

GUARDIAN 275

TRANSLUCENT HURRICANE WALL SYSTEMS

GENERAL NOTES: FLORIDA BUILDING CODE 2020 - 7TH EDITION (NON HVHZ)

- 1- CODE: THIS PRODUCT HAS BEEN TESTED AND DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2020 - 7TH EDITION. NOT APPLICABLE FOR WIND ZONE 4 ($V_{ult} > 170$ MPH) AND THE HIGH VELOCITY HURRICANE ZONES (HVHZ) MIAMI & BROWARD COUNTIES
- 2- DEFINITION: THIS PRODUCT IS A TRANSLUCENT WALL COMPOSED OF A PANEL MADE OF FIBERGLASS AND ALUMINUM SECURED BY AN ALUMINUM PERIMETER FRAMING. THE SYSTEM IS LEVEL D IMPACT RESISTANT AND TESTED FOR USE IN ZONES 1, 2 OR 3 OF THE ASTM E 1996.
- 3- POSTING: A PERMANENT LABEL SHALL BE PROVIDED AS PER THE FBC AND IT SHALL BE PLACED ON A READILY VISIBLE LOCATION WITH A MINIMUM OF ONE LABEL PER OPENING
- 4- DESIGN LOADS: LOADS MUST BE CALCULATED BY A PROFESSIONAL ARCHITECT OR ENGINEER FOR EACH SPECIFIC PROJECT. THE CALCULATED DESIGNED PRESSURE MUST NOT EXCEED THE ALLOWABLE APPROVED PRESSURE.
- 5- MATERIAL: ALL ALUMINUM PARTS ARE MADE MADE OF 6063-T5 ALLOY AND FIBERGLASS MATERIAL TESTED IN ACCORDANCE WITH FBC CHAPTER 26
- 6- FASTENERS: ASSEMBLY SCREWS AND ANCHORS SHALL BE AS SPECIFIED IN THIS CURRENT SET OF DRAWINGS.
- 7- USE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, ARCHITECT OR ENGINEER OF RECORD TO VERIFY THE FOLLOWING:
- 7.1- THE STABILITY OF THE STRUCTURE WHERE THE UNIT IS TO BE ATTACHED INSURING PROPER ANCHORAGE.
- 7.2- THE SITE SPECIFIC PROJECT CRITERIA, SUCH AS BUT NOT LIMITED TO, LOCAL CODE REQUIREMENTS, DESIGNED PRESSURES ETC.
- 7.3- THAT THIS APPROVAL IS ADEQUATE TO THE SPECIFIC PROJECT.
- 8- 33 1/3% INCREASE IN ALLOWABLE LOADS HAVE NOT BEEN USED IN THE DESIGN OF THE ANCHORS FOR THIS PRODUCT APPROVAL. LOAD DURATION FACTOR OF 1.6 WAS USED FOR ANCHORS INTO WOOD.
- 9- DISSIMILAR MATERIALS: WHERE ALUMINUM IS IN CONTACT OR FASTENED TO DISSIMILAR MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL, INSTALLATION SHALL MEET THE REQUIREMENTS OF CHAPTER M.7 OF THE ALUMINUM DESIGN MANUAL 2015.
- 10- WOOD BUCKS (1x or 2x) BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

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PRODUCT RATING:

DESIGNED PRESSURE:
DEAD LOAD: DL= 3 PSF
WIND LOAD: WL= ± 65 PSF

MISSILE IMPACT:
LEVEL D - 9 LB 2X4 LUMBER AT 50 ft/s

LIMITATIONS:

- 1 - NOT FOR USE IN HIGH VELOCITY HURRICANE ZONES (HVHZ), BROWARD & MIAMI-DADE COUNTIES)
- 2 - NOT APPLICABLE FOR WIND ZONE 4 ($V_{ult} > 170$ MPH)
- 3 - MAXIMUM PANEL AREA MUST NOT EXCEED 40 SQF (60"X96")



Pedro De Figueiredo
07/18/2020



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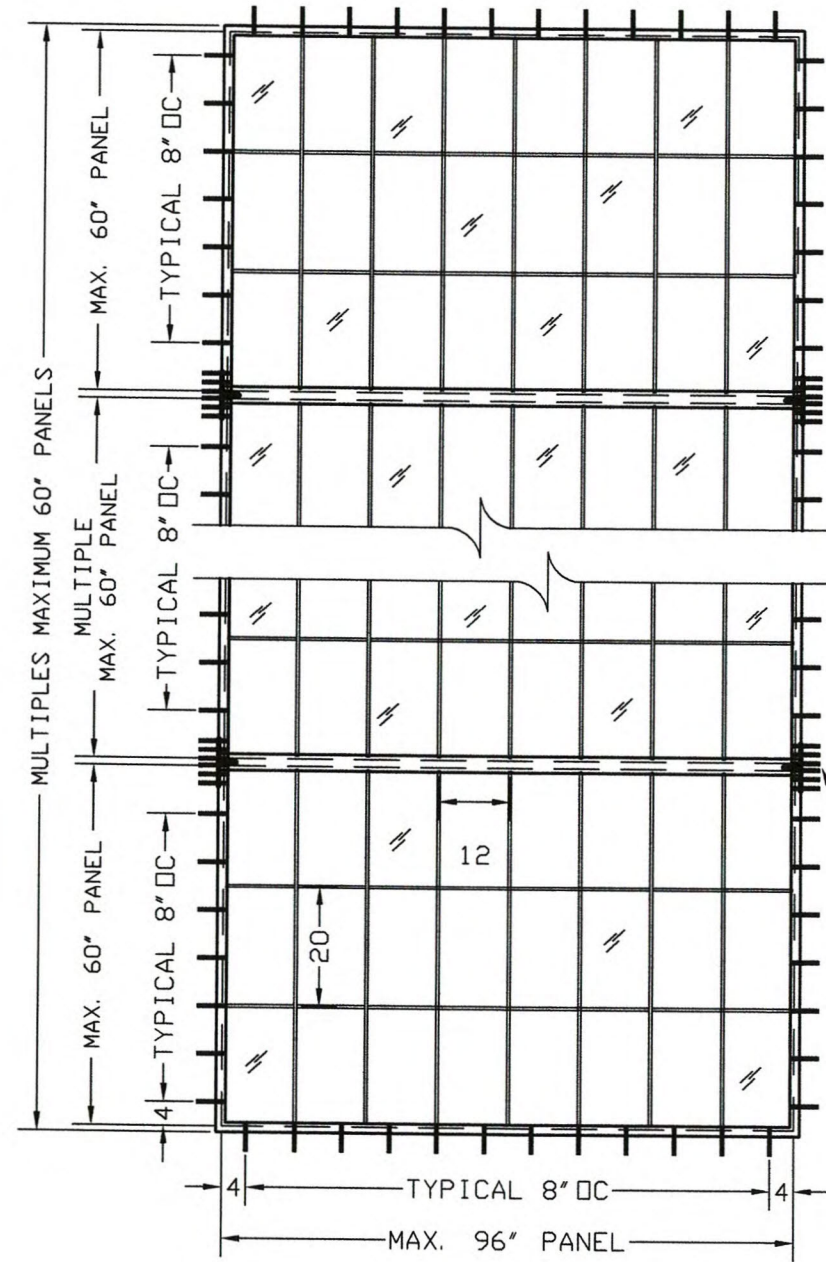
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DATE:
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20-097

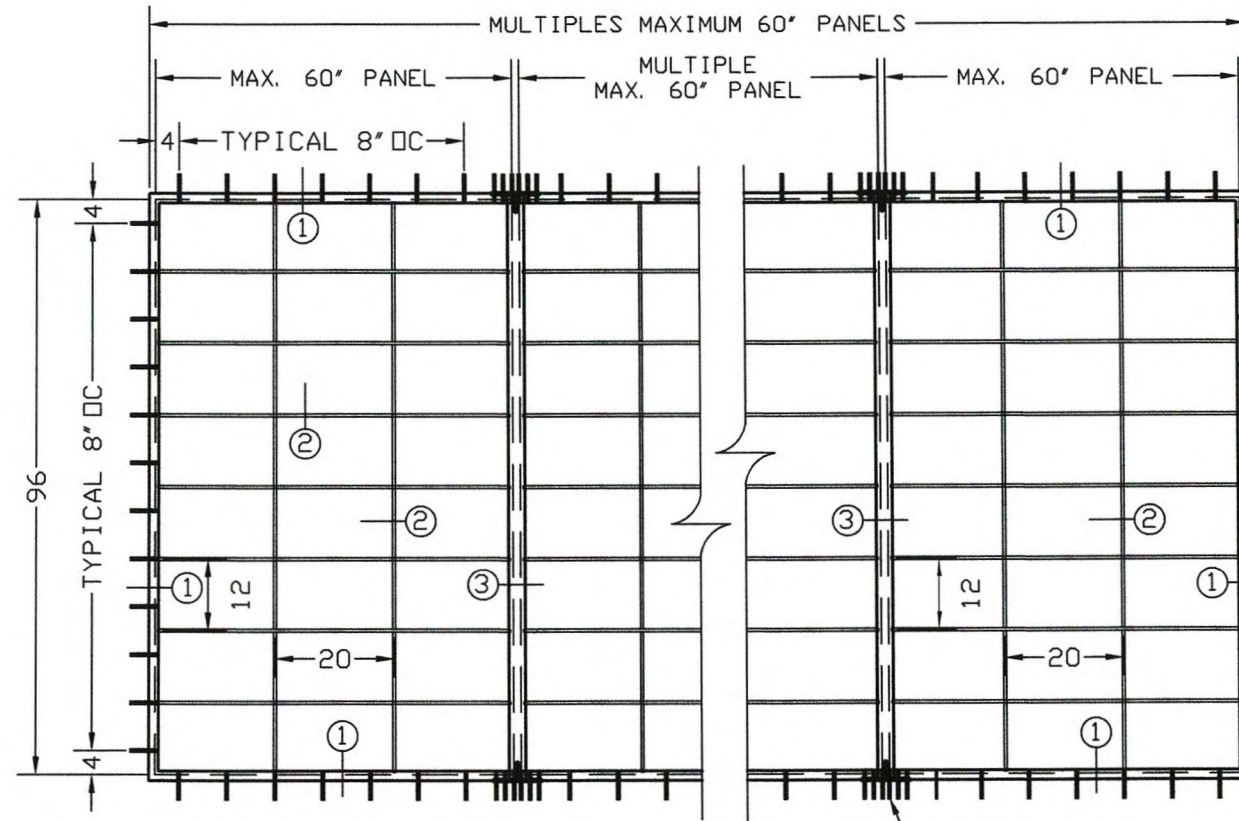
SHEET
1 OF 6

TYPICAL CONFIGURATIONS



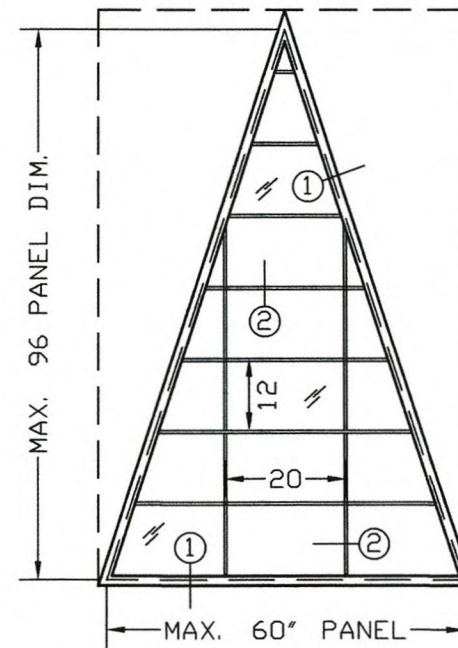
MULTIPLE VERTICAL STACK PANELS

DETAIL 4
TYPICAL INTERMEDIATE
MULL CONNECTION

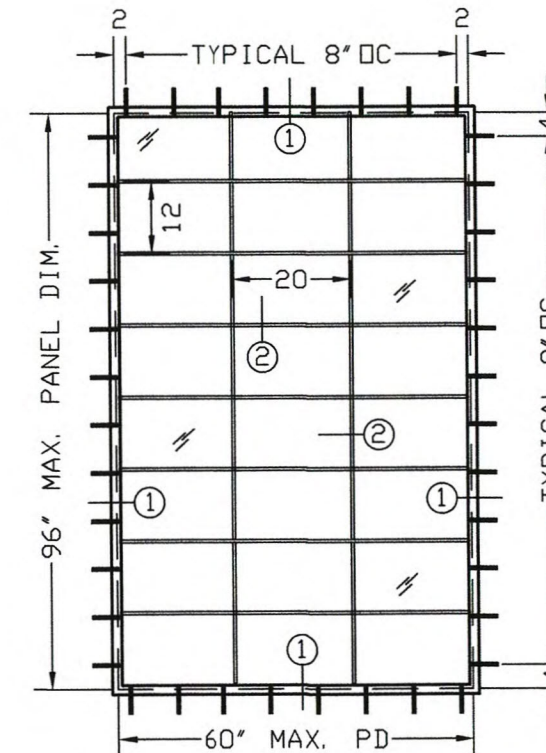


MULTIPLE HORIZONTAL STACK PANELS

DETAIL 4
TYPICAL INTERMEDIATE
MULL CONNECTION



SINGLE SHAPED PANEL
ACCEPTABLE FOR ANY SHAPE THAT
FITS THE MAXIMUM 60X96 MODULE



SINGLE PANEL



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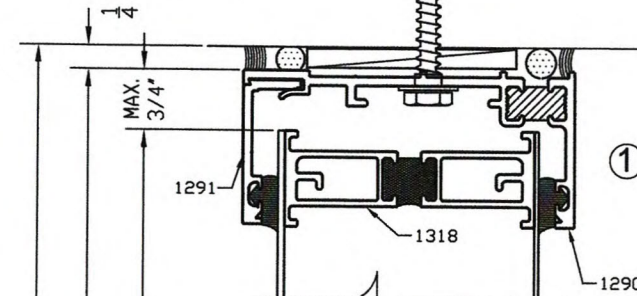


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SHEET
2 OF 6

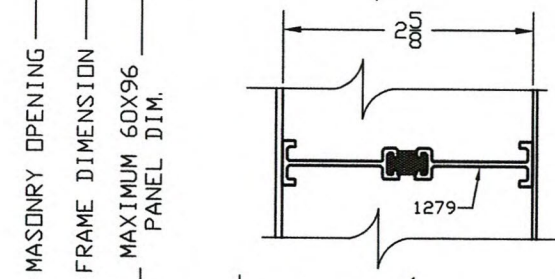
DETAILS

SEE SHEET 4 DETAIL 4 FOR
END MULLION CONNECTION DETAIL
AND TABLE 1 FOR LOAD ADJUSTMENT

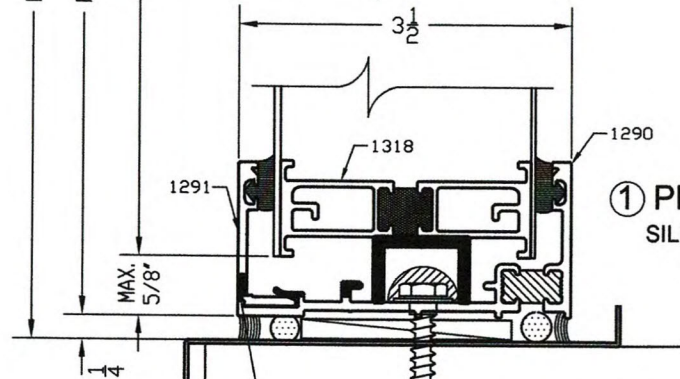
ANCHORAGE TYPE
A, B, C, D, OR E
SPACED AT MAXIMUM 8" OC
SEE ELEVATION FOR LAY-OUT



① HEADER DETAIL
HEADER



② PANEL STIFFENER



① PERIMETER DETAIL
SILL

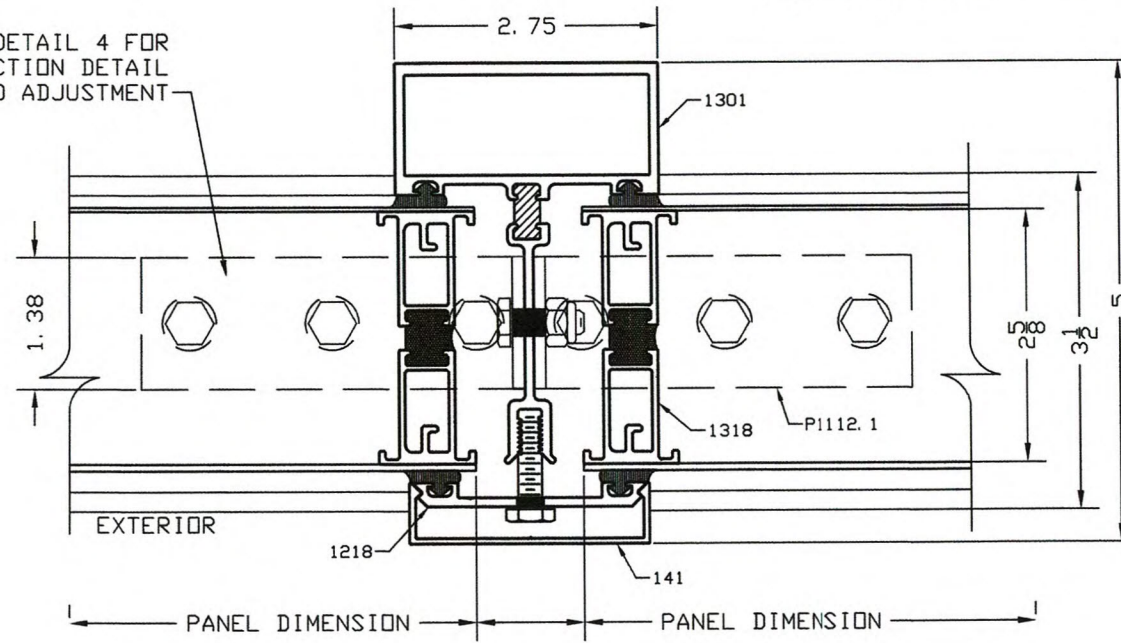
0.040" ALUM.
FLASHING

SILL FLASHING
SET IN CONT.
BEAD OF SEALANT

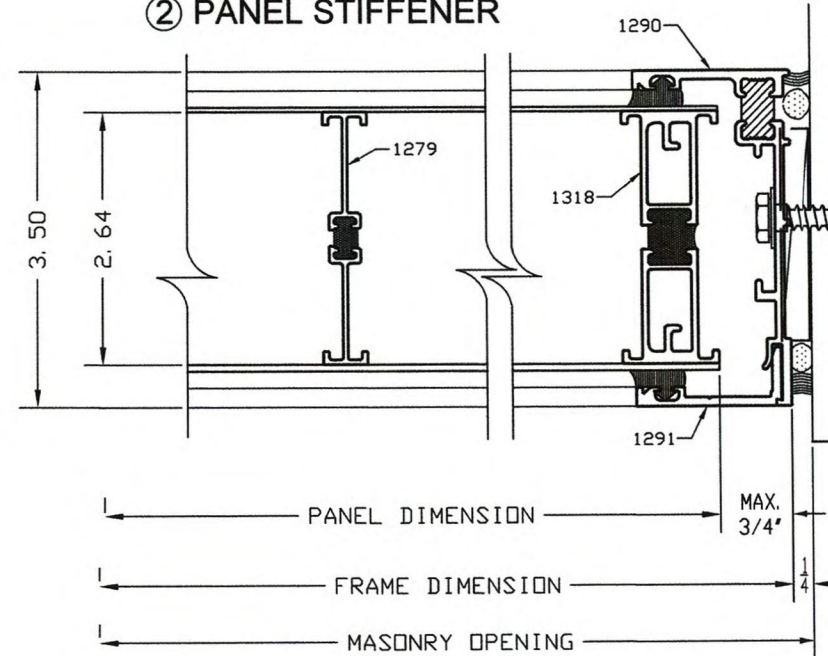
ANCHORAGE TYPE
A, B, C, D, OR E
SPACED AT MAXIMUM 8" OC
SEE ELEVATION FOR LAY-OUT

(1) 3/16" WEEP HOLE
LOCATED AT CENTER
LINE OF EACH PANEL

③ MULLION DETAIL



② PANEL STIFFENER



① PERIMETER DETAIL
JAMB

ANCHORAGE TYPE
A, B, C, D, OR E
SPACED AT MAXIMUM 8" OC
SEE ELEVATION FOR LAY-OUT



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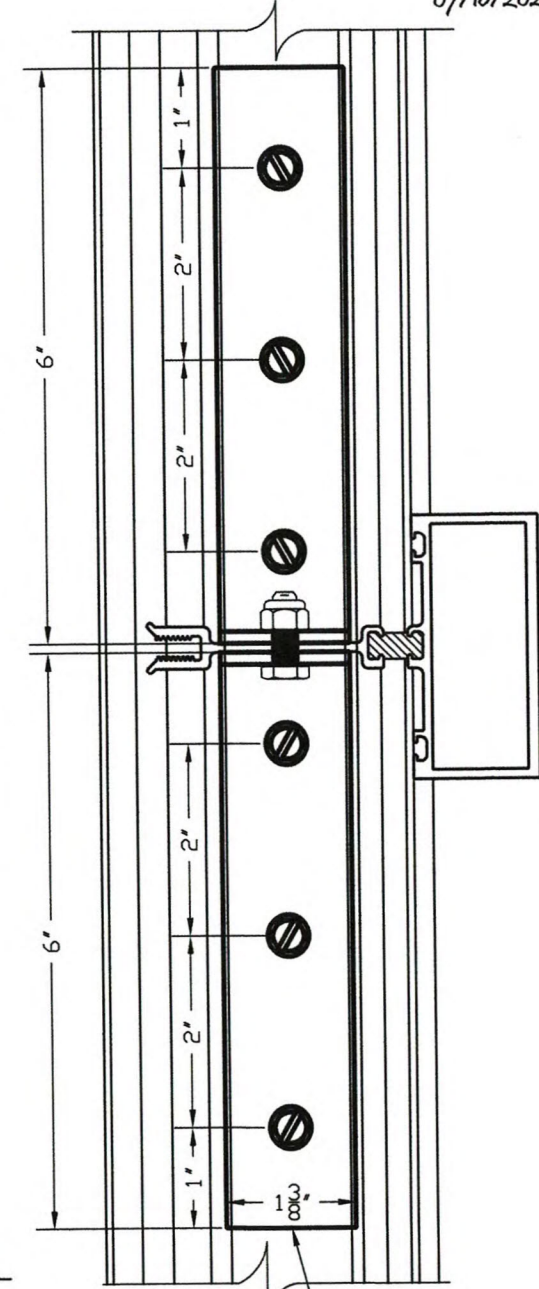
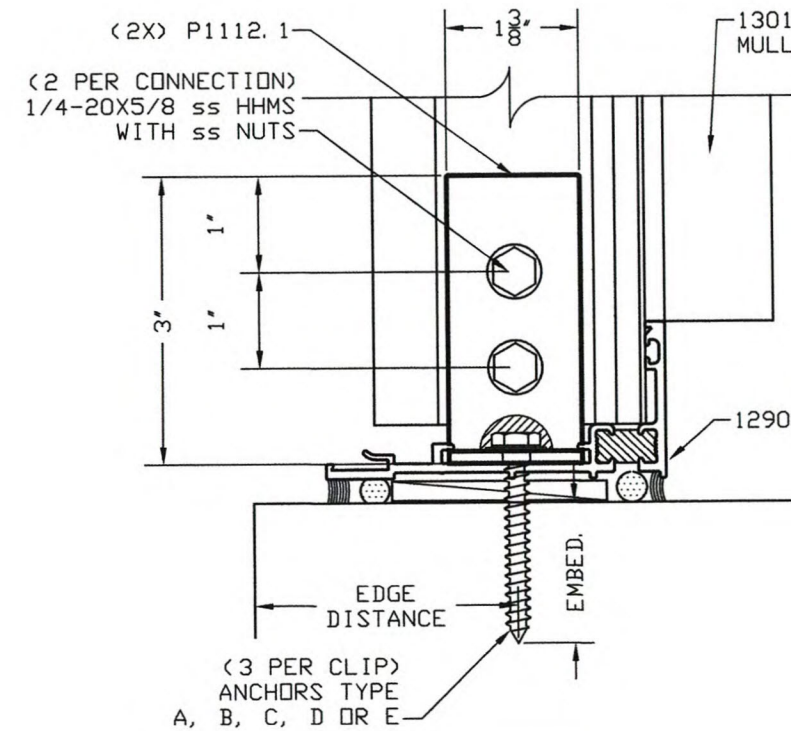
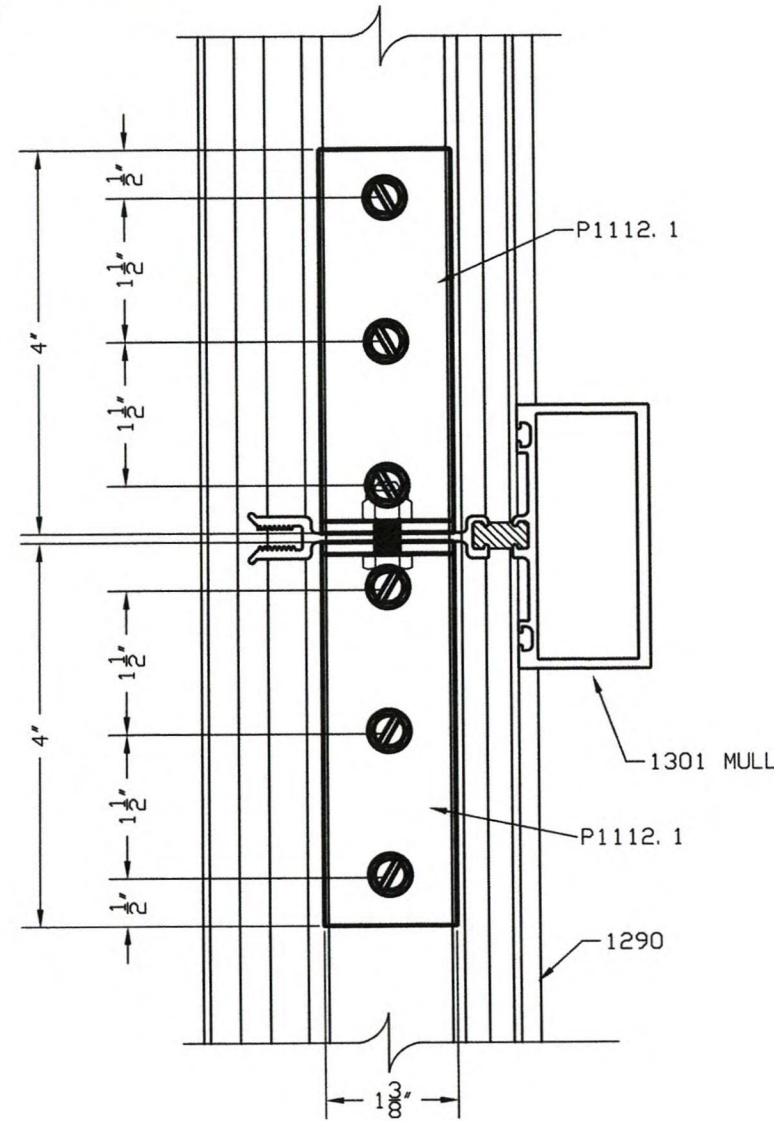
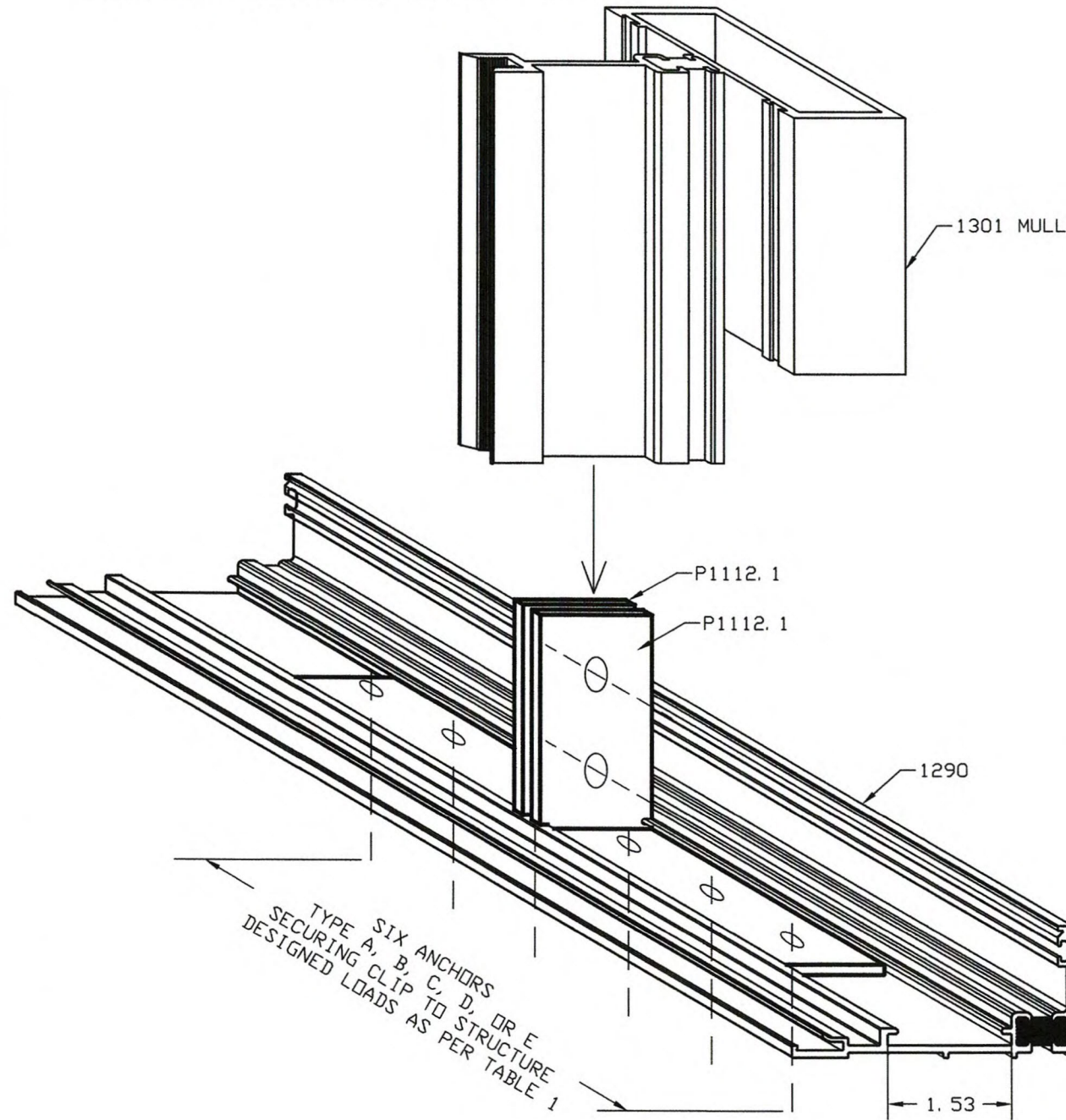
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④ MULLION CONNECTION DETAIL

DETAILS

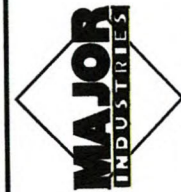


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SHEET
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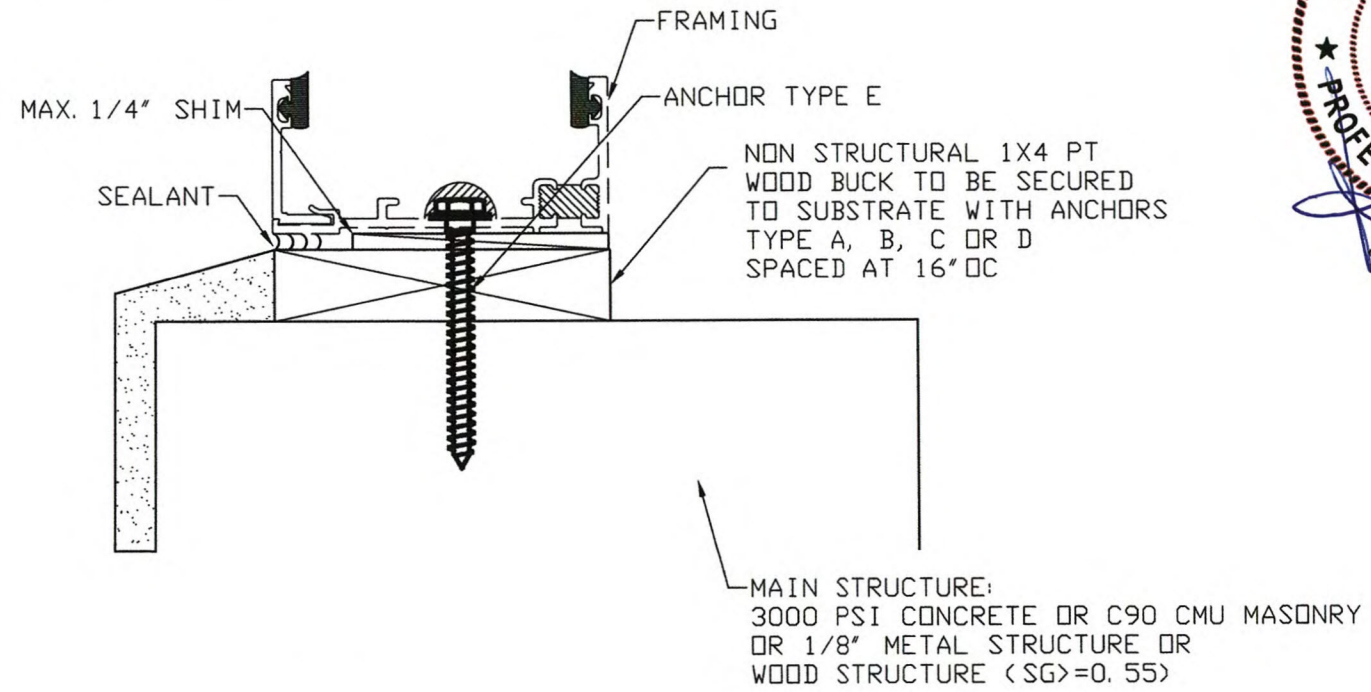
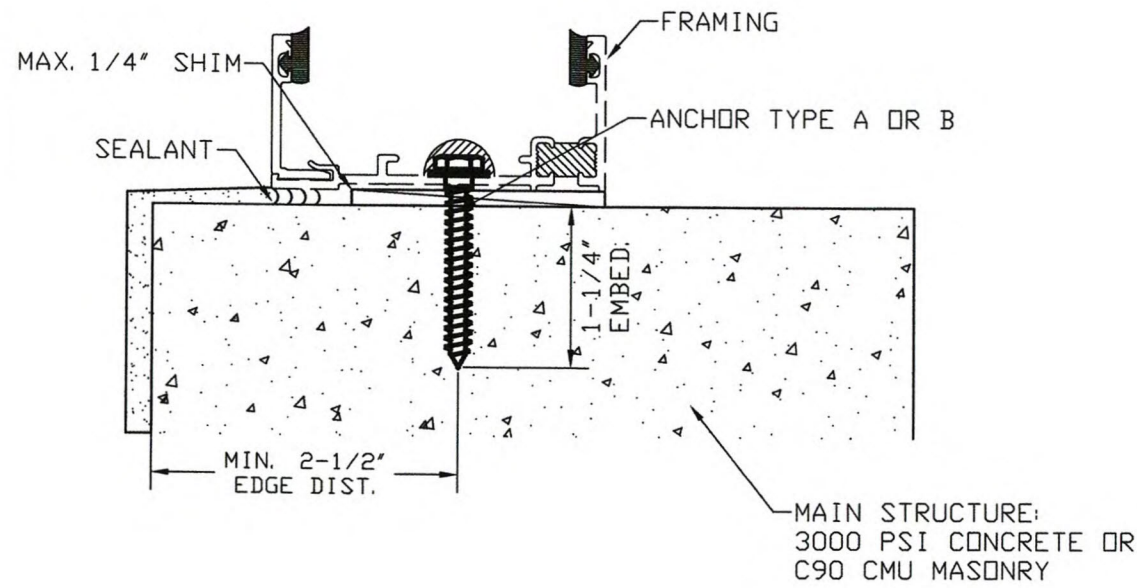
TABLE 1 - MULLION ADJUSTED PRESSURES (PSF) DUE TO ANCHORAGE TYPE

ANCHOR TYPE	PANEL MODULES												HEIGHT WIDTH
	96			84			72			60			
	60	48	36	60	48	36	60	48	36	60	48	36	
A	65	65	65	65	65	65	65	65	65	65	65	65	
B	61	65	65	65	65	65	65	65	65	65	65	65	
C	65	65	65	65	65	65	65	65	65	65	65	65	
D	65	65	65	65	65	65	65	65	65	65	65	65	
E	50	58	65	61	65	65	65	65	65	65	65	65	

SEE SHEET 5 FOR ANCHOR TYPE DEFINITION

EXAMPLE: MODULE 36X84 PANEL ANCHOR TYPE E
MULLION DESIGNED PRESSURE TO BE ADJUSTED TO 58 PSF

FRAMING ANCHORAGE

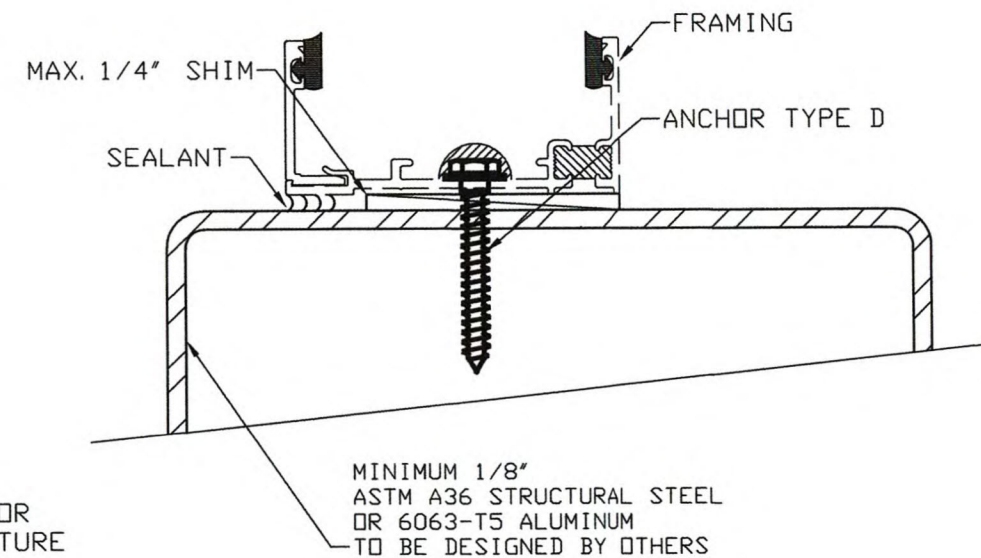
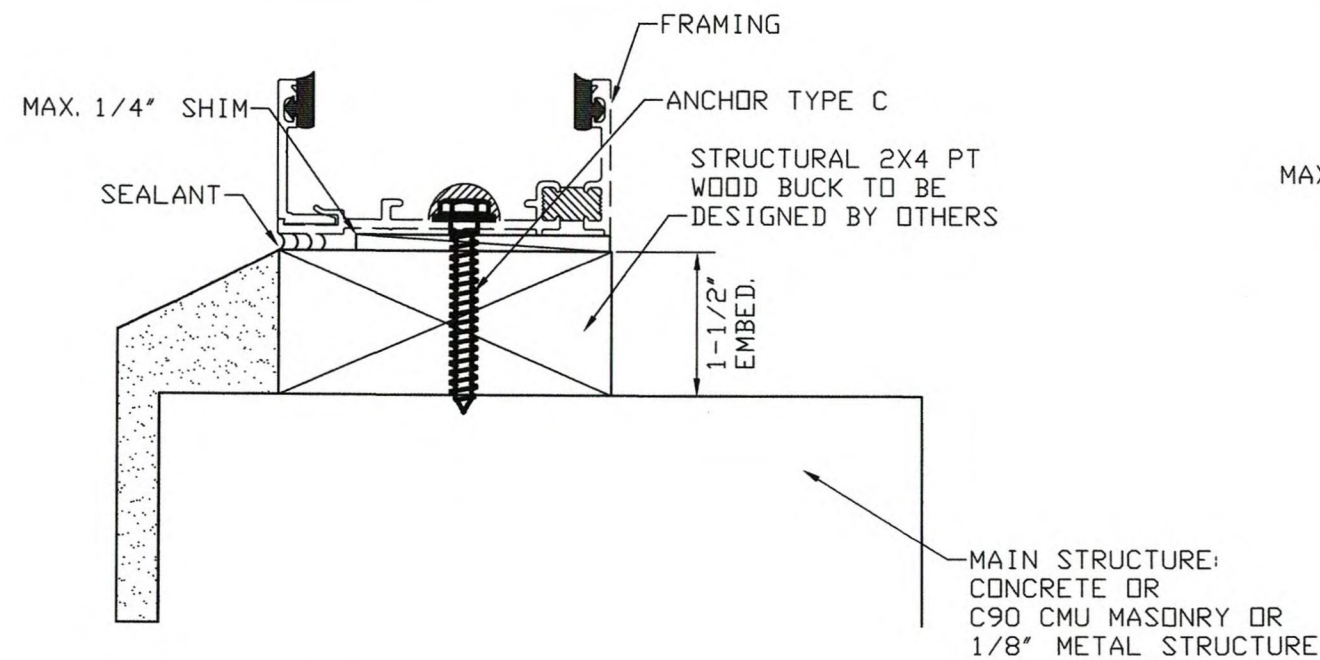


ANCHORAGE NOTES:

- 1- SILL, JAMB AND HEADER WITH TYPE A, B, C, D OR E ANCHORAGE OPTIONS.
- 2- SEE ELEVATIONS FOR WINDOW ANCHORAGE LAY-OUT AND SPACING.

ANCHOR OPTIONS:

- | |
|--|
| A- 1/4" SS ITW TAPCON 1-1/4" DIRECTLY INTO 3000 PSI CONCRETE |
| B- 1/4" SS ITW TAPCON 1-1/4" DIRECTLY INTO MASONRY |
| C- 1/4" SS ITW TAPCON OR 1/4" SS SMS 1 1/2" DIRECTLY INTO MIN. 2X PT WOOD BUCK (G>=.046) |
| D- 1/4" SS SMS DIRECTLY INTO MIN. 1/8" METAL STRUCTURE (6063-T5 ALUM. OR ASTM A36 STEEL) |
| E- ALL ANCHORS ABOVE INSTALLED THROUGH 1X PT INTO MAIN STRUCTURE |



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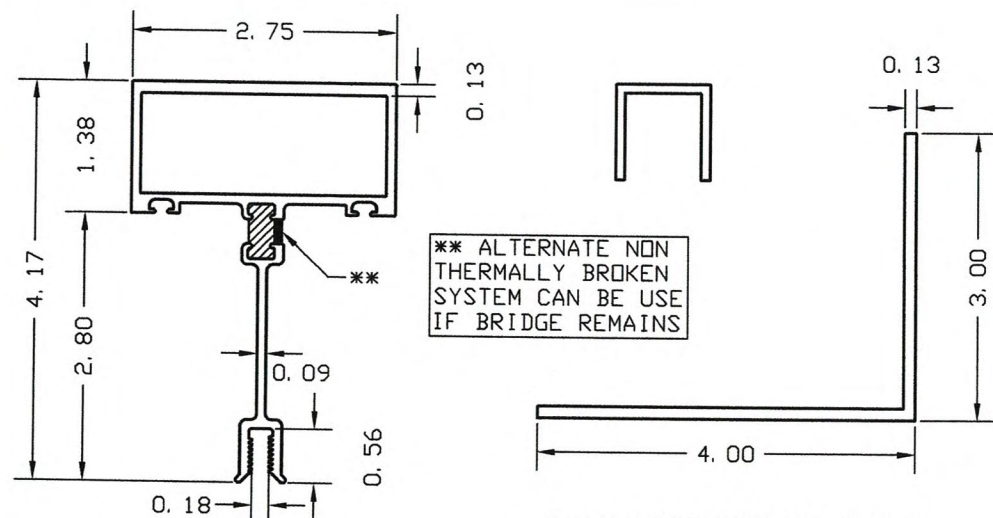
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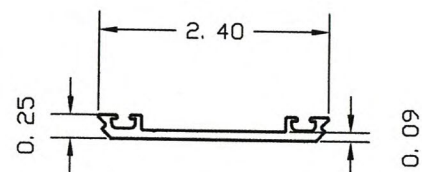
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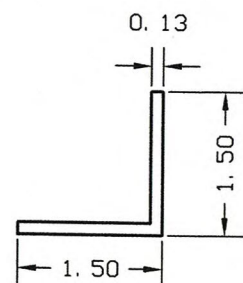
FRAMING COMPONENTS



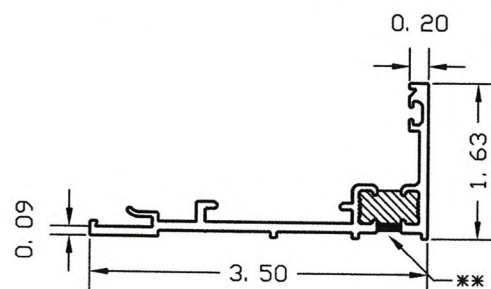
1301 MULLION
6063-T5 ALUMINUM ALLOY



1218 MULLION PRESSURE BAR
6063-T5 ALUMINUM ALLOY

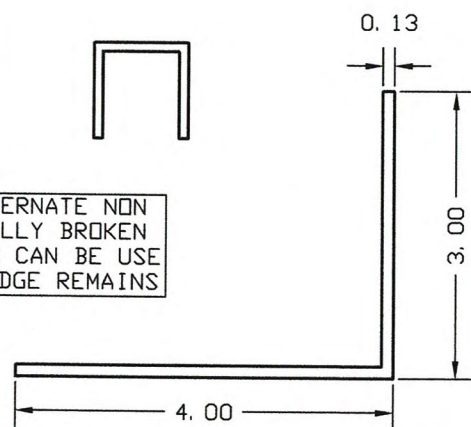


1108 FRAMING CORNER KEY
6063-T5 ALUMINUM ALLOY
1.5" LONG

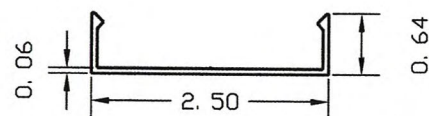


1290 PERIMETER FRAMING
6063-T5 ALUMINUM ALLOY

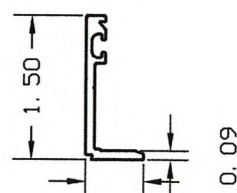
** ALTERNATE NON
THERMALLY BROKEN
SYSTEM CAN BE USE
IF BRIDGE REMAINS



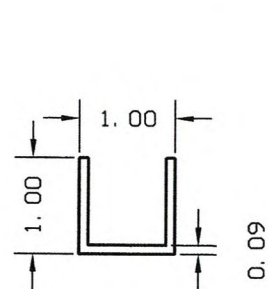
P 1112.1 CORNER MULLION CLIP
6063-T5 ALUMINUM ALLOY
1-3/8" LONG



141 MULLION DRESSING CAP
6063-T5 ALUMINUM ALLOY

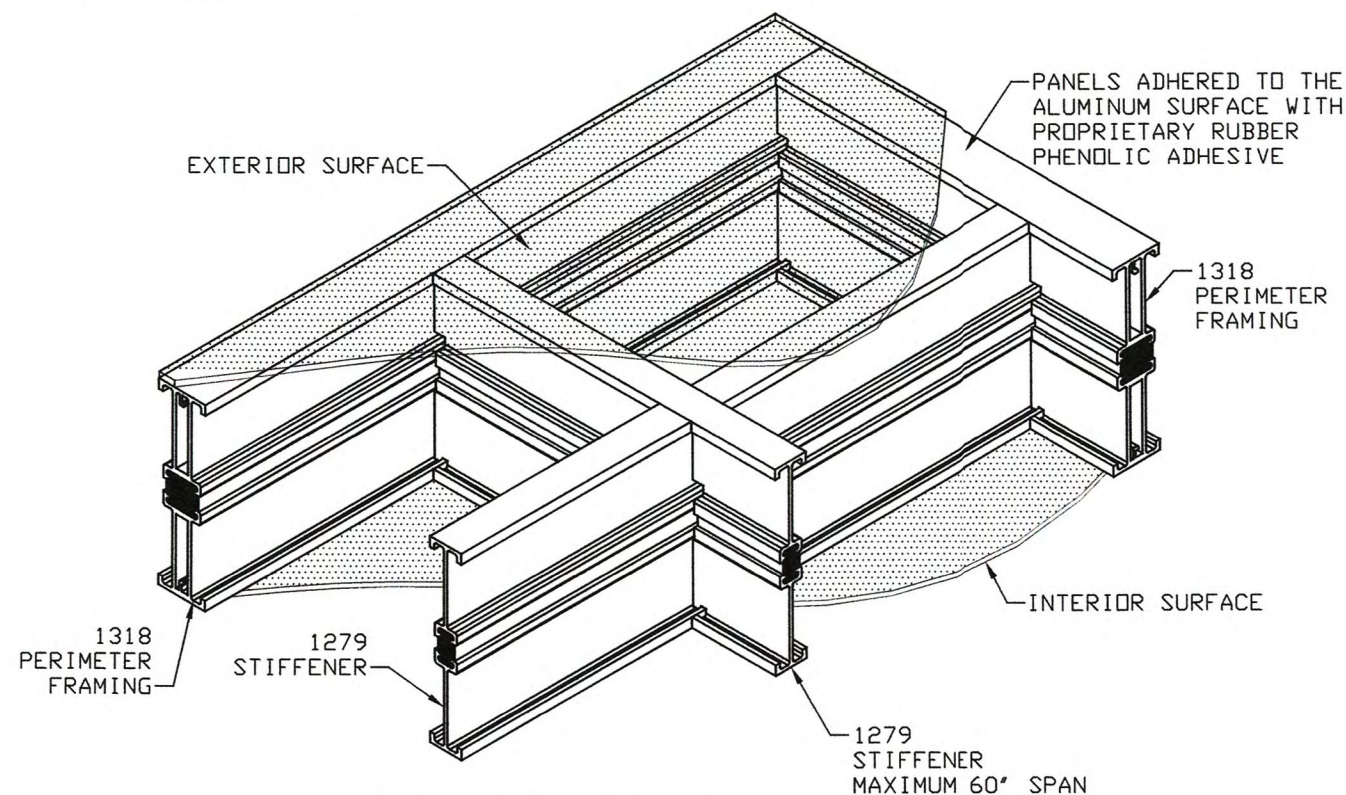


1291 SNAP PANEL STOP
6063-T5 ALUMINUM ALLOY



1052 PANEL STOP
6063-T5 ALUMINUM ALLOY

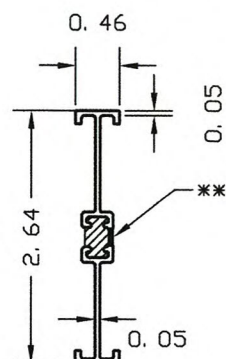
PANEL COMPONENTS



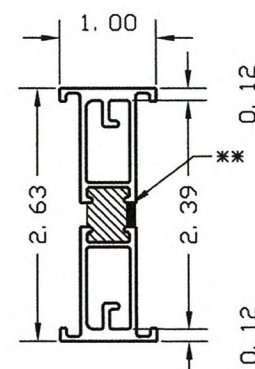
BASIC MODULAR PANEL ASSEMBLY

PANEL CONFIGURATION:
EXTERIOR SURFACE: 0.070" FIBERGLASS PANEL
INTERIOR SURFACE: 0.045" FIBERGLASS PANEL
NOMINAL GRID SIZE: 12" X 20"
MAXIMUM 1279 SPAN: 60"

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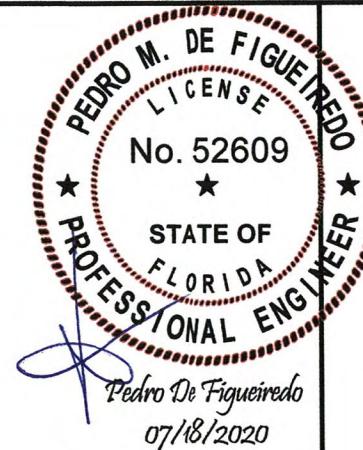


1279 STIFFENER I BEAM
6005-T5 ALUMINUM ALLOY



1318 PERIMETER I BEAM
6005-T5 ALUMINUM ALLOY

INTERIOR SURFACE PANEL	
0.045 FRCW STANDARD FIRE RATED TRANSLUCENT FIBERGLASS SHEET	
ASTM E84:	FLAME SPREAD INDEX - 20 SMOKE DEVELOPED INDEX - 150 (≤450 FBC 2606.4)
ASTM D1929:	SELF IGNITION - 912 °F (≥650 FBC 2606.4) FLASH IGNITION - 872 °F
ASTM D635:	CLASS CC1
EXTERIOR SURFACE	
0.070 STCWW ULTIMATE SERIES HIGH IMPACT TRANSLUCENT FIBERGLASS SHEET	
ASTM E84:	FLAME SPREAD INDEX - 170 SMOKE DEVELOPED INDEX - 350 (≤450 FBC 2606.4)
ASTM D1929:	SELF IGNITION - 860 °F (≥650 FBC 2606.4) FLASH IGNITION - 752 °F
ASTM D635:	BURNING RATE - 24.8 mm/min. (CLASS CC2)



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