

PLY GEM WINDOWS

4700 FLANGE 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 4700 FLANGE ALUMINUM EXTRUDED MULL WITH ALUMINUM ANCHOR CLIP WHEN USED TO MULL WINDOWS WITH A HORIZONTALLY OR 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 #10 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 3/16" ITW TAPCON SCREWS OF SUFFICIENT LENGTH TO ACHIEVE MINIMUM EMBEDMENT OF 1 1/4" INTO CONCRETE/MASONRY SUBSTRATE. (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 PRODUCTS.
10. ALL WINDOWS USED WITH THIS MULLION SHALL BE QUALIFIED UNDER SEPARATE APPROVAL.
11. MULLION MATERIAL: 6063-T6 ALUMINUM.
12. CLIP MATERIAL: 6063-T6 ALUMINUM
13. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:

A. WOOD - MINIMUM SPECIFIC GRAVITY OF 0.55.

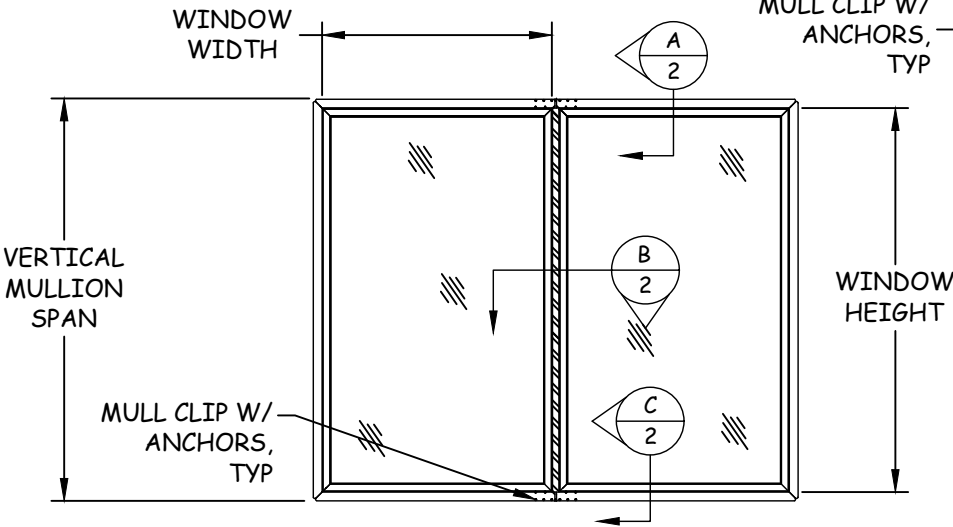
B. CONCRETE -MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.

C. GROUT-FILLED CMU- UNIT STRENGTH CONFORMS TO ASTM C-90 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AND GROUT CONFORMS TO ASTM C 476, MINIMUM GROUT COMPRESSIVE STRENGTH OF 2000 PSI.

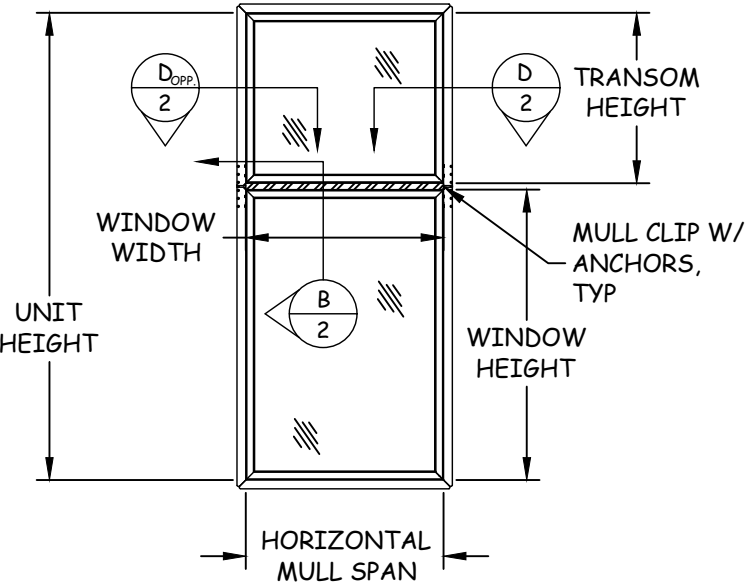
D. HOLLOW BLOCK CMU - UNIT STRENGTH CONFORMS TO ASTM C-90 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.

E. STEEL - MINIMUM YIELD STRENGTH OF 33 KSI. MINIMUM 18 GA. WALL THICKNESS.

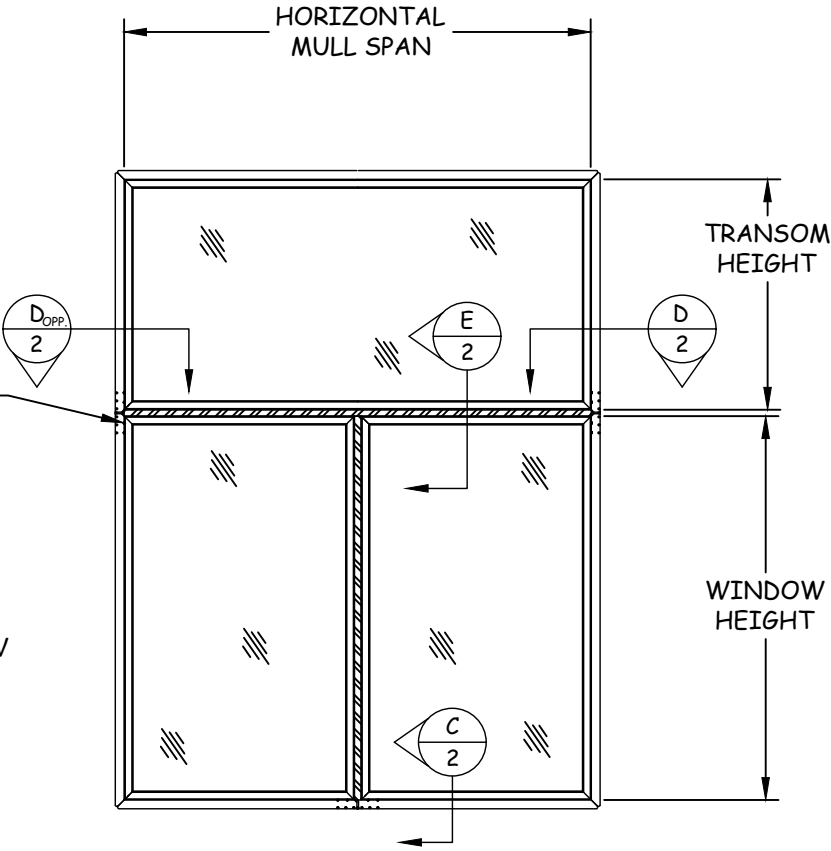
TABLE OF CONTENTS	
SHEET	SHEET DESCRIPTION
1	MULLION ASSEMBLY ELEVATIONS & NOTES
2	MULL VERTICAL & HORI. SECTION DETAILS AND ANCHORING
3	MULLION COMPONENT DETAILS
4	HORIZONTAL MULLION DESIGN PRESSURE CHARTS
5	VERTICAL MULLION DESIGN PRESSURE CHARTS



VERTICAL (TWIN) MULLION FOR SIDE-BY-SIDE WINDOWS



HORIZONTAL MULLION FOR WINDOW WITH TRANSOM



HORIZONTAL MULLION FOR SIDE-BY-SIDE WINDOWS W/ TRANSOM

Digitally signed by Hermes F. Norero, P.E.
Reason: I am approving this document
Date: 2017.10.16 20:14:47 -04'00'



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

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

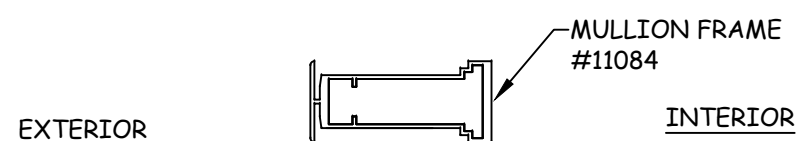
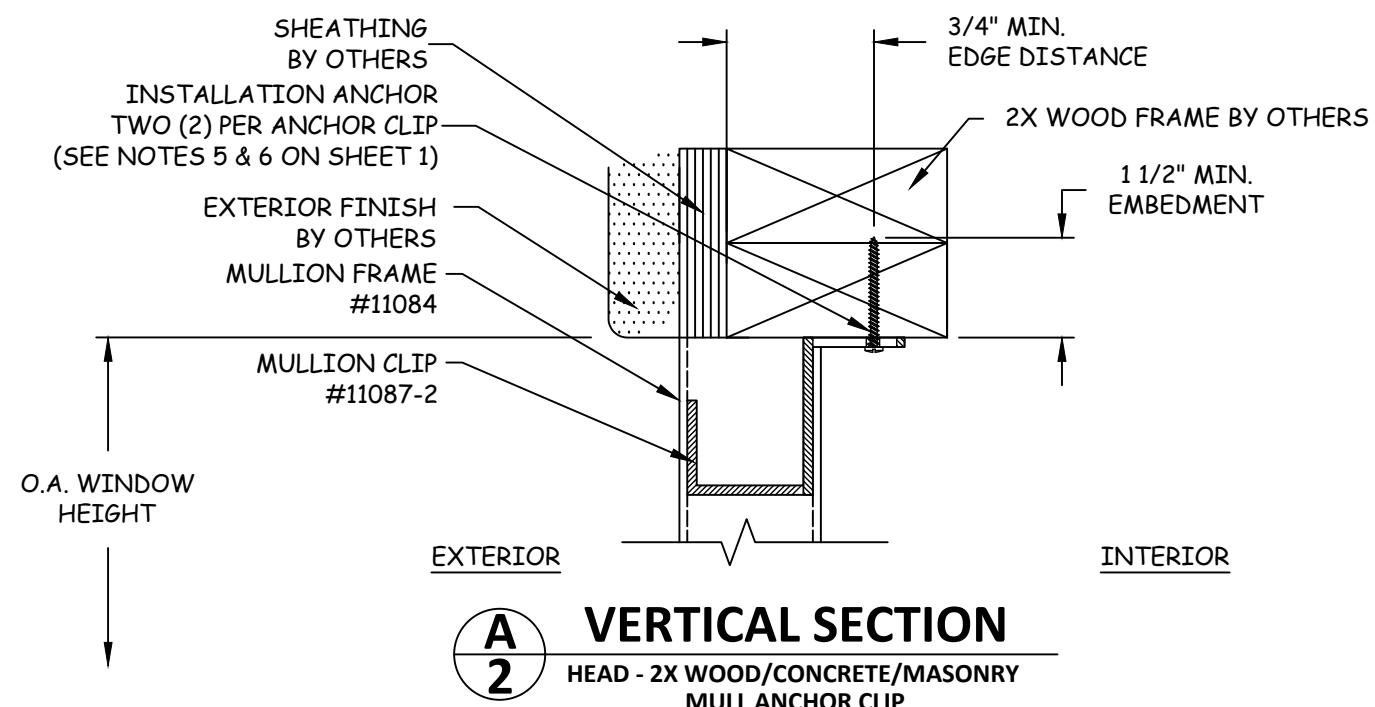
TITLE: 4700 FLANGE MULLION	MULLION ASSEMBLY ELEVATIONS & NOTES		PREPARED BY:	
			BUILDING DROPS, INC. 398 E. DANIA BEACH BLVD. #338 DANIA BEACH, FL 33004 PH: (954) 399-8478 FX: (954) 744-4738	

REVISIONS	NO.	DESCRIPTION	BY	DATE
	A	5TH EDITION FBC UPDATE	SM	08.05.14
	B	UPDATED NOTE 7, SHEETS 4 & 5	LWH	09.27.17
	C	UPDATED NOTE 13, SHEETS 1	LWH	10.16.17



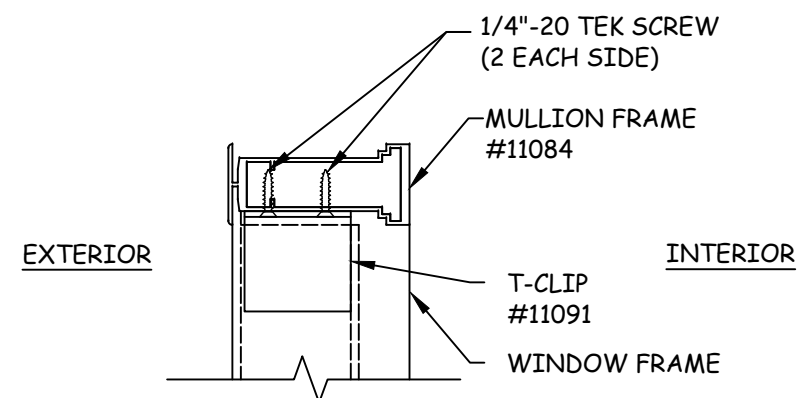
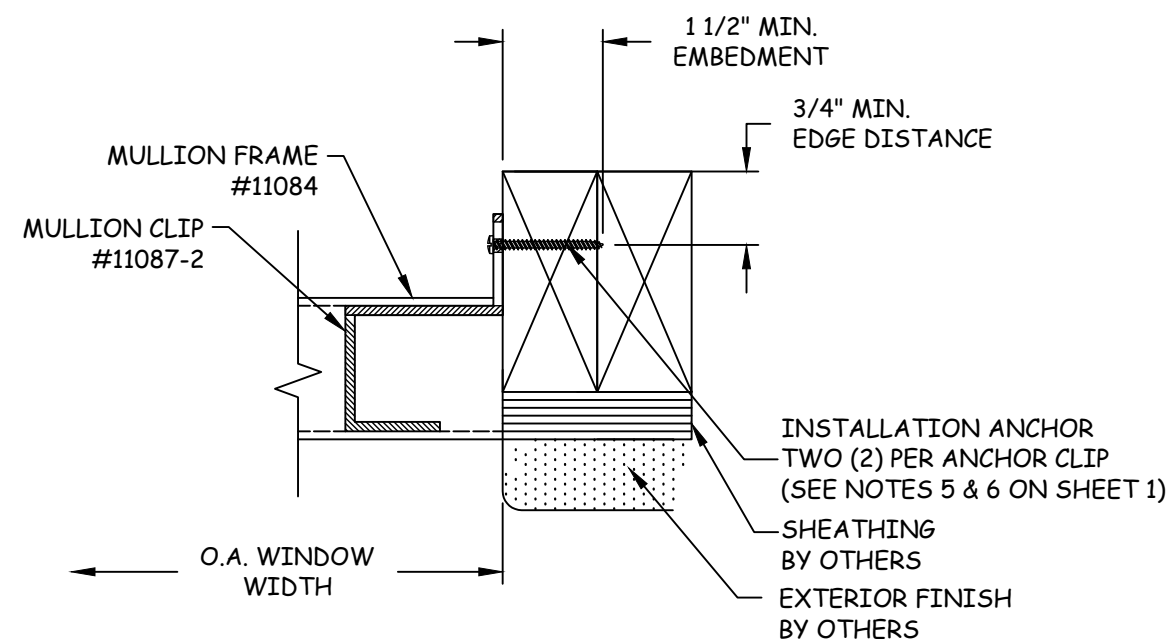
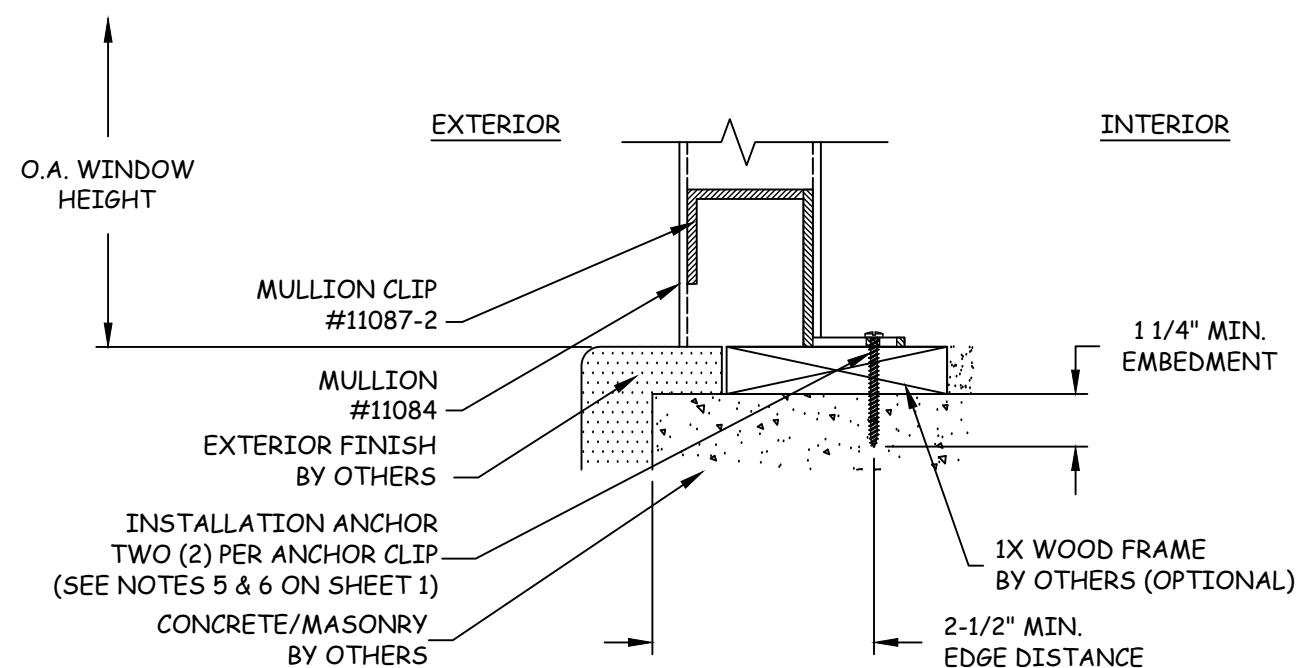
DATE: 02.21.12	DWN BY: GRN	CHK BY: HFN	SCALE: NTS
----------------	-------------	-------------	------------

DWG #:	PGW131
SHEET:	1 OF 5



B
2

VERTICAL SECTION
4700 FLANGE MULLION



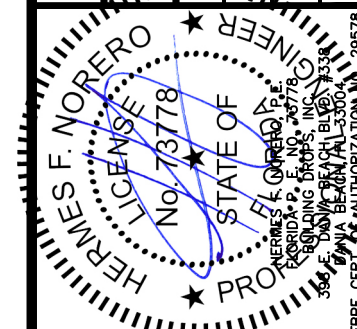
433 N. MAIN ST., PO BOX 559,
ROCKY MOUNT, VA 24151

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

TITLE: 4700 FLANGE MULLION
MULL VERTICAL & HORT. SECTION DETAILS AND 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
A	5TH EDITION FBC UPDATE	SM	08.05.14
B	UPDATED NOTE 7, SHEETS 4 & 5	LWH	09.27.17
C	UPDATED NOTE 13, SHEETS 1	LWH	10.16.17

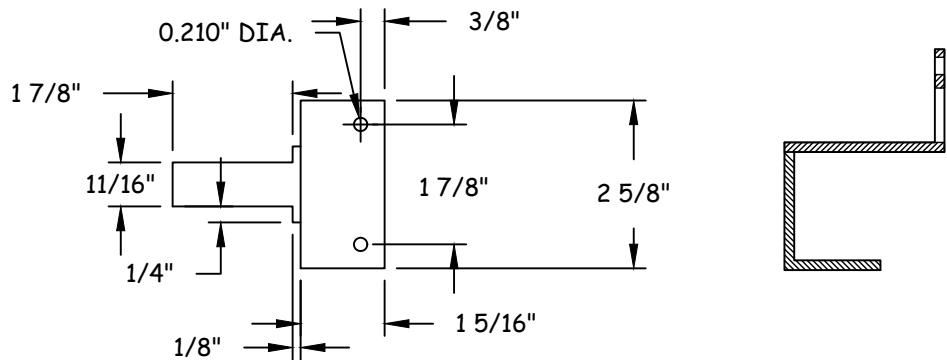


DATE: 02.21.12
DWN BY: GRN
CHK BY: HFN
SCALE: NTS

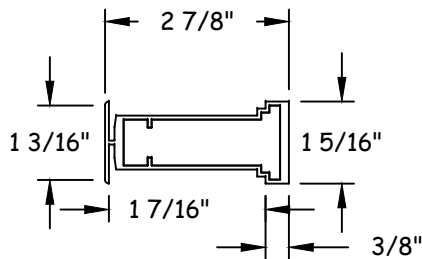
DWG #:

PGW131

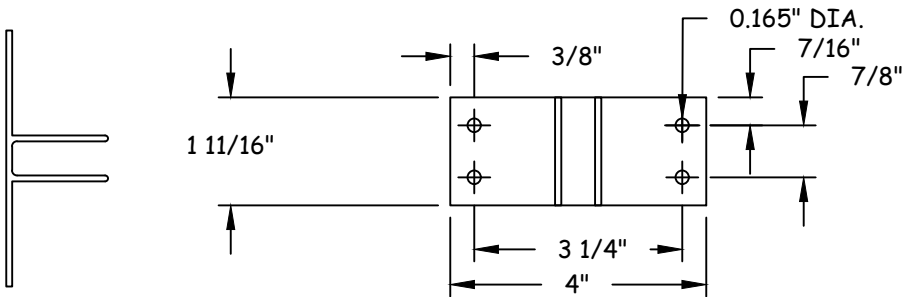
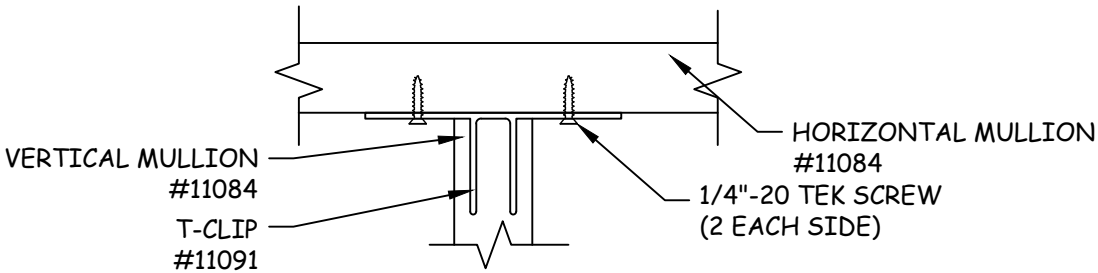
SHEET: **2 OF 5**



ANCHOR CLIP #11087-2
6063-T6 ALUMINUM



4700 FLANGE MULLION (#11084)
6063-T6 ALUMINUM



T-CLIP #11091
6063-T6 ALUMINUM
USED TO MULL VERTICAL MULLION
TO HORIZONTAL MULLION



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

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

TITLE: 4700 FLANGE MULLION	MULLION COMPONENT DETAILS		PREPARED BY:	
			BUTLIDING 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
		A	5TH EDITION FBC UPDATE	SM	08.05.14
		B	UPDATED NOTE 7, SHEETS 4 & 5	LWH	09.27.17
		C	UPDATED NOTE 13, SHEETS 1	LWH	10.16.17



DATE: 02.21.12	DWN BY: GRN	CHK BY: HFN	SCALE: NTS
-------------------	----------------	----------------	---------------

DWG #:
PGW131
SHEET: **3 OF 5**

DESIGN PRESSURE CHARTS

FOR CONTINUOUS HORIZONTAL MULLION

Maximum design pressure capacity chart

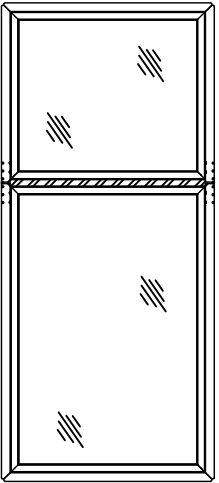
Series 4700 Horizontal mullion, single with transom (11084)

Design pressures are limited either by mullion or anchor screw or anchor clip capacity.

Height (in)		Unit width (in)											
Window	Transom	18.0	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0	45.0	48.0	53.0
24.0	12.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
30.0	15.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
36.0	18.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
42.0	21.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
48.0	24.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
54.0	27.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
60.0	30.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	74.3
66.0	33.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	72.5
72.0	36.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	71.0

NOTES

1. THE DESIGN PRESSURES IN THIS CHART ARE FOR THE MULLIONS LISTED HERE WHEN USED WITH THE CLIP DETAILED IN THIS DOCUMENT.
2. FOR MULL CLIPS IN WOOD FRAMING INSTALLATION USE TWO (2) #10 WOOD SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEET 2 FOR DETAILS.
3. FOR MULL CLIPS IN CONCRETE/MASONRY INSTALLATION USE TWO (2) 3/16" ITW TAPCON SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEET 2 FOR DETAILS.
4. CHARTS APPLY ONLY TO 4700 FLANGE MULLION EXTRUDED MULLIONS AS SPECIFIED HERE WHEN USED TO MULL WINDOWS IN AN OVER-UNDER ORIENTATION WITH A HORIZONTALLY CONTINUOUS MULL.
5. READ WINDOW HEIGHT 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 PER 5111 FOR MORE MULLION SPECIFICATIONS.



Maximum design pressure capacity chart (psf)

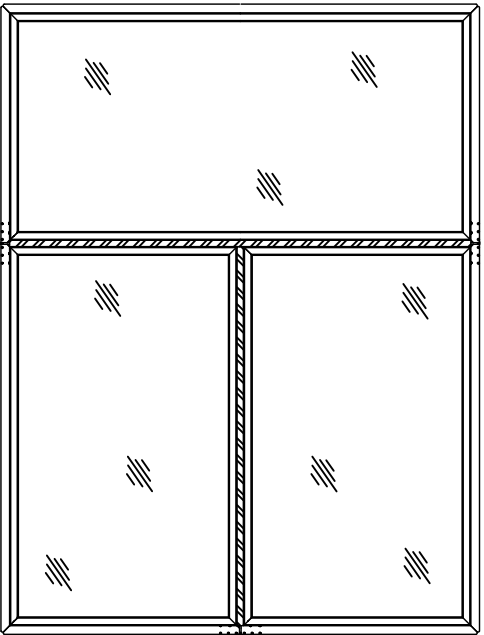
Series 4700 Horizontal mullion, twin with transom (11084)

Design pressures are limited either by mullion or anchor screw or anchor clip capacity.

Height (in)		Unit width (in)											
Window	Transom	36.0	42.0	48.0	54.0	60.0	66.0	72.0	78.0	84.0	90.0	96.0	106.0
24.0	12.0	75.0	75.0	75.0	75.0	75.0	75.0	74.6	63.4	54.5	44.2	36.3	26.8
30.0	15.0	75.0	75.0	75.0	75.0	75.0	71.7	60.1	51.0	43.9	35.9	29.4	21.7
36.0	18.0	75.0	75.0	75.0	75.0	73.2	60.2	50.4	42.8	36.8	30.4	24.9	18.3
42.0	21.0	75.0	75.0	75.0	73.7	63.3	52.0	43.5	36.9	31.8	26.5	21.7	15.9
48.0	24.0	75.0	72.0	65.7	60.9	55.9	45.9	38.4	32.5	28.0	23.5	19.2	14.1
54.0	27.0	70.0	62.1	56.3	51.9	48.5	41.1	34.4	29.1	25.0	21.2	17.3	12.7
60.0	30.0	61.8	54.6	49.2	45.2	42.0	37.3	31.2	26.4	22.6	19.3	15.8	11.6
66.0	33.0	55.3	48.7	43.8	40.0	37.1	34.2	28.5	24.2	20.7	17.8	14.5	10.7
72.0	36.0	50.0	43.9	39.4	35.9	33.2	31.0	26.4	22.3	19.1	16.5	13.5	9.9

NOTES

1. THE DESIGN PRESSURES IN THIS CHART ARE FOR THE MULLIONS LISTED HERE WHEN USED WITH THE CLIP DETAILED IN THIS DOCUMENT.
2. FOR MULL CLIPS IN WOOD FRAMING INSTALLATION USE TWO (2) #10 WOOD SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEET 2 FOR DETAILS.
3. FOR MULL CLIPS IN CONCRETE/MASONRY INSTALLATION USE TWO (2) 3/16" ITW TAPCON SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEET 2 FOR DETAILS.
4. CHARTS APPLY ONLY TO 4700 FLANGE MULLION EXTRUDED MULLIONS AS SPECIFIED HERE WHEN USED TO MULL WINDOWS IN A SIDE-BY-SIDE ORIENTATION WITH CONTINUOUS TRANSOM AND HORIZONTALLY CONTINUOUS MULL.
5. READ WINDOW HEIGHT 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 PER 5111 FOR MORE MULLION SPECIFICATIONS.



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

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

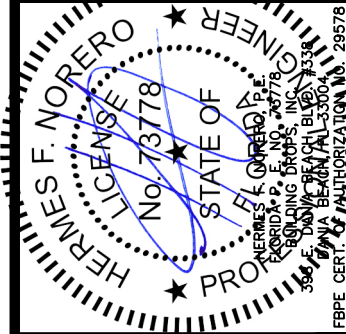
TITLE: 4700 FLANGE MULLION

HORIZONTAL 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
A	5TH EDITION FBC UPDATE	SM	08.05.14
B	UPDATED NOTE 7, SHEETS 4 & 5	LWH	09.27.17
C	UPDATED NOTE 13, SHEETS 1	LWH	10.16.17



DATE: 02.21.12
DWN BY: GRN
CHK BY: HFN
SCALE: NTS

DWG #: PGW131
SHEET: 4 OF 5

DESIGN PRESSURE CHARTS

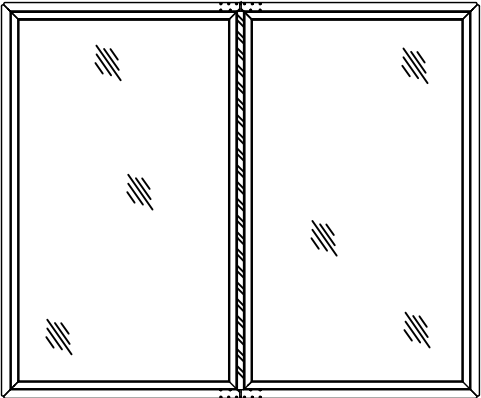
FOR CONTINUOUS VERTICAL MULLION

Maximum design pressure capacity chart (psf)

Series 4700 Vertical Mullion (Twin) (11084)

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

Height (in)	Unit Width (in)											
	18.0	21.0	24.0	27.0	30.0	33.0	36.0	39.0	42.0	45.0	48.0	53.0
24.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
30.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
36.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
42.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
48.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
54.0	75.0	75.0	75.0	75.0	75.0	75.0	73.0	70.3	68.2	66.7	65.6	64.5
60.0	75.0	75.0	75.0	74.6	68.3	63.3	59.3	56.1	53.5	51.4	49.8	47.9
62.0	75.0	75.0	75.0	69.6	63.6	58.9	55.1	52.0	49.5	47.4	45.8	43.9
66.0	75.0	75.0	67.7	60.9	55.6	51.3	47.9	45.1	42.7	40.8	39.3	37.3
68.0	75.0	71.9	63.6	57.2	52.1	48.1	44.8	42.1	39.9	38.1	36.5	34.6
72.0	74.0	63.9	56.5	50.7	46.2	42.5	39.5	37.1	35.0	33.3	31.9	30.0
84.0	52.2	45.0	39.7	35.6	32.4	29.7	27.6	25.8	24.3	23.1	22.0	20.5



NOTES

1. THE DESIGN PRESSURES IN THIS CHART ARE FOR THE MULLIONS LISTED HERE WHEN USED WITH THE CLIP DETAILED IN THIS DOCUMENT.
2. FOR MULL CLIPS IN WOOD FRAMING INSTALLATION USE TWO (2) #10 WOOD SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/2" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEET 2 FOR DETAILS.
3. FOR MULL CLIPS IN CONCRETE/MASONRY INSTALLATION USE TWO (2) 3/16" ITW TAPCON SCREWS AT EACH ANCHOR CLIP. MUST BE OF SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO FRAMING. SEE SHEET 2 FOR DETAILS.
4. CHARTS APPLY ONLY TO 4700 FLANGE MULLION EXTRUDED MULLIONS AS SPECIFIED HERE WHEN USED TO MULL SIDE-BY-SIDE WINDOWS WITH 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 PER 5111 FOR MORE MULLION SPECIFICATIONS.



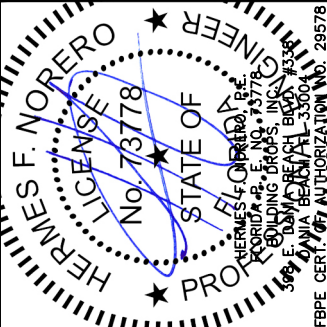
433 N. MAIN ST., PO BOX 559,
ROCKY MOUNT, VA 24151

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

TITLE: 4700 FLANGE MULLION
VERTICAL 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
1	5TH EDITION FBC UPDATE	SM	08.05.14
2	UPDATED NOTE 7, SHEETS 4 & 5	LWH	09.27.17
3	UPDATED NOTE 13, SHEETS 1	LWH	10.16.17



DATE: 02.21.12	DWN BY: GRN	CHK BY: HFN	SCALE: NTS
-------------------	----------------	----------------	---------------

DWG #:
PGW131
SHEET: **5 OF 5**