

2200 SERIES

MULLION INSTALLATION SPECIFICATIONS FOR FACTORY AND FIELD APPLIED MULLIONS. FOR USE ON PGT PRODUCTS ONLY.

FIXED WINDOWS SHOWN FOR CLARITY, MAY ALSO BE OTHER WINDOW TYPES OR MULLION CONFIGURATIONS.

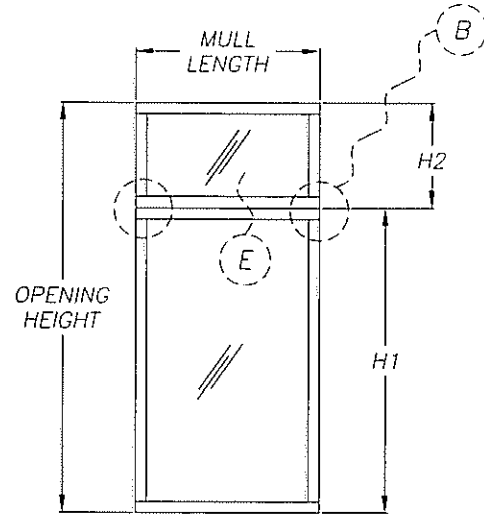


FIG 1: ONE WINDOW MULLED ABOVE ANOTHER

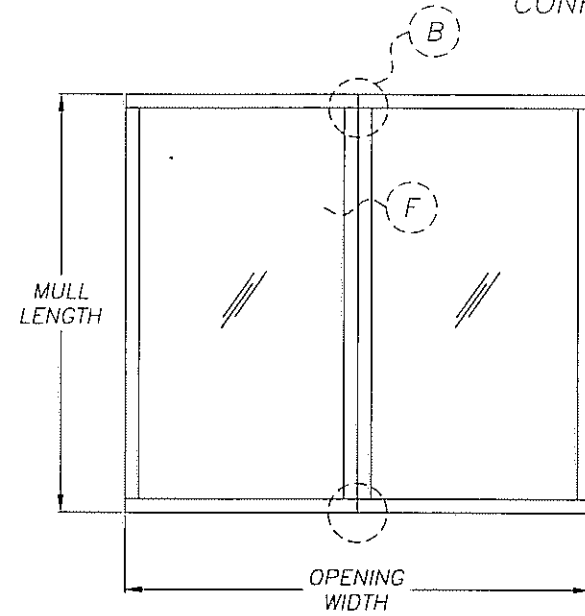


FIG. 2: TWO WINDOWS MULLED SIDE-BY-SIDE

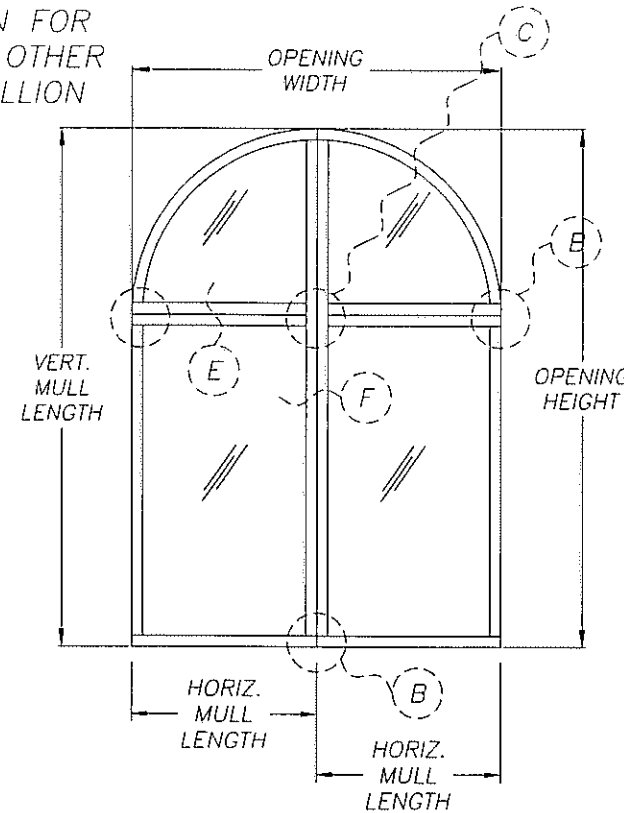


FIG. 3: TWO WINDOWS MULLED ABOVE TWO OTHERS

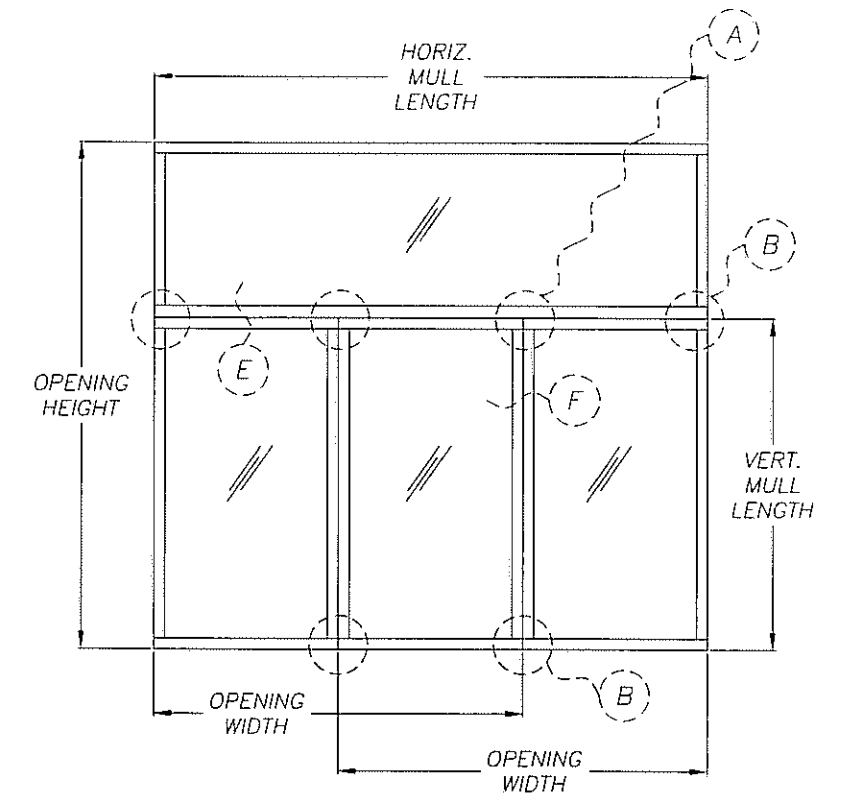


FIG. 4: MULTIPLE WINDOWS MULLED UNDER ONE WINDOW

INSTRUCTIONS:

1. DETERMINE DESIGN PRESSURE REQUIREMENT FOR THE STRUCTURE USING THE METHODS OUTLINED IN ASCE 7 PER THE LOCAL BUILDING CODE.
2. DETERMINE THE DESIGN PRESSURE FOR THE MULLION USING THE CHARTS ON THIS SHEET. THIS DESIGN PRESSURE MUST MEET OR EXCEED THE VALUE FROM STEP 1.
3. DESIGN PRESSURE FROM STEP 2 REQUIRES THAT THE PRODUCT BE INSTALLED IN ACCORDANCE WITH THIS SHEETSET.
4. VERIFY THE DESIGN PRESSURE FOR THE WINDOWS USED WITH THIS MULLION SYSTEM. THE LOWER DESIGN PRESSURE WILL APPLY TO THE OVERALL SYSTEM.

2200 Series, Non-reinforced Mullion Design Pressure (lbs/ft ²)													
		Opening Width or Height											
		48 in	54 in	60 in	66 in	72 in	84 in	96 in	98 in	108 in	120 in	132 in	144 in
Mullion Length	60 in	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
	66 in	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
	72 in	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
	76 in	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	48.7	46.2	44.7	43.9
	84 in	50.0	50.0	50.0	50.0	47.1	41.5	37.5	37.0	34.6	32.5	31.0	30.0
	96 in	45.0	40.3	36.6	33.5	31.0	27.1	24.3	23.9	22.2	20.7	19.5	18.6
	98 in	42.3	37.8	34.3	31.5	29.1	25.4	22.8	22.4	20.8	19.3	18.2	17.3
	108 in	31.5	28.1	25.5	23.3	21.5	18.8	16.7	16.4				
122 in	21.7	19.4	17.5	16.0	14.8	12.8	11.4	11.2					

2200 Series, Reinforced Mullion Design Pressure (lbs/ft ²)													
		Opening Width or Height											
		48 in	54 in	60 in	66 in	72 in	84 in	96 in	98 in	108 in	120 in	132 in	144 in
Mullion Length	60 in	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
	66 in	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
	72 in	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
	76 in	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
	84 in	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	48.8	47.5
	96 in	50.0	50.0	50.0	50.0	50.0	48.3	43.3	42.6	39.6	36.8	34.6	33.1
	98 in	50.0	50.0	50.0	50.0	50.0	45.3	40.5	39.9	37.0	34.3	32.3	30.8
	108 in	50.0	50.0	45.3	41.5	38.3	33.4	29.8	29.3				
122 in	38.7	34.5	31.2	28.5	26.3	22.8	20.3	19.9					

Allowable Anchors (Standard and Interior Mull Clips Only)	1/4" Masonry Anchor, Min. of 2-1/2" Edge Distance and Min. of 1-1/4" Embedment into Concrete or CMU, Qty. = 2
	#12 SMS, (G5), Min. of 7/8" Edge Distance and Min. of 1-3/8" Embedment into Wood, Qty. = 2
	#12 Self-drilling SMS, Into 6063-T6 Aluminum, Minimum Thickness 0.060", Qty. = 2
	#12 Self-drilling SMS, Into A653, Steel Stud, Minimum 16 GA (0.060"), Qty. = 2
Allow. Clips:	2-hole Standard Mull Clip, 2-hole Interior Mull Clip OR 3-hole Intersecting Mull Clip

GENERAL NOTES:

- 1) DETAILS SHOWN ARE FOR THE MULLION ONLY. ANCHORS SHOWN ARE IN ADDITION TO ANY ANCHORS REQUIRED FOR THE WINDOW INSTALLATION. FOR SPECIFIC SUBSTRATE AND ANCHORAGE DETAILS, SEE THE PRODUCT INSTALLATION GUIDELINES. TYPICAL RETROFIT APPLICATIONS ARE SHOWN. EACH SITUATION IS UNIQUE AND SHOULD BE EVALUATED BY AN EXPERIENCED INSTALLER FOR THE BEST INSTALLATION METHOD. WOOD BUCKS IF USED, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS AND ARE TO BE DESIGNED BY OTHERS.
- 2) THE TYPE AND NUMBER OF ANCHORS IS CRITICAL TO THE STRUCTURAL PERFORMANCE OF THE MULLED UNITS.
- 3) THE ANCHORAGE METHODS SHOWN HAVE BEEN DESIGNED TO RESIST THE WINDLOADS CORRESPONDING TO THE REQUIRED DESIGN PRESSURE. MULLIONS ARE CALCULATED TO DEFLECT NO MORE THAN L/180. THE 1/3 STRESS INCREASE WAS NOT USED IN THIS ANCHOR EVALUATION. THE 1.6 LOAD DURATION FACTOR WAS USED FOR THE EVALUATION OF WOOD SCREWS. THE MULLIONS HAVE BEEN DESIGNED & TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, 2010 EDITION.
- 4) PROPER SEALING OF ENTIRE ASSEMBLY IS THE RESPONSIBILITY OF OTHERS AND IS BEYOND THE SCOPE OF THESE INSTRUCTIONS.
- 5) MULLION OPTIONS ARE DEPENDENT ON REQUIRED DP. A SINGLE MULLION MAY BE ATTACHED TO A MAXIMUM OF SIX WINDOWS.
- 6) USE THE COMBINED WINDOW SPAN OF ONLY TWO ADJACENT WINDOWS TO DETERMINE PRESSURES AND ANCHORAGE FOR THE COMMON MULLION.
- 7) WHEN FINDING YOUR SIZE IN THE CHART, ALWAYS ROUND UP TO THE NEXT AVAILABLE VALUE IN THE CHART.
- 8) ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO. WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE. ANCHORS SHALL BE COATED OR CORROSION RESISTANT AS APPROPRIATE FOR SUBSTRATE MATERIAL. DISSIMILAR MATERIALS SHALL BE PROTECTED AS REQUIRED TO PREVENT REACTIONS.

REFERENCE: ANSI/AF&PA NDS-2005 FOR WOOD CONSTRUCTION, AAMA 450-10 MULLED FENESTRATION ASSEMBLIES
TEST REPORT: FTL-6880



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Drawn By: J ROSOWSKI
Date: 6/24/10

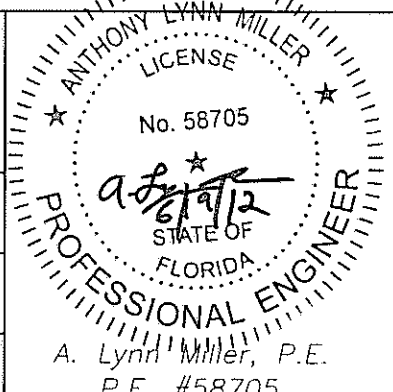
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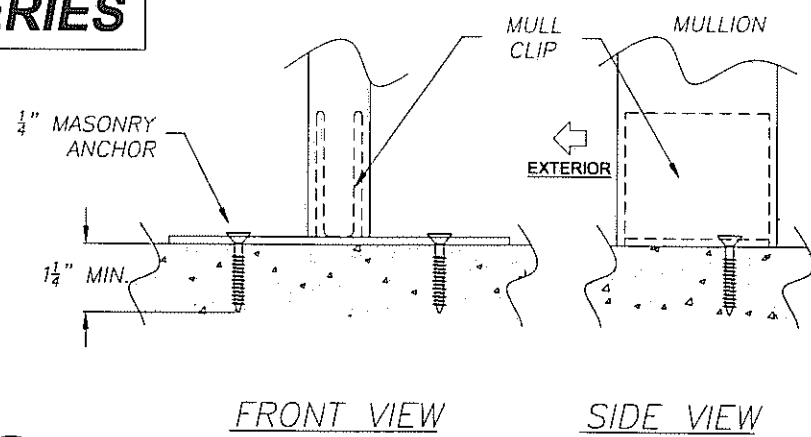
Title: 2200 SERIES MULLION INSTALLATION

Series/Model: 2200
Scale: NTS
Sheet: 1 of 3
Drawing No. 2200MULL-01

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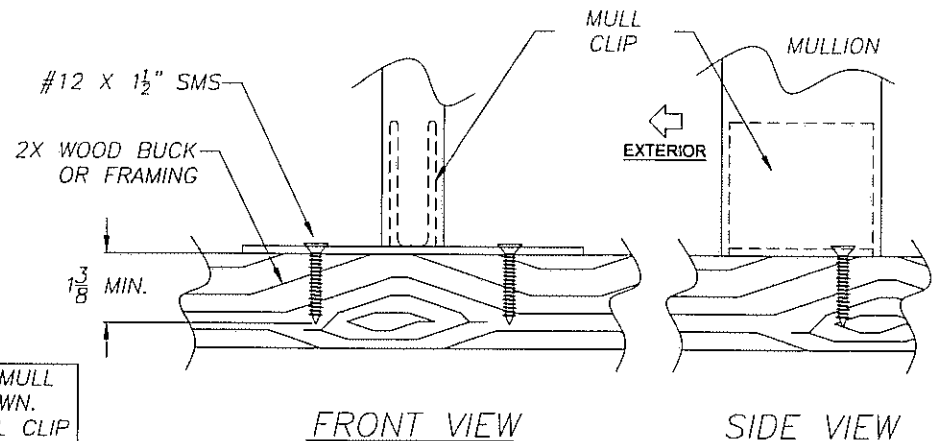


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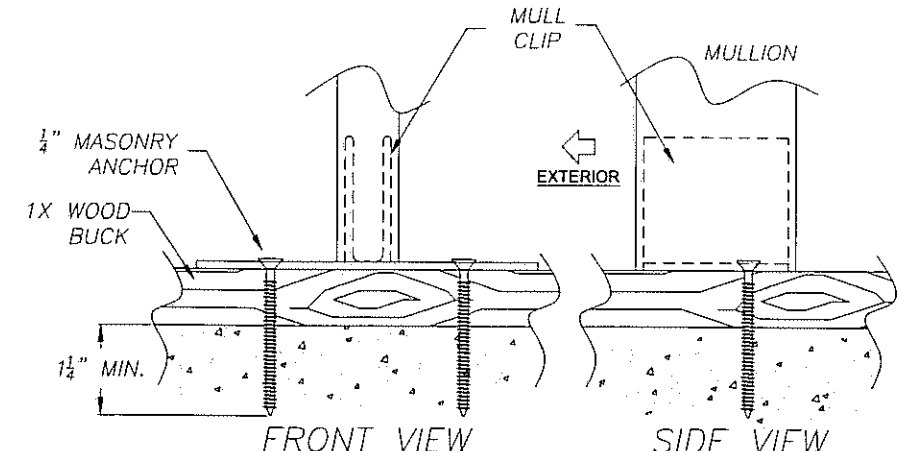


DETAIL B1 MULLION CLIP TO CONCRETE STRUCTURE

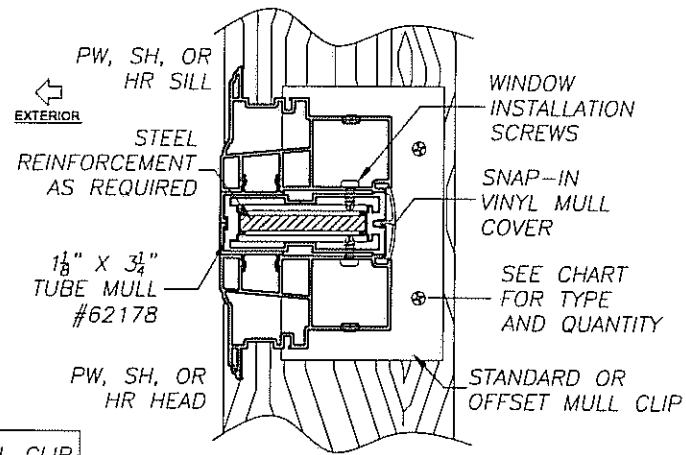
STANDARD MULL CLIP SHOWN. OFFSET MULL CLIP MAY BE SUBSTITUTED FOR DETAILS B1-B3.



DETAIL B2 MULLION CLIP TO 2X WOOD STRUCTURE

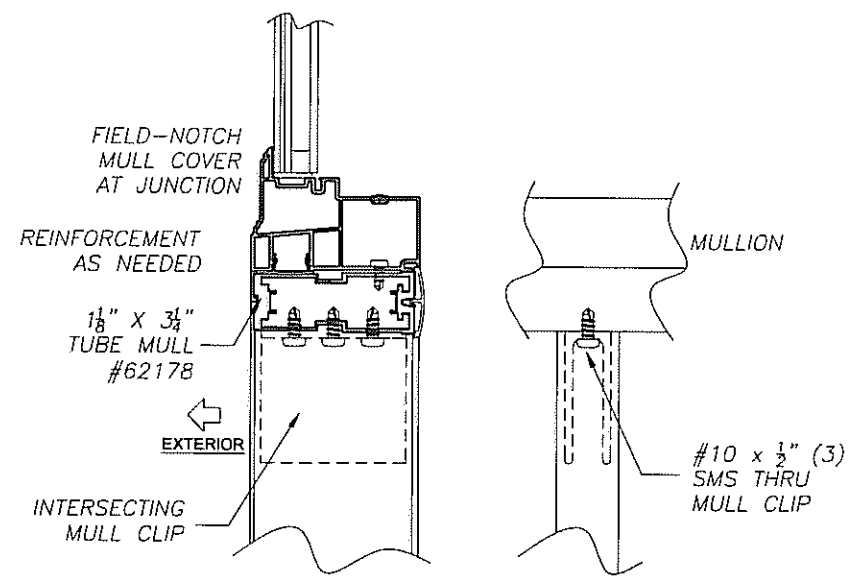


DETAIL B3 MULLION CLIP TO 1X WOOD BUCK

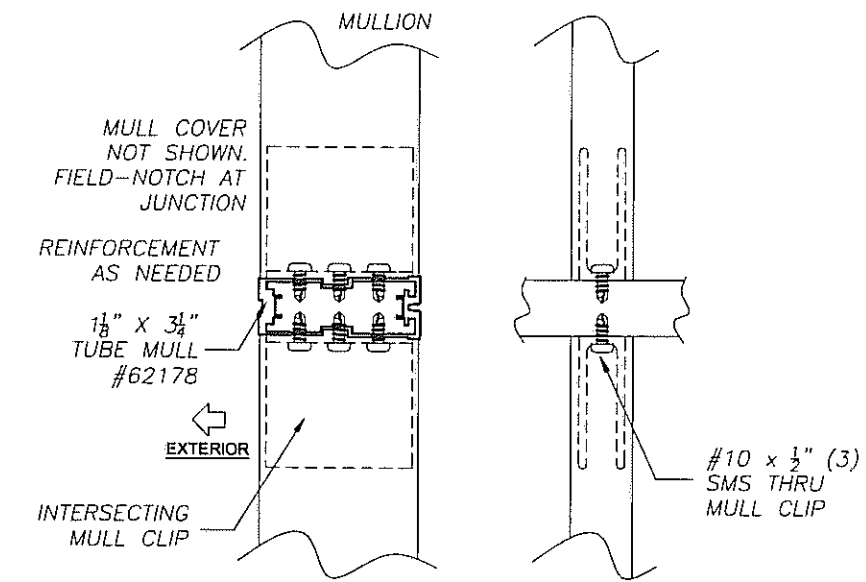


DETAIL E HORIZONTAL CROSS SECTION

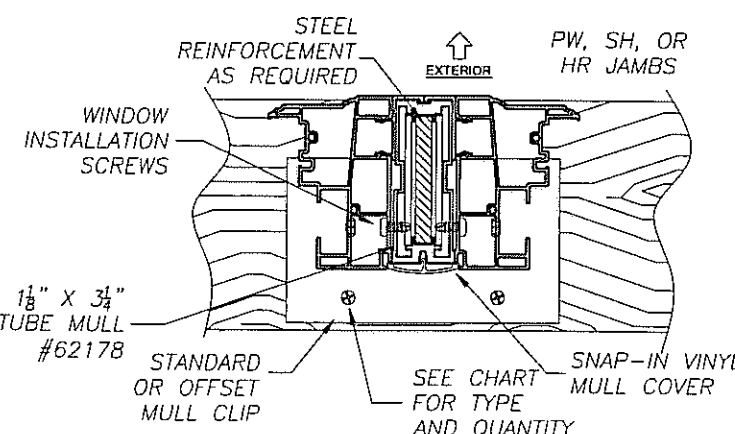
OFFSET MULL CLIP SHOWN. STANDARD MULL CLIP MAY BE SUBSTITUTED FOR DETAILS E-F.



DETAIL A MULLION TEE INTERSECTION



DETAIL C MULLION CROSS INTERSECTION



DETAIL F VERTICAL CROSS SECTION

- INSTALLATION NOTES:
- 1) FLATHEAD ANCHORS ARE SHOWN, BUT PAN OR HEXHEAD MAY ALSO BE USED.
 - 2) REGARDLESS OF REQUIRED DESIGN PRESSURE, ALWAYS USE THE TYPE AND QUANTITY OF ANCHOR SHOWN FOR ATTACHING THE INTERSECTING MULL CLIP.
 - 3) MAY ALSO BE

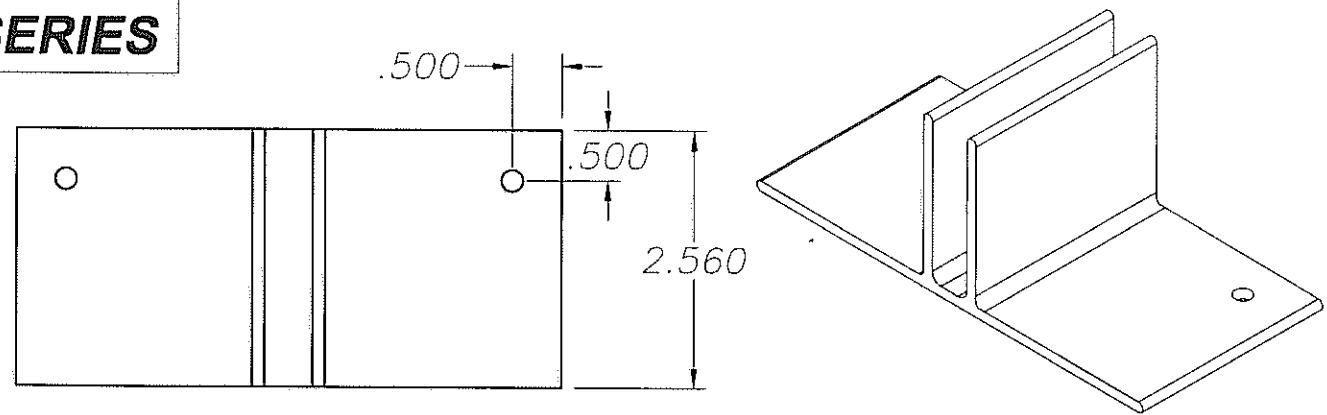
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Description:		
Title: 2200 SERIES MULLION INSTALLATION		
Drawn By: J ROSOWSKI	Date: 6/24/10	Series/Model: 2200
Scale: NTS	Sheet: 2 of 3	Drawing No. 2200MULL-01
		Rev:

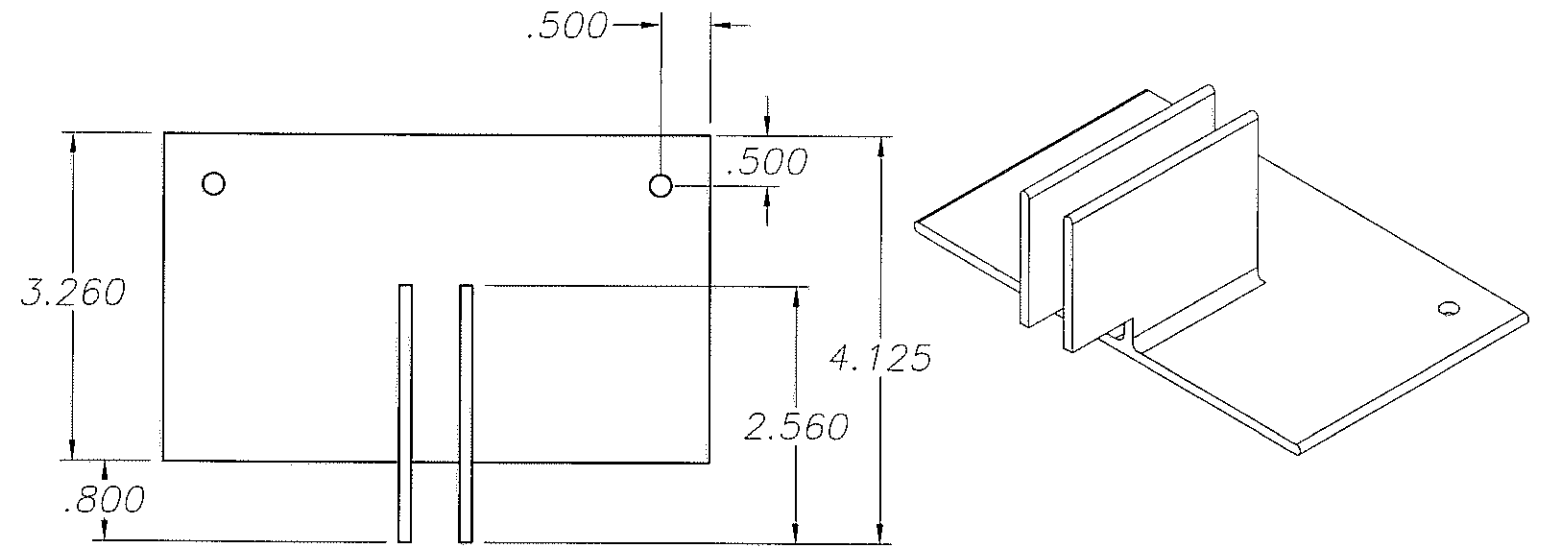
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STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. Lynn Miller, P.E.
P.E. #58705

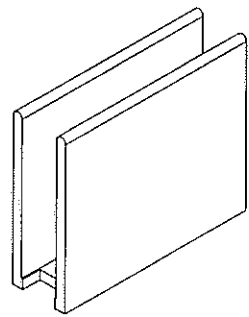
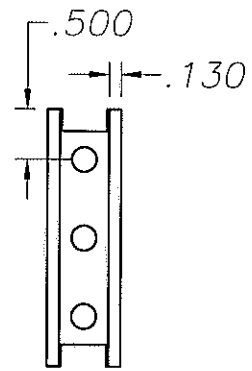
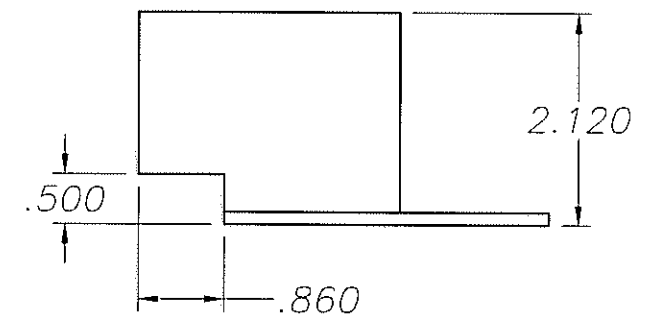
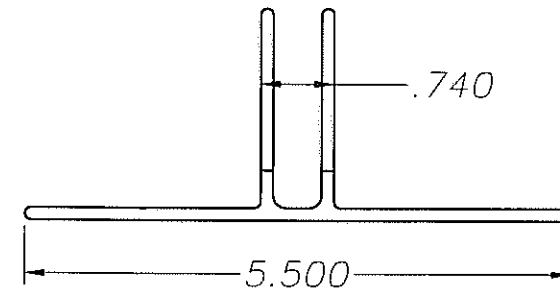
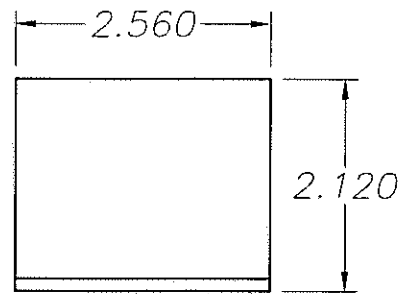
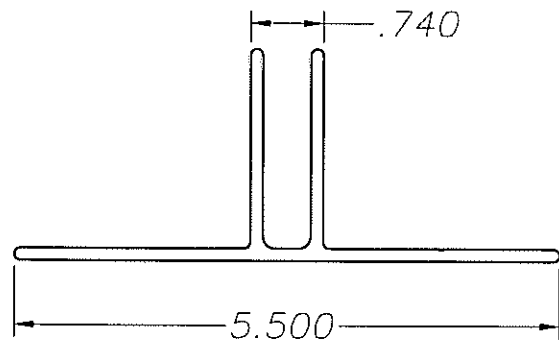
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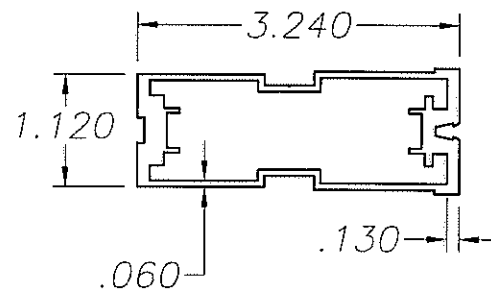
① STANDARD MULLION CLIP
PART NO: 6611-17
6063-T5 AL



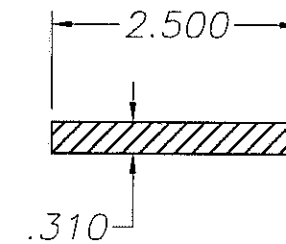
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PART NO: 6611-13
6063-T5 AL



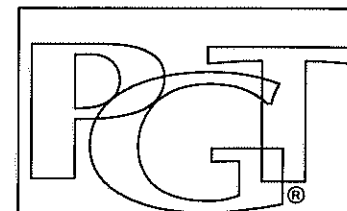
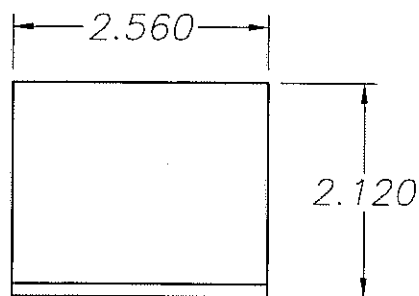
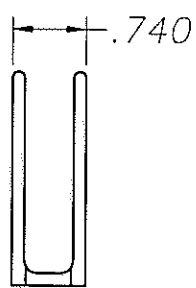
③ INTERSECTING
MULLION CLIP
PART NO: 6624-7
6063-T5 AL



④ TUBE MULLION
PART NO: 62178
6063-T6 AL



⑤ TUBE MULLION
REINFORCEMENT
PART NO: 62188
A36 STEEL



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