

ES WINDOWS, INC.

ES-V200 VINYL HORIZONTAL ROLLING WINDOW -L.M.I.&S.M.I.

GENERAL NOTES:

- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 8TH EDITION FLORIDA BUILDING CODE (2023) INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
- WINDOWS RATED FOR LARGE MISSILE IMPACT. IMPACT SHUTTERS ARE NOT REQUIRED.
- THESE WINDOWS ARE APPROVED FOR AIR AND WATER INFILTRATION.
- ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON 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.
- MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 8TH EDITION FLORIDA BUILDING CODE (2023) SECTION AS APPLICABLE.
- WOOD BUCKS AND METAL STRUCTURES NOT BY E.S. WINDOWS TO BE DESIGNED TO SUPPORT THE LOADS IMPOSED BY THIS GLAZING SYSTEM AND TO TRANSFER SUCH LOADS TO THE BUILDING MAIN STRUCTURE.
- ULTIMATE LOAD OBTAINED FROM ASCE 7-22, MULTIPLY BY 0.6 SHALL BE LESS THAN OR EQUAL TO MAX. DESIGN LOAD IN THIS DOCUMENT. THE DESIGN LOADS SHOWN IN THIS DOCUMENT ARE ALLOWABLE DESIGN LOADS.
- ALL JOINT AND FRAME CONNECTION SEALED WITH SILICONE SEALANT.

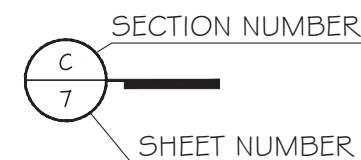
INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

- STEP 1: DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7-22 STANDARD.
- STEP 2: SEE SHEET E1 & E2 FOR APPROVED TYPICAL ELEVATION.
- STEP 3: SEE CHARTS ON SHEET G1 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE BASED ON APPLICABLE WIND DURATION, SEE SHEET G2 FOR GLASS TYPE.
- STEP 4: ANCHOR OPTION SEE SHEET D1 & D2. ANCHOR LAYOUT SEE ELEVATION.
- STEP 5: THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

ABBREVIATIONS AND SYMBOLS

- G.B. - GLASS BITE
- D.L.O. - DAYLITE OPENING
- F.H. - FRAME HEIGHT
- F.W. - FRAME WIDTH
- W/ - WITH
- W/O - WITHOUT
- O.C. - ON CENTER



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.

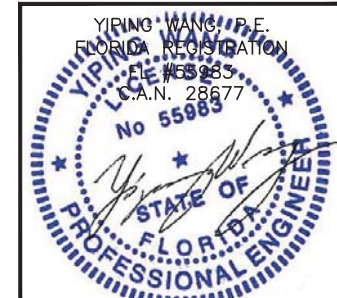
B- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.

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.

FL 42158



MCY ENGINEERING, INC.
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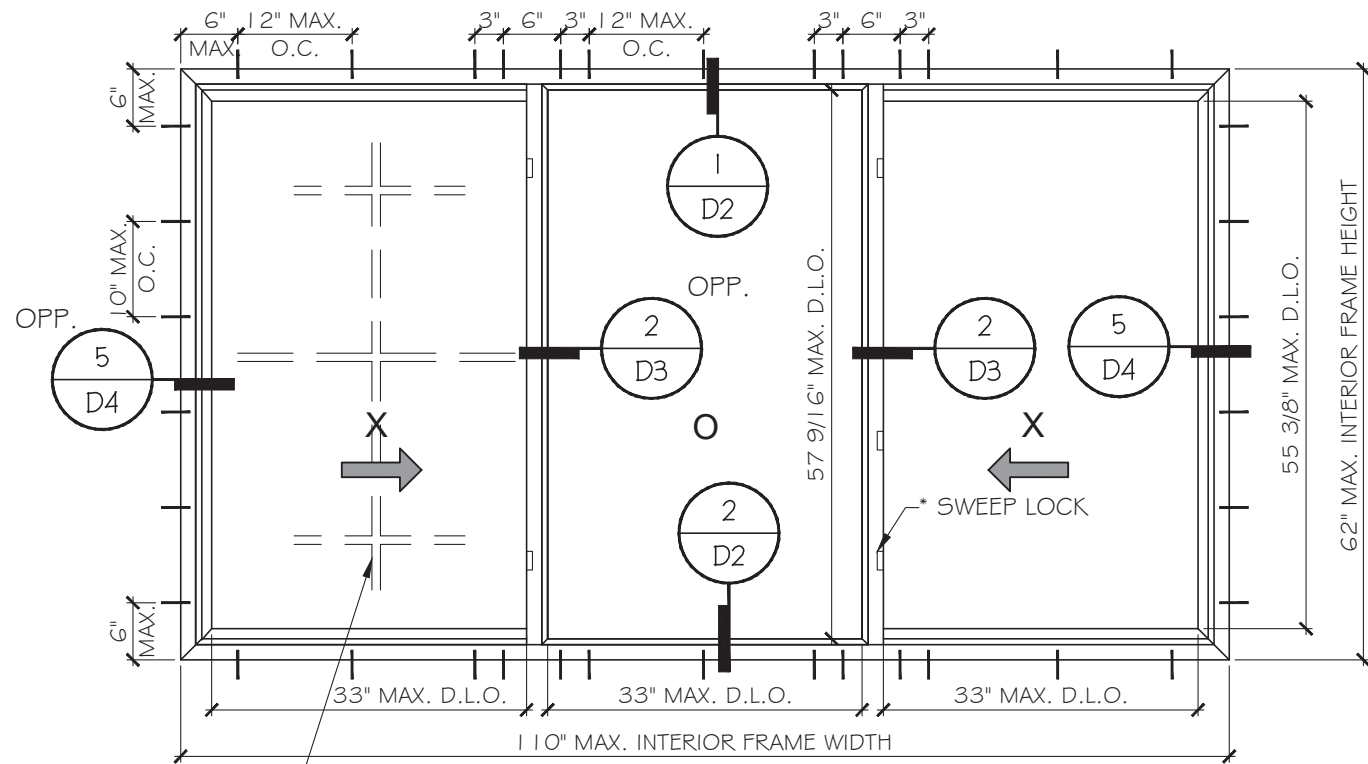
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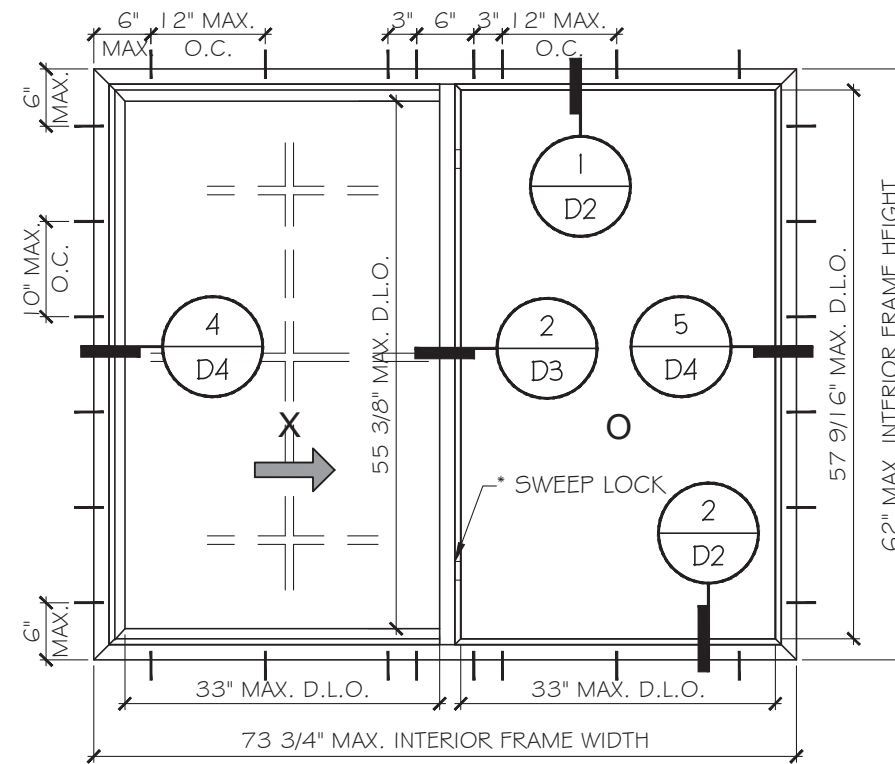
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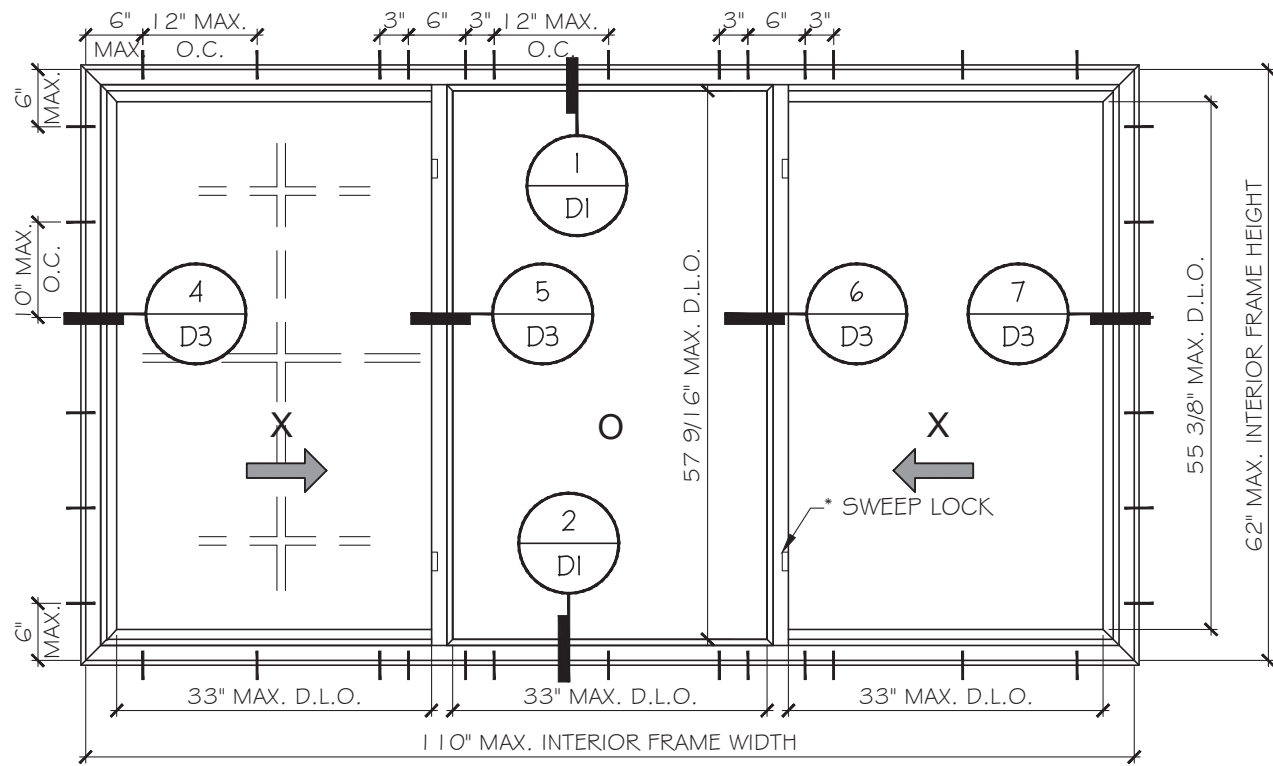


TYPICAL EXTERIOR ELEVATIONS
 FLUSH FRAME
 SEE SHEET G1 FOR DESIGN LOAD

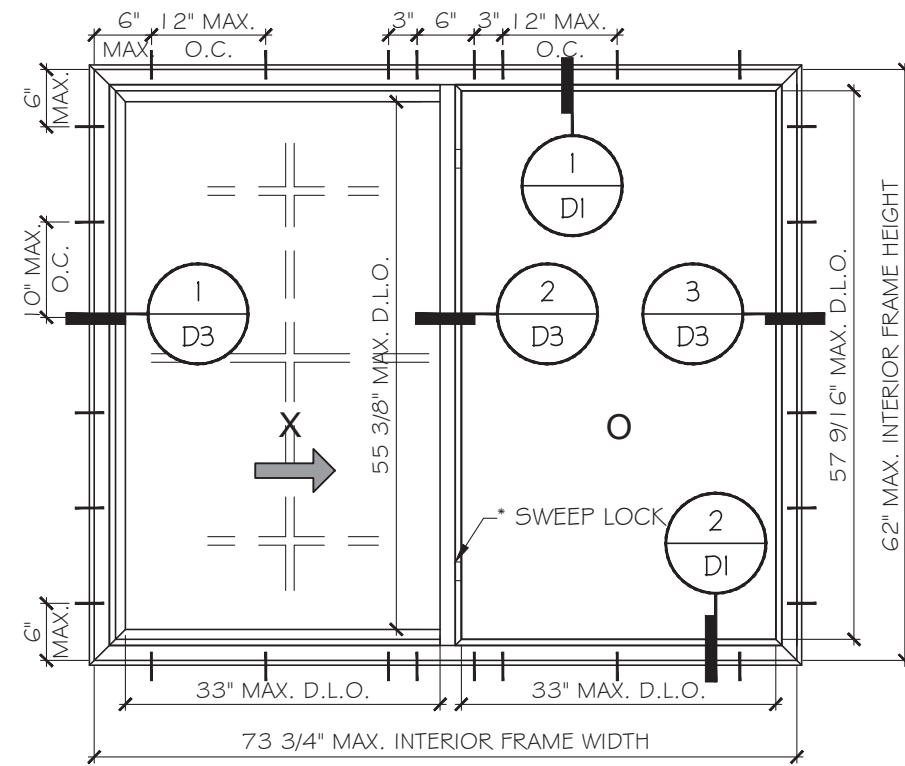


TYPICAL EXTERIOR ELEVATIONS
 FLUSH FRAME
 SEE SHEET G1 FOR DESIGN LOAD

* SWEEP LOCK
 (1) PER VENT FOR WDW. HT UPTO 25" AT MID HEIGHT
 (2) PER VENT FOR WDW. HT ABOVE 25" AT 7" FROM TOP & BOTTOM



TYPICAL EXTERIOR ELEVATIONS
 FLANGE FRAME
 SEE SHEET G1 FOR DESIGN LOAD



TYPICAL EXTERIOR ELEVATIONS
 FLANGE FRAME
 SEE SHEET G1 FOR DESIGN LOAD

FALSE MUNTINS
 SURFACE APPLIED
 MAY BE USED

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 FLORIDA REGISTRATION
 No. 55983
 PROFESSIONAL ENGINEER
 STATE OF FLORIDA

July 11th, 2023

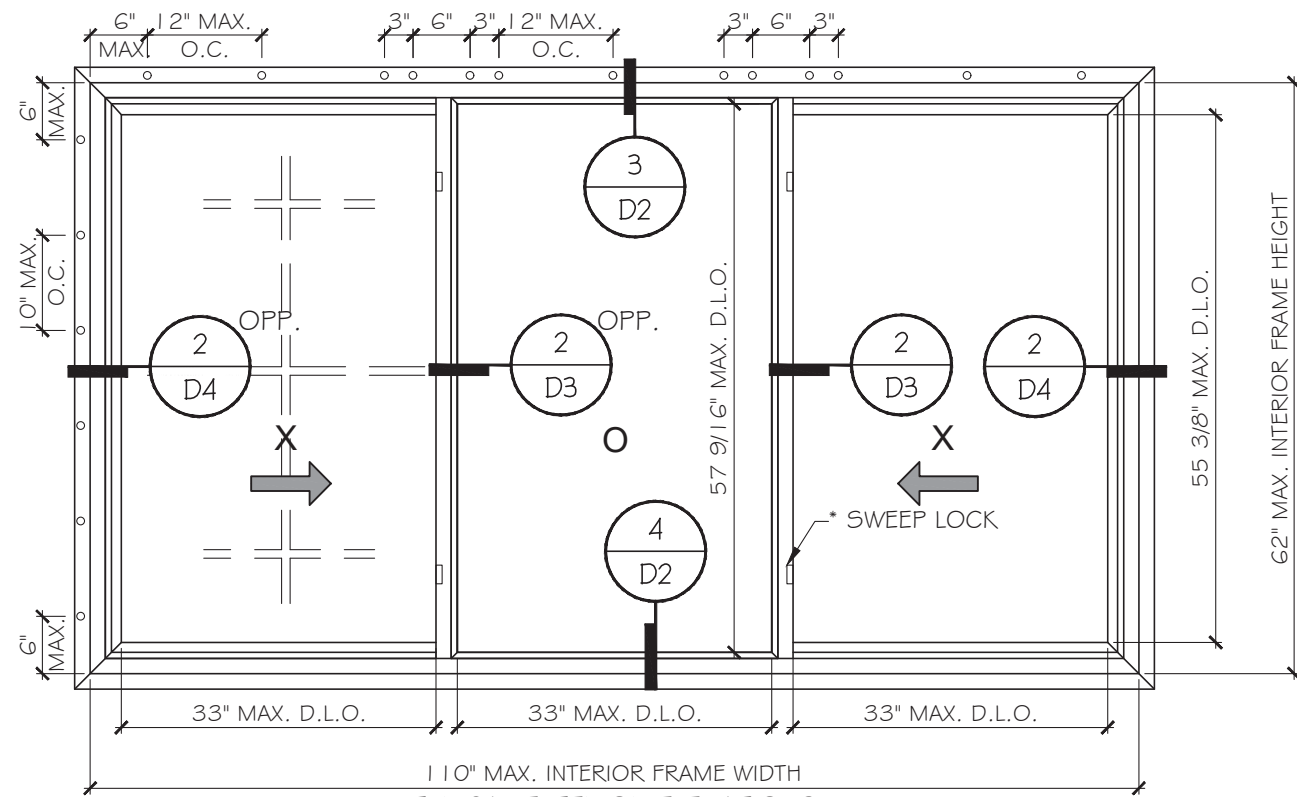
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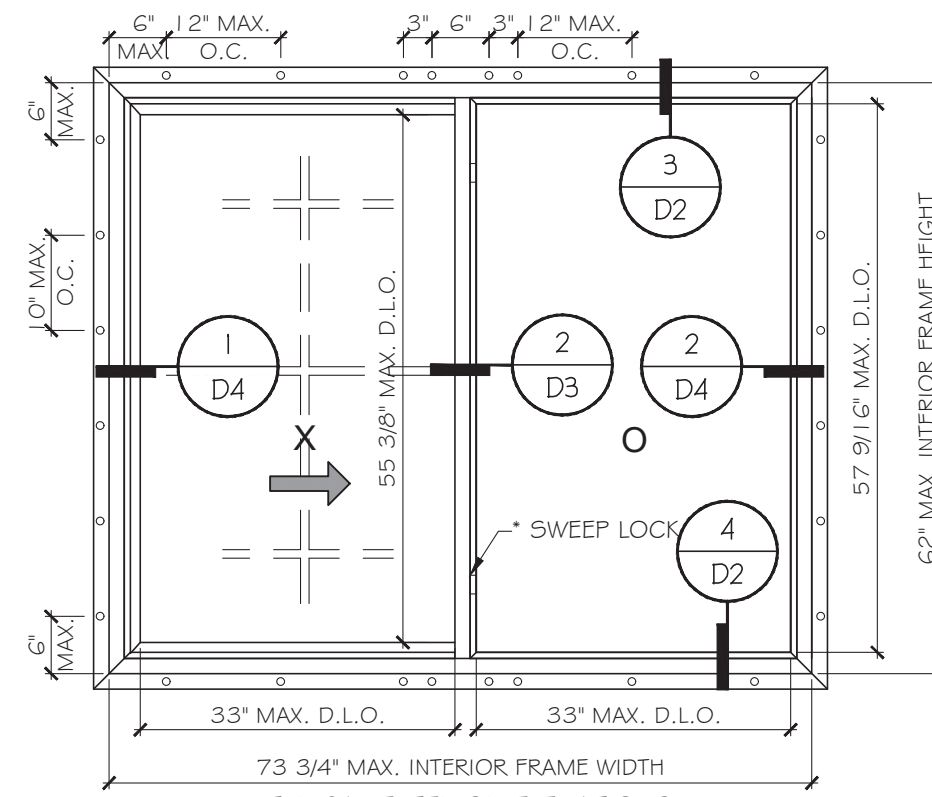
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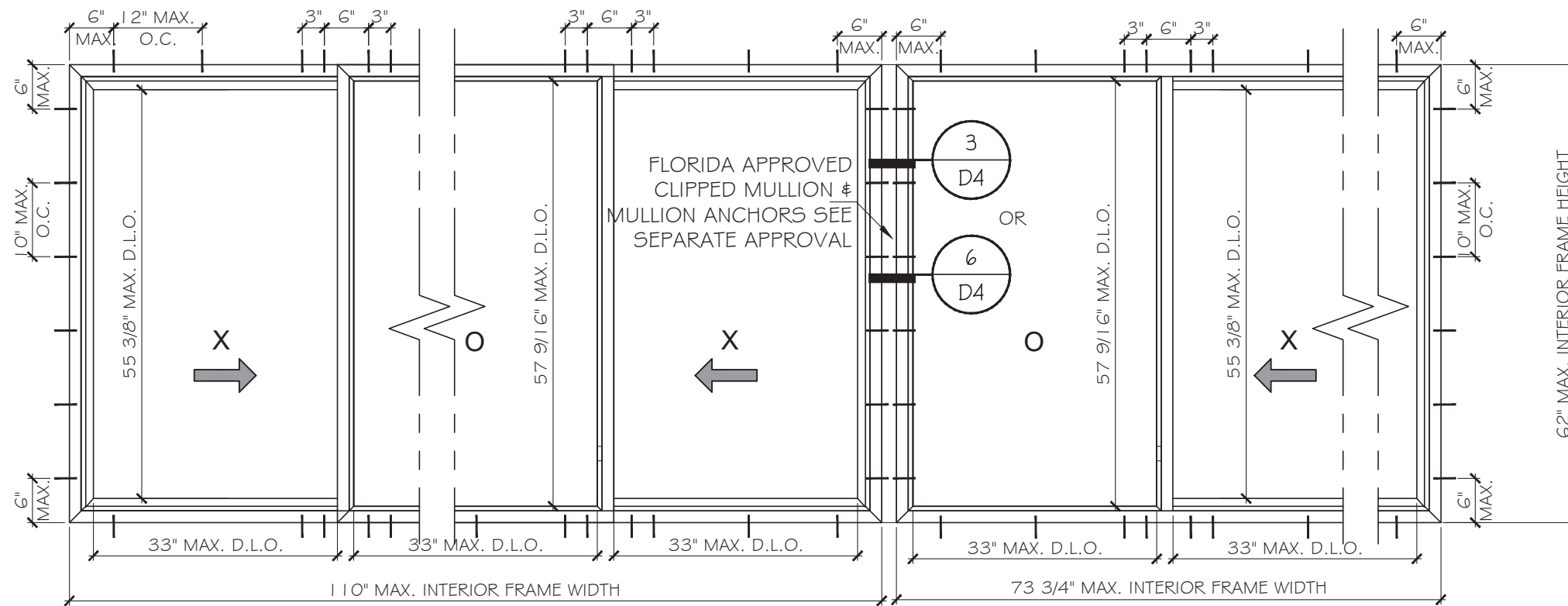


TYPICAL EXTERIOR ELEVATIONS
FIN FRAME
SEE SHEET G1 FOR DESIGN LOAD

* SWEEP LOCK
(1) PER VENT FOR WDW. HT UPTO 25" AT MID HEIGHT
(2) PER VENT FOR WDW. HT ABOVE 25" AT 7" FROM TOP & BOTTOM



TYPICAL EXTERIOR ELEVATIONS
FIN FRAME
SEE SHEET G1 FOR DESIGN LOAD



TYPICAL EXTERIOR ELEVATIONS
SEE SHEET G1 FOR CAPACITY
XOX#OX SHOWN
XOX #XOX OR OX & OX

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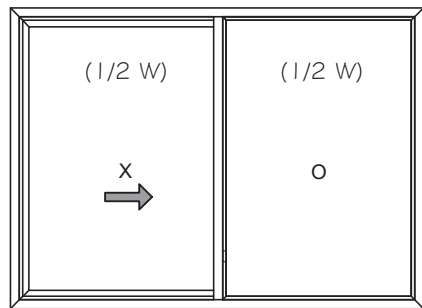
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DESIGN LOAD CAPACITY - PSF (OX OR XO)			
INTERIOR FRAME DIMENSIONS		GLASS TYPE	
HEIGHT	WIDTH	'A' & 'A1' & 'B' & 'B1'	
INCH	INCH	EXT(+)	INT(-)
25	25-1/2	60	60
	36	60	60
	52-1/8	60	60
	73-3/4	60	60
37-3/8	25-1/2	60	60
	36	60	60
	52-1/8	60	60
	73-3/4	60	60
49-5/8	25-1/2	60	60
	36	60	60
	52-1/8	60	60
	73-3/4	60	60
62	25-1/2	60	60
	36	60	60
	52-1/8	60	60
	73-3/4	60	60
23	23	60	60
	31	60	60
	47	60	60
	73	60	60
35	23	60	60
	31	60	60
	47	60	60
	73	60	60
47	23	60	60
	31	60	60
	47	60	60
	73	60	60
59	23	60	60
	31	60	60
	47	60	60
	73	60	60

DESIGN LOAD CAPACITY - PSF (OX OR XO)			
INTERIOR FRAME DIMENSIONS		GLASS TYPE	
HEIGHT	WIDTH	'A' & 'A1' & 'B' & 'B1'	
INCH	INCH	EXT(+)	INT(-)
25	25-1/2	60	60
	36	60	60
	52-1/8	60	60
	73-3/4	60	60
37-3/8	25-1/2	60	60
	36	60	60
	52-1/8	60	60
	73-3/4	60	60
49-5/8	25-1/2	60	60
	36	60	60
	52-1/8	60	60
	73-3/4	60	60
62	25-1/2	60	60
	36	60	60
	52-1/8	60	60
	73-3/4	60	60
23	23	60	60
	31	60	60
	47	60	60
	73	60	60
35	23	60	60
	31	60	60
	47	60	60
	73	60	60
47	23	60	60
	31	60	60
	47	60	60
	73	60	60
59	23	60	60
	31	60	60
	47	60	60
	73	60	60

DESIGN LOAD CAPACITY - PSF (XOX)			
INTERIOR FRAME DIMENSIONS		GLASS TYPE	
HEIGHT	WIDTH	'A' & 'A1' & 'B' & 'B1'	
INCH	INCH	EXT(+)	INT(-)
25	73	60	60
	105-1/4	60	60
	110	60	60
37-3/8	73	60	60
	105-1/4	60	60
	110	60	60
49-5/8	73	60	60
	105-1/4	60	60
	110	60	60
62	73	60	60
	105-1/4	60	60
	110	60	60
23	65	60	60
	77	60	60
	91	60	60
	101	60	60
	107	60	60
35	65	60	60
	77	60	60
	91	60	60
	101	60	60
	107	60	60
47	65	60	60
	77	60	60
	91	60	60
	101	60	60
	107	60	60
59	65	60	60
	77	60	60
	91	60	60
	101	60	60
	107	60	60

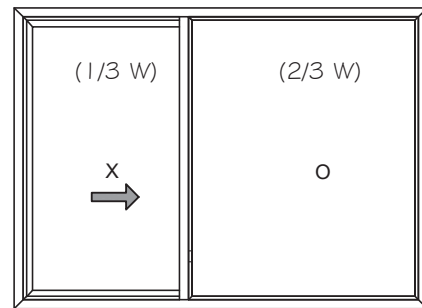
DESIGN LOAD CAPACITY - PSF (XOX)			
INTERIOR FRAME DIMENSIONS		GLASS TYPE	
HEIGHT	WIDTH	'A' & 'A1' & 'B' & 'B1'	
INCH	INCH	EXT(+)	INT(-)
25	73	60	60
	105-1/4	60	60
	110	60	60
37-3/8	73	60	60
	105-1/4	60	60
	110	60	60
49-5/8	73	60	60
	105-1/4	60	60
62	65	60	60
	77	60	60
	91	60	60
	101	60	60
35	65	60	60
	77	60	60
	91	60	60
	101	60	60
47	65	60	60
	77	60	60
	91	60	60
59	65	60	60
	77	60	60
	91	60	60



OPERATING VENT TO BE
1/2 OF THE WDW. WIDTH
OX OR XO

DAYLITE OPENINGS:
AVERAGE DLO WIDTH = $\frac{\text{INTERIOR FRAME WIDTH} - 7.750}{2}$

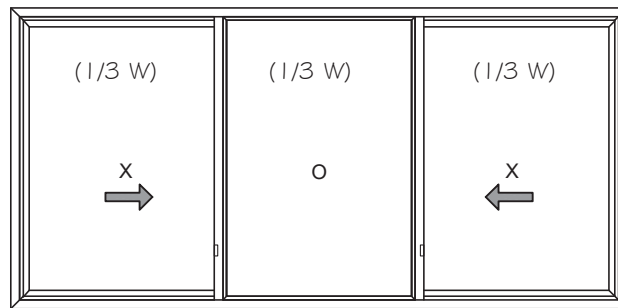
DLO HEIGHT = INTERIOR FRAME HEIGHT - 6.562 (VENT)
= INTERIOR FRAME HEIGHT - 4.438 (FIXED LITE)



OPERATING VENT TO BE
1/3 OF THE WDW. WIDTH
OX OR XO

DAYLITE OPENINGS:
AVERAGE DLO WIDTH = $\frac{\text{INTERIOR FRAME WIDTH} - 11}{3}$

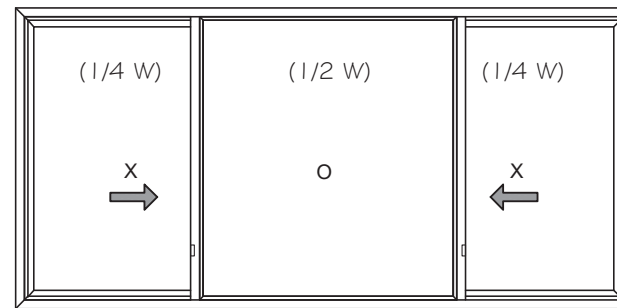
DLO HEIGHT = INTERIOR FRAME HEIGHT - 6.562 (VENT)
= INTERIOR FRAME HEIGHT - 4.438 (FIXED LITE)



OPERATING VENT TO BE
1/3 OF THE WDW. WIDTH
XOX

DAYLITE OPENINGS:
AVERAGE DLO WIDTH = $\frac{\text{INTERIOR FRAME WIDTH} - 11}{3}$

DLO HEIGHT = INTERIOR FRAME HEIGHT - 6.562 (VENT)
= INTERIOR FRAME HEIGHT - 4.438 (FIXED LITE)



OPERATING VENT TO BE
1/4 OF THE WDW. WIDTH
XOX

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FLORIDA REGISTRATION
No. 55983

YIPING WANG
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STATE OF FLORIDA

July 11th, 2023

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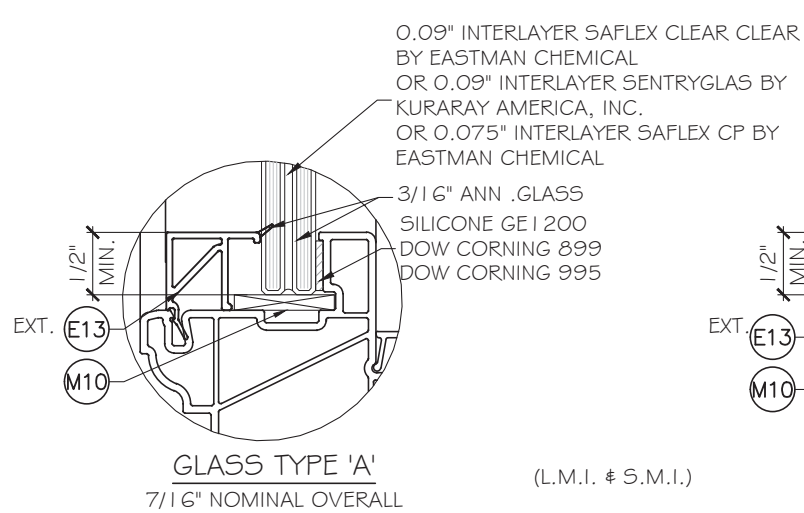
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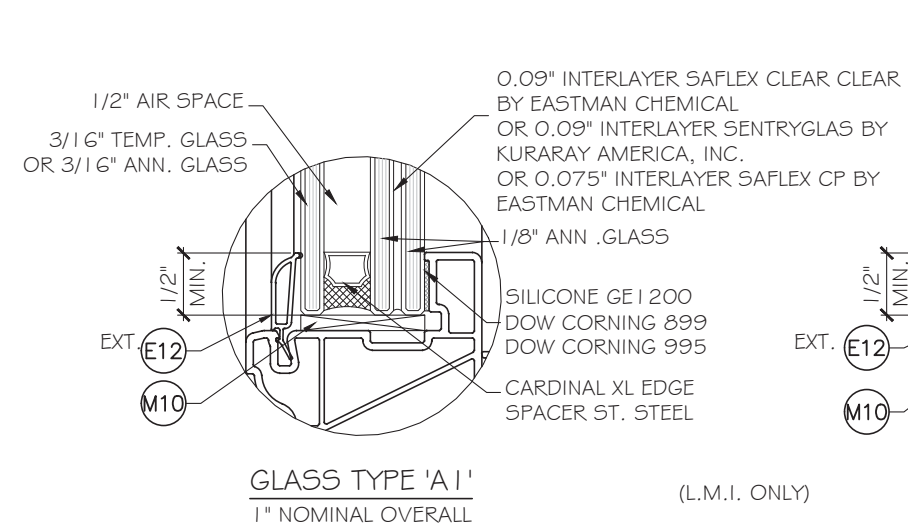
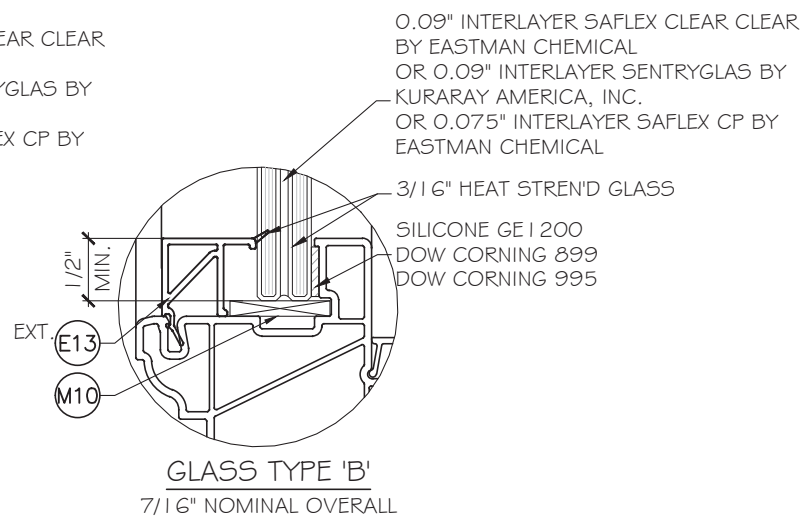
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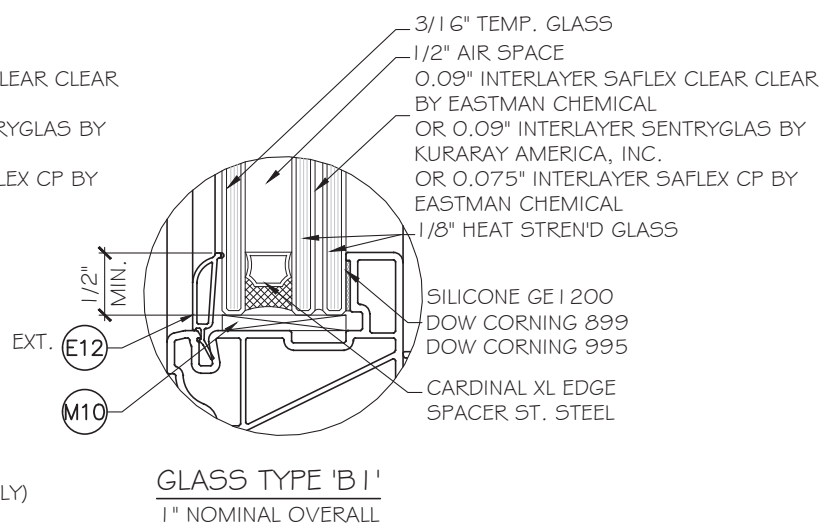
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(L.M.I. & S.M.I.)



(L.M.I. ONLY)



(S.M.I.)
IN ORDER TO QUALIFY FOR SMALL MISSILE IMPACT RATING,
EXTERIOR PLY OF GLASS TYPES 'A1' & 'B1' MUST BE TEMPRED.

NOTE:
GLASS COMPLIES WITH ASTM E1300-09
(3 SEC. GUSTS).

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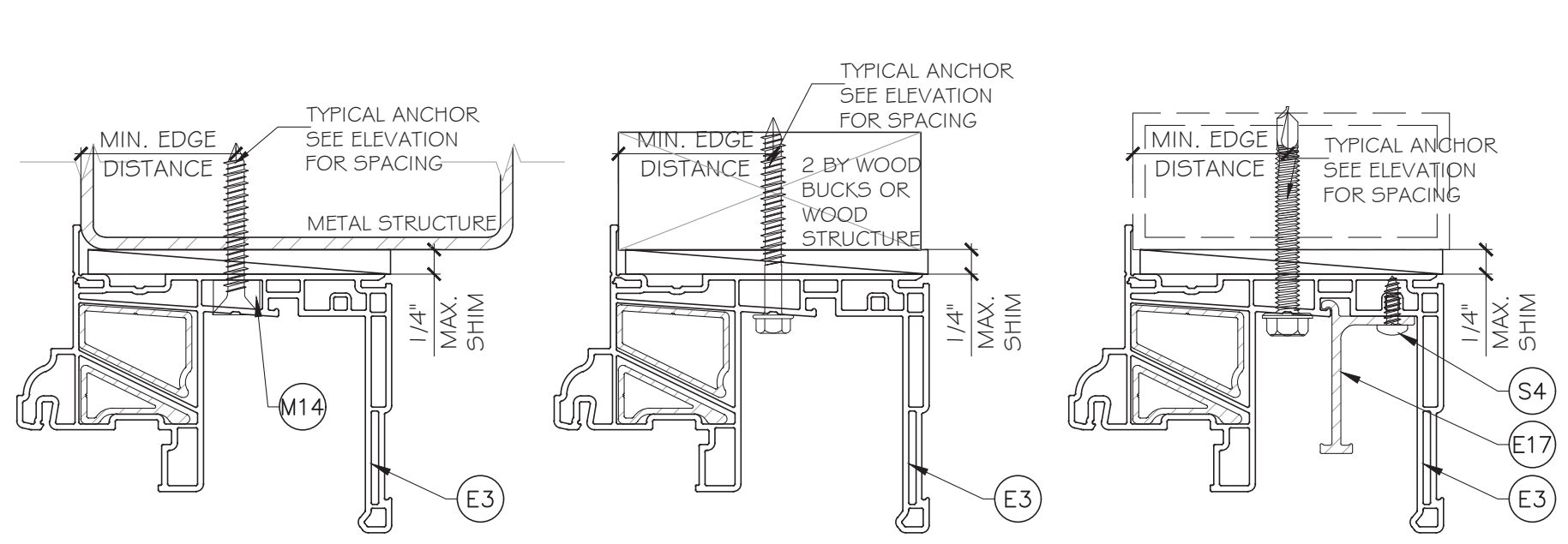
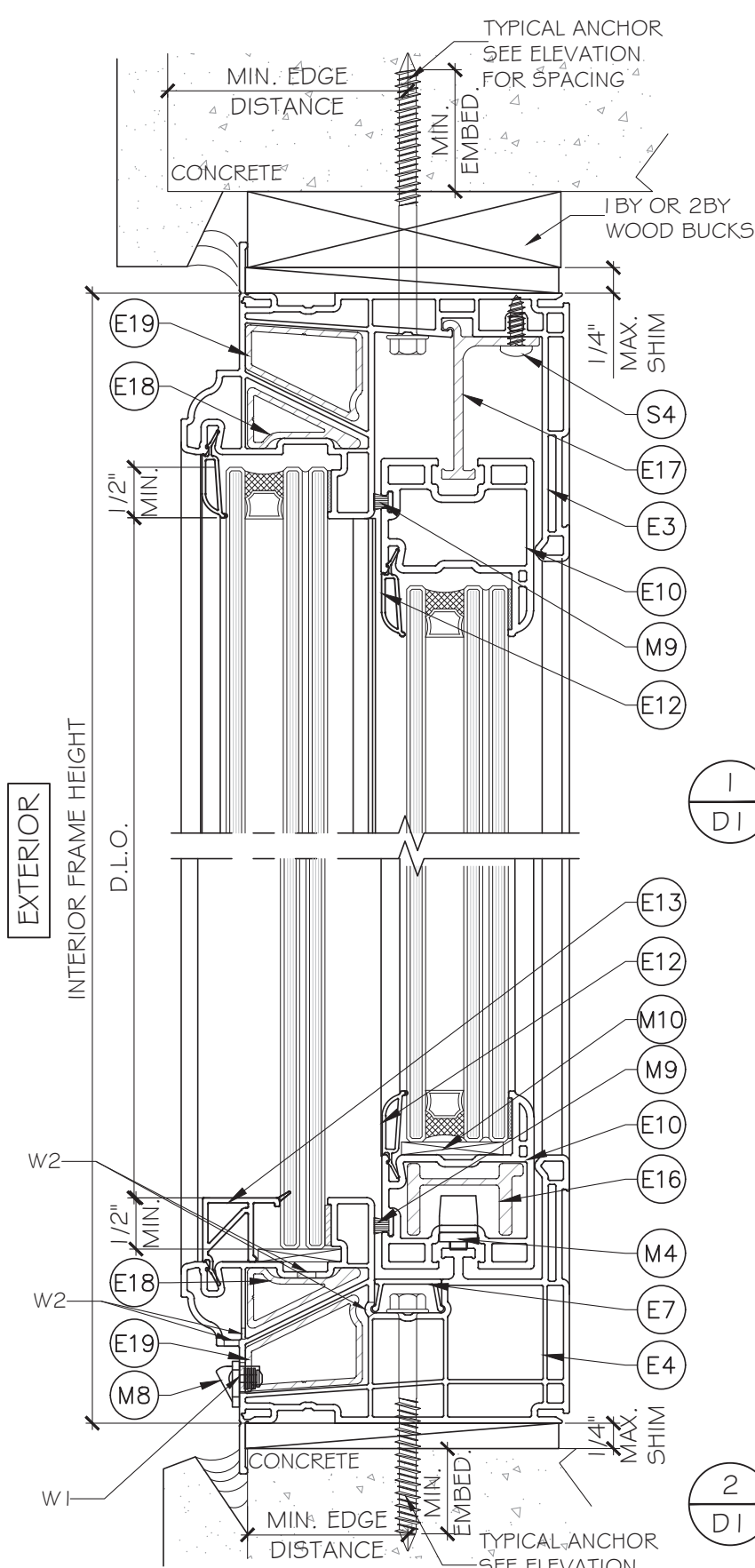
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G2

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FLAT HEAD WITH BUSHING REQUIRED AT HEAD ABOVE FIXED LITE ONLY ON ALL STRUCTURE TYPES

TYPICAL ANCHOR TYPES: (SEE ELEVATIONS FOR SPACING)

TYPE 'A' -- 1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI) INTO 2 BY WOOD BUCKS OR WOOD STRUCTURES. 1 1/2" MIN. PENETRATION INTO WOOD (HEAD/ JAMBS)

THRU 1 BY BUCKS INTO CONCRETE OR BLOCKS 1 3/4" MIN. EMBED INTO CONCRETE (HEAD/ SILL/ JAMBS) 1 3/4" MIN. EMBED IN TO BLOCKS (JAMBS)

DIRECTLY INTO CONCRETE OR BLOCKS 1 3/4" MIN. EMBED IN TO CONCRETE (HEAD/ SILL/ JAMBS) 1 3/4" MIN. EMBED IN TO BLOCKS (JAMBS)

TYPE 'B' -- #14 SMS OR SELF-DRILLING SCREWS: (GRADE 2 CRS) INTO FBC APPROVED MULLIONS 1/8" THK. MIN.(GOG3-T5 MIN.) OR INTO METAL STRUCTURES, STEEL: 12 GA. MIN. (Fy=36 ksi MIN.) (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE

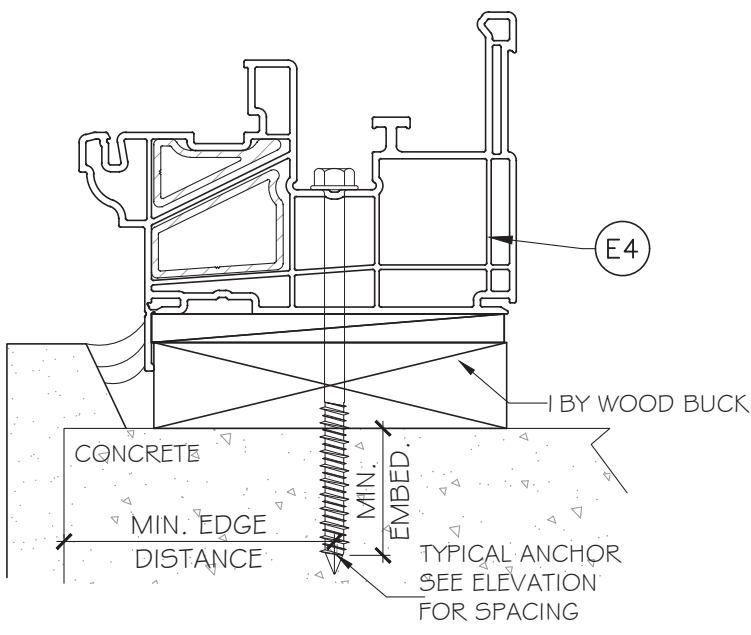
INTO CONCRETE = 2-1/2" MIN.
INTO METAL STRUCTURE = 3/4" MIN.
INTO WOOD STRUCTURE = 1" MIN.

WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.
CONCRETE AT HEAD, SILL OR JAMB f'c=3 ksi MIN.
C-90 HOLLOW/ FILLED BLOCK AT JAMBS fm=2000 PSI MIN.

1
DI DETAIL

2
DI DETAIL

WEEPHOLES:
W1 = 1/4" X 1-1/2" WEEP SLPT AT 4-1/8" FROM EACH END WITH PLASTIC COVER
W2 = 1/8" X 1/2" WEEP SLOT AT 3-1/4" FROM EACH END.



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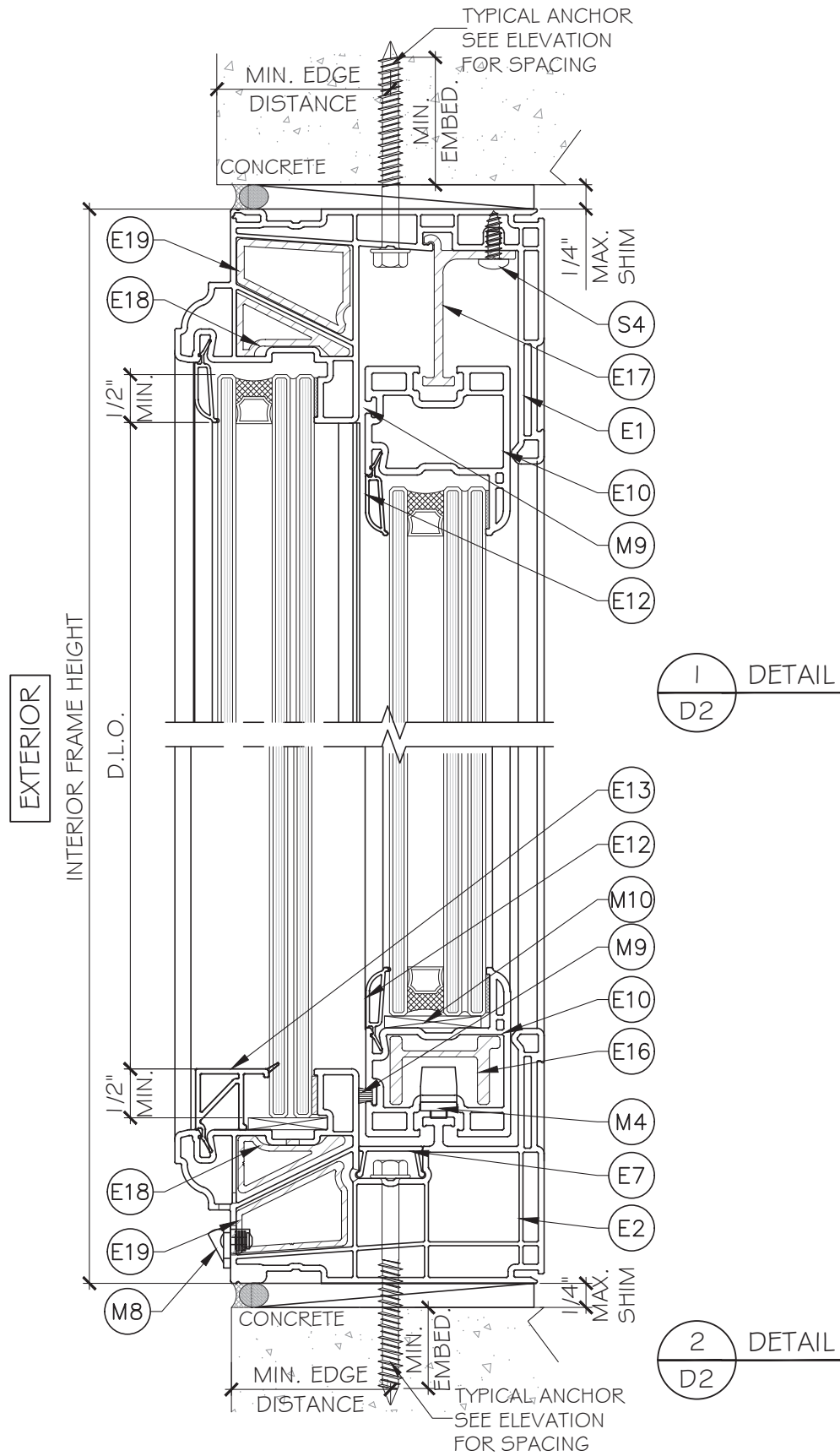
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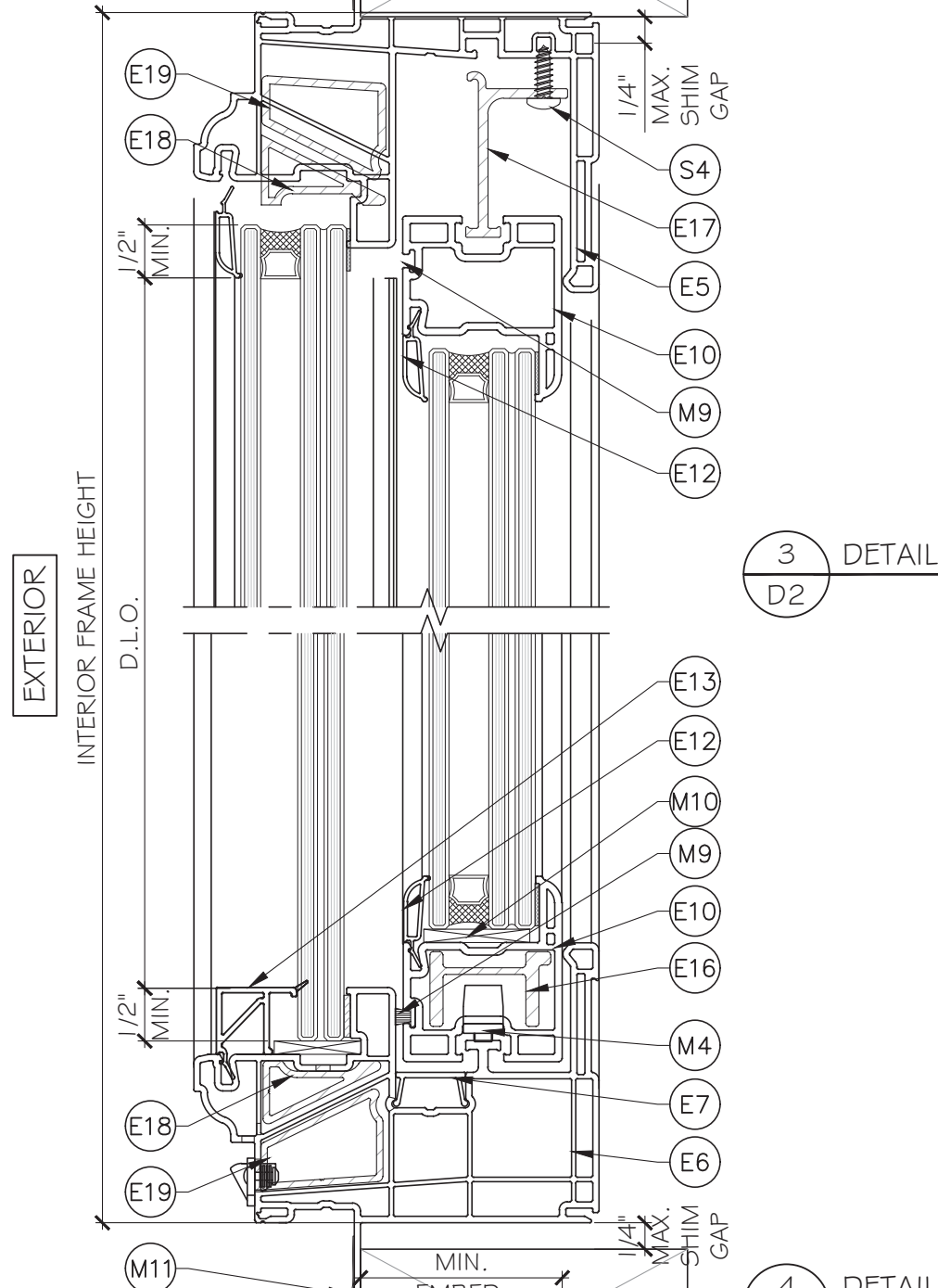
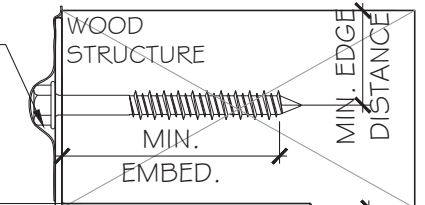
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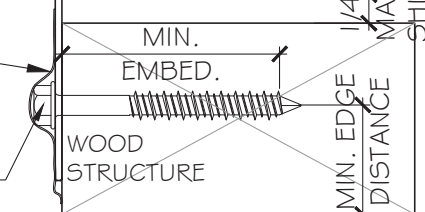
FLANGE AND FLUSH FRAMES CAN BE USED AT ALL ANCHORAGE CONDITIONS



#8 SMS/ WOOD SCREW (GRADE 2 CRS)
 INTO 2 BY WOOD BUCKS
 OR WOOD STRUCTURES
 1 - 1/4" MIN. PENETRATION INTO WOOD (G=0.55 MIN.)
 3/4" MIN. EDGE DISTANCE
 SEE ELEVATION FOR SPACING



#8 SMS/ WOOD SCREW (GRADE 2 CRS)
 INTO 2 BY WOOD BUCKS
 OR WOOD STRUCTURES
 1 - 1/4" MIN. PENETRATION INTO WOOD (G=0.55 MIN.)
 3/4" MIN. EDGE DISTANCE
 SEE ELEVATION FOR SPACING



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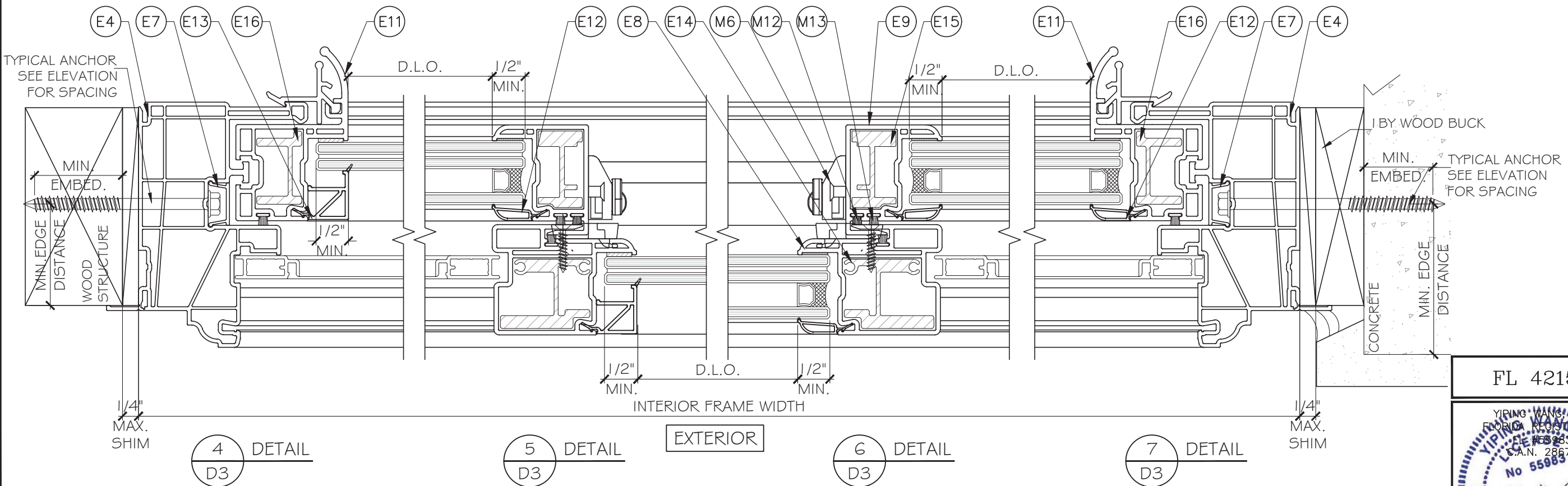
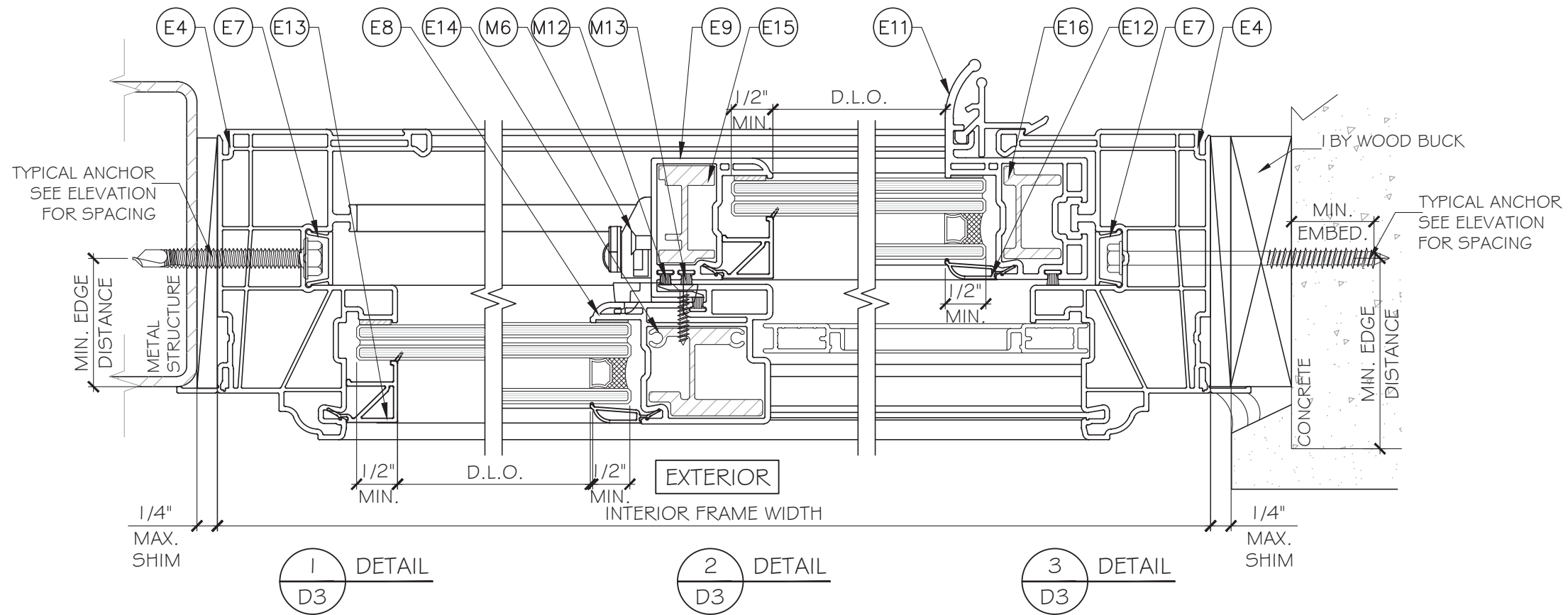
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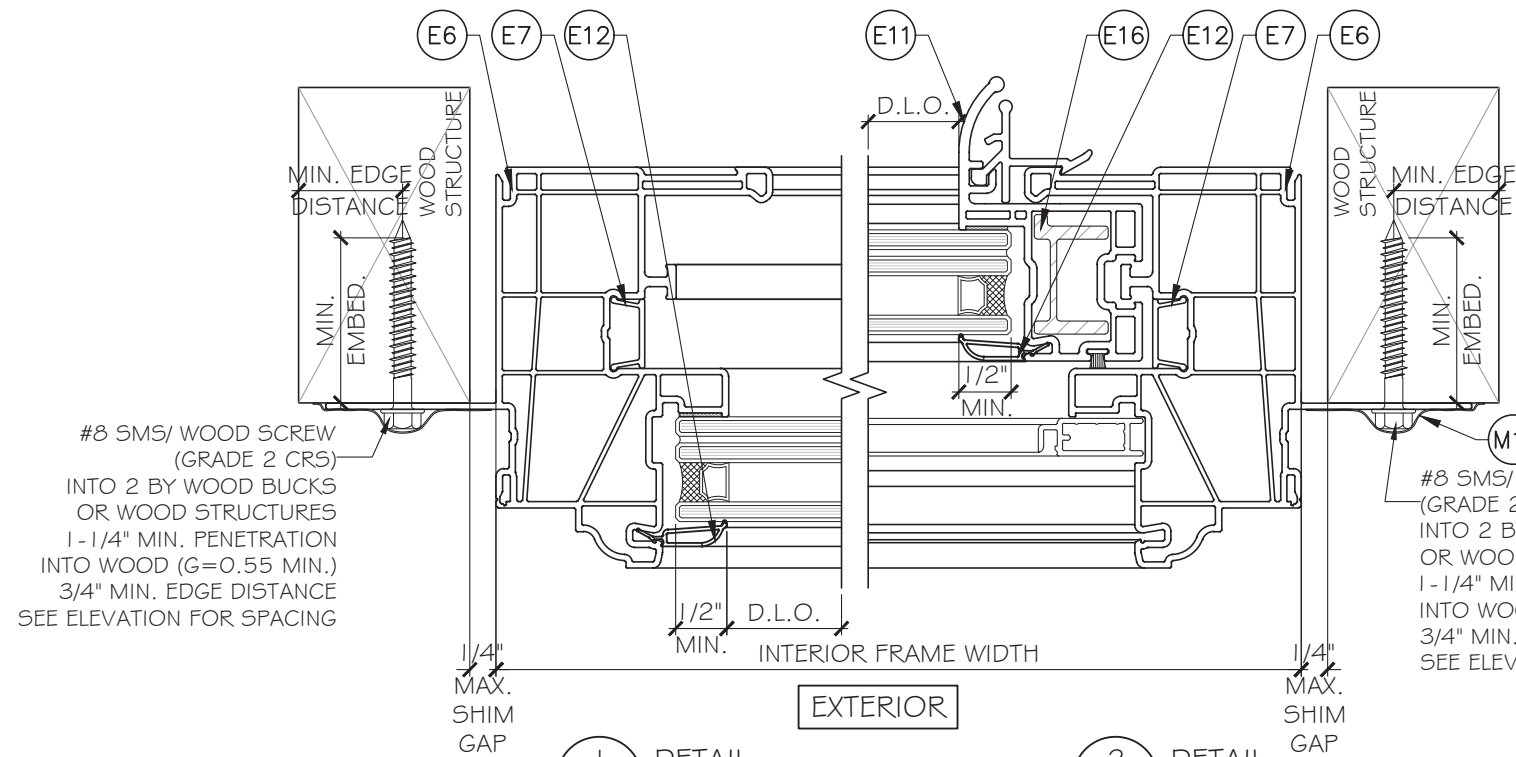
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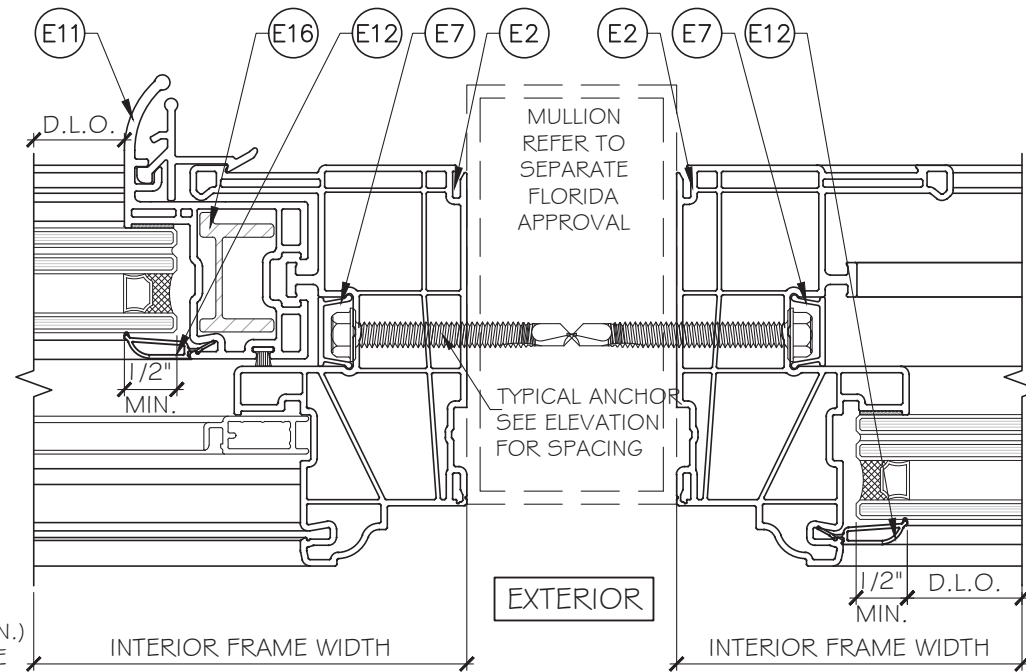


#8 SMS/ WOOD SCREW
(GRADE 2 CRS)
INTO 2 BY WOOD BUCKS
OR WOOD STRUCTURES
1-1/4" MIN. PENETRATION
INTO WOOD (G=0.55 MIN.)
3/4" MIN. EDGE DISTANCE
SEE ELEVATION FOR SPACING

#8 SMS/ WOOD SCREW
(GRADE 2 CRS)
INTO 2 BY WOOD BUCKS
OR WOOD STRUCTURES
1-1/4" MIN. PENETRATION
INTO WOOD (G=0.55 MIN.)
3/4" MIN. EDGE DISTANCE
SEE ELEVATION FOR SPACING

1 DETAIL
D4

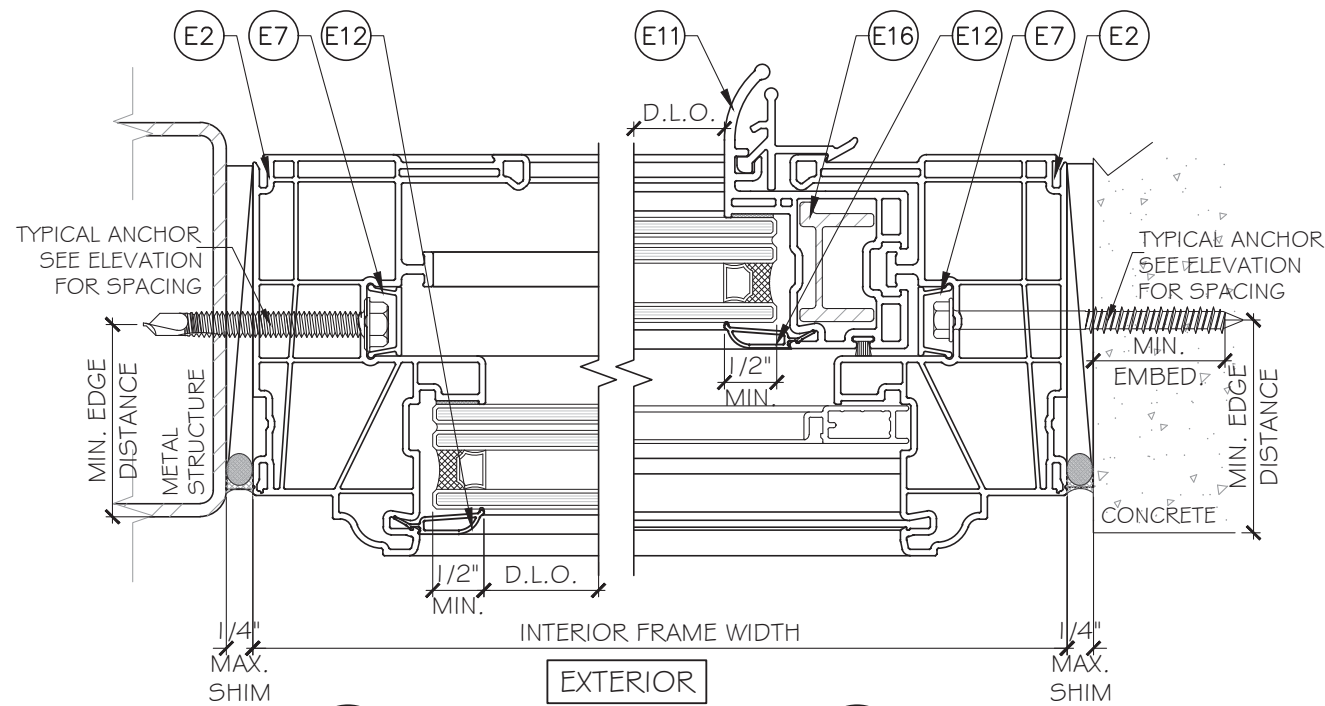
2 DETAIL
D4



EXTERIOR

INTERIOR FRAME WIDTH

3 DETAIL
D4

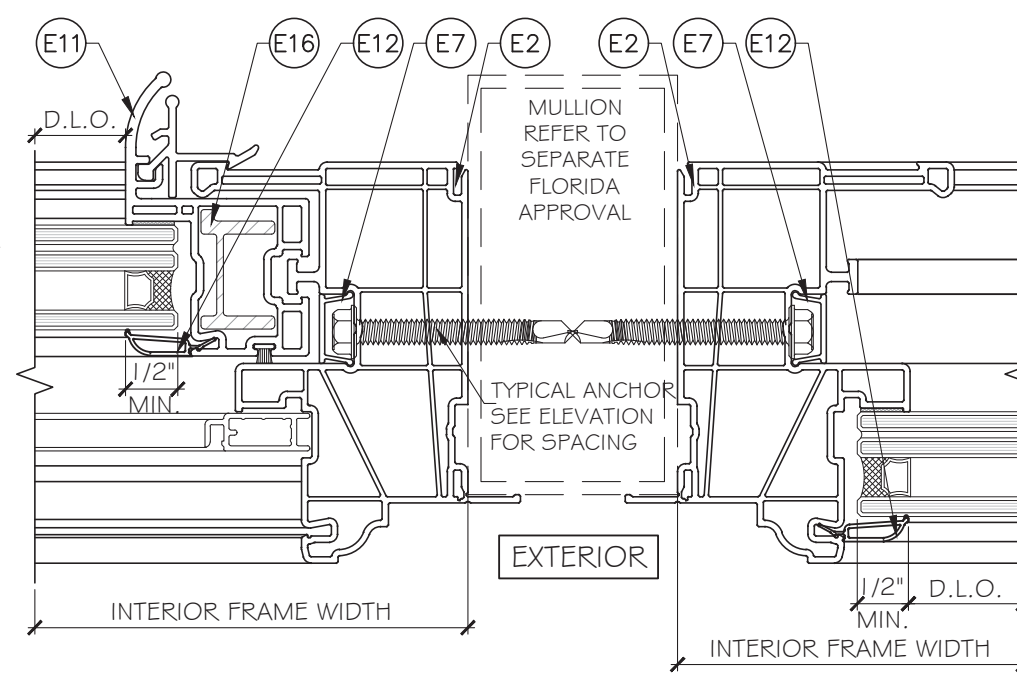


TYPICAL ANCHOR
SEE ELEVATION
FOR SPACING

TYPICAL ANCHOR
SEE ELEVATION
FOR SPACING

4 DETAIL
D4

5 DETAIL
D4



EXTERIOR

INTERIOR FRAME WIDTH

6 DETAIL
D4

FL 42158

YIPING WANG, P.E.
FLORIDA REGISTRATION
No. 55983
C.A.N. 28677

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PROFESSIONAL ENGINEER

July 11th, 2023

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GLAZING CONSULTANTS
12781 MIRAMAR PARKWAY #301
MIRAMAR, FL 33027
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www.MCYEngineering.com mcy@mcyengineering.com

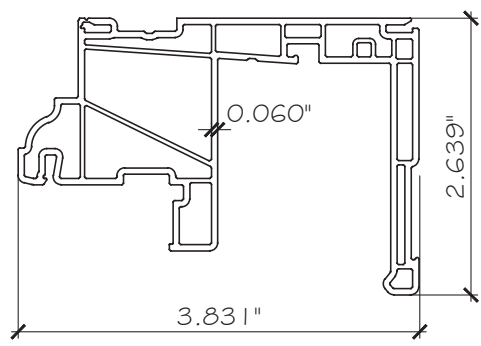
ES-V200 Vinyl Horizontal Rolling Window-L.M.I.& S.M.I.
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3550 N.W. 49 STREET
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Rev. No.	Date	Drawn By	Description
1.	06.23.2023	MCY	NEW

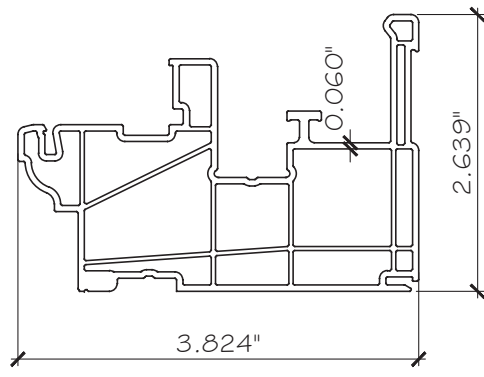
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DRAWING NO. AD23-13

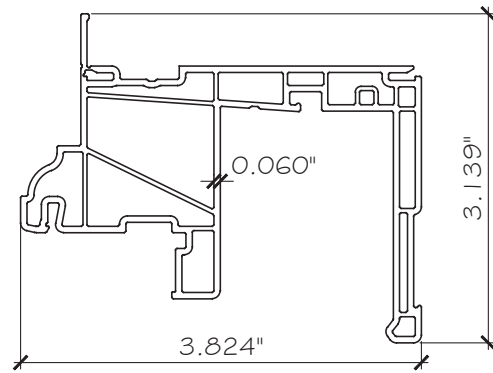
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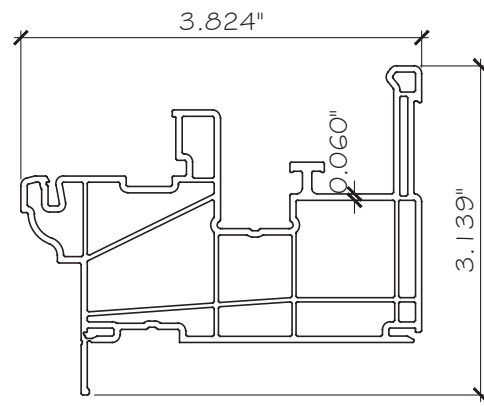
E1 FLUSH FRAME HEAD



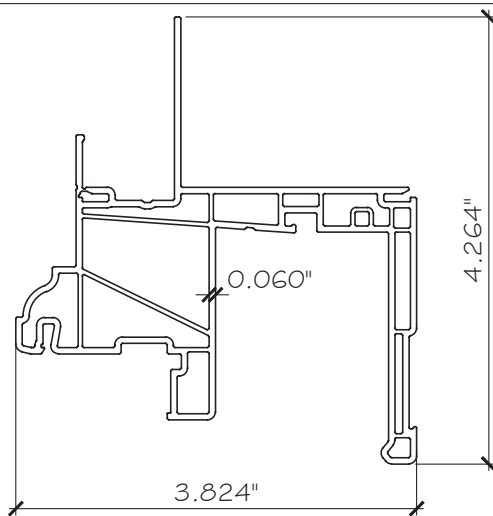
E2 FLUSH FRAME SILL



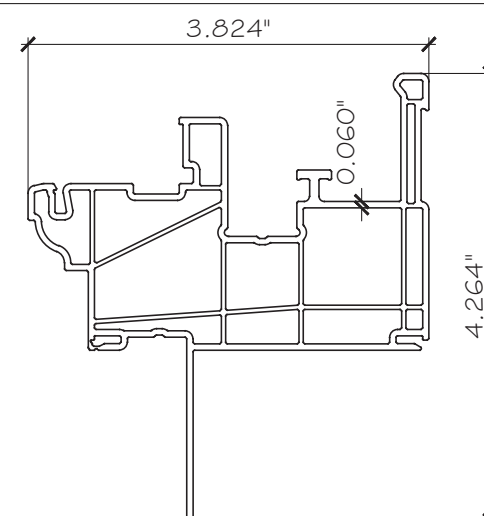
E3 FLANGE FRAME HEAD



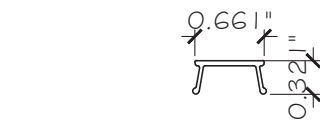
E4 FLANGE FRAME SILL



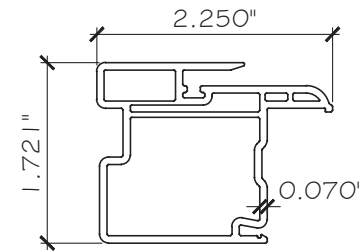
E5 FIN FRAME HEAD



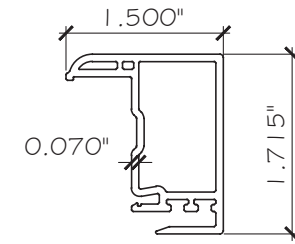
E6 FIN FRAME SILL



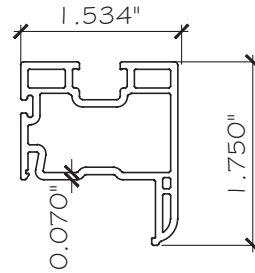
E7 SCREW COVER



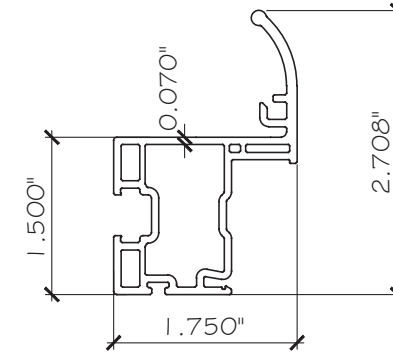
E8 FIXED STILE



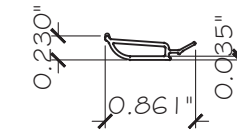
E9 LOCK STILE



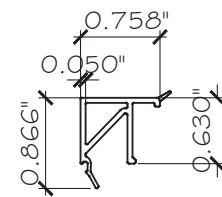
E10 VENT RAIL



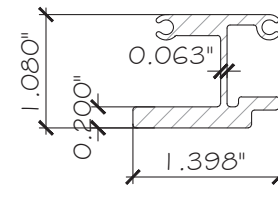
E11 JAMB STILE



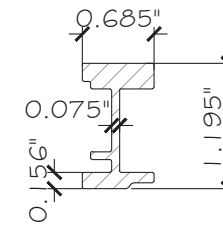
E12 GLAZING BEAD



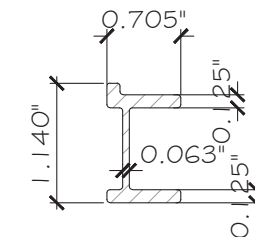
E13 GLAZING BEAD



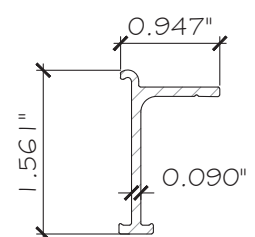
E14 FIXED STILE REINFORCING



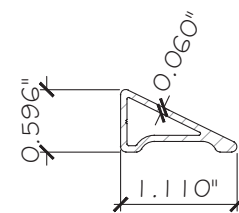
E15 LOCK STILE REINFORCING



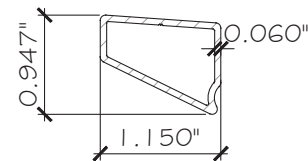
E16 GLAZING BEAD



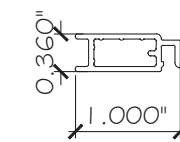
E17 GLAZING BEAD



E18 FRAME REINF. SMALL



E19 FRAME REINF. LARGE



E20 SCREEN

FL 42158

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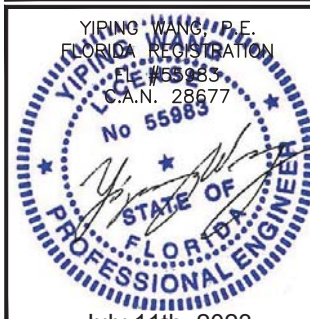
Rev. No.	Date	Drawn By	Description
1	06.23.2023	MCY	NEW
Drawn Date: 06.23.2023		Scale	
DRAWING NO. AD23-13			
PARTS			
Sheet No. 10 OF 12			

BILL OF MATERIALS

ITEM	PART	DESCRIPTION	MATERIAL	MANUF.	REMARKS
E1	ES-1009	EQUAL LEG FRAME HEAD	PVC	DECEUNINCK NORTH AERICA LLC	-
E2	ES-1002	EQUAL LEG FRAME JAMB/ SILL	PVC	DECEUNINCK NORTH AERICA LLC	-
E3	ES-1016	FLANGE FRAME HEAD	PVC	DECEUNINCK NORTH AERICA LLC	-
E4	ES-1015	FLANGE FRAME JAMB/ SILL	PVC	DECEUNINCK NORTH AERICA LLC	-
E5	ES-1021	FIN FRAME HEAD	PVC	DECEUNINCK NORTH AERICA LLC	-
E6	ES-1020	FIN FRAME JAMB/ SILL	PVC	DECEUNINCK NORTH AERICA LLC	-
E7	ES-1003	SCREW COVER	PVC	DECEUNINCK NORTH AERICA LLC	-
E8	ES-1004	FIXED MEETING STILE	PVC	DECEUNINCK NORTH AERICA LLC	-
E9	ES-1005	LOCK STILE	PVC	DECEUNINCK NORTH AERICA LLC	-
E10	ES-1010	TOP/ BOTTOM RAIL	PVC	DECEUNINCK NORTH AERICA LLC	-
E11	ES-1007	JAMB STILE	PVC	DECEUNINCK NORTH AERICA LLC	-
E12	ES-1008	IG GLAZING BEAD	PVC	DECEUNINCK NORTH AERICA LLC	-
E13	ES-1025	7/16" MONOLITHIC GLAZING BEAD	PVC	DECEUNINCK NORTH AERICA LLC	-
E14	ES-802	FIXED MTG. STILE REINFORCEMENT	6005A-T5	ES WINDOWS	-
E15	ES-807	LOCK STILE REINFORCEMENT	6005A-T5	ES WINDOWS	-
E16	ES-800	TOP/ BOTTOM RAIL & JAMB STILE REINFORCEMENT	6005A-T5	ES WINDOWS	-
E17	ES-803	HEAD TRACK	6005A-T5	ES WINDOWS	-
E18	ES-1026	FRAME REINFORCEMENT SMALL	6005A-T5	ES WINDOWS	6" LONG AT MTG. STILE LOCATION
E19	ES-1027	FRAME REINFORCEMENT LARGE	6005A-T5	ES WINDOWS	6" LONG AT MTG. STILE LOCATION
E20	-	SCREEN	PVC	DECEUNINCK NORTH AERICA LLC	-
M1	SCS 1200	GLAZING SILICONE (1/2" X 3/16" BEAD)	SILICONE	GENERAL ELECTIC	-
M2	DOW 995	GLAZING SILICONE (1/2" X 3/16" BEAD)	SILICONE	DOW CORNING	-
M3	DOW 899	GLAZING SILICONE (1/2" X 3/16" BEAD)	SILICONE	DOW CORNING	-
M4	70-10001	ROLLER	NYLON/ SS	SULLIVAN OR EQUIV	-
M6	70-10044	SWEEP LOCK	-	ES WINDOWS	ATTACHED WITH (2) #6 X 3/4" FH SMS
M7	70-10045	KEEPER	-	ES WINDOWS	ATTACHED WITH (2) #6 X 3/4" FH SMS
M8	146-1A	WEEP HOLE COVERS	PVC	ES WINDOWS	
M9	W43291NW	.187 X .290 WATERPROOFING PILE W/ CENTER FIN	WOOL	ULTRAFAB	
M10	-	SETTING BLOCK, 2 PER LITE	EPDM	-	DUROMETER 85±5
M11	-	PROTECTO WARP WATERPROOFING OR EQUIV.	-	-	AT FIN FRAME
M12	W2315NW	.187X.150 WEATHERSTRIP PILE W/ CENTER FIN.	WOOL	ULTRAFAB	
M13	W23221NG	.187X.220 WEATHERSTRIP PILE W/ CENTER FIN.	WOOL	ULTRAFAB	REQD. WITH FLAT HEAD ANCHORS AT FIX. LITE ONLY
M14	71-10047	ANCHOR BUSHING	NYLON	ES CUSTOM	-
S3		#8 X 3" TRUSS HEAD SMS - MEETING RAIL ATTACHMENT	STAINLESS STEEL	4 PER MTG RAIL	-
S4		#8 X 1/2" PAN HEAD SMS - HEAD TRACK	STAINLESS STEEL	-	-
S5		#6 X 3/4" FLAT HEAD SMS - SWEEP LOCK/ KEEPER	STAINLESS STEEL	-	-

WHITE PVC EXTRUSIONS TO BE LABELED WITH AAMA EXTRUDER CODE, EXTRUDER NAME, CITY STATE AND 'MDCA'

FL 42158



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DATE: 06.23.2023

SCALE: DRAWING NO. AD23-13

SHEET NO. 11 OF 12

July 11th, 2023

M C Y

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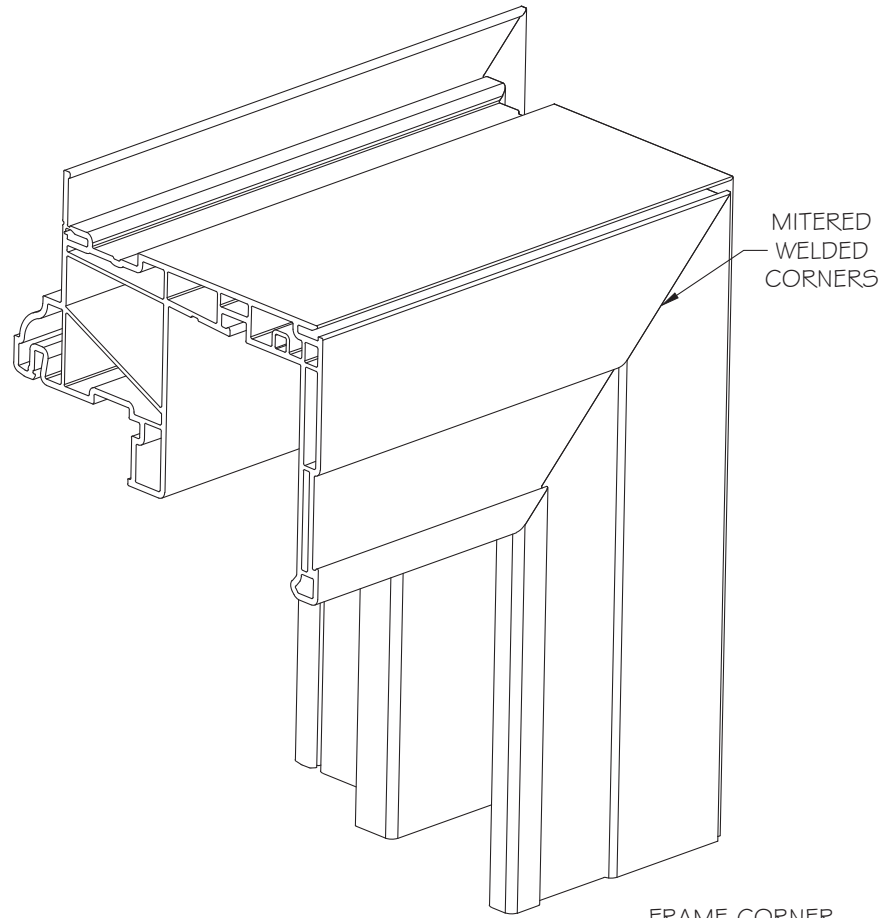
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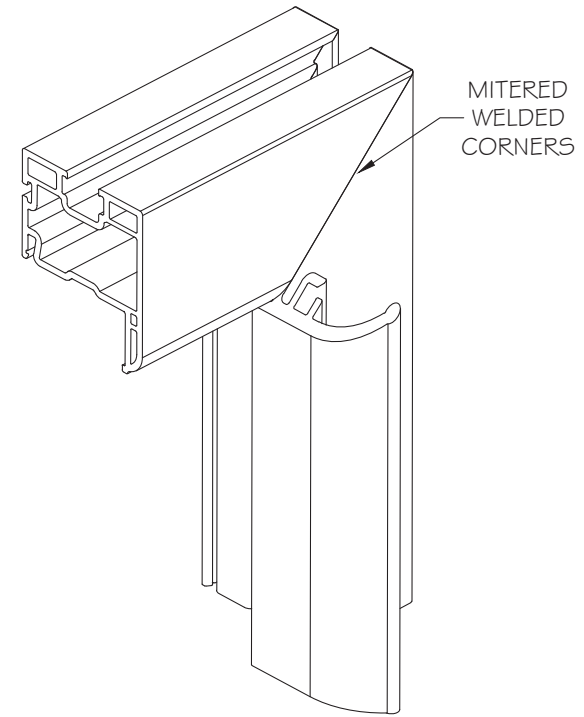
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MITERED
WELDED
CORNERS

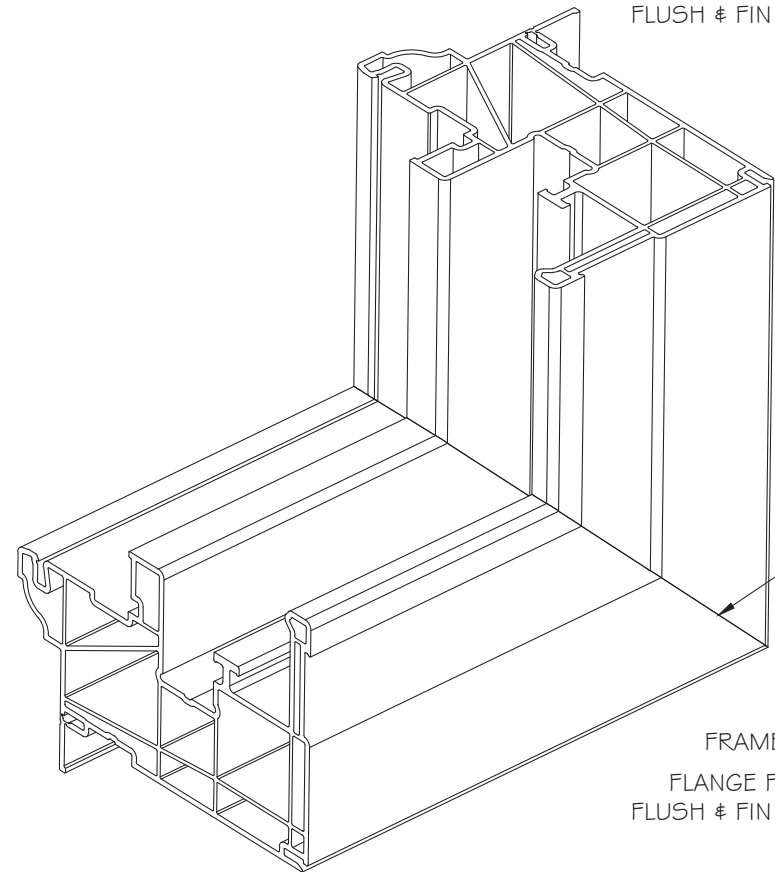
FRAME CORNER

FLANGE FRAME SHOWN
FLUSH & FIN FRAMES SIMILAR



MITERED
WELDED
CORNERS

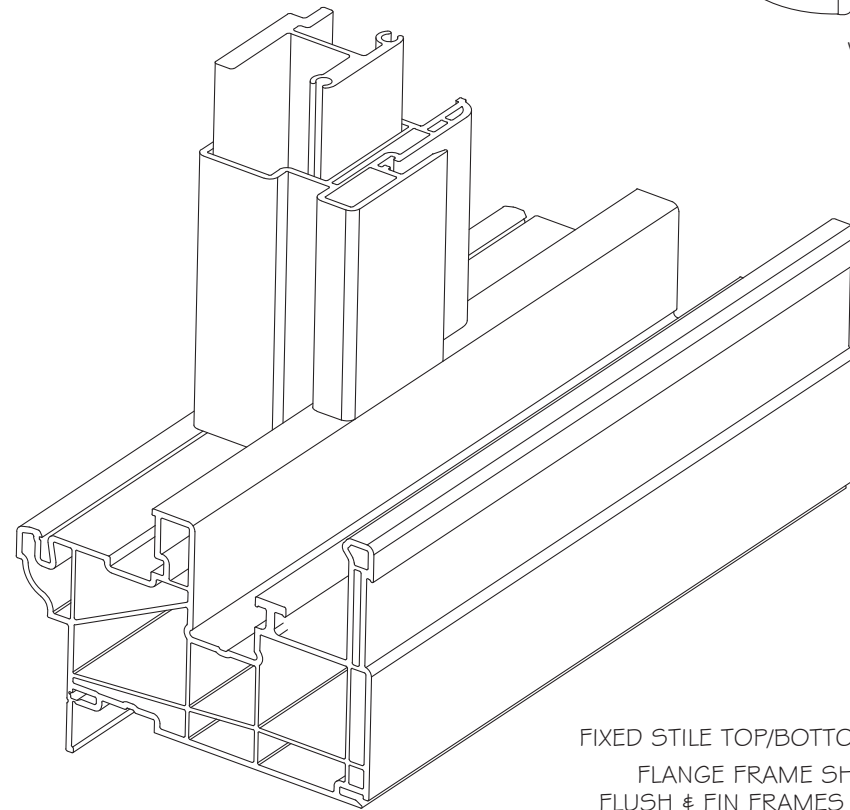
VENT CORNER



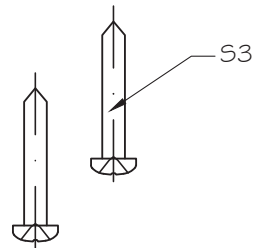
MITERED
WELDED
CORNERS

FRAME CORNER

FLANGE FRAME SHOWN
FLUSH & FIN FRAMES SIMILAR



FIXED STILE TOP/BOTTOM CORNER
FLANGE FRAME SHOWN
FLUSH & FIN FRAMES SIMILAR



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Drawn Date: 06.23.2023 Scale:
DRAWING NO.: AD23-13
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Sheet No.: 12 OF 12