

SIERRA PACIFIC WINDOWS

H3 2.0 FEELSAFE MULLION SYSTEM

INSTALLATION ANCHORAGE DETAILS

GENERAL NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 9TH EDITION (2026) FLORIDA BUILDING CODE (FBC), EXCLUDING HVHZ AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
 - 1.1. AAMA/WDMA/CSA 101/I.S.2/A440-08/11
 - 1.2. ASTM E1886-05/13a
 - 1.3. ASTM E1996-09/12a/14a
2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY, 2X FRAMING, AND METAL FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
3. 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
4. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT IN NON-HVHZ AREAS.
5. THIS MULLION SYSTEM FOR USE WITH SIERRA PACIFIC'S H3 2.0 FEELSAFE WINDOWS.
6. AN IMPACT PROTECTIVE DEVICE IS NOT REQUIRED WITH THIS PRODUCT WHEN USED WITH SIERRA PACIFIC H3 2.0 FEELSAFE WINDOWS IN WIND ZONE 3 OR LESS.
7. WINDOW FRAME MATERIAL: VINYL, WOOD, AND 6063-T5.
8. PERIMETER INSTALLATION ANCHORAGE AND GLAZING SHALL BE AS REQUIRED BY THE INDIVIDUAL MULLED WINDOW'S PRODUCT APPROVAL.
9. AS ALLOWED BY AAMA/WDMA/CSA 101/I.S.2/A440-11, SECTION 4.4.2.5, ANY GEOMETRIC SHAPE THAT FITS WITHIN THE TESTED SIZE AND SHAPE SHOWN FOR THE PRODUCT TYPE HEREIN SHALL BE PERMITTED TO BE QUALIFIED BY THE SHAPE, PROVIDED THAT THE FRAME, SASH, LEAVES, PANELS, HARDWARE, HARDWARE LOCATION, COMPONENTS AS APPLICABLE, AND CONSTRUCTION REMAIN THE SAME.

INSTALLATION NOTES:

1. ONE (1) ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN FOR FIN INSTALLATION. TWO (2) INSTALLATION ANCHORS ARE REQUIRED AT EACH ANCHOR LOCATION SHOWN FOR STRAP INSTALLATION.
2. THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION OF THE MAXIMUM SIZE LISTED.
3. INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF $\pm 1/2$ INCH THE DEPICTED LOCATION & SPACING IN THE ANCHOR LAYOUT DETAILS (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
4. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM(S). MAXIMUM ALLOWABLE SHIM STACK TO BE 11/16 INCH FOR DIRECT SET AND 1/4 INCH FOR OTHER WINDOWS OR 1/4 INCH WHEN OPTIONAL DIRECT SET FLUSH JAMB IS USED - SEE SHEET 22 FOR DETAILS. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER. SPACING BETWEEN SHIMS SHALL BE 6" MINIMUM TO 10" MAXIMUM PLACED AT THE INSTALLATION ANCHORS AND BETWEEN ANCHORS TO MEET REQUIRED SPACING.
5. **WINDOW FRAME TO SUBSTRATE INSTALLATION**
 - 5.1. WINDOW FRAME TO SUBSTRATE INSTALLATION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE WINDOW'S PRODUCT APPROVAL DOCUMENTS.
 - 5.2. INSTALLATION DETAILS SHOWN ON SHEETS 5 THROUGH 17 DETAIL STANDARD JAMB OPTION. SEE SHEET 22 FOR OPTIONAL FLUSH JAMB (SHOWN FOR DIRECT SET ONLY - SIMILAR FOR OTHER WINDOWS).
 - 5.3. INSTALLATION OF ANCHOR CLUSTERS AT MULLED WINDOW COMBINATIONS SHALL BE AS FOLLOWS.
 - 5.3.1. **FIN INSTALLATION:** FOR INSTALLATION INTO WOOD FRAMING USE #8 WOOD SCREWS OF SUFFICIENT LENGTH TO ACHIEVE 1-1/2 INCH MINIMUM EMBEDMENT INTO WOOD SUBSTRATE. ANCHORS SHALL BE PLACED SUCH THAT A MINIMUM EDGE DISTANCE OF 3/8" IS ACHIEVED. SILICON SEAL OVER SCREW HEADS.
 - 5.3.2. **FIN INSTALLATION:** FOR INSTALLATION INTO METAL STUD USE #8 GRADE 5 SELF-DRILLING OR SELF-TAPPING PH OR HWM SCREWS, OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM OF 3 THREADS PENETRATION BEYOND METAL WALL. ANCHORS SHALL BE PLACED SUCH THAT A MINIMUM EDGE DISTANCE OF 3/8" IS ACHIEVED. SILICON SEAL OVER SCREW HEADS.
 - 5.3.3. **STRAP INSTALLATION:** FOR INSTALLATION INTO WOOD FRAMING USE TWO (2) #8 WOOD SCREWS OF SUFFICIENT LENGTH TO ACHIEVE 1-1/2 INCH MINIMUM EMBEDMENT INTO WOOD SUBSTRATE. ANCHORS SHALL BE PLACED SUCH THAT A MINIMUM EDGE DISTANCE OF 3/4" AND MINIMUM SPACING OF 1" BETWEEN ANCHORS IS ACHIEVED.
 - 5.3.4. **STRAP INSTALLATION:** FOR INSTALLATION INTO METAL STUD USE TWO (2) #8 GRADE 5 SELF-DRILLING OR SELF-TAPPING PH OR HWM SCREWS OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM OF 3 THREADS PENETRATION BEYOND METAL WALL. ANCHORS SHALL BE PLACED SUCH THAT A MINIMUM EDGE DISTANCE OF 3/4" AND MINIMUM SPACING OF 1" BETWEEN ANCHORS IS ACHIEVED.
 - 5.3.5. **THROUGH FRAME INSTALLATION:** FOR INSTALLATION INTO WOOD FRAMING USE #10 WOOD SCREWS OF SUFFICIENT LENGTH TO ACHIEVE 1-1/2 INCH MINIMUM EMBEDMENT INTO WOOD SUBSTRATE. ANCHORS SHALL BE PLACED SUCH THAT A MINIMUM EDGE DISTANCE OF 3/4" IS ACHIEVED.
 - 5.3.6. **THROUGH FRAME INSTALLATION:** FOR INSTALLATION INTO METAL STUD USE #10 GRADE 5 SELF-DRILLING OR SELF-TAPPING PH OR HWM SCREWS, OF SUFFICIENT LENGTH TO ACHIEVE A MINIMUM OF 3 THREADS PENETRATION BEYOND METAL WALL. ANCHORS SHALL BE PLACED SUCH THAT A MINIMUM EDGE DISTANCE OF 3/4" IS ACHIEVED.
 - 5.3.7. **THROUGH FRAME OR STRAP INSTALLATION:** FOR INSTALLATION THROUGH 1X BUCK TO CONCRETE/MASONRY OR DIRECTLY INTO CONCRETE/MASONRY, USE 3/16 INCH ITW TAPCONS OF SUFFICIENT LENGTH TO ACHIEVE 1-1/2 INCH MINIMUM EMBEDMENT.

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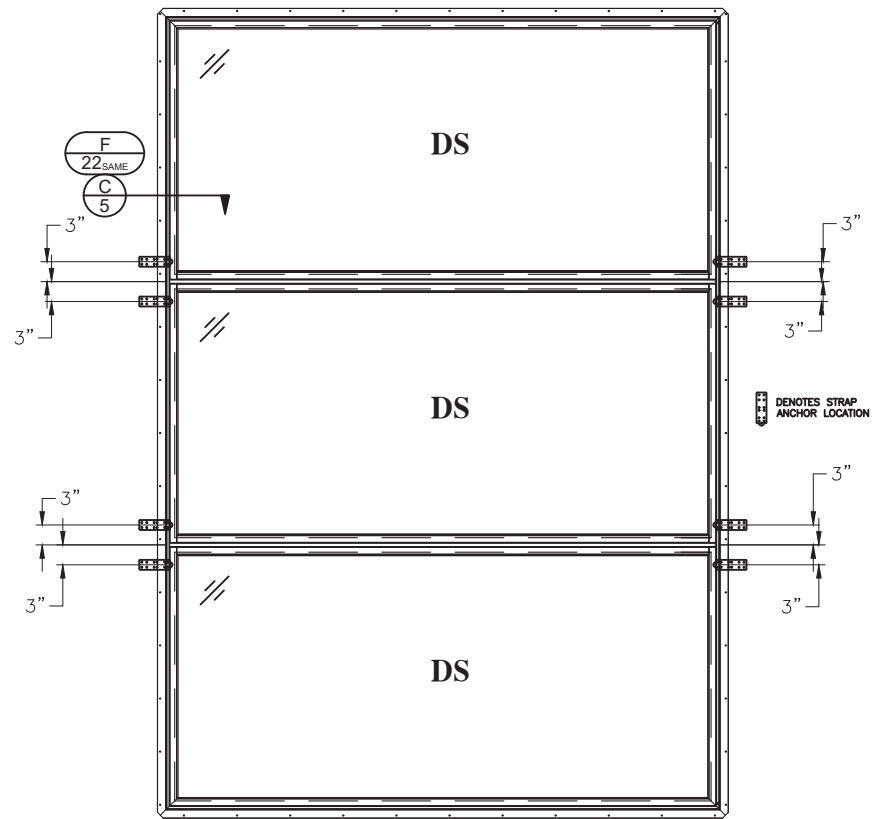
SEE SHEETS 18 THROUGH 21 FOR MULLION SPAN VS. LOAD WIDTH DESIGN
PRESSURE CAPACITY CHARTS AND APPROVED MULLED WINDOW CONFIGURATIONS

SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080			PROJECT NO. ACE-2026-127		
TITLE: H3 2.0 FEELSAFE MULLION SYSTEM					
GENERAL NOTES, INSTALLATION NOTES & TABLE OF CONTENTS					
PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RIAENGPE@GMAIL.COM		DRAWN BY: RJA	DATE: 4/8/18		
SCALE: N.T.S.		DRAWING NO: SPW-PTC0001			
REV: A		SHEET: 1 OF 22			
REV		DESCRIPTION	DATE	BY	
A		UPDATE TO THE 9TH EDITION (2026) FBC	8/14/26	RJA	

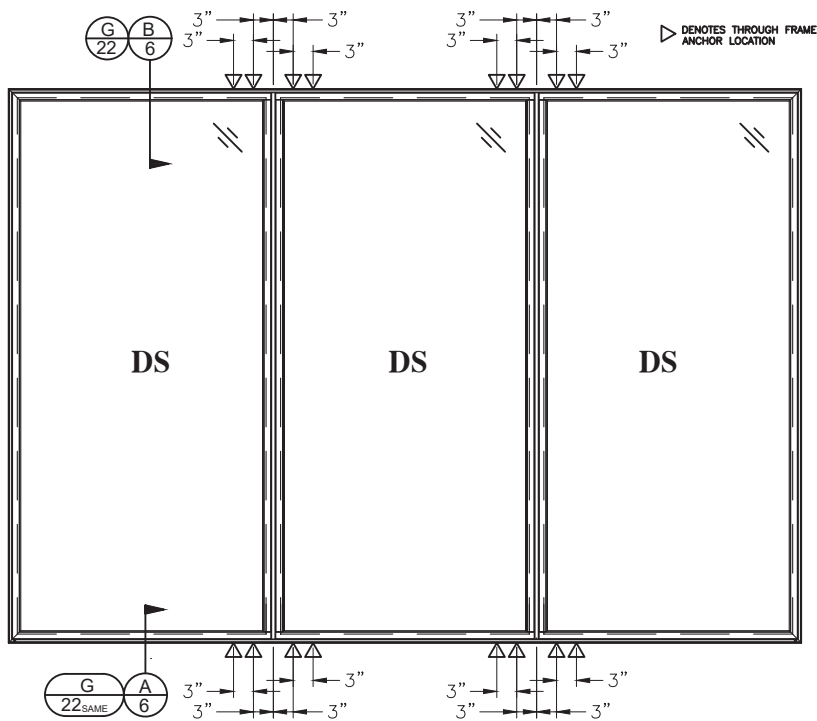
Robert J. Amoruso, P.E.
Florida P.E. No. 49752



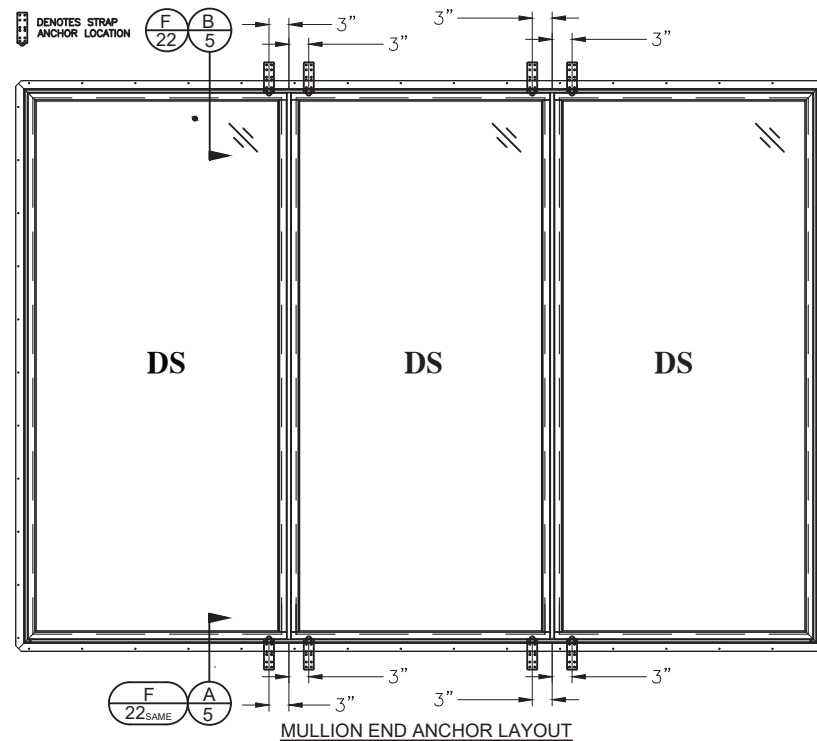
SIGNED/SEALED: 8/14/26



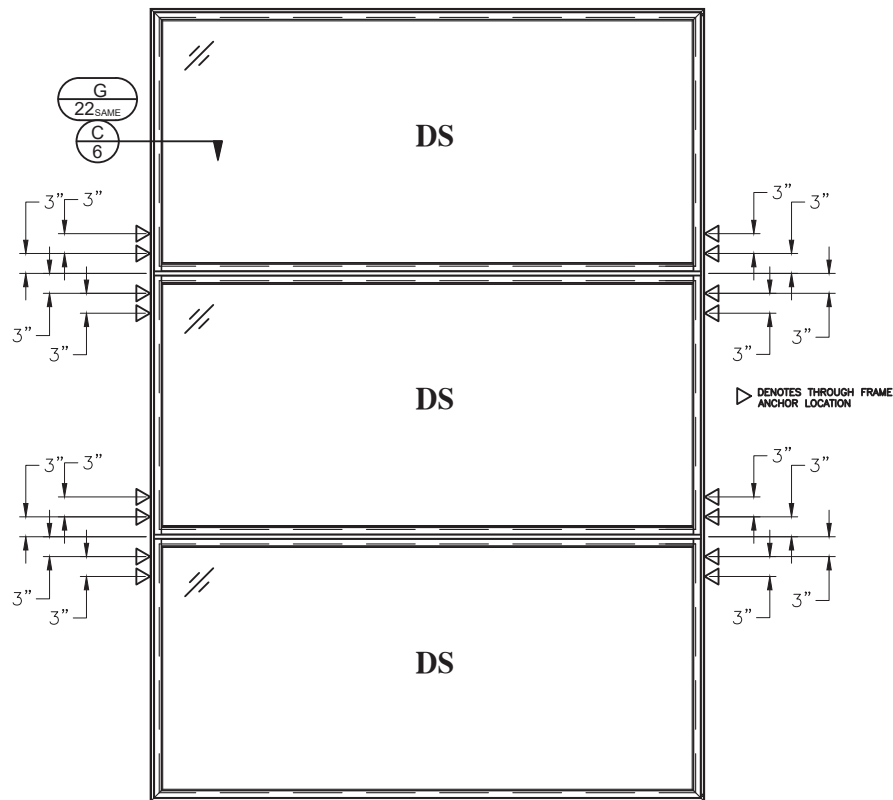
MULLION END ANCHOR LAYOUT
NAIL FIN & STRAP
HORIZONTAL CONFIGURATIONS WITH DIRECT SET (DS) WINDOWS
INSTALLATION ANCHORAGE FOR MULLION ENDS ONLY SHOWN
SEE INDIVIDUAL WINDOW PRODUCT APPROVAL FOR SUBSTRATE ANCHORAGE



MULLION END ANCHOR LAYOUT
THROUGH FRAME
VERTICAL CONFIGURATIONS WITH DIRECT SET (DS) WINDOWS
CASEMENT (CS), DOUBLE HUNG (DH) AND SINGLE HUNG (SH) APPROVED FOR MULLING
INSTALLATION ANCHORAGE FOR MULLION ENDS ONLY SHOWN
SEE INDIVIDUAL WINDOW PRODUCT APPROVAL FOR SUBSTRATE ANCHORAGE



MULLION END ANCHOR LAYOUT
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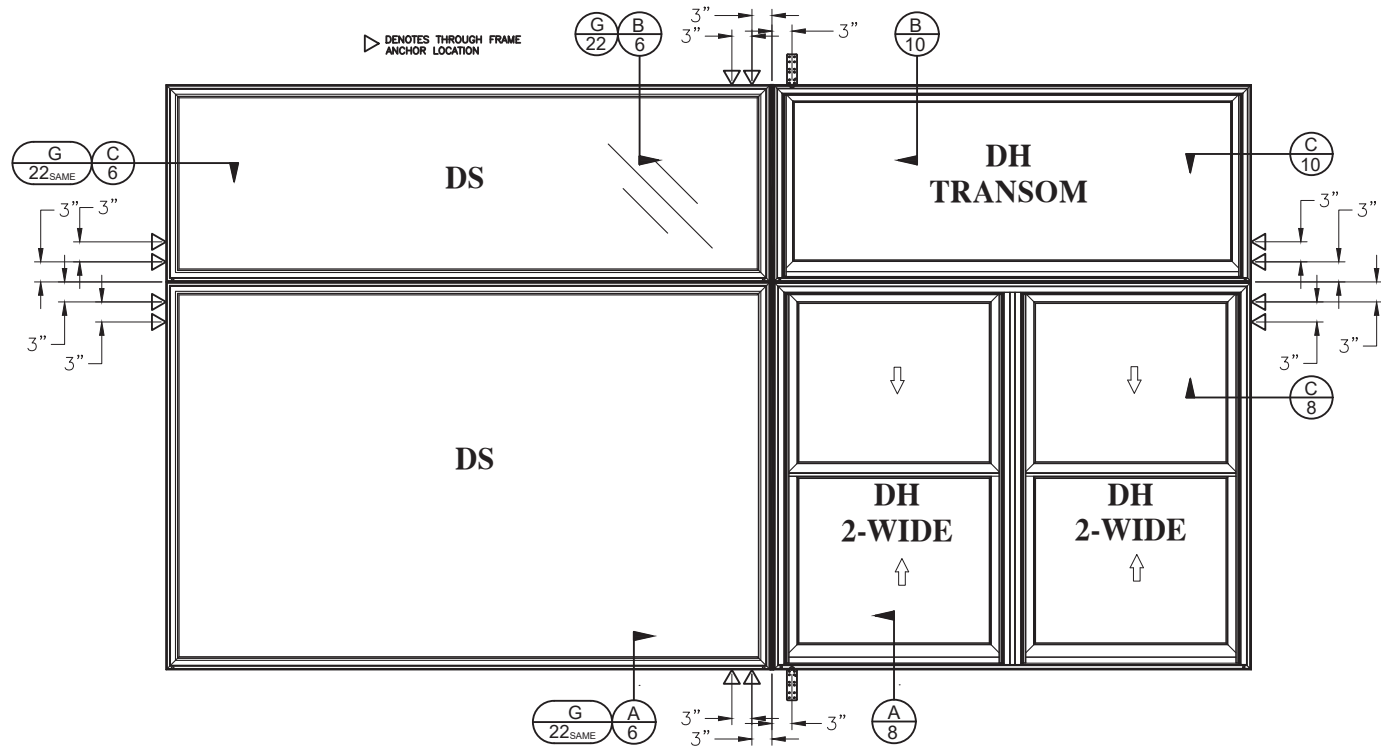
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THROUGH FRAME
HORIZONTAL CONFIGURATIONS WITH DIRECT SET (DS) WINDOWS
INSTALLATION ANCHORAGE FOR MULLION ENDS ONLY SHOWN
SEE INDIVIDUAL WINDOW PRODUCT APPROVAL FOR SUBSTRATE ANCHORAGE

PROJECT NO. ACE-2026-127						
SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080	H3 2.0 FEELSAFE MULLION SYSTEM VERTICAL/HORIZ. CONFIG. ELEVATIONS & ANCHORING LAYOUT			DATE: 4/8/18	DRAWING NO: SPW-PTC0001	SHEET: 2 OF 22
	DRAWN BY: RJA			SCALE: N.T.S.	REV: A	DESCRIPTION
	PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RJAENGPE@GMAIL.COM			8/14/26	RJA	BY
			UPDATE TO THE 9TH EDITION (2026) FBC			DATE

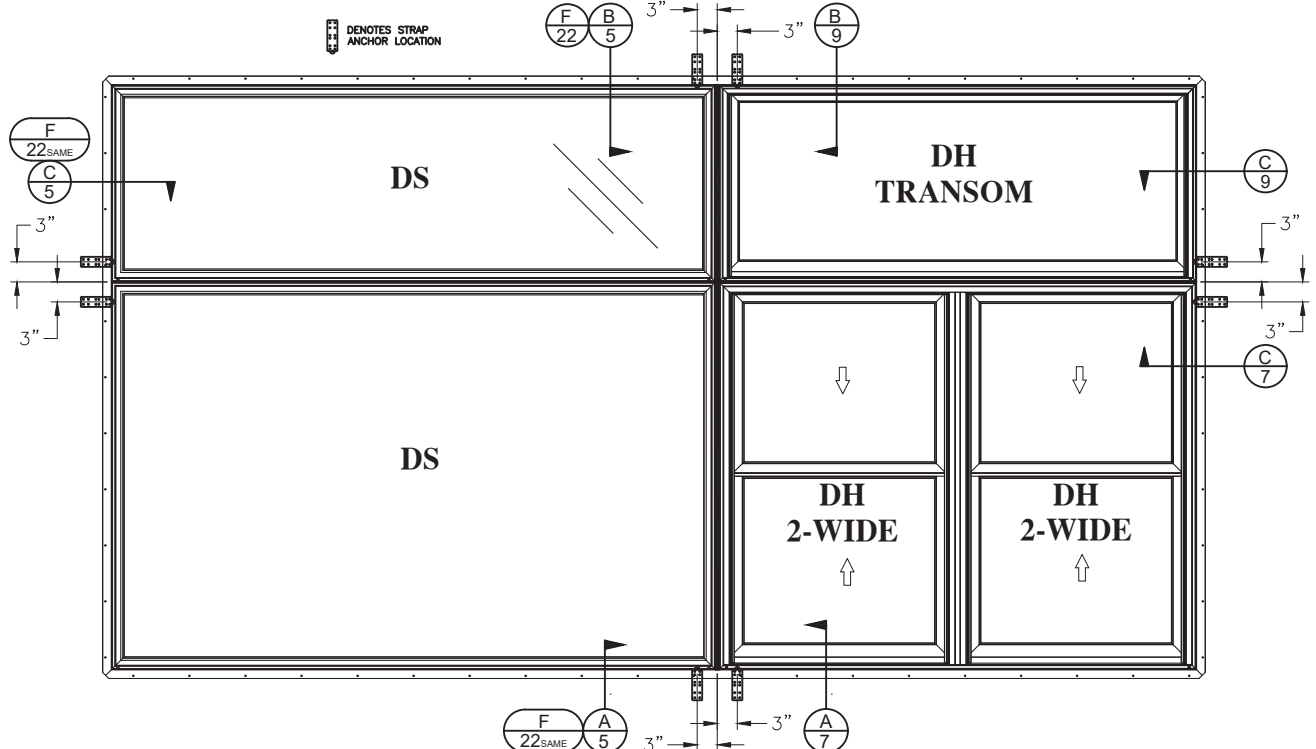
Robert J. Amoruso, P.E.
Florida P.E. No. 49752



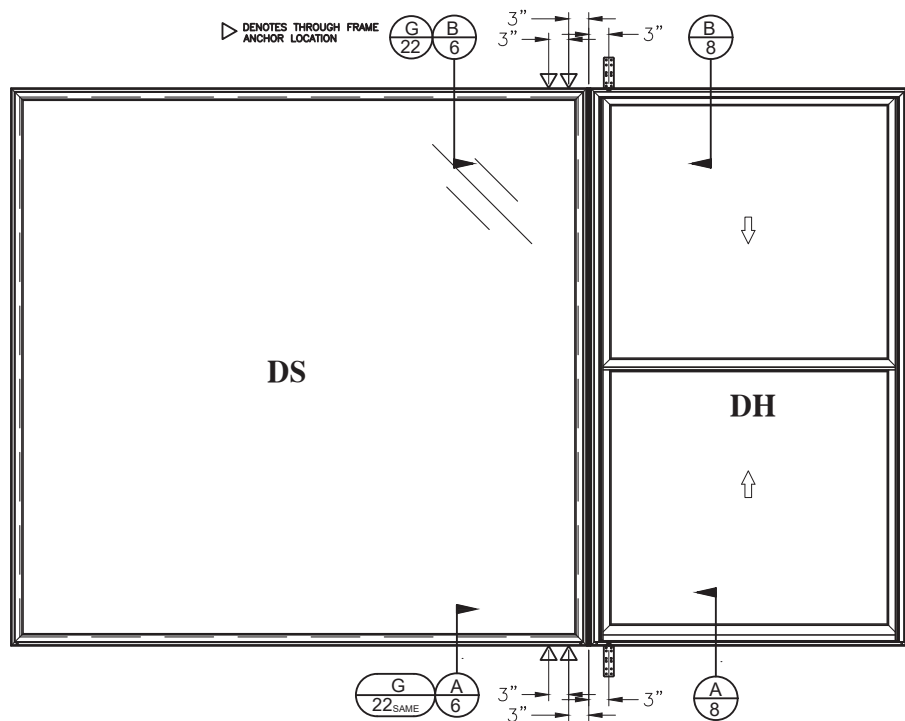
SIGNED/SEALED: 8/14/26



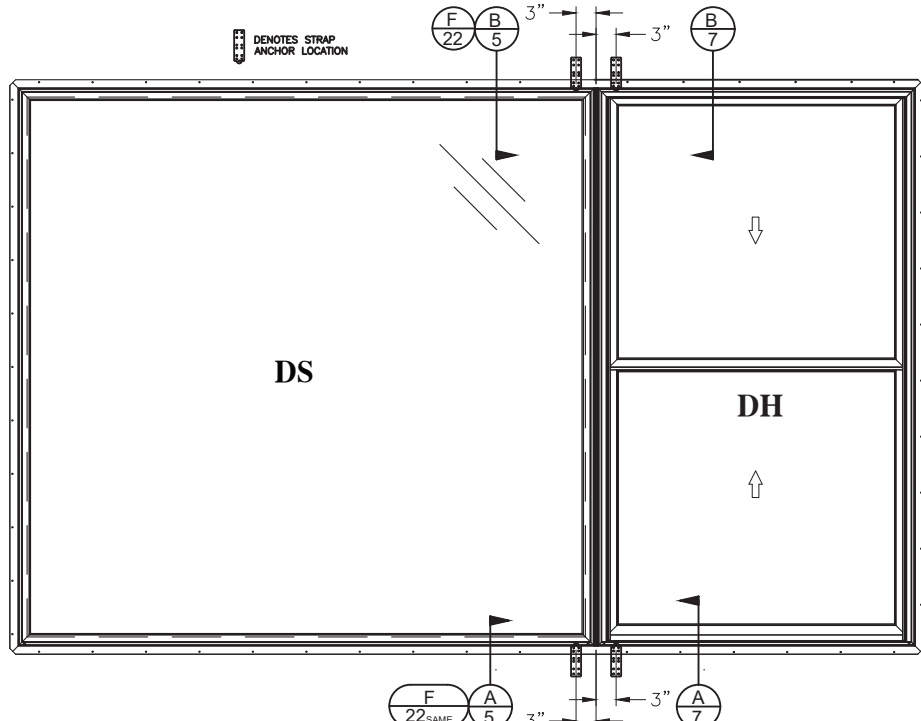
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THROUGH FRAME
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DIRECT SET (DS) & DOUBLE HUNG (DH)
CASEMENT (CS) AND SINGLE HUNG (SH) APPROVED FOR MULLING
INSTALLATION ANCHORAGE FOR MULLION ENDS ONLY SHOWN
SEE INDIVIDUAL WINDOW PRODUCT APPROVAL FOR SUBSTRATE ANCHORAGE



MULLION END ANCHOR LAYOUT
NAIL FIN & STRAP
TWO-WAY CONFIGURATION WITH DIRECT SET TRANSOM/DOUBLE HUNG TRANSOM OVER
DIRECT SET (DS) & DOUBLE HUNG (DH)
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INSTALLATION ANCHORAGE FOR MULLION ENDS ONLY SHOWN
SEE INDIVIDUAL WINDOW PRODUCT APPROVAL FOR SUBSTRATE ANCHORAGE



MULLION END ANCHOR LAYOUT
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MULLION END ANCHOR LAYOUT
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CASEMENT (CS) AND SINGLE HUNG (SH) APPROVED FOR MULLING
INSTALLATION ANCHORAGE FOR MULLION ENDS ONLY SHOWN
SEE INDIVIDUAL WINDOW PRODUCT APPROVAL FOR SUBSTRATE ANCHORAGE

PROJECT NO. ACE-2026-127

SIERRA PACIFIC WINDOWS
11605 READING ROAD, PO BOX 8489
RED BLUFF, CA 96080

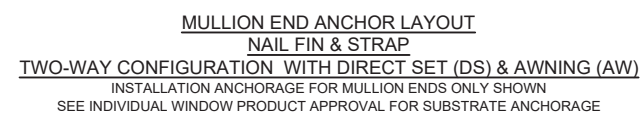
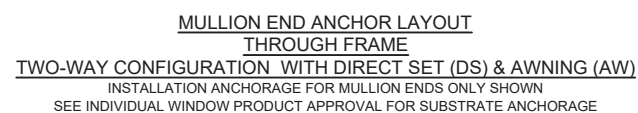
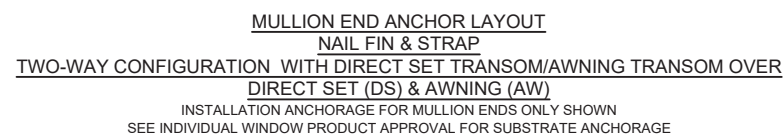
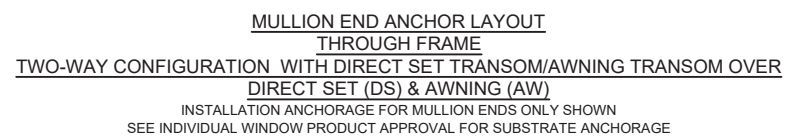
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TWO-WAY CONFIGURATION ELEVATIONS & ANCHORING LAYOUT

DRAWN BY:	RJA	DATE:	4/8/18
PREPARED BY:	AMORUSO CONSULTING ENG., LLC	DRAWING NO.:	SPW-PTC0001
	FBPE REGISTRATION NO. 38327	SCALE:	N.T.S.
	226 N NOVA RD, NO. 142	REV:	A
	ORMOND BEACH, FL 32174	SHEET:	3 OF 22
	RIAENGPE@GMAIL.COM	DESCRIPTION	REV
		DATE	BY

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



SIGNED/SEALED: 8/14/26



SIGNED/SEALED: 8/14/26



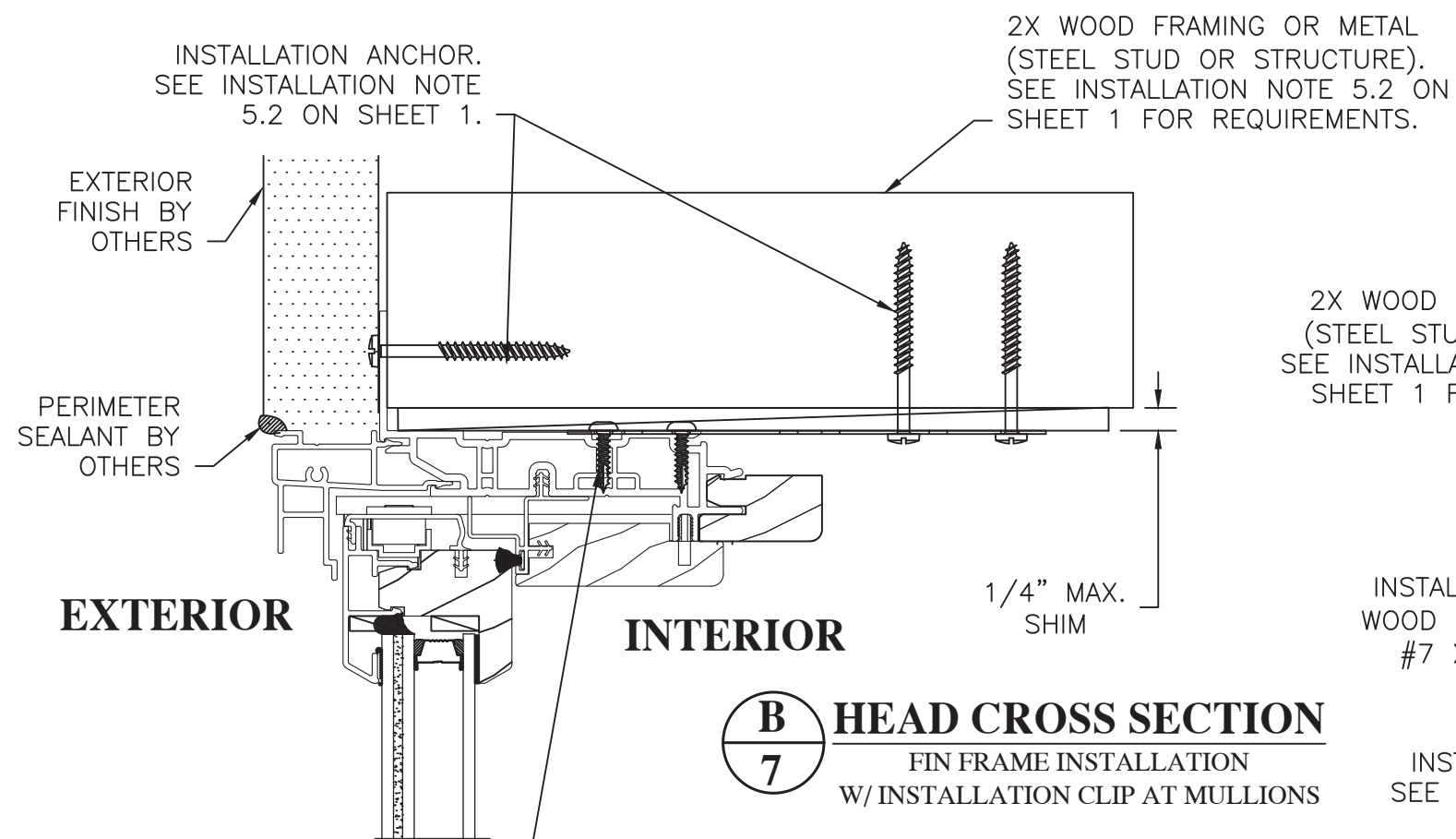
SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080		PROJECT NO. ACE-2026-127	
TITLE: H3 2.0 FEELSAFE MULLION SYSTEM DIRECT SET CROSS SECTIONS - FIN FRAME INSTALLATION			
PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RJAENGPE@GMAIL.COM		DRAWN BY: RJA	DATE: 4/8/18
		SCALE: N.T.S.	DRAWING NO: SPW-PTC0001
		REV: A	SHEET: 5 OF 22
		A	UPDATE TO THE 9TH EDITION (2026) FBC
		REV	DESCRIPTION
		DATE	BY

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Florida P.E. No. 49752



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EXTERIOR
FINISH BY
OTHERS

PERIMETER SEALANT BY OTHERS

EXTERIOR

INTERIOR

1/4" MAX.
SHIM

2X WOOD FRAMING OR METAL
(STEEL STUD OR STRUCTURE).
SEE INSTALLATION NOTE 5.2 ON
SHEET 1 FOR REQUIREMENTS.

B HEAD CROSS SECTION

FIN FRAME INSTALLATION W/ INSTALLATION CLIP AT MULLIONS

FIN FRAME INSTALLATION W/ INSTALLATION CLIP AT MULLIONS

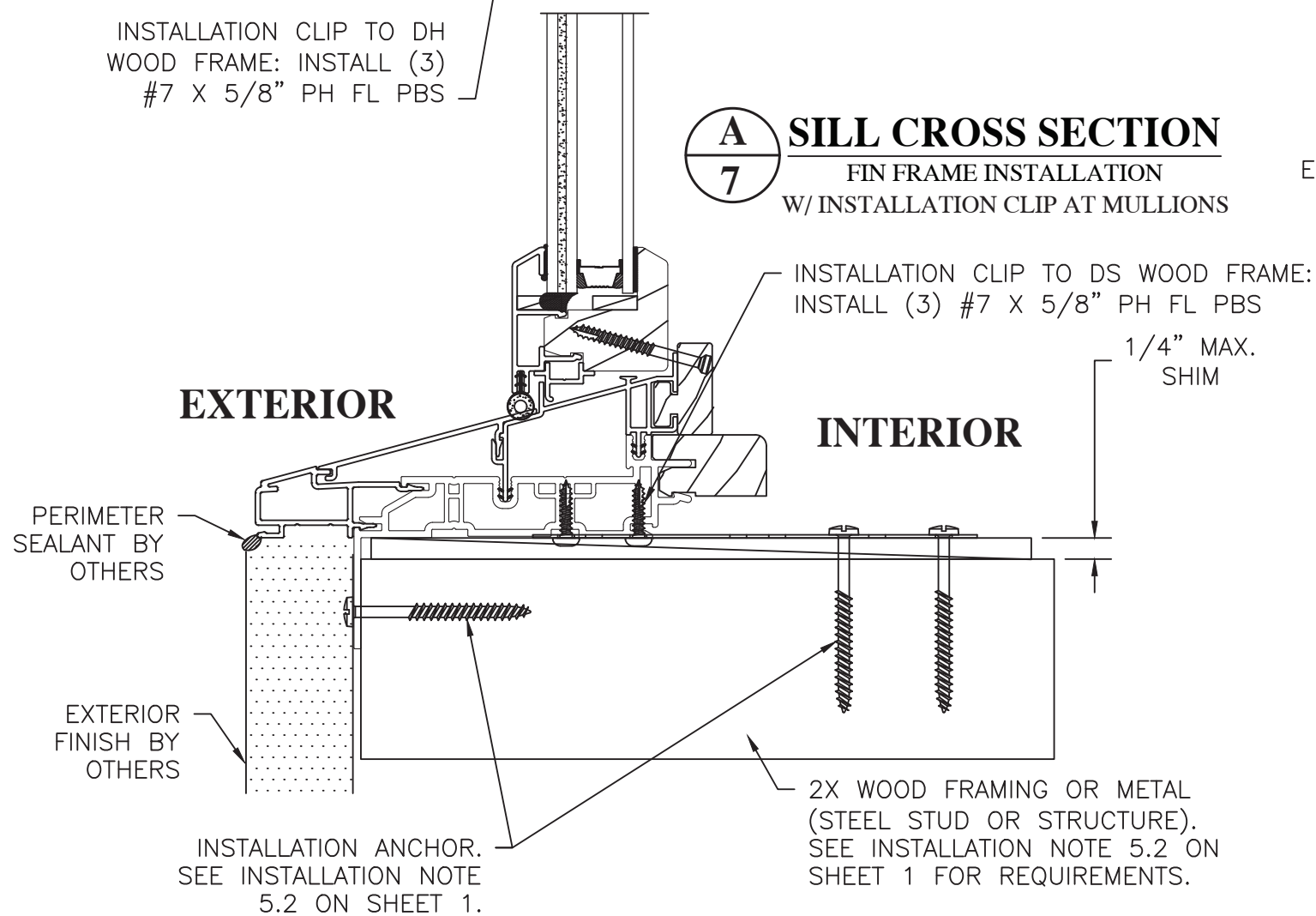
INSTALLATION CLIP TO DH
WOOD FRAME: INSTALL (3)
#7 X 5/8" PH FL PBS

A
7

SILL CROSS SECTION

FIN FRAME INSTALLATION
W/ INSTALLATION CLIP AT MULLIONS

FIN FRAME INSTALLATION
W/ INSTALLATION CLIP AT MULLIONS



1/4" MAX.
SHIM

EXTERIOR

INTERIOR

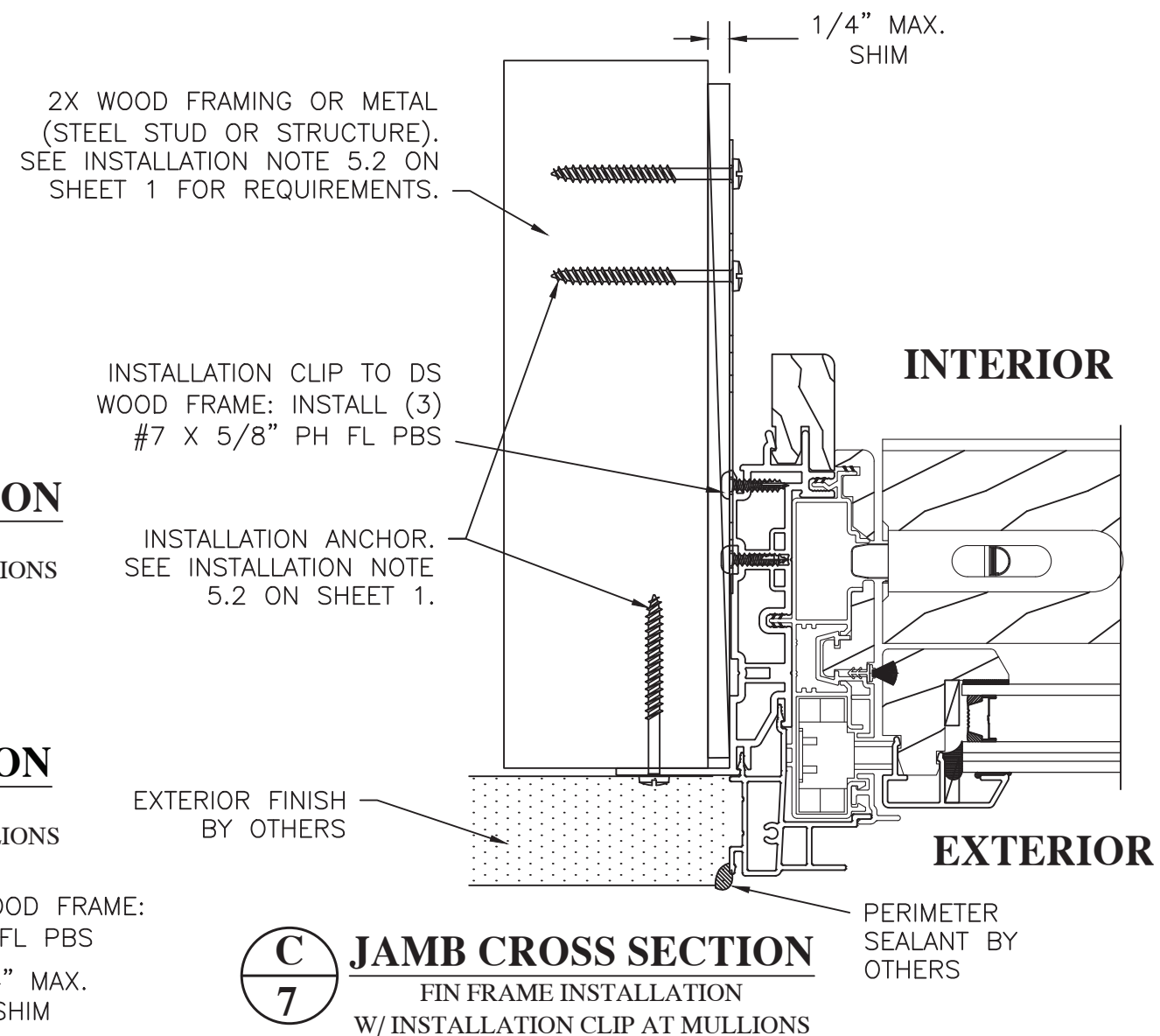
PERIMETER SEALANT BY OTHERS

EXTERIOR
FINISH BY
OTHERS

INSTALLATION ANCHOR.
SEE INSTALLATION NOTE
5.2 ON SHEET 1.

2X WOOD FRAMING OR METAL
(STEEL STUD OR STRUCTURE).
SEE INSTALLATION NOTE 5.2 ON
SHEET 1 FOR REQUIREMENTS.

DOUBLE HUNG SHOWN. SINGLE HUNG SAME. CASEMENT SIMILAR.



1/4" MAX.
SHIM

INSTALLATION CLIP TO DS
WOOD FRAME: INSTALL (3)
#7 X 5/8" PH FL PBS

INSTALLATION ANCHOR.
SEE INSTALLATION NOTE
5.2 ON SHEET 1.

EXTERIOR FINISH
BY OTHERS

INTERIOR

EXTERIOR

PERIMETER
SEALANT BY
OTHERS

JAMB CROSS SECTION FIN FRAME INSTALLATION W/ INSTALLATION CLIP AT MULLIONS

FIN FRAME INSTALLATION W/ INSTALLATION CLIP AT MULLIONS

SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080		PROJECT NO. ACE-2026-127	
TITLE: H3 2.0 FEELSAFE MULLION SYSTEM DOUBLE HUNG CROSS SECTIONS - FIN FRAME INSTALLATION			
PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RJAENGPE@GMAIL.COM		DRAWN BY: RJA	DATE: 4/8/18
		SCALE: N. T. S.	DRAWING NO.: SPW-PTC0001
		REV: A	SHEET: 7 OF 22
		A	UPDATE TO THE 9TH EDITION (2026) FBC
		REV	DESCRIPTION DATE BY

SIERRA PACIFIC WINDOWS
111605 READING ROAD, PO BOX 8489
RED BLUFF, CA 96080

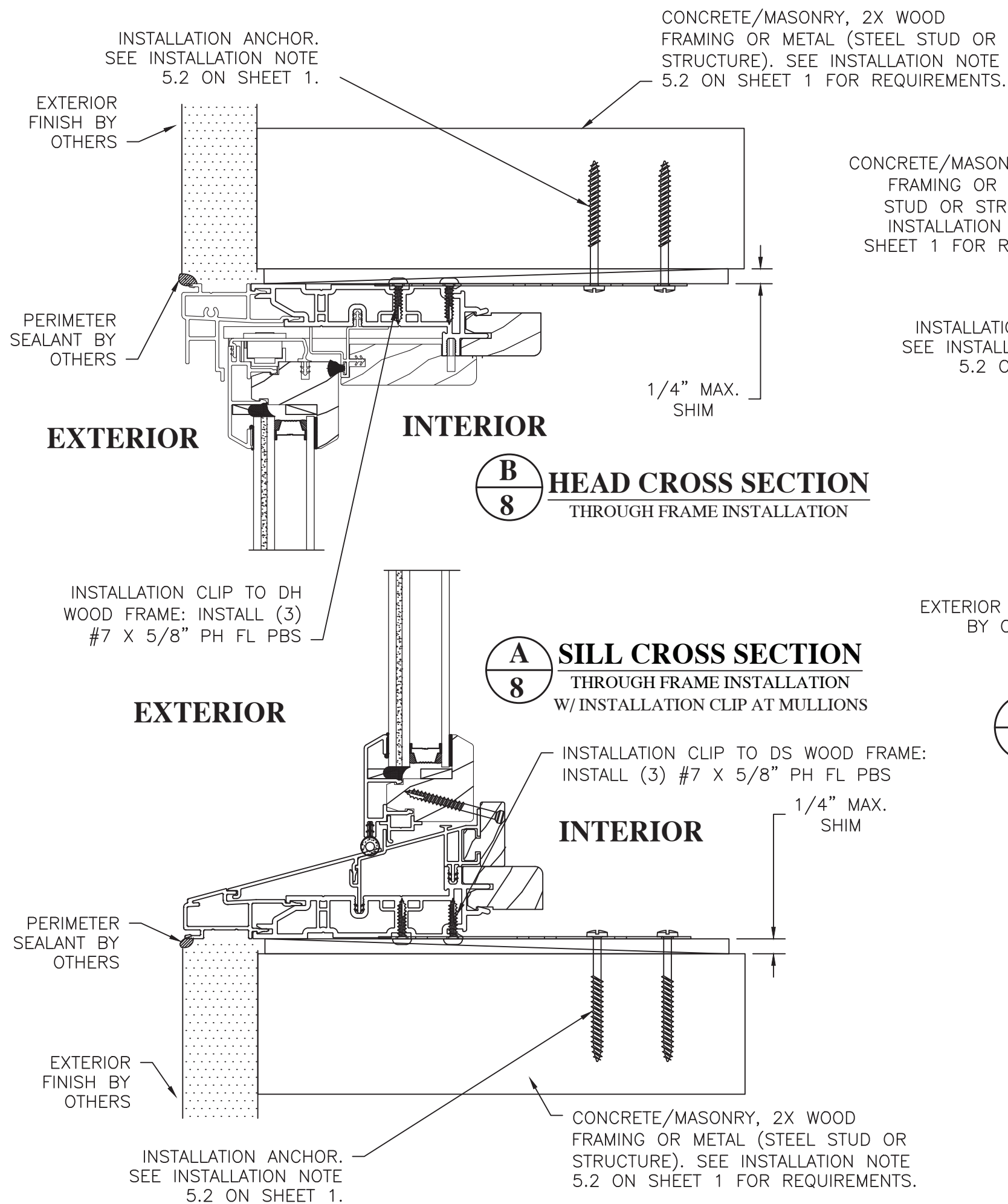
TITLE: H3 2.0 FEELSAFE MULLION SYSTEM
DOUBLE HUNG CROSS SECTIONS - FIN FRAME INSTALLATION

AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RIAENGPE@GMAIL.COM	PREPARED BY:	DATE:
	DRAWN BY: RJA	4/8/18
	SCALE: N.T.S.	DRAWING NO: SPW-PTC0001
	REV: A	SHEET: 7 OF 22

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



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DOUBLE HUNG SHOWN. SINGLE HUNG SAME. CASEMENT SIMILAR.

CONCRETE/MASONRY, 2X WOOD FRAMING OR METAL (STEEL STUD OR STRUCTURE). SEE INSTALLATION NOTE 5.2 ON SHEET 1 FOR REQUIREMENTS.

INSTALLATION ANCHOR. SEE INSTALLATION NOTE 5.2 ON SHEET 1.

EXTERIOR FINISH BY OTHERS

C
8

JAMB CROSS SECTION
THROUGH FRAME INSTALLATION

1/4" MAX. SHIM

INTERIOR

EXTERIOR

PERIMETER SEALANT BY OTHERS

PROJECT NO. ACE-2026-127

SIERRA PACIFIC WINDOWS
11605 READING ROAD, PO BOX 8489
RED BLUFF, CA 96080

TITLE: DOUBLE HUNG CROSS SECTIONS - THROUGH FRAME INSTALLATION

PREPARED BY: AMORUSO CONSULTING ENG., LLC

DATE: 4/8/18

DRAWING NO: SPW-PTC0001

SCALE: N.T.S.

REV: A

SHEET: 8 OF 22

DESCRIPTION

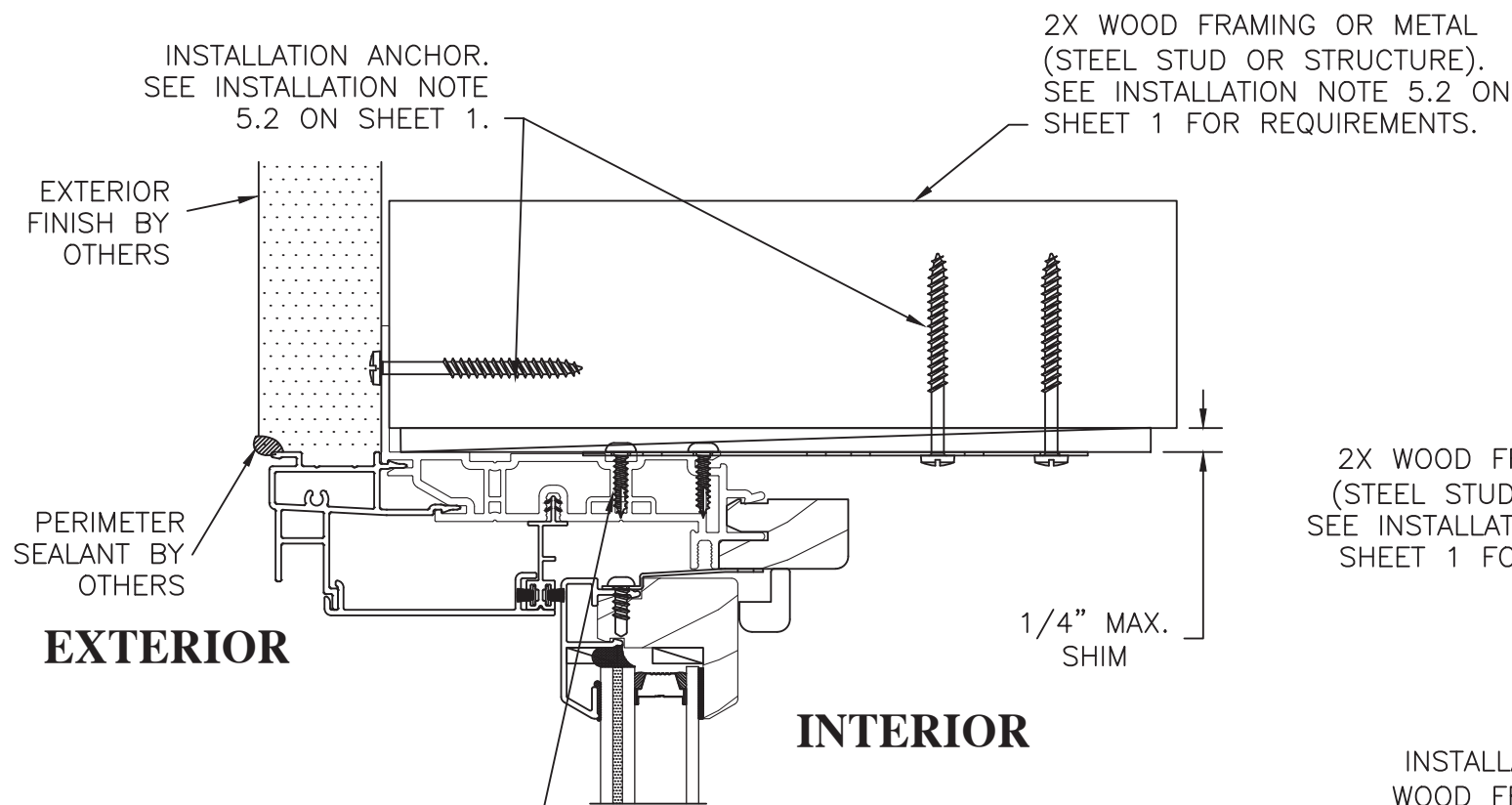
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BY

Robert J. Amoruso, P.E.
Florida P.E. No. 49752

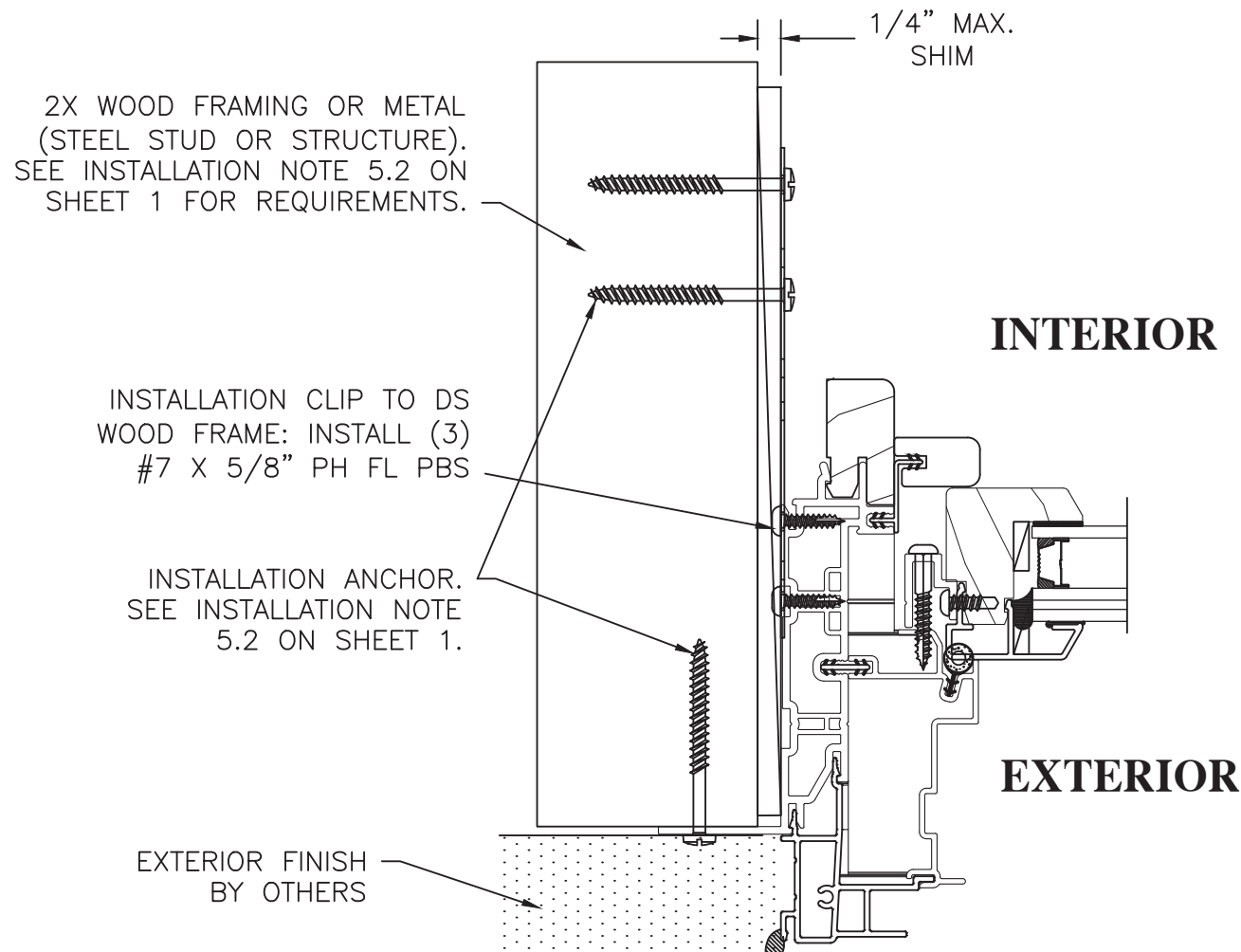


SIGNED/SEALED: 8/14/26



B
HEAD CROSS SECTION
FIN FRAME INSTALLATION
W/ INSTALLATION CLIP AT MULLIONS

INSTALLATION CLIP TO DH
WOOD FRAME: INSTALL (3)
#7 X 5/8" PH FL PBS



C
JAMB CROSS SECTION
FIN FRAME INSTALLATION
W/ INSTALLATION CLIP AT MULLIONS

PERIMETER
SEALANT BY
OTHERS

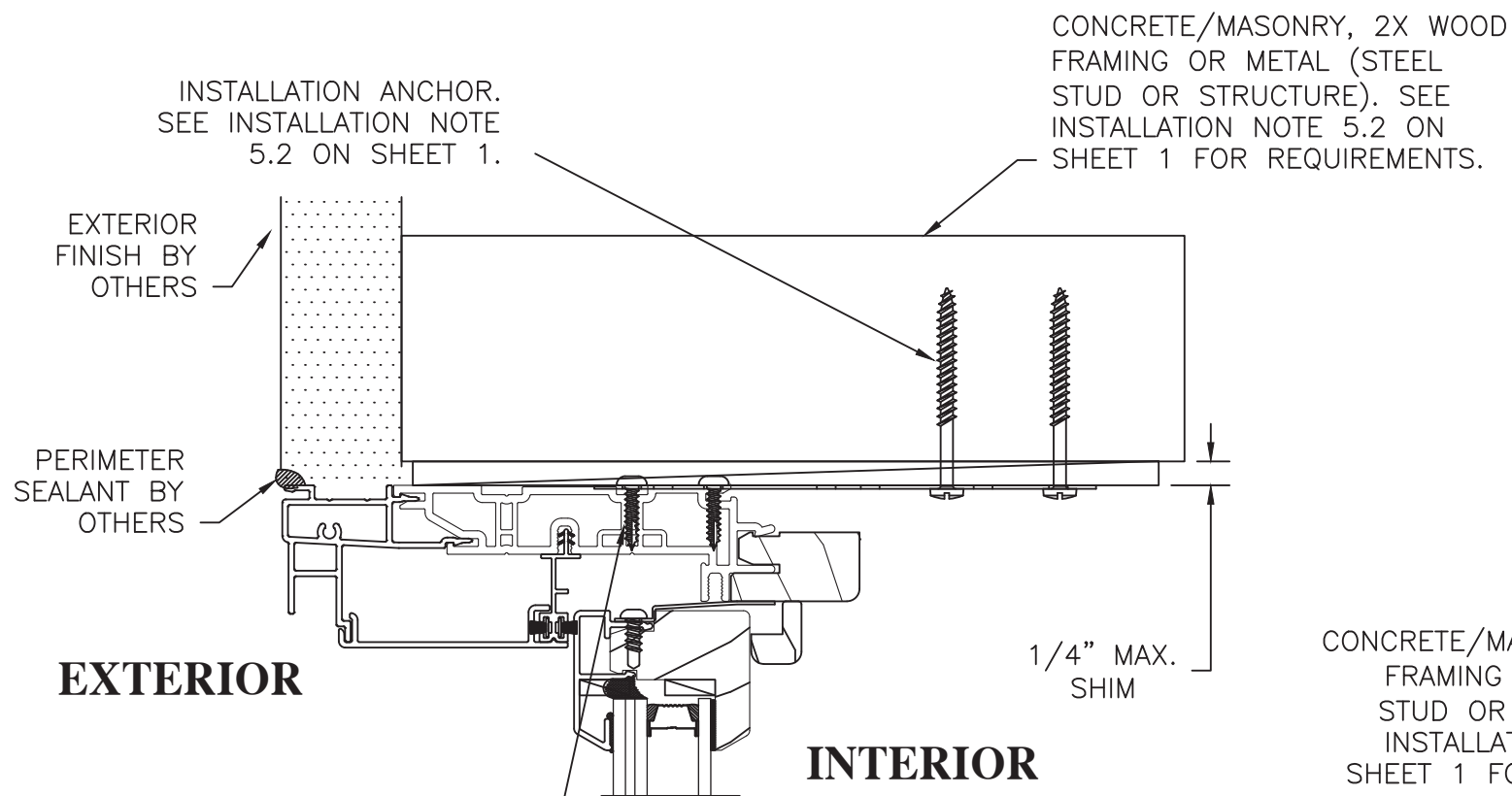
**DOUBLE HUNG TRANSOM SHOWN.
SINGLE HUNG TRANSOM SAME.
CASEMENT TRANSOM SIMILAR.**

PROJECT NO. ACE-2026-127									
SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080	TITLE: DOUBLE HUNG TRANSOM CROSS SECTIONS - FIN FRAME INSTALLATION	DRAWN BY: RJA	DATE: 4/8/18	SCALE: N.T.S.	DRAWING NO: SPW-PTC0001	SHEET: 9 OF 22	REV: A	DESCRIPTION	BY RJA
PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RIAENGPE@GMAIL.COM	DATE: 4/8/18	SCALE: N.T.S.	DRAWING NO: SPW-PTC0001	SHEET: 9 OF 22	REV: A	DESCRIPTION	BY RJA	DATE 8/14/26	BY RJA

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



SIGNED/SEALED: 8/14/26

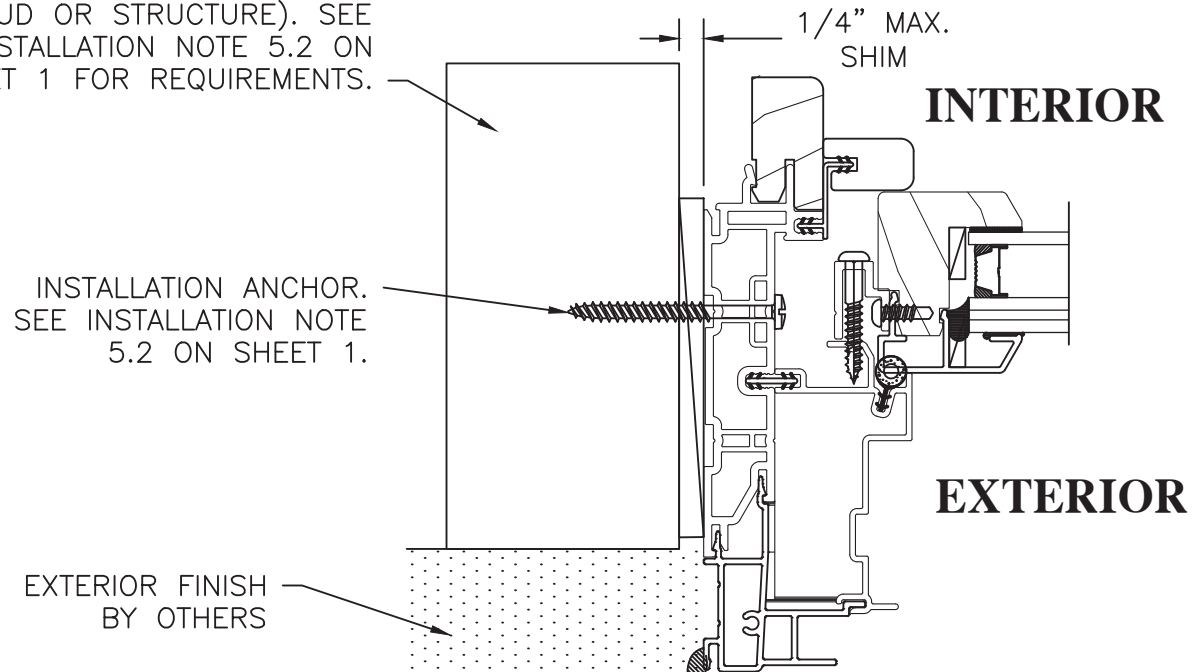


B
10 **HEAD CROSS SECTION**
THROUGH FRAME INSTALLATION

INSTALLATION CLIP TO DH
WOOD FRAME: INSTALL (3)
#7 X 5/8" PH FL PBS

**DOUBLE HUNG TRANSOM SHOWN.
SINGLE HUNG TRANSOM SAME.
CASEMENT TRANSOM SIMILAR.**

CONCRETE/MASONRY, 2X WOOD
FRAMING OR METAL (STEEL
STUD OR STRUCTURE). SEE
INSTALLATION NOTE 5.2 ON
SHEET 1 FOR REQUIREMENTS.



C
10 **JAMB CROSS SECTION**
THROUGH FRAME INSTALLATION

PERIMETER
SEALANT BY
OTHERS

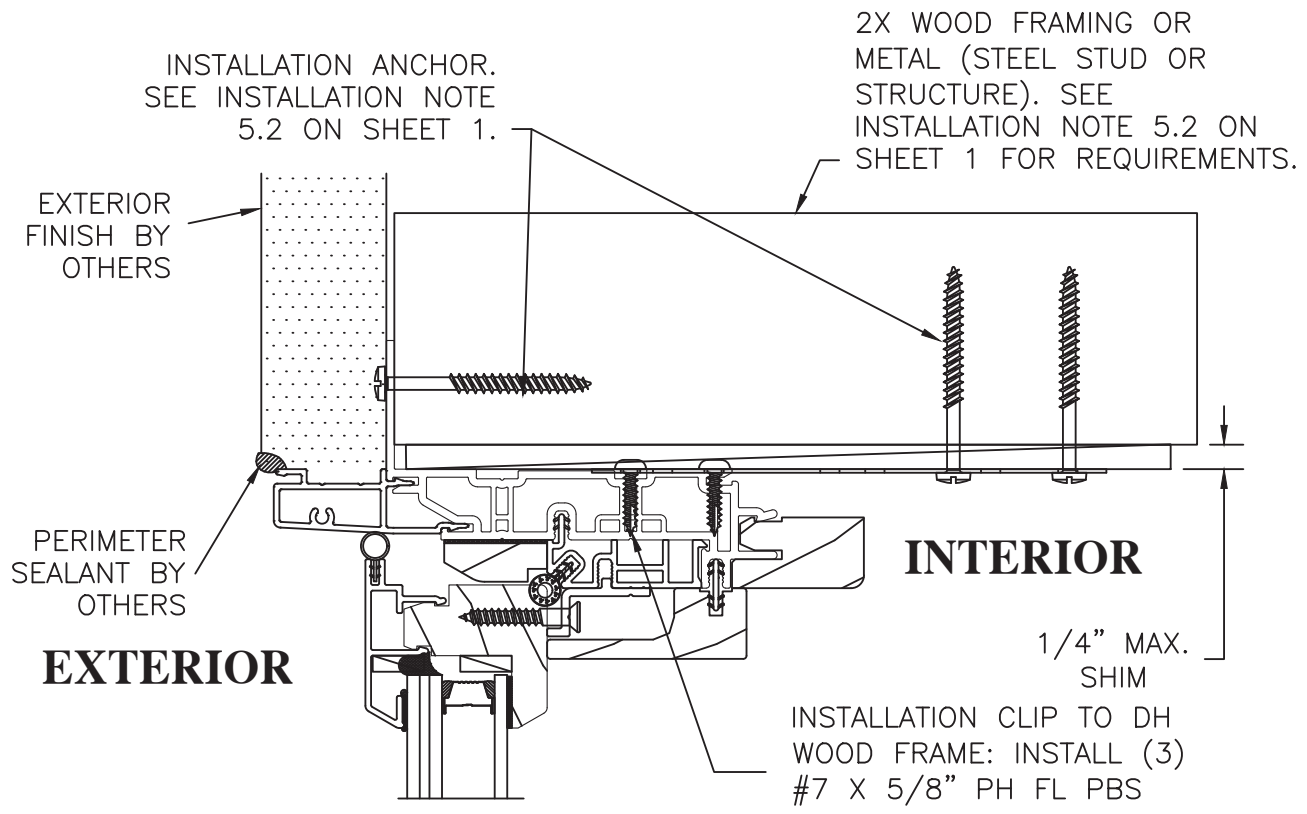
PROJECT NO. ACE-2026-127					
				UPDATE TO THE 9TH EDITION (2026) FBC	8/14/26
					RJA
					DATE
					BY

SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080	H3 2.0 FEELS SAFE MULLION SYSTEM DOUBLE HUNG TRANSOM CROSS SECTIONS - THROUGH FRAME INSTALLATION			
	DRAWN BY:	RJA	DATE:	4/8/18
	SCALE:	N.T.S.	DRAWING NO.:	SPW-PTC0001
	REV:	A	SHEET:	10 OF 22
PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RIAENGPE@GMAIL.COM				

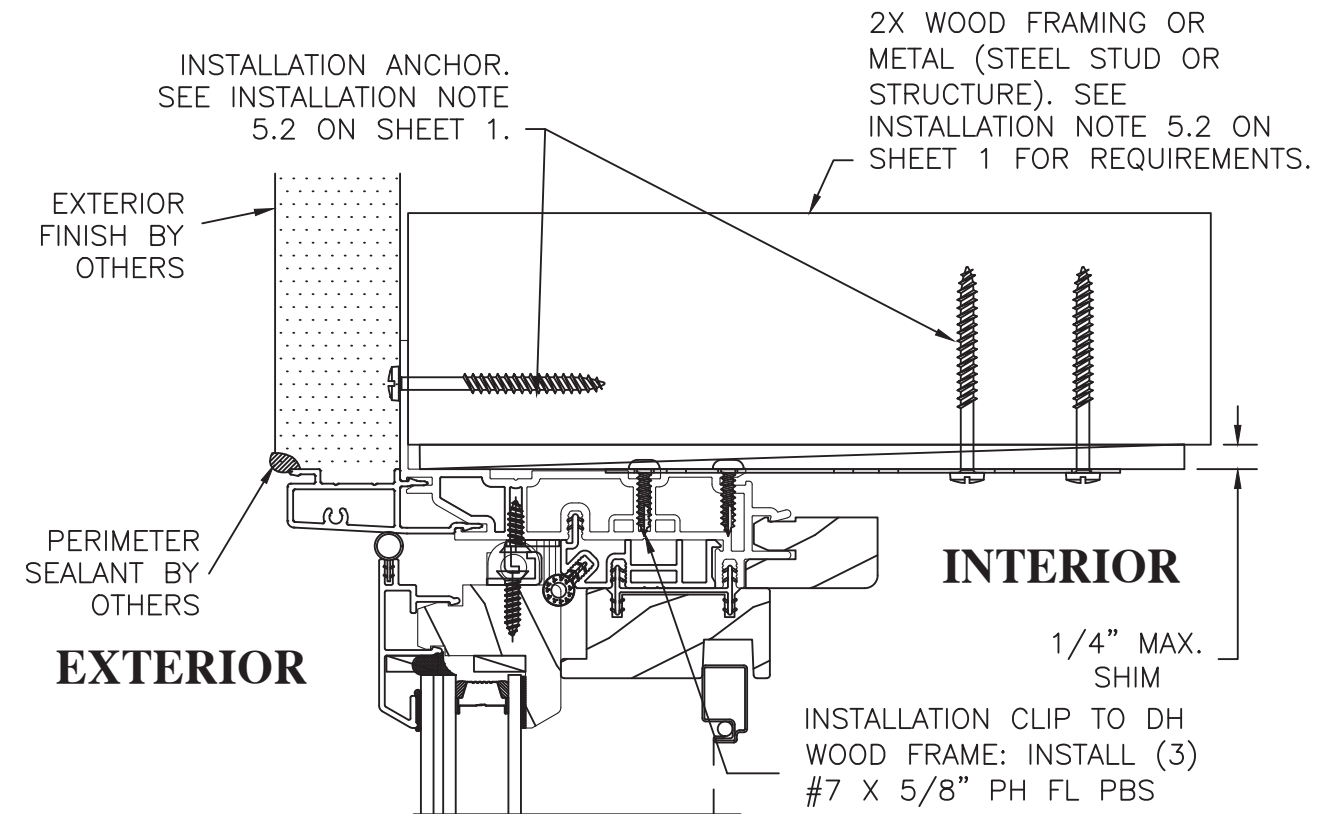
Robert J. Amoruso, P.E.
Florida P.E. No. 49752



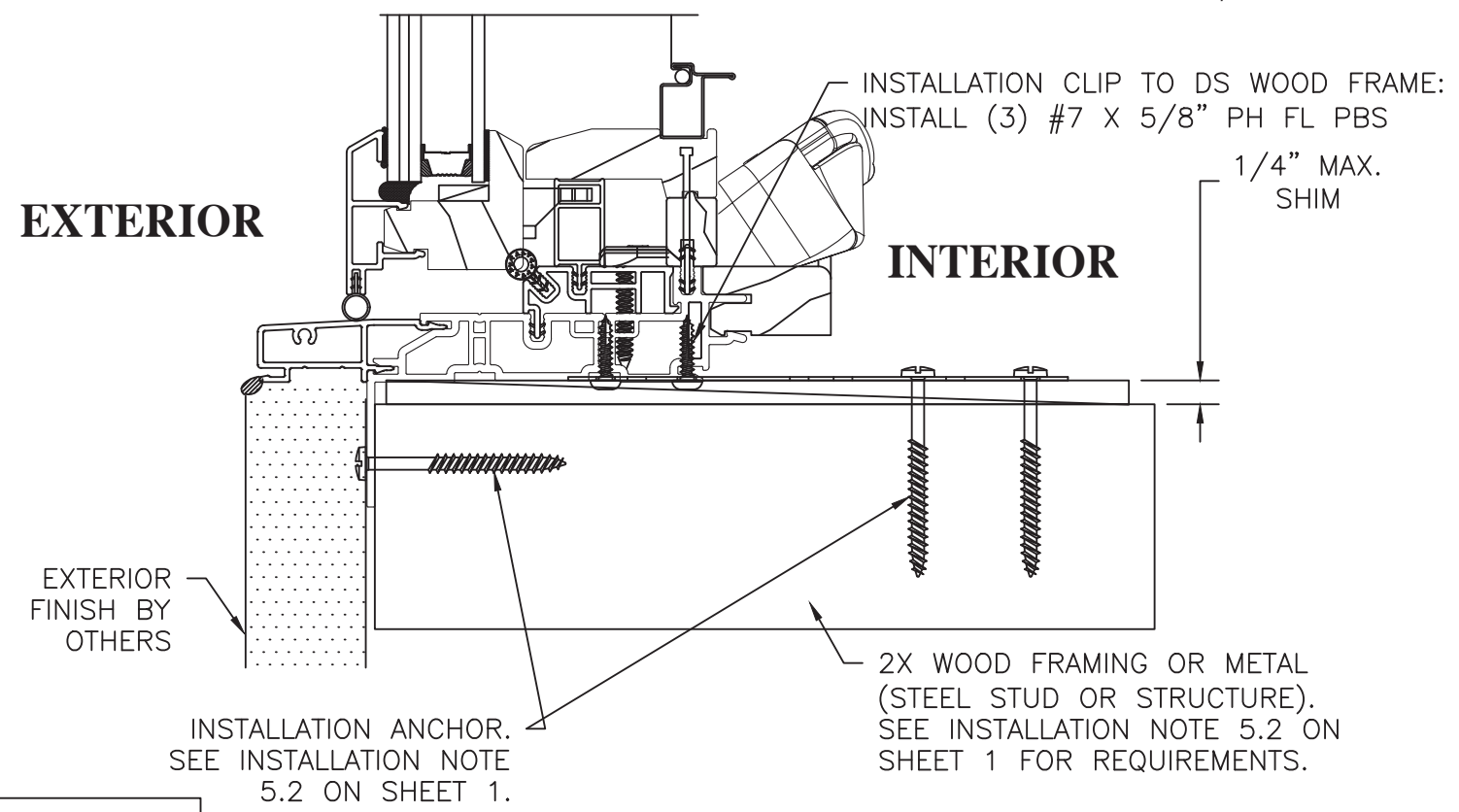
SIGNED/SEALED: 8/14/26



B
11 **HEAD - FIXED CROSS SECTION**
FIN FRAME INSTALLATION
W/ INSTALLATION CLIP AT MULLIONS



C
11 **HEAD - OPERABLE CROSS SECTION**
FIN FRAME INSTALLATION
W/ INSTALLATION CLIP AT MULLIONS



A
11 **SILL CROSS SECTION**
FIN FRAME INSTALLATION
W/ INSTALLATION CLIP AT MULLIONS

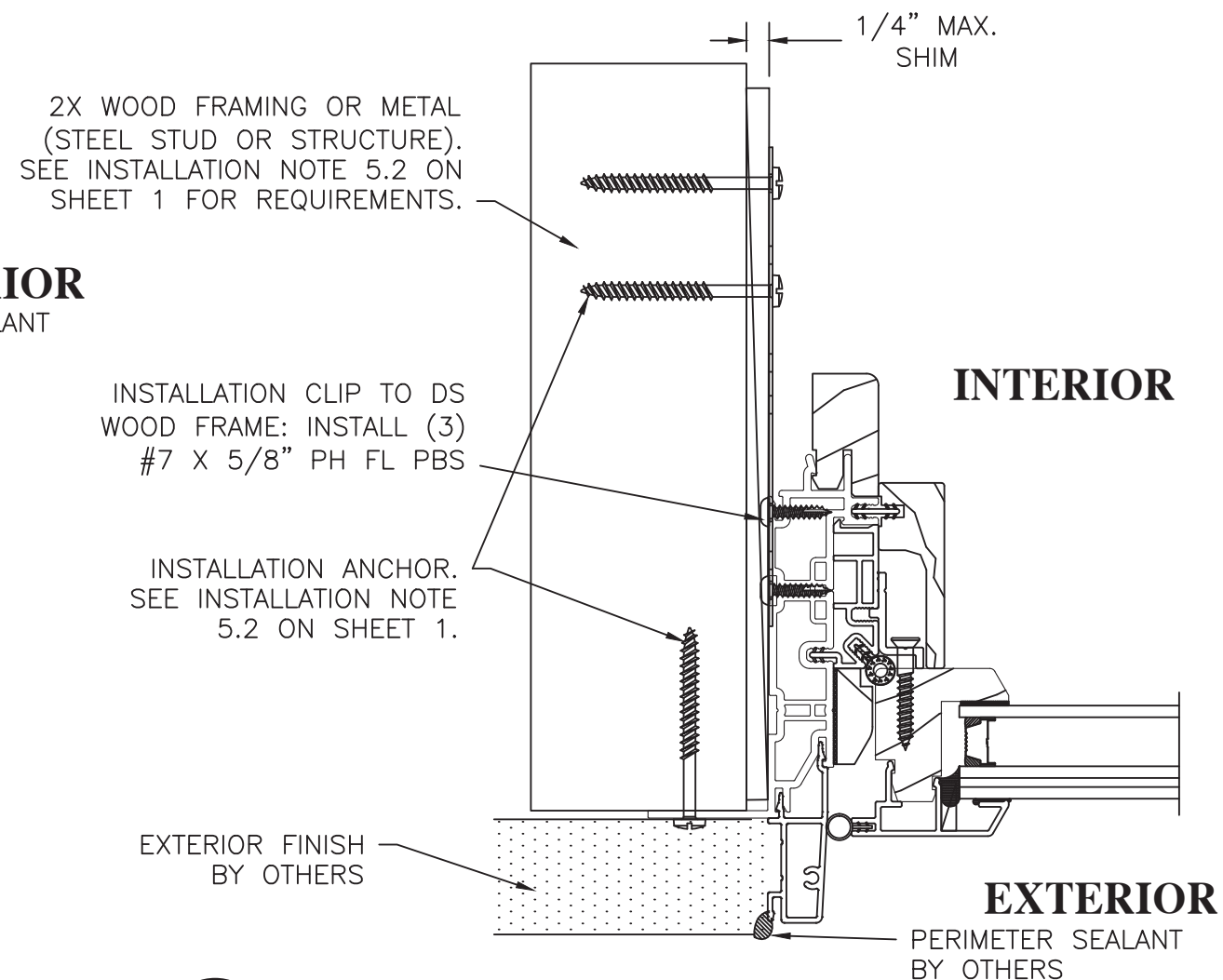
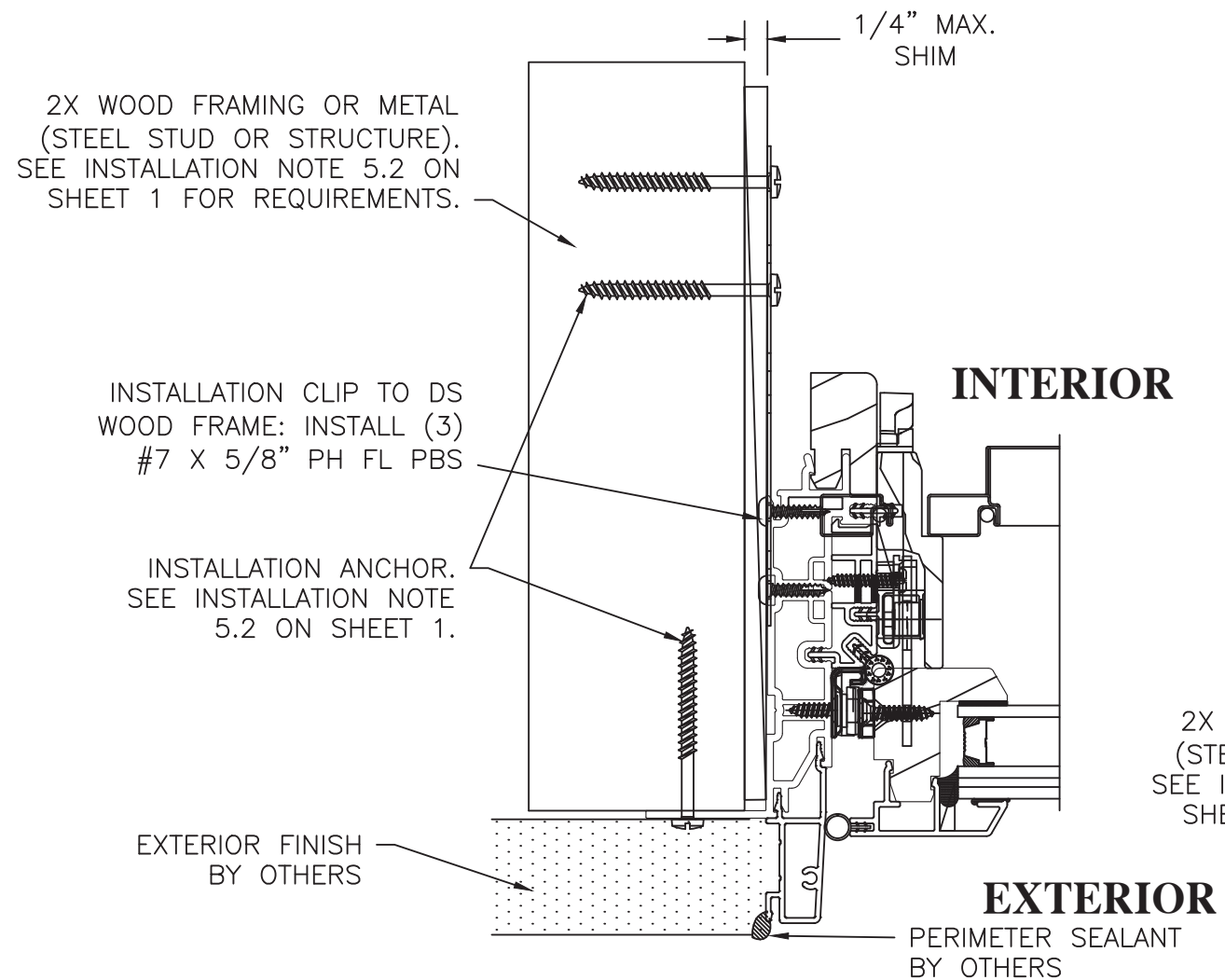
**AWNING WITH & WITHOUT
TRANSOM - HEAD & SILL**

SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080				PROJECT NO. ACE-2026-127			
TITLE: H3 2.0 FEELSAFE MULLION SYSTEM AWNING HEAD & SILL CROSS SECTIONS - FIN FRAME INSTALLATION							
PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RJAENGPE@GMAIL.COM				DRAWN BY: RJA		DATE: 4/8/18	
				SCALE: N.T.S.		DRAWING NO.: SPW-PTC0001	
				REV: A		SHEET: 11 OF 22	
				REV	DESCRIPTION	DATE	BY
				A	UPDATE TO THE 9TH EDITION (2026) FBC	8/14/26	RJA

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



SIGNED/SEALED: 8/14/26



AWNING WITH & WITHOUT TRANSOM - JAMBS

Robert J. Amoruso, P.E.
Florida P.E. No. 49752





INTERIOR

B
13



INTERIOR

C
13



INTERIOR

A
13

SILL CROSS SECTION

THROUGH FRAME INSTALLATION

AWNING WITH & WITHOUT TRANSOM - HEAD & SILL

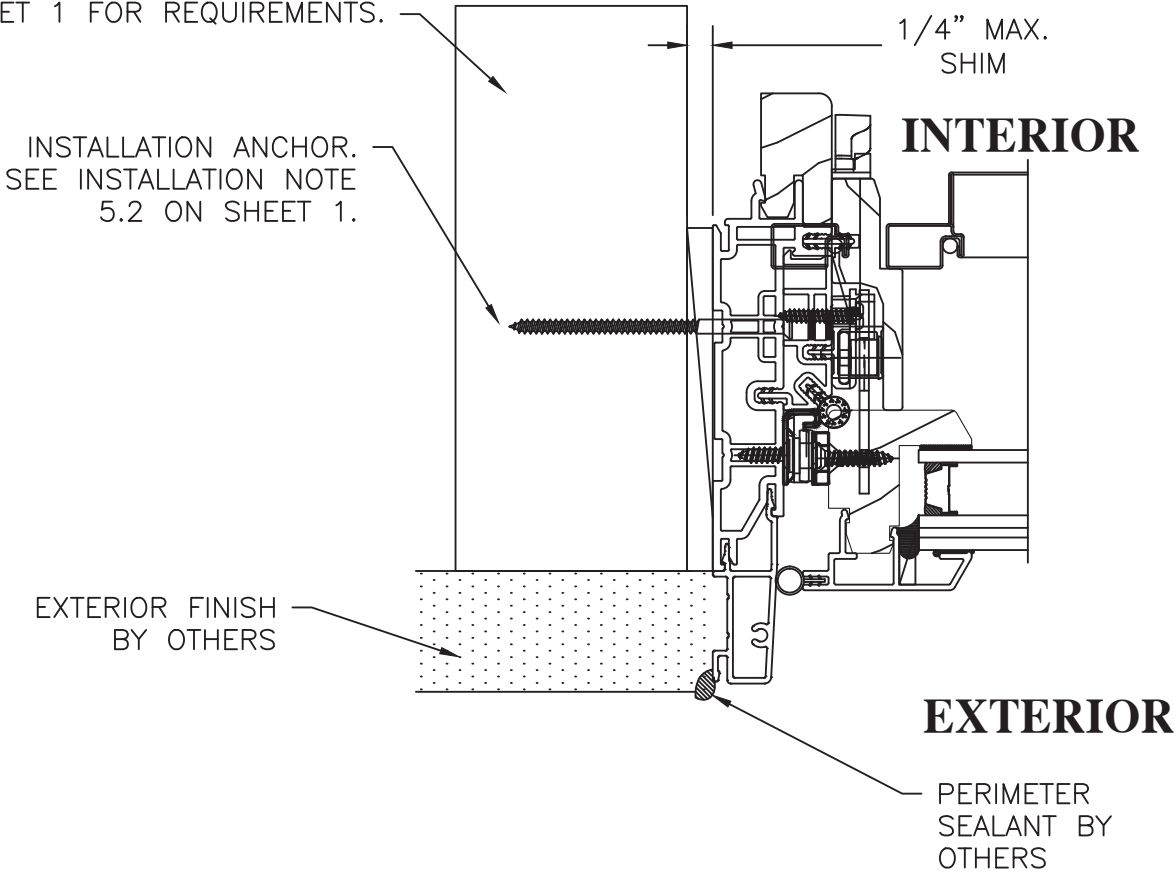
SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080			PROJECT NO. ACE-2026-127		
TITLE: H3 2.0 FEELSAFE MULLION SYSTEM					
AWNING HEAD & SILL CROSS SECTIONS - THROUGH FRAME INSTALLATION					
PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RJAENGPE@GMAIL.COM			DRAWN BY: RJA	DATE: 4/8/18	
			SCALE: N.T.S.	DRAWING NO: SPW-PTC0001	
			REV: A	SHEET: 13 OF 22	
				UPDATE TO THE 9TH EDITION (2026) FBC	RJA
			REV	DESCRIPTION	DATE
					BY

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



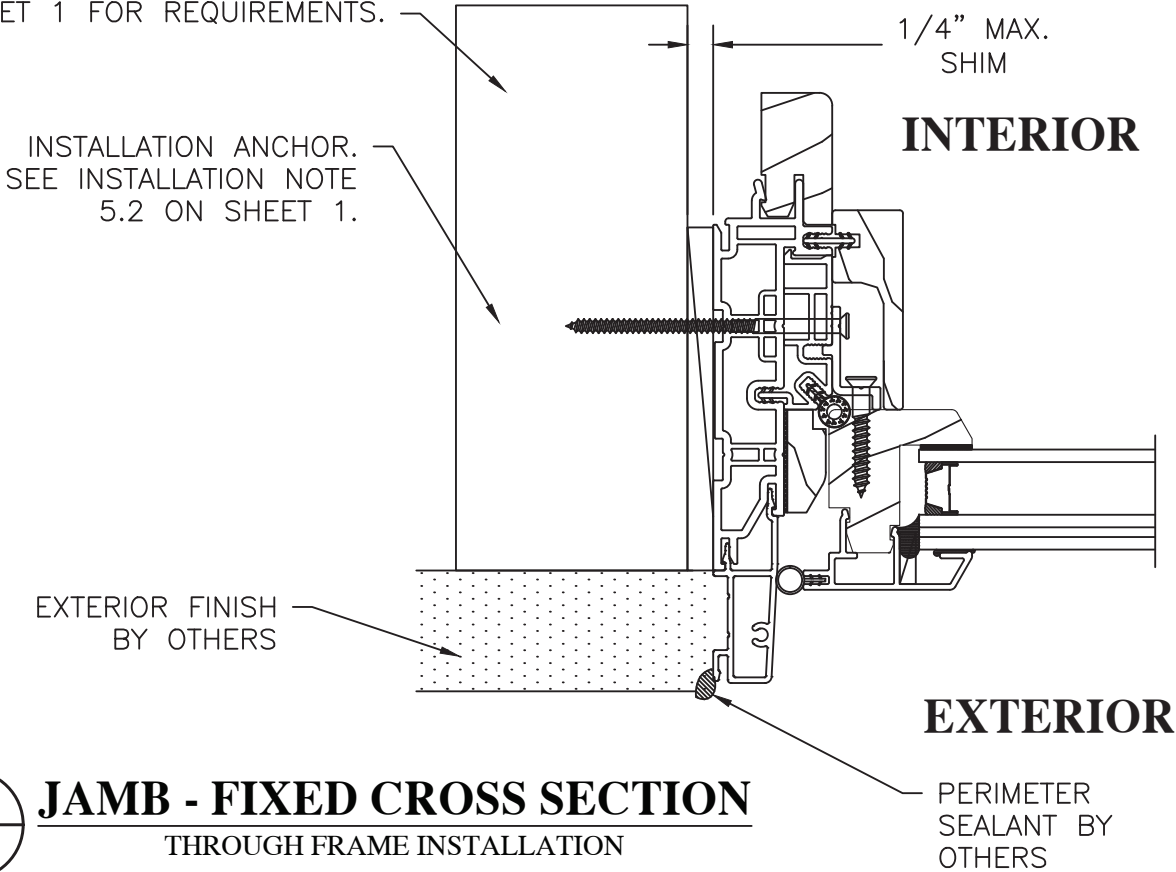
SIGNED/SEALED: 8/14/26

CONCRETE/MASONRY, 2X WOOD
FRAMING OR METAL (STEEL
STUD OR STRUCTURE). SEE
INSTALLATION NOTE 5.2 ON
SHEET 1 FOR REQUIREMENTS.



D
14 **JAMB - OPERABLE CROSS SECTION**
THROUGH FRAME INSTALLATION

CONCRETE/MASONRY, 2X WOOD
FRAMING OR METAL (STEEL
STUD OR STRUCTURE). SEE
INSTALLATION NOTE 5.2 ON
SHEET 1 FOR REQUIREMENTS.



E
14 **JAMB - FIXED CROSS SECTION**
THROUGH FRAME INSTALLATION

**AWNING WITH & WITHOUT
TRANSOM - JAMBS**

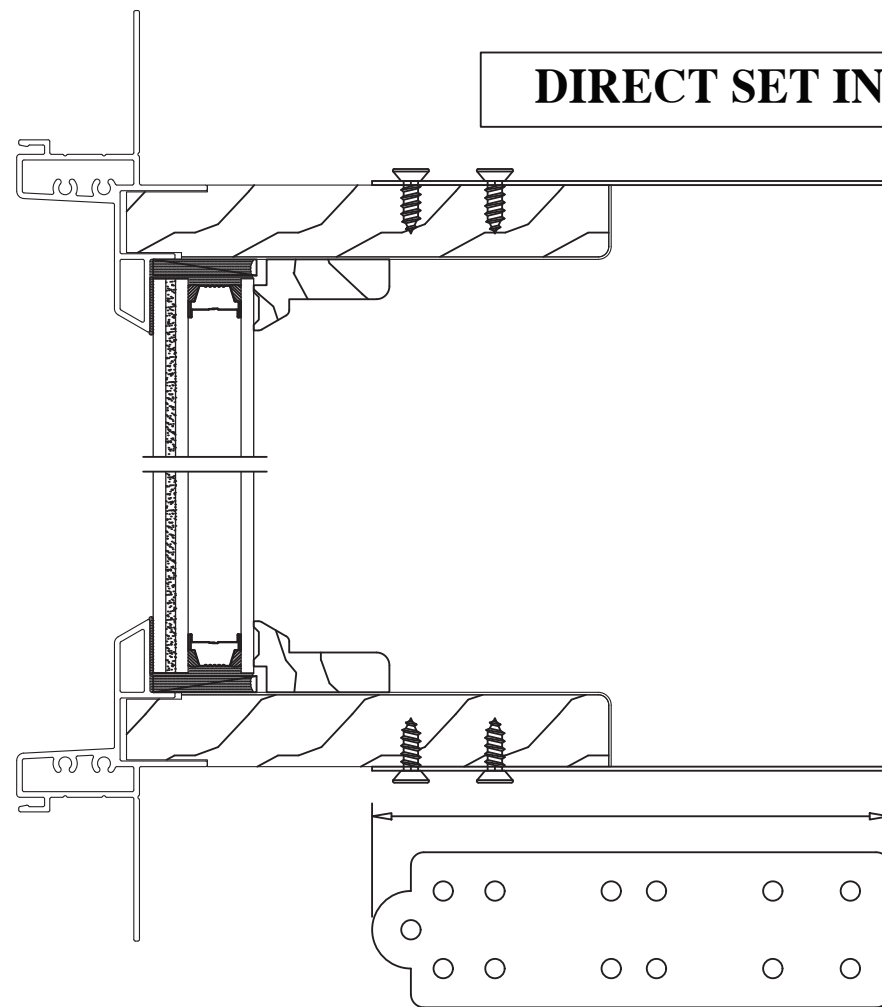
PROJECT NO. ACE-2026-127			
A	UPDATE TO THE 9TH EDITION (2026) FBC	8/14/26	RJA
REV	DESCRIPTION	DATE	BY

SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080			
TITLE: H3 2.0 FEELS SAFE MULLION SYSTEM			
AWNING JAMB CROSS SECTIONS - THROUGH FRAME INSTALLATION			
PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RIAENGPE@GMAIL.COM		DRAWN BY: RJA	DATE: 4/8/18
SCALE: N.T.S.		DRAWING NO: SPW-PTC0001	
REV: A		SHEET: 14 OF 22	

Robert J. Amoruso, P.E.
Florida P.E. No. 49752

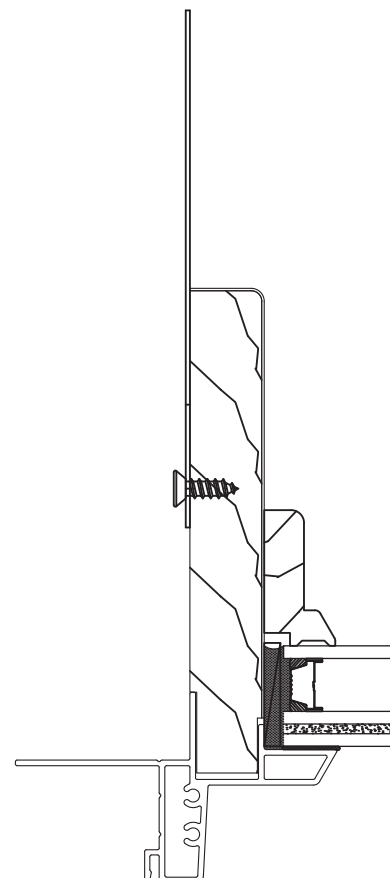
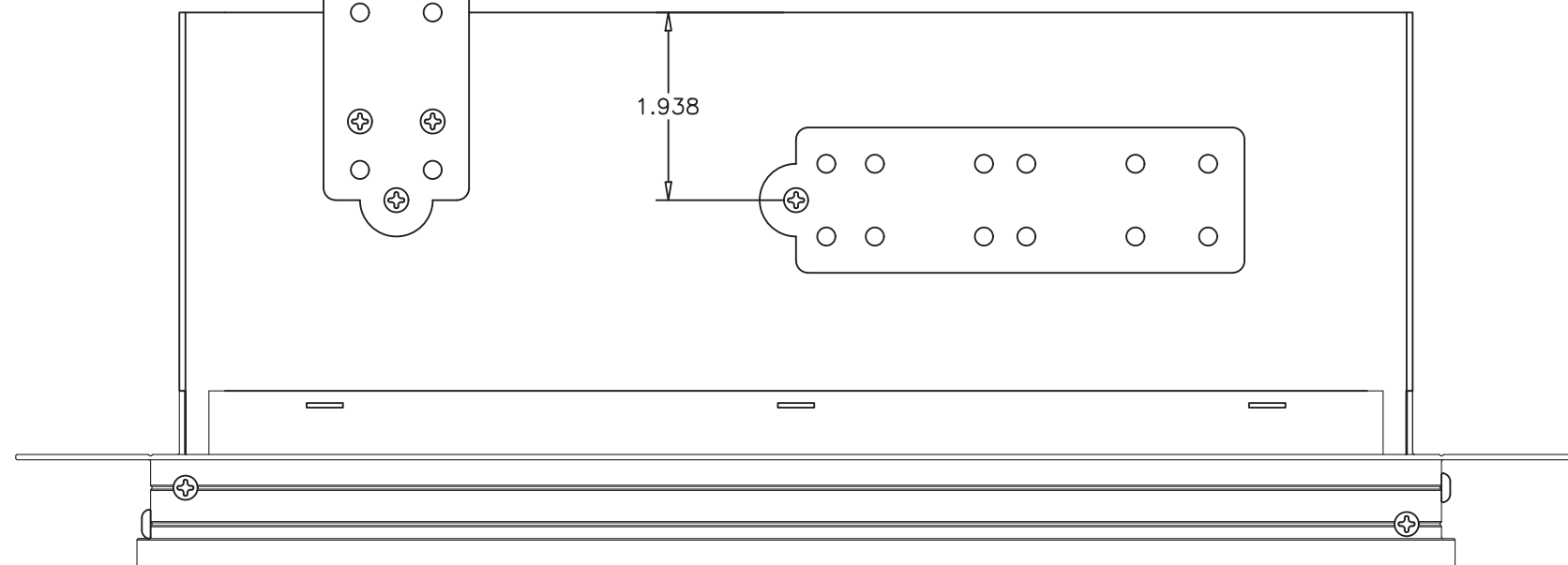


SIGNED/SEALED: 8/14/26



A diagram of a 10-hole punch card. It consists of a vertical rectangle with a semi-circular notch at the bottom center. There are 10 circular holes arranged in two columns of five. The bottom hole in the right column is marked with a plus sign (+).

1.938



DIRECT SET INSTALLATION CLIP

5.0 UP TO 6 $\frac{9}{16}$ JAMB
— 6.0 UP TO 7 $\frac{5}{16}$ JAMB
8.0 OVER 7 $\frac{5}{16}$ JAMB

A circular professional engineer seal for Robert James Amoroso. The outer ring contains the text "ROBERT JAMES AMOROSO" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside the ring, the word "LICENSE" is at the top and "STATE OF FLORIDA" is at the bottom. In the center, the license number "No 49752" is printed above a handwritten signature.

SIGNED/SEALED: 8/14/26

TITLE:

**H3 2.0 FEELSAFE MULLION SYSTEM
DIRECT SET INSTALLATION CLIP**

PREPARED BY:
AMORUSO CONSULTING ENG., LLC
FBPE REGISTRATION NO. 38327
226 N NOVA RD, NO. 142
ORMOND BEACH, FL 32174
RIAENGPE@GMAIL.COM

DRAWN BY:

DRUSO CONSULTING ENG., LLC
PE REGISTRATION NO. 38327

PE REGISTRATION NO. 383

226 N INOARD, NO. 142
ORMOND BEACH, FL 32174
RJAENGPE@GMAIL.COM

DATE: 4/8/18

DRAWING NO:

SHEET: SPW-P1C00

DATE: _____

SHEET: SPW-P1C00

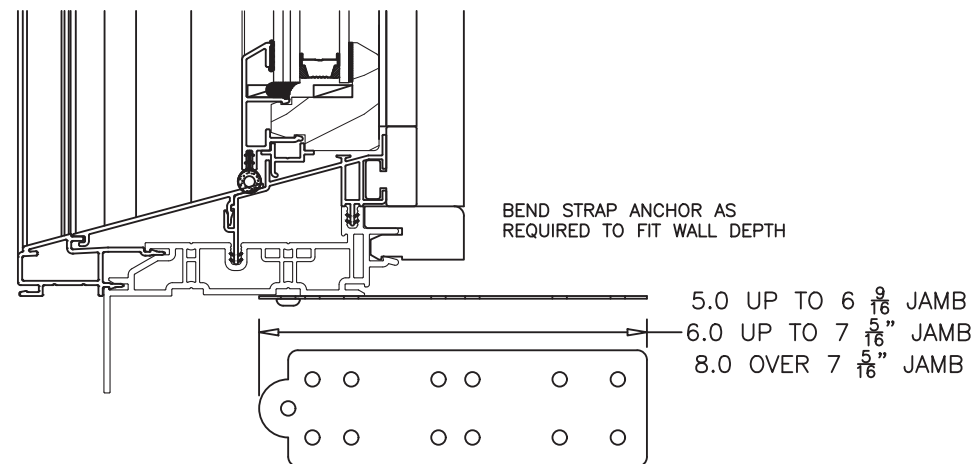
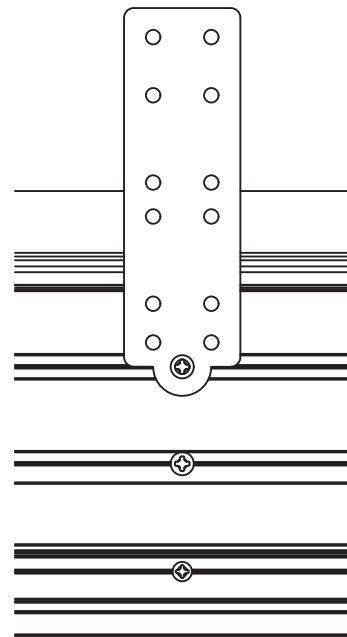
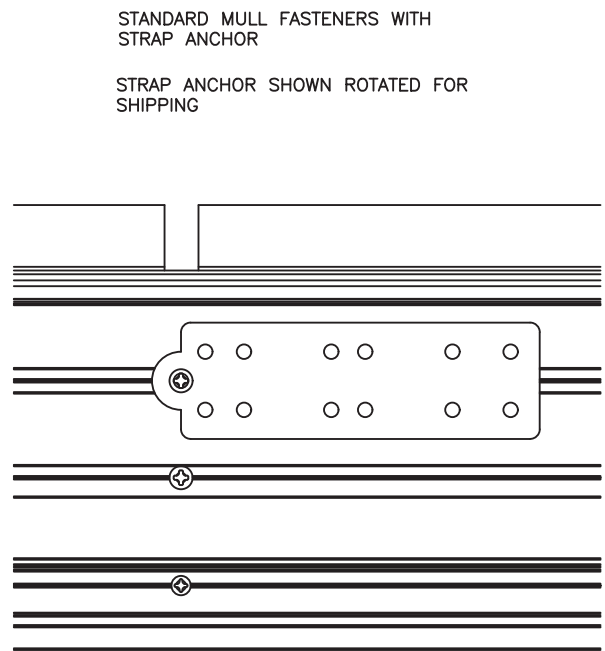
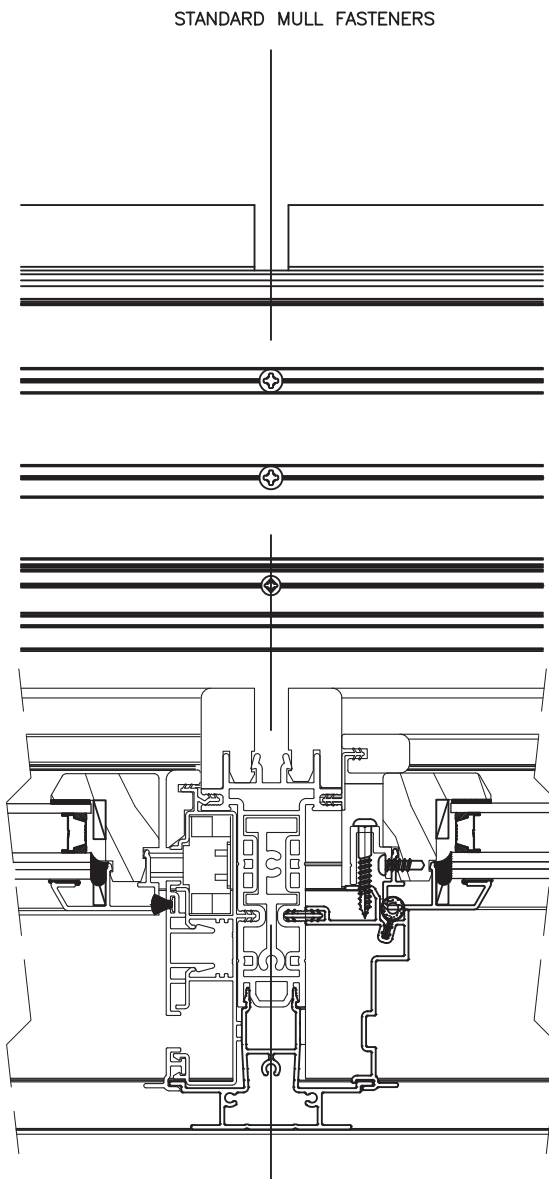
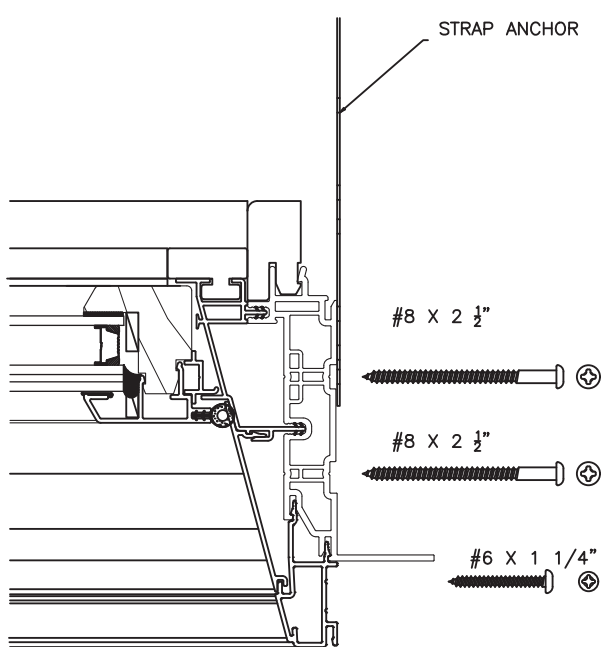
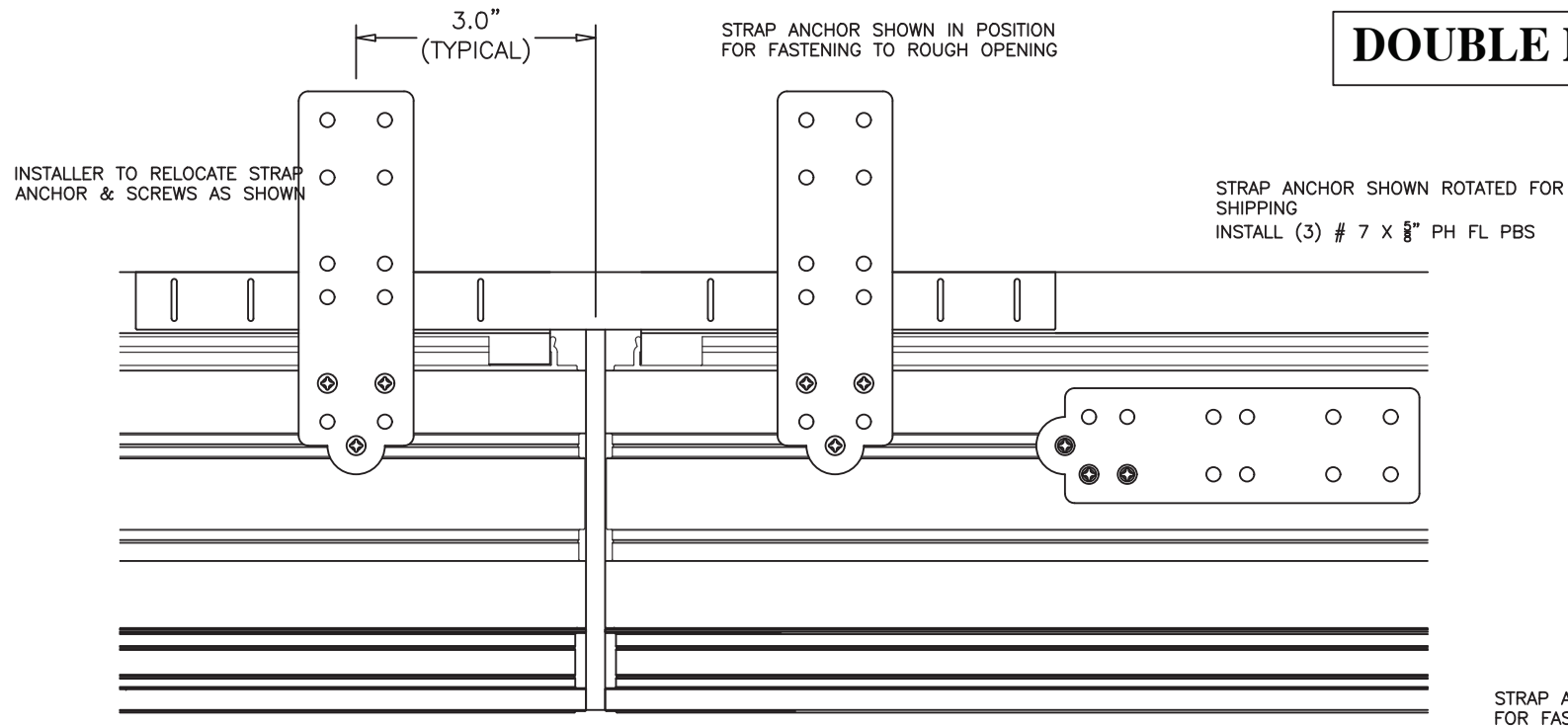
PROJECT NO. ACE-2026-127

UPDATE TO THE 9TH	8/14/26
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8/14/26	RJA
---------	-----

DATE	BY
------	----

DOUBLE HUNG INSTALLATION CLIP



PROJECT NO. ACE-2026-127				
A	UPDATE TO THE 9TH EDITION (2026) FBC	8/14/26	RJA	
REV	DESCRIPTION	DATE	BY	

TITLE:		SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080		
H3 2.0 FEELS SAFE MULLION SYSTEM DOUBLE HUNG INSTALLATION CLIP				
PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RIAENGPE@GMAIL.COM	DRAWN BY:	RJA	DATE:	4/8/18
	SCALE:	N.T.S.	DRAWING NO:	SPW-PTC0001
	REV:	A	SHEET:	16 OF 22

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



SIGNED/SEALED: 8/14/26

AWNING INSTALLATION CLIP

INSTALLER TO RELOCATE STRAP
ANCHOR & SCREWS AS SHOWN

3.0"
(TYPICAL)

STRAP ANCHOR SHOWN IN POSITION
FOR FASTENING TO ROUGH OPENING

STRAP ANCHOR SHOWN ROTATED FOR SHIPPING
INSTALL (3) # 7 X $\frac{5}{8}$ " PH FL PBS

STRAP ANCHOR

#8 x 2 1/2"

#8 x 2 1/2"

#6 X 1 1/4"

BEND STRAP ANCHOR AS
REQUIRED TO FIT WALL DEPTH

5.0 UP TO 6 $\frac{9}{16}$ JAMB
-6.0 UP TO 7 $\frac{5}{16}$ " JAMB
8.0 OVER 7 $\frac{5}{16}$ " JAMB

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



SIGNED/SEALED: 8/14/26

PROJECT NO. ACE-2026-127

SIERRA PACIFIC WINDOWS
11605 READING ROAD, PO BOX 8489
RED BLUFF, CA 96080

TITLE:

H3 2.0 FEELSAFE MULLION SYSTEM AWNING INSTALLATION CLIP

PREPARED BY:

AMORUSO CONSULTING ENG., LLC
FBPE REGISTRATION NO. 38327

226 N NOVA RD, NO. 142
ORMOND BEACH, FL 32174

DRAWN BY:

DRAWING NO: 4/8

4/8/18
DRAWING NO: SPW-PTC0001
SHEET:

DRAWING NO.:
SPW-PTC00
SHEET:

A	UPDATE TO THE 9TH EDITION (2026) FBC
---	--------------------------------------

BY

DATE _____

/14/26

DATE _____

VERTICAL & HORIZONTAL CONFIGURATIONS
BOX MULLION WITH/WITHOUT 1/4" X 5" ALUMINUM PLATE REINFORCEMENT

Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)	
		Positive	Negative			Positive	Negative			Positive	Negative			Positive	Negative
96	22	50	-60	102	22	50	-60	120	22	50	-60	144	22	50	-60
	30	50	-60		30	50	-60		30	50	-60		30	40	-48
	36	50	-60		36	50	-60		36	50	-60		36	33	-40
	42	50	-60		42	50	-60		42	50	-60		42	29	-35
	44	50	-60		44	50	-60		44	49	-58		44	28	-33
	48	50	-60		48	50	-60		48	45	-54		48	26	-31
	54	50	-60		54	50	-60		54	40	-49		54	23	-28
	60	50	-60		60	50	-60		60	37	-44		60	21	-25
	66	50	-60		66	50	-60		66	34	-41		66	19	-23
	72	50	-60		72	49	-59		72	32	-39		72	18	-22
	78	50	-60		78	47	-57		78	30	-37		78	17	-20
	84	50	-60		84	46	-55		84	29	-35		84	16	-19
96	50	-60	96	44	-53	96	27	-32	96	15	-18				
100	22	50	-60	108	22	50	-60	132	22	50	-60	156	22	42	-51
	24	50	-60		24	50	-60		24	50	-60		24	39	-46
	30	50	-60		30	50	-60		30	50	-60		30	31	-37
	36	50	-60		36	50	-60		36	43	-52		36	26	-31
	42	50	-60		42	50	-60		42	38	-45		42	23	-27
	44	50	-60		44	50	-60		44	36	-43		44	22	-26
	48	50	-60		48	50	-60		48	33	-40		48	20	-24
	54	50	-60		54	50	-60		54	30	-36		54	18	-21
	60	50	-60		60	48	-57		60	28	-33		60	16	-20
	66	50	-60		66	45	-53		66	26	-31		66	15	-18
	72	50	-60		72	42	-51		72	24	-29		72	14	-17
	78	49	-59		78	40	-48		78	23	-27		78	13	-16
84	48	-57	84	39	-47	84	21	-26	84	12	-15				
96	46	-56	96	37	-44	96	20	-24	96	11	-13				

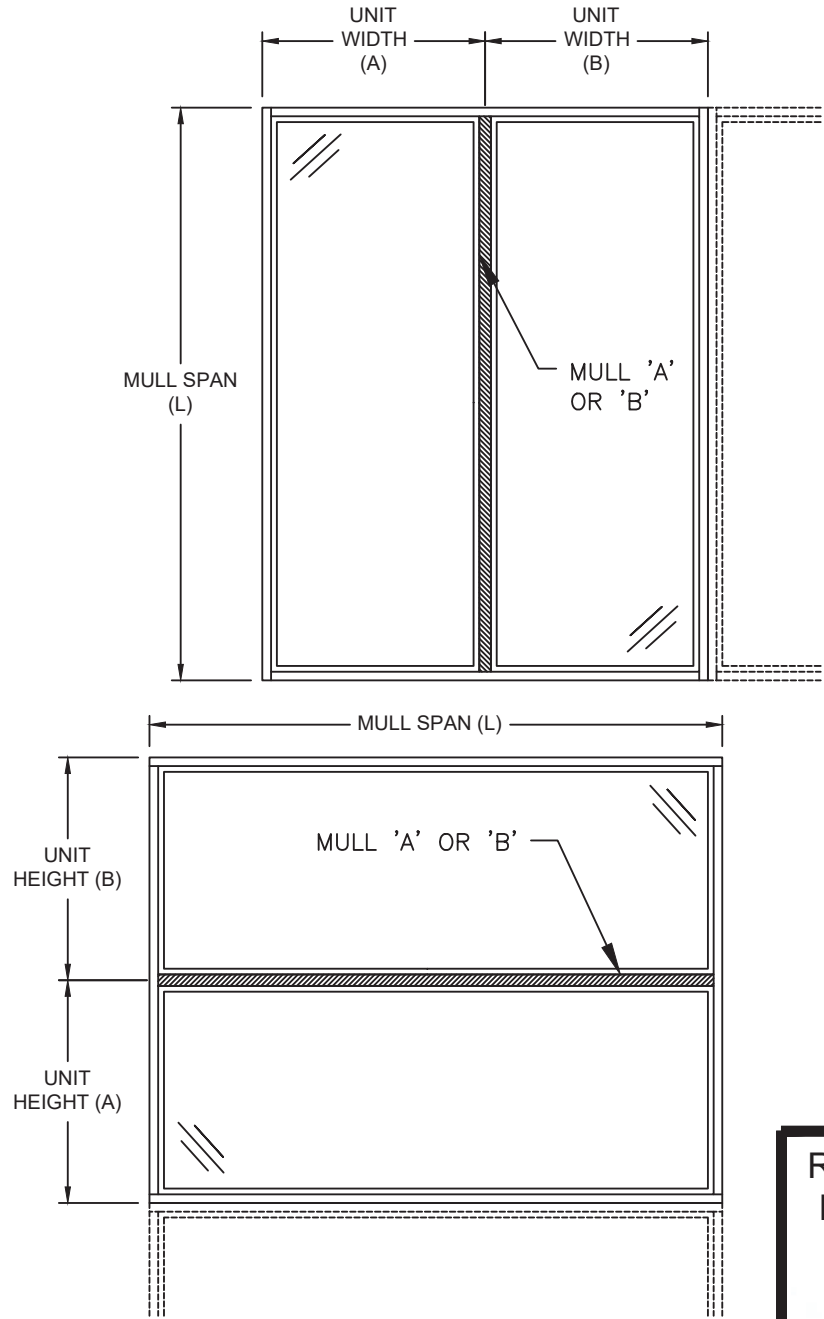
Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)					
		Positive	Negative			Positive	Negative			Positive	Negative			Positive	Negative				
≤ 72	≤ 96	50	-60																
78	18	50	-60	96	18	50	-60	106	18	50	-60	112	18	47	-57	118	18	40	-49
	20	50	-60		20	50	-60		20	43	-51		20	36	-44				
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	36	50	-60		36	39	-47		36	29	-35		36	24	-29		36	21	-25
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	84	36	-44		84	19	-23		84	14	-17		84	11	-14		84	10	-12
	96	37	-44		96	19	-22		96	14	-17		96	11	-13		96	9	-11

DESIGN PRESSURE CAPACITY CHART USAGE

$$\text{LOAD (TRIBUTARY) WIDTH} = (A + B)/2$$

MULL TYPE	
DESIGNATOR	DESCRIPTION
MULL 'A'	BOX MULLION - TIGHT
MULL 'B'	BOX MULLION WITH 1/4" X 5" ALUMINUM PLATE REINFORCEMENT

- 1) ENTER TABLE WITH MULL SPAN (L) AND LOAD WIDTH (LW) THE IS EQUAL TO MULLED ASSEMBLY.
- 2) IF IN BETWEEN MULL SPAN AND LOAD WIDTH IN TABLE, USE NEXT LARGEST VALUES.
- 3) INTERPOLATION BETWEEN MULL SPAN AND LOAD WIDTH VALUES IS ALLOWED.
- 4) SEE SHEET 20 FOR MULL 'A' EXPANDED CHART AND SHEET 21 FOR MULL 'B' EXPANDED CHART



NOTES:

1. APPROVED FENESTRATION TYPES INCLUDE FEELSAFE H3 2.0 DIRECT SET (DS), CASEMENT (CS), SINGLE HUNG (SH), DOUBLE HUNG (DH) AND AWNING (AW) INCLUDING AW & DH PICTURE & TRANSOM.
2. 'TWO-WAY' MULLIONS REFER TO EITHER VERTICAL OR HORIZONTAL WITH INTERMEDIATE MEMBERS SIMILAR TO THOSE DIAGRAMMED ON THIS SHEET.
3. THE POSITIVE AND NEGATIVE DESIGN PRESSURE CHARTS ABOVE ARE APPLICABLE FOR 'STANDARD INSTALLATION' PROCEDURES, SEE DETAILS ON SHEETS 4 TO 14.
4. DESIGN PRESSURES SHALL BE GOVERNED BY THE LESSER OF THE MULLION ASSEMBLY (LISTED IN TABLE) OR INDIVIDUAL WINDOW.
5. MULLIONS MAY BE USED IN ASSEMBLIES UTILIZING MORE THAN TWO WINDOW UNITS AND CAN BE USED FOR UNLIMITED NUMBER OF PANELS.

PROJECT NO. ACE-2026-127

SIERRA PACIFIC WINDOWS
11605 READING ROAD, PO BOX 8489
RED BLUFF, CA 96080

H3 2.0 FEELSAFE MULLION SYSTEM
VERTICAL & HORIZONTAL MULL CONFIGURATIONS - LOAD CAPACITY CHARTS

PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RIAENGPF@GMAIL.COM	DRAWN BY: RJA	DATE: 4/8/18
	SCALE: N.T.S.	DRAWING NO: SPW-PTC0001
	REV: A	SHEET: 18 OF 22

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



SIGNED/SEALED: 8/14/26

TWO-WAY CONFIGURATIONS (WITH INTERMEDIATE MULLIONS)
BOX MULLION WITH/WITHOUT 1/4" X 5" ALUMINUM PLATE REINFORCEMENT

Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)	
		Positive	Negative			Positive	Negative			Positive	Negative			Positive	Negative
96	22	50	-60	102	22	50	-60	120	22	50	-60	144	22	50	-60
	30	50	-60		30	50	-60		30	40	-48				
	36	50	-60		36	50	-60		36	33	-40				
	42	50	-60		42	50	-60		42	29	-35				
	44	50	-60		44	50	-60		44	28	-33				
	48	50	-60		48	50	-60		48	26	-31				
	54	50	-60		54	50	-60		54	23	-28				
	60	50	-60		60	50	-60		60	21	-25				
	66	50	-60		66	50	-60		66	19	-23				
	72	50	-60		72	49	-59		72	18	-22				
	78	50	-60		78	47	-57		78	17	-20				
	84	50	-60		84	46	-55		84	16	-19				
96	50	-60	96	44	-53	96	15	-18							
100	22	50	-60	108	22	50	-60	132	22	50	-60	156	22	42	-51
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	30	50	-60		30	50	-60		30	31	-37				
	36	50	-60		36	50	-60		36	26	-31				
	42	50	-60		42	50	-60		42	23	-27				
	44	50	-60		44	50	-60		44	22	-26				
	48	50	-60		48	50	-60		48	20	-24				
	54	50	-60		54	50	-60		54	18	-21				
	60	50	-60		60	48	-57		60	16	-20				
	66	50	-60		66	45	-53		66	15	-18				
	72	50	-60		72	42	-51		72	14	-17				
	78	49	-59		78	40	-48		78	13	-16				
84	48	-57	84	39	-47	84	12	-15							
96	46	-56	96	37	-44	96	11	-13							

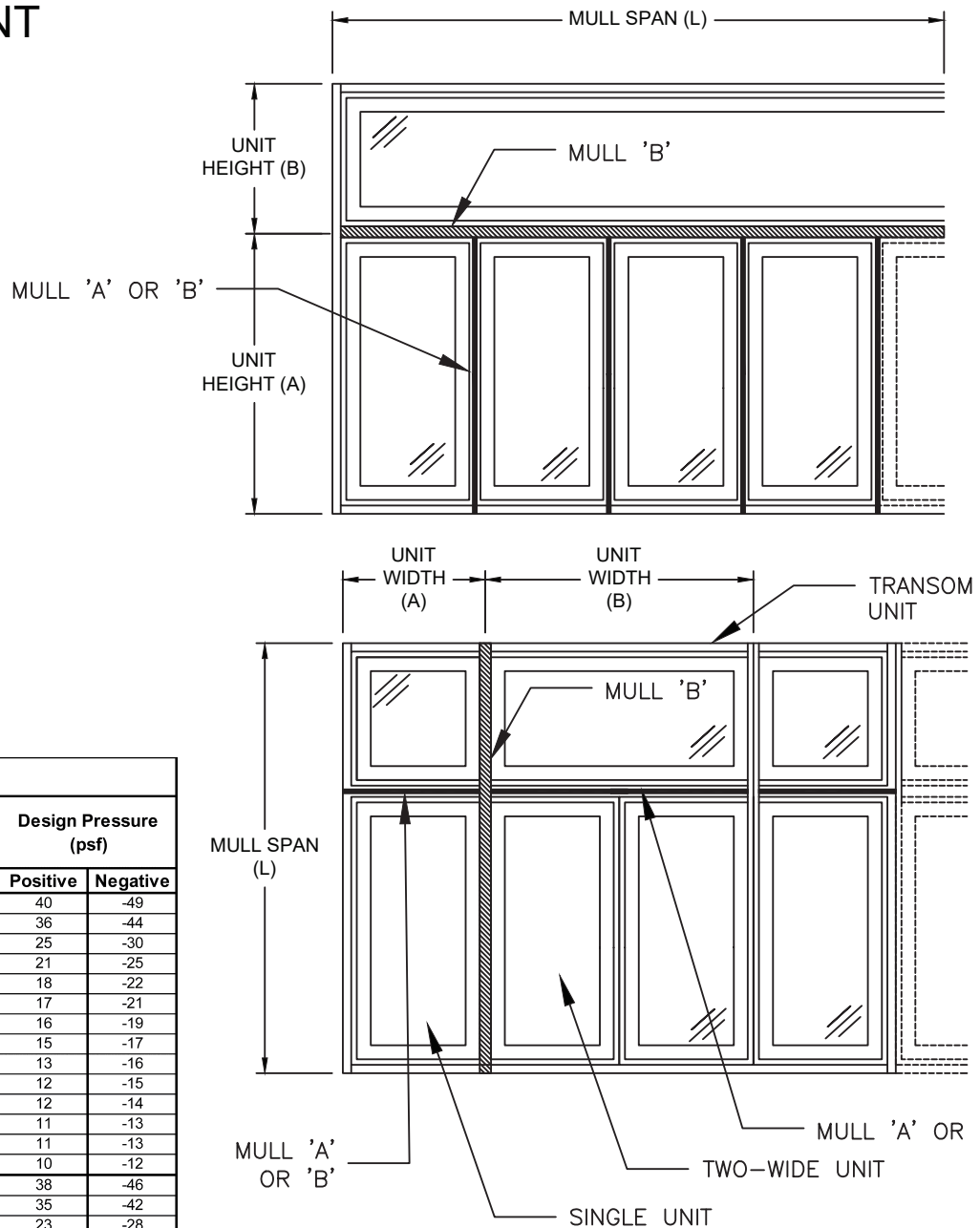
Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)														
		Positive	Negative			Positive	Negative			Positive	Negative			Positive	Negative													
≤ 72	≤ 96	50	-60	96	18	50	-60	106	18	50	-60	112	18	47	-57	118	18	40	-49									
78	18	50	-60			20	50			-60	20			43	-51			20	36	-44								
	20	50	-60			30	46			-56	30			29	-35			30	25	-30								
	30	50	-60			36	39			-47	36			24	-29			36	21	-25								
	36	50	-60			42	34			-41	42			21	-26			42	18	-22								
	42	50	-60			44	33			-40	44			20	-24			44	17	-21								
	44	50	-60			48	31			-37	48			19	-23			48	16	-19								
	48	50	-60			54	28			-34	54			17	-21			54	15	-17								
	54	50	-60			60	26			-32	60			16	-19			60	13	-16								
	60	48	-58			66	25			-30	66			15	-18			66	12	-15								
	66	47	-56			72	24			-28	72			14	-17			72	12	-14								
	72	46	-55			78	23			-27	78			13	-16			78	11	-13								
	78	45	-54			84	22			-27	84			13	-15			84	11	-13								
	84	45	-55			96	22			-26	96			12	-14			96	10	-12								
	84	18	50			-60	100			18	50			-60	108			18	50	-60	116	18	43	-51	120	18	38	-46
		20	50			-60					20			50					-60	20			38	-46			20	35
30		50	-60	30	41	-49		30	26		-31	30	23	-28														
36		50	-60	36	35	-42		36	22		-26	36	20	-24														
42		50	-60	42	30	-36		42	19		-23	42	17	-21														
44		50	-60	44	29	-35		44	18		-22	44	16	-20														
48		48	-57	48	27	-33		48	17		-20	48	15	-18														
54		44	-52	54	25	-30		54	15		-18	54	14	-17														
60		41	-49	60	23	-28		60	14		-17	60	13	-15														
66		39	-47	66	22	-26		66	13		-16	66	12	-14														
72		37	-45	72	20	-25		72	12		-15	72	11	-13														
78		37	-44	78	20	-24		78	12		-14	78	10	-13														
84		36	-44	84	19	-23		84	11		-14	84	10	-12														
96		37	-44	96	19	-22		96	11		-13	96	9	-11														

MULL TYPE	
DESIGNATOR	DESCRIPTION
MULL 'A'	BOX MULLION - TIGHT
MULL 'B'	BOX MULLION WITH 1/4" X 5" ALUMINUM PLATE REINFORCEMENT

DESIGN PRESSURE CAPACITY CHART USAGE

$$\text{LOAD (TRIBUTARY) WIDTH} = (A + B)/2$$

- 1) ENTER TABLE WITH MULL SPAN (L) AND LOAD WIDTH (LW) THE IS EQUAL TO MULLED ASSEMBLY.
- 2) IF IN BETWEEN MULL SPAN AND LOAD WIDTH IN TABLE, USE NEXT LARGEST VALUES.
- 3) INTERPOLATION BETWEEN MULL SPAN AND LOAD WIDTH VALUES IS ALLOWED.
- 4) SEE SHEET 20 FOR MULL 'A' EXPANDED CHART AND SHEET 21 FOR MULL 'B' EXPANDED CHART



NOTES:

1. APPROVED FENESTRATION TYPES INCLUDE FEELSAFE H3 2.0 DIRECT SET (DS), CASEMENT (CS), SINGLE HUNG (SH), DOUBLE HUNG (DH) AND AWNING (AW) INCLUDING AW & DH PICTURE & TRANSOM.
2. 'TWO-WAY' MULLIONS REFER TO EITHER VERTICAL OR HORIZONTAL WITH INTERMEDIATE MEMBERS SIMILAR TO THOSE DIAGRAMMED ON THIS SHEET.
3. THE POSITIVE AND NEGATIVE DESIGN PRESSURE CHARTS ABOVE ARE APPLICABLE FOR 'STANDARD INSTALLATION' PROCEDURES, SEE DETAILS ON SHEETS 5 TO 14.
4. DESIGN PRESSURES SHALL BE GOVERNED BY THE LESSER OF THE MULLION ASSEMBLY (LISTED IN TABLE) OR INDIVIDUAL WINDOW.
5. MULLIONS MAY BE USED IN ASSEMBLIES UTILIZING MORE THAN TWO WINDOW UNITS AND CAN BE USED FOR UNLIMITED NUMBER OF PANELS.

PROJECT NO. ACE-2026-127

SIERRA PACIFIC WINDOWS
11605 READING ROAD, PO BOX 8489
RED BLUFF, CA 96080

TITLE: H3 2.0 FEELSAFE MULLION SYSTEM
TWO-WAY MULLION CONFIGURATIONS - LOAD CAPACITY CHARTS

PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 BJAENGCE@GMAIL.COM	DRAWN BY: RJA	DATE: 4/8/18
	SCALE: N.T.S.	DRAWING NO.: SPW-PTC0001
	REV: A	SHEET: 19 OF 22

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



SIGNED/SEALED: 8/14/26

Maximum Design Pressure Capacity Chart (psf) - Box Mullion Without Reinforcement																			
Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)	
		Positive	Negative			Positive	Negative			Positive	Negative			Positive	Negative				
≤ 72	≤ 96	50	-60																
78	18	50	-60	96	18	50	-60	106	18	50	-60	112	18	47	-57	118	18	40	-49
	20	50	-60		20	50	-60		20	50	-60		20	43	-51		20	36	-44
	22	50	-60		22	50	-60		22	46	-55		22	39	-47		22	33	-40
	24	50	-60		24	50	-60		24	42	-51		24	36	-43		24	31	-37
	26	50	-60		26	50	-60		26	39	-47		26	33	-40		26	28	-34
	28	50	-60		28	50	-59		28	37	-44		28	31	-37		28	26	-32
	30	50	-60		30	46	-56		30	34	-41		30	29	-35		30	25	-30
	32	50	-60		32	44	-53		32	32	-39		32	27	-33		32	23	-28
	34	50	-60		34	41	-50		34	31	-37		34	26	-31		34	22	-26
	36	50	-60		36	39	-47		36	29	-35		36	24	-29		36	21	-25
	38	50	-60		38	38	-45		38	28	-33		38	23	-28		38	20	-24
	39	50	-60		39	37	-44		39	27	-32		39	23	-27		39	19	-23
	40	50	-60		40	36	-43		40	26	-32		40	22	-27		40	19	-23
	42	50	-60		42	34	-41		42	25	-30		42	21	-26		42	18	-22
	44	50	-60		44	33	-40		44	24	-29		44	20	-24		44	17	-21
	46	50	-60		46	32	-38		46	23	-28		46	20	-24		46	17	-20
	48	50	-60		48	31	-37		48	23	-27		48	19	-23		48	16	-19
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84	18	50	-60	100	18	50	-60	108	18	50	-60	116	18	43	-51	120	18	38	-46
	20	50	-60		20	50	-60		20	48	-57		20	38	-46		20	35	-42
	22	50	-60		22	50	-60		22	43	-52		22	35	-42		22	32	-38
	24	50	-60		24	50	-60		24	40	-48		24	32	-39		24	29	-35
	26	50	-60		26	47	-56		26	37	-44		26	30	-36		26	27	-32
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	44	50	-60		44	29	-35		44	23	-27		44	18	-22		44	16	-20
	46	49	-59		46	28	-34		46	22	-26		46	18	-21		46	16	-19
	48	48	-57		48	27	-33		48	21	-25		48	17	-20		48	15	-18
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	96	37	-44		96	19	-22		96	14	-17		96	11	-13		96	9	-11

PROJECT NO. ACE-2026-127

SIERRA PACIFIC WINDOWS
11605 READING ROAD, PO BOX 8489
RED BLUFF, CA 96080

TITLE:
H3 2.0 FEELS SAFE MULLION SYSTEM
BOX MULLION LOAD CAPACITY CHART

PREPARED BY:
AMORUSO CONSULTING ENG., LLC
FBPE REGISTRATION NO. 38327
226 N NOVA RD, NO. 142
ORMOND BEACH, FL 32174
RIAENGPE@GMAIL.COM

DRAWN BY:
RJA

DATE:
4/8/18

DRAWING NO:
SPW-PTC0001

SHEET:
20 OF 22

SCALE:
N.T.S.

REV:
A

DATE
8/14/26

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



SIGNED/SEALED: 8/14/26

Maximum Design Pressure Capacity Chart (psf) - Box Mullion With 1/4" Plate Reinforcement															
Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)		Mull Span (in)	Load Width (in)	Design Pressure (psf)	
		Positive	Negative			Positive	Negative			Positive	Negative			Positive	Negative
96	18	50	-60	102	18	50	-60	120	18	50	-60	144	18	50	-60
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	24	50	-60		24	50	-60		24	50	-60		24	49	-59
	26	50	-60		26	50	-60		26	50	-60		26	46	-55
	28	50	-60		28	50	-60		28	50	-60		28	42	-51
	30	50	-60		30	50	-60		30	50	-60		30	40	-48
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	34	50	-60		34	50	-60		34	50	-60		34	35	-42
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	38	50	-60		38	50	-60		38	50	-60		38	32	-38
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	44	50	-60		44	50	-60		44	49	-58		44	28	-33
	46	50	-60		46	50	-60		46	47	-56		46	27	-32
	48	50	-60		48	50	-60		48	45	-54		48	26	-31
	52	50	-60		52	50	-60		52	42	-50		52	24	-28
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	56	50	-60		56	50	-60		56	39	-47		56	22	-27
60	50	-60	60	50	-60	60	37	-44	60	21	-25				
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72	50	-60	72	49	-59	72	32	-39	72	18	-22				
78	50	-60	78	47	-57	78	30	-37	78	17	-20				
84	50	-60	84	46	-55	84	29	-35	84	16	-19				
96	50	-60	96	44	-53	96	27	-32	96	15	-18				
100	18	50	-60	108	18	50	-60	132	18	50	-60	156	18	50	-60
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68	50	-60	68	44	-52	68	25	-30	68	15	-18				
72	50	-60	72	42	-51	72	24	-29	72	14	-17				
78	49	-59	78	40	-48	78	23	-27	78	13	-16				
84	48	-57	84	39	-47	84	21	-26	84	12	-15				
96	46	-56	96	37	-44	96	20	-24	96	11	-13				

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



SIGNED/SEALED: 8/14/26

PROJECT NO. ACE-2026-127

SIERRA PACIFIC WINDOWS
11605 READING ROAD, PO BOX 8489
RED BLUFF, CA 96080

TITLE:
BOX MULLION W/REINFORCEMENT LOAD CAPACITY CHART

PREPARED BY:
AMORUSO CONSULTING ENG., LLC
FBPE REGISTRATION NO. 38327
226 N NOVA RD, NO. 142
ORMOND BEACH, FL 32174
RIAENGPE@GMAIL.COM

DRAWN BY:
RJA

DATE:
4/8/18

DRAWING NO:
SPW-PTC0001

SHEET:
21 OF 22

8/14/26

UPDATE TO THE 9TH EDITION (2026) FBC

RJA

BY

DESCRIPTION

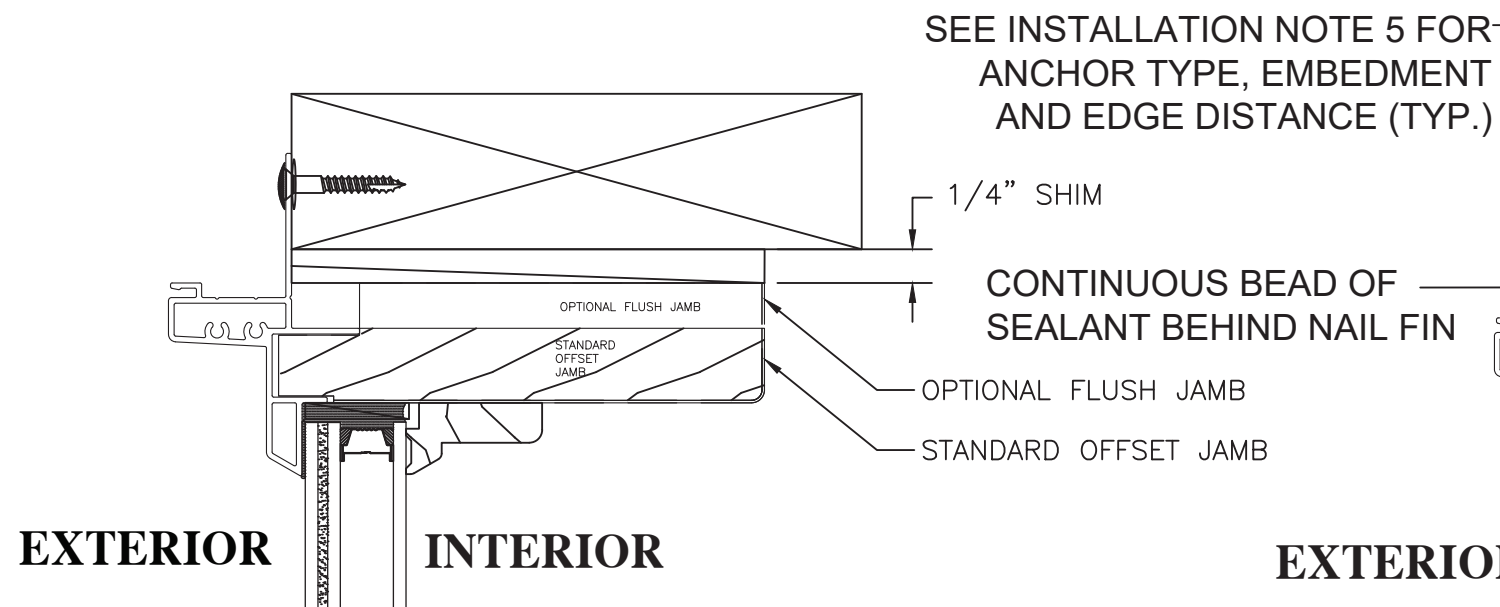
REV

DATE

FRAME JAMB OPTIONS HEAD DETAIL SHOWN, SAME AT SILL AND JAMBS, 1 & 2-WIDE



FEELSAFE H3 2.0 DIRECT SET
NAILING FIN FRAME INSTALLATION
FRAME JAMB OPTIONS



SEE INSTALLATION NOTE
5 FOR EMBEDMENT AND
EDGE DISTANCE (TYP.)

SEE INSTALLATION NOTE 9 FOR
APPLICABLE SUBSTRATES (TYP.)

SEE INSTALLATION
NOTE 3

CONTINUOUS BEAD OF
SEALANT BEHIND NAIL FIN

OPTIONAL FLUSH JAMB
STANDARD OFFSET JAMB

11/16" SHIM

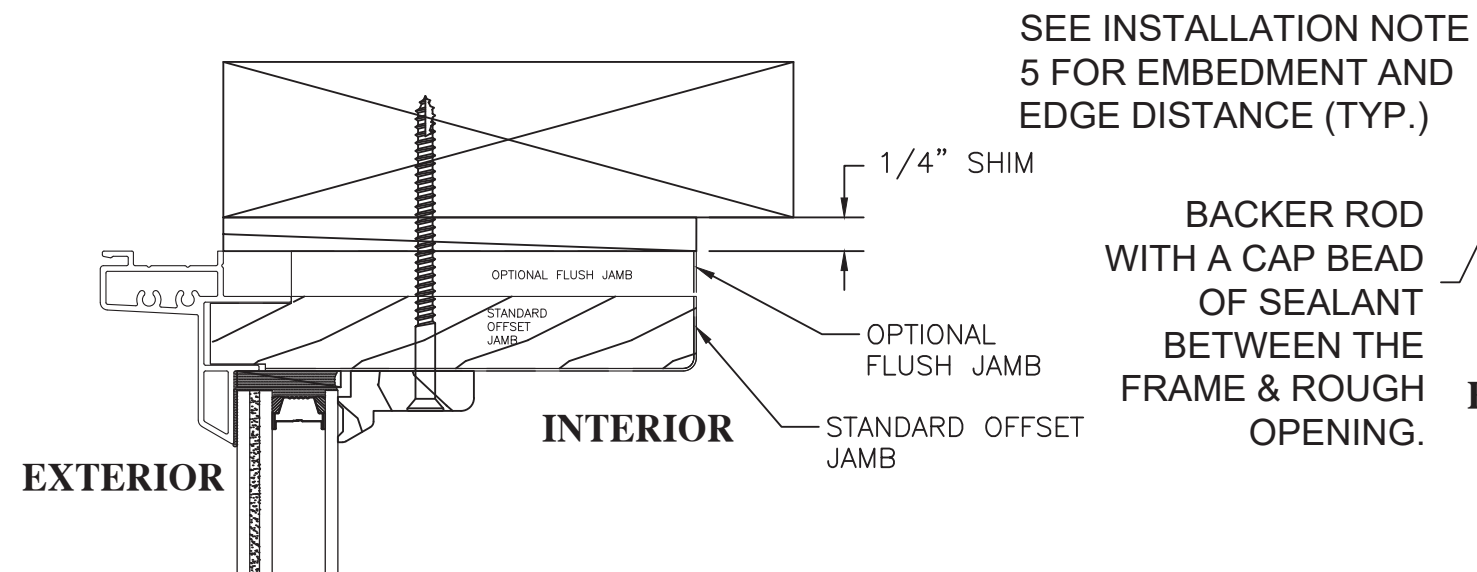
STANDARD OFFSET JAMB

EXTERIOR INTERIOR

FRAME JAMB OPTIONS HEAD DETAIL SHOWN, SAME AT SILL AND JAMBS, 1 & 2-WIDE



FEELSAFE H3 2.0 DIRECT SET
THROUGH FRAME INSTALLATION
FRAME JAMB OPTIONS



SEE INSTALLATION NOTE
5 FOR EMBEDMENT AND
EDGE DISTANCE (TYP.)

SEE INSTALLATION NOTE 9 FOR
APPLICABLE SUBSTRATES (TYP.)

SEE
INSTALLATION
NOTE 3

BACKER ROD
WITH A CAP BEAD
OF SEALANT
BETWEEN THE
FRAME & ROUGH
OPENING.

OPTIONAL FLUSH JAMB
STANDARD OFFSET JAMB

11/16" SHIM

STANDARD
OFFSET JAMB

EXTERIOR

INTERIOR

SEE INSTALLATION NOTE 5 FOR
ANCHOR TYPE, EMBEDMENT AND
EDGE DISTANCE (TYP.)

PROJECT NO. ACE-2026-127

SIERRA PACIFIC WINDOWS
11605 READING ROAD, PO BOX 8489
RED BLUFF, CA 96080

TITLE: H3 2.0 FEELSAFE MULLION SYSTEM
STANDARD AND FLUSH JAMB OPTIONS

PREPARED BY: AMORUSO CONSULTING ENG., LLC
FBPE REGISTRATION NO. 38327
226 N NOVA RD, NO. 142
ORMOND BEACH, FL 32174
RIAENGPE@GMAIL.COM

DRAWN BY: RJA
SCALE: N.T.S.
REV: A
DATE: 4/8/18
DRAWING NO: SPW-PTC0001
SHEET: 22 OF 22

REV	DESCRIPTION	DATE	BY
A	UPDATE TO THE 9TH EDITION (2026) FBC	8/14/26	RJA

Robert J. Amoruso, P.E.
Florida P.E. No. 49752



SIGNED/SEALED: 8/14/26