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Product Approval
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OFFICE OF THE SECRETARY

FL #	FL41580-R3								
Application Type	Revision								
Code Version	2023								
Application Status	Approved								
Comments									
Archived	<input type="checkbox"/>								
Product Manufacturer	E.S. Windows, Inc.								
Address/Phone/Email	10653 NE Quaybridge Ct. Miami, FL 33138 (305) 638-5151 ssabagh@energiasolarsa.com								
Authorized Signature	Yiping Wang mcyengineering@outlook.com								
Technical Representative									
Address/Phone/Email									
Quality Assurance Representative									
Address/Phone/Email									
Category	Exterior Doors								
Subcategory	Sectional Exterior Door Assemblies								
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer <input type="checkbox"/> Evaluation Report - Hardcopy Received								
Florida Engineer or Architect Name who developed the Evaluation Report	Yiping Wang								
Florida License	PE-55983								
Quality Assurance Entity	Keystone Certifications, Inc.								
Quality Assurance Contract Expiration Date	03/20/2035								
Validated By	Xiaojun Gu <input checked="" type="checkbox"/> Validation Checklist - Hardcopy Received								
Certificate of Independence	FL41580_R3_COI_Certificate of Independence-ss.pdf								
Referenced Standard and Year (of Standard)	<table border="0"> <thead> <tr> <th><u>Standard</u></th> <th><u>Year</u></th> </tr> </thead> <tbody> <tr> <td>TAS 201</td> <td>1994</td> </tr> <tr> <td>TAS 202</td> <td>1994</td> </tr> <tr> <td>TAS 203</td> <td>1994</td> </tr> </tbody> </table>	<u>Standard</u>	<u>Year</u>	TAS 201	1994	TAS 202	1994	TAS 203	1994
<u>Standard</u>	<u>Year</u>								
TAS 201	1994								
TAS 202	1994								
TAS 203	1994								

Equivalence of Product Standards
 Certified By

Sections from the Code

Product Approval Method Method 1 Option D

Date Submitted 08/29/2024
 Date Validated 12/12/2024
 Date Pending FBC Approval 12/27/2024
 Date Approved 02/11/2025

Summary of Products

FL #	Model, Number or Name	Description
41580.1	ES-PGD3040 Garage Door LMI	ES-PGD3040 Garage Door large missile impact
Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: Yes Design Pressure: +60/-65 Other: refer to installation drawing		Installation Instructions FL41580_R3_II_ES-PGD3040_Garage_door_LMI_AD22-13_FL41580_rev_11.10.2024-ss.pdf Verified By: Yiping Wang 55983 Created by Independent Third Party: Yes Evaluation Reports FL41580_R3_AE_EVR_ES_WINDOWS_Garage_door_lmi-ss.pdf Created by Independent Third Party: Yes
41580.2	ES-PGD3040 Garage Door NI	ES-PGD3040 Garage Door Non impact
Limits of Use Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: No Design Pressure: +28/-34 Other:		Installation Instructions FL41580_R3_II_ES-PGD3040_Garage_door_NI_AD22-14_FL41580.2_rev11.10.2024-ss.pdf Verified By: Yiping Wang 55983 Created by Independent Third Party: Yes Evaluation Reports FL41580_R3_AE_EVR_ES_WINDOWS_Garage_door_NI.pdf Created by Independent Third Party: Yes

[Back](#) [Next](#)

Contact Us :: 2601 Blair Stone Road, Tallahassee FL 32399 Phone: 850-487-1824

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Product Approval Accepts:



ES WINDOW INC. ES-PGD3040 GARAGE DOOR - L.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).
- DOORS ARE RATED FOR LARGE MISSILE IMPACT. LMI SYSTEM TO BE USED FOR INSTALLATIONS UP TO 30 FT OF GRADE. FOR ABOVE 30 FT OF GRADE, SMI TO BE USED. IMPACT SHUTTERS ARE NOT REQUIRED.
- DOORS ARE NOT APPROVED FOR 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.
- 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.
- 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.
- 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.

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 OR WIND TUNNEL REPORTS.
- STEP 2: SEE SHEET E1 TO E3 FOR TYPICAL DOOR ELEVATION. SEE SHEET G1 FOR GLASS OPTIONS.
- STEP 3: SEE SHEET A1#A2 FOR ANCHOR OPTIONS. SEE SHEET E4 FOR NUMBER OF ANCHORS REQUIRED.
- STEP 4: THE LOWEST VALUE RESULTING FROM STEPS 2 & 3 THAT EXCEED THE DESIGN WIND PRESSURES DETERMINED THRU STEP 1 SHALL APPLY TO ENTIRE SYSTEM.

LIMITATIONS OF USE

A. THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) PREPARED BY THIS ENGINEER IS GENERAL AND NOT FOR A SITE SPECIFIC PROJECT. IT DOES NOT TAKE INTO ACCOUNT THE SITE CONDITIONS AND LOCAL CODES.

B. CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED UNDER THE CONDITIONS DETAILED ON THIS DOCUMENT.

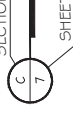
C. THIS PRODUCT EVALUATION DOCUMENT IS NOT TO BE REPRODUCED OR ALTERED BY ANY MEANS.

D. SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED PROFESSIONAL ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD AND WHO WILL BE RESPONSIBLE FOR THE PROJECT. THE REGISTERED ENGINEER OF RECORD MUST AS A DELEGATED ENGINEER TO THE ARCHITECT SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW, APPROVAL AND RECORD.

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

ABBREVIATIONS AND SYMBOLS

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



FLORIDA APPROVAL:
FL # 41580.1





MCY ENGINEERING, INC.
GLAZING CONSULTANTS

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MIRAMAR, FL 33027
P. 305 271 0117

www.MCYEngineering.com
mcy@mcyengineering.com

ES-PGD3040 GARAGE DOOR - LMI

E.S. WINDOWS, INC.
10653 NE QUAYBRID GE CT.
MIAMI, FL 33138
TEL (305) 624-7775

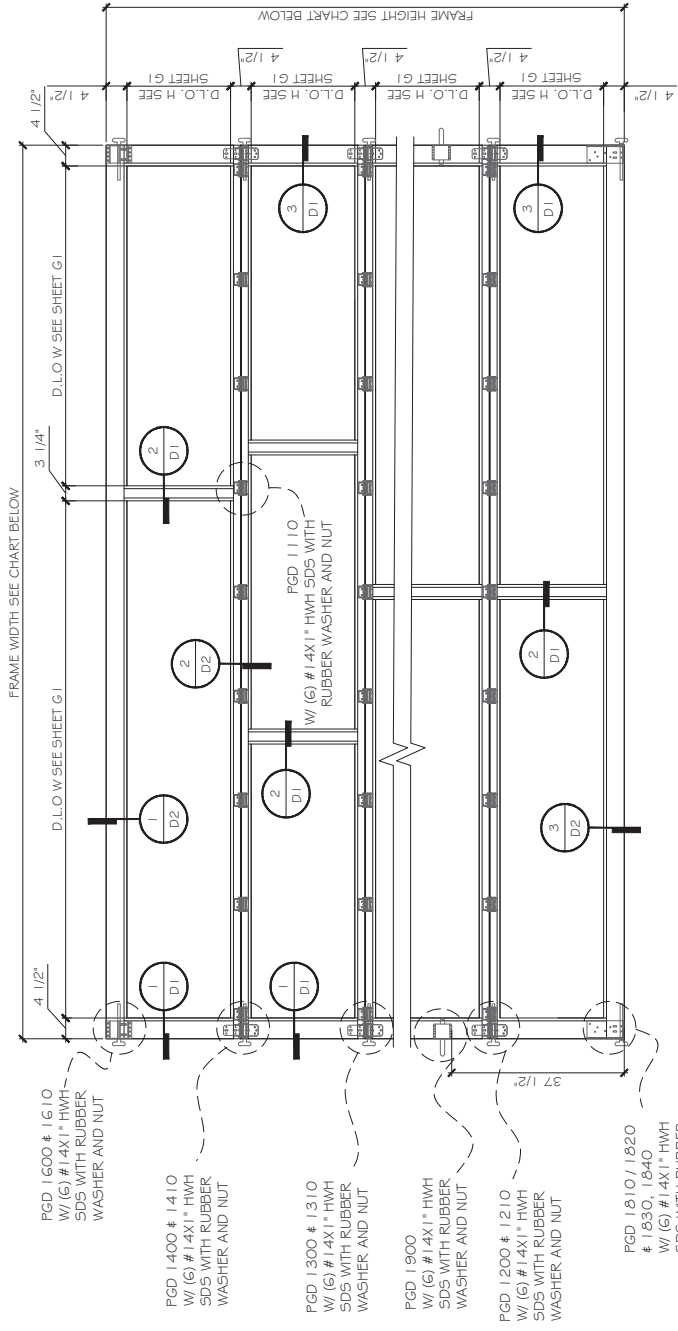
No.	Date	By	Description
04	10.28.2024	Jones	REVISION
Drawn Date: 10/28/2024 Drawn By: James J. Jones DRAWING NO. AD22-13 COVER Sheet No. 1 OF 15			

No.	Date	By	Description
1	10.28.2024	Jamies	REVISION

MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 12781 MIRAMAR PARKWAY #301
 MIRAMAR, FL 33027
 P: 305 271 0117

FLORIDA APPROVAL:
FL # 41580.1

November 10th, 2024



THE AMOUNT OF CENTER HINGES (PGD-1110) SHOULD BE:

- 5 ACROSS EACH SECTION FOR FRAME WIDTH ≤ 144".
- 7 ACROSS EACH SECTION FOR FRAME WIDTH ≤ 194".
- 9 ACROSS EACH SECTION FOR FRAME WIDTH ≤ 240".

TYPICAL EXTERIOR ELEVATIONS


DESIGN LOADS: +55/-65 PSF (W/ REINF)
 +22/-52 PSF (W/O REINF)

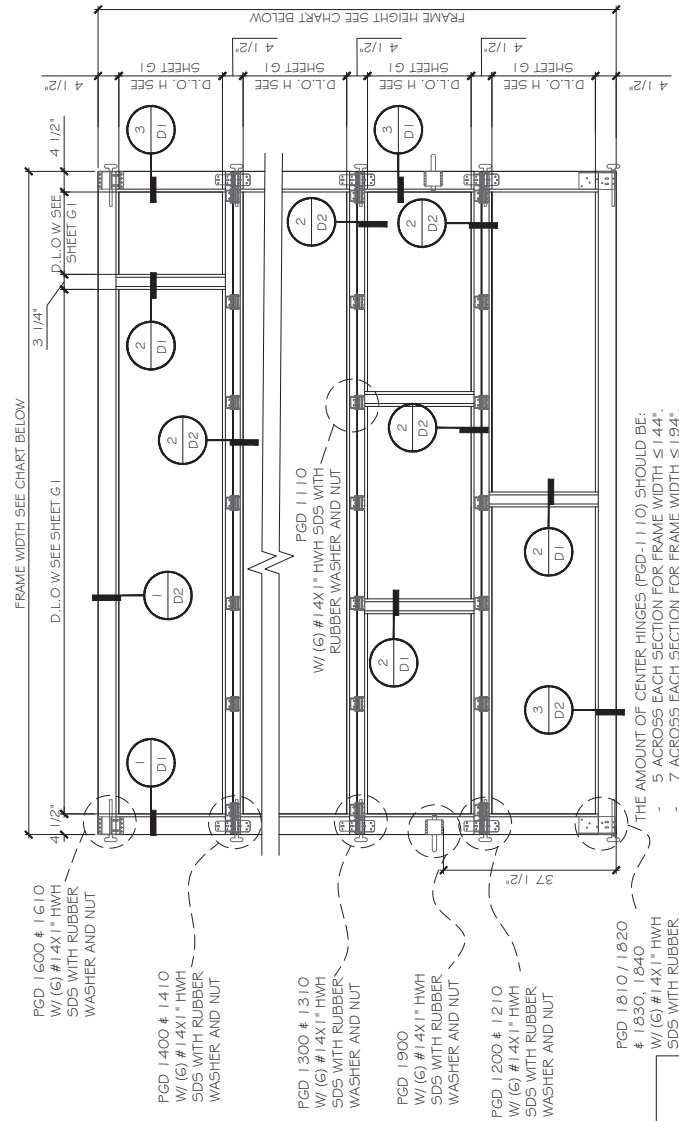
(FOR SIZE SHOWN ABOVE OR SMALLER AS PERMITTED BY FBG)

TOTAL SECTION	MAX. FRAME WIDTH (INCH)	MAX. FRAME HEIGHT (INCH)	DESIGN LOAD (W/ REINF.) EXT.(+) INT.(-)	DESIGN LOAD (W/O REINF.) EXT.(+) INT.(-)
4	194	112 1/2	+55/-65	+42/-52
5	194	139 1/2	+55/-65	+42/-52
6	194	166 1/2	+55/-65	+42/-52
7	194	193 1/2	+55/-65	+42/-52
8	194	220 1/2	+55/-65	+42/-52
9	194	247 1/2	+55/-65	+42/-52

Rev	Date	By	Description
04	10.28.2024	James	REVISION
03			
02			
01			

Drawn Date: 10/28/2024
 Drawn By: James
 Drawing No: AD22-13
 Sheet No: E3
 4 OF 15
 November 10th, 2024

FLORIDA APPROVAL:
FL # 41580.1

 November 10th, 2024



TYPICAL EXTERIOR ELEVATIONS
 DESIGN LOADS: +60/-65 PSF (W/O REINF.)
 (FOR SIZE SHOWN ABOVE OR SMALLER AS PERMITTED BY FBG)

TOTAL SECTION	DESIGN LOAD CAPACITY-PSF (GLASS TYPE AND CAPACITY SEE SHEET G1)		DESIGN LOAD (W/O REINF.) EXT.(+) INT.(-)
	MAX. FRAME WIDTH (INCH)	MAX. FRAME HEIGHT (INCH)	
4	144	112 1/2	+60/-65
5	144	124 1/2	+60/-65
	129 1/2	154 1/2	+60/-65
6	144	166 1/2	+60/-65
	129 1/2	184 1/2	+60/-65
7	144	193 1/2	+60/-65
	129 1/2	214 1/2	+60/-65
8	144	220 1/2	+60/-65
	129 1/2	244 1/2	+60/-65
9	144	247 1/2	+60/-65
	129 1/2	274 1/2	+60/-65

TYPICAL ANCHOR TYPES:

TYPE "A": 5/16" DIA. ULTRACON BY DEWALT. (F_u=177 KSI, F_y=155 KSI)
THROUGH 1" BY WOOD BUCK OR 2" BY WOOD BUCKS
OR DIRECTLY INTO CONCRETE
WITH 2" MIN. EMBED INTO CONCRETE.

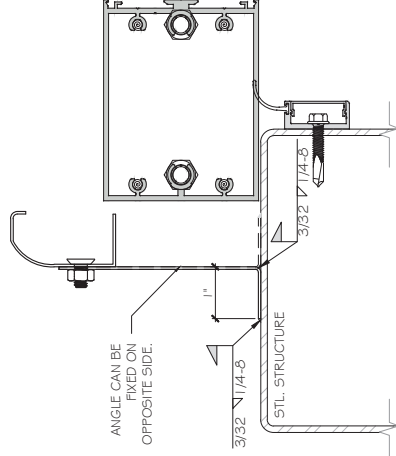
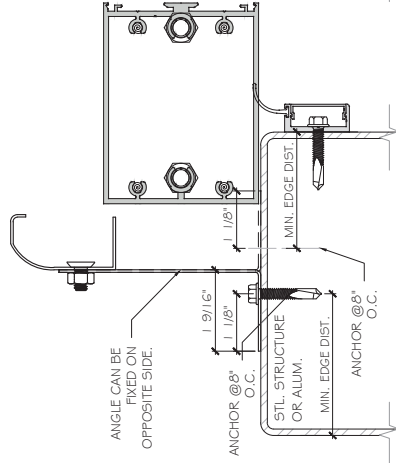
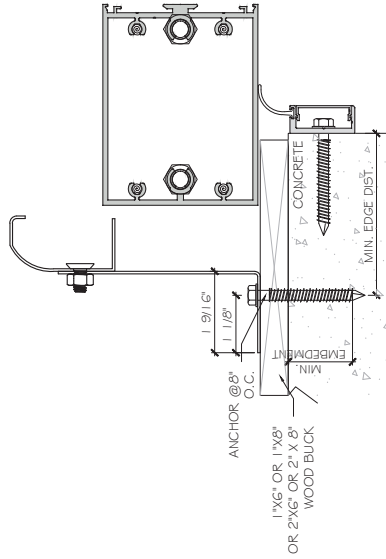
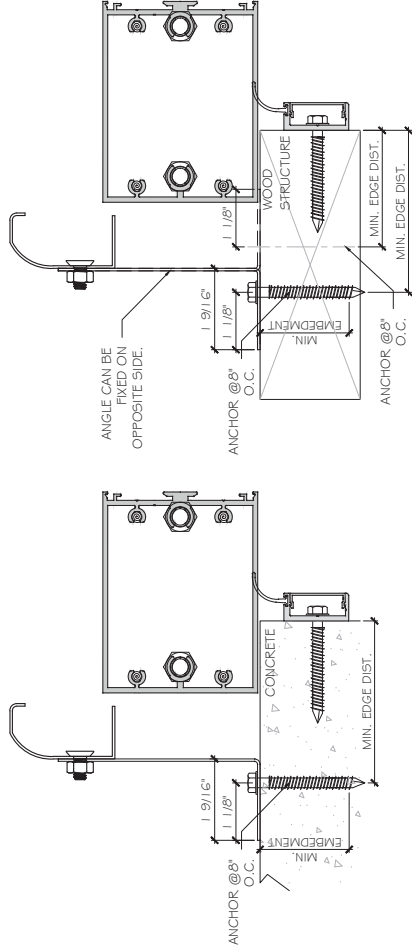
TYPE "B": 5/16" DIA. TEKS SCREW/DRILL - FLEX (GRADE 5) (F_u=120 KSI, F_y=92 KSI)
INTO STL/ALUM.

TYPE "C": 5/16" DIA. ULTRACON OR LAG SCREW (F_u=120 KSI, F_y=92 KSI)
INTO WOODS, 2" PENETRATION MIN.

SUBSTRATE:
CONCRETE: f_c=3KSI,
WOOD: SG=0.55 MIN.
STEEL: A36MIN. 1/4" THK. MIN.
ALUMINUM: 6063-T5 MIN. 1/4" THK. MIN..

TYPICAL ANCHOR EDGE DISTANCE:
INTO CONCRETE = 3 7/8" MIN.
INTO WOOD STRUCTURE = 1 1/4" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

NOTE: WOOD BUCK/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.



FLORIDA APPROVAL:
FL # 41580.1

November 10th, 2024

ES-PGD3040 GARAGE DOOR - LMI
E.S. WINDOWS, INC.
10653 NE QUAYBRID GE CT.
MIAMI, FL 33138
TEL: (305) 624-7775
www.MCEngineering.com
mcy@mcyengineering.com

No	Date	By	Description
1	10.26.2024	James	REVISION

ES-PGD3040 GARAGE DOOR - LMI
E.S. WINDOWS, INC.
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MIAMI, FL 33138
TEL: (305) 624-7775
www.MCEngineering.com
mcy@mcyengineering.com

AD22-13
A1
Sheet No.
7 OF 15

TYPICAL ANCHOR TYPES:

TYPE "D": 1/4" DIA. ULTRACON BY DEWALT. (F_u=164 KSI, F_y=148 KSI)
 INTO CONCRETE/CMU.

TYPE "E": 1/4" DIA. TAPCON
 INTO CONCRETE.

TYPE "F": 3/8" WELT SLEEVE ANCHOR INTO CONCRETE
 INTO CONCRETE.

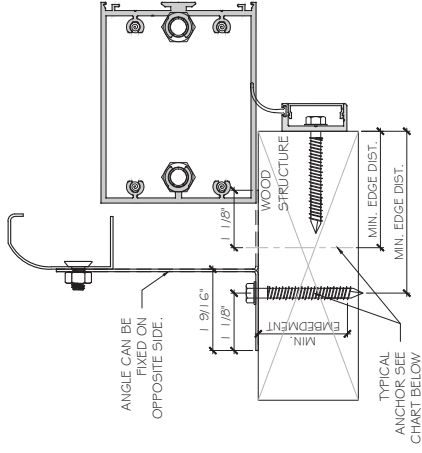
TYPE "G": 1/2" DIA. LAG SCREWS,
 INTO WOOD.

TYPE "H": 1/4"-1.4 TKS. (F_u=120 KSI, F_y=92 KSI)
 INTO STEEL.

NOTE: WOOD BUCKS/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.

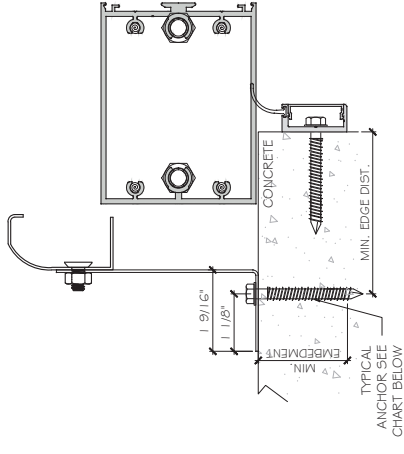
ANCHOR TYPE	SUBSTRATE	EMBEDMENT	EDGE DISTANCE (INCH)	MAX. SPACING (INCH)
D	CMU	2 1/4"	2 1/2"	7
D	CONCRETE (f _c =2ksi)	1 3/4"	2 1/2"	6
E	CONCRETE (f _c =2ksi)	1 3/4"	2 1/2"	5
F	CONCRETE (f _c =2ksi)	2 1/2"	2 1/2"	6
F	CONCRETE (f _c =4ksi)	2 1/2"	2 1/2"	9
G	WOOD (SG=0.55MIN.)	1 5/8"	1 5/8"	13
H	STEEL (A36 MIN.)	1 4 GA (STEEL THK)	3/4"	4
H	STEEL (A36 MIN.)	1 2 GA (STEEL THK)	3/4"	8
H	STEEL (A36 MIN.)	1/8" (STEEL THK)	3/4"	9

ANCHOR CHART

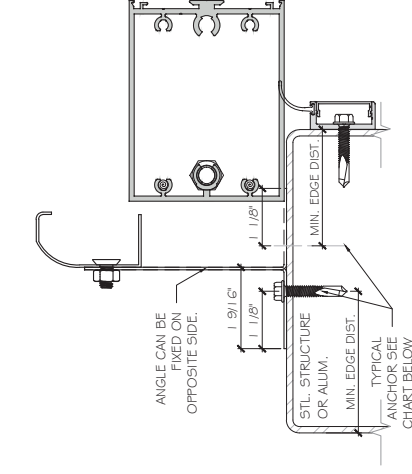


ANGLE CAN BE
 FIXED ON
 OPPOSITE SIDE.

TYPICAL
 ANCHOR SEE
 CHART BELOW

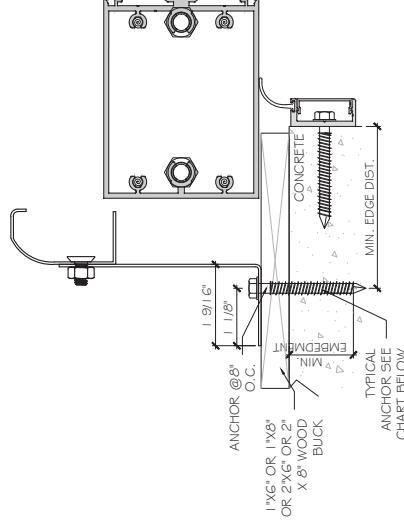


TYPICAL
 ANCHOR SEE
 CHART BELOW



ANGLE CAN BE
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TYPICAL
 ANCHOR SEE
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TYPICAL
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FLORIDA APPROVAL:
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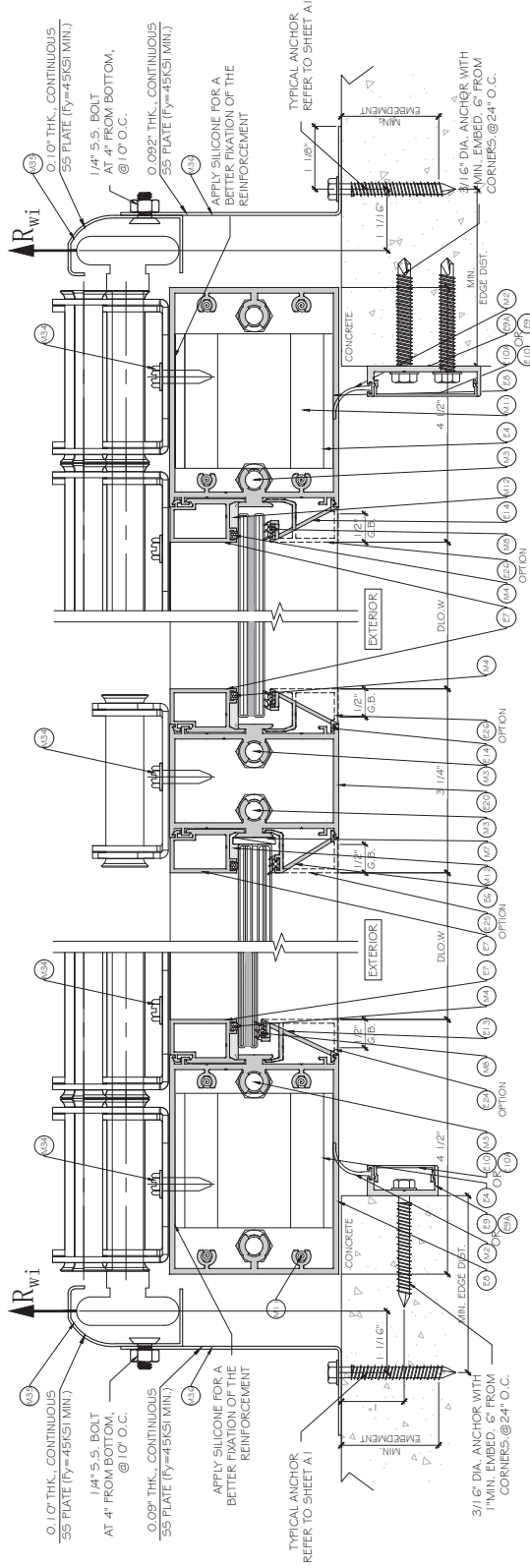
November 10th, 2024

No.	Date	By	Description
1	10.28.2024	Jones	REVISION

No.	Date	By	Description
04	10.28.2024	JAMES	REVISION

Drawn by: JAMES	Checked by: JAMES	Scale: AS SHOWN
Drawn Date: 10/28/2024	Checked Date: 10/28/2024	Scale: AS SHOWN
Project No: AD22-13	Sheet No: D1	9 OF 15

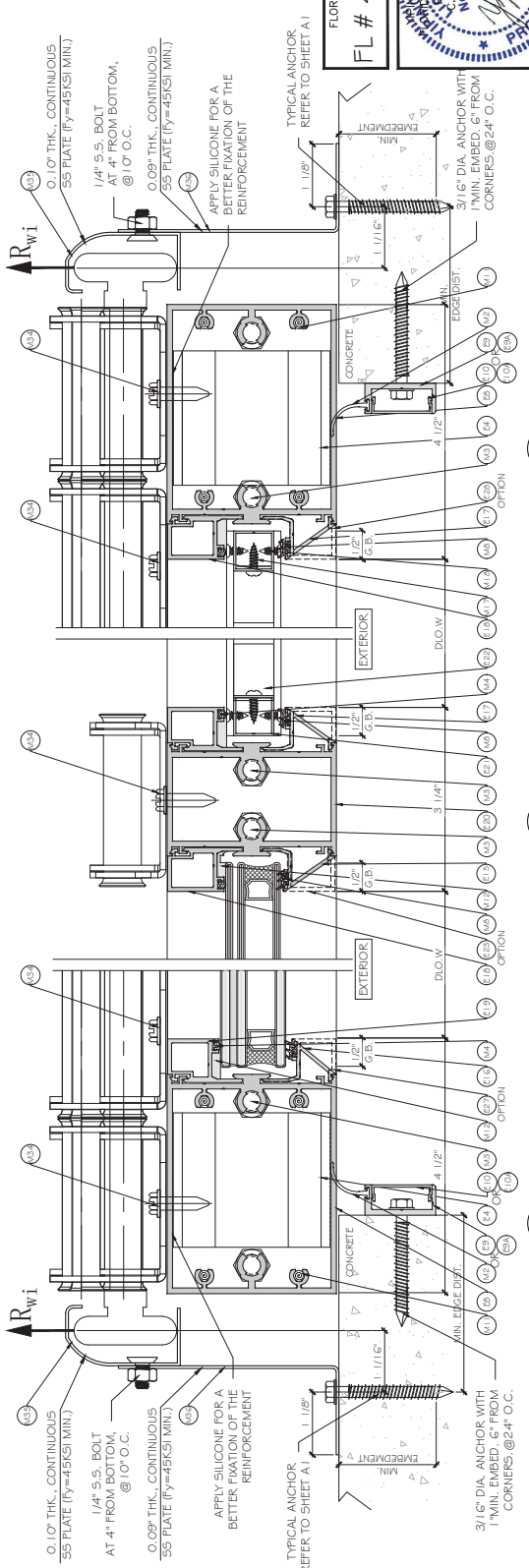
FLORIDA APPROVAL:
FL # 41580.1
 PROFESSIONAL SEAL OF
 JAMES W. JAMES
 PROFESSIONAL ENGINEER
 NO. 4588977
 C.A. 4588977
 November 10th, 2024



3 DETAIL D1

2 DETAIL D1

1 DETAIL D1



3 DETAIL D1 GLASS OPTION

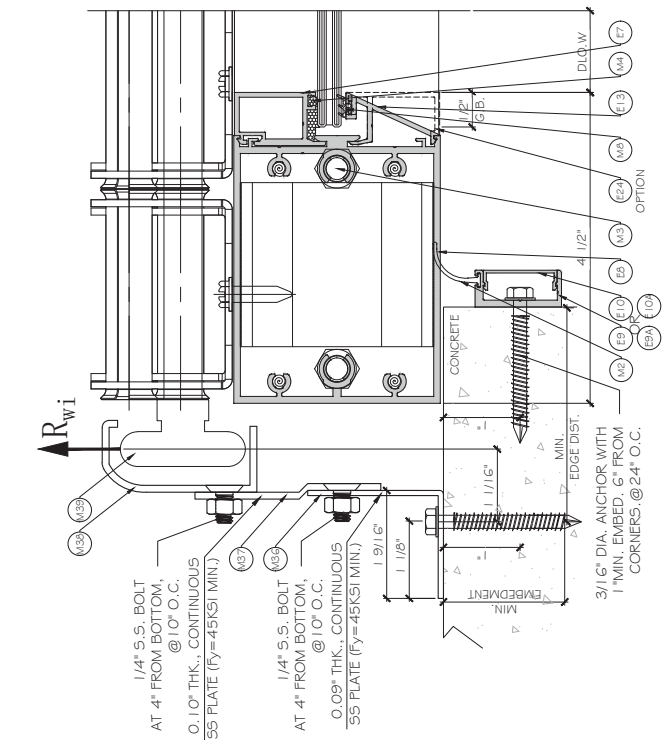
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1 DETAIL D1 GLASS OPTION

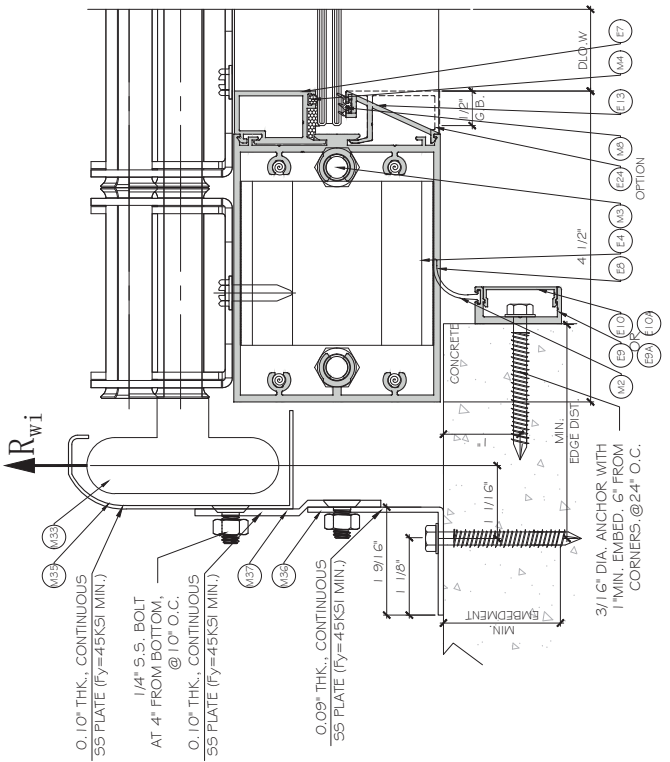
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01	10.28.2024	JAMES	REVISION

Drawn Date	10/28/2024
Drawn By	JAMES
Checked By	
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Drawn By	JAMES
Checked By	
DRAWING NO.	AD22-13
SHEET NO.	D3
TOTAL SHEETS	11 OF 15

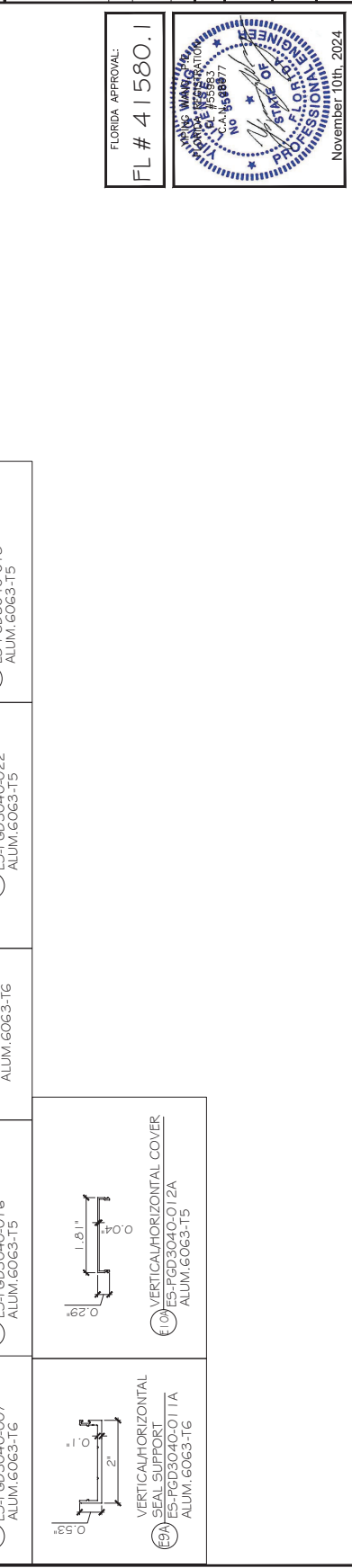
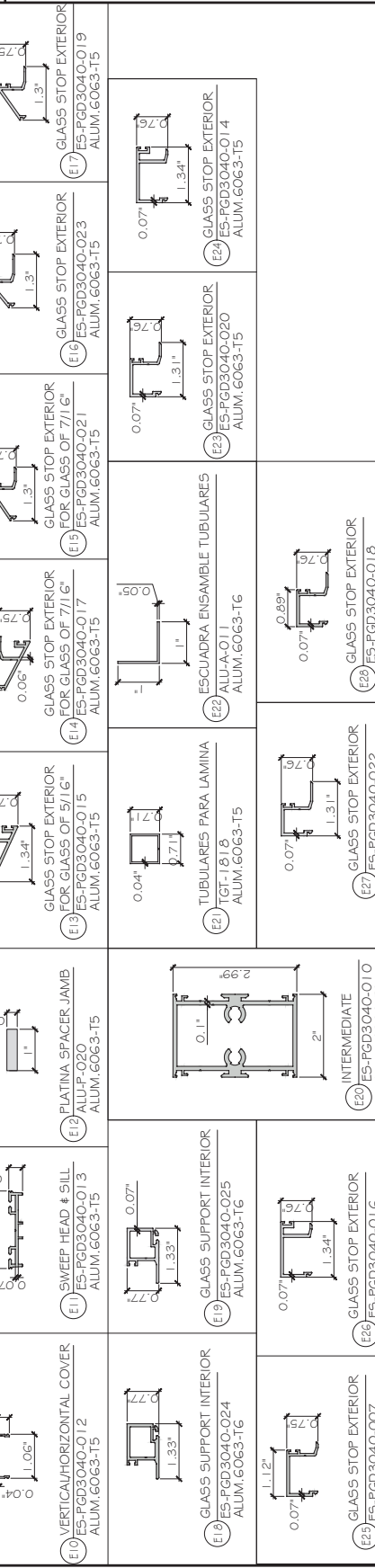
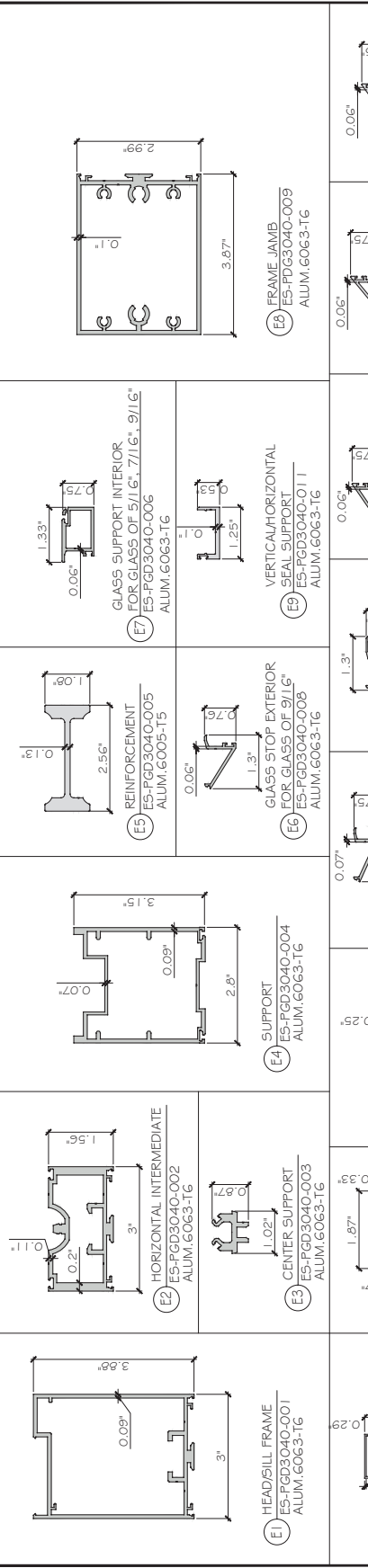
FLORIDA APPROVAL:
FL # 41580.1



1 DETAIL
 D3 2" TRACK OPTION



1 DETAIL
 D3 3" TRACK OPTION

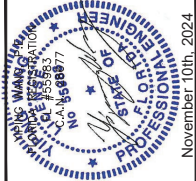












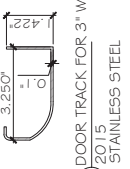

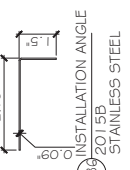

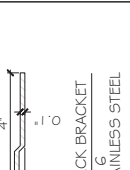

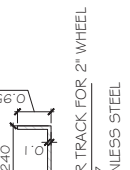



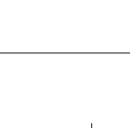




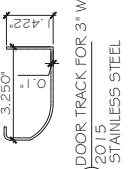
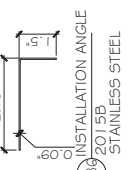
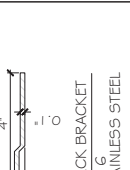
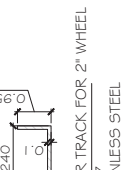


FLORIDA APPROVAL:
FL # 41580.1

November 10th, 2024

No.	Date	By	Description
1	10.28.2024	JAMES	REVISION

Drawn Date	10/28/2024
Drawn By	JAMES
Checked By	
Reviewed By	
Drawn Date	10/28/2024
Drawn By	JAMES
Checked By	
Reviewed By	
Drawn Date	10/28/2024
Drawn By	JAMES
Checked By	
Reviewed By	

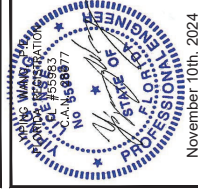
FLORIDA APPROVAL:
FL # 41580.1

 November 10th, 2024

 SHORT BRACKET 1 FGD 1.610 STAINLESS STEEL	 LARGE BRACKET 1 FGD 1.200 STAINLESS STEEL	 SHORT BRACKET 2 FGD 1.210 STAINLESS STEEL	 LARGE BRACKET 2 FGD 1.300 STAINLESS STEEL	 SHORT BRACKET 3 FGD 1.310 STAINLESS STEEL	 LARGE BRACKET 3 FGD 1.400 STAINLESS STEEL	 SHORT BRACKET 4 FGD 1.410 STAINLESS STEEL	 LARGE BRACKET 4 FGD 1.600 STAINLESS STEEL	 TOP BRACKET FGD 1.600 STAINLESS STEEL
 TOP ROLLER HOLDER FGD 1.610 STAINLESS STEEL 	 BOTTOM BRACKET LEFT HAND SIDE FGD 1.810 STAINLESS STEEL 	 BOTTOM BRACKET RIGHT HAND SIDE FGD 1.820 STAINLESS STEEL 	 BOTTOM WHEEL HOLDER FGD 1.830 STAINLESS STEEL 	 PIN + RETAINER FGD 1.840 STAINLESS STEEL 	 HEAVY DUTY INSIDE DEADLOCK FGD 1.900 STAINLESS STEEL 	 3" WHEEL ASSEMBLY FGD 8300 	 2" WHEEL ASSEMBLY FGD 8200 	
 DOOR TRACK FOR 3" WHEEL 2015 STAINLESS STEEL	 INSTALLATION ANGLE 2015B STAINLESS STEEL	 TRACK BRACKET 2016 STAINLESS STEEL	 DOOR TRACK FOR 2" WHEEL 2017 STAINLESS STEEL	 3" WHEEL ASSEMBLY FGD 8300 				

BILL OF MATERIAL

CODE	PART	DESCRIPTION	MATERIAL
E1	ES-PGD3040-001	HEAD/SILL FRAME	6063-T6
E2	ES-PGD3040-002	HORIZONTAL INTERMEDIATE	6063-T6
E3	ES-PGD3040-003	CENTER SUPPORT	6063-T6
E4	ES-PGD3040-004	SUPPORT	6063-T6
E5	ES-PGD3040-005	REINFORCEMENT	6005-T5
E6	ES-PGD3040-008	GLASS STOP EXTERIOR FOR GLASS OF 9/16"	6063-T6
E7	ES-PGD3040-006	GLASS SUPPORT INTERIOR FOR GLASS OF 5/16", 7/16", 9/16"	6063-T6
E8	ES-PDG3040-009	FRAME JAMB	6063-T6
E9	ES-PGD3040-011	VERTICAL/HORIZONTAL SEAL SUPPORT	6063-T6
E9A	ES-PGD3040-011A	VERTICAL/HORIZONTAL SEAL SUPPORT	6063-T6
E10	ES-PGD3040-012	VERTICAL/HORIZONTAL COVER	6063-T5
E10A	ES-PGD3040-012A	VERTICAL/HORIZONTAL COVER	6063-T5
E11	ES-PGD3040-013	SWEEP HEAD & SILL	6063-T5
E12	ALU-P-020	PLATINA SPACER JAMB	6063-T6
E13	ES-PGD3040-015	GLASS STOP EXTERIOR FOR GLASS OF 5/16"	6063-T5
E14	ES-PGD3040-017	GLASS STOP EXTERIOR FOR GLASS OF 7/16"	6063-T5
E15	ES-PGD3040-021	GLASS STOP EXTERIOR FOR GLASS OF 7/16"	6063-T5
E16	ES-PGD3040-023	GLASS STOP EXTERIOR	6063-T5
E17	ES-PGD3040-019	GLASS STOP EXTERIOR	6063-T5
E18	ES-PGD3040-024	GLASS SUPPORT INTERIOR	6063-T6
E19	ES-PGD3040-025	GLASS SUPPORT INTERIOR	6063-T6
E20	ES-PGD3040-010	INTERMEDIATE	6063-T6
E21	TGT-1818	TUBULARES PARA LAMINA	6063-T5
E22	ALU-A-011	ESCUDRA ENSAMBLE TUBULARES	6063-T6
E23	ES-PGD3040-020	GLASS STOP EXTERIOR	6063-T5
E24	ES-PGD3040-014	GLASS STOP EXTERIOR	6063-T5
E25	ES-PGD3040-007	GLASS STOP EXTERIOR	6063-T6
E26	ES-PGD3040-016	GLASS STOP EXTERIOR	6063-T5
E27	ES-PGD3040-022	GLASS STOP EXTERIOR	6063-T5
E28	ES-PGD3040-018	GLASS STOP EXTERIOR	6063-T5

FLORIDA APPROVAL:
FL # 41580.1



ES-PGD3040 GARAGE DOOR - LMI

E.S. WINDOWS, INC.
 10653 NE QUAYBRID GE CT.
 MAAMI, FL 33138
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 12781 MIRAMAR PARKWAY #301
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 P: 305 271 0117

No.	Date	By	Description
01	10.28.2024	James	REVISION

Drawn Date: 10/28/24
 Drawn By: James
 Drawing No: AD22-13

BOM

Sheet No:
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November 10th, 2024

BILL OF MATERIAL

COD	PORTE	DESCRIPCIÓN	MATERIAL
M1	ES-PGD3040-G01 S	SPACER GASKET	SILICONE
M2	ES-PGD3040-G02 S	JAMB SEAL GASKET	SILICONE
M3	TOR 3/8" - 16 X 2" HEX CAP	SCREW	STAINLESS STEEL
M4	ES-PGD3040-G03 S	JOINT GASKET	SILICONE
M5	ARANDELA PRESSION 3/8"	WASHER	STAINLESS STEEL
M6	TOR 8 X 1/2" P.H.	SCREW	STAINLESS STEEL
M7	80-342A S	SETTING BLOCK 80±5 SHORE A	SILICONE
M8	ES-EL100-G02A S	GLAZING GASKET	SILICONE
M9	ES-PGD3040-G04 S	BOTTOM SEAL	SILICONE
M10	TOR 8 X 1" P.H.	SCREW	STAINLESS STEEL
M11	TOR 12 X 1" P.H.	SCREW	STAINLESS STEEL
M12	DS-983	STRUCTURAL SILICONE	SILICONE
M13	DS-791	SEAL SILICONE	SILICONE
M14	ES-U7530 B01A S	SETTING BLOCK 80±5 SHORE A	SILICONE
M15	LAM. ALUMINUM 1/8" X 1220mm x 3050 mm	PANEL OP	ALUMINUM
M16	TOR 6 X 3/8" P.H.	SCREW	STAINLESS STEEL
M17	TOR 6 X 1/2" P.H.	SCREW	STAINLESS STEEL
M18	TOR 6 X 3/8" F.H.	SCREW	STAINLESS STEEL
M19	PGD 1110	SHORT BRACKET 1	STAINLESS STEEL
M20	PGD 1200	LARGE BRACKET 2	STAINLESS STEEL
M21	PGD 1210	SHORT BRACKET 2	STAINLESS STEEL
M22	PGD 1300	LARGE BRACKET 3	STAINLESS STEEL
M23	PGD 1310	SHORT BRACKET 3	STAINLESS STEEL
M24	PGD 1400	LARGE BRACKET 4	STAINLESS STEEL
M25	PGD 1410	SHORT BRACKET 4	STAINLESS STEEL
M26	PGD 1600	TOP BRACKET	STAINLESS STEEL
M27	PGD 1610	TOP ROLLER HOLDER	STAINLESS STEEL
M28	PGD 1810	BOTTOM BRACKET LEFT HAND SIDE	STAINLESS STEEL
M29	PGD 1820	BOTTOM BRACKET RIGHT HAND SIDE	STAINLESS STEEL
M30	PGD 1830	BOTTOM WHEEL HOLDER	STAINLESS STEEL
M31	PGD 1840	PIN + RETAINER	STAINLESS STEEL
M32	PGD 1900	HEAVY DUTY INSIDE DEADLOCK	STAINLESS STEEL
M33	PGD 8300	3" WHEEL ASSEMBLY	-
M34	TOR #14 X 1"	SCREW	STAINLESS STEEL
M35	2015	DOOR TRACK FOR 3" WHEEL	STAINLESS STEEL
M36	2015B	INSTALLATION ANGLE	STAINLESS STEEL
M37	2016	TRACK BRACKET	STAINLESS STEEL
M38	2017	DOOR TRACK FOR 2" WHEEL	STAINLESS STEEL
M39	PGD 8200	2" WHEEL ASSEMBLY	-
M40	ES-PGD3040-C01	CDV-025 ES-PGD3040-C01	-
M41	ES-PGD3040-C02	CDV-025 ES-PGD3040-C02	-

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MAAMI, FL 33138
TEL: (305) 624-7775

No	Date	By	Description
01	10.28.2024	James	REVISION

DRAWING NO.
AD22-13

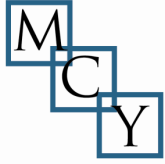
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Sheet No.

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FLORIDA APPROVAL:
FL # 41580.1



November 10th, 2024



PRODUCT APPROVAL EVALUATION REPORT

<p><u>Product Manufacturer:</u> E.S. WINDOWS, Inc. 10653 NE Quaybridge Ct. Miami, FL 33138</p>	<p><u>Product Name/Model & Description:</u> ES-PGD 3040 GARAGE DOOR-LARGE MISSILE IMPACT</p>
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Scope: This product has been evaluated by the below-signed Florida Professional Engineer for compliance with the Code noted herein and is, for the purpose intended, at least equivalent to that required by the Code, in accordance with section 553.842 F.S. & chapter 61G20-3.005 F.A.C. Re-evaluation of this product shall be required following applicable Code modifications or revisions.

Code: 8th Edition Florida Building Code (2023), inclusive of all Supplements effective as of this report date.

Compliance Method: 61G20-3.005 (1)(d) – Evaluation Report from a licensed Professional Engineer

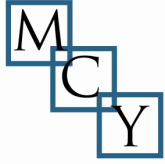
Product Description: Product Approval Drawing #AD22-13 prepared by MCY Engineering, signed and sealed by Yiping Wang P.E., is an integral part of this Evaluation Report.

Limitations & Conditions of Use:

- This product has been evaluated for use **inside and outside of the HVHZ** (High Velocity Hurricane Zone)
- Impact Resistance: **Large Missile Impact**
- Refer to Product Approval Drawing noted above for:
 - Maximum allowable wind loads at related maximum allowable size(s).
 - Other load limitations applicable to the product, if any.
 - Overall dimensions and material/grade of main product components, accessories, etc.
 - Illustrated diagrams of the attachment of the product to the structure
 - Anchor type(s), size(s), substrate(s), embedment, edge distance, and spacing/locations.



November 10th, 2024



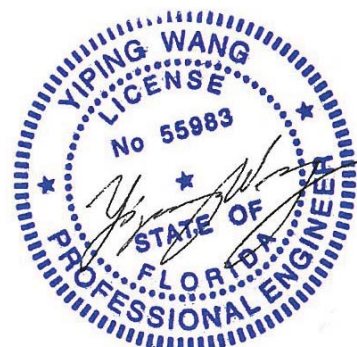
Test Reports:

Mandatory Tests (Tested in accordance with Florida Building Code Tests Protocols)

Test Lab	Report Number	Test Report Date	Test Standard & Description
QAI LABORATORIES 8148 NW 74 AVENUE MEDLEY, FL,33166	13126 Signed and sealed by Idalmis Ortega P.E.	06.17.2022	TAS 201 (IMPACT TEST PROCEDURES) TAS 202 (UNIFORM STATIC AIR PRESSURE) TAS 203 (CYCLIC WIND PRESSURE LOADING)
IFET, INC. 7939 NW 15th Street	TR-IFET-24-0004 Signed and sealed by Arshad Viqar.	05.20.2024	TAS 201 (IMPACT TEST PROCEDURES) TAS 203 (CYCLIC WIND PRESSURE LOADING)

Engineering Analysis: The following engineering analyses and/or calculations have been performed:

- No comparative analysis has been performed for conditions other than those tested.
- No rational analysis has been performed.
- Anchor calculations are based on manufacturer’s published anchor capacity, anchor Notice of Acceptance by Miami Dade County.



November 10th, 2024