

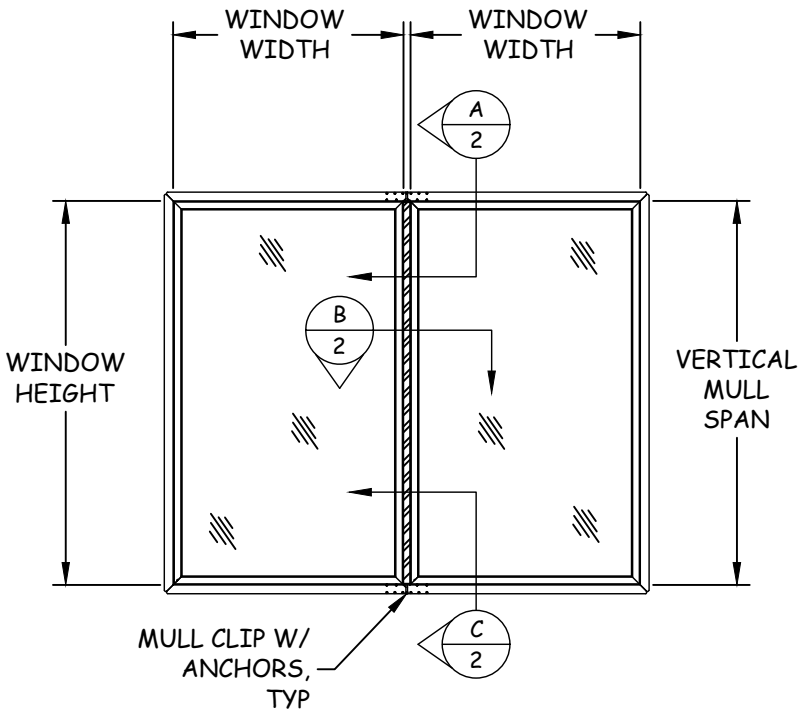
PLY GEM WINDOWS

PREMIUM MIRA VERTICAL MULLION

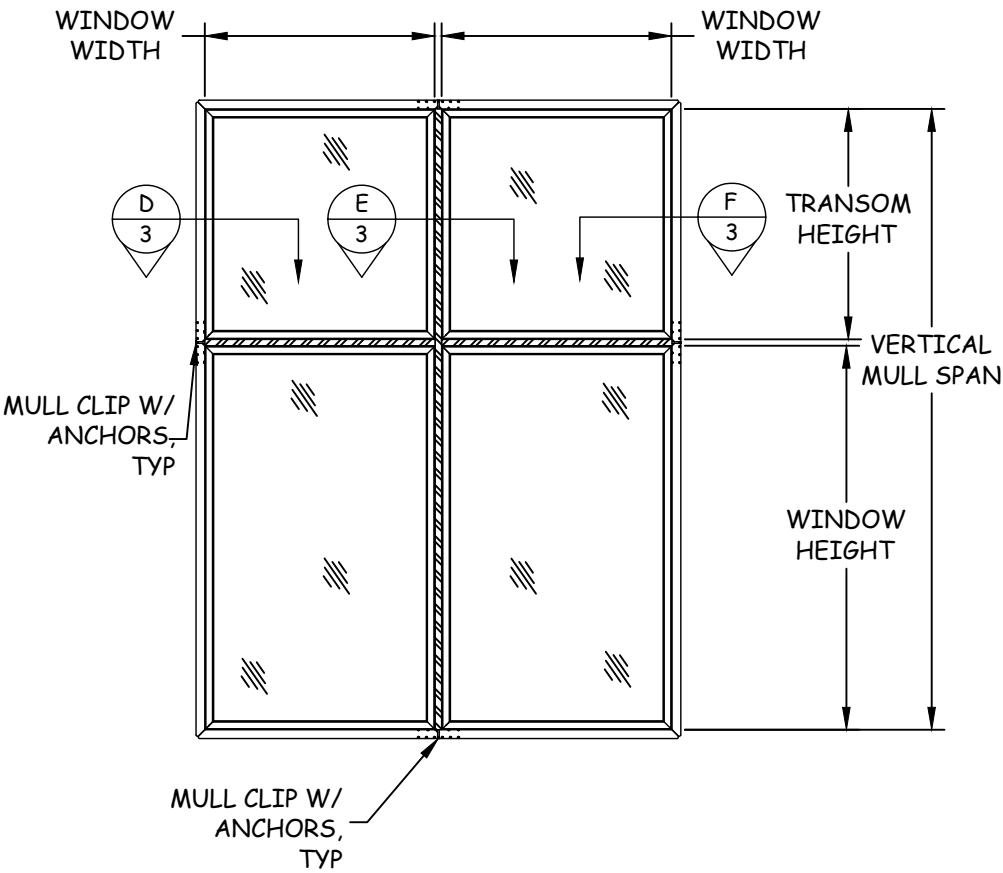
NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT FLORIDA BUILDING CODE.
2. MULLION INSTALLATION DETAILS APPLY TO PLY GEM PREMIUM MIRA ALUMINUM EXTRUDED MULL WITH STEEL ANCHOR CLIP AND ALUMINUM REINFORCEMENT KEY WHEN USED TO MULL WINDOWS WITH A VERTICALLY CONTINUOUS MULLION.
3. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS ZONE 3 OR LESS. INDIVIDUAL UNITS MUST BE IMPACT RATED.
4. APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGION ZONE 4.
5. USE #8 WOOD SCREWS OF SUFFICIENT LENGTH TO ACHIEVE MINIMUM EMBEDMENT OF 1 1/2" INTO WOOD FRAMING. (SEE CHARTS & NOTES ON SHEETS 4 & 5 FOR DESIGN PRESSURE AND ANCHOR NOTES).
6. USE #8 TEK SCREWS OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM 3 THREADS PENETRATION BEYOND STEEL STRUCTURE. (SEE CHARTS & NOTES ON SHEETS 4 & 5 FOR DESIGN PRESSURE AND ANCHOR NOTES).
7. 2X4 WOOD BUCKS TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE AND IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
8. SEE CHARTS & NOTES ON SHEETS 4 & 5 FOR DESIGN PRESSURE.
9. THIS MULLION IS ONLY VALID WHEN USED IN CONJUNCTION WITH APPLICABLE PLY GEM PREMIUM MIRA PRODUCTS.
10. ALL WINDOWS USED WITH THIS MULLION SHALL BE QUALIFIED UNDER SEPARATE APPROVAL.
11. MULLION MATERIAL: 6063-T6 ALUMINUM.
12. CLIP MATERIAL: 16 GA CORROSION-RESISTANT STEEL
13. REINFORCEMENT KEY MATERIAL: 6063-T6 ALUMINUM.
14. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
 - A. WOOD - MINIMUM SPECIFIC GRAVITY OF 0.55.
 - B. STEEL - MINIMUM YIELD STRENGTH OF 33 KSI. MINIMUM 18 GA. WALL THICKNESS

TABLE OF CONTENTS	
SHEET	SHEET DESCRIPTION
1	MULLION ASSEMBLY ELEVATIONS & NOTES
2	MULLION VERTICAL SECTION DETAILS, AND ANCHORING
3	MULLION HORIZONTAL SECTION DETAILS, AND ANCHORING
4	SIDE-BY-SIDE MULLION DESIGN PRESSURE CHARTS
5	X-MULLION DESIGN PRESSURE CHARTS



VERTICAL MULLION FOR SIDE-BY-SIDE WINDOWS



VERTICAL MULLION FOR SIDE-BY-SIDE WINDOWS

W/ SIDE-BY-SIDE TRANSOMS

Digitally signed by Hermes F. Norero, P.E.
Reason: I am approving this document
Date: 2017.09.28 12:38:35 -04'00'



433 N. MAIN ST., PO BOX 559,
ROCKY MOUNT, VA 24151

PH: 540-484-6348 FX: 540-484-6683

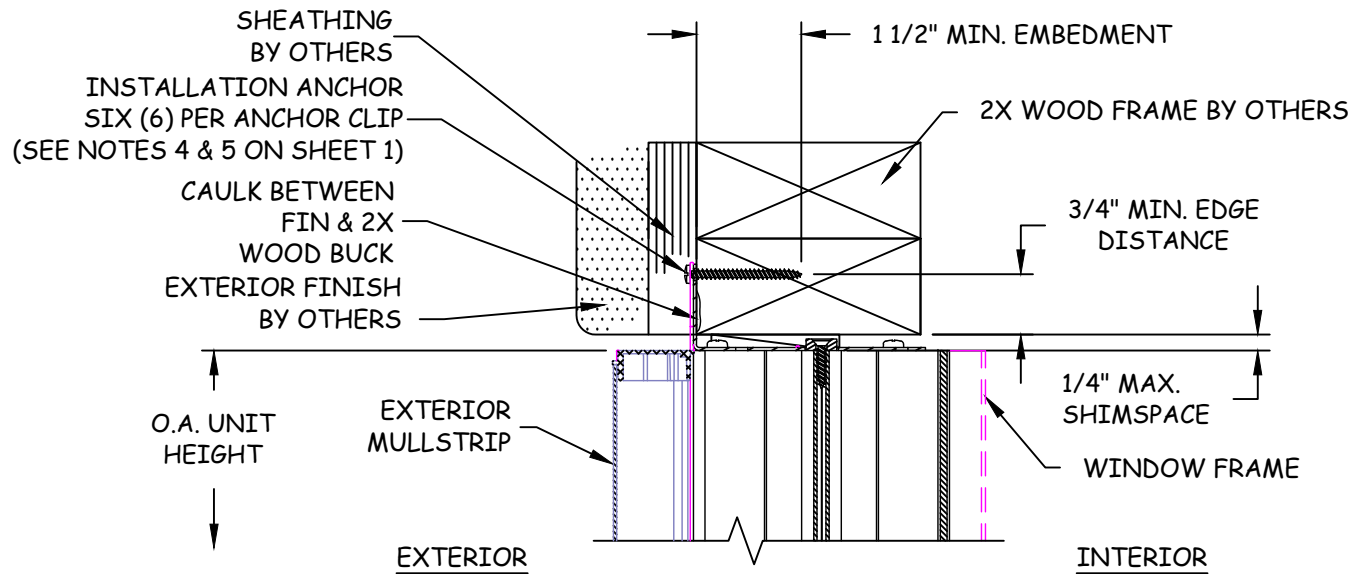
TITLE: PREMIUM MIRA VERTICAL MULLION	MULLION ASSEMBLY ELEVATIONS & NOTES
PREPARED BY:	BUILDING DROPS, INC. 398 E DANIA BEACH BLVD., # 338 DANIA BEACH, FL 33004 PH: (954) 399-8478 FX: (954) 744-4738

REVISIONS		BY	DATE
NO.	DESCRIPTION		
A	FBC 5TH EDITION UPDATE	SM	08.20.14
B	UPDATE NOTE 7, SHEETS 4 & 5	LWH	09.20.17



DATE: 02.13.12	DWN BY: GRN	CHK BY: HFN	SCALE: NTS
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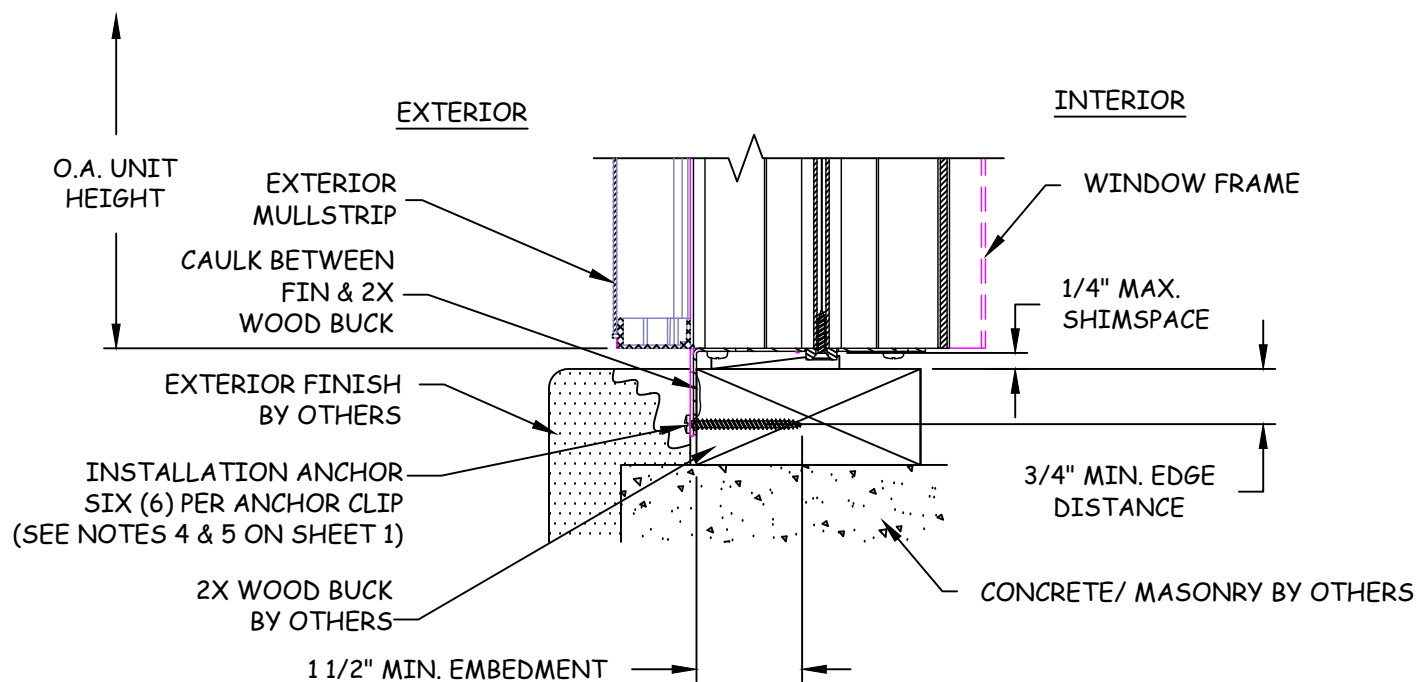
DWG #:	PGW095
SHEET:	1 OF 5



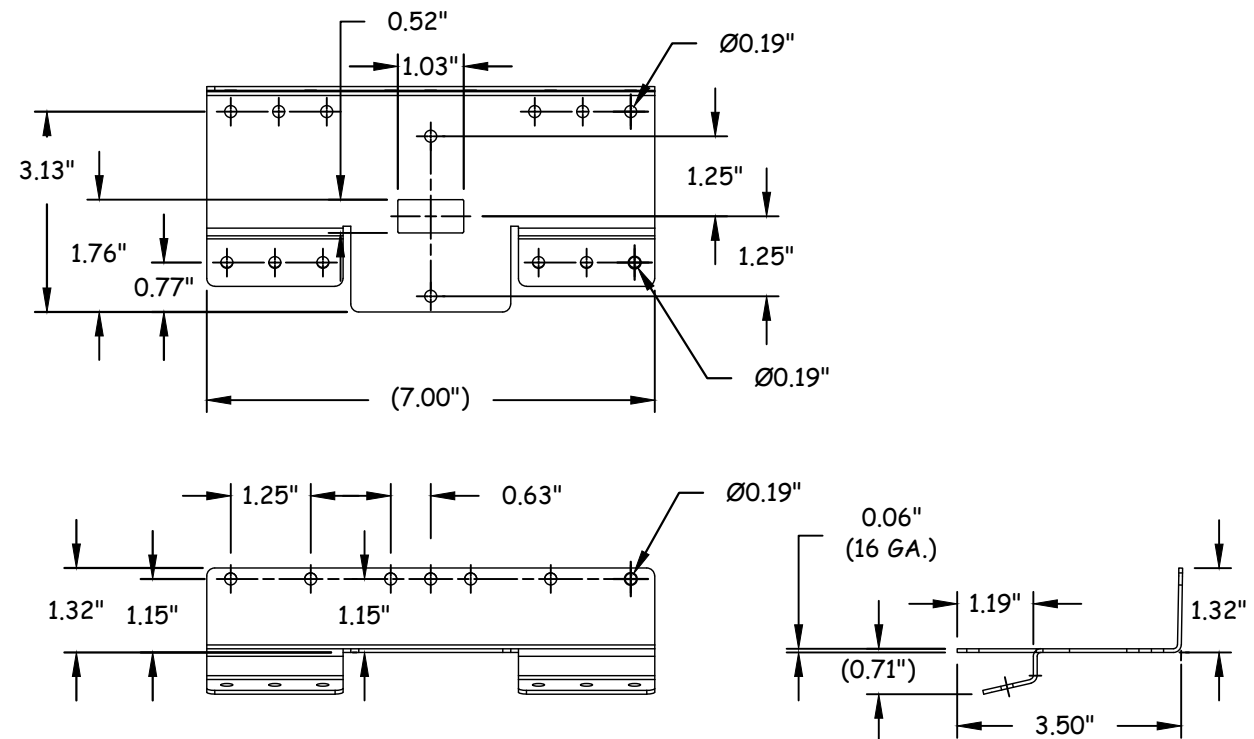
A
2 **VERTICAL SECTION**
HEAD - 2X WOOD FRAME
MULL ANCHOR CLIP



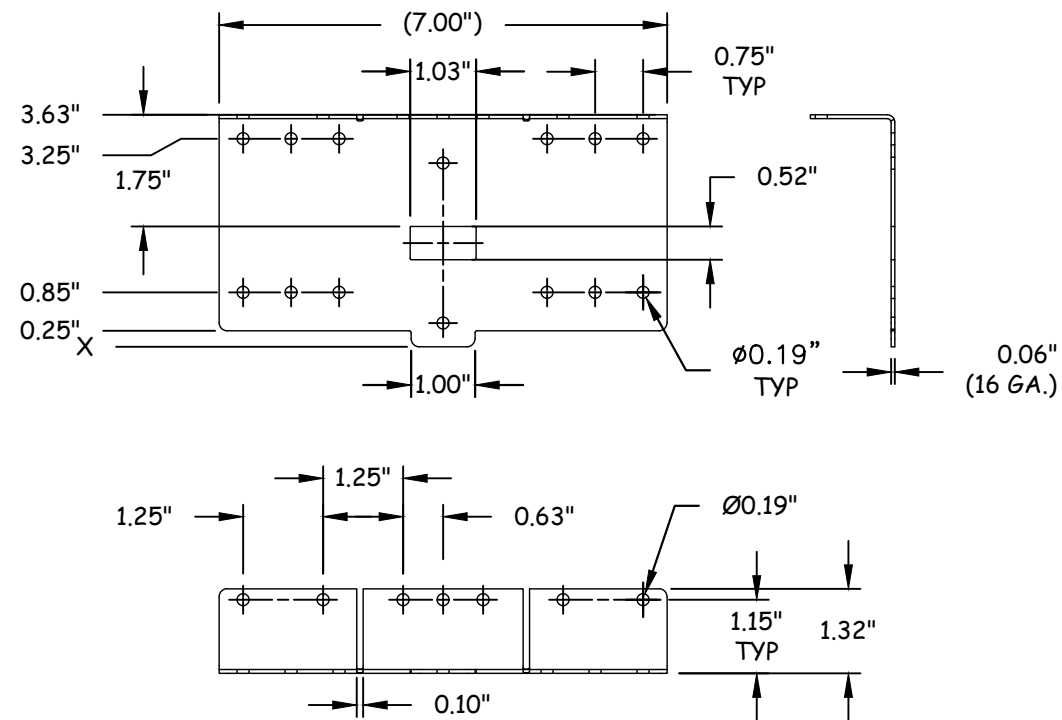
B
2 **HORIZONTAL SECTION**
PREMIUM MIRA MULL
Heavy: Die # 11419, Light: Die # 11421



C
2 **VERTICAL SECTION**
SILL - 2X WOOD BUCK
MULL ANCHOR CLIP



DOUBLE HUNG MULL CLIP
(253796)



STANDARD MULL CLIP
(253797)



433 N. MAIN ST., PO BOX 559,
ROCKY MOUNT, VA 24151

PH: 540-484-6348 FX: 540-484-6683

TITLE: PREMIUM MIRA VERTICAL
MULLION
MULLION VERTICAL SECTION
DETAILS & ANCHORING
PREPARED BY:
BUILDING DROPS, INC.
398 E DANIA BEACH BLVD., # 338
DANIA BEACH, FL 33004
PH: (954) 399-8478 FX: (954) 744-4738

REVISIONS

NO.	DESCRIPTION	BY	DATE
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2	UPDATE NOTE 7, SHEETS 4 & 5	LMH	09.20.17



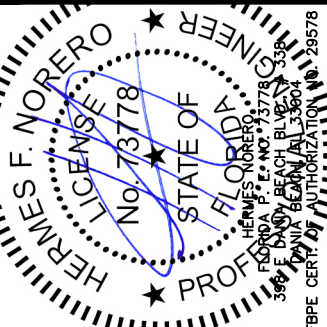
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DWN BY: GRN
CHK BY: HFN
SCALE: NTS

DWG #: **PGW095**

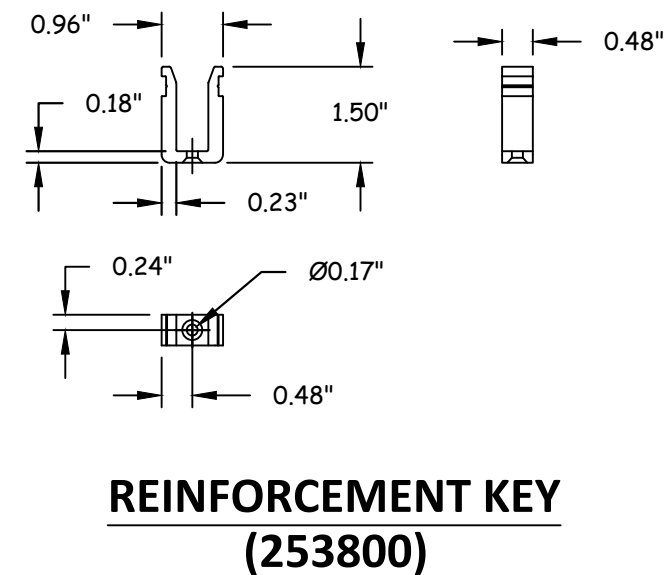
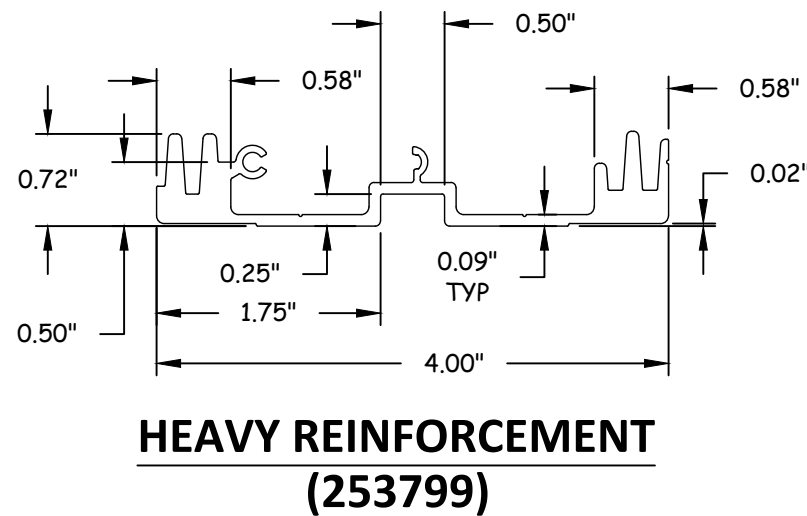
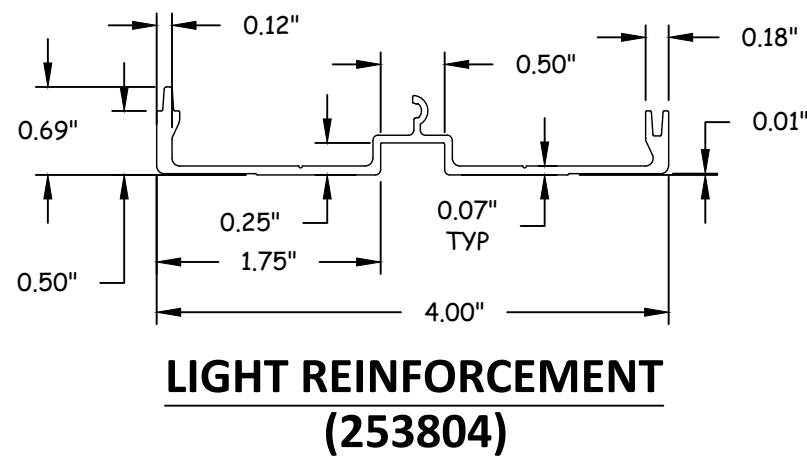
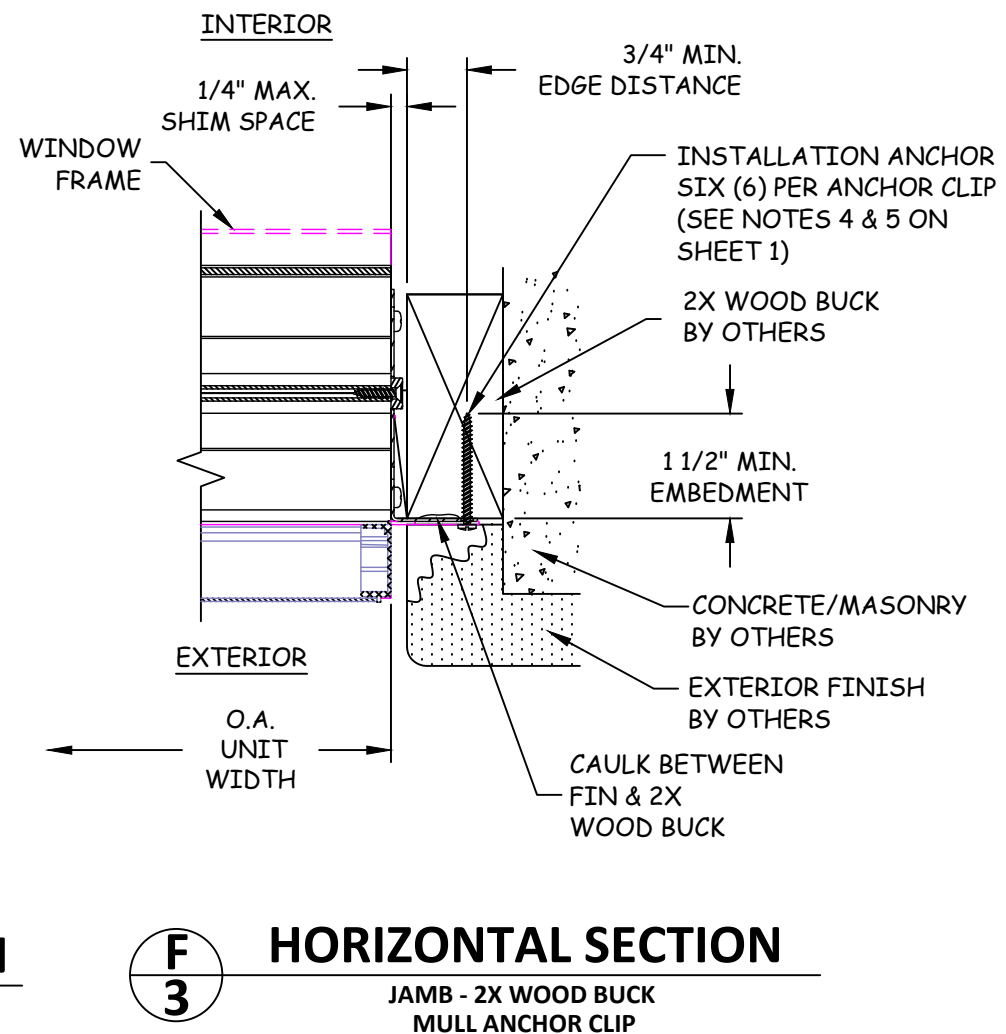
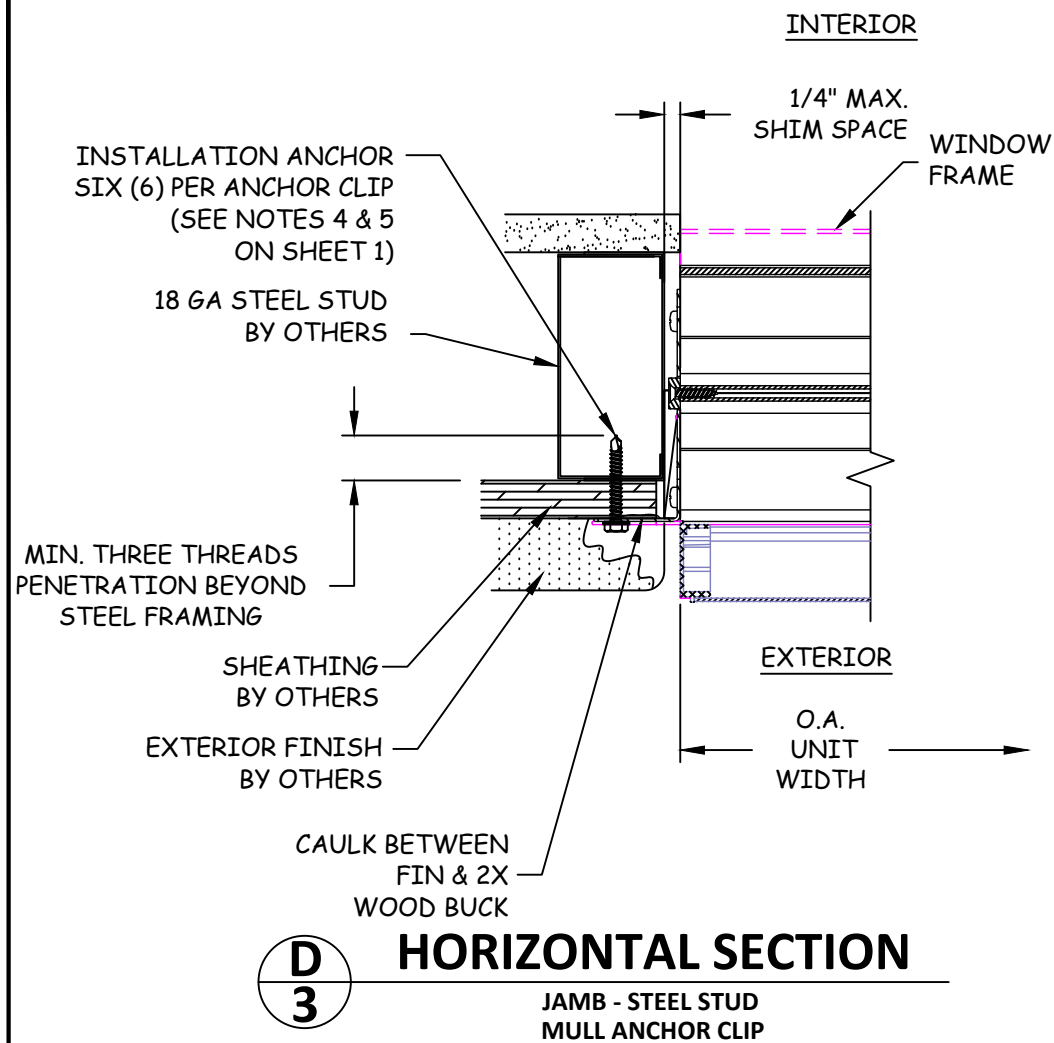
SHEET: **2 OF 5**

TITLE: PREMIUM MIRA VERTICAL MULLION	MULLION HORIZONTAL SECTION DETAILS & ANCHORING		PREPARED BY:	
			— BUILDING DROPS, INC. 398 E DANIA BEACH BLVD., # 338 DANIA BEACH, FL 33004 PH: (954) 399-8478 FX: (954) 744-4738	

REVISIONS	DESCRIPTION	BY	DATE	NO.
	FBC 5TH EDITION UPDATE	SM	08.20.14	A
	UPDATE NOTE 7, SHEETS 4 & 5	LMH	09.20.17	B



DATE:	02.13.12	DWN BY:	GRN	CHK BY:	HFN	SCALE:	NTS
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DESIGN PRESSURE CHARTS

FOR SIDE-BY-SIDE WINDOWS

(LIGHT REINFORCEMENT)

Maximum design pressure capacity chart (psf)

Aluminum Reinforcement/Mullion Design

Design pressures are limited either by mullion or anchor screws or anchor clip capacity

Height (in)	Individual Unit Width (in)														
	18.0	21.0	24.0	27.0	30.0	33.0	36.0	42.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0
16.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
20.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
24.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
28.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
32.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
36.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
40.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
44.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
48.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
52.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
56.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
60.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
64.0	100	100	100	100	100	100	100	100	99	93	93	93	93	93	93
66.0	100	100	100	100	100	100	100	100	95	88	88	88	88	88	88
70.0	100	100	100	100	100	100	100	93	86	79	78	78	78	78	78
74.0	100	100	100	100	100	100	95	86	79	72	70	70	70	70	70
84.0	100	100	100	100	92	86	80	72	66	59	55	54	54	54	54
94.0	100	100	97	88	80	75	70	62	57	50	46	44	43	43	43
108.0	100	89	80	72	66	61	57	50	45	39	35	33	32	31	31

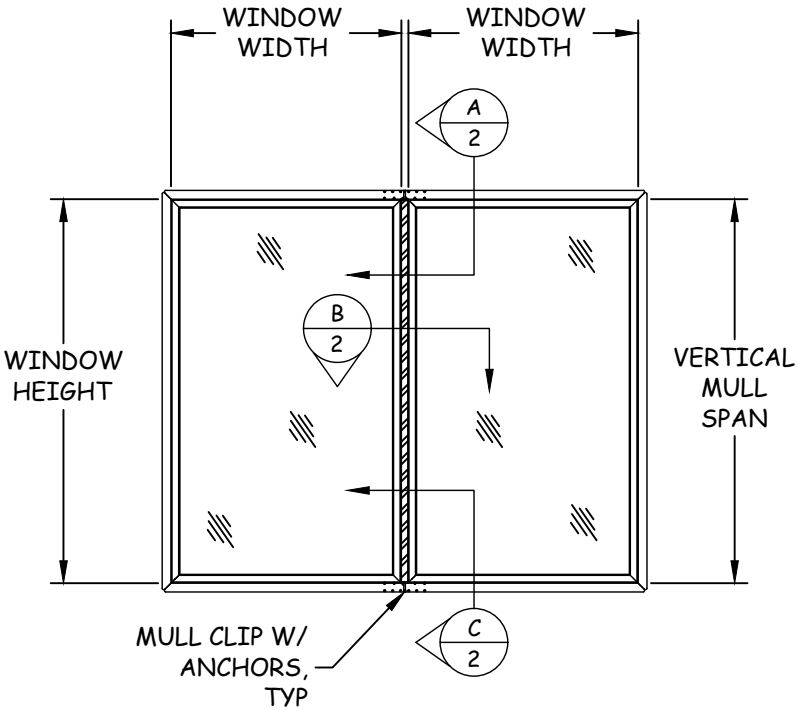
(HEAVY REINFORCEMENT)

Maximum design pressure capacity chart (psf)

Aluminum Reinforcement/Mullion Design

Design pressures are limited either by mullion or anchor screws or anchor clip capacity

Height (in)	Individual Unit Width (in)														
	18.0	21.0	24.0	27.0	30.0	33.0	36.0	42.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0
16.0	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
20.0	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
24.0	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
28.0	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
32.0	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
36.0	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
40.0	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
44.0	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
48.0	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
52.0	150	150	150	150	150	150	150	146	142	141	141	141	141	141	141
56.0	150	150	150	150	150	146	139	130	124	122	122	122	122	122	122
60.0	150	150	150	150	141	133	126	116	110	106	106	106	106	106	106
64.0	150	150	150	140	130	122	115	106	99	93	93	93	93	93	93
66.0	150	150	147	134	125	117	110	101	95	88	88	88	88	88	88
70.0	150	150	137	125	116	108	102	93	86	79	78	78	78	78	78
74.0	150	143	128	117	108	100	95	86	79	72	70	70	70	70	70
84.0	141	124	110	100	92	86	80	72	66	59	55	54	54	54	54
94.0	125	109	97	88	80	75	70	62	57	50	46	44	43	43	43
108.0	107	93	83	75	68	63	59	52	47	41	37	34	33	33	33



VERTICAL MULLION FOR
SIDE-BY-SIDE WINDOWS



433 N. MAIN ST., PO BOX 559,
ROCKY MOUNT, VA 24151

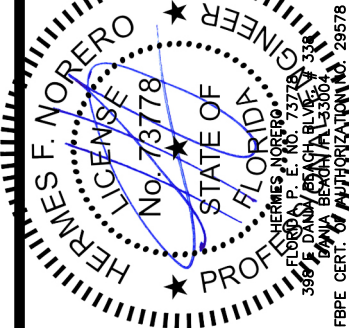
PH: 540-484-6348 FX: 540-484-6683

TITLE: PREMIUM MIRA VERTICAL
MULLION

SIDE BY SIDE MULLION
DESIGN PRESSURE CHARTS

PREPARED BY:
— BUILDING DROPS, INC.
398 E DANIA BEACH BLVD., # 338
DANIA BEACH, FL 33004
PH: (954) 399-8478 FX: (954) 744-4738

NO.	DESCRIPTION	BY	DATE
A	FBC 5TH EDITION UPDATE	SM	08.20.14
B	UPDATE NOTE 7, SHEETS 4 & 5	LMH	09.20.17



DATE: 02.13.12	DWN BY: GRN	CHK BY: HFN	SCALE: NTS
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DWG #:
PGW095

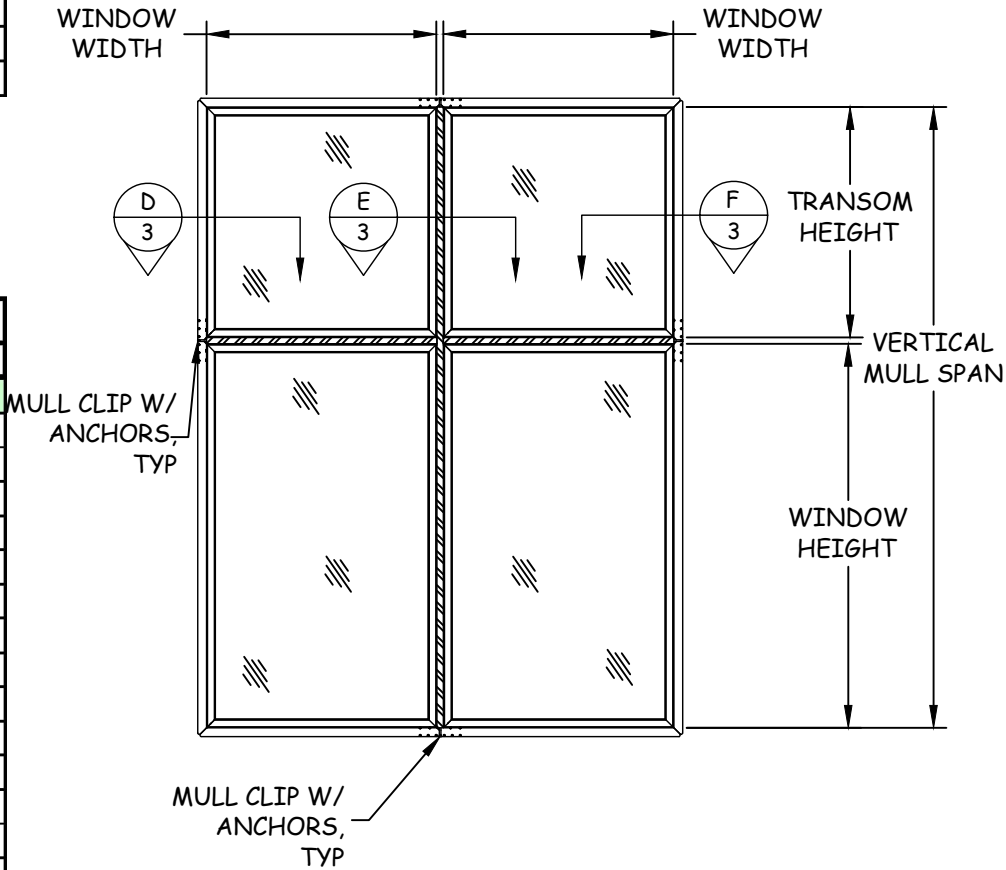
SHEET:
4 OF 5

DESIGN PRESSURE CHARTS

FOR SIDE-BY-SIDE WINDOWS W/ SIDE-BY-SIDE TRANSOMS

NOTES

- 1.THE DESIGN PRESSURES IN THIS CHART ARE FOR THE MULLIONS LISTED HERE WHEN USED WITH THE CLIP AND REINFORCEMENT KEY DETAILED IN THIS DOCUMENT.
- 2.FOR VERTICAL MULL CLIPS IN WOOD FRAMING INSTALLATION USE SIX (6) #8 WOOD SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEETS 2 & 3 FOR DETAILS.
- 3.FOR VERTICAL MULL CLIPS IN STEEL FRAMING INSTALLATION USE SIX (6) #8 TEK SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM 3 THREADS PENETRATION BEYOND STEEL STRUCTURE. SEE SHEETS 2 & 3 FOR DETAILS.
- 4.CHARTS APPLY ONLY TO PREMIUM MIRA EXTRUDED MULLIONS AS SPECIFIED HERE WHEN USED TO MULL STACKED UNITS SIDE-BY-SIDE WITH STACKED UNITS USING A VERTICALLY CONTINUOUS MULL.
- 5.READ WINDOW WIDTH AND MULL SPAN IN INCHES. DESIGN PRESSURE VALUES ON THIS CHART ARE POSITIVE AND NEGATIVE PSF.
- 6.DESIGN PRESSURE VALUES APPLY TO MULLION WHERE TWO OR MORE WINDOWS ARE LISTED IN A SINGLE OPENING.
- 7.REFER TO REPORT #5102 FOR MORE MULLION SPECIFICATIONS.



VERTICAL MULLION FOR
SIDE-BY-SIDE WINDOWS
W/ SIDE-BY-SIDE TRANSOMS

Aluminum Reinforcement/Mullion Design

Design pressures are limited either by mullion or anchor screws or anchor clip capacity

									Vertically Continuous				Light Reinforcement			
Height (in)	Transom Height	Individual Unit Width (in)														
		18.0	21.0	24.0	27.0	30.0	33.0	36.0	42.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0
16.0	8.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
20.0	10.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	84
24.0	12.0	100	100	100	100	100	100	100	100	100	100	100	100	100	85	69
28.0	14.0	100	100	100	100	100	100	100	100	100	100	100	95	84	72	59
32.0	16.0	100	100	100	100	100	100	100	100	100	100	93	82	73	62	51
36.0	18.0	100	100	100	100	100	100	100	100	100	94	81	71	64	54	45
40.0	20.0	100	100	100	100	100	100	100	100	98	83	72	63	56	48	40
44.0	22.0	100	100	100	100	100	100	100	96	87	74	64	56	51	43	36
48.0	24.0	100	100	100	100	100	100	96	86	78	66	58	51	46	39	32
52.0	26.0	100	100	100	100	100	93	87	78	70	60	52	46	42	36	29
56.0	28.0	100	100	100	100	92	85	80	71	64	54	48	42	38	33	27
60.0	30.0	100	100	100	92	85	79	73	65	59	50	44	39	35	30	25
64.0	32.0	100	100	95	86	78	73	68	60	54	46	40	36	32	28	23
66.0	33.0	100	100	91	83	76	70	65	58	52	44	38	33	29	27	22
70.0	35.0	100	94	83	74	68	62	57	50	45	37	31	28	25	22	20
74.0	37.0	91	79	70	63	57	52	48	42	37	31	26	23	21	19	17
84.0	42.0	62	54	47	42	38	35	33	28	25	21	18	16	14	13	11
94.0	47.0	44	38	34	30	27	25	23	20	18	15	12	11	10	9	8
108.0	54.0	29	25	22	20	18	16	15	13	12	9	8	7	6	6	5

Maximum design pressure capacity chart (psf)

Aluminum Reinforcement/Mullion Design

Design pressures are limited either by mullion or anchor screws or anchor clip capacity

		Vertically Continuous										Heavy Reinforcement				
Height (in)	Transom Height	Individual Unit Width (in)														
		18.0	21.0	24.0	27.0	30.0	33.0	36.0	42.0	48.0	60.0	72.0	84.0	96.0	108.0	120.0
16.0	8.0	150	150	150	150	150	150	150	150	150	150	150	150	150	139	125
20.0	10.0	150	150	150	150	150	150	150	150	150	150	150	150	138	122	109
24.0	12.0	150	150	150	150	150	150	150	150	150	150	150	129	113	100	90
28.0	14.0	150	150	150	150	150	150	150	150	150	150	127	109	95	84	76
32.0	16.0	150	150	150	150	150	150	150	150	144	130	108	93	82	73	65
36.0	18.0	150	150	150	150	150	147	138	124	112	94	81	71	64	57	52
40.0	20.0	150	150	150	150	139	129	121	108	98	83	72	63	56	51	46
44.0	22.0	150	150	147	134	123	115	107	96	87	74	64	56	51	46	42
48.0	24.0	150	148	132	121	111	103	96	86	78	66	58	51	46	41	38
52.0	26.0	150	134	120	109	101	93	87	78	70	60	52	46	42	38	35
56.0	28.0	141	124	110	100	92	85	80	71	64	54	48	42	38	35	32
60.0	30.0	131	114	102	92	85	79	73	65	59	50	44	39	35	32	29
64.0	32.0	122	106	95	86	78	73	68	60	54	46	40	36	32	29	27
66.0	33.0	118	103	91	83	76	70	65	58	52	44	39	35	31	28	26
70.0	35.0	110	96	85	77	71	65	61	54	49	41	36	32	29	26	24
74.0	37.0	104	90	80	72	66	61	57	50	45	38	33	30	27	25	23
84.0	42.0	91	78	69	62	56	52	48	41	37	30	26	23	20	18	17
94.0	47.0	64	56	49	44	40	36	34	29	26	21	18	16	14	13	12
108.0	54.0	42	36	32	29	26	24	22	19	17	14	12	10	9	8	8



433 N. MAIN ST., PO BOX 559,
ROCKY MOUNT, VA 24151

PH: 540-484-6348 FX: 540-484-6683

TITLE: PREMIUM MIRA VERTICAL
MULLION

X-MULLION
DESIGN PRESSURE CHARTS

PREPARED BY:
BUILDING DROPS, INC.
398 E DANIA BEACH BLVD., # 338
DANIA BEACH, FL 33004
PH: (954) 399-8478 FX: (954) 744-4738

REVISIONS	NO.	DESCRIPTION	BY	DATE
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	B	UPDATE NOTE 7, SHEETS 4 & 5	LWH	09.20.17



DATE: 02.13.12	DWN BY: GRN	CHK BY: HFN	SCALE: NTS
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DWG #:
PGW095

SHEET:
5 OF 5