

SIERRA PACIFIC WINDOWS

FEELSAFE H3 2.0 DIRECT SET 43" X 120" (1-WIDE/2-WIDE)

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 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 QQ ON SHEET 12. GLAZING WIND LOAD RESISTANCE EXCEEDS THE DESIGN PRESSURES SHOWN ON SHEET 12 IN ACCORDANCE WITH ASTM E1300-24.
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.

SEE SHEET 11 FOR SINGLE AND MULTI-WIDE DESIGN PRESSURE PERFORMANCE RATING TABLE AND COMPARATIVE ANALYSIS RESULTS PER SECTION 1709 AND SECTION R609 OF THE 9TH EDITION (2026) FLORIDA BUILDING CODE AND 9TH EDITION (2026) FLORIDA RESIDENTIAL CODE RESPECTIVELY

SEE SHEET 12 FOR MULLION SPAN VS. LOAD WIDTH DESIGN PRESSURE CAPACITY CHARTS

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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. 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 OF ANCHOR CLUSTERS AT MULLED WINDOW COMBINATIONS SHALL BE AS FOLLOWS.

5.2.1.

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.

5.2.2.

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.

ALL INSTALLATION FASTENERS AND ASSOCIATED HARDWARE/CONNECTORS/CLIPS/ETC. TO BE CORROSION RESISTANT, AND/OR HAVE A CORROSION RESISTANT COATING. WHEN EXPOSED TO SALTWATER ENVIRONMENTS WITHIN 3,000 FEET OF A SALTWATER COASTLINE MEET THE REQUIREMENTS OF SECTION 1711, 9TH EDITION (2026) FBC AND SECTION R332, 9TH EDITION (2026) FRC WHEN APPLICABLE.
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.

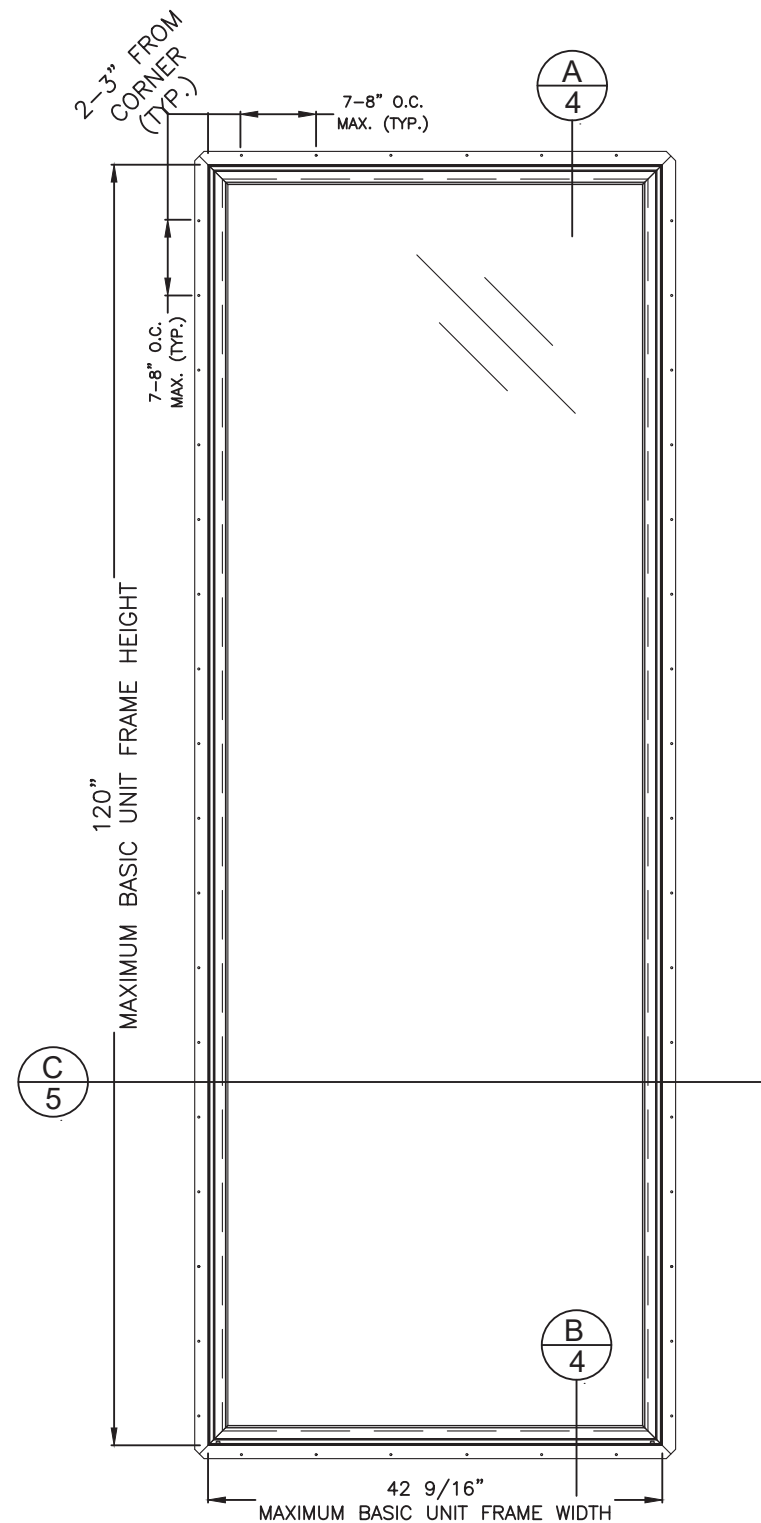
CONCRETE -MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.

9.3.

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

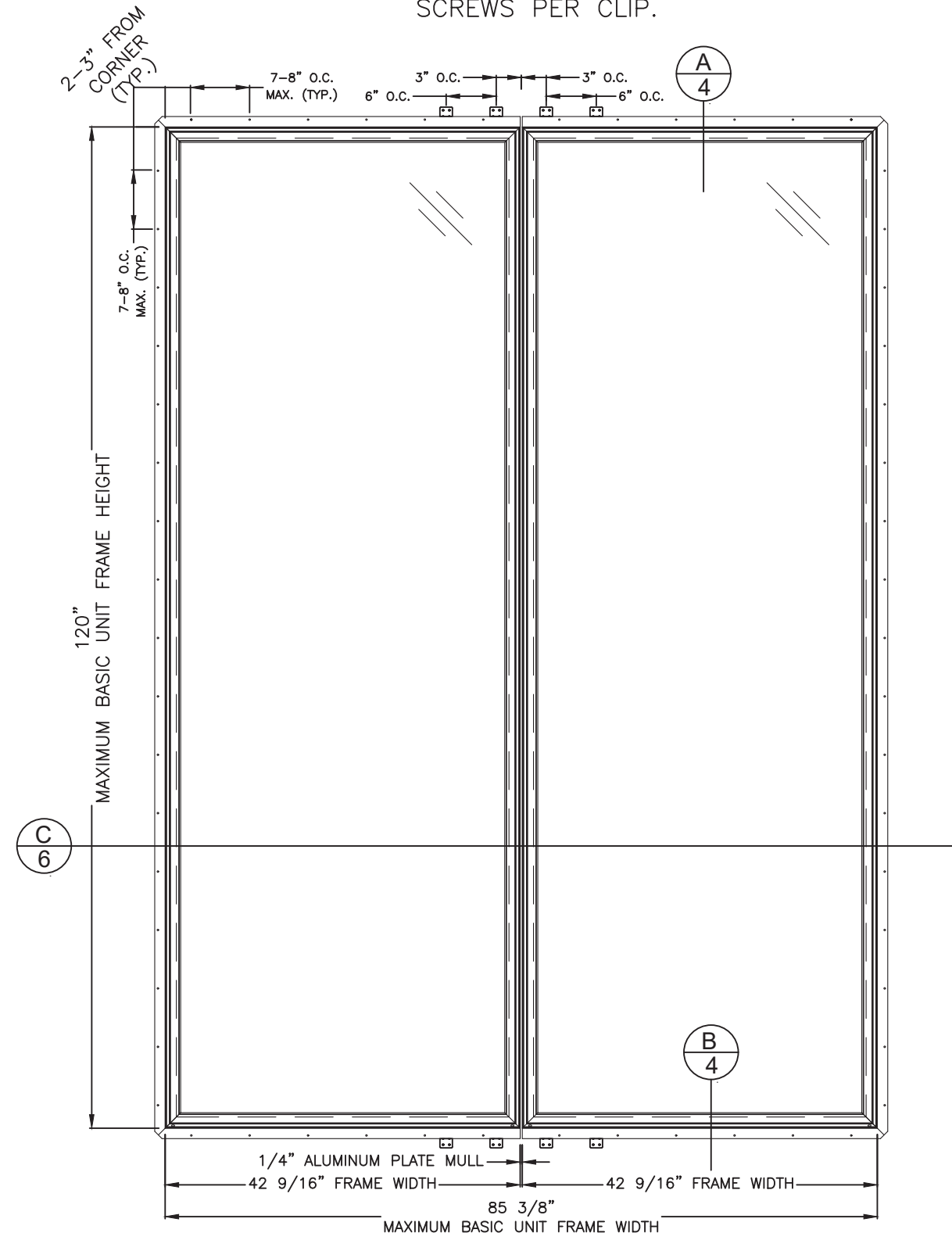
9.4.

STEEL - MINIMUM YIELD STRENGTH OF 33 SKI. MINIMUM WALL THICKNESS OF 35.9 MIL (0.0478" or 18 GAUGE).
- | | | | | | |
|--|--------------------------------------|--|------------------------------------|-------------------------|-------|
| PROJECT NO. ACE-2026-127 | RJA | | | | |
| | 8/14/26 | | | | |
| | UPDATE TO THE 9TH EDITION (2026) FBC | UPDATE TO CURRENT FBC | COMPARATIVE ANALYSIS RESULTS ADDED | DESCRIPTION | DATE |
| | C | B | A | REV | |
| SIERRA PACIFIC WINDOWS
11605 READING ROAD, PO BOX 8489
RED BLUFF, CA 96080 | | TITLE: FEELSAFE H3 2.0 DIRECT SET 43" X 120" (1-WIDE/2-WIDE)
GENERAL NOTES, INSTALLATION NOTES & TABLE OF CONTENTS | | DATE: 5/16/18 | |
| | | DRAWN BY: RJA | SCALE: N.T.S. | DRAWING NO: SPW-PTC0004 | |
| | | PREPARED BY: AMORUSO CONSULTING ENG., LLC
FBPE REGISTRATION NO. 38327
226 N NOVA RD, NO. 142
ORMOND BEACH, FL 32174
RIAENGPE@GMAIL.COM | REV: C | SHEET: 1 | OF 12 |
| | | | | | |
- Robert J. Amoruso, P.E.
Florida P.E. No. 49752
-
- SIGNED/SEALED: 8/14/26



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

DAYLIGHT OPENING (D.L.O.)
WIDTH 38-7/8"
HEIGHT 116-5/16"



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

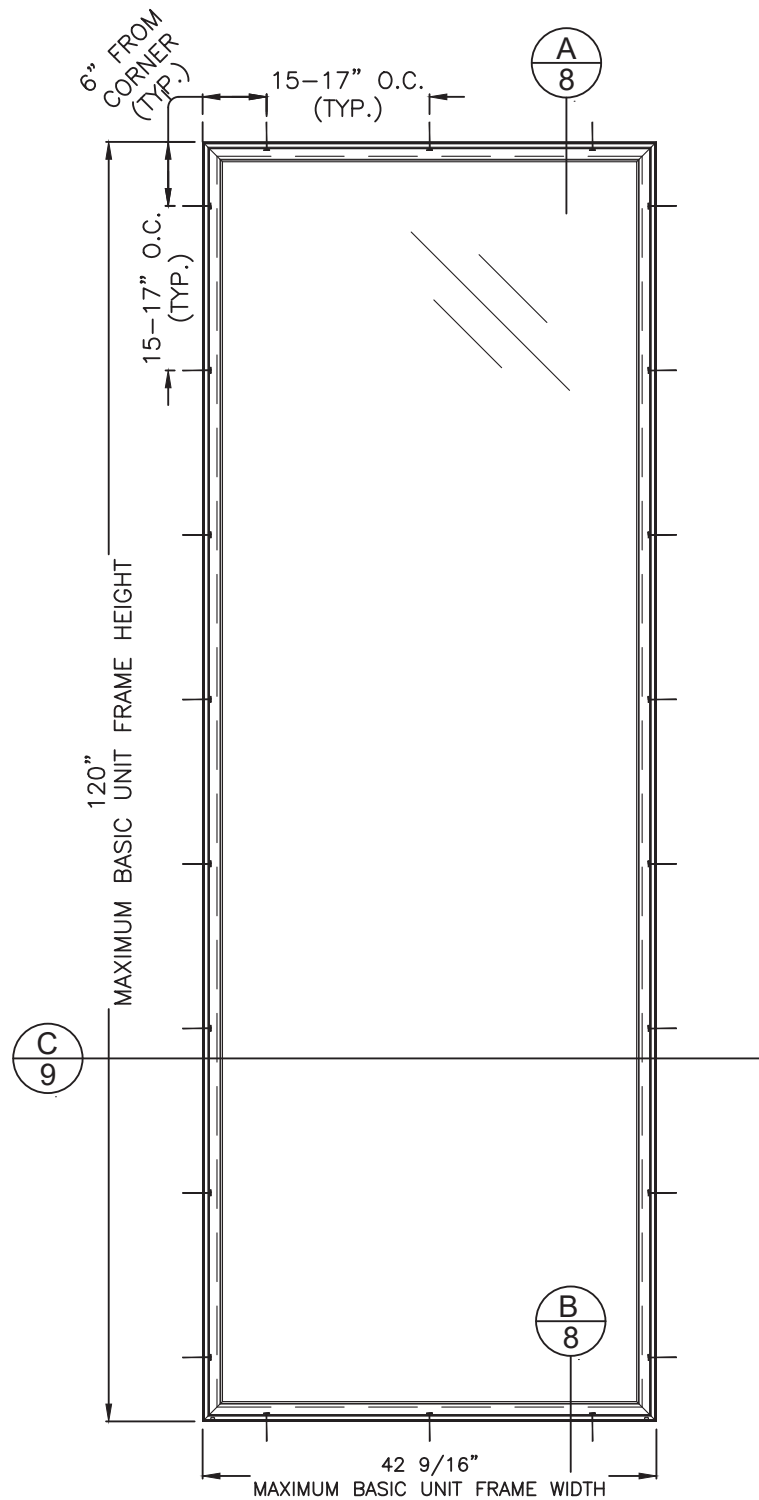
ONE CLIP AT THE HEAD AND SILL SPACED 76MM (3")
AND 152MM (6") ON EACH SIDE OF THE MULL
LOCATION FASTENED TO THE BUCK WITH TWO #8 PPH
SCREWS PER CLIP.

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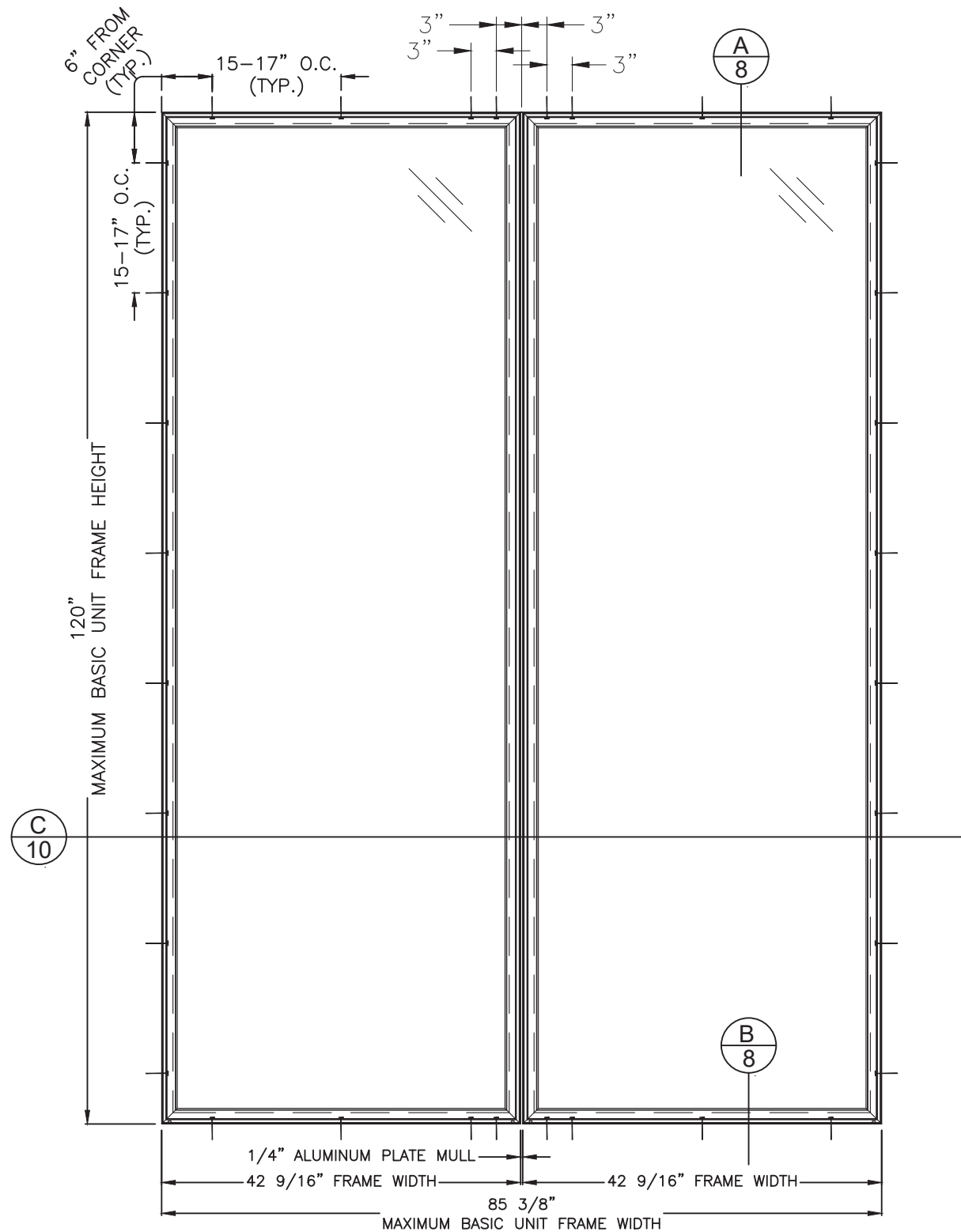
SIGNED/SEALED: 8/14/26

PROJECT NO. ACE-2026-127		SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080	
C	UPDATE TO THE 9TH EDITION (2026) FBC	RJA	DATE: 5/16/18
B	UPDATE TO CURRENT FBC	N.T.S.	DRAWING NO: SPW-PTC0004
A	COMPARATIVE ANALYSIS RESULTS ADDED	C	SHEET: 2 OF 12
REV	DESCRIPTION		



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

DAYLIGHT OPENING (D.L.O.)
WIDTH 38-7/8"
HEIGHT 116-5/16"



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

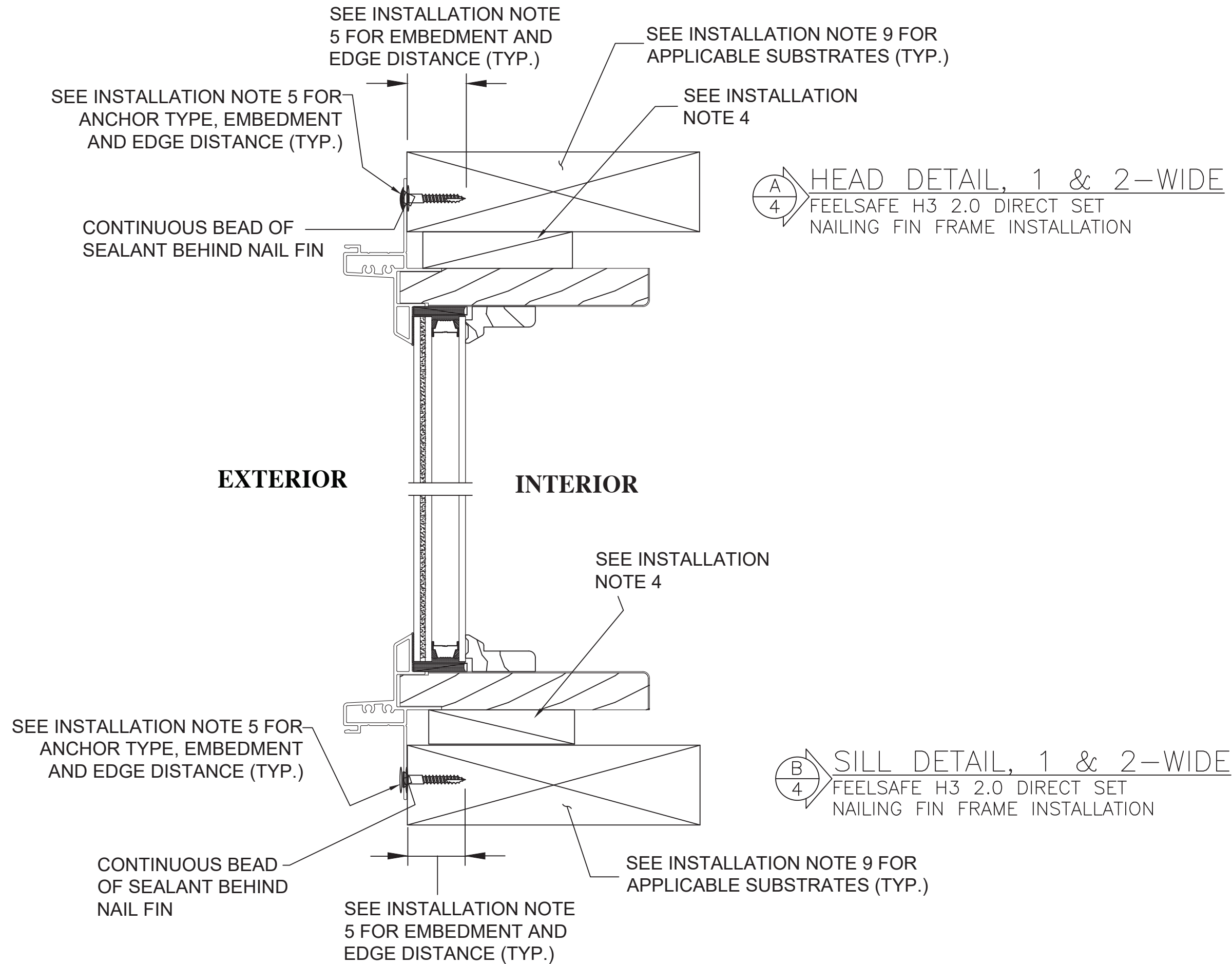
PROJECT NO. ACE-2026-127		SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080	
C	UPDATE TO THE 9TH EDITION (2026) FBC	RJA	8/14/26
B	UPDATE TO CURRENT FBC	RJA	10/6/20
A	COMPARATIVE ANALYSIS RESULTS ADDED	RJA	28/19
REV	DESCRIPTION	DATE	BY

TITLE: FEELSAFE H3 2.0 DIRECT SET 43" X 120" (1-WIDE/2-WIDE) THROUGH FRAME ANCHORAGE ELEVATION		DRAWN BY: RJA		DATE: 5/16/18
PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RIAENGPE@GMAIL.COM		SCALE: N.T.S.		DRAWING NO: SPW-PTC0004
REV: C		SHEET: 3 OF 12		

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PROJECT NO. ACE-2026-127		RJA	BY
C	UPDATE TO THE 9TH EDITION (2026) FBC	8/14/26	DATE
B	UPDATE TO CURRENT FBC	10/6/20	DATE
A	COMPARATIVE ANALYSIS RESULTS ADDED	2/8/19	DATE
REV	DESCRIPTION		

SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080		DRAWN BY: RJA	DATE: 5/16/18
TITLE: FEELSAFE H3 2.0 DIRECT SET 43" X 120" (1-WIDE/2-WIDE) DIRECT SET CROSS SECTIONS - FIN FRAME INSTALLATION		SCALE: N.T.S.	DRAWING NO: SPW-PTC0004
PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RJAENGPE@GMAIL.COM		REV: C	SHEET: 4 OF 12

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

CONTINUOUS BEAD OF
SEALANT BEHIND NAIL FIN

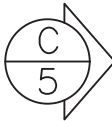
SEE INSTALLATION NOTE
5 FOR EMBEDMENT AND
EDGE DISTANCE (TYP.)

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 NO. ACE-2026-127				
C	UPDATE TO THE 9TH EDITION (2026) FBC	8/14/26	RJA	BY
B	UPDATE TO CURRENT FBC	10/6/20	RJA	
A	COMPARATIVE ANALYSIS RESULTS ADDED	2/8/19	RJA	
REV	DESCRIPTION	DATE		

SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080				
TITLE: FEELSAFE H3 2.0 DIRECT SET 43" X 120" (1-WIDE/2-WIDE) DIRECT SET JAMB DETAIL, 1-WIDE, NAILING FIN 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: 5/16/18	DRAWING NO: SPW-PTC0004	SHEET: 5 OF 12
SCALE: N.T.S.	REV: C			

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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.)

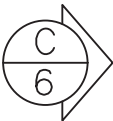
SEE INSTALLATION NOTE 9 FOR APPLICABLE SUBSTRATES (TYP.)

SEE INSTALLATION NOTE 4

1/4" PLATE MULL DETAIL

EXTERIOR

INTERIOR



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

PROJECT NO. ACE-2026-127			
C	UPDATE TO THE 9TH EDITION (2026) FBC	8/14/26	RJA
B	UPDATE TO CURRENT FBC	10/6/20	RJA
A	COMPARATIVE ANALYSIS RESULTS ADDED	2/8/19	RJA
REV	DESCRIPTION	DATE	BY

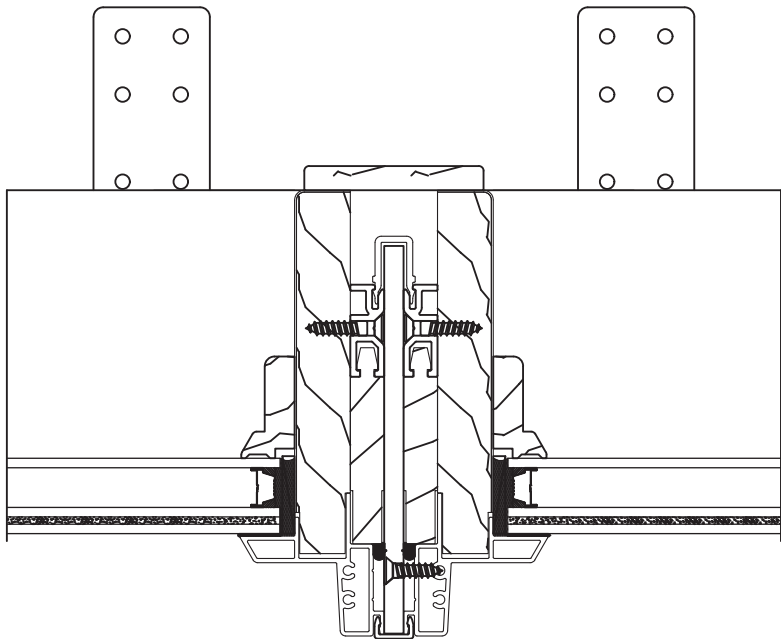
SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080		DRAWN BY: RJA	DATE: 5/16/18
TITLE: FEELSAFE H3 2.0 DIRECT SET 43" X 120" (1-WIDE/2-WIDE) DIRECT SET JAMB DETAIL, 2-WIDE, NAILING FIN FRAME INSTALLATION		SCALE: N.T.S.	DRAWING NO: SPW-PTC0004
PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RIAENGPE@GMAIL.COM		REV: C	SHEET: 6 OF 12

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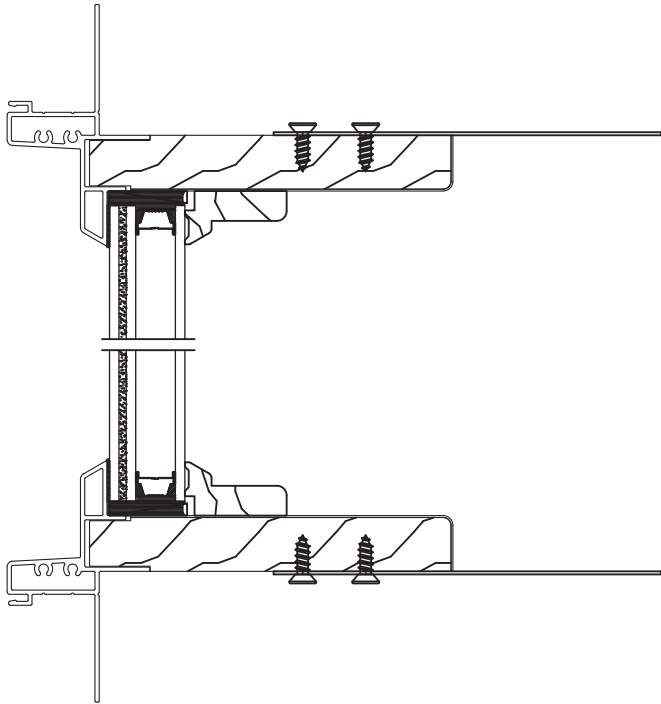


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ONE CLIP AT THE HEAD AND SILL SPACED 76MM (3")
AND 152MM (6") ON EACH SIDE OF THE MULLION
LOCATION FASTENED TO THE BUCK WITH TWO #8
PPH SCREWS PER CLIP.

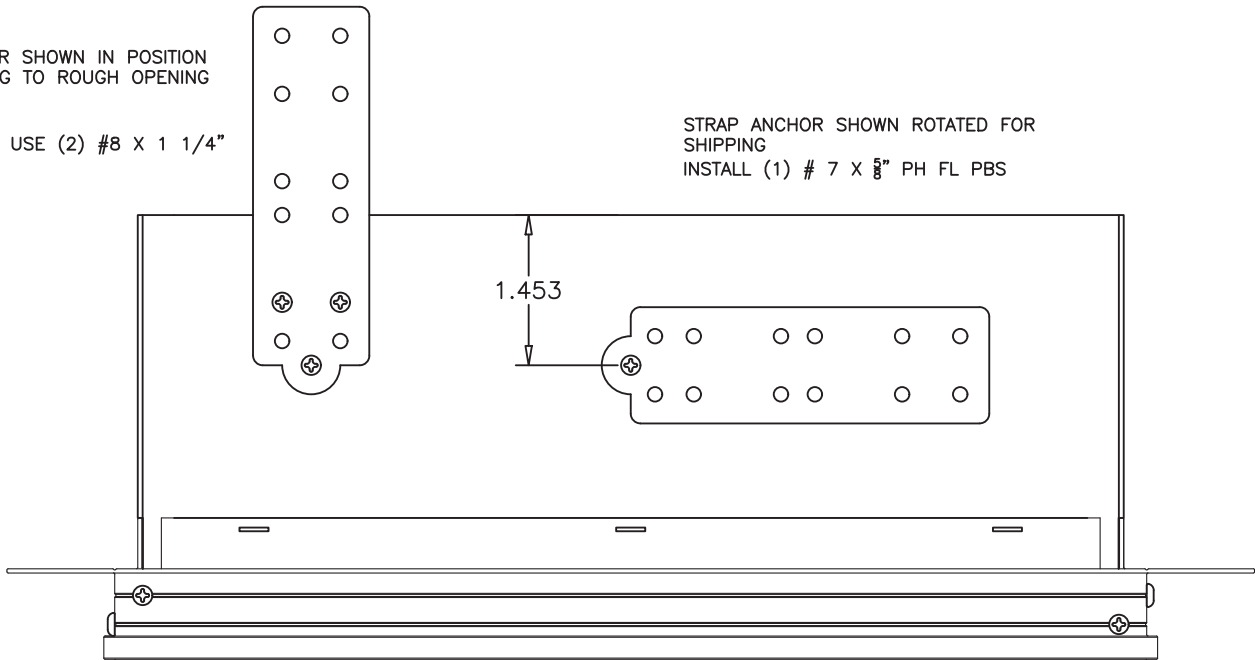


STRAP ANCHOR DETAIL, 2-WIDE
FEELSAFE H3 2.0 DIRECT SET
NAILING FIN FRAME INSTALLATION
STRAP ANCHOR USED AT MULLION

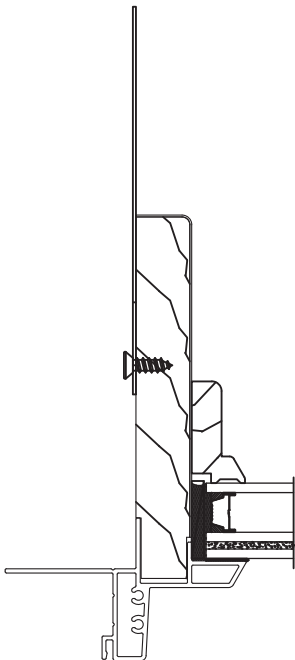


STRAP ANCHOR SHOWN IN POSITION
FOR FASTENING TO ROUGH OPENING

INSTALLER TO USE (2) #8 X 1 1/4"



STRAP ANCHOR SHOWN ROTATED FOR
SHIPPING
INSTALL (1) # 7 X 5/8" PH FL PBS



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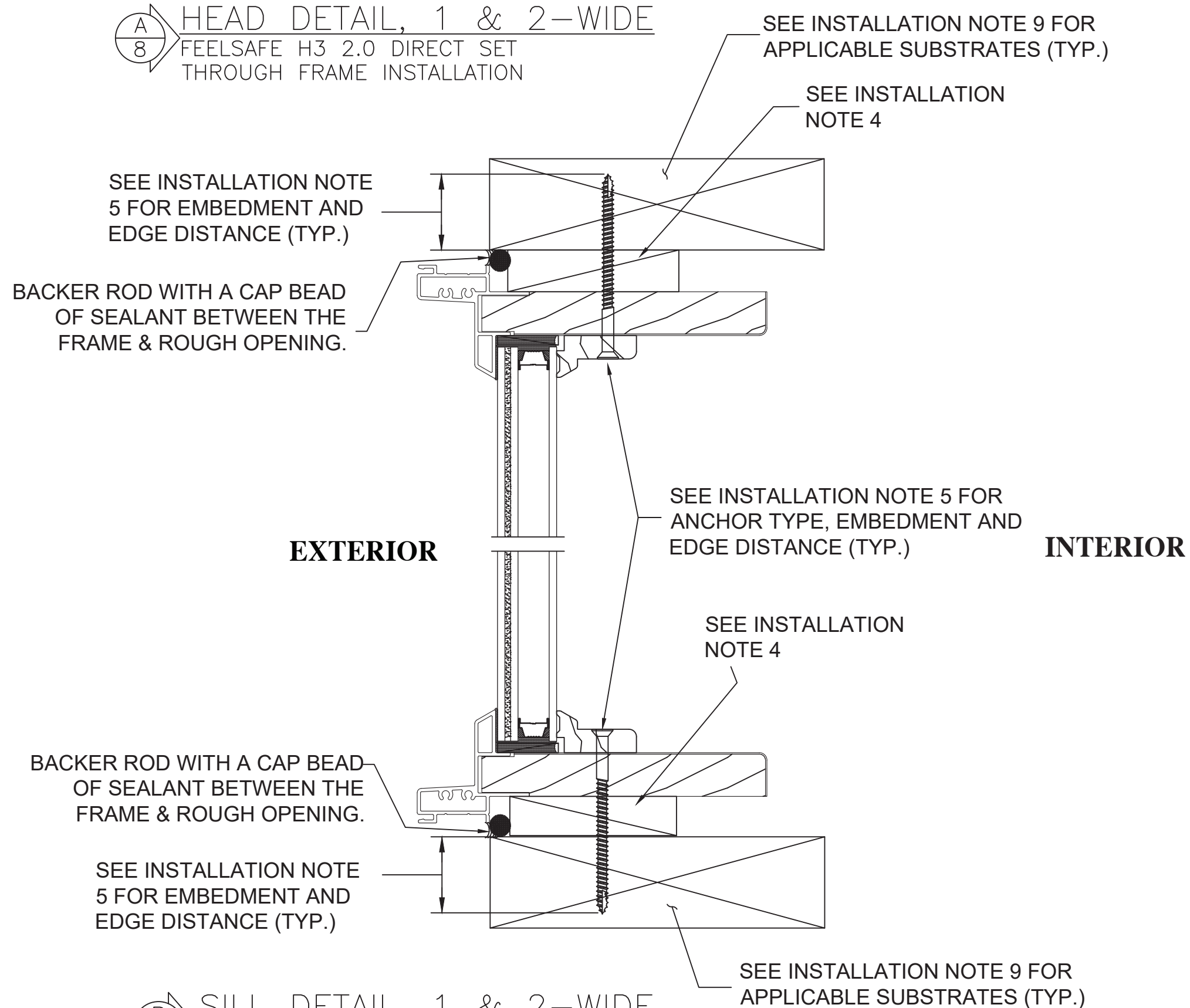


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PROJECT NO. ACE-2026-127		8/14/26	RJA	RJA	BY
C	UPDATE TO THE 9TH EDITION (2026) FBC	10/6/20	RJA	RJA	DATE
B	UPDATE TO CURRENT FBC	28/19	RJA	RJA	DATE
A	COMPARATIVE ANALYSIS RESULTS ADDED	28/19	RJA	RJA	DATE
REV	DESCRIPTION	DATE	BY	DATE	BY

SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080		DATE: 5/16/18		DRAWING NO: SPW-PTC0004	
TITLE: FEELSAFE H3 2.0 DIRECT SET 43" X 120" (1-WIDE/2-WIDE) STRAP ANCHOR DETAIL - FIN FRAME INSTALLATION		DRAWN BY: RJA		SHEET: 7 OF 12	
PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RIAENGPE@GMAIL.COM		SCALE: N.T.S.		REV: C	

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

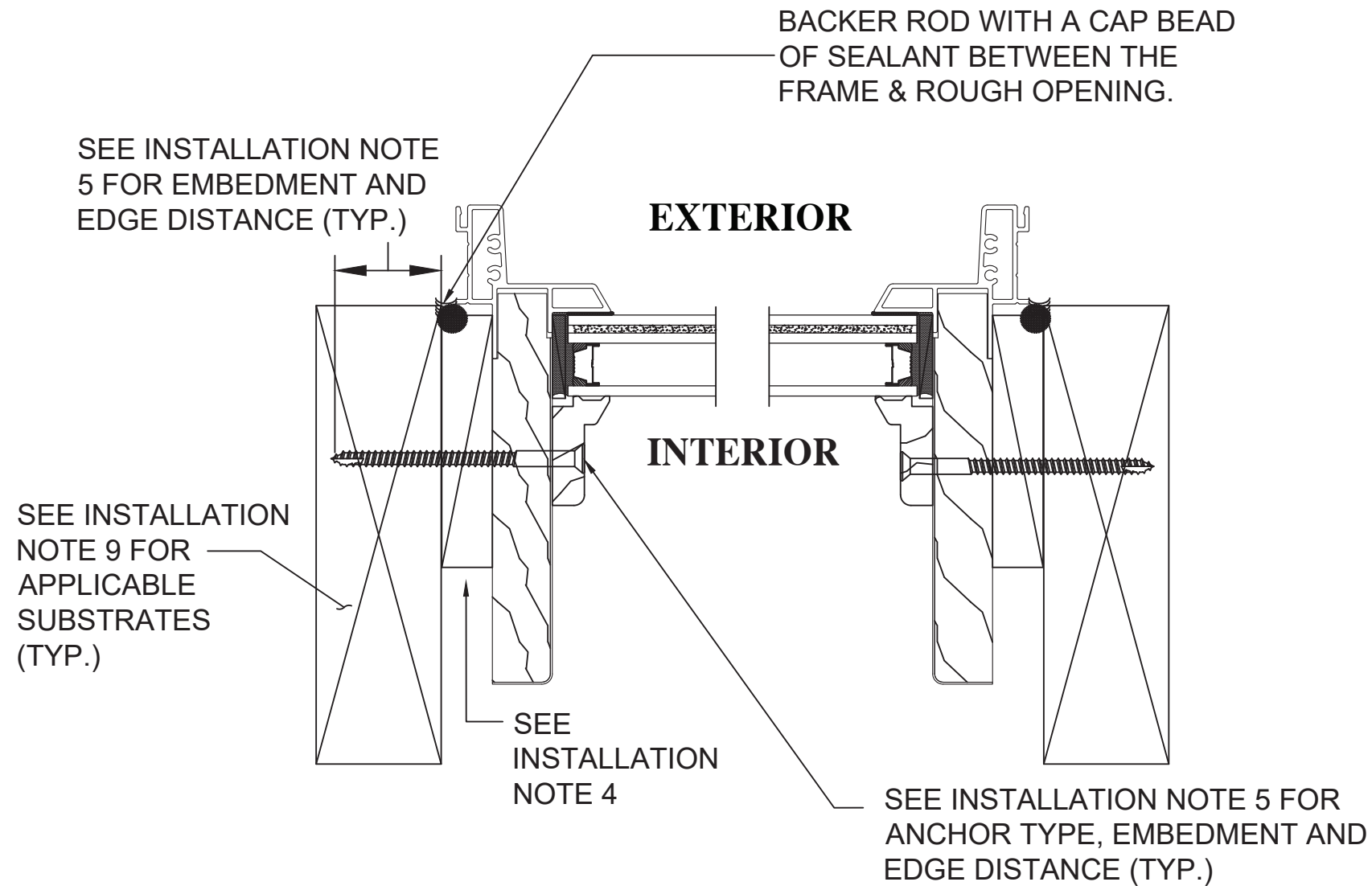
PROJECT NO. ACE-2026-127		8/14/26	RJA	RJA	RJA	BY
C	UPDATE TO THE 9TH EDITION (2026) FBC					
B	UPDATE TO CURRENT FBC	10/6/20	RJA			
A	COMPARATIVE ANALYSIS RESULTS ADDED	2/8/19	RJA			
REV	DESCRIPTION	DATE				

SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080		DATE: 5/16/18	DRAWING NO: SPW-PTC0004	SHEET: 8 OF 12
TITLE: FEELSAFE H3 2.0 DIRECT SET 43" X 120" (1-WIDE/2-WIDE) DIRECT SET HEAD & SILL DETAIL, 1 & 2WIDE, THROUGH FRAME INSTALLATION		DRAWN BY: RJA	SCALE: N.T.S.	REV: C
PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RIAENGPE@GMAIL.COM				

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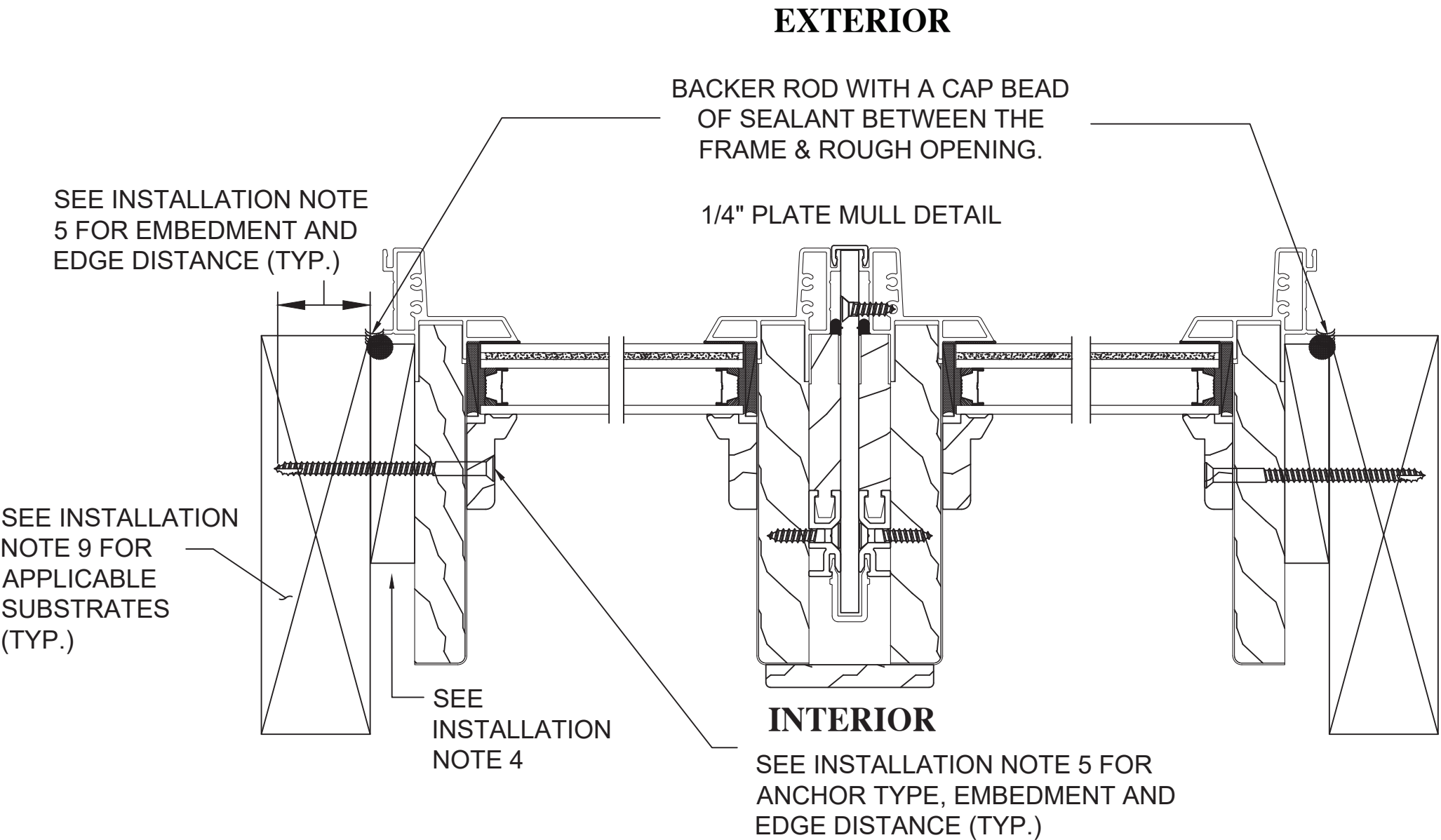
JAMB DETAIL, 1—WIDE
FEELSAFE H3 2.0 DIRECT SET
THROUGH FRAME INSTALLATION

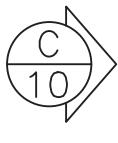
PROJECT NO. ACE-2026-127		SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080		DRAWN BY: RJA		DATE: 5/16/18	
C	UPDATE TO THE 9TH EDITION (2026) FBC	TITLE: FEELSAFE H3 2.0 DIRECT SET 43" X 120" (1-WIDE/2-WIDE) DIRECT SET JAMB DETAIL, 1-WIDE, THROUGH FRAME INSTALLATION		SCALE: N.T.S.		DRAWING NO: SPW-PTC0004	
B	UPDATE TO CURRENT FBC	PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RIAENGPE@GMAIL.COM		REV: C		SHEET: 9 OF 12	
A	COMPARATIVE ANALYSIS RESULTS ADDED						
REV	DESCRIPTION						
	DATE						
	BY						

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SIGNED/SEALED: 8/14/26



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

PROJECT NO. ACE-2026-127			SIERRA PACIFIC WINDOWS 11605 READING ROAD, PO BOX 8489 RED BLUFF, CA 96080		
C	UPDATE TO THE 9TH EDITION (2026) FBC	8/14/26	RJA	TITLE: FEELSAFE H3 2.0 DIRECT SET 43" X 120" (1-WIDE/2-WIDE) DIRECT SET JAMB DETAIL, 2-WIDE, THROUGH FRAME INSTALLATION	
B	UPDATE TO CURRENT FBC	10/6/20	RJA	PREPARED BY: AMORUSO CONSULTING ENG., LLC FBPE REGISTRATION NO. 38327 226 N NOVA RD, NO. 142 ORMOND BEACH, FL 32174 RJAENGPE@GMAIL.COM	DATE: 5/16/18
A	COMPARATIVE ANALYSIS RESULTS ADDED	2/8/19	RJA	SCALE: N.T.S.	DRAWING NO: SPW-PTC0004
REV	DESCRIPTION	DATE	BY	REV: C	SHEET: 10 OF 12

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



SIGNED/SEALED: 8/14/26

DESIGN PRESSURE PERFORMANCE RATING AND COMPARATIVE ANALYSIS RESULTS

DESIGN PRESSURE PERFORMANCE RATING		
MAXIMUM SIZE (NOMINAL)	DESIGN PRESSURE (PSF)	IMPACT RATING
43" x 120" (1-WIDE)	+50/-60 psf	MISSILE LEVEL D WIND ZONE 3
86" x 120" (2-WIDE)	+50/-60 psf	MISSILE LEVEL D WIND ZONE 3
MAXIMUM D.L.O. SIZE: 38-7/8" x 116-5/16"		

Notes:

1. The Comparative Analysis results depicted here are based on Section 1709 and Section R609 of the 9TH EDITION (2026) Florida Building Code and 9TH EDITION (2026) 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 (43" x 120" individual size, 35.8 SF frame area).
3. The results depicted are based on the structural loading test results of +50/-60 psf at a tested size of 43" x 120" 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 43" x 120" 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 + 1/4".
- 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 12 are applicable to the 2-wide window only.
- 5.2. The Comparative Analysis results on Sheet 11 must be compared to the Mull Span vs. Load Width results shown on Sheet 12 for 2-wide windows. The lower of the results shall govern for the 2-wide window size construed.

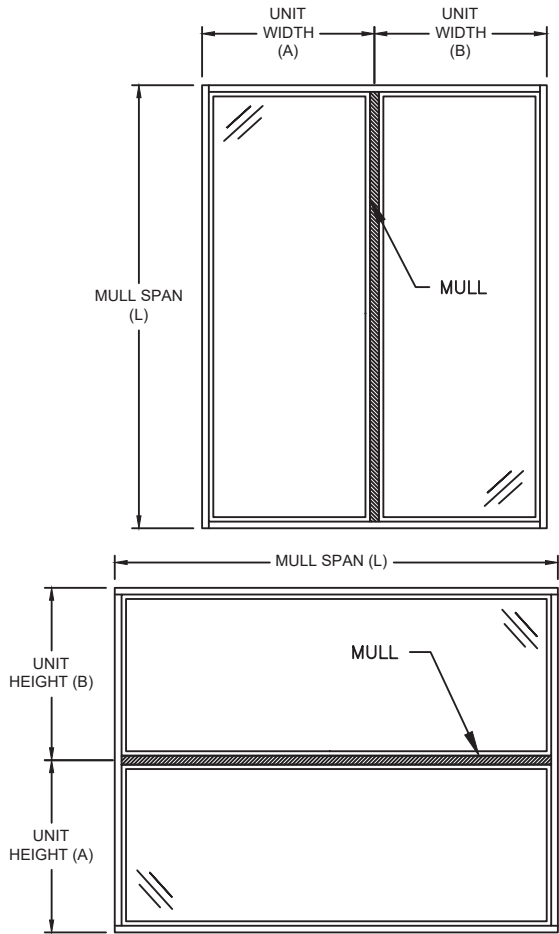
Size		Positive DP (psf)	Negative DP (psf)
Width	Height		
24	78	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
42		50.0	60.0
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56	82	38.4	46.1
60		35.8	43.0
64		33.6	40.3
24		50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
42		50.0	60.0
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56		38.4	46.1
60		35.8	43.0
24	84	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
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56	86	38.4	46.1
60		35.8	43.0
64		33.6	40.3
24		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
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56		38.4	46.1
60		35.8	43.0
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
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56	96	38.4	46.1
60		35.8	43.0
64		33.6	40.3
24		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
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56		38.4	46.1
60		35.8	43.0
24	102	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
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56	108	38.4	46.1
60		35.8	43.0
64		33.6	40.3
24		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
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56		38.4	46.1
60		35.8	43.0
24	114	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
43		50.0	60.0
24	120	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
43		50.0	60.0
24	126	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
24	132	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
24	138	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
24	144	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
24	150	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
24	156	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
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56		38.4	46.1
60		35.8	43.0

Size		Positive DP (psf)	Negative DP (psf)
Width	Height		
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
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56	90	38.4	46.1
60		35.8	43.0
64		33.6	40.3
24		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
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56		38.4	46.1
60		35.8	43.0
24	96	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
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56	102	38.4	46.1
60		35.8	43.0
64		33.6	40.3
24		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
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56		38.4	46.1
60		35.8	43.0
24	108	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
43		50.0	60.0
24	114	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
43		50.0	60.0
24	120	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
43		50.0	60.0
24	126	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
24	132	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
24	138	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
24	144	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
24	150	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
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56		38.4	46.1
60		35.8	43.0
24	156	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
43		50.0	60.0
48		44.8	53.8
52		41.3	49.6
54		39.8	47.8
56		38.4	46.1
60		35.8	43.0

Size		Positive DP (psf)	Negative DP (psf)
Width	Height		
24	108	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
43		50.0	60.0
24	114	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
43		50.0	60.0
24	120	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
43		50.0	60.0
24	126	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
40		50.0	60.0
24	132	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
24	138	50.0	60.0
30		50.0	60.0
32		50.0	60.0
36		50.0	60.0
24	144	50.0	60.0
30		50.0	60.0
32		50.0	60.0
24	150	50.0	60.0
30		50.0	60.0
32		50.0	60.0
24	156	50.0	60.0
30		50.0	60.0
32		50.0	60.0

MULL SPAN VS. LOAD WIDTH

TWO-WAY
MULLION
CONFIGURATION



Maximum Design Pressure Capacity Chart (psf) - Box Mullion With 1/4" 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
≤ 84	24	50	-60	102	24	50	-60	120	24	50	-60	144	24	49	-59
	30	50	-60		30	50	-60		30	50	-60		30	40	-48
	36	50	-60		36	50	-60		36	50	-60		36	33	-40
	43	50	-60		43	50	-60		43	50	-59		43	28	-34
	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	49	-58		60	37	-44		60	21	-25
	66	50	-60		66	46	-55		66	34	-41		66	19	-23
	72	50	-60		72	44	-53		72	32	-39		72	18	-22
	78	50	-60		78	43	-51		78	30	-37		78	17	-20
	84	50	-60		84	42	-50		84	29	-35		84	16	-19
96	50	-60	96	41	-49	96	27	-32	96	15	-18				
96	24	50	-60	108	24	50	-60	132	24	50	-60	156	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
	43	50	-60		43	50	-60		43	37	-44		43	22	-26
	48	50	-60		48	50	-60		48	33	-40		48	20	-24
	54	50	-60		54	48	-58		54	30	-36		54	18	-21
	60	50	-60		60	45	-54		60	28	-33		60	16	-20
	66	50	-60		66	42	-51		66	26	-31		66	15	-18
	72	49	-58		72	41	-49		72	24	-29		72	14	-17
	78	47	-57		78	39	-47		78	23	-27		78	13	-16
	84	46	-56		84	38	-45		84	21	-26		84	12	-15
96	46	-55	96	36	-43	96	20	-24	96	11	-13				

DESIGN PRESSURE CAPACITY CHART USAGE

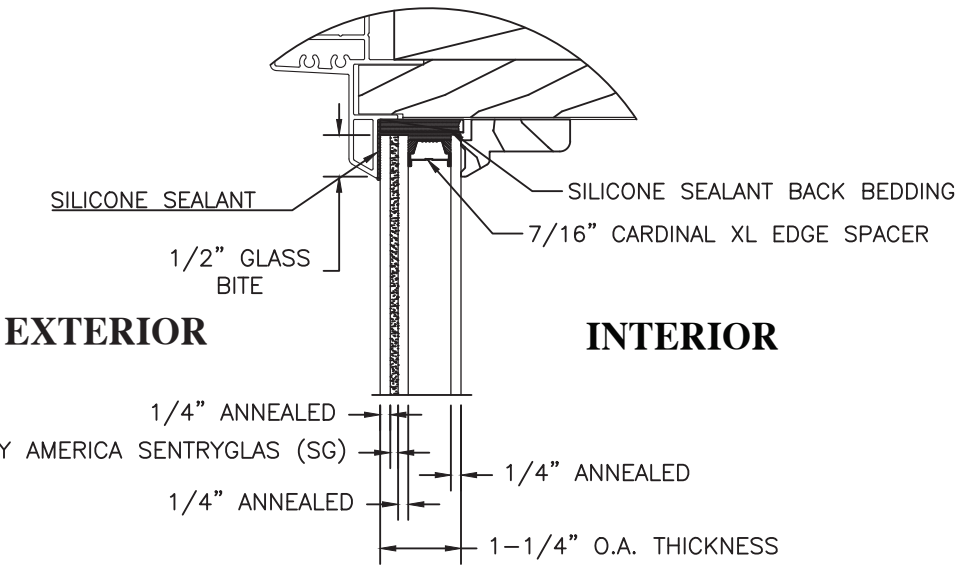
LOAD (TRIBUTARY) WIDTH = (A + B)/2

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 ABOVE 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 11).
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 11 FOR COMPARATIVE ANALYSIS RESULTS. FRAME AREAS OF CONSTRUED UNITS MUST BE EQUAL TO OR LESS THAN THE FRAME AREA OF THE TEST UNIT (43" X 120" INDIVIDUAL SIZE, 35.8 SF FRAME AREA).

DESIGN PRESSURE PERFORMANCE RATING		
MAXIMUM SIZE (NOMINAL)	DESIGN PRESSURE (PSF)	IMPACT RATING
43" x 120" (1-WIDE)	+50/-60 psf	MISSILE LEVEL D WIND ZONE 3
86" x 120" (2-WIDE)	+50/-60 psf	MISSILE LEVEL D WIND ZONE 3
MAXIMUM D.L.O. SIZE: 38-7/8" x 116-5/16"		



GLAZING DETAIL "QQ"

PROJECT NO. ACE-2026-127

8/14/26

10/6/20

28/19

DATE

UPDATE TO THE 9TH EDITION (2026) FBC

UPDATE TO CURRENT FBC

COMPARATIVE ANALYSIS RESULTS ADDED

DESCRIPTION

C

B

A

REV

SIERRA PACIFIC WINDOWS

11605 READING ROAD, PO BOX 8489

RED BLUFF, CA 96080

TITLE: FEELSAFE H3 2.0 DIRECT SET 43" X 120" (1-WIDE/2-WIDE)

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

DRAWN BY: RJA

DATE: 5/16/18

DRAWING NO: SPW-PTC0004

SHEET: 12 OF 12

AMORUSO CONSULTING ENG., LLC

FBPE REGISTRATION NO. 38327

226 N NOVA RD, NO. 142

ORMOND BEACH, FL 32174

RIAENGPE@GMAIL.COM

SCALE: N.T.S.

REV: C

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



SIGNED/SEALED: 8/14/26