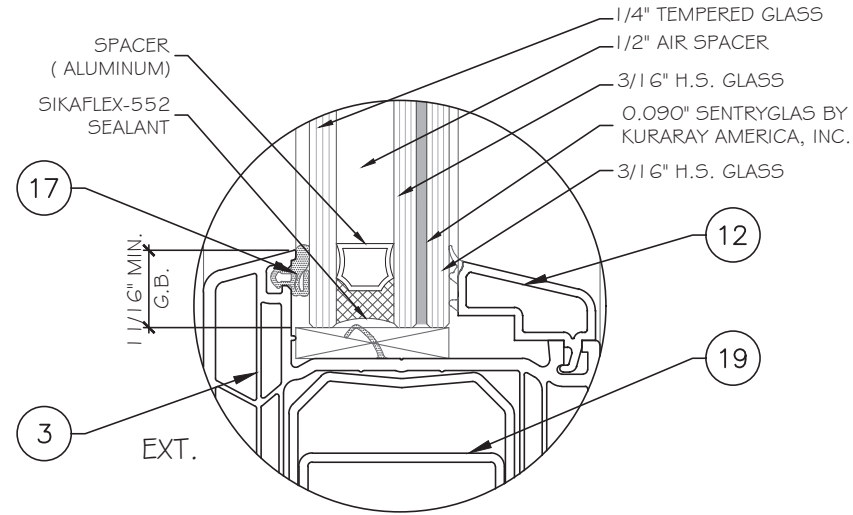


ES WINDOWS, INC.
 PREMIDOOR 88MM VINYL LIFT AND SLIDE DOOR LMI
 LARGE MISSILE IMPACT



G1 INSULATED LAMINATED GLASS BY ST. GOBAIN
 1 3/16" NOMINAL OVERALL

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).
- PRODUCTS ARE RATED FOR LARGE MISSILE IMPACT. IMPACT SHUTTERS ARE NOT REQUIRED.
- PRODUCTS 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 BY OTHERS 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.
- 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.

NOTE:
 GLASS COMPLIES WITH ASTM E1300-16
 (3 SEC. GUSTS).

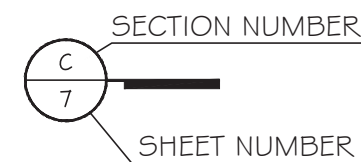
INSTRUCTIONS:

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 FOR APPROVED TYPICAL ELEVATION.
- STEP 3:** SEE SHEET COVER FOR GLASS TYPE.
- STEP 4:** ANCHOR OPTION SEE SHEET A1. 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.

FL44619.1

YIRNG WANG
 FLORIDA REGISTERED PROFESSIONAL ENGINEER
 No. 55985
 L.A.N. 28677

April 30, 2024

MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 12781 MIRAMAR PARKWAY #301
 MIRAMAR, FL 33027 P: 305.271.0117
 www.MCYEngineering.com mcy@mcyengineering.com

ES WINDOWS, INC.
 3550 N.W. 49 STREET
 Miami, FL 33142
 TEL: (305) 638-5151 EMAIL: ssabagh@energiasolar.com

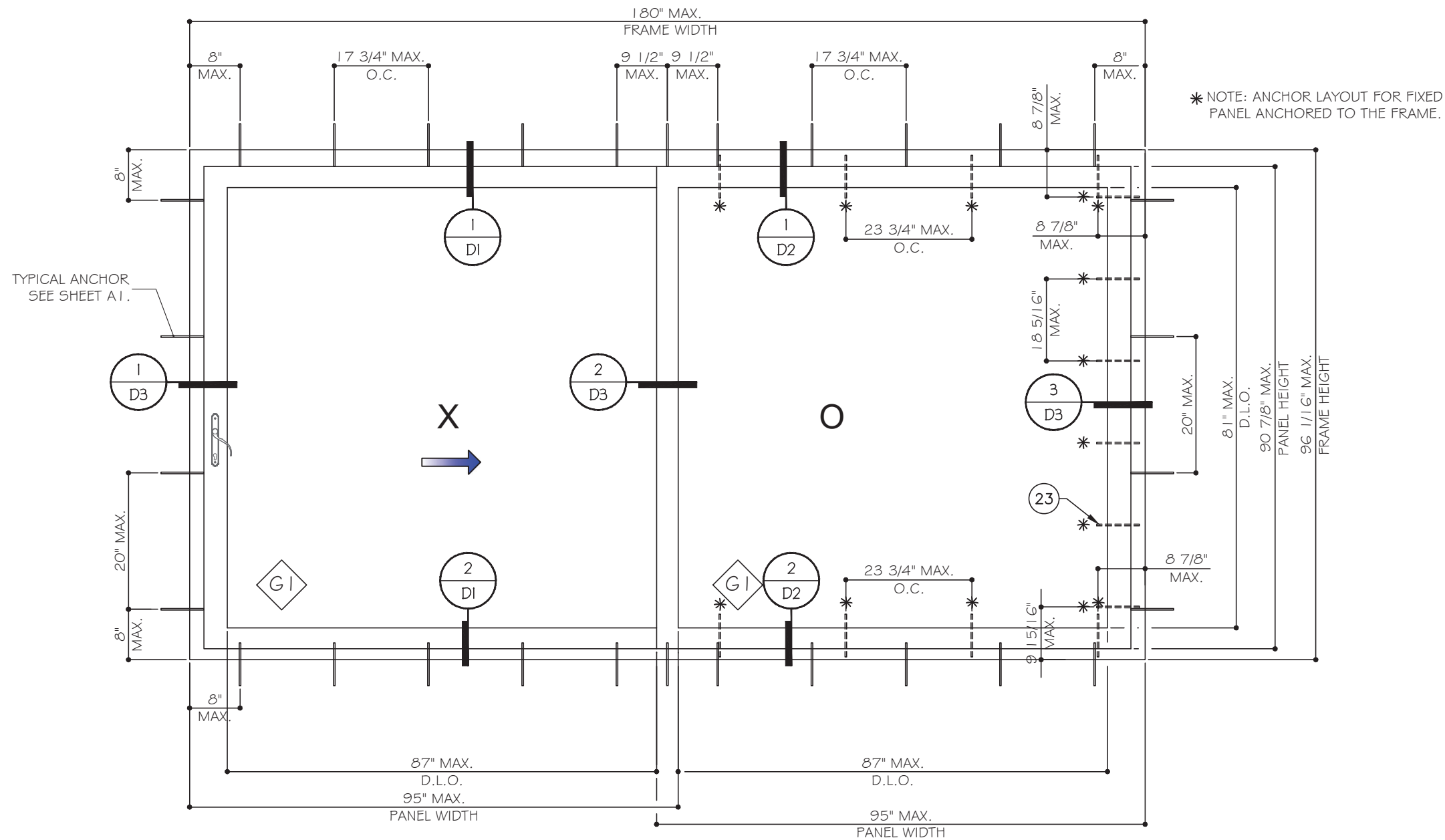
Rev. No.	Date	Drawn By	Description
1.	01.11.2024	JAMES	NEW APPLICATION

Drawn Date: 01.11.2024 Scale: _____

DRAWING NO. AD24-02

COVER

Sheet No. 01 OF 9



* NOTE: ANCHOR LAYOUT FOR FIXED PANEL ANCHORED TO THE FRAME.

TYPICAL ANCHOR SEE SHEET A1.

TYPICAL EXTERIOR ELEVATION (XO SHOWN OR OX OPTION)
SEE ANCHOR OPTION ON SHEET A1

DESIGN LOAD CAPACITY - PSF		
DESIGN LOAD PSF	GLASS TYPE	MISSILE IMPACT RATEING
±55	G1	LARGE AND SMALL MISSILE IMPACT RATED

NOTE: MISSILE LEVEL D, WIND ZONE 4 AND HVHZ.
FOR SIZE SHOWN ABOVE OR SMALLER AS PERMITTED BY FBC.

FL44619.1

YIRNG WANG
PROFESSIONAL REGISTERED ENGINEER
No. 55983
L.A.N. 28677

STATE OF FLORIDA
PROFESSIONAL ENGINEER

April 30, 2024

MCY ENGINEERING, INC.
GLAZING CONSULTANTS
12781 MIRAMAR PARKWAY #301
MIRAMAR, FL 33027 P: 305.271.0117
www.MCYEngineering.com mcy@mcyengineering.com

PREMIDDOOR 88MM VINYL LIFT AND SLIDE DOOR XO/OX L.M.I.
ES WINDOWS, INC.
3550 N.W. 49 STREET
Miami, FL 33142
TEL. (305) 638-5151 EMAIL: ssabagh@energiasolarsa.com

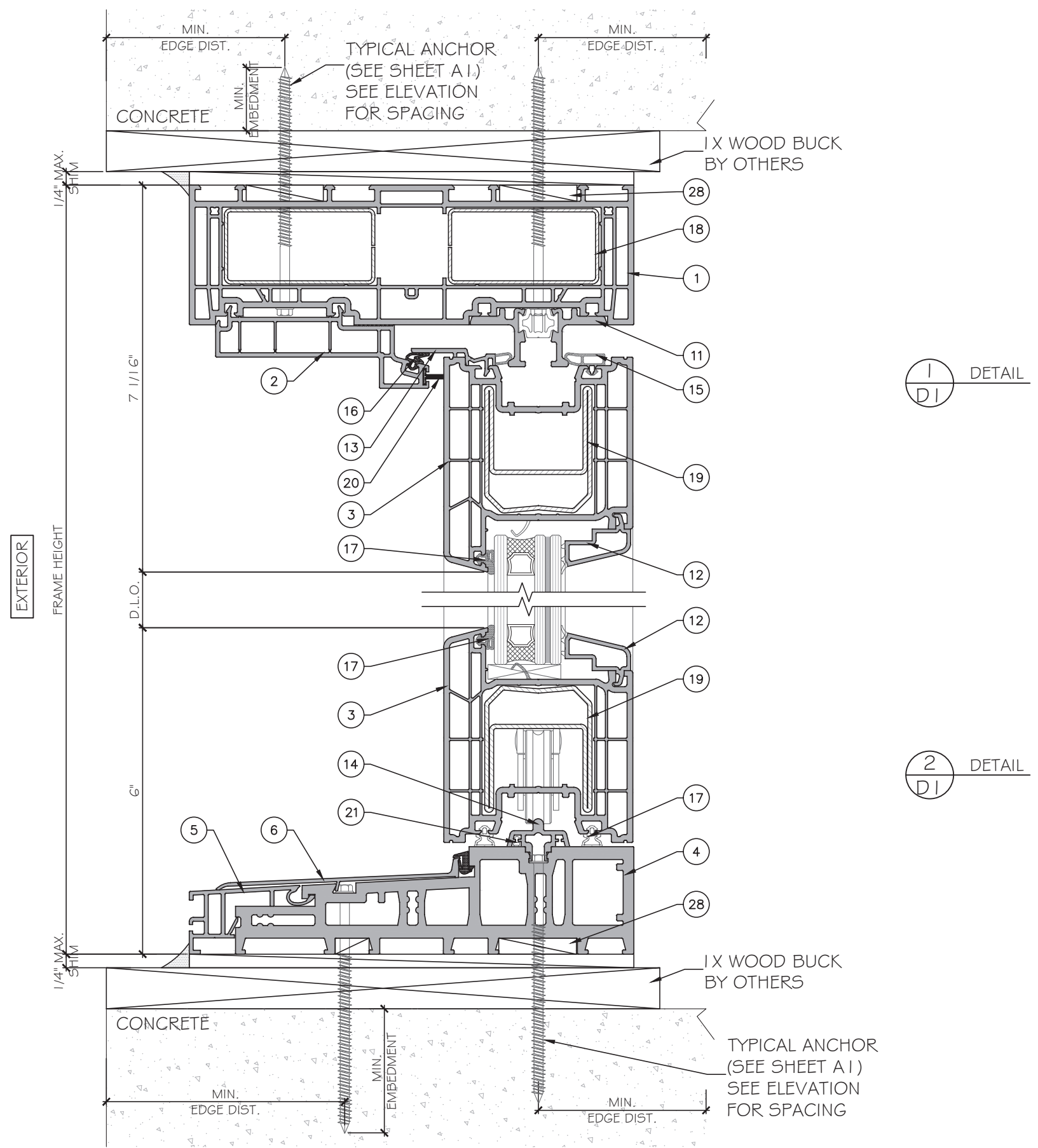
Rev. No.	Date	Drawn By	Description
1.	01.11.2024	JAMES	NEW APPLICATION

Drawn Date: 01.11.2024 Scale: _____

DRAWING NO. AD24-02

Sheet No. E1

02 OF 9



1
D1
DETAIL

2
D1
DETAIL

FL44619.1

YIRNG WANG
 FLORIDA REGISTRATION
 No. 55983
 L.A.N. 28677

STATE OF FLORIDA
 PROFESSIONAL ENGINEER

April 30, 2024

MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 12781 MIRAMAR PARKWAY #301
 MIRAMAR, FL 33027 P: 305.271.0117
 www.MCYEngineering.com mcy@mcyengineering.com

PREMIDDOOR 88MM VINYL LIFT AND SLIDE DOOR X/OX L.M.I.

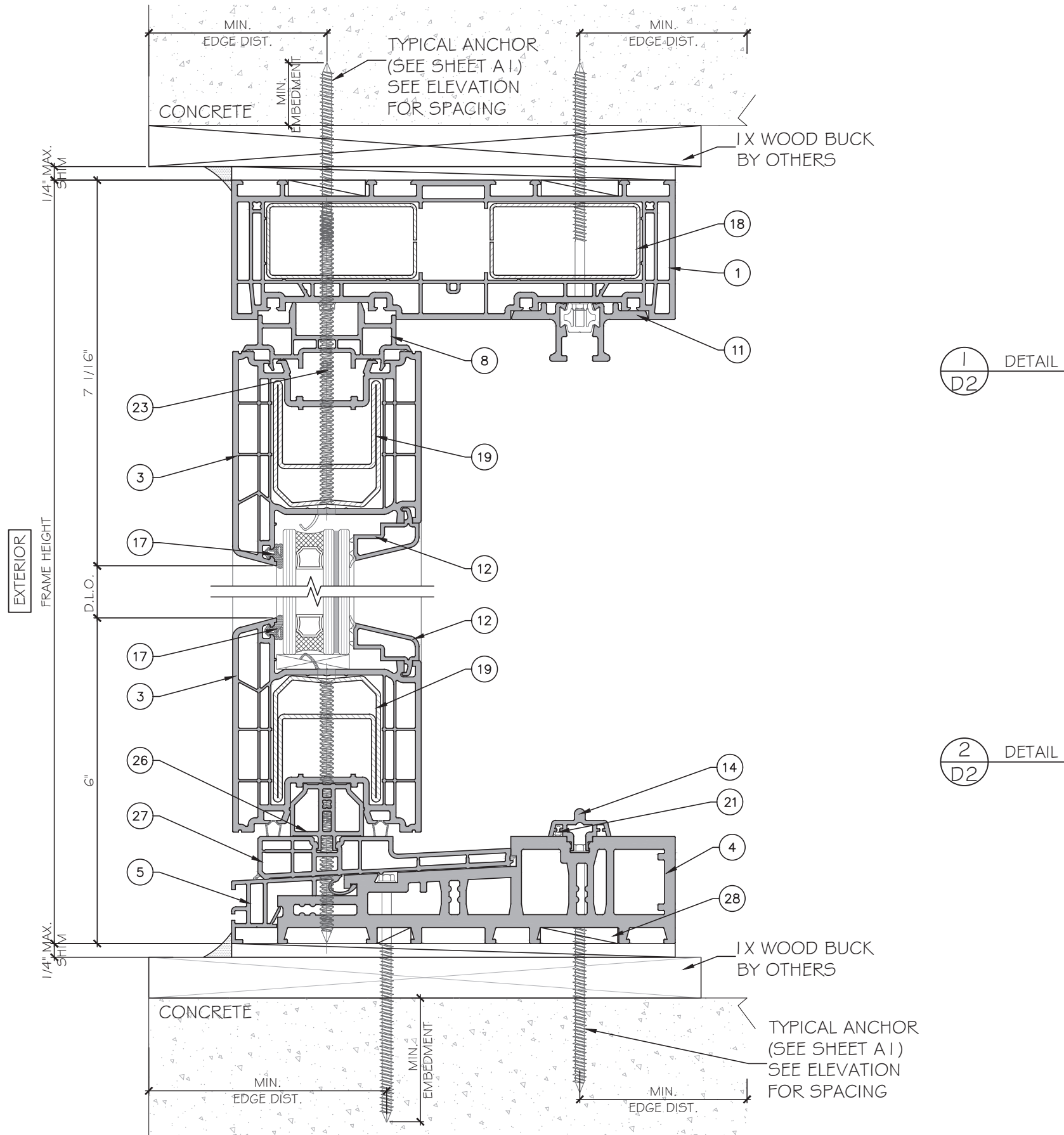
ES WINDOWS, INC.
 3550 N.W. 49 STREET
 Miami, FL 33142
 TEL. (305) 638-5151 EMAIL: ssabagh@energiasolarsa.com

Rev. No.	Date	Drawn By	Description
1	01.11.2024	JAMES	NEW APPLICATION

Drawn Date: 01.11.2024 Scale: _____

DRAWING NO. AD24-02

Sheet No. 03 OF 9



FL44619.1

YIRNG WANG
 FLORIDA REGISTRATION
 LICENSE # 55983
 No. 55983
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

April 30, 2024

MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 12781 MIRAMAR PARKWAY #301
 MIRAMAR, FL 33027 P: 305.271.0117
 www.MCYEngineering.com mcy@mcyengineering.com

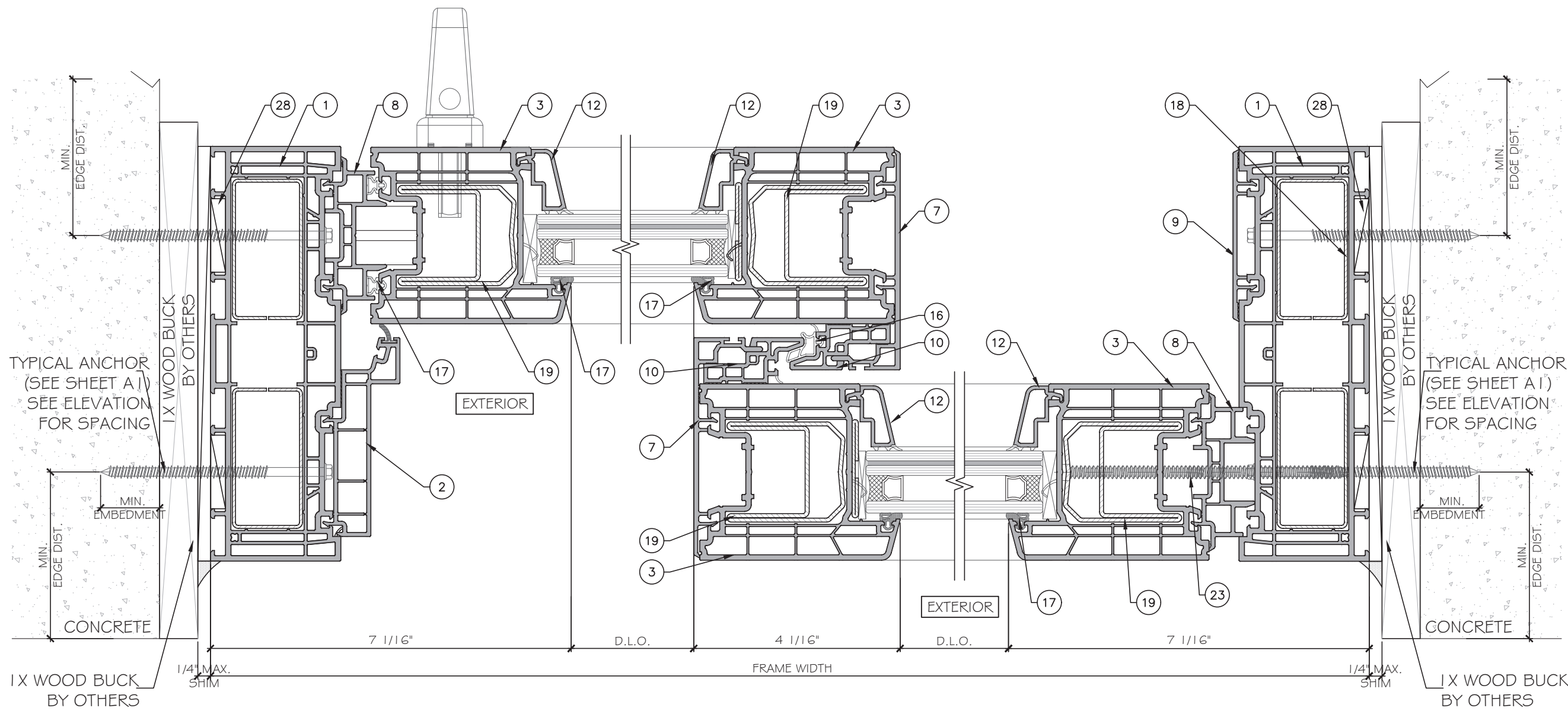
PREMIDDOOR 88MM VINYL LIFT AND SLIDE DOOR X/OX L.M.I.
ES WINDOWS, INC.
 3550 N.W. 49 STREET
 Miami, FL 33142
 TEL. (305) 638-5151 EMAIL: ssabagh@energiasolar.com

Rev. No.	Date	Drawn By	Description
1	01.11.2024	JAMES	NEW APPLICATION

Drawn Date: 01.11.2024 Scale: _____

DRAWING NO. AD24-02

Sheet No. 04 OF 9



1
D3
DETAIL

2
D3
DETAIL

3
D3
DETAIL

FL44619.1

YIRNG WANG
 PROFESSIONAL ENGINEER
 LICENSE NO. 55983
 L.A.N. 28677

April 30, 2024

MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 12781 MIRAMAR PARKWAY #301
 MIRAMAR, FL 33027 P: 305.271.0117
 www.MCYEngineering.com mcy@mcyengineering.com

ES WINDOWS, INC.
 3550 N.W. 49 STREET
 Miami, FL 33142
 TEL. (305) 638-5151 EMAIL: ssabagh@energiasolarsa.com

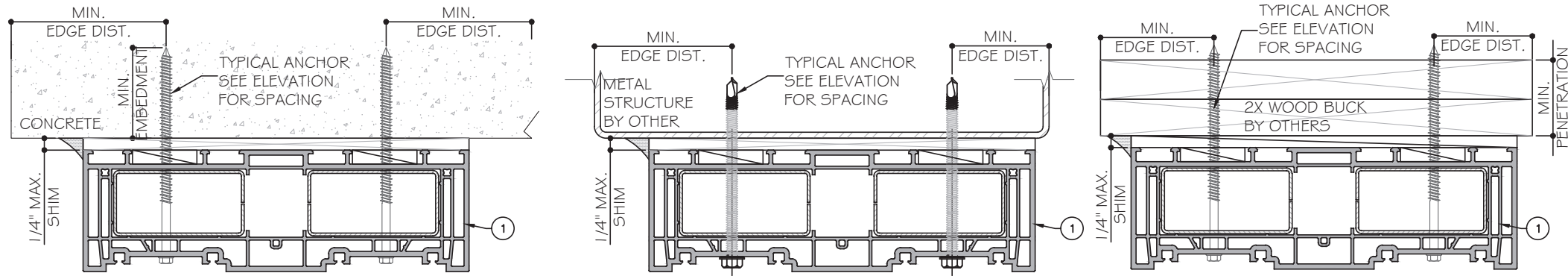
Rev. No.	Date	Drawn By	Description
1	01.11.2024	JAMES	NEW APPLICATION

Drawn Date: 01.11.2024 Scale: AD24-02

DRAWING NO. AD24-02

Sheet No. D3

05 OF 9



TYPICAL ANCHOR TYPES

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

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

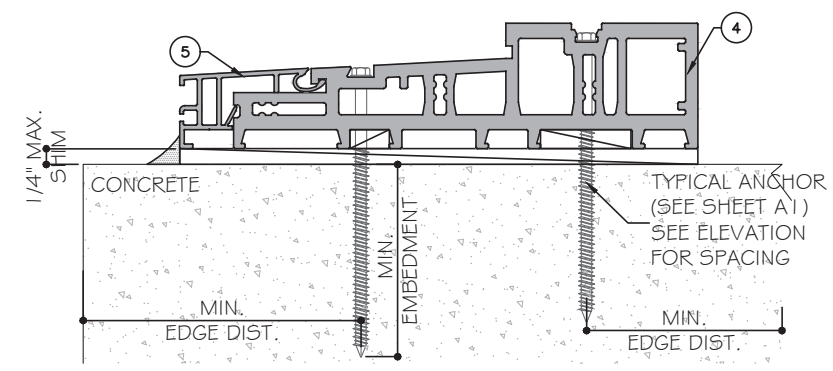
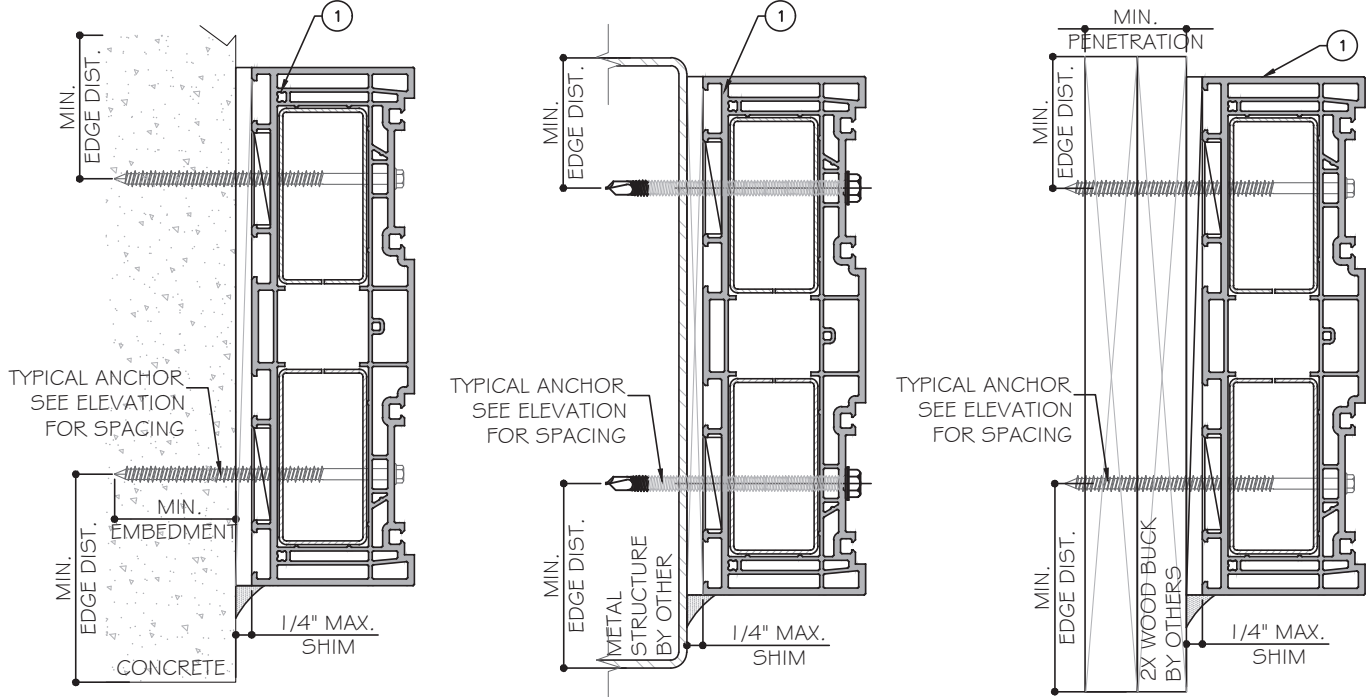
DIRECTLY INTO CONCRETE OR BLOCKS 1 3/4" MIN. EMBED INTO CONCRETE (HEAD/ JAMB/ SILL) 1 3/4" MIN. EMBED INTO BLOCKS (JAMBS)

ANCHOR TYPE 'B' - 1/4" TEK5 OR SELF-DRILLING SCREWS (GRADE 5 CR5) INTO F.B.C. APPROVED MULLIONS OR INTO METAL STRUCTURES. (HEAD/ JAMB) (3) THREADS MIN. PENETRATION BEYOND METAL SUBSTRATE.

ANCHOR EDGE DISTANCE:
 INTO WOOD STRUCTURE: 1" MIN.
 INTO CONCRETE: 2 1/2" MIN.
 INTO METAL STRUCTURE: 3/4" MIN.

SUBSTRATE:
 WOOD: SG = 0.55 MIN.
 CONCRETE: $f_c = 3$ KSI MIN.
 C-90 HOLLOW / FILLED BLOCK: $f_m = 2$ KSI MIN.
 ALUMINUM: 1/8" THK. MIN. (6063-T5, MIN.)
 STEEL: 16GA THK. MIN. ASTM A653 GRADE 33 (Fy=33KSI) MIN.
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

1X OR 2X WOOD WOOD BUCKS BY OTHERS TO BE DESIGNED TO SUPPORT THE LOADS IMPOSED BY THIS GLAZING SYSTEM AND TO TRANSFER SUCH LOADS TO THE BUILDING MAIN STRUCTURE.



FL44619.1

YIRING WANG
 PROFESSIONAL REGISTERED ENGINEER
 No. 55985
 L.A.N. 28677

STATE OF FLORIDA
 PROFESSIONAL ENGINEER

April 30, 2024

MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 12781 MIRAMAR PARKWAY #301
 MIRAMAR, FL 33027 P: 305.271.0117
 www.MCYEngineering.com mcy@mcyengineering.com

PREMIDOR 88MM VINYL LIFT AND SLIDE DOOR X/OX L.M.I.

ES WINDOWS, INC.
 3550 N.W. 49 STREET
 Miami, FL 33142
 TEL. (305) 638-5151 EMAIL: ssabagh@energiasolarsa.com

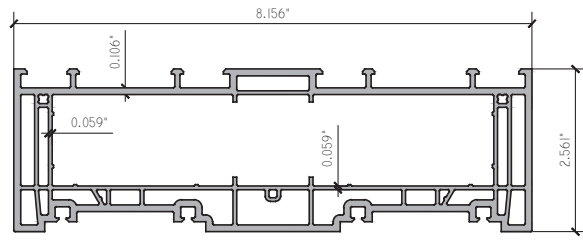
Rev. No.	Date	Drawn By	Description
1.	01.11.2024	JAMES	NEW APPLICATION

Drawn Date: 01.11.2024 Scale: _____

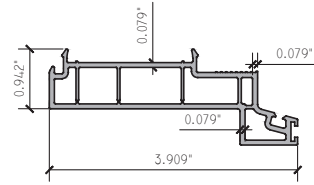
DRAWING NO. AD24-02

Sheet No. A1

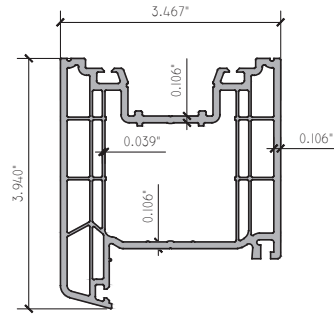
06 OF 9



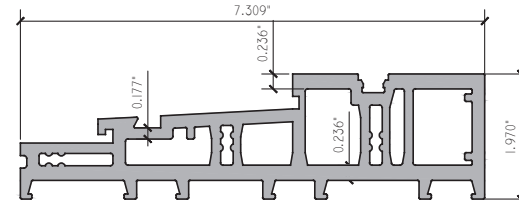
1 MAIN FRAME
2880 RIGID VINYL



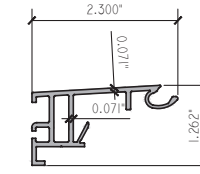
2 FRAME COVER
2881 RIGID VINYL



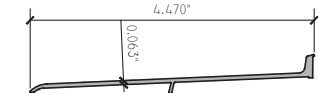
3 SASH PROFILE
2883 RIGID VINYL



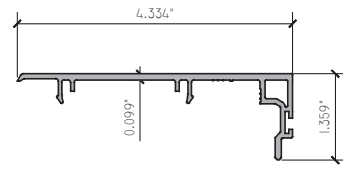
4 FRAME THRESHOLD
9579 RIGID VINYL



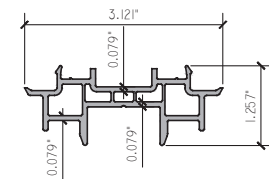
5 CONNECTOR
9572 ALUM. 6063-T5



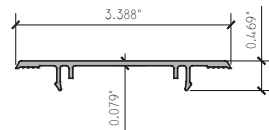
6 SILL COVER
9576.2 ALUM. 6063-T5



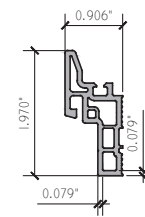
7 COVER PROFILE
2886 ALUM. 6063-T5



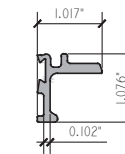
8 SPACING PROFILE
2885 ALUM. 6063-T5



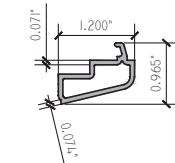
9 COVER PROFILE
2882 ALUM. 6063-T5



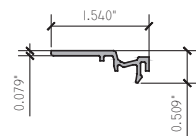
10 MIDDLE CONNECTOR
2887 ALUM. 6063-T5



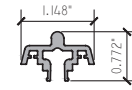
11 CONNECTOR ADAPTOR
9588 ALUM. 6063-T5



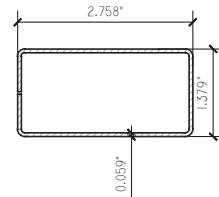
12 GLAZING BEAD
76501.3 RIGID VINYL



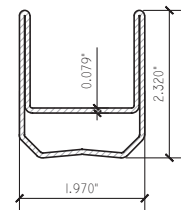
13 CONNECTOR PROFILE
185563 ALUM. 6063-T5



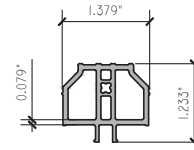
14 ROLLING TRACK
9577/9578 ALUM. 6063-T5



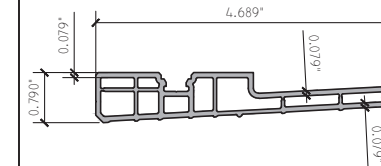
18 FRAME REINFORCEMENT
V191 GALV.STL.



19 SASH REINFORCEMENT
V192 GALV.STL.



26 BOTTOM RAIL
M085 RIGID VINYL



27 BOTTOM FRAME
2884 RIGID VINYL

FL44619.1

YIRING WANG
PROFESSIONAL REGISTERED ENGINEER
No. 55989
STATE OF FLORIDA
APR 30, 2024

MCY ENGINEERING, INC.
GLAZING CONSULTANTS
12781 MIRAMAR PARKWAY #301
MIRAMAR, FL 33027 P: 305.271.0117
www.MCYEngineering.com mcy@mcyengineering.com

PREMIDDOOR 88MM VINYL LIFT AND SLIDE DOOR X/OX L.M.I.
ES WINDOWS, INC.
3550 N.W. 49 STREET
Miami, FL 33142
TEL. (305) 638-5151 EMAIL: ssabagh@energiasolarsa.com

Rev. No.	Date	Drawn By	Description
1.	01.11.2024	JAMES	NEW APPLICATION

Drawn Date	Scale
01.11.2024	
DRAWING NO.	
AD24-02	
M1	
Sheet No.	
07 OF 9	

BILL OF MATERIALS

ITEM NO.	PARTS NUMBERS	DESCRIPTION	MATERIAL	MANUFACTURER
1	2880	MAIN FRAME, RIGID VINYL	RIGID VINYL	PROFINE
2	2881	FRAME COVER, RIGID VINYL	RIGID VINYL	PROFINE
3	2883	SASH PROFILE, RIGID VINYL	RIGID VINYL	PROFINE
4	9579	FRAME THRESHOLD, RIGID VINYL	RIGID VINYL	PROFINE
5	9572	CONNECTOR, 6063 T5 ALUMINUM	6063 T5 ALUMINUM	PURCHASE
6	9576.2	SILL COVER, 6063 T5 ALUMINUM	6063 T5 ALUMINUM	PURCHASE
7	2886	COVER PROFILE, 6063 T5 ALUMINUM	6063 T5 ALUMINUM	PURCHASE
8	2885	SPACING PROFILE, 6063 T5 ALUMINUM	6063 T5 ALUMINUM	PURCHASE
9	2882	COVER PROFILE, 6063 T5 ALUMINUM	6063 T5 ALUMINUM	PURCHASE
10	2887	MIDDLE CONNECTOR, 6063 T5 ALUMINUM	6063 T5 ALUMINUM	PURCHASE
11	9588	CONNECTOR ADAPTOR, 6063 T5 ALUMINUM	6063 T5 ALUMINUM	PURCHASE
12	76501.3	GLAZING BEAD, RIGID VINYL	RIGID VINYL	PROFINE
13	185563	CONNECTOR PROFILE, 6063 T5 ALUMINUM	6063 T5 ALUMINUM	————
14	9577/9578	ROLLING TRACK, 6063 T5 ALUMINUM	6063 T5 ALUMINUM	————
15	G030_KU	GASKET TPE, EPDM DUR 70	EPDM	————
16	G034_KU	GASKET, 80 DUROMETER EPDM	EPDM	PURCHASE
17	G032_KU	GASKET, 80 DUROMETER EPDM	EPDM	PURCHASE
18	V191	FRAME REINFORCEMENT, GALV.STL.	GALV.STL.	PURCHASE
19	V192	SASH REINFORCEMENT, GALV.STL.	GALV.STL.	PURCHASE
20	G057	GASKET, 80 DUROMETER EPDM	EPDM	PURCHASE
21	G043	GASKET, 80 DUROMETER EPDM	EPDM	PURCHASE
22	V192	SASH REINFORCEMENT, GALV. STL.	GALV.STL.	PURCHASE
23	————	AMO III 7.5MM DIA. CYLINDER HEAD SCREW, VARIABLE LENGTH BASED ON USAGE	STAINLESS STEEL	WURTH *
24	PURCHASE	#14 PH OR FH WOOD INSTALLATION SCREW	STAINLESS STEEL	————
25	PURCHASE	1/4" DIAM.HH OR FH I.T.W. MASONRY ANCHOR	STAINLESS STEEL	I.T.W.
26	M085	BOTTOM RAIL. RIGID VINYL	RIGID VINYL	PROFINE
27	2884	BOTTOM FRAME. RIGID VINYL	RIGID VINYL	PROFINE
28	————	SOLID SHIM	————	————

MCY ENGINEERING, INC.
GLAZING CONSULTANTS
12781 MIRAMAR PARKWAY #301
MIRAMAR, FL 33027 P: 305.271.0117
www.MCYEngineering.com mcy@mcyengineering.com

ES WINDOWS, INC.
3550 N.W. 49 STREET
Miami, FL 33142
TEL. (305) 638-5151 EMAIL: ssabagh@energiasolar.com

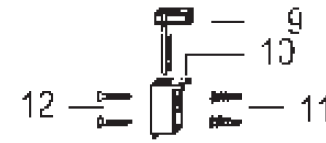
Rev. No.	Date	Drawn By	Description
1.	01.11.2024	JAMES	NEW APPLICATION

FL44619.1

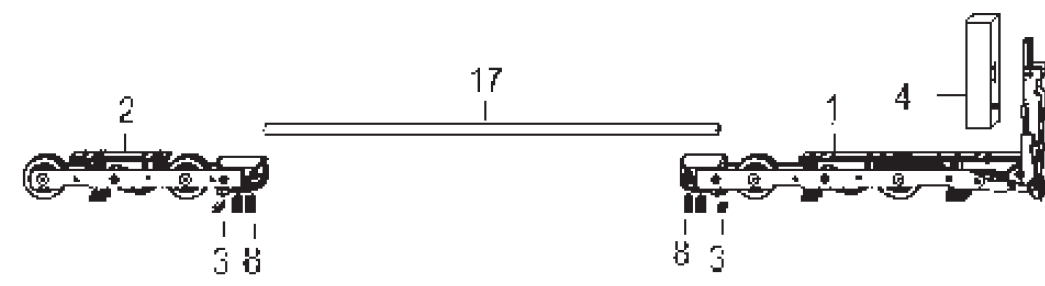
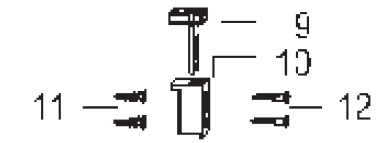
Drawn Date 01.11.2024	Scale
DRAWING NO. AD24-02	
M2	
Sheet No. 08 OF 9	

KomaDoor 88 scheme A right
Lift-Slidingdoor - PremiDoor 88

Pos.	part description	part code
1	corner drive VSU HS300	basic kit PORTAL-HS 300 PMKE0300-...
2	rear bogie HS300	
3	brush sealing	
4	distance piece A0008	additional kit PORTAL-HS 300 scheme A PremiDoor PMZB4170-...
5	locking piece top A0005	
6	locking piece bottom A0005	
7	packer 1 mm	
8	grub screw M8 x 16	
9	guiding piece	
10	guiding part	
11	screw anchor	
12	clamping screw 4,5 x 45	
13	countersunk screw PZD M5 x 13	
14	cover cap	kit handle Si-line PORTAL-HS 300 PMHE0010-...
15	buffer	
16	countersunk screw K/PSD M5 x 95	
17	connecting rod D10 sz. 200	PVSE0050-...
18	gear PORTAL-HS 300 PZ sz. 260	PGKB0030-...
19	handle HS 300 Si-line	
20	rosette Si-line HS 300 interior	
21	cover cap Si-line HS 300	
22	sliding grip Si-line	



15 →



15 →

FL44619.1

YIPING WANG
PROFESSIONAL REGISTERED ENGINEER
No. 55989
L.A.N. 28677

STATE OF FLORIDA
PROFESSIONAL ENGINEER

April 30, 2024

MCY ENGINEERING, INC.
GLAZING CONSULTANTS
12781 MIRAMAR PARKWAY #301
MIRAMAR, FL 33027 P: 305.271.0117
www.MCYEngineering.com mcy@mcyengineering.com

PREMIDOOOR 88MM VINYL LIFT AND SLIDE DOOR X/O/OX L.M.I.

ES WINDOWS, INC.
3550 N.W. 49 STREET
Miami, FL 33142
TEL. (305) 638-5151 EMAIL: ssabagh@energiasolarsa.com

Rev. No.	Date	Drawn By	Description
1	01.11.2024	JAMES	NEW APPLICATION

Drawn Date: 01.11.2024 Scale: _____

DRAWING NO. AD24-02

Sheet No. M3 09 OF 9