

FX 2100 ALUMINUM FIXED WINDOW

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 7TH EDITION (2020) FLORIDA BUILDING CODE/ 8TH EDITION (2023) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

GLASS CAPACITY BASED ON ASTM E1300-09 (3 SEC. GUSTS).

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

METAL STRUCTURE /WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

ANCHORS SHALL BE LISTED, SPACED AS SHOWN IN DETAILS, ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.

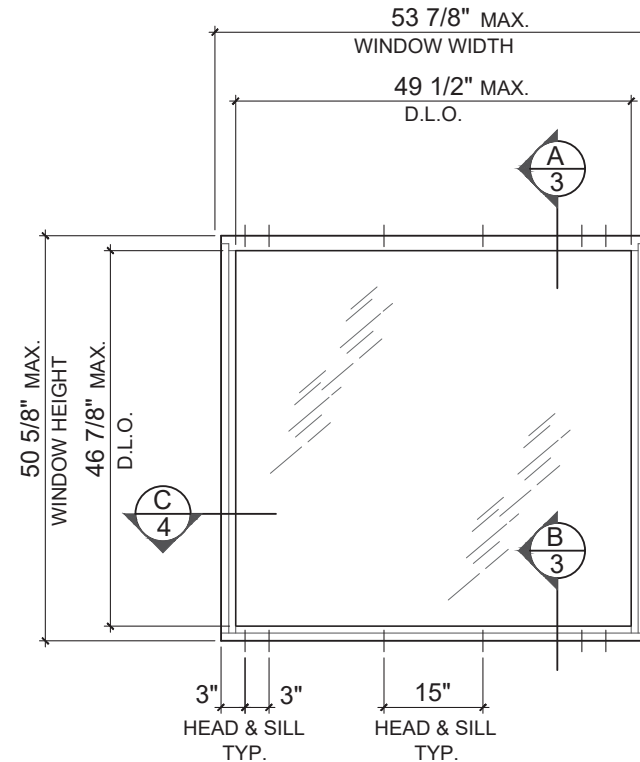
MATERIAL:
ALL ALUMINUM EXTRUSION TO BE 6063 T6 ALLOY.

SEALANT:
- ALL FRAME PERIMETER CAULKING USING DOWSIL 995
- JOINT AND SEAM TO BE SEALED WITH DOWSIL 995

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 7TH EDITION (2020) FLORIDA BUILDING CODE/ 8TH EDITION (2023) FLORIDA BUILDING CODE.

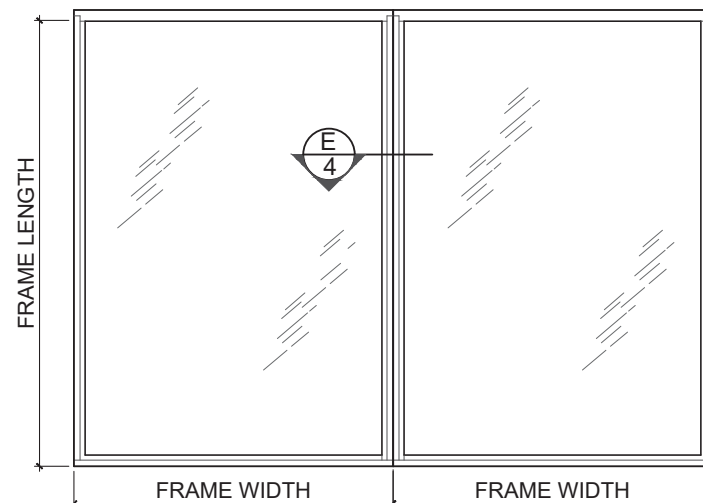
ULTIMATE DESIGN LOAD OBTAINED FROM ASCE 7-16/ ASCE 7-22, MULTIPLY BY 0.6 SHALL BE LESS THAN OR EQUAL TO DESIGN LOAD IN THIS DOCUMENT.

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

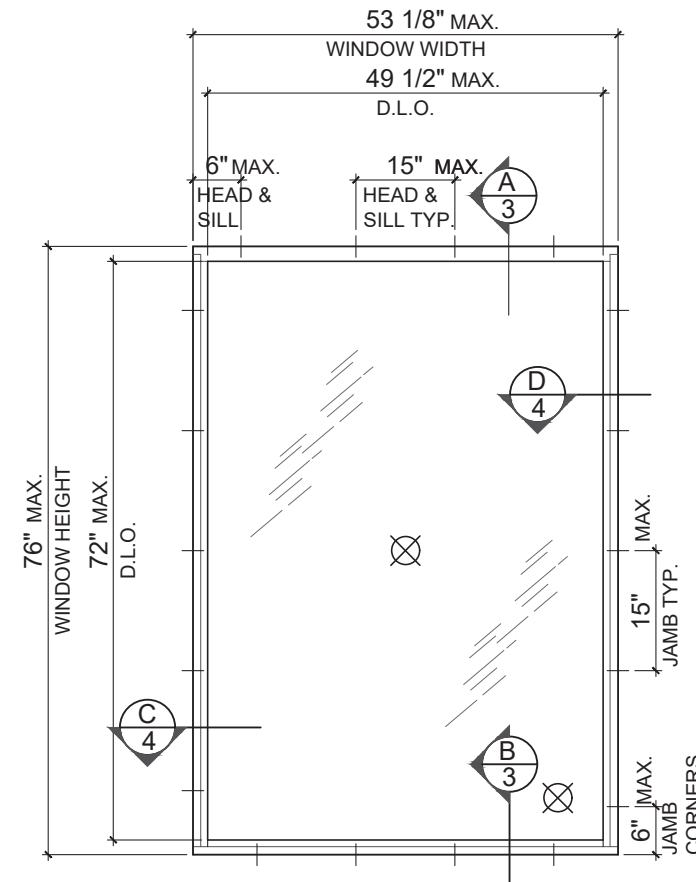


TYPICAL ELEVATION (WITHOUT JAMB ANCHORS)

FIXED WINDOW WITHOUT JAMB ANCHORS
FOR WINDOW SIZE 53 1/8" X 50 5/8" OR SMALLER WITHOUT JAMB ANCHOR MAX. DESIGN LOAD ±70 PSF.



D.L.O. WIDTH = WINDOW WIDTH - 3.690"
D.L.O. LENGTH = WINDOW LENGTH - 3.690"



TYPICAL ELEVATION (WITH JAMB ANCHORS)

FIXED WINDOW WITH JAMB ANCHORS
FOR DESIGN LOAD SEE CHART ON SHEET 2 OF 5.

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF F.X./F.X. OR FIXED WINDOW WITH OTHER WINDOW TYPES IN MODULES OF TWO OR MORE WINDOWS USING FLORIDA APPROVED MULLIONS IN BETWEEN.
LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL WILL APPLY TO ENTIRE SYSTEM.

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

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

YIPING WANG, P.E.
FLORIDA REGISTRATION NO. 55083
CA 15 28677

September 28th, 2023

NO.	DATE	DESCRIPTION
RE	09.23.2023	PBC 2023

MCY ENGINEERING, INC.
GLAZING CONSULTANTS

12781 MIRAMAR PKWY. STE. 301
MIRAMAR, FL 33027 P: 305.271.0117
www.MCYEngineering.com mcy@mcyengineering.com

SERIES FX2100 ALUMINUM FIXED WINDOW - LMI & SWI

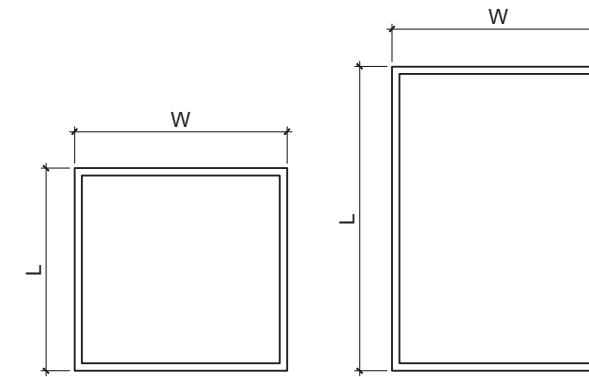
EMC WINDOWS AND DOORS, LLC.
455 E. 10TH AVE.
HIALEAH, FL 33010
P: (305) 283 - 6280 EMCWindowsDoors@gmail.com

FL #17583
DATE 09.23.2023
SCALE AS NOTED
DRAWN James
PROJECT 15-023
DRAWING NO. AD15-13
1 OF 5

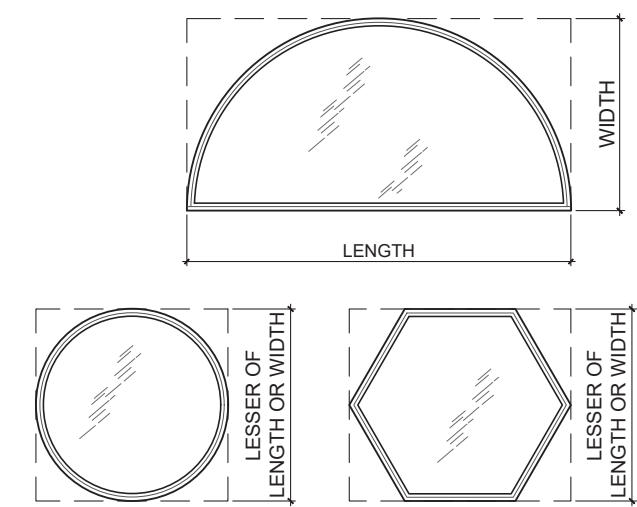
FIXED WINDOW WITH JAMB ANCHORS

DESIGN LOAD CAPACITY - PSF

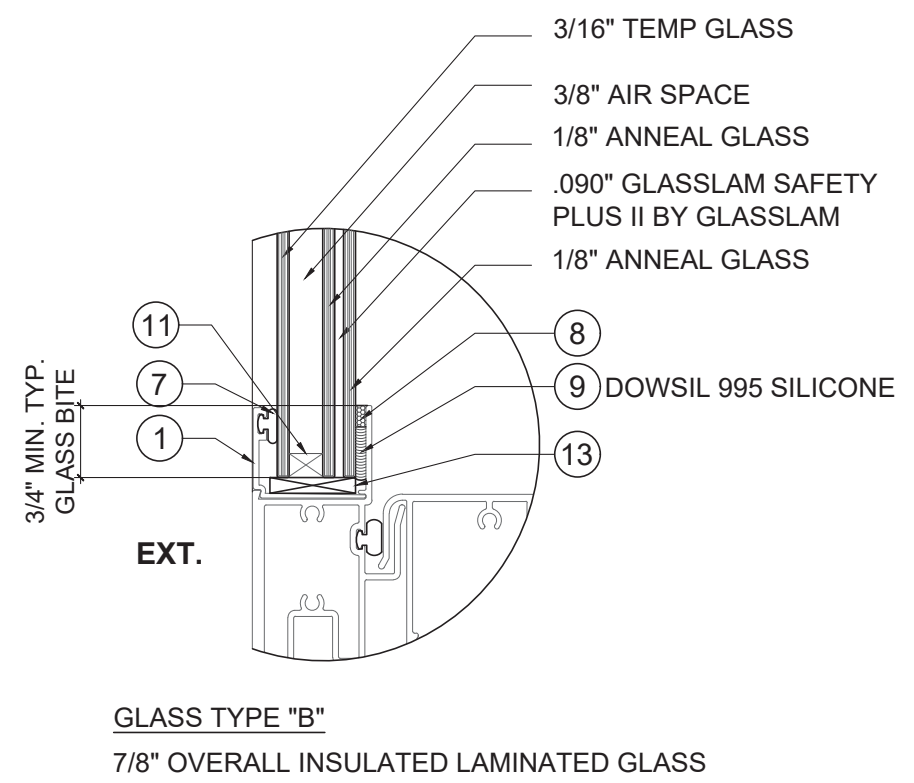
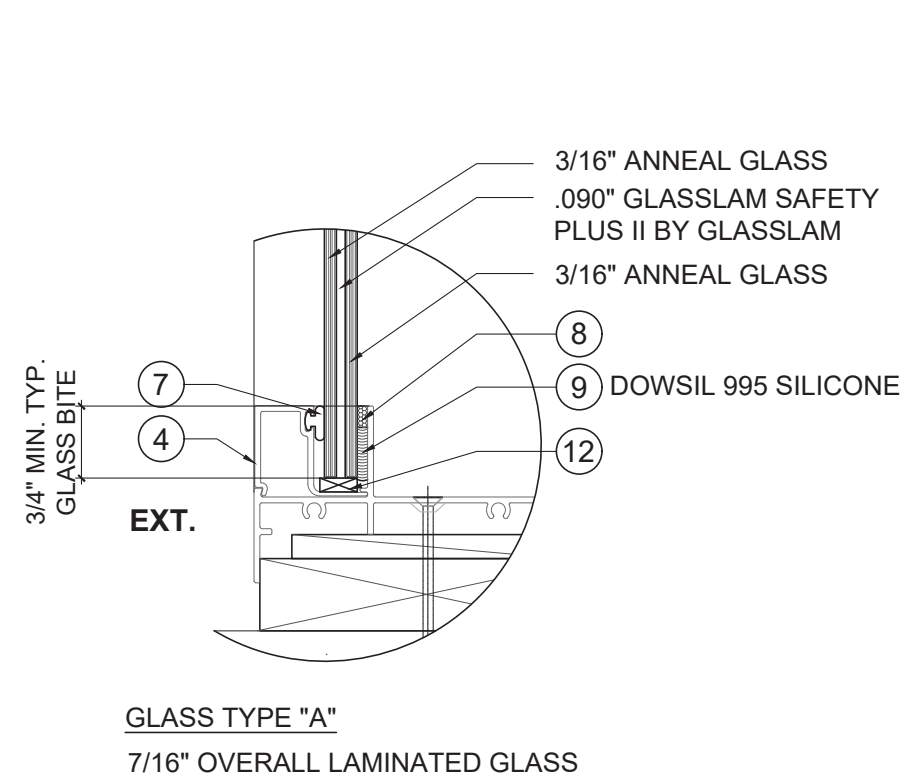
WINDOW DIMS.		GLASS TYPE "A"		GLASS TYPE "B"	
WIDTH (W)	LENGTH (L)	EXT. (+)	INT. (-)	EXT. (+)	INT. (-)
26"	19 1/8"	90.00	100.00	70.00	85.00
	26 1/2"	90.00	100.00	70.00	85.00
	37"	90.00	100.00	70.00	85.00
	53 1/8"	90.00	100.00	70.00	85.00
38-3/8"	19 1/8"	90.00	100.00	70.00	85.00
	26 1/2"	90.00	100.00	70.00	85.00
	37"	90.00	100.00	70.00	85.00
	53 1/8"	90.00	100.00	70.00	85.00
50-5/8"	19 1/8"	90.00	100.00	70.00	85.00
	26 1/2"	90.00	100.00	70.00	85.00
	37"	90.00	100.00	70.00	85.00
	53 1/8"	73.50	89.20	70.00	85.00
63"	19 1/8"	90.00	100.00	70.00	85.00
	26 1/2"	90.00	100.00	70.00	85.00
	37"	90.00	100.00	70.00	85.00
	53 1/8"	70.00	85.00	70.00	71.60
76"	19 1/8"	90.00	100.00	70.00	85.00
	26 1/2"	90.00	100.00	70.00	85.00
	37"	90.00	98.60	70.00	73.00
	53 1/8"	70.00	75.10	60.20	60.20



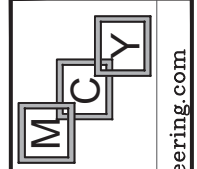
NOTE:
WIDTH AND LENGTH DIMENSIONS CAN BE ORIENTED VERTICALLY OR HORIZONTALLY AS SHOWN ABOVE



ALLOWABLE LOADS FOR ALTERNATE SHAPES AS SHOWN ABOVE OR SIMILAR CAN BE VERIFIED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN SQUARE OR RECTANGLE AS SHOWN IN DOTTED LINES AND OBTAINING ALLOWABLE LOADS FROM CHART.



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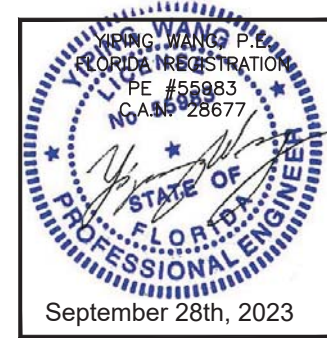
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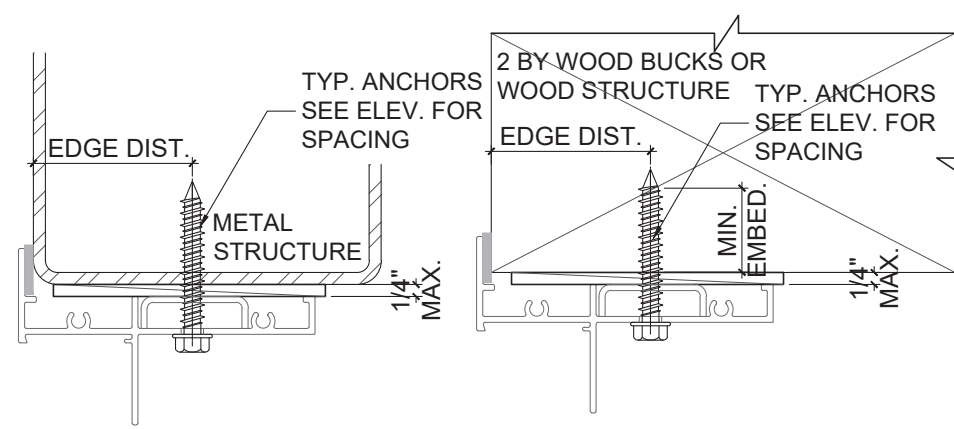
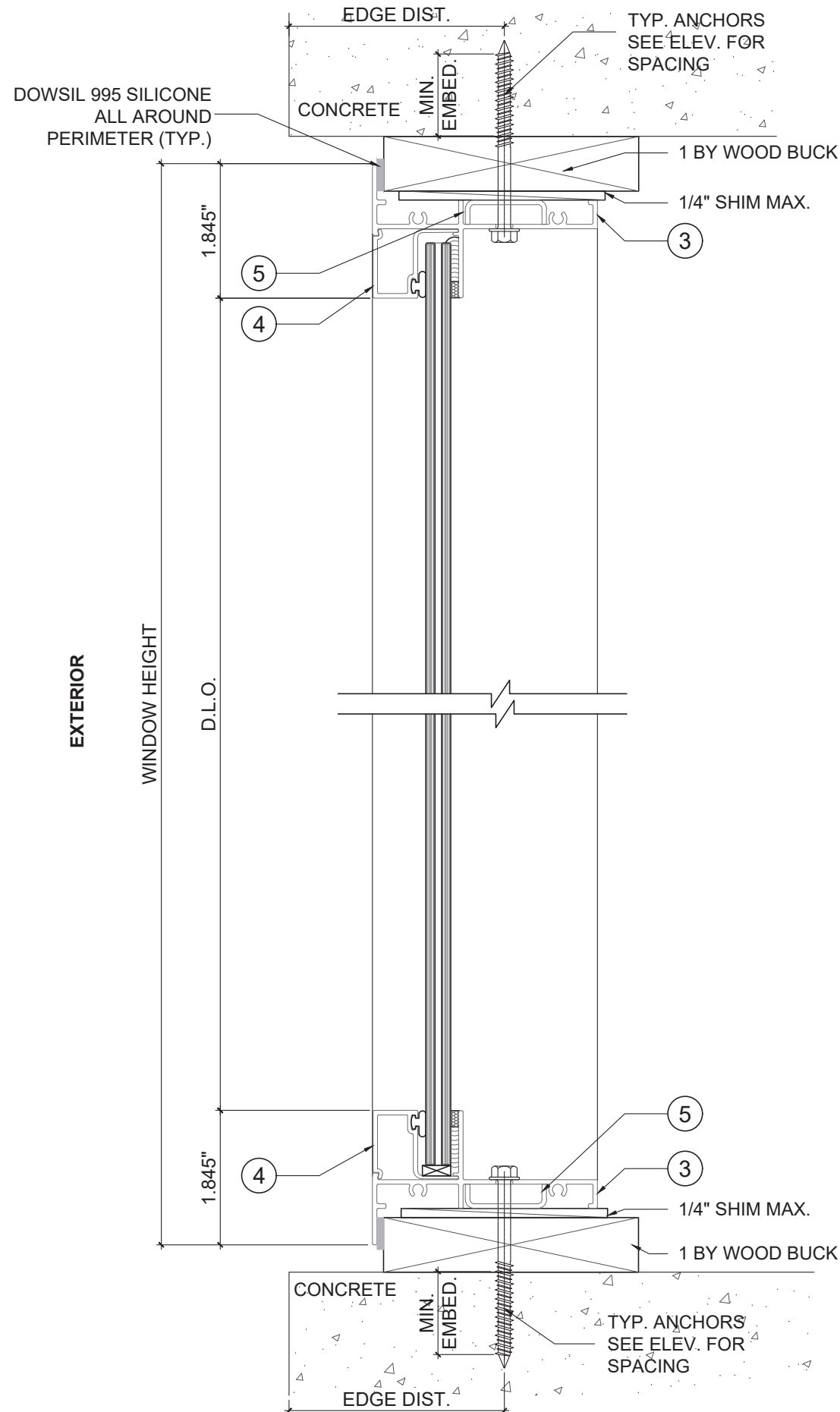
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PROJECT	15-023

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AD15-13



A
3

B
3



TYPICAL ANCHORS: (SEE ELEV. FOR SPACING)

TYPE 'A' - **1/4" ULTRACON+ BY 'DEWALT'** (Fu = 164 KSI, Fy = 148 KSI)

- INTO 2BY WOOD BUCKS OR WOOD STRUCTURE
1-1/2" MIN. PENETRATION INTO WOOD
- THRU 1BY BUCKS INTO CONC. OR MASONRY
1-1/4" MIN. EMBED INTO CONC. OR MASONRY
- DIRECTLY INTO CONC. OR MASONRY
1-1/4" MIN. EMBED INTO CONC. OR MASONRY

TYPE 'B' - **1/4" TEKS OR SELFDRILLING SCREWS (GRADE 5 CRS)**

- INTO METAL STRUCTURES

TYPE 'C' - **#14 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)**

- INTO FLORIDA STATE APPROVED MULLIONS

- STEEL : 16 GA THK MIN (Fy = 36KSI MIN.)
- ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)
- (3) THREADS MIN. PENETRATION BEYOND METAL SUBSTRATE

MASONRY

- ASTM C90 GROUT FILLED CONCRETE BLOCK
- ASTM C90 HOLLOW CONCRETE BLOCK

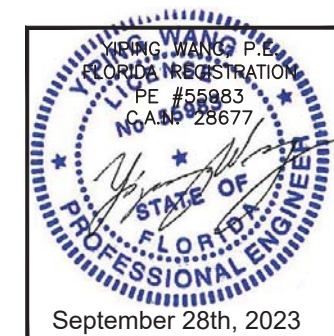
CONCRETE

- f_c = 3,000 PSI MIN.

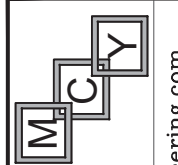
ANCHOR EDGE DISTANCES

- INTO CONCRETE AND MASONRY = 2-1/2" MIN.
- INTO WOOD STRUCTURE = 1" MIN.
- INTO METAL STRUCTURE = 3/4" MIN.

ALL ANCHOR OPTIONS CAN APPLY TO HEAD, SILL AND JAMB ANCHORS.



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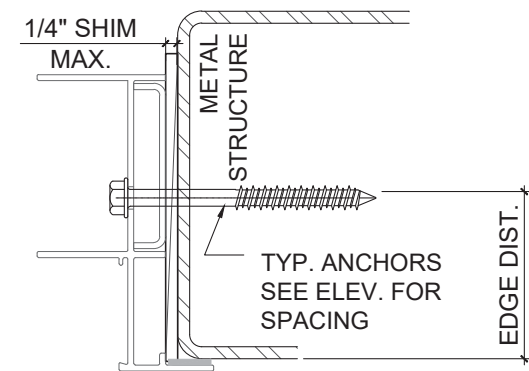
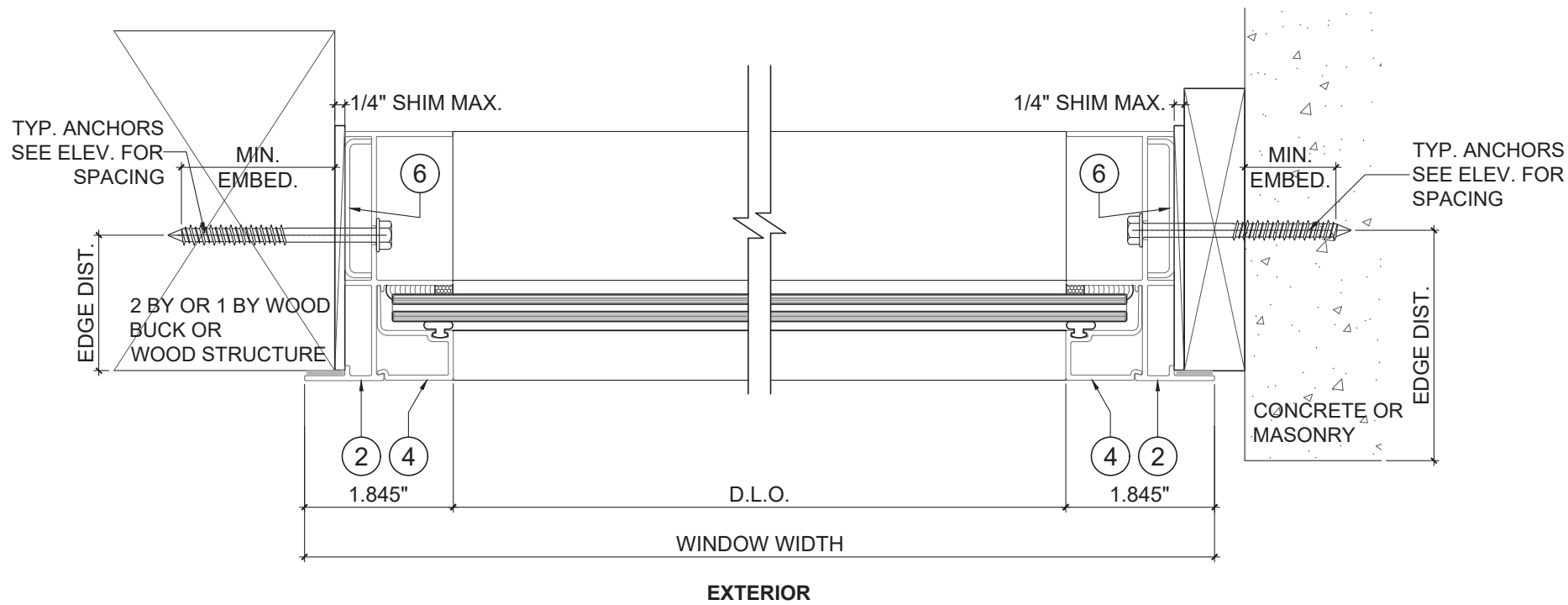
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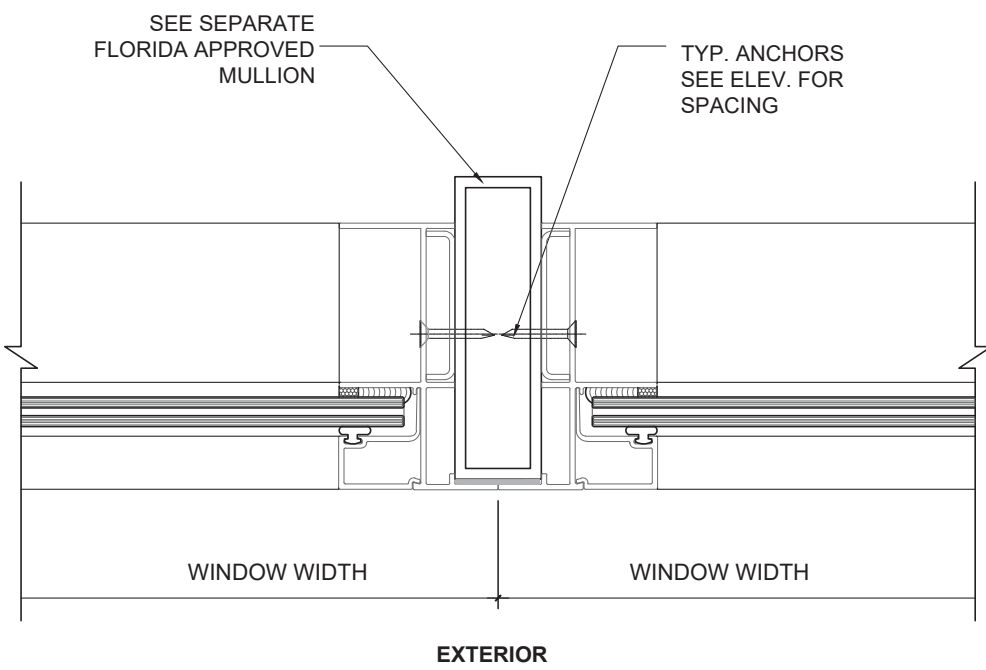
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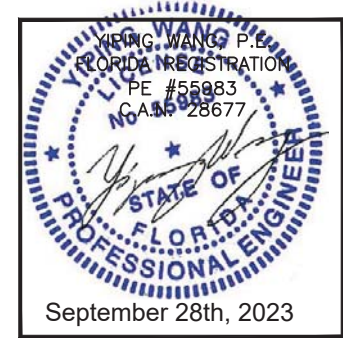


C
4

D
4



E
4



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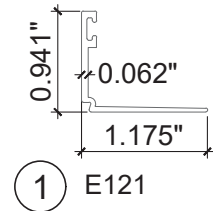
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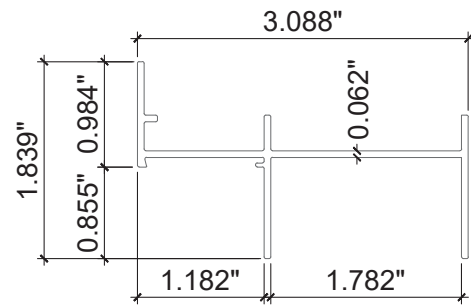
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BILL OF MATERIALS

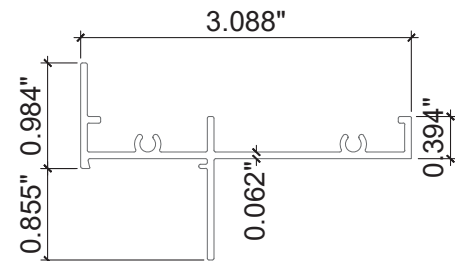
ITEM #	QTY.	PROFILE	DESCRIPTION	MATERIAL	MANUFACTURER/REMARKS
1	AS REQD.	E121	ALUM. INSULATED GLAZING CHANNEL	ALUM. 6063-T6	EMC WINDOWS & DOORS, LLC.
2	2	E102	FRAME JAMB, PC WHITE	ALUM. 6063-T6	EMC WINDOWS & DOORS, LLC.
3	2	E103	FRAME HEAD/ SILL, PCWHITE	ALUM. 6063-T6	EMC WINDOWS & DOORS, LLC.
4	4	E110	GLAZING CHANNEL, PC WHITE	ALUM. 6063-T6	EMC WINDOWS & DOORS, LLC.
5	AS REQD.	E118	ANCHOR CLIP 16 GA	ALUM. 6063-T6	EMC WINDOWS & DOORS, LLC.
6	AS REQD.	E119	ANCHOR CLIP 16 GA	ALUM. 6063-T6	EMC WINDOWS & DOORS, LLC.
7	AS REQD.	V0021	E202 VINYL BULB, GLAZING STOP	VINYL	FENESTRATION GLASS PRODUCTS
8	AS REQD.	W0019	.125 X .25 GLAZNG TAPE, 2 SIDED	TAPE	FRANK LOWED
9	AS REQD.	SEAL01-1	DOWSIL 995 BACK SILICONE	SILICONE	DOWSIL
10	AS REQD.	# 8 X 1	FRAME ASSEMBLY SCREWS	STEEL	SPH SHEET METAL SCREW
11	AS REQD.	-	CRL GRAY EDGETECH SUPER SPACER - GLASS SPACER	SILICONE FOAM	C.R. LAURENCE CO., INC.
12	1/ QUARTER POINT	-	1/8" X 3/8" X 2" SETTING BLOCKS, DUROMETER 70 ± 5	EPDM	-
13	1/ QUARTER POINT	-	1/8" X 7/8" X 2" SETTING BLOCKS, DUROMETER 70 ± 5	EPDM	-



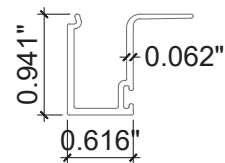
1 E121



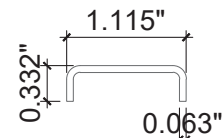
2 E102 FRAME JAMB



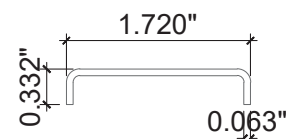
3 E103 FRAME HEAD/SILL



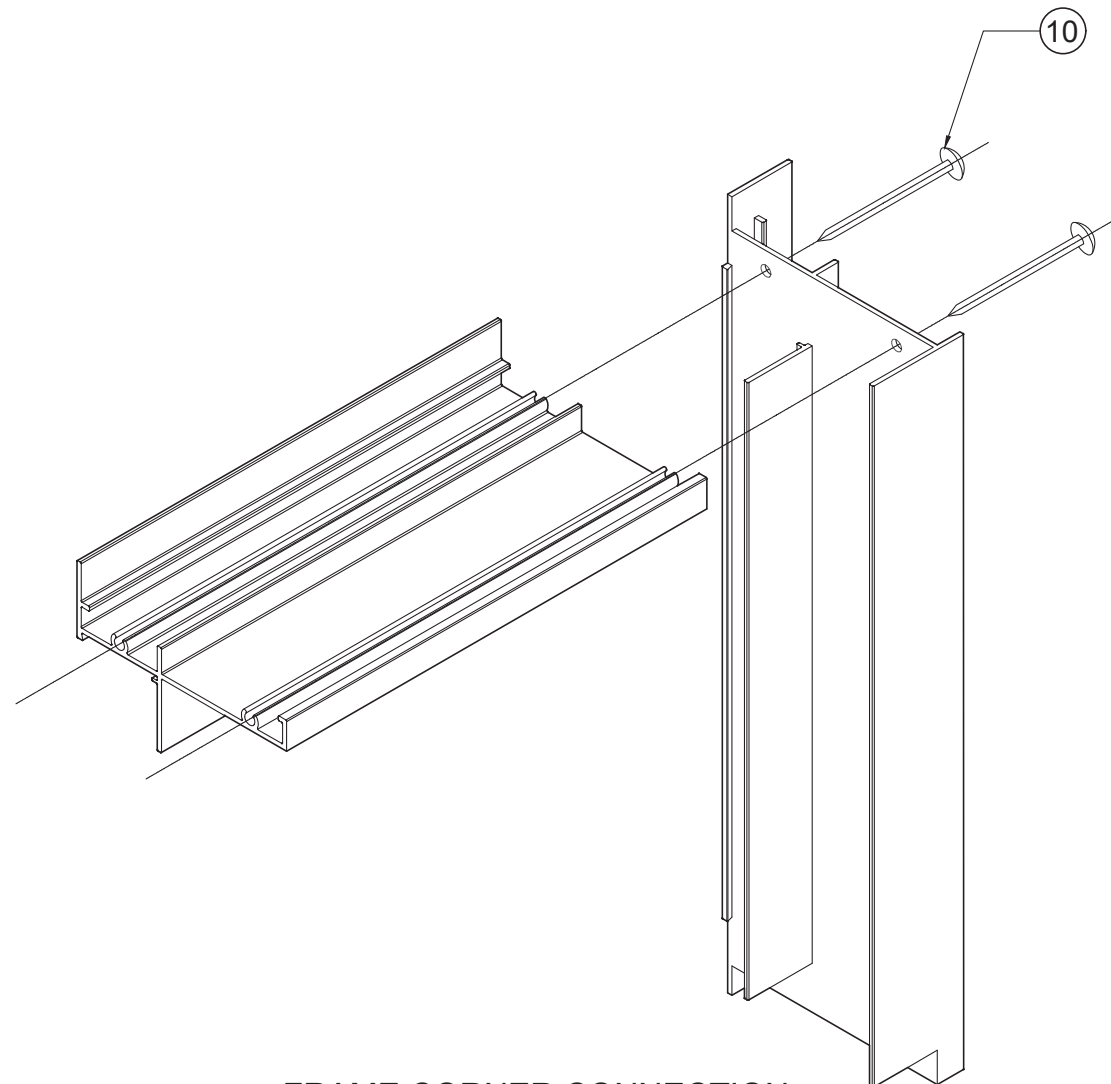
4 E110 GLAZING CHANNEL



5 E118 ANCHOR CLIP

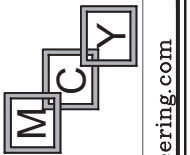


6 E119 ANCHOR CLIP



FRAME CORNER CONNECTION

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