

PLY GEM WINDOWS SERIES 1500 FIXED WINDOW (IMPACT)

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE REQUIREMENTS OF THE 2018 INTERNATIONAL BUILDING CODE AND 2018 INTERNATIONAL RESIDENTIAL CODE.
2. THIS PRODUCT IS MISSILE LEVEL D, WIND ZONE 3 IMPACT RESISTANT. WHEN USED IN WIND ZONE 3 OR BELOW AREAS, THIS PRODUCT DOES NOT REQUIRE THE USE OF APPROVED IMPACT PROTECTIVE DEVICES (SHUTTERS).
3. ANCHOR TYPE, SIZE, SPACING, EMBEDMENT, AND EDGE DISTANCE SHALL BE AS SPECIFIED IN THESE DRAWINGS. USE APPROPRIATE ANCHORAGE FROM TABLE I ACCORDING TO SUBSTRATE TYPE. A MINIMUM CENTER-TO-CENTER SPACING OF 3" SHALL BE MAINTAINED BETWEEN ALL INSTALLATION FASTENERS IN ANY DIRECTION.
4. ANCHOR EMBEDMENT TO SUBSTRATE SHALL BE BEYOND WALL DRESSING OR STUCCO. FOR MASONRY OPENINGS WITH WOOD BUCKS LESS THAN 1-1/2" THICK, EMBEDMENT SHALL BE BEYOND WOOD BUCKS, IF USED, AND INTO MASONRY SUBSTRATE. WOOD BUCKS WITH MASONRY ARE OPTIONAL.
5. WOOD, METAL, OR MASONRY OPENINGS, BUCKS, AND BUCK FASTENERS, BY OTHERS, SHALL BE PROPERLY DESIGNED AND INSTALLED BY OTHERS TO TRANSFER SUPERIMPOSED LOADS TO THE STRUCTURE. ADEQUACY OF THE STRUCTURE TO RECEIVED THESE LOADS SHALL BE VERIFIED BY THE CONTRACTOR OR AUTHORITY HAVING JURISDICTION (AHJ).
6. IT IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD OR AS APPROVED BY THE AHJ TO SELECT PLY GEM PRODUCTS TO MEET ALL APPLICABLE LOCAL LAWS, BUILDING CODES, ORDINANCES, OR OTHER SAFETY REQUIREMENTS FOR EACH INSTALLATION.
7. SHIMS ARE REQUIRED WHERE GAPS OF GREATER THAN 1/16" EXIST BETWEEN OPENING AND FRAME. MAX. SHIM STACK IS 1/4". SHIMS SHALL BE LOAD-BEARING AND CAPABLE OF TRANSFERRING LOADS TO THE SUBSTRATE.
8. SEALING AND FLASHING STRATEGIES FOR OVERALL WATER INFILTRATION RESISTANCE OF THE INSTALLED PRODUCT SHALL BE THE RESPONSIBILITY OF OTHERS USING ASTM E 2112 AND IS NOT ADDRESSED BY THIS DOCUMENT.
9. INSTALLED GLAZING SHALL COMPLY WITH ASTM E 1300.
10. ALL FASTENERS PENETRATING INTO PRESSURE TREATED WOOD SHALL BE CAPABLE OF PREVENTING CORROSION DUE TO REACTION WITH PRESSURE TREATMENT CHEMICALS. ANY DISSIMILAR MATERIALS THAT COME INTO CONTACT SHALL BE PROTECTED TO PREVENT REACTIONS IN ACCORDANCE WITH CODE REQUIREMENTS.
11. A WIND LOAD DURATION FACTOR $C_d = 1.6$ WAS USED FOR THE ANALYSIS OF WOOD SCREWS ONLY.
12. PRODUCTS SHALL BE CONSTRUCTED AS SPECIFIED IN TEST REPORTS NATIONAL CERTIFIED TESTING LABORATORIES I10-15615-1 AND I10-21233-1.
13. DESIGNATION "X" IS FOR OPERABLE PANEL AND "O" IS FOR FIXED PANEL.
14. USE 100% PURE SILICONE CAULK COMPLIANT WITH AAMA 800 SECTION 1 - SEALANT SPECIFICATIONS FOR USE WITH ARCHITECTURAL FENESTRATION PRODUCTS.
15. USE A BACKER ROD ON ALL JOINTS $>3/4"$ DEEP AND/OR WIDER THAN $1/4"$. FINISHED CAULK JOINT SHOULD BE A MINIMUM OF $3/8"$ DEEP.

SIZE CHART					
OVERALL SIZE		PRODUCT RATING	MAX. DESIGN PRESSURE	GLAZING DETAIL	MISSILE IMPACT RATING
WIDTH	HEIGHT				
60"	71-15/16"	FW-LC50	+50/-60 PSF	1	LARGE & SMALL MISSILE IMPACT
48"	80"	FW-LC50	+50/-50 PSF	2	

TABLE OF CONTENTS	
SHEET	SHEET DESCRIPTION
1	INSTALLATION & GENERAL NOTES
2	ELEVATIONS & ANCHOR SCHEDULE
3	VERTICAL SECTIONS & GLAZING DETAIL
4	HORIZONTAL SECTIONS

TABLE I: INSTALLATION FASTENERS TABLE

ID	SUBSTRATE TYPE	ANCHOR TYPE	MIN. EMBED.	MIN. EDGE DISTANCE
FIN INSTALLATION				
A	2X MIN. SPRUCE-PINE-FIR WOOD (G=0.42)	#8 WOOD SCREW	1-1/2"	7/16"
B	16 GAUGE (0.060") STEEL 36 KSI MIN. OR 1/8" ALUM. 6063-T5 MIN.	#10-16 SELF-DRILLING SCREW (TEKS/DRIL-FLEX/KWIK-FLEX)	FULL, PLUS 3 THREADS MIN.	7/16"
FRAME OR CLIP INSTALLATION				
C	CONCRETE (2 KSI MIN.)	3/16" ITW TAPCON	1-1/2"	1-1/8"
D	HOLLOW OR GROUT-FILLED CMU (117 PCF MIN.)	3/16" ITW TAPCON	1"	2"
E	2X MIN. SOUTHERN PINE WOOD (G=0.55)	3/16" ITW TAPCON	1-3/8"	7/8"
F	2X MIN. SOUTHERN PINE WOOD (G=0.55)	#10 WOOD SCREW	1-3/8"	7/8"
G	16 GAUGE (0.060") STEEL 36 KSI MIN. OR 1/8" ALUM. 6063-T5 MIN.	#10-16 SELF-DRILLING SCREW (TEKS/DRIL-FLEX/KWIK-FLEX)	FULL, PLUS 3 THREADS MIN.	1/2"

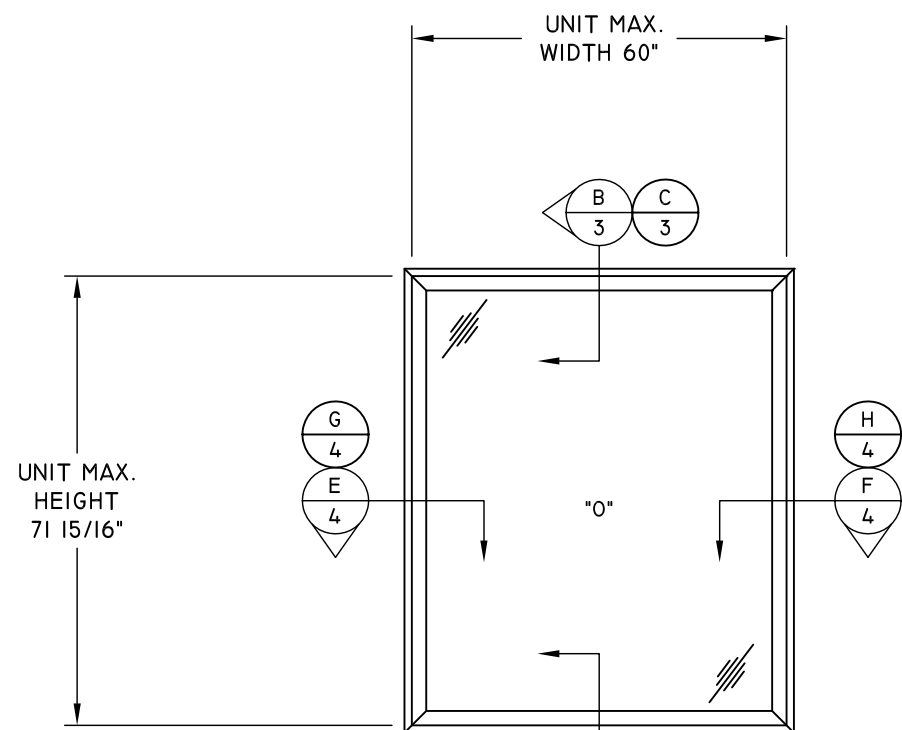
NOTE: ALL SCREWS AND TAPCONS SHALL HAVE MOD. TRUSS, PAN, OR HEX WASHER HEAD, 0.42" MIN. HEAD OR WASHER DIAMETER FOR FIN ANCHORS, 0.355" MIN. HEAD OR WASHER DIAMETER FOR FRAME ANCHORS.

TITLE: SERIES 1500 FIXED WINDOW INSTALLATION AND GENERAL NOTES	DATE	REVISION DESCRIPTION	NO.	BY
	DATE			
	09.09.16		A	LS
	12.09.17	5TH EDITION FBC REVISIONS	B	LMH
	03.27.19	ADDED NOTES & TABLE 1	C	LMH
	08.03.20	UPDATED SIZE CHART PER EC 18-104	D	LMH
		CODE UPDATE		



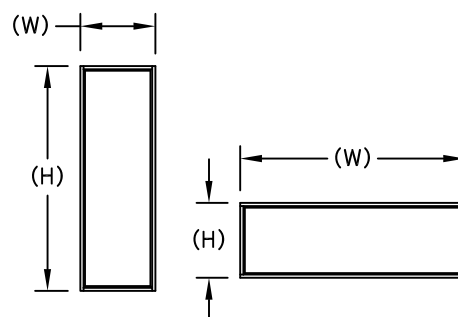
7/30/2020
LUCAS A. TURNER, P.E.
TX PE # 115094
TURNER ENGINEERING & CONSULTING, INC.
(TBPE REG. # F-18075)
2428 OLD NATCHEZ TRACE TRAIL, CAMDEN, TN 38320
PH. 941-380-1574

DWG #:
PGWI79TX
SHEET: **1-TX** OF 4

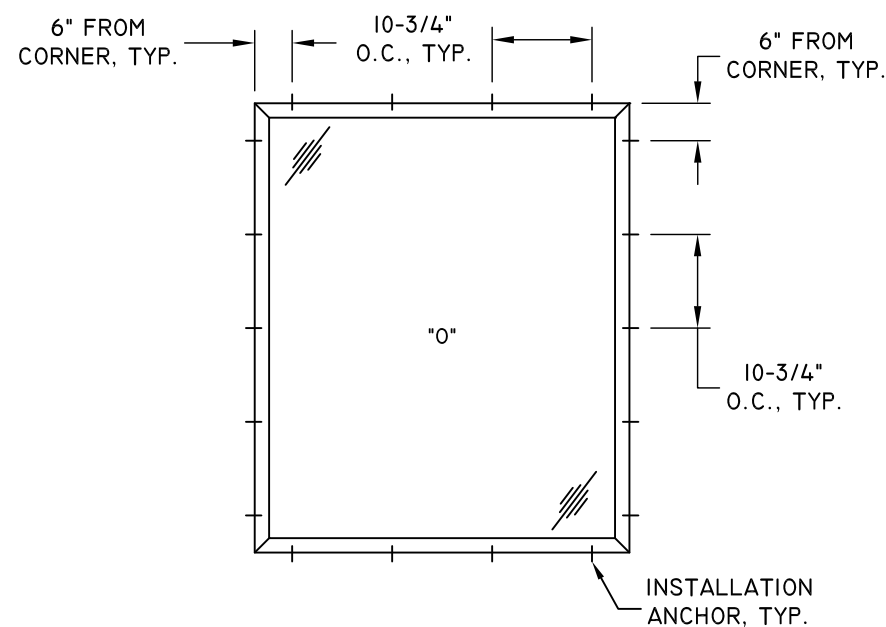


TYPICAL ELEVATION
TYPICAL

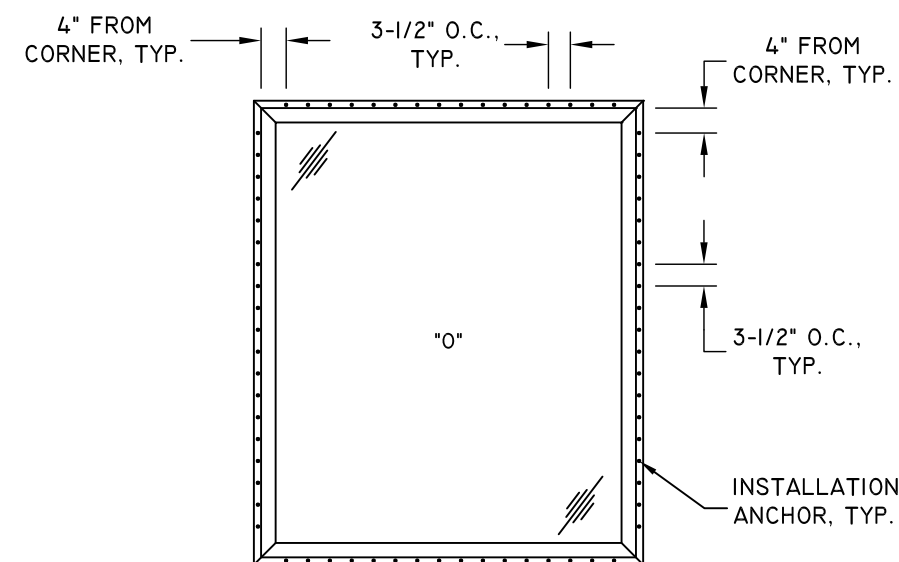
NOTE:
USE OF EITHER BRICKMOULD OR BEVELED
FRAME TYPES IS QUALIFIED UNDER THIS
APPROVAL TO THE SIZES AND
PERFORMANCE LIMITS LISTED HEREIN.



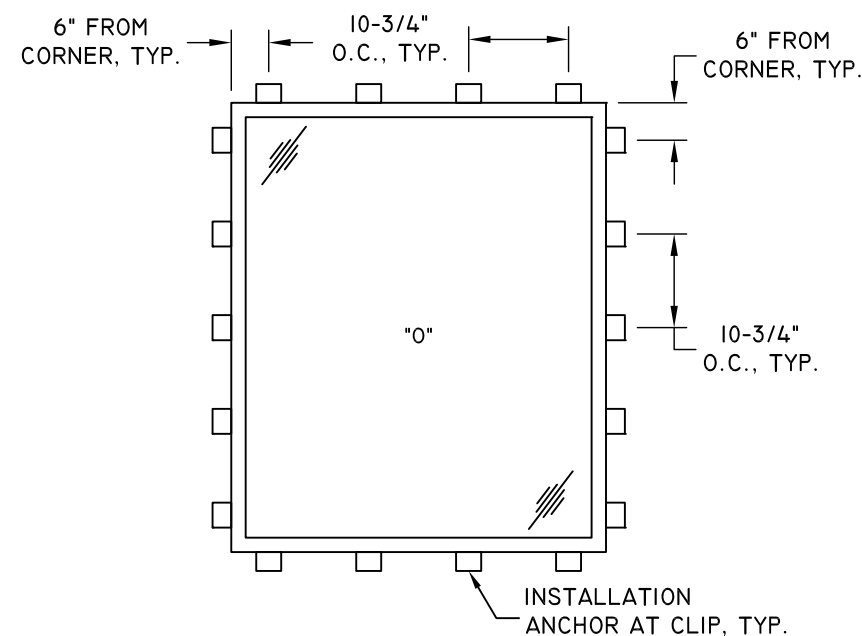
NOTE:
WINDOW WIDTH (W) AND HEIGHT
(H) ARE INTERCHANGEABLE FOR ALL
SIZES SHOWN HEREIN NOT TO EXCEED
MAXIMUM TESTED SQUARE FOOT AREA.



ANCHOR LAYOUT
FRAME INSTALLATION



ANCHOR LAYOUT
FIN INSTALLATION



ANCHOR LAYOUT
CLIP INSTALLATION

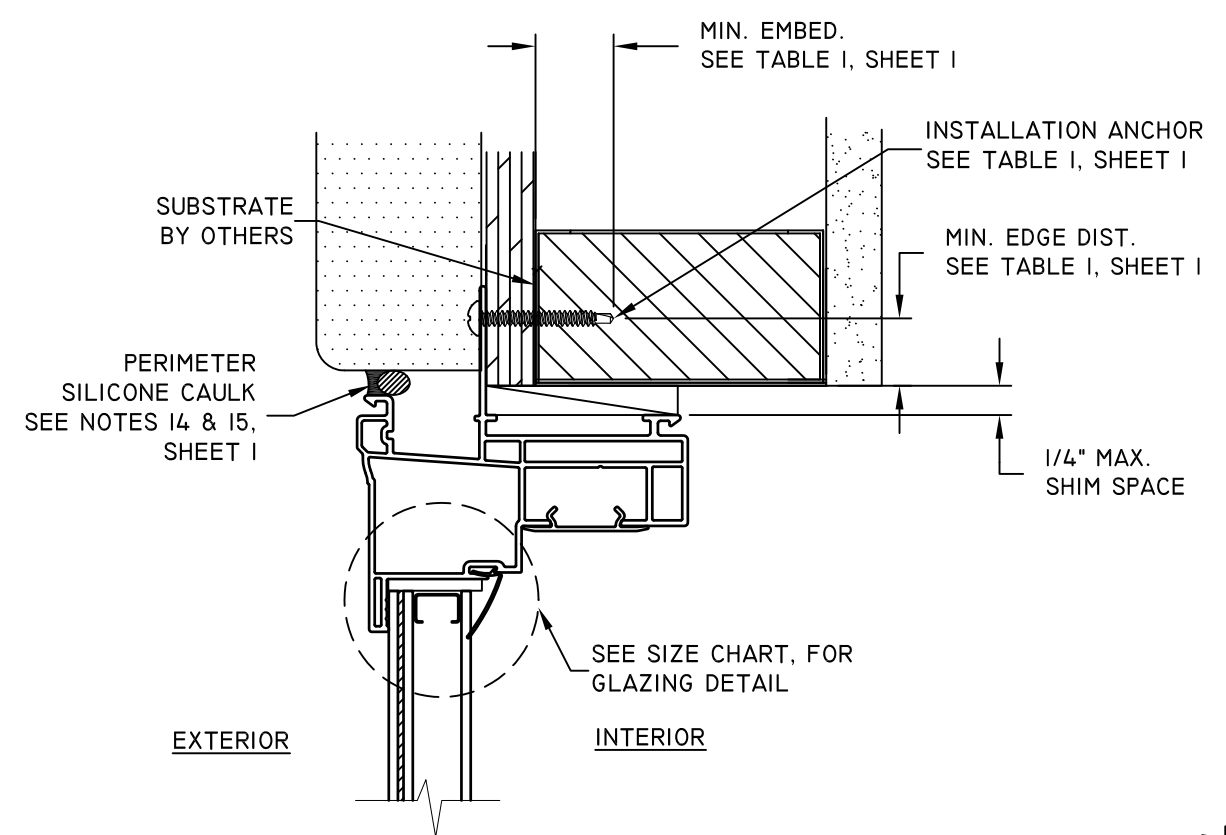
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NO.	REVISION DESCRIPTION	BY
A	5TH EDITION FBC REVISIONS	LS
B	ADDED NOTES & TABLE 1	LMH
C	UPDATED SIZE CHART PER EC 18-104	LMH
D	CODE UPDATE	LMH

DATE:	12.05.12
DWN BY:	JLA
CHK BY:	
SCALE:	NTS

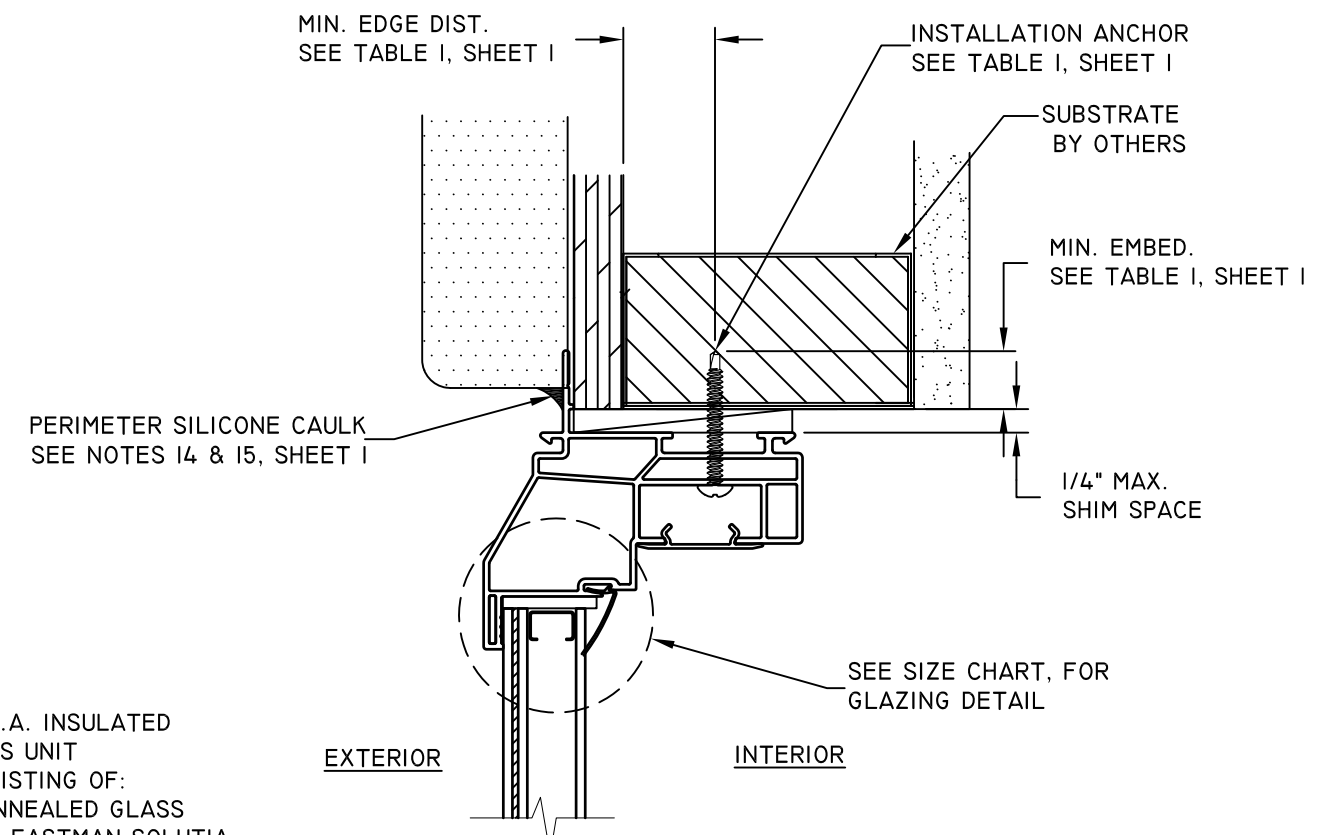


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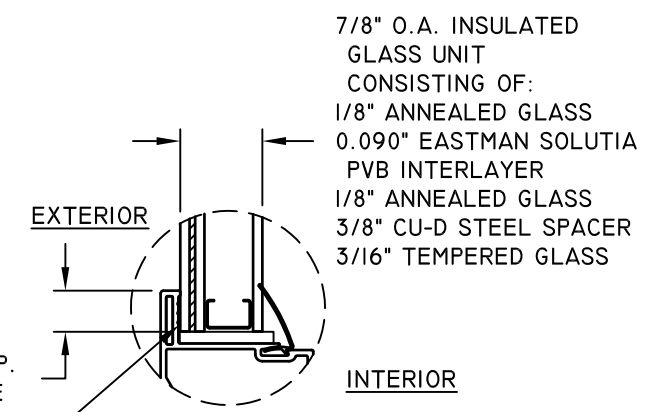
DWG #:
PGW179TX
SHEET: **2** OF **4**



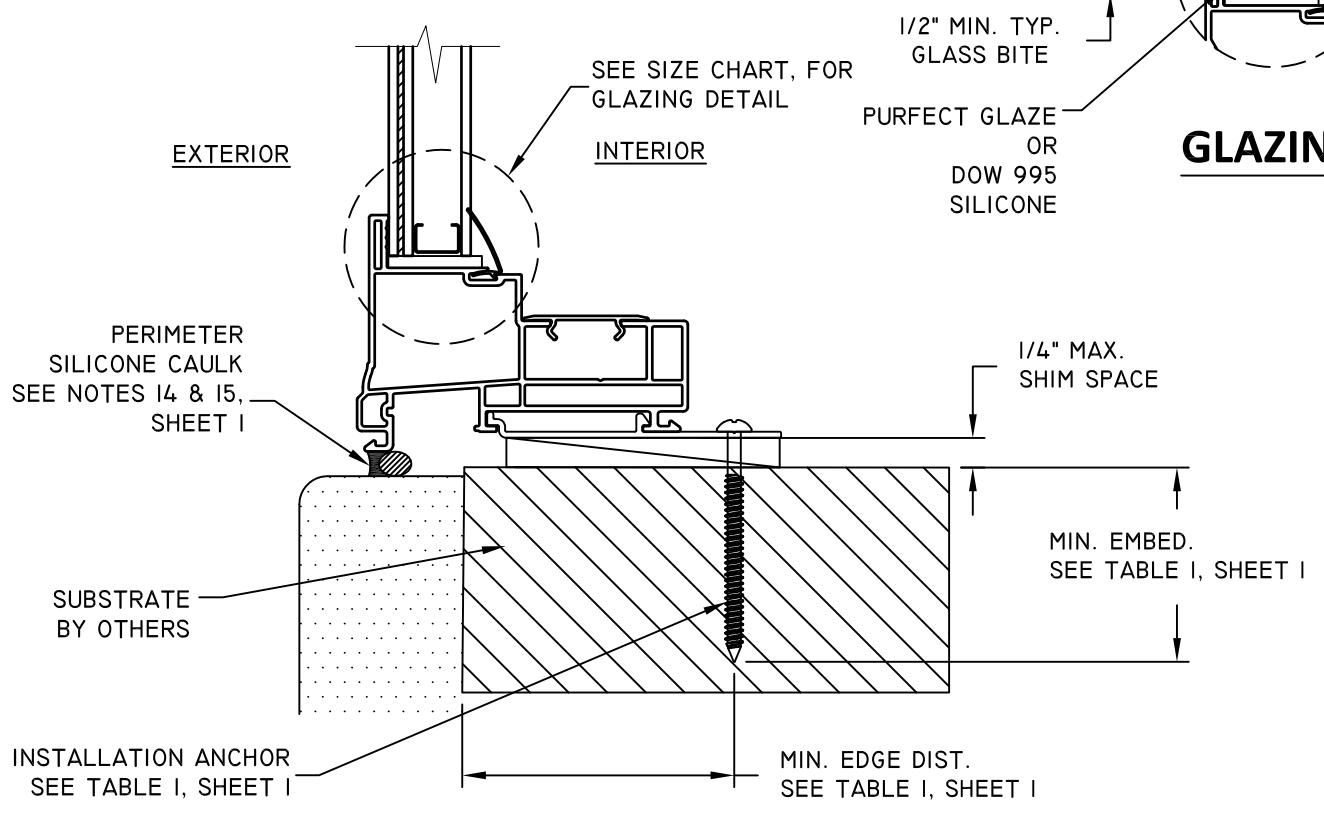
B
3
VERTICAL SECTION
HEAD
BRICKMOULD FRAME - FIN INSTALLATION



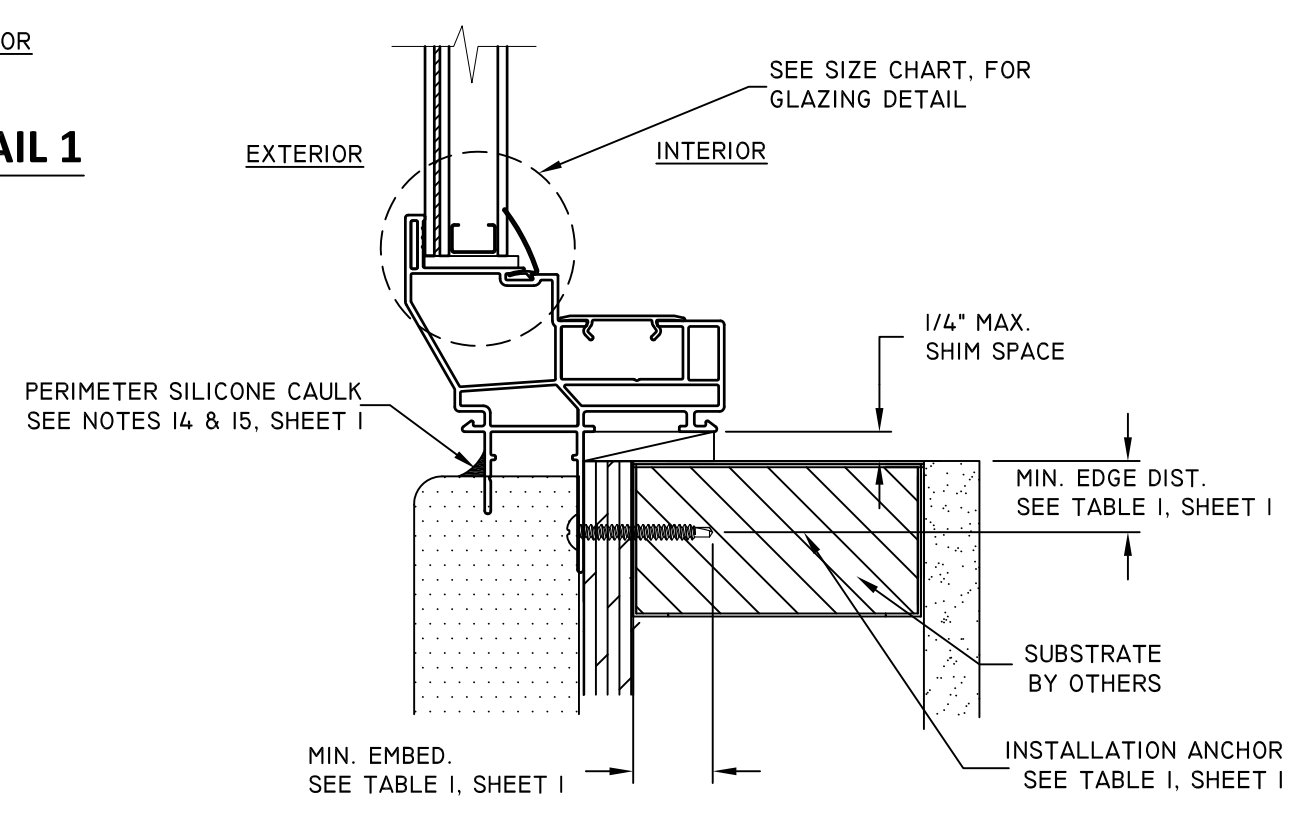
C
3
VERTICAL SECTION
HEAD
BEVELED FRAME - FRAME INSTALLATION



GLAZING DETAIL 1



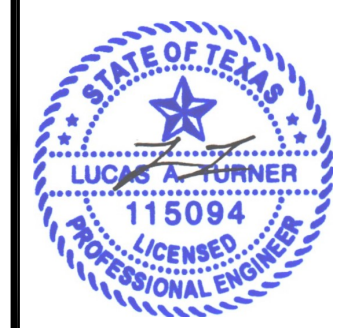
A
3
VERTICAL SECTION
SILL
BRICKMOULD FRAME - CLIP INSTALLATION



D
3
VERTICAL SECTION
SILL - STEEL STUD
BEVELED FRAME - FIN INSTALLATION

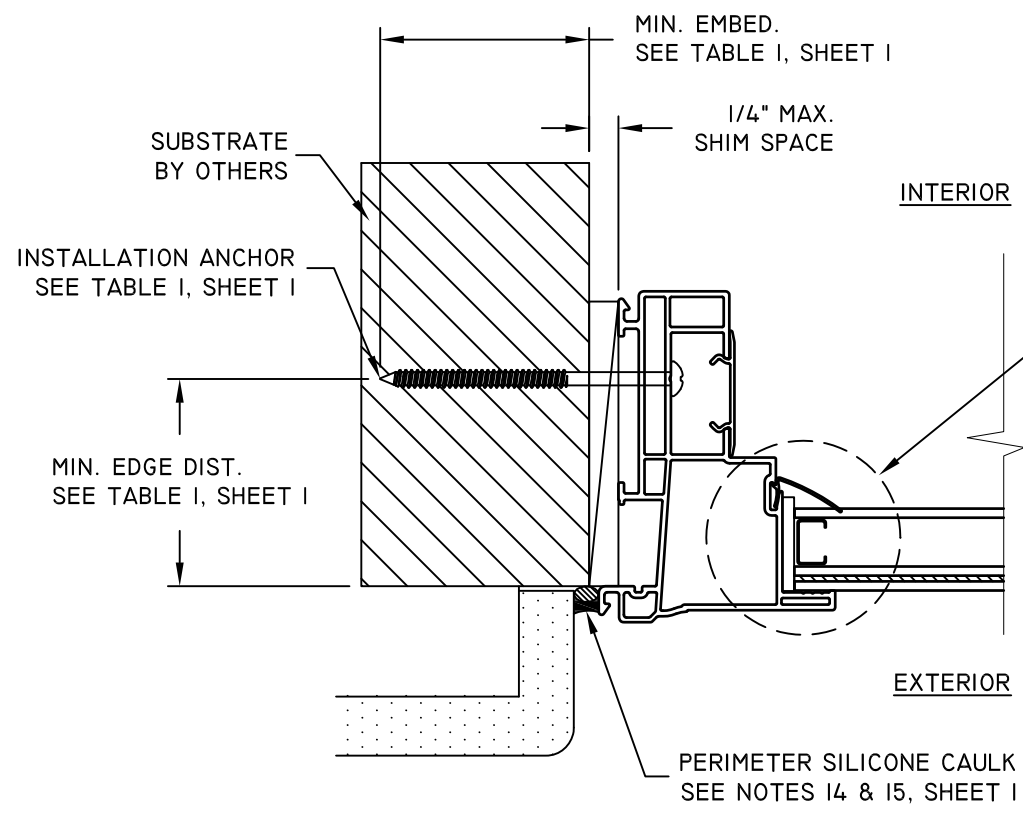
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NO.	REVISION DESCRIPTION	BY	DATE
A	5TH EDITION FBC REVISIONS	LS	09.09.16
B	ADDED NOTES & TABLE I	LMH	12.09.17
C	UPDATED SIZE CHART PER EC 18-104	LMH	03.27.19
D	CODE UPDATE	LMH	08.03.20

DATE:	12.05.12
DWN BY:	JLA
CHK BY:	
SCALE:	NTS

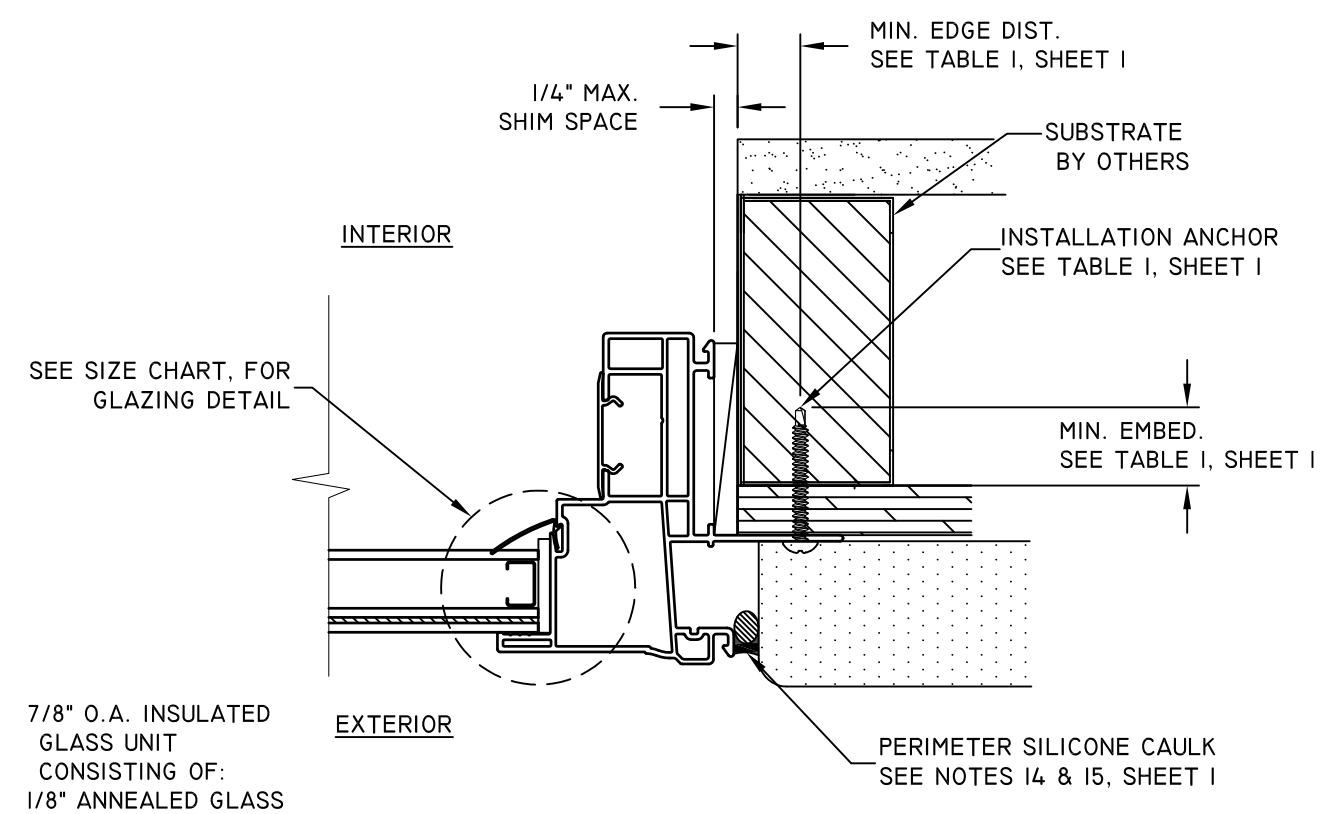


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SHEET: **3** OF **4**

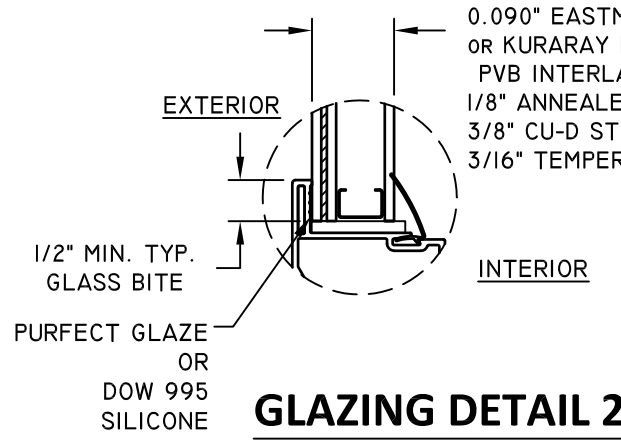


E
4
HORIZONTAL SECTION
JAMB
BRICKMOULD FRAME - FRAME INSTALLATION

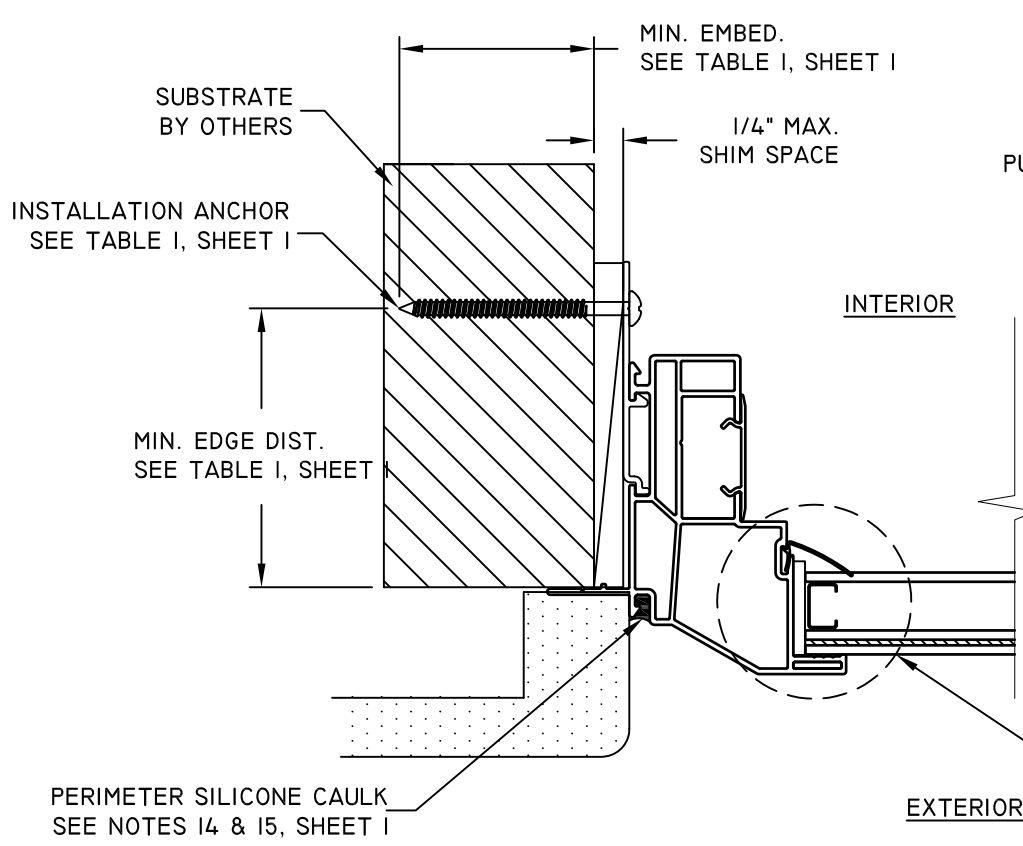


F
4
HORIZONTAL SECTION
JAMB
BRICKMOULD FRAME - FIN INSTALLATION

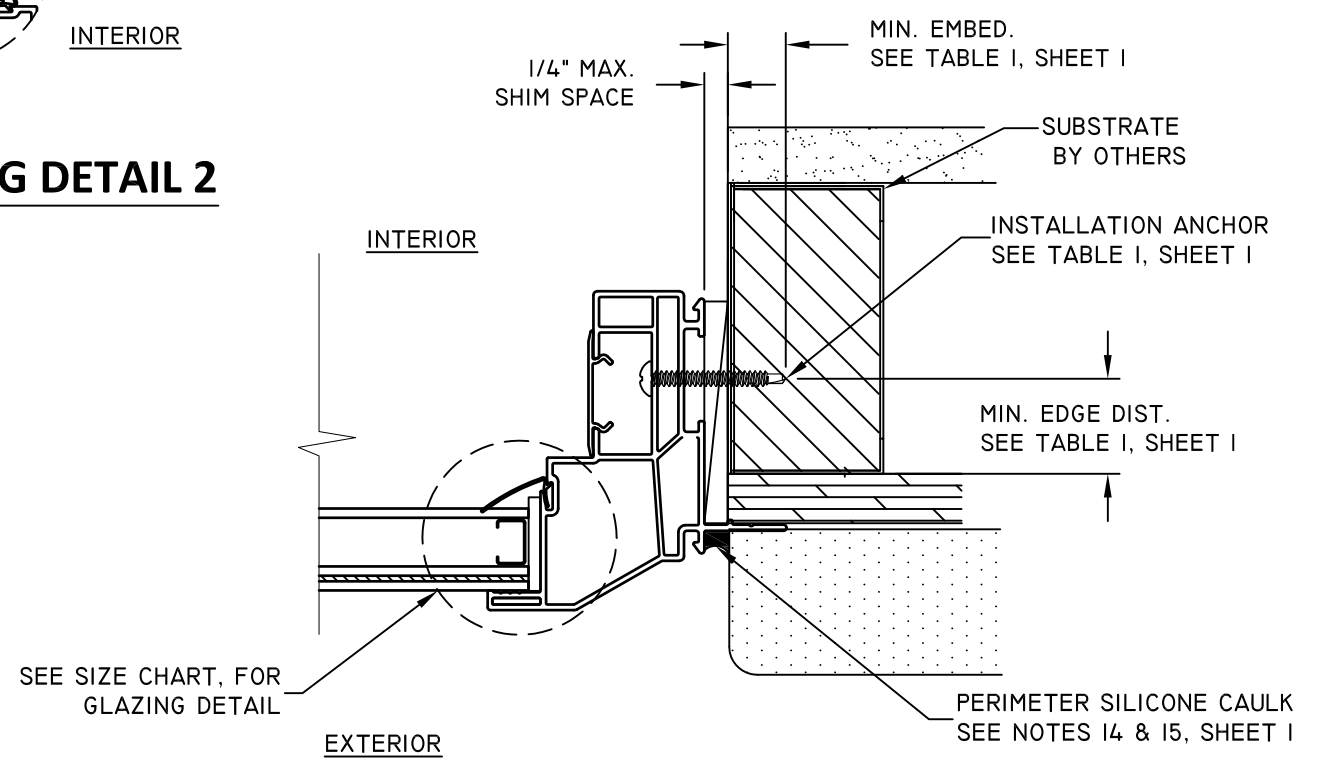
7/8" O.A. INSULATED
GLASS UNIT
CONSISTING OF:
1/8" ANNEALED GLASS
0.090" EASTMAN SOLUTIA
OR KURARAY DUPONT
PVB INTERLAYER
1/8" ANNEALED GLASS
3/8" CU-D STEEL SPACER
3/16" TEMPERED GLASS



GLAZING DETAIL 2



G
4
HORIZONTAL SECTION
JAMB
BEVELED FRAME - CLIP INSTALLATION



H
4
HORIZONTAL SECTION
JAMB
BEVELED FRAME - FRAME INSTALLATION

TITLE: SERIES 1500 FIXED WINDOW HORIZONTAL SECTIONS

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