

CLIPPED ALUMINUM MULLION
WINDOW FRAME MEMBER INCLUDED IN PROPERTIES

ZERO MULLION (22029) TO BE USED WITH SERIES 250
FIXED AND HORIZONTAL ROLLER WINDOWS
1 X 3 X 1/8 TUBE MULLION (57555) TO BE USED WITH
CONTINENTAL PICTURE WINDOW, CASEMENT, PROJECTED WINDOWS,
SERIES 250 PICTURE WINDOW, HORIZONTAL ROLLER AND SINGLE
HUNG.
FOR WINDOWS IMPACT AND LOAD RATINGS SEE
CORRESPONDING FLORIDA PRODUCT APPROVALS.
LOWER DESIGN PRESSURE FROM WINDOW APPROVALS
OR MULLION CHARTS WILL APPLY TO ENTIRE SYSTEM.

NOTES:

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE
REQUIREMENTS OF THE 2023 (8TH EDITION)/2026 (9TH EDITION) FLORIDA
BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

ALL GLAZING PRODUCTS USED WITH THESE MULLIONS MUST MEET THE
APPLICABLE BUILDING CODE REQUIREMENTS I.E: WIND LOAD, WATER
INFILTRATION, FORCED ENTRY RESISTANCE, SAFEGUARDS ETC.

1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE
DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS
TO THE BUILDING STRUCTURE.

ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS
AND INSTALLED PER MANUF’S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE
MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE LOAD-BEARING, (HIGH DENSITY PLASTIC/COMPOSITE, METAL
OR OTHER RIGID MATERIALS).

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT
COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE
REQUIREMENTS OF THE 2023/2026 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION
FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY
OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR
WATER INFILTRATION RESISTANCE ETC.
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY,
AND TO BE REVIEWED BY BUILDING OFFICIAL.

DESIGN LOADS SHOWN ARE BASED ON ‘ALLOWABLE STRESS DESIGN (ASD)’.

MANUFACTURER’S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION
IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE.
LABELING TO COMPLY WITH SECTION 1709.9.2.

MULLIONS MAY BE USED TO ATTACH TWO OR MORE WINDOWS TOGETHER

THESE MULLIONS ARE RATED FOR LARGE & SMALL MISSILE IMPACT

INDEX OF DRAWING	
SHEET NO.	DESCRIPTION
1	GENERAL NOTES, INSTRUCTIONS AND INDEX OF DRAWINGS
2	PARTS DRAWING
3	1 X 3 X 1/8" ALUM TUBE MULLION WITH SERIES CONTINENTAL/250 FRAMES
4	1 X 3 X 1/8" ALUM TUBE MULLION WITH SERIES CONTINENTAL/250 FRAMES
5	1 X 3 X 1/8" ALUM TUBE MULLION WITH SERIES CONTINENTAL/250 FRAMES
6	DESIGN LOAD CAPACITY TABLE 1 X 3 X 1/8" ALUM TUBE MULLION WITH SERIES CONTINENTAL/250 FRAMES
7	DESIGN LOAD CAPACITY TABLE ZERO MULLION WITH SERIES 250 FRAMES
8	ANCHORING DETAILS FOR 1 X 3 X 1/8" ALUM TUBE AND ZERO MULLION AND SERIES CONTINENTAL/250 FRAMES

INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

- STEP 1** DETERMINE DESIGN LOAD REQUIRED PER ASCE 7
FOR PARTICULAR OPENING.
- STEP 2** USE CONNECTION OF WINDOWS TO MULLION AS PER
PRODUCT APPROVAL.
- STEP 3** USING CHARTS ON SHEETS 6 AND 7 SELECT MULLION TYPE
WITH DESIGN RATING MORE THAN
THE DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 4** SELECT ANCHOR QUANTITIES ON SHEET 8
WITH ANCHOR TYPE AND SUBSTRATE DESIGN
- STEP 5** CAPACITY OF SELECTED AIR MASTER WINDOWS AND MULLION
MUST EQUAL OR EXCEED REQUIRED LOADS.

FASTENERS AND CONNECTORS (AS APPLICABLE) SHOWN IN THIS APPROVAL MAY NOT MEET
CORROSION RESISTANCE REQUIREMENTS FOR COASTAL OR SALT WATER EXPOSURE ZONES.
COMPLIANCE WITH THESE CONDITIONS TO BE CHECKED PER FBC 1711.

Sealed: 7/31/2026

FL #26358

- A- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND
INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION
PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED
ON THIS DOCUMENT.
- B- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF
ALTERED BY ANY MEANS.
- C- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED
ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.)
FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER
USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED
ENGINEER TO THE P.E.D. ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE
SPECIFIC DRAWINGS FOR REVIEW.
- D- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF
THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.



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AIR MASTER
windows and doors
P.O. Box 2097 Barceloneta, P.R. 00817,
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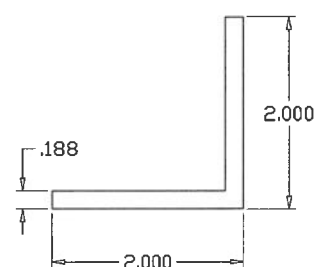
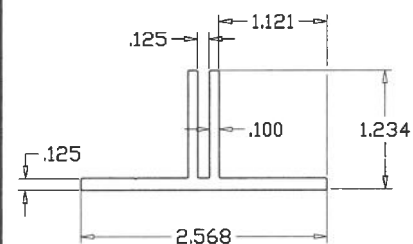
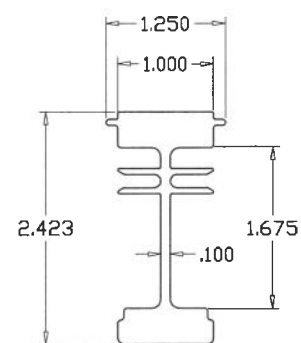
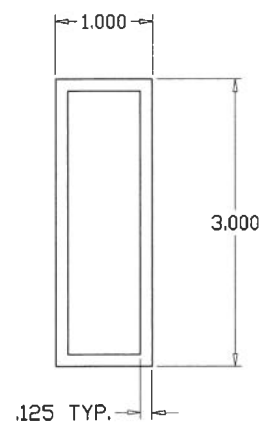
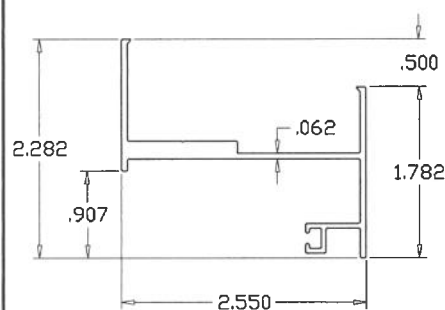
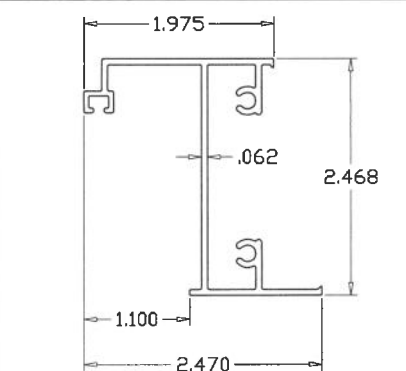
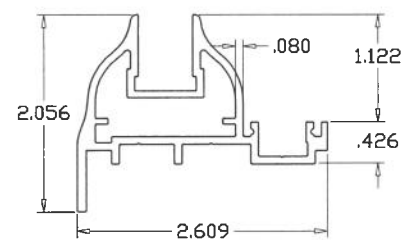
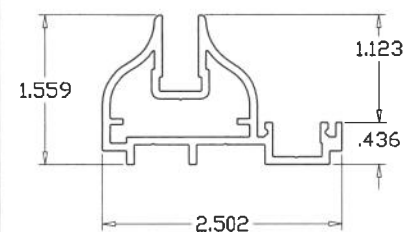
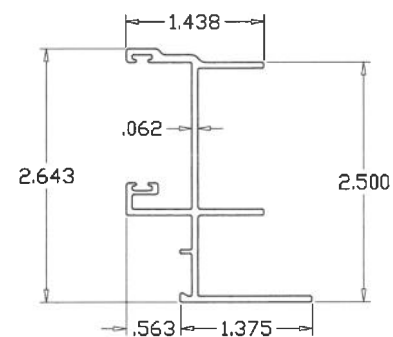
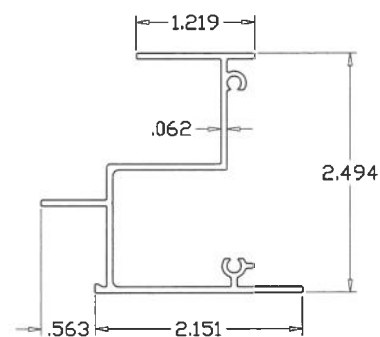
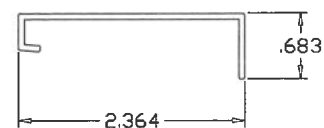
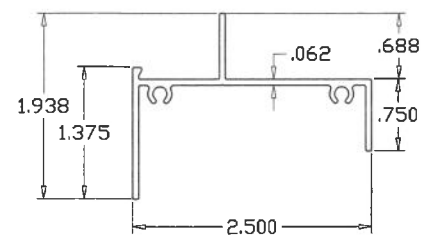
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B	07.30.26 UPDATED TO 2026 FBC

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dr. by:	MLS
chk. by:	

drawing no.
M18-29

sheet 1 of 8

af c
MULLION\M18-29AM



ALL FRAMES AND CLIP TO BE ALLOY 6063-T5
ALL MULLIONS TO BE ALLOY 6063-T6

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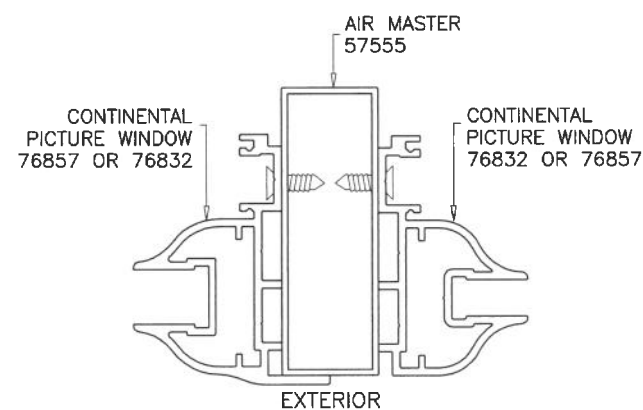
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ALUM MULLION

AIR MASTER
windows and doors

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drawing no.		description	
M18-29			
sheet 2 of 8			



The diagram shows a three-panel window assembly. The central panel is labeled 'W2' and is a fixed unit. The two side panels are labeled 'W1' and are operable, as indicated by dashed lines showing they can swing inward. A vertical dimension line on the left is labeled 'MULLION SPAN'. Each panel contains a hatched area representing the glass. The entire assembly is shown within a frame with multiple panes of glass.

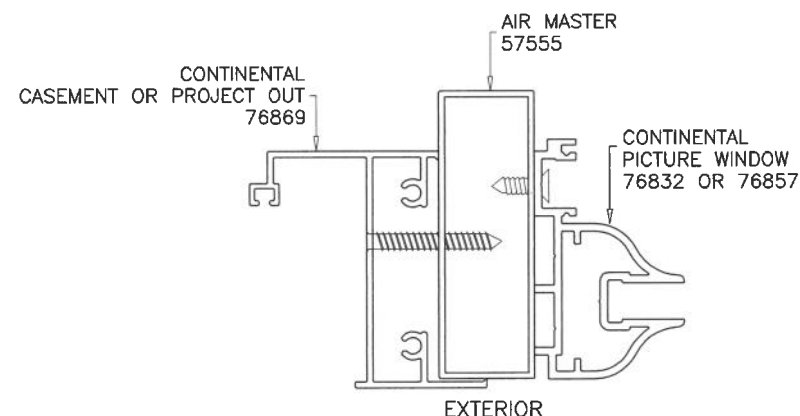
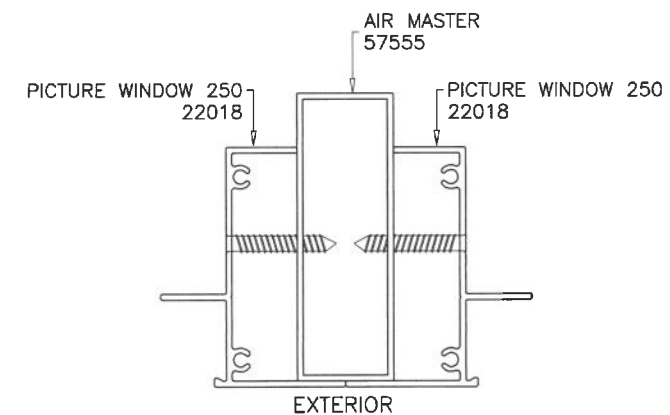


Diagram illustrating the dimensions of a double window unit. The vertical dimension is labeled "MULLION SPAN". The horizontal dimensions for the two panes are labeled "W1" and "W2".



The diagram illustrates a double window unit with two panes. The vertical dimension is labeled 'MULLION SPAN' with a double-headed arrow. The horizontal dimensions for the two panes are labeled 'W1' and 'W2' respectively, with arrows indicating the width of each pane.

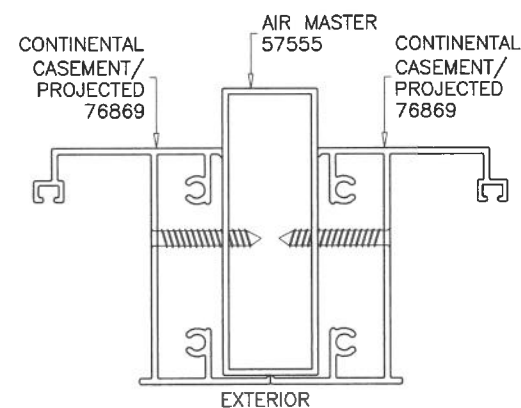


Diagram illustrating the geometry of a double window with triangular mullions. The diagram shows two adjacent window units. The width of each unit is labeled $W1$ and $W2$, and the height is labeled $MULLION\ SPAN$.

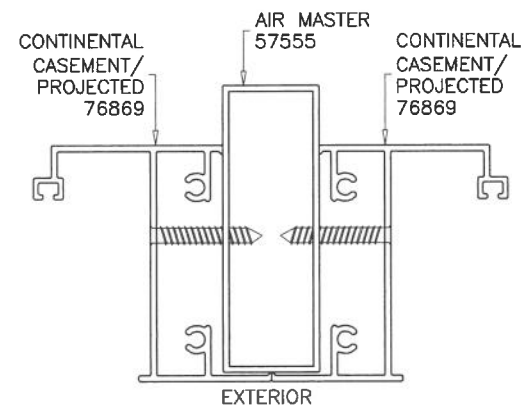
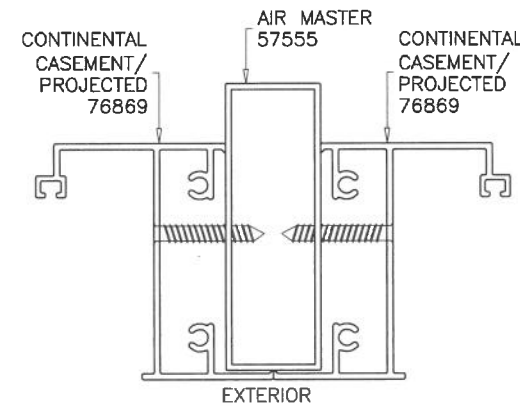


Diagram illustrating the layout of two adjacent window units. The left unit has a triangular mullion pattern with width W_1 . The right unit has a rectangular mullion pattern with width W_2 . The vertical dimension is labeled "MULLION SPAN".



A circular professional engineer seal for Jalal Farooq. The outer ring contains the text "JALAL FAROOQ" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside the ring, the word "LICENSE" is at the top and "STATE OF FLORIDA" is at the bottom, also separated by two stars. In the center, the license number "No. 81223" is printed. A large, stylized purple signature is written over the center of the seal.

CLIPPED ALUM MULLION



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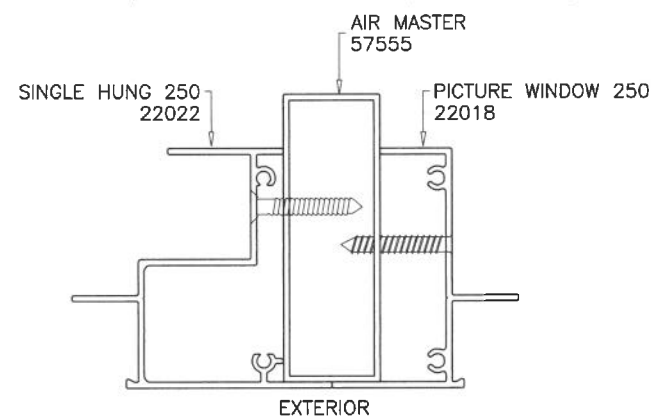
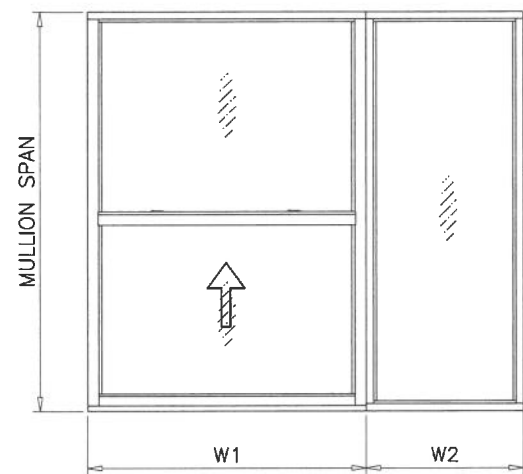
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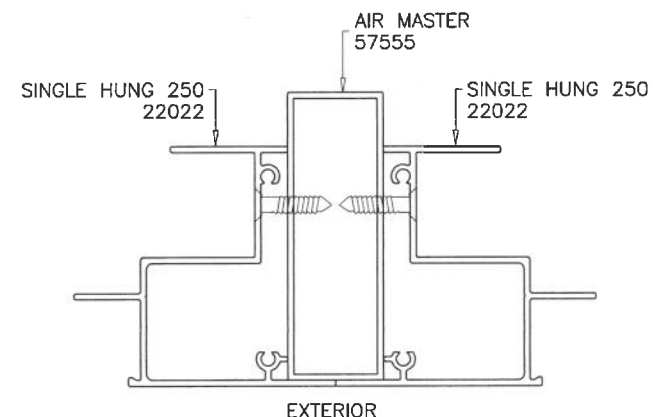
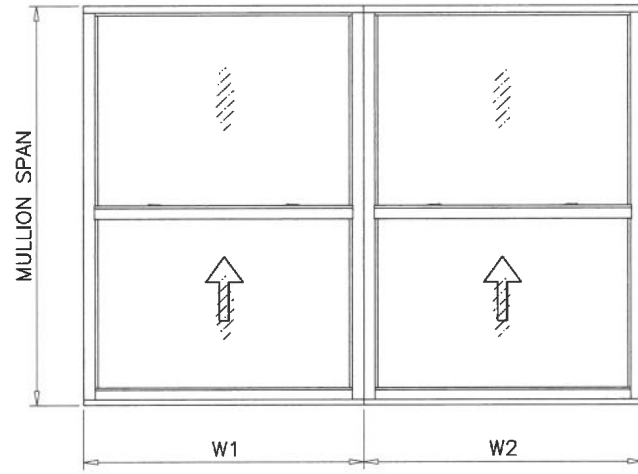
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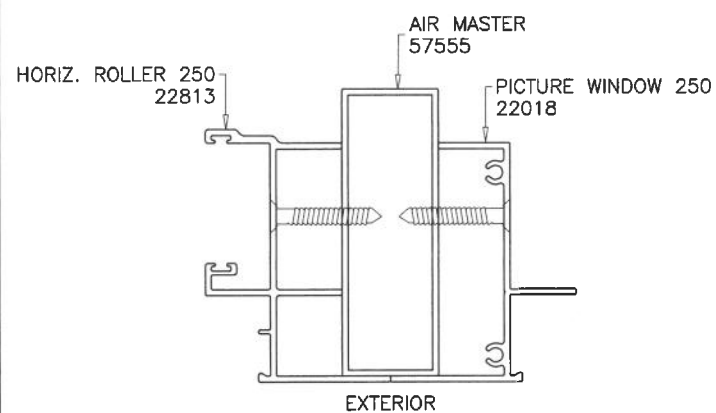
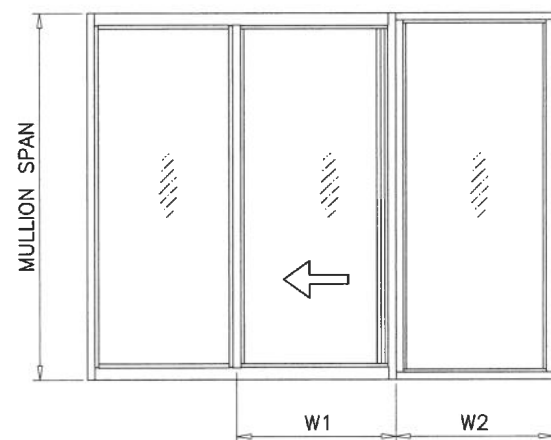
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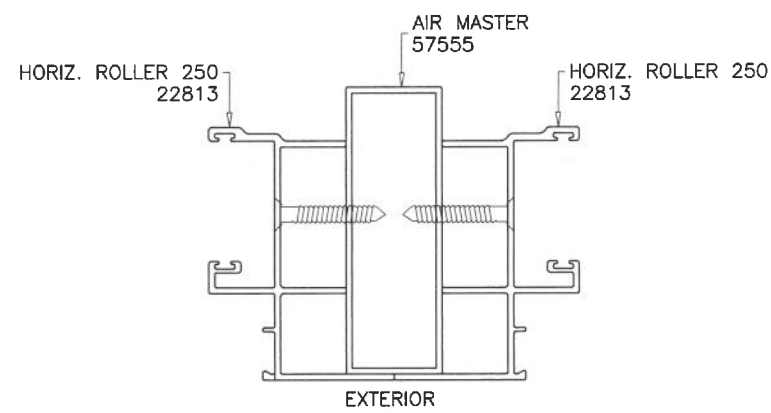
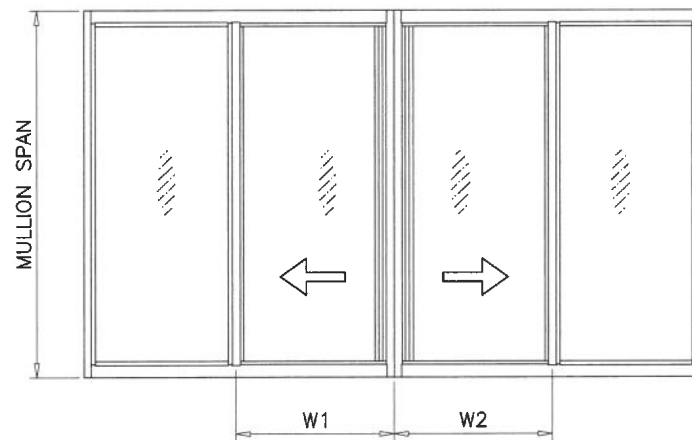
**SINGLE HUNG TO 250 PICTURE WINDOW
COMBINATION 7**



**SINGLE HUNG TO SINGLE HUNG
COMBINATION 8**



**HORIZONTAL ROLLER TO FIXED
COMBINATION 9**



**HORIZONTAL ROLLER TO HORIZONTAL ROLLER
COMBINATION 10**

SEE SHEET 6 OF 8 FOR DESIGN LOAD CAPACITY

$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$

**TUBE MULLION
SERIES CONTINENTAL /250 FRAMES**

Sealed: 7/31/2026

FL #26358



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CLIPPED ALUM MULLION

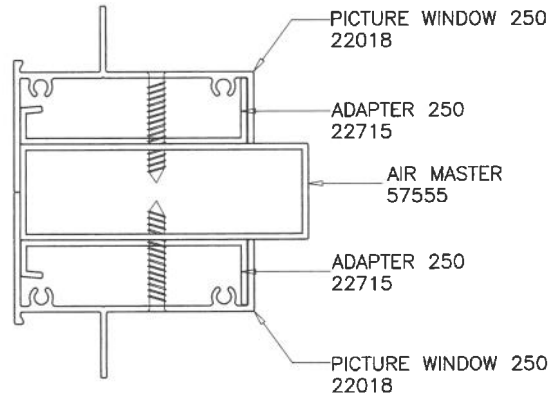
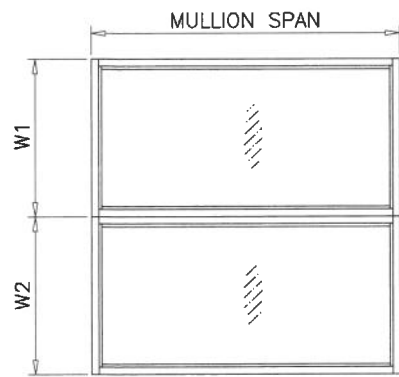
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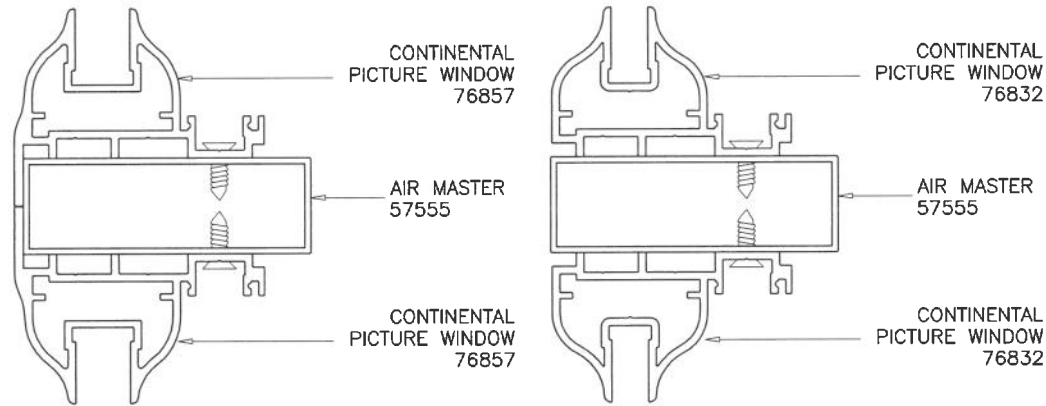
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drawing no.
M18-29
sheet 4 of 8

MULLION\M08-04SAT

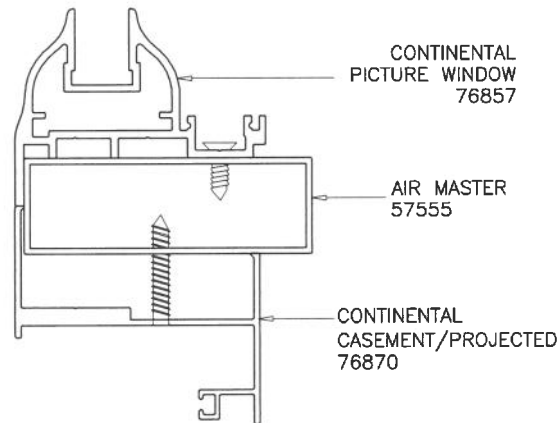
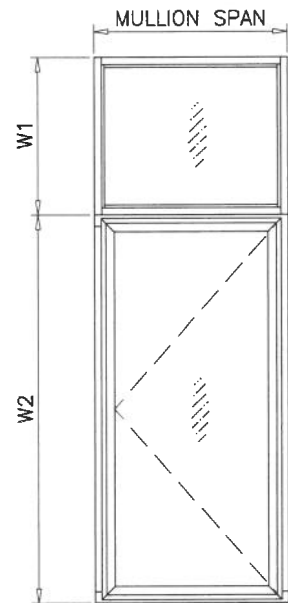


250 PICTURE WINDOW TO 250 PICTURE WINDOW

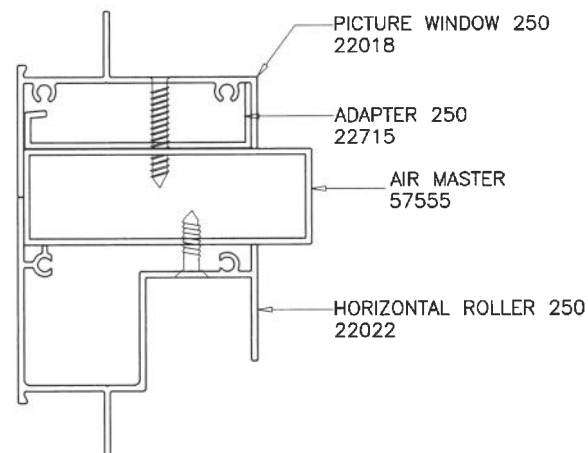
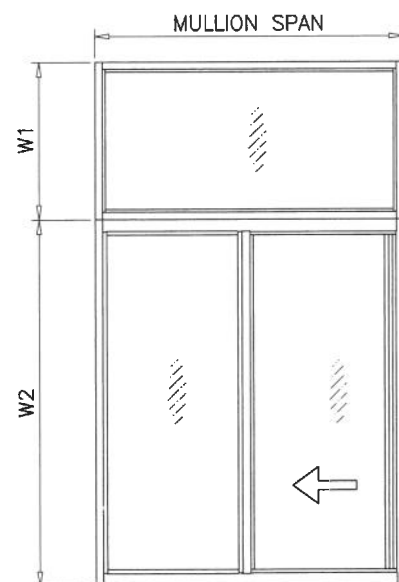


CONT. PICTURE WINDOW TO CONT. PICTURE WINDOW

COMBINATION 11



CASEMENT/ PROJECT OUT TO CONT. PICTURE WINDOW
COMBINATION 12



HORIZONTAL ROLLER TO 250 PICTURE WINDOW
COMBINATION 13

SEE SHEET 6 OF 8 FOR DESIGN LOAD CAPACITY

$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$

TUBE MULLION
SERIES CONTINENTAL/250 FRAMES

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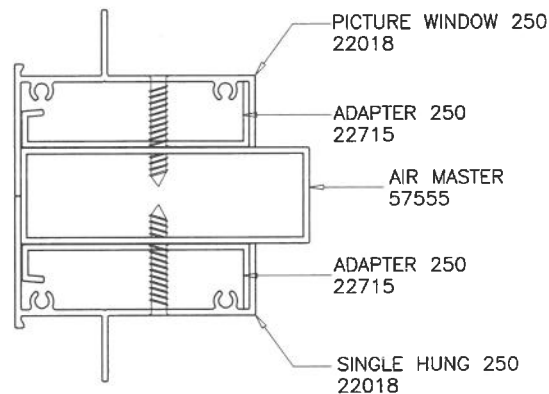
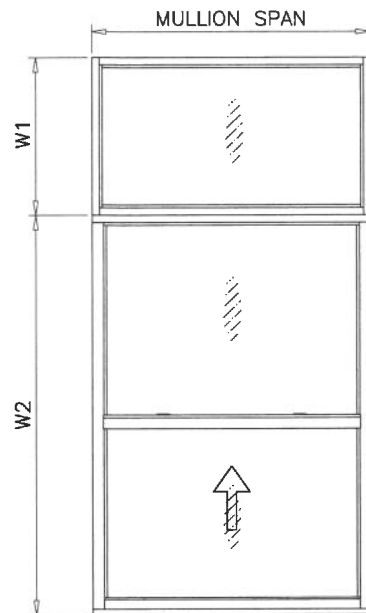


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MULLION M18-29AM



SINGLE HUNG TO 250 PICTURE WINDOW
COMBINATION 14

DESIGN LOAD CAPACITY - PSF								
TUBE MULLION WITH ANY COMBINATION OF CONTINENTAL FIXED, CASEMENT PROJECTED WDW., 250 SINGLE HUNG, HORIZONTAL ROLLER AND PICTURE WINDOW								
WINDOW DIMS.								
WIDTH (W)	MULL SPAN	COMBINATION 1, 3, 11, 14	COMBINATION 10	COMBINATION 8	COMBINATION 4, 5, 6	COMBINATION 7, 13	COMBINATION 9	COMBINATION 2, 12
36"	58"	70.0	70.0	70.0	70.0	70.0	70.0	70.0
40"		70.0	70.0	70.0	70.0	70.0	70.0	70.0
44"		70.0	70.0	70.0	70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	70.0	70.0	70.0	70.0
52"		70.0	70.0	70.0	70.0	70.0	70.0	70.0
56"		70.0	70.0	70.0	70.0	70.0	70.0	70.0
36"	60"	70.0	70.0	70.0	70.0	70.0	70.0	70.0
40"		70.0	70.0	70.0	70.0	70.0	70.0	70.0
44"		70.0	70.0	70.0	70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	70.0	70.0	70.0	70.0
52"		70.0	70.0	70.0	70.0	69.8	70.0	70.0
56"		70.0	70.0	70.0	70.0	65.5	70.0	70.0
36"	66"	70.0	70.0	70.0	70.0	70.0	70.0	70.0
40"		68.2	70.0	70.0	70.0	70.0	70.0	70.0
44"		63.9	70.0	70.0	70.0	65.6	67.7	70.0
48"		60.6	67.8	67.0	70.0	60.8	64.2	69.2
52"		58.1	65.1	62.4	70.0	56.7	61.6	66.4
56"		56.4	63.1	58.5	69.2	53.1	59.7	64.4
36"	72"	60.6	67.9	70.0	70.0	64.3	64.3	69.3
40"		55.8	62.4	64.9	68.5	58.9	59.1	63.7
44"		51.9	58.2	59.8	63.8	54.3	55.1	59.4
48"		49.0	54.8	55.5	60.1	50.3	51.9	55.9
52"		46.6	52.2	51.7	57.3	46.9	49.4	53.3
56"		44.8	50.2	48.4	55.0	43.9	47.5	51.2

WIDTH (W) = $\frac{W1 + W2}{2}$

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