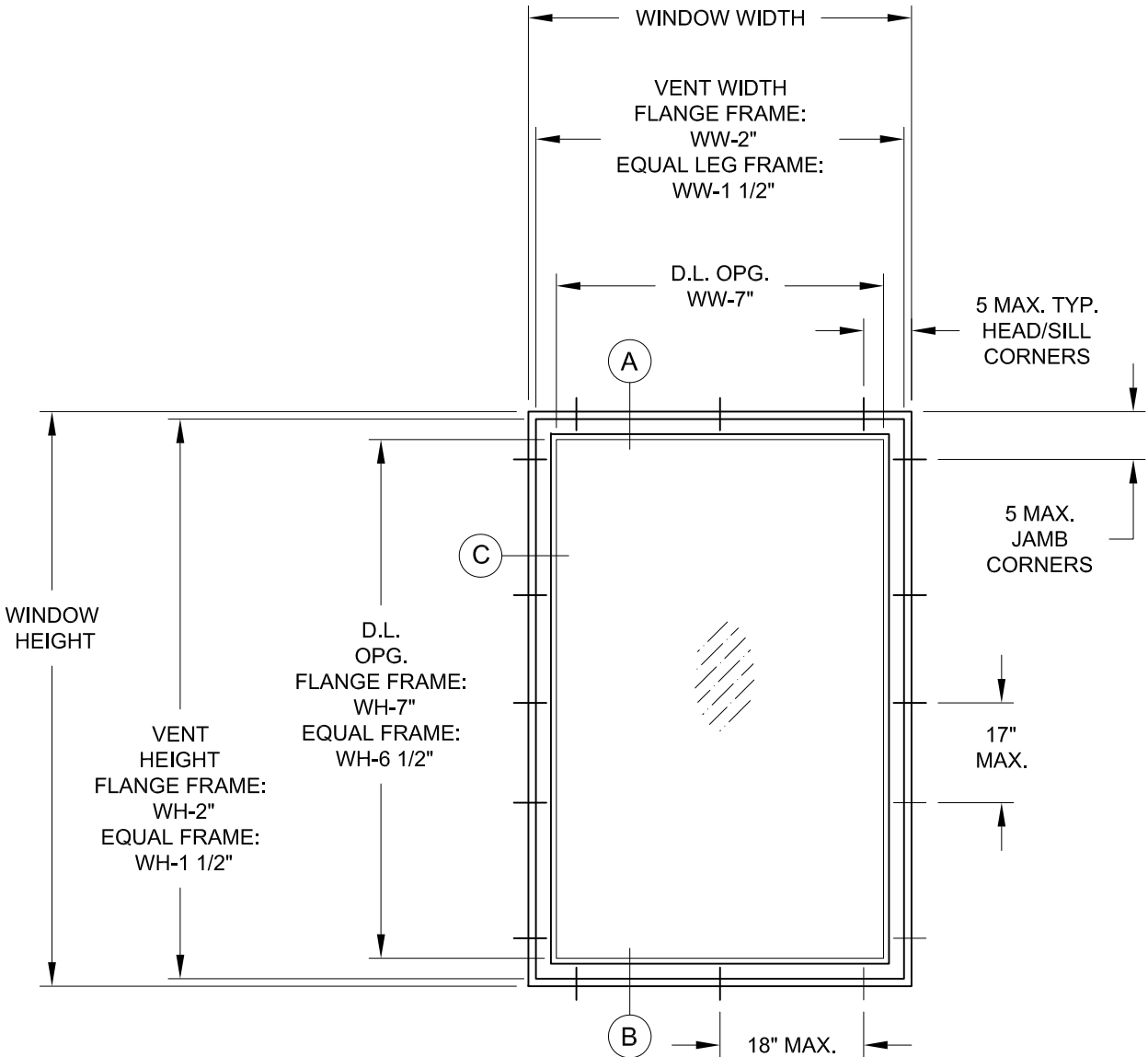


THESE WINDOWS ARE RATED FOR LARGE MISSILE IMPACT.
SHUTTERS ARE NOT REQUIRED.

SERIES 238 ALUMINUM FIXED WINDOWS - LARGE MISSILE

- 1). THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- 2). 1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.
- 3). 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.
- 4). A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.
- 5). ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.
- 6). MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.
- 7). THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR THE SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND THE SEALING AROUND THE OPENING FOR WATER INFILTRATION RESISTANCE ETC. CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.
- 8). ALL TEMPERED AND LAMINATED GLASS OPTIONS IN THIS APPROVAL HAVE BEEN CERTIFIED BY THE SGCC FOR COMPLIANCE TO ANSI Z97.1, CLASS A AND CPSC 16 CFR 1201, CATEGORY II. THIS INCLUDES LAMINATED GLASS THAT IS MANUFACTURED WITH ANNEALED GLASS PLIES. FOR APPLICATIONS WHERE THE WINDOW IS BEING USED AS A GUARD, H/H OR T/T LAMINATED GLASS MUST BE USED"



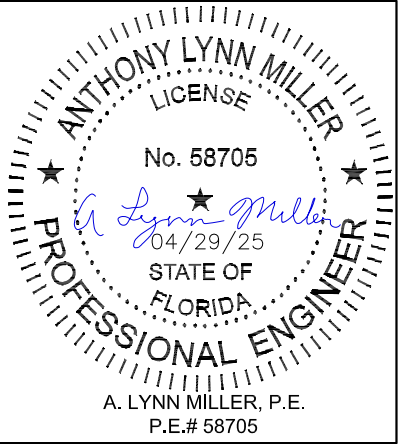
MAX. ANCHOR SPACING TO BE AS FOLLOWS
17" O.C. ON LONGER SIDES
18" O.C. ON SHORTER SIDES

TYPICAL ELEVATION

INSTRUCTIONS:
USE CHARTS AS FOLLOWS.

- STEP 1 DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2 SEE CHARTS ON SHEETS 4 THRU 6 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE/TYPE.
- STEP 3 USING CHART ON SHEETS 9 & 10 SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 4 IF ALUMINUM BUCK SYSTEM IS USED USE CHART ON SHEETS 11 & 12 TO DETERMINE CAPACITY.
- STEP 5 THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

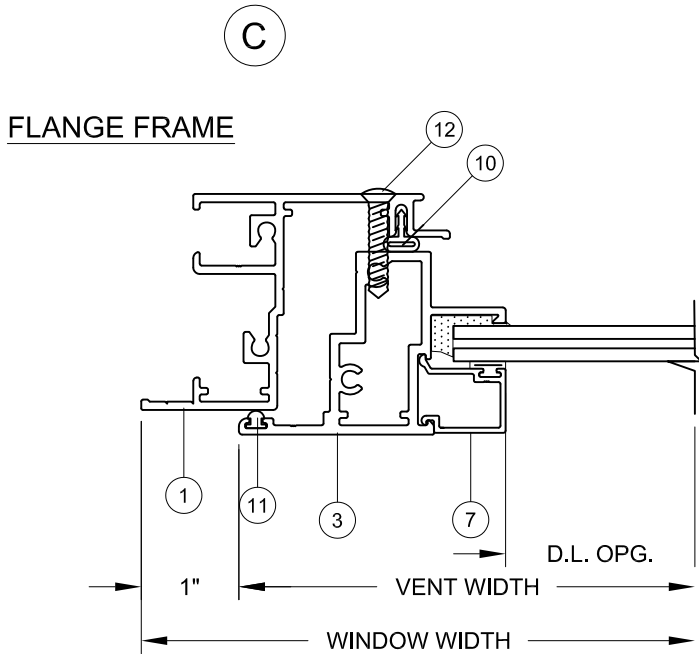
PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	REGISTRATION #29296 COPYRIGHT © 2025 WINDOOR, INC., LIMITED LICENSE TO MAKE COPIES FOR PERMITTING.	1/26/23		A. MORLESIN	PW238LMI-FPA
		Date	By		
WINDOOR [®] INCORPORATED 104 TRIPLE DIAMOND BLVD N VENICE, FL 34275 (833) 554-5432	SERIES "238" ALUM. FIXED WINDOW (LMI)	ELEVATION & GENERAL NOTES		PW238	1 OF 12
		Title	Desc.		



Rev.	ADDED SETTING BLOCKS	Date	04/29/25	Rev. #	B

GENERAL WINDOW SECTIONS

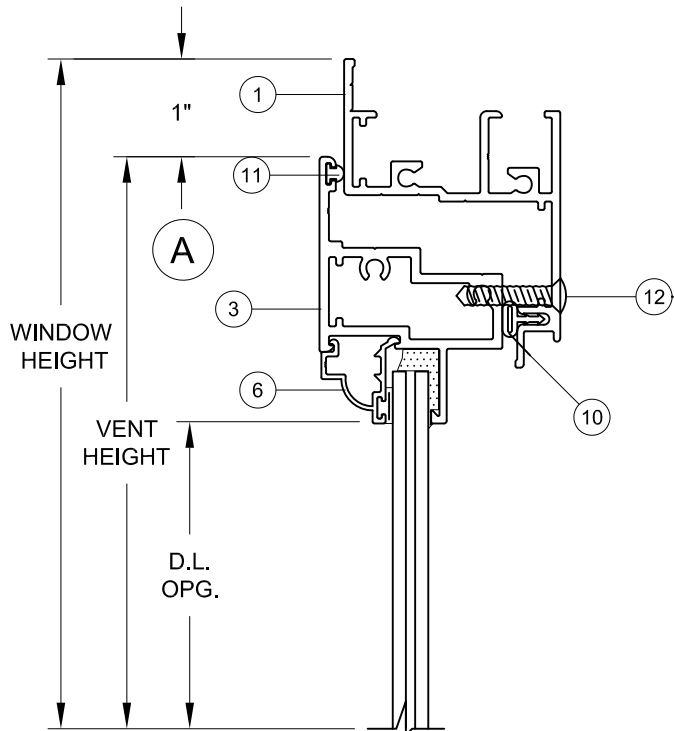
FLANGE FRAME



EXTERIOR

FLANGE FRAME

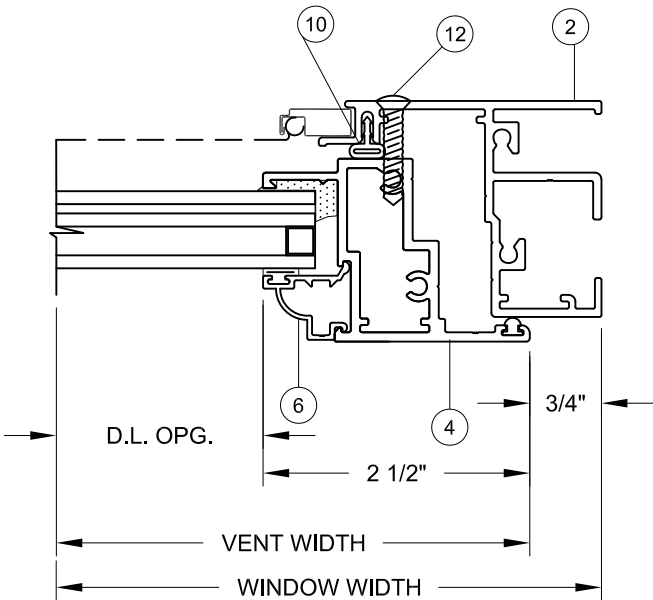
EXTERIOR



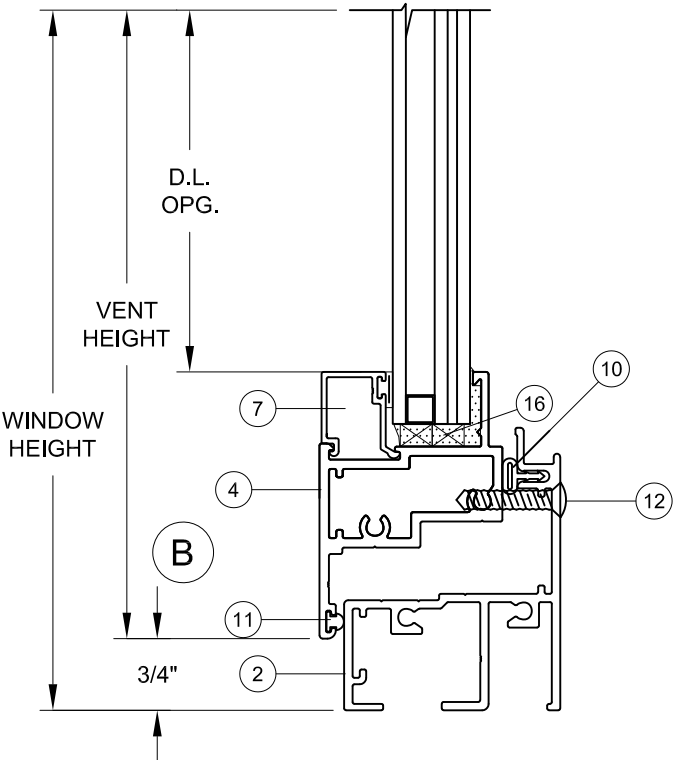
FOR GLASS TYPES
REFER TO
SHEETS 4 THRU 7

AT EACH END AND
18" O.C. ON SHORTER SIDES
20" O.C. ON LONGER SIDES

FOR MULLION/MULTIPLE UNITS, REFER TO
SEPARATE MULLION N.O.A.



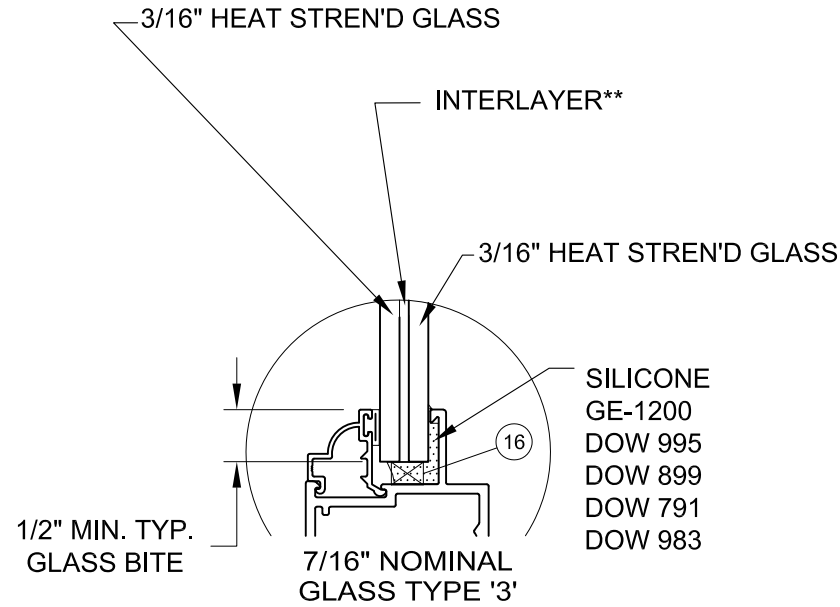
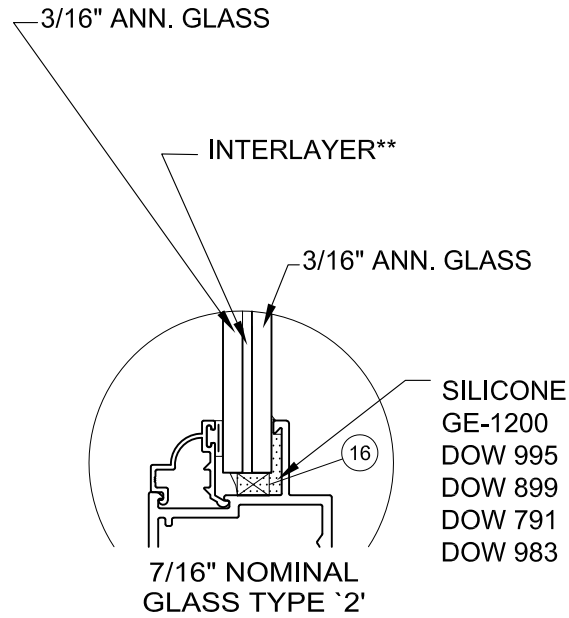
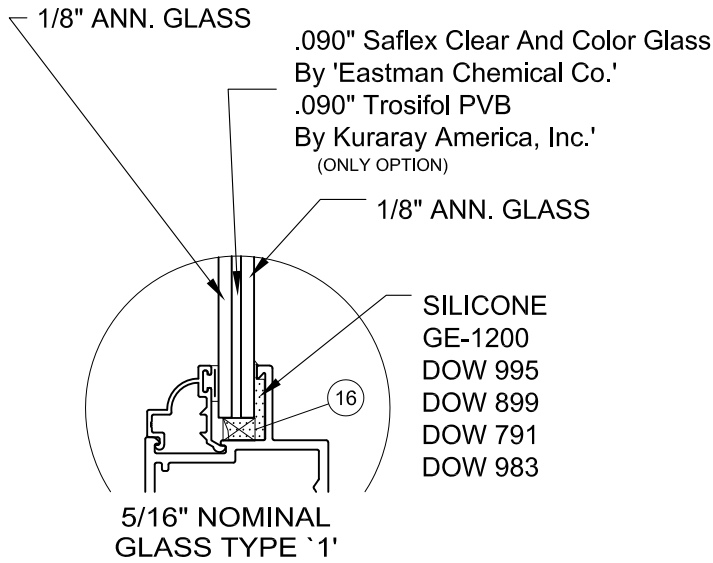
EQUAL LEG FRAME



EQUAL LEG FRAME

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WINDOOR® INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD N VENICE, FL 34275 (833) 554-5432		SERIES "238" ALUM. FIXED WINDOW (LMI)	
SECTION DETAILS		A. MORLESIN	
PW238		PW238LMI-FPA	
2 OF 12		2	

Anthony Lynn Miller
Professional Engineer
No. 58705
04/29/25
STATE OF FLORIDA
A. LYNN MILLER, P.E.
P.E.# 58705



**** INTERLAYER OPTIONS:**

.075" Saflex CP With PET Core
By 'Eastman Chemical Co.'

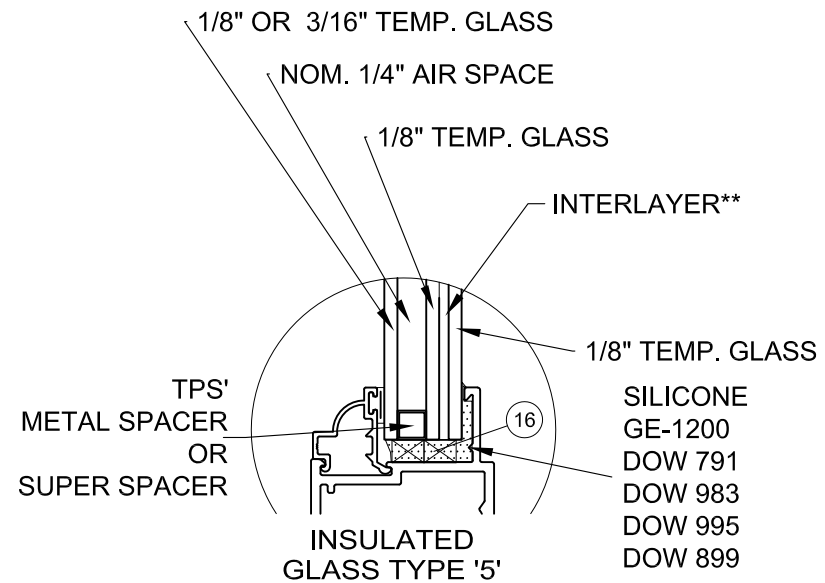
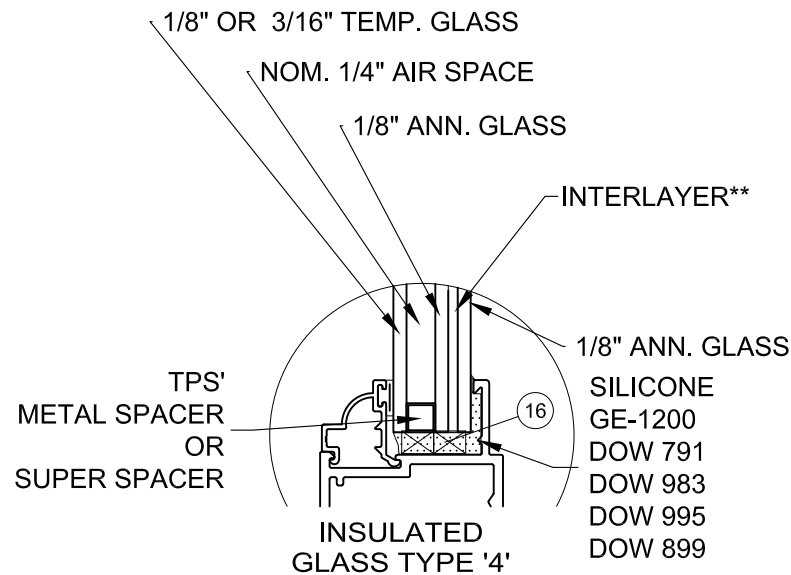
.090" Saflex Clear And Color Glass
By 'Eastman Chemical Co.'

.090" SentryGlas
By 'Kuraray America, Inc.'

.090" Trosifol PVB
By Kuraray America, Inc.'

PERFORMANCE VALUES OF IMPACT RESISTANT WINDOWS							
REFER TO SHEETS 7 THRU 12 FOR INSTALLATION DETAILS							
WINDOW DIMS.		GLASS TYPE '1'		GLASS TYPE '2'		GLASS TYPE '3'	
WIDTH	HEIGHT	POS. (+)	NEG. (-)	POS. (+)	NEG. (-)	POS. (+)	NEG. (-)
19-1/8"	26"	110.0	195.0	110.0	195.0	110.0	195.0
26-1/2"		110.0	166.2	110.0	195.0	110.0	195.0
37"		110.0	166.2	110.0	172.5	110.0	195.0
53-1/8"		110.0	120.0	110.0	148.2	110.0	195.0
19-1/8"	38-3/8"	110.0	195.0	110.0	195.0	110.0	195.0
26-1/2"		110.0	163.0	110.0	167.7	110.0	195.0
37"		110.0	116.8	110.0	151.9	101.8	180.5
53-1/8"		84.1	84.1	108.8	118.7	108.8	118.7
19-1/8"	50-5/8"	110.0	185.7	110.0	187.6	110.0	195.0
26-1/2"		110.0	131.2	110.0	148.7	110.0	195.0
37"		95.0	95.0	110.0	120.0	110.0	120.0
53-1/8"		67.9	67.9	85.3	85.3	85.3	85.3
19-1/8"	63"	110.0	177.5	110.0	179.4	110.0	195.0
26-1/2"		102.7	102.7	110.0	120.0	110.0	120.0
37"		70.5	70.5	102.1	111.3	102.1	111.3
53-1/8"		57.7	57.7	81.3	81.3	81.3	81.3
19-1/8"	74-1/4"	110.0	120.0	110.0	174.6	110.0	195.0
26-1/2"		89.8	89.8	110.0	120.0	110.0	120.0
37"		56.9	56.9	90.0	90.0	90.0	90.0
53-1/8"		-	-	-	-	70.0	70.0

SQUARE BEAD
OPTIONAL
ALL GLASS TYPES



PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600

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WindoOR®
INCORPORATED
WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD
N VENICE, FL 34275
(833) 554-5432

SERIES "238" ALUM. FIXED WINDOW (LMI)
GLASS TYPES, PERFORMANCE
VALUES

By
A. MORLESIN

Date
1/26/23

DWG No.
3 OF 12

Sheet
PW238

Desc.
PW238LMI-FPA

ANTHONY LYNN MILLER
LICENSE
No. 58705
04/29/25
STATE OF
FLORIDA
A. LYNN MILLER, P.E.
P.E.# 58705

	Glass Type: 1	Design Load Capacity (lbs/ft ²)																																							
		Window Buck Width (in)																																							
		19-1/8	24	26-1/2	30	36	37	42	48	53-1/8	54	57	60	63	66	69	72	75	78	81	84	87																			
Window Buck Height (in)	26	+110.0	-195.0	+110.0	-180.0	+110.0	-166.2	+110.0	-166.2	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+88.3	-88.3	+81.9	-81.9	+76.9	-76.9	+72.5	-72.5	+68.5	-68.5	+64.5	-64.5	+60.9	-60.9	+57.8	-57.8	+55.0	-55.0	+50.2	-50.2	+48.6	-48.6	+47.0	-47.0		
	36	+110.0	-195.0	+110.0	-180.0	+110.0	-163.0	+110.0	-144.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+104.8	-104.8	+88.3	-88.3	+81.9	-81.9	+76.9	-76.9	+72.5	-72.5	+68.5	-68.5	+64.5	-64.5	+60.9	-60.9	+57.8	-57.8	+55.0	-55.0	+50.2	-50.2	+48.6	-48.6	+47.0	-47.0
	38-3/8	+110.0	-195.0	+110.0	-168.0	+110.0	-163.0	+110.0	-144.0	+110.0	-120.0	+110.0	-116.8	+102.9	-102.9	+87.2	-87.2	+84.1	-84.1	+76.9	-76.9	+72.2	-72.2	+67.9	-67.9	+63.9	-63.9	+60.2	-60.2	+55.3	-55.3	+52.0	-52.0	+49.4	-49.1	+46.7	-46.7	+44.8	-44.8		
	42	+110.0	-185.7	+110.0	-168.0	+110.0	-144.0	+110.0	-144.0	+110.0	-120.0	+102.9	-102.9	+102.9	-102.9	+87.2	-87.2	+76.9	-76.9	+76.9	-76.9	+72.2	-72.2	+67.9	-67.9	+63.9	-63.9	+60.2	-60.2	+55.3	-55.3	+52.0	-52.0	+49.4	-49.1	+46.7	-46.7	+44.8	-44.8		
	48	+110.0	-185.7	+110.0	-160.0	+110.0	-131.2	+110.0	-120.0	+104.8	-104.8	+95.0	-95.0	+87.2	-87.2	+77.3	-77.3	+69.8	-69.8	+69.8	-69.8	+66.3	-66.3	+65.0	-65.0	+60.8	-60.8	+57.0	-57.0	+53.6	-53.6	+50.6	-50.6								
	50-5/8	+110.0	-185.7	+110.0	-142.2	+110.0	-131.2	+103.3	-103.3	+95.0	-95.0	+95.0	-95.0	+76.9	-76.9	+69.8	-69.8	+67.9	-67.9	+67.4	-67.4	+63.7	-63.7	+60.2	-60.2	+57.1	-57.1														
	54	+110.0	-177.5	+110.0	-142.2	+103.3	-103.3	+103.3	-103.3	+88.3	-88.3	+76.9	-76.9	+76.9	-76.9	+69.8	-69.8	+67.4	-67.4	+67.4	-67.4	+63.7	-63.7	+60.2	-60.2	+57.1	-57.1														
	60	+110.0	-177.5	+110.0	-120.0	+102.7	-102.7	+91.2	-91.2	+76.9	-76.9	+70.5	-70.5	+67.9	-67.9	+65.0	-65.0	+60.2	-60.2	+60.2	-60.2	+57.6	-57.6																		
	63	+110.0	-177.5	+110.0	-119.6	+102.7	-102.7	+81.6	-81.6	+70.5	-70.5	+70.5	-70.5	+60.2	-60.2	+57.7	-57.7	+57.7	-57.7																						
	66	+110.0	-120.0	+110.0	-119.6	+89.8	-89.8	+81.6	-81.6	+68.5	-68.5	+60.2	-60.2	+60.2	-60.2	+57.0	-57.0																								
	72	+110.0	-120.0	+110.0	-114.4	+89.8	-89.8	+77.0	-77.0	+60.9	-60.9	+56.9	-56.9	+52.0	-52.0	+50.6	-50.6																								
	74-1/4	+110.0	-120.0	+110.0	-114.4	+89.8	-89.8	+70.2	-70.2	+56.9	-56.9	+56.9	-56.9	+46.7	-46.7																										
	78	+110.0	-114.4	+110.0	-114.4	+70.2	-70.2	+70.2	-70.2	+55.0	-55.0	+46.7	-46.7	+46.7	-46.7																										
	84	+110.0	-114.4	+110.0	-114.4	+65.7	-65.7	+65.7	-65.7	+48.6	-48.6																														
	96	+88.6	-88.6	+88.6	-88.6	+57.9	-57.9	+57.9	-57.9	+43.0	-43.0																														
108	+70.4	-70.4	+70.4	-70.4	+56.4	-56.4	+56.4	-56.4																																	
120	+59.5	-59.5	+59.5	-59.5																																					
132	+46.9	-46.9	+46.9	-46.9																																					
144	+41.3	-41.3	+41.3	-41.3																																					

	Glass Type: 2	Design Load Capacity (lbs/ft ²)																																					
		Window Buck Width (in)																																					
		19-1/8	24	26-1/2	30	36	37	42	48	53-1/8	54	57	60	63	66	69	72	75	78	81	84	87																	
Window Buck Height (in)	26	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-172.5	+110.0	-172.5	+110.0	-172.5	+110.0	-148.2	+110.0	-148.2	+110.0	-120.0	+108.3	-118.1	+105.9	-115.5	+103.7	-113.2	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0
	36	+110.0	-195.0	+110.0	-181.9	+110.0	-167.7	+110.0	-166.3	+110.0	-161.7	+110.0	-151.9	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+108.3	-118.1	+105.9	-115.5	+103.7	-113.2	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0
	38-3/8	+110.0	-195.0	+110.0	-169.7	+110.0	-167.7	+110.0	-151.9	+110.0	-151.9	+110.0	-151.9	+110.0	-120.0	+110.0	-120.0	+108.8	-118.7	+103.9	-113.4	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0
	42	+110.0	-187.6	+110.0	-169.7	+110.0	-150.9	+110.0	-150.9	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+103.9	-113.4	+103.9	-113.4	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0
	48	+110.0	-187.6	+110.0	-161.7	+110.0	-148.7	+110.0	-141.4	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0
	50-5/8	+110.0	-187.6	+110.0	-155.9	+110.0	-148.7	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+103.9	-113.4	+90.0	-90.0	+85.3	-85.3	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0		
	54	+110.0	-179.4	+110.0	-155.9	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+103.9	-113.4	+103.9	-113.4	+90.0	-90.0	+81.3	-81.3	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0		
	60	+110.0	-179.4	+110.0	-151.6	+110.0	-120.0	+110.0	-120.0	+105.9	-115.5	+102.1	-111.3	+90.0	-90.0	+80.0	-90.0	+81.3	-81.3	+80.0	-80.0	+75.8	-75.8																
	63	+110.0	-179.4	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+102.1	-111.3	+102.1	-111.3	+90.0	-90.0	+90.0	-90.0	+81.3	-81.3																				
	66	+110.0	-174.6	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+80.0	-80.0																				
	72	+110.0	-174.6	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+85.5	-85.5																						
	74-1/4	+110.0	-174.6	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+88.4	-88.4																						
	78	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+88.4	-88.4	+88.4	-88.4																								
	84	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0																												
	96	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0																												
108	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0																															
120	+90.0	-90.0	+90.0	-90.0																																			
132	+90.0	-90.0	+90.0	-90.0																																			
144	+90.0	-90.0	+90.0	-90.0																																			

	Glass Type: 3	Design Load Capacity (lbs/ft ²)																																									
		Window Buck Width (in)																																									
		19-1/8	24		26-1/2		30		36		37		42		48		53-1/8		54		57	60		63		66		69		72		75		78		81		84		87			
Window Buck Height (in)	26	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-120.0	+108.3	-118.1	+105.9	-115.5	+103.7	-113.2	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0		
	36	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-185.5	+110.0	-180.5	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+108.3	-118.1	+105.9	-115.5	+103.7	-113.2	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0		
	38-3/8	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-180.5	+110.0	-180.5	+110.0	-120.0	+110.0	-120.0	+108.8	-118.7	+103.9	-113.4	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+70.0	-70.0		
	42	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+103.9	-113.4	+103.9	-113.4	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+70.0	-70.0		
	48	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0		
	50-5/8	+110.0	-195.0	+110.0	-195.0	+110.0	-195.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+103.9	-113.4	+90.0	-90.0	+85.3	-85.3	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0		
	54	+110.0	-195.0	+110.0	-195.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+103.9	-113.4	+103.9	-113.4	+90.0	-90.0	+81.3	-81.3	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0		
	60	+110.0	-195.0	+110.0	-195.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+105.9	-115.5	+102.1	-111.3	+90.0	-90.0	+81.3	-81.3	+80.0	-80.0	+75.8	-75.8	+72.0	-72.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+50.0	-50.0		
	63	+110.0	-195.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+105.9	-102.1	+111.3	+102.1	-111.3	+90.0	-90.0	+81.3	-81.3	+80.0	-80.0	+70.0	-70.0	+70.0	-70.0	+68.6	-68.6	+65.5	-65.5	+65.5	-65.5	+65.5	-65.5	+65.5	-65.5	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	
	66	+110.0	-195.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+80.0	-80.0	+80.0	-80.0	+70.0	-70.0	+70.0	-70.0	+68.6	-68.6	+65.5	-65.5	+65.5	-65.5	+65.5	-65.5	+65.5	-65.5	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0
	72	+110.0	-195.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+68.6	-68.6	+65.5	-65.5	+62.6	-62.6	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0
	74-1/4	+110.0	-195.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+68.6	-68.6	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0
	78	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+68.6	-68.6	+50.0	-50.0	+50.0	-50.0	+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	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0										
	96	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+70.0	-70.0	+70.0	-70.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0														
108	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0																	
120	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+50.0	-50.0																									
132	+90.0	-90.0	+90.0	-90.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+50.0	-50.0	+50.0	-50.0	+50.0	-50.0																											
144	+90.0	-90.0	+90.0	-90.0	+70.0	-70.0	+70.0	-70.0	+50.0	-50.0																																	
156	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+70.0	-70.0	+50.0	-50.0																																	

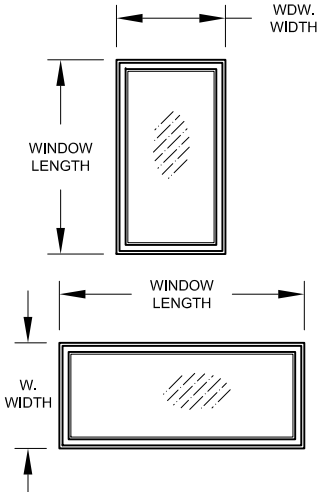
	Glass Type: 4	Design Load Capacity (lbs/ft ²)																							
		Window Buck Width (in)																							
		19-1/8	24	26-1/2	30	36	37	42	48	53-1/8	54	57	60	63	66	69	72	75	78	81	84	87			
Window Buck Height (in)	26	+110.0	-195.0	+110.0	-180.0	+110.0	-166.2	+110.0	-166.2	+110.0	-166.2	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0
	36	+110.0	-195.0	+110.0	-180.0	+110.0	-163.0	+110.0	-144.0	+110.0	-120.0	+110.0	-120.0	+110.0	-111.3	+93.8	-93.8	+93.8	-93.8	+87.0	-87.0	+81.7	-81.7	+77.0	-77.0
	38-3/8	+110.0	-195.0	+110.0	-168.0	+110.0	-163.0	+110.0	-144.0	+110.0	-120.0	+110.0	-116.8	+102.9	-102.9	+92.7	-92.7	+89.3	-89.3	+81.7	-81.7	+76.7	-76.7	+72.1	-72.1
	42	+110.0	-185.7	+110.0	-168.0	+110.0	-144.0	+110.0	-144.0	+110.0	-120.0	+102.9	-102.9	+102.9	-102.9	+92.7	-92.7	+81.7	-81.7	+76.7	-76.7	+72.1	-72.1	+67.9	-67.9
	48	+110.0	-185.7	+110.0	-160.0	+110.0	-139.4	+110.0	-120.0	+110.0	-111.3	+100.6	-100.9	+92.7	-92.7	+82.1	-82.1	+74.2	-74.2	+74.2	-74.2	+70.4	-70.4	+69.0	-69.0
	50-5/8	+110.0	-185.7	+110.0	-151.0	+110.0	-139.4	+109.7	-109.7	+100.6	-100.9	+100.6	-100.9	+81.7	-81.7	+74.2	-74.2	+72.1	-72.1	+71.6	-71.6	+67.6	-67.6	+64.0	-64.0
	54	+110.0	-177.5	+110.0	-151.0	+109.7	-109.7	+109.7	-109.7	+93.8	-93.8	+81.7	-81.7	+81.7	-81.7	+74.2	-74.2	+71.6	-71.6	+71.6	-71.6	+67.6	-67.6	+64.0	-64.0
	60	+110.0	-177.5	+110.0	-120.0	+109.1	-109.1	+96.9	-96.9	+81.7	-81.7	+74.9	-74.9	+72.1	-72.1	+69.0	-69.0	+64.0	-64.0	+64.0	-64.0	+61.2	-61.2		
	63	+110.0	-177.5	+110.0	-120.0	+109.1	-109.1	+86.9	-86.9	+74.9	-74.9	+74.9	-74.9	+63.9	-63.9	+61.3	-61.3	+61.3	-61.3						
	66	+110.0	-120.0	+110.0	-120.0	+95.4	-95.4	+86.9	-86.9	+72.7	-72.7	+63.9	-63.9	+63.9	-63.9	+60.5	-60.5								
	72	+110.0	-120.0	+110.0	-120.0	+95.4	-95.4	+81.8	-81.8	+64.7	-64.7	+60.4	-60.4	+55.2	-55.2	+53.7	-53.7								
	74-1/4	+110.0	-120.0	+110.0	-120.0	+95.4	-95.4	+74.6	-74.6	+60.4	-60.4	+60.4	-60.4	+49.6	-49.6										
	78	+110.0	-120.0	+110.0	-120.0	+74.6	-74.6	+74.6	-74.6	+58.4	-58.4	+49.6	-49.6	+49.6	-49.6										
	84	+110.0	-120.0	+110.0	-120.0	+69.8	-69.8	+69.8	-69.8	+51.6	-51.6														
	96	+94.1	-94.1	+94.1	-94.1	+61.6	-61.6	+61.6	-61.6	+45.6	-45.6														
	108	+74.8	-74.8	+74.8	-74.8	+59.9	-59.9	+59.9	-59.9																
	120	+63.2	-63.2	+63.2	-63.2																				
	132	+49.8	-49.8	+49.8	-49.8																				
	144	+43.8	-43.8	+43.8	-43.8																				

	Glass Type: 5	Design Load Capacity (lbs/ft ²)																							
		Window Buck Width (in)																							
		19-1/8	24	26-1/2	30	36	37	42	48	53-1/8	54	57	60	63	66	69	72	75	78	81	84	87			
Window Buck Height (in)	26	+110.0	-195.0	+110.0	-180.0	+110.0	-166.2	+110.0	-166.2	+110.0	-166.2	+110.0	-120.0	+110.0	-120.0	+110.0	-116.9	+110.0	-114.5	+110.0	-112.0	+90.0	-90.0	+90.0	-90.0
	36	+110.0	-195.0	+110.0	-180.0	+110.0	-163.0	+110.0	-144.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-116.9	+110.0	-114.5	+110.0	-112.0	+90.0	-90.0	+90.0	-90.0
	38-3/8	+110.0	-195.0	+110.0	-168.0	+110.0	-163.0	+110.0	-144.0	+110.0	-120.0	+110.0	-116.8	+110.0	-112.6	+110.0	-112.6	+96.9	-102.9	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0
	42	+110.0	-185.7	+110.0	-168.0	+110.0	-147.5	+110.0	-144.0	+110.0	-120.0	+110.0	-116.8	+96.9	-102.9	+96.9	-102.9	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0
	48	+110.0	-185.7	+110.0	-160.0	+110.0	-147.5	+110.0	-120.0	+110.0	-116.8	+96.9	-102.9	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0
	50-5/8	+110.0	-185.7	+110.0	-154.3	+110.0	-147.2	+110.0	-120.0	+110.0	-116.8	+96.9	-102.9	+90.0	-90.0	+85.3	-85.3	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0
	54	+110.0	-177.5	+110.0	-154.3	+110.0	-120.0	+110.0	-120.0	+110.0	-110.2	+96.9	-102.9	+90.0	-90.0	+81.3	-81.3	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0	+80.0	-80.0
	60	+110.0	-177.5	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-114.3	+110.0	-110.2	+90.0	-90.0	+90.0	-90.0	+81.3	-81.3	+80.0	-80.0	+75.8	-75.8		
	63	+110.0	-177.5	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-110.2	+110.0	-110.2	+90.0	-90.0	+90.0	-90.0	+81.3	-81.3						
	66	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0
	72	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0
	74-1/4	+110.0	-120.0	+110.0	-120.0	+110.0	-120.0	+110.0	-118.9	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0
	78	+110.0	-120.0	+110.0	-120.0	+110.0	-118.9	+110.0	-118.9	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0
	84	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0														
	96	+110.0	-120.0	+110.0	-120.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0														
	108	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0	+90.0	-90.0																
	120	+90.0	-90.0	+90.0	-90.0																				
	132	+90.0	-90.0	+90.0	-90.0																				
	144	+90.0	-90.0	+90.0	-90.0																				

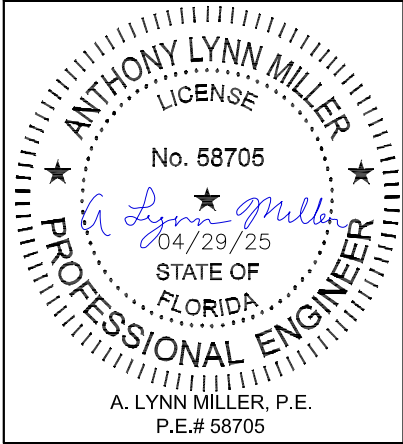
NOTE: LOAD AREA LIMITS
+110, -195 PSF = 9.32 SQ. FT.
+110, -120 PSF = 16.2 SQ. FT.
+90, -90 PSF = 24.0 SQ. FT.

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-09 (3 SEC. GUSTS).

NOTE:
WIDTH AND LENGTH DIMENSIONS
CAN BE ORIENTED VERTICALLY OR
HORIZONTALLY AS SHOWN BELOW.



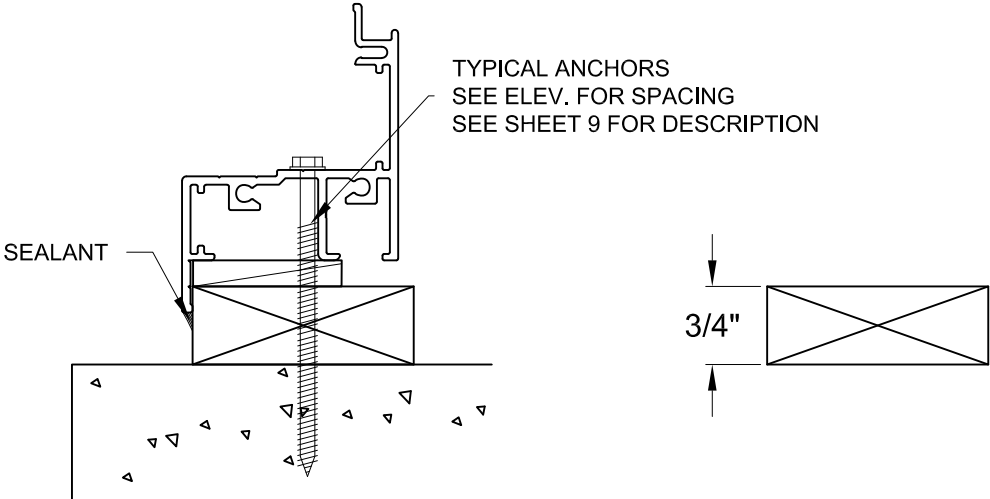
PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600		REGISTRATION #29296 COPYRIGHT © 2025 WINDOOR, INC., LIMITED LICENSE TO MAKE COPIES FOR PERMITTING.		1/26/23	
WINDOOR® INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD N VENICE, FL 34275 (833) 554-5432		SERIES "238" ALUM. FIXED WINDOW (LMI)		A. MORLESIN	
GLASS PERFORMANCE VALUES		PW238		PW238LMI-FPA	
5 OF 12		PW238		PW238LMI-FPA	



Rev. #	04/29/25
Date	04/29/25
Rev.	04/29/25

INSTALLATION CONDITIONS FLANGE FRAME (APPLIES TO ALL FOUR SIDES)

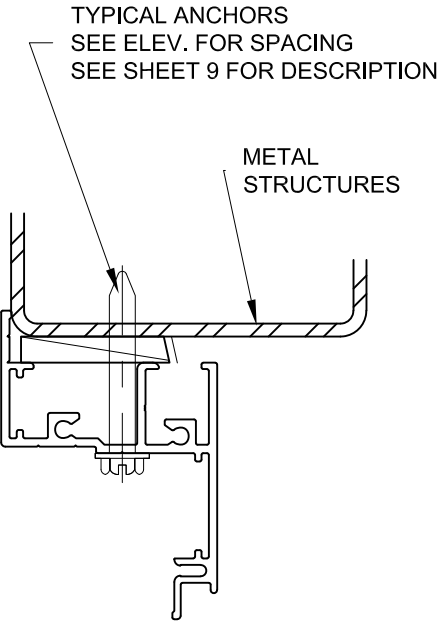
FOR ANCHOR PERFORMANCE VALUES SEE SHEETS 9



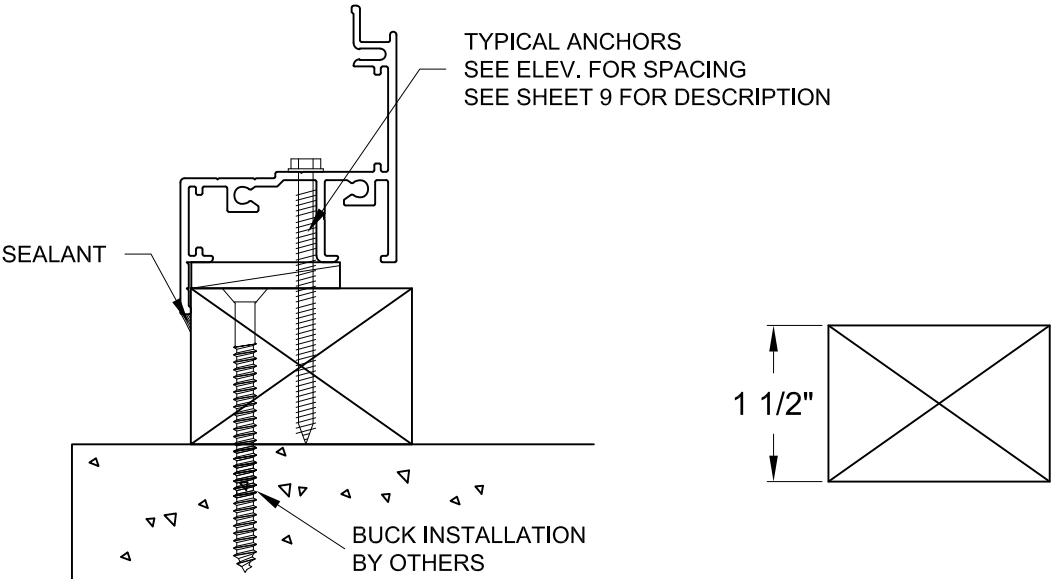
WOOD BUCK TYPE '1'
MATERIAL: PRESSURE TREATED

INSTALLATION TYPE '2'

TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING WOOD



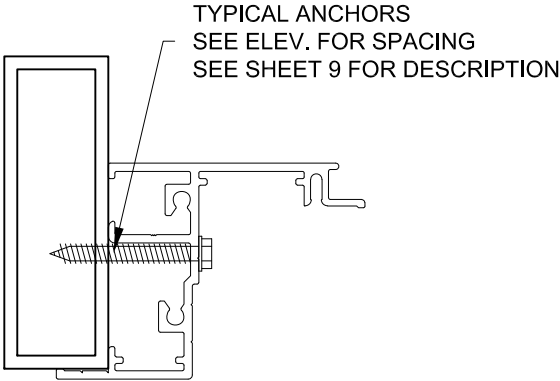
ATTACHMENT TO
METAL STRUCTURES



WOOD BUCK TYPE '2'
MATERIAL: PRESSURE TREATED

INSTALLATION TYPE '4'

TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING WOOD



ATTACHMENT TO
APPROVED MULLIONS

WOOD BUCKS NOT BY WINDOOR INC. MUST SUSTAIN
LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER
THEM TO THE BUILDING STRUCTURE.

WINDOOR® INCORPORATED		PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	
WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD N VENICE, FL 34275 (833) 554-5432		REGISTRATION #29296	
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Title		1/26/23	
SERIES "238" ALUM. FIXED WINDOW (LMI)		Date	
ANCHOR INSTALLATION 2		By	
PW238		A. MORLESIN	
6 OF 12		Dwg	
Sheet		No.	
PW238		PW238LMI-FPA	
6 OF 12			
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FOR ANCHOR PERFORMANCE VALUES SEE SHEETS 9



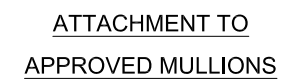
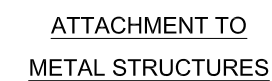
WOOD BUCK TYPE '1'

MATERIAL: PRESSURE TREATED



WOOD BUCKS NOT BY WINDOOR INC. MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

WOOD BUCK TYPE '2'
MATERIAL: PRESSURE TREATED



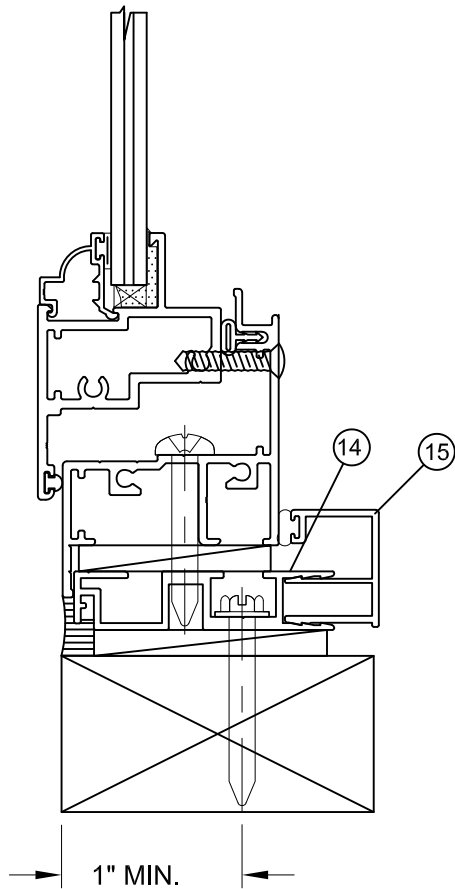
WINDOOR® INCORPORATED		PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	
WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD N VENICE, FL 34275 (833) 554-5432		REGISTRATION #29296	
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SERIES "238" ALUM. FIXED WINDOW (LMI)		1/26/23 Date	
ANCHOR INSTALLATION 3		A. MORLESIN Drawn By	
PW238		PW238LMI-FPA	
Sheet		Dwg No.	
7 OF 12			
Series		Desc.	

ANTHONY LYNN MILLER
LICENSE
No. 58705
A. Lynn Miller
04/29/25
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

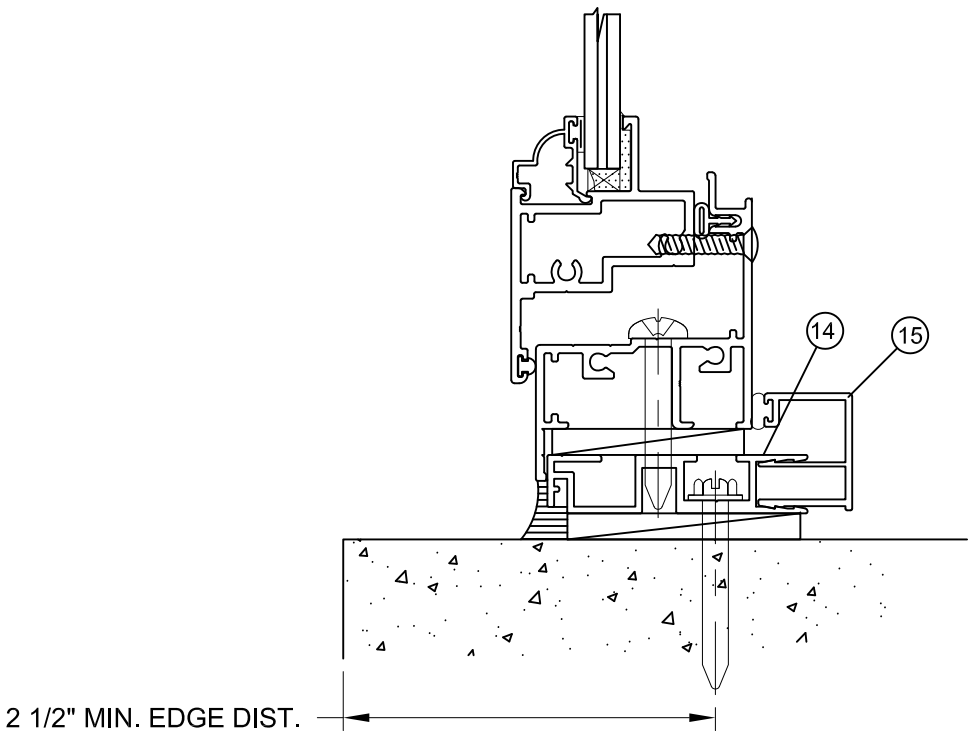
A. LYNN MILLER, P.E.
P.E.# 58705

ALUMINUM BUCK FRAMING DETAIL

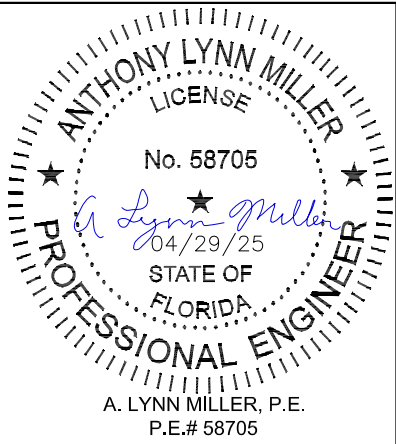
REFER TO SHEETS 3 THRU 5 FOR WINDOW CAPACITIES
USE LOWER APPLICABLE VALUES.



INSTALLATION TYPE '5'
2BY WOOD BUCK OR WOOD STRUCTURES



INSTALLATION TYPE '6'
ON ALL FOUR SIDES/USING ALUMINUM BUCK SYSTEM



WinDoor® INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD N VENICE, FL 34275 (833) 554-5432	PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600		REGISTRATION #29296 COPYRIGHT © 2025 WINDOOR, INC., LIMITED LICENSE TO MAKE COPIES FOR PERMITTING.	
	SERIES "238" ALUM. FIXED WINDOW (LMI)		1/26/23	
ALU. BUCK DETAILS		Drawn By	A. MORLESIN	
PW238	Sheet	8 OF 12		DWG No.
PW238		PW238LMI-FPA		

Rev.	ADDED SETTING BLOCKS	Date	04/29/25	Rev. #	B
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PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEETS 7 & 8 FOR DETAILS		
WINDOW DIMS.		POS. (+) NEG. (-)
WIDTH	HEIGHT	
24"	36"	195.0
30"		195.0
36"		195.0
42"		195.0
48"		195.0
54"		195.0
57"		195.0
60"		184.4
63"		172.1
66"		161.3
69"		189.8
72"		179.3
75"		169.8
78"		161.3
81"		153.7
84"		146.7
87"		168.3
24"	42"	195.0
30"		195.0
36"		195.0
42"		195.0
48"		184.4
54"		195.0
57"		184.4
60"		170.2
63"		158.0
66"		147.5
69"		172.9
72"		162.7
75"		153.7
78"		145.6
81"		138.3
84"		131.7
87"		150.9
24"	48"	195.0
30"		195.0
36"		193.6
42"		184.4
48"		181.5
54"		181.5
57"		176.0
60"		161.3
63"		148.9
66"		138.3
69"		161.3
72"		151.3
75"		142.4
78"		134.4
81"		127.4
84"		121.0
87"		138.3

NOTE:
INTERPOLATION BETWEEN SIZES ALLOWED.

PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEETS 7 & 8 FOR DETAILS		
WINDOW DIMS.		POS. (+) NEG. (-)
WIDTH	HEIGHT	
24"	54"	195.0
30"		195.0
36"		195.0
42"		195.0
48"		181.5
54"		191.2
57"		172.1
60"		158.4
63"		143.4
66"		132.4
69"		153.7
72"		143.4
75"		134.4
78"		126.5
81"		119.5
84"		113.2
87"		129.1
24"	60"	195.0
30"		195.0
36"		184.4
42"		170.2
48"		161.3
54"		156.4
57"		155.3
60"		154.9
63"		140.8
66"		129.1
69"		148.9
72"		138.3
75"		129.1
78"		121.0
81"		113.9
84"		107.6
87"		122.3
24"	66"	195.0
30"		182.2
36"		161.3
42"		147.5
48"		138.3
54"		132.4
57"		130.4
60"		129.1
63"		128.3
66"		128.0
69"		128
72"		128.0
75"		125.7
78"		117.3
81"		110.0
84"		103.5
87"		117.3

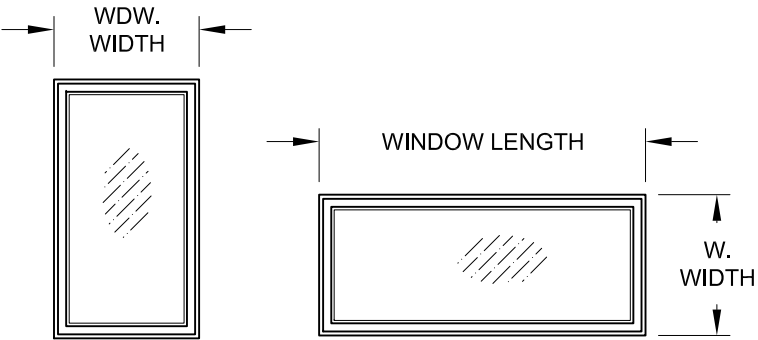
PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEETS 7 & 8 FOR DETAILS		
WINDOW DIMS.		POS. (+) NEG. (-)
WIDTH	HEIGHT	
24"	72"	195.0
30"		195.0
36"		179.3
42"		162.7
48"		151.3
54"		143.4
57"		140.5
60"		138.3
63"		136.6
66"		128
69"		134.7
72"		134.4
75"		124.1
78"		115.2
81"		107.6
84"		100.8
87"		113.9
24"	78"	195.0
30"		184.4
36"		161.3
42"		145.6
48"		134.4
54"		126.5
57"		123.5
60"		121.0
63"		119.0
66"		117.3
69"		116.1
72"		115.2
75"		114.7
78"		114.6
81"		106.4
24"	84"	195.0
30"		168.3
36"		146.7
42"		131.7
48"		121.0
54"		113.2
57"		110.2
60"		107.6
63"		105.4
66"		103.5
69"		102.0
72"		100.8
75"		99.9
24"	96"	195.0
30"		172.1
36"		148.9
42"		132.8
48"		121.0
54"		112.2
57"		108.7
60"		105.6
63"		102.6
66"		100.6

PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEETS 7 & 8 FOR DETAILS		
WINDOW DIMS.		POS. (+) NEG. (-)
WIDTH	HEIGHT	
24"	108"	195.0
30"		174.9
36"		150.6
42"		133.5
48"		121.0
54"		111.5
57"		107.7
60"		104.2
24"	120"	188.2
30"		154.9
36"		132.9
42"		117.3
48"		105.9
54"		97.1
24"	132"	193.6
30"		158.9
36"		135.9
42"		119.6
48"		107.6
24"	144"	195.0
30"		162.1
36"		138.3
42"		121.4
24"	156"	181.5
30"		148.3
36"		126.3

PERFORMANCE VALUES OF INSTALLATION ANCHORS REFER TO SHEETS 7 & 8 FOR DETAILS		
WINDOW DIMS.		POS. (+) NEG. (-)
WIDTH	HEIGHT	
19-1/8"	26"	195.0
26-1/2"		195.0
37"		195.0
53-1/8"		195.0
19-1/8"	38-3/8"	195.0
26-1/2"		195.0
37"		195.0
53-1/8"		195.0
19-1/8"	50-5/8"	195.0
26-1/2"		195.0
37"		195.0
53-1/8"		184.1
19-1/8"	63"	195.0
26-1/2"		195.0
37"		169.3
53-1/8"		144.0
19-1/8"	74-1/4"	195.0
26-1/2"		195.0
37"		168.9
53-1/8"		137.6

TYPICAL ANCHORS:

Anchor Type	Description	Substrate	Frame Members	Min. Edge Distance	Min. Embedment or Metal Thickness
A	1/4" DIA. Hilti Kwik-con II	Into 2BY Wood Buck or Wodd Structure	All	1"	1-1/2"
		Thru 1BY Buck into Concrete or Masonry	All	2-1/2"	1-1/4"
		Directly into Concrete or Filled Block	All	2-1/2"	1-3/4"
B	1/4" DIA. Ultracon	Into 2BY Wood Buck or Wodd Structure	All	1"	1-1/2"
		Thru 1BY Buck into Concrete or Masonry	All	2-1/2"	1-1/4"
		Directly into Concrete or Filled Block	All	2-1/2"	1-3/4"
B+	1/4" DIA. Ultracon+	Into 2BY Wood Buck or Wodd Structure	All	1"	1-1/2"
		Thru 1BY Buck into Concrete	All	2-1/2"	1-1/4"
		Directly into Concrete or Filled Block	All	2-1/2"	1-1/4"
D	#14 SMS	Into Steel 12 GA Min.	All	3/4"	(3) Threads min. to extended beyond metal thickness
		Into Aluminum 1/8" thk.	All	3/4"	(3) Threads min. to extended beyond metal thickness



NOTE:
WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE. INTERPOLATION BETWEEN SIZES ALLOWED.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600

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WINDOOR[®]
INCORPORATED

WINDOOR INCORPORATED
104 TRIPLE DIAMOND BLVD
N VENICE, FL 34275
(833) 554-5432

SERIES "238" ALUM. FIXED WINDOW (LMI)

ANCHOR TABLES

1/26/23

A. MORLESIN

9 OF 12

PW238

PW238LMI-FPA

ANTHONY LYNN MILLER
LICENSE
No. 58705
04/29/25
STATE OF FLORIDA
A. LYNN MILLER, P.E.
P.E.# 58705

PERFORMANCE VALUES OF ALUMBUCK INSTALLATION ANCHORS			
WINDOW DIMS.		ANCHORS AT 17" O.C.	ANCHORS AT 10" O.C.
WIDTH	HEIGHT	POS. (+) NEG. (-)	POS. (+) NEG. (-)
24"	36"	159.0	195.0
30"		145.4	193.8
36"		141.3	188.4
42"		106.0	141.3
48"		113.1	141.3
54"		94.2	141.3
57"		87.0	130.5
60"		80.8	121.1
63"		75.4	131.9
66"		88.3	123.7
69"		83.1	116.4
72"		78.5	109.9
75"		74.4	119.0
78"		70.7	113.1
81"		80.8	107.7
84"		77.1	115.6
87"		73.7	110.5
24"	42"	127.2	169.6
30"		113.1	150.8
36"		106.0	141.3
42"		103.8	138.4
48"		103.8	134.6
54"		88.1	132.2
57"		80.8	121.1
60"		74.5	111.8
63"		69.2	121.1
66"		80.8	113.1
69"		75.7	106.0
72"		71.3	99.8
75"		67.3	107.7
78"		63.8	102.0
81"		72.7	96.9
84"		69.2	103.8
87"		66.1	99.1
24"	48"	141.3	176.7
30"		123.3	154.2
36"		113.1	141.3
42"		103.8	134.6
48"		106.0	132.5
54"		84.8	127.2
57"		77.1	115.6
60"		70.7	106.0
63"		65.2	114.2
66"		75.7	106.0
69"		70.7	98.9
72"		66.3	92.8
75"		62.4	99.8
78"		58.9	94.2
81"		66.9	89.3
84"		63.6	95.4
87"		60.6	90.9

PERFORMANCE VALUES OF ALUMBUCK INSTALLATION ANCHORS			
WINDOW DIMS.		ANCHORS AT 17" O.C.	ANCHORS AT 10" O.C.
WIDTH	HEIGHT	POS. (+) NEG. (-)	POS. (+) NEG. (-)
24"	54"	121.1	181.7
30"		104.4	156.6
36"		94.2	141.3
42"		88.1	132.2
48"		84.8	127.2
54"		83.8	125.6
57"		75.4	113.1
60"		68.5	102.8
63"		62.8	109.9
66"		72.5	101.5
69"		67.3	94.2
72"		62.8	87.9
75"		58.9	94.2
78"		55.4	88.7
81"		62.8	83.8
84"		59.5	89.3
87"		56.5	84.8
24"	60"	106.0	159.0
30"		90.5	135.7
36"		80.8	121.1
42"		74.5	111.8
48"		70.7	106.0
54"		68.5	102.8
57"		68.0	102.0
60"		67.8	101.8
63"		61.7	101.8
66"		67.8	98.9
69"		65.2	91.3
72"		60.6	84.8
75"		56.5	90.5
78"		53.0	84.8
81"		59.9	79.8
84"		56.5	84.8
87"		53.6	80.3
24"	66"	117.8	164.9
30"		99.8	139.7
36"		88.3	123.7
42"		80.8	113.1
48"		75.7	106.0
54"		72.5	101.5
57"		71.4	100.0
60"		67.8	98.9
63"		61.5	98.3
66"		70.1	98.1
69"		64.2	89.9
72"		59.3	83.0
75"		55.1	88.1
78"		51.4	82.2
81"		57.8	77.1
84"		54.4	81.6
87"		51.4	77.1

PERFORMANCE VALUES OF ALUMBUCK INSTALLATION ANCHORS			
WINDOW DIMS.		ANCHORS AT 17" O.C.	ANCHORS AT 10" O.C.
WIDTH	HEIGHT	POS. (+) NEG. (-)	POS. (+) NEG. (-)
24"	72"	106.0	148.4
30"		89.3	125.0
36"		78.5	109.9
42"		71.3	99.8
48"		66.3	92.8
54"		62.8	87.9
57"		61.6	86.2
60"		60.6	84.8
63"		59.8	83.8
66"		59.3	83.0
69"		59.0	82.6
72"		58.9	82.4
75"		54.4	82.4
78"		50.5	80.8
81"		56.5	75.4
84"		53.0	79.5
87"		49.9	74.8
24"	78"	96.4	154.2
30"		80.8	129.2
36"		70.7	113.1
42"		63.8	102.0
48"		58.9	94.2
54"		55.4	88.7
57"		54.1	86.6
60"		53.0	84.8
63"		52.1	83.4
66"		51.4	82.2
69"		50.9	81.4
72"		50.5	80.8
75"		50.3	80.4
78"		50.2	80.3
81"		50.2	74.5
24"	84"	106.0	159.0
30"		88.5	132.7
36"		77.1	115.6
42"		69.2	103.8
48"		63.6	95.4
54"		59.5	89.3
57"		57.9	86.9
60"		56.5	84.8
63"		55.4	83.1
66"		54.4	81.6
69"		53.6	80.4
72"		53.0	79.5
75"		52.5	78.8

PERFORMANCE VALUES OF ALUMBUCK INSTALLATION ANCHORS			
WINDOW DIMS.		ANCHORS AT 17" O.C.	ANCHORS AT 10" O.C.
WIDTH	HEIGHT	POS. (+) NEG. (-)	POS. (+) NEG. (-)
24"	96"	90.9	151.4
30"		75.4	125.6
36"		65.2	108.7
42"		58.1	96.9
48"		53.0	88.3
54"		49.2	81.9
57"		47.6	79.3
60"		46.3	77.1
63"	108"	45.1	75.1
66"		44.1	73.4
24"		92.8	145.8
30"		76.6	120.4
36"		66.0	103.6
42"		58.5	91.9
48"		53.0	83.3
54"		48.9	76.8
57"		47.2	74.1
60"		45.7	71.8
24"	120"	94.2	141.3
30"		77.5	116.3
36"		66.5	99.8
42"		58.7	88.1
48"		53.0	79.5
54"	132"	48.6	72.9
24"		95.4	137.8
30"		78.3	113.1
36"		66.9	96.7
42"		58.9	85.1
48"	144"	53.0	76.6
24"		86.7	144.5
30"		71.0	118.3
36"		60.6	101.0
42"	156"	53.2	88.6
24"		88.3	141.3
30"		72.2	115.5
36"		61.4	98.3

PERFORMANCE VALUES OF ALUMBUCK INSTALLATION ANCHORS			
WINDOW DIMS.		ANCHORS AT 17" O.C.	ANCHORS AT 10" O.C.
WIDTH	HEIGHT	POS. (+) NEG. (-)	POS. (+) NEG. (-)
19-1/8"	26"	194.2	195.0
26-1/2"		173.9	195.0
37"		146.8	195.0
53-1/8"		117.0	175.6
19-1/8"	38-3/8"	166.2	195.0
26-1/2"		137.6	183.4
37"		124.5	166.1
53-1/8"		93.8	140.6
19-1/8"	50-5/8"	155.5	194.4
26-1/2"		123.3	154.1
37"		102.7	128.4
53-1/8"		86.7	119.1
19-1/8"	63"	119.5	195.0
26-1/2"		92.6	162.1
37"		74.2	129.8
53-1/8"		63.1	110.4
19-1/8"	74-1/4"	123.4	195.0
26-1/2"		94.4	151.1
37"		74.0	118.4
53-1/8"		60.3	96.4

WINDOOR[®]

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104 TRIPLE DIAMOND BLVD

N VENICE, FL 34275

(833) 554-5432

PREPARED BY A. LYNN MILLER

1070 TECHNOLOGY DRIVE

N. VENICE, FL 34275

(941) 480-1600

REGISTRATION #29296

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SERIES "238" ALUM. FIXED WINDOW (LMI)

1/26/23

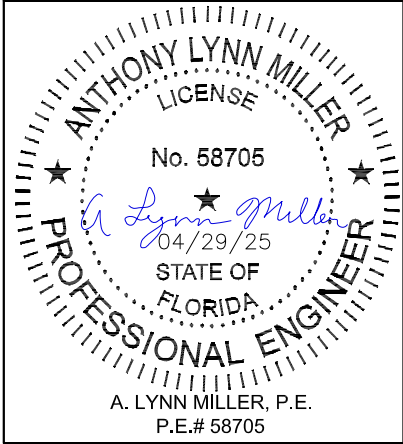
A. MORLESIN

ALUM. BUCK PERFORMANCE 2

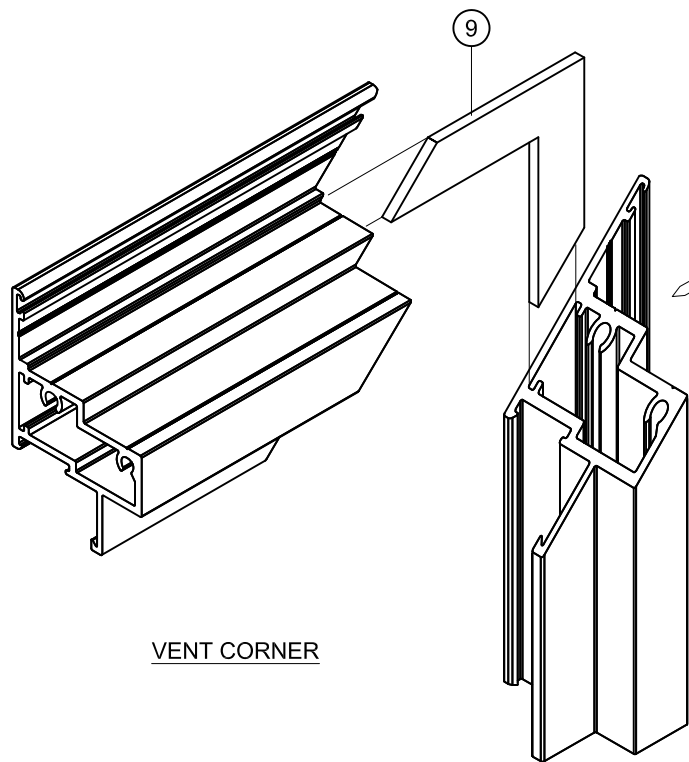
11 OF 12

PW238

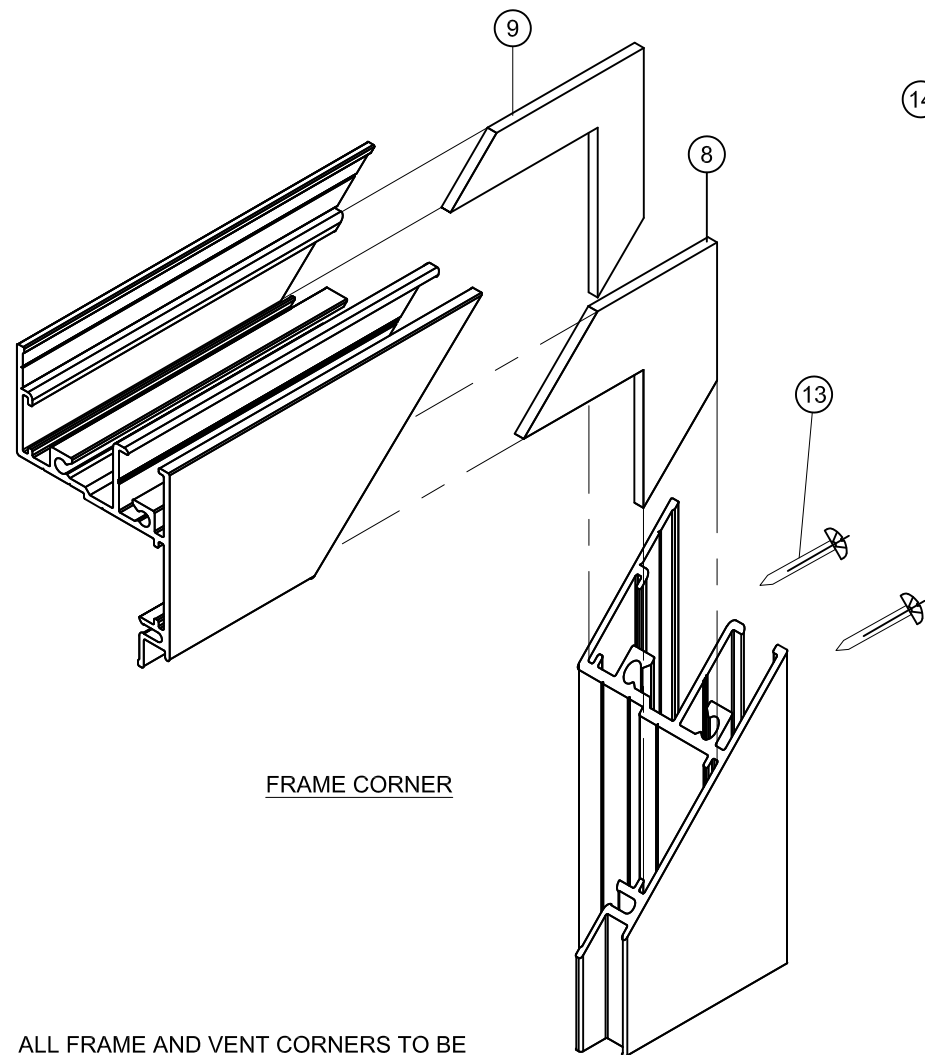
PW238LMI-FPA



NOTE:
INTERPOLATION BETWEEN SIZES ALLOWED.

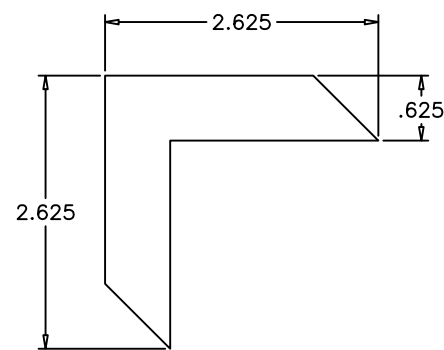


VENT CORNER

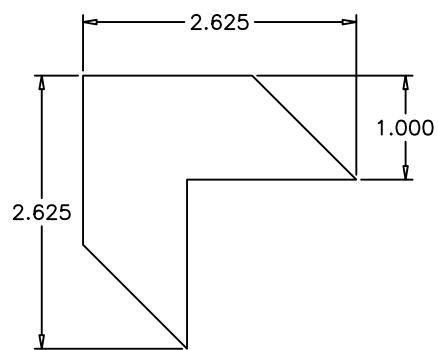


FRAME CORNER

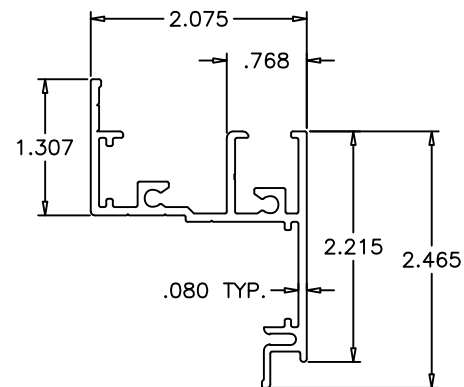
ALL FRAME AND VENT CORNERS TO BE SEALED WITH GE SILPRUF OR EQUIV.



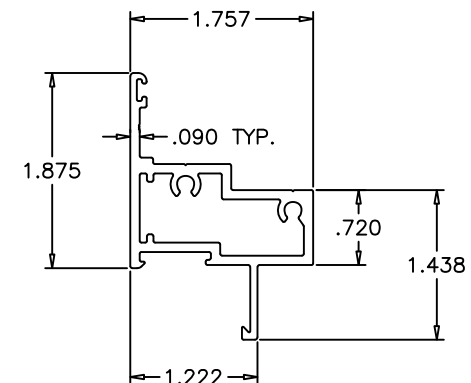
9 CORNER KEY



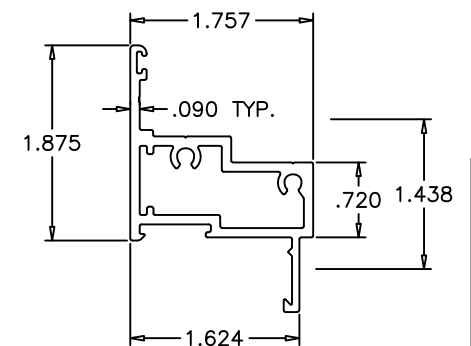
8 CORNER KEY



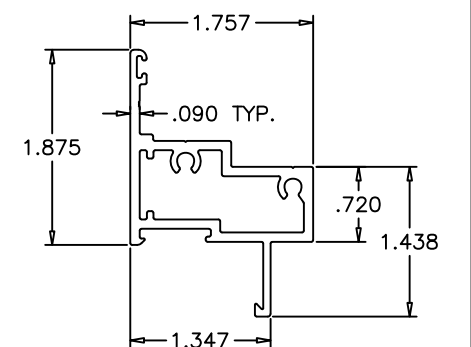
1 FLANGE FRAME



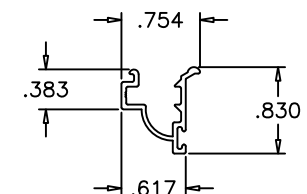
3 VENT (5/16" LAM. GLASS)



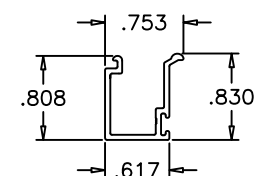
4 VENT (INSUL. LAM. GLASS)



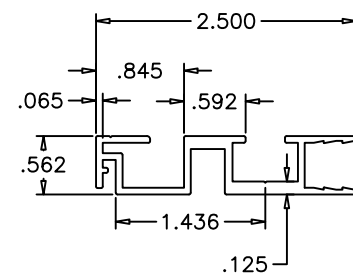
5 VENT (7/16" LAM. GLASS)



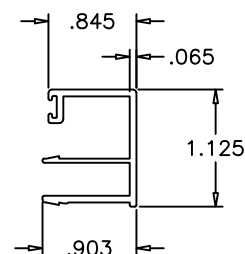
6 CGI-375: OGEE GLAZING STOP



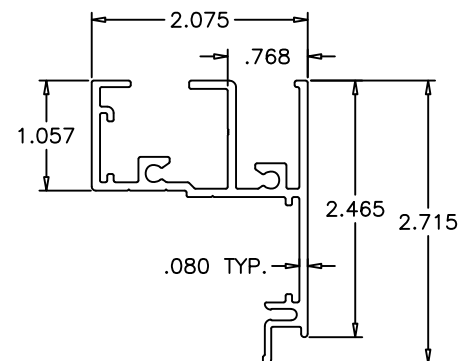
7 CGI-396: SQUARE GLAZING STOP



14 ALUMINUM BUCK



15 OPTIONAL COVER



2 EQUAL LEG FRAME

ITEM	PART #	DESCRIPTION	MATERIAL
1	CGI-373	FLANGE FRAME	6063-T6
2	CGI-397	EQUAL LEG FRAME	6063-T6
3	CGI-378	VENT (5/16" LAM. GLASS)	6063-T6
4	CGI-381	VENT (INSUL. LAM. GLASS)	6063-T6
5	CGI-385	VENT (7/16" LAM. GLASS)	6063-T6
6	CGI-375	OGEE GLAZING BEAD	6063-T5
7	CGI-396	SQUARE GLAZING BEAD	6063-T5
8	-	.060 THICK CORNER KEY	ALUMINUM
9	-	.060 THICK CORNER KEY	ST. STEEL
10	AP-425	FRAME WEATHERSTRIPPING	-
11	Q200 X190	VENT WEATHERSTRIPPING	Q-LON
12	HD10-10209	VENT SCREWS #10 x 1" PH-SMS @ 20" O.C. LONGER SIDES, 18" O.C. SHORTER SIDES	SS
13	-	FRAME AND VENT ASSEMBLY SCREWS #10 x 1-1/4" SMS	SS
14	-	ALUMINUM BUCK	6063-T6
15	-	OPTIONAL COVER	6063-T6
16	-	SETTING BLOCK DUROMETER 80+-5	EPDM

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WINDOOR [®] INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD N VENICE, FL 34275 (833) 554-5432		SERIES "238" ALUM. FIXED WINDOW (LMI)	
ANCHOR LOAD CAPACITY		A. MORLESIN	
PW238		PW238LMI-FPA	

