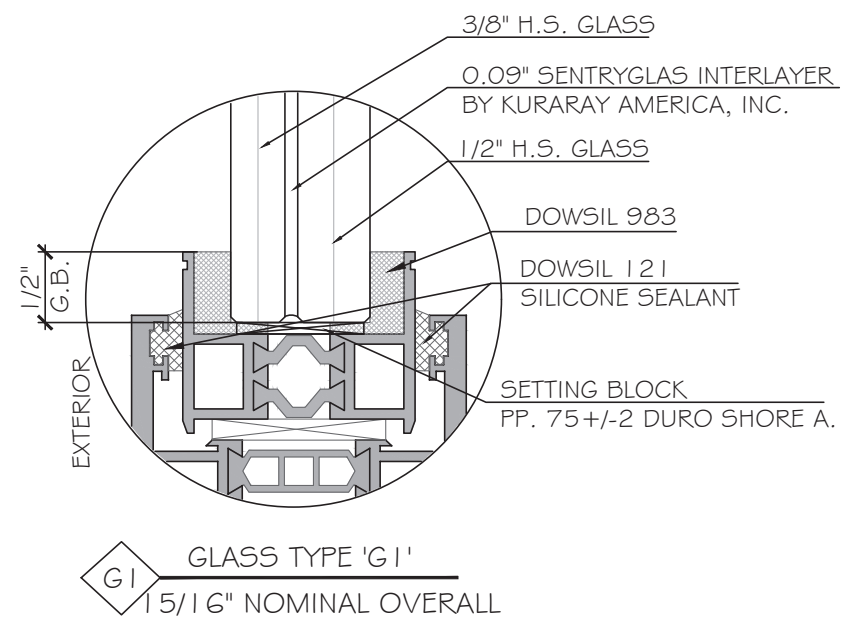


KELLER MINIMAL WINDOWS S.A.
SH LFI SLIDING GLASS DOOR
LARGE MISSILE IMPACT (LMI)



NOTE:
GLASS COMPLIES WITH ASTM E1300-09 (3 SEC. GUSTS).
GLASS IS TESTED IN ACCORDANCE WITH SECTION 2406.2/2406.3 OF FLORIDA BUILDING CODE 2023. GLASS COMPLY WITH SAFETY GLAZING.

GENERAL NOTES:

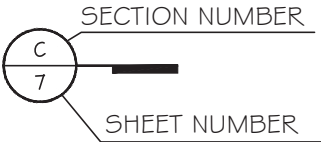
- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 8TH EDITION FLORIDA BUILDING CODE 2023. INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ). PRODUCTS ARE RATED FOR LARGE MISSILE IMPACT. IMPACT SHUTTERS ARE NOT REQUIRED.
- THESE DOORS ARE APPROVED FOR AIR AND WATER INFILTRATION.
- 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 FLORIDA BUILDING CODE 2023 SECTION AS APPLICABLE.
- 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.
- 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.
- SEALANTS:
ALL FRAME CORNERS, JOINTS, MULLION SEAMS AND PERIMETER GLAZING BEAD TO FRAME INSTALLATION FASTENERS SEALED WITH SILICON SEALANT.

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 & E2 FOR APPROVED TYPICAL ELEVATION & CONFIGURATION.
- STEP 3:** ANCHOR TYPE SEE SHEET A1 & A2. ANCHOR LAYOUT SEE SHEET E1 & E2.
- 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.

ABBREVIATIONS AND SYMBOLS

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



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.

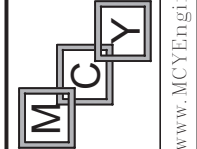
FLORIDA APPROVAL:

FL46854

YIPING WANG
FLORIDA PROFESSIONAL ENGINEER
FL #55983
C.A.N. 66699
July 18th, 2024

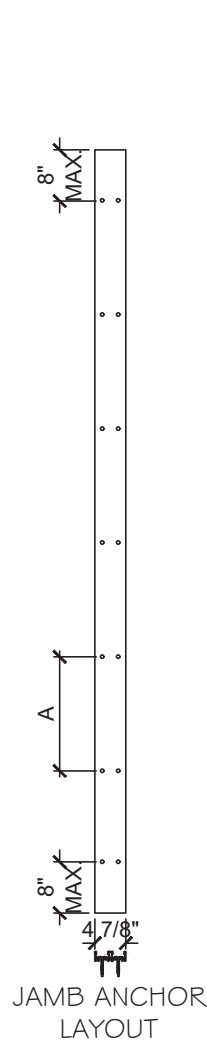
SH-LFI SLIDING GLASS DOOR - LARGE MISSILE IMPACT

KELLER MINIMAL WINDOWS S.A.
38-40 ROUTE DE WILVERDANGE
L-9911 TROISVIERGES LUXEMBOURG
Email: werner.jager@keller-minimal-windows.com

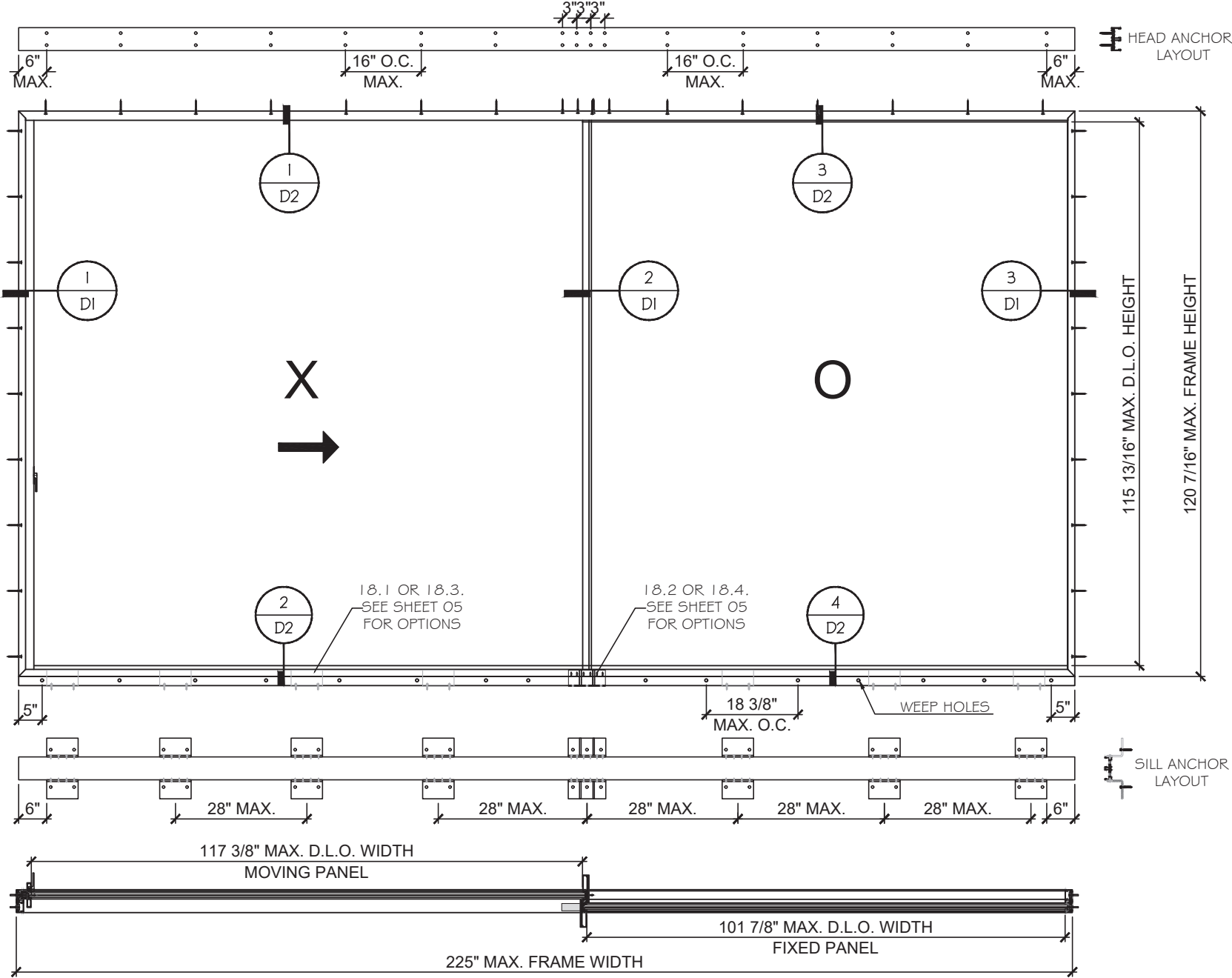


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COVER	
Sheet No.	
1 OF 16	



JAMB ANCHOR LAYOUT	
INTO WOOD/ CONCRETE	A = 16"
INTO GROUT FILLED BLOCK	A = 12"



TYPICAL EXTERIOR ELEVATION
XO SHOWN (OR OX)

DESIGN LOADS - PSF
+60 / -80

NOTE: FOR SIZE SHOWN ABOVE OR SMALLER AS PERMITTED BY FBC.

FLORIDA APPROVAL:
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SH-LFI SLIDING GLASS DOOR - LARGE MISSILE IMPACT
KELLER MINIMAL WINDOWS S.A.
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1.	07/15/2024	JAMES	NEW APPLICATION
Drawing Date: 07/15/2024 Scale: AS SHOWN			
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E1			
Sheet No. 2 OF 16			

TYPICAL ANCHORS (2 TRACK SHOWN, 3-TRACK IS SAME AS 2-TRACK)

ANCHOR TYPE 'A' - 5/16" DIA. ULTRACON BY 'DEWALT' ($F_u = 177\text{KSI}$, $F_y = 155\text{KSI}$)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURE (HEAD/JAMB)
 WITH 1 1/2" MIN. PENETRATION.

OR THROUGH 1X WOOD BUCKS INTO CONCRETE OR BLOCK	
1 3/4" MIN. EMBEDMENT INTO CONCRETE	(HEAD/JAMB)
1 3/4" MIN. EMBEDMENT INTO BLOCK	(JAMB ONLY)

DIRECTLY INTO CONCRETE OR BLOCKS	
3/4" MIN. EMBEDMENT INTO CONCRETE	(HEAD/JAMB)
3/4" MIN. EMBEDMENT INTO BLOCK	(JAMB ONLY)

ANCHOR TYPE 'B' - 5/16" DIA. TEKS OR SELF-DRILLING SCREWS (GRADE 5 CRS)
 INTO FBC APPROVED MULLIONS OR METAL STRUCTURES (HEAD/JAMB)
 (3) THREADS MIN. PENETRATION BEYOND METAL SUBSTRATE.

TYPICAL EDGE DISTANCE

INTO CONCRETE OR GROUT FILLED BLOCKS = 2-1/2" MIN.

INTO METAL STRUCTURE = 3/4" MIN.

INTO WOOD STRUCTURE = 1 1/4".

INTO HOLLOW BLOCK = 3 1/8"

SUBSTRATE

WOOD SG=0.55 MIN.

CONCRETE $f'_c=3.5$ ksi MIN.

C-90 HOLLOW/FILLED BLOCK AT JAMB $f'_m=2$ ksi MIN.

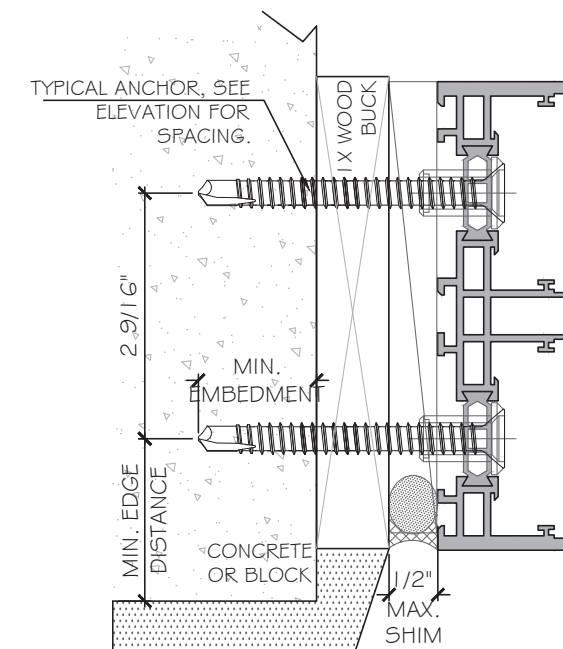
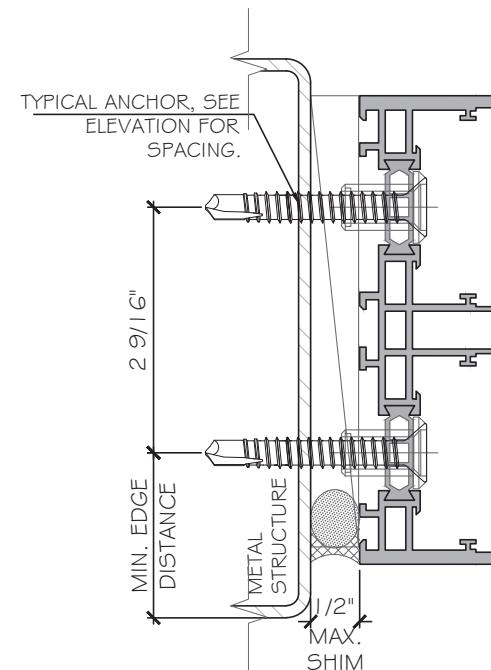
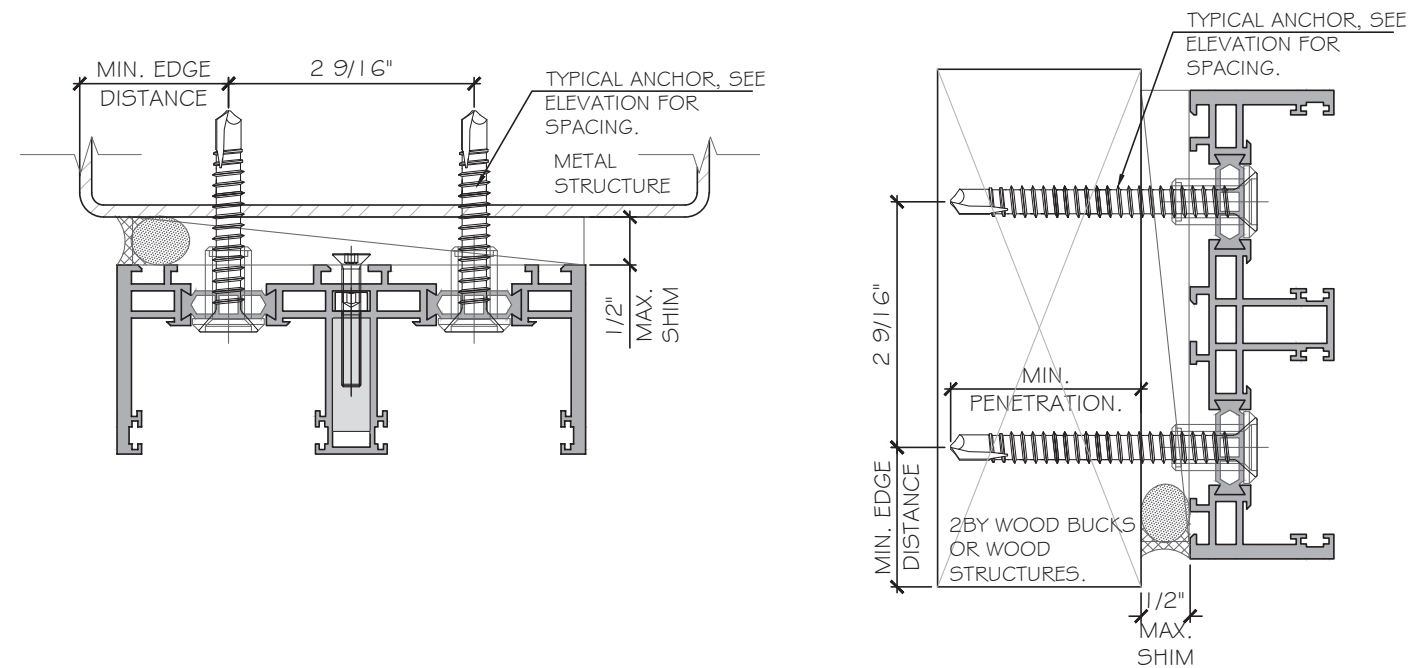
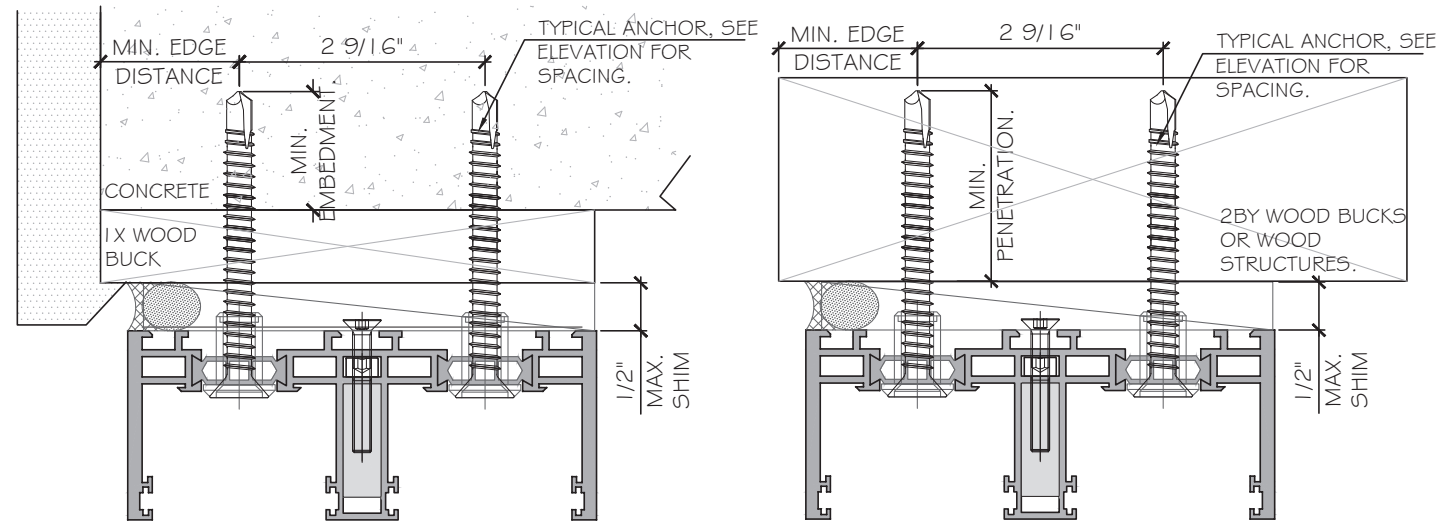
ALUMINUM: 1/8" MIN. THK. (6063-T5, MIN.)

STEEL: 16GA THK. MIN. ASTM A653 GRADE 33 ($F_y=33$ ksi) MIN.

STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED.

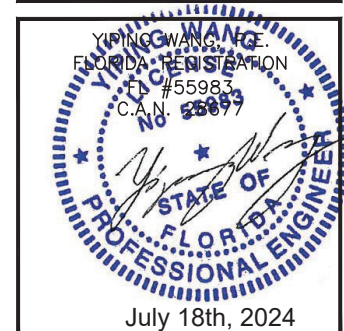
NOTE:

METAL/ WOOD STRUCTURE BY OTHERS MUST BE DESIGNED AND ANCHORED PROPERLY TO SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.



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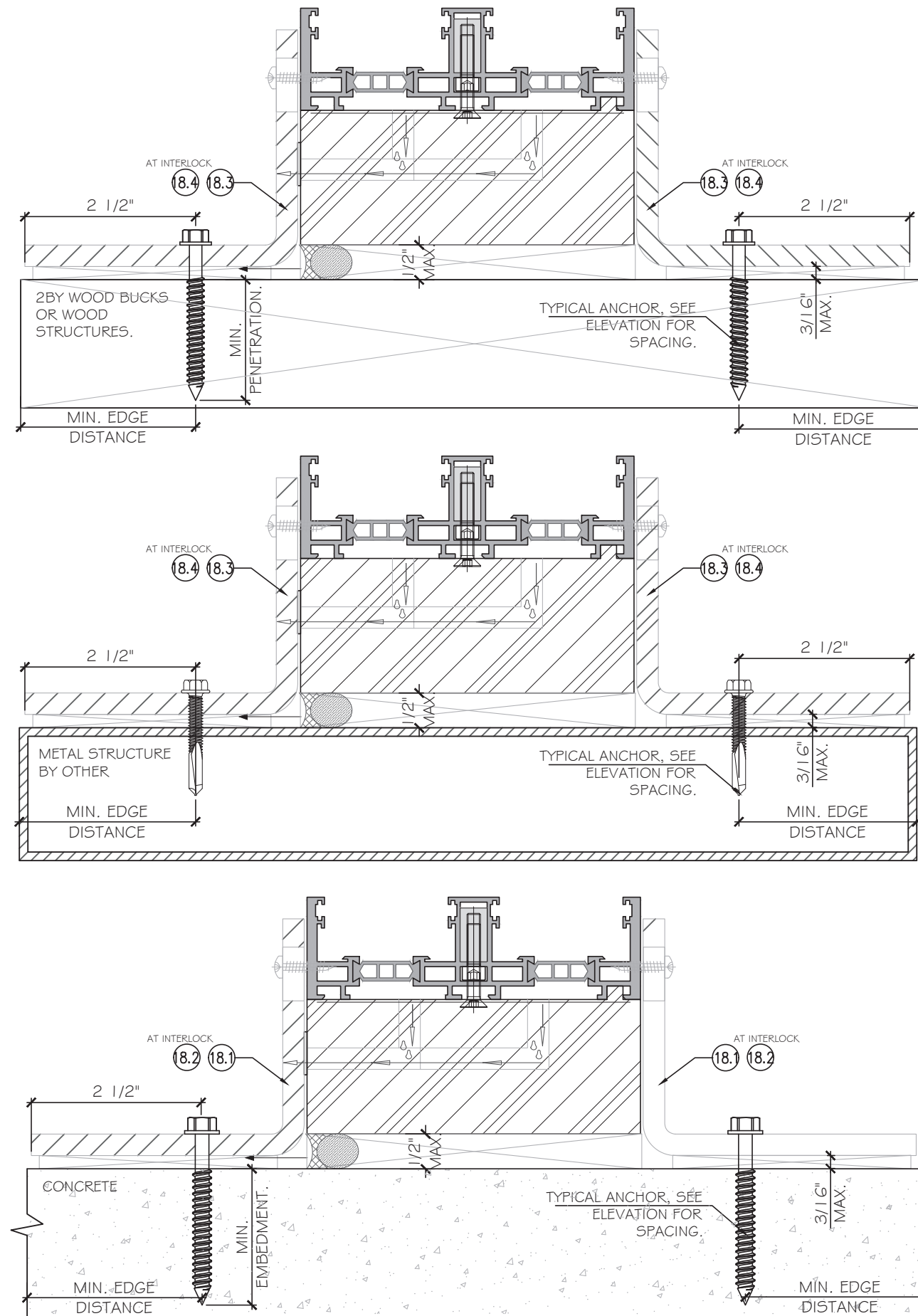


SH-LFI SLIDING GLASS DOOR - LARGE MISSILE IMPACT

KELLER MINIMAL WINDOWS S.A.
38-40 ROUTE DE WILVERDANGE
L-9911 TROISVIÈRES LUXEMBOURG
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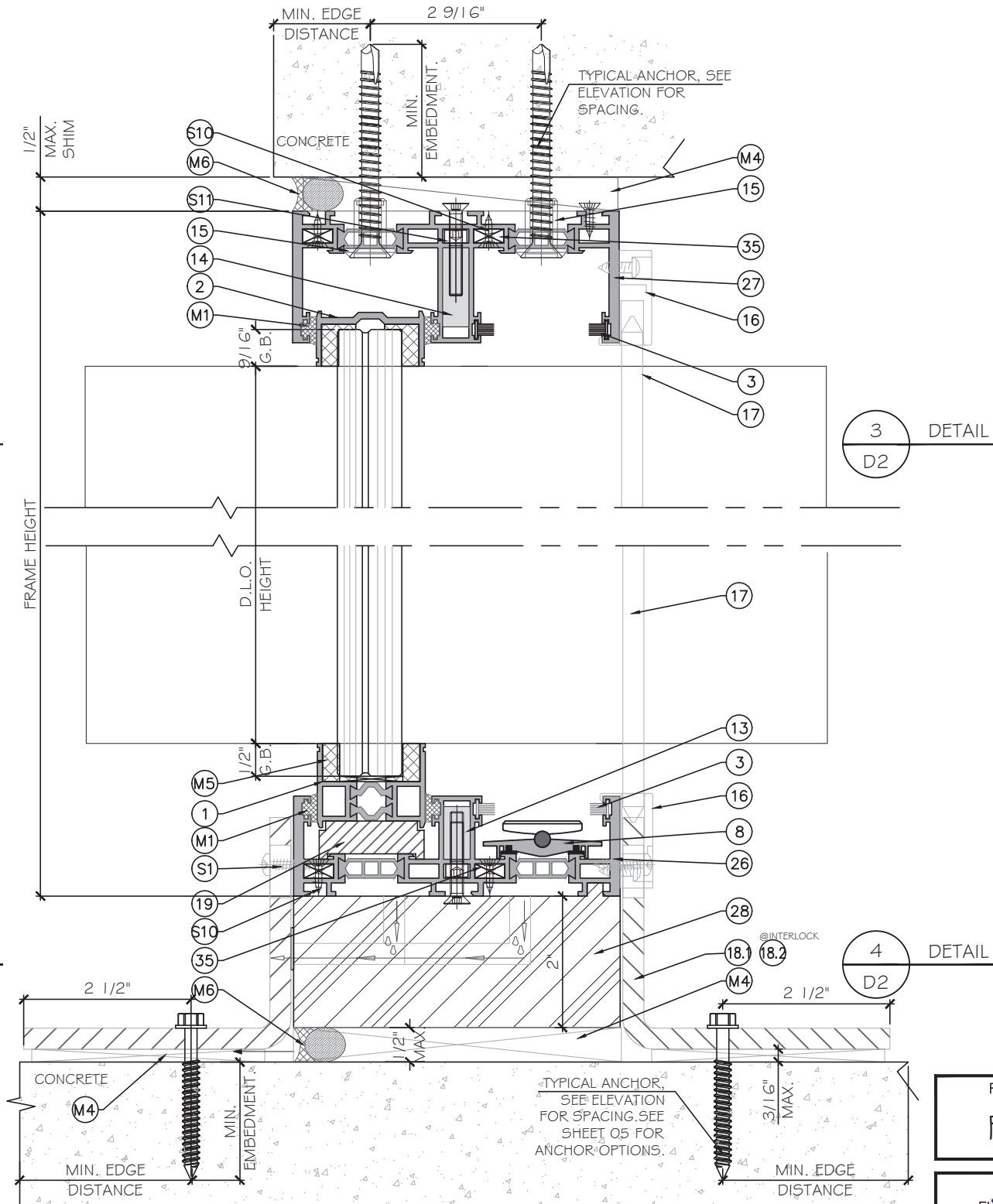
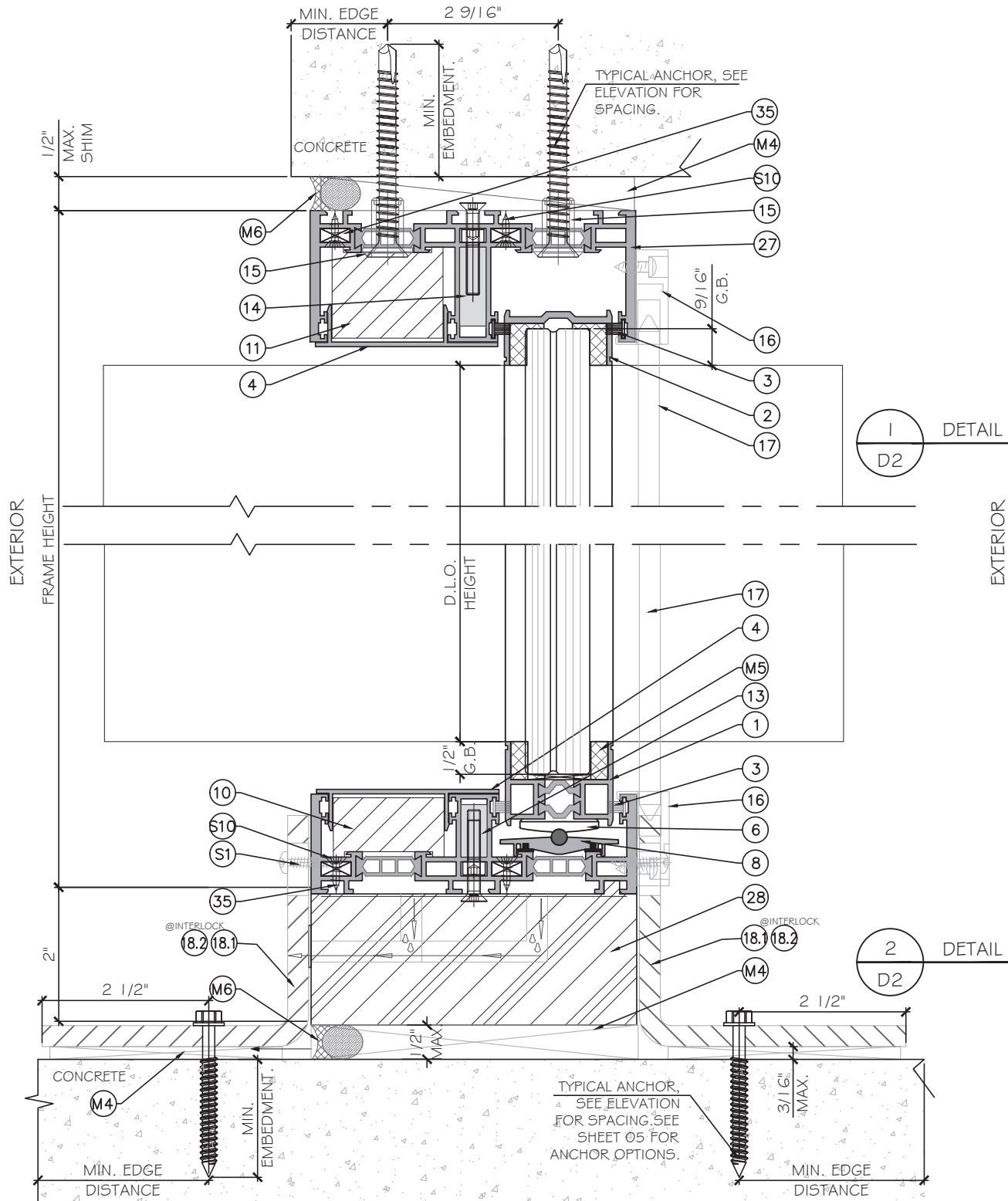
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NOTE:
METAL/ WOOD STRUCTURE BY OTHERS MUST BE DESIGNED AND
ANCHORED PROPERLY TO SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM
AND TRANSFER THEM TO THE BUILDING STRUCTURE.



Sheet No.
5 OF 16





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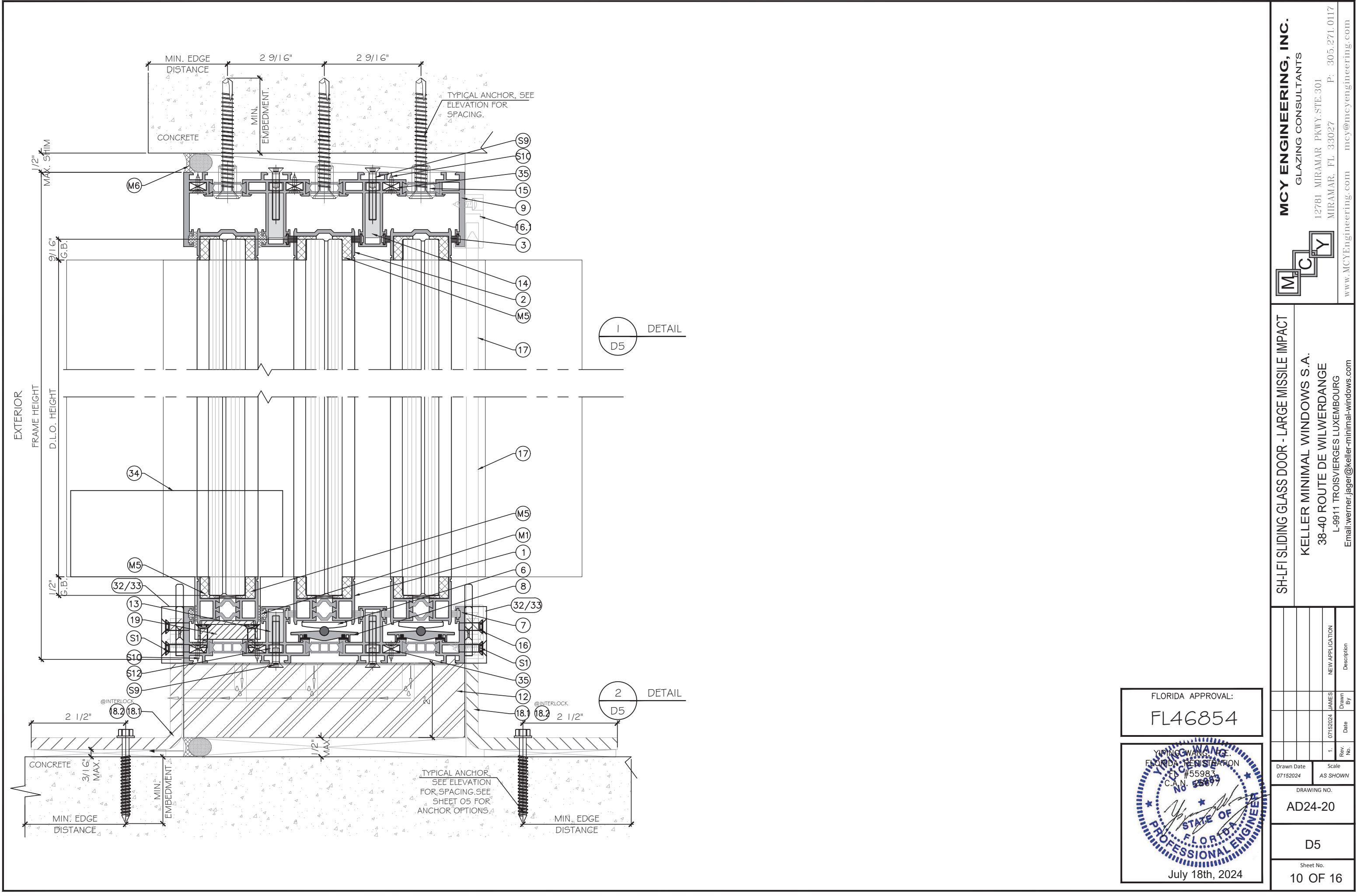
SH-LFI SLIDING GLASS DOOR - LARGE MISSILE IMPACT

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1.	07/15/2024	JAMES	NEW APPLICATION
Drawn Date: 07/15/2024 Scale: AS SHOWN			
Drawing No. AD24-20			
Sheet No. 7 OF 16			

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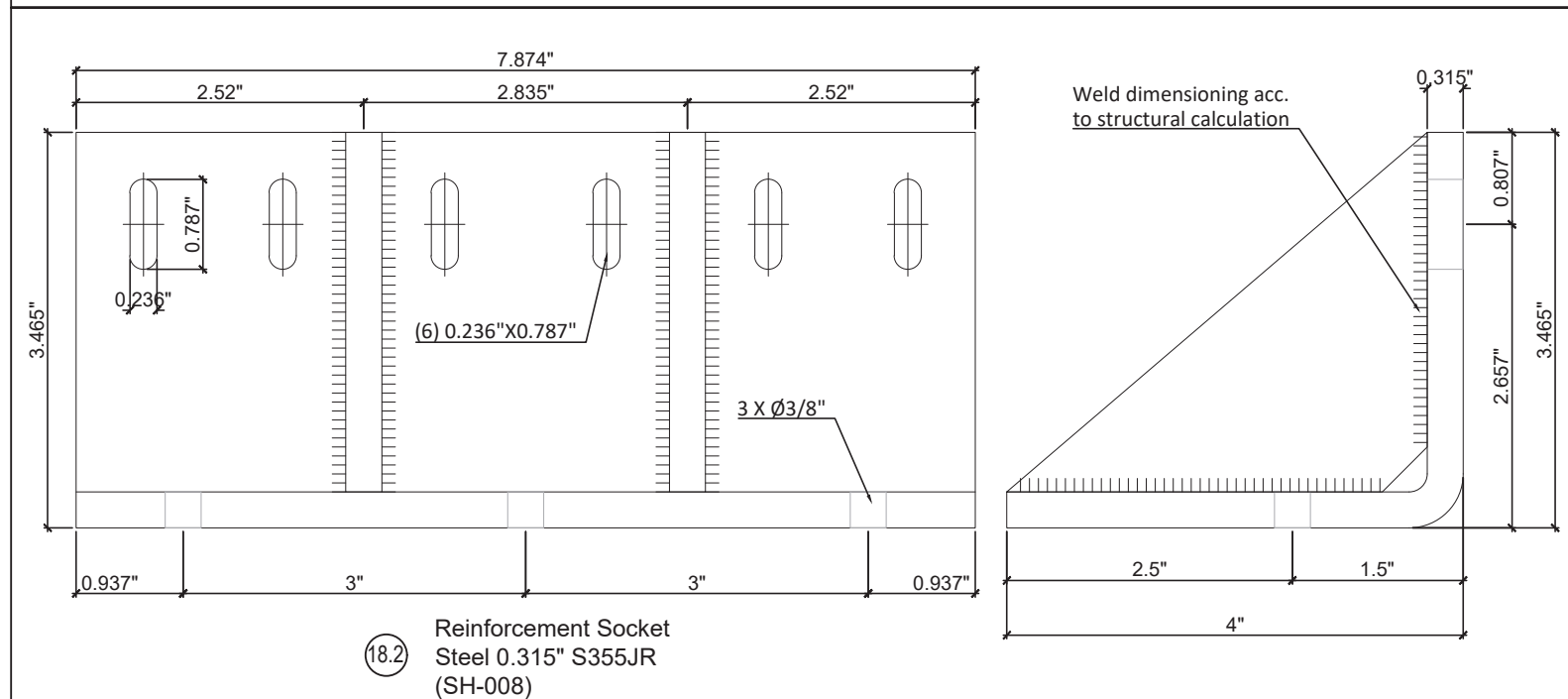
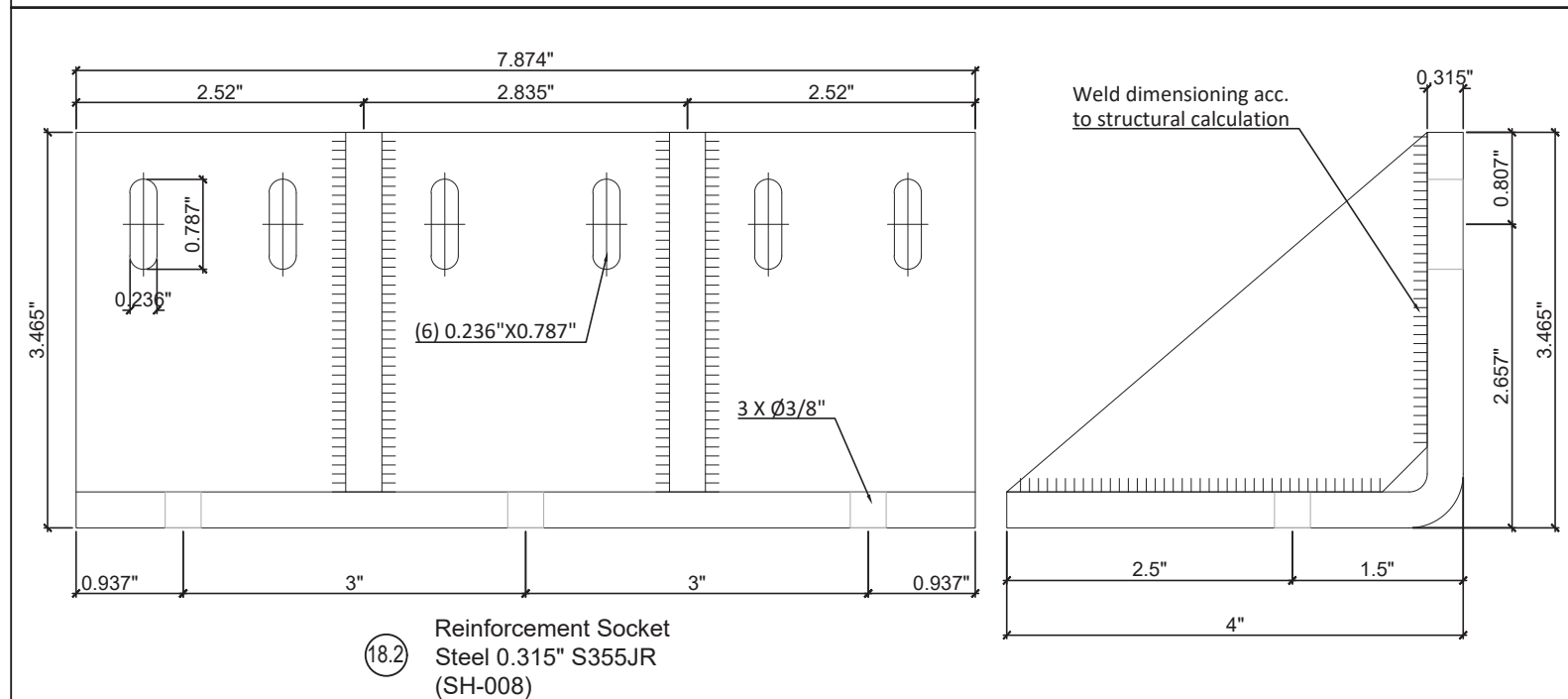
SH-LFI SLIDING GLASS DOOR - LARGE MISSILE IMPACT KELLER MINIMAL WINDOWS S.A. 38-40 ROUTE DE WILVERDANGE L-9911 TROISVIERGES LUXEMBOURG Email: werner.jager@keller-minimal-windows.com				 MCY ENGINEERING, INC. GLAZING CONSULTANTS 12781 MIRAMAR PKWY.,STE.301 MIRAMAR, FL 33027 P: 305.271.0117 www.MCYEngineering.com mcy@mcyengineering.com			

MCY

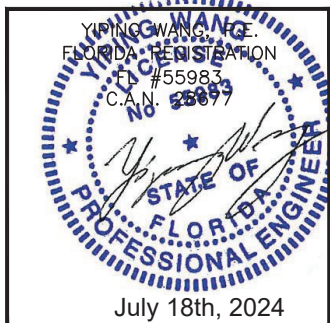
ENGINEERING, INC.

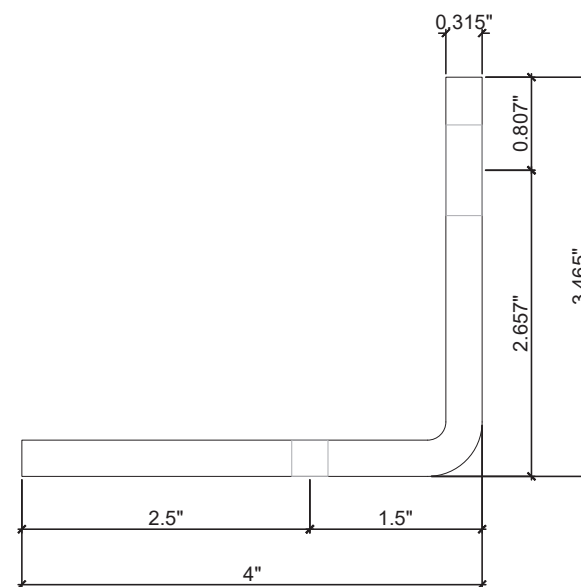
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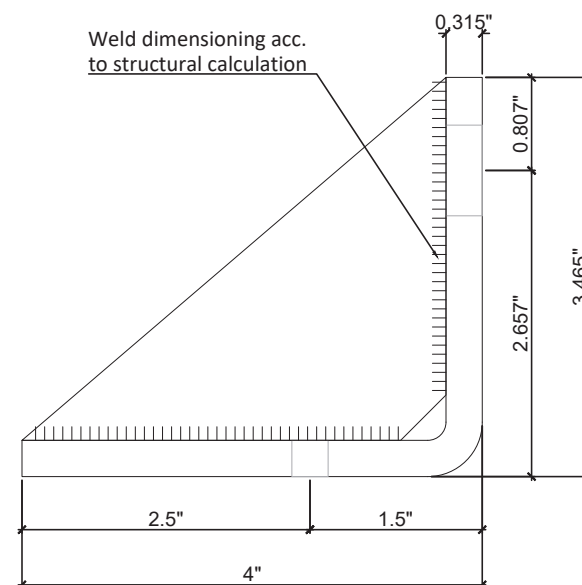


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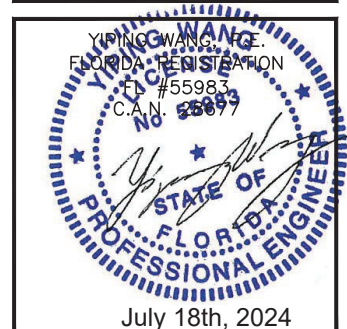
18.3 Reinforcement Socket
Steel 0.315" S355JR
(SH-008)



18.4 Reinforcement Socket
Steel 0.315" S355JR
(SH-008)

Weld dimensioning acc. to structural calculation

FL46854



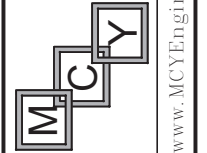
July 18th, 2024

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SH-LFI SLIDING GLASS DOOR - LARGE MISSILE IMPACT

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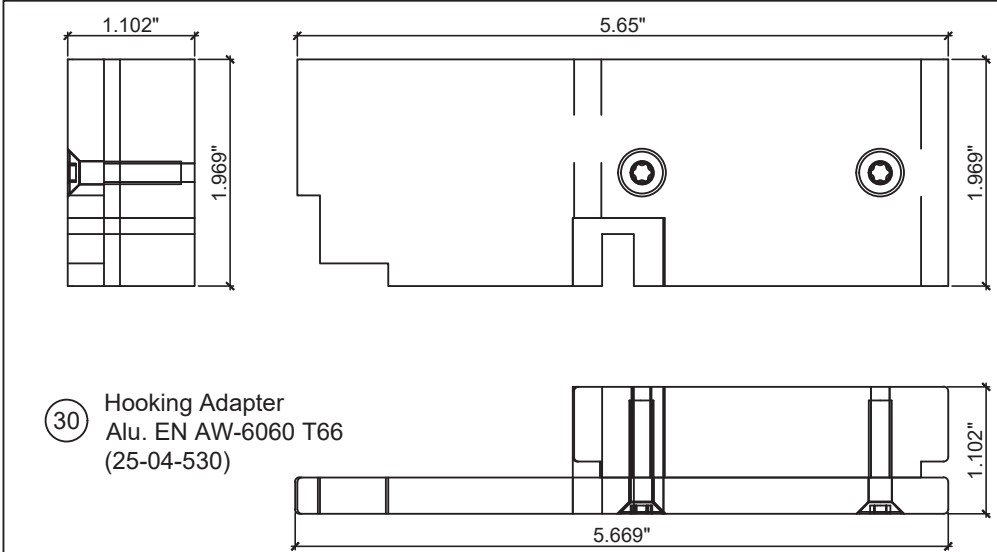
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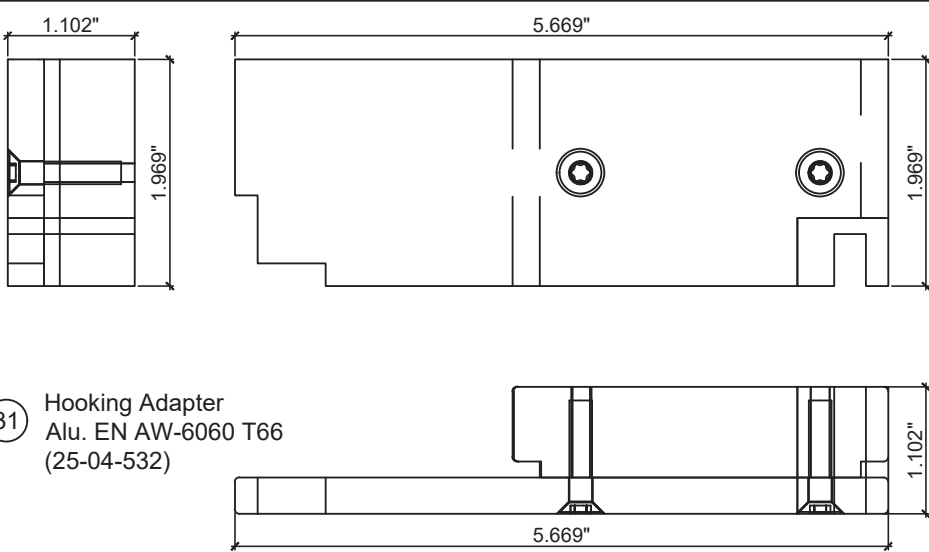
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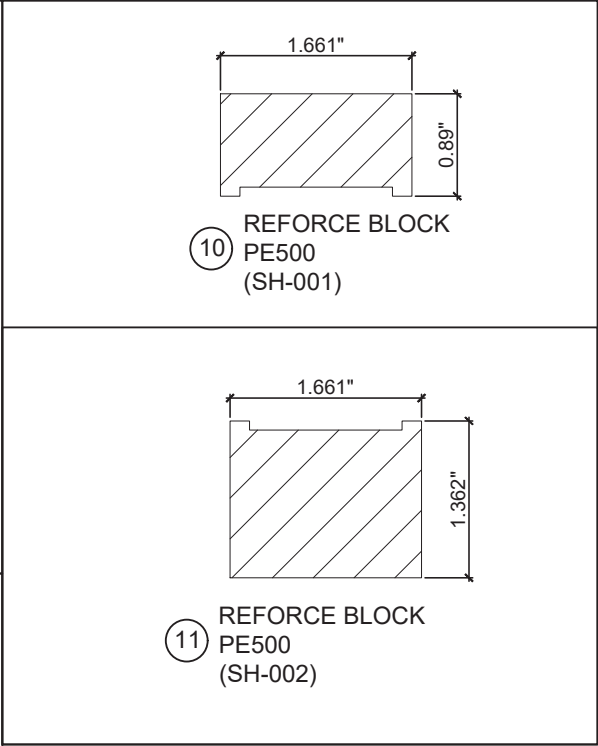
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30 Hooking Adapter
Alu. EN AW-6060 T66
(25-04-530)

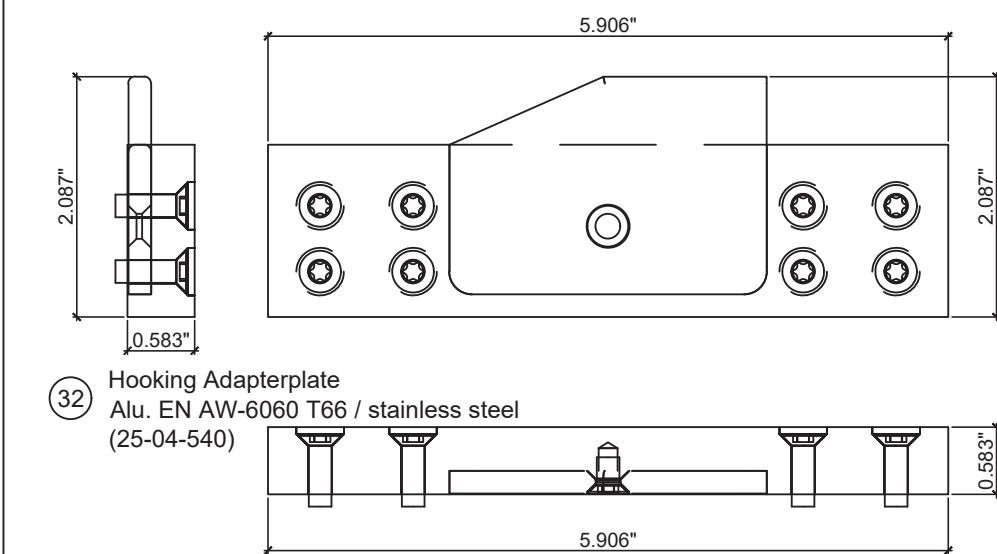


31 Hooking Adapter
Alu. EN AW-6060 T66
(25-04-532)

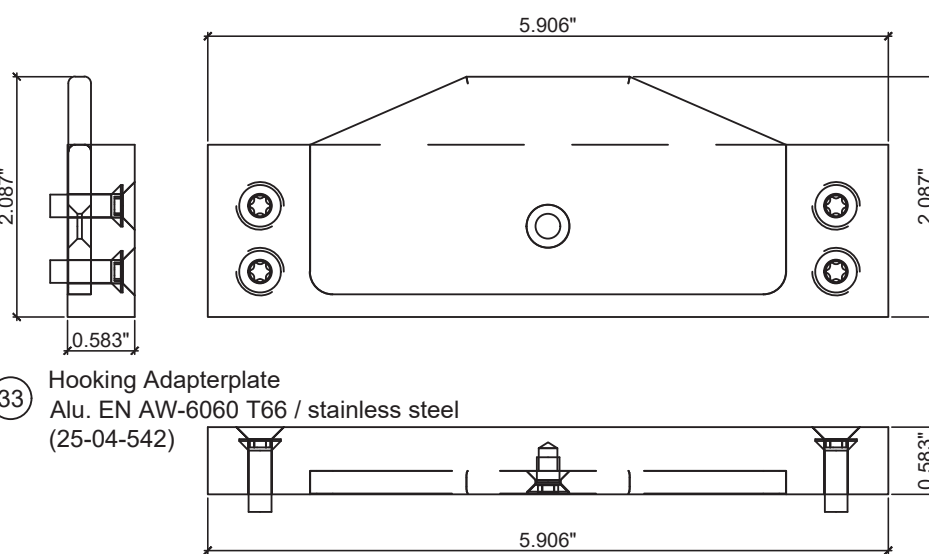


10 REFORCE BLOCK
PE500
(SH-001)

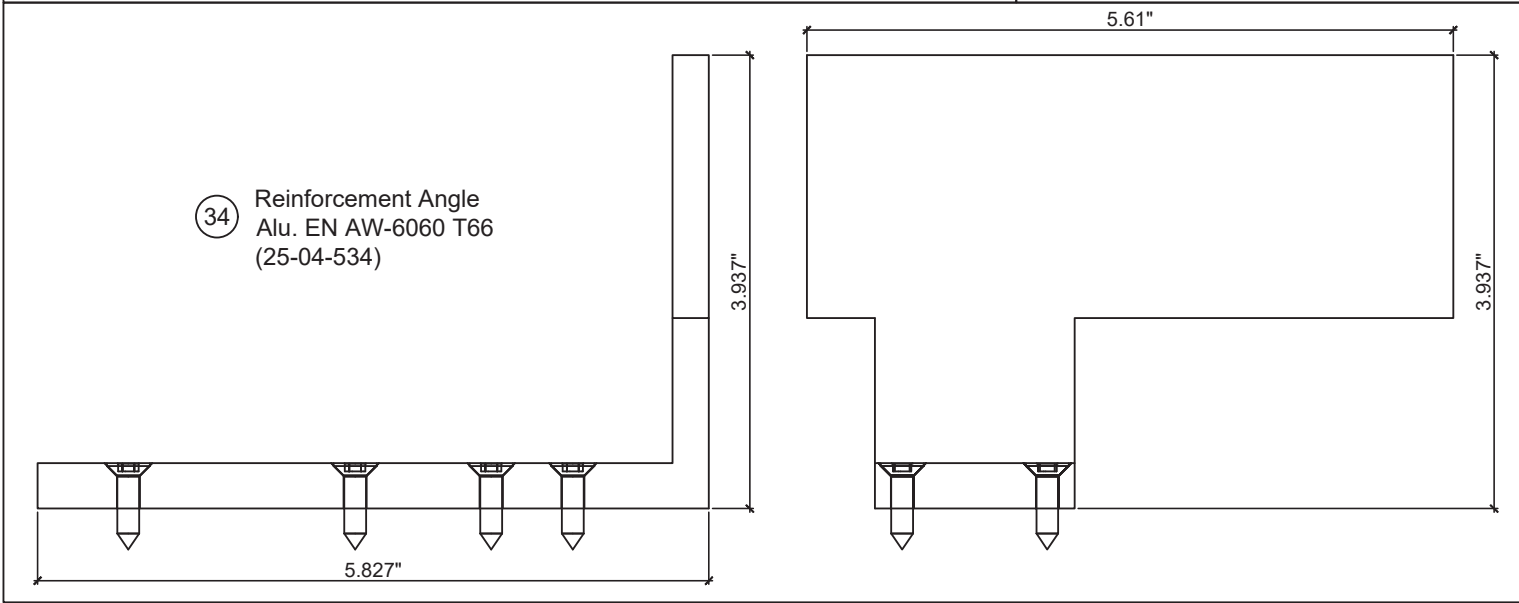
11 REFORCE BLOCK
PE500
(SH-002)



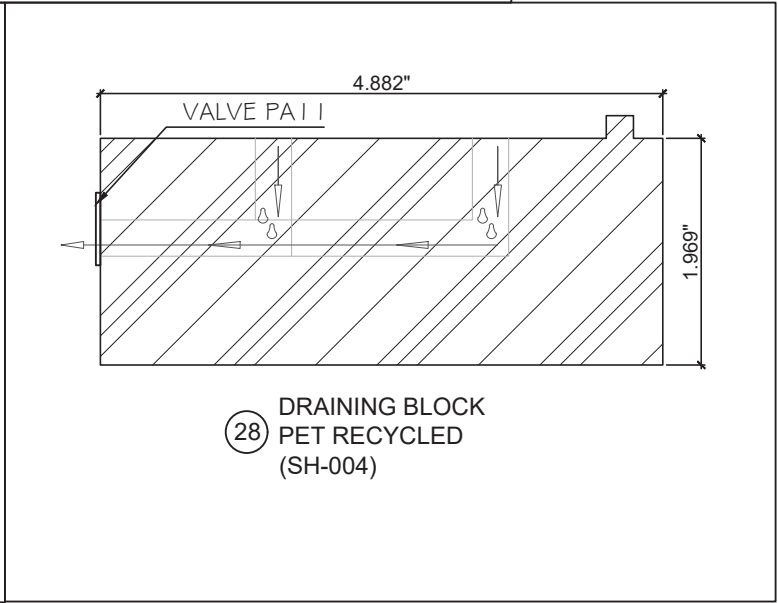
32 Hooking Adapterplate
Alu. EN AW-6060 T66 / stainless steel
(25-04-540)



33 Hooking Adapterplate
Alu. EN AW-6060 T66 / stainless steel
(25-04-542)



34 Reinforcement Angle
Alu. EN AW-6060 T66
(25-04-534)



28 DRAINING BLOCK
PET RECYCLED
(SH-004)

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SH-LFI SLIDING GLASS DOOR - LARGE MISSILE IMPACT

KELLER MINIMAL WINDOWS S.A.
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Rev. No.	Date	Drawn By	Description
1.	07152024	JAMES	NEW APPLICATION

Drawn Date
07152024

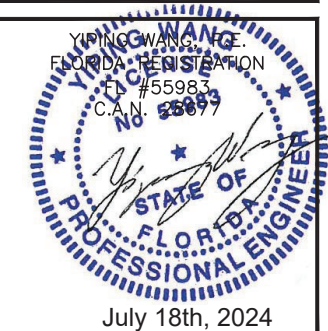
Scale
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DRAWING NO.
AD24-20

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14 OF 16

BILL OF MATERIALS				
ITEM #	PROFILE	DESCRIPTION	MATERIAL	MANUFACTURER/REMARKS
30	25-04-530	HOOKING ADAPTER	ALU. EN AW-6060-T66	KELLER MINIMAL WINDOWS S.A.
31	25-04-532	HOOKING ADAPTER	ALU. EN AW-6060 T66	KELLER MINIMAL WINDOWS S.A.
32	25-04-540	HOOKING ADAPTERPLATE	ALU. EN AW-6060 T66/ STAINLESS STEEL	KELLER MINIMAL WINDOWS S.A.
33	25-04-542	HOOKING ADAPTERPLATE	ALU. EN AW-6060 T66/ STAINLESS STEEL	KELLER MINIMAL WINDOWS S.A.
34	25-04-534	REINFORCEMENT ANGLE	ALU. EN AW-6060 T66/ STAINLESS STEEL	KELLER MINIMAL WINDOWS S.A.
35	-	CORNER KEY(2-TRACK)	METALLIC	KELLER MINIMAL WINDOWS S.A.
S1	-	PH SMS 5.5X19mm (#12 x 3/4")	STAINLESS STEEL (A2)	-
S4	DIN912	CYLINDER HEXAGON SCREW METRIC M5X35mm (7/32" x 1 3/8")	STAINLESS STEEL (A2)	-
S7	DIN 7982	HEXAGON CS SMS 4.2X19mm (11/64" x 3/4")	STAINLESS STEEL (A2)	-
S8	-	SCREW SLEEVE	PA6	-
S9	DIN7991	HEXAGON CS SCREW METRIC M5X35mm (7/32" x 1 3/8")	STAINLESS STEEL (A2)	-
S10	DIN7982	HEXAGON CS S,S 4.2x13mm (11/64" x 17/32")	STAINLESS STEEL (A2)	-
S11	DIN912	CYLINDER HEXAGON SCREW METRIC M5X20mm (7/32" x 25/32")	STAINLESS STEEL (A2)	-
S12	DIN912	CYLINDER HEXAGON SCREW METRIC M5X16mm (7/32" x 5/8")	STAINLESS STEEL (A2)	-
M1	-	STRUCTURAL SILICONE	SILICONE	DOW CORNING 121
M4	-	HARD SHIM(COMPARABLE TO WOOD BUCK (G=0.55)	PVC OR HARD WOOD	-
M5	-	STRUCTURAL SILICONE	SILICONE	DOW CORNING 983
M6	-	WEATHER SEALANT, AT FRAME CORNER	SILICONE	TREMCO SPECTREM 2

FL46854



July 18th, 2024

SH-LFI SLIDING GLASS DOOR - LARGE MISSILE IMPACT

KELLER MINIMAL WINDOWS S.A.

38-40 ROUTE DE WILVERDANGE
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BOM 2

Sheet No.
16 OF 16