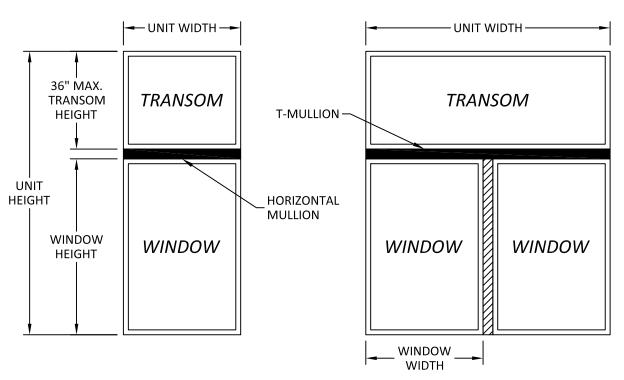
# **SHOWCASE CUSTOM WINDOWS AND DOORS**

## HORIZONTAL & T-REINFORCED MULLION (IMPACT)



HORIZONTAL MULLION CAPACITY												
HEIGH	IT (IN.)	UNIT WIDTH (IN.)										
WINDOW	TRANSOM	18.0	21.0	24.0	27.0	30.0	36.0	39.0	42.0	45.0	48.0	53.0
24.0	36.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	69.3
30.0	36.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	64.8
36.0	36.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	61.7
42.0	36.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	59.7
48.0	36.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	69.7	58.6
54.0	36.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	69.7	58.4
60.0	36.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	69.7	58.4
63.0	36.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	69.7	58.4
66.0	36.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	69.7	58.4
72.0	36.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	69.7	58.4
78.0	36.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	69.7	58.4
84.0	36.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	69.7	58.4

T-MULLION CAPACITY													
HEIGH	1T (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	36.0	70.0	70.0	70.0	67.5	58.4	51.4	46.0	41.5	37.9	34.8	32.2	27.4
30.0	36.0	70.0	70.0	70.0	63.0	54.3	47.7	42.6	38.4	35.0	32.1	29.7	24.6
36.0	36.0	70.0	70.0	69.7	59.1	51.1	44.9	40.0	36.0	32.7	30.0	27.6	22.4
42.0	36.0	70.0	70.0	65.5	55.7	48.3	42.5	37.9	34.1	31.0	28.3	25.3	20.5
48.0	36.0	70.0	70.0	61.7	52.6	45.7	40.3	36.0	32.5	29.5	26.7	23.3	18.9
54.0	36.0	70.0	70.0	58.4	49.9	43.4	38.4	34.3	30.9	28.1	24.7	21.6	17.6
60.0	36.0	70.0	66.3	55.4	47.4	41.3	36.6	32.7	29.6	26.6	23.1	20.2	16.4
63.0	36.0	70.0	64.6	54.0	46.3	40.4	35.7	32.0	28.9	25.7	22.3	19.5	15.9
66.0	36.0	70.0	63.0	52.7	45.2	39.5	34.9	31.3	28.3	24.9	21.6	18.9	15.4
72.0	36.0	70.0	59.9	50.2	43.1	37.7	33.5	30.0	27.1	23.4	20.3	17.8	14.5
78.0	36.0	70.0	57.1	48.0	41.3	36.2	32.1	28.8	25.8	22.1	19.2	16.8	13.7
84.0	36.0	67.0	54.6	46.0	39.6	34.7	30.8	27.7	24.4	20.9	18.2	15.9	13.0

#### DESIGN PRESSURE TABLE INSTRUCTION:

- 1. DEFINE REQUIRED DESIGN LOAD PER INTERNATIONAL BUILDING CODE OR INTERNATIONAL RESIDENTIAL CODE.
- 2. DETERMINE UNIT HEIGHT AND MULLION SPAN BASED ON PRODUCT TO BE INSTALLED.
- 3. LOCATE MULLION SPAN (UNIT WIDTH) AND UNIT HEIGHT. AT THE INTERSECTION OF ROW AND COLUMN CONTAINING THE MULLION SPAN AND UNIT HEIGHT RESPECTIVELY IS THE MULLION RATING FOR PRODUCT IN STEP 2.

  MULLION RATING MUST BE EQUAL OR GREATER THAN REQUIRED DESIGN PRESSURE OBTAINED IN STEP 1.

	TABLE OF CONTENTS						
SHEET	SHEET DESCRIPTION						
1	ELEVATION, NOTES AND DESIGN PRESSURE CHAR						
2	INSTALLATION DETAILS AND BILL OF MATERIALS						
3	INSTALLATION DETAILS						
4	COMPONENTS						

#### NOTES:

- 1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 2018 INTERNATIONAL BUILDING CODE (IBC) AND 2018 INTERNATIONAL RESIDENTIAL CODE (IRC).
- WOOD FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
- 4. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS ZONE 3 OR LESS.
- 5. APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS ZONE 4.
- DESIGN PRESSURE AND INSTALLATION DETAILS SHOWN IN THIS DOCUMENT APPLY ONLY TO THE MULLION. WINDOWS MUST BE APPROVED UNDER SEPARATE APPROVAL.
- 7. SINGLE UNITS TO BE MULLED ARE NOT LIMITED TO THOSE SHOWN IN THIS DRAWING.
- 8. DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL WINDOW UNIT.
- 9. FOR USE WITH APPLICABLE SHOWCASE PRODUCTS.



12613 CITYPARK DRIVE, SUITE 100 MISSOURI CITY, TX 77489 PH: (713) 926-8500

(IMPACT)

NO NOTES AND DESIGN
RESSURE CHART

ELEVATION, NOTES
PRESSURE CI

BUILDING I
398 E. DANIA BEA

 REMARKS
 BY
 DATE

 A. CHANGE OF P.E.
 LS
 12.10.15

 B. REV. ANCHOR & DP 70
 MS
 05.06.16

 C. RE-EVALUATION
 MS
 12.21.21

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



HERMES F. NORERO, P.E. TEXAS P.E. No 118471 BUILDING DROPS, INC 398 E. DANIA BEACH BLVD. # 338 DANIA BEACH, FL 33004 TBPE FIRM No. 13734

DATE:

03.12.14

DWG. BY:

CHK. BY:
HFN
NTS

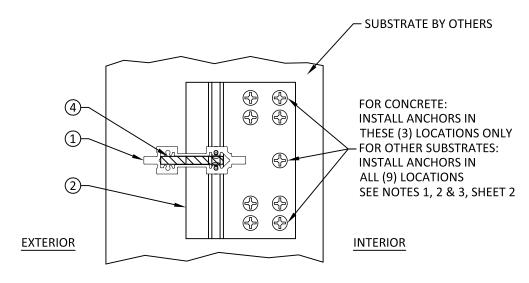
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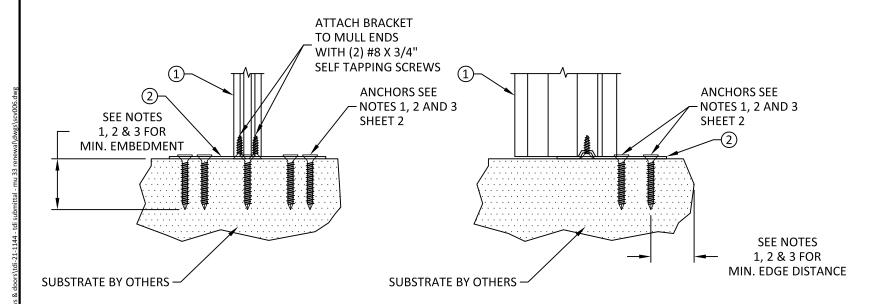
DWG. #: SCV006

SHEET:



OF 4





STEEL MULLION BRACKET 10203000 **INSTALLATION DETAILS** SILL, HEAD AND JAMBS TYP.

### **ANCHOR NOTES:**

- 1. FOR ANCHORING MULLION BRACKET OR MULL CLIP INTO MASONRY/CONCRETE USE 3/16" ITW TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 5/8" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 2. FOR ANCHORING MULLION BRACKET OR MULL CLIP INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 3/4" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 3. FOR ANCHORING MULLION BRACKET OR MULL CLIP INTO METAL FRAMING USE #10 TEK SELF TAPPING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A MINIMUM EMBEDMENT OF THREE THREADS PAST SUBSTRATE WITH 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 4. FOR WINDOW UNIT ANCHORING TO VERTICAL MULLION SEE INDIVIDUAL WINDOW APPROVAL INSTALLATION INSTRUCTIONS.
- 5. FOR WINDOW UNIT ANCHORING SCHEDULE TO SUBSTRATE REFER TO INDIVIDUAL WINDOW APPROVAL INSTALLATION INSTRUCTIONS.
- 6. ALL FASTENERS TO BE CORROSION RESISTANT.
- 7. 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 BELOW:
  - A. WOOD MINIMUM SPECIFIC GRAVITY OF G = 0.42
  - CONCRETE MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.
  - MASONRY STRENGTH CONFORMANCE TO ASTM C-90.
  - STEEL MIN. 16 GA. TENSILE YIELD STRENGTH OF 33 KSI
  - ALUMINUM MIN. 0.125" THICK, 6063-T5 (f'y=16000 PSI)

12613 CITYPARK DRIVE, SUITE 100 MISSOURI CITY, TX 77489 PH: (713) 926-8500

-E: HORIZONTAL & T
-REINFORCED MULLION
(IMPACT)
INSTALLATION DETAILS AND
BILL OF MATERIALS DROPS, EACH BLVD., STE ACH, FL 33004 BUILDING I

•	1		-
REMARKS		ВΥ	DATE
A. CHANGE OF P.E.		LS	12.10.15
B. REV. ANCHOR & I	DP 70	MS	05.06.16
C. RE-EVALUATION		MS	12.21.21

AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECI SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIA FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSEL
ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.



HERMES F. NORERO, P.E. TEXAS P.E. No 118471 BUILDING DROPS, INC 398 E. DANIA BEACH BLVD. # 338 DANIA BEACH, FL 33004 TBPE FIRM No. 13734

03.12.14 DATE:

DWG. BY: SSM CHK. BY: HFN

NTS

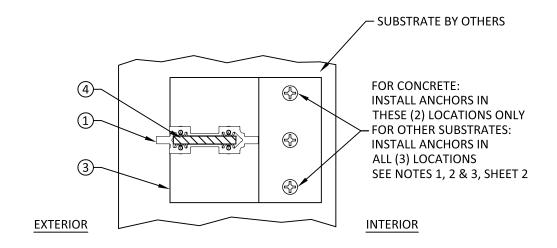
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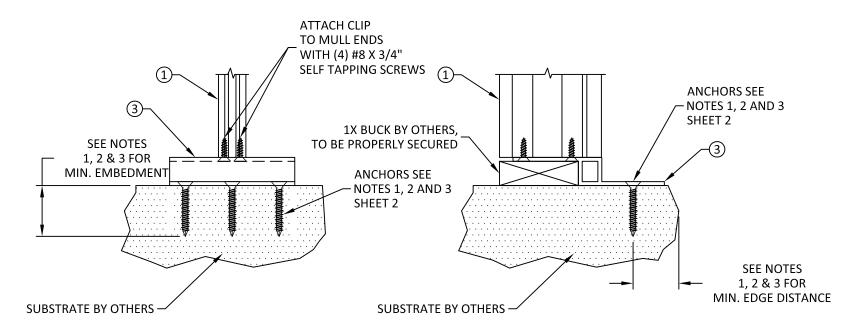
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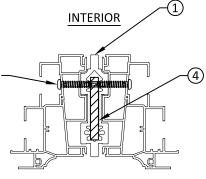


OF 4





#8 PH SCREW MIN. 3 THREADS PENETRATION, 4" FROM CORNERS, 12" MAX. O.C. AT EACH SIDE, 1/2" OFFSET



**EXTERIOR** 

12613 CITYPARK DRIVE, SUITE 100 MISSOURI CITY, TX 77489 PH: (713) 926-8500

> BUILDING DROPS, II 398 E. DANIA BEACH BLVD., STE. DANIA BEACH, 133004 PH: (954)399-8478 FAX: (954)744.4738 INSTALLATION DETAILS

HORIZONTAL & T -REINFORCED MULLION (IMPACT)

REMARKS BY DATE A. CHANGE OF P.E. LS 12.10.15 B. REV. ANCHOR & DP 70 MS 05.06.10 C. RE-EVALUATION MS 12.21.21

AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFI 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. TEXAS P.E. No 118471 BUILDING DROPS, INC 398 E. DANIA BEACH BLVD. # 338 DANIA BEACH, FL 33004 TBPE FIRM No. 13734

03.12.14 DATE:

DWG. BY: SSM

CHK. BY: HFN NTS

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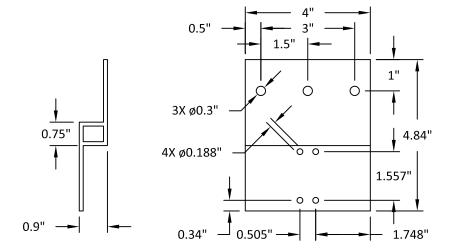
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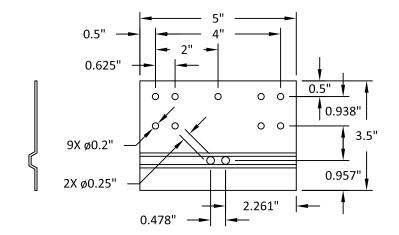
OF 4

**MULLION CLIP 10300093** INSTALLATION DETAILS SILL, HEAD AND JAMBS TYP.

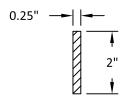
10300085 ALUMINUM VERTICAL MULLION ALUMINUM 6005-T5 0.075" THICK MINIMUM



10300093 MULLION CLIP ALUMINUM 6005-T5 0.125" THICKNESS



10203000 STEEL MULLION BRACKET 15 GA. GALVANIZED STEEL



MULLION REINFORCEMENT STEEL 1/4" THICKNESS



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BUILDING DROPS, INC. 398 E. DANIA BEACH BLVD., STE 338 DANIA BEACH, FI 33004 PH: (954)399-8478 FAX: (954)744,4738 HORIZONTAL & T -REINFORCED MULLION (IMPACT) COMPONENTS

REMARKS DATE A. CHANGE OF P.E. LS 12.10.1 B. REV. ANCHOR & DP 70 MS 05.06.10 C. RE-EVALUATION MS 12.21.2

THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERI AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFI 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. TEXAS P.E. No 118471 BUILDING DROPS, INC 398 E. DANIA BEACH BLVD. # 338 DANIA BEACH, FL 33004 TBPE FIRM No. 13734

03.12.14 DATE:

DWG. BY: SSM CHK. BY: HFN

SCALE:

NTS SCV006 DWG. #:

SHEET:



OF 4