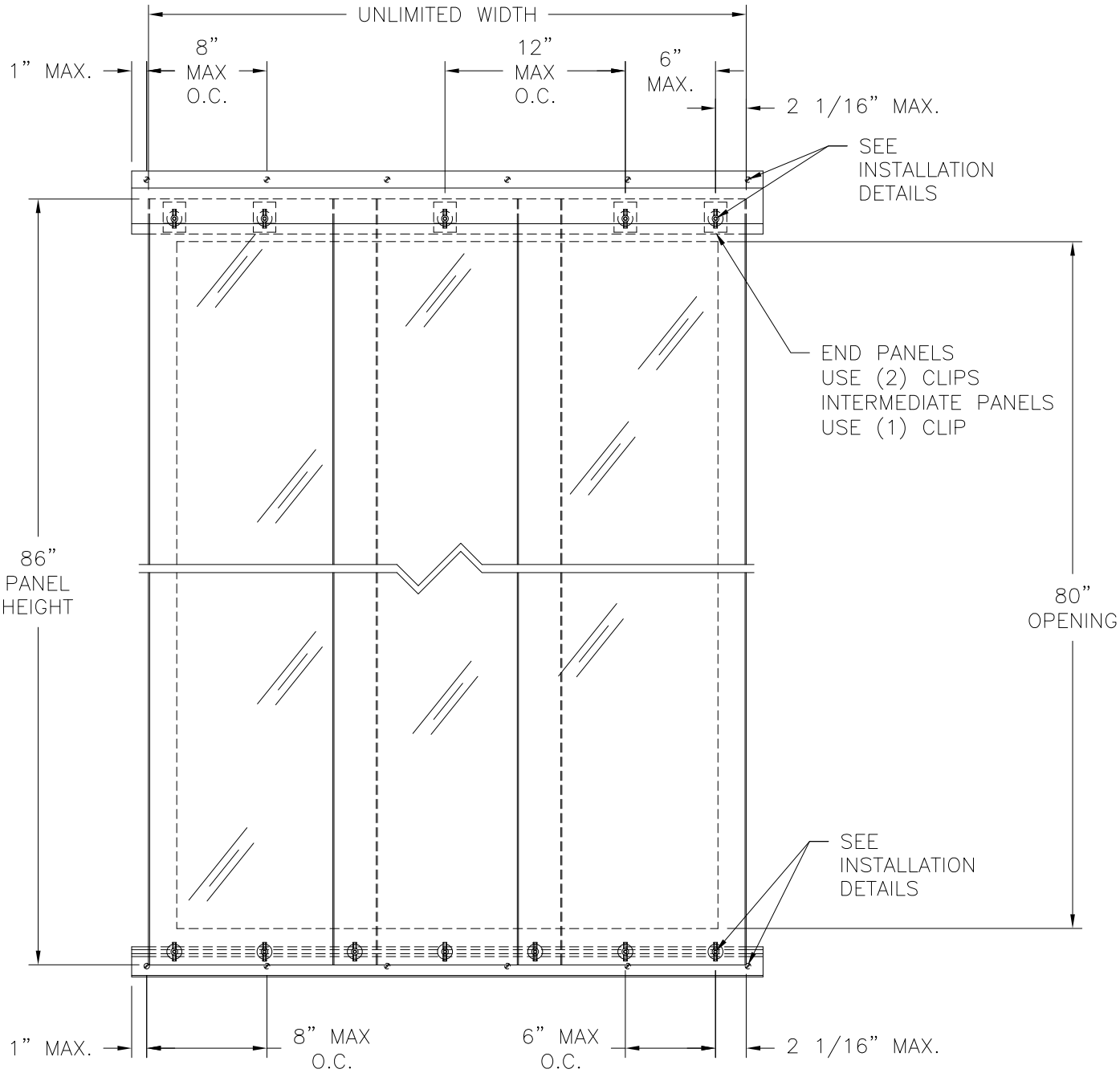


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
D	REVISED PER NEW CODE	08/29/2024	R.L.



- NOTES:
- 1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
 - 2. WOOD FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
 - 3. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
 - 4. PANEL MATERIAL: CORRUGATED POLYCARBONATE.
 - 5. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
 - 6. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #14 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 2" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
 - 7. FOR ANCHORING INTO MASONRY/CONCRETE USE 1/4" TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1 1/4" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
 - 8. FOR ANCHORING INTO BRICK VENEER USE PANELMATE TVAS WITH 2" MINIMUM EMBEDMENT. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
 - 9. ALL FASTENERS TO BE CORROSION RESISTANT.
 - 10. 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 BELOW:
 - 10.1. WOOD: MINIMUM SPECIFIC GRAVITY OF G=0.42
 - 10.2. CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.
 - 10.3. MASONRY: GROUT FILLED BLOCK PER ASTM C90 WITH Fm=2,000PSI MINIMUM.
 - 11. SEPARATION FROM GLASS MUST BE 6 3/4" MINIMUM.
 - 12. BUILD UP PROFILES MAY BE COMBINED TO ACHIEVE DESIRED SEPARATION FROM OPENING.

STORM SHUTTER TYPE D
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±60.0PSF	LARGE AND SMALL MISSILE IMPACT

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	ELEVATION AND NOTES
2 – 9	INSTALLATION DETAILS
10	COMPONENTS

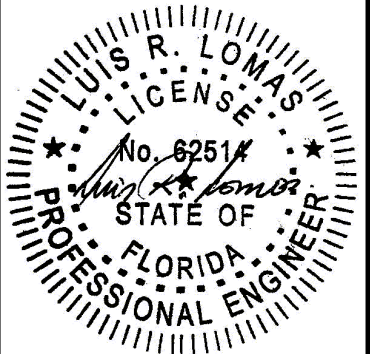
VUSAFE INDUSTRIES, LLC.
350 KIDDS HILL ROAD
HYANNIS, MA 02601

STORM SHUTTER TYPE D
IMPACT
ELEVATION AND NOTES

DRAWN: R.L.	DWG NO. 08-01262	REV D
SCALE NTS	DATE 06/20/11	SHEET 1 OF 10

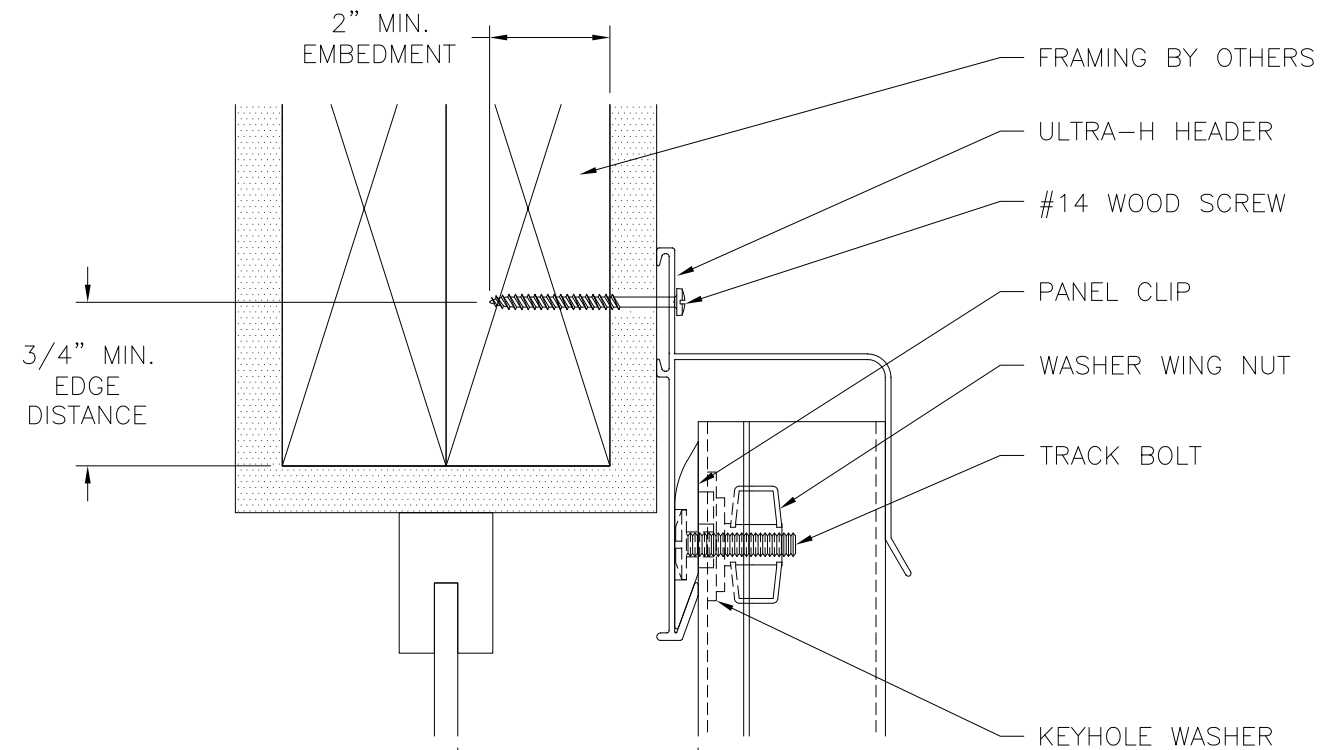
L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

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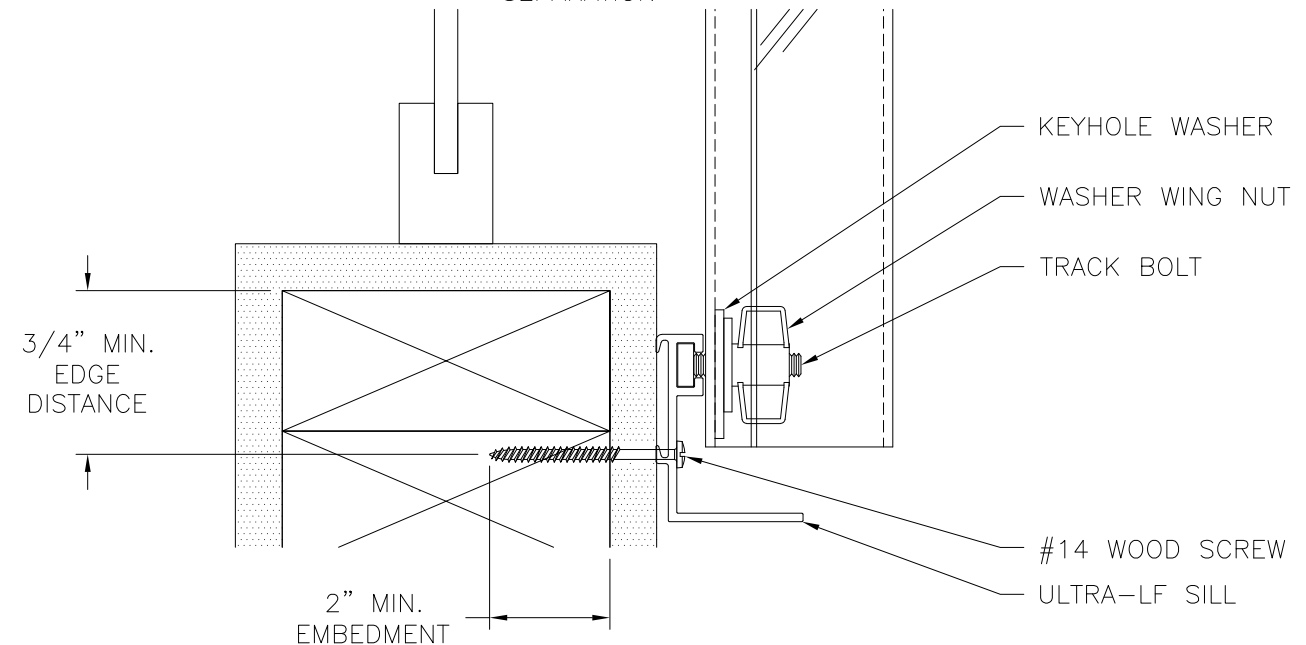


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FL No.: 62514

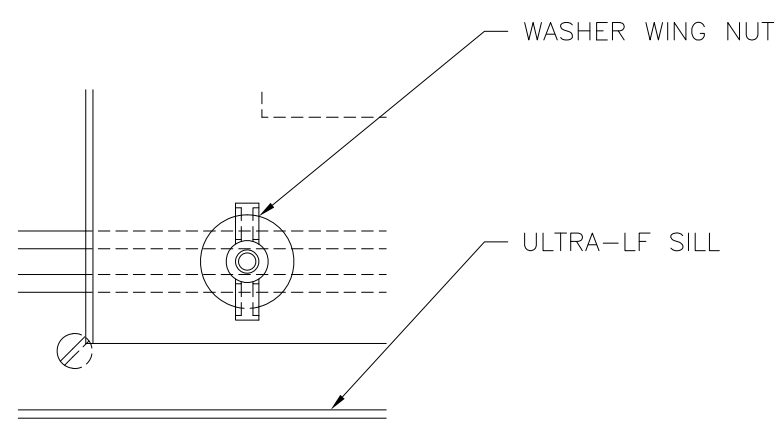
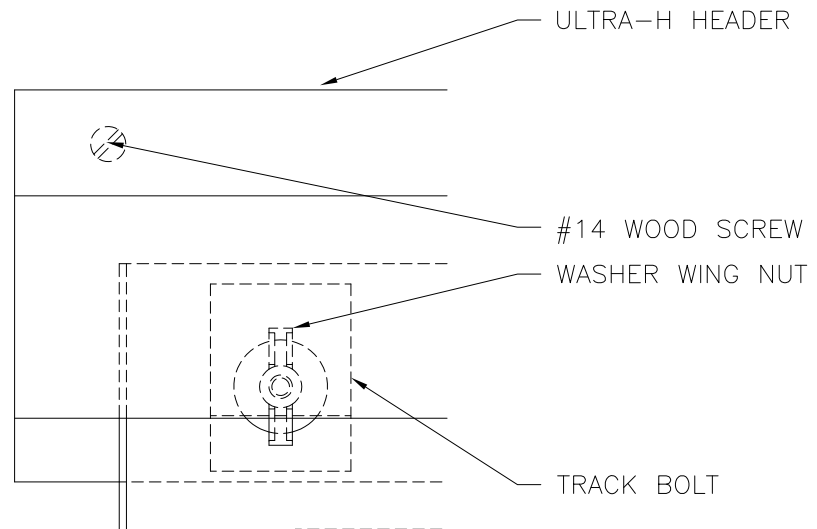
REVISIONS			
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SEE NOTE 11
FOR GLASS
SEPARATION



VERTICAL CROSS SECTION
WOOD FRAMING INSTALLATION
PANEL TO OVERLAP OPENING
2 1/4" MIN. AT HEAD AND SILL

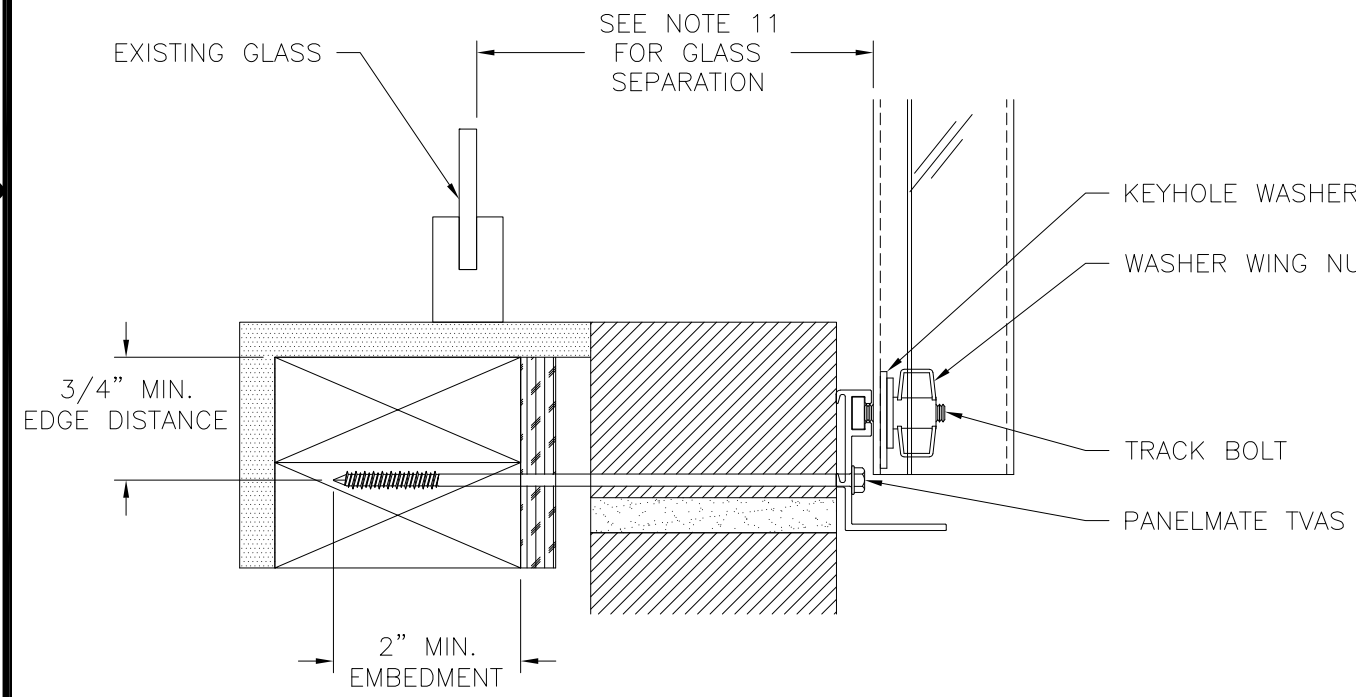
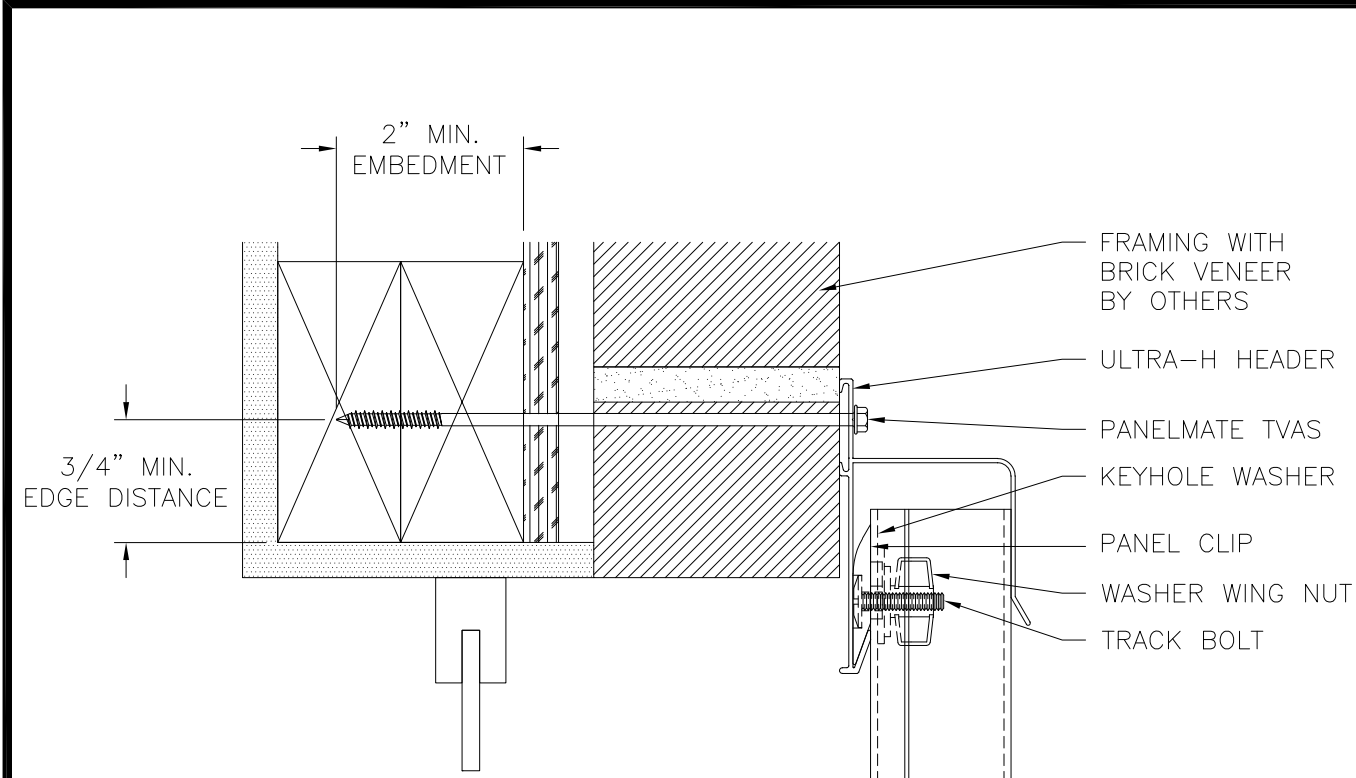


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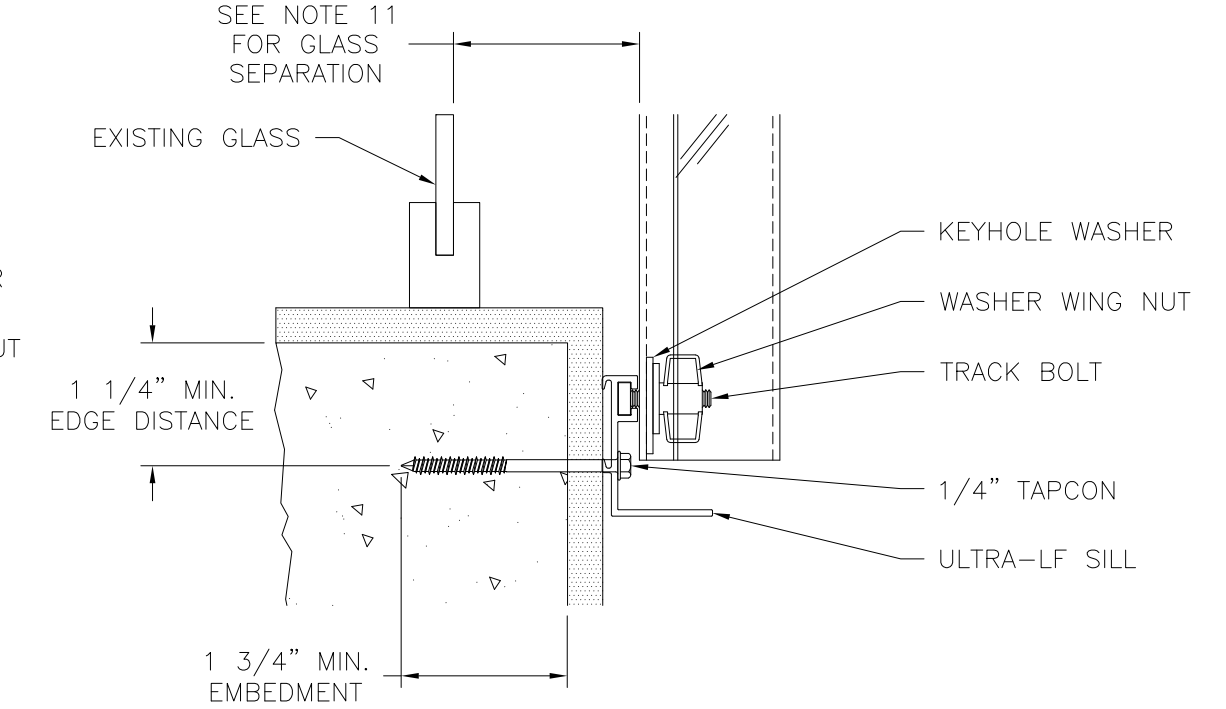
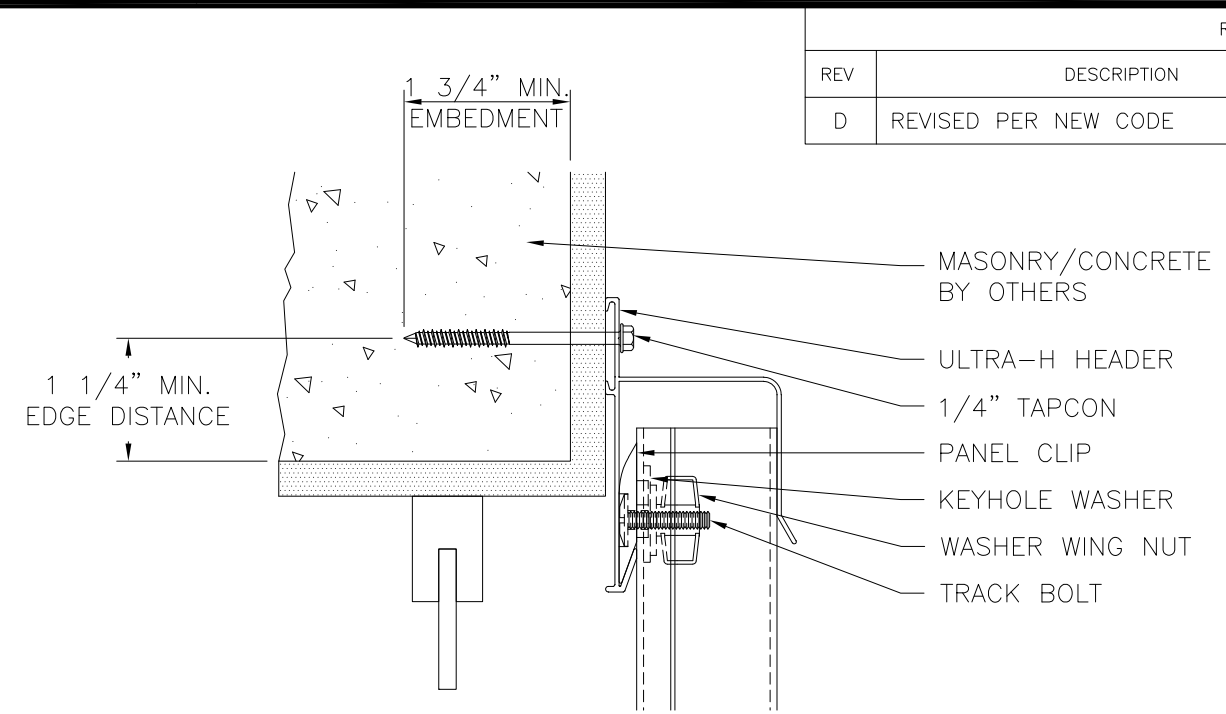
VUSAFE INDUSTRIES, LLC. 350 KIDDS HILL ROAD HYANNIS, MA 02601		
STORM SHUTTER TYPE D IMPACT INSTALLATION DETAILS		
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SCALE NTS	DATE 06/20/11	SHEET 2 OF 10
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

Professional Engineer Seal for Luis R. Lomas, State of Florida, License No. 62514.

Luis R. Lomas P.E.
FL No.: 62514



VERTICAL CROSS SECTION
 BRICK VENEER INSTALLATION
 PANEL TO OVERLAP OPENING
 2 1/4" MIN. AT HEAD AND SILL



VERTICAL CROSS SECTION
 MASONRY/CONCRETE INSTALLATION
 PANEL TO OVERLAP OPENING
 2 1/4" MIN. AT HEAD AND SILL

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VUSAFE INDUSTRIES, LLC.
 350 KIDDS HILL ROAD
 HYANNIS, MA 02601

STORM SHUTTER TYPE D
 IMPACT
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DWG NO. 08-01262

REV D

SCALE NTS

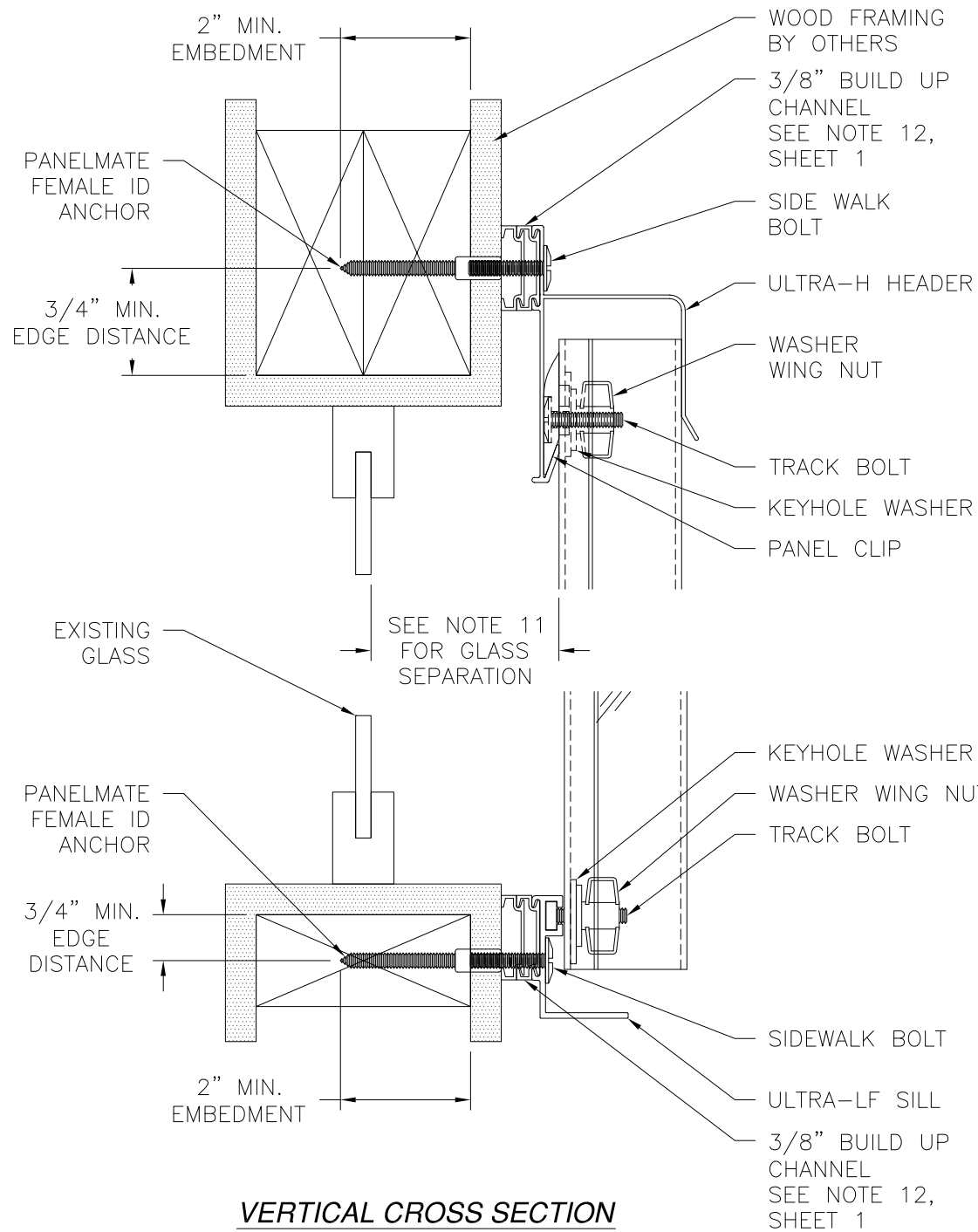
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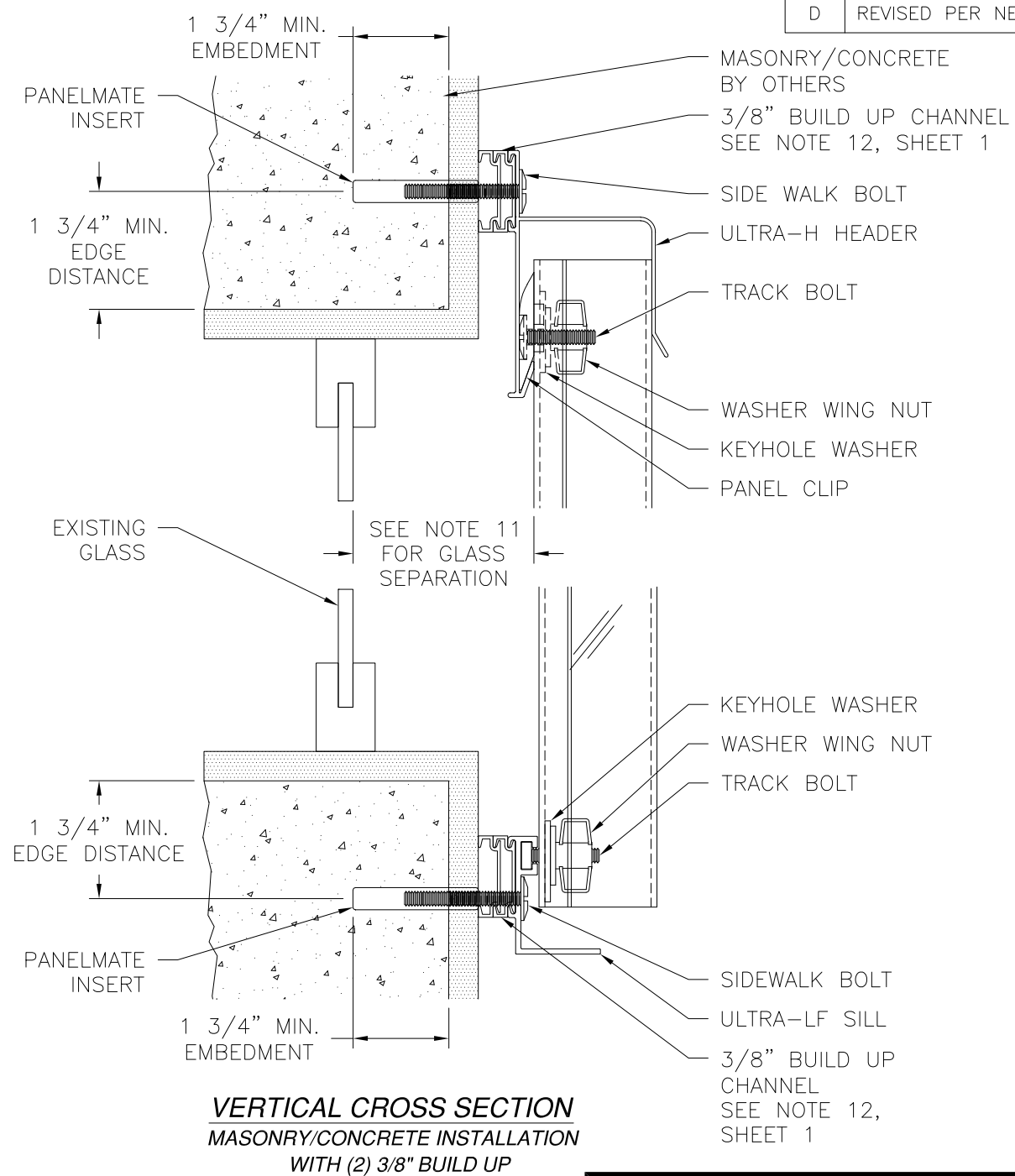
L. ROBERTO LOMAS P.E.
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 434-688-0609 rllomas@lrlomaspe.com

SIGNED: 08/29/2024

Luis R. Lomas P.E.
 FL No.: 62514



VERTICAL CROSS SECTION
WOOD INSTALLATION
WITH (2) 3/8" BUILD UP



VERTICAL CROSS SECTION
MASONRY/CONCRETE INSTALLATION
WITH (2) 3/8" BUILD UP

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VUSAFE INDUSTRIES, LLC.
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IMPACT
INSTALLATION DETAILS

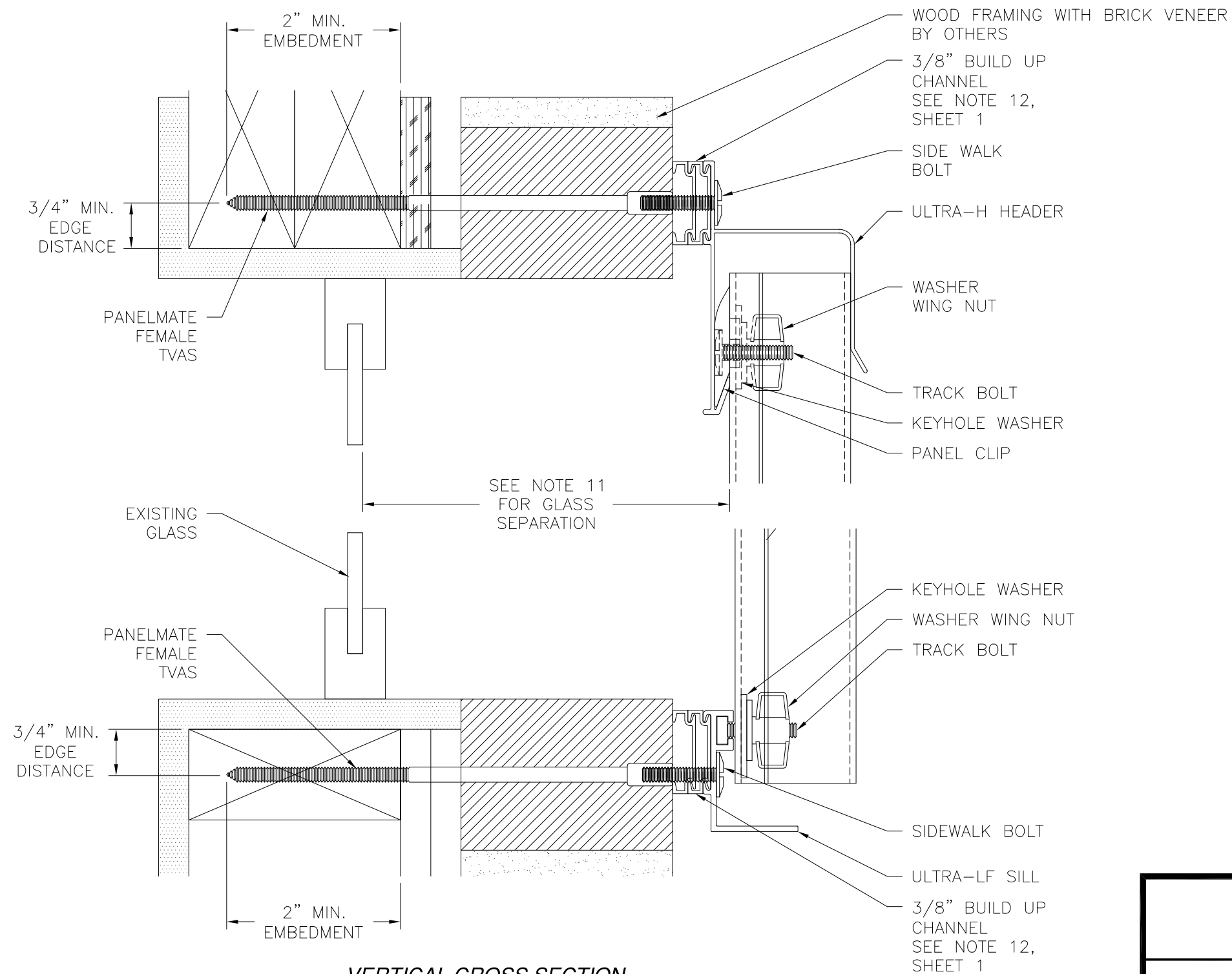
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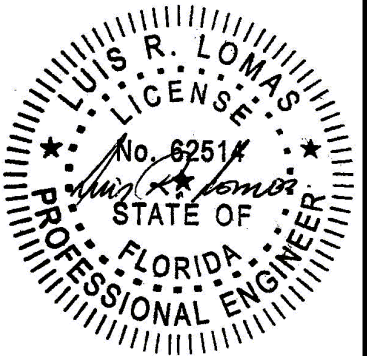
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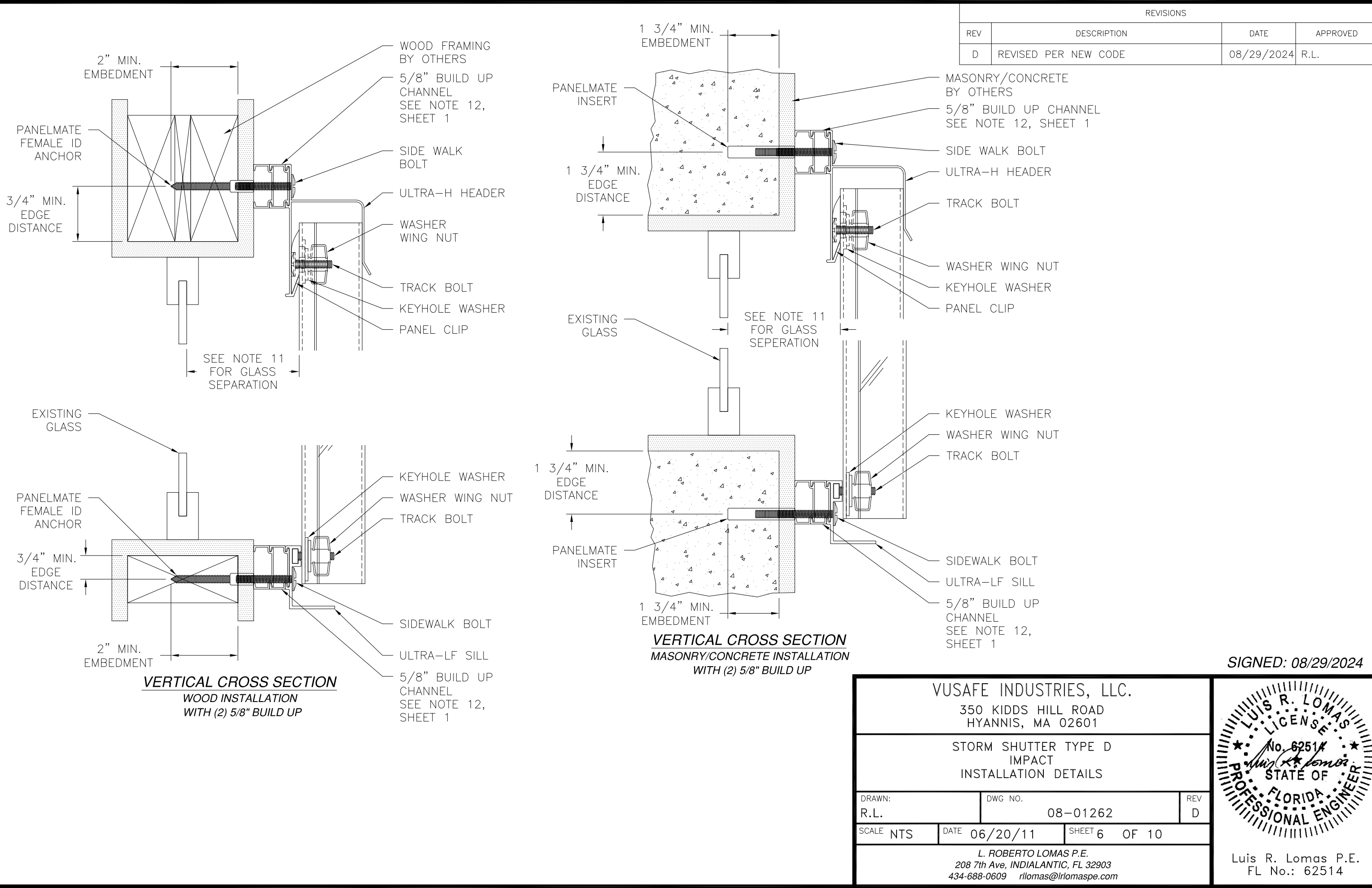
VERTICAL CROSS SECTION
BRICK VENEER INSTALLATION
WITH (2) 3/8" BUILD UP

VUSAFE INDUSTRIES, LLC. 350 KIDDS HILL ROAD HYANNIS, MA 02601		
STORM SHUTTER TYPE D IMPACT INSTALLATION DETAILS		
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SCALE NTS	DATE 06/20/11	SHEET 5 OF 10
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

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VERTICAL CROSS SECTION
WOOD INSTALLATION
WITH (2) 5/8" BUILD UP

VERTICAL CROSS SECTION
MASONRY/CONCRETE INSTALLATION
WITH (2) 5/8" BUILD UP

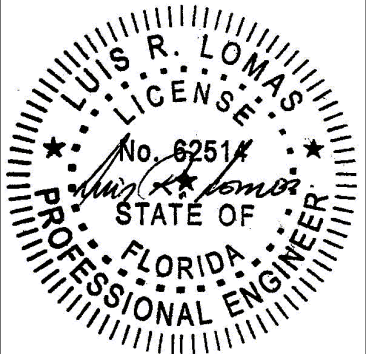
VUSAFE INDUSTRIES, LLC.
350 KIDDS HILL ROAD
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STORM SHUTTER TYPE D
IMPACT
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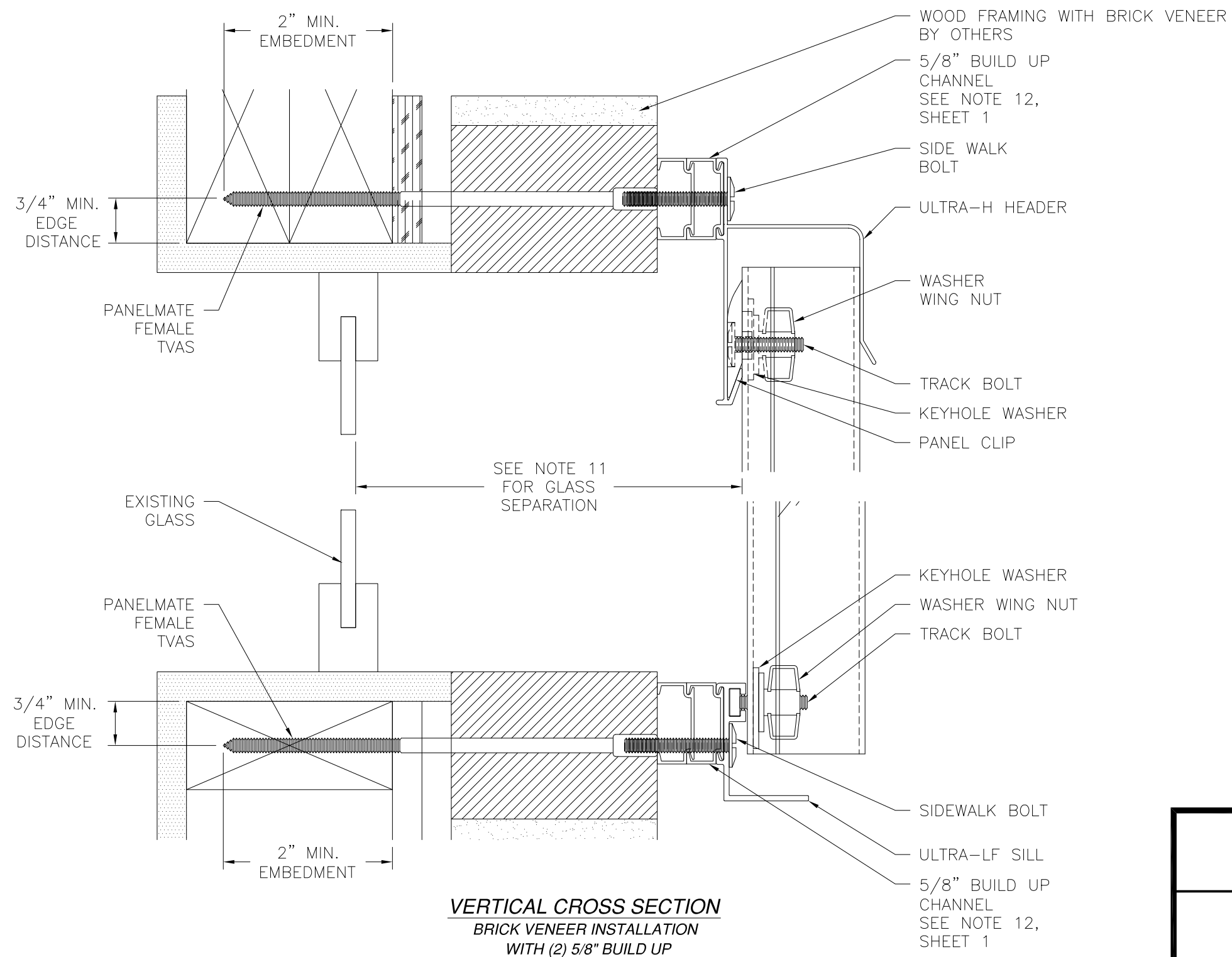
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VERTICAL CROSS SECTION
BRICK VENEER INSTALLATION
WITH (2) 5/8" BUILD UP

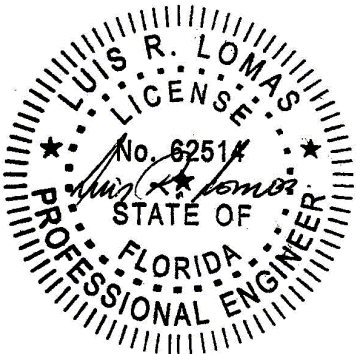
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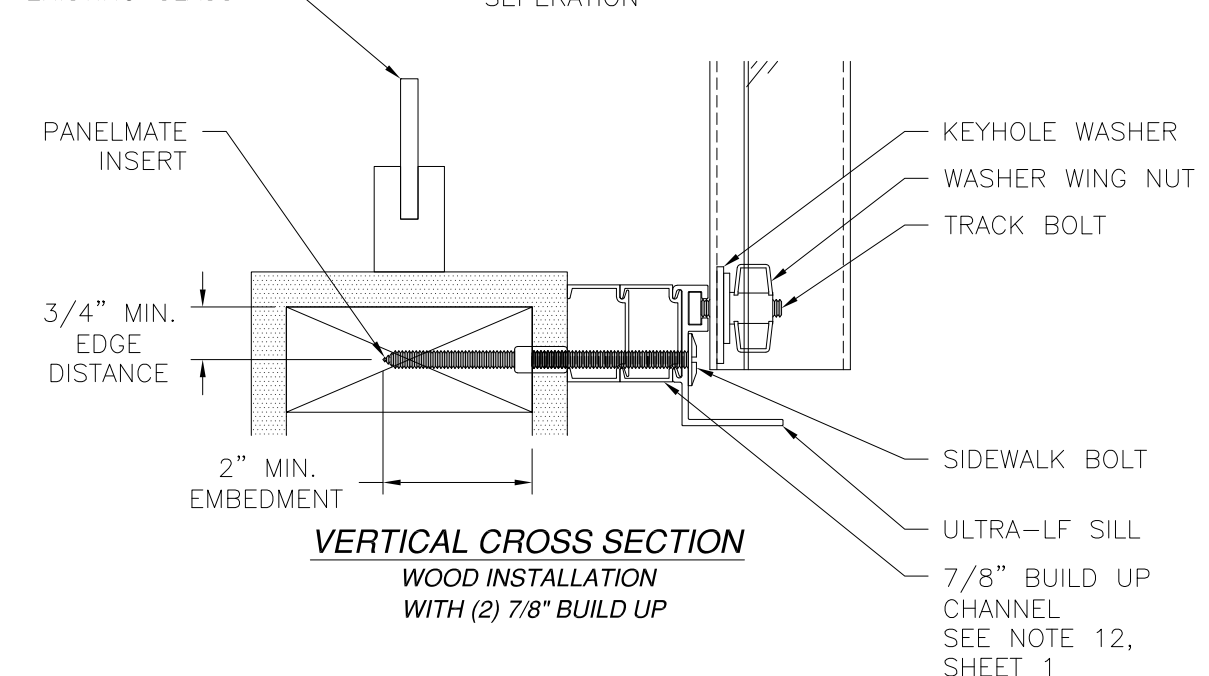
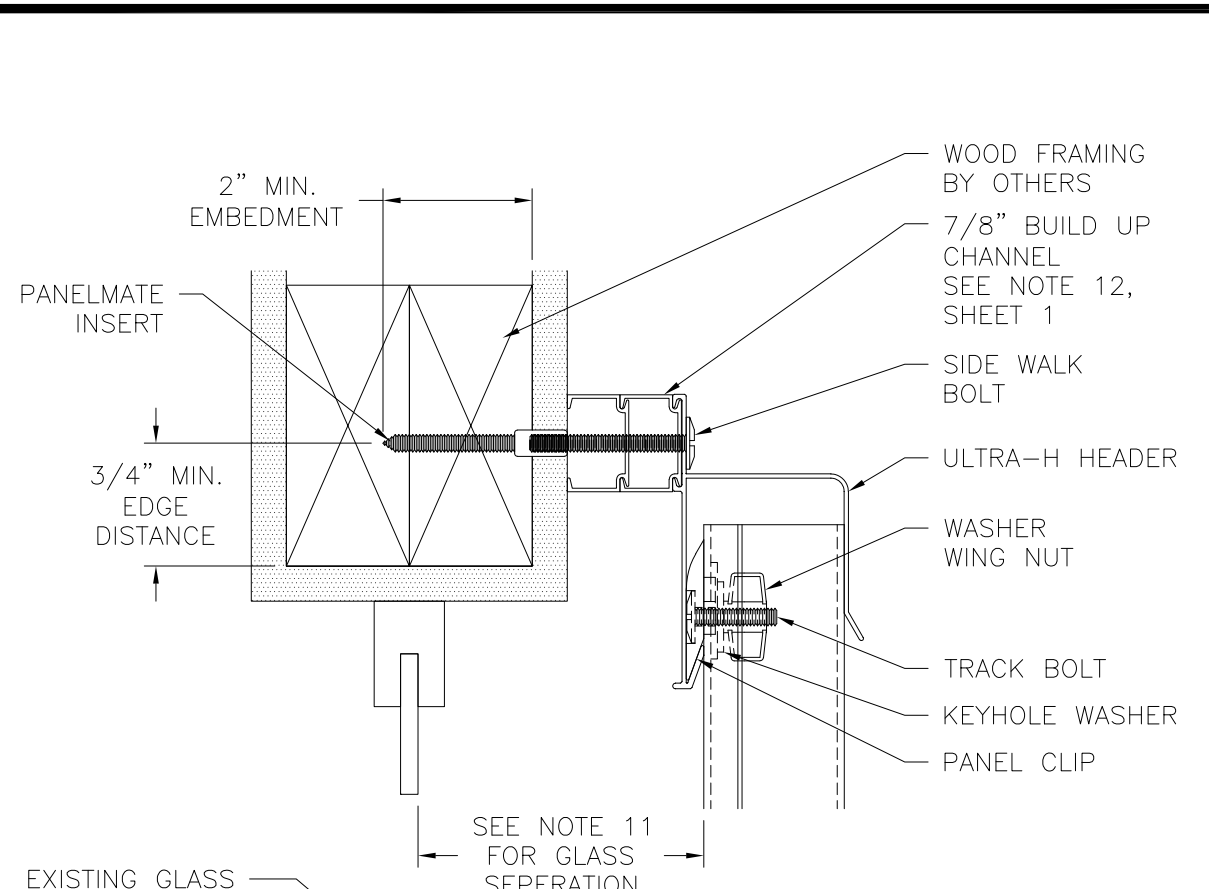
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IMPACT
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SCALE NTS	DATE 06/20/11	SHEET 7 OF 10

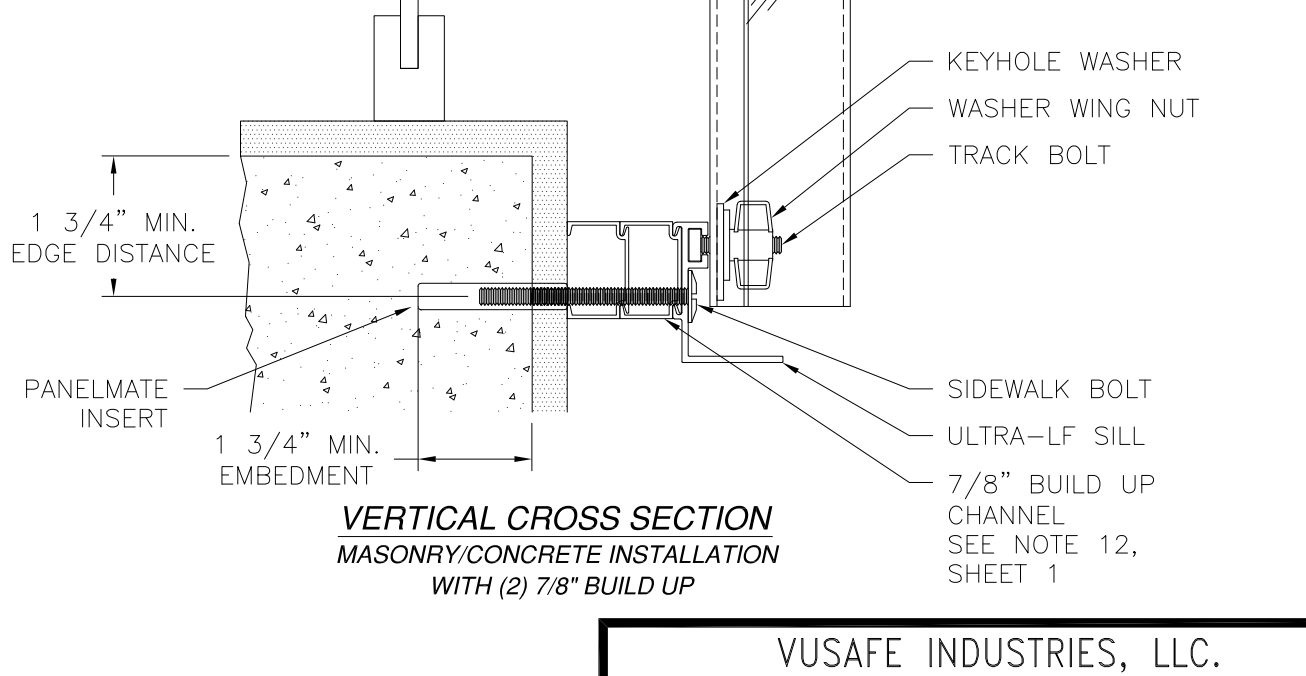
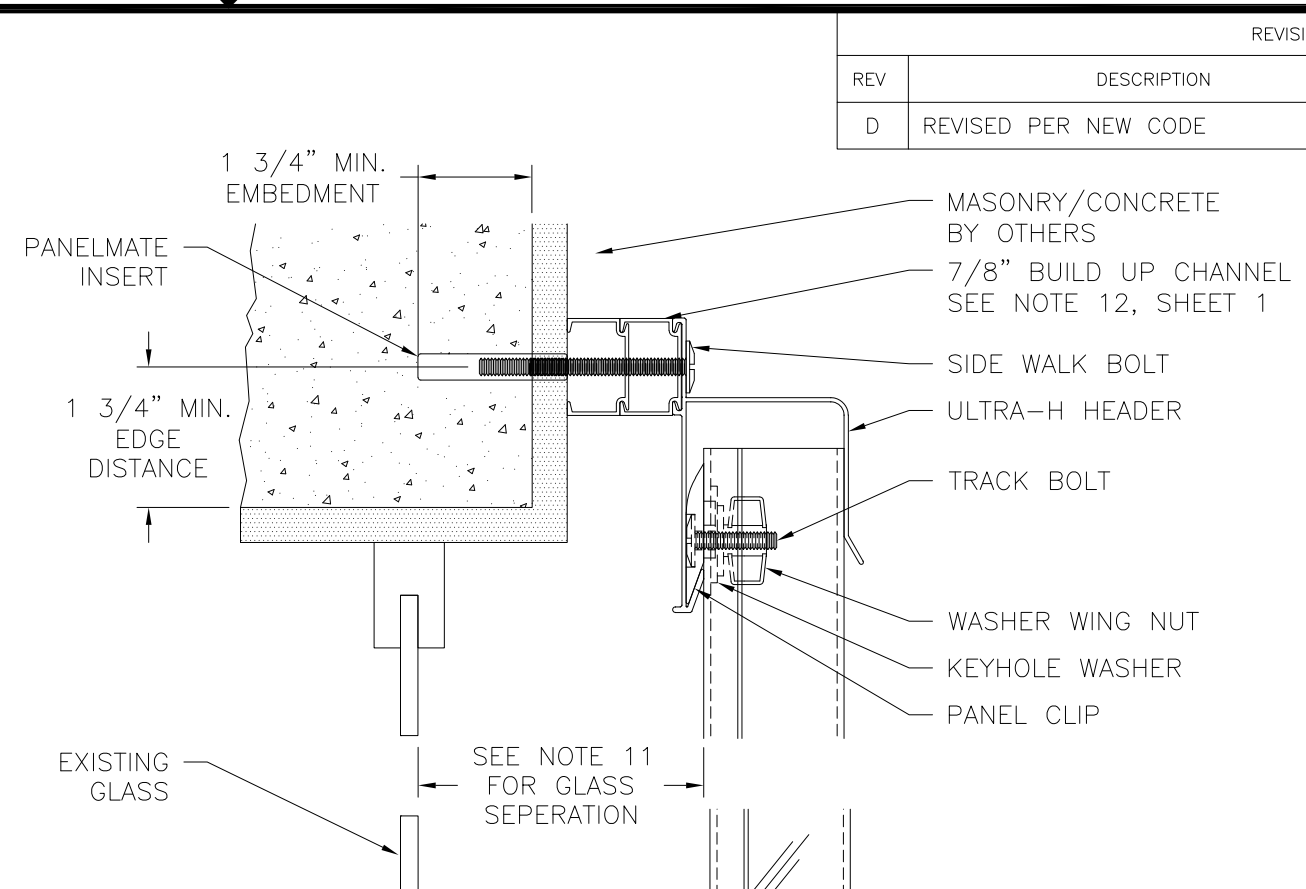
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Luis R. Lomas P.E.
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VERTICAL CROSS SECTION
WOOD INSTALLATION
WITH (2) 7/8" BUILD UP



VERTICAL CROSS SECTION
MASONRY/CONCRETE INSTALLATION
WITH (2) 7/8" BUILD UP

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STORM SHUTTER TYPE D
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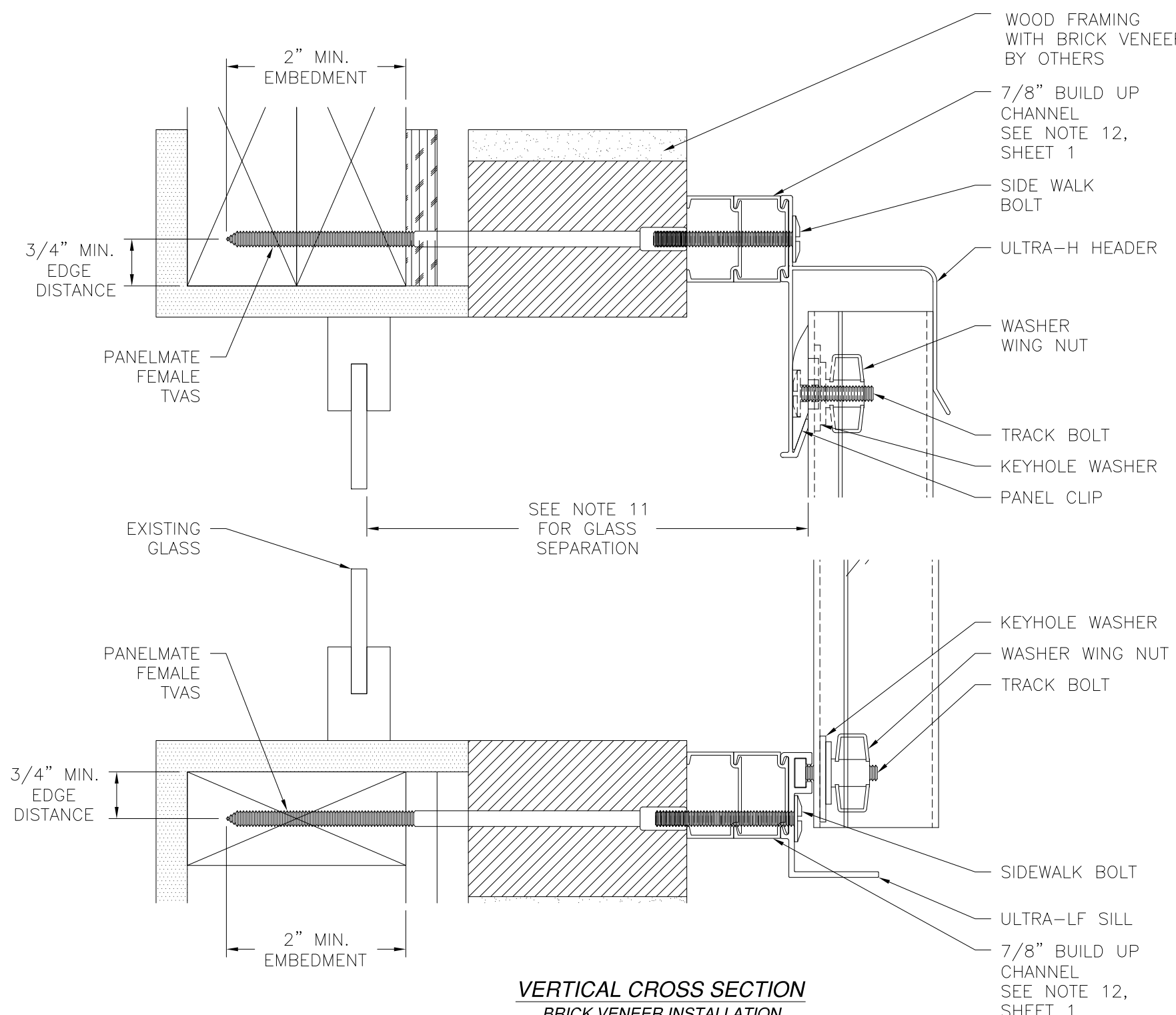
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LUIS R. LOMAS
P.E.
No. 62514
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Luis R. Lomas P.E.
FL No.: 62514

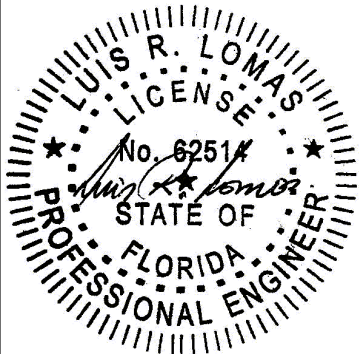
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VERTICAL CROSS SECTION
BRICK VENEER INSTALLATION
WITH (2) 7/8" BUILD UP

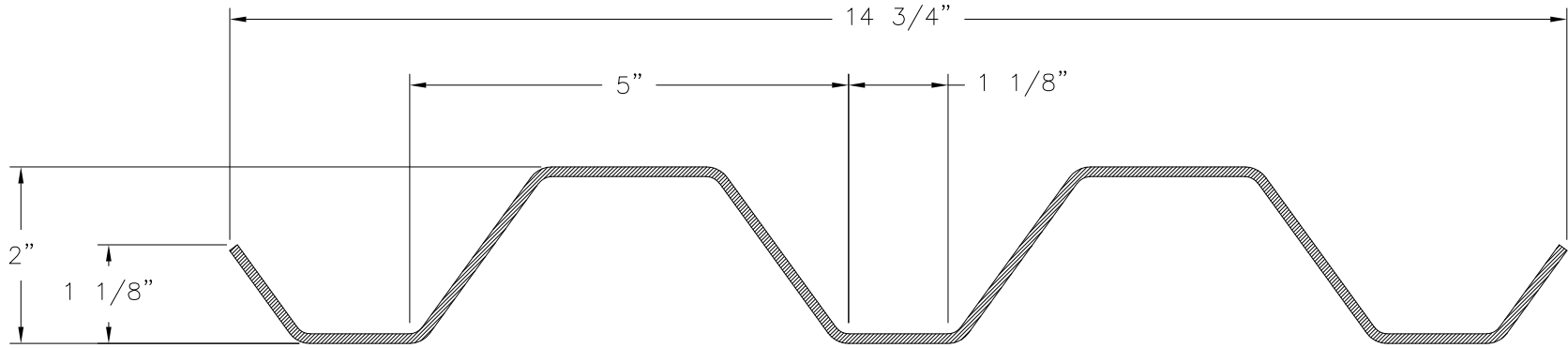
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VUSAFE INDUSTRIES, LLC. 350 KIDDS HILL ROAD HYANNIS, MA 02601		
STORM SHUTTER TYPE D IMPACT INSTALLATION DETAILS		
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L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

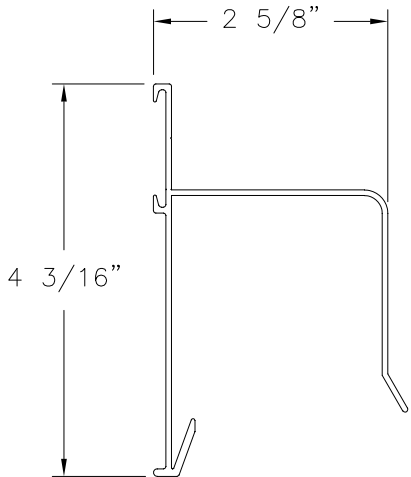


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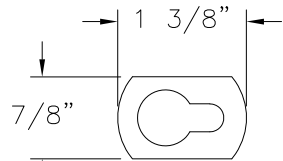
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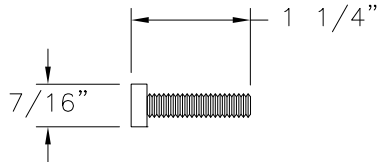
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FY: 9.43KSI



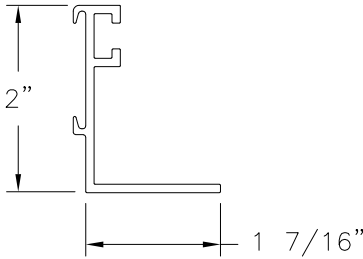
ULTRA-H HEADER
ALUMINUM 6063-T6



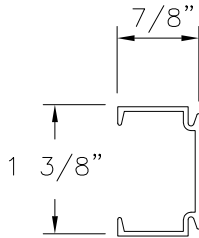
KEYHOLE WASHER
POLYCARBONATE .093" THICK



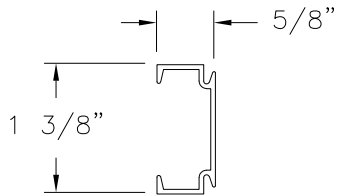
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STAINLESS STEEL



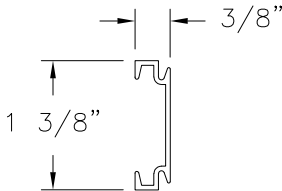
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ALUMINUM 6063-T6 .090" THICK



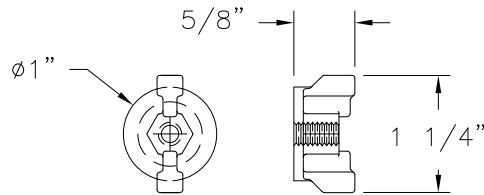
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ALUMINUM 6063-T6
.055" THICK



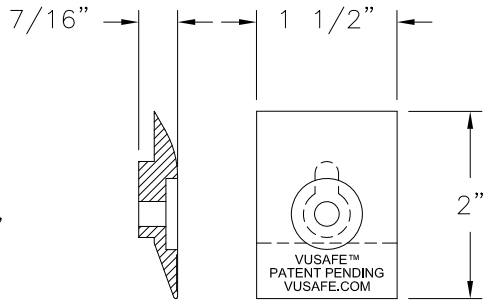
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ALUMINUM 6063-T6
.055" THICK



3/8" BUILD UP CHANNEL
ALUMINUM 6063-T6
.055" THICK



WASHER WING NUT
STAINLESS STEEL



PANEL CLIP
POLYCARBONATE OR
30% FIBER FILLED NYLON

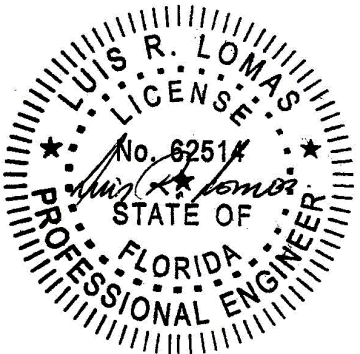
VUSAFE INDUSTRIES, LLC.
350 KIDDS HILL ROAD
HYANNIS, MA 02601

STORM SHUTTER TYPE D
IMPACT
INSTALLATION DETAILS AND COMPONENTS

DRAWN: R.L.	DWG NO. 08-01262	REV D
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