

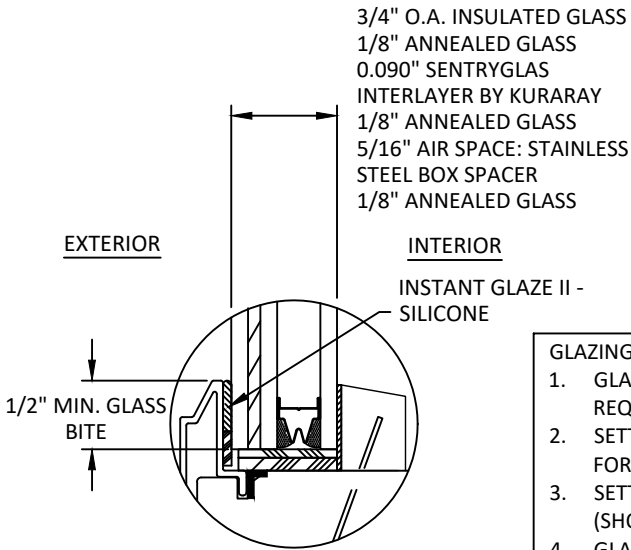
ANDERSEN CORPORATION

E-SERIES CASEMENT WINDOW

(WZ3)(IMPACT)

GENERAL NOTES:

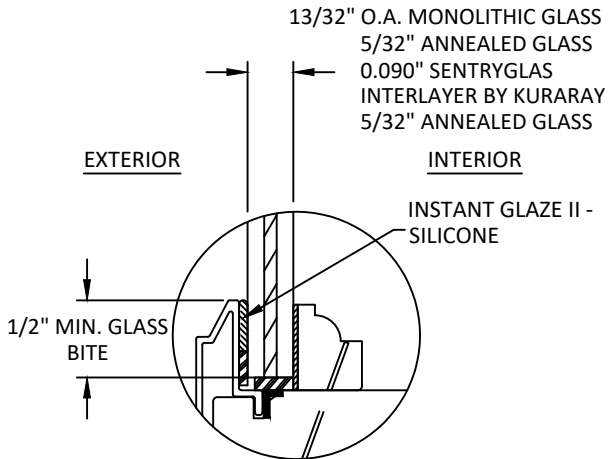
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT EDITION FLORIDA BUILDING CODE (FBC), EXCLUDING HVHZ AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
- AAMA/WDMA/CSA 101/I.S.2/A440-08/11
 - ASTM E1886-05
 - ASTM E1996-12
2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY, 2X FRAMING, AND METAL FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
3. 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
4. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT IN NON-HVHZ AREAS.
5. APPROVED IMPACT PROTECTIVE SYSTEM **IS NOT REQUIRED** ON THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE IN WIND ZONE 3 OR LESS.
6. APPROVED IMPACT PROTECTIVE SYSTEM **IS REQUIRED** ON THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE IN WIND ZONE 4.
7. WINDOW FRAME MATERIAL: WOOD / ALUMINUM
8. MULLION MATERIAL: LAMINATED VENEER LUMBER
9. GLASS MEETS THE REQUIREMENTS OF ASTM E 1300. SEE GLAZING DETAILS ON SHEET 1.
10. DESIGNATIONS "X" AND "O" STAND FOR THE FOLLOWING:
X: OPERABLE PANEL
O: FIXED PANEL
11. CUSTOM SIZES AVAILABLE UPON REQUEST. CUSTOM DESIGN PRESSURE WILL BE ASSIGNED EQUAL TO NEXT LARGER STANDARD SIZE.



GLAZING DETAIL G1

GLAZING NOTES:

- GLASS TYPE COMPLIES WITH ASTM E1300 REQUIREMENTS.
- SETTING BLOCKS TO BE LOCATED AT 1/4 SPAN LENGTH FOR GLASS WIDER THAN 36" AS PER FBC CHAPTER 24.
- SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN FBC CHAPTER 24.
- GLASS TYPE SHALL COMPLY WITH APPLICABLE GLAZING REQUIREMENTS PER CHAPTER 24 OF THE FBC



GLAZING DETAIL G2

WINDOW TYPE	OVERALL FRAME SIZE		OVERALL D.L.O. DIMENSION		GLASS TYPE	No. LOCK POINTS	DESIGN PRESSURE (PSF)	
	WIDTH (IN.)	HEIGHT (IN.)	WIDTH (IN.)	HEIGHT (IN.)			POS.	NEG.
SINGLE	36.0	72.0	29.87	65.87	G1	3	+65	-75
SINGLE	36.0	72.0	29.87	65.87	G2	3	+65	-75
SINGLE	36.0	66.0	29.87	59.87	G1	2	+65	-75
SINGLE	36.0	66.0	29.87	59.87	G2	2	+65	-75

TABLE OF CONTENTS		
SHEET	REVISION	SHEET DESCRIPTION
1	D	GENERAL NOTES AND GLAZING DETAILS
2	D	ELEVATIONS
3	D	MULLED ELEVATIONS
4	D	ANCHOR LAYOUTS
5	D	MULLED ANCHOR LAYOUTS
6	D	VERTICAL SECTIONS
7	D	MULLED VERTICAL SECTIONS
8	D	HORIZONTAL SECTIONS
9	D	MULLED 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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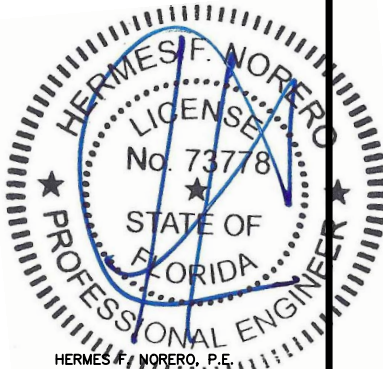
E-SERIES CASEMENT
WINDOW (WZ3) (IMPACT)
GENERAL NOTES AND GLAZING DETAILS

BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
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WEB: www.buildingdrops.com



REMARKS	BY	DATE
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

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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: **10.09.17**

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

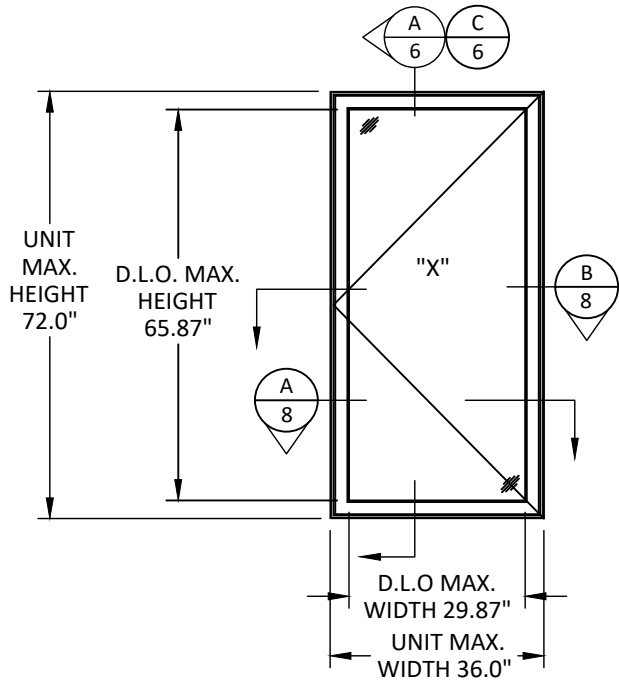
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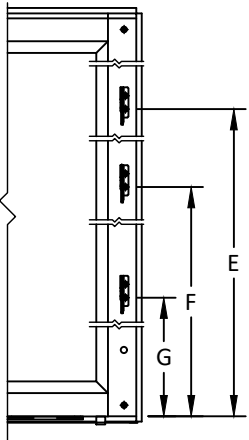
SHEET

1

OF 28



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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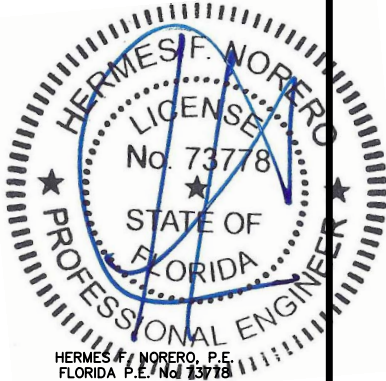
TITLE: E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
ELEVATIONS

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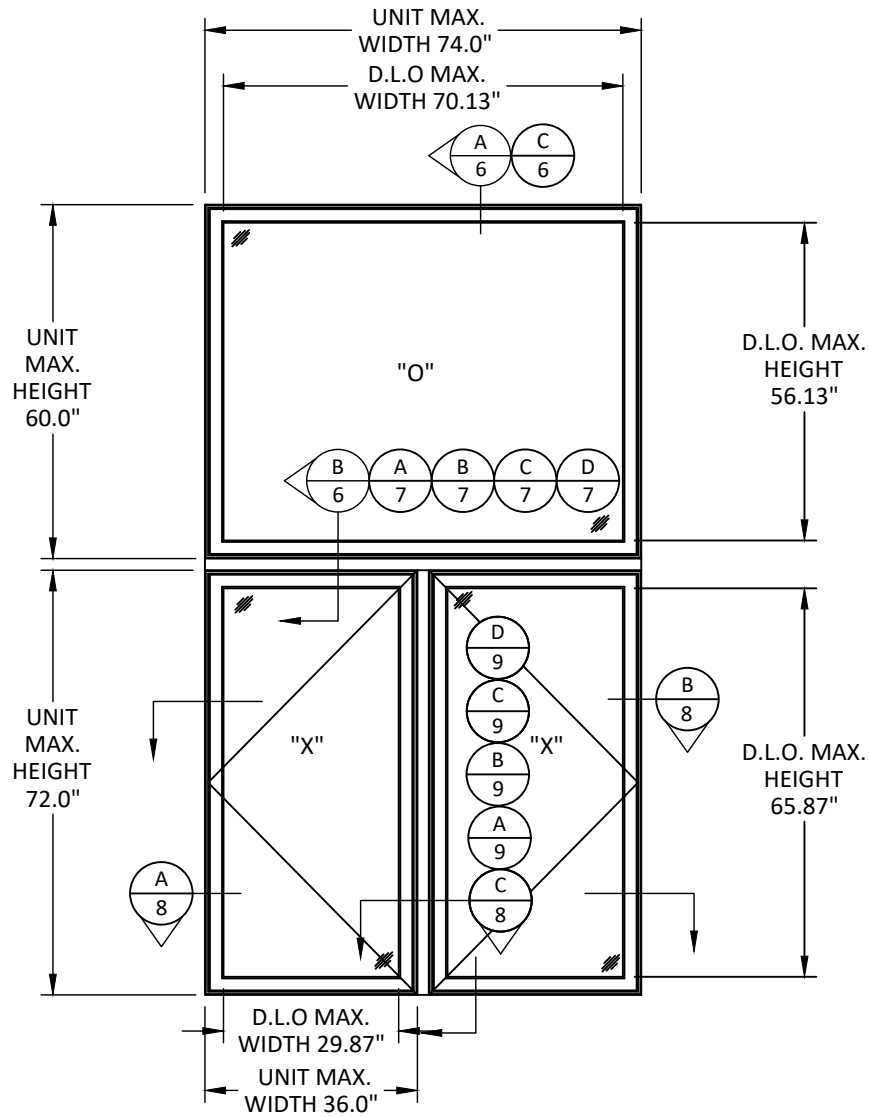
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CHK. BY: HFN

SCALE: NTS

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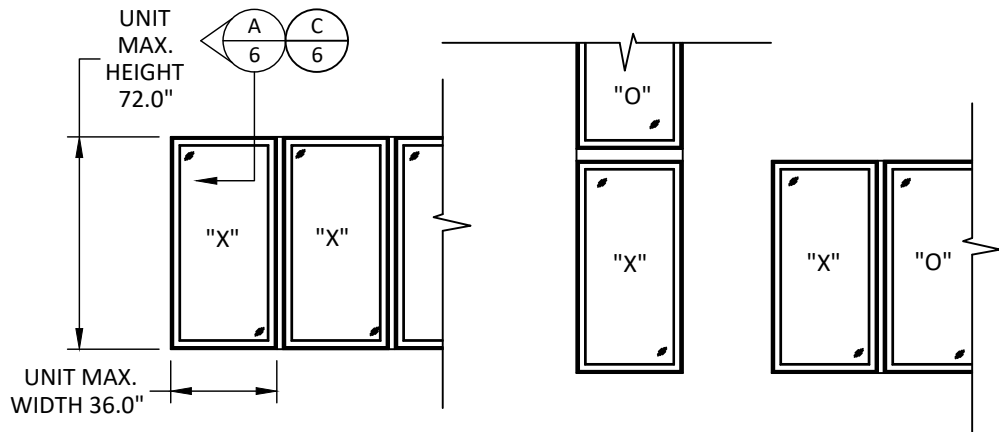
SHEET

2



ELEVATION
MULLED UNITS

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



QUALIFIED CONFIGURATIONS



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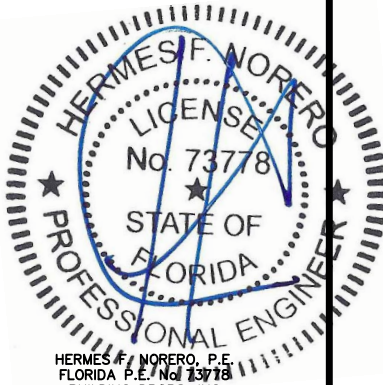
TITLE:
E-SERIES CASEMENT
WINDOW (WZ3) (IMPACT)
MULLED ELEVATIONS

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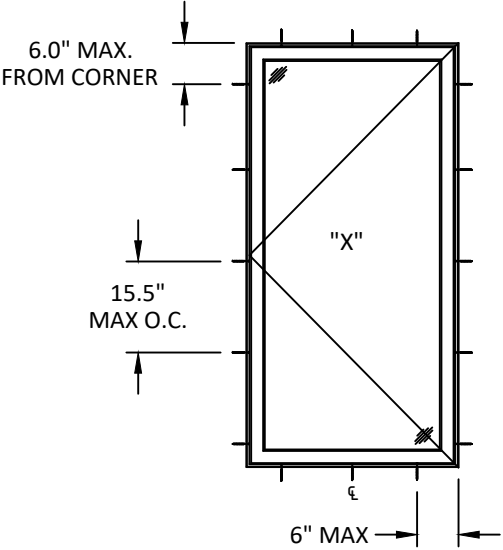
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CHK. BY: HFN

SCALE: NTS

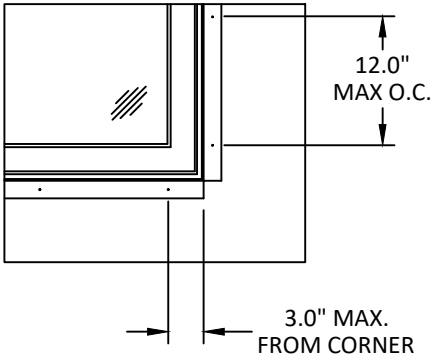
DWG. #: AWD201

SHEET

3



ANCHOR LAYOUT
THROUGH FRAME



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:

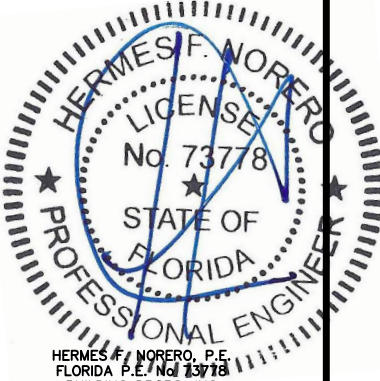
E-SERIES CASEMENT
WINDOW (WZ3) (IMPACT)
ANCHOR LAYOUTS

PREPARED BY:

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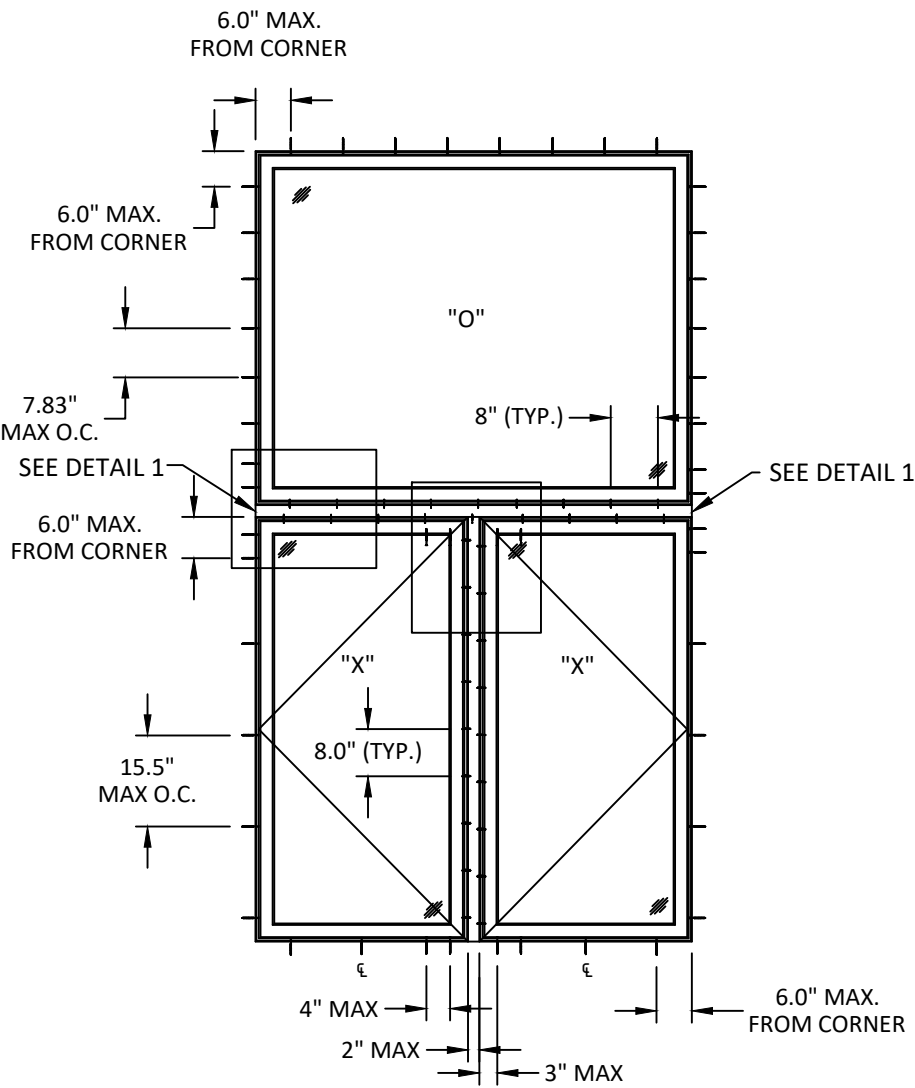
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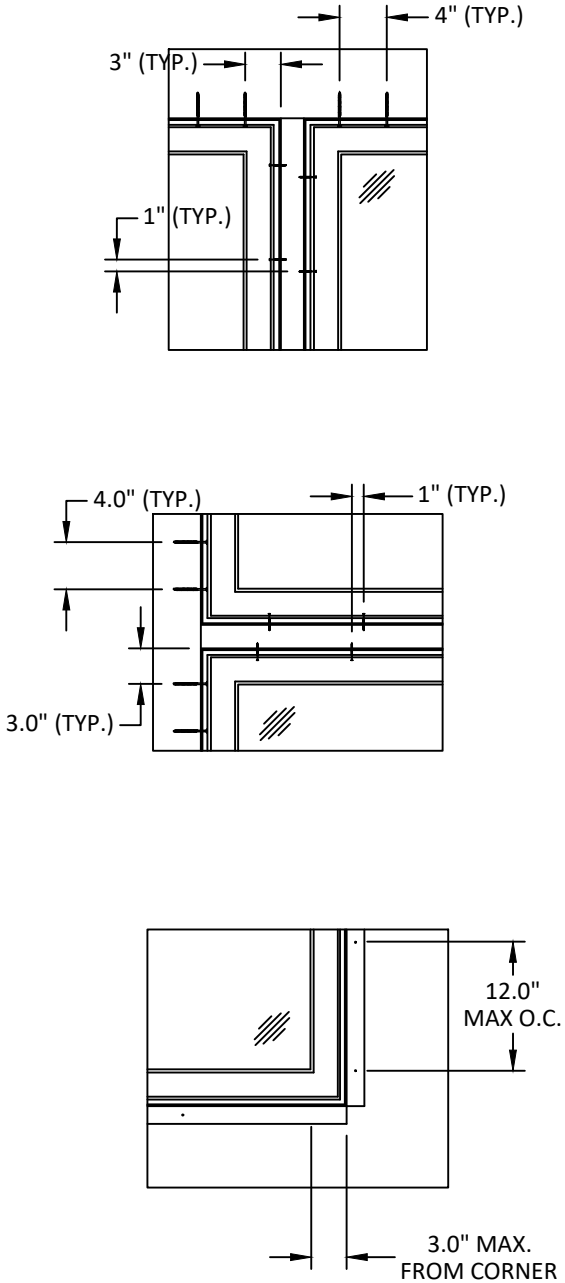
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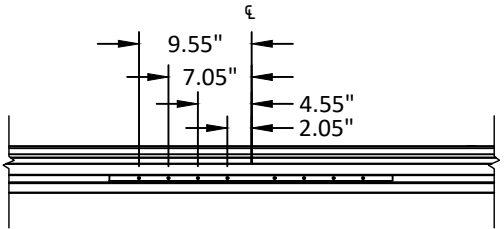
**ANCHOR LAYOUT
THROUGH FRAME**



**ALUMINUM FIN ANCHORING
SINGLE UNIT**

NOTE :

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DETAIL 1



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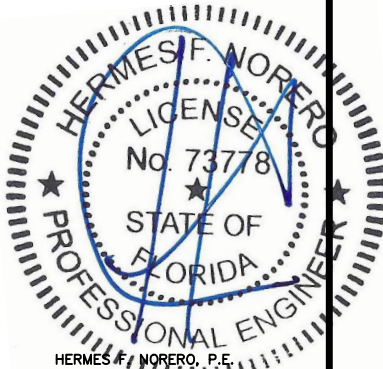
TITLE: **E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
MULLED ANCHOR LAYOUTS**

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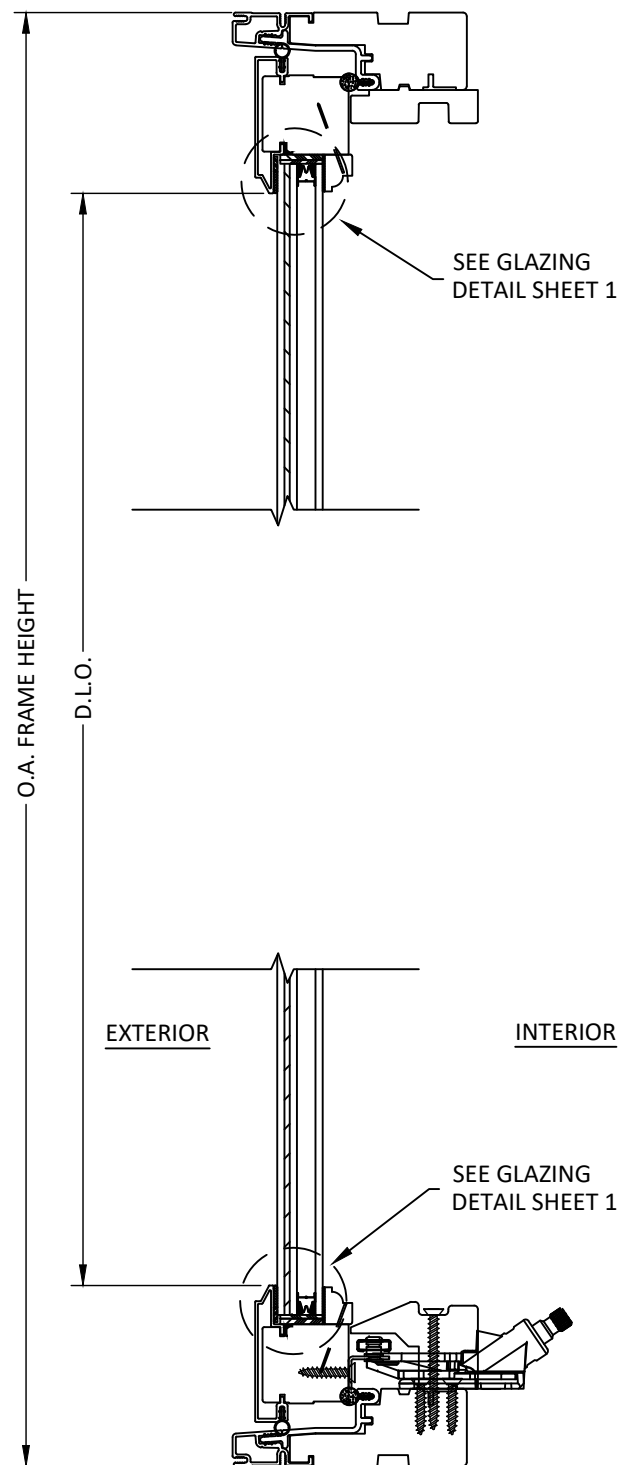
DWG. BY: **RV** CHK. BY: **HFN**

SCALE: **NTS**

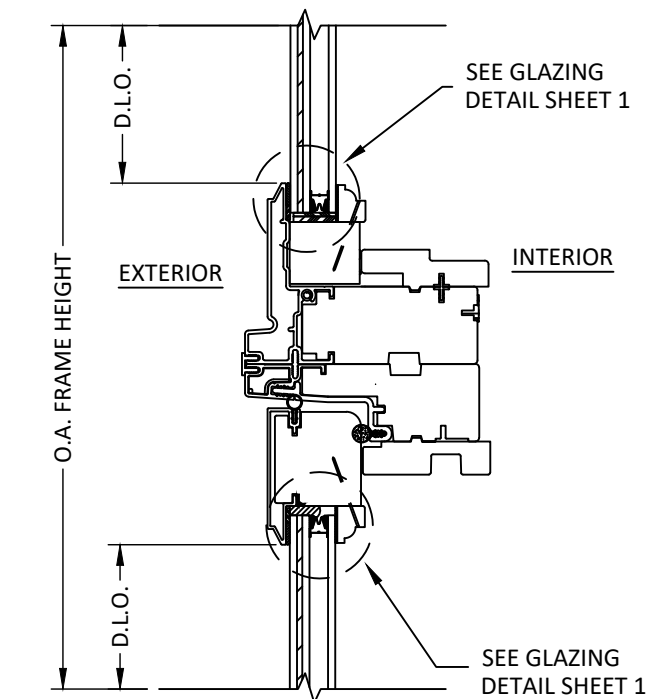
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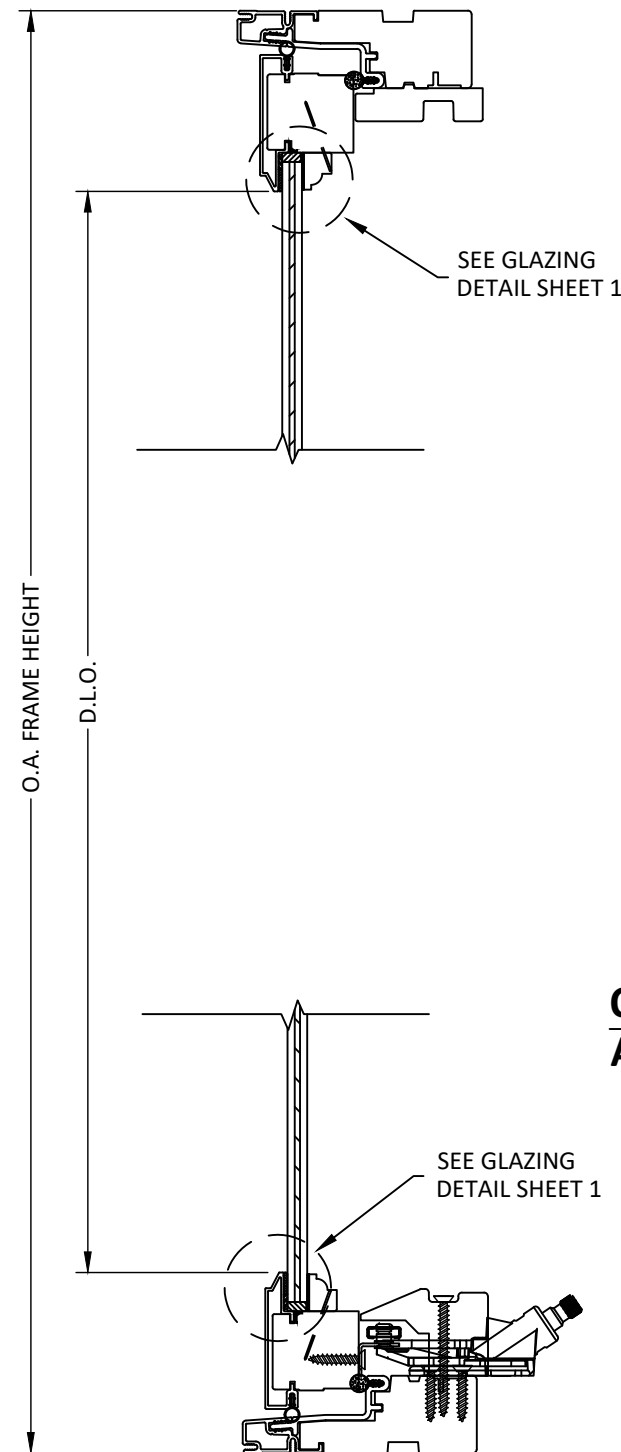
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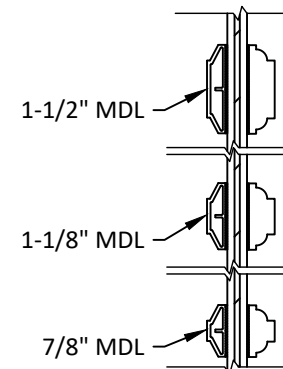
A
6 VERTICAL SECTION
INSULATED GLASS



B
6 VERTICAL SECTION
ZERO MULLION



C
6 VERTICAL SECTION
MONOLITHIC GLASS



**OPTIONAL MUNTIN BAR
ATTACHMENT TO GLASS**



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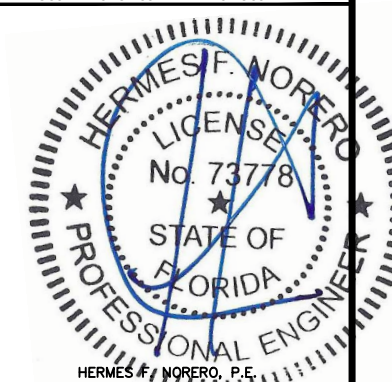
TITLE:
E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
VERTICAL SECTIONS

PREPARED BY:
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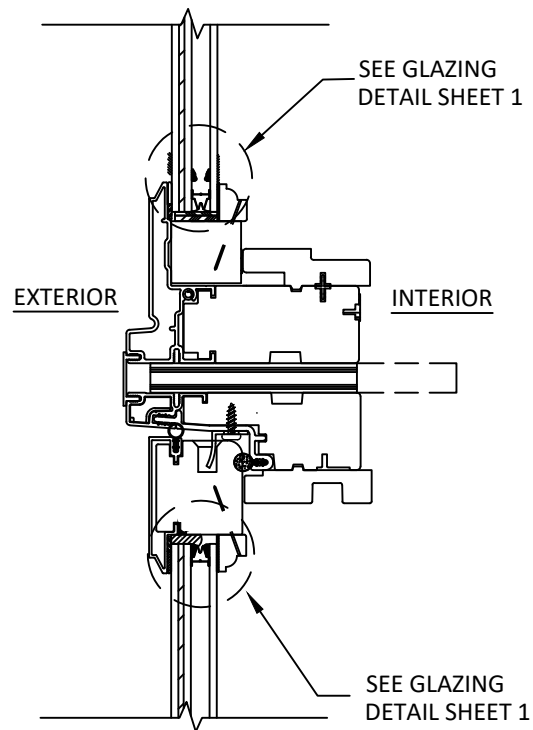
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SCALE: **NTS**

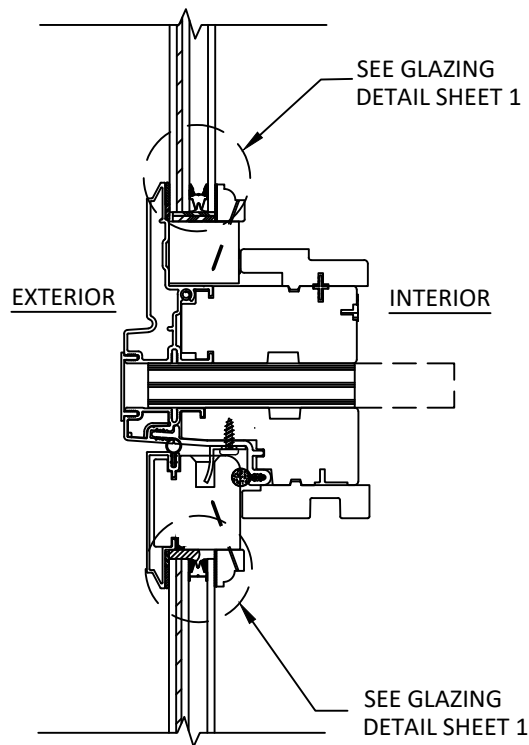
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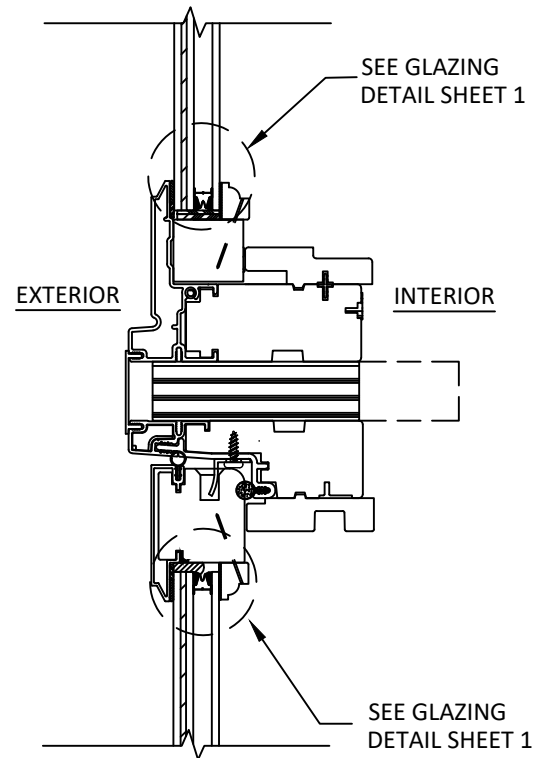
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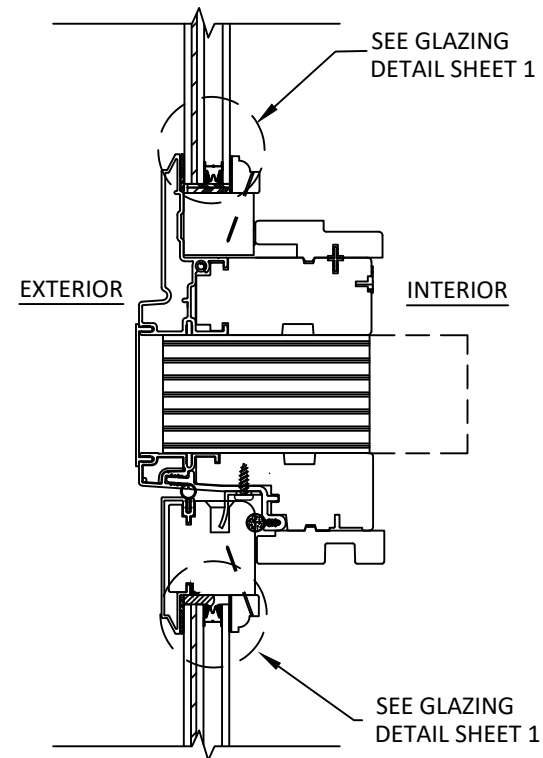
A
7
VERTICAL SECTION
INSULATED GLASS
1/2" X 3-1/2" MULLION
OR 1/2" x 5 3/16"



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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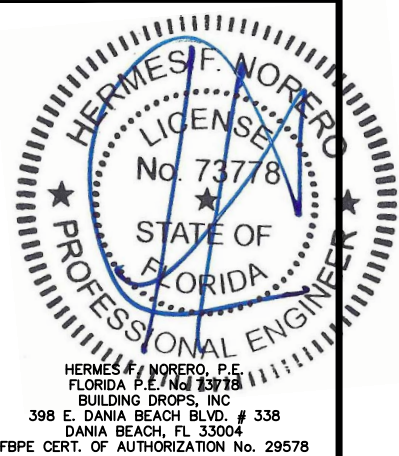
TITLE:
E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
MULLED VERTICAL SECTIONS

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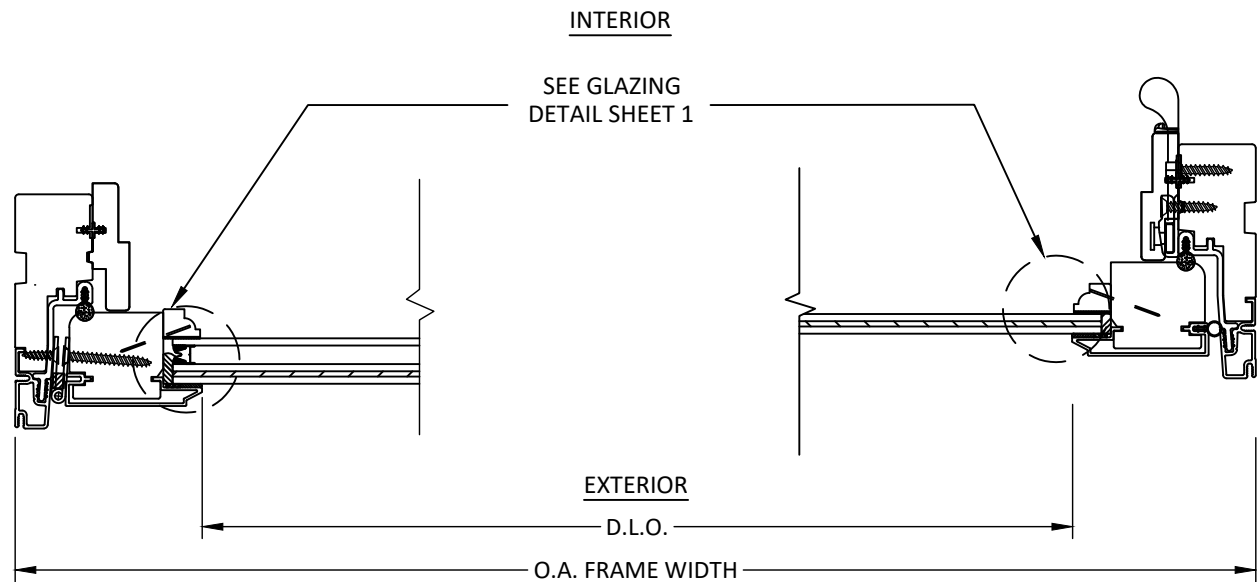
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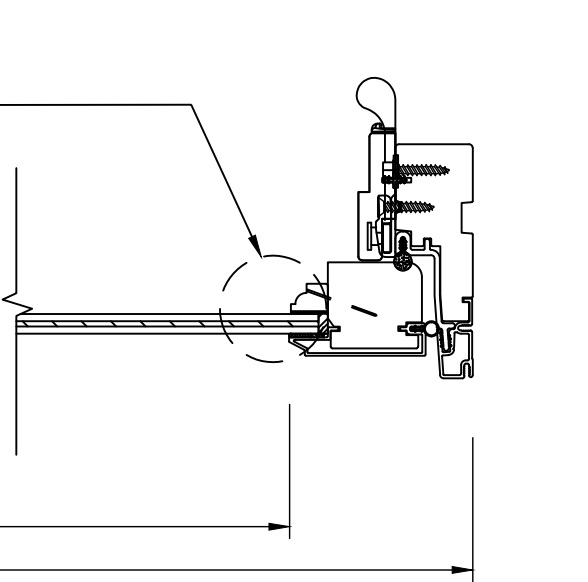
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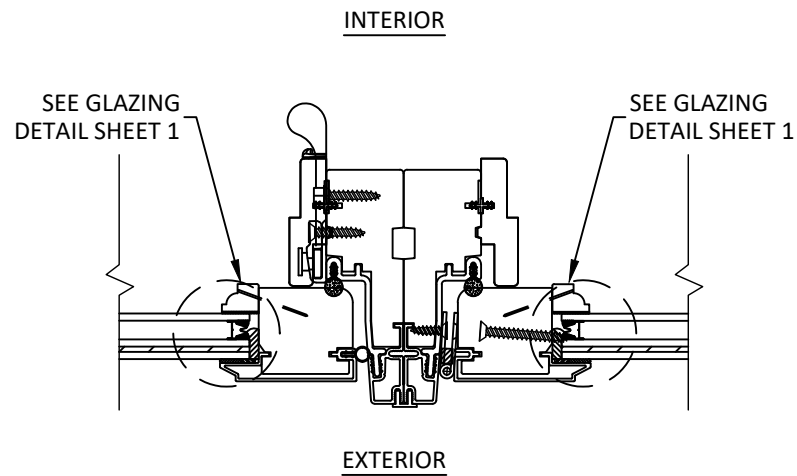
SHEET
7



A
8 **HORIZONTAL SECTION**
HINGE JAMB



B
8 **HORIZONTAL SECTION**
LOCK JAMB



C
8 **HORIZONTAL SECTION**
ZERO MULLION



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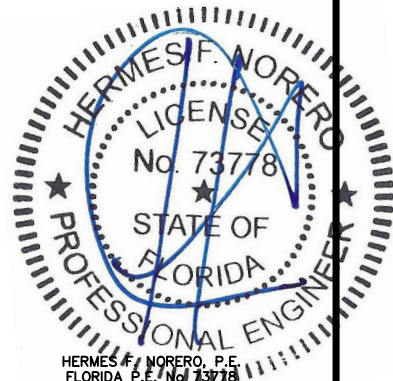
TITLE:
**E-SERIES CASEMENT
WINDOW (WZ3) (IMPACT)**
HORIZONTAL SECTIONS

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



REMARKS	BY	DATE
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

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, 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: **10.09.17**

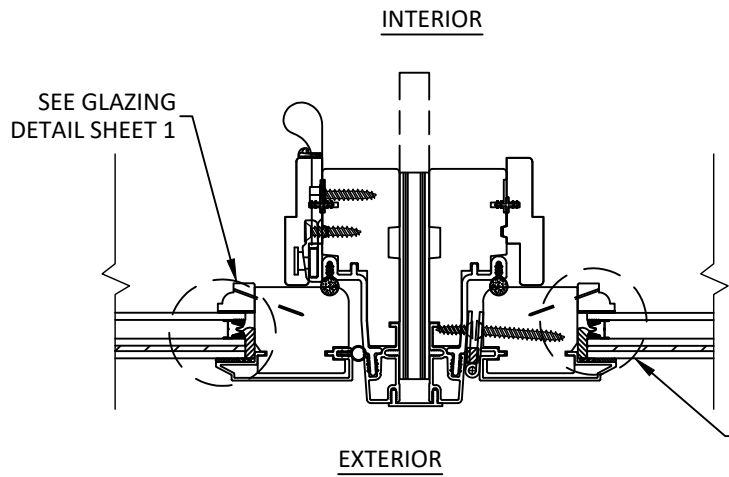
DWG. BY: RV	CHK. BY: HFN
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SCALE: **NTS**

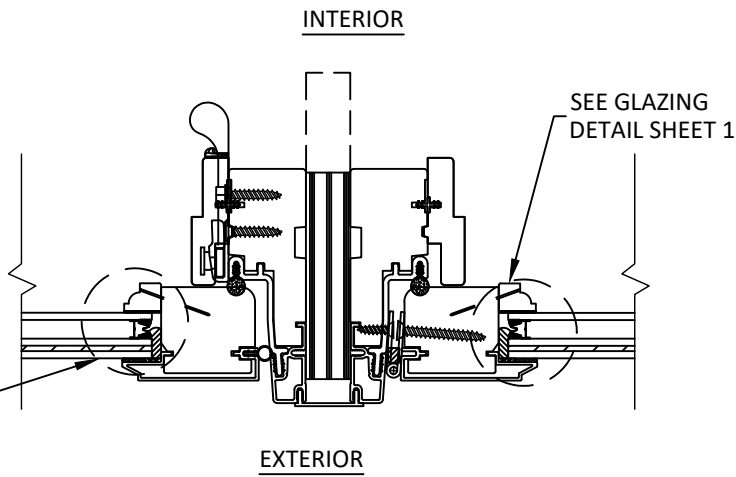
DWG. #: **AWD201**

SHEET

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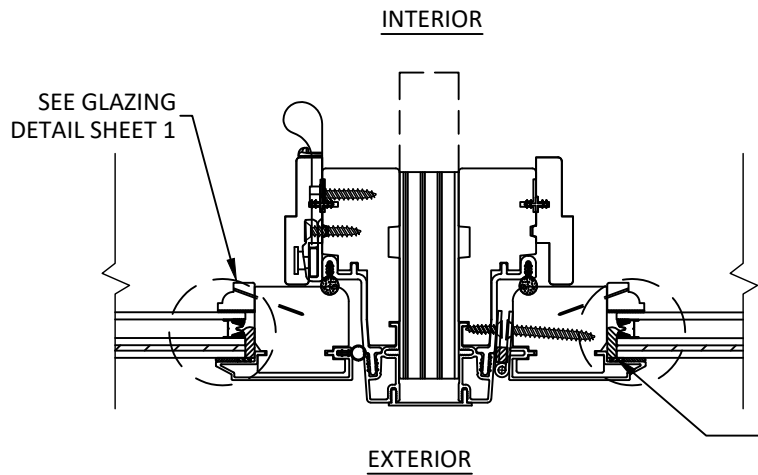


A
9 **HORIZONTAL SECTION**
INSULATED GLASS
1/2" X 3-1/2" MULLION
OR 1/2" x 5 3/16"

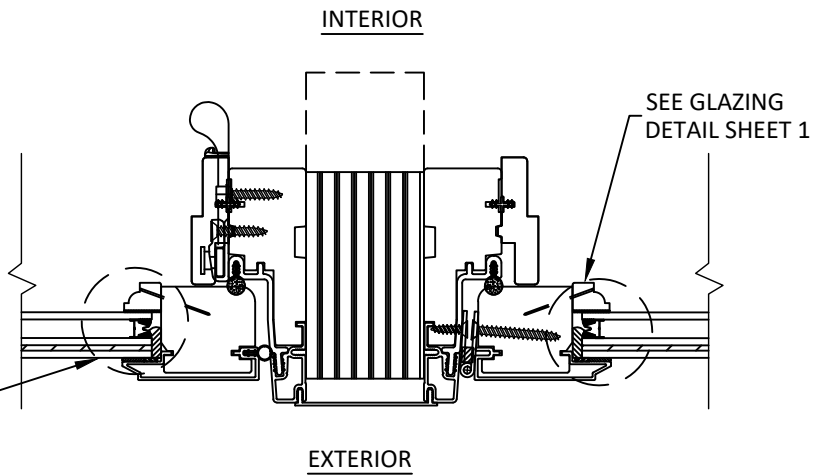


B
9 **HORIZONTAL SECTION**
INSULATED GLASS
3/4" X 3-1/2" MULLION
OR 3/4" x 5 3/16"

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"



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



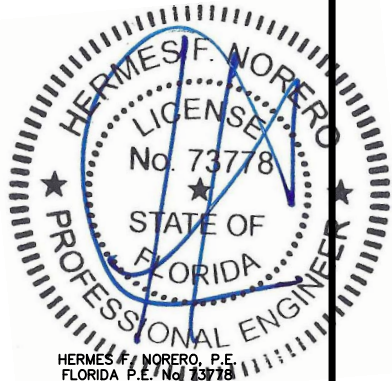
100 FOURTH AVE. NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE: **E-SERIES CASEMENT
WINDOW (W23) (IMPACT)**
MULLED HORIZONTAL SECTIONS

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

REMARKS	BY	DATE
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

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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, 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: **10.09.17**

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

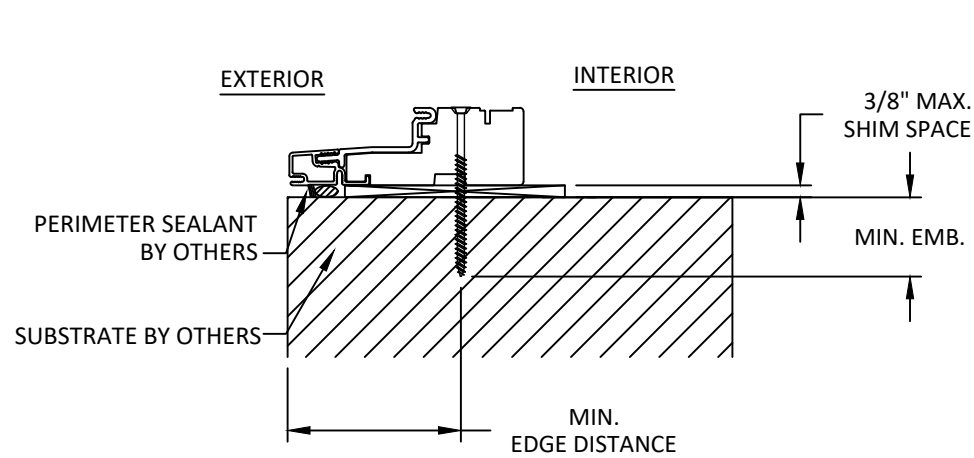
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DWG. #: **AWD201**

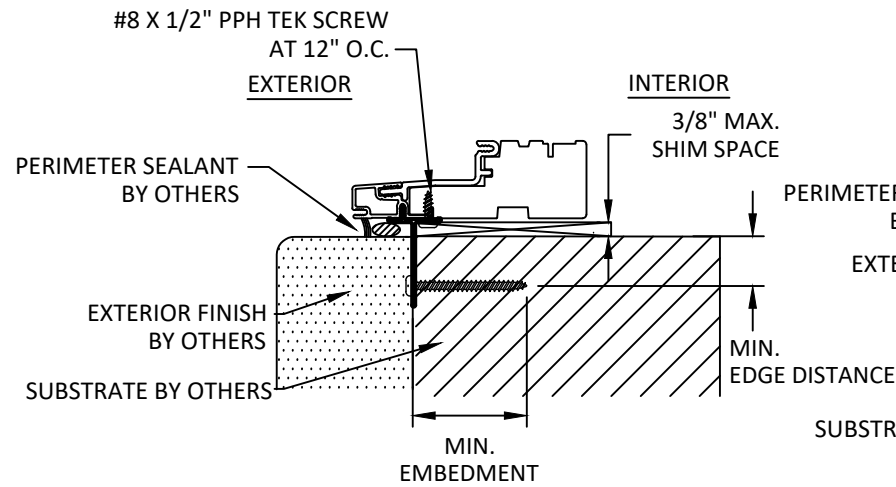
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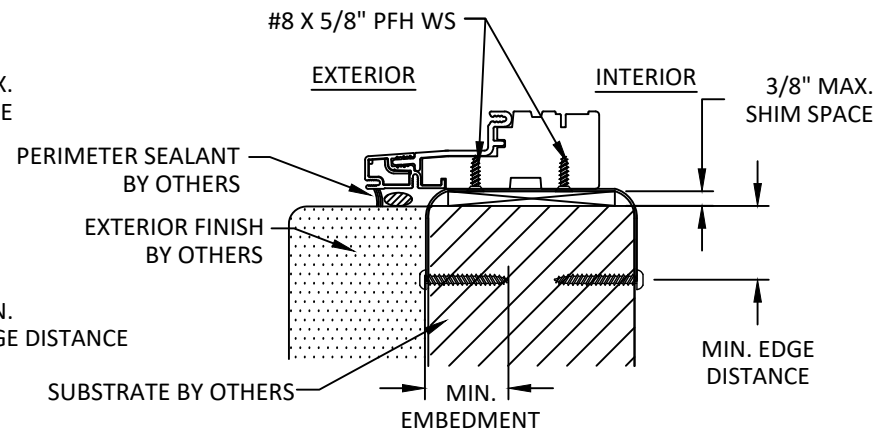
s:\projects\andersen windows\fb-19-0548.2 - fbc submittal - e-series mullion revisions\dwgs\124226.1, 2, 3, 4, 5, & 6\awd201 - e-series series1.1 impact.dwg



A
10 **ANCHOR DETAIL**
THROUGH FRAME



B
10 **ANCHOR DETAIL**
ALUMINUM NAIL FIN



C
10 **ANCHOR DETAIL**
STRAP ANCHOR

-HEAD, SILL AND JAMB HAVE
SIMILAR DETAILS

INSTALLATION NOTES:

- ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN.
- THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION OF THE MAXIMUM SIZE LISTED.
- INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF $\pm 1/2$ 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	1.5000	0.75
STRAP	2	CONCRETE/MASONRY	3/16" ITW TAPCON	1.2500	2.50
STRAP	2	METAL STUD	#8 SELF-TAPPING SCREW	3 THREADS	0.75
THRU FRAME	1	WOOD	#10 WOOD ANCHOR	1.5000	0.75
THRU FRAME	1	CONCRETE/MASONRY	3/16" ITW TAPCON	1.2500	2.50
THRU FRAME	1	METAL STUD	#10 SELF-TAPPING SCREW	3 THREADS	
ALUMINUM NAILING FLANGE	1	WOOD	11 GA. ROOFING NAIL	1.5000	0.75
ALUMINUM NAILING FLANGE	1	WOOD	#8 WOOD ANCHOR	1.5000	0.75
ALUMINUM NAILING FLANGE	1	METAL STUD	#8 SELF-TAPPING SCREW	3 THREADS	0.75



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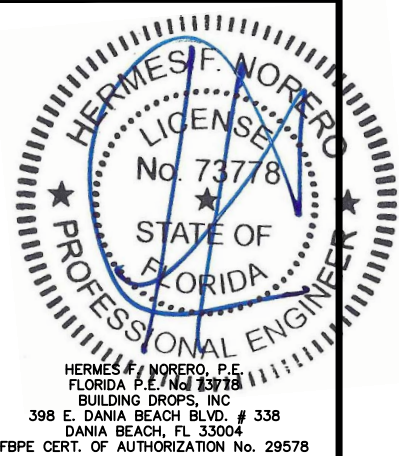
TITLE: **E-SERIES CASEMENT
WINDOW (W23) (IMPACT)**
ANCHOR DETAILS

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
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

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FL #: **FL24226**

DATE: **10.09.17**

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

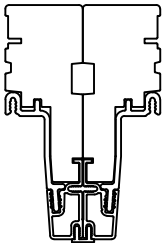
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DWG. #: **AWD201**

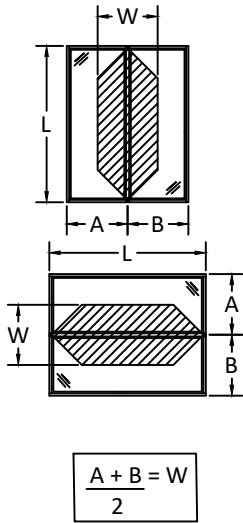
SHEET
10

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



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

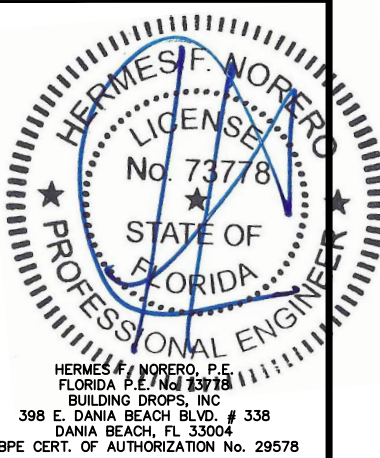
TITLE:
E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
ZERO MULLION LOADS TABLE - ONE WAY

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
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

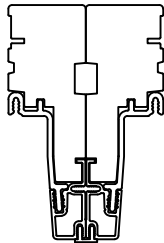
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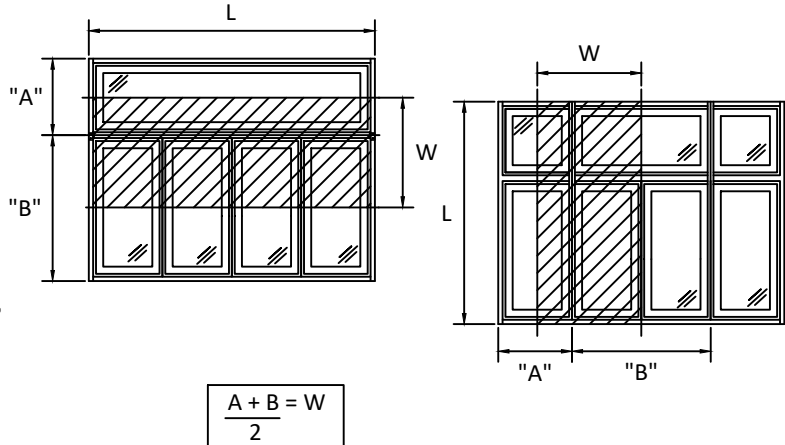
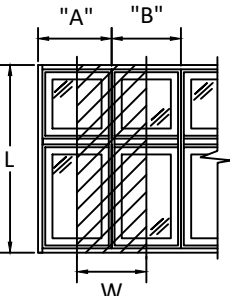
FL #:	FL24226
DATE:	10.09.17
DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD201
SHEET	11

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	192.0	
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	7.32	
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	4.68	
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	3.25	
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	2.39	
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	1.83	
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	1.45	
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	1.17	
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	0.97	
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	0.81	
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	0.69	
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	0.60	
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	0.52	
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	0.46	
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	0.41	
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	0.36	
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	0.32	
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	0.29	
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	0.27	
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	0.24	
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	0.22	
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	0.20	
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	0.19	
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	0.17	
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	0.16	
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	0.15	
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	0.14	
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	0.13	
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	0.12	
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	0.11	

- 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



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

E-SERIES CASEMENT WINDOW (W23) (IMPACT)

ZERO MULLION LOADS TABLE

TWO WAY

PREPARED BY:

BUILDING DROPS, INC.

398 E. DANIA BEACH BLVD., STE. 338

DANIA BEACH, FL 33004

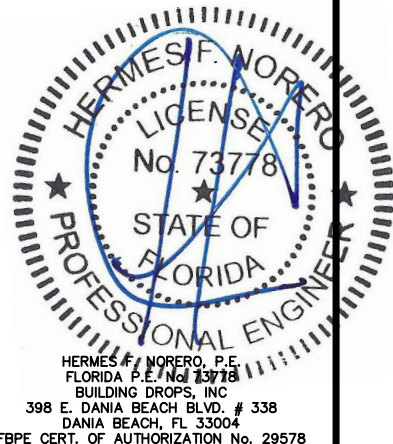
PH: (954) 399-8478

FAX: (954) 744-4738

WEB: www.buildingdrops.com

REMARKS	BY	DATE
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

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FL #:

FL24226

DATE:

10.09.17

DWG. BY:

RV

CHK. BY:

HFN

SCALE:

NTS

DWG. #:

AWD201

SHEET

12

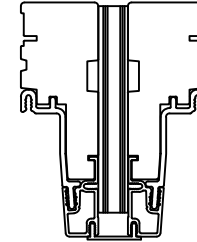
OF 28

MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)
1/2" X 3-1/2" STRUCTURAL MULLION (ONE-WAY) CONFIGURATION

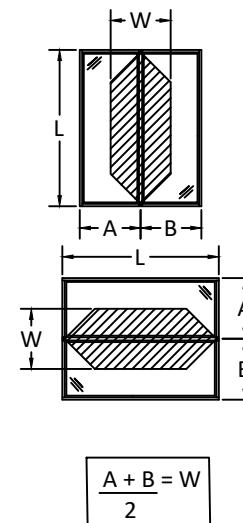
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00
30.0	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	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.
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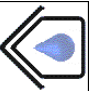
1/2" X 3 1/2"
LVL MULL PROFILE



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

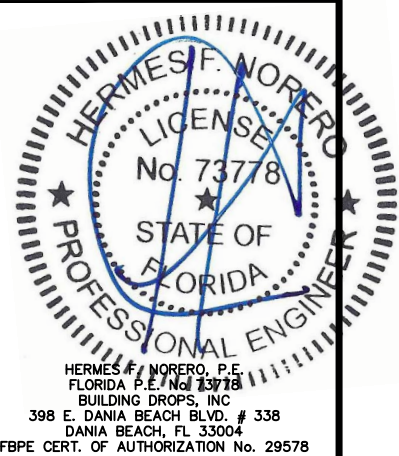
TITLE: E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
1/2" X 3-1/2" MULLION LOADS TABLE
ONE WAY

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
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WEB: www.buildingdrops.com



REMARKS	BY	DATE
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

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FL #: **FL24226**

DATE: **10.09.17**

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

SCALE: **NTS**

DWG. #: **AWD201**

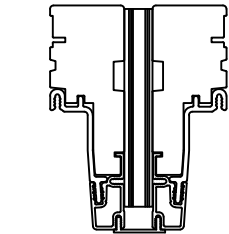
SHEET

13

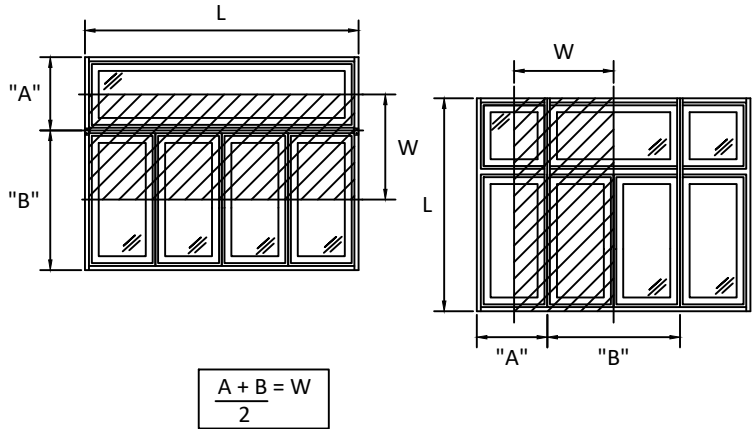
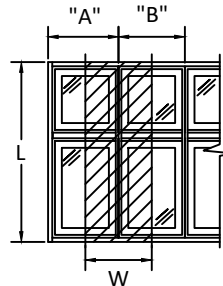
OF 28

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



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

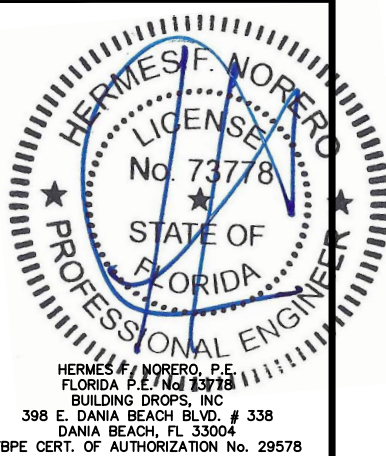
TITLE:
E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
1/2" X 3-1/2" MULLION LOADS TABLE
ONE WAY

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
FAX: (954) 744-4738
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REMARKS	BY	DATE
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

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FL #: FL24226

DATE: 10.09.17

DWG. BY: RV
CHK. BY: HFN

SCALE: NTS

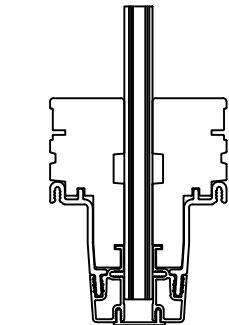
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SHEET

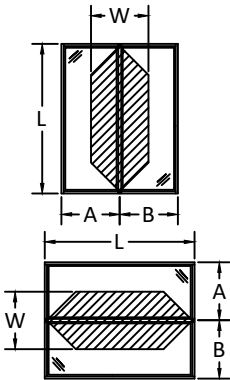
14

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:
- 1) MULLION CHART APPLIES TO 1/2" 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.



1/2" 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

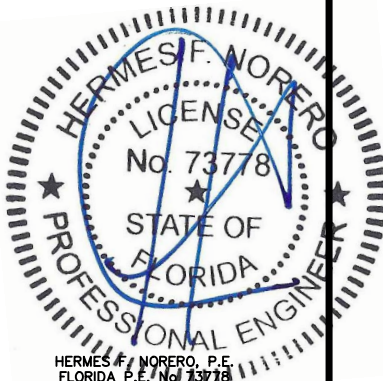
TITLE: E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
1/2" X 5-3/16" MULLION LOADS TABLE
ONE WAY

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



REMARKS	BY	DATE
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

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, 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: 10.09.17

DWG. BY: RV
CHK. BY: HFN

SCALE: NTS

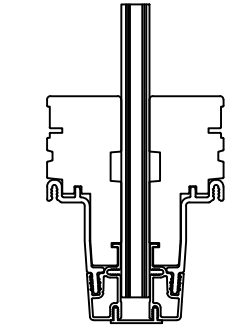
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SHEET

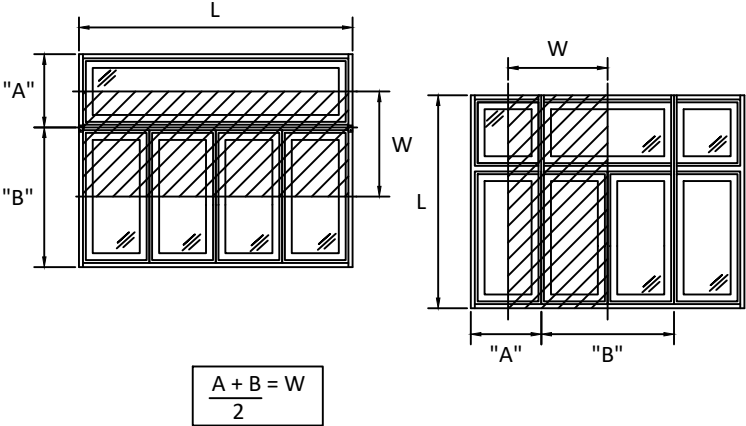
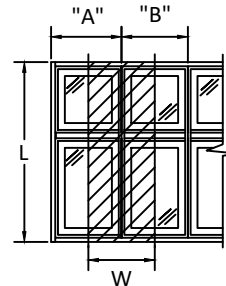
15

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



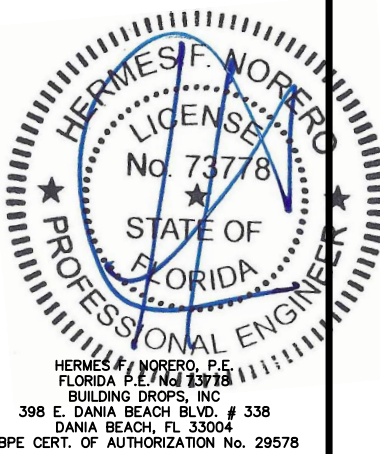
100 FOURTH AVE. NORTH
BAYPORT, MN 55003-1096
PH: (651) 264-5150 FX: (651) 264-5485

TITLE: E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
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
WEB: www.buildingdrops.com

REMARKS	BY	DATE
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

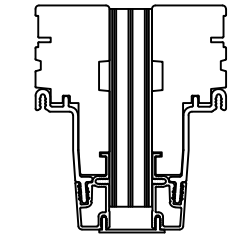
THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



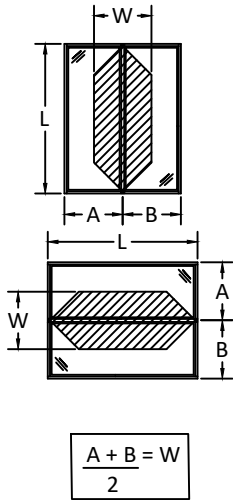
FL #:	FL24226
DATE:	10.09.17
DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD201
SHEET	16

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:
- 1) MULLION CHART APPLIES TO 3/4" 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.



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



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

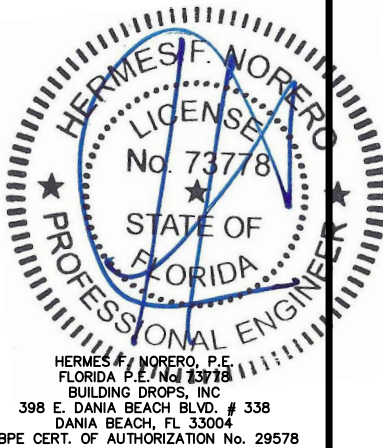
TITLE: E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
3/4" X 3-1/2" MULLION LOADS TABLE
ONE WAY

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
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

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.

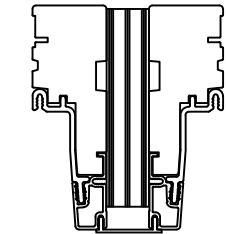


FL #:	FL24226
DATE:	10.09.17
DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD201
SHEET	17

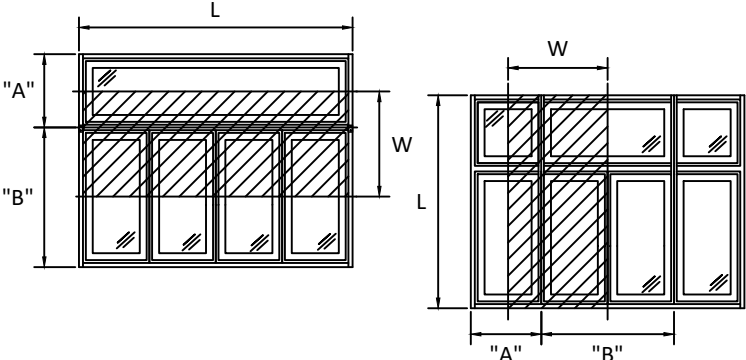
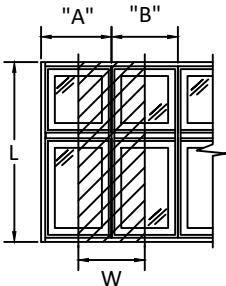
MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
3/4" X 3-1/2" STRUCTURAL MULLION (TWO-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	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

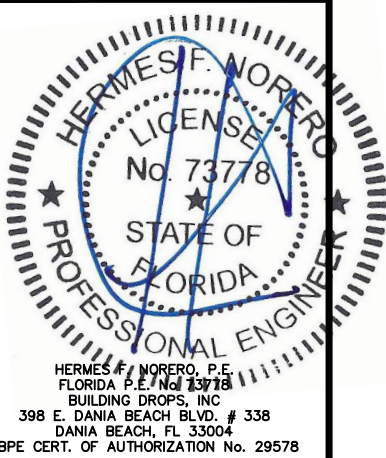
TITLE:
E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
3/4" X 3-1/2" MULLION LOADS TABLE
TWO WAY

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
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

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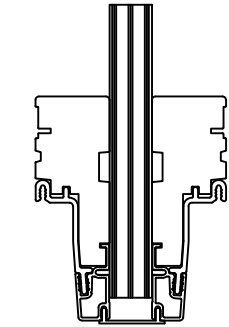


FL #:	FL24226
DATE:	10.09.17
DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD201
SHEET	18

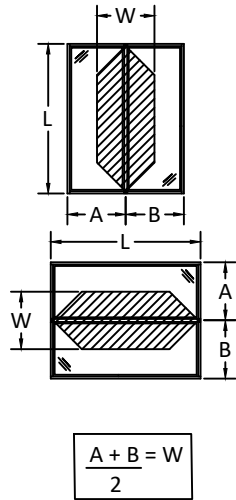
MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)															
3/4" X 5-3/16" STRUCTURAL MULLION (ONE-WAY) CONFIGURATION															
L - Mull Length (in)	W - Tributary Width (in)														
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0
24.0	75.00	75.00	75.00	75.00	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:

- 1) MULLION CHART APPLIES TO 3/4" 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.



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



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

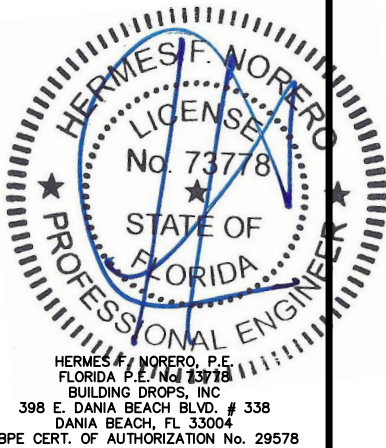
TITLE:
E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
3/4" X 5-3/16" MULLION LOADS TABLE
ONE WAY

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
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REMARKS	BY	DATE
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

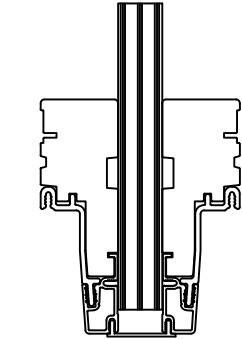
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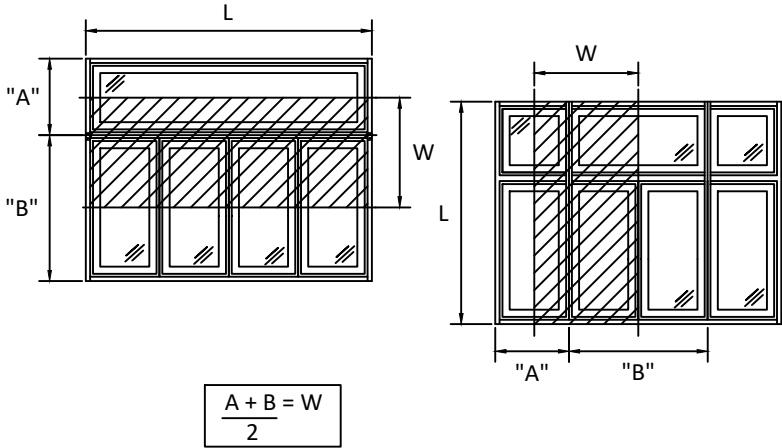
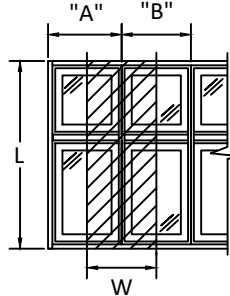
FL #:	FL24226
DATE:	10.09.17
DWG. BY:	CHK. BY:
RV	HFN
SCALE:	NTS
DWG. #:	AWD201
SHEET	

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



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

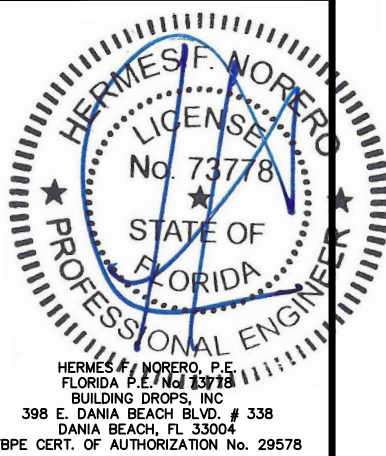
TITLE: E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
3/4" X 3-1/2" MULLION LOADS TABLE
TWO WAY

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
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

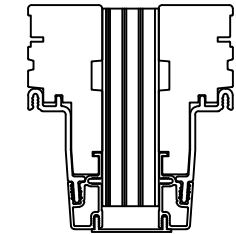
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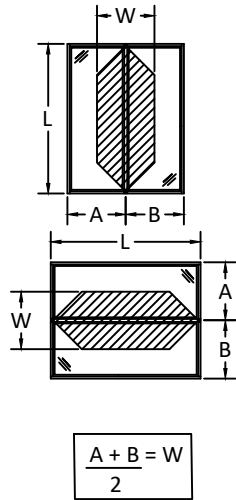
FL #:	FL24226
DATE:	10.09.17
DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD201
SHEET	20

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:
- 1) MULLION CHART APPLIES TO 1" 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" X 3 1/2"
LVL MULL PROFILE



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

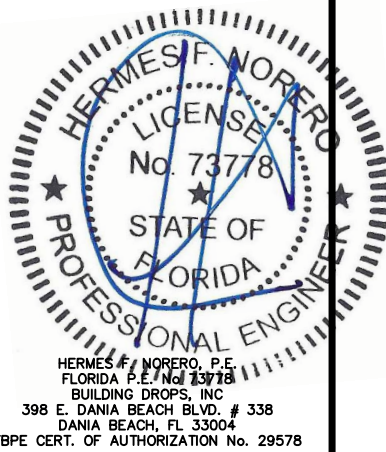
TITLE: E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
1" X 3-1/2" MULLION LOADS TABLE
ONE WAY

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
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

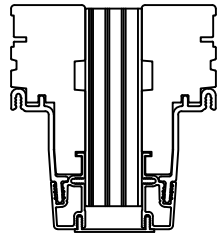
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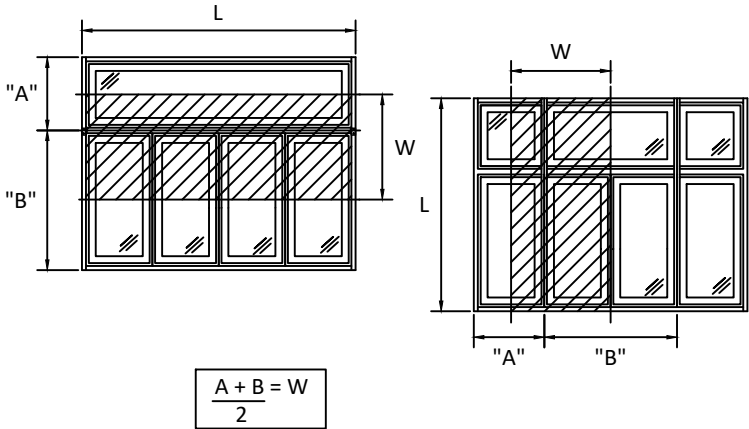
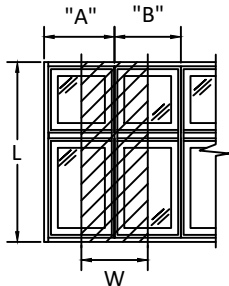
FL #:	FL24226
DATE:	10.09.17
DWG. BY:	CHK. BY:
RV	HFN
SCALE:	NTS
DWG. #:	AWD201
SHEET	

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



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

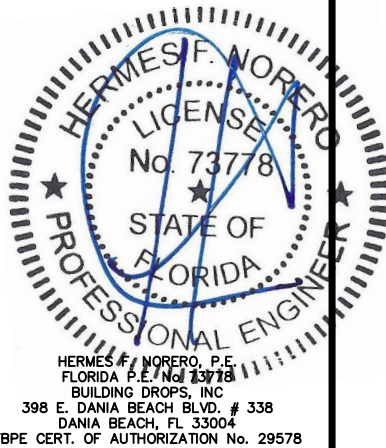
TITLE: E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
1" X 3-1/2" MULLION LOADS TABLE
TWO WAY

PREPARED BY: BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
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REMARKS	BY	DATE
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

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FL #: FL24226

DATE: 10.09.17

DWG. BY: RV
CHK. BY: HFN

SCALE: NTS

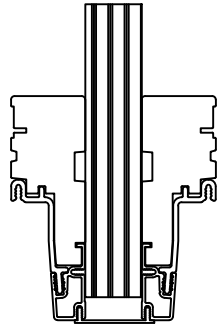
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SHEET

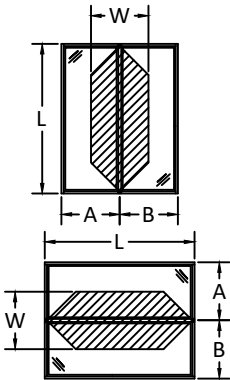
22

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

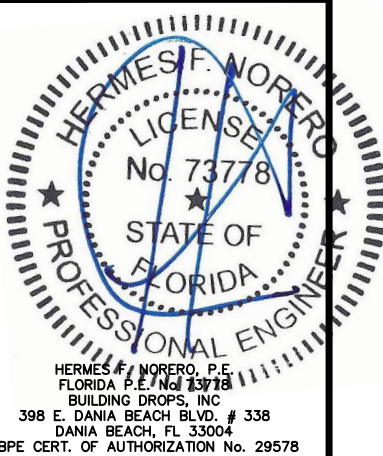
TITLE: E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
1" X 5-3/16" MULLION LOADS TABLE
ONE WAY

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



REMARKS	BY	DATE
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

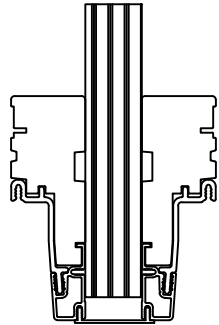
THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



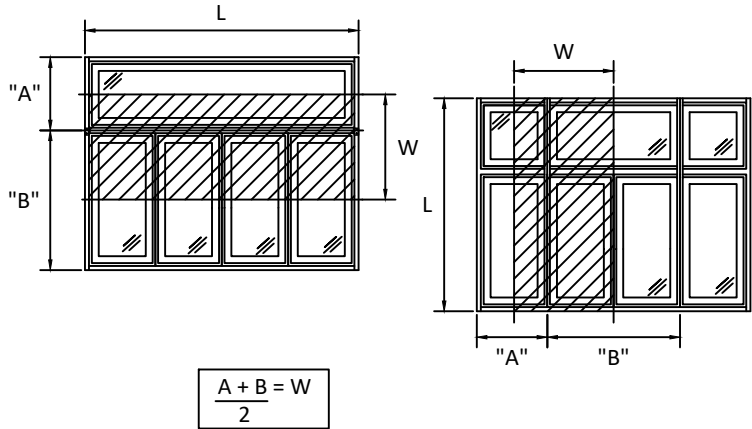
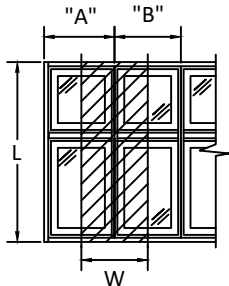
FL #:	FL24226
DATE:	10.09.17
DWG. BY:	CHK. BY:
RV	HFN
SCALE:	NTS
DWG. #:	AWD201
SHEET	

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



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

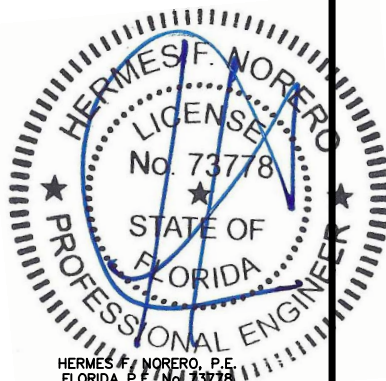
TITLE: E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
1" X 5-3/16" MULLION LOADS TABLE
TWO WAY

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
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

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, 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: 10.09.17

DWG. BY: RV
CHK. BY: HFN

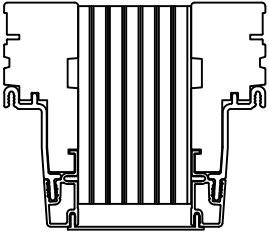
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DWG. #: AWD201

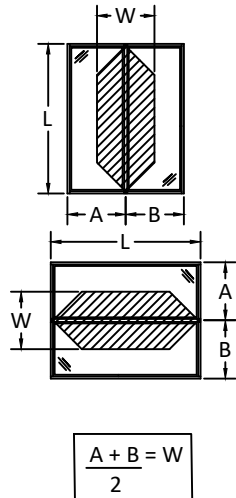
SHEET
24

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



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

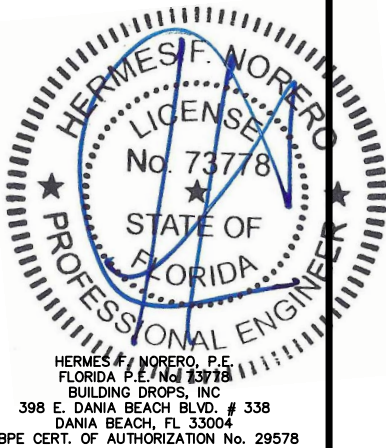
TITLE: E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
2" X 3-1/2" MULLION LOADS TABLE
ONE WAY

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
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

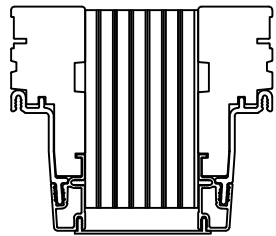
THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



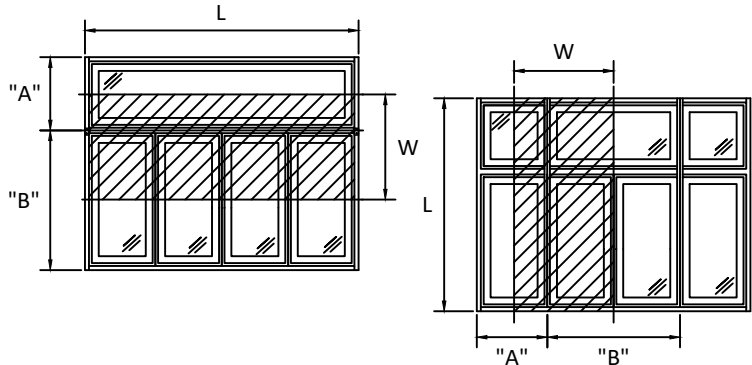
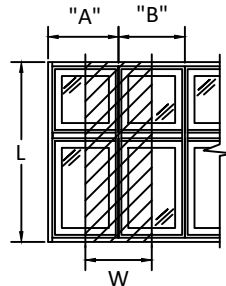
FL #:	FL24226
DATE:	10.09.17
DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD201
SHEET	

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

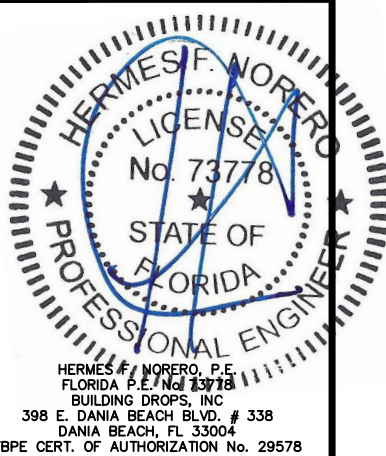
TITLE: E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
2" X 3-1/2" MULLION LOADS TABLE
TWO WAY

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
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

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: **10.09.17**

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

SCALE: **NTS**

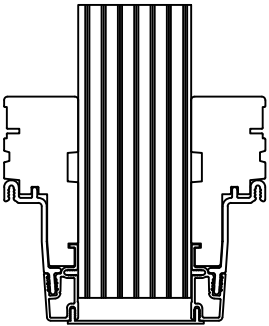
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SHEET **26**

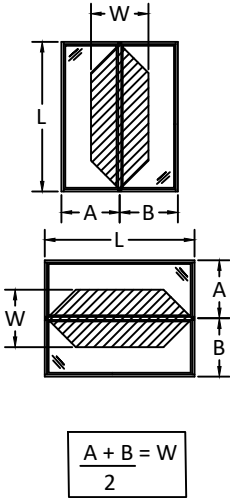
MAXIMUM DESIGN PRESSURE CAPACITY CHART (PSF)																
2" X 5-3/16" STRUCTURAL MULLION (ONE-WAY) CONFIGURATION																
L - Mull Length (in)	W - Tributary Width (in)															
	24.0	36.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0	132.0	144.0	156.0	168.0	180.0	192.0	
24.0	75.00	75.00	75.00	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.
- 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



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

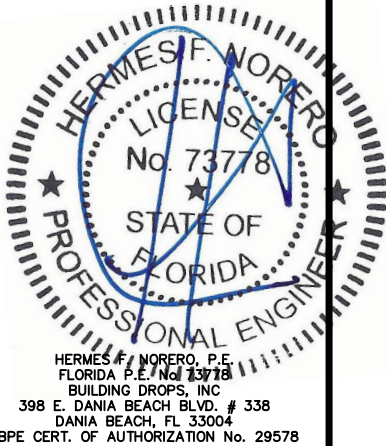
TITLE:
E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
2" X 5-3/16" MULLION LOADS TABLE
ONE WAY

PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD., STE. 338
DANIA BEACH, FL 33004
PH: (954) 399-8478
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WEB: www.buildingdrops.com



REMARKS	BY	DATE
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

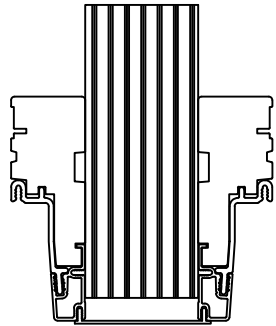
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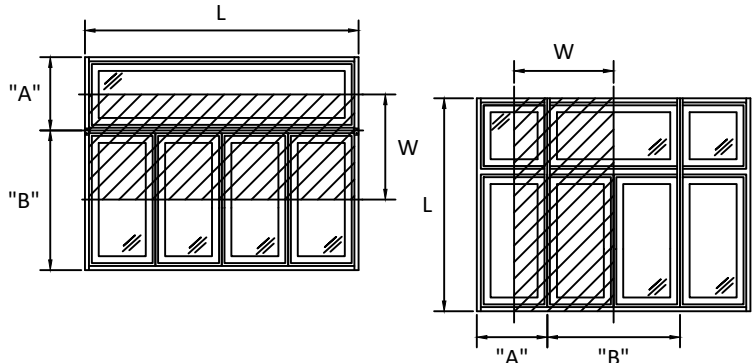
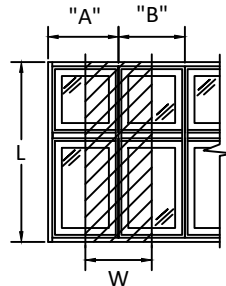
FL #:	FL24226
DATE:	10.09.17
DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD201
SHEET	

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

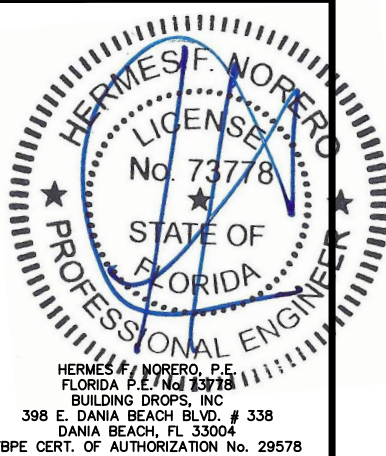
TITLE: E-SERIES CASEMENT
WINDOW (W23) (IMPACT)
2" X 5-3/16" MULLION LOADS TABLE
TWO WAY

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
6TH FBC EDITION	FM	10/17
MULL TABLES UPDATE	HR	11/30
ADDED ZERO, 1/2", 1" & 2" MULL	HR	4/12
DP CHARTS UPDATE	LL	7/30

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:	10.09.17
DWG. BY:	RV
CHK. BY:	HFN
SCALE:	NTS
DWG. #:	AWD201
SHEET	28