

ES-WA9040

ALUMINUM WINDOW WALL SYSTEM

WITH DM12J SLIDING WINDOW

AND JULIET RAILING

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

ANCHORS SHALL BE SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL BE ISOLATED TO MEET THE REQUIREMENTS OF THE 2023 FLORIDA BLDG. CODE & ADOPTED STANDARD.

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT. ie LIFE SAFETY OF THIS PRODUCT, ADEQUACY OR STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANT ETC. CONDITIONS NOT SHOWN IN THIS DOCUMENT ARE TO BE ANALYSED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL.

DESIGN LOADS SHOWN ARE BASED ON "ALLOWABLE STRESS DESIGN (ASD)".

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.

THIS DOCUMENT ADDRESSES ONLY THE STRUCTURAL COMPLIANCE OF THE GLAZING SYSTEM. ENERGY VALUES, THERMAL INFORMATION OR GLASS MANUFACTURING RESTRICTIONS SUCH AS COMPATIBILITY WITH ENERGY PERFORMANCE FILMS. ARE OUT OF THE SCOPE OF THIS DOCUMENT.

INSTRUCTIONS:

USE CHART AS FOLLOWS:

- STEP 1

DETERMINE DESIGN WIND PRESSURE REQUIREMENTS BASED ON WIND VELOCITY, BUILDING HEIGHT, WIND ZONE, USING APPLICABLE ASCE 7 STANDARD.
- STEP 2

REFER TO SHEETS 2.0 FOR GLAZING ELEVATIONS FOR SYSTEM DESCRIPTION
- STEP 3

REFER TO SHEETS 3.0 FOR GLASS CAPACITIES
- STEP 4

REFER TO SHEETS 4.0 FOR JAMBS / MULLIONS CAPACITIES
- STEP 5

REFER TO SHEETS 5.0 FOR ANCHORS CAPACITIES

THIS SYSTEM IS RATED FOR SMALL MISSILE IMPACT.
SHUTTERS ARE REQUIRED FOR ELEVATIONS BELOW 30 FT FROM GRADE.

A- 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.

B- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

C- 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. ENGINEER OF RECORD.

D- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

E.S.
WINDOWS, LLC

3550 N.W. 49 STREET
MIAMI, FL 33142
TEL. (305) 638-5151
FAX. (305) 638-5158

PROJECT ES-WA9040
ALUMINUM WINDOW WALL
SYSTEM WITH DM12J SLIDING
WINDOW AND JULIET RAILING

FLORIDA APPROVAL #
FL# 47332.3

SHEET NAME:
GENERAL NOTES

DRAWING REVISION LOG		
No.	Date:	Revision:
R1	05/02/2025	UPDATE
R3	08/22/2025	UPDATE

ENGINEER:
**DEERFIELD
TECHNICAL INC.**
CA# 36112

PO BOX 1339
DEERFIELD BEACH, FL 33443

CHECKED FOR STRUCTURAL
COMPLIANCE ONLY. BY:

JOHN FREDY DELGADO
LICENSE
No. 94078
09/06/2025
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

JOHN DELGADO, P.E.
FL. REG. # 94078

John Delgado

This item has been Digitally Signed and sealed by
John Delgado, P.E. on the date adjacent to the seal.
Printed copies of this document are not considered
signed and sealed and the signature must be
verfied on any electronic copies.

PREPARED BY	DRAFTED BY	DATE
AC	SS & DF	08/22/2025
DWG NUMBER		SCALE
DT-PA-ESW-006		N.T.S.
PAGE		
1.0 OF 7.2		

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SHEET NAME:
**WINDOWS
ELEVATION**

DRAWING REVISION LOG

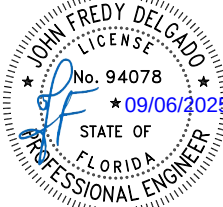
No.	Date:	Revision:
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ENGINEER:

**DEERFIELD
TECHNICAL INC.**
CA# 36112

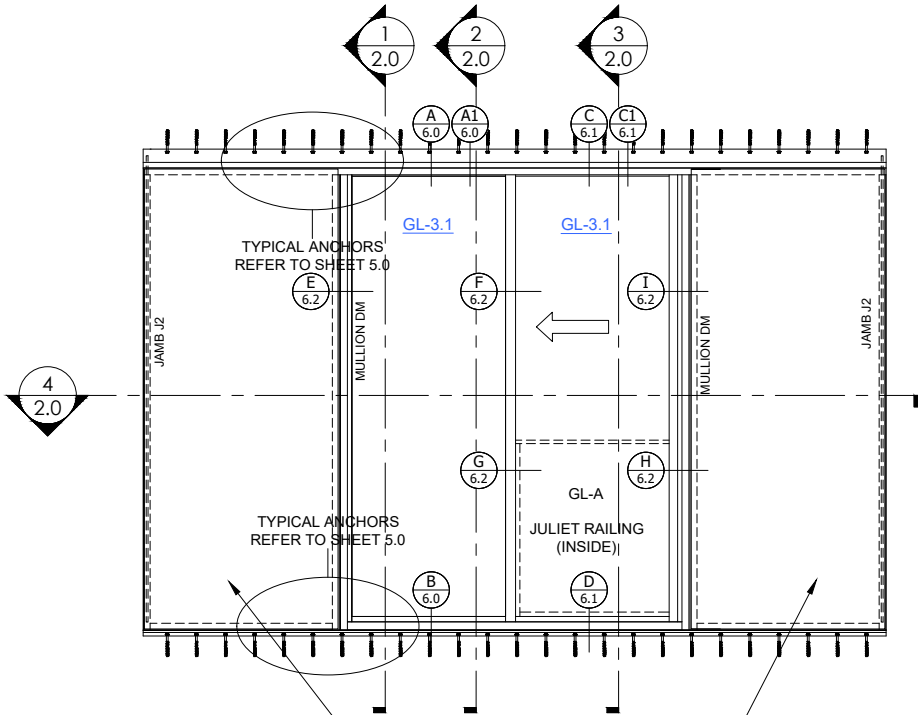
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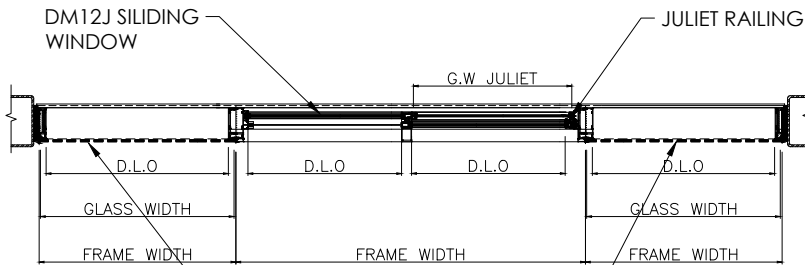
JOHN DELGADO, P.E.
FL. REG. # 94078

PREPARED BY AC	DRAFTED BY SS & DF	DATE 08/22/2025
DWG NUMBER DT-PA-ESW-006	SCALE 1/4"=1'-0"	
PAGE 2.0 OF 7.2		



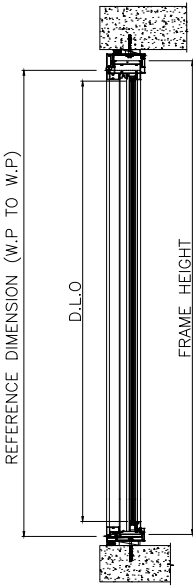
TYPICAL ELEVATION

ES-WA9040 WINDOW WALL.
SEE FL47332.1 OR FL47332.2

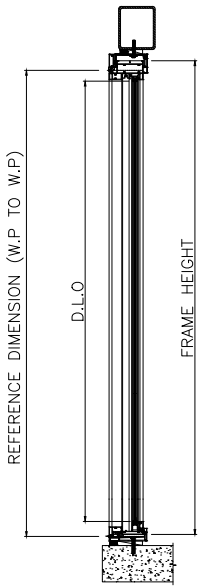


TYPICAL PLAN VIEW

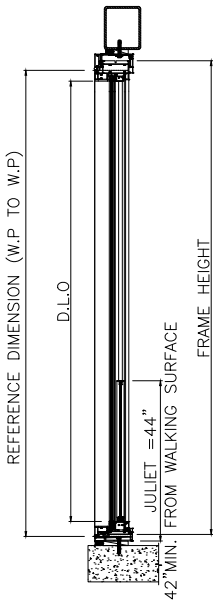
ES-WA9040 WINDOW WALL.
SEE FL47332.1 OR FL47332.2



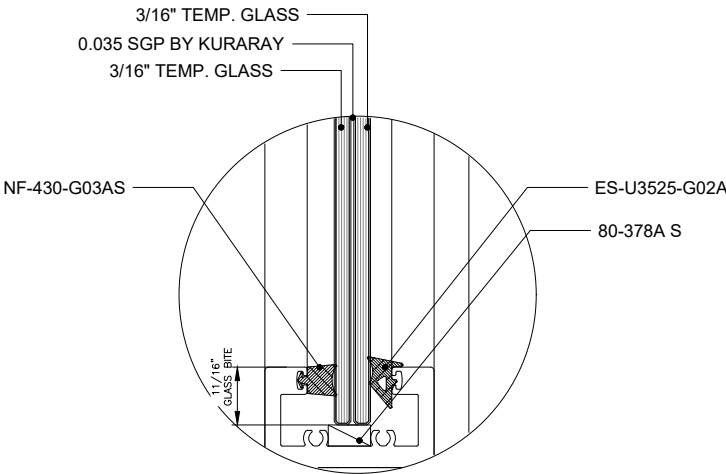
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TYPICAL SECTION 2



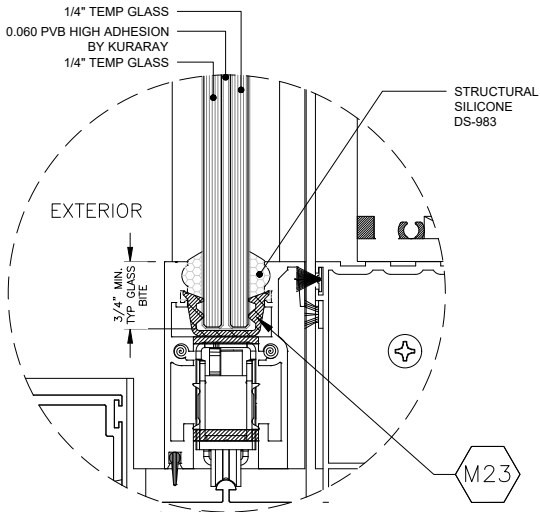
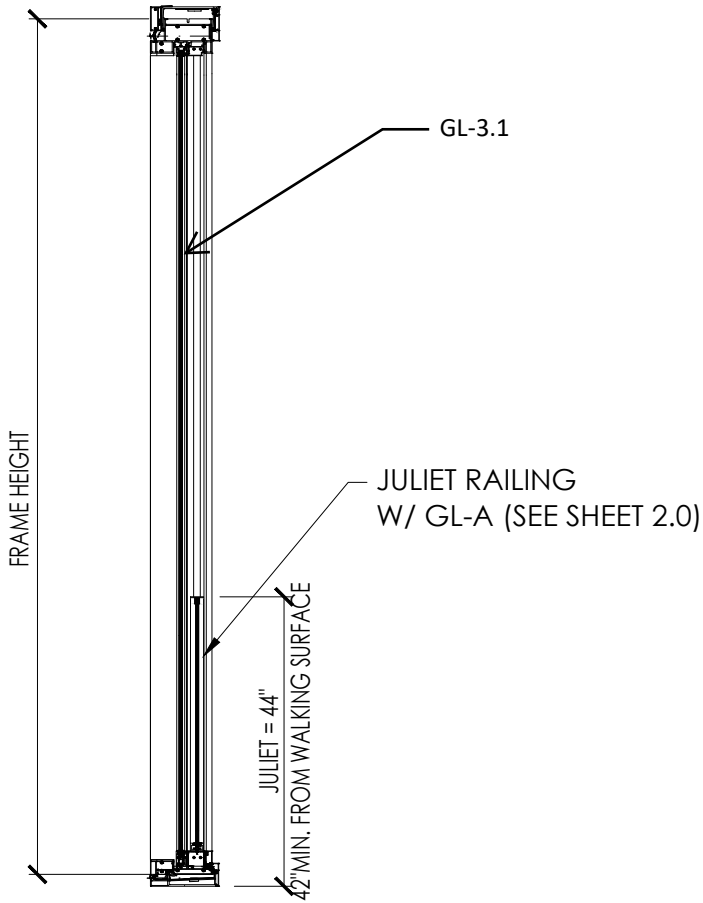
TYPICAL SECTION 3



GL-A

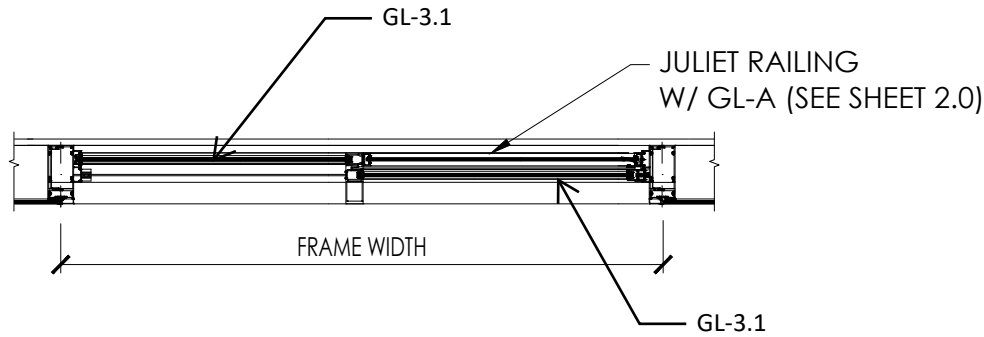
JULIET RAILING
TESTED TO COMPLY WITH
ANSI Z97.1 AND LIVE LOADS
PER FLORIDA BUILDING
CODE 2023, SECTION 1607.8

DESIGN LOAD CAPACITY - PSF EXT.(+) \$ INT. (-)			
NOMINAL DIMENSIONS		GL-3.1	
PANEL WIDTH	DOOR FRAME HEIGHT	+	-
36	96	150	150
48		150	150
54		150	150
36	102	150	150
48		150	150
54		150	150
36	106	150	150
48		150	150
54		150	150
36	114	150	150
48		150	150
54		130	130
36	120	150	150
42		150	150
48		150	150
36	130	150	150
42		150	150
48		150	150
36	134	150	150
42		150	150
48		130	130



APPLIES TO:

DM-12J
GL-3.1



PW= PANEL WIDTH
FW= FRAME WIDTH
PW=FW/2

GLASS CAPACITY TABLE

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FL# 47332.3

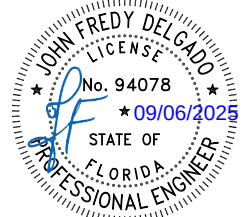
SHEET NAME:
GLASS
CAPACITY TABLE

DRAWING REVISION LOG		
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R1	05/02/2025	UPDATE
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ENGINEER:
**DEERFIELD
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CA# 36112

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FL. REG. # 94078

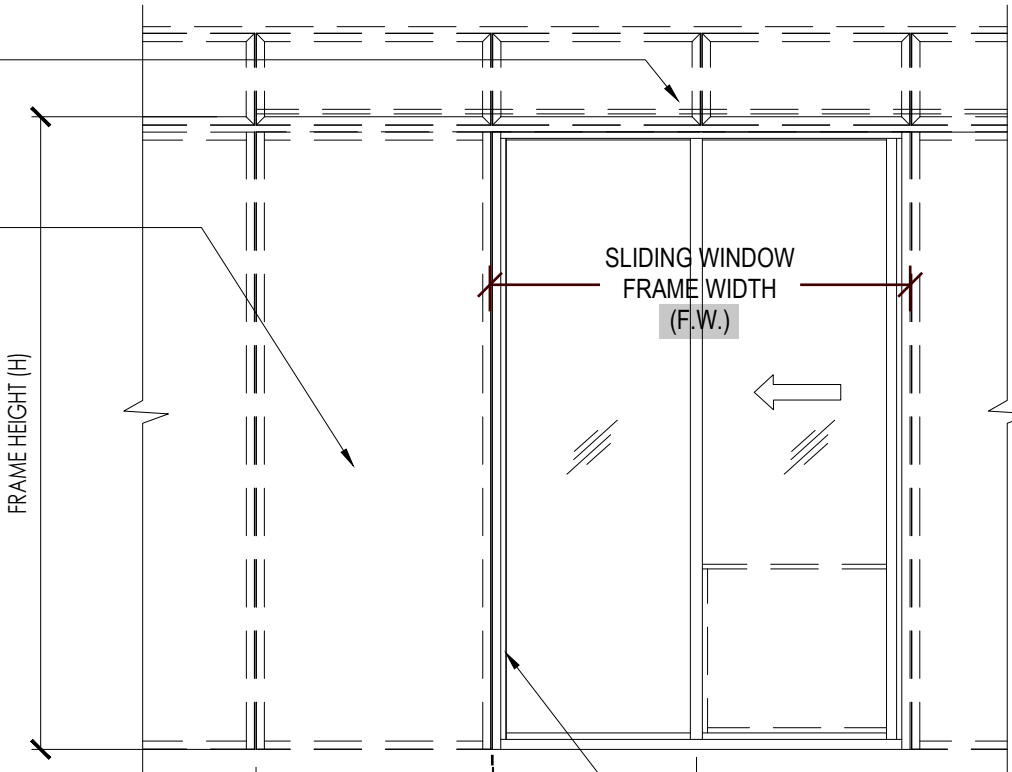
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DWG NUMBER DT-PA-ESW-006	SCALE N.T.S.	
PAGE 3.0 OF 7.2		

SINGLE HEIGHT MULLION DESIGN LOAD CAPACITY--P.S.F.			
WITH OR WITHOUT INTERMEDIATE HORIZONTAL			
NOMINAL DIMENSIONS		MULLION 'MJ1'	
WIDTH (W)	FRAME HEIGHT (H)	EXT.(+)	INT.(-)
36	88	150	150
48		150	150
54		150	150
60		150	150
66		150	150
36	96	150	150
48		150	150
54		150	150
60		150	150
66		150	150
36	102	150	150
48		150	150
54		150	150
60		150	150
66		130	130
36	108	150	150
48		150	150
54		150	150
60		150	150
66		130	130
36	116	150	150
48		150	150
54		150	150
60		150	150
66		130	130
36	120	150	150
48		150	150
54		150	150
60		150	150
66		130	130
36	126	150	150
48		150	150
52		150	150
54		130	130
60		130	130
36	130	150	150
48		150	150
51		150	150
60		150	150
66		130	130
36	134	150	150
48		150	150
51		130	130

MULLION CAPACITY TABLE
WITH OR WITHOUT INTERMEDIATE
HORIZONTALS

SLAB COVER. SEE FL47332.1
OR FL47332.2

WA-9040 WINDOW WALL. SEE
FL47332.1 OR FL47332.2



LEGEND

FOR MULLIONS:

- W1: WIDTH OF UNIT LEFT TO THE ANALYZED MULLION
W2: WIDTH OF UNIT RIGHT TO THE ANALYZED MULLION (F.W. / 2)
W: TRIBUTARY WIDTH OF ANALYZED MULLION
TO BE USED IN THE TABLE ON THE LEFT

W = (W1 + W2) / 2

	MULLION 'MJ1'		MULLION 'MJ1'	
	Ix IN^4	Sx IN^3	Ix IN^4	Sx IN^3
ALUMINUM	60.247	12.78	60.254	12.78
STEEL	-	-	-	-
TOTAL Ix ALUM + Ix STL X 2.9	60.247	-	60.254	-

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MULLION
CAPACITY TABLE

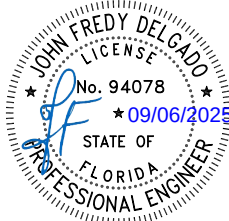
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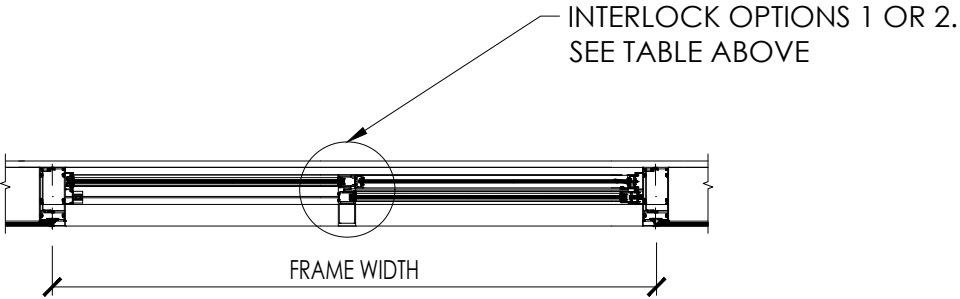
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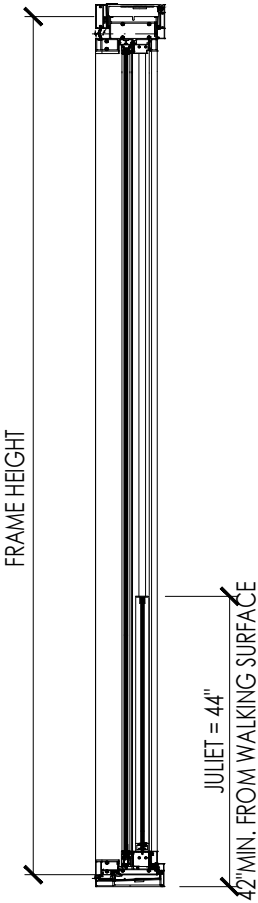
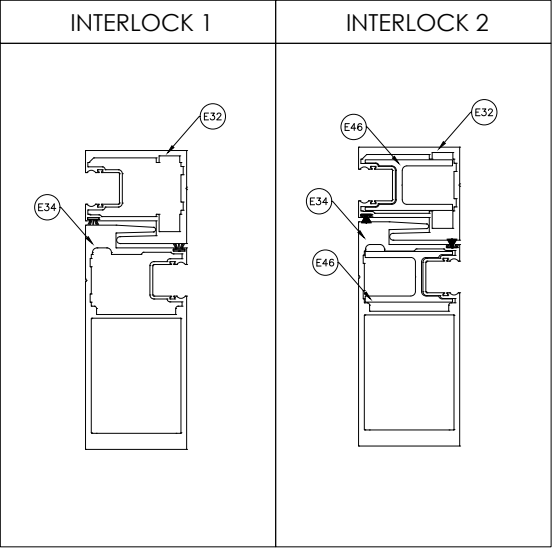
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DWG NUMBER DT-PA-ESW-006	SCALE N.T.S.	
PAGE 4.0 OF 7.2		

SINGLE HEIGHT INTERLOCK DESIGN LOAD CAPACITY--P.S.F.					
NOMINAL DIMENSIONS		INTERLOCK 1		INTERLOCK 2	
PANEL WIDTH (W)	FRAME HEIGHT (H)	EXT.(+)	INT.(−)	EXT.(+)	INT.(−)
36	96	150	150	150	150
48		150	150	150	150
54		150	150	150	150
36	102	150	150	150	150
48		150	150	150	150
54		150	150	150	150
36	108	150	150	150	150
48		150	150	150	150
54		150	150	150	150
36	116	150	150	150	150
48		150	150	150	150
54		—	—	130	130
36	120	150	150	150	150
48		150	150	150	150
36	126	150	150	150	150
42		150	150	150	150
48		150	150	150	150
36	130	150	150	150	150
42		150	150	150	150
48		150	150	150	150
36	134	—	—	130	130
42		—	—	130	130
48		—	—	130	130



PW= PANEL WIDTH
FW= FRAME WIDTH
PW=FW/2



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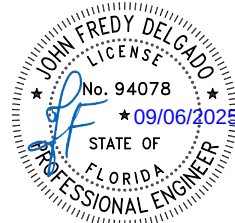
MULLION
CAPACITY TABLE

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PAGE 4.1 OF 7.2		

ANCHOR DESIGN LOAD CAPACITY – PSF EXT.(+) & INT.(–)								
NOMINAL DIMS.	ANCHOR TYPE 'A'				ANCHOR TYPE 'B'			
FRAME HEIGHT (H)	A10	A8	A6	A4	B10	B8	B6	B4
88	150	150	150	150	150	150	150	150
96	150	150	150	150	150	150	150	150
102	150	150	150	150	150	150	150	150
108	150	150	150	150	150	150	150	150
114	150	150	150	150	150	150	150	150
120	144	150	150	150	143	150	150	150
126	136	150	150	150	135	150	150	150
134	127	150	150	150	126	150	150	150

ANCHORS TYPES

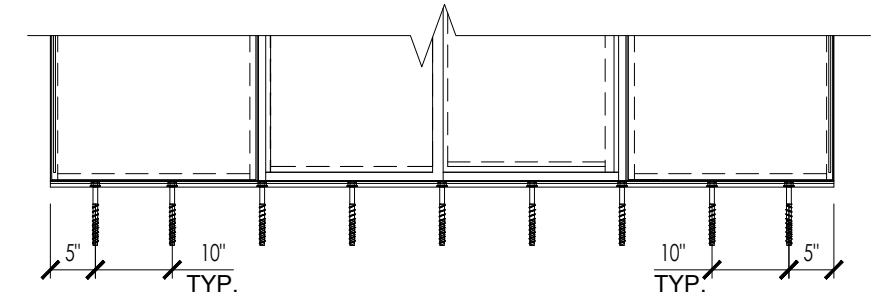
A10 = ANCHORS TYPE A AT 5" FROM CORNERS AND 10" O.C. B10 = ANCHORS TYPE B AT 5" FROM CORNERS AND 10" O.C.
A8 = ANCHORS TYPE A AT 4" FROM CORNERS AND 8" O.C. B8 = ANCHORS TYPE B AT 4" FROM CORNERS AND 8" O.C.
A6 = ANCHORS TYPE A AT 3" FROM CORNERS AND 6" O.C. B6 = ANCHORS TYPE B AT 3" FROM CORNERS AND 6" O.C.
A4 = ANCHORS TYPE A AT 2" FROM CORNERS AND 4" O.C. B4 = ANCHORS TYPE B AT 2" FROM CORNERS AND 4" O.C.

TYPICAL ANCHORS:

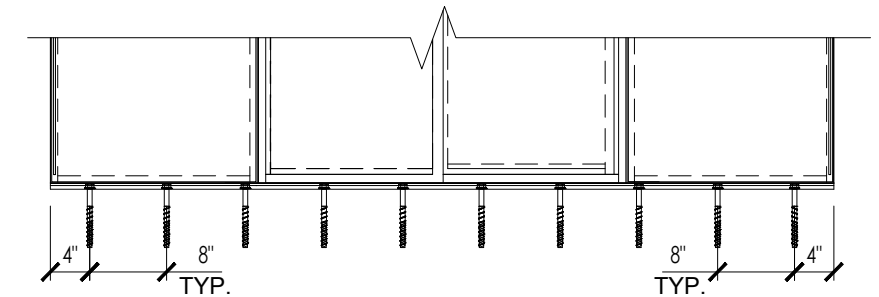
TYPE 'A'	TYPE 'B'
1/2" HILTI KH-EZ (FU=112540 psi) 2 1/2" MIN. EDGE DISTANCE 3" MIN. EMBEDMENT INTO CONCRETE (3000 PSI MIN.)	1/2" SAE GRADE 5 TAPPED DRILLED THREADED BOLT INTO STEEL STRUCTURES 1/4" THK. MIN. (SUBSTRATE fy = 36 KSI MIN.) (FU=120000 psi) 1-1/2" MIN. EDGE DISTANCE 1/2" MIN. EMBEDMENT

ANCHORS CAPACITY TABLE

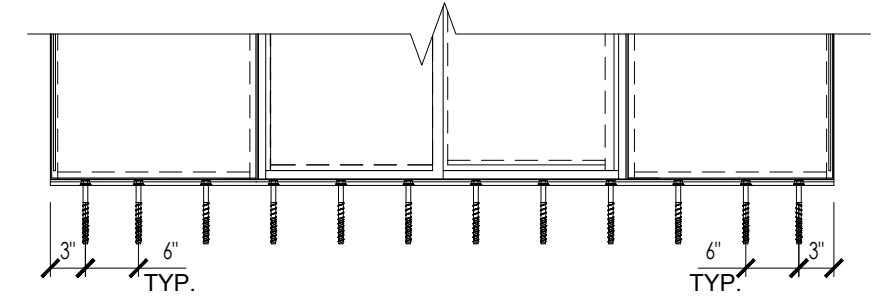
'A10' & 'B10'



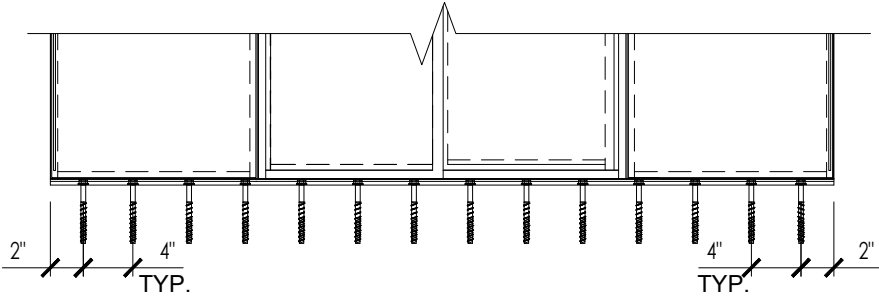
'A8' & 'B8'



'A6' & 'B6'



'A4' & 'B4'



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SHEET NAME:
ANCHORS
CAPACITY TABLE

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**DEERFIELD
TECHNICAL INC.**
CA# 36112

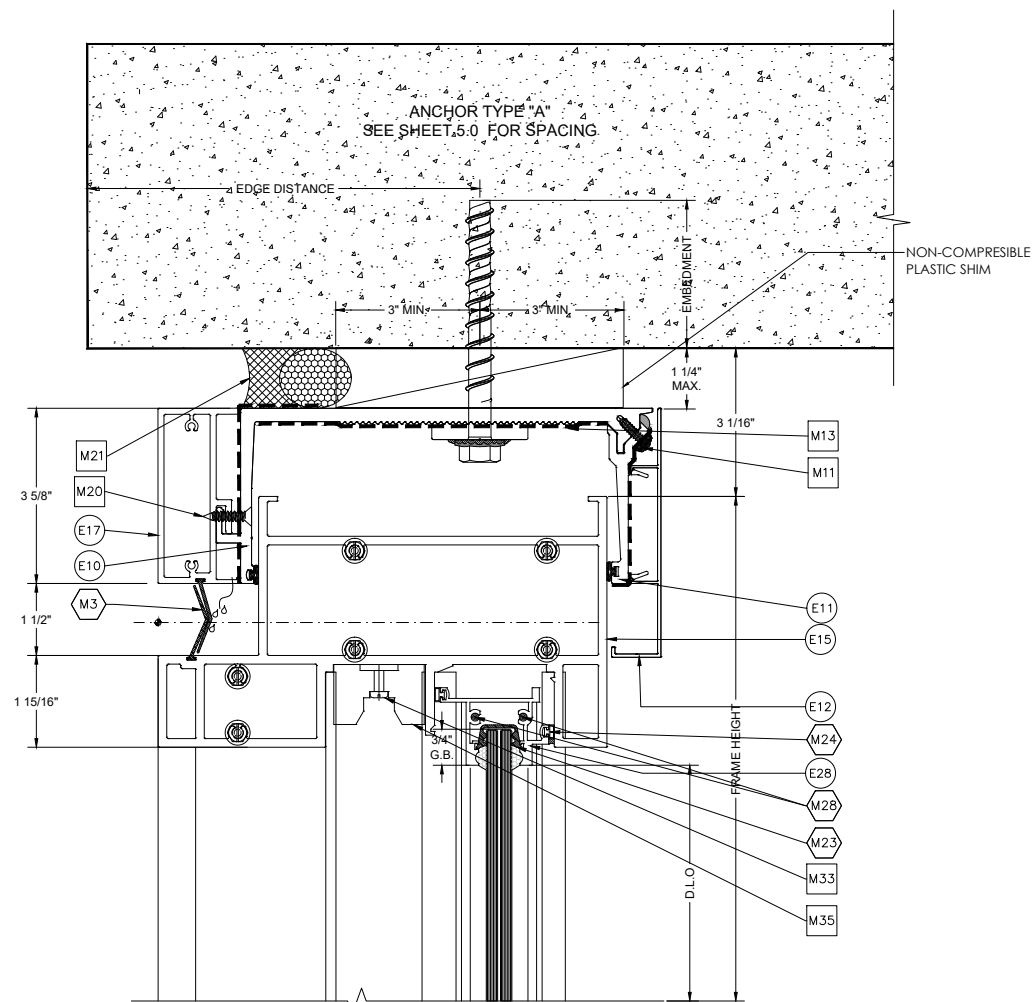
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DEERFIELD BEACH, FL 33443

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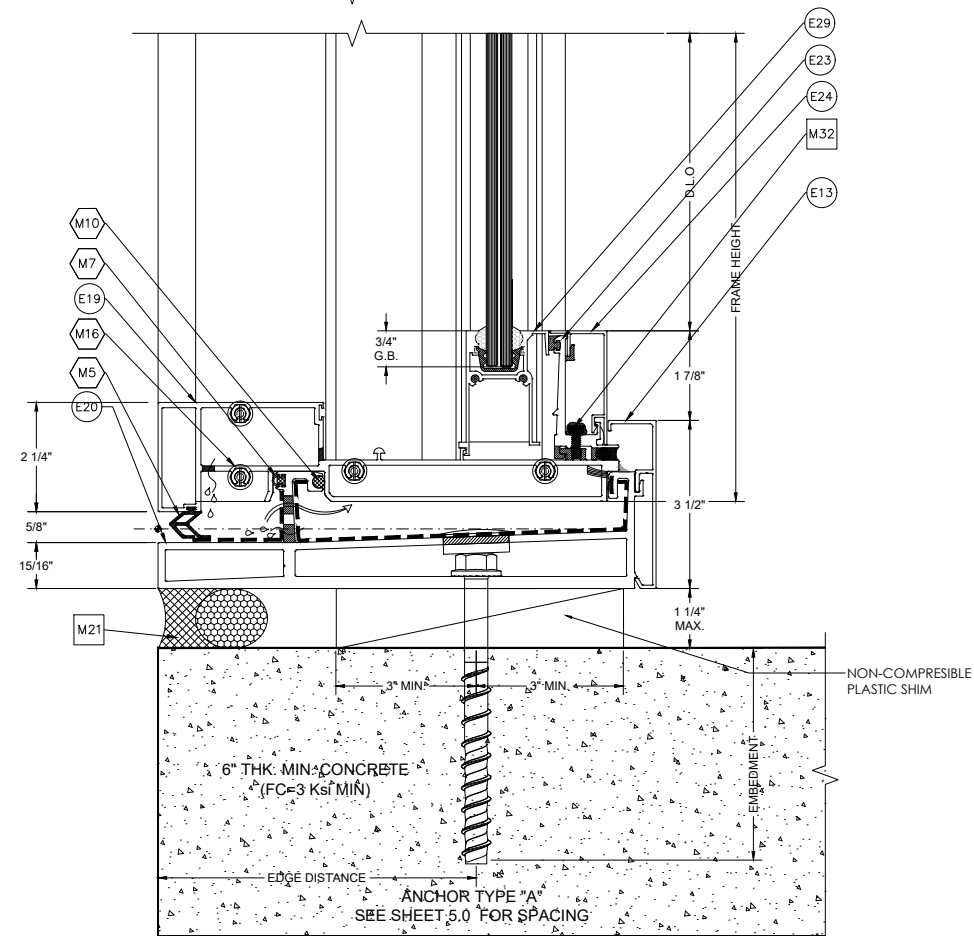
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PAGE 5.0 OF 7.2		

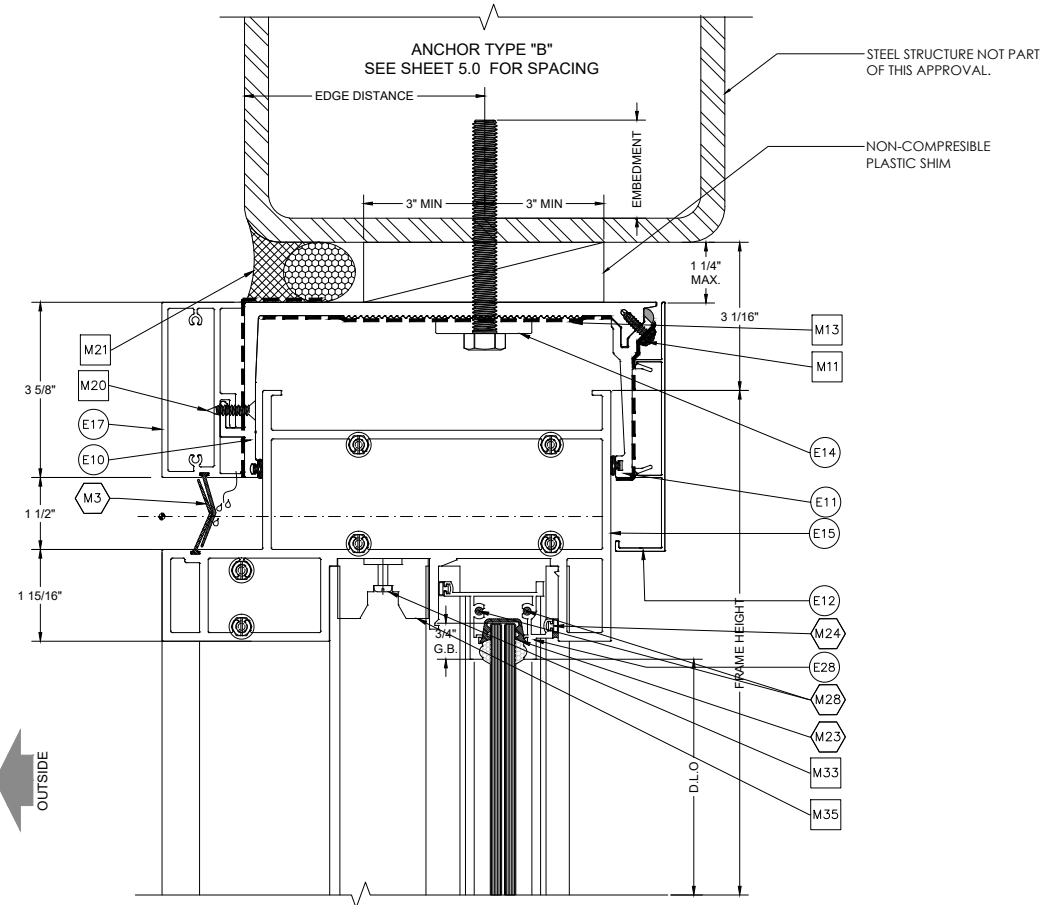
A



B



A1



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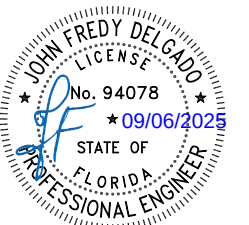
SHEET NAME:
**SYSTEM
DETAILS**

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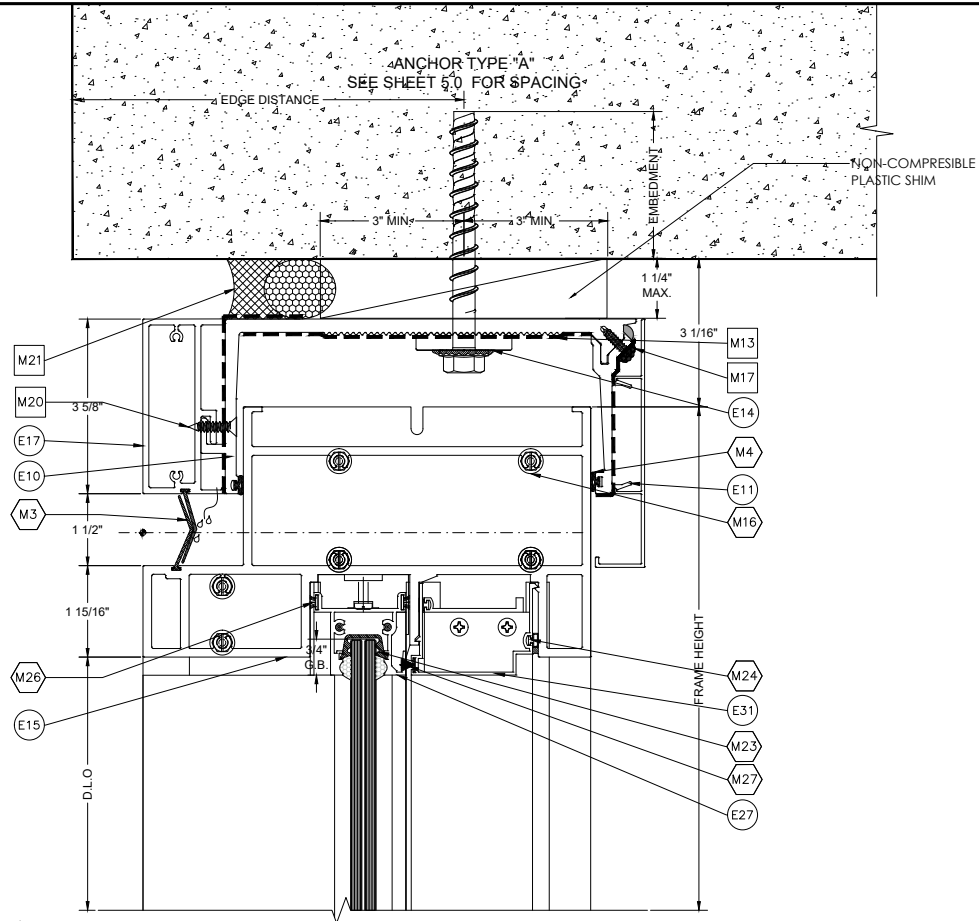
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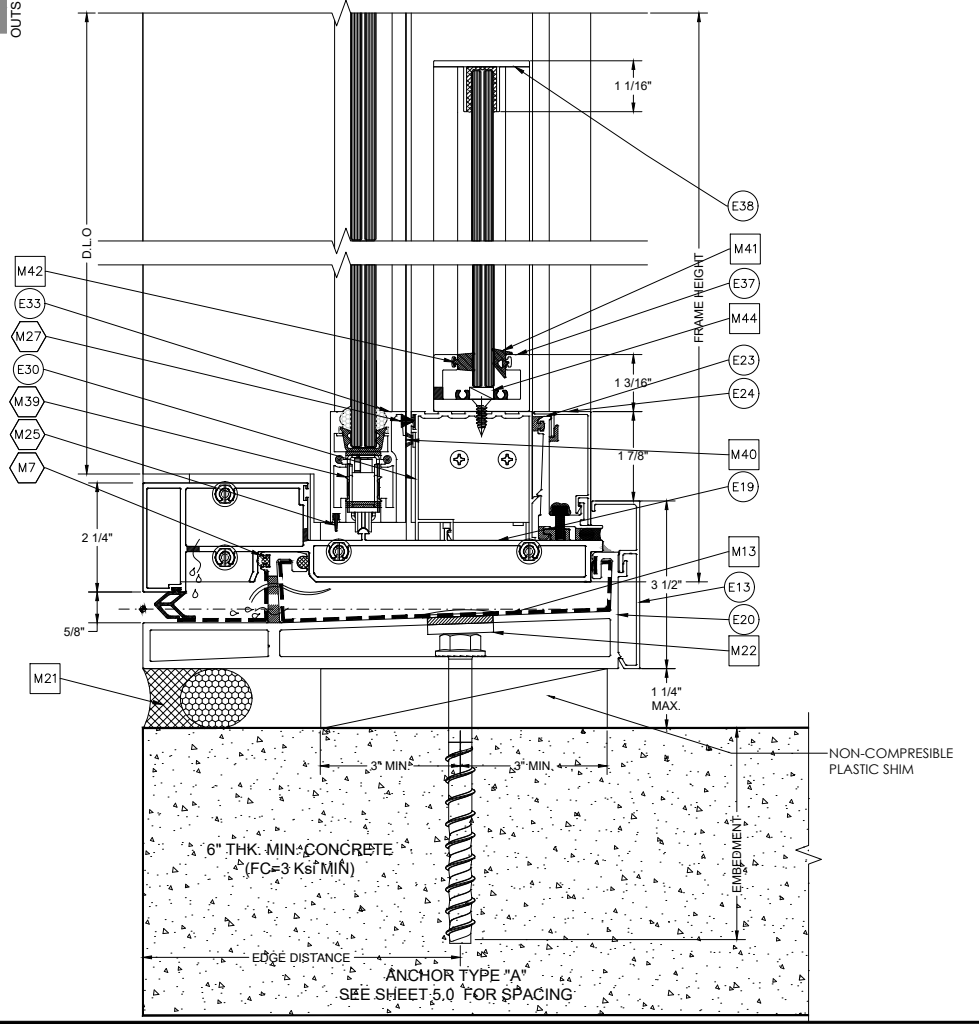
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PAGE 6.0 OF 7.2		

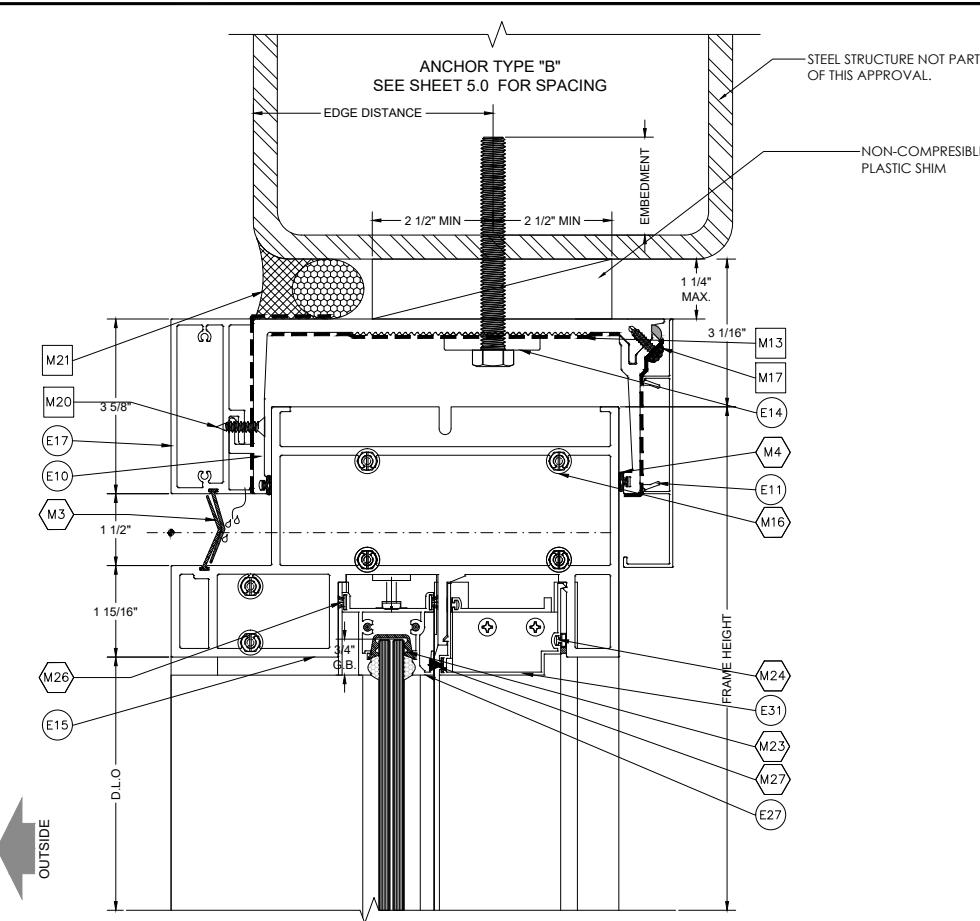
C



D



C1



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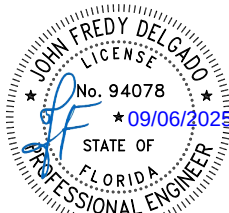
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CA# 36112

PO BOX 1339
DEERFIELD BEACH, FL 33443

CHECKED FOR STRUCTURAL
COMPLIANCE ONLY. BY:

JOHN DELGADO, P.E.
FL. REG. # 94078

PREPARED BY AC	DRAFTED BY SS & DF	DATE 08/22/2025
DWG NUMBER DT-PA-ESW-006	SCALE 3" = 1'-0"	
PAGE 6.1 OF 7.2		

E.S.
WINDOWS, LLC

3550 N.W. 49 STREET
MIAMI, FL 33142
TEL. (305) 638-5151
FAX. (305) 638-5158

PROJECT ES-WA9040
ALUMINUM WINDOW WALL
SYSTEM WITH DM12J SLIDING
WINDOW AND JULIET RAILING

FLORIDA APPROVAL #
FL# 47332.3

SHEET NAME:
**SYSTEM
DETAILS**

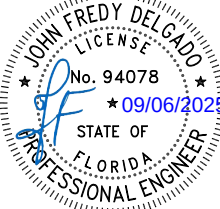
DRAWING REVISION LOG

No.	Date:	Revision:
R1	05/02/2025	UPDATE
R3	08/22/2025	UPDATE

ENGINEER:
**DEERFIELD
TECHNICAL INC.**
CA# 36112

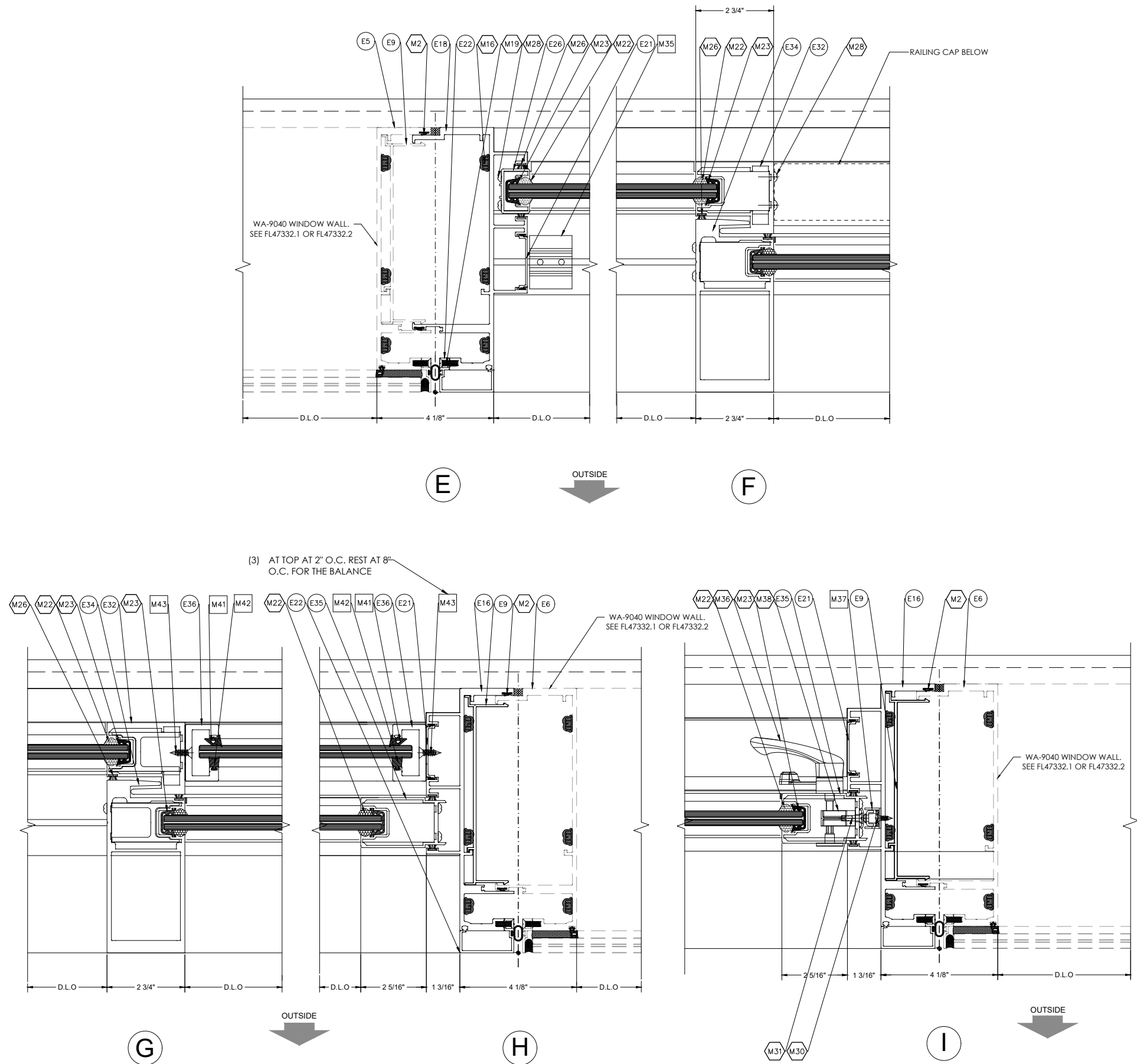
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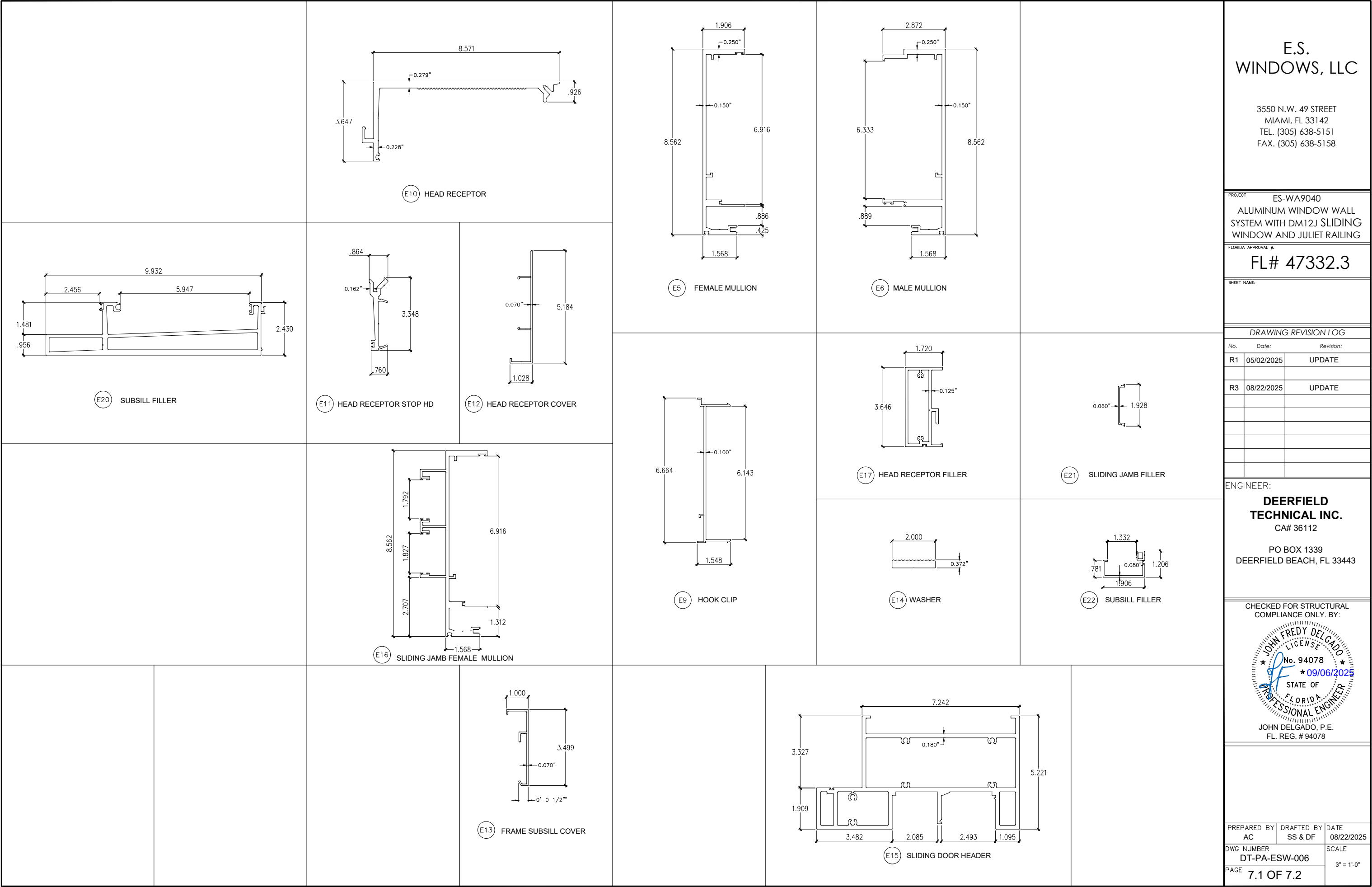
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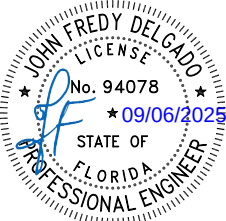
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