.58	1.45	1.34	1.24	1.16	1.09
174.0	7.82	5.21	3.91	3.13	2.61	2.23	1.95	1.74	1.56	1.42	1.30	1.20	1.12	1.04	0.98
180.0	7.06	4.71	3.53	2.83	2.35	2.02	1.77	1.57	1.41	1.28	1.18	1.09	1.01	0.94	0.88
186.0	6.40	4.27	3.20	2.56	2.13	1.83	1.60	1.42	1.28	1.16	1.07	0.98	0.91	0.85	0.80
192.0	5.82	3.88	2.91	2.33	1.94	1.66	1.45	1.29	1.16	1.06	0.97	0.90	0.83	0.78	0.73

- NOTE:**
- 1) MULLION CHART APPLIES TO 1/2" X 5-3/16" MULL ASSEMBLIES, WHEN MULLED IN TWO-WAY CONFIGURATIONS.
 - 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 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 AS LISTED ON SHEET 10
 - 6) TRIBUTARY WIDTH = $W = (A+B)/2$
 - 7) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



1/2" X 5 3/16"
LVL MULL PROFILE



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



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

TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
1/2" X 5 3/16" MULLION LOADS TABLE - TWO
WAY

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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REMARKS	BY	DATE
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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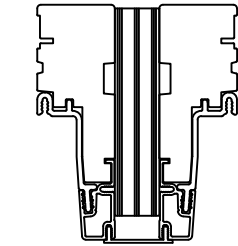
HERMES F. NORERO
LICENSED PROFESSIONAL ENGINEER
No. 73778
STATE OF FLORIDA

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

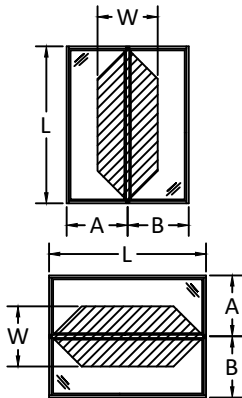
FL #:	FL24226
DATE:	10.07.17
DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD198
SHEET	

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
3/4" X 3-1/2" STRUCTURAL MULLION (ONE-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
30.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
36.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
42.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
48.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
54.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
60.0	75.00	75.00	64.53	60.93	60.93	60.93	60.93	60.93	60.93	60.93	60.93	60.93	60.93	60.93	60.93
66.0	75.00	62.08	50.92	46.34	45.78	45.78	45.78	45.78	45.78	45.78	45.78	45.78	45.78	45.78	45.78
72.0	73.24	51.27	41.37	36.70	35.26	35.26	35.26	35.26	35.26	35.26	35.26	35.26	35.26	35.26	35.26
78.0	57.64	40.35	32.45	28.54	26.88	26.67	26.67	26.67	26.67	26.67	26.67	26.67	26.67	26.67	26.67
84.0	45.90	31.92	25.41	22.02	20.35	19.83	19.83	19.83	19.83	19.83	19.83	19.83	19.83	19.83	19.83
90.0	37.16	25.70	20.30	17.39	15.83	15.14	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04	15.04
96.0	30.51	21.01	16.48	14.00	12.59	11.86	11.62	11.62	11.62	11.62	11.62	11.62	11.62	11.62	11.62
102.0	25.36	17.40	13.58	11.45	10.19	9.49	9.17	9.12	9.12	9.12	9.12	9.12	9.12	9.12	9.12
108.0	21.31	14.58	11.33	9.49	8.39	7.73	7.37	7.26	7.26	7.26	7.26	7.26	7.26	7.26	7.26
114.0	18.08	12.34	9.55	7.96	6.99	6.39	6.03	5.87	5.84	5.84	5.84	5.84	5.84	5.84	5.84
120.0	15.47	10.53	8.13	6.75	5.89	5.35	5.01	4.82	4.76	4.76	4.76	4.76	4.76	4.76	4.76
126.0	13.34	9.07	6.98	5.78	5.02	4.53	4.21	4.02	3.93	3.92	3.92	3.92	3.92	3.92	3.92
132.0	11.59	7.86	6.04	4.98	4.31	3.87	3.58	3.39	3.29	3.25	3.25	3.25	3.25	3.25	3.25
138.0	10.13	6.86	5.26	4.33	3.73	3.34	3.07	2.89	2.78	2.73	2.72	2.72	2.72	2.72	2.72
144.0	8.91	6.03	4.61	3.79	3.26	2.90	2.65	2.49	2.38	2.32	2.30	2.30	2.30	2.30	2.30
150.0	7.87	5.32	4.07	3.33	2.86	2.54	2.31	2.16	2.05	1.99	1.95	1.95	1.95	1.95	1.95
156.0	6.99	4.72	3.60	2.95	2.52	2.23	2.03	1.88	1.78	1.72	1.68	1.67	1.67	1.67	1.67
162.0	6.24	4.21	3.21	2.62	2.24	1.98	1.79	1.66	1.56	1.50	1.46	1.44	1.43	1.43	1.43
168.0	5.59	3.77	2.87	2.34	2.00	1.76	1.59	1.47	1.38	1.31	1.27	1.25	1.24	1.24	1.24
174.0	5.03	3.39	2.58	2.10	1.79	1.57	1.42	1.30	1.22	1.16	1.12	1.09	1.08	1.08	1.08
180.0	4.54	3.06	2.32	1.89	1.61	1.41	1.27	1.16	1.09	1.03	0.99	0.96	0.95	0.94	0.94
186.0	4.11	2.77	2.10	1.71	1.45	1.27	1.14	1.04	0.97	0.92	0.88	0.85	0.84	0.83	0.82
192.0	3.74	2.51	1.91	1.55	1.31	1.15	1.03	0.94	0.87	0.82	0.79	0.76	0.74	0.73	0.73

- NOTE:
- MULLION CHART APPLIES TO 3/4" X 3-1/2" MULL ASSEMBLIES, WHEN MULLED IN ONE-WAY CONFIGURATIONS.
 - 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 UNIT OF INSTALLATION. ADJACENT WINDOWS OR DOORS SHALL BE UNDER SEPARATE FL OR MIAMI-DADE APPROVAL.
 - MULLION CHART APPLIES TO THE FOLLOWING INSTALLATION CONDITIONS AS LISTED ON SHEET 10
 - TRIBUTARY WIDTH = $W = (A+B)/2$
 - WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



3/4" X 3 1/2"
LVL MULL PROFILE



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



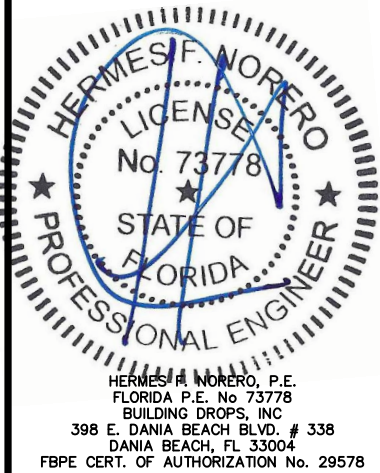
100 FOURTH AVE. NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
3/4" X 3 1/2" MULLION LOADS TABLE - ONE WAY

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
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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FL #:
FL24226

DATE:
10.07.17

DWG. BY:
RV

CHK. BY:
HFN

SCALE:
NTS

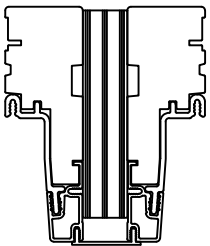
DWG. #:
AWD198

SHEET

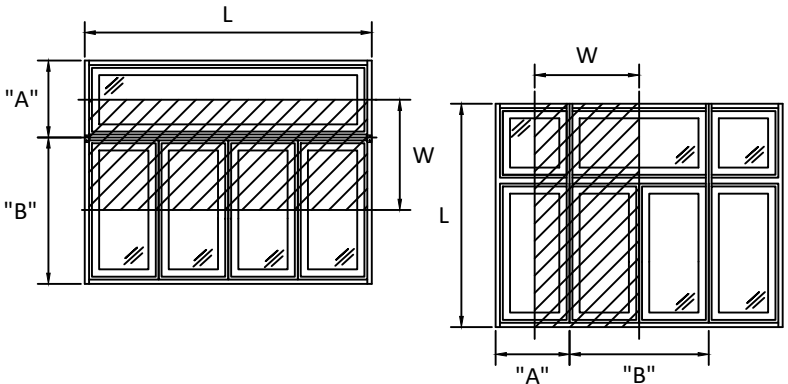
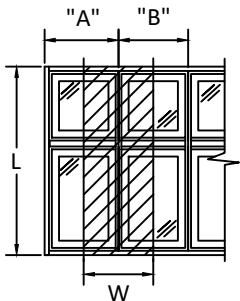
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MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)																
3/4" X 3-1/2" STRUCTURAL MULLION (TWO-WAY) CONFIGURATION																
L - Mull Length (in)	W - Tributary Width (in)															
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0	
24.0	75.00	75.00	75.00	75.00	75.00	66.86	58.50	52.00	46.80	42.55	39.00	36.00	33.43	31.20	29.25	
30.0	75.00	75.00	75.00	74.88	62.40	53.49	46.80	41.60	37.44	34.04	31.20	28.80	26.74	24.96	23.40	
36.0	75.00	75.00	75.00	62.40	52.00	44.57	39.00	34.67	31.20	28.36	26.00	24.00	22.29	20.80	19.50	
42.0	75.00	75.00	66.86	53.49	44.57	38.20	33.43	29.71	26.74	24.31	22.29	20.57	19.10	17.83	16.71	
48.0	75.00	75.00	58.50	46.80	39.00	33.43	29.25	26.00	23.40	21.27	19.50	18.00	16.71	15.60	14.63	
54.0	75.00	69.33	52.00	41.60	34.67	29.71	26.00	23.11	20.80	18.91	17.33	16.00	14.86	13.87	13.00	
60.0	75.00	62.40	46.80	37.44	31.20	26.74	23.40	20.80	18.72	17.02	15.60	14.40	13.37	12.48	11.70	
66.0	75.00	55.94	41.96	33.57	27.97	23.98	20.98	18.65	16.78	15.26	13.99	12.91	11.99	11.19	10.49	
72.0	70.51	47.01	35.26	28.20	23.50	20.15	17.63	15.67	14.10	12.82	11.75	10.85	10.07	9.40	8.81	
78.0	55.47	36.98	27.73	22.19	18.49	15.85	13.87	12.33	11.09	10.08	9.24	8.53	7.92	7.40	6.93	
84.0	44.41	29.61	22.20	17.76	14.80	12.69	11.10	9.87	8.88	8.07	7.40	6.83	6.34	5.92	5.55	
90.0	36.11	24.07	18.05	14.44	12.04	10.32	9.03	8.02	7.22	6.56	6.02	5.55	5.16	4.81	4.51	
96.0	29.75	19.83	14.88	11.90	9.92	8.50	7.44	6.61	5.95	5.41	4.96	4.58	4.25	3.97	3.72	
102.0	24.80	16.54	12.40	9.92	8.27	7.09	6.20	5.51	4.96	4.51	4.13	3.82	3.54	3.31	3.10	
108.0	20.89	13.93	10.45	8.36	6.96	5.97	5.22	4.64	4.18	3.80	3.48	3.21	2.98	2.79	2.61	
114.0	17.77	11.84	8.88	7.11	5.92	5.08	4.44	3.95	3.55	3.23	2.96	2.73	2.54	2.37	2.22	
120.0	15.23	10.15	7.62	6.09	5.08	4.35	3.81	3.38	3.05	2.77	2.54	2.34	2.18	2.03	1.90	
126.0	13.16	8.77	6.58	5.26	4.39	3.76	3.29	2.92	2.63	2.39	2.19	2.02	1.88	1.75	1.64	
132.0	11.44	7.63	5.72	4.58	3.81	3.27	2.86	2.54	2.29	2.08	1.91	1.76	1.63	1.53	1.43	
138.0	10.02	6.68	5.01	4.01	3.34	2.86	2.50	2.23	2.00	1.82	1.67	1.54	1.43	1.34	1.25	
144.0	8.82	5.88	4.41	3.53	2.94	2.52	2.20	1.96	1.76	1.60	1.47	1.36	1.26	1.18	1.10	
150.0	7.80	5.20	3.90	3.12	2.60	2.23	1.95	1.73	1.56	1.42	1.30	1.20	1.11	1.04	0.97	
156.0	6.93	4.62	3.47	2.77	2.31	1.98	1.73	1.54	1.39	1.26	1.16	1.07	0.99	0.92	0.87	
162.0	6.19	4.13	3.10	2.48	2.06	1.77	1.55	1.38	1.24	1.13	1.03	0.95	0.88	0.83	0.77	
168.0	5.55	3.70	2.78	2.22	1.85	1.59	1.39	1.23	1.11	1.01	0.93	0.85	0.79	0.74	0.69	
174.0	5.00	3.33	2.50	2.00	1.67	1.43	1.25	1.11	1.00	0.91	0.83	0.77	0.71	0.67	0.62	
180.0	4.51	3.01	2.26	1.81	1.50	1.29	1.13	1.00	0.90	0.82	0.75	0.69	0.64	0.60	0.56	
186.0	4.09	2.73	2.05	1.64	1.36	1.17	1.02	0.91	0.82	0.74	0.68	0.63	0.58	0.55	0.51	
192.0	3.72	2.48	1.86	1.49	1.24	1.06	0.93	0.83	0.74	0.68	0.62	0.57	0.53	0.50	0.46	

- NOTE:**
- 1) MULLION CHART APPLIES TO 3/4" X 3-1/2" MULL ASSEMBLIES, WHEN MULLED IN TWO-WAY CONFIGURATIONS.
 - 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 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 AS LISTED ON SHEET 10
 - 6) TRIBUTARY WIDTH = $W = (A+B)/2$
 - 7) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



3/4" X 3 1/2"
LVL MULL PROFILE



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



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

TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
3/4" X 3 1/2" MULLION LOADS TABLE - TWO
WAY

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
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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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 #:
FL24226

DATE: **10.07.17**

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

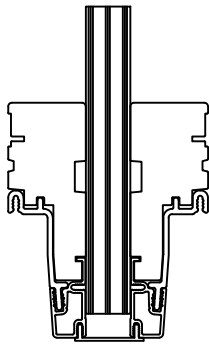
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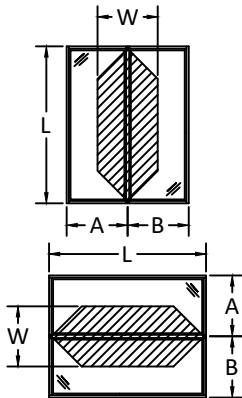
SHEET
18

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
3/4" X 5-3/16" STRUCTURAL MULLION (ONE-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
30.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
36.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
42.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
48.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
54.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
60.0	75.00	75.00	75.00	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88
66.0	75.00	75.00	66.86	62.40	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88
72.0	75.00	69.33	58.50	53.49	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00
78.0	75.00	62.40	52.00	46.80	44.57	44.31	44.31	44.31	44.31	44.31	44.31	44.31	44.31	44.31	44.31
84.0	75.00	56.73	46.80	41.60	39.00	38.20	38.20	38.20	38.20	38.20	38.20	38.20	38.20	38.20	38.20
90.0	72.00	52.00	42.39	36.32	33.06	31.62	31.42	31.42	31.42	31.42	31.42	31.42	31.42	31.42	31.42
96.0	63.71	43.88	34.43	29.23	26.29	24.77	24.27	24.27	24.27	24.27	24.27	24.27	24.27	24.27	24.27
102.0	52.96	36.34	28.36	23.91	21.29	19.81	19.14	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04
108.0	44.50	30.44	23.66	19.82	17.51	16.13	15.40	15.15	15.15	15.15	15.15	15.15	15.15	15.15	15.15
114.0	37.75	25.76	19.95	16.63	14.60	13.34	12.60	12.26	12.21	12.21	12.21	12.21	12.21	12.21	12.21
120.0	32.31	22.00	16.98	14.10	12.31	11.17	10.46	10.07	9.94	9.94	9.94	9.94	9.94	9.94	9.94
126.0	27.87	18.94	14.58	12.06	10.48	9.45	8.79	8.40	8.21	8.18	8.18	8.18	8.18	8.18	8.18
132.0	24.20	16.42	12.61	10.41	9.01	8.08	7.47	7.08	6.87	6.79	6.79	6.79	6.79	6.79	6.79
138.0	21.16	14.33	10.99	9.04	7.80	6.97	6.41	6.04	5.81	5.70	5.68	5.68	5.68	5.68	5.68
144.0	18.60	12.58	9.63	7.91	6.80	6.05	5.54	5.19	4.97	4.84	4.79	4.79	4.79	4.79	4.79
150.0	16.44	11.11	8.49	6.96	5.97	5.30	4.83	4.50	4.28	4.15	4.08	4.07	4.07	4.07	4.07
156.0	14.60	9.86	7.52	6.15	5.27	4.66	4.24	3.93	3.72	3.59	3.51	3.48	3.48	3.48	3.48
162.0	13.03	8.79	6.70	5.47	4.67	4.13	3.74	3.46	3.26	3.13	3.04	3.00	2.99	2.99	2.99
168.0	11.68	7.87	5.99	4.89	4.17	3.67	3.32	3.06	2.87	2.74	2.66	2.61	2.59	2.59	2.59
174.0	10.50	7.07	5.38	4.38	3.73	3.28	2.96	2.72	2.55	2.42	2.34	2.28	2.25	2.25	2.25
180.0	9.48	6.38	4.85	3.95	3.35	2.94	2.65	2.43	2.27	2.15	2.07	2.01	1.98	1.96	1.96
186.0	8.59	5.78	4.39	3.57	3.03	2.65	2.38	2.18	2.03	1.92	1.84	1.78	1.74	1.73	1.72
192.0	7.81	5.25	3.98	3.23	2.74	2.40	2.15	1.97	1.83	1.72	1.64	1.59	1.55	1.53	1.52

- NOTE:
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3/4" X 5 3/16"
LVL MULL PROFILE



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



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

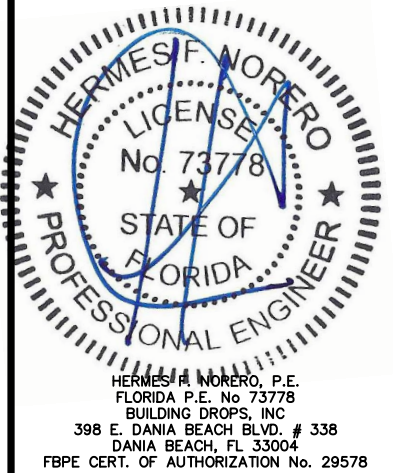
TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
3/4" X 5 3/16" MULLION LOADS TABLE - ONE
WAY

PREPARED BY:
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REMARKS	BY	DATE
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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FL #:
FL24226

DATE: 10.07.17

DWG. BY: RV
CHK. BY: HFN

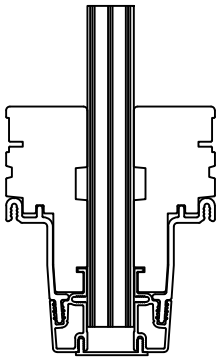
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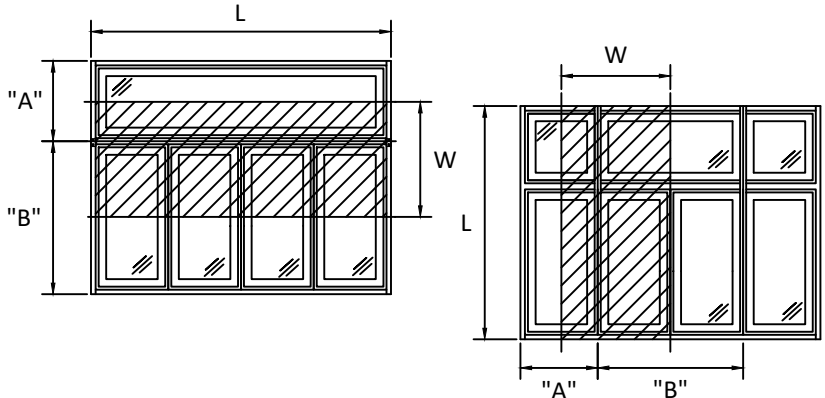
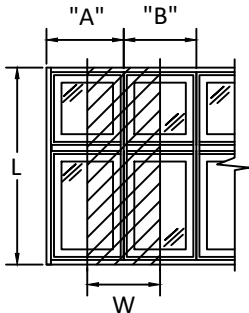
SHEET
19

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
3/4" X 5-3/16" STRUCTURAL MULLION (TWO-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	66.86	58.50	52.00	46.80	42.55	39.00	36.00	33.43	31.20	29.25
30.0	75.00	75.00	75.00	74.88	62.40	53.49	46.80	41.60	37.44	34.04	31.20	28.80	26.74	24.96	23.40
36.0	75.00	75.00	75.00	62.40	52.00	44.57	39.00	34.67	31.20	28.36	26.00	24.00	22.29	20.80	19.50
42.0	75.00	75.00	66.86	53.49	44.57	38.20	33.43	29.71	26.74	24.31	22.29	20.57	19.10	17.83	16.71
48.0	75.00	75.00	58.50	46.80	39.00	33.43	29.25	26.00	23.40	21.27	19.50	18.00	16.71	15.60	14.63
54.0	75.00	69.33	52.00	41.60	34.67	29.71	26.00	23.11	20.80	18.91	17.33	16.00	14.86	13.87	13.00
60.0	75.00	62.40	46.80	37.44	31.20	26.74	23.40	20.80	18.72	17.02	15.60	14.40	13.37	12.48	11.70
66.0	75.00	56.73	42.55	34.04	28.36	24.31	21.27	18.91	17.02	15.47	14.18	13.09	12.16	11.35	10.64
72.0	75.00	52.00	39.00	31.20	26.00	22.29	19.50	17.33	15.60	14.18	13.00	12.00	11.14	10.40	9.75
78.0	72.00	48.00	36.00	28.80	24.00	20.57	18.00	16.00	14.40	13.09	12.00	11.08	10.29	9.60	9.00
84.0	66.86	44.57	33.43	26.74	22.29	19.10	16.71	14.86	13.37	12.16	11.14	10.29	9.55	8.91	8.36
90.0	62.40	41.60	31.20	24.96	20.80	17.83	15.60	13.87	12.48	11.35	10.40	9.60	8.91	8.32	7.80
96.0	58.50	39.00	29.25	23.40	19.50	16.71	14.63	13.00	11.70	10.64	9.75	9.00	8.36	7.80	7.31
102.0	51.80	34.53	25.90	20.72	17.27	14.80	12.95	11.51	10.36	9.42	8.63	7.97	7.40	6.91	6.48
108.0	43.64	29.09	21.82	17.46	14.55	12.47	10.91	9.70	8.73	7.93	7.27	6.71	6.23	5.82	5.45
114.0	37.11	24.74	18.55	14.84	12.37	10.60	9.28	8.25	7.42	6.75	6.18	5.71	5.30	4.95	4.64
120.0	31.81	21.21	15.91	12.73	10.60	9.09	7.95	7.07	6.36	5.78	5.30	4.89	4.54	4.24	3.98
126.0	27.48	18.32	13.74	10.99	9.16	7.85	6.87	6.11	5.50	5.00	4.58	4.23	3.93	3.66	3.44
132.0	23.90	15.93	11.95	9.56	7.97	6.83	5.98	5.31	4.78	4.35	3.98	3.68	3.41	3.19	2.99
138.0	20.92	13.95	10.46	8.37	6.97	5.98	5.23	4.65	4.18	3.80	3.49	3.22	2.99	2.79	2.61
144.0	18.41	12.27	9.21	7.36	6.14	5.26	4.60	4.09	3.68	3.35	3.07	2.83	2.63	2.45	2.30
150.0	16.29	10.86	8.14	6.52	5.43	4.65	4.07	3.62	3.26	2.96	2.71	2.51	2.33	2.17	2.04
156.0	14.48	9.65	7.24	5.79	4.83	4.14	3.62	3.22	2.90	2.63	2.41	2.23	2.07	1.93	1.81
162.0	12.93	8.62	6.47	5.17	4.31	3.69	3.23	2.87	2.59	2.35	2.16	1.99	1.85	1.72	1.62
168.0	11.59	7.73	5.80	4.64	3.86	3.31	2.90	2.58	2.32	2.11	1.93	1.78	1.66	1.55	1.45
174.0	10.44	6.96	5.22	4.17	3.48	2.98	2.61	2.32	2.09	1.90	1.74	1.61	1.49	1.39	1.30
180.0	9.43	6.28	4.71	3.77	3.14	2.69	2.36	2.09	1.89	1.71	1.57	1.45	1.35	1.26	1.18
186.0	8.54	5.70	4.27	3.42	2.85	2.44	2.14	1.90	1.71	1.55	1.42	1.31	1.22	1.14	1.07
192.0	7.77	5.18	3.88	3.11	2.59	2.22	1.94	1.73	1.55	1.41	1.29	1.19	1.11	1.04	0.97

- NOTE:**
- 1) MULLION CHART APPLIES TO 3/4" X 5-3/16" MULL ASSEMBLIES, WHEN MULLED IN TWO-WAY CONFIGURATIONS.
 - 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 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 AS LISTED ON SHEET 10
 - 6) TRIBUTARY WIDTH = $W = (A+B)/2$
 - 7) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



3/4" X 5 3/16"
LVL MULL PROFILE



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



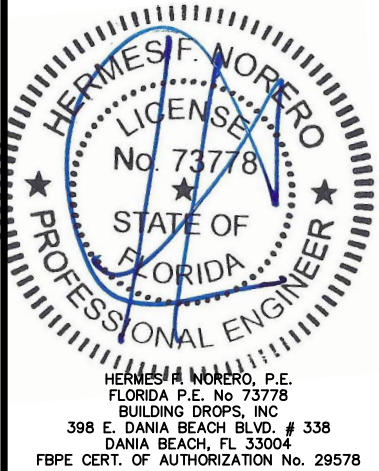
100 FOURTH AVE. NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
3/4" X 5 3/16" MULLION LOADS TABLE - TWO
WAY

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
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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 #:
FL24226

DATE:
10.07.17

DWG. BY:
RV

CHK. BY:
HFN

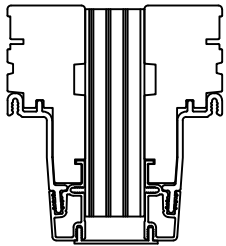
SCALE:
NTS

DWG. #:
AWD198

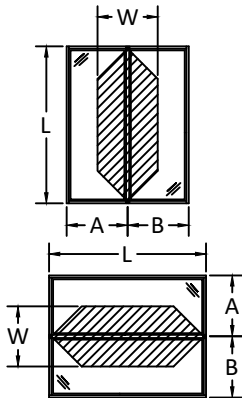
SHEET
20

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
1" X 3-1/2" STRUCTURAL MULLION (ONE-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
30.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
36.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
42.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
48.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
54.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
60.0	75.00	75.00	74.90	70.73	70.73	70.73	70.73	70.73	70.73	70.73	70.73	70.73	70.73	70.73	70.73
66.0	75.00	72.06	59.11	53.79	53.14	53.14	53.14	53.14	53.14	53.14	53.14	53.14	53.14	53.14	53.14
72.0	75.00	59.51	48.02	42.60	40.93	40.93	40.93	40.93	40.93	40.93	40.93	40.93	40.93	40.93	40.93
78.0	66.92	46.84	37.67	33.13	31.21	30.96	30.96	30.96	30.96	30.96	30.96	30.96	30.96	30.96	30.96
84.0	53.29	37.05	29.50	25.56	23.62	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01	23.01
90.0	43.13	29.83	23.56	20.18	18.37	17.57	17.46	17.46	17.46	17.46	17.46	17.46	17.46	17.46	17.46
96.0	35.41	24.39	19.14	16.25	14.61	13.77	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49	13.49
102.0	29.43	20.20	15.77	13.29	11.83	11.01	10.64	10.59	10.59	10.59	10.59	10.59	10.59	10.59	10.59
108.0	24.73	16.92	13.15	11.02	9.73	8.97	8.56	8.42	8.42	8.42	8.42	8.42	8.42	8.42	8.42
114.0	20.98	14.32	11.09	9.25	8.11	7.41	7.00	6.81	6.78	6.78	6.78	6.78	6.78	6.78	6.78
120.0	17.96	12.23	9.44	7.84	6.84	6.21	5.81	5.60	5.53	5.53	5.53	5.53	5.53	5.53	5.53
126.0	15.49	10.53	8.10	6.71	5.83	5.25	4.89	4.67	4.56	4.55	4.55	4.55	4.55	4.55	4.55
132.0	13.45	9.13	7.01	5.78	5.01	4.49	4.15	3.94	3.82	3.77	3.77	3.77	3.77	3.77	3.77
138.0	11.76	7.97	6.11	5.03	4.33	3.87	3.56	3.35	3.23	3.17	3.16	3.16	3.16	3.16	3.16
144.0	10.34	6.99	5.35	4.39	3.78	3.37	3.08	2.89	2.76	2.69	2.66	2.66	2.66	2.66	2.66
150.0	9.14	6.18	4.72	3.87	3.32	2.94	2.68	2.50	2.38	2.31	2.27	2.26	2.26	2.26	2.26
156.0	8.12	5.48	4.18	3.42	2.93	2.59	2.35	2.19	2.07	1.99	1.95	1.93	1.93	1.93	1.93
162.0	7.24	4.89	3.72	3.04	2.60	2.29	2.08	1.92	1.81	1.74	1.69	1.67	1.66	1.66	1.66
168.0	6.49	4.37	3.33	2.72	2.32	2.04	1.84	1.70	1.60	1.52	1.48	1.45	1.44	1.44	1.44
174.0	5.84	3.93	2.99	2.44	2.07	1.82	1.64	1.51	1.42	1.35	1.30	1.27	1.25	1.25	1.25
180.0	5.27	3.55	2.70	2.19	1.86	1.64	1.47	1.35	1.26	1.20	1.15	1.12	1.10	1.09	1.09
186.0	4.77	3.21	2.44	1.98	1.68	1.48	1.32	1.21	1.13	1.07	1.02	0.99	0.97	0.96	0.96
192.0	4.34	2.92	2.21	1.80	1.52	1.33	1.20	1.09	1.02	0.96	0.91	0.88	0.86	0.85	0.84

- NOTE:
- MULLION CHART APPLIES TO 1" X 3-1/2" MULL ASSEMBLIES, WHEN MULLED IN ONE-WAY CONFIGURATIONS.
 - 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 UNIT OF INSTALLATION. ADJACENT WINDOWS OR DOORS SHALL BE UNDER SEPARATE FL OR MIAMI-DADE APPROVAL.
 - MULLION CHART APPLIES TO THE FOLLOWING INSTALLATION CONDITIONS AS LISTED ON SHEET 10
 - TRIBUTARY WIDTH = $W = (A+B)/2$
 - WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



1" X 3 1/2"
LVL MULL PROFILE



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



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

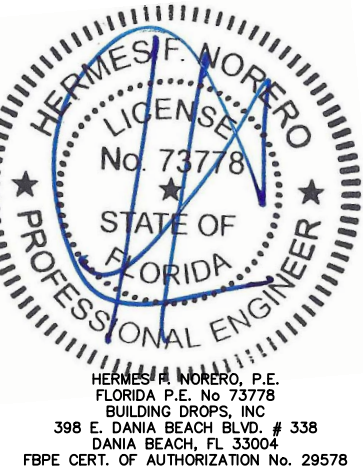
TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
1" X 3 1/2" MULLION LOADS TABLE - ONE WAY

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
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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FL #:
FL24226

DATE: 10.07.17

DWG. BY: RV
CHK. BY: HFN

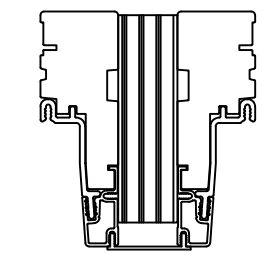
SCALE: NTS

DWG. #: AWD198

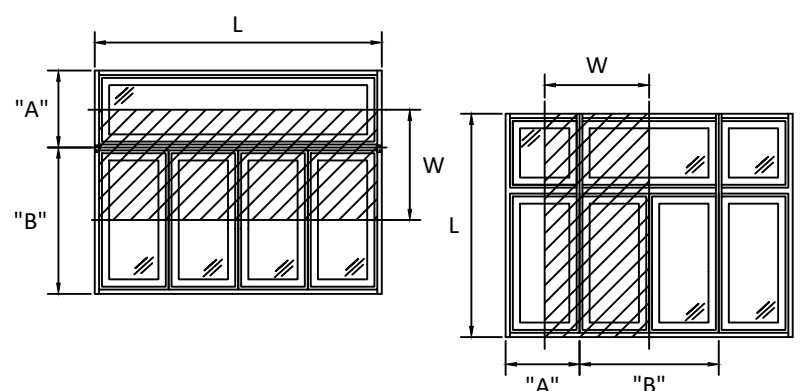
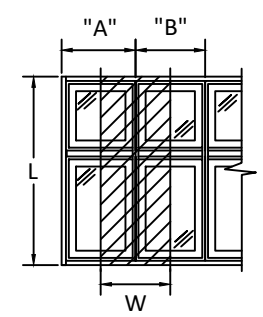
SHEET
21

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
1" X 3-1/2" STRUCTURAL MULLION (TWO-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	66.86	58.50	52.00	46.80	42.55	39.00	36.00	33.43	31.20	29.25
30.0	75.00	75.00	75.00	74.88	62.40	53.49	46.80	41.60	37.44	34.04	31.20	28.80	26.74	24.96	23.40
36.0	75.00	75.00	75.00	62.40	52.00	44.57	39.00	34.67	31.20	28.36	26.00	24.00	22.29	20.80	19.50
42.0	75.00	75.00	66.86	53.49	44.57	38.20	33.43	29.71	26.74	24.31	22.29	20.57	19.10	17.83	16.71
48.0	75.00	75.00	58.50	46.80	39.00	33.43	29.25	26.00	23.40	21.27	19.50	18.00	16.71	15.60	14.63
54.0	75.00	69.33	52.00	41.60	34.67	29.71	26.00	23.11	20.80	18.91	17.33	16.00	14.86	13.87	13.00
60.0	75.00	62.40	46.80	37.44	31.20	26.74	23.40	20.80	18.72	17.02	15.60	14.40	13.37	12.48	11.70
66.0	75.00	56.73	42.55	34.04	28.36	24.31	21.27	18.91	17.02	15.47	14.18	13.09	12.16	11.35	10.64
72.0	75.00	52.00	39.00	31.20	26.00	22.29	19.50	17.33	15.60	14.18	13.00	12.00	11.14	10.40	9.75
78.0	64.39	42.93	32.19	25.76	21.46	18.40	16.10	14.31	12.88	11.71	10.73	9.91	9.20	8.59	8.05
84.0	51.55	34.37	25.78	20.62	17.18	14.73	12.89	11.46	10.31	9.37	8.59	7.93	7.36	6.87	6.44
90.0	41.91	27.94	20.96	16.77	13.97	11.98	10.48	9.31	8.38	7.62	6.99	6.45	5.99	5.59	5.24
96.0	34.54	23.02	17.27	13.81	11.51	9.87	8.63	7.67	6.91	6.28	5.76	5.31	4.93	4.60	4.32
102.0	28.79	19.20	14.40	11.52	9.60	8.23	7.20	6.40	5.76	5.24	4.80	4.43	4.11	3.84	3.60
108.0	24.26	16.17	12.13	9.70	8.09	6.93	6.06	5.39	4.85	4.41	4.04	3.73	3.47	3.23	3.03
114.0	20.62	13.75	10.31	8.25	6.87	5.89	5.16	4.58	4.12	3.75	3.44	3.17	2.95	2.75	2.58
120.0	17.68	11.79	8.84	7.07	5.89	5.05	4.42	3.93	3.54	3.21	2.95	2.72	2.53	2.36	2.21
126.0	15.27	10.18	7.64	6.11	5.09	4.36	3.82	3.39	3.05	2.78	2.55	2.35	2.18	2.04	1.91
132.0	13.29	8.86	6.64	5.31	4.43	3.80	3.32	2.95	2.66	2.42	2.21	2.04	1.90	1.77	1.66
138.0	11.63	7.75	5.81	4.65	3.88	3.32	2.91	2.58	2.33	2.11	1.94	1.79	1.66	1.55	1.45
144.0	10.23	6.82	5.12	4.09	3.41	2.92	2.56	2.27	2.05	1.86	1.71	1.57	1.46	1.36	1.28
150.0	9.05	6.04	4.53	3.62	3.02	2.59	2.26	2.01	1.81	1.65	1.51	1.39	1.29	1.21	1.13
156.0	8.05	5.37	4.02	3.22	2.68	2.30	2.01	1.79	1.61	1.46	1.34	1.24	1.15	1.07	1.01
162.0	7.19	4.79	3.59	2.87	2.40	2.05	1.80	1.60	1.44	1.31	1.20	1.11	1.03	0.96	0.90
168.0	6.44	4.30	3.22	2.58	2.15	1.84	1.61	1.43	1.29	1.17	1.07	0.99	0.92	0.86	0.81
174.0	5.80	3.87	2.90	2.32	1.93	1.66	1.45	1.29	1.16	1.05	0.97	0.89	0.83	0.77	0.73
180.0	5.24	3.49	2.62	2.10	1.75	1.50	1.31	1.16	1.05	0.95	0.87	0.81	0.75	0.70	0.65
186.0	4.75	3.17	2.37	1.90	1.58	1.36	1.19	1.06	0.95	0.86	0.79	0.73	0.68	0.63	0.59
192.0	4.32	2.88	2.16	1.73	1.44	1.23	1.08	0.96	0.86	0.78	0.72	0.66	0.62	0.58	0.54

- NOTE:**
- 1) MULLION CHART APPLIES TO 1" X 3-1/2" MULL ASSEMBLIES, WHEN MULLED IN TWO-WAY CONFIGURATIONS.
 - 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 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 AS LISTED ON SHEET 10
 - 6) TRIBUTARY WIDTH = $W = (A+B)/2$
 - 7) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



1" X 3 1/2"
LVL MULL PROFILE



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



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

TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
1" X 3 1/2" MULLION LOADS TABLE - TWO
WAY

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
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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HERMES F. NORERO
LICENSE
No. 73778
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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 #:
FL24226

DATE:
10.07.17

DWG. BY:
RV

CHK. BY:
HFN

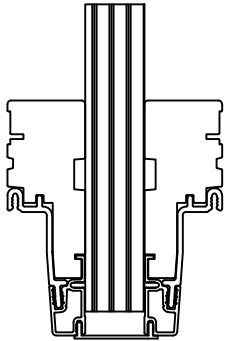
SCALE:
NTS

DWG. #:
AWD198

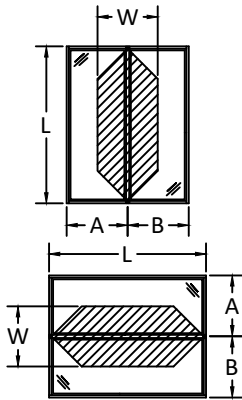
SHEET

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
1" X 5-3/16" STRUCTURAL MULLION (ONE-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
30.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
36.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
42.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
48.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
54.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
60.0	75.00	75.00	75.00	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88
66.0	75.00	75.00	66.86	62.40	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88
72.0	75.00	69.33	58.50	53.49	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00
78.0	75.00	62.40	52.00	46.80	44.57	44.31	44.31	44.31	44.31	44.31	44.31	44.31	44.31	44.31	44.31
84.0	75.00	56.73	46.80	41.60	39.00	38.20	38.20	38.20	38.20	38.20	38.20	38.20	38.20	38.20	38.20
90.0	72.00	52.00	42.55	37.44	34.67	33.43	33.28	33.28	33.28	33.28	33.28	33.28	33.28	33.28	33.28
96.0	66.86	48.00	39.00	34.04	31.20	29.71	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25
102.0	62.40	44.57	35.48	29.90	26.63	24.78	23.94	23.82	23.82	23.82	23.82	23.82	23.82	23.82	23.82
108.0	55.66	38.08	29.59	24.80	21.90	20.18	19.26	18.95	18.95	18.95	18.95	18.95	18.95	18.95	18.95
114.0	47.22	32.22	24.95	20.80	18.26	16.68	15.76	15.33	15.27	15.27	15.27	15.27	15.27	15.27	15.27
120.0	40.41	27.51	21.24	17.64	15.39	13.97	13.08	12.60	12.43	12.43	12.43	12.43	12.43	12.43	12.43
126.0	34.85	23.69	18.24	15.09	13.11	11.82	11.00	10.50	10.27	10.23	10.23	10.23	10.23	10.23	10.23
132.0	30.27	20.54	15.78	13.02	11.26	10.11	9.34	8.86	8.59	8.49	8.49	8.49	8.49	8.49	8.49
138.0	26.46	17.93	13.74	11.31	9.75	8.72	8.01	7.55	7.27	7.13	7.11	7.11	7.11	7.11	7.11
144.0	23.27	15.74	12.05	9.89	8.51	7.57	6.93	6.49	6.21	6.05	6.00	6.00	6.00	6.00	6.00
150.0	20.56	13.90	10.62	8.70	7.46	6.62	6.04	5.63	5.36	5.19	5.11	5.09	5.09	5.09	5.09
156.0	18.27	12.33	9.41	7.70	6.59	5.83	5.30	4.92	4.66	4.49	4.39	4.35	4.35	4.35	4.35
162.0	16.30	10.99	8.38	6.84	5.85	5.16	4.68	4.33	4.08	3.91	3.80	3.75	3.74	3.74	3.74
168.0	14.61	9.84	7.49	6.11	5.21	4.59	4.15	3.83	3.59	3.43	3.32	3.26	3.24	3.24	3.24
174.0	13.14	8.85	6.73	5.48	4.67	4.10	3.70	3.40	3.19	3.03	2.92	2.85	2.82	2.81	2.81
180.0	11.86	7.98	6.07	4.93	4.20	3.68	3.31	3.04	2.84	2.69	2.58	2.51	2.47	2.46	2.46
186.0	10.74	7.23	5.49	4.46	3.79	3.32	2.98	2.73	2.54	2.40	2.30	2.23	2.18	2.16	2.15
192.0	9.76	6.56	4.98	4.04	3.43	3.00	2.69	2.46	2.28	2.15	2.05	1.98	1.94	1.91	1.90

- NOTE:
- 1) MULLION CHART APPLIES TO 1" X 5-3/16" MULL ASSEMBLIES, WHEN MULLED IN ONE-WAY CONFIGURATIONS.
 - 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 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 AS LISTED ON SHEET 10
 - 6) TRIBUTARY WIDTH = $W = (A+B)/2$
 - 7) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



1" X 5 3/16"
LVL MULL PROFILE



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



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

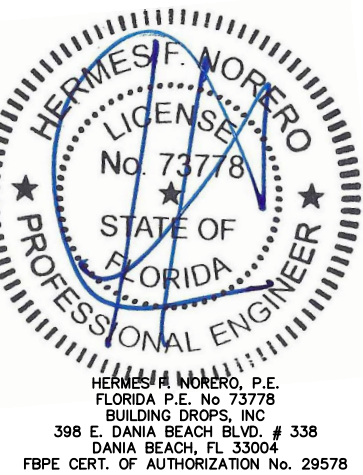
TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
1" X 5 3/16" MULLION LOADS TABLE - ONE
WAY

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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REMARKS	BY	DATE
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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FL #:
FL24226

DATE: 10.07.17

DWG. BY: RV
CHK. BY: HFN

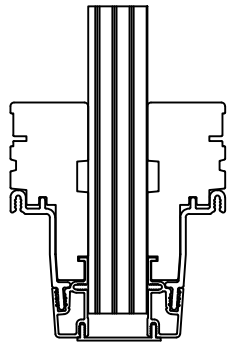
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DWG. #: AWD198

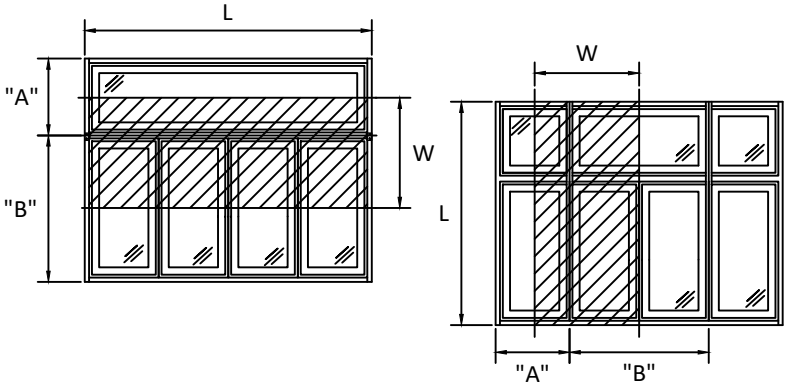
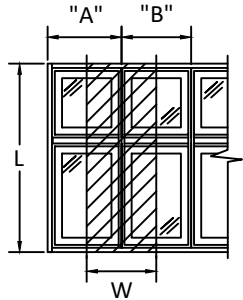
SHEET
23

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
1" X 5-3/16" STRUCTURAL MULLION (TWO-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	66.86	58.50	52.00	46.80	42.55	39.00	36.00	33.43	31.20	29.25
30.0	75.00	75.00	75.00	74.88	62.40	53.49	46.80	41.60	37.44	34.04	31.20	28.80	26.74	24.96	23.40
36.0	75.00	75.00	75.00	62.40	52.00	44.57	39.00	34.67	31.20	28.36	26.00	24.00	22.29	20.80	19.50
42.0	75.00	75.00	66.86	53.49	44.57	38.20	33.43	29.71	26.74	24.31	22.29	20.57	19.10	17.83	16.71
48.0	75.00	75.00	58.50	46.80	39.00	33.43	29.25	26.00	23.40	21.27	19.50	18.00	16.71	15.60	14.63
54.0	75.00	69.33	52.00	41.60	34.67	29.71	26.00	23.11	20.80	18.91	17.33	16.00	14.86	13.87	13.00
60.0	75.00	62.40	46.80	37.44	31.20	26.74	23.40	20.80	18.72	17.02	15.60	14.40	13.37	12.48	11.70
66.0	75.00	56.73	42.55	34.04	28.36	24.31	21.27	18.91	17.02	15.47	14.18	13.09	12.16	11.35	10.64
72.0	75.00	52.00	39.00	31.20	26.00	22.29	19.50	17.33	15.60	14.18	13.00	12.00	11.14	10.40	9.75
78.0	72.00	48.00	36.00	28.80	24.00	20.57	18.00	16.00	14.40	13.09	12.00	11.08	10.29	9.60	9.00
84.0	66.86	44.57	33.43	26.74	22.29	19.10	16.71	14.86	13.37	12.16	11.14	10.29	9.55	8.91	8.36
90.0	62.40	41.60	31.20	24.96	20.80	17.83	15.60	13.87	12.48	11.35	10.40	9.60	8.91	8.32	7.80
96.0	58.50	39.00	29.25	23.40	19.50	16.71	14.63	13.00	11.70	10.64	9.75	9.00	8.36	7.80	7.31
102.0	55.06	36.71	27.53	22.02	18.35	15.73	13.76	12.24	11.01	10.01	9.18	8.47	7.87	7.34	6.88
108.0	52.00	34.67	26.00	20.80	17.33	14.86	13.00	11.56	10.40	9.45	8.67	8.00	7.43	6.93	6.50
114.0	46.41	30.94	23.20	18.56	15.47	13.26	11.60	10.31	9.28	8.44	7.73	7.14	6.63	6.19	5.80
120.0	39.79	26.53	19.90	15.92	13.26	11.37	9.95	8.84	7.96	7.23	6.63	6.12	5.68	5.31	4.97
126.0	34.37	22.91	17.19	13.75	11.46	9.82	8.59	7.64	6.87	6.25	5.73	5.29	4.91	4.58	4.30
132.0	29.89	19.93	14.95	11.96	9.96	8.54	7.47	6.64	5.98	5.44	4.98	4.60	4.27	3.99	3.74
138.0	26.16	17.44	13.08	10.47	8.72	7.48	6.54	5.81	5.23	4.76	4.36	4.03	3.74	3.49	3.27
144.0	23.03	15.35	11.51	9.21	7.68	6.58	5.76	5.12	4.61	4.19	3.84	3.54	3.29	3.07	2.88
150.0	20.37	13.58	10.19	8.15	6.79	5.82	5.09	4.53	4.07	3.70	3.40	3.13	2.91	2.72	2.55
156.0	18.11	12.07	9.06	7.24	6.04	5.17	4.53	4.02	3.62	3.29	3.02	2.79	2.59	2.41	2.26
162.0	16.17	10.78	8.09	6.47	5.39	4.62	4.04	3.59	3.23	2.94	2.70	2.49	2.31	2.16	2.02
168.0	14.50	9.67	7.25	5.80	4.83	4.14	3.63	3.22	2.90	2.64	2.42	2.23	2.07	1.93	1.81
174.0	13.05	8.70	6.53	5.22	4.35	3.73	3.26	2.90	2.61	2.37	2.18	2.01	1.86	1.74	1.63
180.0	11.79	7.86	5.89	4.72	3.93	3.37	2.95	2.62	2.36	2.14	1.96	1.81	1.68	1.57	1.47
186.0	10.69	7.12	5.34	4.27	3.56	3.05	2.67	2.37	2.14	1.94	1.78	1.64	1.53	1.42	1.34
192.0	9.71	6.48	4.86	3.89	3.24	2.78	2.43	2.16	1.94	1.77	1.62	1.49	1.39	1.30	1.21

- NOTE:**
- 1) MULLION CHART APPLIES TO 1" X 5-3/16" MULL ASSEMBLIES, WHEN MULLED IN TWO-WAY CONFIGURATIONS.
 - 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 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 AS LISTED ON SHEET 10
 - 6) TRIBUTARY WIDTH = $W = (A+B)/2$
 - 7) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



1" X 5 3/16"
LVL MULL PROFILE



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



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

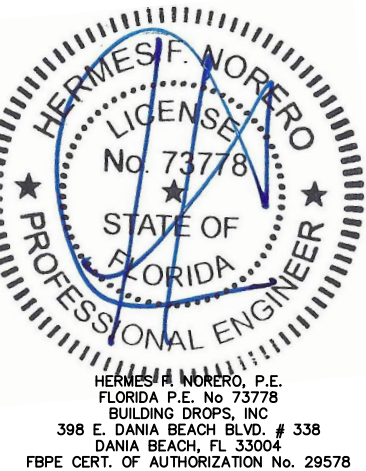
TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
1" X 5 3/16" MULLION LOADS TABLE - TWO
WAY

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
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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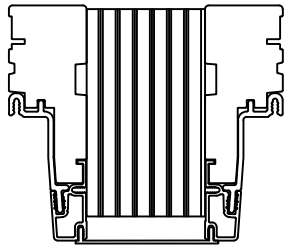


FL #:	FL24226
DATE:	10.07.17
DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD198
SHEET	

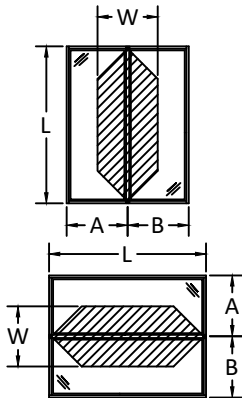
24

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
2" X 3-1/2" STRUCTURAL MULLION (ONE-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
30.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
36.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
42.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
48.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
54.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
60.0	75.00	75.00	75.00	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88
66.0	75.00	75.00	66.86	62.40	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88
72.0	75.00	69.33	58.50	53.49	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00
78.0	75.00	62.40	52.00	46.80	44.57	44.31	44.31	44.31	44.31	44.31	44.31	44.31	44.31	44.31	44.31
84.0	75.00	56.73	45.84	39.73	36.72	35.77	35.77	35.77	35.77	35.77	35.77	35.77	35.77	35.77	35.77
90.0	67.04	46.37	36.62	31.37	28.56	27.31	27.14	27.14	27.14	27.14	27.14	27.14	27.14	27.14	27.14
96.0	55.04	37.90	29.74	25.25	22.71	21.40	20.97	20.97	20.97	20.97	20.97	20.97	20.97	20.97	20.97
102.0	45.75	31.39	24.50	20.65	18.39	17.12	16.54	16.45	16.45	16.45	16.45	16.45	16.45	16.45	16.45
108.0	38.44	26.30	20.44	17.13	15.13	13.94	13.30	13.09	13.09	13.09	13.09	13.09	13.09	13.09	13.09
114.0	32.61	22.26	17.23	14.37	12.61	11.52	10.88	10.59	10.54	10.54	10.54	10.54	10.54	10.54	10.54
120.0	27.91	19.00	14.67	12.18	10.63	9.65	9.04	8.70	8.59	8.59	8.59	8.59	8.59	8.59	8.59
126.0	24.07	16.36	12.60	10.42	9.06	8.17	7.59	7.25	7.09	7.07	7.07	7.07	7.07	7.07	7.07
132.0	20.91	14.18	10.90	8.99	7.78	6.98	6.45	6.12	5.93	5.87	5.87	5.87	5.87	5.87	5.87
138.0	18.28	12.38	9.49	7.81	6.74	6.02	5.53	5.21	5.02	4.93	4.91	4.91	4.91	4.91	4.91
144.0	16.07	10.87	8.32	6.83	5.87	5.23	4.79	4.49	4.29	4.18	4.14	4.14	4.14	4.14	4.14
150.0	14.20	9.60	7.34	6.01	5.16	4.58	4.17	3.89	3.70	3.58	3.53	3.52	3.52	3.52	3.52
156.0	12.62	8.52	6.50	5.32	4.55	4.03	3.66	3.40	3.22	3.10	3.03	3.01	3.01	3.01	3.01
162.0	11.26	7.59	5.79	4.73	4.04	3.56	3.23	2.99	2.82	2.70	2.63	2.59	2.59	2.59	2.59
168.0	10.09	6.80	5.18	4.22	3.60	3.17	2.87	2.64	2.48	2.37	2.29	2.25	2.24	2.24	2.24
174.0	9.07	6.11	4.65	3.79	3.22	2.83	2.55	2.35	2.20	2.09	2.02	1.97	1.95	1.94	1.94
180.0	8.19	5.51	4.19	3.41	2.90	2.54	2.29	2.10	1.96	1.86	1.78	1.74	1.71	1.70	1.70
186.0	7.42	4.99	3.79	3.08	2.62	2.29	2.06	1.89	1.76	1.66	1.59	1.54	1.51	1.49	1.49
192.0	6.74	4.53	3.44	2.79	2.37	2.07	1.86	1.70	1.58	1.49	1.42	1.37	1.34	1.32	1.31

- NOTE:
- 1) MULLION CHART APPLIES TO 2" X 3-1/2" MULL ASSEMBLIES, WHEN MULLED IN ONE-WAY CONFIGURATIONS.
 - 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 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 AS LISTED ON SHEET 10
 - 6) TRIBUTARY WIDTH = $W = (A+B)/2$
 - 7) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



2" X 3 1/2"
LVL MULL PROFILE



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



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

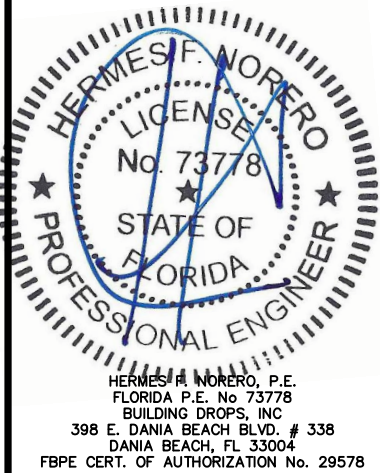
TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
2" X 3 1/2" MULLION LOADS TABLE - ONE
WAY

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
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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FL #:
FL24226

DATE: 10.07.17

DWG. BY: RV
CHK. BY: HFN

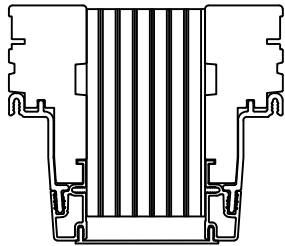
SCALE: NTS

DWG. #: AWD198

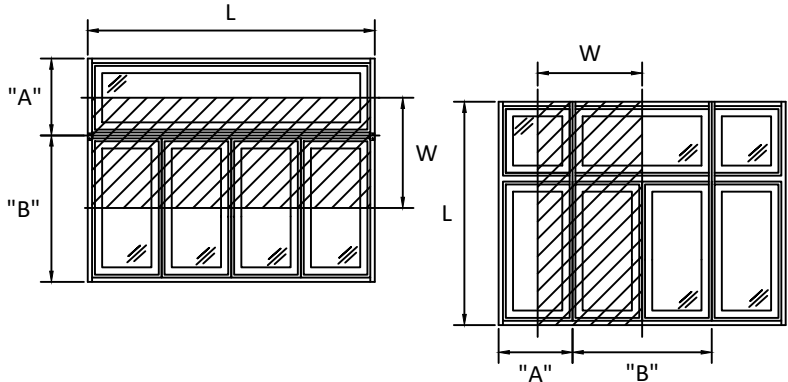
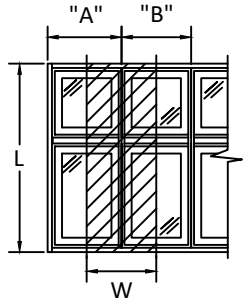
SHEET
25

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
2" X 3-1/2" STRUCTURAL MULLION (TWO-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	66.86	58.50	52.00	46.80	42.55	39.00	36.00	33.43	31.20	29.25
30.0	75.00	75.00	75.00	74.88	62.40	53.49	46.80	41.60	37.44	34.04	31.20	28.80	26.74	24.96	23.40
36.0	75.00	75.00	75.00	62.40	52.00	44.57	39.00	34.67	31.20	28.36	26.00	24.00	22.29	20.80	19.50
42.0	75.00	75.00	66.86	53.49	44.57	38.20	33.43	29.71	26.74	24.31	22.29	20.57	19.10	17.83	16.71
48.0	75.00	75.00	58.50	46.80	39.00	33.43	29.25	26.00	23.40	21.27	19.50	18.00	16.71	15.60	14.63
54.0	75.00	69.33	52.00	41.60	34.67	29.71	26.00	23.11	20.80	18.91	17.33	16.00	14.86	13.87	13.00
60.0	75.00	62.40	46.80	37.44	31.20	26.74	23.40	20.80	18.72	17.02	15.60	14.40	13.37	12.48	11.70
66.0	75.00	56.73	42.55	34.04	28.36	24.31	21.27	18.91	17.02	15.47	14.18	13.09	12.16	11.35	10.64
72.0	75.00	52.00	39.00	31.20	26.00	22.29	19.50	17.33	15.60	14.18	13.00	12.00	11.14	10.40	9.75
78.0	72.00	48.00	36.00	28.80	24.00	20.57	18.00	16.00	14.40	13.09	12.00	11.08	10.29	9.60	9.00
84.0	66.86	44.57	33.43	26.74	22.29	19.10	16.71	14.86	13.37	12.16	11.14	10.29	9.55	8.91	8.36
90.0	62.40	41.60	31.20	24.96	20.80	17.83	15.60	13.87	12.48	11.35	10.40	9.60	8.91	8.32	7.80
96.0	53.68	35.78	26.84	21.47	17.89	15.34	13.42	11.93	10.74	9.76	8.95	8.26	7.67	7.16	6.71
102.0	44.75	29.83	22.38	17.90	14.92	12.79	11.19	9.94	8.95	8.14	7.46	6.88	6.39	5.97	5.59
108.0	37.70	25.13	18.85	15.08	12.57	10.77	9.42	8.38	7.54	6.85	6.28	5.80	5.39	5.03	4.71
114.0	32.05	21.37	16.03	12.82	10.68	9.16	8.01	7.12	6.41	5.83	5.34	4.93	4.58	4.27	4.01
120.0	27.48	18.32	13.74	10.99	9.16	7.85	6.87	6.11	5.50	5.00	4.58	4.23	3.93	3.66	3.44
126.0	23.74	15.83	11.87	9.50	7.91	6.78	5.94	5.28	4.75	4.32	3.96	3.65	3.39	3.17	2.97
132.0	20.65	13.77	10.32	8.26	6.88	5.90	5.16	4.59	4.13	3.75	3.44	3.18	2.95	2.75	2.58
138.0	18.07	12.05	9.04	7.23	6.02	5.16	4.52	4.02	3.61	3.29	3.01	2.78	2.58	2.41	2.26
144.0	15.90	10.60	7.95	6.36	5.30	4.54	3.98	3.53	3.18	2.89	2.65	2.45	2.27	2.12	1.99
150.0	14.07	9.38	7.04	5.63	4.69	4.02	3.52	3.13	2.81	2.56	2.35	2.16	2.01	1.88	1.76
156.0	12.51	8.34	6.25	5.00	4.17	3.57	3.13	2.78	2.50	2.27	2.08	1.92	1.79	1.67	1.56
162.0	11.17	7.45	5.59	4.47	3.72	3.19	2.79	2.48	2.23	2.03	1.86	1.72	1.60	1.49	1.40
168.0	10.02	6.68	5.01	4.01	3.34	2.86	2.50	2.23	2.00	1.82	1.67	1.54	1.43	1.34	1.25
174.0	9.01	6.01	4.51	3.61	3.00	2.58	2.25	2.00	1.80	1.64	1.50	1.39	1.29	1.20	1.13
180.0	8.14	5.43	4.07	3.26	2.71	2.33	2.04	1.81	1.63	1.48	1.36	1.25	1.16	1.09	1.02
186.0	7.38	4.92	3.69	2.95	2.46	2.11	1.85	1.64	1.48	1.34	1.23	1.14	1.05	0.98	0.92
192.0	6.71	4.47	3.35	2.68	2.24	1.92	1.68	1.49	1.34	1.22	1.12	1.03	0.96	0.89	0.84

- NOTE:**
- 1) MULLION CHART APPLIES TO 2" X 3-1/2" MULL ASSEMBLIES, WHEN MULLED IN TWO-WAY CONFIGURATIONS.
 - 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 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 AS LISTED ON SHEET 10
 - 6) TRIBUTARY WIDTH = $W = (A+B)/2$
 - 7) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



2" X 3 1/2"
LVL MULL PROFILE



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



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

TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
2"X 3 1/2" MULLION LOADS TABLE - TWO
WAY

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 999-8478
FAX: (954) 744-4738
WEB: www.buildingdrops.com

REMARKS	BY	DATE
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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HERMES F. NORERO
LICENSE
No. 73778
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

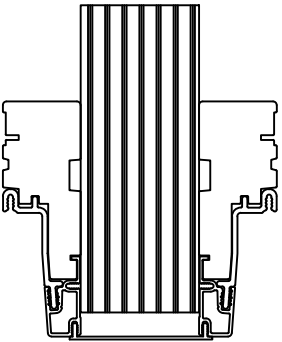
HERMES F. NORERO, P.E.
FLORIDA P.E. No. 73778
BUILDING DROPS, INC
398 E. DANIA BEACH BLVD. # 338
DANIA BEACH, FL 33004
FBPE CERT. OF AUTHORIZATION No. 29578

FL #:	FL24226
DATE:	10.07.17
DWG. BY:	CHK. BY:
RV	HFN
SCALE:	NTS
DWG. #:	AWD198
SHEET	

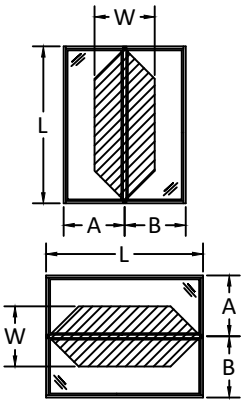
MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF) 2" X 5-3/16" STRUCTURAL MULLION (ONE-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
30.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
36.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
42.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
48.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
54.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
60.0	75.00	75.00	75.00	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88
66.0	75.00	75.00	66.86	62.40	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88	61.88
72.0	75.00	69.33	58.50	53.49	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00
78.0	75.00	62.40	52.00	46.80	44.57	44.31	44.31	44.31	44.31	44.31	44.31	44.31	44.31	44.31	44.31
84.0	75.00	56.73	46.80	41.60	39.00	38.20	38.20	38.20	38.20	38.20	38.20	38.20	38.20	38.20	38.20
90.0	72.00	52.00	42.55	37.44	34.67	33.43	33.28	33.28	33.28	33.28	33.28	33.28	33.28	33.28	33.28
96.0	66.86	48.00	39.00	34.04	31.20	29.71	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25	29.25
102.0	62.40	44.57	36.00	31.20	28.36	26.74	26.00	25.91	25.91	25.91	25.91	25.91	25.91	25.91	25.91
108.0	58.50	41.60	33.43	28.80	26.00	24.31	23.40	23.11	23.11	23.11	23.11	23.11	23.11	23.11	23.11
114.0	55.06	39.00	31.20	26.74	24.00	22.29	21.27	20.80	20.74	20.74	20.74	20.74	20.74	20.74	20.74
120.0	52.00	36.71	29.25	24.96	22.29	20.57	19.50	18.91	18.72	18.72	18.72	18.72	18.72	18.72	18.72
126.0	49.26	34.67	27.53	23.40	20.80	19.10	18.00	17.33	17.02	16.98	16.98	16.98	16.98	16.98	16.98
132.0	46.80	32.84	26.00	22.02	19.50	17.83	16.71	15.96	15.47	15.30	15.30	15.30	15.30	15.30	15.30
138.0	44.57	31.20	24.63	20.38	17.58	15.70	14.44	13.60	13.09	12.85	12.81	12.81	12.81	12.81	12.81
144.0	41.92	28.36	21.71	17.82	15.33	13.64	12.49	11.70	11.19	10.91	10.81	10.81	10.81	10.81	10.81
150.0	37.05	25.04	19.14	15.68	13.45	11.94	10.88	10.15	9.66	9.35	9.20	9.18	9.18	9.18	9.18
156.0	32.91	22.22	16.96	13.87	11.87	10.51	9.55	8.87	8.39	8.09	7.91	7.84	7.84	7.84	7.84
162.0	29.37	19.81	15.10	12.33	10.53	9.30	8.42	7.80	7.35	7.05	6.86	6.76	6.75	6.75	6.75
168.0	26.32	17.74	13.50	11.01	9.39	8.27	7.47	6.90	6.48	6.18	5.99	5.87	5.83	5.83	5.83
174.0	23.67	15.94	12.13	9.88	8.41	7.39	6.67	6.13	5.74	5.46	5.26	5.14	5.08	5.07	5.07
180.0	21.37	14.38	10.93	8.89	7.56	6.64	5.97	5.48	5.12	4.85	4.66	4.53	4.45	4.43	4.43
186.0	19.36	13.02	9.89	8.04	6.82	5.98	5.37	4.92	4.58	4.33	4.14	4.01	3.93	3.89	3.88
192.0	17.59	11.83	8.97	7.29	6.18	5.41	4.85	4.43	4.12	3.88	3.70	3.57	3.49	3.44	3.42

NOTE:

- 1) MULLION CHART APPLIES TO 2" X 5-3/16" MULL ASSEMBLIES, WHEN MULLED IN ONE-WAY CONFIGURATIONS.
- 2) DESIGN PRESSURE VALUES ARE POSITIVE AND NEGATIVE IN PSF.
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2" X 5 3/16"
LVL MULL PROFILE



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



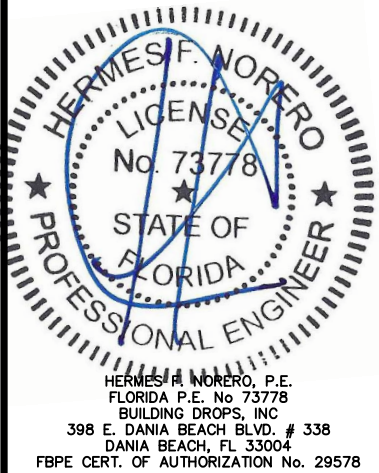
100 FOURTH AVE. NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
2" X 5 3/16" MULLION LOADS TABLE - ONE WAY

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
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REMARKS	BY	DATE
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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FL #:
FL24226

DATE:
10.07.17

DWG. BY:
RV

CHK. BY:
HFN

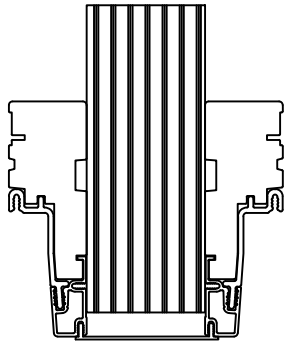
SCALE:
NTS

DWG. #:
AWD198

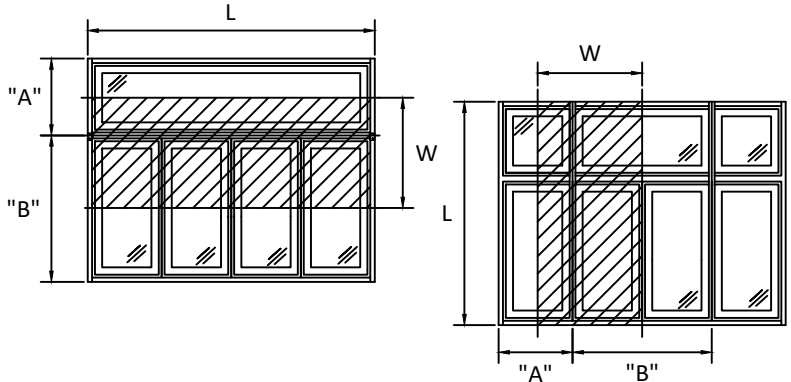
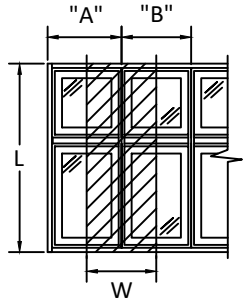
SHEET

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
2" X 5-3/16" STRUCTURAL MULLION (TWO-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	66.86	58.50	52.00	46.80	42.55	39.00	36.00	33.43	31.20	29.25
30.0	75.00	75.00	75.00	74.88	62.40	53.49	46.80	41.60	37.44	34.04	31.20	28.80	26.74	24.96	23.40
36.0	75.00	75.00	75.00	62.40	52.00	44.57	39.00	34.67	31.20	28.36	26.00	24.00	22.29	20.80	19.50
42.0	75.00	75.00	66.86	53.49	44.57	38.20	33.43	29.71	26.74	24.31	22.29	20.57	19.10	17.83	16.71
48.0	75.00	75.00	58.50	46.80	39.00	33.43	29.25	26.00	23.40	21.27	19.50	18.00	16.71	15.60	14.63
54.0	75.00	69.33	52.00	41.60	34.67	29.71	26.00	23.11	20.80	18.91	17.33	16.00	14.86	13.87	13.00
60.0	75.00	62.40	46.80	37.44	31.20	26.74	23.40	20.80	18.72	17.02	15.60	14.40	13.37	12.48	11.70
66.0	75.00	56.73	42.55	34.04	28.36	24.31	21.27	18.91	17.02	15.47	14.18	13.09	12.16	11.35	10.64
72.0	75.00	52.00	39.00	31.20	26.00	22.29	19.50	17.33	15.60	14.18	13.00	12.00	11.14	10.40	9.75
78.0	72.00	48.00	36.00	28.80	24.00	20.57	18.00	16.00	14.40	13.09	12.00	11.08	10.29	9.60	9.00
84.0	66.86	44.57	33.43	26.74	22.29	19.10	16.71	14.86	13.37	12.16	11.14	10.29	9.55	8.91	8.36
90.0	62.40	41.60	31.20	24.96	20.80	17.83	15.60	13.87	12.48	11.35	10.40	9.60	8.91	8.32	7.80
96.0	58.50	39.00	29.25	23.40	19.50	16.71	14.63	13.00	11.70	10.64	9.75	9.00	8.36	7.80	7.31
102.0	55.06	36.71	27.53	22.02	18.35	15.73	13.76	12.24	11.01	10.01	9.18	8.47	7.87	7.34	6.88
108.0	52.00	34.67	26.00	20.80	17.33	14.86	13.00	11.56	10.40	9.45	8.67	8.00	7.43	6.93	6.50
114.0	49.26	32.84	24.63	19.71	16.42	14.08	12.32	10.95	9.85	8.96	8.21	7.58	7.04	6.57	6.16
120.0	46.80	31.20	23.40	18.72	15.60	13.37	11.70	10.40	9.36	8.51	7.80	7.20	6.69	6.24	5.85
126.0	44.57	29.71	22.29	17.83	14.86	12.73	11.14	9.90	8.91	8.10	7.43	6.86	6.37	5.94	5.57
132.0	42.55	28.36	21.27	17.02	14.18	12.16	10.64	9.45	8.51	7.74	7.09	6.55	6.08	5.67	5.32
138.0	40.70	27.13	20.35	16.28	13.57	11.63	10.17	9.04	8.14	7.40	6.78	6.26	5.81	5.43	5.09
144.0	39.00	26.00	19.50	15.60	13.00	11.14	9.75	8.67	7.80	7.09	6.50	6.00	5.57	5.20	4.88
150.0	36.71	24.47	18.35	14.68	12.24	10.49	9.18	8.16	7.34	6.67	6.12	5.65	5.24	4.89	4.59
156.0	32.63	21.76	16.32	13.05	10.88	9.32	8.16	7.25	6.53	5.93	5.44	5.02	4.66	4.35	4.08
162.0	29.14	19.43	14.57	11.66	9.71	8.33	7.29	6.48	5.83	5.30	4.86	4.48	4.16	3.89	3.64
168.0	26.13	17.42	13.06	10.45	8.71	7.47	6.53	5.81	5.23	4.75	4.35	4.02	3.73	3.48	3.27
174.0	23.52	15.68	11.76	9.41	7.84	6.72	5.88	5.23	4.70	4.28	3.92	3.62	3.36	3.14	2.94
180.0	21.24	14.16	10.62	8.50	7.08	6.07	5.31	4.72	4.25	3.86	3.54	3.27	3.03	2.83	2.66
186.0	19.25	12.84	9.63	7.70	6.42	5.50	4.81	4.28	3.85	3.50	3.21	2.96	2.75	2.57	2.41
192.0	17.50	11.67	8.75	7.00	5.83	5.00	4.38	3.89	3.50	3.18	2.92	2.69	2.50	2.33	2.19

- NOTE:
- 1) MULLION CHART APPLIES TO 2" X 5-3/16" MULL ASSEMBLIES, WHEN MULLED IN TWO-WAY CONFIGURATIONS.
 - 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 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 AS LISTED ON SHEET 10
 - 6) TRIBUTARY WIDTH = $W = (A+B)/2$
 - 7) WHEN WINDOWS ARE STACKED VERTICALLY, THE MANUFACTURER/INSTALLER SHALL ENSURE THAT THE WEIGHT OF UNITS ABOVE WILL NOT CAUSE DEFLECTIONS OR STRESSES WHICH WILL AFFECT OPERATION OR STRUCTURAL ADEQUACY OF UNITS BELOW.



2" X 5 3/16"
LVL MULL PROFILE



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



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

TITLE:
E-SERIES CASEMENT WINDOW
(NON-IMPACT)/(NON-HVHZ)
2"X 5 3/16" MULLION LOADS TABLE - TWO
WAY

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
MULL TABLES UPDATE	HR	11/30
VINYL FIN ADDITION	HR	01/14
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4.12.19
ADDED 3/4" & 5" MULL	LL	8.13.19

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. NORERO
LICENSE
No. 73778
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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 #:	FL24226
DATE:	10.07.17
DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD198
SHEET	