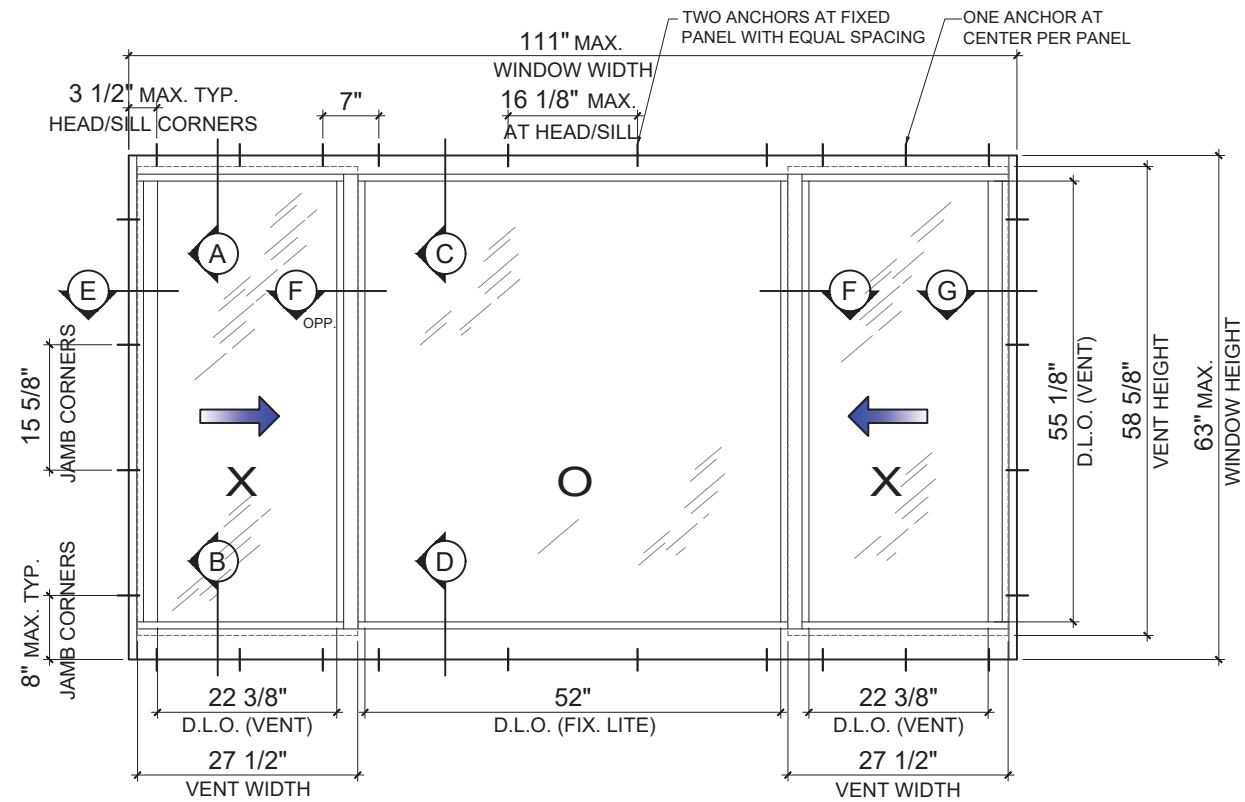
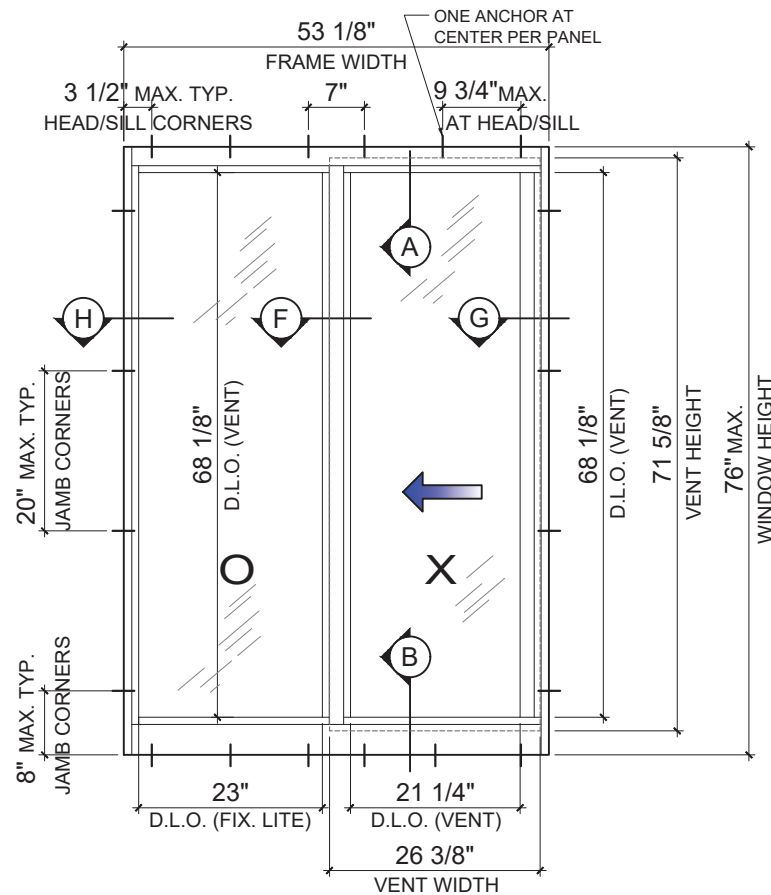


TYPICAL ELEVATIONS
TESTED XOX (1/3, 1/3, 1/3)



TYPICAL ELEVATIONS
TESTED XOX (1/4, 1/2, 1/4)



TYPICAL ELEVATIONS
TESTED (OX,XO)

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

HR 2100 ALUMINUM HORIZONTAL ROLLING WINDOW

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

HORIZONTAL SLIDING WINDOW RATED FOR LARGE AND SMALL MISSILE IMPACT AND DOES NOT REQUIRE SHUTTERS.

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

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER CHARTS SHOWN ON SHEETS S2.

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.

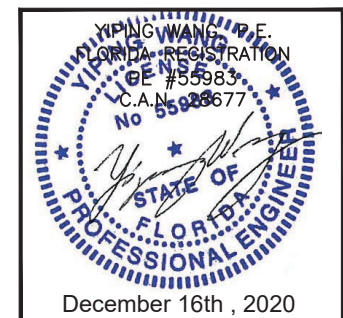
ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.

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

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 SECTION AS APPLICABLE.

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF HR-HR OR HORIZONTAL ROLLING 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

- 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.



NO.	DATE	DESCRIPTION
01	12.14.20	2020 FBC

MCY ENGINEERING, INC.
GLAZING CONSULTANTS

12781 MIRAMAR PKWY. STE. 301
MIRAMAR, FL. 33027

P: 305.271.0117
www.MCYEngineering.com
MCY.Engineering@Att.net

SERIES HR2100 ALUMINUM HORIZONTAL SLIDING WINDOW - LMI & SM

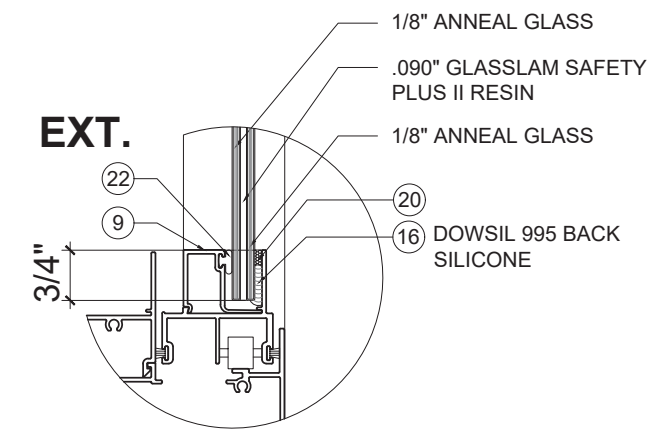
EMC WINDOWS AND DOORS, LLC.
455 E. 10TH AVE.
HIALEAH, FL. 33010
P: (305) 283 - 6280 EMCWindowsDoors@gmail.com

FL #17595
DATE 03-06-15
SCALE AS NOTED
DRAWN A.R.
PROJECT 15-024
DRAWING NO. AD15-14
SHEET S1

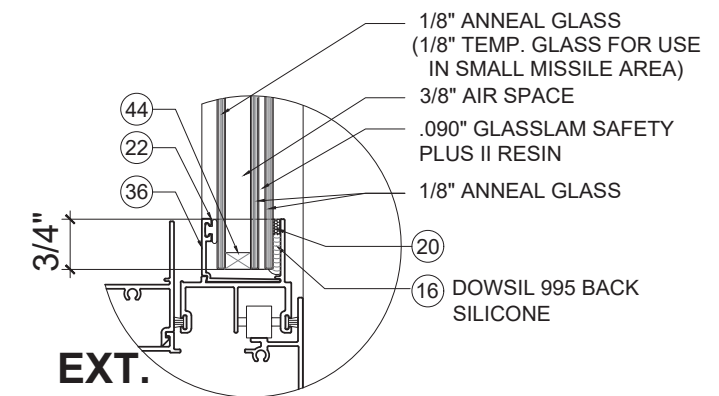
DESIGN LOAD CAPACITY - PSF (XO & OX)											
GLASS TYPE A						GLASS TYPE B					
WIDTH \ HEIGHT	26 1/2"	37"	53 1/8"	63"	74"	WIDTH \ HEIGHT	26 1/2"	37"	53 1/8"	63"	74"
26"	+90 -100	+90 -100	+90 -100	+90 -100	+90 -100	26"	+65 -75	+65 -75	+65 -75	+65 -75	+65 -75
38-3/8"	+90 -100	+90 -100	+90 -100	+90 -100	+90 -100	38-3/8"	+65 -75	+65 -75	+65 -75	+65 -75	+65 -75
50-5/8"	+90 -100	+90 -100	+90 -100	+90 -100	+90 -92.8	50-5/8"	+65 -75	+65 -75	+65 -75	+65 -75	+65 -75
63"	+65 -75	+65 -75	+65 -75	+65 -75	+65 -71.5	63"	+65 -75	+65 -75	+65 -75	+65 -75	+65 -73.5
74 1/4"	+65 -75	+65 -75	+65 -75			74 1/4"	+65 -75	+65 -75	+65 -75		
76"	+65 -75	+65 -75	+65 -75			76"	+65 -75	+65 -75	+65 -75		

DESIGN LOAD CAPACITY - PSF (XOX 1/3-1/3-1/3)											
GLASS TYPE "A"						GLASS TYPE "B"					
WIDTH \ HEIGHT	53 1/8"	63"	74"	94 1/2"	111"	WIDTH \ HEIGHT	53 1/8"	63"	74"	94 1/2"	111"
26"	+90 -100	+90 -100	+90 -100	+90 -100	+90 -100	26"	+90 -100	+90 -100	+90 -100	+65 -75	+65 -75
38-3/8"	+90 -100	+90 -100	+90 -100	+90 -100	+90 -100	38-3/8"	+90 -100	+90 -100	+90 -100	+65 -75	+65 -75
50-5/8"	+90 -100	+90 -100	+90 -100	+90 -100	+90 -100	50-5/8"	+90 -100	+90 -100	+90 -100	+65 -75	+65 -75
63"	+65 -75	+65 -75	+65 -75	+65 -75	+65 -75	63"	+65 -75	+65 -75	+65 -75	+65 -75	+65 -74.1

DESIGN LOAD CAPACITY - PSF (XOX 1/4-1/2-1/4)											
GLASS TYPE "A"						GLASS TYPE "B"					
WIDTH \ HEIGHT	53 1/8"	63"	74"	94 1/2"	111"	WIDTH \ HEIGHT	53 1/8"	63"	74"	94 1/2"	111"
26"	+90 -100	+90 -100	+90 -100	+90 -100	+90 -100	26"	+65 -75	+65 -75	+65 -75	+65 -75	+65 -75
38-3/8"	+90 -100	+90 -100	+90 -100	+90 -100	+85.5 -85.5	38-3/8"	+65 -75	+65 -75	+65 -75	+65 -75	+65 -75
50-5/8"	+90 -100	+90 -100	+90 -100	+90 -100	+69.7 -69.7	50-5/8"	+63.6 -75	+63.6 -75	+63.6 -75	+63.6 -75	+65 -71.8
63"	+65 -75	+65 -75	+65 -75	+65 -75	+56 -56	63"	+63.6 -63.6	+63.6 -63.6	+63.6 -63.6	+63.6 -63.6	+57.7 -57.7

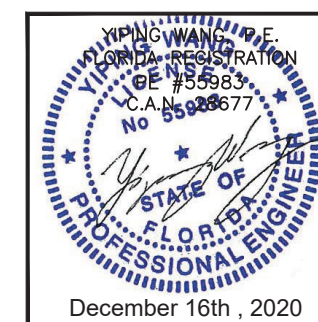


GLASS TYPE "A"
5/16" OVERALL LAMINATED GLASS



GLASS TYPE "B"
13/16" OVERALL INSULATED LAMINATED GLASS

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



NO.	DATE	DESCRIPTION
01	12.14.20	2020 PBC

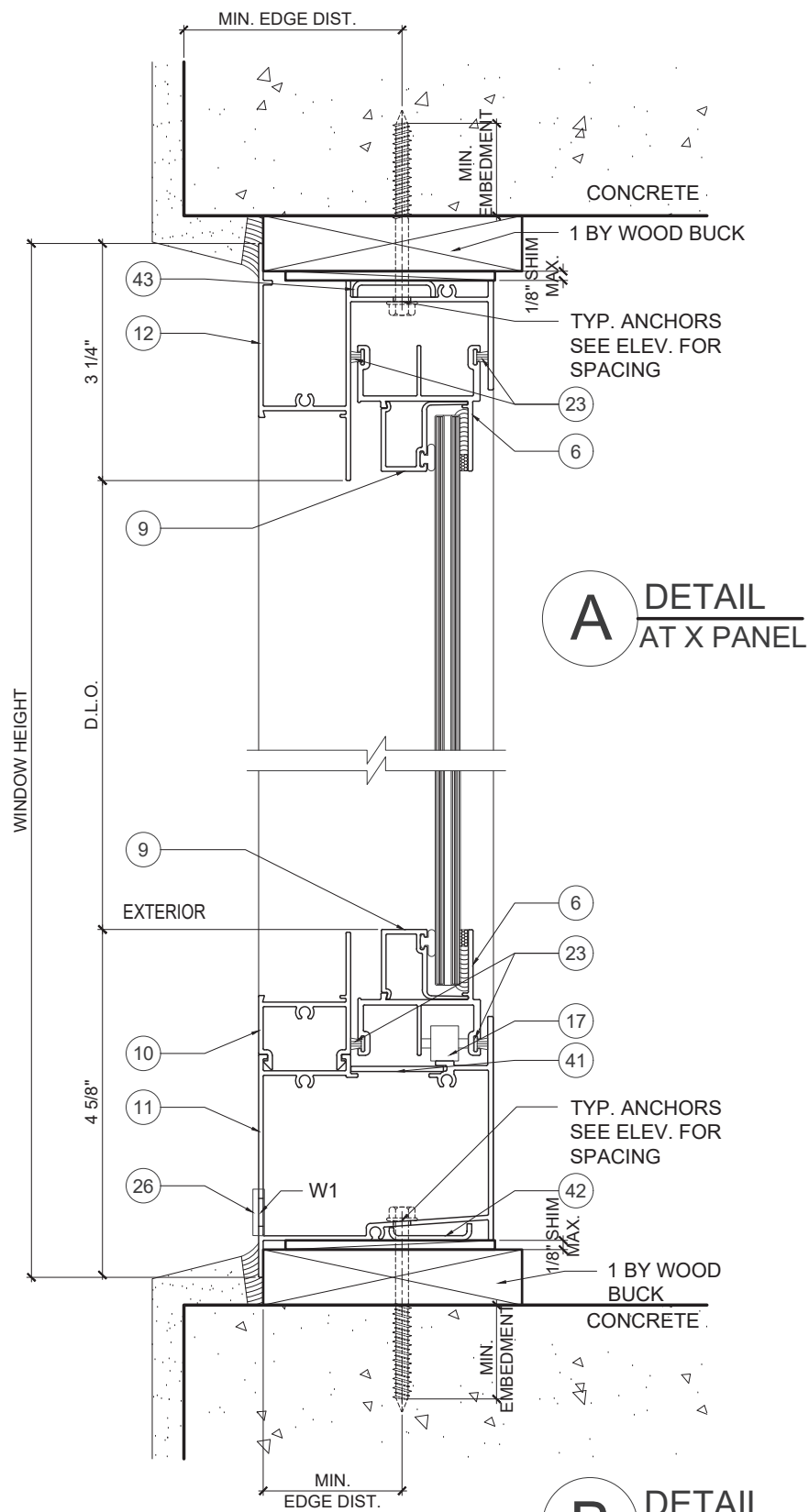
MCY ENGINEERING, INC.
GLAZING CONSULTANTS

12781 MIRAMAR PKWY. STE. 301
MIRAMAR, FL. 33027
P: 305.271.0117
www.MCYEngineering.com
MCY.Engineering@Att.net

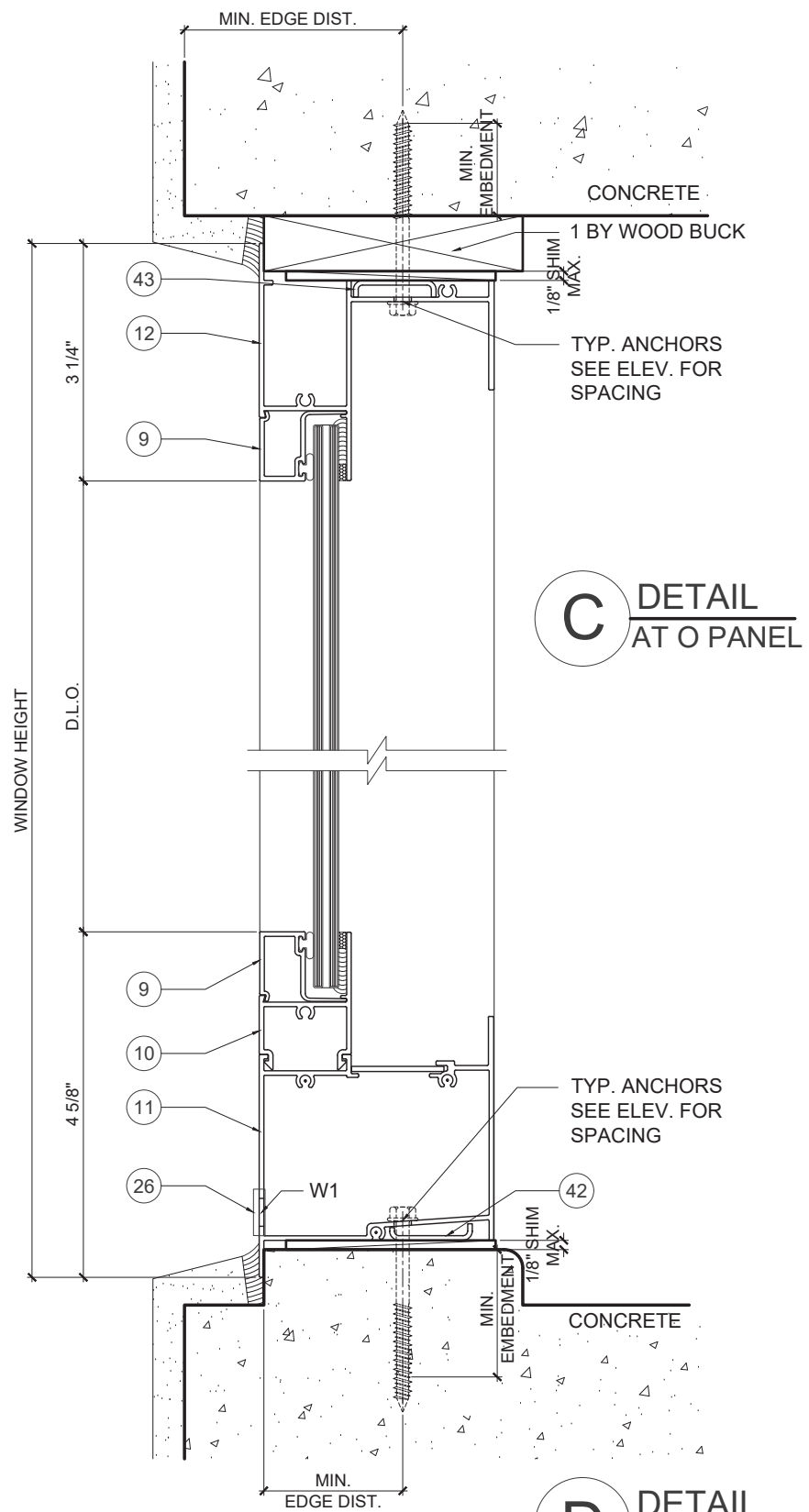
SERIES HR2100 ALUMINUM HORIZONTAL SLIDING WINDOW - LMI & SM

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

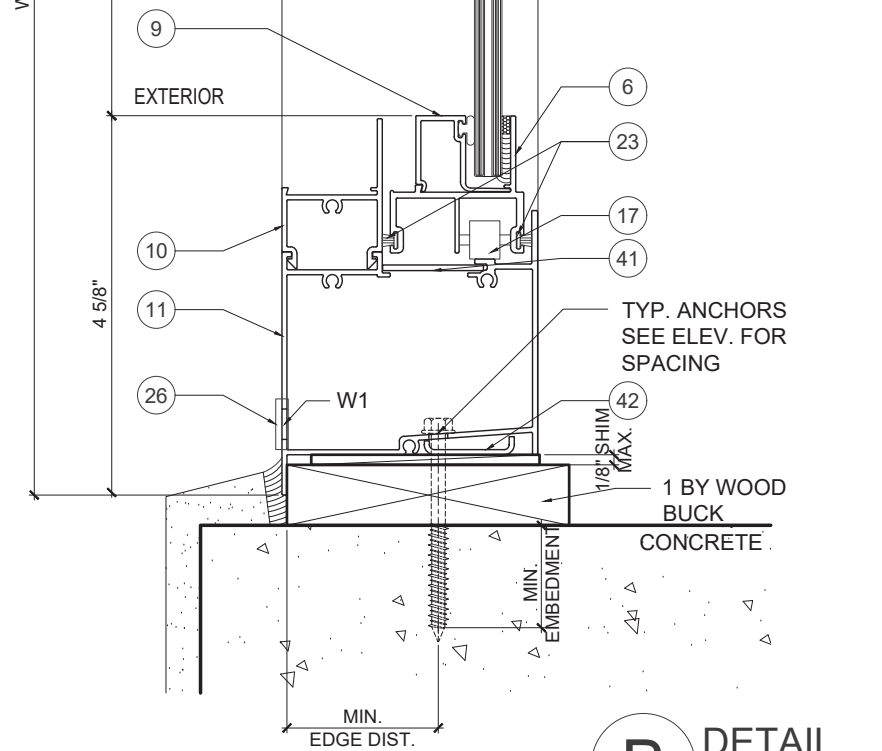
FL #17595	
DATE	03-06-15
SCALE	AS NOTED
DRAWN	A.R.
PROJECT	15-024
DRAWING NO. AD15-14	
SHEET S2	



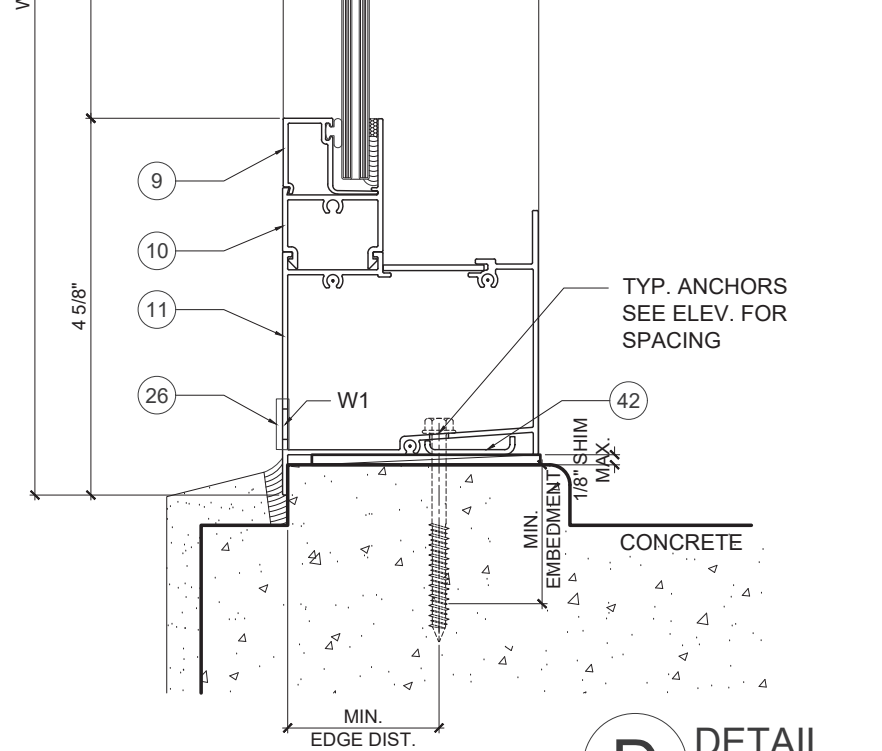
A DETAIL AT X PANEL



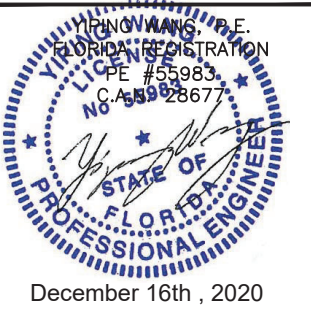
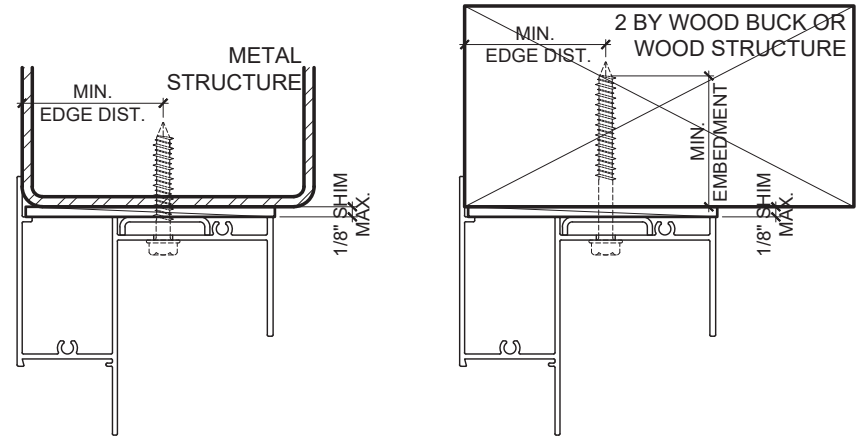
C DETAIL AT O PANEL



B DETAIL AT X PANEL



D DETAIL AT O PANEL



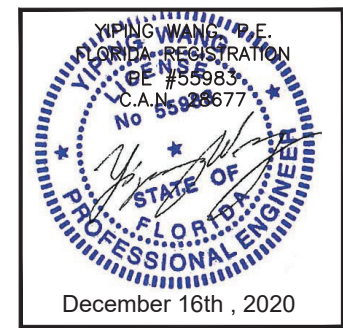
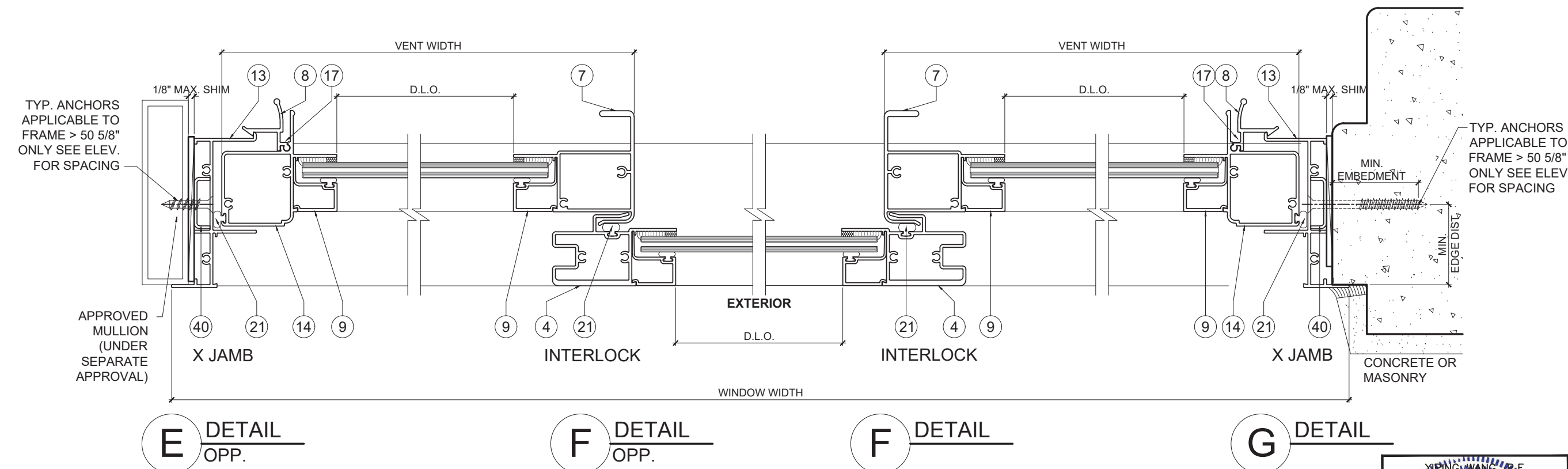
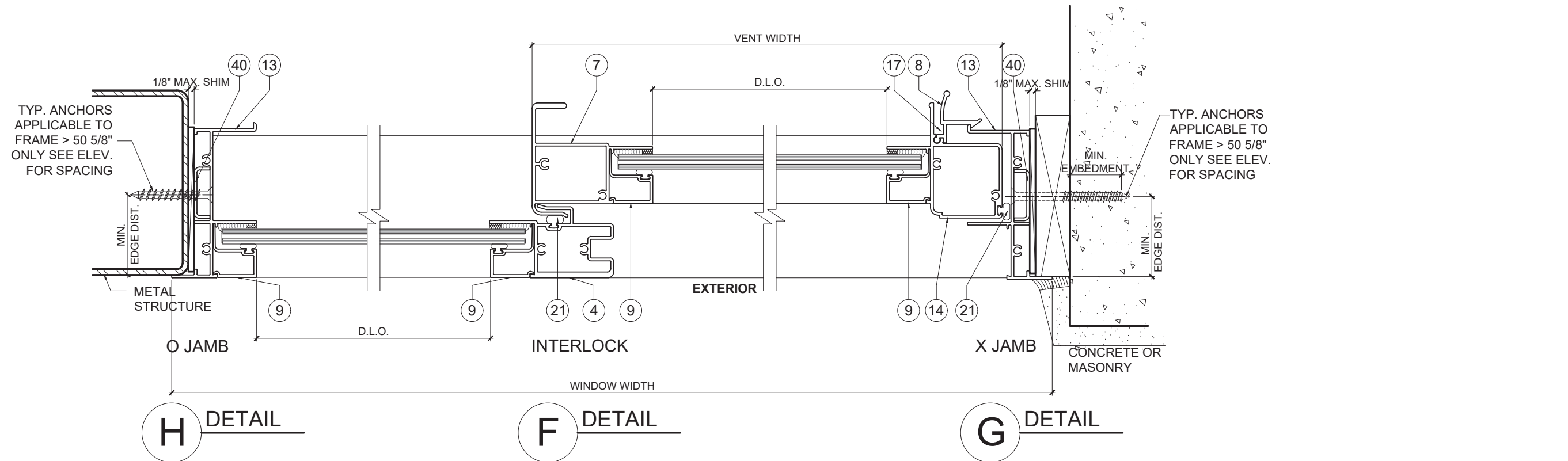
NO.	DATE	DESCRIPTION
1	01.12.14.20	2020 FBC

MCY
MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 12781 MIRAMAR PKWY. STE. 301
 MIRAMAR, FL. 33027
 P: 305.271.0117
 www.MCYEngineering.com
 MCY.Engineering@Att.net

SERIES HR2100 ALUMINUM HORIZONTAL SLIDING WINDOW - LMI & SM
EMC WINDOWS AND DOORS, LLC.
 455 E. 10TH AVE.
 HIALEAH, FL. 33010
 P: (305) 283 - 6280 EMCWindowsDoors@gmail.com

FL #17595
DATE 03-06-15
SCALE AS NOTED
DRAWN A.R.
PROJECT 15-024

DRAWING NO.
AD15-14
 SHEET S3



NO.	DATE	DESCRIPTION
01	12.14.20	2020 FBC

MCY
MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 12781 MIRAMAR PKWY. STE. 301
 MIRAMAR, FL. 33027
 P: 305.271.0117
 www.MCYEngineering.com MCY.Engineering@Att.net

SERIES HR2100 ALUMINUM HORIZONTAL SLIDING WINDOW - LMI & SM
EMC WINDOWS AND DOORS, LLC.
 455 E. 10TH AVE.
 HIALEAH, FL. 33010
 P: (305) 283 - 6280 EMCWindowsDoors@gmail.com

FL #17595	
DATE	03-06-15
SCALE	AS NOTED
DRAWN	A.R.
PROJECT	15-024
DRAWING NO. AD15-14	
SHEET S4	

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A' - **1/4" ULTRACON BY 'ELCO'** Fu = 177 Ksi Fy = 155 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)** Fu = 120 Ksi Fy = 92 Ksi

- INTO METAL STRUCTURES
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)

TYPE 'C' - **#14 SMS OR SELF DRILLING SCREWS**

INTO MIAMI-DADE COUNTY APPROVED MULLIONS. 0.090" THK MIN.
(NO SHIM SPACE)

WEEP HOLES

W1 = 3/8" X 1 1/2" WEEP HOLES
AT 8" FROM EACH END (2) PER PANEL.

SEALANT

ALL FRAME AND VENT CORNERS AND INSTALLATIONS
SIZES SEALED WITH SILICONE.

MASONRY

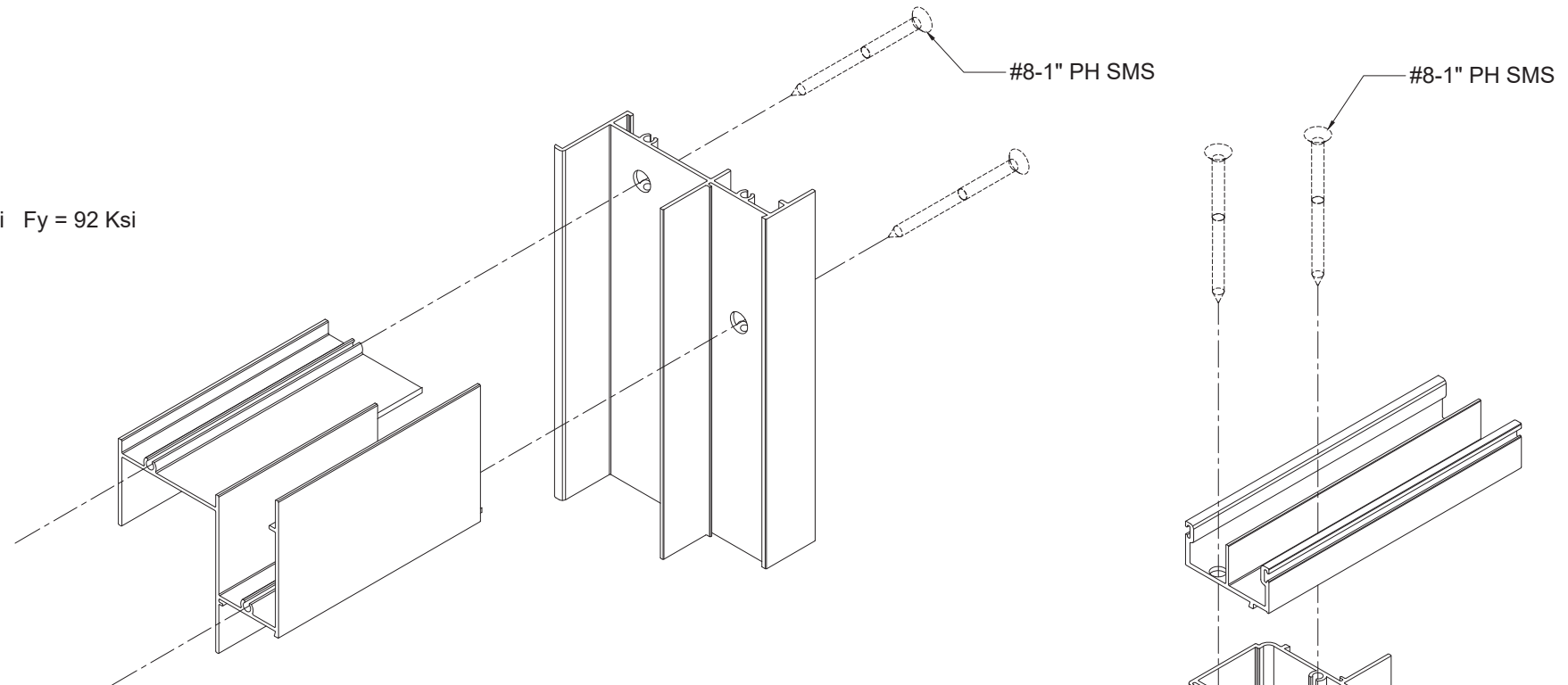
- ASTM C90 GROUT FILLED CONCRETE BLOCK
- ASTM C90 HOLLOW CONCRETE BLOCK

CONCRETE

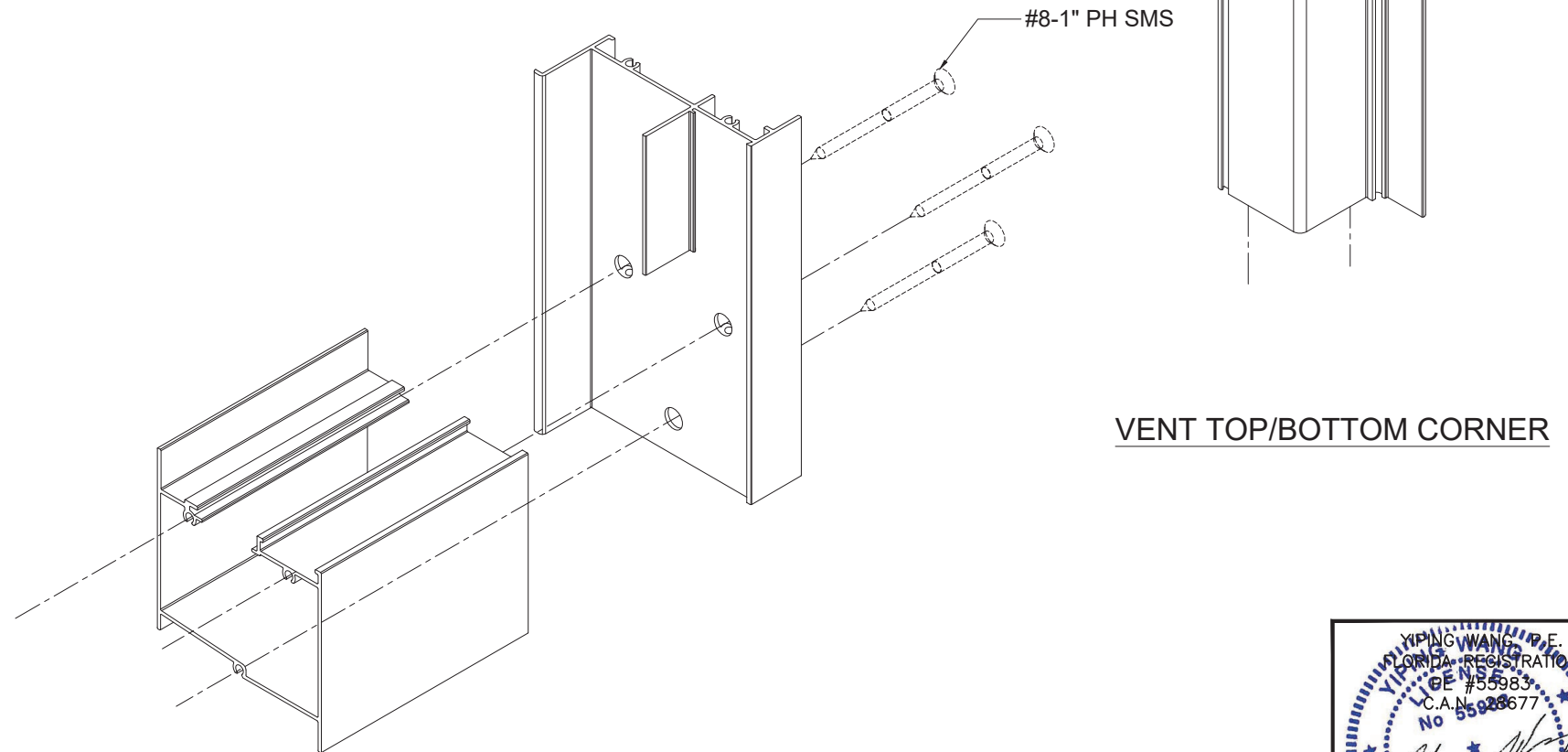
f_c = 3,000 PSI MIN.

ANCHOR MIN. EDGE DISTANCES

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

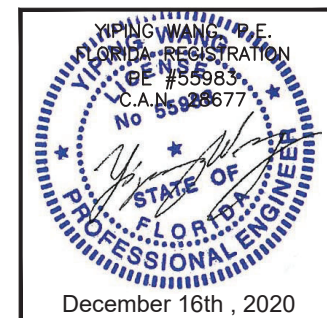


FRAME TOP CORNER



FRAME BOTTOM CORNER

VENT TOP/BOTTOM CORNER



NO.	DATE	DESCRIPTION
01	12.14.20	2020 FBC

MCY

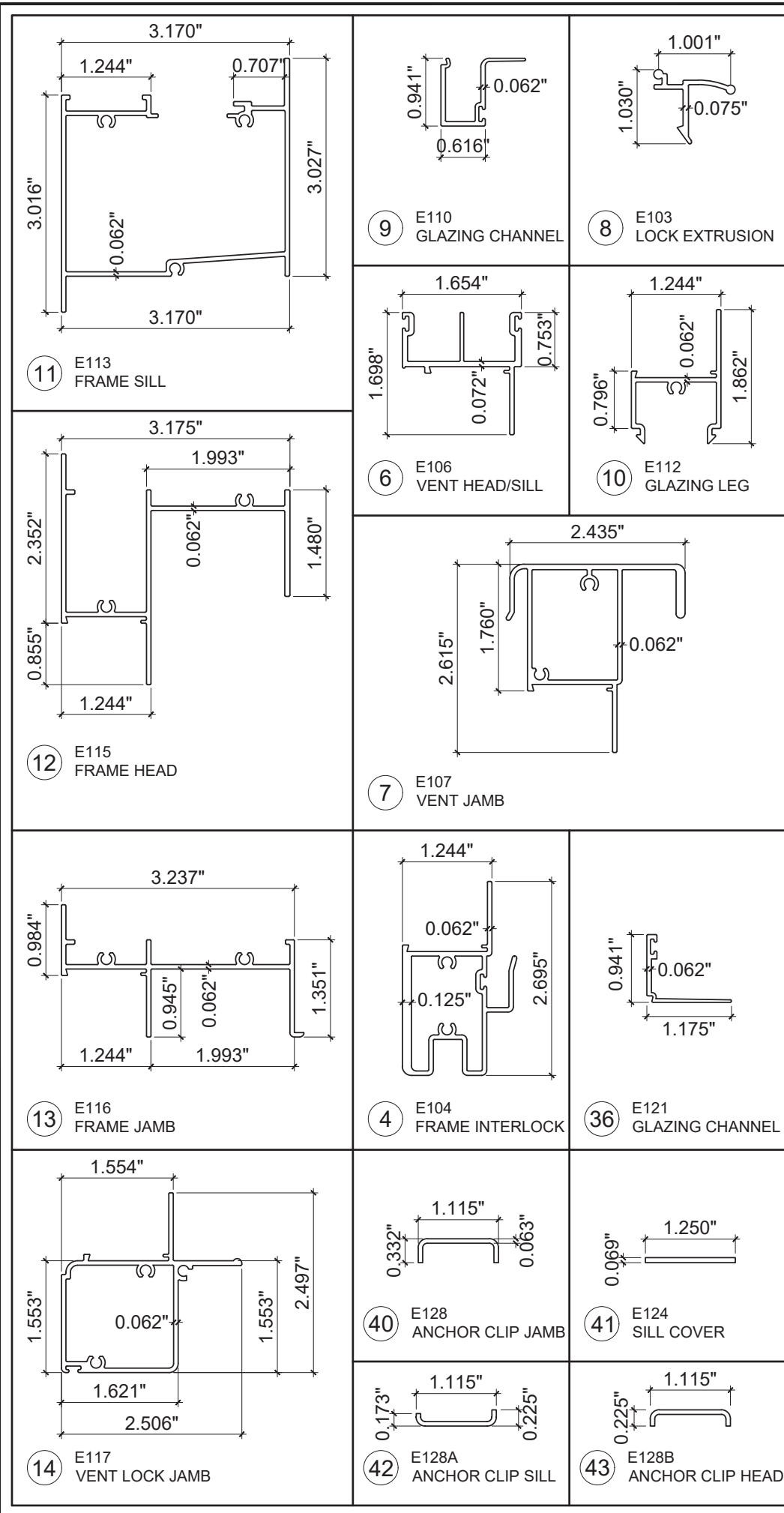
MCY ENGINEERING, INC.
GLAZING CONSULTANTS

12781 MIRAMAR PKWY. STE. 301
MIRAMAR, FL. 33027
P: 305.271.0117
www.MCYEngineering.com
MCY.Engineering@Att.net

SERIES HR2100 ALUMINUM HORIZONTAL SLIDING WINDOW - LMI & SM

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

FL #17595	
DATE	03-06-15
SCALE	AS NOTED
DRAWN	A.R.
PROJECT	15-024
DRAWING NO. AD15-14	
SHEET S5	



BILL OF MATERIALS

ITEM #	PART #	DESCRIPTION	QTY.	MATERIAL TYPE	MANF. / SUPPLIER / REMARKS
4	E104	ALUM. FRAME INTERLOCK	AS REQD.	6063-T6	EMC WINDOWS AND DOORS, LLC.
6	E106	ALUM. VENT HEAD/SILL	2 PER. PANEL	6063-T6	EMC WINDOWS AND DOORS, LLC.
7	E107	ALUM. VENT JAMB	1 PER. MOVING PANEL	6063-T6	EMC WINDOWS AND DOORS, LLC.
8	E108	ALUM. LOCK EXTRUSION	2 PER. MOVING PANEL	6063-T6	EMC WINDOWS AND DOORS, LLC.
9	E110	ALUM. GLAZING CHANNEL	4 PER. PANEL	6063-T6	EMC WINDOWS AND DOORS, LLC.
10	E112	ALUM. ROLLING GLAZING LEG	1 PER. FRAME	6063-T6	EMC WINDOWS AND DOORS, LLC.
11	E113	ALUM. ROLLING STANDARD FRAME SILL	1 PER. FRAME	6063-T6	EMC WINDOWS AND DOORS, LLC.
12	E115	ALUM. ROLLING FRAME HEAD	1 PER. FRAME	6063-T6	EMC WINDOWS AND DOORS, LLC.
13	E116	ALUM. ROLLING FRAME JAMB	2 PER. FRAME	6063-T6	EMC WINDOWS AND DOORS, LLC.
14	E117	ALUM. ROLLING VENT LOCK JAMB	1 PER. MOVING PANEL	6063-T6	EMC WINDOWS AND DOORS, LLC.
16	SEAL01-1	DOWSIL 995 BACK SILICONE	AS REQD.	SILICONE	DOWSIL
17	H0001	LOCK SPRING	AS REQD.	STEEL	EMC WINDOWS AND DOORS, LLC.
20	W0019	.125 X .25 GLAZING TAPE, 2 SIDED	AS REQD.	TAPE	FRANK LOWED
21	V0020	E708 VINYL BULB, FRAME	AS REQD.	VINYL	FENESTRATION GLASS PRODUCTS
22	V0021	E202 VINYL BULB, GLAZING STOP	AS REQD.	VINYL	FENESTRATION GLASS PRODUCTS
23	W0023	WOOL PILE, FRAME	AS REQD.	WOOL	ULTRA FAB
25	H0104	SLIDER WHEEL ASSEMBLY	AS REQD.	-	EMC WINDOWS AND DOORS, LLC.
26	H0105	WEEP COVER	AS REQD.	PLASTIC	EMC WINDOWS AND DOORS, LLC.
36	E121	ALUM. INSULATED GLAZING CHANNEL	AS REQD.	6060-T6	EMC WINDOWS AND DOORS, LLC.
39	# 8 X 1	FRAME ASSEMBLY SCREWS	AS REQD.	ST/ST	VARIES
40	E128	ALUM. ANCHOR CLIP 1/16" THICK 3" LONG	1 PER. ANCHOR	6063-T6	EMC WINDOWS AND DOORS, LLC.
41	E124	SILL COVER	1 PER. FRAME	6063-T6	EMC WINDOWS AND DOORS, LLC.
42	E128A	ALUM. ANCHOR CLIP 1/16" THICK 3" LONG	1 PER. ANCHOR	6063-T6	EMC WINDOWS AND DOORS, LLC.
43	E128B	ALUM. ANCHOR CLIP 1/16" THICK 3" LONG	1 PER. ANCHOR	6063-T6	EMC WINDOWS AND DOORS, LLC.
44	-	CRL GRAY EDGETECH SUPER SPACER - GLASS SPACER	AS REQD.	SILICONE FOAM	C.R. LAURENCE CO., INC.

MCY ENGINEERING, INC.
GLAZING CONSULTANTS

12781 MIRAMAR PKWY. STE. 301
MIRAMAR, FL. 33027
P: 305.271.0117
www.MCYEngineering.com MCY.Engineering@Att.net

SERIES HR2100 ALUMINUM HORIZONTAL SLIDING WINDOW - LMI & SM

EMC WINDOWS AND DOORS, LLC.

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

FL #17595

DATE	03-06-15
SCALE	AS NOTED
DRAWN	A.R.
PROJECT	15-024

DRAWING NO.
AD15-14

SHEET S6

YIPING WANG, P.E.
FLORIDA REGISTRATION
No. 55983
C.A. No. 5598677

PROFESSIONAL ENGINEER

STATE OF FLORIDA

December 16th, 2020