

SEE CLIP INSTALLATION  
DETAIL, TYPICAL.

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

NOTES:

- 1) THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE AND THE RESIDENTIAL BUILDING CODE WITH STATE OF TEXAS MODIFICATIONS.
- 2) WOOD FRAMING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
- 3) 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 UP TO WIND ZONE 3.
- 5) DESIGN PRESSURE AND INSTALLATION DETAILS SHOWN IN THIS DOCUMENT APPLY ONLY TO MULLION. WINDOWS MUST BE APPROVED UNDER SEPARATE APPROVAL.
- 6) SINGLE WINDOWS TO BE MULLED ARE NOT LIMITED TO THOSE SHOWN IN THIS DRAWING. WINDOWS MUST BE MANUFACTURED BY WinDoor INC.
- 7) DESIGN PRESSURE OF MULLED UNIT SHALL BE CONTROLLED BY THE LESSER DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL WINDOW OR DOOR UNIT.
- 8) UNITS MAY BE MULLED TOGETHER INDEFINITELY AS LONG AS SINGLE UNIT WIDTH AND HEIGHT ARE NOT EXCEEDED AND MULLION IS ANCHORED AS SHOWN HEREIN.
- 9) MULLION VERTICAL INSTALLATION IS SHOWN, MULLION MAY BE USED IN HORIZONTAL APPLICATIONS AS LONG AS DIMENSIONS INDICATED HEREIN ARE NOT EXCEEDED AND MULLION IS ANCHORED ACCORDING TO THIS DOCUMENT.

Maximum Design Pressure (psf)								
Mullion span (in)	Tributary width (in)							
	24.00	30.00	36.00	42.00	48.00	54.00	60.00	
24.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
30.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
36.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
42.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
48.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
54.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
55.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
66.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
72.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
78.00	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
84.00	150.0	150.0	150.0	150.0	150.0	149.7	142.2	
90.00	150.0	150.0	150.0	150.0	145.5	135.4	128.0	
96.00	150.0	150.0	150.0	141.4	126.8	115.9	107.7	
102.00	150.0	150.0	133.8	116.8	104.4	95.2	88.1	
108.00	150.0	132.6	112.1	97.6	87.1	79.1	73.0	
114.00	139.1	112.4	94.8	82.5	73.4	66.6	61.3	
120.00	119.0	96.1	81.0	70.3	62.5	56.6	51.9	

IMPACT RATED UP TO WIND ZONE 3

$$\text{TRIBUTARY WIDTH} = \frac{W1 + W2}{2}$$

DESIGN PRESSURE TABLE INSTRUCTIONS:

- 1) DEFINE REQUIRED DESIGN LOAD PER BUILDING CODE CHAPTER 16.
- 2) DETERMINE TRIBUTARY WIDTH AND MULLION SPAN BASED ON PRODUCT TO BE INSTALLED. SEE FORMULA FOR TRIBUTARY WIDTH.
- 3) LOCATE MULLION SPAN (UNIT HEIGHT) AND TRIBUTARY WIDTH. AT THE INTERSECTION OF ROW AND COLUMN CONTAINING THE MULLION SPAN AND TRIBUTARY WIDTH 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.

SIGNED: 07/24/2012

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1	ELEVATIONS, NOTES AND DESIGN PRESSURE CHART
2	BILL OF MATERIALS AND COMPONENTS
3	ASSEMBLED VIEW AND INSTALLATION DETAIL
4 - 5	INSTALLATION DETAILS

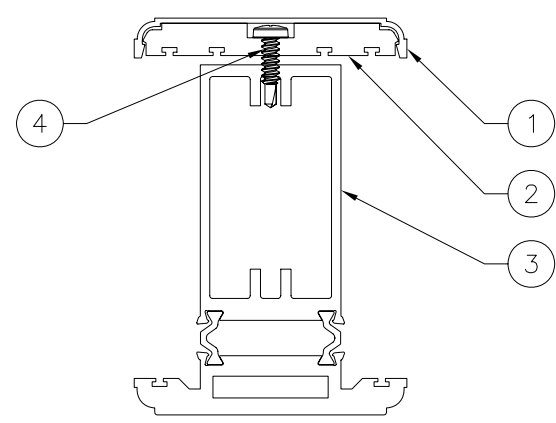
<b>WinDoor</b> INCORPORATED		7500 AMSTERDAM DRIVE ORLANDO, FL 32832 Phone: 407.481.8400 Fax: 407.481.0505 www.windoorinc.com	
9020 FIELD MULLION LMI AND SMI WIND ZONE 3 120" SPAN ELEVATION AND NOTES			
DRAWN: V.L.	DWG NO. 08-01682	REV -	
SCALE NTS	DATE 07/19/12	SHEET 1 OF 4	



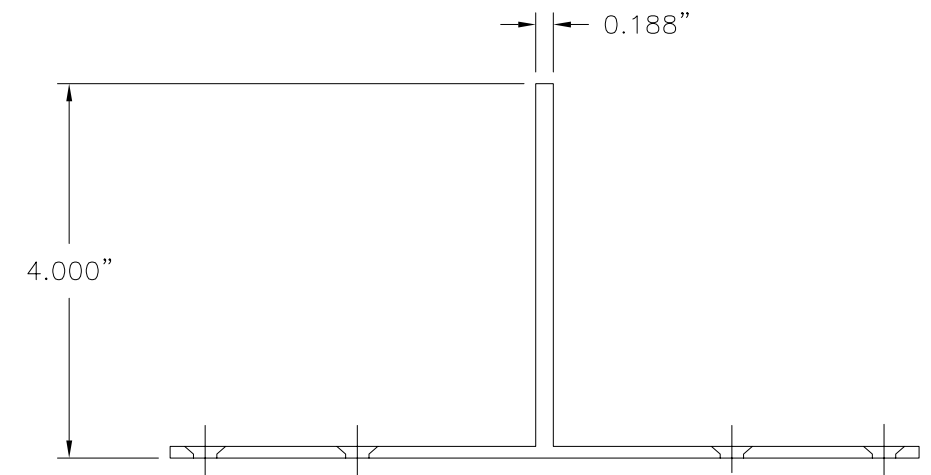
Luis R. Lomas P.E.  
TX No.: 101889

PARTS LIST				
NO.	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1	S-49673	180° FIELD MULL PLATE COVER	KEYMARK	ALUMINUM 6063-T6
2	S-49672	180° FIELD MULL PLATE	KEYMARK	ALUMINUM 6105-T6
3	S-9020A4-WDI	180° FIELD MULL ASSEMBLY	KEYMARK	ALUMINUM 6063-T6
4	131009	#10X3/4" PH SELF DRILLING SCREW		STAINLESS STEEL

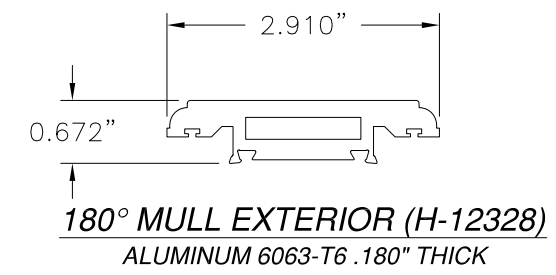
REVISIONS			
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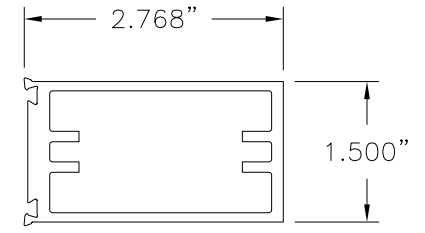
**MULLION ASSEMBLY DETAIL**  
MOMENT OF INERTIA: 7.612in<sup>4</sup>  
(MI PER TIR-A8 SOFTWARE)



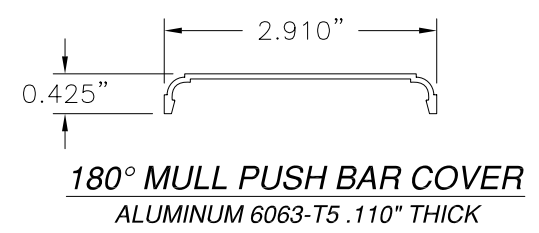
**MULL T-CLIP**  
ALUMINUM 6063-T6 .125" THICK



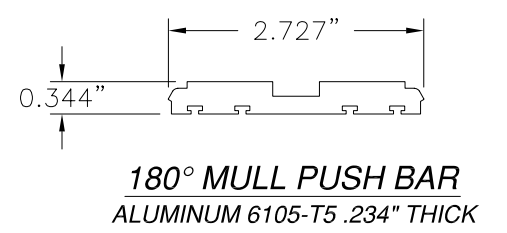
**180° MULL EXTERIOR (H-12328)**  
ALUMINUM 6063-T6 .180" THICK



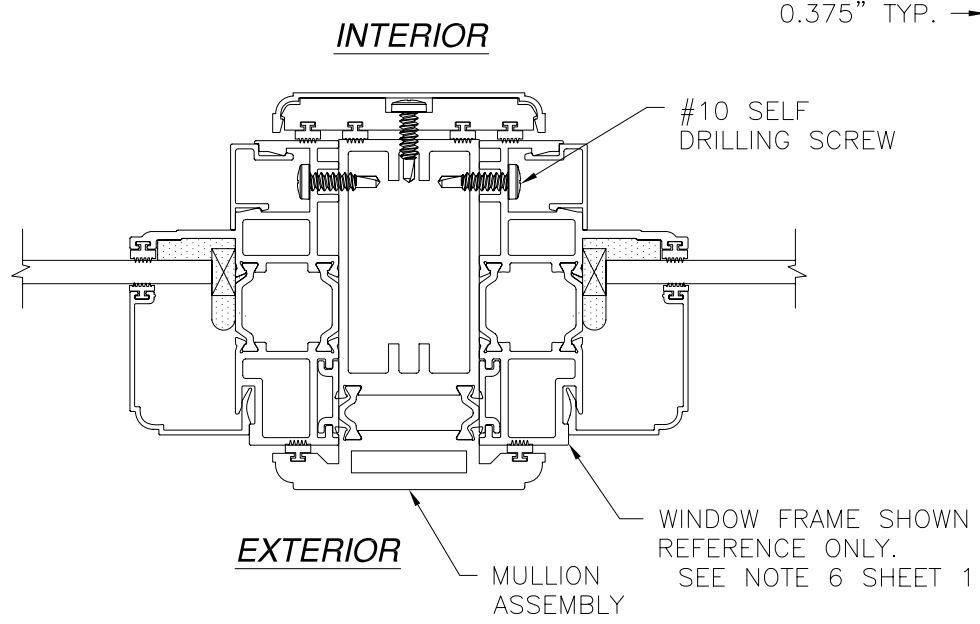
**180° MULL INTERIOR (H-12329)**  
ALUMINUM 6063-T6 .125" THICK



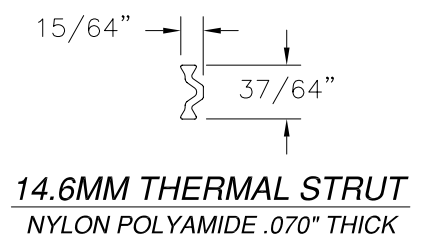
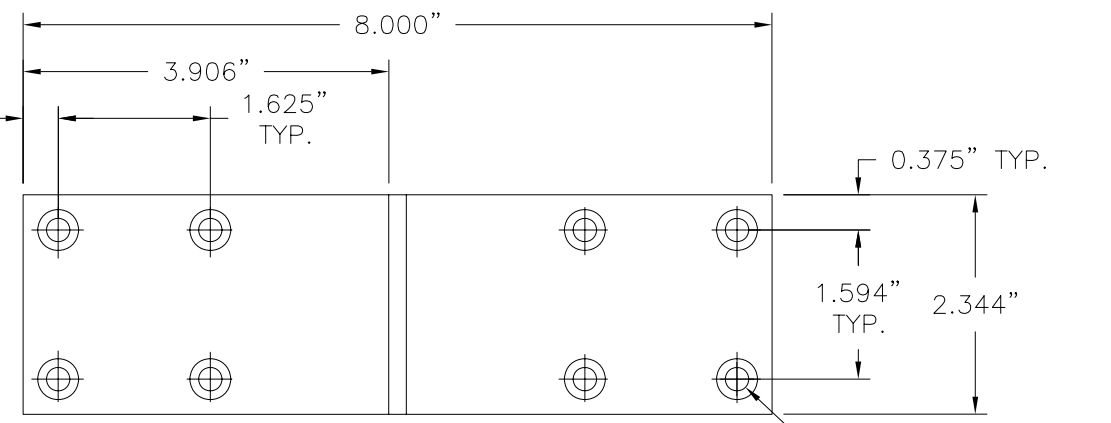
**180° MULL PUSH BAR COVER**  
ALUMINUM 6063-T5 .110" THICK



**180° MULL PUSH BAR**  
ALUMINUM 6105-T5 .234" THICK



**WINDOW TO MULLION  
INSTALLATION DETAIL**  
WINDOW FRAME SHOWN FOR DETAIL  
PURPOSES ONLY, MULLION IS NOT LIMITED  
TO THIS PRODUCT

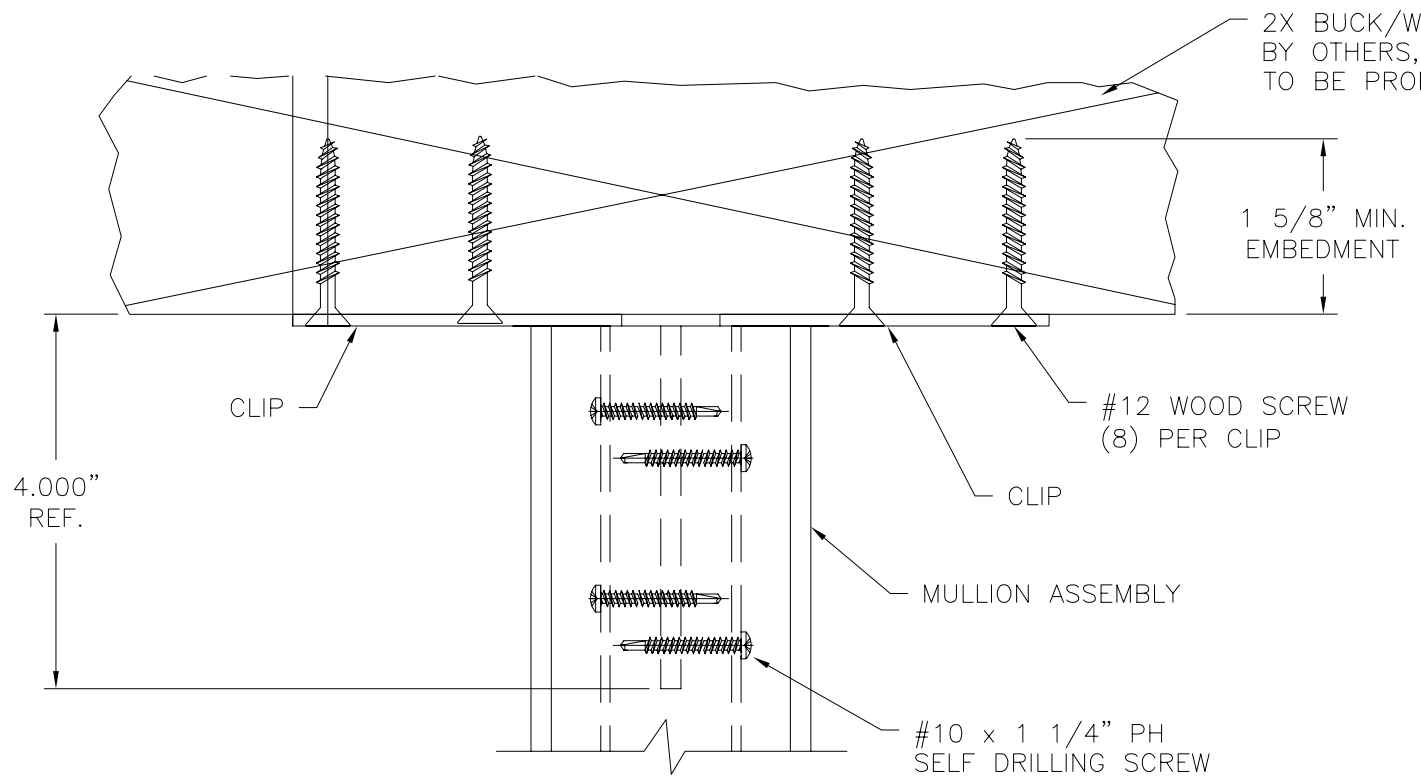


**14.6MM THERMAL STRUT**  
NYLON POLYAMIDE .070" THICK

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SCALE NTS	DATE 07/19/12	SHEET 2 OF 4	

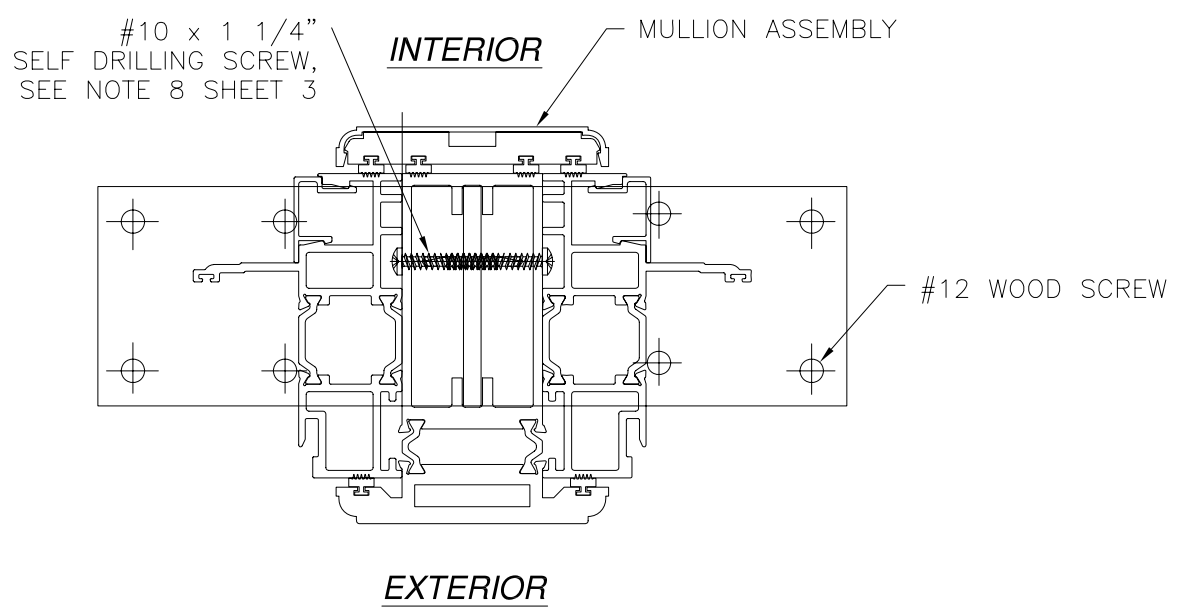
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ANCHORING NOTES:

- 1) FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #12 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 5/8" MINIMUM EMBEDMENT. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS SHEET 3.
- 2) FOR ANCHORING INTO CONCRETE USE 1/4" TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT WITH 2 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS SHEET 4.
- 3) FOR ANCHORING INTO METAL STRUCTURE USE #12 SELF DRILLING SCREW WITH SUFFICIENT LENGTH TO ACHIEVE 3-THREADS MINIMUM BEYOND METAL FRAMING. LOCATE ANCHORS AS SHOWN IN INSTALLATION DETAILS SHEET 4.
- 4) FOR ATTACHING WINDOW UNITS TO MULLION USE #10 SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A MINIMUM EMBEDMENT OF THREE THREADS PAST THE MULLION WALL. LOCATE SCREWS 6" FROM EACH MULLION END AND 24" MAX. O.C. THEREAFTER. STAGGER SCREWS AT EACH WINDOW.
- 5) FOR WINDOW AND DOOR UNITS ANCHORING SCHEDULE REFER TO WINDOW AND DOOR APPROVED 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
  - B. CONCRETE - 2000 PSI MINIMUM
  - C. METAL STRUCTURE - STEEL 16GA. (.063") 33KSI MINIMUM OR ALUMINUM 6063-T5 1/8" THICK MINIMUM.
- 8) TO ATTACH MULLION TO CLIP USE (4) #10 x 1 1/4" SELF DRILLING SCREWS PER CLIP. SCREWS MUST BE FIELD INSTALLED. HOLES FOR SCREWS ARE NOT PRE-DRILLED BY MANUFACTURER.

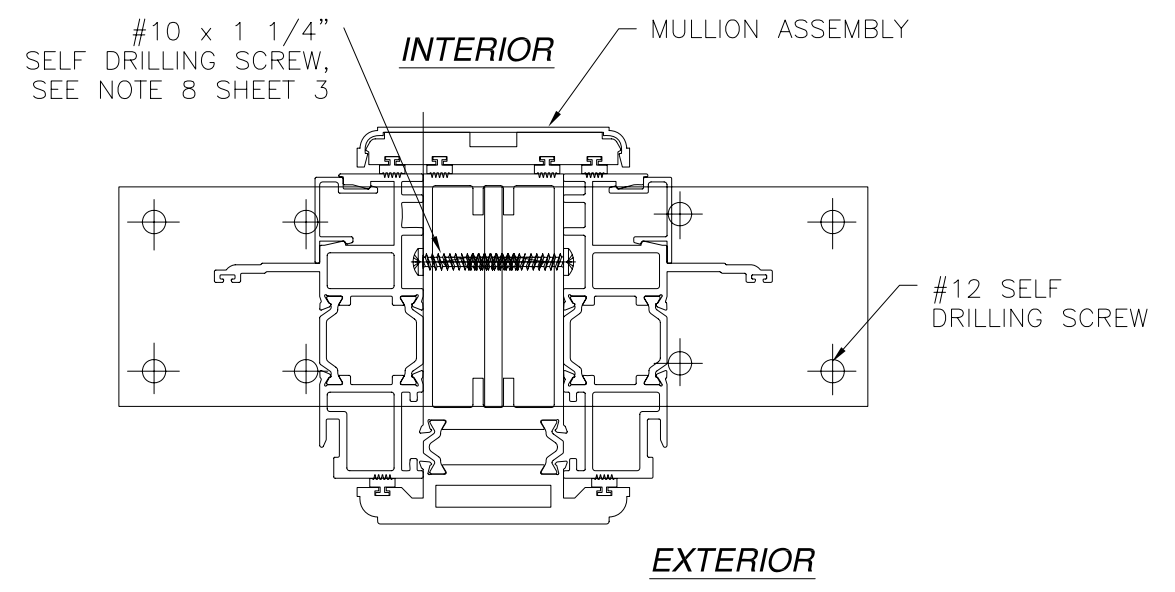
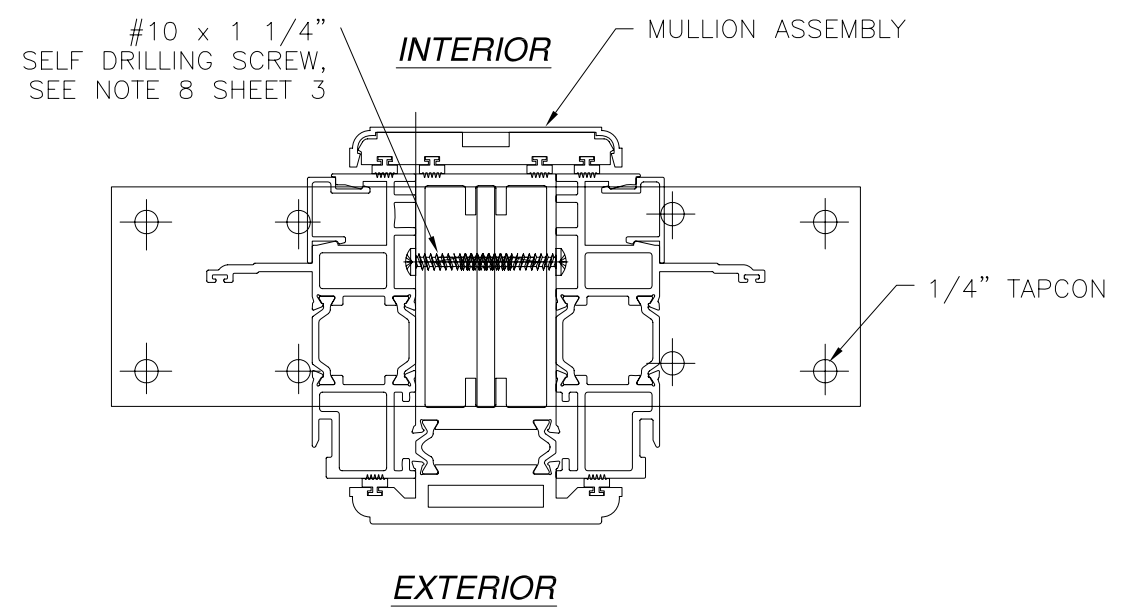
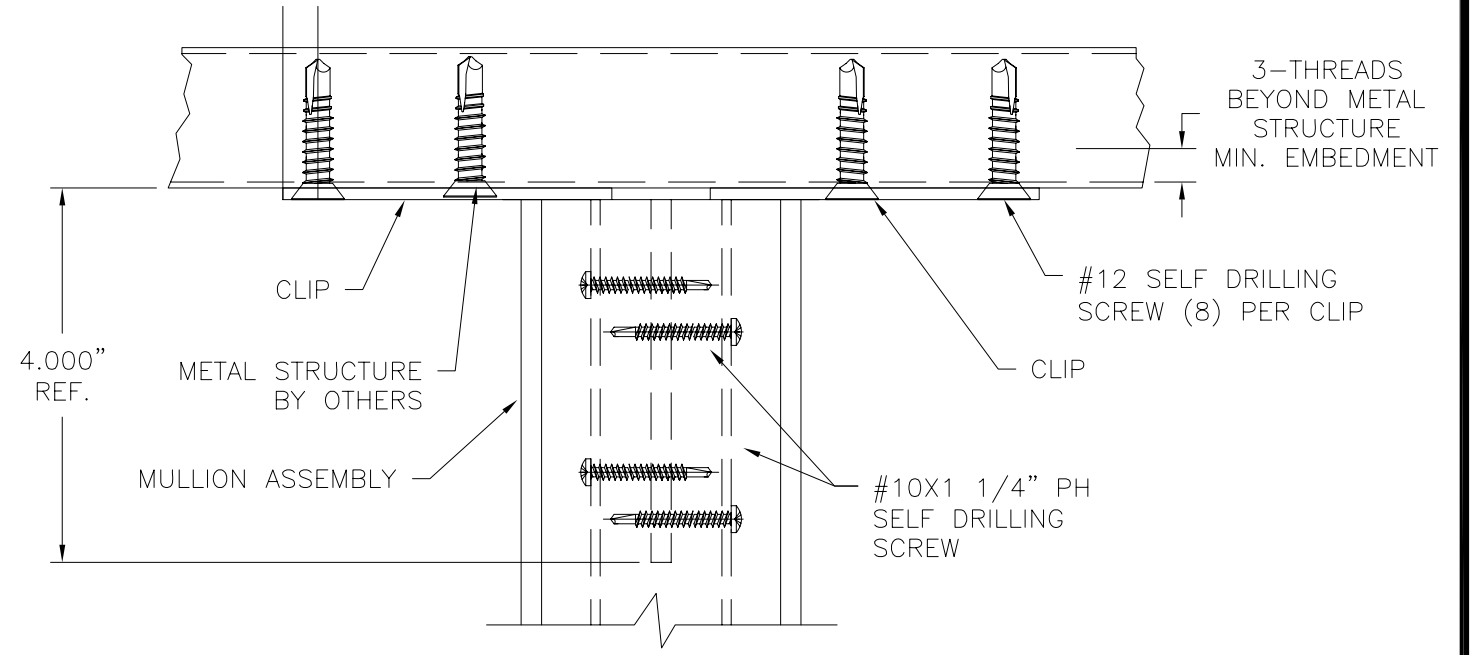
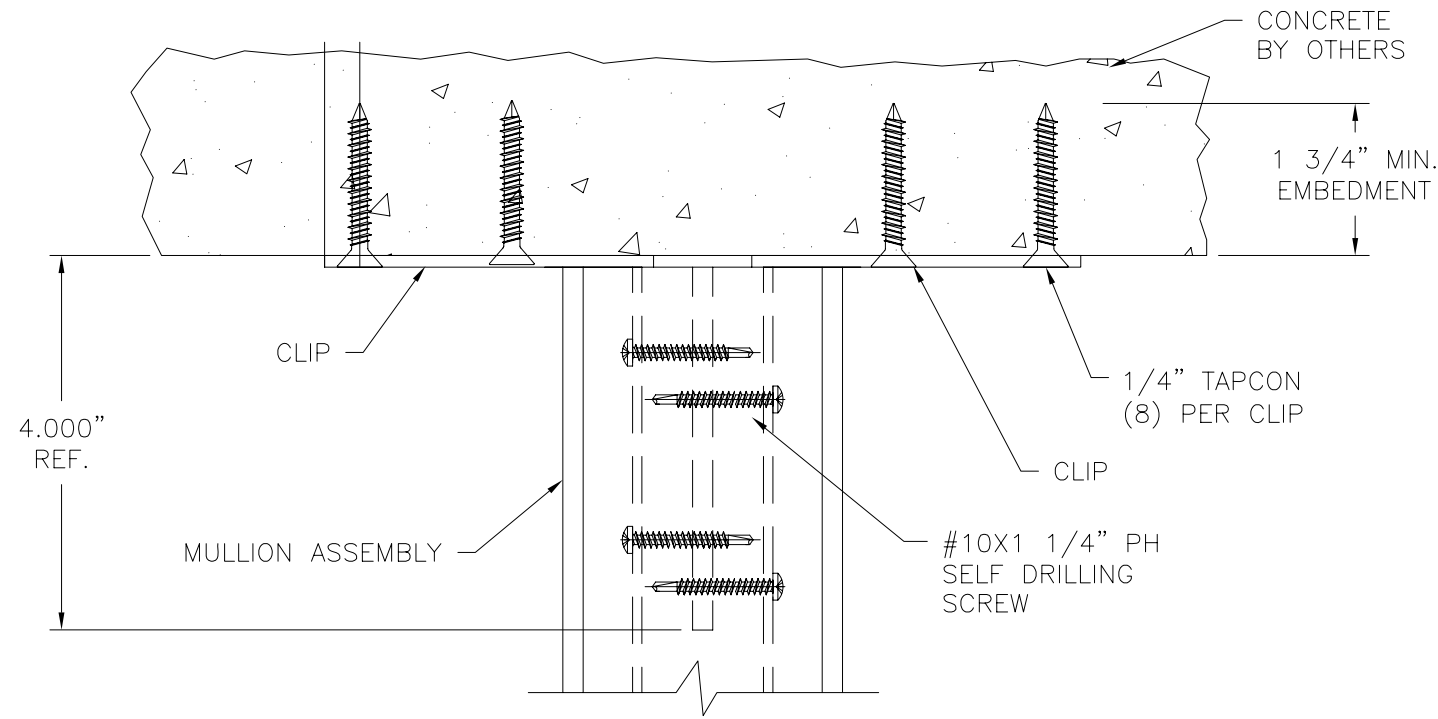


**CLIP INSTALLATION DETAIL**  
2X BUCK/WOOD FRAMING, TOP & BOTTOM SIMILAR

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**CLIP INSTALLATION DETAIL**  
CONCRETE INSTALLATION, TOP & BOTTOM SIMILAR

**CLIP INSTALLATION DETAIL**  
METAL STRUCTURE, TOP & BOTTOM SIMILAR

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