

PLY GEM WINDOWS

BUILDER SERIES 4712 / 4812 SINGLE-HUNG

(IMPACT)

NOTES:

1. THIS INSTALLATION HAS BEEN EVALUATED FOR USE IN LOCATIONS ADHERING TO THE FLORIDA BUILDING CODE OUTSIDE THE HVHZ, AND WHERE PRESSURE REQUIREMENTS AS DETERMINED BY ASCE 7 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES DO NOT EXCEED THE DESIGN PRESSURE RATINGS HEREIN.
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 Cd = 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-I3420-I & I10-I3482-I.
13. DESIGNATION "X" IS FOR OPERABLE PANEL AND "O" IS FOR FIXED PANEL.
14. 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.

OVERALL SIZE					
PRODUCT	WIDTH	HEIGHT	PRODUCT RATING	DP RATING	MISSILE IMPACT RATING
4712FIR	53"	72"	R-PG50	+50/-57 PSF	MISSILE D WIND ZONE 3
4712FLIR	53"	72"	R-PG50	+50/-57 PSF	
4712FIR	48"	84"	LC-PG50	+50/-57 PSF	
4712FLIR	48"	84"	LC-PG50	+50/-57 PSF	
4812FIR	53"	72"	R-PG50	+50/-57 PSF	MISSILE D WIND ZONE 3
4812FIR	48"	84"	LC-PG50	+50/-57 PSF	

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Lucas Turner

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TABLE 1: INSTALLATION FASTENERS TABLE

ID	SUBSTRATE TYPE	ANCHOR TYPE	MIN. EMBED	MIN. EDGE DISTANCE
FIN INSTALLATION				
A	2X MIN. SOUTHERN PINE WOOD (G=0.55)	#8 WOOD SCREW	1-1/2"	3/8"
B	1/8" ALUM. 6063-T5 MIN. OR 16 GAUGE (0.060") STEEL 36 KSI MIN.	#10-16 SELF-DRILLING SCREW (TEKS/DRIL-FLEX/KWIK-FLEX)	FULL, PLUS 3 THREADS MIN.	3/8"
FRAME 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 SHALL HAVE MOD. TRUSS, PAN, OR HEX WASHER HEAD, 0.42" MIN. HEAD OR WASHER DIAMETER. ALL NAILS SHALL HAVE FULL ROUND HEAD (OR USE CAPS/WASHERS), 0.42" MIN. HEAD OR WASHER DIAMETER.

PlyGem

RESIDENTIAL SOLUTIONS

A division of Cornerstone Building Brands

433 N. MAIN ST.,
PO BOX 559,
ROCKY MOUNT, VA 24151
PH: 540-484-6348
FX: 540-484-6683

TITLE: BUILDER SERIES 4712/4812 SINGLE HUNG IMPACT GENERAL AND INSTALLATION NOTES	DATE	BY	NO.	5TH EDITION FBC UPDATE	ADDED NOTES & TABLE I	7TH EDITION (2020) FBC	UPDATE SHEET 2, NPD# 18-005.01
	02.22.12	DWN BY: GRN	B	C	D	E	
		CHK BY:					
		SCALE: NTS					

LUCAS A. TURNER

LICENSE

No. 58201

STATE OF FLORIDA

PROFESSIONAL ENGINEER

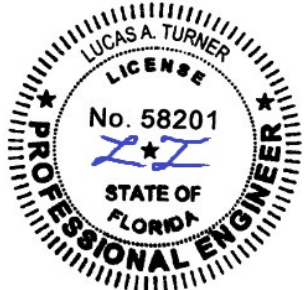
03/08/2023
LUCAS A. TURNER, P.E.
FL PE # 58201
TURNER ENGINEERING & CONSULTING, INC.
(COA # 29779)
2428 OLD NACHEZ TRACE
TRAIL, CAMDEN, TN 38320
PH. 941-380-1574

FL#: 15329

DWG #: PGW036

SHEET: 1 OF 5

TITLE: BUILDER SERIES 4712/4812 SINGLE HUNG IMPACT ELEVATIONS & ANCHOR LAYOUTS	DATE	02.22.12
	DWN BY:	GRN
	CHK BY:	.
	SCALE:	NTS
	NO.	B
REVISION DESCRIPTION	BY	DATE
	SM	08.21.14
	LMH	02.09.18
	LMH	11.30.20
	LMH	03.08.23
5TH EDITION FBC UPDATE	NO.	B
	BY	DATE
	LMH	02.09.18
	LMH	11.30.20
	LMH	03.08.23
ADDED NOTES & TABLE I	NO.	C
	BY	DATE
	LMH	02.09.18
	LMH	11.30.20
	LMH	03.08.23
7TH EDITION (2020) FBC UPDATE SHEET 2, NPD# 18-005.01	NO.	D
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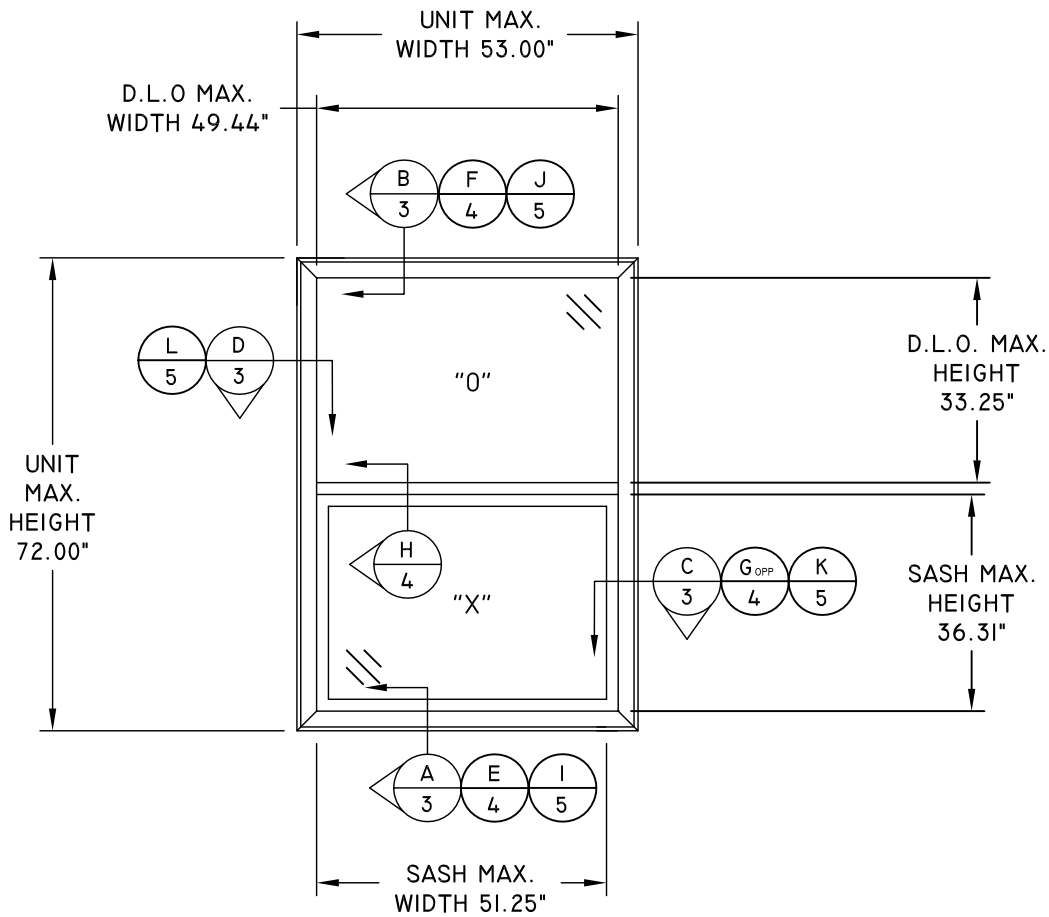


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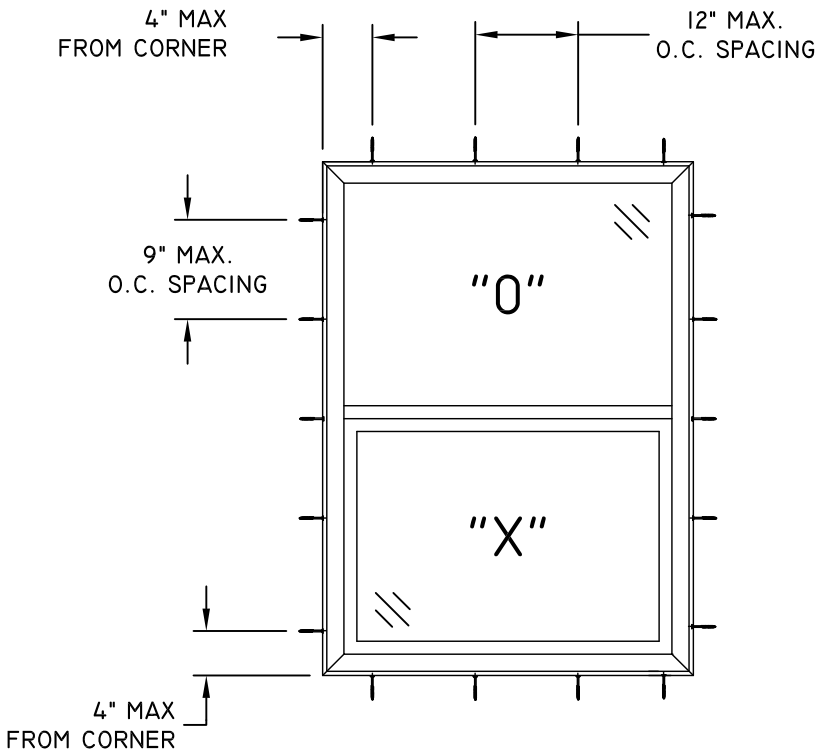
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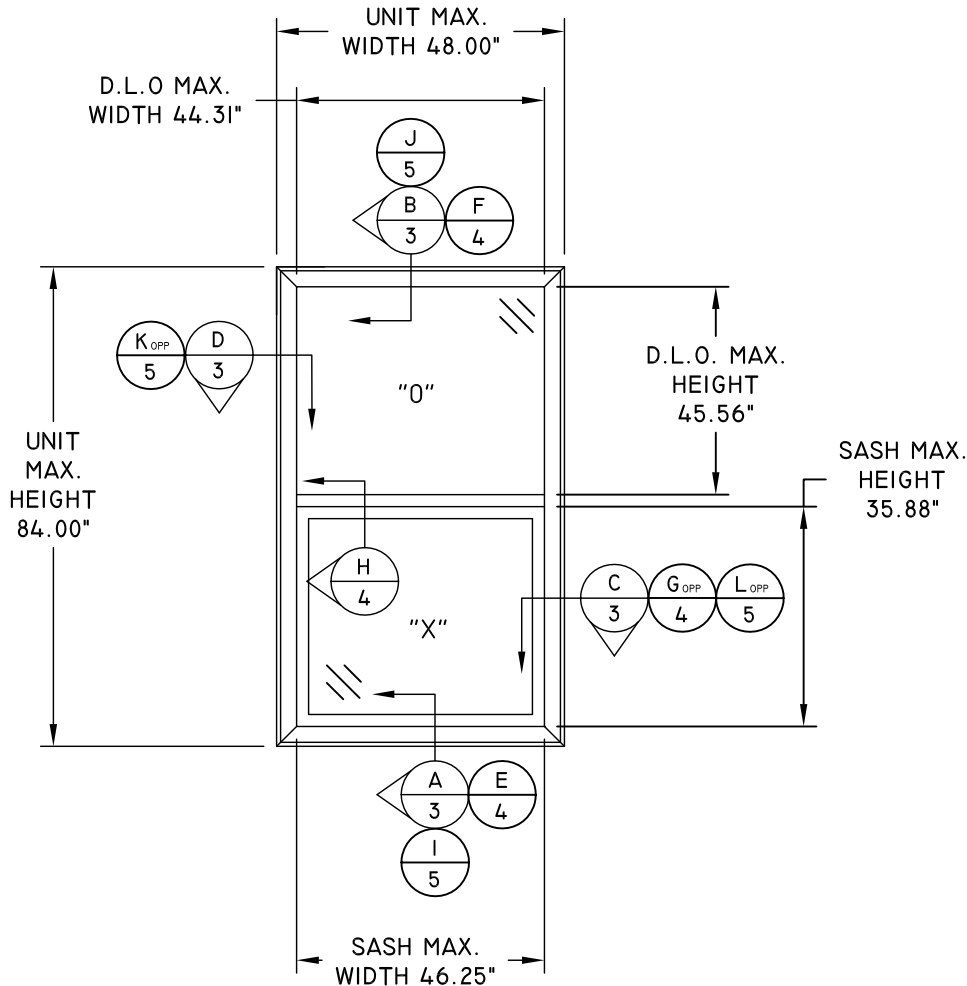
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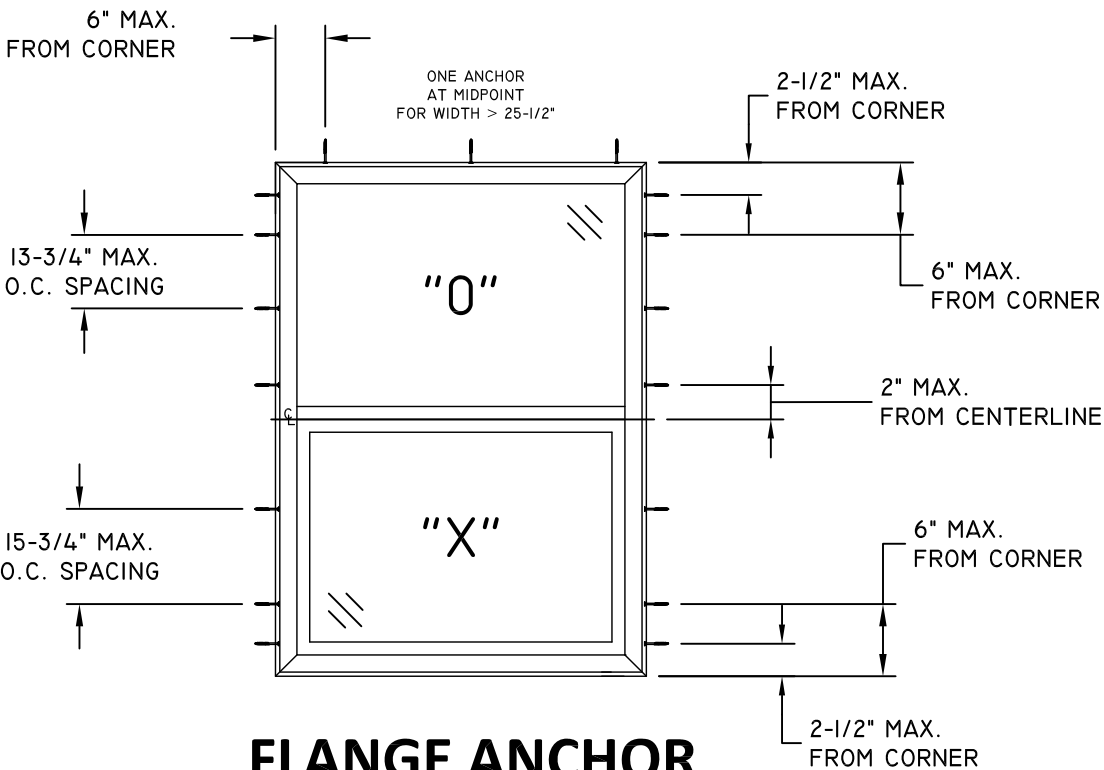
ELEVATION



FIN ANCHOR LAYOUT

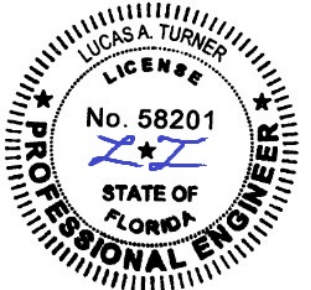


ELEVATION



FLANGE ANCHOR LAYOUT

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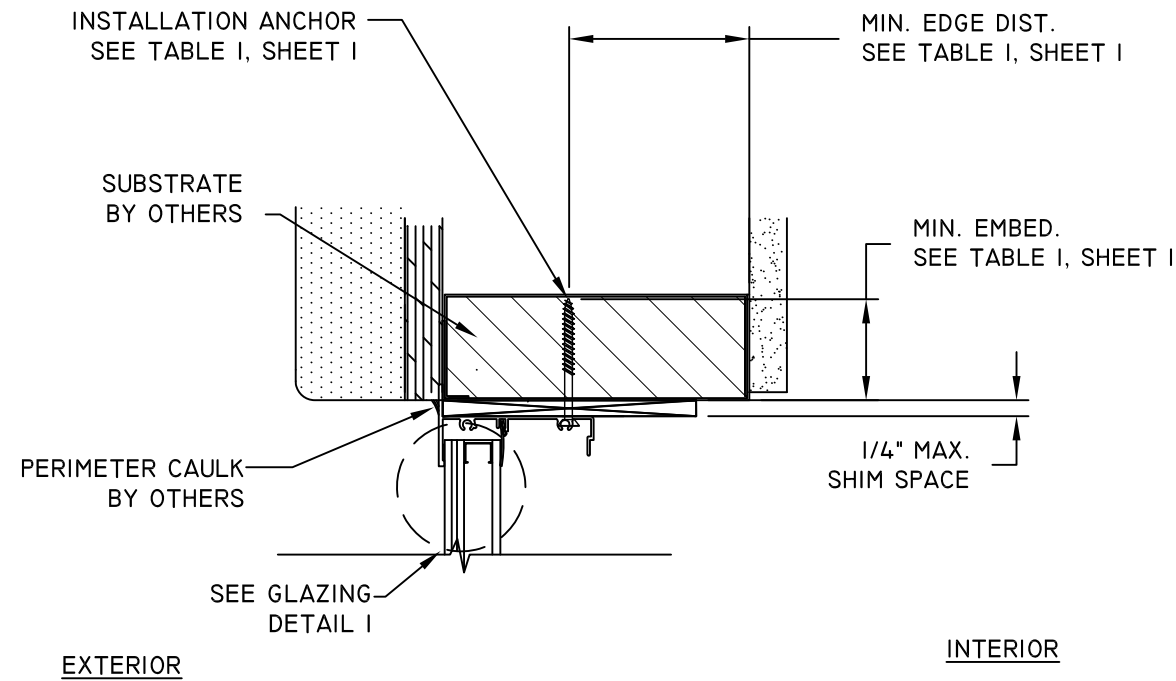


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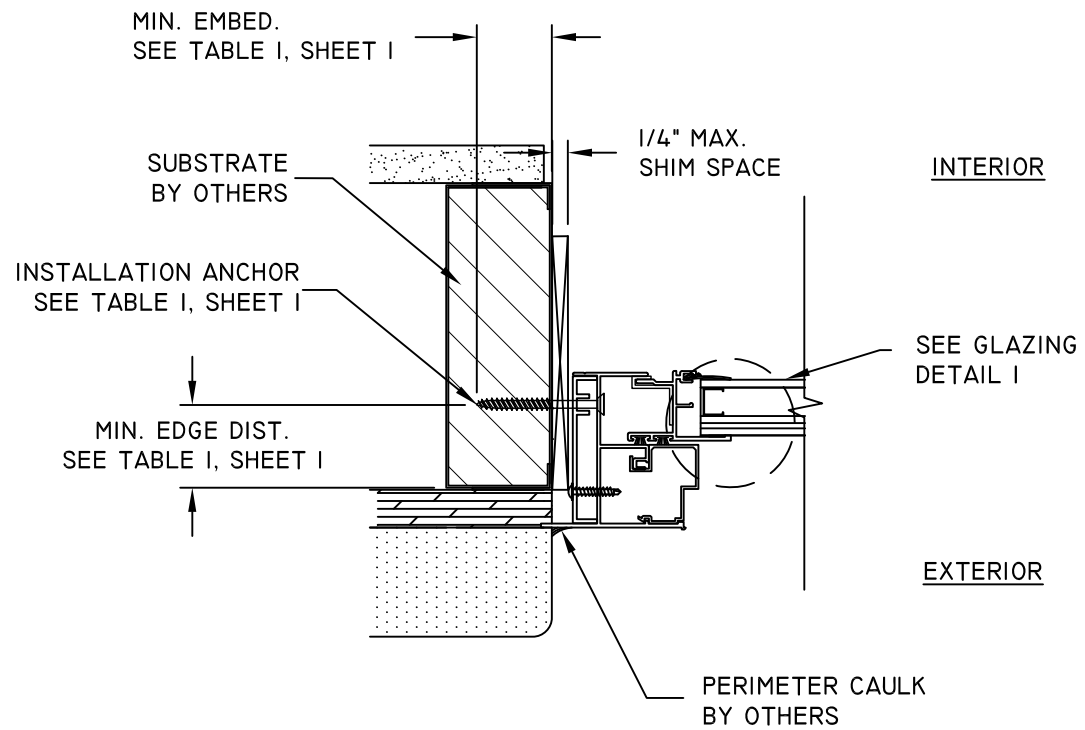
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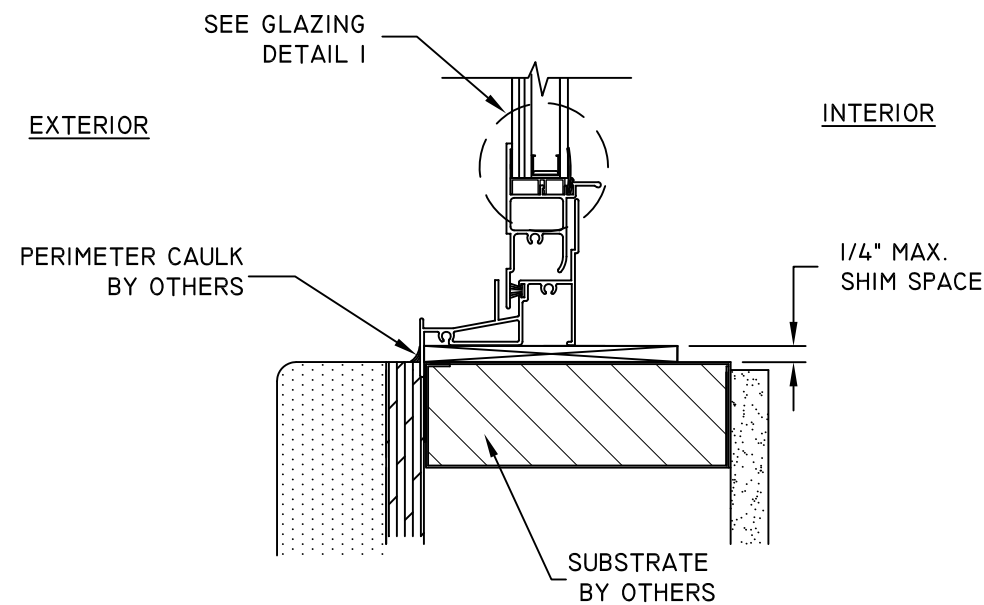
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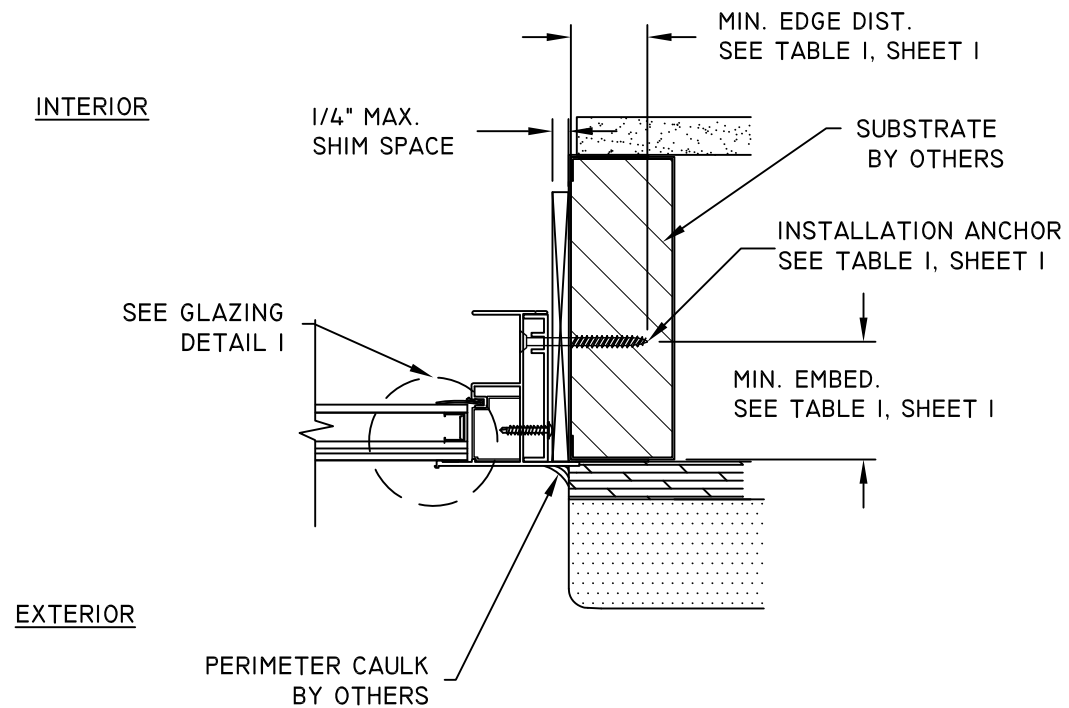
B
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VERTICAL SECTION
HEAD
4712 FLANGE



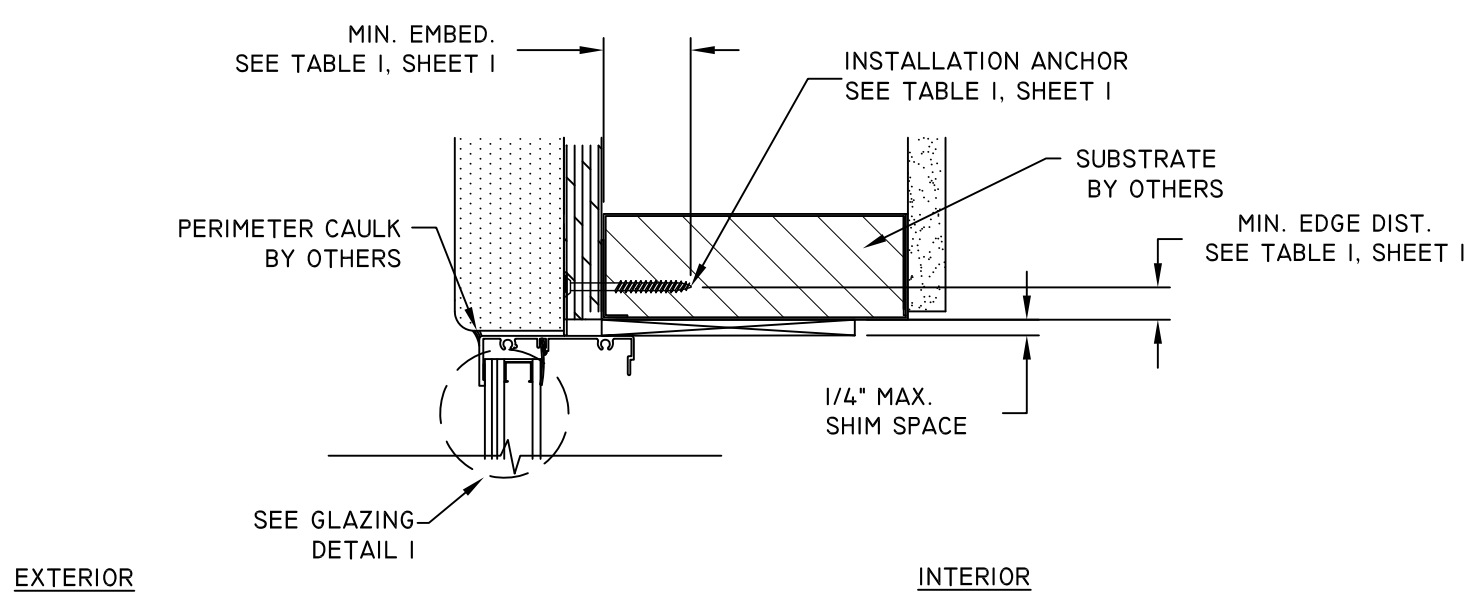
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HORIZONTAL SECTION
JAMB
4712 FLANGE



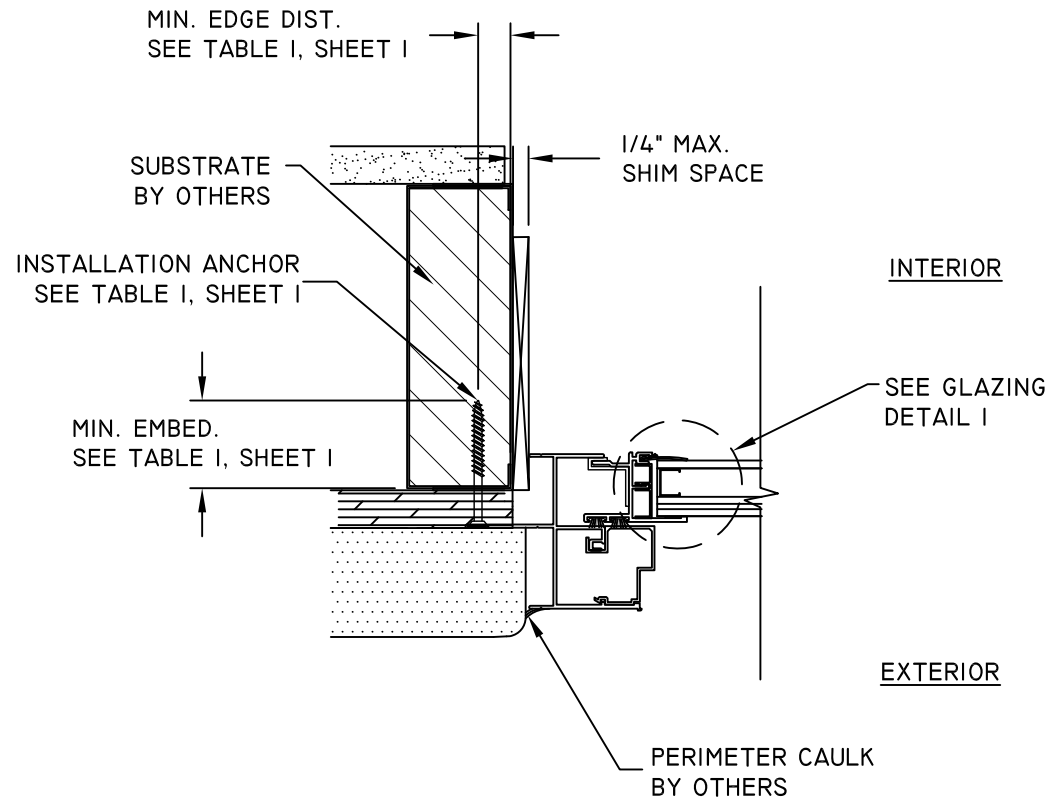
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3
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SILL
4712 FLANGE



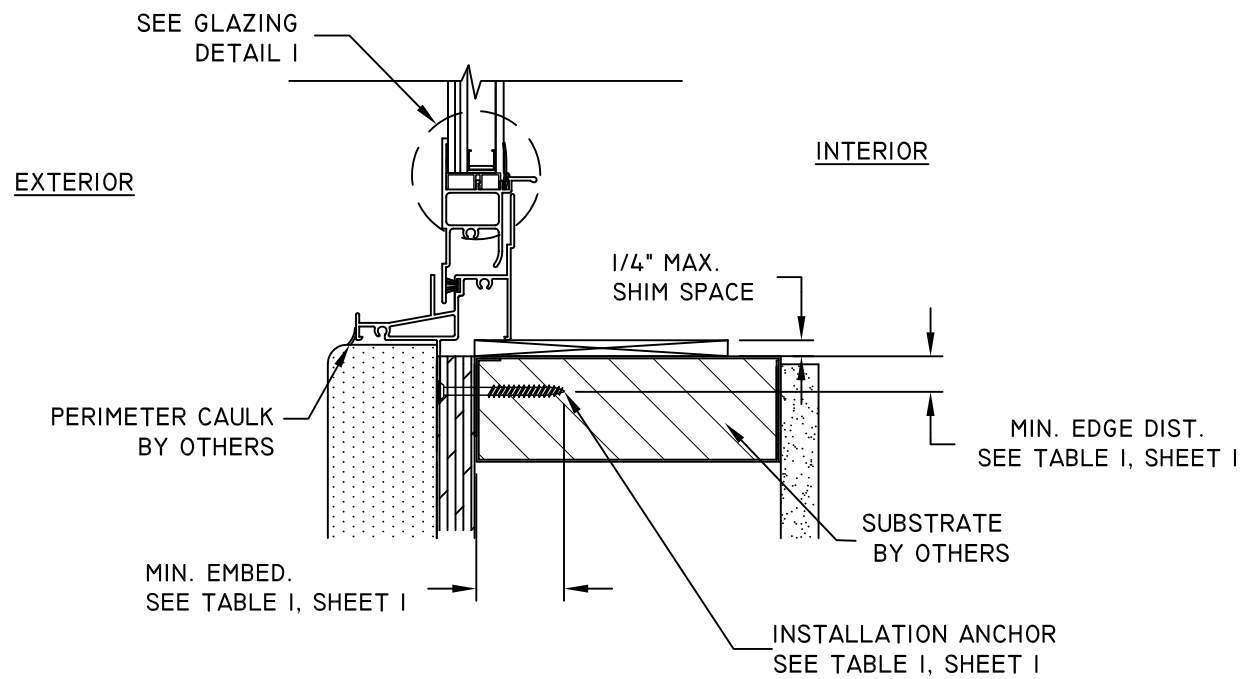
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JAMB
4712 FLANGE



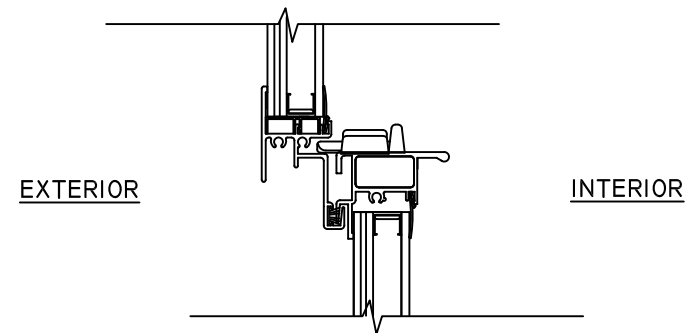
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4 **VERTICAL SECTION**
HEAD
4712 FIN



G
4 **HORIZONTAL SECTION**
JAMB
4712 FIN

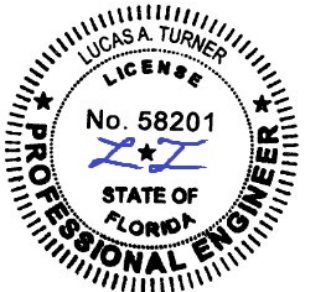


E
4 **VERTICAL SECTION**
SILL
4712 FIN



H
4 **VERTICAL SECTION**
MEETING RAIL

TITLE: BUILDER SERIES 4712/4812 SINGLE HUNG IMPACT 4712F VERTICAL & HORIZONTAL SECTIONS	DATE	BY	REVISION DESCRIPTION	DATE
	02.22.12	SM	5TH EDITION FBC UPDATE	08.21.14
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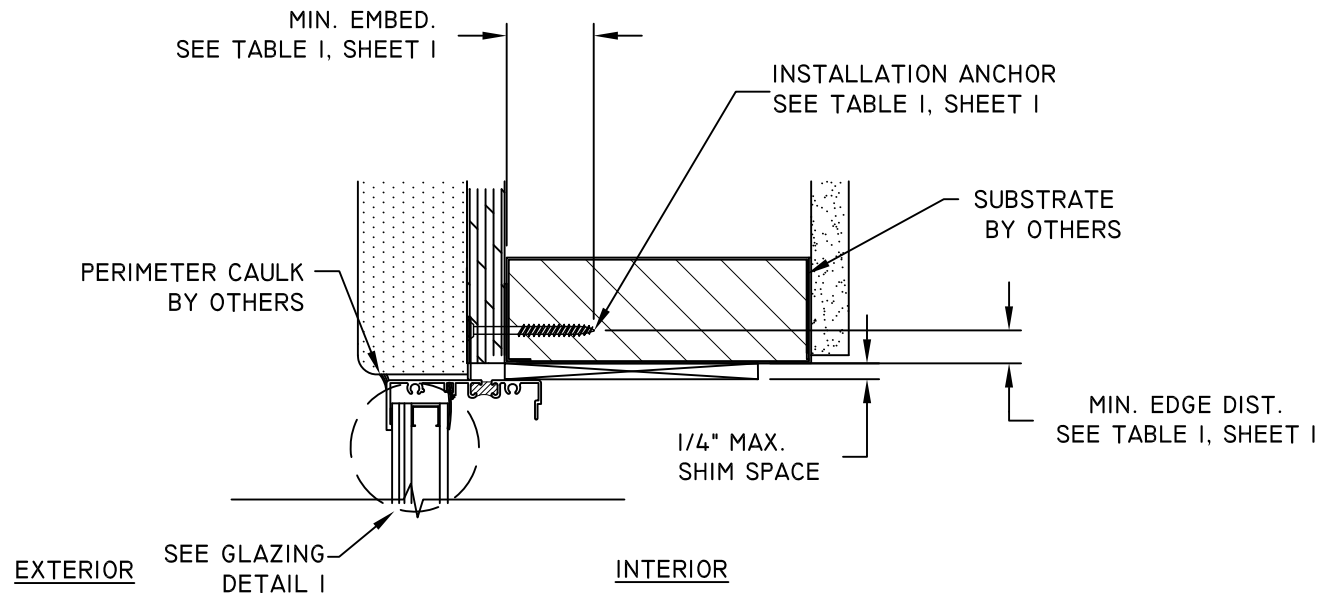


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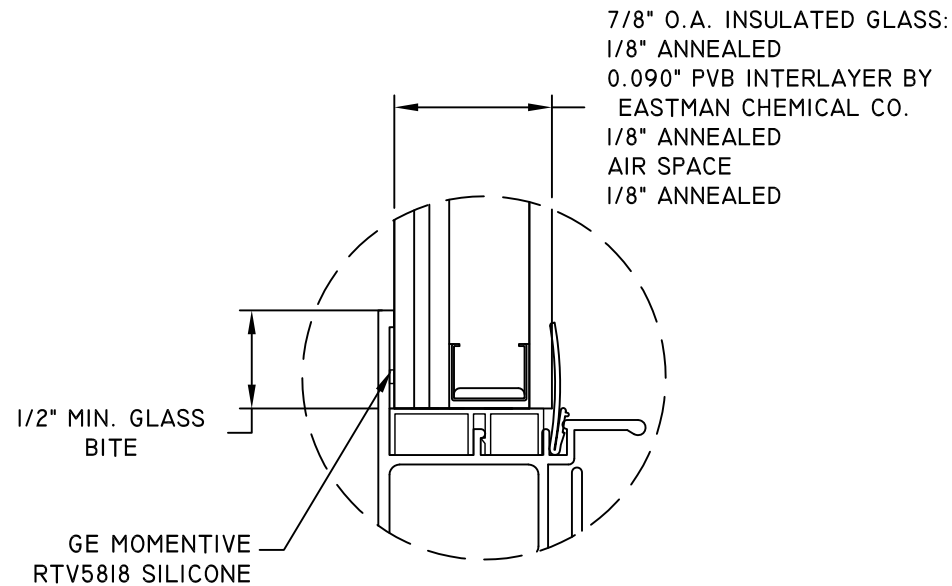
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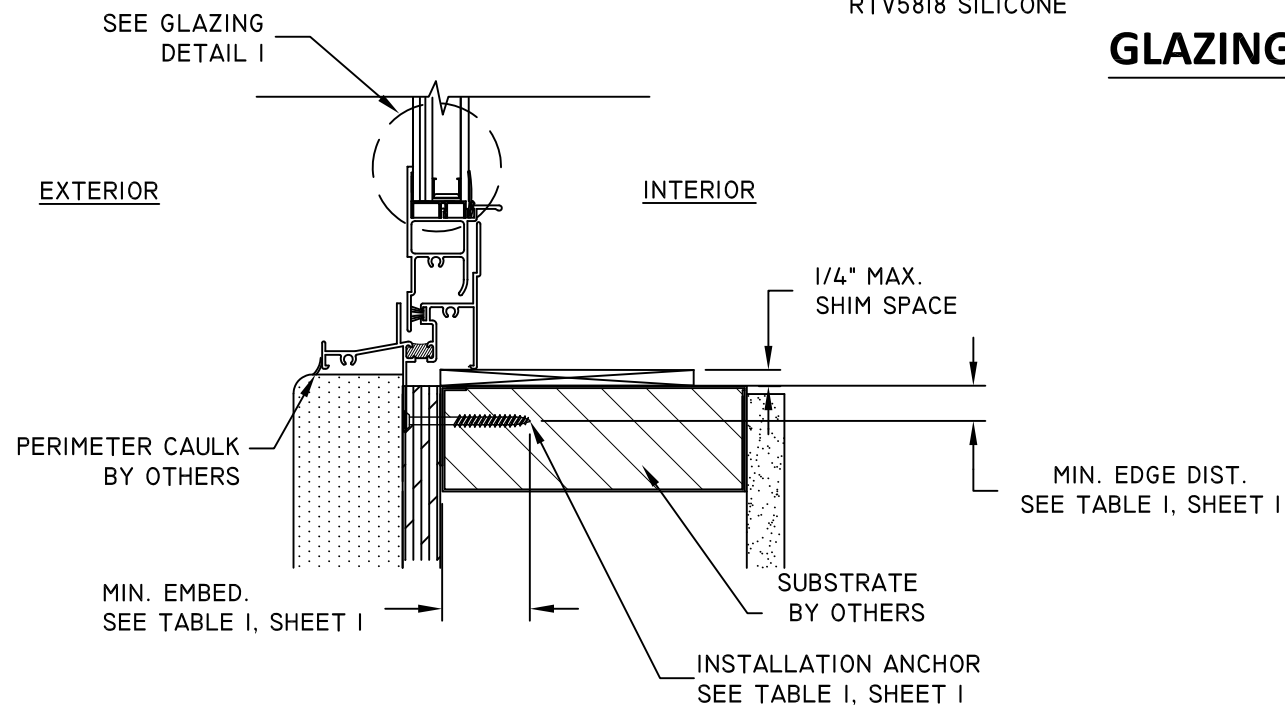
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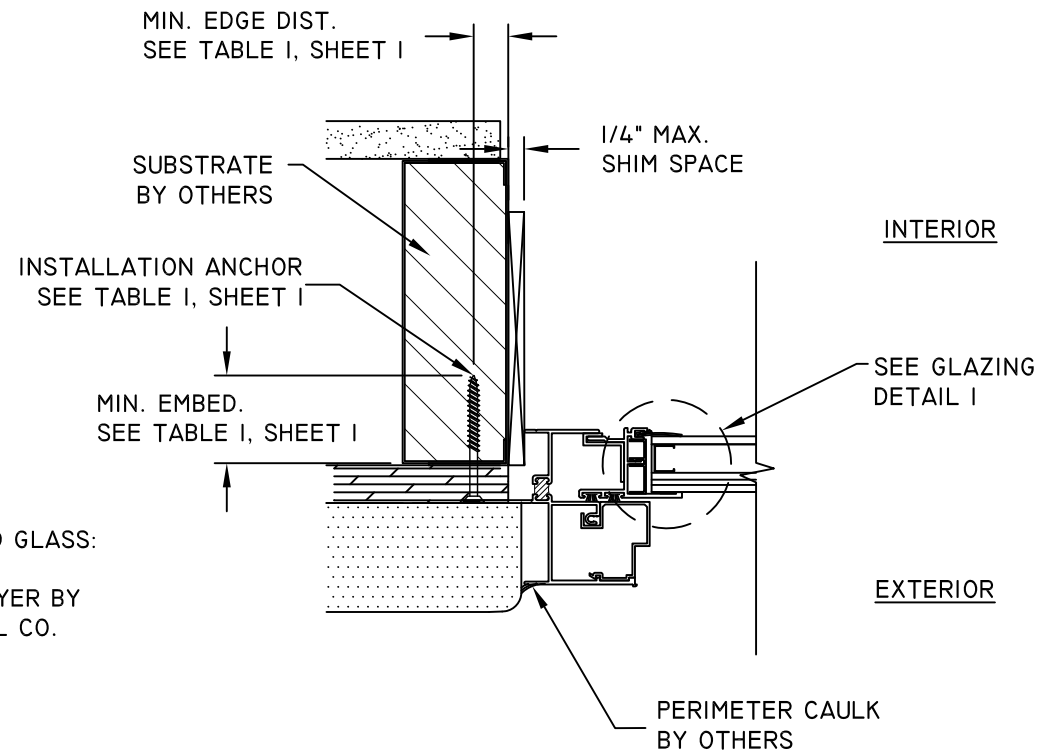
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HEAD
4812 FIN



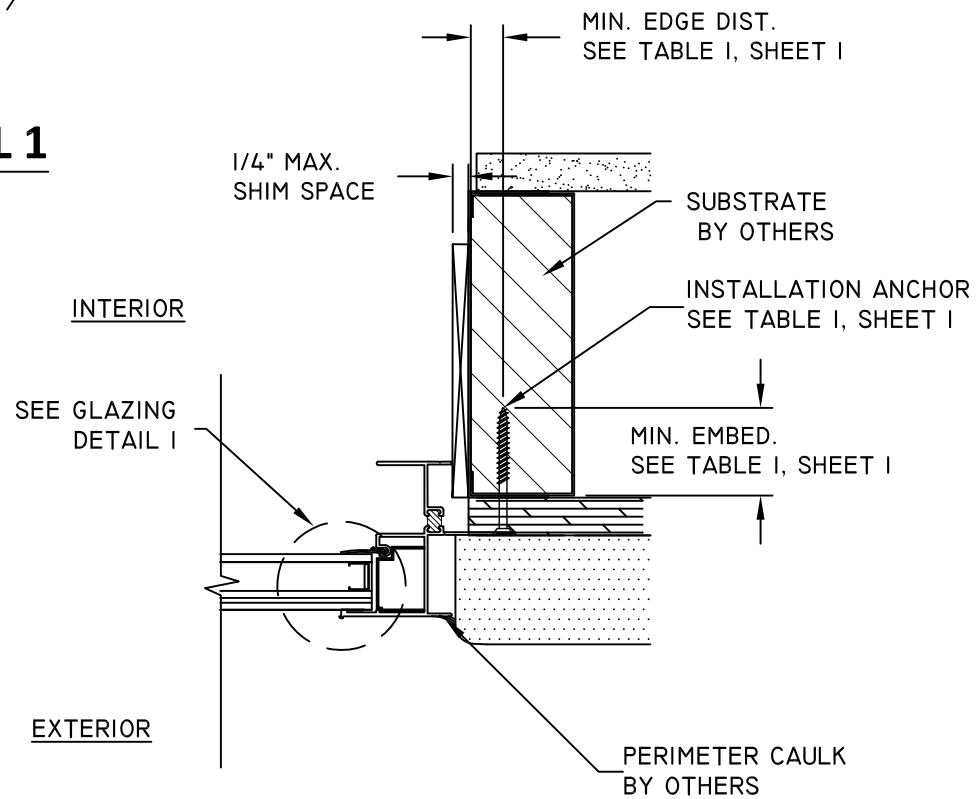
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VERTICAL SECTION
SILL
4812 FIN



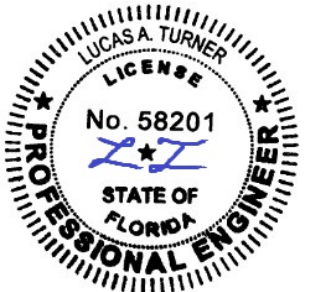
L
5
HORIZONTAL SECTION
JAMB
4812 FIN



K
5
HORIZONTAL SECTION
JAMB
4812 FIN

TITLE: BUILDER SERIES 4712/4812 SINGLE HUNG IMPACT 4812F VERTICAL & HORIZONTAL SECTIONS, & GLAZING DETAIL	NO.	REVISION DESCRIPTION	BY	DATE
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SHEET: **5 OF 5**