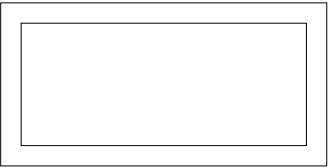


ORIGIN MULLIONS

GENERAL NOTES

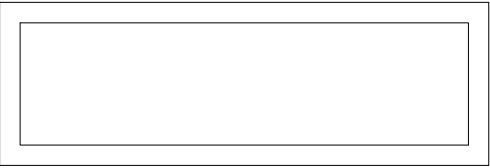
1. THIS APPROVAL APPLIES TO ORIGIN 6063–T6 ALUMINUM MULLIONS AS SHOWN IN THESE DRAWINGS. THESE MULLIONS, FABRICATED AND ANCHORED AS DETAILED IN THIS DRAWING, MAY BE USED IN ASSEMBLIES OF ORIGIN AW, CA, OR PW WINDOWS OR SLIDING OR FOLDING DOORS. MULLIONS AS INDICATED IN CHARTS 1 THROUGH 5 MAY BE USED WITH LARGE MISSILE OR SMALL MISSILE IMPACT RESISTANT OR NON–IMPACT ORIGIN PRODUCTS AND IMPACT PROTECTIVE DEVICES (SHUTTERS) ARE NOT REQUIRED IN WINDBORNE DEBRIS REGIONS. MULLIONS AS INDICATED IN CHART 6 MAY BE USED WITH NON–IMPACT ORIGIN PRODUCTS ONLY AND REQUIRE THE USE OF IMPACT PROTECTIVE DEVICES (SHUTTERS) IN WINDBORNE DEBRIS REGIONS.
2. THIS PRODUCT HAS BEEN TESTED TO ASTM E 1886/1996, AAMA 450, AND TAS 201/202/203, AND MEETS THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, 8TH EDITION (2023), INCLUDING THE HIGH VELOCITY HURRICANE ZONE (SHADED REGION OF CHARTS 4 AND 5 AND ALL VALUES IN CHART 6 MAY ONLY BE USED OUTSIDE THE HVHZ).
3. ALLOWABLE CONFIGURATIONS ARE AS SHOWN IN THESE DRAWINGS. ALL MULLIONS MAY BE USED VERTICALLY OR HORIZONTALLY.
4. DESIGN PRESSURES SHOWN IN THE CHARTS IN THESE DRAWINGS APPLY TO THE MULLION ONLY. GLAZED ORIGIN PRODUCTS SHALL BE SEPARATELY APPROVED, SEE SEPARATE APPROVALS FOR APPLICABLE DESIGN PRESSURES FOR GLAZED PRODUCTS.
5. THE LEAST DESIGN PRESSURE OF THE MULLION OR THE INDIVIDUAL GLAZED PRODUCTS SHALL BE THE APPLICABLE DESIGN PRESSURE OF THE ENTIRE MULLED ASSEMBLY.
6. THE 4/3 ALLOWABLE STRESS INCREASE FACTOR (SHORT–TERM INCREASE FACTOR) HAS NOT BEEN USED IN THE ANCHOR ANALYSIS FOR THIS SYSTEM. THE 1.6 Cd FACTOR WAS USED IN THE ANALYSIS OF ANCHORAGE INTO WOOD SUBSTRATE.
7. INSTALLATION OF 2X WOOD BUCKS TO THE SUBSTRATE TO BE ENGINEERED BY OTHERS OR AS APPROVED BY THE AUTHORITY HAVING JURISDICTION (A.H.J.). BUCKING, OPENINGS, & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED BY OTHERS IN ACCORDANCE WITH THE FBC TO TRANSFER SUPERIMPOSED LOADS TO THE STRUCTURE. ADEQUACY OF THE STRUCTURE TO RECEIVE THESE LOADS SHALL BE VERIFIED BY THE CONTRACTOR OR A.H.J.
8. DISSIMILAR MATERIALS THAT COME INTO CONTACT SHALL BE COATED OR OTHERWISE PROTECTED TO PREVENT GALVANIC REACTIONS. WOOD BUCKS, IF USED, SHALL BE PRESSURE TREATED, WITH EITHER A TREATMENT OR COATING COMPATIBLE WITH ALUMINUM. ALL ANCHORS USED SHALL BE OF A MATERIAL OR HAVE A COATING COMPATIBLE WITH THE PRESSURE TREATED WOOD BUCKS AND ALL OTHER WINDOW MATERIALS.
9. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS, OR AS APPROVED, SIGNED, AND SEALED BY A FLORIDA–REGISTERED PROFESSIONAL ENGINEER ON A SITE–SPECIFIC BASIS.
10. SEALING AND FLASHING STRATEGIES FOR OVERALL WATER INFILTRATION RESISTANCE OF THE INSTALLED PRODUCT SHALL BE THE RESPONSIBILITY OF OTHERS AND IS NOT ADDRESSED BY THIS DOCUMENT.

2” X 4” X 1/4”  
TUBE MULLION



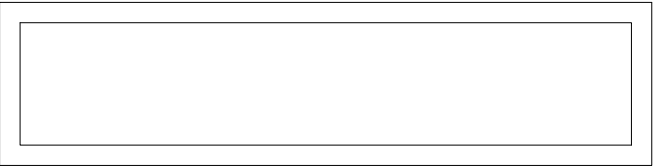
SEE CHART 1  
ON SHEET 2

2” X 6” X 1/4”  
TUBE MULLION



SEE CHART 2  
ON SHEET 3

2” X 8” X 1/4”  
TUBE MULLION



SEE CHART 3  
ON SHEET 4

1” X 4”  
FLAT  
MULLION



SEE CHART 4  
ON SHEET 5

3/8” X  
2–13/16”  
FLAT  
MULLION



SEE CHARTS 5 AND 6  
ON SHEET 6



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CAMDEN, TN 38320  
PH. 941–380–1574



ORIGIN USA INC.  
573 PAUL MORRIS DR.  
ENGLEWOOD, FL 34223  
Phone: 941–484–4861

ALUMINUM MULLIONS  
FOR ORIGIN WINDOWS  
AND DOORS

DRAWN BY:

LAT

DATE:

1/26/17

SCALE:

NTS

REVISION:

REVISION 10/20/2023:

B: 2023 UPDATE

DRAWING #

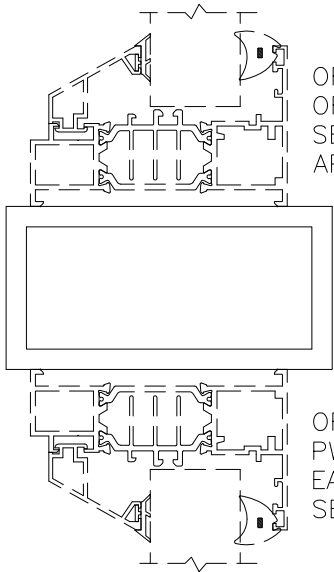
FPA–MULLS

SHEET DESCRIPTION

NOTES,  
ELEVATION

SHEET  
1 of 8

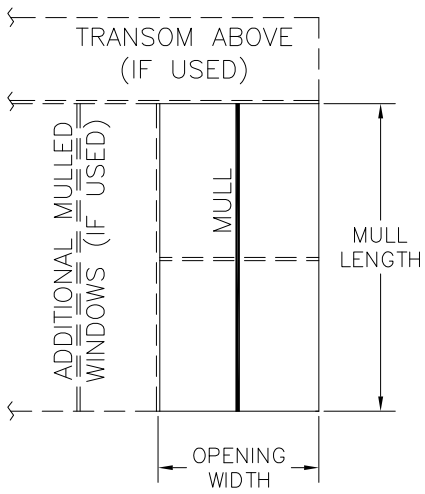
2X4X1/4”  
6063-T6  
TUBE  
MULLION



ORIGIN AW 6, CA 6,  
OR PW 6 WINDOWS,  
SEE SEPARATE  
APPROVALS

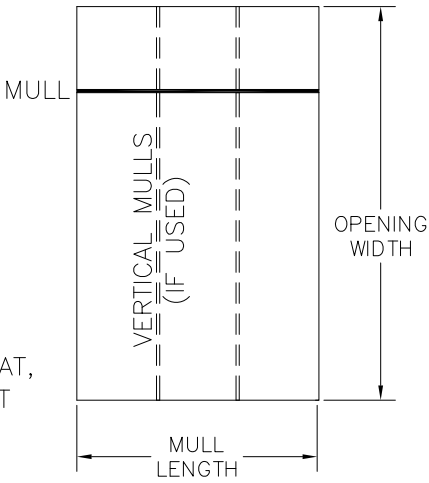
ORIGIN AW 6, CA 6, OR  
PW 6 WINDOWS OR  
EASIFOLD 3000 DOORS,  
SEE SEPARATE APPROVALS

NOTE: FOR MULLION  
ANCHORAGE SEE SHEETS 7  
AND 8. INSTALLER TO  
SEAL ALL CONTACT POINTS  
BETWEEN GLAZED  
PRODUCTS AND MULLIONS.  
FOR ANCHORAGE OF  
GLAZED PRODUCTS TO  
MULLION, SEE SEPARATE  
APPROVALS AND FOLLOW  
INSTRUCTIONS FOR  
ATTACHMENT TO ALUMINUM.



SAMPLE VERTICAL MULLION

2X4”, 1X4” FLAT,  
AND 3/8” FLAT  
MULLS MAY  
T-INTERSECT  
TO THIS MULL.



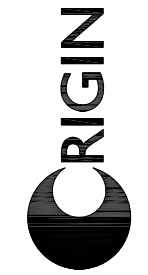
SAMPLE HORIZONTAL MULLION

CHART 1. 2x4x1/4" ALUM. MULL, 6063-T6 MIN., ALLOWABLE PRESSURES (PSF) WITH END CLIP ANCHORAGE AS SHOWN IN THIS DRAWING

|                  |     | OPENING WIDTH, IN. |    |    |    |    |    |     |     |     |     |     |     |
|------------------|-----|--------------------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
|                  |     | 36                 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 | 144 | 156 | 168 |
| MULL LENGTH, IN. | 96  | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 102 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 53  | 51  | 49  |
|                  | 108 | 55                 | 55 | 55 | 55 | 55 | 55 | 54  | 49  | 46  | 44  | 42  | 40  |
|                  | 114 | 55                 | 55 | 55 | 55 | 55 | 50 | 45  | 42  | 39  | 36  | 35  | 33  |
|                  | 120 | 55                 | 55 | 55 | 55 | 48 | 42 | 38  | 35  | 33  | 31  | 29  | 28  |
|                  | 126 | 55                 | 55 | 55 | 47 | 41 | 36 | 33  | 30  | 28  | 26  | 25  | 24  |
|                  | 132 | 55                 | 55 | 49 | 41 | 36 | 31 | 28  | 26  | 24  | 22  | 21  | 20  |
|                  | 138 | 55                 | 53 | 43 | 36 | 31 | 27 | 25  | 23  | 21  | 19  | 18  | 17  |
|                  | 144 | 55                 | 46 | 37 | 31 | 27 | 24 | 22  | 20  | 18  | 17  | 16  | 15  |
|                  | 150 | 54                 | 41 | 33 | 28 | 24 | 21 | 19  | 17  | 16  | -   | -   | -   |
|                  | 156 | 48                 | 36 | 29 | 25 | 21 | 19 | 17  | 15  | -   | -   | -   | -   |
|                  | 162 | 43                 | 33 | 26 | 22 | 19 | 17 | 15  | -   | -   | -   | -   | -   |
|                  | 168 | 39                 | 29 | 23 | 20 | 17 | -  | -   | -   | -   | -   | -   | -   |
|                  | 174 | 35                 | 26 | 21 | 18 | 15 | -  | -   | -   | -   | -   | -   | -   |
|                  | 180 | 31                 | 24 | 19 | 16 | -  | -  | -   | -   | -   | -   | -   | -   |
|                  | 186 | 29                 | 21 | 17 | -  | -  | -  | -   | -   | -   | -   | -   | -   |
|                  | 192 | 26                 | 19 | 16 | -  | -  | -  | -   | -   | -   | -   | -   | -   |
|                  | 198 | 24                 | 18 | -  | -  | -  | -  | -   | -   | -   | -   | -   | -   |
|                  | 204 | 22                 | 16 | -  | -  | -  | -  | -   | -   | -   | -   | -   | -   |
|                  | 210 | 20                 | -  | -  | -  | -  | -  | -   | -   | -   | -   | -   | -   |



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573 PAUL MORRIS DR.  
ENGLEWOOD, FL 34223  
Phone: 941-484-4861

ALUMINUM MULLIONS  
FOR ORIGIN WINDOWS  
AND DOORS

DRAWN BY:

LAT

DATE:

1/26/17

SCALE:

NTS

REVISION:

REVISION 10/20/2023:

B: 2023 UPDATE

DRAWING #

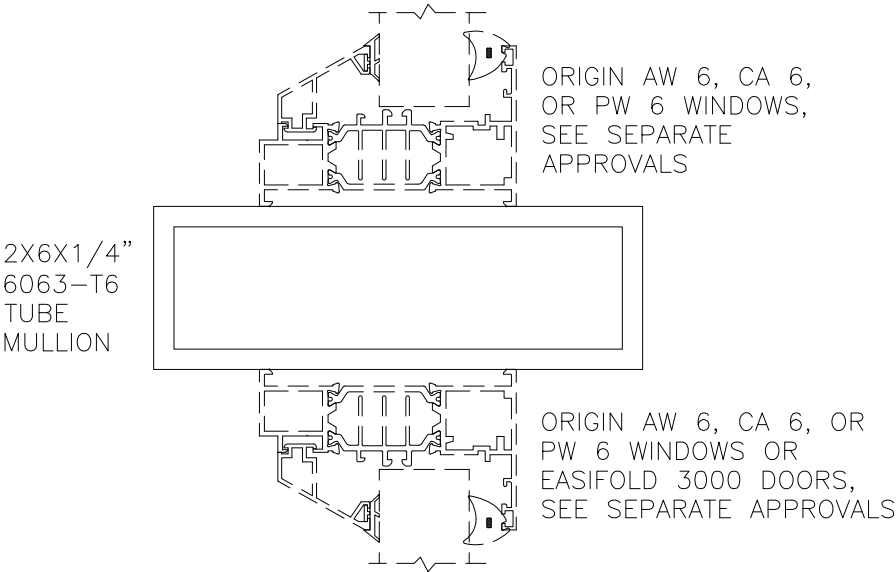
FPA-MULLS

SHEET DESCRIPTION

2 X 4 MULL

SHEET

2 of 8



NOTE: FOR MULLION ANCHORAGE SEE SHEETS 7 AND 8. INSTALLER TO SEAL ALL CONTACT POINTS BETWEEN GLAZED PRODUCTS AND MULLIONS. FOR ANCHORAGE OF GLAZED PRODUCTS TO MULLION, SEE SEPARATE APPROVALS AND FOLLOW INSTRUCTIONS FOR ATTACHMENT TO ALUMINUM.

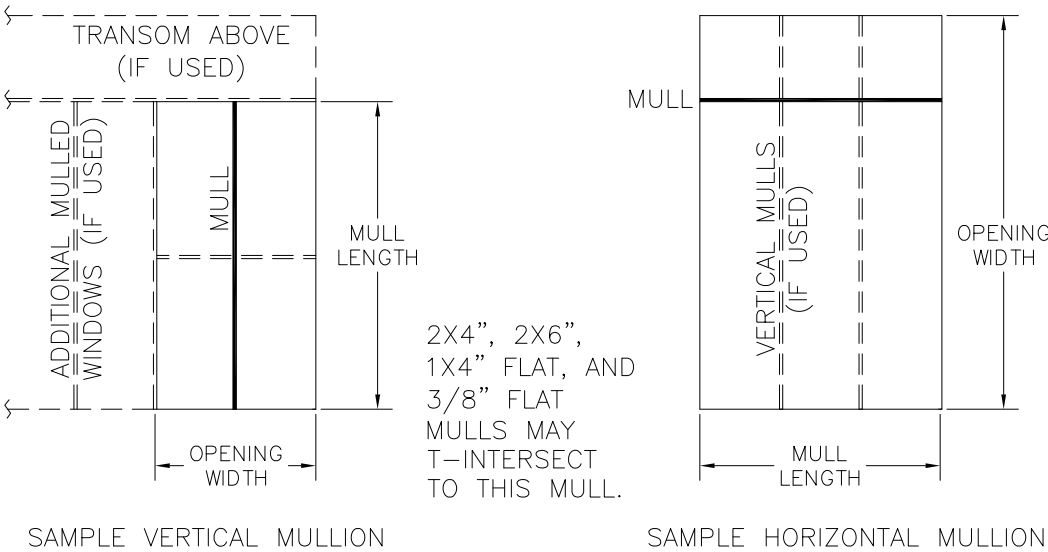
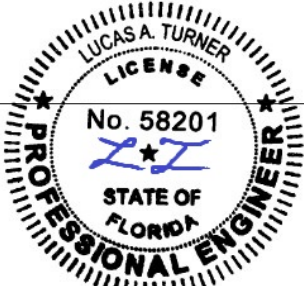


CHART 2. 2x6x1/4" ALUM. MULL, 6063-T6 MIN., ALLOWABLE PRESSURES (PSF) WITH END CLIP ANCHORAGE AS SHOWN IN THIS DRAWING

|                  |     | OPENING WIDTH, IN. |    |    |    |    |    |     |     |     |     |     |     |
|------------------|-----|--------------------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
|                  |     | 36                 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 | 144 | 156 | 168 |
| MULL LENGTH, IN. | 96  | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 102 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 108 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 114 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 120 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 126 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 132 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 138 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 53  | 50  |
|                  | 144 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 52  | 49  | 46  | 43  |
|                  | 150 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 50  | 46  | 43  | 40  | 38  |
|                  | 156 | 55                 | 55 | 55 | 55 | 55 | 54 | 48  | 44  | 41  | 38  | 35  | 33  |
|                  | 162 | 55                 | 55 | 55 | 55 | 54 | 48 | 43  | 39  | 36  | 33  | 31  | 30  |
|                  | 168 | 55                 | 55 | 55 | 55 | 49 | 43 | 38  | 35  | 32  | 30  | 28  | 26  |
|                  | 174 | 55                 | 55 | 55 | 51 | 44 | 38 | 34  | 31  | 29  | 27  | 25  | 23  |
|                  | 180 | 55                 | 55 | 54 | 46 | 39 | 35 | 31  | 28  | 26  | 24  | 22  | 21  |
|                  | 186 | 55                 | 55 | 49 | 41 | 36 | 31 | 28  | 25  | 23  | 22  | 20  | 19  |
|                  | 192 | 55                 | 55 | 45 | 38 | 32 | 28 | 25  | 23  | 21  | 20  | 18  | 17  |
|                  | 198 | 55                 | 51 | 41 | 34 | 29 | 26 | 23  | 21  | 19  | 18  | 17  | 16  |
|                  | 204 | 55                 | 47 | 37 | 31 | 27 | 24 | 21  | 19  | 18  | 16  | 15  | -   |
|                  | 210 | 55                 | 43 | 34 | 29 | 25 | 22 | 19  | 18  | 16  | -   | -   | -   |



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FL PE # 58201  
TURNER ENGINEERING &  
CONSULTING, INC.  
2428 OLD NATCHEZ TRC. TRL.  
CAMDEN, TN 38320  
PH. 941-380-1574

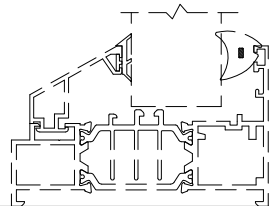
ORIGIN  
USA INC.

573 PAUL MORRIS DR.  
ENGLEWOOD, FL 34223  
Phone: 941-484-4861

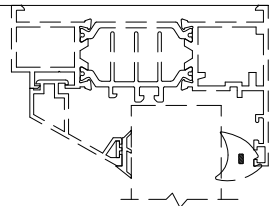
ALUMINUM MULLIONS  
FOR ORIGIN WINDOWS  
AND DOORS

|                   |                               |
|-------------------|-------------------------------|
| DRAWN BY:         | LAT                           |
| DATE:             | 1/26/17                       |
| SCALE:            | NTS                           |
| REVISION:         |                               |
| REVISION          | 10/20/2023:<br>B: 2023 UPDATE |
| DRAWING #         | FPA-MULLS                     |
| SHEET DESCRIPTION | 2 X 6 MULL                    |
| SHEET             | 3 of 8                        |

2X8X1/4”  
6063-T6  
TUBE  
MULLION

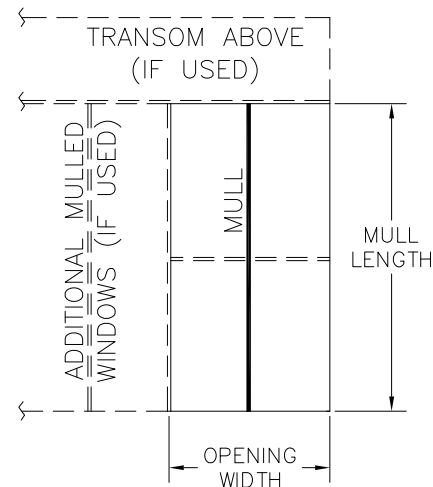


ORIGIN AW 6, CA 6,  
OR PW 6 WINDOWS,  
SEE SEPARATE  
APPROVALS



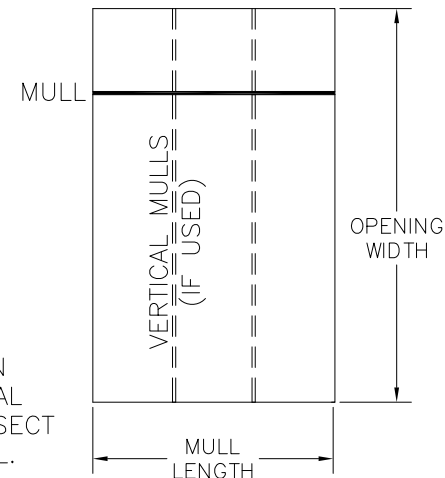
ORIGIN AW 6, CA 6, OR  
PW 6 WINDOWS OR  
EASIFOLD 3000 DOORS,  
SEE SEPARATE APPROVALS

NOTE: FOR MULLION  
ANCHORAGE SEE SHEETS 7  
AND 8. INSTALLER TO  
SEAL ALL CONTACT POINTS  
BETWEEN GLAZED  
PRODUCTS AND MULLIONS.  
FOR ANCHORAGE OF  
GLAZED PRODUCTS TO  
MULLION, SEE SEPARATE  
APPROVALS AND FOLLOW  
INSTRUCTIONS FOR  
ATTACHMENT TO ALUMINUM.



SAMPLE VERTICAL MULLION

ALL MULLS IN  
THIS APPROVAL  
MAY T-INTERSECT  
TO THIS MULL.



SAMPLE HORIZONTAL MULLION

CHART 3. 2x8x1/4" ALUM. MULL, 6063-T6 MIN., ALLOWABLE PRESSURES (PSF) WITH END CLIP ANCHORAGE AS SHOWN IN THIS DRAWING

|                  |     | OPENING WIDTH, IN. |    |    |    |    |    |     |     |     |     |     |     |
|------------------|-----|--------------------|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
|                  |     | 36                 | 48 | 60 | 72 | 84 | 96 | 108 | 120 | 132 | 144 | 156 | 168 |
| MULL LENGTH, IN. | 96  | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 102 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 108 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 114 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 120 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 126 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 132 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 138 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 144 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 54  |
|                  | 150 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 53  | 51  |
|                  | 156 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 53  | 50  | 48  |
|                  | 162 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 54  | 51  | 48  | 46  |
|                  | 168 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 52  | 48  | 46  | 44  |
|                  | 174 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 53  | 50  | 46  | 44  | 42  |
|                  | 180 | 55                 | 55 | 55 | 55 | 55 | 55 | 55  | 51  | 47  | 44  | 42  | 40  |
|                  | 186 | 55                 | 55 | 55 | 55 | 55 | 55 | 54  | 49  | 46  | 43  | 40  | 38  |
|                  | 192 | 55                 | 55 | 55 | 55 | 55 | 55 | 52  | 47  | 44  | 41  | 39  | 37  |
|                  | 198 | 55                 | 55 | 55 | 55 | 55 | 55 | 50  | 45  | 41  | 38  | 36  | 33  |
|                  | 204 | 55                 | 55 | 55 | 55 | 55 | 51 | 45  | 41  | 38  | 35  | 32  | 30  |
|                  | 210 | 55                 | 55 | 55 | 55 | 53 | 46 | 42  | 38  | 34  | 32  | 30  | 28  |



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ALUMINUM MULLIONS  
FOR ORIGIN WINDOWS  
AND DOORS

DRAWN BY:

LAT

DATE:

1/26/17

SCALE:

NTS

REVISION:

REVISION 10/20/2023:

B: 2023 UPDATE

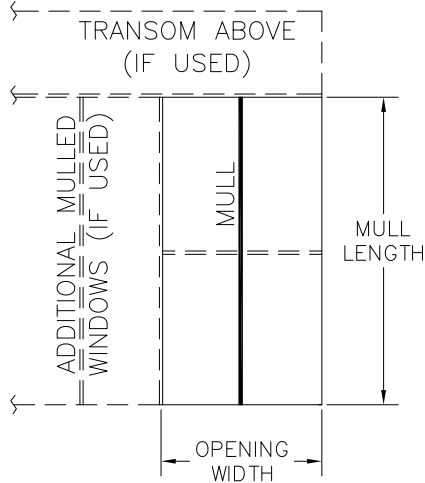
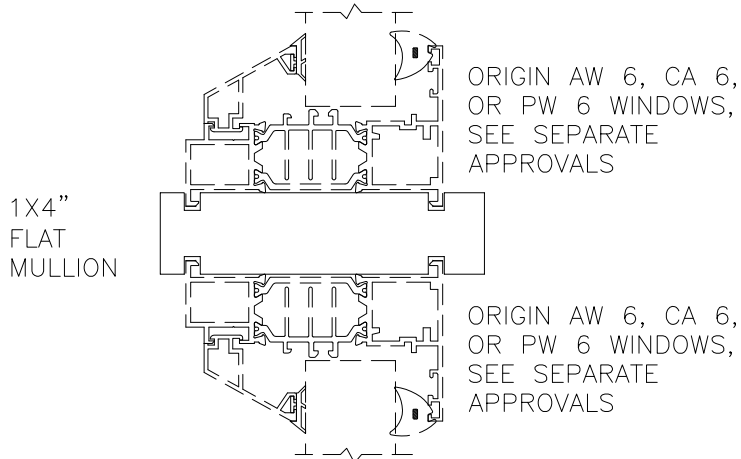
DRAWING #

FPA-MULLS

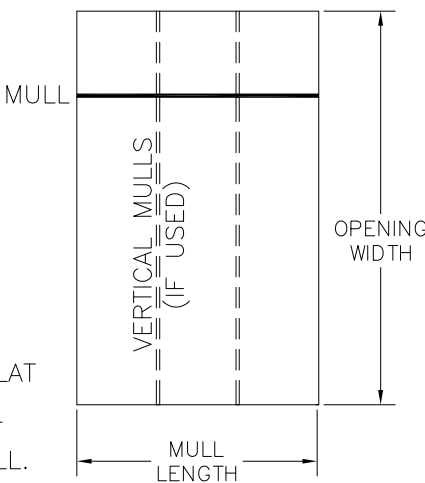
SHEET DESCRIPTION

2 X 8 MULL

SHEET  
4 of 8



SAMPLE VERTICAL MULLION



SAMPLE HORIZONTAL MULLION

THE 3/8" FLAT MULL MAY T-INTERSECT TO THIS MULL.

NOTE: SHADED AREAS IN CHART 4 ONLY APPLICABLE OUTSIDE THE HVHZ

NOTE: INSTALLER TO SEAL ALL CONTACT POINTS BETWEEN GLAZED PRODUCTS AND MULLIONS. FOR ANCHORAGE OF GLAZED PRODUCTS TO MULLION, SEE SEPARATE APPROVALS AND FOLLOW INSTRUCTIONS FOR ATTACHMENT TO ALUMINUM.

CHART 4. 1"X4" ALUM. FLAT MULL, 6063-T6, ALLOWABLE PRESSURES (PSF) WITH ONE EXTRA ANCHOR LOCATION AT CORNER OF EACH MULLED PRODUCT AT EACH MULL END \*

|                  |        | OPENING WIDTH, IN. |    |    |    |    |    |    |    |    |    |    |    |     |         |     |     |     |     |
|------------------|--------|--------------------|----|----|----|----|----|----|----|----|----|----|----|-----|---------|-----|-----|-----|-----|
|                  |        | 30                 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 | 84 | 90 | 96 | 108 | 120.625 | 132 | 144 | 156 | 168 |
| MULL LENGTH, IN. | 70.625 | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55      | 55  | 55  | 55  | 55  |
|                  | 72     | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55      | 55  | 55  | 55  | 55  |
|                  | 76     | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55      | 55  | 55  | 55  | 55  |
|                  | 78     | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55      | 55  | 55  | 55  | 55  |
|                  | 82.375 | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55      | 55  | 55  | 55  | 55  |
|                  | 84     | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55      | 55  | 55  | 55  | 55  |
|                  | 89.875 | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55      | 55  | 55  | 55  | 55  |
|                  | 93     | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55      | 55  | 55  | 55  | 54  |
|                  | 96     | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55      | 55  | 53  | 52  | 51  |
|                  | 98.375 | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55      | 53  | 51  | 50  | 49  |
|                  | 102    | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 53      | 51  | 48  | 47  | 46  |
|                  | 108    | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 53  | 49      | 47  | 44  | 43  | 42  |
|                  | 114    | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 53 | 49  | 46      | 43  | 41  | 39  | 38  |
|                  | 120    | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 53 | 50 | 46  | 43      | 40  | 38  | 36  | 35  |
|                  | 126    | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 51 | 48 | 45 | 41  | 37      | 35  | 33  | 31  | 29  |
|                  | 132    | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 51 | 48 | 44 | 42 | 39 | 35  | 32      | 30  | 28  | 26  | 25  |
|                  | 138    | 55                 | 55 | 55 | 55 | 55 | 53 | 49 | 45 | 41 | 39 | 36 | 34 | 31  | 28      | 26  | 24  | 23  | 22  |
|                  | 144    | 55                 | 55 | 55 | 55 | 52 | 47 | 43 | 39 | 36 | 34 | 32 | 30 | 27  | 25      | 23  | 21  | 20  | 19  |
|                  | 150    | 55                 | 55 | 55 | 51 | 46 | 41 | 38 | 35 | 32 | 30 | 28 | 26 | 24  | 22      | 20  | 19  | 17  | 17  |
|                  | 156    | 55                 | 55 | 52 | 46 | 41 | 37 | 33 | 31 | 28 | 27 | 25 | 23 | 21  | 19      | 18  | 16  | 15  | -   |
|                  | 162    | 55                 | 54 | 46 | 41 | 36 | 33 | 30 | 27 | 25 | 24 | 22 | 21 | 19  | 17      | 16  | -   | -   | -   |
|                  | 168    | 55                 | 48 | 42 | 36 | 32 | 29 | 27 | 25 | 23 | 21 | 20 | 19 | 17  | 15      | -   | -   | -   | -   |
|                  | 174    | 52                 | 44 | 37 | 33 | 29 | 26 | 24 | 22 | 20 | 19 | 18 | 17 | 15  | -       | -   | -   | -   | -   |
|                  | 180    | 47                 | 39 | 34 | 30 | 26 | 24 | 22 | 20 | 18 | 17 | 16 | 15 | -   | -       | -   | -   | -   | -   |

\* ATTACHMENT OF MULLION TO OPENING SUBSTRATE IS VIA AN ADDITIONAL INSTALLATION ANCHOR AT THE CORNER OF EACH MULLED WINDOW PRODUCT AT EACH MULL END. THIS APPLIES TO ORIGIN WINDOW PRODUCTS ANCHORED WITH 1/4" MASONRY FASTENERS OR #12 WOOD OR METAL SCREWS. ENSURE THAT ANCHOR LOCATIONS, MINIMUM SPACING, AND EDGE AND EMBEDMENT DISTANCES ARE AS REQUIRED IN SEPARATE WINDOW APPROVALS, E.G. IF WINDOW APPROVAL CALLS FOR ANCHORS AT 4" FROM CORNERS AND 4" MIN. ON-CENTER BETWEEN ANCHOR LOCATIONS, PLACE ADDITIONAL ANCHORS THROUGH WINDOW FRAMING AT 8" FROM CORNER OF EACH MULLED WINDOW.



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ALUMINUM MULLIONS  
FOR ORIGIN WINDOWS  
AND DOORS

DRAWN BY:

LAT

DATE:

1/26/17

SCALE:

NTS

REVISION:

REVISION 10/20/2023:

B: 2023 UPDATE

DRAWING #

FPA-MULLS

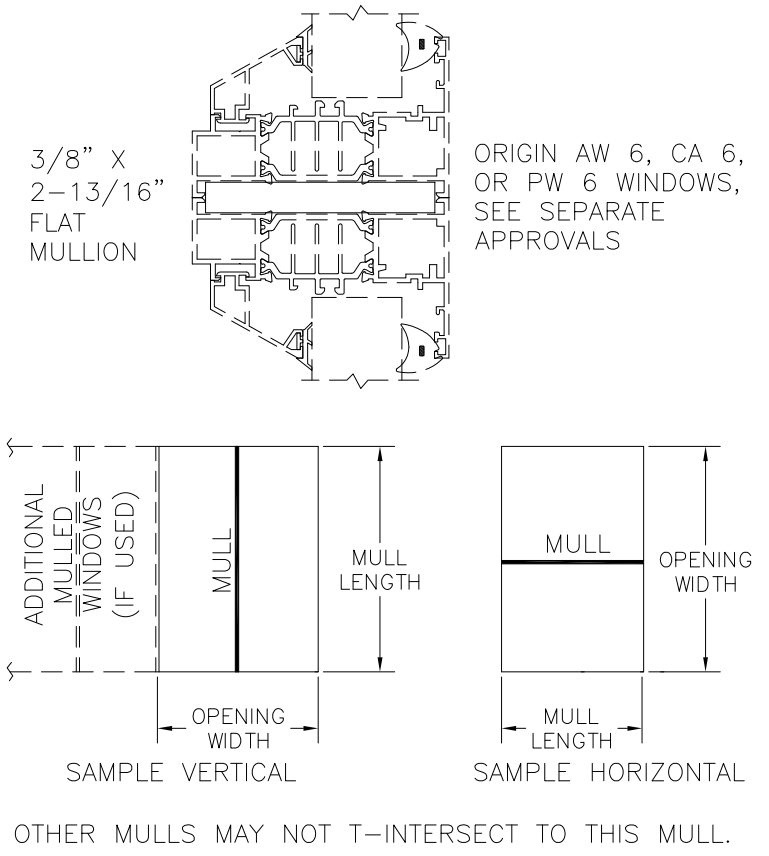
SHEET DESCRIPTION

1 X 4 FLAT  
MULL

SHEET  
5 of 8

CHART 5. 3/8"X2-13/16" ALUM. FLAT MULL, 6063-T6, ALLOWABLE PRESSURES (PSF) WITH ONE EXTRA ANCHOR LOCATION AT CORNER OF EACH MULLED PRODUCT AT EACH MULL END \*

|                  |     | OPENING WIDTH, IN. |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |
|------------------|-----|--------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
|                  |     | 30                 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 | 84 | 90 | 96 | 104 | 108 | 114 | 120 | 126 | 132 | 138 | 144 |
| MULL LENGTH, IN. | 56  | 30                 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30  | 30  | 30  | 30  | 30  | 30  | 30  | 30  |
|                  | 60  | 30                 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30  | 30  | 30  | 30  | 30  | 30  | 30  | 30  |
|                  | 64  | 30                 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30  | 30  | 30  | 30  | 30  | 30  | 30  | 30  |
|                  | 68  | 30                 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30  | 30  | 30  | 30  | 30  | 30  | 30  | 30  |
|                  | 72  | 30                 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30  | 30  | 30  | 30  | 30  | 30  | 30  | 30  |
|                  | 76  | 30                 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30  | 30  | 30  | 30  | 30  | 30  | 30  | 30  |
|                  | 81  | 30                 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30  | 30  | 30  | 30  | 30  | 30  | 30  | 30  |
|                  | 84  | 30                 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30  | 30  | 30  | 30  | 30  | 30  | 30  | 30  |
|                  | 88  | 30                 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30  | 30  | 30  | 30  | 30  | 30  | 30  | 30  |
|                  | 92  | 30                 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30  | 30  | 30  | 30  | 30  | 30  | 30  | 30  |
|                  | 96  | 30                 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30  | 30  | 30  | 30  | 30  | 30  | 30  | 30  |
|                  | 102 | 30                 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30  | 29  | 28  | 27  | 26  | 25  | 25  | 24  |
|                  | 108 | 30                 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 28 | 27 | 25  | 24  | 23  | 22  | 21  | 21  | 20  | 20  |
|                  | 114 | 30                 | 30 | 30 | 30 | 30 | 30 | 30 | 29 | 27 | 25 | 24 | 22 | 21  | 20  | 19  | 19  | 18  | 17  | 17  | 16  |
|                  | 120 | 30                 | 30 | 30 | 30 | 30 | 29 | 27 | 25 | 23 | 21 | 20 | 19 | 18  | 17  | 16  | 15  | -   | -   | -   | -   |
|                  | 126 | 30                 | 30 | 30 | 30 | 28 | 25 | 23 | 21 | 20 | 18 | 17 | 16 | 15  | -   | -   | -   | -   | -   | -   | -   |
|                  | 132 | 30                 | 30 | 30 | 27 | 24 | 22 | 20 | 18 | 17 | 16 | 15 | -  | -   | -   | -   | -   | -   | -   | -   | -   |



NOTE: SHADED AREAS IN CHART 5, AND ALL OF CHART 6, ONLY APPLICABLE OUTSIDE THE HVHZ

CHART 6. 3/8"X2-13/16" ALUM. FLAT MULL, 6063-T6, NON-IMPACT NON-HVHZ ALLOWABLE PRESSURES (PSF) WITH ONE EXTRA ANCHOR LOCATION AT CORNER OF EACH MULLED PRODUCT AT EACH MULL END \*

|                  |     | OPENING WIDTH, IN. |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |
|------------------|-----|--------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|
|                  |     | 30                 | 36 | 42 | 48 | 54 | 60 | 66 | 72 | 78 | 84 | 90 | 96 | 104 | 108 | 114 | 120 | 126 | 132 | 138 | 144 |
| MULL LENGTH, IN. | 56  | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 60  | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 64  | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 68  | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 72  | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 76  | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 55  | 55  | 55  |
|                  | 81  | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 55  | 55  | 55  | 54  | 53  | 53  |
|                  | 84  | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55  | 55  | 53  | 52  | 50  | 49  | 48  | 48  |
|                  | 88  | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 54 | 51 | 48  | 47  | 45  | 44  | 43  | 42  | 41  | 40  |
|                  | 92  | 55                 | 55 | 55 | 55 | 55 | 55 | 55 | 55 | 53 | 49 | 47 | 44 | 42  | 41  | 39  | 38  | 37  | 36  | 35  | 34  |
|                  | 96  | 55                 | 55 | 55 | 55 | 55 | 55 | 53 | 49 | 46 | 43 | 41 | 39 | 36  | 35  | 34  | 33  | 32  | 31  | 30  | 30  |
|                  | 102 | 55                 | 55 | 55 | 55 | 53 | 48 | 44 | 41 | 38 | 36 | 34 | 32 | 30  | 29  | 28  | 27  | 26  | 25  | 25  | 24  |
|                  | 108 | 55                 | 55 | 55 | 50 | 45 | 40 | 37 | 34 | 32 | 30 | 28 | 27 | 25  | 24  | 23  | 22  | 21  | 21  | 20  | 20  |
|                  | 114 | 55                 | 55 | 48 | 42 | 38 | 34 | 31 | 29 | 27 | 25 | 24 | 22 | 21  | 20  | 19  | 19  | 18  | 17  | 17  | 16  |
|                  | 120 | 55                 | 48 | 41 | 36 | 32 | 29 | 27 | 25 | 23 | 21 | 20 | 19 | 18  | 17  | 16  | 15  | -   | -   | -   | -   |
|                  | 126 | 50                 | 41 | 36 | 31 | 28 | 25 | 23 | 21 | 20 | 18 | 17 | 16 | 15  | -   | -   | -   | -   | -   | -   | -   |
|                  | 132 | 43                 | 36 | 31 | 27 | 24 | 22 | 20 | 18 | 17 | 16 | 15 | -  | -   | -   | -   | -   | -   | -   | -   | -   |

NOTE: INSTALLER TO SEAL ALL CONTACT POINTS BETWEEN GLAZED PRODUCTS AND MULLIONS. FOR ANCHORAGE OF GLAZED PRODUCTS TO MULLION, SEE SEPARATE APPROVALS AND FOLLOW INSTRUCTIONS FOR ATTACHMENT TO ALUMINUM.

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ALUMINUM MULLIONS  
FOR ORIGIN WINDOWS  
AND DOORS

DRAWN BY:  
LAT

DATE:  
1/26/17

SCALE:  
NTS

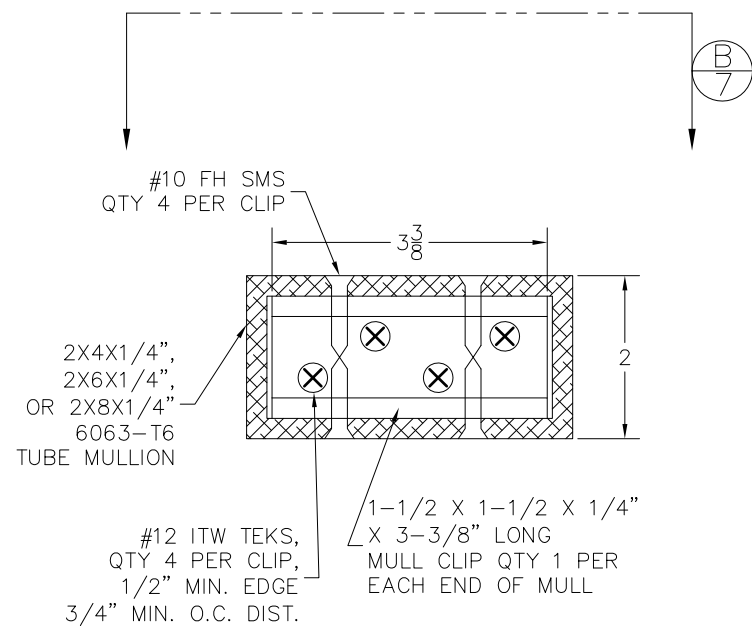
REVISION:

REVISION 10/20/2023:  
B: 2023 UPDATE

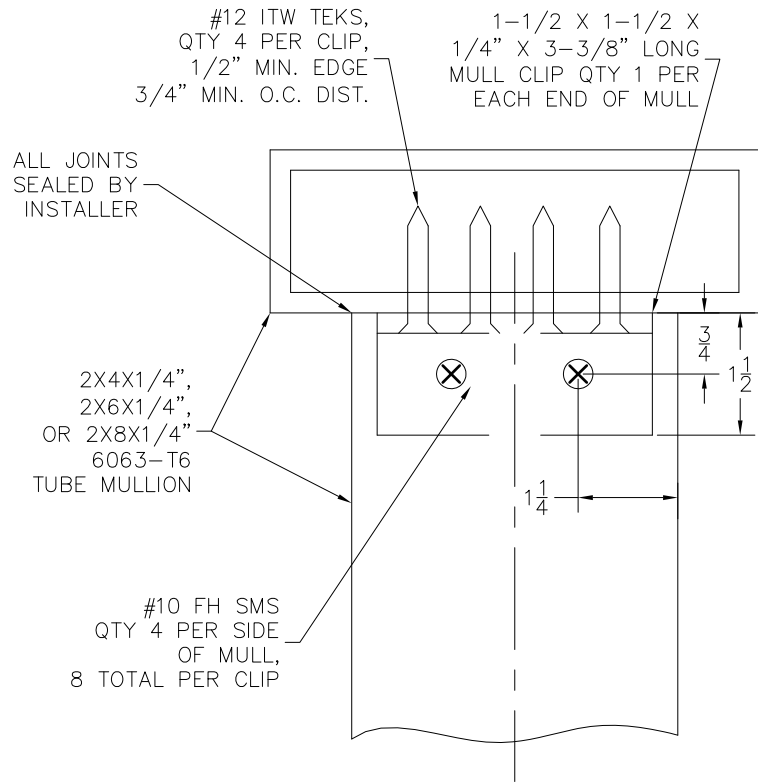
DRAWING #  
FPA-MULLS

SHEET DESCRIPTION  
3/8" FLAT  
MULL

SHEET  
6 of 8



**A** CLIP TO MULLION  
ANCHOR LAYOUT



**B** VERT. MULL END CONDITION TO  
HORIZ. MULL ANCHOR LAYOUT

**INSTALLATION OF T-INTERSECTING  
MULLIONS ANCHOR NOTES:**

1) INSTALL MULLION WITH ONE  
U-CLIP PER EACH END OF MULLION  
AS INDICATED ON THIS SHEET.

2) LOCATE ANCHORS IN PATTERN  
INDICATED IN DETAIL A/7 FOR  
ATTACHMENT OF MULL CLIP  
T-INTERSECTING TO CROSSING MULL.

3) ANCHOR EMBEDMENTS INDICATED  
BELOW SHALL BE BEYOND WALL  
DRESSING OR STUCCO.

4) FOR ATTACHMENT OF  
T-INTERSECTING MULL CLIPS TO  
CROSSING MULLS (1/4" WALL,  
6063-T6) USE FOUR TOTAL 1" LONG  
#12 ITW TEKS SCREWS WITH 1/2"  
MIN. EDGE DISTANCE AND 3/4" MIN.  
O.C. DISTANCE. PRE-DRILL  
REQUIRED.



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B: 2023 UPDATE

DRAWING #

FPA-MULLS

SHEET DESCRIPTION

MULL TO MULL  
ANCHOR DET.

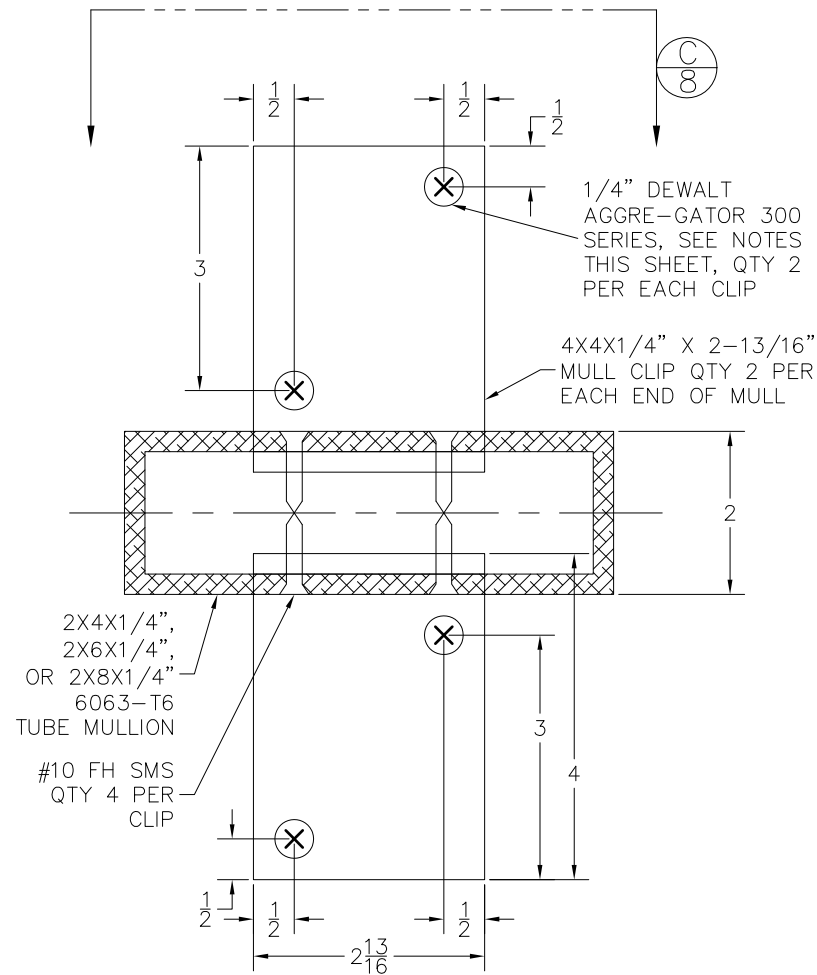
SHEET  
7 of 8



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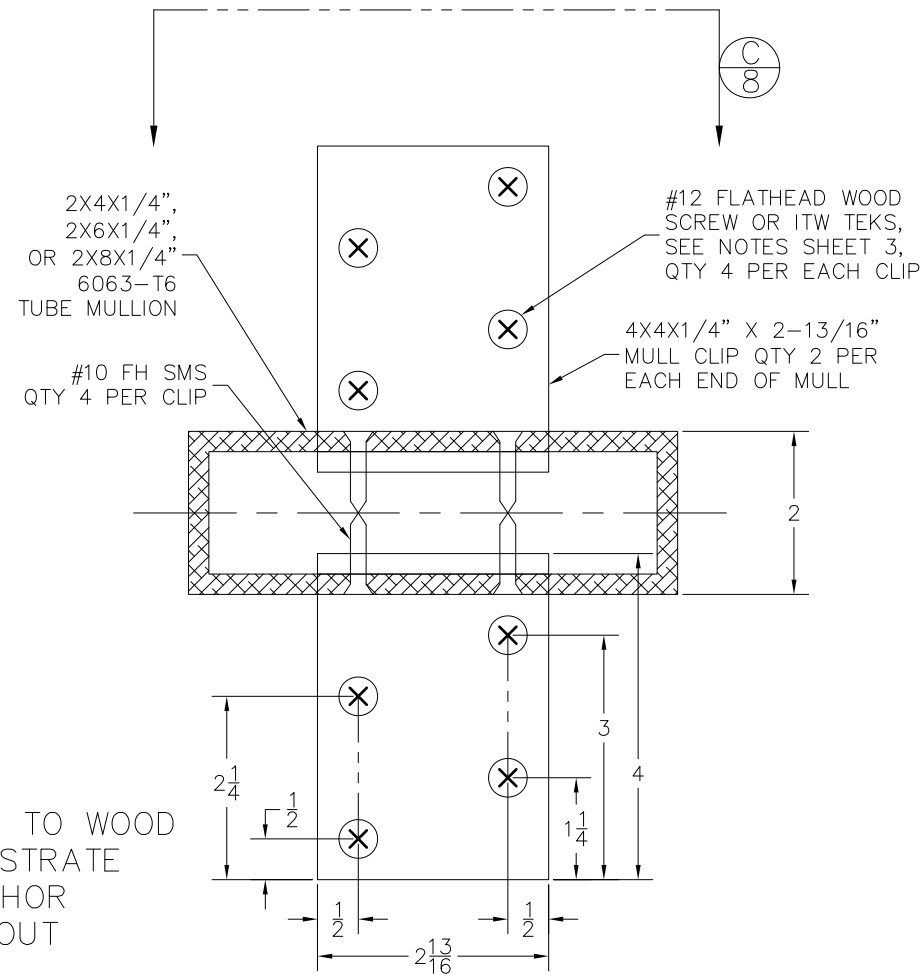
A  
8

CLIP TO CMU  
OR CONCRETE  
SUBSTRATE  
ANCHOR  
LAYOUT



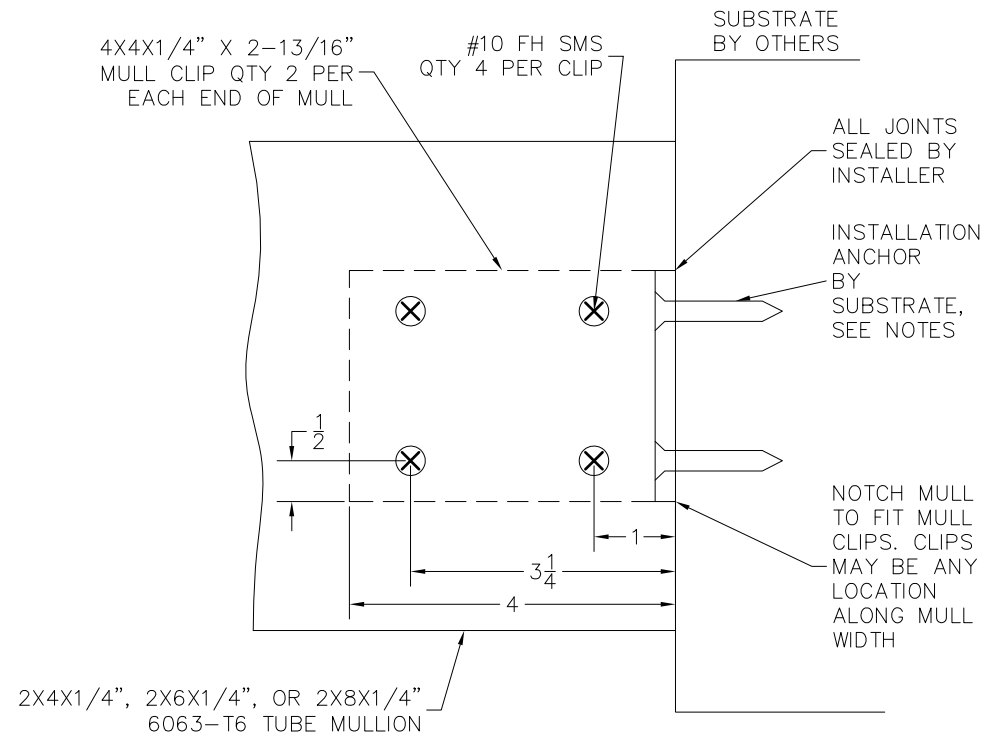
B  
8

CLIP TO WOOD  
SUBSTRATE  
ANCHOR  
LAYOUT



C  
8

MULL END CONDITION  
TO SUBSTRATE  
ANCHOR LAYOUT



INSTALLATION TO SUBSTRATE  
ANCHOR NOTES:

1) INSTALL MULLION WITH TWO CLIPS  
PER EACH END OF MULLION AS  
INDICATED ON THIS SHEET.

2) LOCATE ANCHORS IN PATTERN  
INDICATED IN DETAIL A/8 FOR SOLID  
CONCRETE OR GROUT-FILLED CMU  
SUBSTRATE, OR DETAIL B/8 FOR  
WOOD SUBSTRATE, WITH THE  
SPECIFIED NUMBER OF INSTALL  
SCREWS, AND 8 SHEET METAL  
SCREWS INTO MULLION PER EACH  
END OF MULLION.

3) ANCHOR EMBEDMENTS INDICATED  
BELOW SHALL BE BEYOND WALL  
DRESSING OR STUCCO.

4) FOR ATTACHMENT TO WOOD  
SUBSTRATES (SPRUCE-PINE-FIR  
WITH G=0.42 MIN.) USE EIGHT  
TOTAL (FOUR PER CLIP) #12  
FLATHEAD WOOD SCREWS WITH  
1-1/2" MIN. PENETRATION INTO  
WOOD AND 1" MIN. EDGE DISTANCE.

5) FOR ATTACHMENT TO SOLID  
CONCRETE (3KSI MIN.) OR  
REINFORCED GROUT-FILLED CMU  
(ASTM C90) USE FOUR TOTAL (2  
PER CLIP) 1/4" DEWALT  
AGGRE-GATOR 300 SERIES WITH 2"  
MIN. PENETRATION INTO  
CONCRETE/CMU AND 2" MIN. EDGE  
DISTANCE. MAINTAIN 3" MIN.  
CENTER-TO-CENTER DISTANCE  
BETWEEN ALL AGGRE-GATORS.



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REVISION:

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B: 2023 UPDATE

DRAWING #

FPA-MULLS

SHEET DESCRIPTION

TUBE MULL  
ANCHOR DET.

SHEET  
8 of 8



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