Engineering Evaluation Report # 9998LM-042325

Prepared by:
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N. Venice, FL 34275
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Registration Number: #29296

Manufacturer:
WinDoor LLC
104 Triple Diamond Blvd
N Venice, FL 34275

Product Description:
PV9998A Series Impact-resistant Aluminum Pivot Door, PW, Sidelite and Transom, (LM & SM); FL Approval #29783

Compliance:
The above-mentioned product has been evaluated for compliance with the requirements of the Florida Department of Business and Professional Regulation for Statewide Acceptance per Rule 61 G20-3.005 method 1(d). The product listed herein complies with the requirements of the current Florida Building Code.

ASTM E1300 calculations for glass types containing ATG were performed using base 3/16" or 1/4" tempered glass only.

This product has been evaluated and is in compliance with the current Florida Building Code, including the "High Velocity Hurricane Zone" (HVHZ).

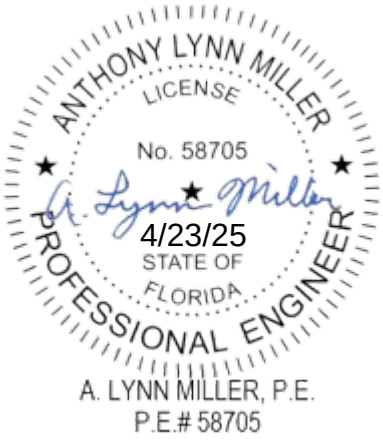
Supporting Technical Documentation:
1. Approval document: drawing number 9998FPA-LM-2, signed and sealed by A. Lynn Miller, P.E.
2. Test Report Nos. FTL 19-8979, 10944, 20-1044, 20-1058, 20-2216, 20-2161, 21-1169 & QAI NOK-0012, NOK-0099, NOK-0102, & NOK-0121 signed and sealed by Idalmis Ortega, P.E.
Fenestration Testing Laboratories, Medley, FL 33166
QAI Laboratories, Nokomis, FL

TAS 201-94 Large Missile Impact Test
TAS 202-94 Uniform Static Air Pressure Test
TAS 203-94 Cyclic Pressure Loading Test

3. Calculations, signed and sealed by A. Lynn Miller, P.E., dated 5/31/19, 12/12/19, 8/10/20, 10/11/21, 10/11/22, 6/26/23, 6/6/24, 1/30/25, & 4/23/25

4. Miami-Dade RER Product Control Section NOA's; SentryGlas Interlayer by Kuraray America, Inc.

Limitations and Conditions of use:
• Units must be glazed per ASTM E1300-09, refer to approval document for glazing details.
• This product is rated to be used in the HVHZ.
• This product is impact resistant and does not require impact protection in wind borne debris regions.
• Frame and panel material to be extruded Aluminum.
• Units must be installed in accordance with approval documents.



SERIES SW6A IMPACT RESISTANT, OUTSWING & INSWING PIVOT DOOR WITH SIDELITE, TRANSOM & PICTURE WINDOW

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

2) BUTT HIPS ARE NOT REQUIRED WHEN USED IN WIND-BORNE DEBRIS REGIONS.

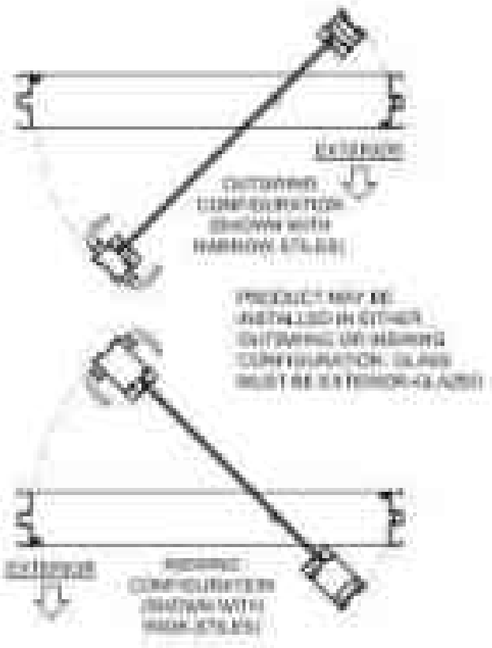
3) MASONRY ANCHORS MAY BE USED INTO WOOD AS PER TABLE 1. ALL WOOD BUCKS LESS THAN 1-1/2" THICK ARE TO BE CONSIDERED AS INSTALLATIONS TO WOOD SUCH ARE OPTIONAL IF UNIT IS INSTALLED DIRECTLY TO SUBSTRATE. WOOD BUCKS DEPICTED AS 2X ARE 1-1/2" THICK OR GREATER. TJI AND OSB BUCKS WHEN USED SHALL BE DESIGNED TO PRIMARILY 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 HALL 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 ANCHOR LOCATION WHERE THE PRODUCT IS NOT FLUSH TO THE SUBSTRATE. USE SHIMS CAPABLE OF TRANSFERRING APPLIED LOADS. WOOD BLOCKS, BY OTHERS, MUST BE SUFFICIENTLY ANCHORED TO RESIST LOADS IMPOSED ON THEM BY THE DOOR OR PICTURE WINDOW FRAME/ANCHORS, ETC.

6) THE ANCHORAGE METHODS SHOWN HAVE BEEN DESIGNED TO RESIST THE WIND LOADS CONFORMING TO THE REQUIRED DESIGN PRESSURE. THE 33.1(3) STRESS INCREASE WAS 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.

7) THE DOOR IS NOT RATED FOR WATER INFILTRATION RESISTANCE. SEE SHEETS 2-4. THE PICTURE WINDOW/TRANSOM/SIDELITE WAS FULLY TESTED FOR WATER INFILTRATION. SEE SHEETS 5, 11 & 13.



FLORIDA PRODUCT APPROVAL #24153

UNIFORM PERFORMANCE RATING	IMPACT RATING
SEE TABLES ON SHEETS 5-13	RATED FOR LARGE & SMALL MISSILE IMPACT RESISTANCE
WATER INFILTRATION RATING: SEE NOTE 7 THIS SHEET	

Table 1

Anchor Group	Anchor Type	Frame Member	Substrate	Min. Edge Distance	Max O.C. Distance	Min. Embedment or Metal Thickness
A	#12 Steel SMS (Qty. 1) or #8 x 2" SMS	All	Southern Pine (G=0.42)	3/4"	4"	1-1/4"
			SBC-15 Gypsum	3/8"	4"	0.317"
			ASR Steel	3/8"	4"	.060"
			Steel (min. 33 ksi)	3/8"	4"	0.047" (18 GA)
	1/4" Tapcon MonoClad	All	Concrete (min. 3.0 ksi)	1-1/4"	4"	1-1/4"
			Southern Pine (G=0.42)	1"	4"	1-1/4"
	5/16" #10 SDS Flat Head Screw	All	Concrete (min. 3.0 ksi)	1"	8"	1-1/4"
			Southern Pine (G=0.42)	1"	8"	1-1/4"
B	1/4" Tapcon MonoClad	Head/Sill	Concrete (min. 3.0 ksi)	1-1/2"	8"	1-1/4"
		Jamb	Concrete (min. 3.0 ksi)	1"	8"	1-1/4"
C	1/4" Tapcon MonoClad	All	Concrete (min. 3.0 ksi)	1-1/4"	8"	1-1/4"
	5/16" #10 SDS Flat Head Screw	All	Concrete (min. 3.0 ksi)	1-1/4"	8"	1-1/4"
D	1/4" Tapcon MonoClad	Head/Sill	Concrete (min. 3.0 ksi)	1-1/2"	8"	1-1/4"
		Jamb	Hollow Core Slab/Steel Deck (ASTM C90)	2-1/2"	8"	1-1/4"
	5/16" #10 SDS Flat Head Screw	Head/Sill	Concrete (min. 3.0 ksi)	1-1/4"	8"	1-1/4"
		Jamb	Hollow Core Slab/Steel Deck (ASTM C90)	1-1/4"	8"	1-1/4"

1) ANCHOR MUST EXTEND A MINIMUM OF 2 THREADS BEYOND ANY METAL SUBSTRATE.
2) FLATHEAD ANCHORS REQUIRED AT DOOR SILL. OTHER LOCATIONS MAY USE ANY HEAD TYPE.
3) MIN. #10 X 1" SMS TO BE USED FOR ALL MULLION APPLICATIONS.
4) FOR CASES WHERE SUBSTRATES VARY PER FRAME MEMBER, USE THE ANCHOR GROUP WITH THE GREATEST QUANTITY OF ANCHORS FOR ALL SIDES.

DIRECTIONS

1) YOU MUST DETERMINE THE DESIGN PRESSURE FROM EACH INDIVIDUAL PRODUCT IN YOUR CONFIGURATION. YOUR CONFIGURATION MAY CONTAIN ANY COMBINATION OF DOOR, SIDELITE, TRANSOM, HORIZONTAL MULLION AND/OR VERTICAL MULLION. (SEE SHEETS 2-4 FOR EXAMPLES).

2) FROM THE DP TABLES, SHEETS 5-13, FIND THE LOWEST APPLICABLE DESIGN PRESSURE FOR ALL OF THE COMPONENTS IN YOUR SYSTEM. THIS DESIGN PRESSURE IS TO BE USED FOR THE ENTIRE ASSEMBLED AND INSTALLED SYSTEM AND MUST BE GREATER THAN THE DESIGN'S DP REQUIREMENTS.

3) USE ANCHOR QUANTITY TABLES ALONG WITH THE ELEVATIONS ON SHEETS 2-4 TO DETERMINE YOUR ANCHOR REQUIREMENTS.

4) INSTALL AS PER THE APPLICABLE INSTRUCTIONS IN THE DRAWING PACKET.

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. THE INSULATED LAMINATED GLASS THAT IS MANUFACTURED WITH HEAT-ALTERED GLASS PLIES FOR APPLICATIONS WHERE THE WINDOW IS BEING USED AS A GUARD, HEAT STRENGTHENED OR TEMPERED LAMINATED GLASS MUST BE USED.

GENERAL NOTES	1
ANCHOR TYPES TABLE	1
SAMPLE ELEVATIONS	2-4
"A" DP/ANCHOR TABLES	5-7
"B/C" DP/ANCHOR TABLES	8
"D/D2" DP/ANCHOR TABLES	9
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VERT. DOOR X-SECTIONS	17
HORZ. FIXED LITE X-SECTIONS	18
VERT. FIXED LITE X-SECTIONS	19
ANCHOR LAYOUTS	20-22
EXTRUSIONS	23
BILL OF MATERIALS	23

NO. CHANGES THIS SHEET	DESCRIPTION	DATE	DRAWN BY	CHECKED BY	APPROVED BY	SHEET NO.

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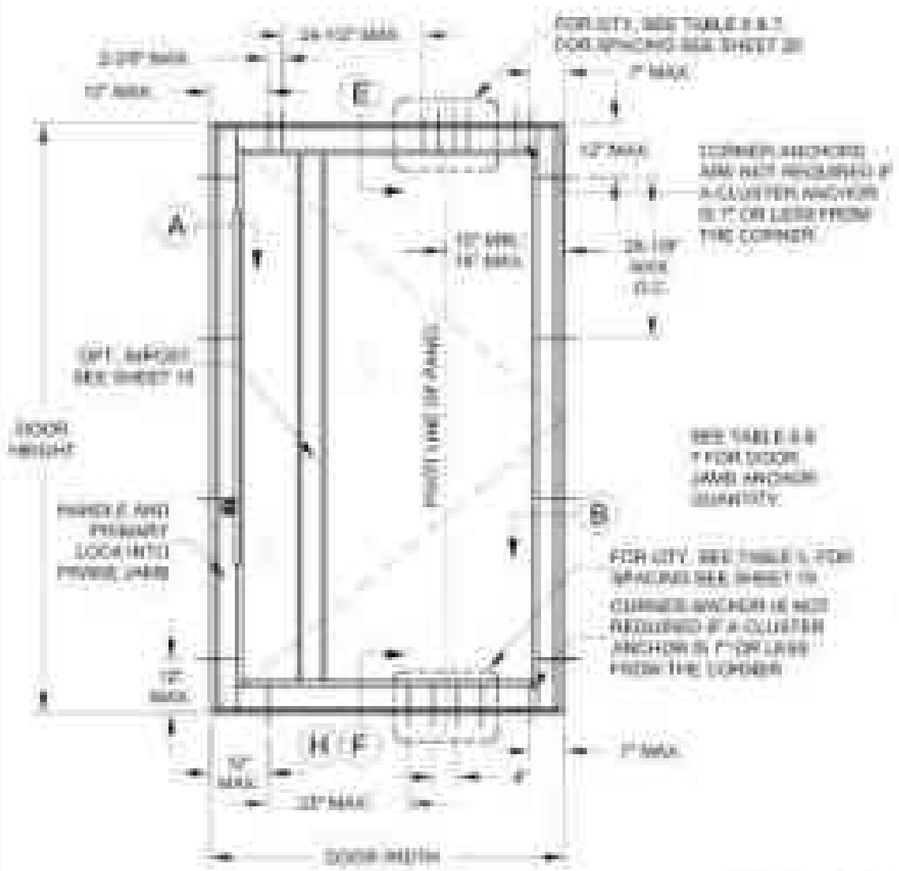
WINDOOR

ALUMINUM PIVOT DOOR, CW & R 50 PA

ELEVATION & GENERAL NOTES

PGR6MA | 1 OF 23 | JEANS ROSCHWALB

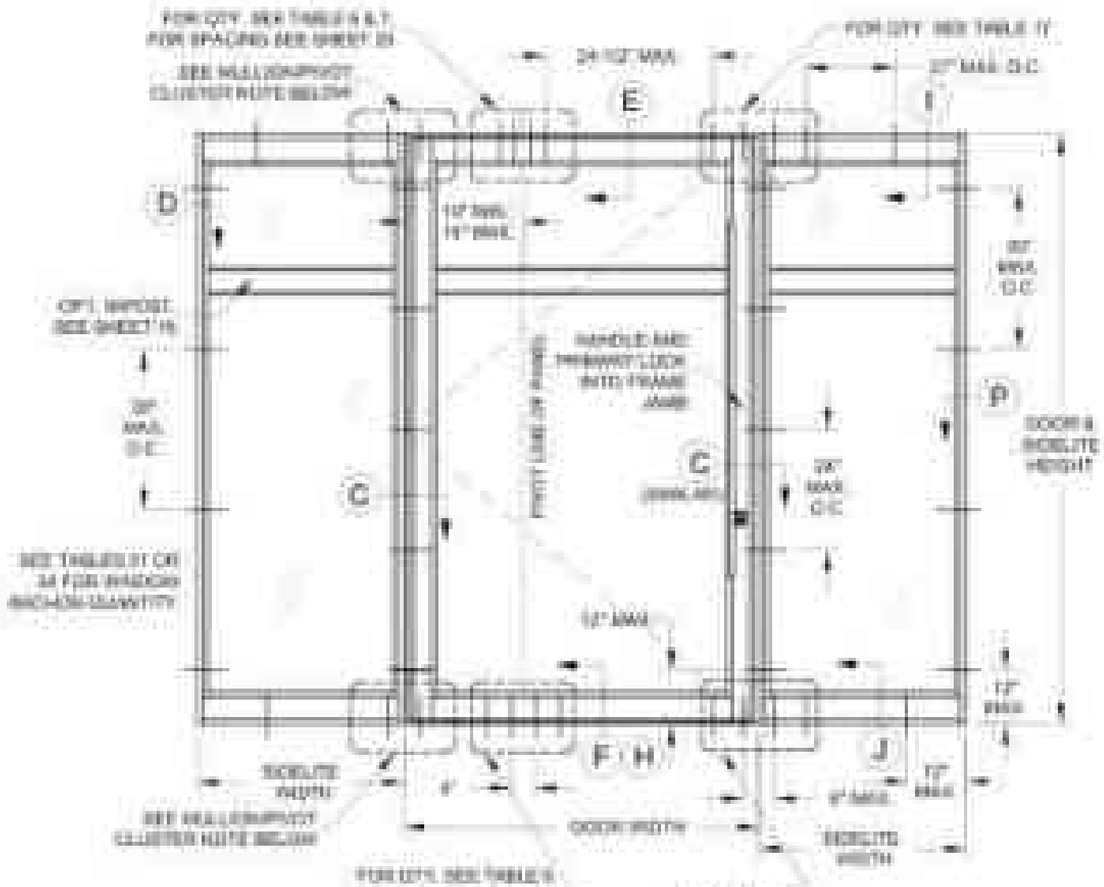
ANTHONY LYNN MILLER
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STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E. # 50705



X, SINGLE DOOR

RIGHT SIDE PIVOT SHOWN, MAY BE REVERSED FOR LEFT SIDE PIVOT.

NO THRESHOLD APPLICATION
FOR APPLICATIONS WITHOUT A DOOR THRESHOLD, UNIT ALL SILL ANCHORAGE SHOWN ALSO SEE DETAIL K SHEET 17 FOR INSTALLATION SPECIFICATIONS



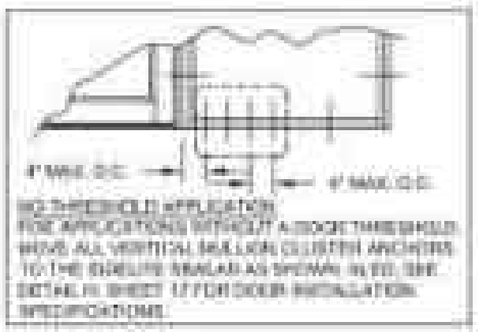
DOOR WITH LEFT & RIGHT SIDELITE, OXO

LEFT SIDE PIVOT SHOWN, MAY BE REVERSED FOR RIGHT SIDE PIVOT.

FIGURE 1



THE DOOR IS NOT RATED FOR WATER INFILTRATION RESISTANCE AND MUST ONLY BE USED WHERE IT IS NOT REQUIRED OR WHEN THE DOOR IS PROTECTED BY AN OVERHANG COMPLYING WITH THE CURRENT FLORIDA BUILDING CODE (SEE FIGURE 1).



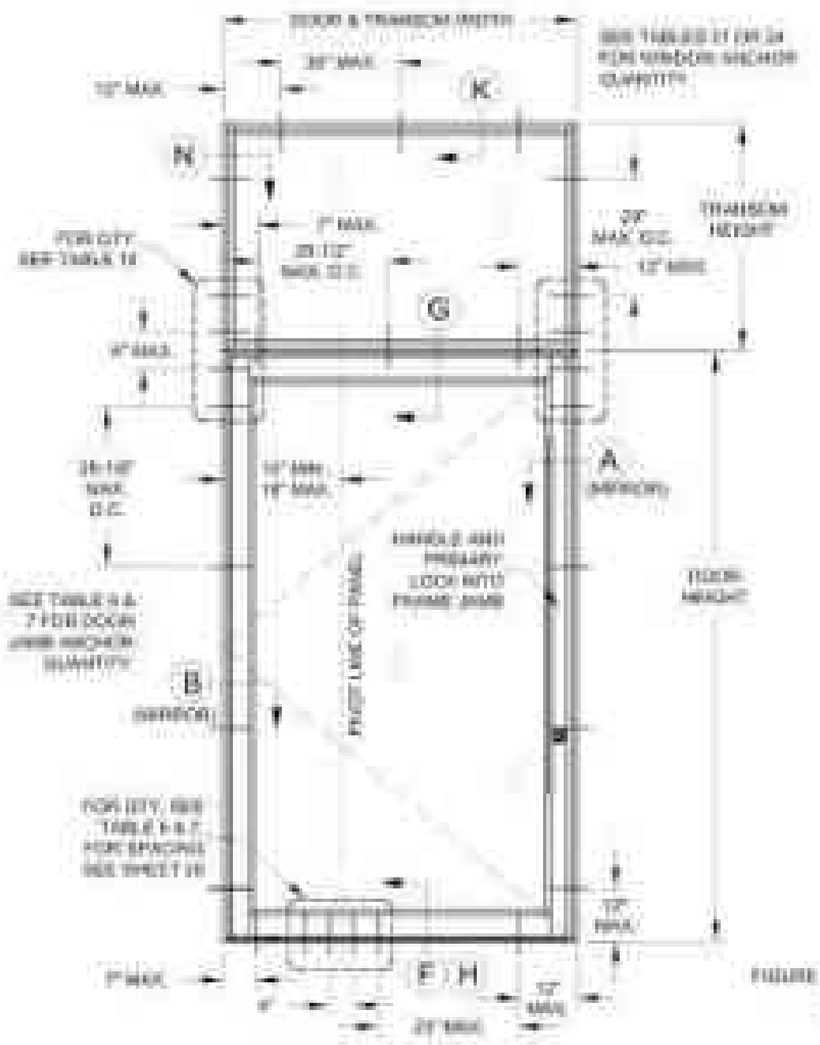
NO THRESHOLD APPLICATION
FOR APPLICATIONS WITHOUT A DOOR THRESHOLD, WAIVE ALL VERTICAL MULLION CLUSTER ANCHORS TO THE SIDELITE SIMILAR AS SHOWN IN ED, SEE DETAIL H, SHEET 17 FOR DOOR INSTALLATION SPECIFICATIONS.

MULLION/POST CLUSTER NOTE:
IN CASES WHERE THE PIVOT LINE IS ON THE SIDE OF A DOOR TO SIDELITE MULLION, YOU MAY USE HALF OF THE VERTICAL MULLION ANCHOR CLUSTER QUANTITY SHOWN IN TABLE 17 (ROUNDED UP).

NOTES:
1) DOOR PICTURE WINDOW/SIDELITE/TRANSOM MAY HAVE TEMPERED OR WIRE STRENGTHENED.
2) THE FIXED MULLION IS ONLY AVAILABLE WITH THE NARROW STILE.

REVISIONS	7
CORRECTED ELEVATION	
DRAWING NO.	9988PALM-01
DRAWN BY	JENS ROSCHMANN
CHECKED BY	ANTHONY MILLER
DATE	10/10/11
SCALE	1/2" = 1'-0"
ALUMINUM PIVOT DOOR, OXO & XO	
ELEVATIONS	
PGW/PA	
SHEET	2 OF 20

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X. SINGLE DOOR WITH TRANSOM

LEFT SIDE PIVOT SHOWN. MAY BE REVERSED FOR RIGHT SIDE PIVOT

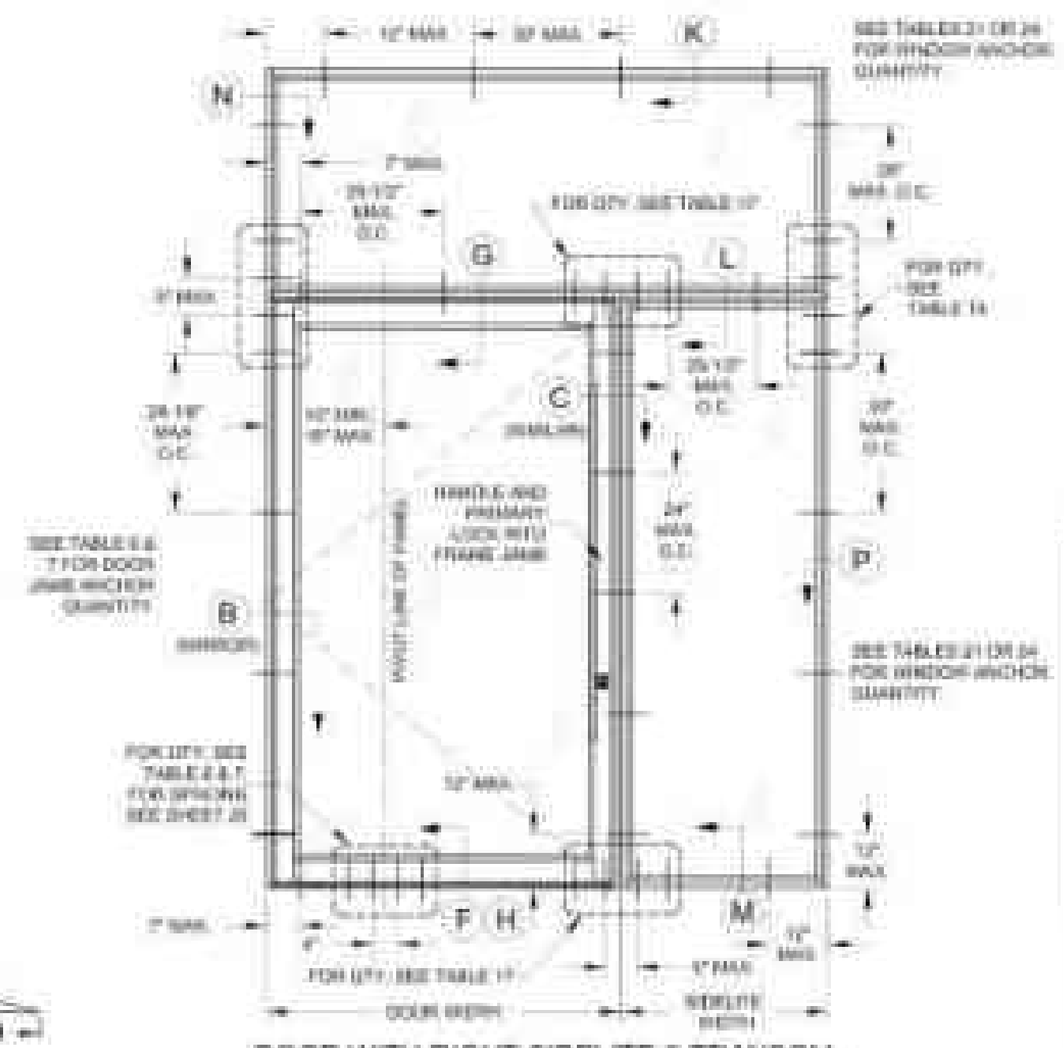
NO THRESHOLD APPLICATION
FOR APPLICATIONS WITHOUT A DOOR THRESHOLD, OMIT ALL SILL ANCHORAGE SHOWN. ALSO, SEE DETAIL H, SHEET 17 FOR INSTALLATION SPECIFICATIONS.

FIGURE 1



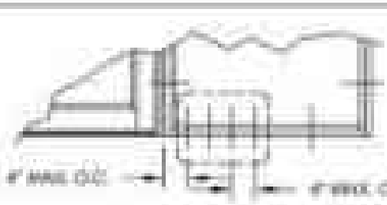
DH RATIO MUST BE 1.5 OR GREATER

THE DOOR IS NOT RATED FOR WATER INFILTRATION RESISTANCE AND MUST ONLY BE USED WHERE IT IS NOT REQUIRED OR WHERE THE DOOR IS PROTECTED BY AN OVERHANG COMPLYING WITH THE CURRENT FLORIDA BUILDING CODE (SEE FIGURE 1).



DOOR WITH RIGHT SIDELITE & TRANSOM

LEFT SIDE PIVOT SHOWN. MAY BE REVERSED FOR RIGHT SIDE PIVOT
LEFT SIDELITE SHOWN. SIMILAR CAN CONFIGURATION WITH TRANSOM ALSO ACCEPTABLE. SEE SHEET 3 FOR SIMILAR.



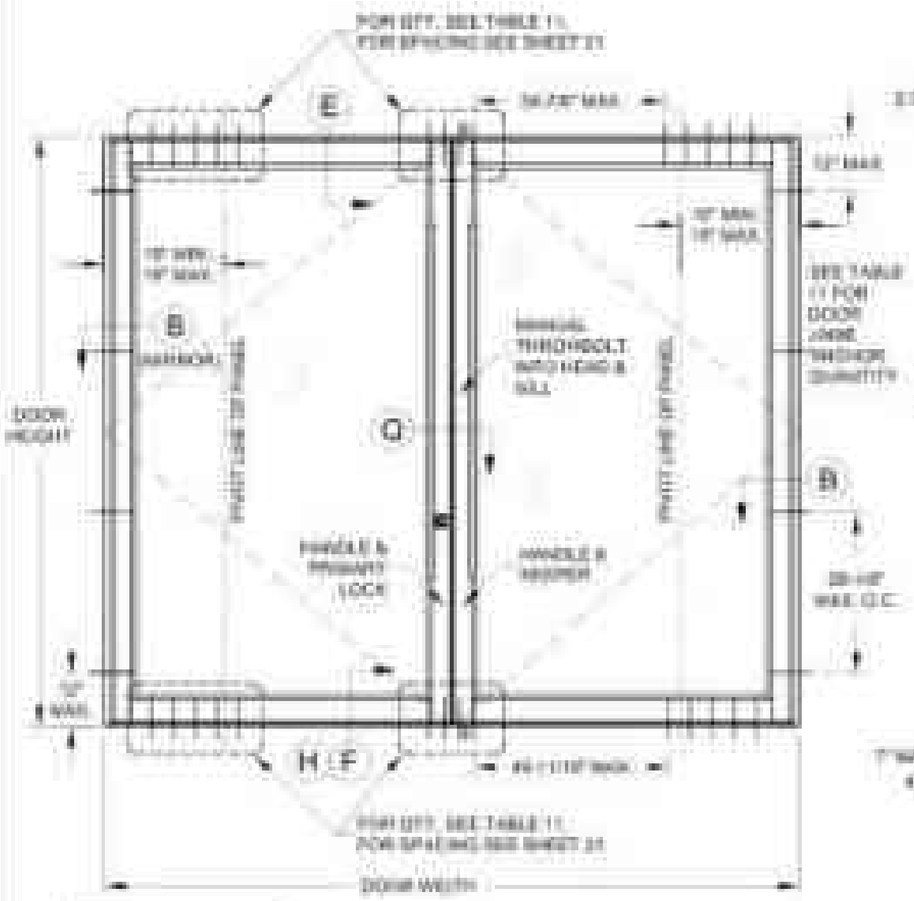
NO THRESHOLD APPLICATION
FOR APPLICATIONS WITHOUT A DOOR THRESHOLD, SHOWN ALL VERTICAL MULLION CLUSTER ANCHORS TO THE SIDELITE SIMILAR AS SHOWN. ALSO, SEE DETAIL H, SHEET 17 FOR DOOR INSTALLATION SPECIFICATIONS.

NOTES:
1) DOOR/PICTURE WINDOW/SIDELITE/TRANSOM MAY HAVE NARROW OR WIDE STILES/RAILS.
2) THE FIXED MULLION IS ONLY AVAILABLE WITH THE NARROW STILES.

1	08/24/22	JENS ROSCHMANN	REVISIONS

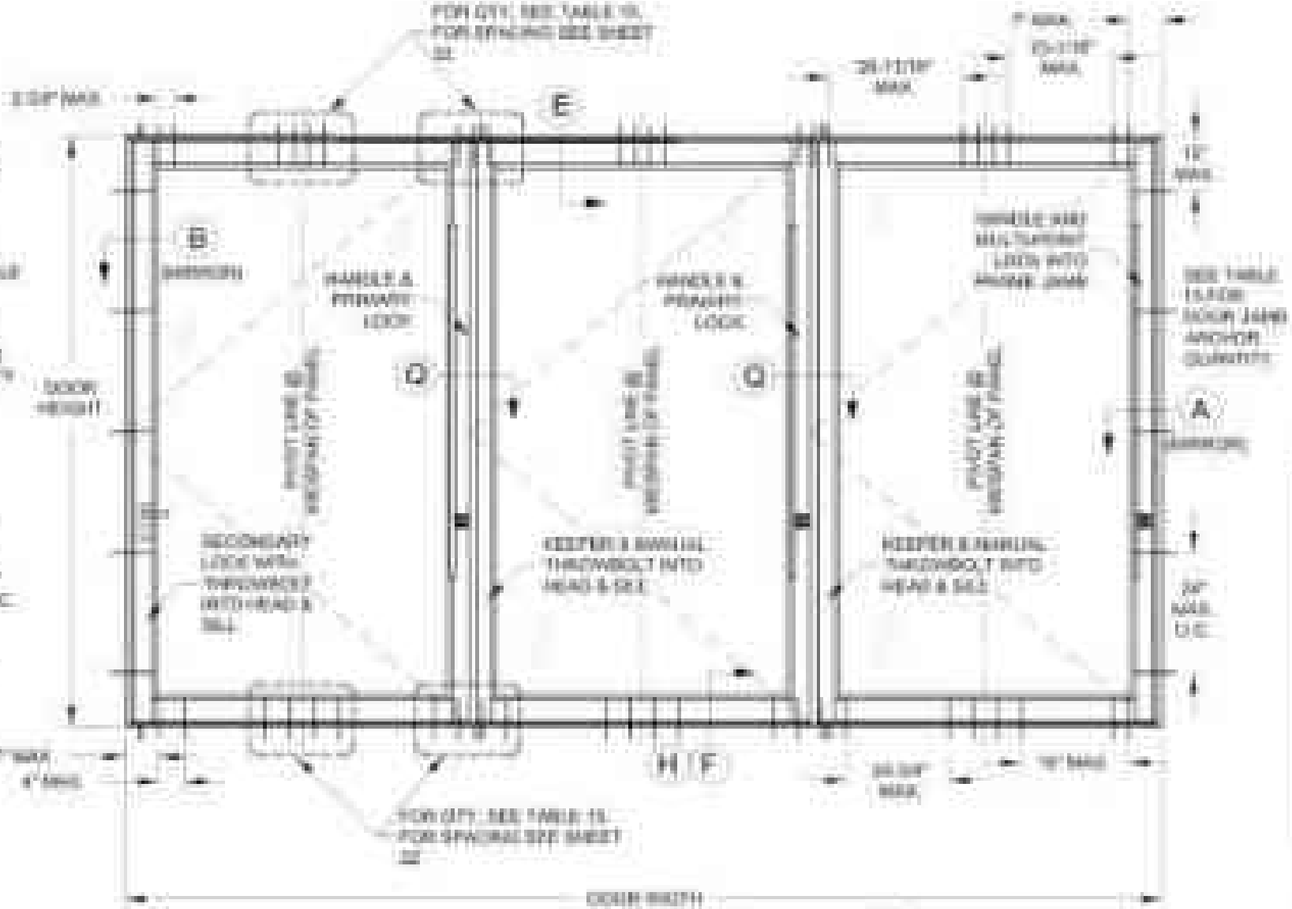
ALUMINUM PIVOT DOOR, CW & IW SERIES
ELEVATIONS
PW3WMA
3 OF 23

ANTHONY LYNN MILLER
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XX DOOR

SEE QTY TABLES FOR APPLICABLE GLASS & SIZES



XXX DOOR

SHOWN WITH 3 PANELS & JAMB NOTE ②

SEE QTY TABLES FOR APPLICABLE GLASS AND SIZES

NO THRESHOLD APPLICATION
FOR APPLICATIONS WITHOUT A DOOR THRESHOLD, OMIT ALL SILL ANCHORAGE SHOWN. ALSO, SEE DETAIL 6 - SHEET 21 FOR INSTALLATION SPECIFICATIONS

FIGURE 1



FOR CENTER PIVOT DOORS WITH EQUALLY SIZED PANELS:

$$\text{PANEL WIDTH} = \frac{\text{FRAME WIDTH} - [(\text{\# OF PANELS} - 1) \times 3.5]}{\text{\# OF PANELS}}$$

FRAME WIDTH = (# OF PANELS) x (PANEL WIDTH) + [(# OF PANELS) - 1) x 3.5]

THE DOOR IS NOT RATED FOR WATER INFILTRATION RESISTANCE AND MUST ONLY BE USED WHERE IT IS NOT REQUIRED OR WHEN THE DOOR IS PROTECTED BY AN OVERHANG COMPLYING WITH THE CURRENT FLORIDA BUILDING CODE (SEE FIGURE 1)

NOTES:
1) PRIMARY LOCK: LOCKS INTO ADJACENT JAMB OR STILE WITH MULTIPLE HOOKS.
2) SECONDARY LOCK: THROWBOLTS LOCK INTO HEAD AND SILL. SINGLE LOCK INTO JAMB BY INTERIOR HANDLE ACTIVATION.
3) XXX CONFIGURATION SHOWN. ADDITIONAL PANELS ALLOWED PROVIDED THE MAXIMUM FRAME AREA OR SIZE BY QTY AND PANEL SIZES IN TABLES 12, 13, OR 14 ARE NOT EXCEEDED.

NO.	REVISIONS	DATE
1	ADDED NOTE 3 TO ELEVATIONS	10/2/2019
2	ADDED NOTE 3 TO ELEVATIONS	10/2/2019

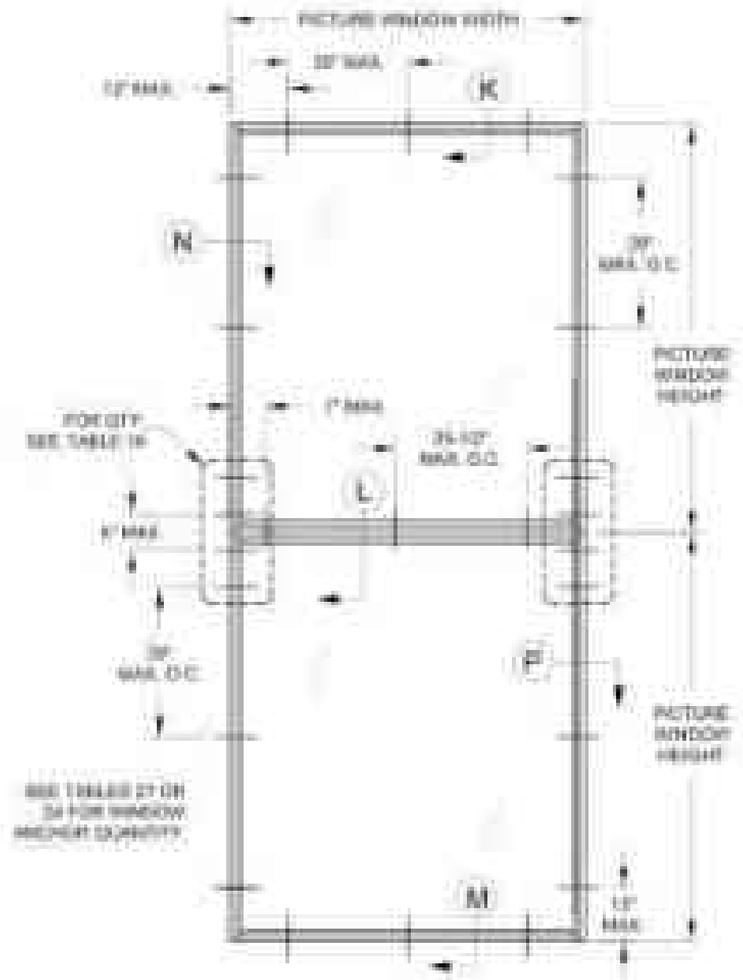
DRAWN BY:	JENS ROSCHMANN
DATE:	10/2/2019
SCALE:	1/4" = 1'-0"
JOB NO.	19-0000
SHEET NO.	2 OF 3

ALUMINUM PIVOT DOOR, OS & SLIDING

ELEVATIONS

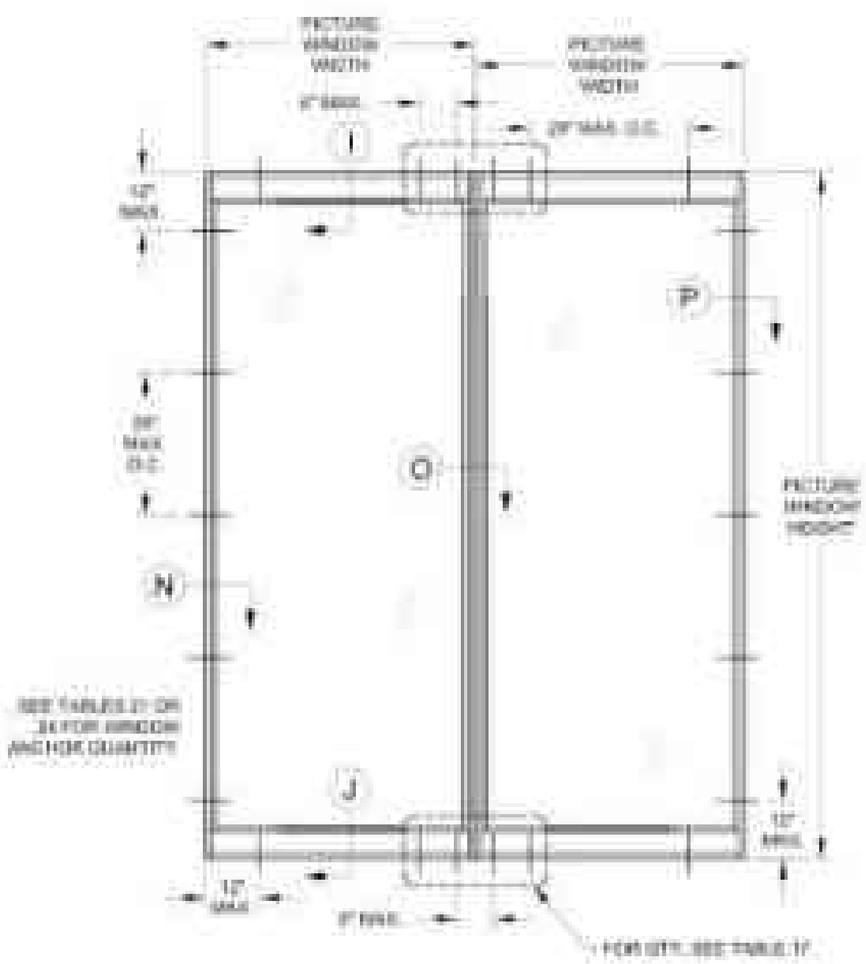
PVDWMA

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HORIZONTALLY MULLED PICTURE WINDOWS O/O

SHOWN WITH OPTIONAL NARROW JAMB RAILS



VERTICALLY MULLED PICTURE WINDOWS O|O

SHOWN WITH OPTIONAL WIDE TOP/BOTTOM RAILS

NOTES:

1) WINDOWS ARE RATED FOR A WATER TEST PRESSURE THAT IS 15% OF THE POSITIVE DESIGN PRESSURE LISTED IN THE DP TABLES, SEE SHEETS 11 OR 12.
2) TWO INSTALLED UNITS SHOWN, MAY BE UNLIMITED UNITS.
3) TRANSOM MAY ALSO BE INSTALLED OVER 2 OR MORE HORIZONTALLY MULLED WINDOWS (NOT SHOWN) USE SIMILAR FRAMING DIMENSIONS AS SHOWN ABOVE.
4) DOOR/PICTURE WINDOW/SIDELITE/TRANSOM MAY HAVE NARROW OR WIDE STILES/RAILS.
5) THE FIXED MULLION IS ONLY AVAILABLE WITH THE NARROW STILE.
6) SINGLE, STAND-ALONE PICTURE WINDOWS (NOT SHOWN) ARE ALSO QUALIFIED.

NO.	DESCRIPTION	DATE
1	NO CHANGES THIS SHEET	

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ALUMINUM PATIO DOOR, OTS & IS (LH)	
ELEVATIONS	
PGW6A	6 OF 23

ANTHONY LYNN MILLER
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TABLE 1

X Door Design Pressure (lbs/ft²), Glass Types 1, 3, & Opaque Panels

Frame Height	Frame Width					
	48"	54"	60"	63-3/4"	72"	80"
80"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75
84"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75
96"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75	+60/-74.6
108"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-72.2	+60/-66.3
120"	+60/-75	+60/-75	+60/-75	+60/-72.3	+60/-65	
126-1/2"	+60.9/-63.8	+63.4/-67.8	+60.8/-62.9	+60.3/-60.2		
144"	+60.1/-61.2	+64.5/-48.2	+60.7/-44.1			

TABLE 2

X Door Design Pressure (lbs/ft²), Glass Type 2

Frame Height	Frame Width					
	48"	54"	60"	63-3/4"	72"	80"
80"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75
84"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75
96"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75	+60/-74.6
108"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-72.2	+60/-66.3
120"	+60/-75	+60/-75	+60/-75	+60/-72.3	+60/-65	+60/-60"
126-1/2"	+60/-60"	+60/-60"	+60/-60"	+60/-60"	+60/-60"	
144"	+60/-60"	+60/-60"	+60/-60"	+60/-60"	+60/-60"	

TABLE 4

X Door Design Pressure (lbs/ft²), Glass Types 4, 5 & Opaque Panels

Frame Height	Frame Width				
	48"	54"	60"	63-3/4"	72"
80"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75
84"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75
96"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75
108"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-72.2
120"	+60/-72	+60/-75	+60/-75	+60/-72.3	
126-1/2"	+58.9/-63.8	+63.4/-67.8			

TABLE 5

X Door Design Pressure (lbs/ft²), Glass Types 6, 7 & Opaque Panels

Frame Height	Frame Width				
	48"	54"	60"	63-3/4"	72"
80"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75
84"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75
96"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-75
108"	+60/-75	+60/-75	+60/-75	+60/-75	+60/-72.2
120"	+60/-75	+60/-75	+60/-75	+60/-72.3	+60/-65
126-1/2"	+58.9/-63.8	+63.4/-67.8	+58.8/-62.9	+60.3/-60.2	

REQUIRES PART #21 AT STILE ON PIVOT SIDE

TABLE 3

X Door Anchor Quantities, Glass Types 1, 3, 4, 5, 6, & 7

Frame Height	Anchor Group	Anchor Location on Frame	X Frame Width / Meet Rails					
			48"	54"	60"	63-3/4"	72"	80"
			45"	51"	57"	60-3/4"	69"	77"
80"	A & B	Head or Rail (at C or D)	2	2	2	2	3	3
		Sill (at C or D)	2	2	2	2	3	3
	A	Jamb	3	3	3	3	4	4
	B	Jamb	3	3	3	3	4	4
	C & D	Head or Rail (at A or B)	2	2	2	2	2	2
		Sill (at A or B)	2	2	2	2	2	2
	C	Jamb	3	3	3	3	3	3
	D	Jamb	3	3	3	3	3	3
96"	A & B	Head or Rail (at C or D)	2	2	2	2	3	3
		Sill (at C or D)	2	2	2	2	3	3
	A	Jamb	3	3	3	4	4	4
	B	Jamb	3	3	3	4	4	4
	C & D	Head or Rail (at A or B)	2	2	2	2	2	2
		Sill (at A or B)	2	2	2	2	2	2
	C	Jamb	3	3	3	3	4	4
	D	Jamb	3	3	3	3	4	4
108"	A & B	Head or Rail (at C or D)	2	2	2	3	3	4
		Sill (at C or D)	2	2	2	3	3	4
	A	Jamb	3	3	3	3	4	5
	B	Jamb	3	3	3	3	4	5
	C & D	Head or Rail (at A or B)	2	2	2	2	3	3
		Sill (at A or B)	2	2	2	2	3	3
	C	Jamb	3	3	3	3	4	4
	D	Jamb	3	3	3	3	4	4
120"	A & B	Head or Rail (at C or D)	2	2	2	3	4	4
		Sill (at C or D)	2	2	2	3	4	4
	A	Jamb	3	3	3	3	5	6
	B	Jamb	3	3	3	3	5	6
	C & D	Head or Rail (at A or B)	2	2	2	2	3	3
		Sill (at A or B)	2	2	2	2	3	3
	C	Jamb	3	3	3	3	4	4
	D	Jamb	3	3	3	3	4	4
126-1/2"	A & B	Head or Rail (at C or D)	2	2	2	3	4	5
		Sill (at C or D)	2	2	2	3	4	5
	A	Jamb	3	3	3	3	5	6
	B	Jamb	3	3	3	3	5	6
	C & D	Head or Rail (at A or B)	2	2	2	2	3	3
		Sill (at A or B)	2	2	2	2	3	3
	C	Jamb	3	3	3	3	4	4
	D	Jamb	3	3	3	3	4	4
144"	A & B	Head or Rail (at C or D)	2	2	2	3	4	5
		Sill (at C or D)	2	2	2	3	4	5
	A	Jamb	3	3	3	3	5	6
	B	Jamb	3	3	3	3	5	6
	C & D	Head or Rail (at A or B)	2	2	2	2	3	3
		Sill (at A or B)	2	2	2	2	3	3
	C	Jamb	3	3	3	3	4	4
	D	Jamb	3	3	3	3	4	4

"X" DOOR NOTES:

1) THE DOOR IS NOT RATED FOR WATER INFILTRATION (WEATHERING) AND MUST ONLY BE USED WHERE IT IS NOT REQUIRED OR WHERE THE DOOR IS PROTECTED BY AN OVERHANG COMPLYING WITH THE CURRENT FLORIDA BUILDING CODE (SEE FIGURE 1, SHEETS 3-4).

2) SEE SHEETS 3-4 FOR INSTALLATION ELEVATIONS.

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

REVISIONS	
DRAWN BY	
CHECKED	
APPROVED	
DATE	
SHEET	6 OF 9

ALUMINUM PIVOT DOORS (OS & WO TYPE)
DP & IMPACT RATINGS TABLES

ANTHONY LYNN MILLER
LICENSE
No. 56705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 56705

TABLE 7

4 Door Anchor Quantities, Wind Type 2

Frame Height	Number Doors	Anchor Location (1) Frame	A Frame Width / Panel Width					
			60"	72"	96"	120 5/8"	132"	144"
			48"	60"	84"	108 3/4"	120"	132"
84"	A & B	Head @ Frame Sill @ Track	2 2	2 2	2 2	2 2	2 2	2 2
	A	Jamb	3	3	3	3	3	3
	B	Jamb	3	3	3	3	3	3
	C & D	Head @ Frame Sill @ Track	2 2	2 2	2 2	2 2	2 2	2 2
	C	Jamb	3	3	3	3	3	3
	D	Jamb	3	3	3	3	3	3
96"	A & B	Head @ Frame Sill @ Track	2 2	2 2	2 2	2 2	2 2	2 2
	A	Jamb	4	4	4	4	4	4
	B	Jamb	4	4	4	4	4	4
	C & D	Head @ Frame Sill @ Track	2 2	2 2	2 2	2 2	2 2	2 2
	C	Jamb	4	4	4	4	4	4
	D	Jamb	4	4	4	4	4	4
108"	A & B	Head @ Frame Sill @ Track	2 2	2 2	2 2	2 2	2 2	2 2
	A	Jamb	4	4	4	4	4	4
	B	Jamb	4	4	4	4	4	4
	C & D	Head @ Frame Sill @ Track	2 2	2 2	2 2	2 2	2 2	2 2
	C	Jamb	4	4	4	4	4	4
	D	Jamb	4	4	4	4	4	4
120"	A & B	Head @ Frame Sill @ Track	2 2	2 2	2 2	2 2	2 2	2 2
	A	Jamb	5	5	5	5	5	5
	B	Jamb	5	5	5	5	5	5
	C & D	Head @ Frame Sill @ Track	2 2	2 2	2 2	2 2	2 2	2 2
	C	Jamb	5	5	5	5	5	5
	D	Jamb	5	5	5	5	5	5
156-120"	A & B	Head @ Frame Sill @ Track	3 3	3 3	3 3	3 3	3 3	
	A	Jamb	5	5	5	5	5	
	B	Jamb	5	5	5	5	5	
	C & D	Head @ Frame Sill @ Track	3 3	3 3	3 3	3 3	3 3	
	C	Jamb	5	5	5	5	5	
	D	Jamb	5	5	5	5	5	
180"	A & B	Head @ Frame Sill @ Track	3 3	3 3	3 3	3 3	3 3	
	A	Jamb	6	6	6	6	6	
	B	Jamb	6	6	6	6	6	
	C & D	Head @ Frame Sill @ Track	3 3	3 3	3 3	3 3	3 3	
	C	Jamb	6	6	6	6	6	
	D	Jamb	6	6	6	6	6	

"X" DOOR NOTES

1) THE DOOR IS NOT RATED FOR WATER INFILTRATION RESISTANCE AND MUST ONLY BE USED WHERE IT IS NOT REQUIRED OR WHEN THE DOOR IS PROTECTED BY AN OVERHANG COMPLYING WITH THE CURRENT FLORIDA BUILDING CODE (SEE FIGURE 1, SHEETS 2-4).

2) SEE SHEETS 2-4 FOR INSTALLATION ELEVATIONS.

3) FOR SIZES NOT SHOWN ROUND UP TO THE NEXT AVAILABLE WIDTH OR HEIGHT DIMENSION SHOWN ON THE TABLE.

1	10/30/20	ADDED TABLE

ANTHONY LYNN MILLER
LICENSED
No. 59705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 59705

DRAWN BY:	JEANS ROSEMOND
CHECKED BY:	A. LYNN MILLER, P.E.
DATE:	10/30/20
SCALE:	NTS
JOB NO.	20-1
SHEET NO.	2 OF 23

ALUMINUM SWING DOOR SYSTEMS
DESIGN PRESSURE TABLES

TABLE 9

XX Door Design Pressure, (lbs/ft²), Glass Types 1, 2, 3, & 6 Opaque Panels

Frame Height	All Frame Widths					
	24"	30"	36"	42"	48"	54"-72"
80"	+52.5/-77	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75
96"	+52.5/-77	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75
98"	+52.5/-77	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75
108"	+52.5/-77	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75
120"	+52.5/-77	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75
135-1/2"	+52.5/-77	+50.7/-75	+50.7/-75	+50.7/-75		
144"	+52.5/-77	+50.7/-75	+50.7/-75	+50.7/-75		

TABLE 8

XX Door Design Pressure, (lbs/ft²) Glass Types 4, 5 & Opaque Panels

Frame Height	All Frame Widths					
	24"	30"	36"	42"	48"	54"-72"
80"	+50.7/-77	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75
96"	+50.7/-77	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75
98"	+50.7/-77	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75
108"	+50.7/-77	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75	+50.7/-75
120"	+50.7/-77	+50.7/-75	+50.7/-75	+50.7/-75		
135-1/2"	+50.7/-77	+50.7/-75	+50.7/-75			

TABLE 10

All Door Design Pressure, (lbs/ft²), Glass Types 4, 7 & Opaque Panels

Frame Height	All Frame Widths					
	24"	30"	36"	42"	48"	54"-72"
80"	+45.7/-75	+45.7/-75	+45.7/-75	+45.7/-75	+45.7/-75	+45.7/-75
96"	+45.7/-75	+45.7/-75	+45.7/-75	+45.7/-75	+45.7/-75	+45.7/-75
98"	+45.7/-75	+45.7/-75	+45.7/-75	+45.7/-75	+45.7/-75	+45.7/-75
108"	+45.7/-75	+45.7/-75	+45.7/-75	+45.7/-75	+45.7/-75	+45.7/-75
120"	+45.7/-75	+45.7/-75	+45.7/-75	+45.7/-75		
135-1/2"	+45.7/-75	+45.7/-75	+45.7/-75			

TABLE 11

XX Door Anchor Capacities, All Glass Types

Frame Height	Anchor Group	Anchor Location (in Pairs)	All Frame Widths / Panel Width					
			24"	30"	36"	42"	48"	54"-72"
80"	A & B	(2) Pivot / (2) Strike Post	3	4	5	6	7	8
		(2) Pivot / (2) Meeting Post	3	4	5	6	7	8
	C & D	(2) Pivot / (2) Strike Post	3	3	3	3	3	3
		(2) Pivot / (2) Meeting Post	3	3	4	4	4	4
	A, B, C, D	Jamb	3	3	3	3	3	3
96"	A & B	(2) Pivot / (2) Strike Post	3	4	4	5	6	7
		(2) Pivot / (2) Meeting Post	3	4	5	6	7	8
	C & D	(2) Pivot / (2) Strike Post	3	3	3	3	4	4
		(2) Pivot / (2) Meeting Post	3	4	4	5	5	6
	A, B, C, D	Jamb	4	4	4	4	4	4
98"	A & B	(2) Pivot / (2) Strike Post	4	4	5	6	7	8
		(2) Pivot / (2) Meeting Post	4	5	6	6	7	8
	C & D	(2) Pivot / (2) Strike Post	3	3	3	3	4	4
		(2) Pivot / (2) Meeting Post	4	4	4	5	5	6
	A, B, C, D	Jamb	4	4	4	4	4	4
108"	A & B	(2) Pivot / (2) Strike Post	4	5	6	7	8	9
		(2) Pivot / (2) Meeting Post	5	6	7	8	9	10
	C & D	(2) Pivot / (2) Strike Post	3	4	4	5	6	7
		(2) Pivot / (2) Meeting Post	4	5	6	7	8	9
	A, B, C, D	Jamb	5	5	5	5	5	5
120"	A & B	(2) Pivot / (2) Strike Post	5	6	7	8	9	10
		(2) Pivot / (2) Meeting Post	6	7	8	9	10	11
	C & D	(2) Pivot / (2) Strike Post	4	5	6	7	8	9
		(2) Pivot / (2) Meeting Post	5	6	7	8	9	10
	A, B, C, D	Jamb	6	6	6	6	6	6
135-1/2"	A & B	(2) Pivot / (2) Strike Post	5	6	7	8	9	10
		(2) Pivot / (2) Meeting Post	6	7	8	9	10	11
	C & D	(2) Pivot / (2) Strike Post	4	5	6	7	8	9
		(2) Pivot / (2) Meeting Post	5	6	7	8	9	10
	A, B, C, D	Jamb	6	6	6	6	6	6
144"	A & B	(2) Pivot / (2) Strike Post	5	6	7	8	9	10
		(2) Pivot / (2) Meeting Post	6	7	8	9	10	11
	C & D	(2) Pivot / (2) Strike Post	4	5	6	7	8	9
		(2) Pivot / (2) Meeting Post	5	6	7	8	9	10
	A, B, C, D	Jamb	6	6	6	6	6	6

"XX" DOOR NOTES:

1) THE DOOR IS NOT RATED FOR WATER INFILTRATION RESISTANCE AND MUST ONLY BE USED WHERE IT IS NOT REQUIRED OR WHEN THE DOOR IS PROTECTED BY AN OVERHANG COMPLYING WITH THE CURRENT FLORIDA BUILDING CODE (SEE FIGURE 1, SHEET 4).

2) SEE SHEET 4 FOR INSTALLATION ELEVATIONS.

3) FOR SIZES NOT SHOWN, ROUND-UP TO THE NEXT AVAILABLE WIDTH OR HEIGHT DIMENSION SHOWN ON THE TABLE.

WINDOOR

ALUMINUM PIVOT DOOR, OS & SS (LH)

DP & ANCHORAGE TABLES

REVISIONS

NO.	DESCRIPTION	DATE
1		

JEFFERSON ROSCOWSKI

PRODUCT APPROVAL #

8 OF 23

PA3888.4

ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.A.# 6110

TABLE 1B

Door Design Pressure, (kpsf)[1] for Doors with 1 or More Panels Glass Types 1, 2, 3, & Opaque Panels Only

Panel Height	Panel Width [2]					
	40-1/16"	20-11/16"	24-11/16"	27-3/16"	32"	36-13/16"
60"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75
80"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75
96"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75
108"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-72.2
120"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-72.2	+60.7/-63.1
132-1/2"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-72.2	+60.7/-63.1
144"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-72.2	+60.7/-63.1

[1] SEE FORMULAS ON SHEET 4 TO CALCULATE PRIMARY LOADS

TABLE 1C

Door Design Pressure, (kpsf)[1] for Doors with 2 or More Panels Glass Types 4, 5 & Opaque Panels

Panel Height	Panel Width [2]					
	40-1/16"	20-11/16"	24-11/16"	27-3/16"	32"	36-13/16"
60"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75
80"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75
96"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75
108"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-72.2
120"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-72.2	+60.7/-63.1
132-1/2"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-72.2	+60.7/-63.1

[1] SEE FORMULAS ON SHEET 4 TO CALCULATE PRIMARY LOADS

TABLE 1D

Door Design Pressure, (kpsf)[1] for Doors with 2 or More Panels Glass Types 6, 7 & Opaque Panels

Panel Height	Panel Width [2]					
	40-1/16"	20-11/16"	24-11/16"	27-3/16"	32"	36-13/16"
60"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75
80"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75
96"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75
108"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-72.2
120"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-72.2	+60.7/-63.1
132-1/2"	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-75	+60.7/-72.2	+60.7/-63.1

[1] SEE FORMULAS ON SHEET 4 TO CALCULATE PRIMARY LOADS

TABLE 1E

Door Anchor Quantities for Doors with 2 or More Panels, All Glass Types

Panel Height	Anchor Detail	Anchor Location on Frame	Jamb Frame Width (in.) / Panel Width (in.)					
			1 Leaf 40-1/16"	1 Leaf 20-11/16"	1 Leaf 24-11/16"	1 Leaf 27-3/16"	1 Leaf 32"	1 Leaf 36-13/16"
60"	A, B, E	Head & Sill @ Post Point	3	3	3	3	3	3
		Head & Sill @ Meeting Point	3	3	3	3	3	3
	C & D	Head & Sill @ Post Point	3	3	3	3	3	3
		Head & Sill @ Meeting Point	3	3	3	3	3	3
	A, B, C, D	Jamb	6	6	6	6	6	6
80"	A & E	Head & Sill @ Post Point	3	3	3	3	3	3
		Head & Sill @ Meeting Point	3	3	3	3	3	3
	C & D	Head & Sill @ Post Point	3	3	3	3	3	3
		Head & Sill @ Meeting Point	3	3	3	3	3	3
	A, B, C, D	Jamb	6	6	6	6	6	6
96"	A & E	Head & Sill @ Post Point	3	3	3	3	3	3
		Head & Sill @ Meeting Point	3	3	3	3	3	3
	C & D	Head & Sill @ Post Point	3	3	3	3	3	3
		Head & Sill @ Meeting Point	3	3	3	3	3	3
	A, B, C, D	Jamb	6	6	6	6	6	6
108"	A & E	Head & Sill @ Post Point	3	3	3	3	3	3
		Head & Sill @ Meeting Point	3	3	3	3	4	4
	C & D	Head & Sill @ Post Point	3	3	3	3	3	3
		Head & Sill @ Meeting Point	3	3	3	3	4	4
	A, B, C, D	Jamb	6	6	6	6	6	6
120" & 132-1/2"	A & E	Head & Sill @ Post Point	3	3	3	3		
		Head & Sill @ Meeting Point	3	3	3	3		
	C & D	Head & Sill @ Post Point	3	3	3	3		
		Head & Sill @ Meeting Point	3	3	3	3		
	A, B, C, D	Jamb	10	10	10	10		
144"	A & E	Head & Sill @ Post Point	3	3	3	3		
		Head & Sill @ Meeting Point	3	3	3	3		
	C & D	Head & Sill @ Post Point	3	3	3	3		
		Head & Sill @ Meeting Point	3	3	3	3		
	A, B, C, D	Jamb	10	10	10	10		

[1] SEE FORMULAS ON SHEET 4 TO CALCULATE PRIMARY SIZES

"XXX+" DOOR NOTES:

1) THE DOOR IS NOT RATED FOR WATER INFILTRATION RESISTANCE AND MUST ONLY BE USED WHERE IT IS NOT REQUIRED OR WHEN THE DOOR IS PROTECTED BY AN OVERHANG COMPLYING WITH THE CURRENT FLORIDA BUILDING CODE (SEE FIGURE 1, SHEET 4).

2) SEE SHEET 4 FOR INSTALLATION ELEVATIONS.

3) FOR SIZES NOT SHOWN, ROUND UP TO THE NEXT AVAILABLE WIDTH OR HEIGHT. USE NUMBERS SHOWN ON THE TABLE.

1	10/22/20	ADDED NOTE 3		
0	08/27/20	ORIGINAL ISSUE		
REV	DATE	DESCRIPTION		

ALUMINUM IMPACT DOOR, OS & IS LITE

DP & ANCHORAGE TABLES

WINDOOR

DRAWN BY:	JOB NO.
CHECKED BY:	SCALE:
APPROVED BY:	SHEET NO.
DATE:	3 OF 4

ANTHONY LYNN MILLER
LICENSE
No. 56705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E. # 56705

TABLE 10

Vertical Mullion Design Pressure (lbs/ft²)

Mullion Length	Opening Width (Both Units)								
	72"	84"	96"	114"	120"	132"	144"	156"	180"
96"	+/-75	+/-75	+/-75	+/-75	+/-75	+/-75	+/-75	+/-75	+/-75
108"	+/-75	+/-75	+/-75	+/-75	+/-75	+/-75	+/-75		
120"	+/-75	+/-75	+/-75	+/-75	+/-75	+/-75			
132"	+/-75	+/-75	+/-75	+/-75	+/-75				
144"	+/-75.4	+/-75	+/-75	+/-75					
156-1/2"	+/-66.2	+/-71.3	+/-75.1						
164"	+/-62.1	+/-68.4							

TABLE 11

Cluster Anchors Required at Each Vertical Mullion End

Mullion Length	Anchor (Dwg)	Opening Width (Both Units)								
		72"	84"	96"	114"	120"	132"	144"	156"	180"
96"	A & B	4	4	5	6	6	7	8	8	9
	C & D	3	3	4	4	5	5	6	6	6
108"	A & B	4	5	5	6	7	8	8		
	C & D	3	4	4	5	5	6	6		
120"	A & B	5	5	6	7	8	8			
	C & D	3	4	4	5	5	6			
132"	A & B	5	6	7	7	7				
	C & D	4	4	5	6	6				
144"	A & B	6	6	7	8					
	C & D	4	4	5	5					
156-1/2"	A & B	6	6	7						
	C & D	4	5	5						
164"	A & B	6	7							
	C & D	5	5							

TABLE 12

Horizontal Mullion Design Pressure (lbs/ft²)

Mullion Length	Twin Opening Height (Both Units)							
	36"	108"	120"	132"	144"	168"	192"	180"
60"	+/-75	+/-75	+/-75	+/-75	+/-75	+/-75	+/-75	+/-75
80"	+/-75	+/-75	+/-75	+/-75	+/-75	+/-75	+/-75	+/-75
92"	+/-75	+/-75	+/-75	+/-75	+/-75	+/-75	+/-69.8	+/-63.0
96"	+/-75	+/-75	+/-75	+/-75	+/-69.8	+/-64.3	+/-55.7	+/-50.7
108"	+/-75	+/-75	+/-69.7	+/-63.0	+/-56.1	+/-52.0	+/-45.3	+/-41.2
116"	+/-62.4	+/-55.5	+/-51	+/-47	+/-41	+/-38	+/-33	+/-30
120"	+/-57.5	+/-51.1	+/-46.9	+/-43.2	+/-37.7	+/-34.8	+/-30.4	+/-27.6
132"	+/-47.9	+/-42.7	+/-38.8	+/-35.7	+/-31.1	+/-28.7	+/-25.1	+/-22.8

TABLE 13

Cluster Anchors Required at Each Horizontal Mullion End

Mullion Length	Anchor Dwg.	Max Opening Height (Both Units)							
		108"	108"	120"	132"	144"	156"	168"	180"
60"	A	5	6	6	7	8	8	9	9
	B	11	9	8	10	13	12	11	14
	C	4	4	5	5	7	6	6	7
	D	4	5	6	6	8	7	7	8
80"	A	6	6	7	7	8	8	9	10
	B	8	8	10	11	13	12	11	10
	C	4	4	5	6	6	6	7	7
	D	5	6	6	7	8	7	8	8
92"	A	6	7	7	8	8	9	9	9
	B	9	10	11	12	13	15	13	15
	C	4	5	5	6	7	8	8	9
	D	5	5	6	6	7	7	7	7
96"	A	6	7	8	8	9	9	9	9
	B	9	10	11	12	12	13	14	14
	C	4	5	6	6	6	6	8	8
	D	5	6	6	7	7	7	7	7
108"	A	7	7	7	8	9	9	9	9
	B	10	11	11	11	14	14	11	17
	C	5	5	6	6	8	8	9	8
	D	6	6	6	8	8	8	8	7
116"	A	8	8	8	7	7	8	8	9
	B	10	9	9	10	11	12	12	13
	C	5	4	4	6	7	5	6	6
	D	5	5	6	6	8	6	7	7
120"	A	8	9	5	6	6	6	6	
	B	8	8	8	8	9	8	8	
	C	4	6	6	6	6	6	6	
	D	5	6	6	7	7	8	8	
132"	A	8	8	8	8	8			
	B	7	7	7	8	9			
	C	5	5	8	8	9			
	D	4	5	6	6	6			

MULLION NOTES:

(1) IN SOME CASES, YOU MAY USE HALF OF THE VERTICAL MULLION ANCHOR QUANTITY SHOWN. SEE SHEET 2, "SHALLOW PVOT CLUSTER NOTE".

(2) SEE SHEETS 2-5 FOR INSTALLATION ELEVATIONS

(3) FOR SIZES NOT SHOWN, ROUND UP TO THE NEXT AVAILABLE WIDTH OR HEIGHT DIMENSION SHOWN ON THE TABLE.

NO CHANGES THIS SHEET

SHEET NAME: MULLION ANCHORAGE TABLES

DRAWING NO.: 10 OF 20

REVISIONS

WINDOOR

ALUMINUM PIVOT DOOR, DS & SL SERIES

DR & ANCHORAGE TABLES

PURPOSE: PERMIT

ANTHONY LYNN MILLER
LICENSED
No. 56705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E. # 56705

TABLE 2D

Picture Window, Eyebrow or Transom Design Pressure (lbs/ft²), Sizes Types 1, 2, 3, & Obscure Panels

Long Size Length	Short Side Length										
	36"	38"	42"	46"	54"	62"	70"	72"	78"	84"	96"
36"	+50 -75										
38"	+50 -75	+60 -75									
42"	+50 -75	+60 -75	+60 -75								
46"	+50 -75	+60 -75	+60 -75	+60 -75							
54"	+50 -75	+60 -75	+60 -75	+60 -75	+60 -75						
62"	+50 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75					
70"	+50 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75				
72"	+50 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75			
78"	+50 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75		
84"	+50 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	
96"	+50 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75
108"	+50 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75
114"	+50 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75
120"	+50 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75
126"	+50 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75
132"	+50 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75
138"	+50 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75
144"	+50 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75	+60 -75

SEE TABLE 2F FOR ANCHOR QUANTITIES REQUIRED

"O" FIXED LITE NOTES:

1) SEE SHEETS 2-5 FOR INSTALLATION REQUIREMENTS.

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

3) ALL SIZES ON THIS SHEET ARE RATED FOR A WATER TEST PRESSURE THAT IS 15% OF THE POSITIVE DESIGN PRESSURE LISTED IN THE TABLE.

REVISIONS	NO CHANGES THIS SHEET
DRAWN BY	JENS ROSCHKE
CHECKED BY	
DATE	12-01-23
SCALE	NTS
SHEET NO.	11 OF 23

ALUMINUM PIVOT DOOR, DP & IMPACT RATINGS

DP & IMPACT TABLES

ANTHONY LYNN MILLER
LICENSE
No. 56705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 56705

TABLE 2.1

Picture Window, Sidelite or Transom And/or Operating Fixed Types 1, 2, 3, & Opposite Panels

Short Side Length / Active Group

Long Side Length	And/or Location of Fixed	30"				36"				42"				48"				54"				60"				66"				72"				78"				84"				90"			
		A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
30"	Long Side	2	2	3	3																																						
	Short Side	2	2	3	3																																						
36"	Long Side	2	2	3	3	3	3	3	3																																		
	Short Side	2	2	3	3	3	3	3	3																																		
42"	Long Side	2	2	3	3	3	3	3	4	3	3	3	3	3																													
	Short Side	2	3	3	3	3	4	3	3	3	3	3	3	3																													
48"	Long Side	3	3	3	3	3	3	3	3	3	3	3	4	3	3	3	4																										
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4																										
54"	Long Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4																						
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4																						
60"	Long Side	3	3	3	3	3	3	3	3	3	3	3	3	3	4	3	3	3	4	3	3	3	4	3	4																		
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3																		
66"	Long Side	3	3	3	3	3	4	3	3	3	4	3	3	3	4	3	3	3	4	3	3	3	4	3	4	4	4	3	4														
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3														
72"	Long Side	3	4	3	3	3	4	3	3	3	4	3	3	3	4	3	3	3	4	3	3	4	4	3	4	4	4	3	4	4	4	3	4										
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3										
78"	Long Side	3	4	3	3	3	4	3	3	4	4	3	3	4	4	3	3	4	4	3	3	4	4	3	4	4	4	3	4	4	4	3	4	4	4	3	4						
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3						
84"	Long Side	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
90"	Long Side	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
96"	Long Side	4	5	4	4	4	5	4	4	4	5	4	4	4	5	4	4	4	5	4	4	4	5	4	4	4	5	4	4	4	5	4	4	4	5	4	4	4	5	4	4	4	4
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
102"	Long Side	4	5	4	4	4	5	4	4	5	5	4	4	5	5	4	4	5	5	4	4	5	5	4	5	5	5	4	5	5	5	4	5	5	5	4	5	5	5	4	5	5	5
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
108"	Long Side	4	5	4	4	4	5	4	4	5	5	4	4	5	5	4	4	5	5	4	4	5	5	4	5	5	5	4	5	5	5	4	5	5	5	4	5	5	5	4	5	5	5
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
114"	Long Side	4	5	4	4	5	5	4	4	5	5	4	4	5	5	4	4	5	5	4	4	5	5	4	5	5	5	4	5	5	5	4	5	5	5	4	5	5	5	4	5	5	5
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
120"	Long Side	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
126"	Long Side	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
132"	Long Side	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
138"	Long Side	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
144"	Long Side	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Short Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

FOR SIZES NOT SHOWN, ROUND UP TO THE NEXT AVAILABLE SIDE LENGTH DIMENSION SHOWN ON THIS TABLE.

NO CHANGES THIS SHEET

12 OF 12

ALUMINUM RIGHT DOOR, CW & R-PG

UP & AWNING/CASE TABLES

JELD-WEN

ANTHONY LYNN MILLER
LICENSE
No. 59230
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER P.E.
P.E.#59230

TABLE 23

Picture Window, Sidelite or Transom Design Pressure (lbs/ft²), Glass Types 4 & 5

Long Side Length	Short Side Length								
	30"	36"	42"	48"	54"	60"	62-1/4"	66"	72"
30"	+50/-50								
36"	+50/-50	+50/-50							
42"	+50/-50	+50/-50	+50/-50						
48"	+50/-50	+50/-50	+50/-50	+50/-50					
54"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50				
60"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50			
62-1/4"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50		
66"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	
72"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50
78"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50
84"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50
90"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50
96"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50
102"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50		
108"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50		
114"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50		
120"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50		
126-132	+50/-50	+50/-50	+50/-50	+50/-50					

SEE TABLE 24 FOR ANCHOR QUANTITIES REQUIRED

TABLE 24

Picture Window, Sidelite or Transom Design Pressure (lbs/ft²), Glass Types 4 & 5

Long Side Length	Short Side Length								
	30"	36"	42"	48"	54"	60"	62-1/4"	66"	72"
30"	+50/-50								
36"	+50/-50	+50/-50							
42"	+50/-50	+50/-50	+50/-50						
48"	+50/-50	+50/-50	+50/-50	+50/-50					
54"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50				
60"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50			
62-1/4"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50		
66"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	
72"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50
78"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50
84"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50
90"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50
96"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50
102"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50		
108"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50		
114"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50		
120"	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50		
126-132	+50/-50	+50/-50	+50/-50	+50/-50	+50/-50				

SEE TABLE 24 FOR ANCHOR QUANTITIES REQUIRED

"O" FIXED LITE NOTES:

1) SEE SHEETS 2-5 FOR INSTALLATION ELEVATIONS

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

3) ALL SIZES ON THIS SHEET ARE RATED FOR A WATER TEST PRESSURE THAT IS 15% OF THE POSITIVE DESIGN PRESSURE LISTED IN THE TABLE

NO.	DESCRIPTION	DATE
1	NO CHANGES THIS SHEET	

ALUMINUM PIVOT DOOR, CW & R.O. MULTIPLE

DP & ANCHORAGE TABLES

PW5PA

12-07-23

ANTHONY LYNN MILLER

No. 56705

STATE OF FLORIDA

PROFESSIONAL ENGINEER

A. LYNN MILLER, P.E.

P.E. # 56705

TABLE 2a

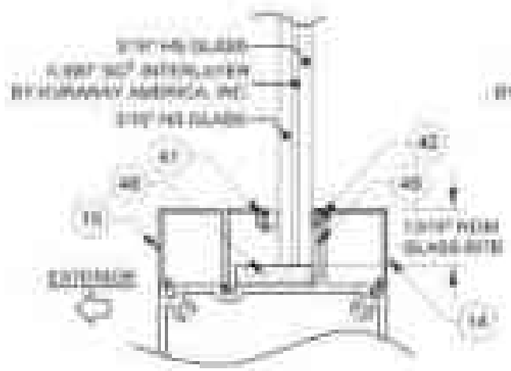
Pribute Window, Sidelite or Transom Anchor Quantities, Glass Types 4, 5, 6, & 7

Long Side Length	Anchor Location on Frame	Short Side Length / Anchor Group																													
		30"				36"				42"				48"				54"				60"				66" & 72"				84"				96"			
		A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
30"	Long Side	2	2	2	2																																
	Short Side	2	2	2	2																																
36"	Long Side	2	2	2	2	2	2	2	2																												
	Short Side	2	2	2	2	2	2	2	2																												
42"	Long Side	2	2	2	2	2	2	2	2	2	2	2	2																								
	Short Side	2	2	2	2	2	2	2	2	2	2	2	2																								
48"	Long Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2																				
	Short Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2																				
54"	Long Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2																
	Short Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2																
60"	Long Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2												
	Short Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2												
66" & 72"	Long Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2								
	Short Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2								
84"	Long Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3				
	Short Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2				
96"	Long Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	Short Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
102"	Long Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	Short Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
108"	Long Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	Short Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
114"	Long Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	Short Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
120"	Long Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	Short Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
126"-144"	Long Side	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	Short Side	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

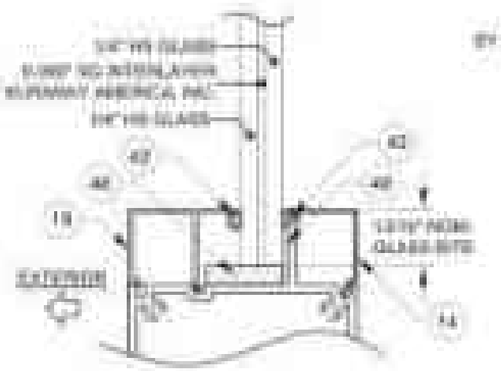
FOR SIZES NOT SHOWN ROUND UP TO THE NEXT AVAILABLE SIZE LENGTH DIMENSION SHOWN ON THE TABLE.

MODIFICATIONS	
NO CHANGES THIS SHEET	
DRAWN BY	JEMS
CHECKED BY	JEMS
DATE	10/15/21
ALUMINUM PIVOT DOOR, DS & SS ANCHORAGE TABLES	
DP & JAMB ANCHORAGE TABLES	
PROJECT NO.	14 OF 23

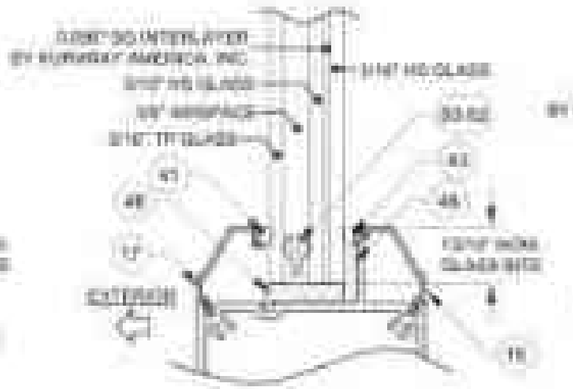
ANTHONY LYNN MILLER
LICENSED
No. 56705
STATE OF ILLINOIS
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E. # 56705



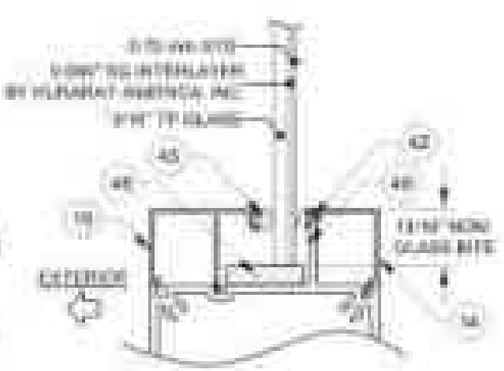
GLASS TYPE 1



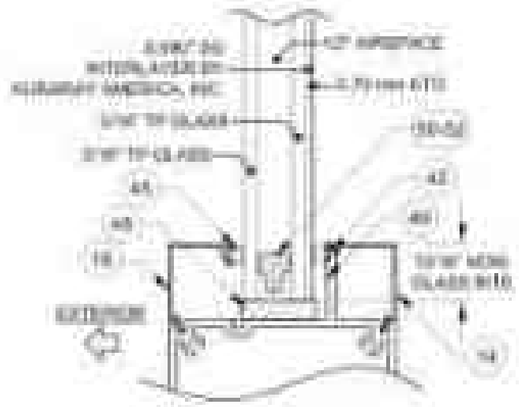
GLASS TYPE 2



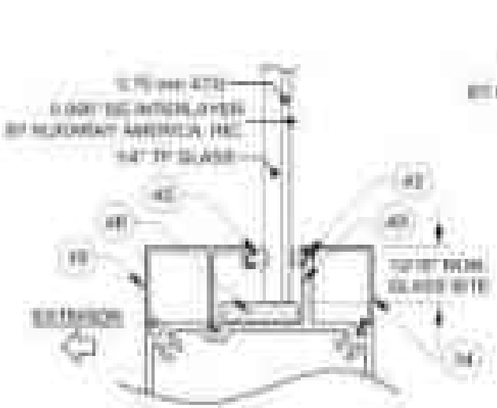
GLASS TYPE 3



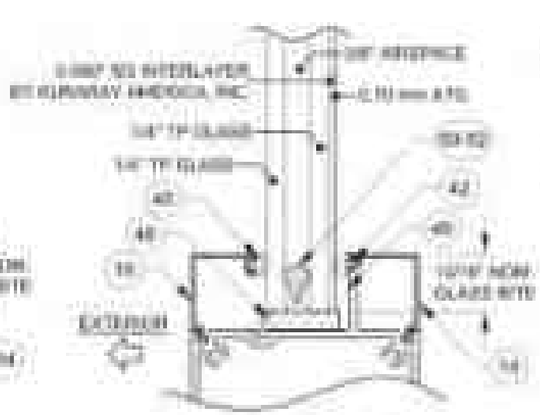
GLASS TYPE 4



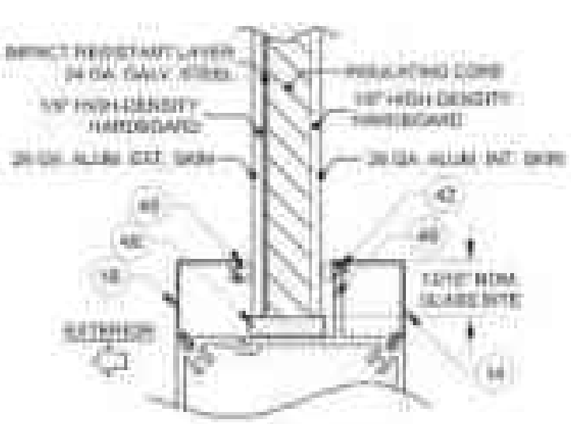
GLASS TYPE 5



GLASS TYPE 6



GLASS TYPE 7



OPAQUE PANEL

HE = HEAT STRENGTHENED
TP = TEMPERED

SS = 090" SENTRYGLAS INTERLAYER BY KURARAY AMERICA, INC.

NO.	CHANGES THIS SHEET	BY

PREPARED BY: A. LYNN MILLER
5570 TECHNOLOGY DRIVE
FT. MYERS, FL 33912
(941) 489-1933

ALUMINUM PHOTOVOLTAIC (PV) CANOPY
GLAZING DETAILS

PROJECT NO.	SHEET NO.
PV0001A	15 OF 20

ANTHONY LYNN MILLER
LICENSE
No. 56705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER P.E.
P.E.# 56705

DETAIL (A)

DETAIL (B)

HORIZONTAL X-SECTION

(OUTSWING DOOR SHOWN, HEADING SIMILAR)

NOTES

1) USE ONLY SUBSTRATE APPROPRIATE ANCHORS LISTED IN TABLE 1. FOLLOW EMBEDMENT, EDGE DISTANCE AND SUBSTRATE REQUIREMENTS PER TABLE 1, SHEET 1. ANY INSTALLATION OPTION SHOWN MAY BE USED ON ANY PROFILE HEREIN. ALL ANCHOR HEAD TYPES ARE ALLOWED AT THE HEAD AND JAMBS. FLAT HEAD ANCHORS REQUIRED AT THE SILL.

2) MASONRY ANCHORS MAY BE USED INTO WOOD AS PER TABLE 1. ALL WOOD BUCKS LESS THAN 1-1/2" THICK ARE TO BE CONSIDERED 1/4 INSTALLATIONS. 1/4 WOOD BUCKS ARE OPTIONAL IF UNIT IS INSTALLED DIRECTLY TO SUBSTRATE. WOOD BUCKS DEPICTED AS 2X ARE 1-1/2" THICK OR GREATER. 1/4 WIND DY BUCKS (WHICH 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.

D DETAIL

C DETAIL

(OPT. WIDE STILE SHOWN)

Q DETAIL

HORIZONTAL X-SECTION

(SWING TO DUTSWING DOOR)

HORIZONTAL X-SECTION

(PANEL TO PANEL MEETING POINT)

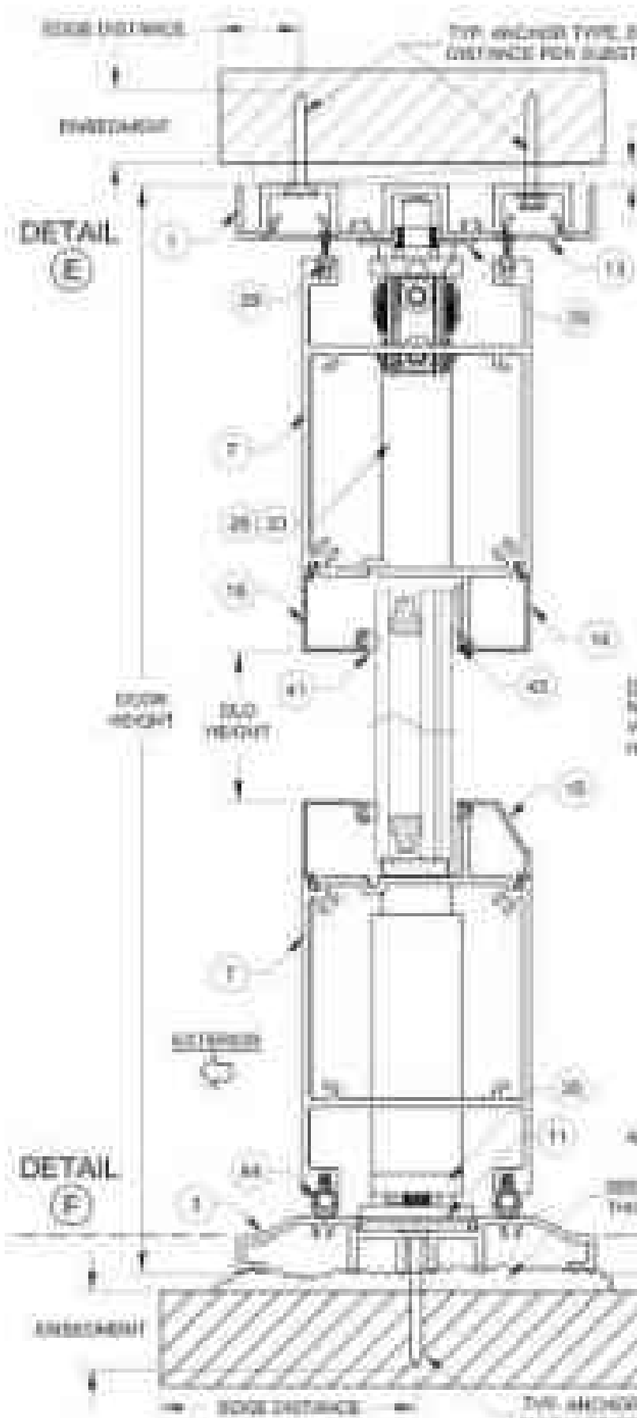
DOOR SLD FORMULAS:
NARROW STILE SLD = FRAME WIDTH - 4-1/8"
WIDE STILE SLD = FRAME WIDTH - 13-1/8"
HEIGHT SLD = FRAME HEIGHT - 13-1/8"

WINDOW SLD FORMULAS:
NARROW STILE SLD = FRAME WIDTH OR HEIGHT - 4-1/8"
WIDE STILE WINDOW SLD = WIDTH OR HEIGHT - 13-1/8"

ANTHONY LYNN MILLER
LICENSE
No. 56035
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 56035

ALUMINUM PIVOT DOOR, DS & RS
HORIZONTAL X-SECTIONS
P-DS&RS
16 OF 23

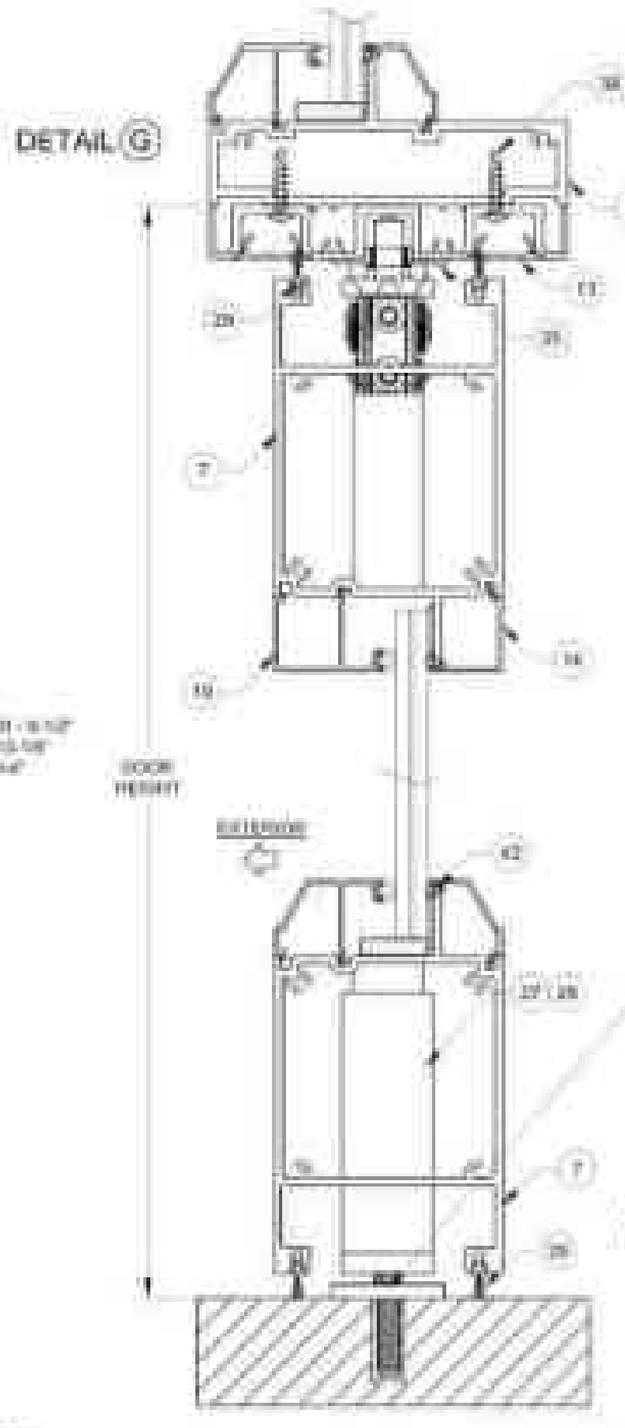
DETAIL (E)



DOOR D.L.O. FORMULAS:
NARROW STILE: D.L.O. = FRAME WIDTH - 9-1/2"
WIDE STILE: D.L.O. = FRAME WIDTH - 13-1/8"
HEIGHT D.L.O. = FRAME HEIGHT - 13-1/4"

VERTICAL X-SECTION
(DOOR SILL)

DETAIL (G)



NOTES

1) USE ONLY SUBSTRATE APPROPRIATE ANCHORS LISTED IN TABLE 1 FOLLOW EMBEDMENT, EDGE DISTANCE AND SUBSTRATE REQUIREMENTS PER TABLE 1, SHEET 1. ANY INSTALLATION OPTION SHOWN MAY BE USED ON ANY FRAME MEMBER. ALL ANCHOR HEAD TYPES ARE ALLOWED AT THE HEAD AND JAMBS. FLATHEAD ANCHORS REQUIRED AT THE SILL.

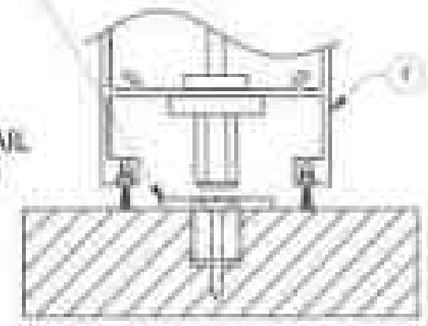
2) MASONRY ANCHORS MAY BE USED INTO WOOD AS PER TABLE 1. ALL WOOD BUCKS LESS THAN 1-1/2" THICK ARE TO BE CONSIDERED IN-INSTALLATIONS. IF WOOD BUCKS ARE OPTIONAL IF UNIT IS INSTALLED DIRECTLY TO SUBSTRATE. WOOD BUCKS DEPICTED AS 2X 4PR 1-1/2" THICK OR GREATER. 15 AND 23 BUCKS WHEN USED SHALL BE DESIGNED TO PROPERLY TRANSFER LOADS TO THE STRUCTURE. WOOD BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD.

3) IF SILL IS TIGHT TO SUBSTRATE, GROUT OR OTHER MATERIAL IS NOT REQUIRED IF USED, NON-SHRINK, NON-METALLIC GROUT, MIN. 1/4" THICK & 5400 PSI MIN. (SHIM BY OTHERS) MUST FULLY SUPPORT THE ENTIRE LENGTH OF THE SILL THAT IS NOT TIGHT TO THE SUBSTRATE, AND TRANSFER SHEAR LOAD TO SUBSTRATE. IF SUBSTRATE IS WOOD, 30# FELT PAPER OR MASTIC IS REQUIRED BETWEEN THE GROUT AND WOOD SUBSTRATE, OR AS APPROVED BY THE AUTHORITY HAVING JURISDICTION.

(1) DOOR BOLT RECEIVER ATTACHMENT WITH EPOXY TO SUBSTRATE. FOLLOW HARDWARE MANUFACTURERS INSTRUCTIONS USING SUPPLIED EPOXY

(2) SWOOP BOLT KEEPER ATTACHMENT TO SUBSTRATE WITH SCREWS

DETAIL (H)

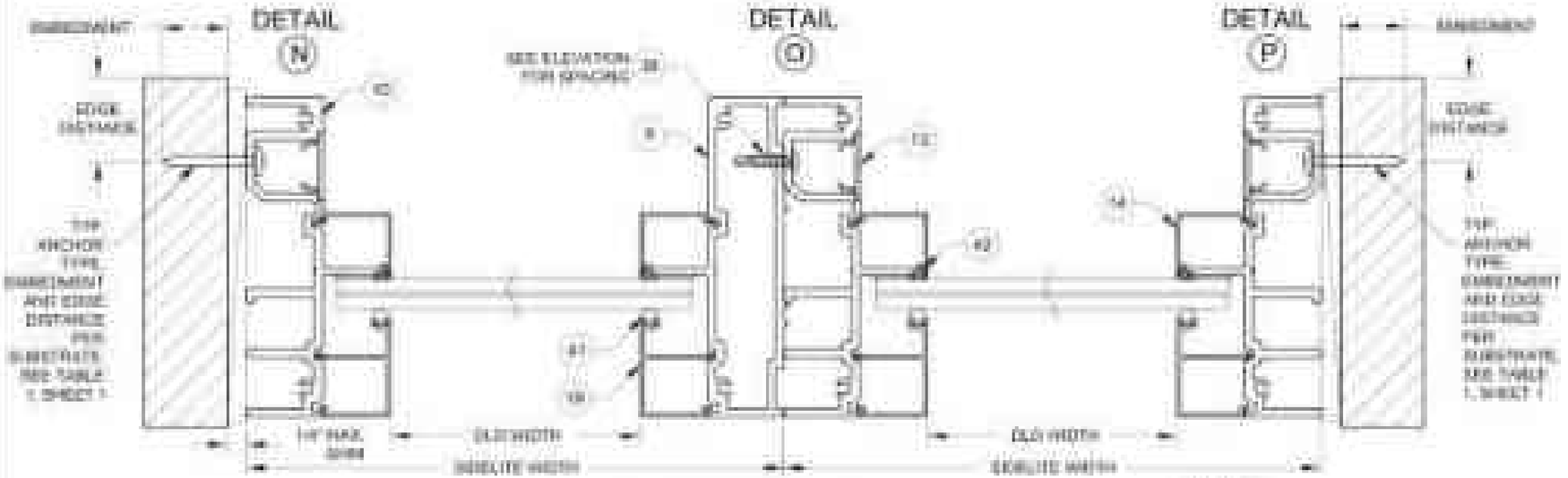


VERTICAL X-SECTION
(DOOR TO TRANSOM W/ FRAME DOOR SILL)

NO.	CHANGES THIS SHEET	DATE
1	ADDED	10/14/21

DRAWN BY:	JENS ROSCHKE
CHECKED BY:	A.LYNN MILLER
SCALE:	1-1/2" = 1'-0"
DATE:	10/14/21
PROJECT:	ALUMINUM PIVOT DOOR, OS & 10 LITE
	VERTICAL X-SECTIONS
PAGE:	17 OF 25

ANTHONY LYNN MILLER
LICENSE
No. 56705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 56705



HORIZONTAL X-SECTION

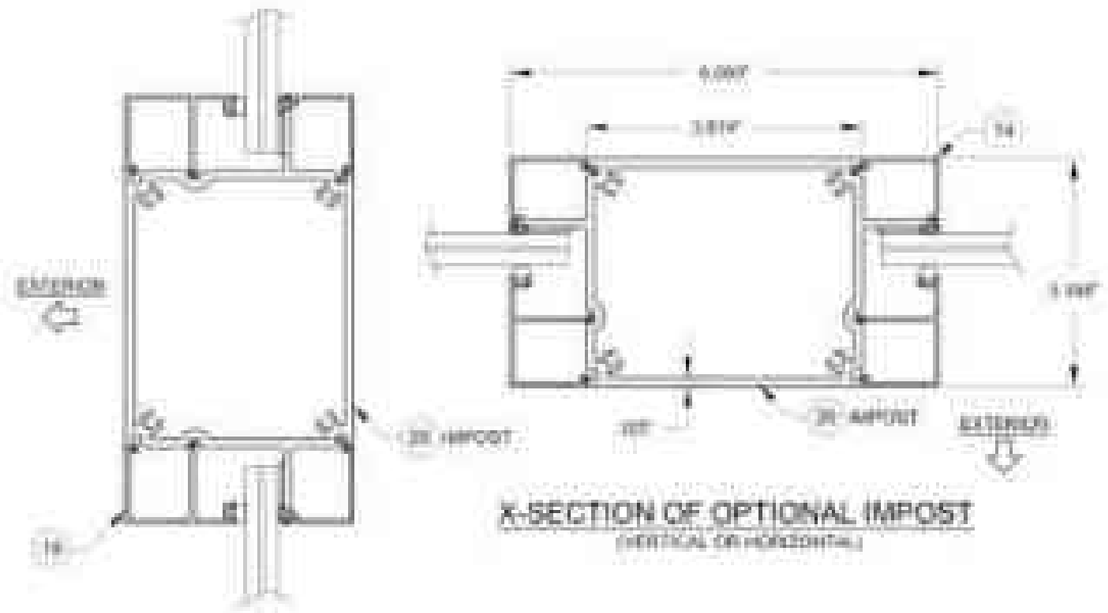
(VERTICALLY MULLED PICTURE WINDOWS (2X))

NOTES

1) USE ONLY SUBSTRATE APPROPRIATE ANCHORS LISTED IN TABLE 1. FOLLOW EMBEDMENT, EDGE DISTANCE AND SUBSTRATE REQUIREMENTS PER TABLE 1, SHEET 1. ANY INSTALLATION OPTION SHOWN MAY BE USED ON ANY FRAME MEMBER. ALL ANCHOR HEAD TYPES ARE ALLOWED AT THE HEAD AND JAMBS. FLATHEAD ANCHORS REQUIRED AT THE SILL.

2) MASONRY ANCHORS MAY BE USED INTO WOOD AS PER TABLE 1. ALL WOOD BUCKS LESS THAN 1 1/2" THICK ARE TO BE CONSIDERED IN INSTALLATIONS TO WOOD BUCKS AND OPTIONAL IF UNIT IS INSTALLED DIRECTLY TO SUBSTRATE. WOOD BUCKS (INSPECTED AS OF MIN 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.

WINDOW O.A.D. FORMULAS:
MARVIN STYLE O.A.D. = FRAME WIDTH OR HEIGHT - 4 1/2"
WEB STYLE WINDOW O.A.D. = WIDTH OR HEIGHT - 1 5 1/8"



X-SECTION OF OPTIONAL IMPOST

(VERTICAL OR HORIZONTAL)



IMPOST NOTES:

1) IMPOSTS MAY BE VERTICAL OR HORIZONTAL. SINGLE OR DOUBLE TYPES ILLUSTRATED.

2) IMPOSTS MAY BE USED IN ANY DOOR OR WINDOW CONFIGURATION.

3) IMPOST MAY NOT CROSS ANOTHER IMPOST, I.E. NO 'T' OR 'CROSS' PATTERNS.

4) A MIXTURE OF GLAZING TYPES OR DYNGLE PANELS WITHIN THE SAME UNIT IS ALLOWED.

NO.	CHANGES THIS SHEET	INITIALS	DATE
1	ADDED	JENS ROSOWSKI	9/9/24

ALUMINUM PIVOT DOOR & WINDOW
HORIZONTAL PW X-SECTIONS &
IMPACT L.A. SECTIONS

DRAWING NO. 8.01.23
SHEET NO. 15

ANTHONY LYNN MILLER
LICENSE
No. 50705
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 50705

DETAIL (I)

TYP. ANCHOR TYPE, EMBEDMENT AND EDGE DISTANCE PER SUBSTRATE; SEE TABLE 1, SHEET 1

EDGE DISTANCE

EMBEDMENT

1/4" MAX. SHIM

(8)

(11)

SIDELITE HEIGHT

SLD HEIGHT

(14)

(9)

EXTERIOR

(13)

DETAIL (J)

1/4" MAX. SHIM

EMBEDMENT

TYP. ANCHOR TYPE, EMBEDMENT AND EDGE DISTANCE PER SUBSTRATE; SEE TABLE 1, SHEET 1

EDGE DISTANCE

VERTICAL X-SECTION

WINDOW SLD FORMULAS:
WARRIOR STYLE SLD = FRAME WIDTH OR HEIGHT - 4-1/2"
WIDE STYLE WINDOW SLD = WIDTH OR HEIGHT - 12-1/8"

DETAIL (K)

OPTIONAL I/S BUCK

EDGE DISTANCE

EMBEDMENT

TYP. ANCHOR TYPE, EMBEDMENT AND EDGE DISTANCE PER SUBSTRATE; SEE TABLE 1, SHEET 1

1/4" MAX. SHIM

(10)

THRESHOLD HEIGHT

SLD HEIGHT

(41)

(15)

(6)

SEE ELEVATION FOR SPACING

DETAIL (L)

(10)

(9)

SIDELITE HEIGHT

EXTERIOR

(42)

(17)

(10)

DETAIL (M)

1/4" MAX. SHIM

EMBEDMENT

TYP. ANCHOR TYPE, EMBEDMENT AND EDGE DISTANCE PER SUBSTRATE; SEE TABLE 1, SHEET 1

EDGE DISTANCE

VERTICAL X-SECTION

NOTES

1) USE ONLY SUBSTRATE APPROPRIATE ANCHORS LISTED IN TABLE 1. FOLLOW EMBEDMENT, EDGE DISTANCE AND SUBSTRATE REQUIREMENTS PER TABLE 1, SHEET 1, AND INSTALLATION OPTION SHOWN MAY BE USED ON ANY FRAME MEMBER. ALL ANCHOR HEAD TYPES ARE ALLOWED AT THE HEAD AND JAMBS. FLATHEAD ANCHORS REQUIRED AT THE SILL.

2) MASONRY ANCHORS MAY BE USED INTO WOOD AS PER TABLE 1. ALL WOOD BUCKS LESS THAN 1-1/2" THICK ARE TO BE CONSIDERED I/S INSTALLATIONS. I/S 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.

NO.	DESCRIPTION	DATE
1	NO CHANGES THIS SHEET	08/22/25

DRAWN BY	JENS ROSCHKE
CHECKED BY	A.LYNN MILLER
DATE	08/07/24
SCALE	3" = 1'-0"
PROJECT	ALUMINUM PIVOT DOOR, CW & IW SERIES
TITLE	VERTICAL X-SECTIONS
SHEET	19 OF 23
DRAWING	PVDWG

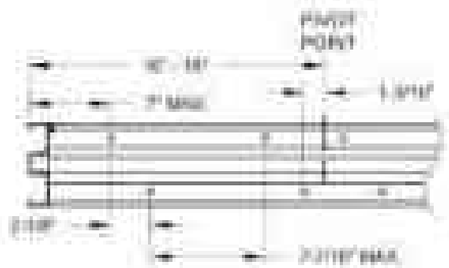
ANTHONY LYNN MILLER
LICENSED
No. 50230
STATE OF
ILLINOIS
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.



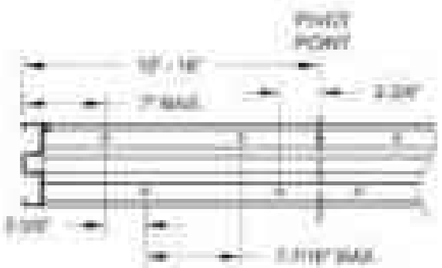
2 ANCHORS @ PIVOT POINT



3 ANCHORS @ PIVOT POINT



4 ANCHORS @ PIVOT POINT



5 ANCHORS @ PIVOT POINT

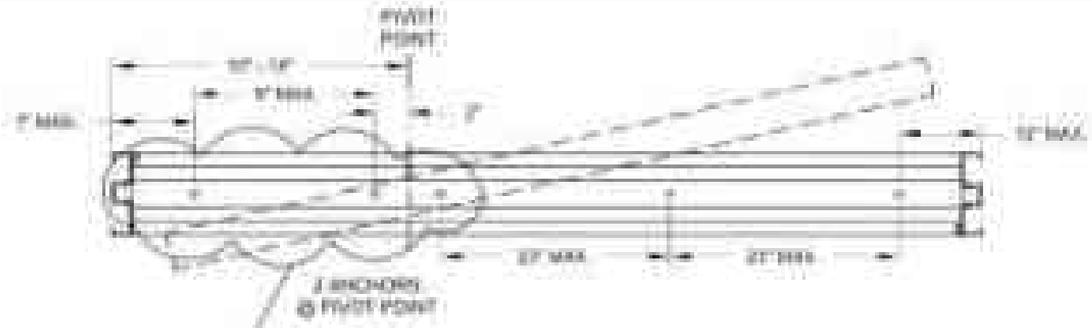
NOTES:

1) ANCHOR PATTERN MAY BE MIRRORED ABOUT THE MIDTHRUPOINT OF THE FRAME HEAD OR MIDTHRUPOINT OF EACH GUIDER.

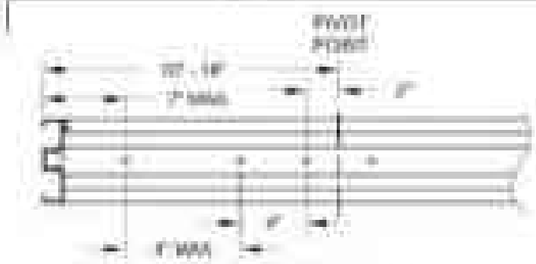
2) 3" & 12" END DISTANCES INCLUDE THE JAMB WIDTH AND IS MEASURED TO THE OUTER EDGE OF THE FRAME.
3) TYPICAL ANCHOR (I.D. DIMENSIONS SHOWN)
4) PANELS MAY BE PASSING OR OUTSWING.

X HEAD ANCHOR LAYOUT

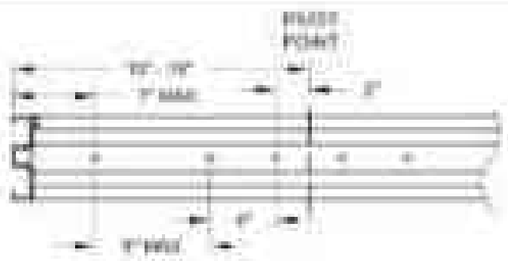
X SILL ANCHOR LAYOUT



2 ANCHORS @ PIVOT POINT



3 ANCHORS @ PIVOT POINT



4 ANCHORS @ PIVOT POINT

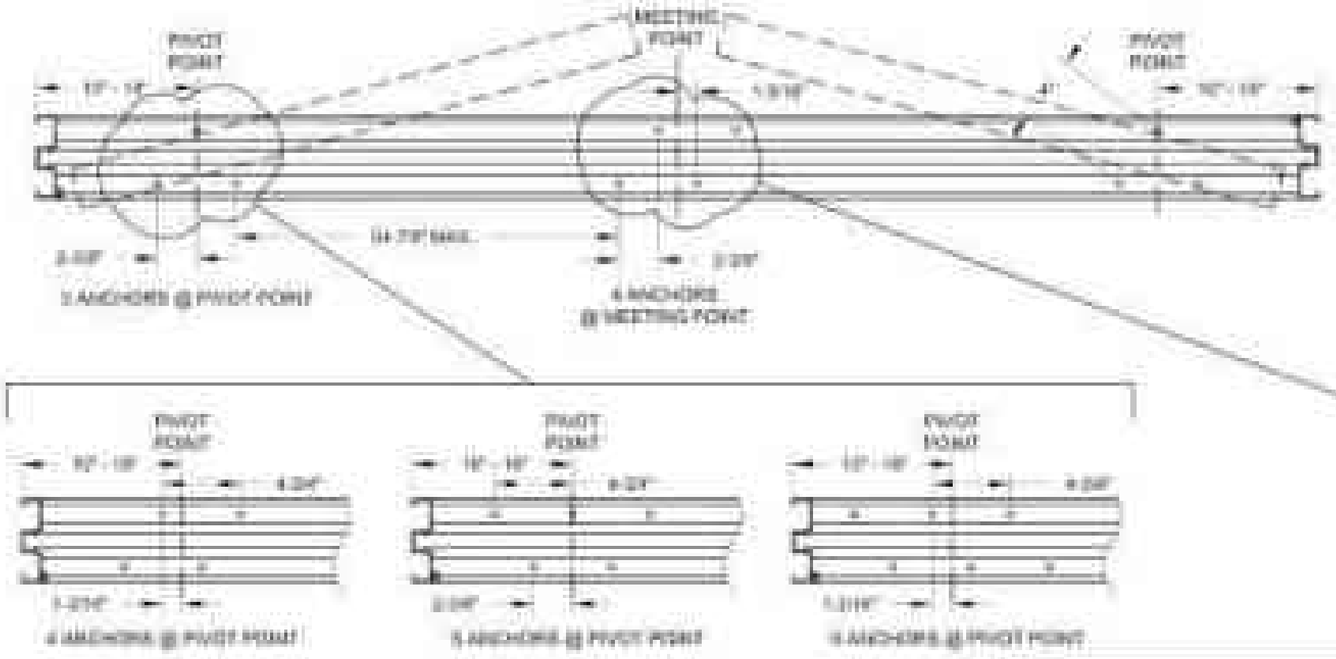


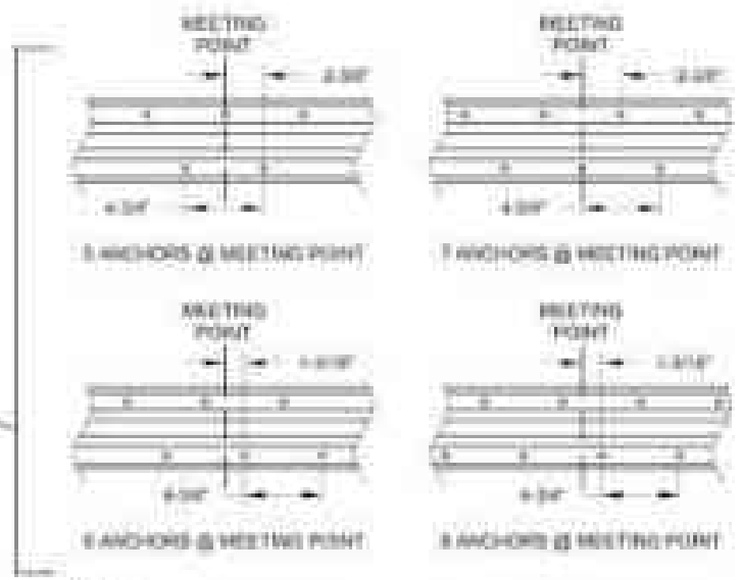
5 ANCHORS @ PIVOT POINT

NO.	DESCRIPTION	DATE
	NO CHANGES THIS SHEET	

PREPARED BY: A.L.LYNN MILLER WITH TECHNICAL ASSISTANCE FROM: A. VERSACE, C. HUTT DATE: 1-800-7663	
DESIGNED FOR:	
ALUMINUM PIVOT DOOR, OS & SLIM	
SINGLE PANEL ANCHOR LAYOUT	
PROJECT NO.	22-05
SHEET NO.	5

ANTHONY LYNN MILLER
LICENSE
No. 56705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A.L.LYNN MILLER, P.E.
P.E.#56705

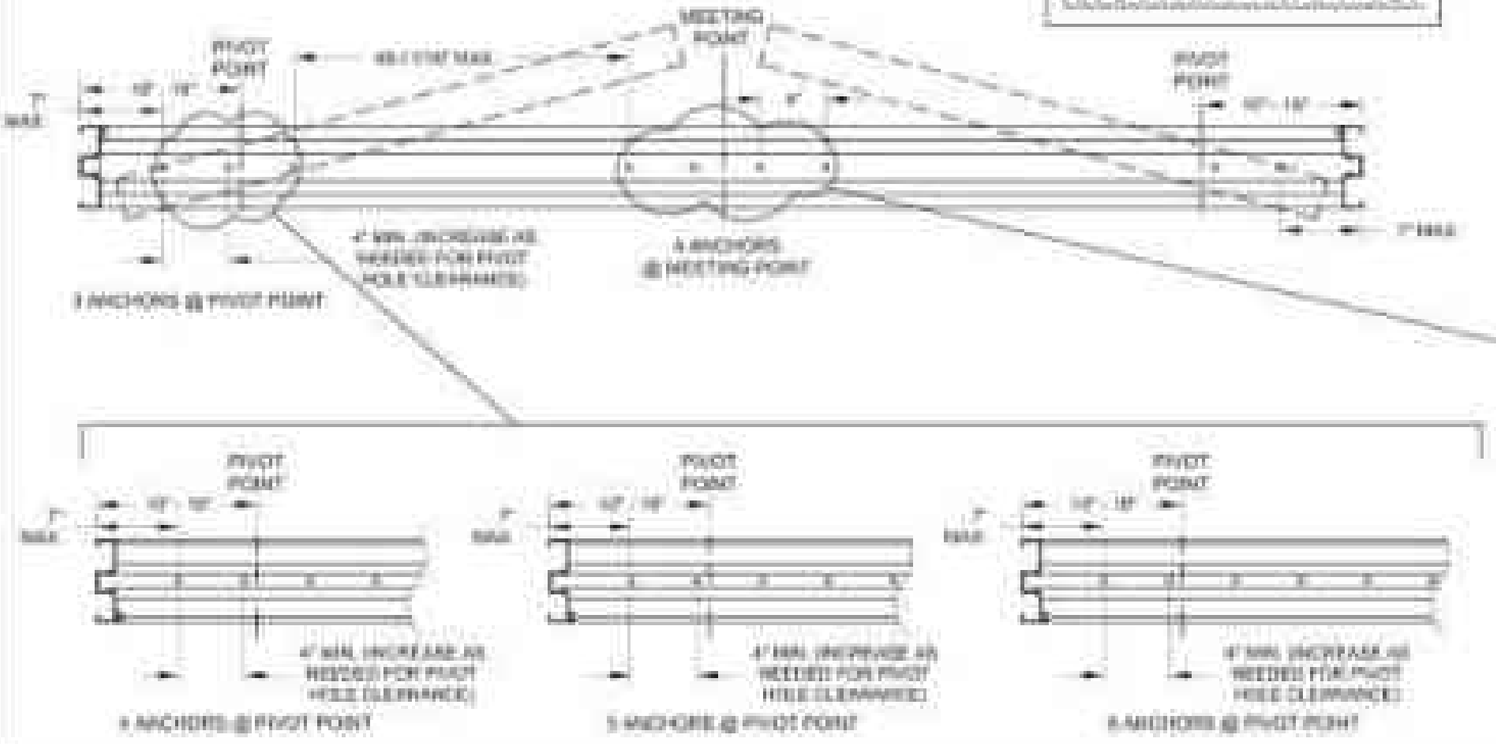


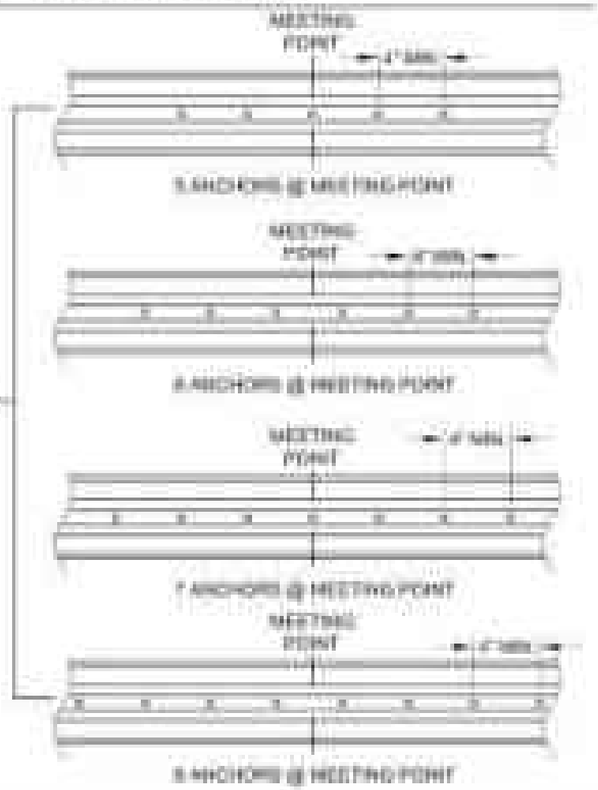


NOTES:
1) ANCHOR PATTERN MAY BE MIRRORED ABOUT THE MEETING POINT OF THE FRAME HEAD OR MEETING POINT OF EACH CLUSTER.
2) 7" END DISTANCES INCLUDE THE JAMB WIDTH AND IS MEASURED TO THE OUTER EDGE OF THE FRAME.
3) TYPICAL ANCHOR O.C. DIMENSIONS SHOWN.
4) PANELS MAY BE INSWING OR OUTSWING.

XX HEAD ANCHOR LAYOUT

XX SILL ANCHOR LAYOUT





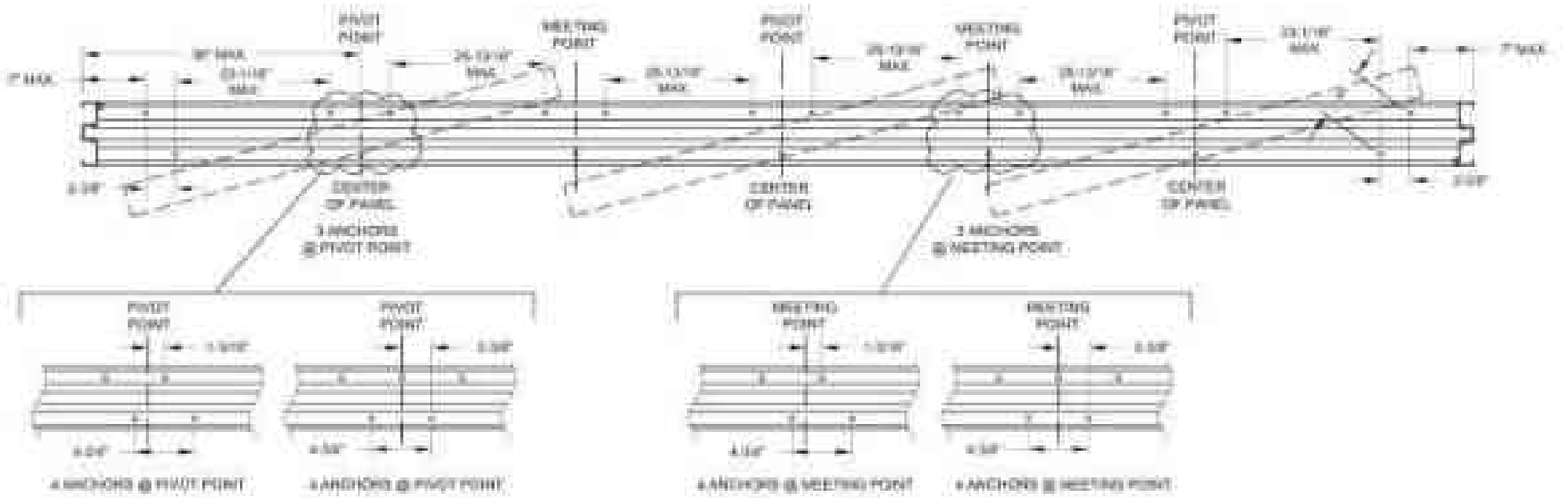
NO.	CHANGES THIS SHEET	INITIALS
1		

PREPARED BY: A. LYNN MILLER	JOB NO.	
WITH TECHNICAL ASSISTANCE FROM:	DATE:	
A. LYNN MILLER, P.E.	SCALE:	
DATE: 1-1-1900		

ENGINEERING CONSULTANTS	DESIGNED	
	DRAWN	
	CHECKED	

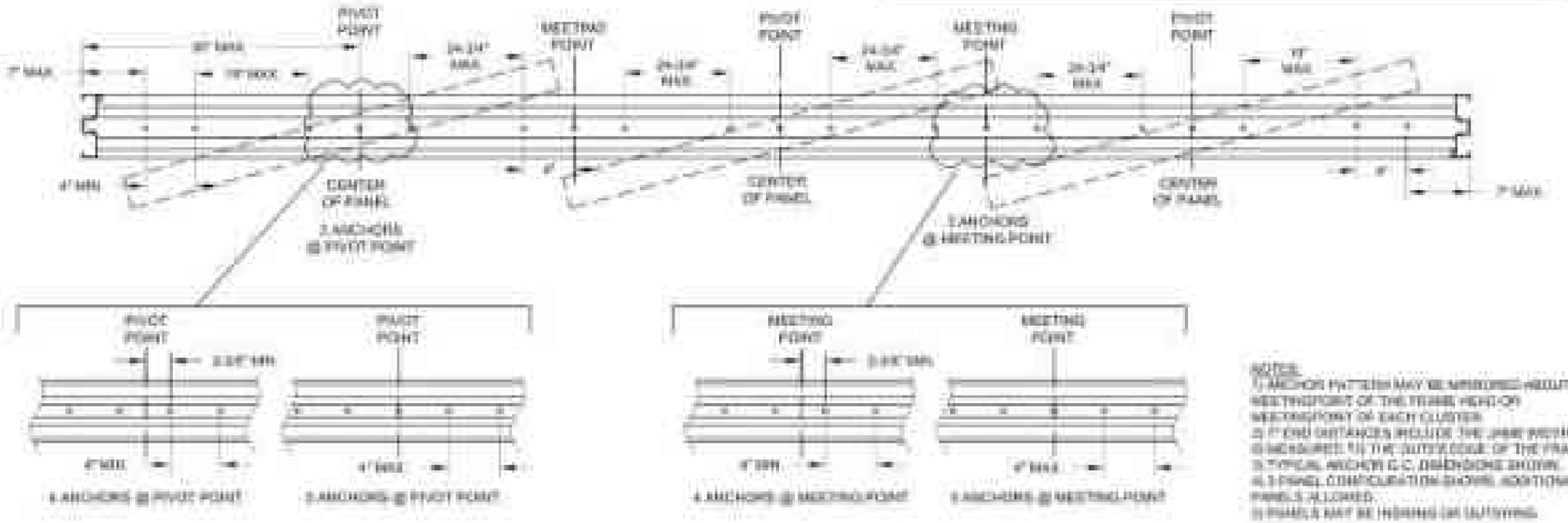
ALUMINUM PIVOT DOOR, OS & 15 H.M.	
XX ANCHOR LAYOUT	
DRAWING NO.	
SHEET NO.	2 OF 2

A. LYNN MILLER, P.E.
P.E. # 00000



3 OR MORE PANEL CONFIGURATION HEAD ANCHOR LAYOUT

3 OR MORE PANEL CONFIGURATION SILL ANCHOR LAYOUT



NOTES:
1) ANCHOR PATTERN MAY BE MIRRORED ABOUT THE MEETINGPOINT OF THE FRAME HEAD OR MEETINGPOINT OF EACH CLUSTER.
2) 7" END DISTANCES INCLUDE THE JAMB WIDTH AND IS MEASURED TO THE OUTSIDE EDGE OF THE FRAME.
3) TYPICAL ANCHOR C.C. DIMENSIONS SHOWN.
4) 3 PANEL CONFIGURATION SHOWN, ADDITIONAL PANELS ALLOWED.
5) PANELS MAY BE INSWING OR OUTSWING.

NO.	DATE	NO CHANGES THIS SHEET
1	08/31/21	

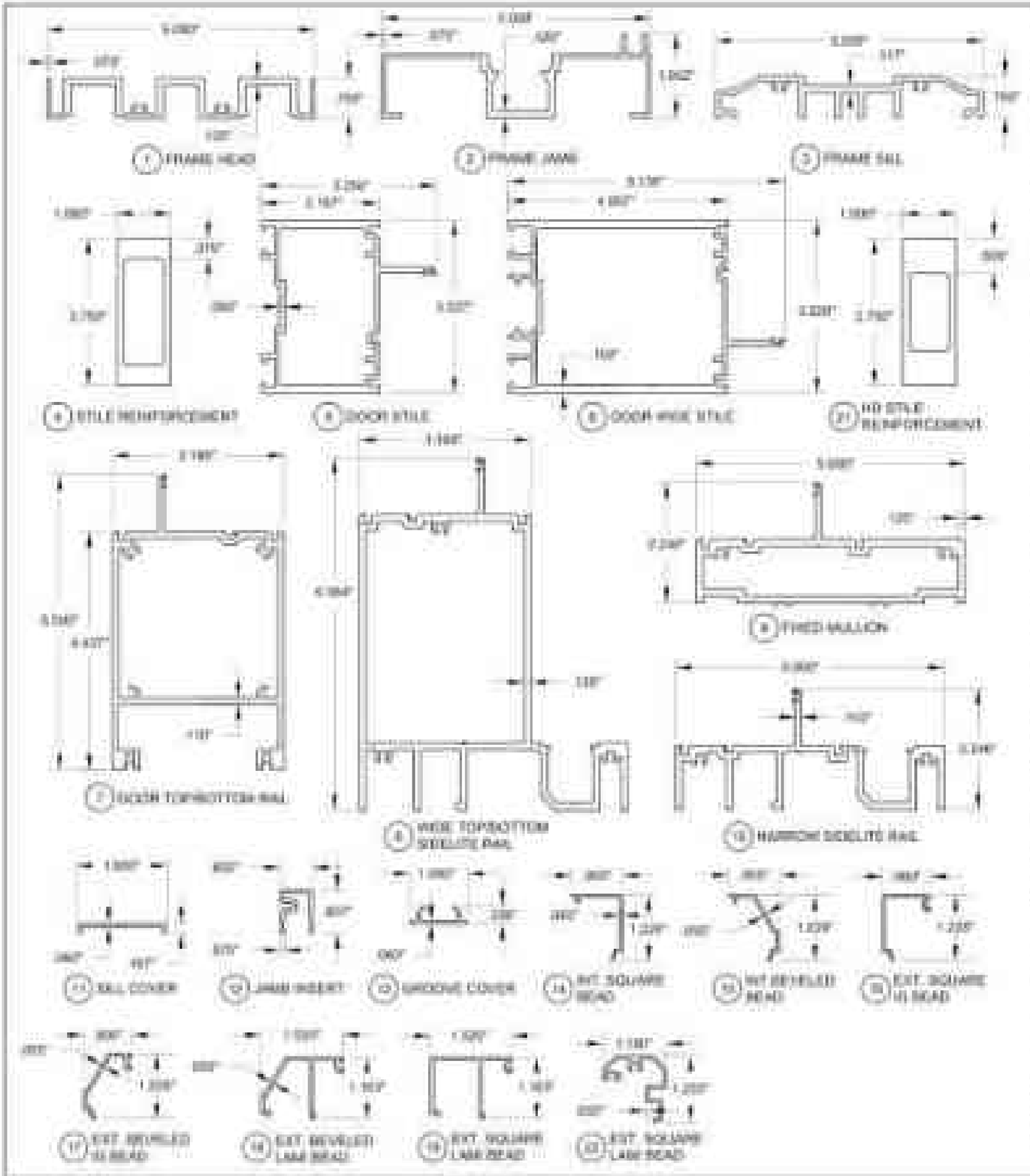
DRAWN BY:	JENS ROSCHKE	
CHECKED BY:		
DATE:	08/31/21	
SCALE:	NTS	
JOB NO.		
SHEET NO.	23 OF 33	

ALUMINUM PIVOT DOOR, CW & RW Lite

3+ PANELS ANCHOR LAYOUT

PVD0000





Item	Part #	Description	Hits
1	37037	Frame Head	6063-T6
2	37032	Frame Jamb	6063-T6
3	37039	Frame Sill	6063-T6
4	96837	Stile Reinforcement	5083-T6
5	37070	Door Stile	6063-T6
6	37035	Door Rail/ Stile	6063-T6
7	37038	Door Top/Bottom Rail	6063-T6
8	37037	Wide Top/Bottom Sidelite Rail	6063-T6
9	37046	Fixed Mullion	6063-T6
10	37045	Narrow Sidelite Rail	6063-T6
11	37034	Sill Cover	6463-T6
12	37076	Jamb Insert	6063-T6
13	37047	Groove Cover	6063-T6
14	37053	Interior Square Bead	6063-T6
15	37074	Interior Beveled Bead	6063-T6
16	37036	Extruded Square ID Bead	6063-T6
17	37075	Extruded Beveled ID Bead	6063-T6
18	37077	Beveled Lamb Bead	6063-T6
19	37042	Lamb Square Bead	6063-T6
20	37073	Impact	6063-T6
21	96838	HD Stile Reinforcement	5083-T6
22	37071	Astragal	6063-T6
23	37033	Bulb Gasket at Sill	
24	none	Finger Pile Slip	
25	none	Outer Weather	
26		Top Plate	6063
27		Bottom Plate	6063
28		Bottom Block	6063
29	37058/37059	Kraft Tite Weatherstrip	
30	none	Lock	
31		Keeper	6063
32		Strike	6063
33		Support Block	
34	37060/37061	Jamb Slot	
35		Top / Bottom Pivot	6063
36		#8 x 3/4" Flathead, Ph. Screw	6063
37		#10 x 3/4" Flathead, Ph. Screw	6063
38		#10 x 1" Flathead, Ph. Screw	6063
39	37064/37070	Gasket	Vinyl
40	37021	Sweeping Bulb Weatherstrip	Vinyl
41	37046	Small Glazing Leg Weatherstrip	Vinyl
42	37040	Large Glazing Leg Weatherstrip	Vinyl
43	37062/37063	1.375" Bulb Weatherstrip	Polypropylene
44	81045	2.375" C-Fin Bulb Weatherstrip	
45	81021	Astragal Bulb Weatherstrip	
46		Glass Setting Block	EPDM
47	none	Dow-PIC Dow 982 or 4000 Y100	Silicone
48		Backstopping Backup Rod 40-60 Hz	none
49		Optional Glass Spacer	none
50		Mortar #8 Spacer	none

1	10/20/21	CHANGED DESIGNATION	RC-1812FT
NO.	DATE	DESCRIPTION	

ALUMINUM PIVOT DOOR, OS & B or MULLION

EXTRUSIONS & BOM

DRAWN BY	CHECKED	APPROVED	SCALE
			3/8"=1'-0"

DRAWING NO.	REVISION	SHEET
23-23		2

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PROFESSIONAL ENGINEER
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