SERIES 410 FIXED WINDOWS - SMALL MISSILE

1). APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF FIX./FIX. OR FIX. WDW. WITH OTHER FLORIDA PRODUCT APPROVED WINDOWS.

2). APPROVED WINDOWS USING FLORIDA PRODUCT APPROVED MULLIONS IN BETWEEN.

3). LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL WILL APPLY TO ENTIRE SYSTEM.

4). THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

5). 1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE.

6). 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.

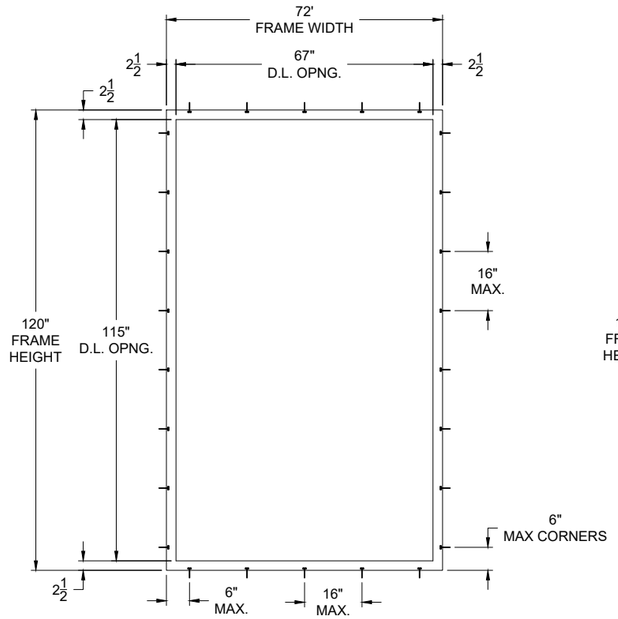
7). A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY. ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

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

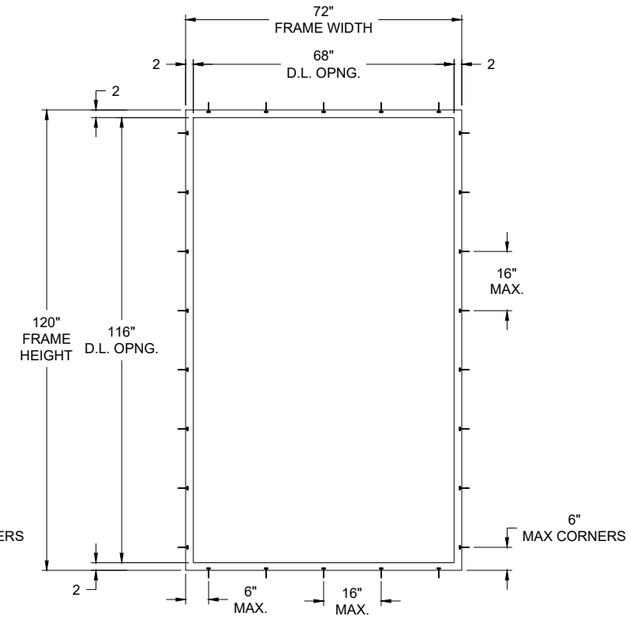
9). THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC.

10). CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

11). 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"



TYPICAL ELEVATION
FLANGE FRAME



TYPICAL ELEVATION
EQUAL LEG FRAME

INSTRUCTIONS FOR USING CAPACITY CHARTS:

STEP 1 DETERMINE THE REQUIRED DESIGN PRESSURES FOR A GIVEN WINDOW OPENING.

STEP 2 DETERMINE THE CAPACITY OF THE WINDOW SIZE/CONFIGURATION/GLASS TYPE FROM CHARTS ON SHEETS 2 AND 3.
FOR INSTALLATION ANCHOR TYPES SEE SHEETS 4 & 5.

STEP 3 IF ALUMINUM BUCKS ARE USED, VERIFY THE BUCK INSTALLATION CAPACITY FROM SHEET 9.

STEP 4 FOR UNCLIPPED MULLED WINDOWS DETERMINE MULLION CAPACITY FOR 1X4 AND 2X6 TUBES FROM CHARTS ON SHEETS 6 & 8.

STEP 5 FOR MULLION ANCHOR CAPACITY SEE CHART ON SHEET 7.

THE LOWEST SELECTED VALUE APPLY TO THE INSTALLATION AND MUST EQUAL OR EXCEED THE REQUIRED DESIGN PRESSURES OBTAINED FROM STEP 1.

THESE WINDOWS ARE RATED FOR SMALL MISSILE IMPACT.
FLORIDA PRODUCT APPROVED IMPACT RESISTANT SHUTTERS REQUIRED FOR INSTALLATIONS UP TO 30 FT. OF GRADE.
SHUTTERS NOT REQD. FOR INSTALLATIONS ABOVE 30 FT. OF GRADE.

Rev.#	Date	Rev.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
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REGISTRATION #29296

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Date	Drawn By	DWG No.
1/24/23	A. MORLESIN	PW410SMI-FPA

Title	Desc.	Series	Sheet
SERIES "410" ALUM. FIXED WINDOW (SMI)	ELEVATION & GENERAL NOTES	PW410	1 OF 11

ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. Lynn Miller
2/10/23

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

DESIGN LOAD CAPACITY - PSF

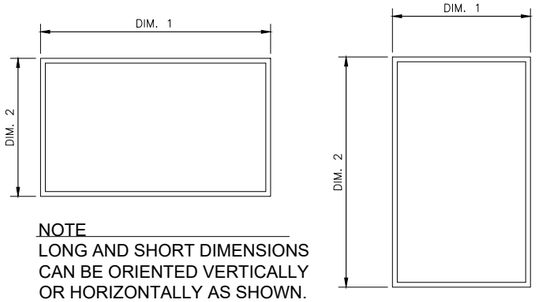
DIM. 1 INCHES	DIM. 2 INCHES	GLASS TYPE 1				GLASS TYPE 1A			
		ANCHOR OPTION 1		ANCHOR OPTION 2		ANCHOR OPTION 1		ANCHOR OPTION 2	
		POS.(+)	NEG.(-)	POS.(+)	NEG.(-)	POS.(+)	NEG.(-)	POS.(+)	NEG.(-)
30	48	133.0	181.6	133.0	210.0	133.0	181.6	133.0	210.0
36		133.0	166.5	133.0	210.0	133.0	166.5	133.0	210.0
42		133.0	152.9	133.0	210.0	133.0	152.9	133.0	210.0
48		133.0	156.1	133.0	210.0	133.0	15 6.1	133.0	210.0
51		133.0	138.8	133.0	200.7	133.0	138.8	133.0	200.7
54		124.9	124.9	133.0	191.3	124.9	124.9	133.0	191.3
57		113.5	113.5	133.0	176.0	113.5	113.5	133.0	176.0
60		104.1	104.1	133.0	177.1	104.1	104.1	133.0	161.3
63		120.1	120.1	133.0	171.6	120.1	120.1	133.0	171.6
66		111.5	111.5	130.6	167.0	111.5	111.5	130.6	167.0
69		104.1	104.1	127.5	161.3	104.1	104.1	127.5	161.3
72		97.6	97.6	124.7	151.3	97.6	97.6	124.7	151.3
30	54	133.0	153.7	133.0	210.0	133.0	153.7	133.0	210.0
36		133.0	138.8	133.0	210.0	133.0	138.8	133.0	210.0
42		129.7	129.7	133.0	198.7	129.7	129.7	133.0	198.7
48		124.9	124.9	133.0	191.3	124.9	124.9	133.0	191.3
51		123.7	123.7	133.0	189.5	123.7	123.7	133.0	189.5
54		123.3	123.3	133.0	188.9	123.3	123.3	133.0	188.9
57		111.0	111.0	133.0	172.1	111.0	111.0	133.0	172.1
60		100.9	100.9	133.0	171.7	100.9	100.9	133.0	156.4
63		115.6	115.6	129.3	165.3	115.6	115.6	129.3	165.3
66		106.7	106.7	125.0	159.8	106.7	106.7	125.0	159.8
69		99.1	99.1	118.9	118.9	99.1	99.1	118.9	118.9
72		92.5	92.5	118.9	118.9	92.5	92.5	118.9	118.9
30	60	133.0	133.2	133.0	210.0	133.0	133.2	133.0	206.5
36		118.9	118.9	133.0	202.4	118.9	118.9	133.0	184.4
42		109.8	109.8	133.0	186.8	109.8	109.8	133.0	170.2
48		104.1	104.1	133.0	177.1	104.1	104.1	133.0	161.3
51		102.2	102.2	133.0	173.9	102.2	102.2	133.0	158.4
54		100.9	100.9	133.0	171.7	100.9	100.9	133.0	156.4
57		100.2	100.2	133.0	170.4	100.2	100.2	133.0	155.3
60		99.9	99.9	133.0	170.0	99.9	99.9	133.0	154.9
63		99.9	99.9	107.0	107.0	99.9	99.9	107.0	107.0
66		99.9	99.9	107.0	107.0	99.9	99.9	107.0	107.0
69		96.1	96.1	107.0	107.0	96.1	96.1	107.0	107.0
72		89.2	89.2	107.0	107.0	89.2	89.2	107.0	107.0
30	66	133.0	146.9	133.0	210.0	133.0	146.9	133.0	210.0
36		130.1	130.1	133.0	194.8	130.1	130.1	133.0	194.8
42		118.9	118.9	133.0	178.1	118.9	118.9	133.0	178.1
48		111.5	111.5	130.6	167.0	111.5	111.5	130.6	167.0
51		108.8	108.8	127.5	163.0	108.8	108.8	127.5	163.0
54		106.7	106.7	125.0	159.8	106.7	106.7	125.0	159.8
57		105.2	105.2	112.6	112.6	105.2	105.2	112.6	112.6
60		99.9	99.9	107.0	107.0	99.9	99.9	107.0	107.0
63		101.9	101.9	101.9	101.9	101.9	101.9	101.9	101.9
66		97.3	97.3	97.3	97.3	97.3	97.3	97.3	97.3
69		94.6	94.6	97.3	97.3	94.6	94.6	97.3	97.3
72		87.3	87.3	97.3	97.3	87.3	87.3	97.3	97.3
30	72	131.5	131.5	133.0	203.8	131.5	131.5	133.0	203.8
36		115.6	115.6	133.0	179.3	115.6	115.6	133.0	179.3
42		104.9	104.9	133.0	162.7	104.9	104.9	133.0	162.7
48		97.6	97.6	124.7	151.3	97.6	97.6	124.7	151.3
51		94.8	94.8	120.0	125.9	94.8	94.8	120.0	125.9
54		92.5	92.5	118.9	118.9	92.5	92.5	118.9	118.9
57		90.7	90.7	112.6	112.6	90.7	90.7	112.6	112.6
60		89.2	89.2	107.0	107.0	89.2	89.2	107.0	107.0
63		88.1	88.1	101.9	101.9	88.1	88.1	10 1.9	101.9
66		87.3	87.3	97.3	97.3	87.3	87.3	97.3	97.3
69		86.9	86.9	93.0	93.0	86.9	86.9	93.0	93.0
72		86.7	86.7	89.2	89.2	86.7	86.7	89.2	89.2

DESIGN LOAD CAPACITY - PSF

DIM. 1 INCHES	DIM. 2 INCHES	GLASS TYPE 1				GLASS TYPE 1A			
		ANCHOR OPTION 1		ANCHOR OPTION 2		ANCHOR OPTION 1		ANCHOR OPTION 2	
		POS.(+)	NEG.(-)	POS.(+)	NEG.(-)	POS.(+)	NEG.(-)	POS.(+)	NEG.(-)
30	78	133.0	142.7	133.0	210.0	133.0	142.7	133.0	210.0
36		124.9	124.9	133.0	184.2	124.9	124.9	133.0	184.2
42		112.7	112.7	130.0	166.2	112.7	112.7	130.0	166.2
48		104.1	104.1	120.0	132.8	104.1	104.1	120.0	132.8
51		100.7	100.7	120.0	125.9	100.7	100.7	120.0	125.9
54		97.9	97.9	118.9	118.9	97.9	97.9	118.9	118.9
57		95.6	95.6	112.6	112.6	95.6	95.6	112.6	112.6
60		93.7	93.7	107.0	107.0	93.7	93.7	107.0	107.0
63		92.1	92.1	101.9	101.9	92.1	92.1	101.9	101.9
66		90.8	90.8	97.3	97.3	90.8	90.8	97.3	97.3
69		89.9	89.9	93.0	93.0	89.9	89.9	93.0	93.0
72		86.7	86.7	89.2	89.2	86.7	86.7	89.2	89.2
30	84	130.3	130.3	133.0	202.0	130.3	130.3	133.0	202.0
36		113.5	113.5	133.0	176.0	113.5	113.5	133.0	176.0
42		101.9	101.9	126.7	158.0	101.9	101.9	126.7	158.0
48		93.7	93.7	120.0	128.7	93.7	93.7	120.0	128.7
51		90.4	90.4	120.0	124.3	90.4	90.4	120.0	124.3
54		87.6	87.6	118.9	118.9	87.6	87.6	118.9	118.9
57		85.3	85.3	112.6	112.6	85.3	85.3	112.6	112.6
60		83.3	83.3	107.0	107.0	83.3	83.3	107.0	107.0
63		81.6	81.6	101.9	101.9	81.6	81.6	101.9	101.9
66		80.1	80.1	97.3	97.3	80.1	80.1	97.3	97.3
69		78.3	78.3	78.3	78.3	78.3	78.3	78.3	78.3
72		75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
30	90	119.9	119.9	133.0	204.0	119.9	119.9	133.0	185.9
36		104.1	104.1	133.0	1n.1	104.1	104.1	133.0	161.3
42		93.1	93.1	120.0	137.1	93.1	93.1	120.0	137.1
48		85.1	85.1	120.0	125.4	85.1	85.1	120.0	125.4
51		82.0	82.0	120.0	120.8	82.0	82.0	12 0.0	120.8
54		79.3	79.3	116.8	116.8	79.3	79.3	116.8	116.8
57		76.9	76.9	112.6	112.6	76.9	76.9	112.6	112.6
60		74.9	74.9	107.0	107.0	74.9	74.9	107.0	107.0
63		73.2	73.2	101.9	101.9	73.2	73.2	101.9	101.9
66		71.7	71.7	81.8	81.8	71.7	71.7	81.8	81.8
69		70.4	70.4	78.3	78.3	70.4	70.4	78.3	78.3
72		69.4	69.4	75.0	75.0	69.4	69.4	75.0	75.0
30	96	129.5	129.5	133.0	200.8	129.5	129.5	133.0	200.8
36		112.1	112.1	133.0	173.7	112.1	112.1	133.0	173.7
42		99.9	99.9	120.0	134.5	99.9	99.9	120.0	134.5
48		91.1	91.1	120.0	122.6	91.1	91.1	120.0	122.6
51		87.5	87.5	117.8	117.8	87.5	87.5	117.8	117.8
54		84.5	84.5	113.7	113.7	84.5	84.5	113.7	113.7
57		81.8	81.8	110.1	110.1	81.8	81.8	110.1	110.1
60		79.5	79.5	107.0	107.0	79.5	79.5	107.0	107.0
63		77.4	n.4	85.7	85.7	n.4	77.4	85.7	85.7
66		75.7	75.7	81.8	81.8	75.7	75.7	81.8	81.8
69		7+.2	74.2	78.3	78.3	74.2	74.2	78.3	78.3
72		72.8	72.8	75.0	75.0	72.8	72.8	75.0	75.0
30	102	120.6	120.6	133.0	186.9	120.6	120.6	133.0	186.9
36		104.1	104.1	120.0	148.9	104.1	104.1	120.0	148.9
42		92.5	92.5	120.0	132.3	92.5	92.5	120.0	132.3
48		84.1	84.1	120.0	120.2	84.1	84.1	120.0	120.2
51		80.7	80.7	115.4	115.4	80.7	80.7	115.4	115.4
54		77.7	77.7	111.2	111.2	77.7	77.7	111.2	111.2
57		75.1	75.1	92.0	92.0	75.1	75.1	92.0	92.0
60		72.8	72.8	89.3	89.3	72.8	72.8	89.3	89.3
63		70.9	70.9	85.7	85.7	70.9	70.9	85.7	85.7
66		69.1	69.1	81.8	81.8	69.1	69.1	81.8	81.8
69		67.6	67.6	78.3	78.3	67.6	67.6	78.3	78.3
72		66.2	66.2	75.0	75.0	66.2	66.2	75.0	75.0

DESIGN LOAD CAPACITY - PSF

DIM. 1 INCHES	DIM. 2 INCHES	GLASS TYPE 1				GLASS TYPE 1A			
		ANCHOR OPTION 1		ANCHOR OPTION 2		ANCHOR OPTION 1		ANCHOR OPTION 2	
		POS.(+)	NEG.(-)	POS.(+)	NEG.(-)	POS.(+)	NEG.(-)	POS.(+)	NEG.(-)
30	108	112.8	112.8	133.0	197.4	112.8	112.8	133.0	174.9
36		97.1	97.1	120.0	147.1	97.1	97.1	120.0	147.1
42		86.1	86.1	120.0	130.5	86.1	86.1	120.0	130.5
48		78.1	78.1	118.2	118.2	78.1	78.1	118.2	118.2
51		74.8	74.8	113.3	113.3	74.8	74.8	113.3	113.3
54		71.9	71.9	93.3	93.3	71.9	71.9	93.3	93.3
57		69.4	69.4	90.1	90.1	69.4	69.4	90.1	90.1
60		67.2	67.2	87.2	87.2	67.2	67.2	87.2	87.2
63		65.3	65.3	84.7	84.7	65.3	65.3	84.7	84.7
66		63.6	63.6	81.8	81.8	63.6	63.6	81.8	81.8
69		62.1	62.1	78.3	78.3	62.1	62.1	78.3	78.3
72		60.7	60.7	75.0	75.0	60.7	60.7	75.0	75.0
30	114	121.1	121.1	133.0	195.8	121.1	121.1	133.0	187.7
36		104.1	104.1	120.0	145.6	104.1	104.1	120.0	145.6
42		92.1	92.1	120.0	128.8	92.1	92.1	120.0	128.8
48		83.3	83.3	116.5	116.5	83.3	83.3	116.5	116.5
51		79.7	79.7	95.5	95.5	79.7	79.7	95.5	95.5
54		76.6	76.6	91.7	91.7	76.6	76.6	91.7	91.7
57		73.8	73.8	88.4	88.4	73.8	73.8	88.4	88.4
60		71.4	71.4	85.5	85.5	71.4	71.4	85.5	85.5
63		69.2	69.2	82.9	82.9	69.2	69.2	82.9	82.9
66		67.3	67.3	80.6	80.6	67.3	67.3	80.6	80.6
69		65.6	65.6	78.3	78.3	65:6	65.6	78.3	78.3
72		64.0	64.0	75.0	75.0	64.0	64.0	75.0	75.0
30	120	114.2	114.2	133.0	187.7	114.2	114.2	133.0	177.0
36		97.9	97.9	120.0	144.2	97.9	97.9	120.0	144.2
42		86.5	86.5	120.0	127.4	86.5	86.5	120.0	127.4
48		78.1	78.1	114.9	114.9	78.1	78.1	114.9	114.9
51		74.6	74.6	94.1	94.1	74.6	74.6	94.1	94.1
54		71.6	71.6	90.3	90.3	71.6	71.6	90.3	90.3
57		69.0	69.0	87.0	87.0	69.0	69.0	87.0	87.0
60		66.6	66.6	84.0	84.0	66.6	66.6	84.0	84.0
63		64.5	64.5	81.4	81.4	64.5	64.5	81.4	81.4
66		62.6	62.6	79.0	79.0	62.6	62.6	79.0	79.0
69		61.0	61.0	76.9	76.9	61.0	61.0	76.9	76.9
72		59.5	59.5	75.0	75.0	59.5	59.5	75.0	75.0



NOTE
LONG AND SHORT DIMENSIONS CAN BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN.

NOTES:
1. GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS).
2. FOR ANCHOR OPTIONS, SEE SHEETS 4 & 5.

Rev.#
Date
Rev.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
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REGISTRATION #29296

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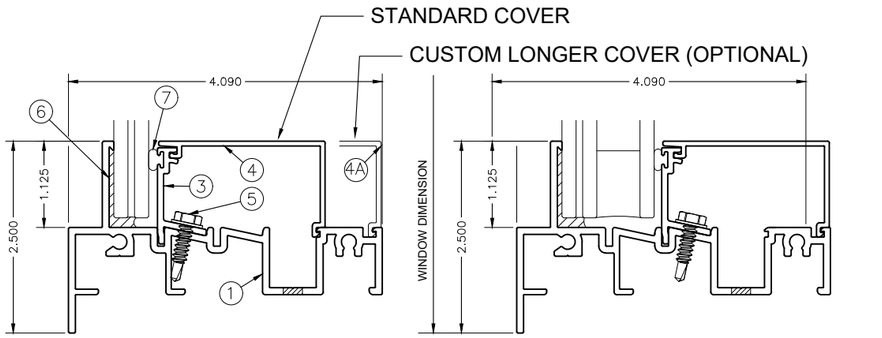
Title		Date	1/24/23
Desc.	SERIES "410" ALUM. FIXED WINDOW (SMI)	Drawn By	A. MORLESIN
	LOAD CAPACITY / LAMINATED GLASS	DWG No.	PW410SMI-FPA
Series	PW410	Sheet	2 OF 11

ANTHONY LYNN MILLER
LICENSE
No. 58705
A. Lynn Miller
2/10/23
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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

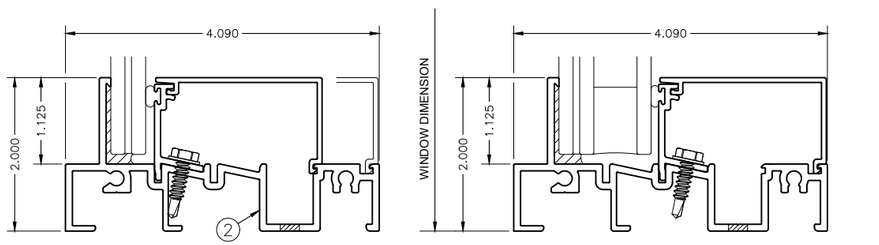
AVAILABLE FRAME TYPES

SAME FRAME USED IN ALL SIDES



FLANGE FRAME
LAMINATED GLASS

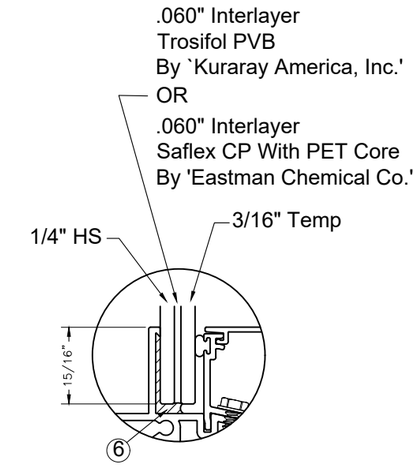
FLANGE FRAME
INSULATED LAMINATED GLASS



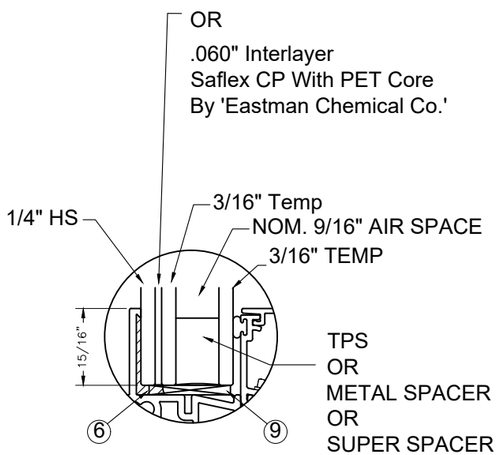
EQUAL LEG FRAME
LAMINATED GLASS

EQUAL LEG FRAME
INSULATED LAMINATED GLASS

GLASS TYPES AVAILABLE



GLASS TYPE "1"



GLASS TYPE "1A"

Rev.#	Date

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

REGISTRATION #29296

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

Title	Desc.	Series
SERIES "410" ALUM. FIXED WINDOW (SMI)	GLASS / FRAMES TYPES	PW410

Drawn By	Date	DWG No.	Sheet
A. MORLESIN	1/24/23	PW410SMI-FPA	3 OF 11

ANTHONY LYNN MILLER
LICENSE
No. 58705
A. Lynn Miller
2/10/23
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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

TYPICAL ANCHORS: ALSO SEE NEXT SHEET. SEE ELEV. FOR SPACING.

Anchor Type	Description	Substrate	Frame Members	Min. Edge Distance	Min. Enbedment 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	All	2-1/2"	1-3/8"
		Thru 1BY Buck into Hollow Block	All	2-1/2"	1-1/4"
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"
		Thru 1BY Buck into Hollow Block	All	2-1/2"	1-3/4"
B+	1/4" DIA. Ultracon+	Into 2BY Wood Buck or Wodd Structure	All	1"	1"
		Thru 1BY Buck into Concrete	All	2-1/2"	1"
		Thru 1BY Buck into Hollow Block	All	2-1/2"	1-3/4"
C	5/16" DIA. Ultracon	Into 2BY Wood Buck or Wodd Structure	All	1-1/4"	1-7/8"
		Thru 1BY Buck into Concrete	All	3-1/8"	1-1/2"
		Thru 1BY Buck into Hollow Block	All	3-1/8"	1-1/4"

ANCHOR OPTION 1:
ALL ANCHORS AS SHOWN ON SHEETS 5 & 6.

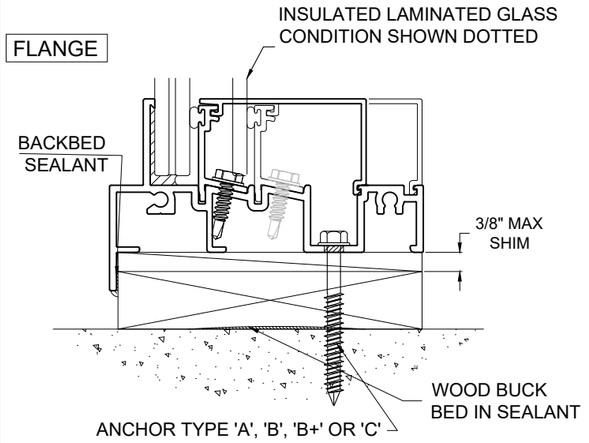
ANCHOR OPTION 2:
ANCHOR TYPES 'C' WITH 1/2" SHIM SPACE.
ANCHOR TYPES 'AA', 'BB', 'BBB', 'BB+', 'BBB+', 'D' & 'E' WITH 1/4" SHIM SPACE.

CONCRETE f'c = 3000 PSI MIN.
CONCRETE BLOCKS f'm = 2000 PSI MIN.

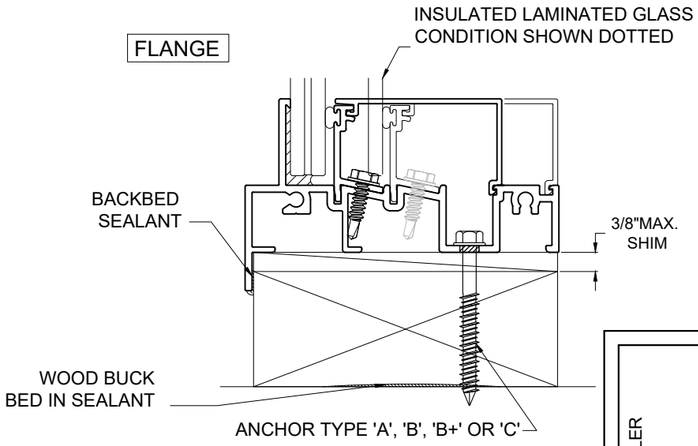
TYPICAL INSTALLATION DETAILS, ALSO SEE NEXT SHEET

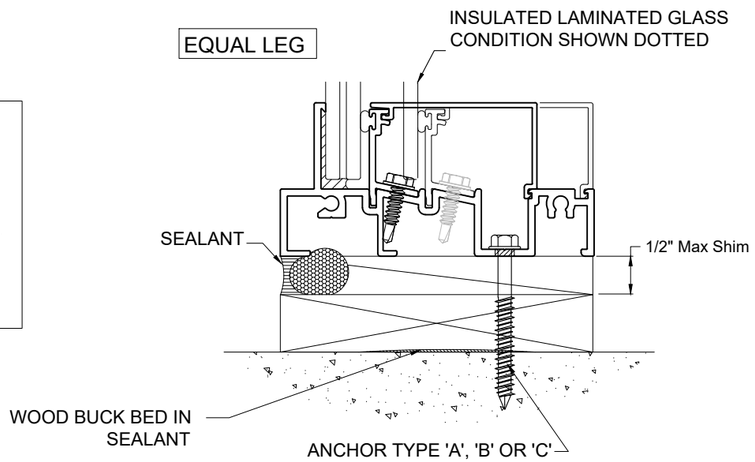
THESE DETAILS ARE TYPICAL ON ALL FOUR SIDES OF WINDOW

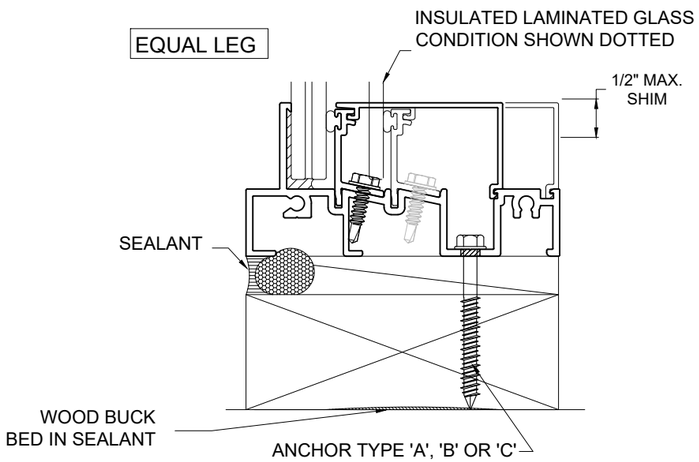
INSTALLATION DETAILS THRU 1X WOOD BUCKS INTO CONCRETE



INSTALLATION DETAILS INTO 2X WOOD BUCKS OR INTO WOOD STRUCTURES







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PREPARED BY A. LYNN MILLER
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Date: 1/24/23
Drawn By: A. MORLESIN
DWG No.: PW410SMI-FPA

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N VENICE, FL 34275
(833) 554-5432

Title: SERIES "410" ALUM. FIXED WINDOW (SMI)
Desc.: ANCHORS INSTALLATION 1
Series: PW410
Sheet: 4 OF 11

ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. Lynn Miller
2/10/23

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

TYPICAL ANCHORS: ALSO SEE PREVIOUS SHEET. SEE ELEV. FOR SPACING.

Anchor Type	Description	Substrate	Frame Members	Min. Edge Distance	Min. Enbedment or Metal Thickness
AA	1/4" DIA. Hilti Kwik-con II	Directly into Concrete	All	2-1/2"	1-3/8"
BB	1/4" DIA. Ultracon	Directly into Concrete	All	2-1/2"	1-3/8"
BB+	1/4" DIA. Ultracon+	Directly into Concrete	All	2-1/2"	1-3/8"
BBB	1/4" DIA. Ultracon	Directly into Hollow Block	All	2-1/2"	1-1/4"
BBB+	1/4" DIA. Ultracon+	Directly into Hollow Block	All	2-1/2"	1-1/4"
D	#14 SMS	Into Steel 12 GA Min.	All	2-1/2"	(3) Threads min. to extended beyond metal thickness
		Into Aluminum 1/8" thk.	All	2-1/2"	(3) Threads min. to extended beyond metal thickness
E	#14 SMS	Into Steel 12 GA Min.	All	2-1/2"	(3) Threads min. to extended beyond metal thickness
		Into Aluminum 1/8" thk.	All	2-1/2"	(3) Threads min. to extended beyond metal thickness

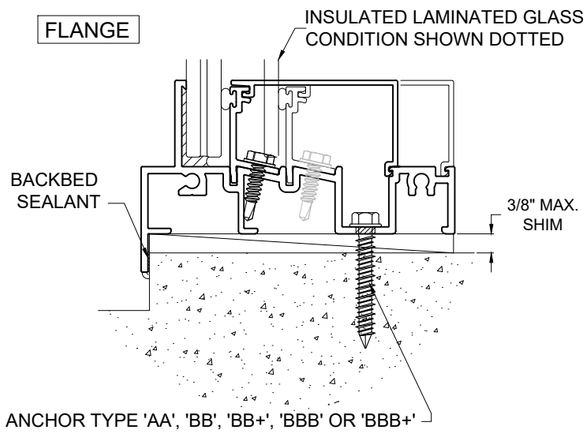
ANCHOR OPTION 1:
ALL ANCHORS AS SHOWN ON SHEETS 4 & 5.

ANCHOR OPTION 2:
ANCHOR TYPES 'C' WITH 1/2" SHIM SPACE.
ANCHOR TYPES 'AA', 'BB', 'BBB', 'BB+', 'BBB+', 'D' & 'E' WITH 1/4" SHIM SPACE.

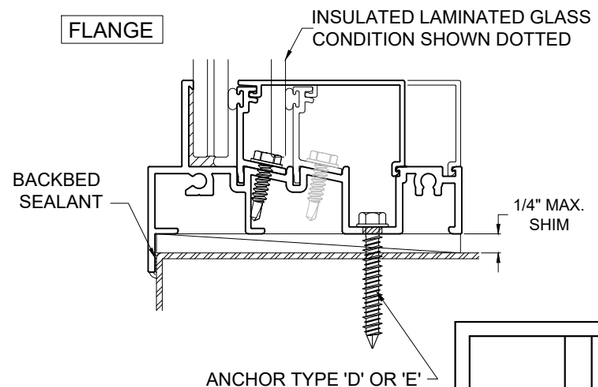
CONCRETE f'c = 3000 PSI MIN.
CONCRETE BLOCKS f'm = 2000 PSI MIN.

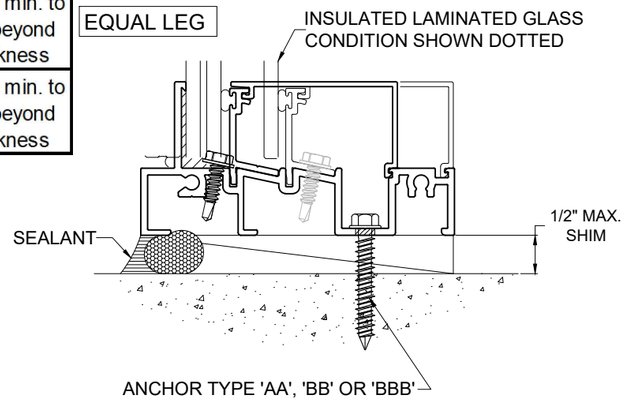
TYPICAL INSTALLATION DETAILS, ALSO SEE PREVIOUS SHEET
THESE DETAILS ARE TYPICAL ON ALL FOUR SIDES OF WINDOW

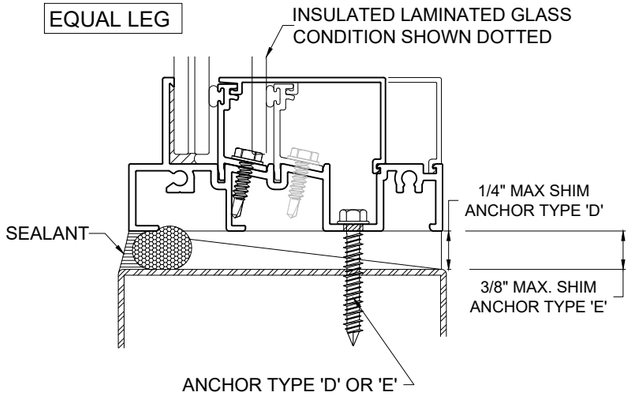
INSTALLATION DETAILS
DIRECTLY INTO CONCRETE



INSTALLATION DETAILS INTO METAL
STRUCTURES OR INTO APPROVED MULLIONS







(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)
INTO FLORIDA PRODUCT APPROVED MULLIONS (MIN. THK. = .125")

Rev.# | Date | Rev.

PREPARED BY A. LYNN MILLER
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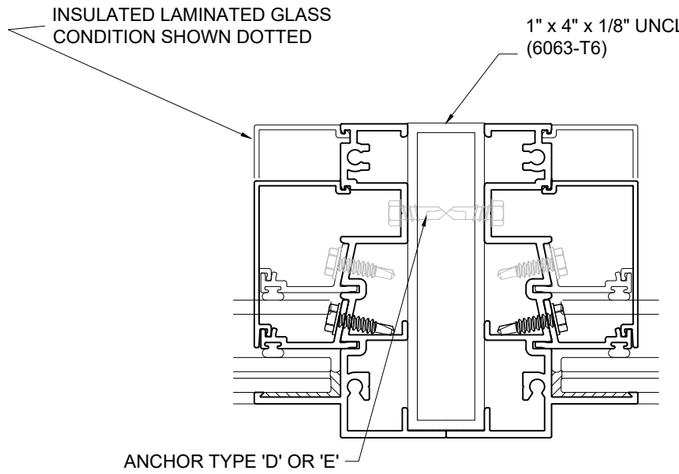
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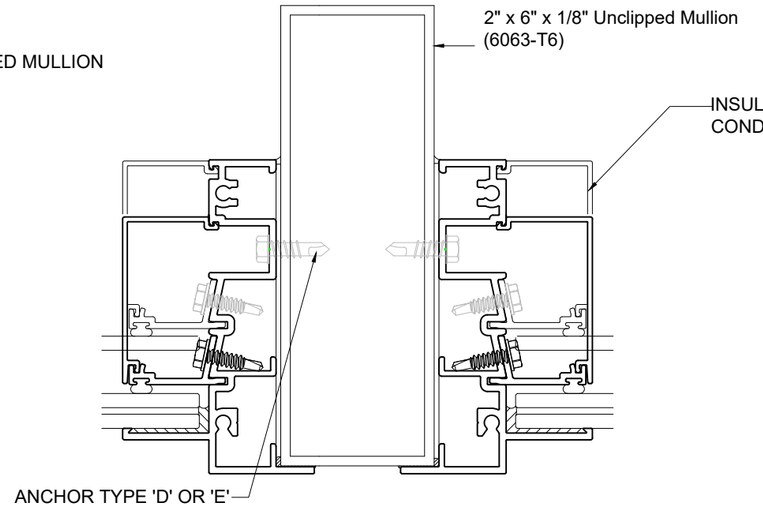
Date: 1/24/23
Drawn By: A. MORLESIN
DWG No.: PW410SMI-FPA
Sheet: 5 OF 11
Series: PW410
Desc.: SERIES "410" ALUM. FIXED WINDOW (SMI)
Title: ANCHOR INSTALLATION 2

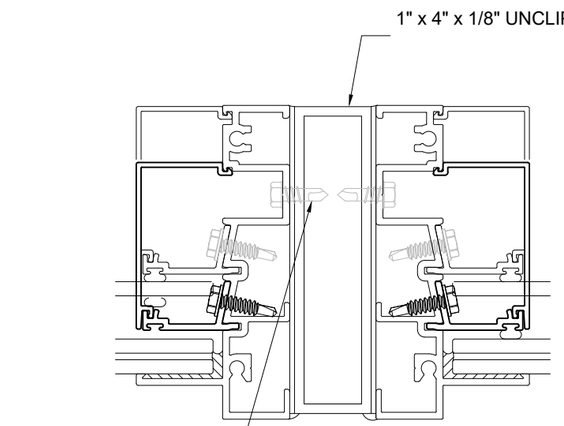
ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
2/10/23

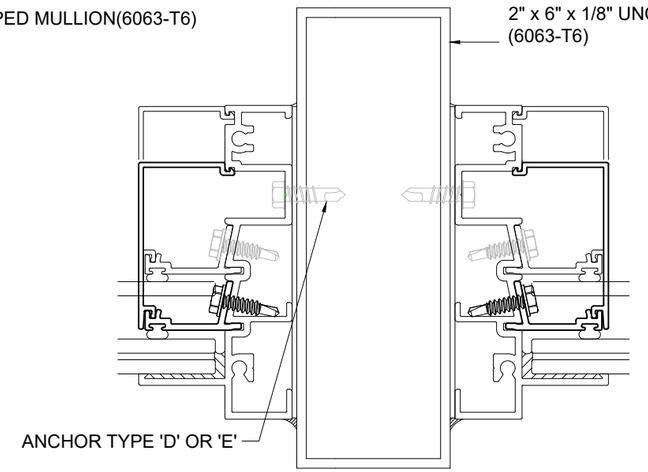
A. LYNN MILLER, P.E.
P.E.# 58705

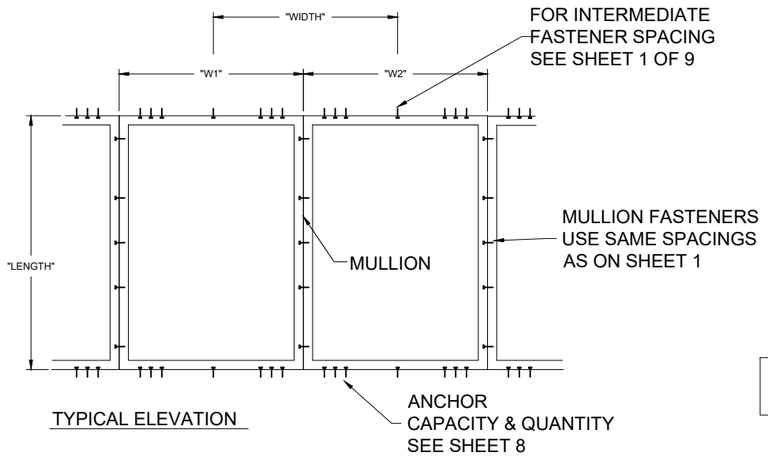
DESIGN LOAD CAPACITY - PSF (MULLION)			
WINDOW DIMS		1" X 4" X 1/8" ALUM TUBE	2" X 6" X 1/8" ALUM TUBE
WIDTH	LENGTH	POS.(+) & NEG.(-)	POS.(+) & NEG.(-)
36"	72"	210.0	210.0
42"		199.0	210.0
48"		181.3	210.0
54"		169.1	210.0
60"		161.1	210.0
66"		156.4	210.0
72"		154.7	210.0
36"	84"	158.6	210.0
42"		139.1	210.0
48"		125.2	192.6
54"		115.1	177.0
60"		107.7	165.6
66"		102.4	157.4
72"		-	151.9
36"	96"	117.8	181.5
42"		102.8	158.3
48"		91.8	141.4
54"		93.6	128.8
60 "		77.4	119.3
66"		-	112.0
72"		-	106.5
36"	102"	-	150.0
42"		-	138.3
48"		-	123.2
54"		-	111.9
60"		-	103.2
66"		-	96.5
72"		-	91.3
36"	108"	-	140.2
42"		-	121.8
48"		-	108.3
54"		-	98.0
60"		-	90.2
66"		-	84.0
72"		-	79.2
36"	114"	-	124.6
42"		-	108.0
48"		-	95.9
54"		-	86.7
60"		-	79.5
66"		-	73.8
72"		-	69.4
36"	120"	-	111.4
42"		-	96.5
48"		-	85.5
54"		-	77.1
60"		-	70.6
66"		-	65.4
72"		-	61.3











TYPICAL ELEVATION

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

Rev.#	Date	Rev.

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Title	Date	Drawn By	DWG No.	Sheet
SERIES "410" ALUM. FIXED WINDOW (SMI)	1/24/23	A. MORLESIN	PW410SMI-FPA	
MULLION LOAD CAPACITY 1				6 OF 11
Series	Desc.			
PW410				

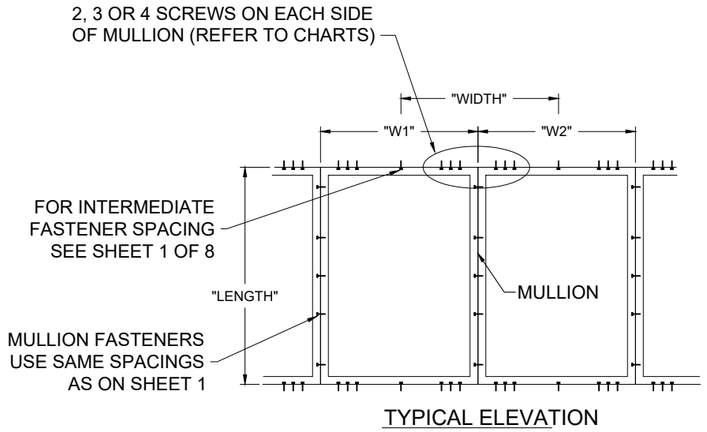
ANTHONY LYNN MILLER
LICENSE
No. 58705
A. Lynn Miller
2/10/23
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

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

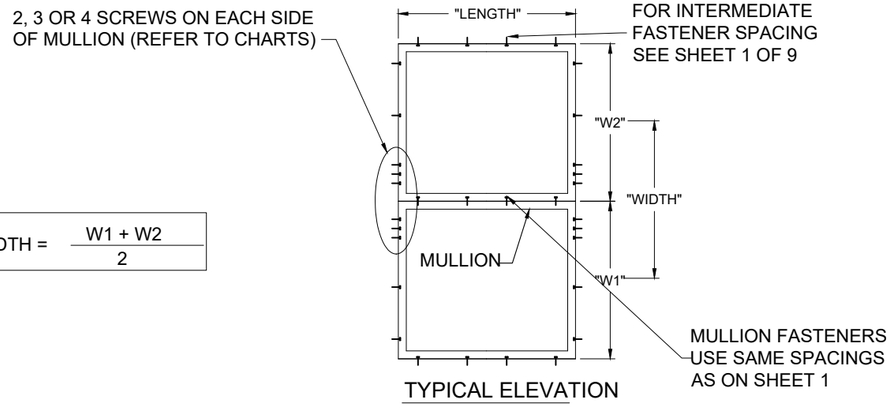
DESIGN LOAD CAPACITY - PSF (ANCHORS AT EACH SIDE OF MULLION)

		ANCHOR TYPE A			ANCHOR TYPE AA			ANCHOR TYPES A & AA			ANCHOR TYPES A & AA		
WINDOW DIMS.		1/4" SHIM			1/4" SHIM			3/8" SHIM			1/2" SHIM		
WIDTH	LENGTH	2 / SIDE	3 / SIDE	4 / SIDE	2 / SIDE	3 / SIDE	4 / SIDE	2 / SIDE	3 / SIDE	4 / SIDE	2 / SIDE	3 / SIDE	4 / SIDE
36"		116 .4	150.0	150.0	150.0	150.0	150.0	112.7	150.0	150.0	88.2	132.3	150.0
42"		99.8	149.7	150.0	150.0	150.0	150.0	96.6	144.9	150.0	75.6	113.4	150.0
48"		87.3	131.0	150.0	134.3	150.0	150.0	84.5	126.8	150.0	66.1	99.2	132.3
54"	72"	77.6	116.4	150.0	119.4	150.0	150.0	75.1	112.7	150.0	58.8	88.2	117 .6
60"		69.9	104.8	139.7	107.5	150.0	150.0	67.6	101.4	135.2	52.9	79.4	105.8
66"		63.5	95.3	127.0	97.7	146.5	150.0	61.5	92.2	122.9	48.1	72.1	96.2
72"		58.2	87.3	116.4	89.6	134.3	150 .0	56 .3	84.5	112.7	44 .1	66 .1	88.2
36"		99.8	149.7	150.0	150.0	150.0	150.0	96.6	144.9	150.0	75.6	113.4	150 .0
42"		85.6	128.3	150.0	131.6	150.0	150.0	82.8	124.2	150.0	64.8	97.2	129.6
48"		74.9	112.3	149.7	115.1	150.0	150.0	72.4	108.6	144.9	56.7	85.0	113.4
54"	84"	66.5	99.8	133.1	102.3	150.0	150.0	64.4	96.6	128.8	50 .4	76.5	100.8
60"		59.9	89.8	119.8	92.1	138.2	150.0	57.9	86.9	115.9	45.3	68.0	90.7
66"		54.4	81.7	108.9	83.7	125.6	150.0	52.7	79.0	105.4	41.2	61.8	82.5
72"		49.9	74.9	99.8	76.8	115.1	150.0	48.3	72.4	96.6	37.8	56.7	75.6
36"		87.3	131.0	150.0	134.3	150.0	150.0	84.5	126.8	150.0	66.1	99.2	132.3
42"		74.9	112.3	149.7	115.1	150.0	150 .0	72.4	108.6	144.9	56.7	85.0	113.4
48"		65.5	98.3	131.0	100.8	150.0	150.0	63.4	95.1	126.8	49.6	74.4	99.2
54"	96"	58.2	87.3	116.4	89.6	134.3	150.0	56.3	84.5	112.7	44.1	66.1	88.2
60"		52.4	78.6	104.8	80.6	120.9	150.0	50.7	76.1	101.4	39.7	59.5	79.4
66"		47.6	71.5	95.3	73.3	109.9	146.5	46.1	69.1	92.2	36.1	54.1	72.1
72"		43.7	65.5	87.3	67.2	100.8	134.3	42.3	63.4	84.5	33.1	49.6	66.1
36"		82.2	123.3	150.0	126.4	150.0	150.0	79.5	119.3	150.0	62.2	93.4	124.5
42"		70.5	105.7	140.9	108.4	150.0	150.0	68.2	102.3	136.3	53.4	80.0	106.7
48"		61.6	92.5	123.3	94.8	142.2	150.0	59.6	89.5	119.3	46.7	70.0	93.4
54"	102"	54.8	82.2	109.6	84.3	126.4	150.0	53.0	79.5	106.0	41.5	62.2	83.0
60"		49.3	74.0	98.6	75.9	113.8	150.0	47.7	71.6	95.4	37.3	56.0	74.7
66"		44.8	67.3	89.7	69.0	103.4	137.9	43.4	65.1	86.8	34.0	50.9	67.9
72"		41.1	61.6	82.2	63.2	94.8	126.4	39.8	59.6	79.5	31.1	46.7	62.2
36"		77.6	116.4	150.0	119.4	150.0	150.0	75.1	112.7	150.0	58.8	88.2	117.6
42"		66.5	99.8	133.1	102.3	150.0	150.0	64.4	96.6	128.8	50.4	75.6	100.8
48"		58.2	87.3	116.4	89.6	134.3	150.0	56.3	84.5	112.7	44.1	66.1	88.2
54"	108"	51.8	77.6	103.5	79.6	119.4	150.0	50.1	75.1	100.1	39.2	58.8	78.4
60"		46.6	69.9	93.2	71.6	107.5	143.3	45.1	67.6	90.1	35.3	52.9	70.5
66"		42.3	63.5	84.7	65.1	97.7	130.3	41.0	61.5	81.9	32 .1	48.1	64.1
72"		38.8	58.2	77.6	59.7	89.6	119.4	37.6	56.3	75.1	29.4	44.1	58.8
36"		73.5	110.3	147.1	113.1	150.0	150.0	71.2	106.7	142.3	55.7	83.5	111.4
42"		63.0	94.6	126.1	97.0	145.4	150.0	61.0	91.5	122.0	47.7	71.6	95.5
48"		55.2	82.7	110.3	84.8	27.3	150.0	53.4	80.1	106.7	41.8	62.7	83.5
54"	114"	49.0	73.5	98.1	75.4	113.1	150.0	47.4	71.2	94.9	37.1	55.7	74.3
60"		44.1	66.2	88.3	67.9	101.8	135.7	42.7	64.0	85.4	33.4	50.1	66.8
66"		40.1	60.2	80.2	61.7	92.6	123.4	38.8	58.2	77.6	30.4	45.6	60.8
72"		36.8	55.2	73.5	56.6	84.8	113.1	35.6	53.4	71.2	27.8	41.8	55.7
36"		69.9	104.8	139.7	107.5	150.0	150.0	67.6	101.4	135.2	52.9	79.4	105.8
42"		59.9	89.8	119.8	92.1	138.2	150.0	57.9	86.9	115.9	45.3	68.0	90.7
48"		52.4	78.6	104.8	80.6	120.9	150.0	50.7	76.1	101.4	39.7	59.5	79.4
54"	120"	46.6	69.9	93.2	71.6	107.5	143 .3	45.1	67.6	90 .1	35.3	52.9	70.5
60"		41.9	62.9	83.8	64.5	96.7	129.0	40.6	60.8	81.1	31.7	47.6	63.5
66"		38.1	57.2	76.2	58.6	87.9	117.2	36.9	55.3	73.7	28.9	43.3	57.7
72"		34.9	52.4	69.9	53.7	80.6	107.5	33.8	50.7	67.6	26.5	39.7	52.9

INTERPOLATION FROM THESE CHARTS IS ALLOWED.



TYPICAL ELEVATION



TYPICAL ELEVATION

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

Rev.# | Date | Rev.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
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Date 1/24/23
Drawn By A. MORLESIN
DWG No. PW410SMI-FPA
Sheet 7 OF 11

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

Title: SERIES "410" ALUM. FIXED WINDOW (SMI)
Desc.: MULLION LOAD CAPACITY 2
Series: PW410

ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
2/10/23

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

DESIGN LOAD CAPACITY - PSF (ANCHORS AT EACH SIDE OF MULLION)

		ANCHOR TYPES B & B+			ANCHOR TYPES BB & BB+			ANCHOR TYPES BBB & BBB+			ANCHOR TYPES B, B+, BB, BB+, BBB & BBB+			ANCHORS 'B', 'BB', 'BBB'			ANCHOR TYPE 'C'			ANCHOR TYPE 'D' , 'E'			ANCHOR TYPE 'E'		
WINDOW DIMS.		1/4" SHIM			1/4" SHIM			1/4" SHIM			3/8" SHIM			1/2" SHIM			1/2" SHIM			1/4" SHIM			3/8" SHIM		
WIDTH	LENGTH	2 / SIDE	3 / SIDE	4 / SIDE	2 / SIDE	3 / SIDE	4 / SIDE	2 / SIDE	3 / SIDE	4 / SIDE	2 / SIDE	3 / SIDE	4 / SIDE	2 / SIDE	3 / SIDE	4 / SIDE	2 / SIDE	3 / SIDE	4 / SIDE	2 / SIDE	3 / SIDE	4 / SIDE	2 / SIDE	3 / SIDE	4 / SIDE
36"		105.8	158.7	210.0	151.1	210.0	210.0	131.1	196.7	210.0	89.2	133.8	178.4	69.4	104.1	138.8	128.9	193 .3	210 .0	170.2	210.0	210.0	82.8	124.2	165.6
42"		90.7	136.0	181.3	129.5	194.3	210.0	112.4	168.6	210.0	76.5	114.7	152.9	59.5	8 9.2	118.9	110.5	165.7	210.0	145.9	210.0	210.0	71.0	106.5	141.9
48"		79.3	119.0	158.7	113.3	170.0	210.0	98.3	147.5	196.7	66.9	100.4	133.8	52.0	78.1	104.1	96.7	145.0	193.3	127.7	191.5	210.0	62.1	93.2	124.2
54"	72"	70.5	105.8	141.0	100.7	151.1	201.5	87.4	131.1	174.8	59.5	89.2	118.9	46.3	69.4	92.5	85.9	128.9	171.9	113.5	170.2	210.0	55.2	82.8	110.4
60"		63.5	95.2	126.9	90.7	136.0	181.3	78.7	118.0	157.3	53.5	80.3	107.0	41.6	62.4	83.3	77.3	116.0	154.7	102.1	153.2	204.3	49.7	74.5	99.4
66"		57.7	86.5	115.4	82.4	123.6	164.8	71.5	107.3	143.0	48.7	73.0	97.3	37.8	56.8	75.7	70.3	105.5	140.6	92.8	139.3	185.7	45.2	67.7	90.3
72"		52.9	79.3	105.8	75.6	113.3	151.1	65.6	98.3	131.1	44.6	66.9	89.2	34.7	52.0	69.4	64.4	96.7	128.9	85.1	127.7	170.2	41.4	62.1	82.8
36"		90.7	136.0	181.3	129.5	194.3	210.0	112.4	168.6	210.0	76.5	114.7	152.9	59.5	89.2	118.9	110.5	165.7	210.0	145.9	210.0	210.0	71.0	106.5	141.9
42"		77.7	116.6	155.4	111.0	166.5	210.0	96.3	144.5	192.7	65.5	98.3	131.1	51.0	76.5	101.9	94.7	142.0	189.4	125.1	187.6	210.0	60.8	91.2	121.7
48"		68.0	102.0	136.0	97.1	145.7	194.3	84.3	126.4	168.6	57.3	86.0	114.7	44.6	66.9	89.2	82.9	124.3	165.7	109.4	164.1	210.0	53.2	79.8	106.5
54"	84"	60.4	90.7	120.9	86.3	129.5	172.7	74.9	112.4	149.8	51.0	76.5	101.9	39.6	59.5	79.3	73.7	110.5	14 7.3	97.3	145.9	194.5	47.3	71.0	94.6
60"		54.4	81.6	108.8	77.7	116.6	155.4	67.4	101.1	134.9	45.9	68.8	91.7	35.7	53.5	71.4	66.3	99.4	132.6	87.5	131.3	175.1	42.6	63.9	85.2
66"		49.5	74.2	98.9	70.6	106.0	141.3	61.3	91.9	122.6	41.7	62.6	83.4	32.4	48.7	64.9	60.3	90.4	120.5	79.6	119.4	159.2	38.7	58.1	77.4
72"		45.3	68.0	90.7	64.8	97.1	129.5	56.2	84.3	112.4	38.2	57.3	76.5	29.7	44.6	59.5	55.2	82.9	110.5	73.0	109.4	145.9	35.5	53.2	71.0
36"		79.3	119.0	158.7	113.3	170.0	210.0	98.3	147.5	196.7	66.9	100.4	133.8	52.0	78.1	104.1	96.7	145.0	193.3	127.7	191.5	210.0	62.1	93.2	124.2
42"		68.0	102.0	136.0	97.1	145.7	194.3	84.3	126.4	168.6	57.3	86.0	114.7	44.6	66.9	89.2	82.9	124.3	165.7	109.4	164.1	210.0	53.2	79.8	106.5
48"		59.5	89.3	119.0	85.0	127.5	170.0	73.8	110.6	147.5	50.2	75.3	100.4	39.0	58.5	78.1	72.5	108.8	145.0	95.8	143.6	191.5	46.6	69.9	93.2
54"	96"	52.9	79.3	105.8	75.6	113.3	151.1	65.6	98.3	131.1	44.6	66.9	89.2	34.7	52.0	69.4	64.4	96.7	128.9	85.1	127.7	170.2	41.4	62.1	82.8
60"		47.6	71.4	95.2	68.0	102.0	136.0	59.0	88.5	118.0	40.1	60.2	80.3	31.2	46.8	62.4	58.0	87.0	116.0	76.6	114.9	153.2	37.3	55.9	74.5
66"		43.3	64.9	86.5	61.8	92.7	123.6	53.6	80.5	107.3	36.5	54.7	73.0	28.4	42.6	56.8	52.7	79.1	105.5	69.6	104.5	139.3	33.9	50.8	67.7
72"		39.7	59.5	79.3	56.7	85.0	113.3	49.2	73.8	98.3	33.5	50.2	66.9	26.0	39.0	52.0	48.3	72.5	96.7	63.8	95.8	127.7	31.1	46.6	62.1
36"		74.7	112.0	149.3	106.7	160.0	210.0	92.5	138.8	185.1	63.0	94.4	125.9	49.0	73.5	97.9	91.0	136.5	182.0	120.2	180.2	210.0	58.4	87.7	116.9
42"		64.0	96.0	128.0	91.4	137.1	182.9	79.3	11 9.0	158.7	54.0	81.0	107.9	42.0	63.0	84.0	78.0	117.0	156.0	103.0	15 4.5	206.0	50.1	75.1	100.2
48"		56.0	84.0	112.0	80.0	120.0	160.0	69.4	104.1	138.8	47.2	70.8	94.4	36.7	55.1	73.5	68.2	102.4	136.5	90.1	135.2	180.2	43.8	65.8	87.7
54"	102"	49.8	74.7	99.6	71.1	106.7	142.2	61.7	92.5	123.4	42.0	63.0	84.0	32.6	49.0	65.3	60.7	91.0	121.3	80.1	120.2	160.2	39.0	58.4	77.9
60"		44.8	67.2	89.6	64.0	96.0	128.0	55.5	83.3	111.1	37.8	56.7	75.6	29.4	44.1	58.8	54.6	81.9	109.2	72.1	108.1	144.2	35.1	52.6	70.1
66"		40.7	61.1	81.5	58.2	87.3	116.4	50.5	75.7	101.0	34.3	51.5	68.7	26.7	40.1	53.4	49.6	74.4	99.3	65.5	98.3	131.1	31.9	47.8	63.8
72"		37.3	56.0	74.7	53.3	80.0	106.7	46.3	69.4	92.5	31.5	47.2	63.0	24.5	36.7	49.0	45.5	68.2	91.0	60.1	90.1	120.2	29.2	43.8	58.4
36"		70.5	105.8	141.0	100.7	151.1	201.5	87.4	131.1	174.8	59.5	89.2	118.9	46.3	69.4	92.5	85.9	128.9	171.9	113.5	170.2	210.0	55.2	82.8	110.4
42"		60.4	90.7	120.9	86.3	129.5	172.7	74.9	112.4	149.8	51.0	76.5	101.9	39.6	59.5	79.3	73.7	110.5	147.3	97.3	14 5.9	194.5	47.3	71.0	94.6
48"		52.9	79.3	105.8	75.6	113.3	151.1	65.6	98.3	131.1	44.6	66.9	89.2	34.7	52.0	69.4	64.4	96.7	128.9	85.1	127.7	170.2	41.4	62.1	82.8
54"	108"	47.0	70.5	94.0	67.2	100.7	134.3	58.3	87.4	116.5	39.6	59.5	79.3	30.8	46.3	61.7	57.3	85.9	114.6	75.7	113.5	151.3	36.8	55.2	73.6
60"		42.3	63.5	84.6	60.4	90.7	120.9	52.4	78.7	104.9	35.7	53.5	71.4	27.8	41.6	55.5	51.6	77.3	103.1	68.1	10 2.1	136.2	33.1	49.7	66.2
66"		38.5	57.7	76.9	54.9	82.4	109.9	47.7	71.5	95.4	32.4	48.7	64.9	25.2	37.8	50.5	46.9	70.3	93.7	61.9	92.8	123.8	30.1	45.2	60.2
72"		35.3	52.9	70.5	50.4	75.6	100.7	43.7	65.6	87.4	29.7	44.6	59.5	23.1	34.7	46.3	43.0	64.4	85.9	56.7	85.1	113.5	27.6	41.4	55.2
36"		66.8	100.2	133.6	95.4	143.2	190.9	82.8	124.2	165.6	56.3	84.5	112.7	43.8	65.7	87.6	81.4	122.1	162.8	107.5	161.3	210.0	52.3	78.4	104.6
42"		57.3	85.9	114.5	81.8	122.7	163.6	71.0	106.5	142.0	48.3	72.4	96.6	37.6	56.3	75.1	69.8	104.7	139.5	92.2	138.2	184.3	44.8	67.2	89.6
48"		50.1	75.2	100.2	71.6	107.4	143.2	62.1	93.2	124.2	42.3	63.4	84.5	32.9	49.3	65.7	61.1	91.6	122.1	80.6	120.9	161.3	39.2	58.8	78.4
54"	114"	44.5	66.8	89.1	63.6	95.4	127.3	55.2	82.8	110.4	37.6	56.3	75.1	29.2	43.8	58.4	54.3	81.4	108.5	71.7	107.5	143.3	34.9	52.3	69.7
60"		40.1	60.1	80.2	57.3	85.9	114.5	49.7	74.5	99.4	33.8	50.7	67.6	26.3	39.4	52.6	48.8	73.3	97.7	64.5	96.8	129.0	31.4	47.1	62.8
66"		36.4	54.7	72.9	52.1	78.1	104.1	45.2	67.8	90.3	30.7	46.1	61.5	23.9	35.9	47.8	44.4	66.6	88.8	58.6	88.0	117.3	28.5	42.8	57.0
72"		33.4	50.1	66.8	47.7	71.6	95.4	41.4	62.1	82.8	28.2	42.3	56.3	21.9	32.9	43.8	40.7	61.1	8 1.4	53.8	80.6	107.5	26.1	39.2	52.3
36"		63.5	95.2	126.9	90.7	136.0	181.3	78.7	118.0	157.3	53.5	80.3	107.0	41.6	62.4	83.3	77.3	116.0	154.7	102.1	153.2	204.3	49.7	74.5	99.4
42"		54.4	81.6	108.8	77.7	116.6	155 .4	67.4	101.1	134.9	45.9	68.8	91.7	35.7	53.5	71.4	66.3	99.4	132.6	87.5	131.3	175.1	42.6	63.9	85.2
48"		47.6	71.4	95.2	68.0	102.0	136.0	59.0	88.5	118.O	40.1	60.2	80.3	31.2	46.8	62.4	58.0	87.0	116.0	76.6	114.9	153.2	37.3	55.9	74.5
54"	120"	42.3	63.5	84.6	60.4	90.7	120.9	52.4	78.7	104.9	35.7	53.5	71.4	27.8	41.6	55.5	51.6	77.3	103.1	68.1	102.1	136.2	33.1	49.7	66.2
60"		38.1	57.1	76.2	54.4	81.6	108.8	47.2	70.8	94.4	32.1	48.2	64.2	25.0	37.5	50.0	46.4	69.6	92.8	61.3	91.9	122.6	29.8	44.7	59.6
66"		34.6	51.9	69.2	49.5	74.2	98.9	42.9	64.4	85.8	29.2	43.8	58.4	22.7	34.1	45.4	42.2	63.3	8 4.4	55.7	83.6	111.4	27.1	40.6	54.2
72"		31.7	47.6	63.5	45.3	68.0	90.7	39.3	59.0	78.7	26.8	40.1	53.5	20.8	31.2	41.6	38.7	58.0	77.3	51.1	76.6	102.1	24.8	37.3	49.7

INTERPOLATION FROM THESE CHARTS IS ALLOWED.

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

Rev.# | Date | Rev.

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Date: 1/24/23
Drawn By: A. MORLESIN
DWG No.: PW410SMI-FPA
Sheet: 8 OF 11
Series: PW410
Desc.: MULLION LOAD CAPACITY 3
Title: SERIES "410" ALUM. FIXED WINDOW (SMI)

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LICENSE
No. 58705
A. Lynn Miller
2/10/23
STATE OF FLORIDA
PROFESSIONAL ENGINEER

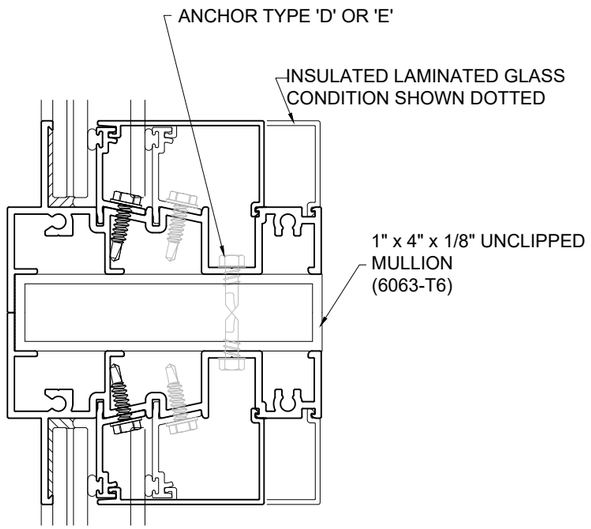
A. LYNN MILLER, P.E.
P.E.# 58705

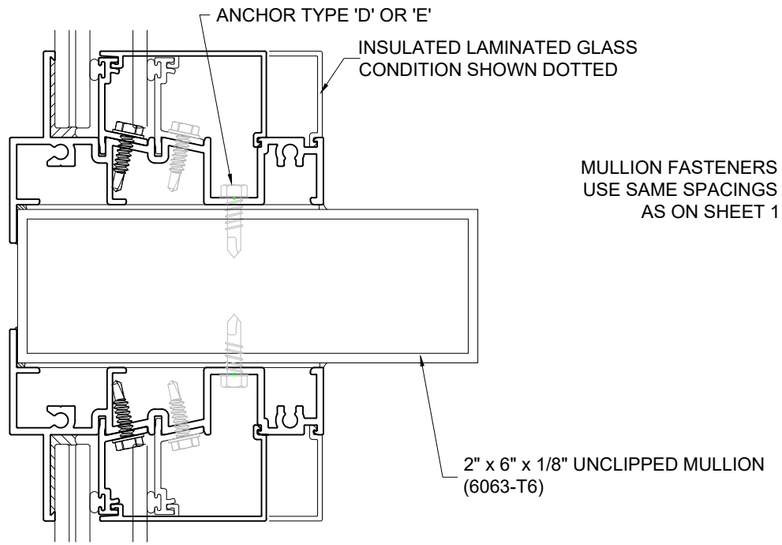
DESIGN LOAD CAPACITY - PSF (MULLION) 1" X 4" X 1/8" ALUM TUBE			
WINDOW DIMS.		LAMINATED GLASS	INSUL. LAM. GLASS
WIDTH	LENGTH	POS.(+) & NEG.(-)	POS.(+) & NEG.(-)
72"	72"	100.0	80.0
36"	84"	100.0	100.0
48"		90.0	57.0
68"		59.0	37.0

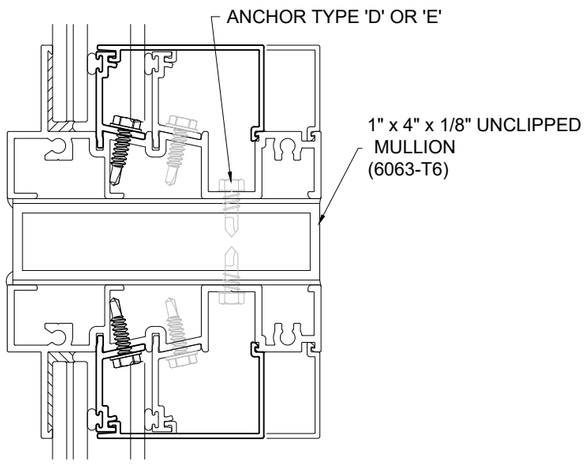
ANY SIZE OR DESIGN LOAD LESS THAN CHART IS ALLOWED.

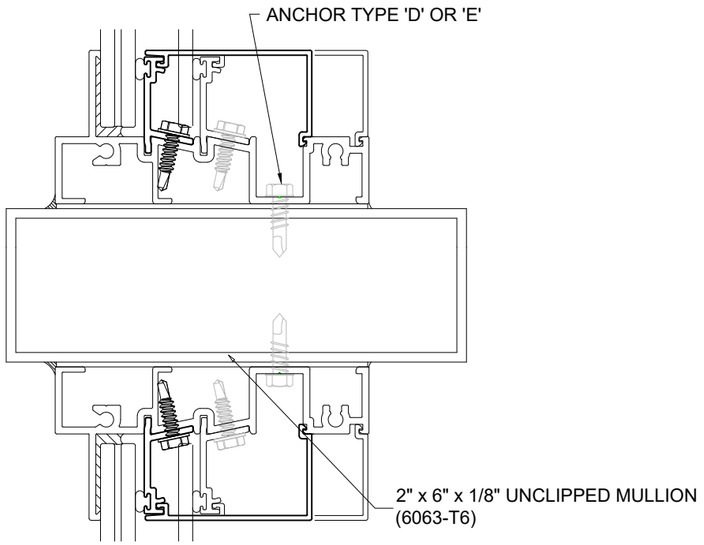
DESIGN LOAD CAPACITY - PSF (MULLION) 2" X 6" X 1/8" ALUM TUBE			
WINDOW DIMS.		LAMINATED GLASS	INSUL. LAM. GLASS
WIDTH	LENGTH	POS.(+) & NEG.(-)	POS.(+) & NEG.(-)
84"	72"	100.0	100.0
60"	96"	100.0	100.0
84"		75.0	75.0
60"	108"	75.0	72.0
72"		68.0	58.0
48"	120"	75.0	68.0
60"		60.0	51.0
72"		49.0	36.0

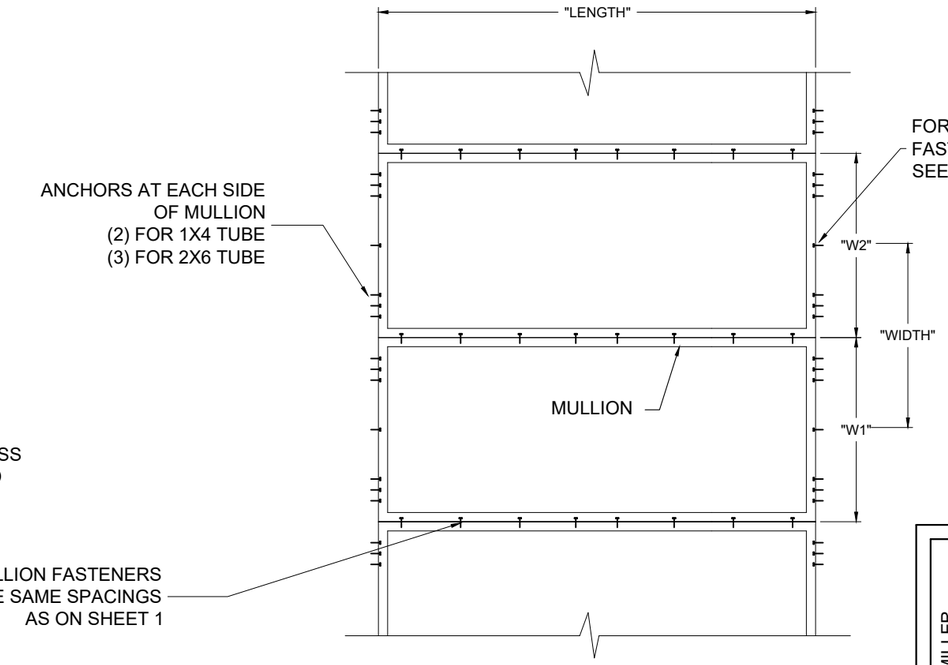
ANY SIZE OR DESIGN LOAD LESS THAN CHART IS ALLOWED.











TYPICAL ELEVATION

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

$W2 \leq W1$

Rev.#	Date	Drawn By	DWG No.	Sheet	Series	Desc.	Title
	1/24/23	A. MORLESIN	PW410SMI-FPA	9 OF 11	PW410	MULLION LOAD CAPACITY 4	SERIES "410" ALUM. FIXED WINDOW (SMI)

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
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REGISTRATION #29296

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ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
2/10/23

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

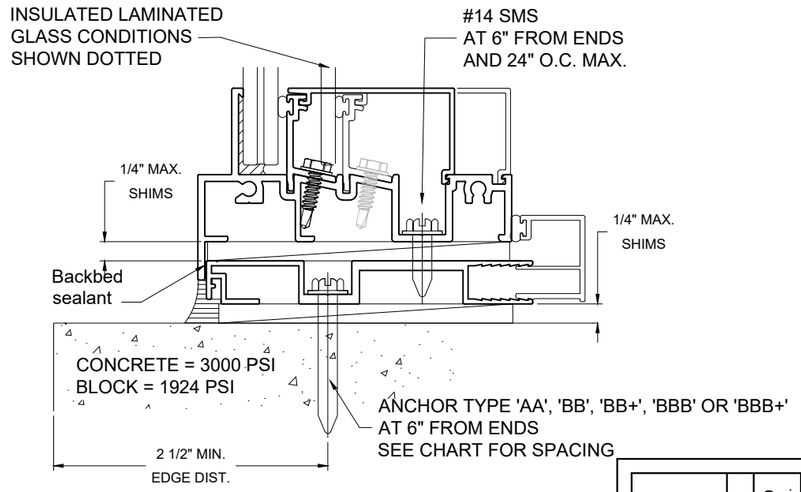
DESIGN LOAD CAPACITY - PSF				
WINDOW DIMS		ANCHOR TYPES A, AA, B, B+, BB & BB+		ANCHOR TYPES BBB & BBB+
DIM 1	DIM 2	AT 16" O.C.	AT 8" O.C.	AT 16" O.C.
30"	48"	210.0	210.0	210.0
36"		210.0	210.0	210.0
42"		210.0	210.0	210.0
48"		210.0	210.0	210.0
51"		210.0	210.0	210.0
57"		173.1	210.0	210.0
60"		158.7	210.0	210.0
63"		183.1	210.0	210.0
66"		170.0	210.0	210.0
69"		158.7	210.0	196.7
72"		148.8	210.0	184.4
30"	54"	210.0	210.0	210.0
36"		210.0	210.0	210.0
42"		197.8	210.0	210.0
48"		190.4	210.0	210.0
51"		188.6	210.0	210.0
57"		169.2	210.0	210.0
60"		153.9	210.0	210.0
63"		176.3	210.0	210.0
66"		162.7	210.0	201.7
69"		151.1	210.0	187.3
72"		141.0	210.0	174.8
30"	60"	203.1	210.0	210.0
36"		181.3	210.0	210.0
42"		167.4	210.0	210.0
48"		158.7	210.0	210.0
51"		155.8	210.0	210.0
57"		152.7	210.0	210.0
60"		152.3	210.0	210.0
63"		173.1	210.0	210.0
66"		158.7	210.0	196.7
69"		146.5	210.0	181.5
72"		136.0	210.0	168.6
30"	66"	210.0	210.0	21 0.0
36 "		198.3	210.0	210.0
42"		181.3	210.0	210.0
48"		170.0	210.0	210.0
51"		165.9	210.0	205.7
57"		160.3	210.0	198.7
60"		158.7	210.0	196.7
63"		157.7	210.0	195.4
66"		157.4	210.0	195.0
69"		144.2	210.0	178.8
72"		133.1	21 0.0	165.0
30"	72"	200.4	210.0	210.0
36"		176.3	210.0	210.0
42"		160.0	210.0	198.3
48"		148.8	210.0	184.4
51"		144.5	210.0	179.1
57"		13 8.2	210.0	171.3
60"		136.0	210.0	168.6
63"		134.3	210.0	166.5
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69"		132.5	210.0	164.2
72"		132.2	210.0	163.9

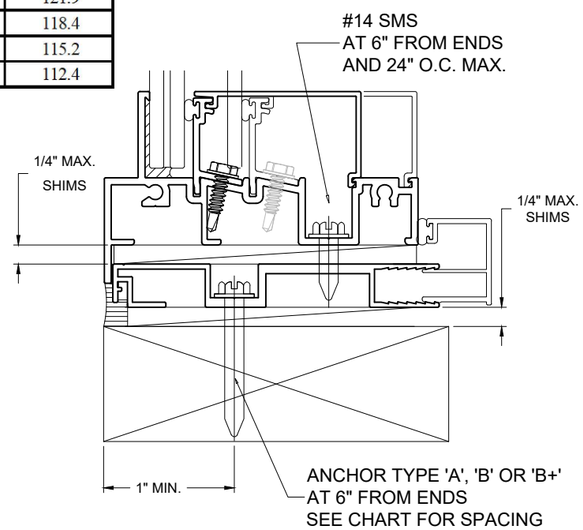
DESIGN LOAD CAPACITY - PSF				
WINDOW DIMS		ANCHOR TYPES A, AA, B, B+, BB & BB+		ANCHOR TYPES BBB & BBB+
DIM 1	DIM 2	AT 16" O.C.	AT 8" O.C.	AT 16" O.C.
30"	78"	210.0	210.0	210.0
36"		190.4	210.0	210.0
42"		171.8	210.0	210.0
48"		158.7	210.0	196.7
51"		153.6	210.0	190.4
57"		145.8	210.0	180.7
60"		142.8	210.0	177.0
63"		140.4	210.0	174.0
66"		138.5	210.0	171.6
69"		137.0	210.0	169.8
72"		136.0	210.0	168.6
30"	84"	198.7	210.0	210.0
36"		173.1	210.0	210.0
42"		155.4	210.0	192.7
48"		142.8	210.0	177.0
51"		137.8	210.0	170.9
57"		130.0	210.0	161.1
60"		126.9	210.0	157.3
63"		124.3	207.2	154.1
66"		122.2	203.6	151.4
69"		120.4	200.7	149.2
72"		119.0	198.3	147.5
30"	90"	182.8	210.0	210.0
36"		158.7	210.0	196.7
42"		141.9	210.0	175.9
48"		129.8	210.0	160.9
51"		125.0	210.0	155.0
57"		117.3	210.0	145.4
60"		114.2	209.4	141.6
63"		111.6	204.6	138.3
66"		109.3	200.4	135.5
69"		107.4	196.9	133.1
72"		105.8	19 3.9	131.1
30"	96"	197.5	210.0	210.0
36 "		170.9	210.0	210.0
42"		152.3	210.0	188.8
48"		138.8	210.0	172.1
51"		133.4	210.0	165.4
57"		124.7	210.0	154.6
60"		121.2	207.7	150.2
63"		118.1	202.4	146.4
66"		115.4	197.8	143.0
69"		113.1	193.8	140.1
72"		111.1	190.4	137.7
30"	102"	183.8	210.0	210.0
36"		158.7	210.0	196.7
42"		141.0	210.0	174.8
48"		128.2	210.0	158.8
51"		123.0	210.0	152.4
57"		114.5	210.0	142.0
60"		111.1	206.3	137.7
63"		108.0	200.6	133.9
66"		105.4	195.7	130.6
69"		103.0	191.3	127.7
72"		101.0	187.5	125.2

DESIGN LOAD CAPACITY - PSF				
WINDOW DIMS		ANCHOR TYPES A, AA, B, B+, BB & BB+		ANCHOR TYPES BBB & BBB+
DIM 1	DIM 2	AT 16" O.C.	AT 8" O.C.	AT 16" O.C.
30"	108"	172.0	210.0	210.0
36"		148.1	210.0	183.6
42"		131.3	210.0	162.8
48"		119.0	210.0	147.5
51"		114.0	210.0	141.3
57"		105.9	196.6	131.2
60"		102.5	190.4	127.1
63"		99.6	184.9	123.4
66"		96.9	180.0	120.1
69"		94.6	175.7	117.3
72"		92.6	171.9	114.7
30"	114"	164.6	210.0	210.0
36"		158.7	210.0	196.7
42"		140.4	210.0	174.0
48"		126.9	210.0	157.3
51"		121.5	210.0	150.6
57"		112.5	196.9	139.5
60"		108.6	190.4	134.9
63"		105.5	184.6	130.8
66"		102.6	179.5	127.1
69"		100.0	174.9	123.9
72"		97.6	170.9	121.0
30"	120"	174.1	210.0	210.0
36"		149.3	210.0	185.1
42"		131.9	210.0	163.5
48"		119.0	210.0	147.5
51"		113.8	210.0	141.0
57"		105.1	197.1	130.3
60"		101.5	190.4	125.9
63"		98.4	184.4	121.9
66"		95.5	179.1	118.4
69"		92.9	174.3	115.2
72"		90.7	170.0	112.4

INTERPOLATION FROM THESE CHARTS IS ALLOWED.

ALUMINUM BUCK FRAMING DETAILS





TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES

Rev.#	Date	Drawn By	DWG No.	Sheet
Rev.				

PREPARED BY A. LYNN MILLER
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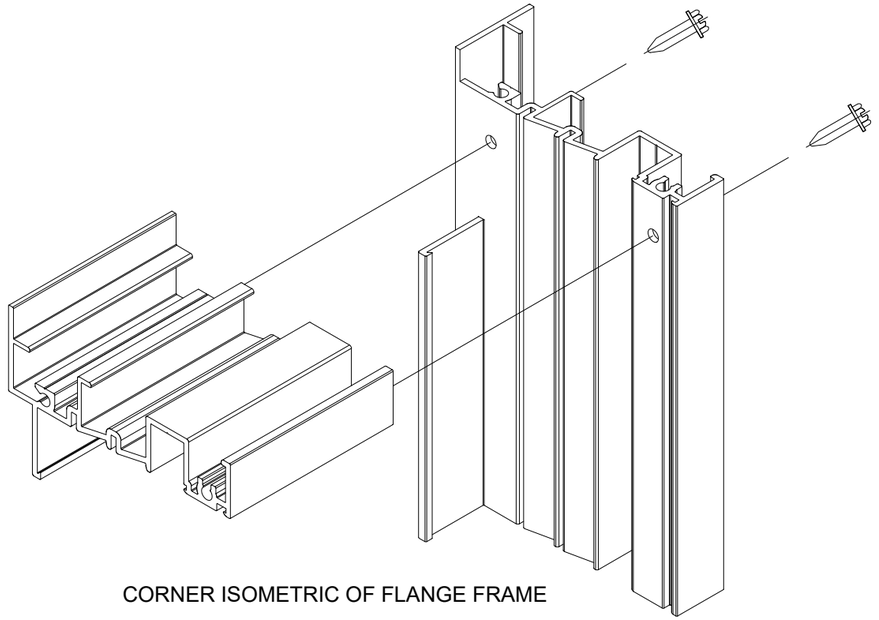
Title	Date	Drawn By	DWG No.	Sheet
SERIES "410" ALUM. FIXED WINDOW (SMI)	1/24/23	A. MORLESIN		10 OF 11
Desc.				
ANCHOR LOAD CAPACITY				
Series				
PW410		PW410SMI-FPA		

ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
2/10/23

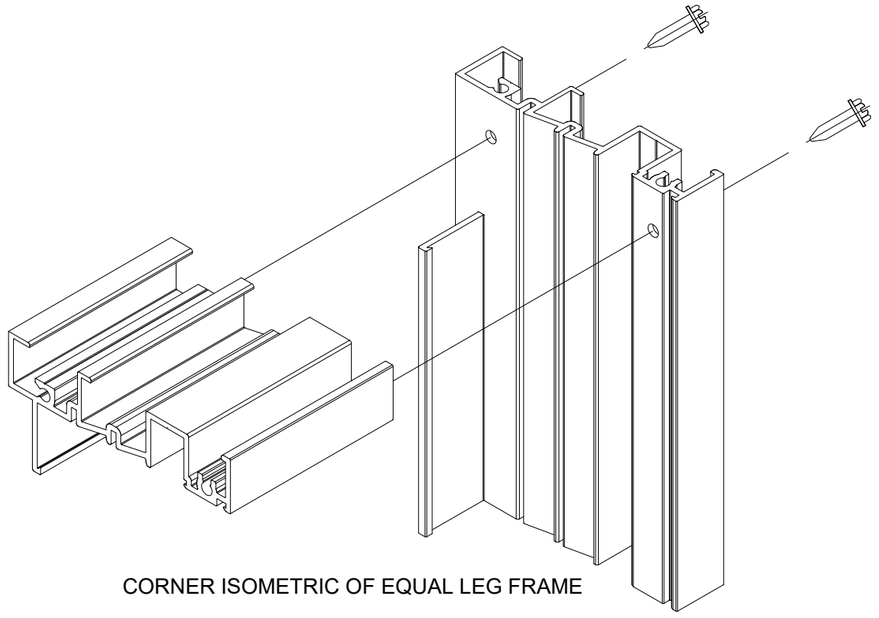
A. LYNN MILLER, P.E.
P.E.# 58705

BILL OF MATERIALS

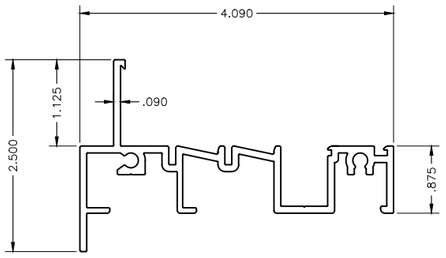
ITEM	PART NUMBER OR NAME	DESCRIPTION	MATERIAL
1	AL700	MAINE FRAME (FLANGE)	6063-T6
2	AL703	MAIN FRAME (EQUAL LEG)	6063-T6
3	AL701	GLASS STOP	6063-T6
4	AL702	STANDARD COVER	6063-T5
4A	AL702	LAMI COVER	6063-T5
5	GLASS STOP SCREW	#10 x 3/4" HEX HD. SELF DRILLING	STEEL
6	VARIES	GE-1200 or 2000 DOW-791, 983 OR 995	SILICONE
7	HD-55-10124	GLASS STOP BULB	VINYL
8	FRAME SCREW	#12 x 1 1/4" HEX HD. SMS	S/S
9	-	SETTING BLOCK	EPDM
10	-	ALUMINUM BUCK	6063-T6
11	-	OPTIONAL COVER	6063-T5



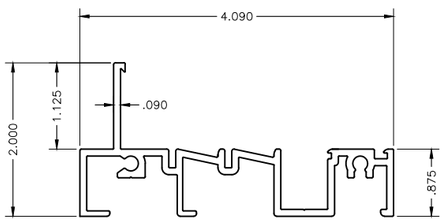
CORNER ISOMETRIC OF FLANGE FRAME



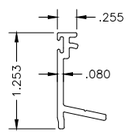
CORNER ISOMETRIC OF EQUAL LEG FRAME



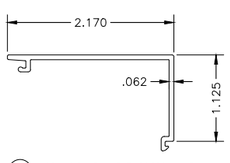
1 FLANGE FRAME



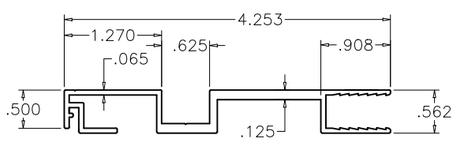
2 EQUAL LEG FRAME



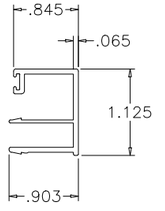
3 GLASS STOP



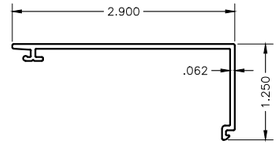
4 STANDARD COVER



10 ALUMINUM BUCK



11 OPTIONAL COVER



4A LAMI COVER

Rev.	Date
Rev.#	

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Title	Date	Drawn By	DWG No.
SERIES "410" ALUM. FIXED WINDOW (SMI)	1/24/23	A. MORLESIN	PW410SMI-FPA

Desc.	Sheet
EXTRUSIONS / BOM	11 OF 11

Series
PW410

ANTHONY LYNN MILLER
LICENSE
No. 58705
A. Lynn Miller
2/10/23
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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