

SIERRA PACIFIC WINDOWS

FEELSAFE H3 2.0 DIRECT SET 45" X 84" (1-WIDE/2-WIDE)

INSTALLATION ANCHORAGE DETAILS

GENERAL NOTES:

1.

THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT EDITION FLORIDA BUILDING CODE (FBC), EXCLUDING HVHZ AND HAS BEEN TESTED ACCORDING TO THE FOLLOWING:
- 1.1.

AAMA/WDMA/CSA 101/I.S.2/A440-11
- 1.2.

ASTM E1886-13a
- 1.3.

ASTM E1996-14
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.
8.

THIS MULLION SYSTEM FOR USE WITH SIERRA PACIFIC'S FEELSAFE H3 2.0 DIRECT SET WINDOWS.
9.

AN IMPACT PROTECTIVE DEVICE IS NOT REQUIRED WITH THIS PRODUCT WHEN USED IN WIND-BORNE DEBRIS REGIONS FOR WIND ZONE 3, MISSILE LEVEL D OR LESS.
10.

WINDOW FRAME MATERIAL: VINYL, WOOD, AND 6063-T5.
11.

GLAZING SHALL BE PER DETAIL PP ON SHEET 13. GLAZING WIND LOAD RESISTANCE EXCEEDS THE DESIGN PRESSURES SHOWN ON SHEET 13 IN ACCORDANCE WITH ASTM E1300-09a.
12.

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 HEREING 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) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN FOR NAIL 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 ±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 OR 1/4 INCH WHEN OPTIONAL FLUSH JAMB IS USED - SEE SHEET 10 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 4 THROUGH 9 DETAIL STANDARD JAMB OPTION. SEE SHEET 10 FOR OPTIONAL FLUSH JAMB.

5.3.

INSTALLATION OF ANCHORAGE 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.

5.2.3.

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.

5.2.4.

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.

5.2.5.

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.

5.2.6.

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.

5.2.7.

THROUGH FRAME 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 INTO CONCRETE AND 1" INTO MASONRY. ANCHORS SHALL BE PLACED SUCH THAT A MINIMUM EDGE DISTANCE OF 1-1/8" IN CONCRETE AND 2" IN MASONRY IS ACHIEVED.

6.

MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.

7.

INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.

8.

INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.

9.

INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:

9.1.

WOOD - MINIMUM SPECIFIC GRAVITY OF 0.42.

9.2.

CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.

9.3.

MASONRY - STRENGTH CONFORMANCE TO ASTM C-90, MEDIUM WEIGHT, DENSITY > 190 PCF

9.4.

STEEL - MINIMUM YIELD STRENGTH OF 33 SKI. MINIMUM WALL THICKNESS OF 35.9 MIL (0.0478" or 18 GAUGE).

SEE SHEET 12 FOR SINGLE AND MULTI-WIDE DESIGN PRESSURE PERFORMANCE RATING TABLE AND COMPARATIVE ANALYSIS RESULTS PER SECTION 1709 AND SECTION R609 OF THE CURRENT EDITION FLORIDA BUILDING CODE AND CURRENT EDITION FLORIDA RESIDENTIAL CODE RESPECTIVELY

SEE SHEET 13 FOR MULLION SPAN VS. LOAD WIDTH DESIGN PRESSURE CAPACITY CHARTS

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PROJECT # 0420-0909

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

TITLE: FEELSAFE H3 2.0 DIRECT SET 45" X 84" (1-WIDE/2-WIDE)
GENERAL NOTES, INSTALLATION NOTES & TABLE OF CONTENTS

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DRAWN BY: RJA
SCALE: N.T.S.
REV: B
DATE: 5/16/18
DRAWING NO: SPW-PTC0003
SHEET: 1 OF 13

UPDATE TO CURRENT FBC

B

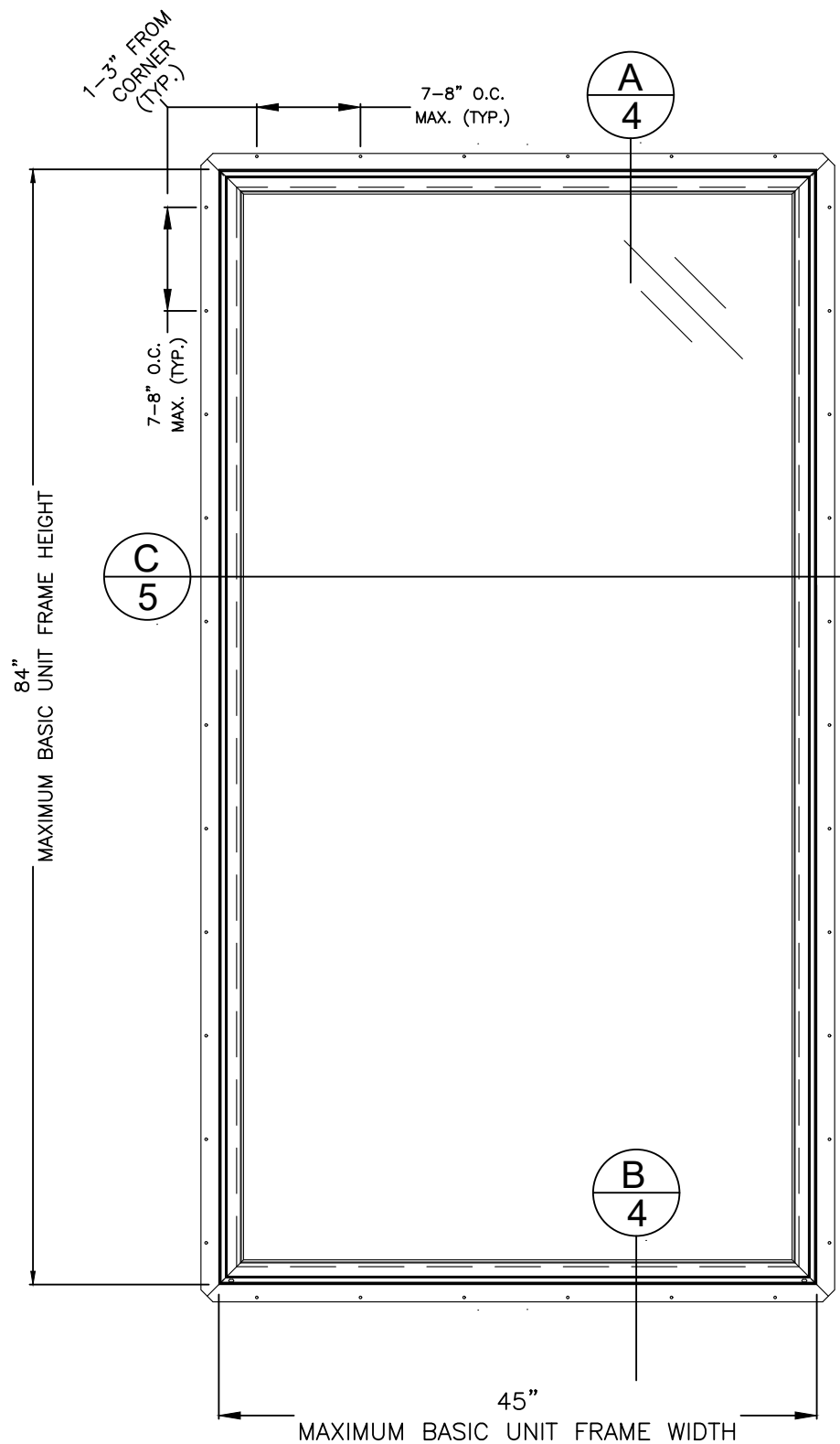
COMPARATIVE ANALYSIS RESULTS ADDED

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DESCRIPTION

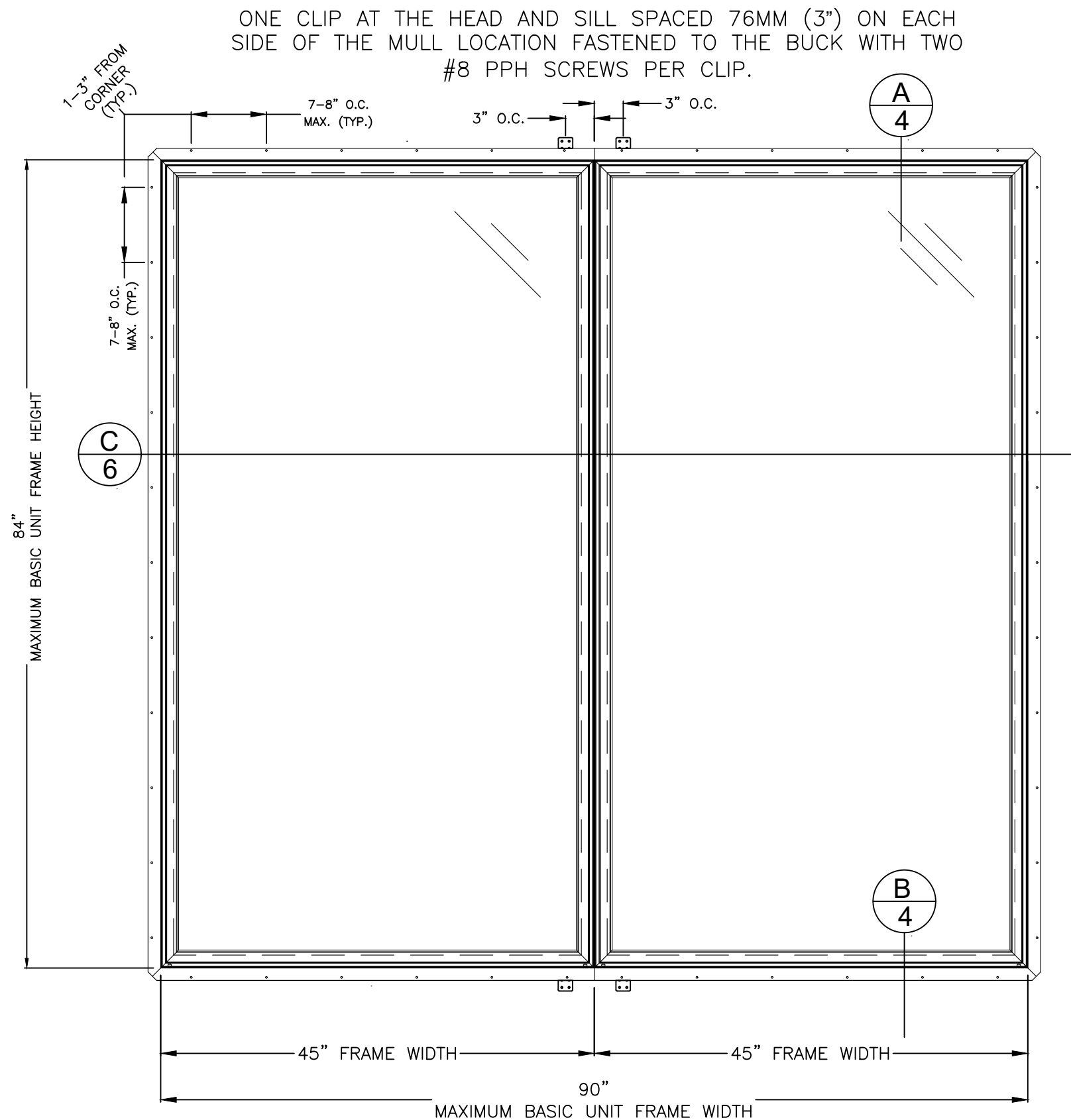
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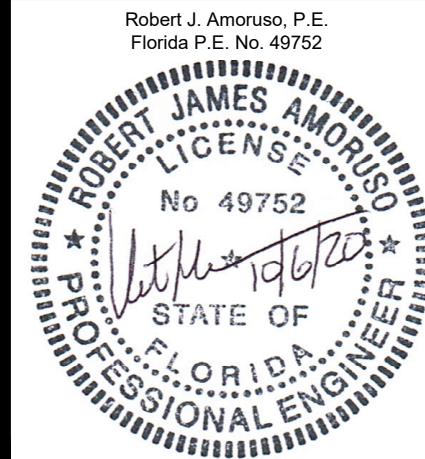


1-WIDE FEELSAFE H3 2.0 DIRECT SET WINDOW
EXTERIOR ELEVATION
NAILING FIN FRAME INSTALLATION

DAYLIGHT OPENING (D.L.O.)
WIDTH 41-5/16"
HEIGHT 80-5/16"



2-WIDE FEELSAFE H3 2.0 DIRECT SET WINDOW
EXTERIOR ELEVATION
NAILING FIN FRAME INSTALLATION



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11605 READING ROAD, PO BOX 8489
RED BLUFF, CA 96080

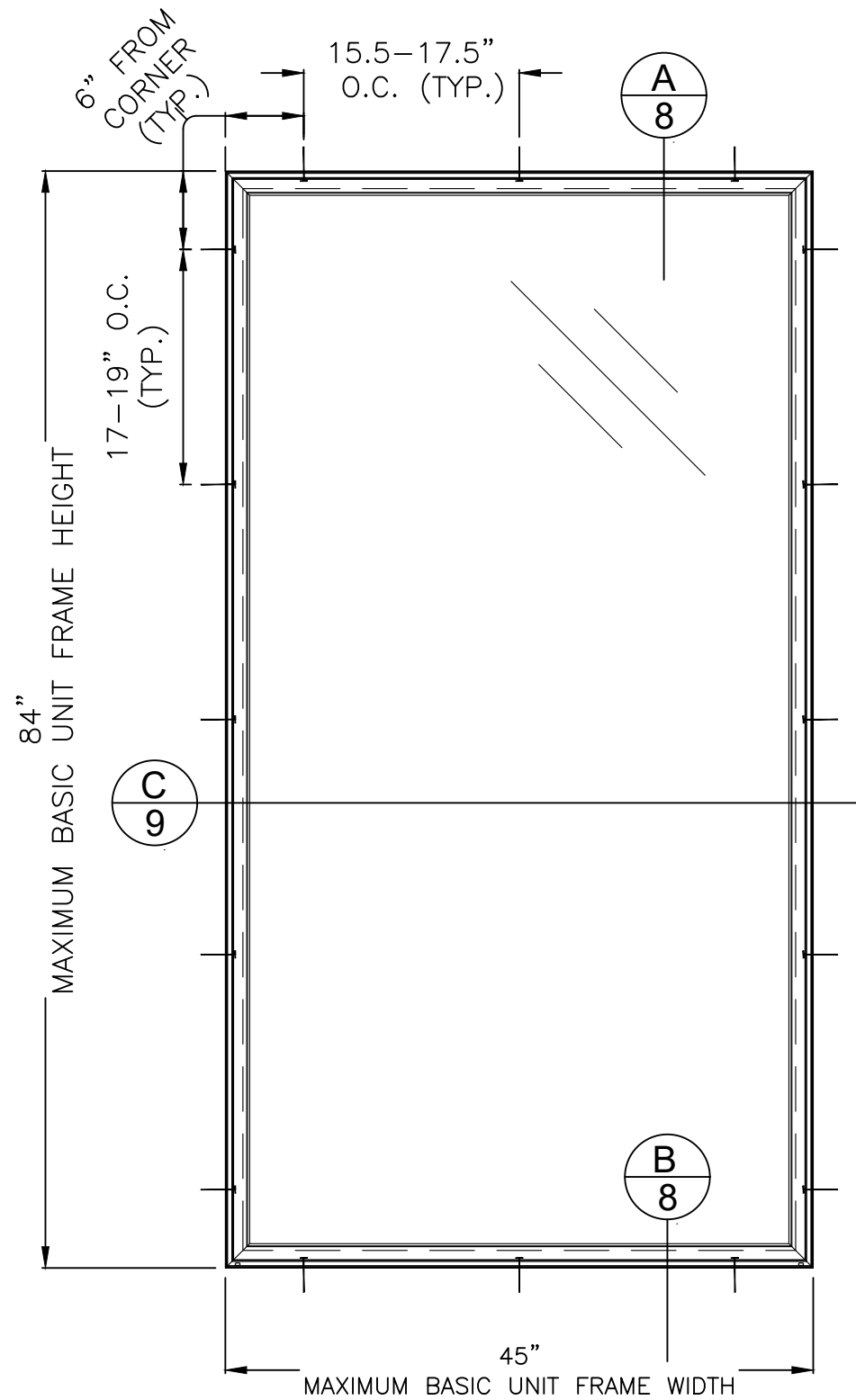
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NAILING FIN FRAME ANCHORAGE ELEVATION

PREPARED BY:	DRAWN BY:	DATE:	DRAWING NO:	SHEET:
	RJA	5/16/18	SPW-PTC0003	2 OF 13
SCALE:	N.T.S.			
REV:	B			

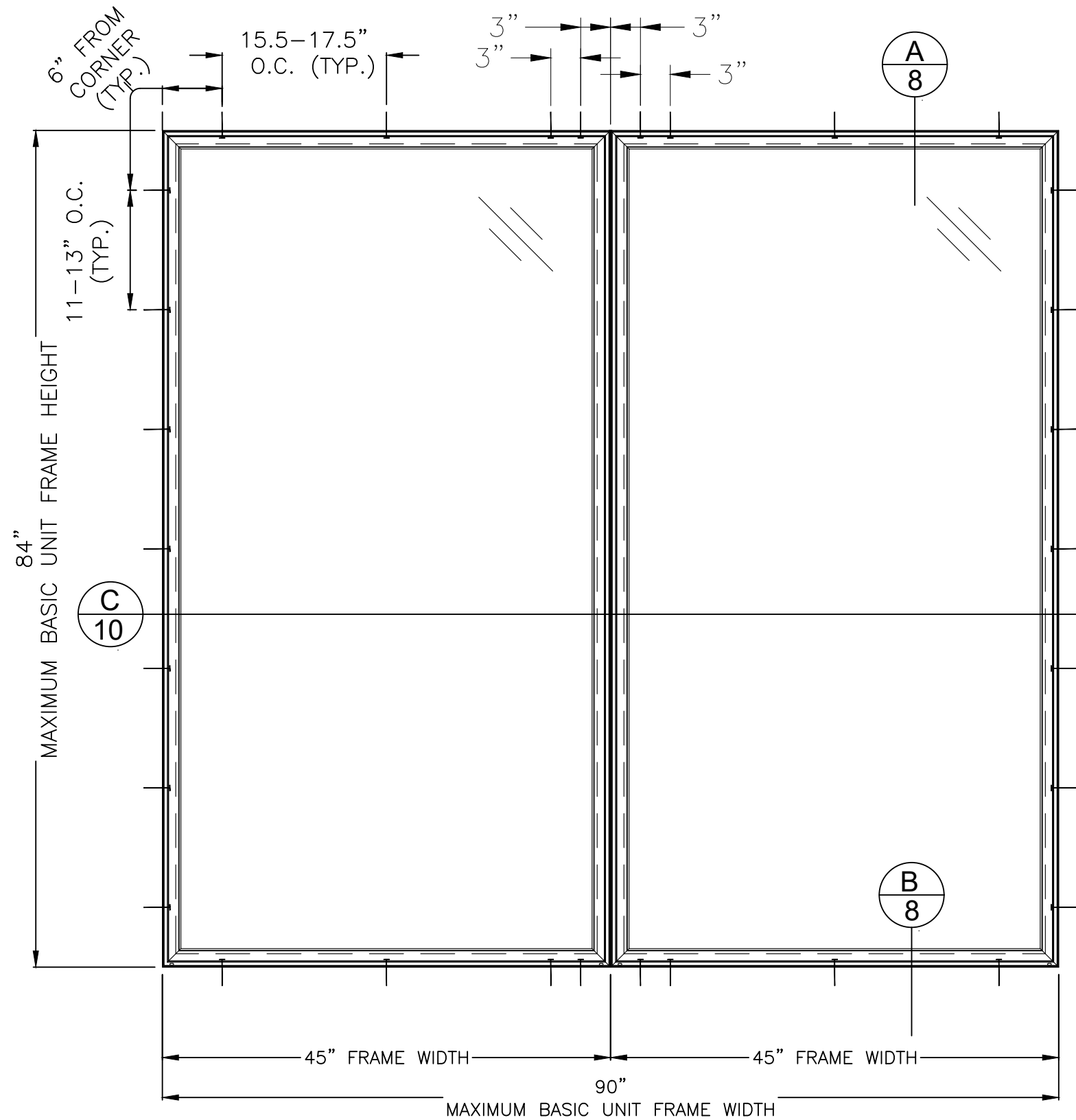
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PDP CA NO. 23355 Email: info@pdc-corp.com

PROJECT # 0420-0909

		RJA	BY
		10/6/20	
B	UPDATE TO CURRENT EBC		
A	COMPARATIVE ANALYSIS RESULTS ADDED	2/8/19	
REV	DESCRIPTION	DATE	



1-WIDE FEELSAFE H3 2.0 DIRECT SET WINDOW
EXTERIOR ELEVATION
THROUGH FRAME INSTALLATION



2-WIDE FEELSAFE H3 2.0 DIRECT SET WINDOW
EXTERIOR ELEVATION
THROUGH FRAME INSTALLATION

DAYLIGHT OPENING (D.L.O.)
WIDTH 41-5/16"
HEIGHT 80-5/16"

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

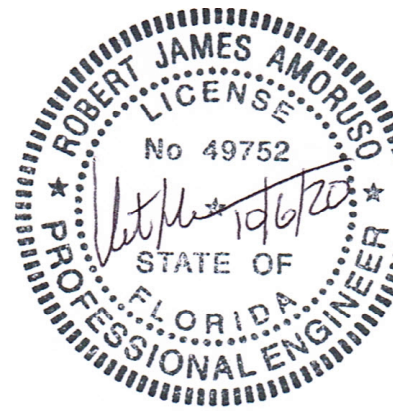
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THROUGH FRAME ANCHORAGE ELEVATION

PREPARED BY:	DRAWN BY:	DATE:	DRAWING NO:	SHEET:
PTC PRODUCT DESIGN GROUP, LLC PO BOX 520775 LONGWOOD, FLORIDA 32752 FBPE CA NO 23385	RJA N.T.S. B	5/16/18	SPW-PTC0003	3 OF 13

PROJECT # 0420-0909

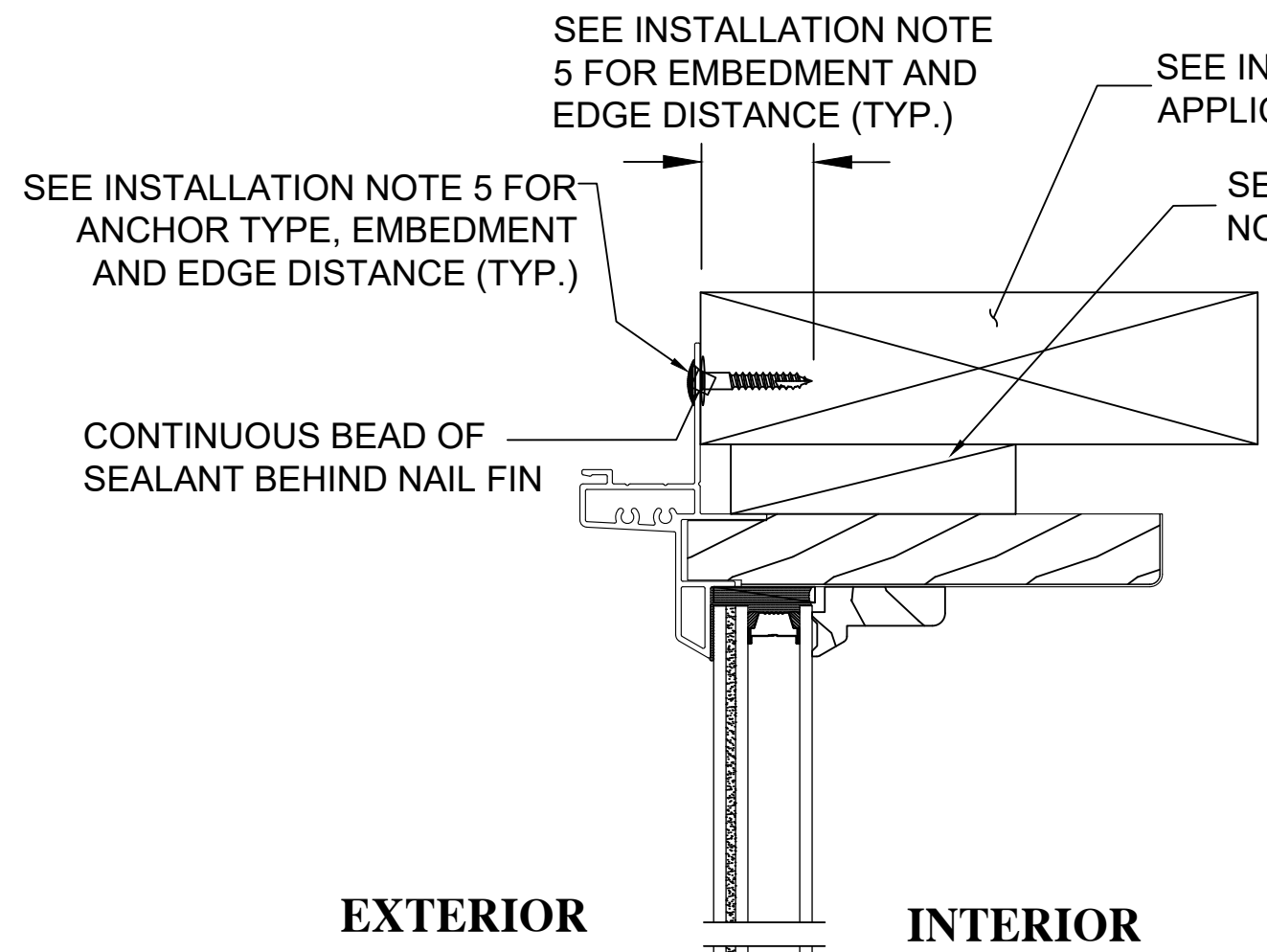
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		10/6/20	2/8/19	
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REV	DESCRIPTION			

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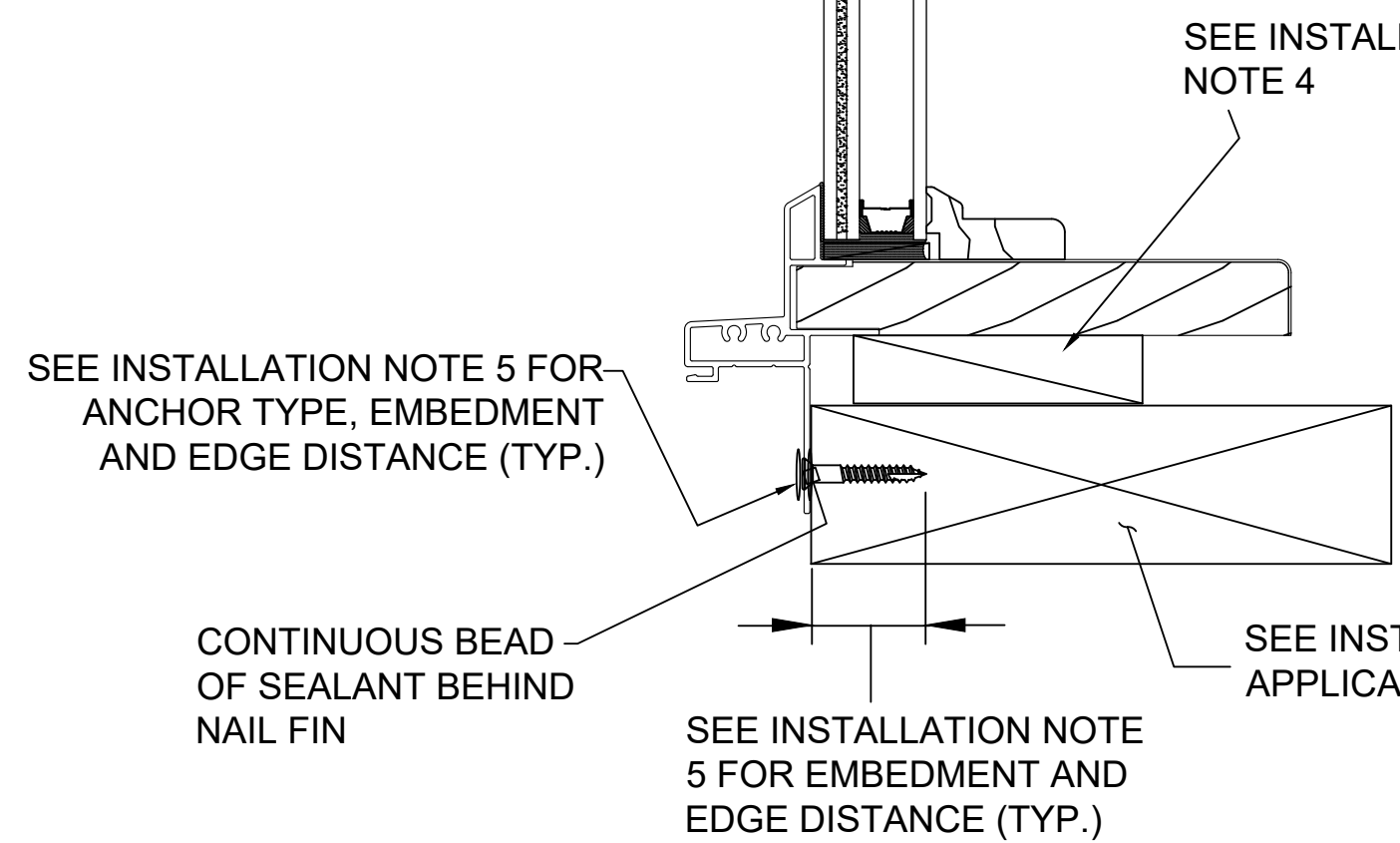


PROJECT # 0420-0909			
		RJA	BY
		10/6/20	DATE
		UPDATE TO CURRENT FBC	DESCRIPTION
		COMPARATIVE ANALYSIS RESULTS ADDED	REV
		2/8/19	DATE
		RJA	BY

SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080			
TITLE: FEELSAFE H3 2.0 DIRECT SET 45" X 84" (1-WIDE/2-WIDE) DIRECT SET CROSS SECTIONS - FIN FRAME INSTALLATION			
DATE: 5/16/18	DRAWING NO: SPW-PTC0003	SHEET: 4 OF 13	
DRAWN BY: RJA	SCALE: N.T.S.	REV: B	
 PTC PRODUCT DESIGN GROUP, LLC Phone: 321.690.1788 PO BOX 520775 LONGWOOD, FLORIDA 32752 Fax: 321.690.1789 Email: info@ptc-corp.com			

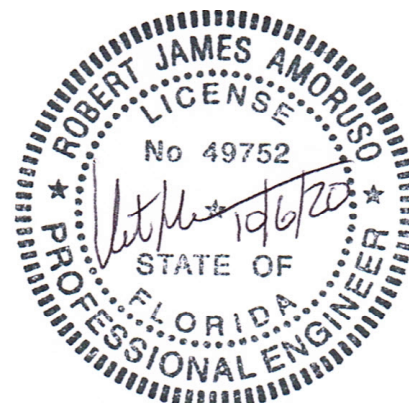


HEAD DETAIL, 1 & 2-WIDE
FEELSAFE H3 2.0 DIRECT SET
NAILING FIN FRAME INSTALLATION



SILL DETAIL, 1 & 2-WIDE
FEELSAFE H3 2.0 DIRECT SET
NAILING FIN FRAME INSTALLATION

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

CONTINUOUS BEAD OF
SEALANT BEHIND NAIL FIN

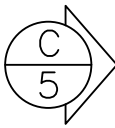
SEE INSTALLATION NOTE
5 FOR EMBEDMENT AND
EDGE DISTANCE (TYP.)

SEE INSTALLATION
NOTE 9 FOR
APPLICABLE
SUBSTRATES
(TYP.)

SEE INSTALLATION
NOTE 4

EXTERIOR

INTERIOR



JAMB DETAIL, 1-WIDE
FEELSAFE H3 2.0 DIRECT SET
NAILING FIN FRAME INSTALLATION

PROJECT # 0420-0909

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

TITLE: FEELSAFE H3 2.0 DIRECT SET 45" X 84" (1-WIDE/2-WIDE)
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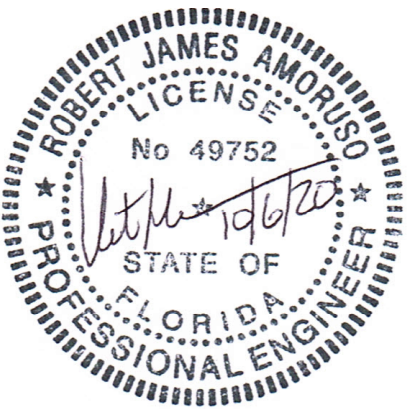
PREPARED BY: DRAWN BY: RJA DATE: 5/16/18

SCALE: N.T.S. DRAWING NO: SPW-PTC0003

REV: B SHEET: 5 OF 13



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

CONTINUOUS BEAD OF
SEALANT BEHIND NAIL FIN

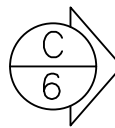
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5 FOR EMBEDMENT AND
EDGE DISTANCE (TYP.)

SEE INSTALLATION
NOTE 9 FOR
APPLICABLE
SUBSTRATES
(TYP.)

SEE INSTALLATION
NOTE 4

EXTERIOR

INTERIOR



JAMB DETAIL, 2-WIDE
FEELSAFE H3 2.0 DIRECT SET
NAILING FIN FRAME INSTALLATION

PROJECT # 0420-0909

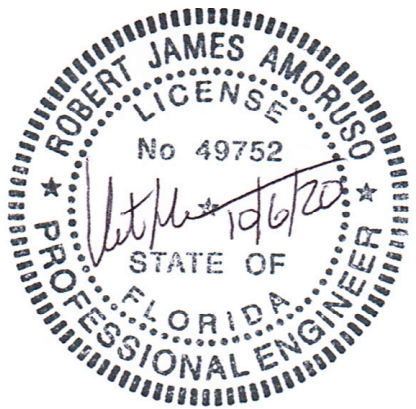
SIERRA PACIFIC WINDOWS
11605 READING ROAD, PO BOX 8489
RED BLUFF, CA 96080

TITLE: FEELSAFE H3 2.0 DIRECT SET 45" X 84" (1-WIDE/2-WIDE)
DIRECT SET JAMB DETAIL, 2-WIDE, NAILING FIN FRAME INSTALLATION

PREPARED BY: RJA
SCALE: N.T.S.
REV: B
DATE: 5/16/18
DRAWING NO: SPW-PTC0003
SHEET: 6 OF 13

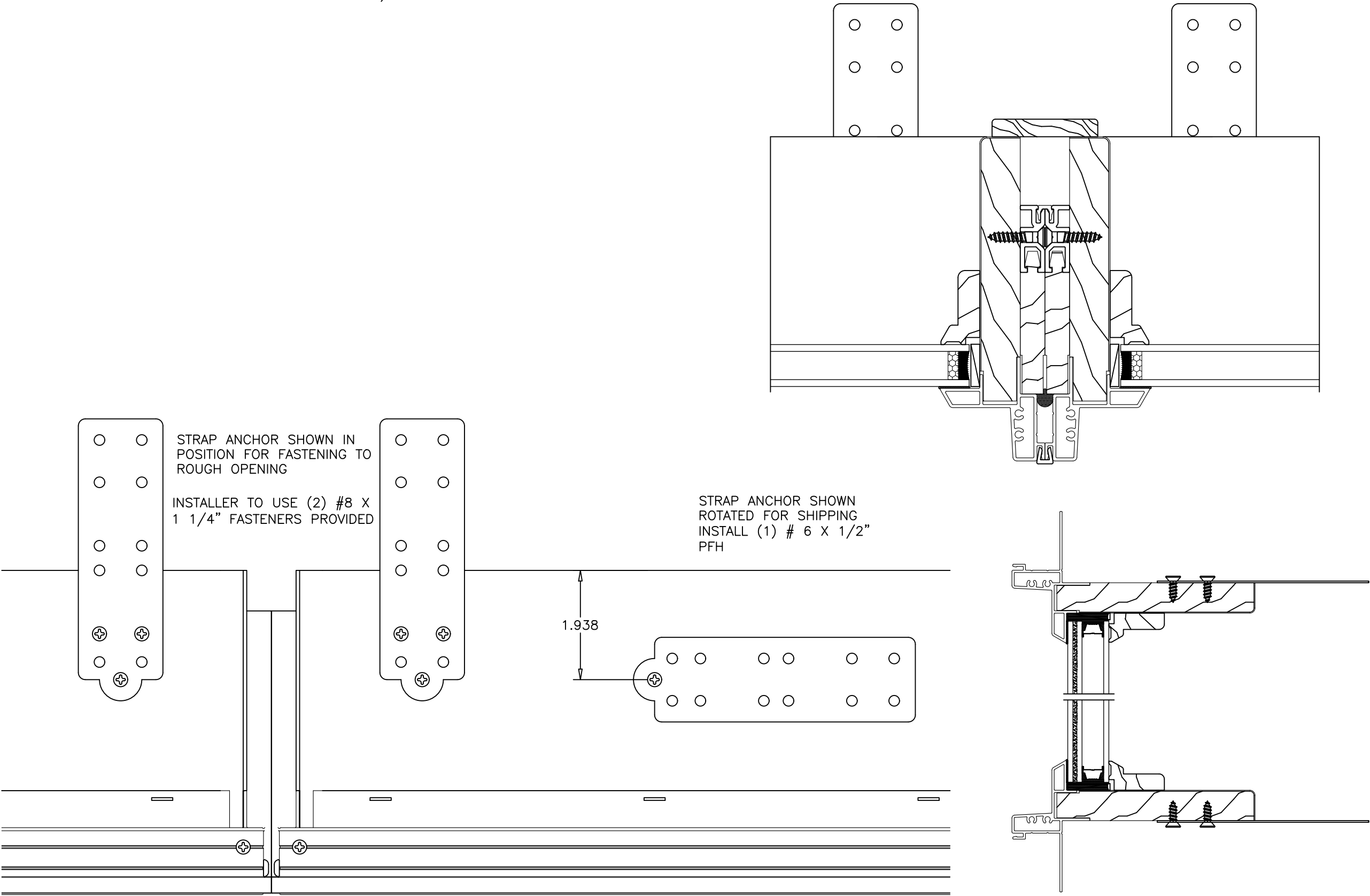


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STRAP ANCHOR DETAIL, 2-WIDE
FEELSAFE H3 2.0 DIRECT SET
NAILING FIN FRAME INSTALLATION
STRAP ANCHOR USED AT MULLION, HEAD & SILL

ONE CLIP AT THE HEAD AND SILL SPACED 76MM (3")
ON EACH SIDE OF THE MULL LOCATION FASTENED TO
THE BUCK WITH TWO #8 PPH SCREWS PER CLIP.



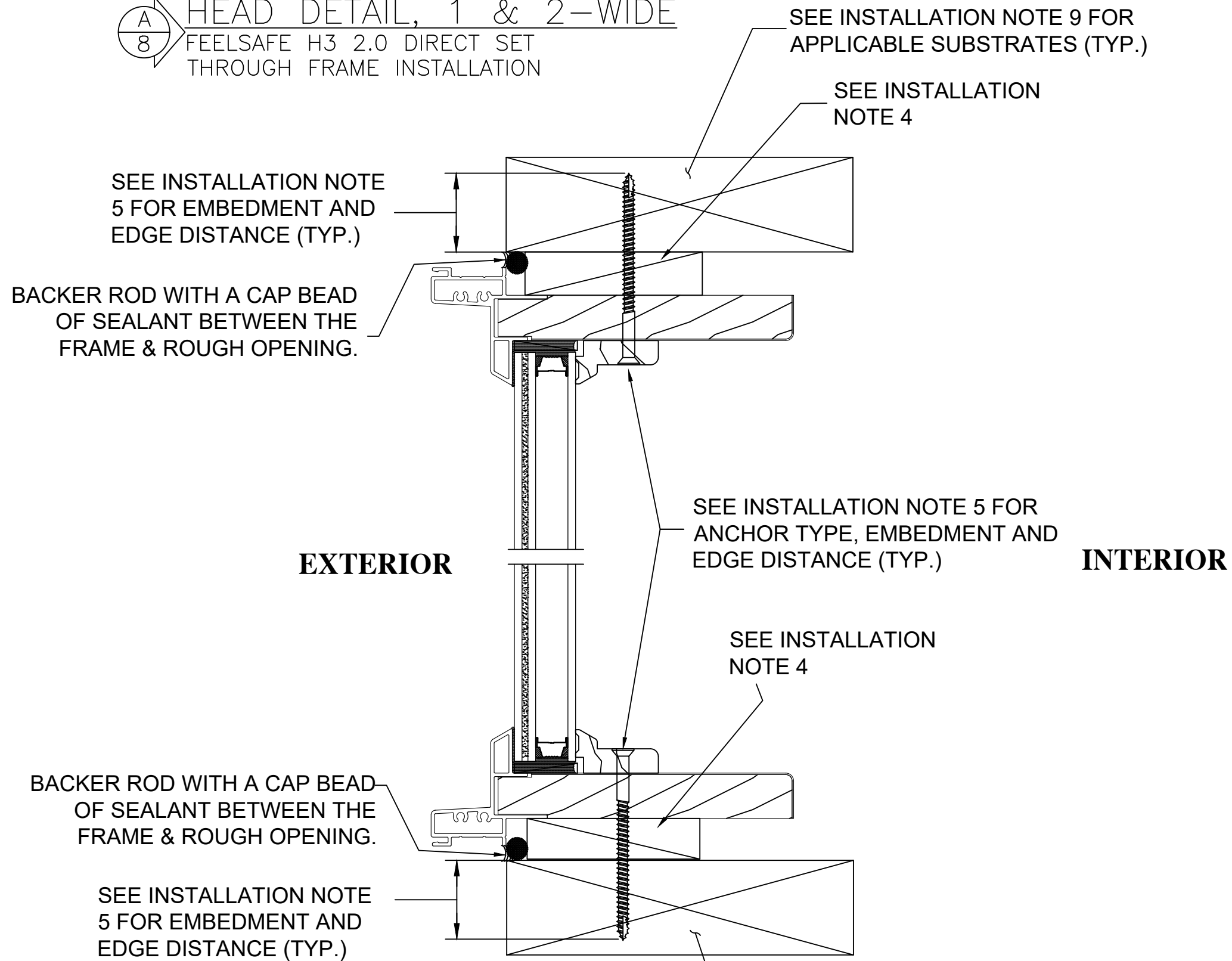
PROJECT # 0420-0909					
		B	UPDATE TO CURRENT FBC	10/6/20	RJA
		A	COMPARATIVE ANALYSIS RESULTS ADDED	2/8/19	RJA
		REV	DESCRIPTION	DATE	BY

SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080		DATE: 5/16/18		DRAWING NO: SPW-PTC0003		SHEET: 7 OF 13	
TITLE: FEELSAFE H3 2.0 DIRECT SET 45" X 84" (1-WIDE/2-WIDE) STRAP ANCHOR DETAIL - FIN FRAME INSTALLATION		DRAWN BY: RJA		SCALE: N.T.S.		REV: B	
PREPARED BY:		DATE: 5/16/18		DRAWING NO: SPW-PTC0003		SHEET: 7 OF 13	
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HEAD DETAIL, 1 & 2-WIDE
FEELSAFE H3 2.0 DIRECT SET
THROUGH FRAME INSTALLATION



SILL DETAIL, 1 & 2-WIDE
FEELSAFE H3 2.0 DIRECT SET
THROUGH FRAME INSTALLATION

SEE INSTALLATION NOTE 9 FOR
APPLICABLE SUBSTRATES (TYP.)

PROJECT # 0420-0909

		RJA	RJA	BY
		10/6/20	2/8/19	DATE
	UPDATE TO CURRENT FBC	COMPARATIVE ANALYSIS RESULTS ADDED		DESCRIPTION
B	A	REV		

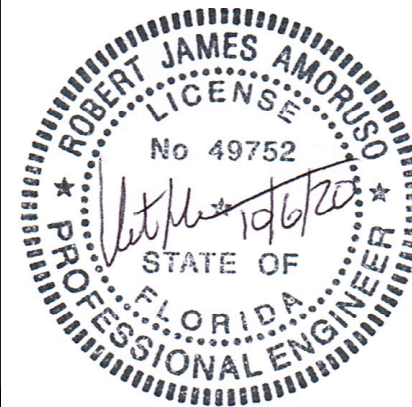
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RED BLUFF, CA 96080

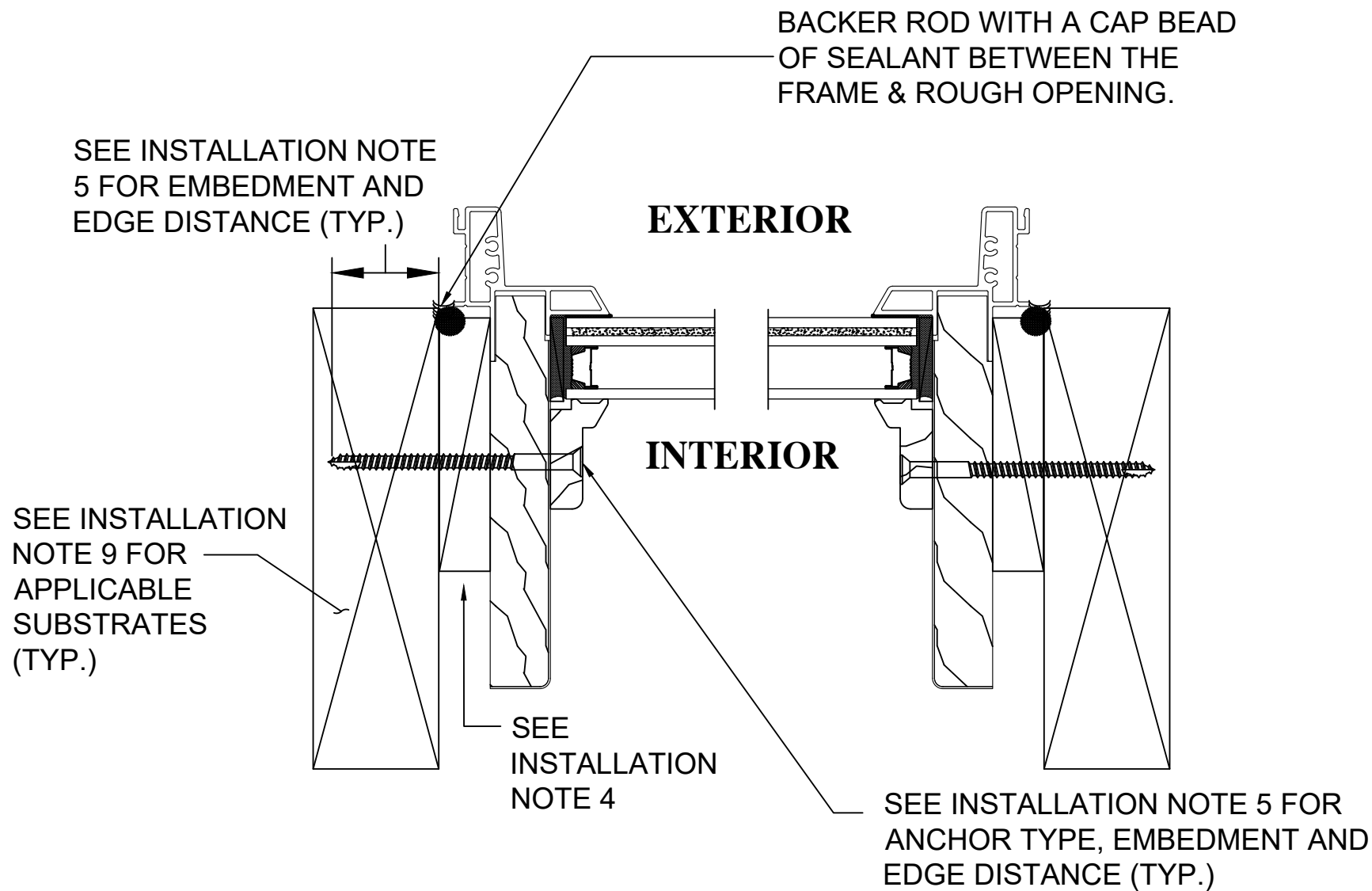
TITLE: FEELSAFE H3 2.0 DIRECT SET 45" X 84" (1-WIDE/2-WIDE)
DIRECT SET HEAD & SILL DETAIL, 1 & 2WIDE, THROUGH FRAME INSTALLATION

DRAWN BY:	RJA	DATE:	5/16/18
SCALE:	N.T.S.	DRAWING NO:	SPW-PTC0003
REV:	B	SHEET:	8 OF 13

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JAMB DETAIL, 1-WIDE
 FEELSAFE H3 2.0 DIRECT SET
 THROUGH FRAME INSTALLATION

PROJECT # 0420-0909

		RJA	RJA	BY
		10/6/20	2/8/19	DATE
B	UPDATE TO CURRENT FBC	A	COMPARATIVE ANALYSIS RESULTS ADDED	REV
			DESCRIPTION	

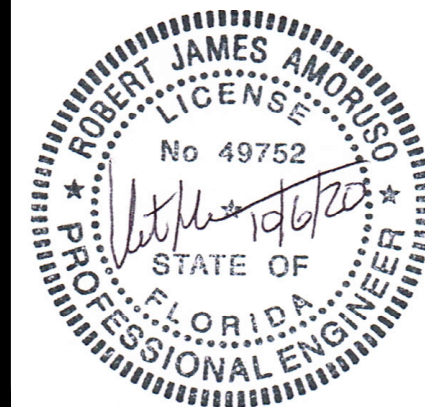
SIERRA PACIFIC WINDOWS
 11605 READING ROAD, PO BOX 8489
 RED BLUFF, CA 96080

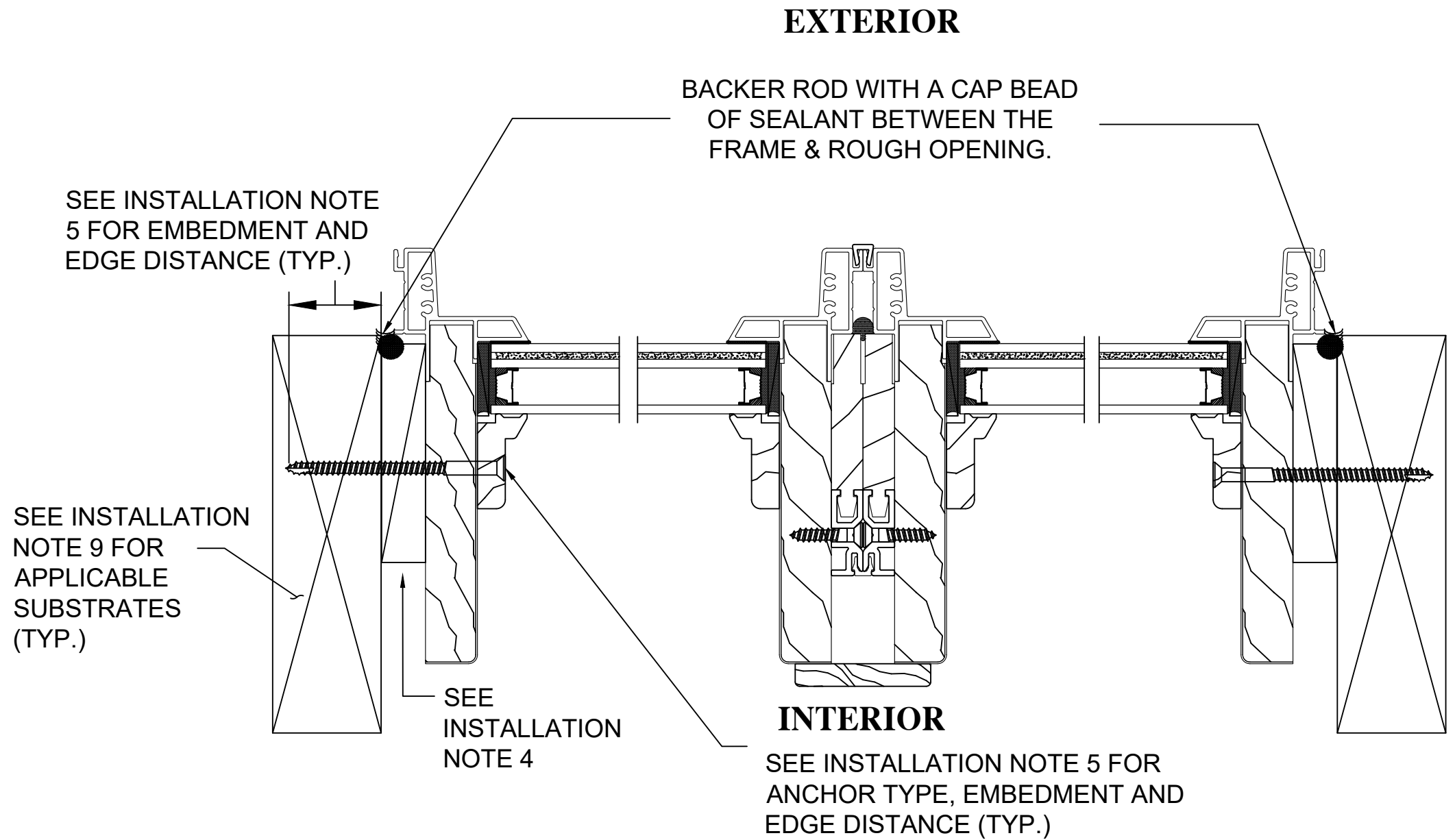
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 DIRECT SET JAMB DETAIL, 1-WIDE, THROUGH FRAME INSTALLATION

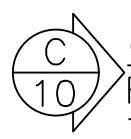
DATE:	5/16/18
DRAWING NO:	SPW-PTC0003
REV:	9 OF 13
DRAWN BY:	RJA
SCALE:	N.T.S.
REV:	B

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 JAMB DETAIL, 2-WIDE
FEELSAFE H3 2.0 DIRECT SET
THROUGH FRAME INSTALLATION

PROJECT # 0420-0909		SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080		DATE: 5/16/18		DRAWING NO: SPW-PTC0003		SHEET: 10 OF 13	
		UPDATE TO CURRENT FBC	COMPARATIVE ANALYSIS RESULTS ADDED						
B	A	REV	DESCRIPTION	DATE	BY				

PREPARED BY: RJA
SCALE: N.T.S.
REV: B

DATE: 5/16/18
DRAWING NO: SPW-PTC0003
SHEET: 10 OF 13

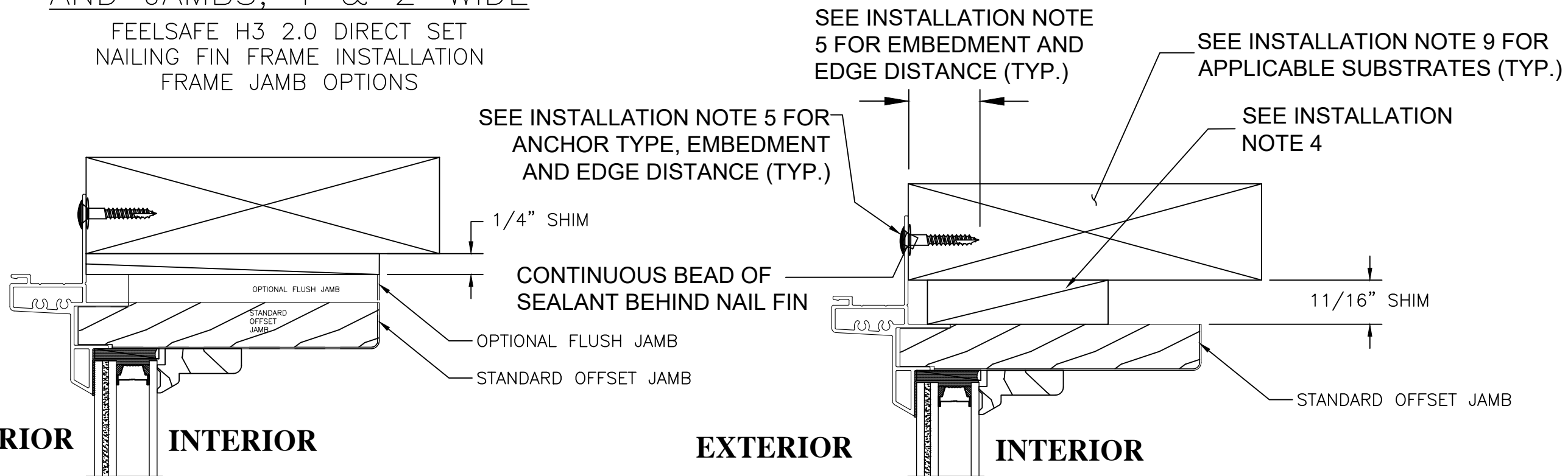
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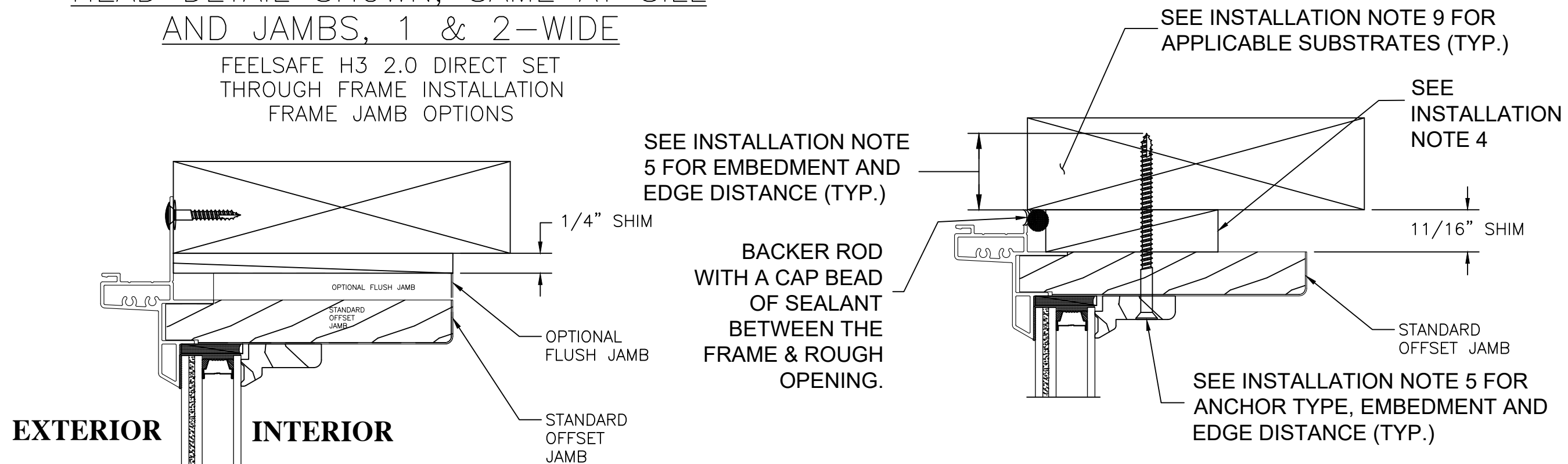
FRAME JAMB OPTIONS HEAD DETAIL SHOWN, SAME AT SILL AND JAMBS, 1 & 2-WIDE

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



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



PROJECT # 0420-0909

		RJA	RJA	BY
	10/6/20		2/8/19	DATE
	UPDATE TO CURRENT FBC	COMPARATIVE ANALYSIS RESULTS ADDED		DESCRIPTION
B	A	REV		

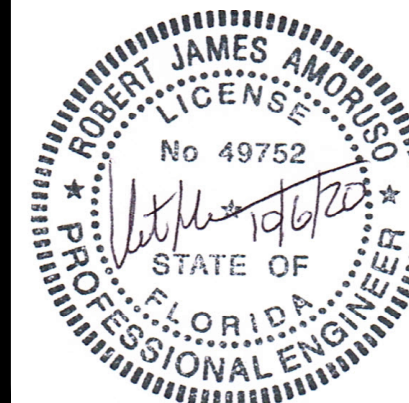
SIERRA PACIFIC WINDOWS
11605 READING ROAD, PO BOX 8489
RED BLUFF, CA 96080

TITLE: FEELSAFE H3 2.0 DIRECT SET 45" X 84" (1-WIDE/2-WIDE)
DIRECT SET JAMB DETAIL, 2-WIDE, THROUGH FRAME INSTALLATION

DATE:	5/16/18	DRAWING NO:	SPW-PTC0003	SHEET:	11 OF 13
DRAWN BY:	RJA	SCALE:	N.T.S.	REV:	B
PREPARED BY:					

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DESIGN PRESSURE PERFORMANCE RATING AND COMPARATIVE ANALYSIS RESULTS

DESIGN PRESSURE PERFORMANCE RATING		
MAXIMUM SIZE (NOMINAL)	DESIGN PRESSURE (PSF)	IMPACT RATING
45" x 84" (1-WIDE)	+50/-60 psf	MISSILE LEVEL D WIND ZONE 3
90" x 84" (2-WIDE)	+50/-60 psf	MISSILE LEVEL D WIND ZONE 3
MAXIMUM D.L.O. SIZE: 41-5/16" x 80-5/16"		

- Notes:
1.

The Comparative Analysis results depicted here are based on Section 1709 and Section R609 of the Current Edition Florida Building Code and Current Edition Florida Residential Code respectively. Comparative Analysis results are in conformance with AAMA/WDMA/CSA 101/I.S.2/A440-11, WDMA I.S. 11-13 and AAMA 2502-07.
2.

The results depicted are for frame areas that are equal to or less than the frame area of the test unit (45" x 84" individual size, 26.3 SF frame area).
3.

The results depicted are based on the structural loading test results of +50/-60 psf at a tested size of 45" x 84" 1-wide window.The tested water resistance design pressure is +50 psf. The tested impact cyclic loading design pressure is +50/-60 psf.
- 3.1.

The design pressures are limited to +50/-60 psf.
4.

Comparative Analysis results applicability. See Note 5 for Mull Span vs. Load Width results applicability.
- 4.1.

The results depicted are for a 1-wide window but are applicable to 2-wide windows. A 2-wide window of comprised of two 45" x 84" nominal mulled windows was tested thereby enveloping a 1-wide window in this analysis.
- 4.2.

2-wide windows will be the window height depicted in the table. 2-wide windows will be the window width depicted in the table multiplied by 2.
- 4.3.

2-wide window individual bay widths can vary (i.e., not equal to each other), but cannot exceed the individual window width shown individually or the frame area of the test unit shown in note 2 above.
5.

Mull Span vs. Load Width results applicability.
- 5.1.

Mull Span vs. Load Width results shown on Sheet 13 are applicable to the 2-wide window only.
- 5.2.

The Comparative Analysis results on Sheet 12 must be compared to the Mull Span vs. Load Width results shown on Sheet 13 for 2-wide windows. The lower of the results shall govern for the 2-wide window size construed.

Size		Positive DP (psf)	Negative DP (psf)
Width	Height		
24	60	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
42		50.0	60.0
45		50.0	60.0
48		46.9	56.3
52		43.3	51.9
54		41.7	50.0
56		40.2	48.2
60		37.5	45.0
24	64	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
42		50.0	60.0
45		50.0	60.0
48		46.9	56.3
52		43.3	51.9
54		41.7	50.0
56		40.2	48.2
24	66	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
42		50.0	60.0
45		50.0	60.0
48		46.9	56.3
52		43.3	51.9
54		41.7	50.0
56		40.2	48.2
24	70	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
42		50.0	60.0
45		50.0	60.0
48		46.9	56.3
52		43.3	51.9
54		41.7	50.0

Size		Positive DP (psf)	Negative DP (psf)
Width	Height		
24	72	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
42		50.0	60.0
45		50.0	60.0
48		46.9	56.3
52		43.3	51.9
24	74	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
42		50.0	60.0
45		50.0	60.0
48		46.9	56.3
24	78	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
42		50.0	60.0
45		50.0	60.0
48		46.9	56.3
24	82	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
42		50.0	60.0
45		50.0	60.0
24	84	50.0	60.0
30		50.0	60.0
36		50.0	60.0
40		50.0	60.0
42		50.0	60.0
45		50.0	60.0
24	86	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
42		50.0	60.0

Size		Positive DP (psf)	Negative DP (psf)
Width	Height		
24	90	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
42		50.0	60.0
24	92	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40	96	50.0	60.0
24		50.0	60.0
30		50.0	60.0
32		50.0	60.0
36	99	50.0	60.0
24		50.0	60.0
30		50.0	60.0
32		50.0	60.0
36	102	50.0	60.0
24		50.0	60.0
30		50.0	60.0
32		50.0	60.0
36	108	50.0	60.0
24		50.0	60.0
30		50.0	60.0
32		50.0	60.0

PROJECT # 0420-0909

SIERRA PACIFIC WINDOWS

11605 READING ROAD, PO BOX 8489

RED BLUFF, CA 96080

TITLE: FEELSAFE H3 2.0 DIRECT SET 45" X 84" (1-WIDE/2-WIDE)

PERFORMANCE RATING AND COMPARATIVE ANALYSIS RESULTS

PREPARED BY: 

DRAWN BY: RJA

SCALE: N.T.S.

DATE: 5/16/18

DRAWING NO: SPW-PTC0003

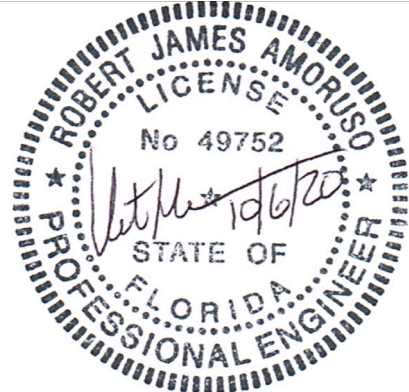
REV: B

SHEET: 12 OF 13

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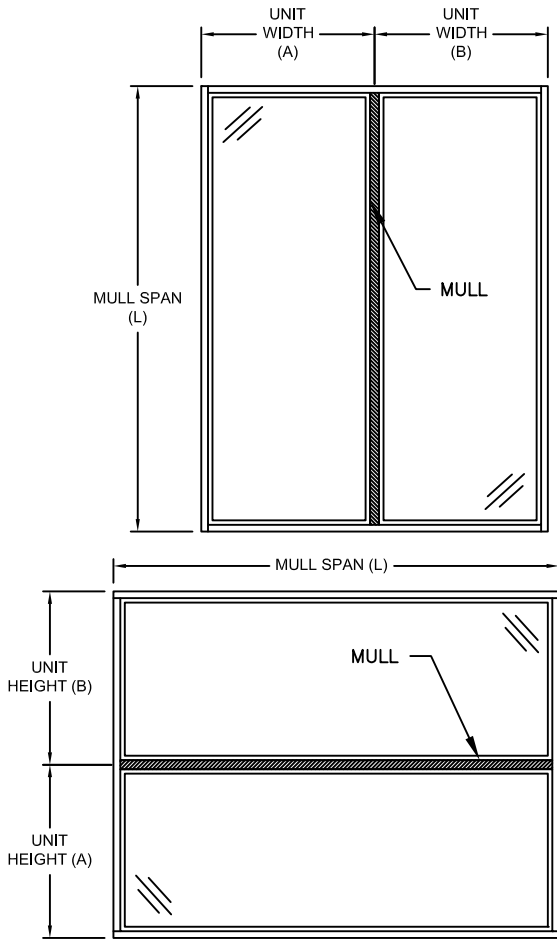
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MULL SPAN VS. LOAD WIDTH

TWO-WAY
MULLION
CONFIGURATION



Maximum Design Pressure Capacity Chart (psf) - Box Mullion, Tight							
Mull Span (in)	Load Width (in)	Design pressure (psf)		Mull Span (in)	Load Width (in)	Design pressure (psf)	
		Positive	Negative			Positive	Negative
≤ 72	to 96	50	-60				
78	24	50	-60	96	24	50	-60
	30	50	-60		30	46	-56
	36	50	-60		36	39	-47
	42	50	-60		42	34	-41
	45	50	-60		45	33	-39
	48	50	-60		48	31	-37
	54	50	-60		54	28	-34
	60	48	-58		60	26	-32
	66	47	-56		66	25	-30
	72	46	-55		72	24	-28
	78	45	-54		78	23	-27
	84	45	-55		84	22	-27
	96	45	-55		96	22	-26
84	24	50	-60	102	24	48	-57
	30	50	-60		30	39	-46
	36	50	-60		36	33	-39
	42	50	-60		42	28	-34
	45	50	-60		45	27	-32
	48	48	-57		48	25	-31
	54	44	-52		54	23	-28
	60	41	-49		60	21	-26
	66	39	-47		66	20	-24
	72	37	-45		72	19	-23
	78	37	-44		78	18	-22
	84	36	-44		84	18	-21
	96	37	-44		96	17	-21

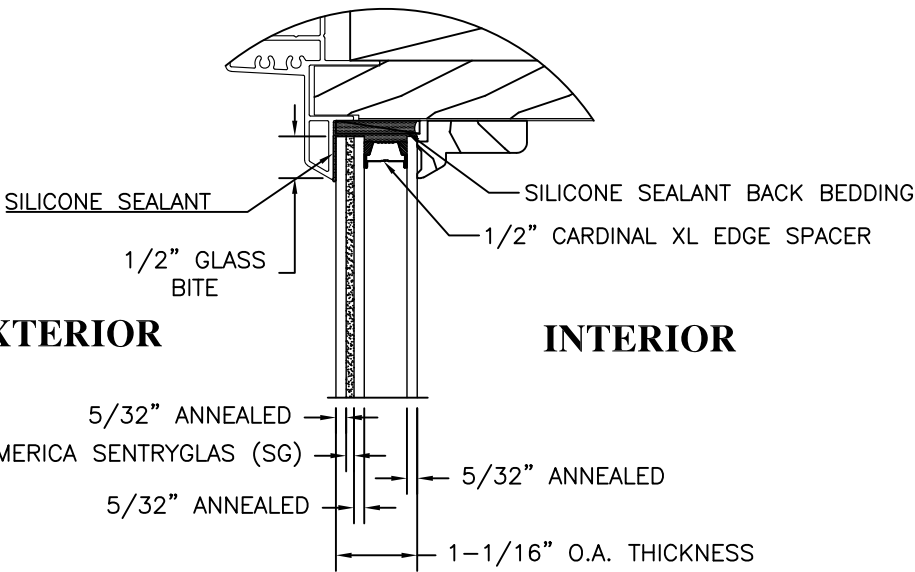
DESIGN PRESSURE CAPACITY CHART USAGE

LOAD (TRIBUTARY) WIDTH = (A + B)/2

1. ENTER TABLE WITH MULL SPAN (L) AND LOAD WIDTH (LW) THAT IS EQUAL TO MULLED ASSEMBLY.
2. IF BETWEEN MULL SPAN AND LOAD WIDTH IN TABLE, USE NEXT LARGEST VALUES.
3. INTERPOLATION BETWEEN MULL SPAN AND LOAD WIDTH VALUES IS ALLOWED.

NOTES

1. APPROVED FENESTRATION TYPE IS THE FEELSAFE H3 2.0 DIRECT SET (DS).
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 AT RIGHT ARE APPLICABLE FOR 'STANDARD INSTALLATION' PROCEDURES, SEE DETAILS ON SHEETS 2 TO 10.
4. DESIGN PRESSURES SHALL BE GOVERNED BY THE LESSER OF THE MULLION ASSEMBLY (LISTED IN TABLE ON THIS SHEET) OR INDIVIDUAL WINDOW PERFORMANCE RATINGS (COMPARATIVE ANALYSIS RESULTS AND DESIGN PRESSURE PERFORMANCE RATING TABLE ON SHEET 12).
5. MULLIONS MAY BE USED IN ASSEMBLIES UTILIZING MORE THAN TWO WINDOW UNITS AND CAN BE USED FOR UNLIMITED NUMBER OF PANELS.
6. SEE SHEET 12 FOR COMPARATIVE ANALYSIS RESULTS. FRAME AREAS OF CONSTRUED UNITS MUST BE EQUAL TO OR LESS THAN THE FRAME AREA OF THE TEST UNIT (45" X 84" INDIVIDUAL SIZE, 26.3 SF FRAME AREA).



GLAZING DETAIL "PP"

DESIGN PRESSURE PERFORMANCE RATING		
MAXIMUM SIZE (NOMINAL)	DESIGN PRESSURE (PSF)	IMPACT RATING
45" x 84" (1-WIDE)	+50/-60 psf	MISSILE LEVEL D WIND ZONE 3
90" x 84" (2-WIDE)	+50/-60 psf	MISSILE LEVEL D WIND ZONE 3
MAXIMUM D.L.O. SIZE: 41-5/16" x 80-5/16"		

PROJECT # 0420-0909

SIERRA PACIFIC WINDOWS

11605 READING ROAD, PO BOX 8489

RED BLUFF, CA 96080

TITLE: FEELSAFE H3 2.0 DIRECT SET 45" X 84" (1-WIDE/2-WIDE)

PERFORMANCE RATING, GLAZING DETAIL, MULL SPAN VS. LOAD WIDTH TABLE

PREPARED BY:

DRAWN BY: RJA

DATE: 5/16/18

DRAWING NO: SPW-PTC0003

SHEET: 13 OF 13

REV: B

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