

KELLER MINIMAL WINDOWS S.A.
SH LFI FIXED WINDOWS
LARGE MISSILE IMPACT (LMI)

GENERAL NOTES

- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 8TH EDITION FLORIDA BUILDING CODE 2023/ 9TH EDITION FLORIDA BUILDING CODE 2026. INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).- WINDOWS ARE 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/ 9TH EDITION FLORIDA BUILDING CODE 2026 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.
- ALL FRAME CORNERS, JOINTS, MULLION SEAMS AND PERIMETER GLAZING BEAD TO FRAME INSTALLATION FASTENERS SEALED WITH SILICON SEALANT.
- INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING. COMPLIANCE WITH THESE CONDITIONS TO BE CHECKED PER FBC 1711.
 - FASTENERS USED WITHIN 3,000 FEET OF A SALTWATER COASTLINE AND INSTALLED IN ENCLOSED SPACES SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 1711.1.1 (E.G., ASTM A153 CLASS D, ASTM A641 CLASS 3S, OR EQUIVALENT CORROSION RESISTANCE).
 - CONNECTORS AND METAL PLATES USED WITHIN 3,000 FEET OF A SALTWATER COASTLINE SHALL BE STANDARD GALVANIZED IN ACCORDANCE WITH SECTION 1711.1.2 (E.G., ASTM A653 G90, ASTM A123, OR PROTECTIVE COATING PER TPI 1).

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 E I FOR APPROVED TYPICAL ELEVATION & CONFIGURATION.
- STEP 3: ANCHOR TYPE SEE SHEET A I. ANCHOR LAYOUT SEE SHEET E I.
- 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.

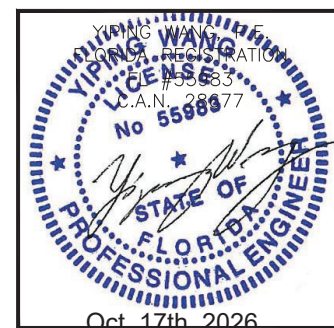
ABBREVIATIONS AND SYMBOLS	
D.L.O. - DAYLITE OPENING	
F.H. - FRAME HEIGHT	
F.W. - FRAME WIDTH	
W/ - WITH	
W/O - WITHOUT	
O.C. - ON CENTER	
G.B. - GLASS BITE	

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 HERE 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:

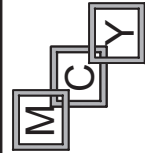
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KELLER MINIMAL WINDOWS S.A.
38-40 ROUTE DE WILWERDANGE
 L-9911 TROISVIERGES LUXEMBOURG
 Email: werner.jager@keller-minimal-windows.com

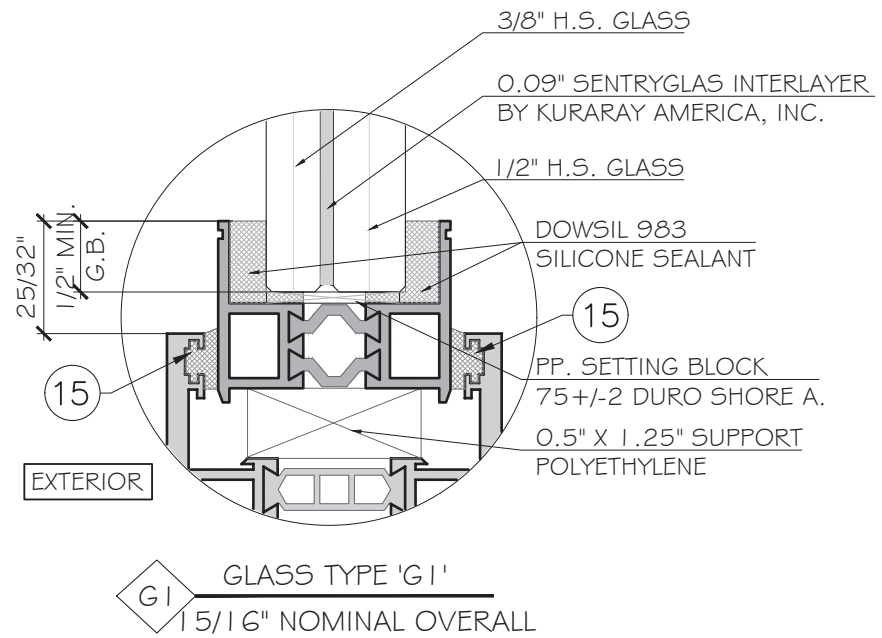
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GLAZING CONSULTANTS



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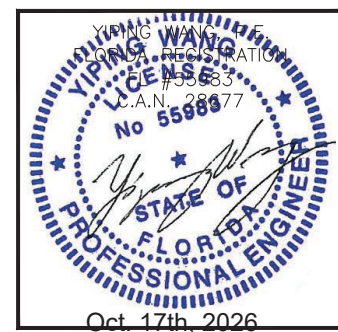
NOTE:
GLASS COMPLIES WITH ASTM E1300-16
OR 24(3 SEC. GUSTS).

DESIGN LOADS - PSF
+60 / -80

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

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ANCHOR TYPE 'A' - 5/16" DIA. ULTRACON BY 'DEWALT' (Fu=177KSI, Fy=155KSI)
INTO 2BY WOOD BUCKS OR WOOD WOOD STRUCTURE
WITH 1 1/2" MIN. PENETRATION.

OR THROUGH 1X WOOD BUCKS INTO CONCRETE OR BLOCK
1 3/4" MIN. EMBEDMENT INTO CONCRETE
1 3/4" MIN. EMBEDMENT INTO BLOCK

(JAMB ONLY)

DIRECTLY INTO CONCRETE OR BLOCKS
1 3/4" MIN. EMBEDMENT INTO CONCRETE
1 3/4" MIN. EMBEDMENT INTO BLOCK

(JAMB ONLY)

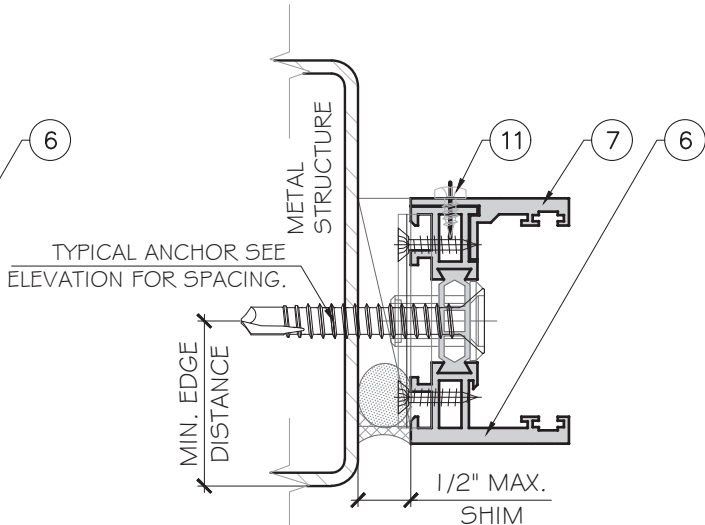
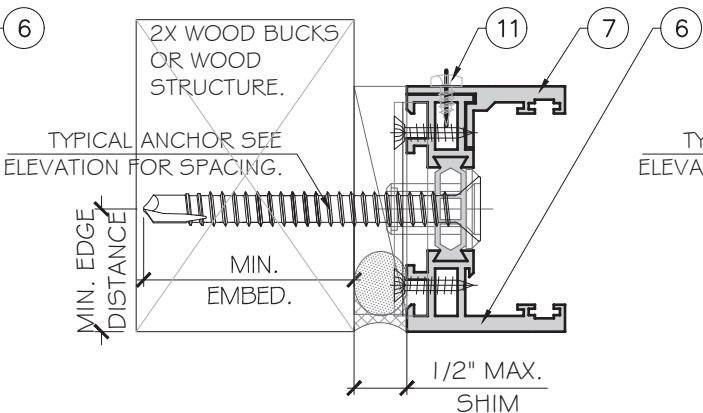
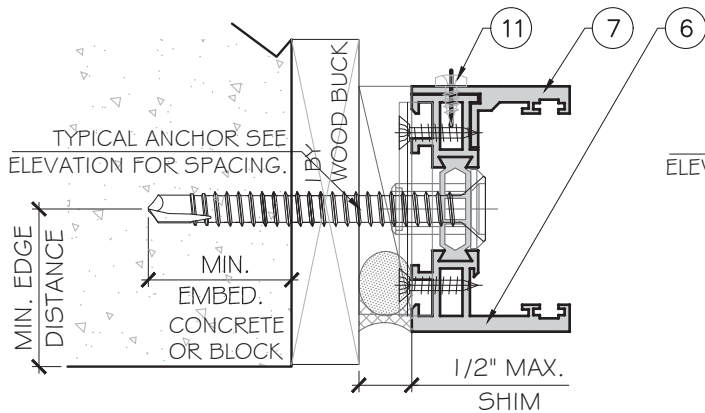
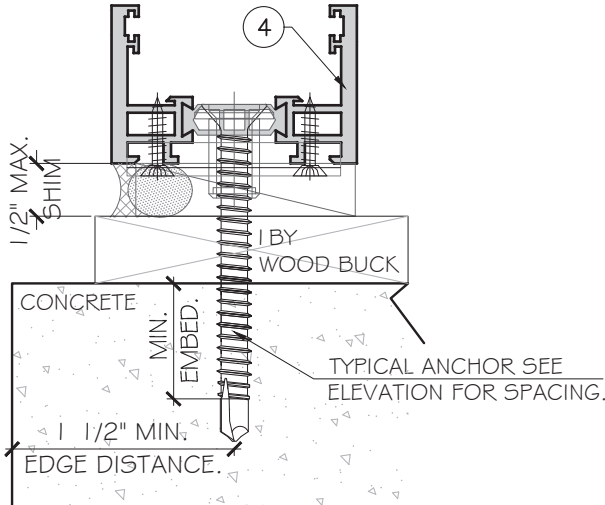
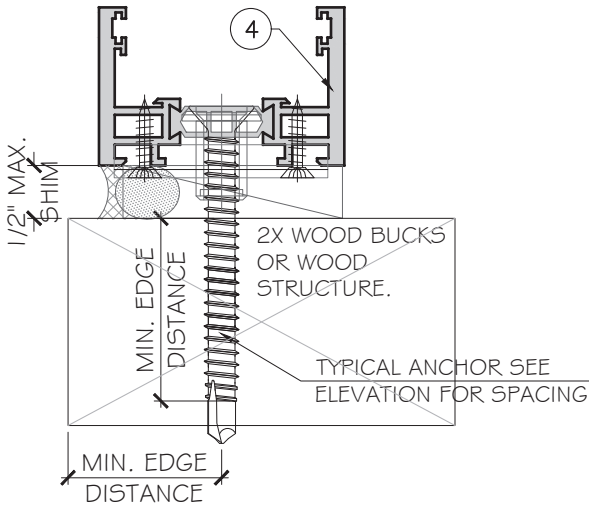
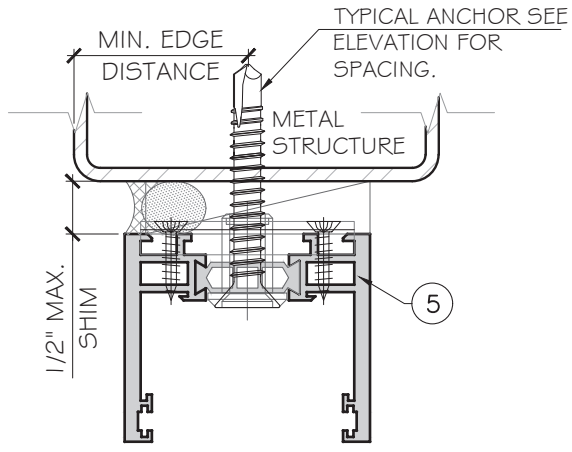
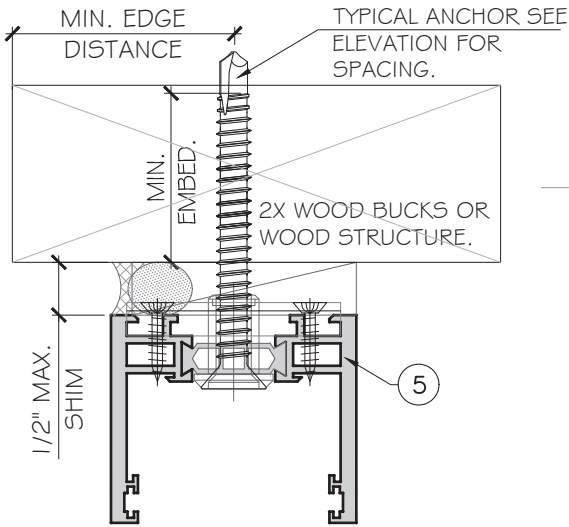
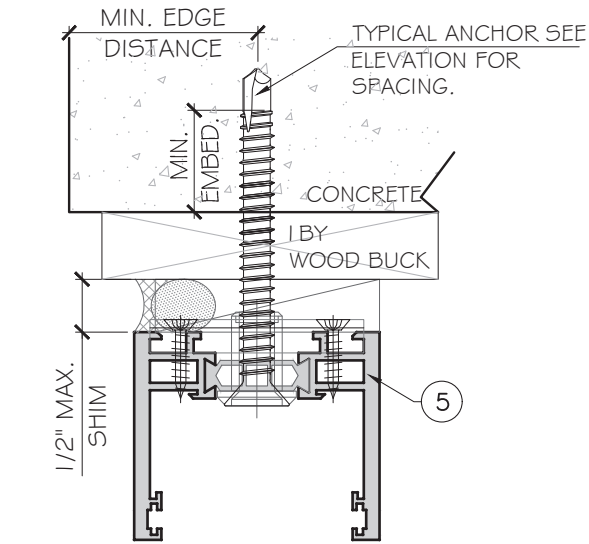
ANCHOR TYPE 'B' - 5/16" DIA. TEKS OR SELF-DRILLING SCREWS (GRADE 5 CRS)
INTO FBC APPROVED MULLIONS OR METAL STRUCTURES
(3) THREADS MIN. PENETRATION BEYOND METAL SUBSTRATE.

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 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 (Fy=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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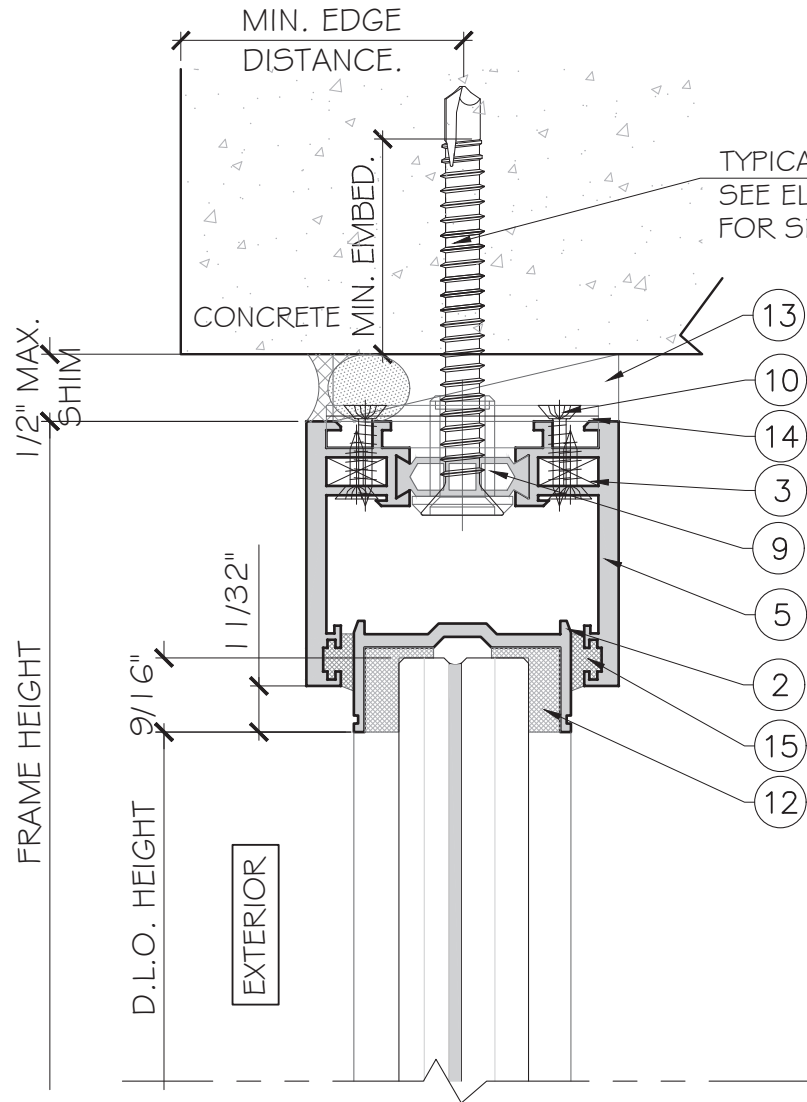
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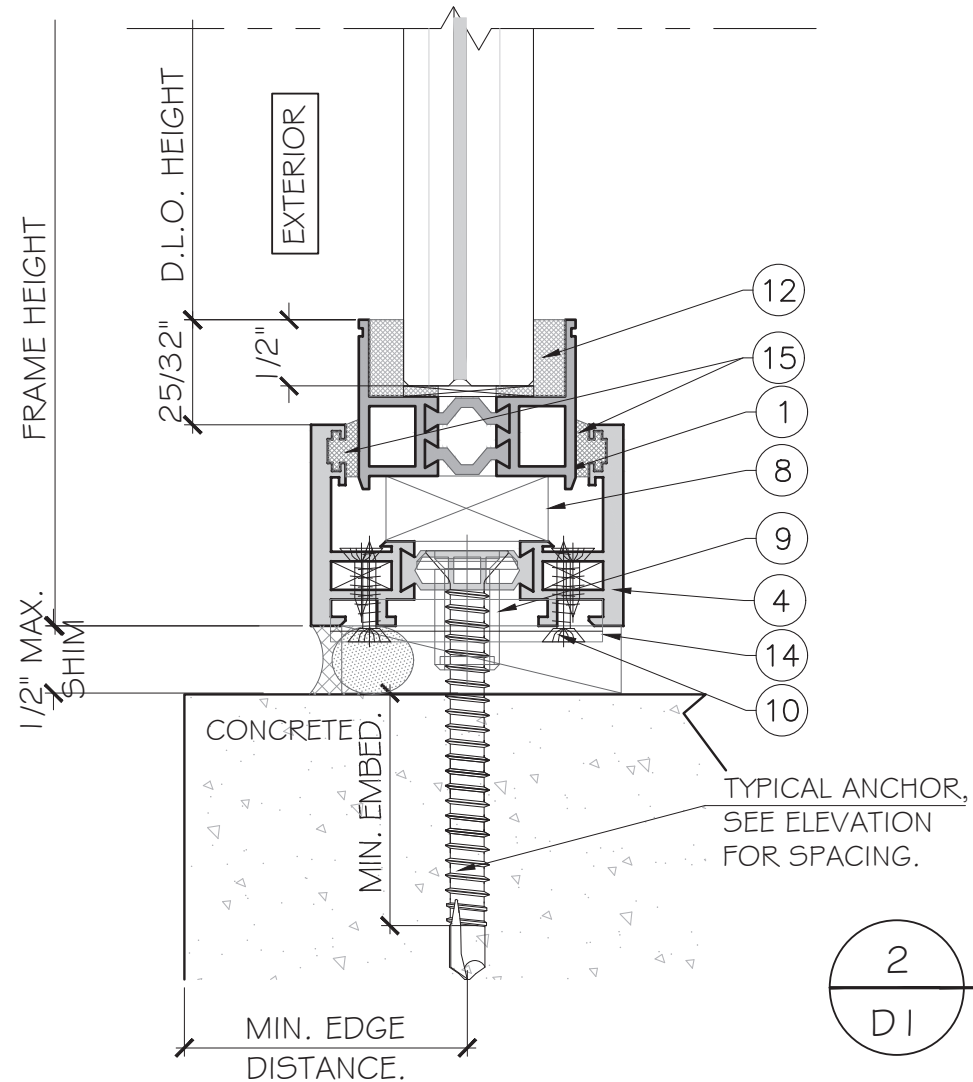
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Rev. No.	Date	Drawn By	Description
3	10.19.2026	JAMES	REVISION
2	12.01.2025	JAMES	REVISION
Drawing No. AD24-11			
Sheet No. 3 OF 7			



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YIPING WANG
Professional Engineer
No 55983
Oct. 17th, 2026

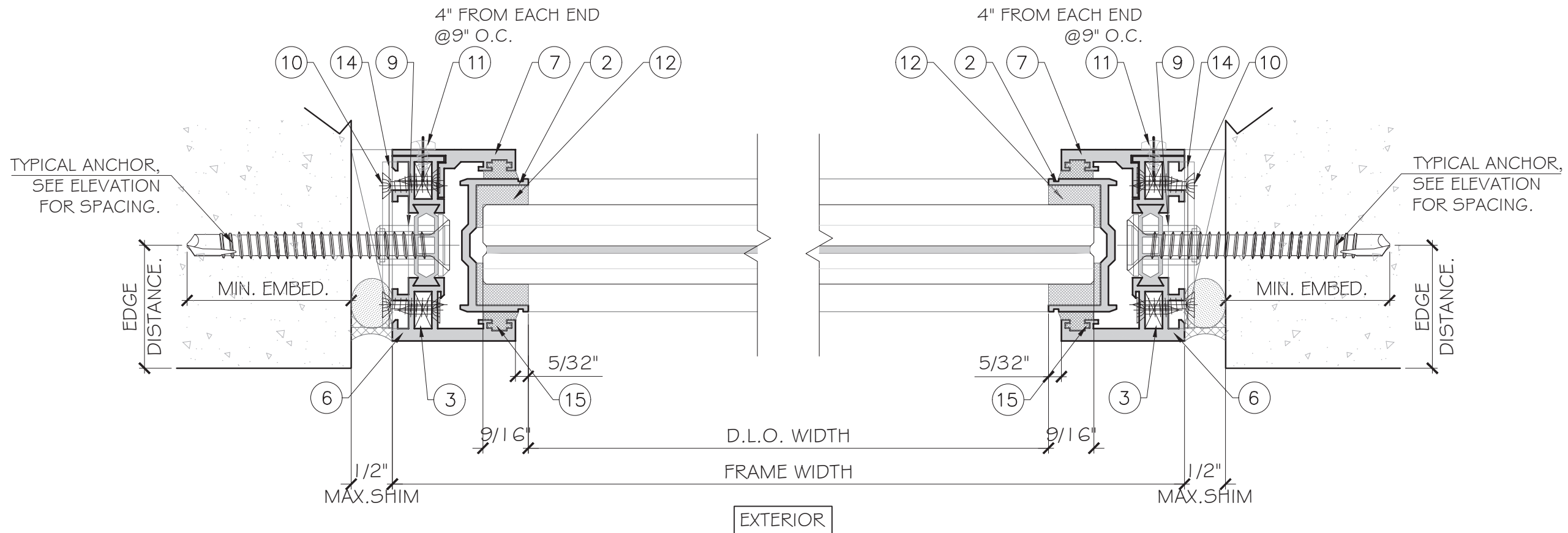
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4 OF 7			

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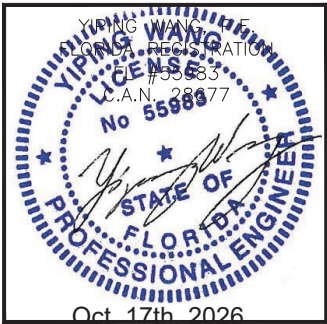
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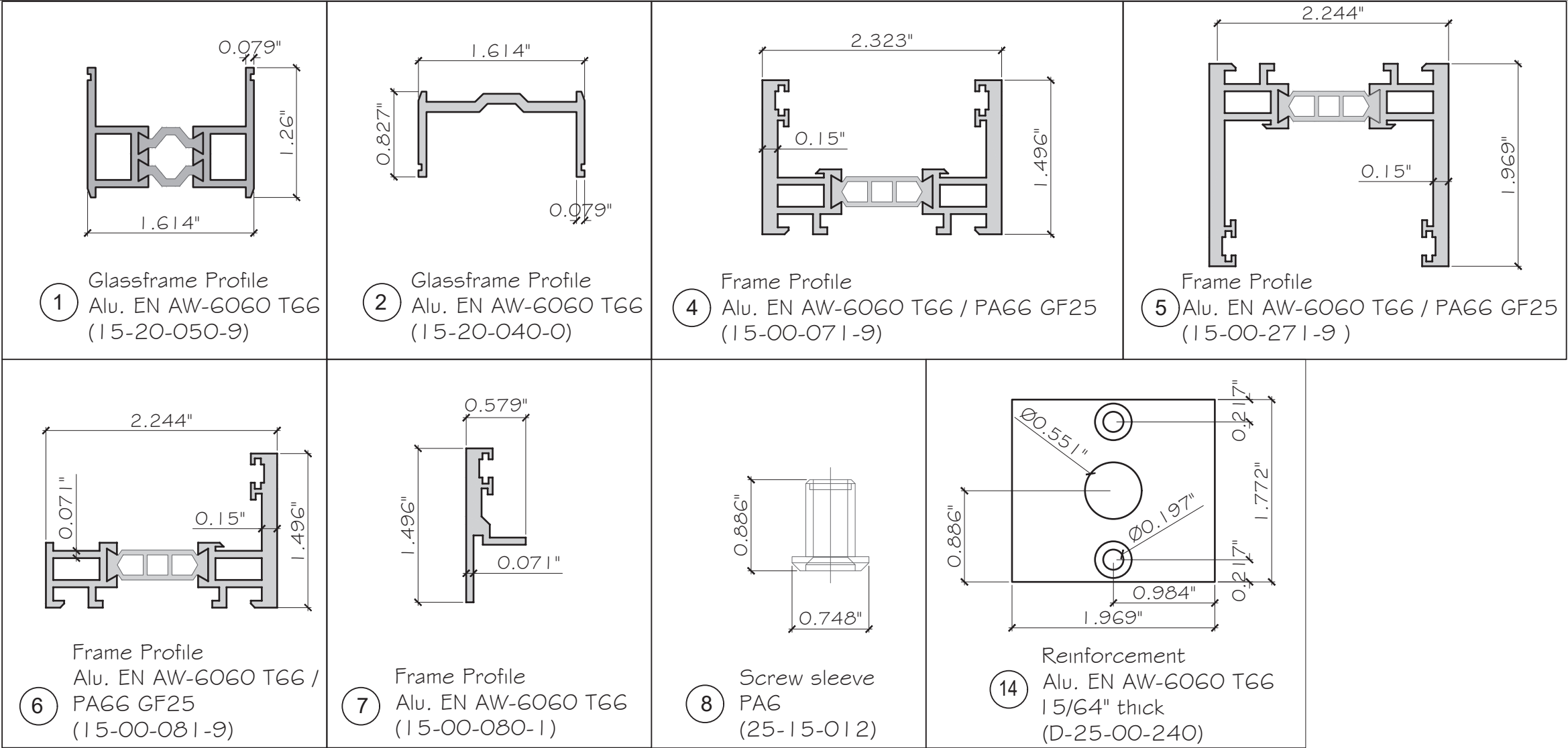
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5 OF 7



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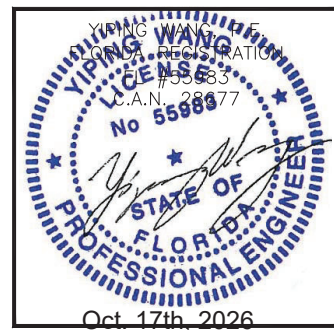
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Sheet No. 6 OF 7							

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BILL OF MATERIALS				
ITEM #	PROFILE	DESCRIPTION	MATERIAL	MANUFACTURER/REMARKS
1	15-20-050-9	GLASS FRAME PROFILE	ALUM. 6060-T66	KELLER MINIMAL WINDOWS S.A.
2	15-20-040-0	GLASS FRAME PROFILE	ALUM. 6060-T66	KELLER MINIMAL WINDOWS S.A.
3	-	CORNER KEY	METALLIC	KELLER MINIMAL WINDOWS S.A.
4	15-00-071-9	FRAME PROFILE	ALUM. 6060-T66	KELLER MINIMAL WINDOWS S.A.
5	15-00-271-9	FRAME PROFILE	ALUM. 6060-T66	KELLER MINIMAL WINDOWS S.A.
6	15-00-081-9	FRAME PROFILE	ALUM. 6060-T66	KELLER MINIMAL WINDOWS S.A.
7	15-00-080-1	FRAME PROFILE	ALUM. 6060-T66	KELLER MINIMAL WINDOWS S.A.
8	25-04-152	1.25" X 0.5" SETTING BLOCK. SUPPORT	POLYETHYLENE	KELLER MINIMAL WINDOWS S.A.
9	25-15-012	SCREW SLEEVE	PAG	-
10	DIN7982	HEXAGON CS SMS #8X3/4"	STAINLESS STEEL A2	-
11	DIN7981	PH SMS DIA. 5/32" X 3/8"	STAINLESS STEEL A2	-
12	-	STRUCTURAL SILICONE. DOWSIL 983	SILICONE	DOWSIL
13	-	HARD SHIM	PVC OR HARD WOOD	-
14	D-25-00-240	REINFORCEMENT, 5/16" THK.	ALUM. EN AW-6060 T66	KELLER MINIMAL WINDOWS S.A.
15	-	STRUCTURAL SILICONE DOWSIL 121	SILICONE	DOWSIL
	-	STRUCTURAL SILICONE DOWSIL 995	SILICONE	DOWSIL

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