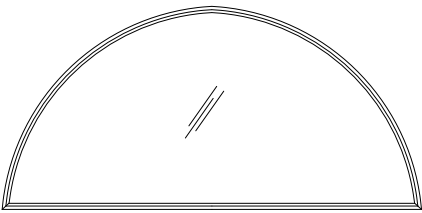


SERIES PW4120A IMPACT RESISTANT
FIXED WINDOW

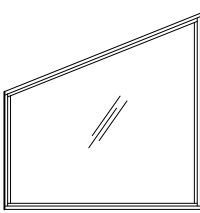
FLORIDA PRODUCT APPROVAL #26095

- 1) THIS PRODUCT HAS BEEN DESIGNED & TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE, INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- 2) SHUTTERS ARE NOT REQUIRED WHEN USED IN WIND-BORNE DEBRIS REGIONS.
- 3) MASONRY ANCHORS MAY BE USED INTO WOOD AS PER TABLE 2. ALL WOOD BUCKS LESS THAN 1-1/2" THICK ARE TO BE CONSIDERED 1X INSTALLATIONS. 1X WOOD BUCKS ARE OPTIONAL IF UNIT IS INSTALLED DIRECTLY TO SUBSTRATE. WOOD BUCKS DEPICTED AS 2X ARE 1-1/2" THICK OR GREATER. 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED TO PROPERLY TRANSFER LOADS TO THE STRUCTURE. WOOD BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD.
- 4) ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO. USE ANCHORS OF SUFFICIENT LENGTH. OVERALL SEALING/FLASHING STRATEGY FOR WATER RESISTANCE OF INSTALLATION SHALL BE DONE BY OTHERS AND IS BEYOND THE SCOPE OF THESE INSTRUCTIONS.
- 5) SHIMS ARE REQUIRED AT EACH FLANGE ANCHOR LOCATION WHERE THE PRODUCT IS NOT FLUSH TO THE SUBSTRATE. USE SHIMS CAPABLE OF TRANSFERRING APPLIED LOADS. WOOD BUCKS, BY OTHERS, MUST BE SUFFICIENTLY ANCHORED TO RESIST LOADS IMPOSED ON THEM BY THE WINDOW.
- 6) THE ANCHORAGE METHODS SHOWN HAVE BEEN DESIGNED TO RESIST THE WIND LOADS CORRESPONDING TO THE REQUIRED DESIGN PRESSURE. THE 33-1/3% STRESS INCREASE HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. THE 1.6 LOAD DURATION FACTOR WAS USED FOR THE EVALUATION OF ANCHORS INTO WOOD. ANCHORS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE FOR CORROSION RESISTANCE.

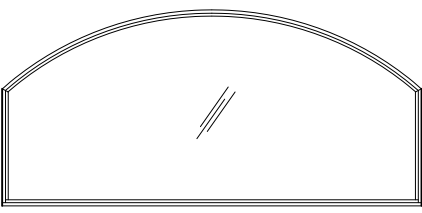
ALL WINDOW SHAPES QUALIFIED, COMMON EXAMPLES SHOWN BELOW:



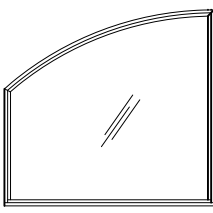
HALF CIRCLE/ARCH



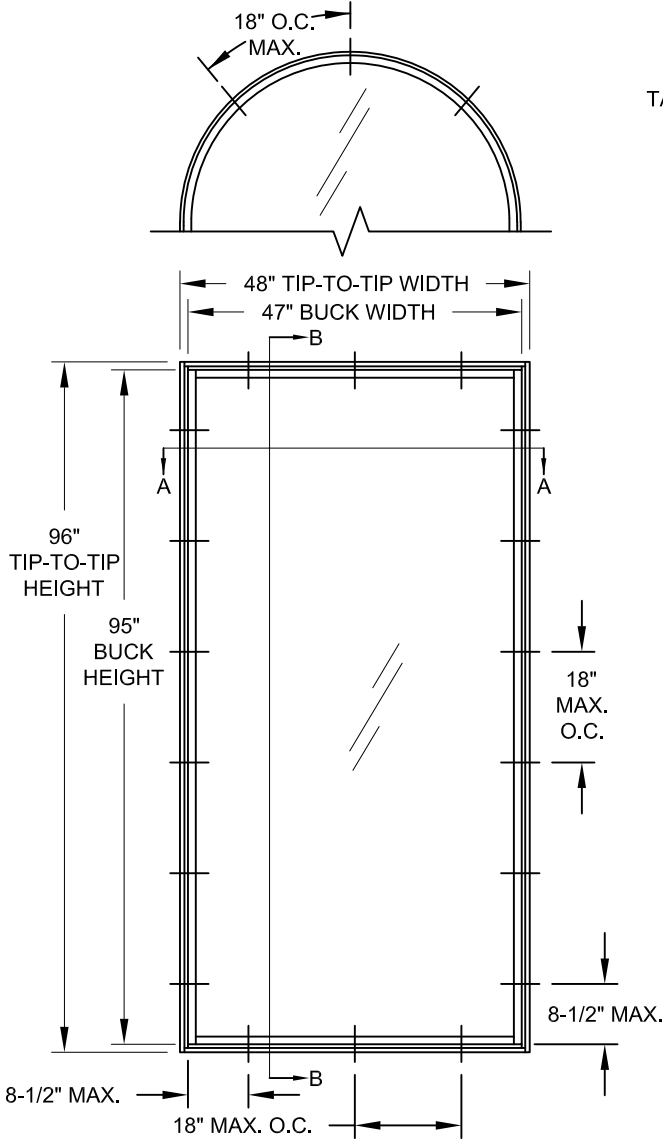
TRAPEZOID



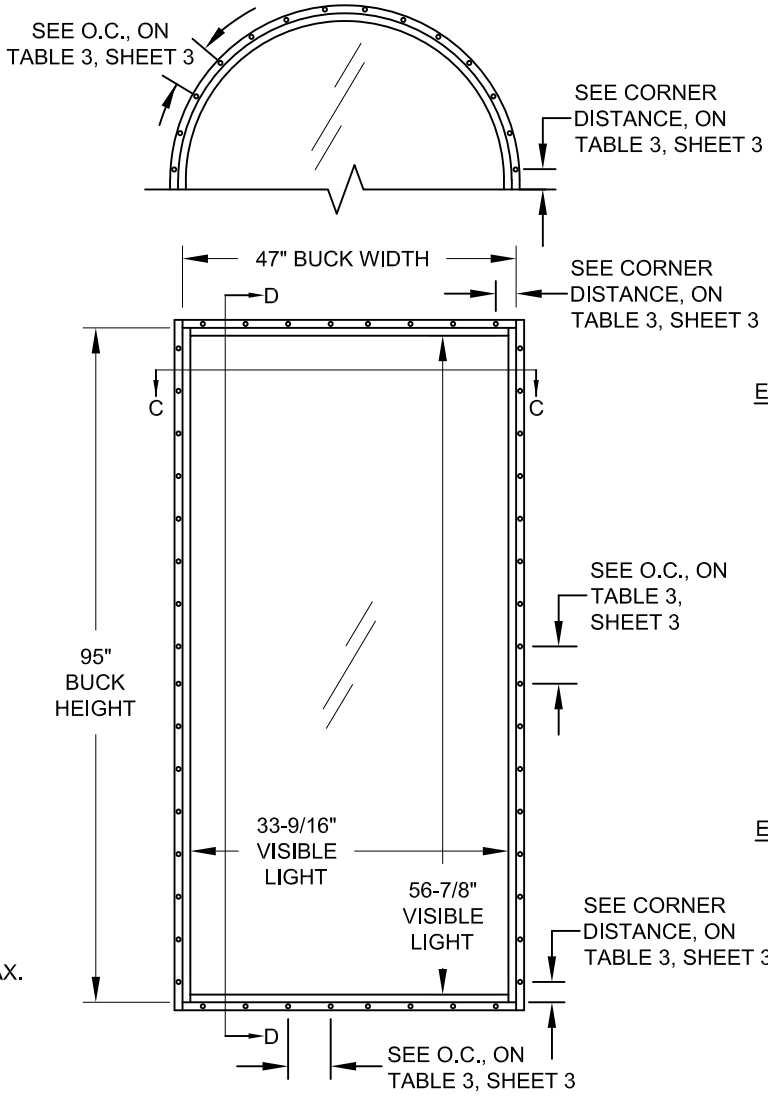
EYEBROW



HALF EYEBROW



TYP. FLANGE FRAME
ANCHOR LOCATIONS
@ MAX. SIZE



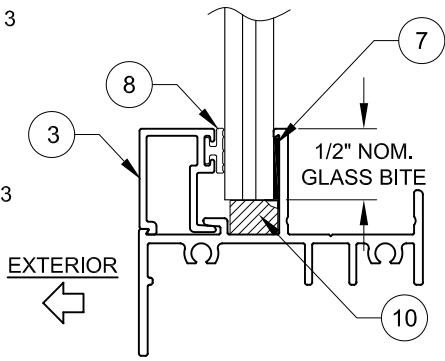
TYP. FIN FRAME
ANCHOR LOCATIONS
@ MAX. SIZE

TABLE 1:

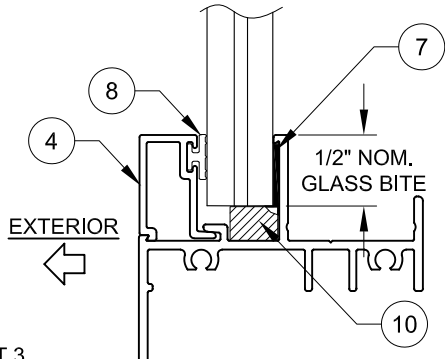
Laminated Glass Types	
1	1/8" Annealed, 0.090" PVB, 1/8" Annealed
2	1/8" Heat Strengthened, 0.090" PVB, 1/8" Heat Strengthened
3	3/16" Annealed, 0.090" PVB, 3/16" Annealed
4	3/16" Heat Strengthened, 0.090" PVB, 3/16" Heat Strengthened

INTERLAYER MAY BE SAFLEX PVB OR TROSIFOL PVB
SEE SHEETS 4 & 5 FOR GLASS DETAILS

DESIGN PRESSURE RATING	IMPACT RATING
VARIES, SEE SHEETS 4 & 5	RATED FOR LARGE & SMALL MISSILE IMPACT RESISTANCE



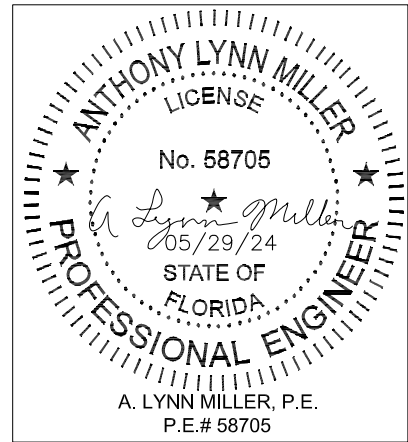
5/16" GLAZING DETAIL



7/16" GLAZING DETAIL

ALL TEMPERED AND/OR 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, HEAT STRENGTHENED OR TEMPERED LAMINATED GLASS MUST BE USED.

Impact Resistant Windows & Doors 	PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600		REGISTRATION #29296 COPYRIGHT © 2024 CGI, INC., LIMITED LICENSE TO MAKE COPIES FOR PERMITTING.		01/09/18 Date		A MORLESIN By		PW4120FLPA	
	CGI WINDOWS AND DOORS 3780 W. 104TH STREET HIALEAH, FL 33018		ALUMINUM FIXED WINDOW (LM)		ELEVATION & GENERAL NOTES		1 OF 5		PW4120A	



Rev.	NO CHANGES ON THIS SHEET.	Date	5/28/24	Rev.	5
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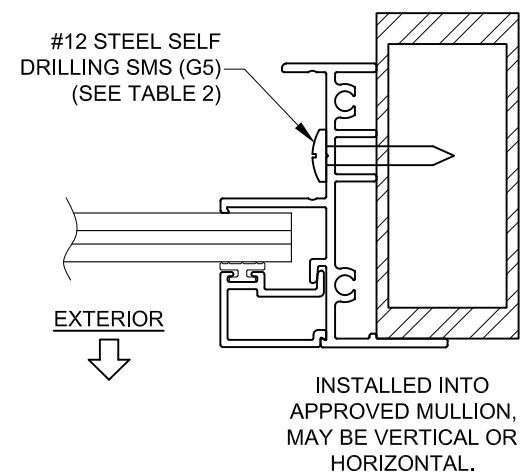
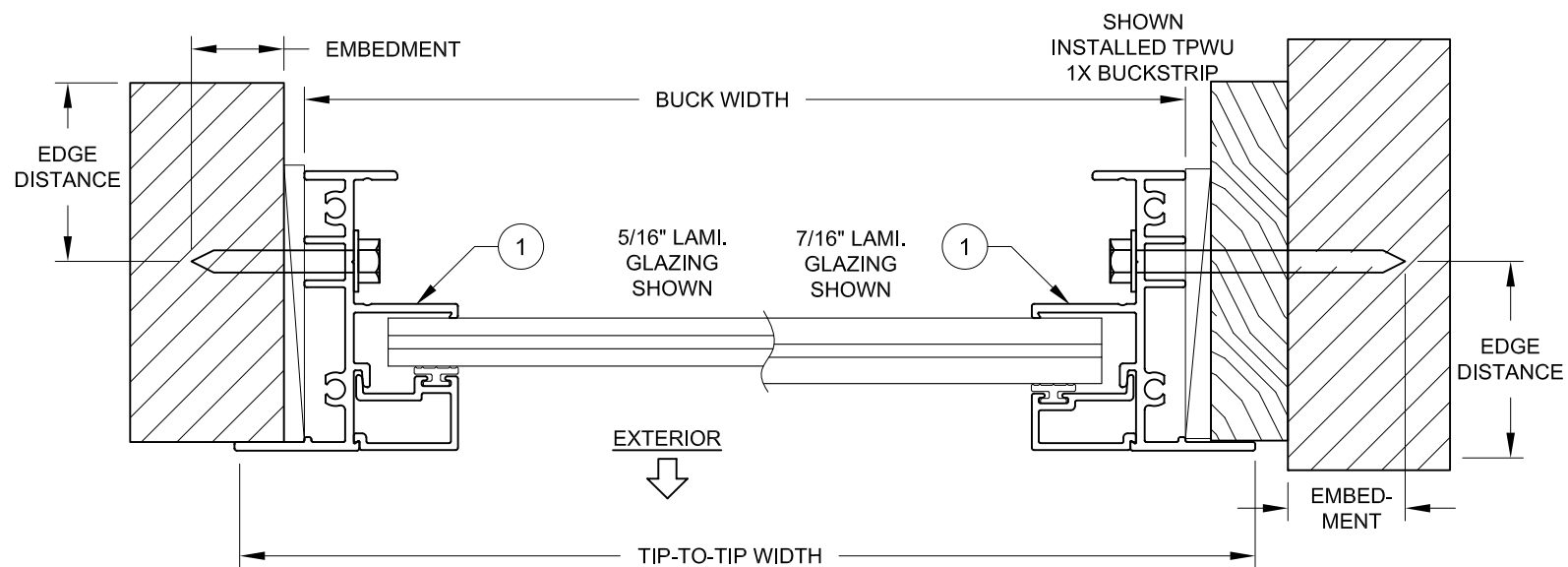


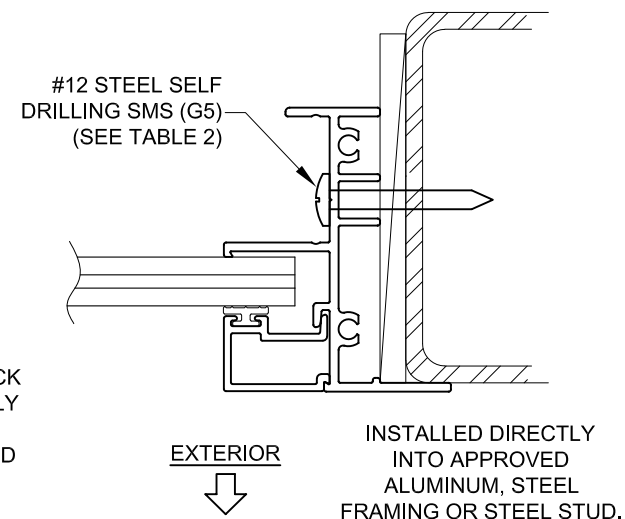
TABLE 2: THRU FRAME ANCHORS

Anchor	Substrate	Minimum Edge Distance	Minimum Embedment
#12 Steel, 18-8 SS or 410 SS Screw	P.T. Southern Pine (SG = .55)	9/16"	1-3/8"
	Aluminum, 6063-T5 min.	3/8"	0.062"
	Steel Stud, Gr. 33 min.	3/8"	0.045" (20 Ga)
	A36 Steel	3/8"	0.050"
1/4" Steel Ultracon+	P.T. Southern Pine (SG = .55)	1"	1-3/8"
	Concrete (min. 3.0 ksi)	1"	1-3/8"
	Ungrouted CMU, (ASTM C-90)	1"	1-1/4"
1/4" 410 SS CreteFlex	P.T. Southern Pine (SG = .55)	1"	1-3/8"
	Concrete (min. 3.35 ksi)	1"	1-3/4"
	Concrete (min. 3.35 ksi)	2-1/2"	1"
	Ungrouted CMU, (ASTM C-90)	1-3/4"	1-1/4"

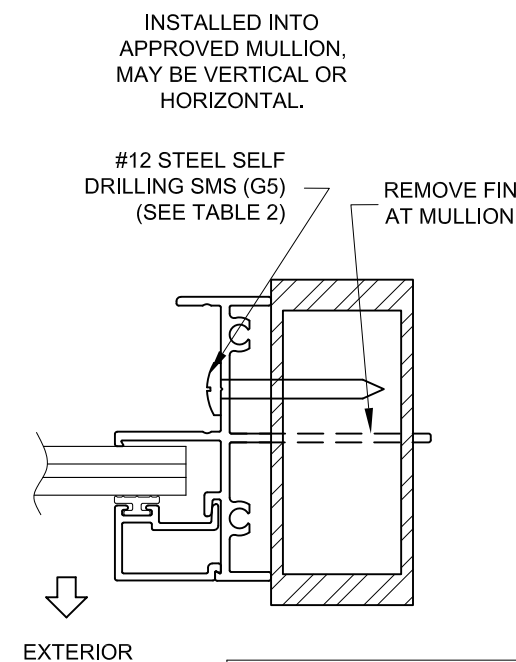
- 1) ANCHOR MUST EXTEND A MINIMUM OF 3 THREADS BEYOND ANY METAL SUBSTRATE.
- 2) "UNGROUTED CMU" VALUES MAY BE USED FOR GROUTED CMU APPLICATIONS.
- 3) ALL ANCHOR HEAD TYPES ARE APPLICABLE.

NOTES:

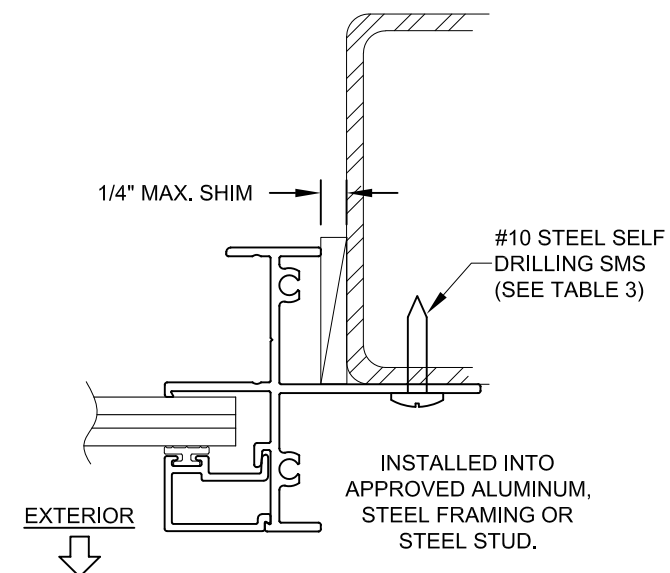
- 1) USE ONLY SUBSTRATE APPROPRIATE ANCHORS LISTED IN TABLE 2. FOLLOW EMBEDMENT AND EDGE DISTANCE LIMITS. ANY INSTALLATION OPTION SHOWN MAY BE USED ON ANY SIDE OF THE WINDOW.
- 2) MASONRY ANCHORS MAY BE USED INTO WOOD AS PER TABLE 2. ALL WOOD BUCKS LESS THAN 1-1/2" THICK ARE TO BE CONSIDERED 1X INSTALLATIONS. 1X WOOD BUCKS ARE OPTIONAL IF UNIT IS INSTALLED DIRECTLY TO SUBSTRATE. WOOD BUCKS DEPICTED AS 2X ARE 1-1/2" THICK OR GREATER. 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED TO PROPERLY TRANSFER LOADS TO THE STRUCTURE. WOOD BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD.
- 3) SEE SHEET 1 FOR SPACING REQUIREMENTS.
- 4) MAX. SHIM THICKNESS TO BE 1/4".
- 5) GLASS SHOWN IS FOR ILLUSTRATIVE PURPOSES ONLY AND MAY DIFFER TO MEET DESIGN REQUIREMENTS.



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							Date	
							Drawn By	
							A MORLESIN	
CGI WINDOWS AND DOORS 3780 W. 104TH STREET HIALEAH, FL 33018		ALUMINUM FIXED WINDOW (LM)						
		Title		ANCHOR INFORMATION, CROSS SECTION		DWG No.		PW4120FLPA
		Sheet		2 OF 5		Series		PW4120A



Anchor	Substrate	Min. Embedment or Metal Thickness	Min. Edge Distance	Max. On-center, Distance, OC	Max. Corner Distance
2-1/2" x .113" Box Nail	P.T. Southern Pine (SG = .55)	-	3/8"	6"	2-7/8"
2-1/2" x .131" Common Nail	P.T. Southern Pine (SG = .55)	-	3/8"		
2-1/2" x .145" Roofing Nail	P.T. Southern Pine (SG = .55)	-	3/8"		
#10 Steel SMS Screw (G5)	P.T. Southern Pine (SG = .55)	1-3/8"	1/2"	16-9/16"	8-1/2"
	Aluminum, 6063-T5 min	0.125"	3/8"		
	Steel Stud, Gr. 33 min.	0.057"	3/8"		
	A36 Steel	0.050"	3/8"		
#12 Steel SMS Screw (G5)	P.T. Southern Pine (SG = .55)	1-3/8"	9/16"	26"	8-1/2"
	Aluminum, 6063-T5 min.	0.125"	7/16"		
	Steel Stud, Gr. 33 min.	0.071"	7/16"		
	A36 Steel	0.050"	7/16"		



	CGI WINDOWS AND DOORS 3780 W. 104TH STREET HIALEAH, FL 33018		REGISTRATION #29296		PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600	
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ALUMINUM FIXED WINDOW (LM)		Date		01/09/18		
ANCHOR INFORMATION, CROSS SECTION		By		A MORLESIN		
PW4120A		Sheet		DWG No.		
3 OF 5		PW4120FLPA				

TABLE 4:

For Glass Type 1		Window Design Pressure (+/-, psf)													
		Short Side (in)													
		22"	24"	26"	28"	30"	32"	34"	36"	38"	40"	42"	44"	46"	47"
Long Side (in)	56"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-63.1	+55/-61.5	+55/-60.2	+55/-59.5
	60"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-64.7	+55/-62.2	+55/-60.8	+55/-59.3	+54/-57.8		
	64"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-62.4	+55/-60.6	+55/-58.9	+54.7/-57.3	+53.3/-56			
	68"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-62.2	+55/-60.5	+55/-59	+55/-57.4	+55/-55.6					
	72"	+55/-65	+55/-65	+55/-65	+55/-62.2	+55/-58.6	+55/-56.8	+55/-55.2	+/-53.9						
	75"	+55/-65	+55/-65	+55/-65	+55/-60.5	+55/-56.7	+/-53.9	+/-52.3	+/-51.3						
	80"	+55/-65	+55/-65	+55/-62.9	+55/-57.8	+/-53.8	+/-50.7								
	84"	+55/-65	+55/-65	+55/-61.3	+55/-56	+/-51.8	+/-48.8								
	88"	+55/-65	+55/-63.7	+55/-59.3	+/-54.1	+/-50									
	92"	+55/-65	+55/-62.2	+55/-57.6	+/-52.2										
	95"	+55/-65	+55/-62.1	+55/-56.6	+/-51.4										

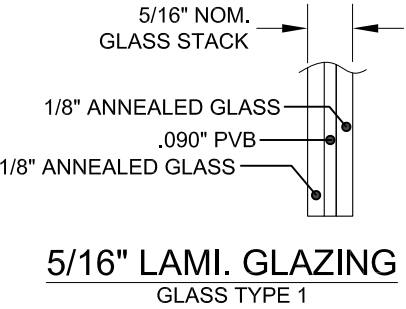
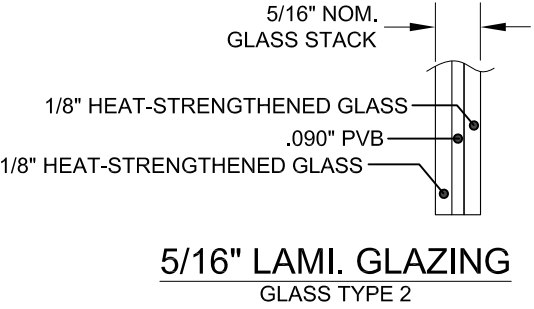


TABLE 5:

For Glass Type 2		Window Design Pressure (+/-, psf)										
		Short Side (in)										
		22"	24"	26"	28"	30"	32"	36"	38"	42"	44"	47"
Long Side (in)	56"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65
	60"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	
	64"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65		
	68"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65			
	72"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65				
	75"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65				
	80"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65					
	84"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65					
	88"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65						
	92"	+55/-65	+55/-65	+55/-65	+55/-65							
	95"	+55/-65	+55/-65	+55/-65	+55/-65							



NOTES:

- 1) BUCK DIMENSIONS SHOWN.
- 2) FOR SIZES NOT SHOWN, ROUND UP TO THE NEXT AVAILABLE WIDTH OR HEIGHT DIMENSION.

Rev.	NO CHANGES ON THIS SHEET.	Date	5/28/24	Rev.#	F
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 Impact Resistant Windows & Doors		CGI WINDOWS AND DOORS 3780 W. 104TH STREET HIALEAH, FL 33018		PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600		REGISTRATION #29296		
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Series	PW4120A	Sheet	4 OF 5	DWG No.	A MORLESIN		Date	01/09/18
Desc.	GLAZING INFORMATION & DESIGN PRESSURES			By		ALUMINUM FIXED WINDOW (LM)		
Title								

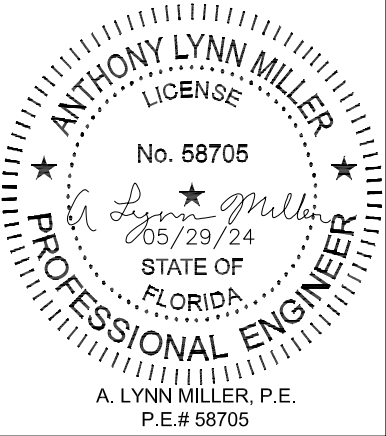


TABLE 6:

For Glass Type 3		Window Design Pressure (+/-, psf)						
		Short Side (in)						
		36"	38"	40"	42"	44"	46"	47"
Long Side (in)	72"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65
	75"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65
	80"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65
	84"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65
	88"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65
	92"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-64.4	+55/-63.4
	95"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-64	+55/-61.9	+55/-60.9

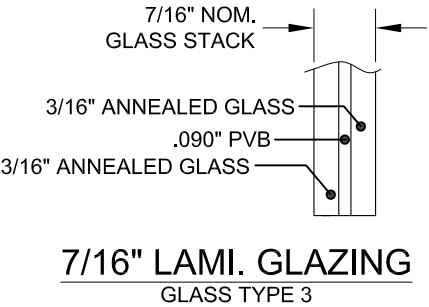


TABLE 7:

For Glass Type 4		Window Design Pressure (+/-, psf)						
		Short Side (in)						
		36"	38"	40"	42"	44"	46"	47"
Long Side (in)	72"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65
	75"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65
	80"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65
	84"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65
	88"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65
	92"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65
	95"	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65	+55/-65

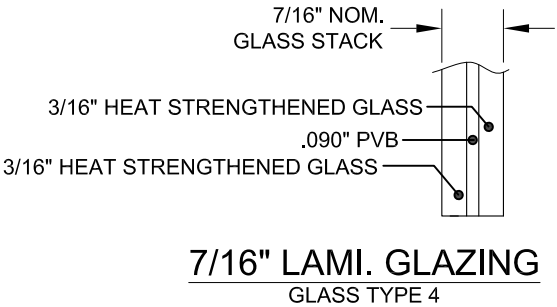
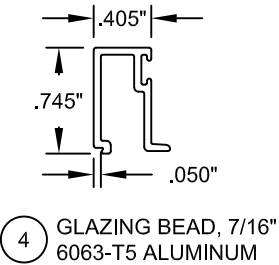
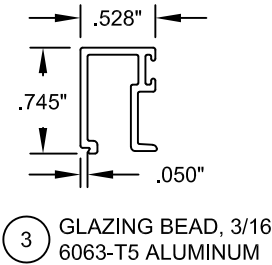
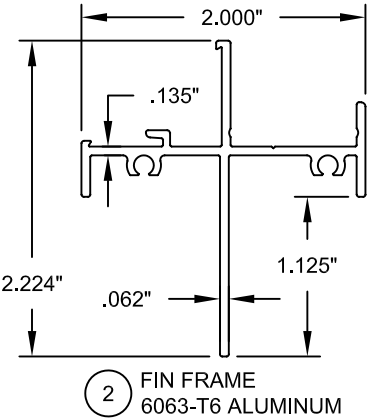
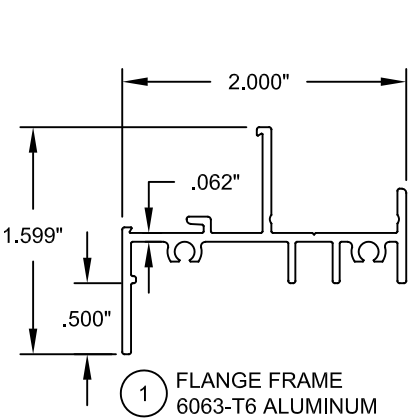


TABLE 8:

Item #	Description
1	Flange Frame
2	Integral Fin Frame
3	Glazing Bead, 5/16" Lami & 3/16" Mono
4	Glazing Bead, 7/16" Lami
7	Dow 791, 899, 983 or RGS-7700 Silicone
8	Vinyl Bulb Glazing Gasket
10	Setting Block 3/16" x 5/16" x 1-1/2"
12	#8 X 1" Panhead SMS (Assembly Screw)



NOTES:

1) BUCK DIMENSIONS SHOWN.

2) FOR SIZES NOT SHOWN, ROUND UP TO THE NEXT AVAILABLE WIDTH OR HEIGHT DIMENSION.

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

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Impact Resistant
Windows & Doors

CGI WINDOWS AND DOORS
3780 W. 104TH STREET
HIALEAH, FL 33018

ALUMINUM FIXED WINDOW (LM)

EXTRUSIONS, GLAZING & DESIGN
PRESSURE

By

Drawn

Date

01/09/18

A MORLESIN

Sheet

5 OF 5

DWG

No.

5

PW4120A

PW4120FLPA

ANTHONY LYNN MILLER
LICENSE
No. 58705
05/29/24
STATE OF
FLORIDA
A. LYNN MILLER, P.E.
P.E.# 58705

PROFESSIONAL ENGINEER

Anthony Lynn Miller