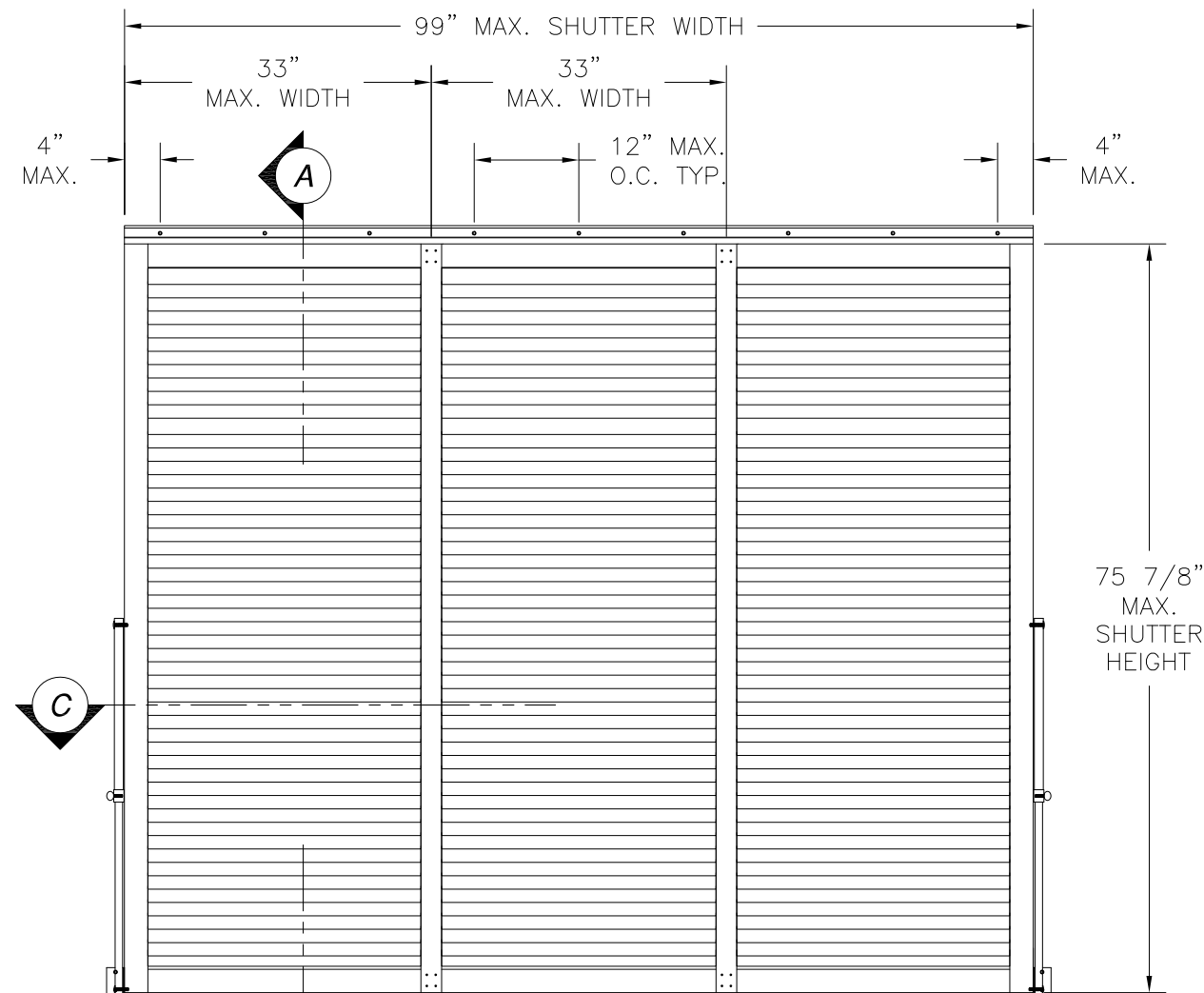


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED GLASS SEPARATION	10/28/15	R.L.



BAHAMA SHUTTER - DOUBLE MULLED
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±45.0PSF	LARGE AND SMALL MISSILE IMPACT

NOTES:

- 1) THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE 2006 IBC AND 2006 IRC WITH STATE OF TEXAS MODIFICATIONS.
- 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) ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
- 4) SHUTTER FRAME: 6063-T6.
BLADE MATERIAL: 6061-T6.
- 5) APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
- 6) FOR ANCHORING INTO MASONRY USE 1/4" ITW TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 3" MINIMUM EDGE DISTANCE AND 2" MINIMUM SEPARATION. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 7) FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK OR THROUGH BRICK VEENER INTO WOOD FRAMING OR 2X BUCK USE #12 WOOD SCREW WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- 8) ALL FASTENERS TO BE CORROSION RESISTANT.
- 9) 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:
A. WOOD - MINIMUM SPECIFIC GRAVITY OF G=0.42
B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.
C. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).

SIGNED: 10/28/2015

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SHEET NO.	DESCRIPTION
1 - 2	ELEVATIONS AND NOTES
3 - 4	BILL OF MATERIALS AND COMPONENTS
5 - 6	CROSS SECTIONS
7 - 11	INSTALLATION DETAILS

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

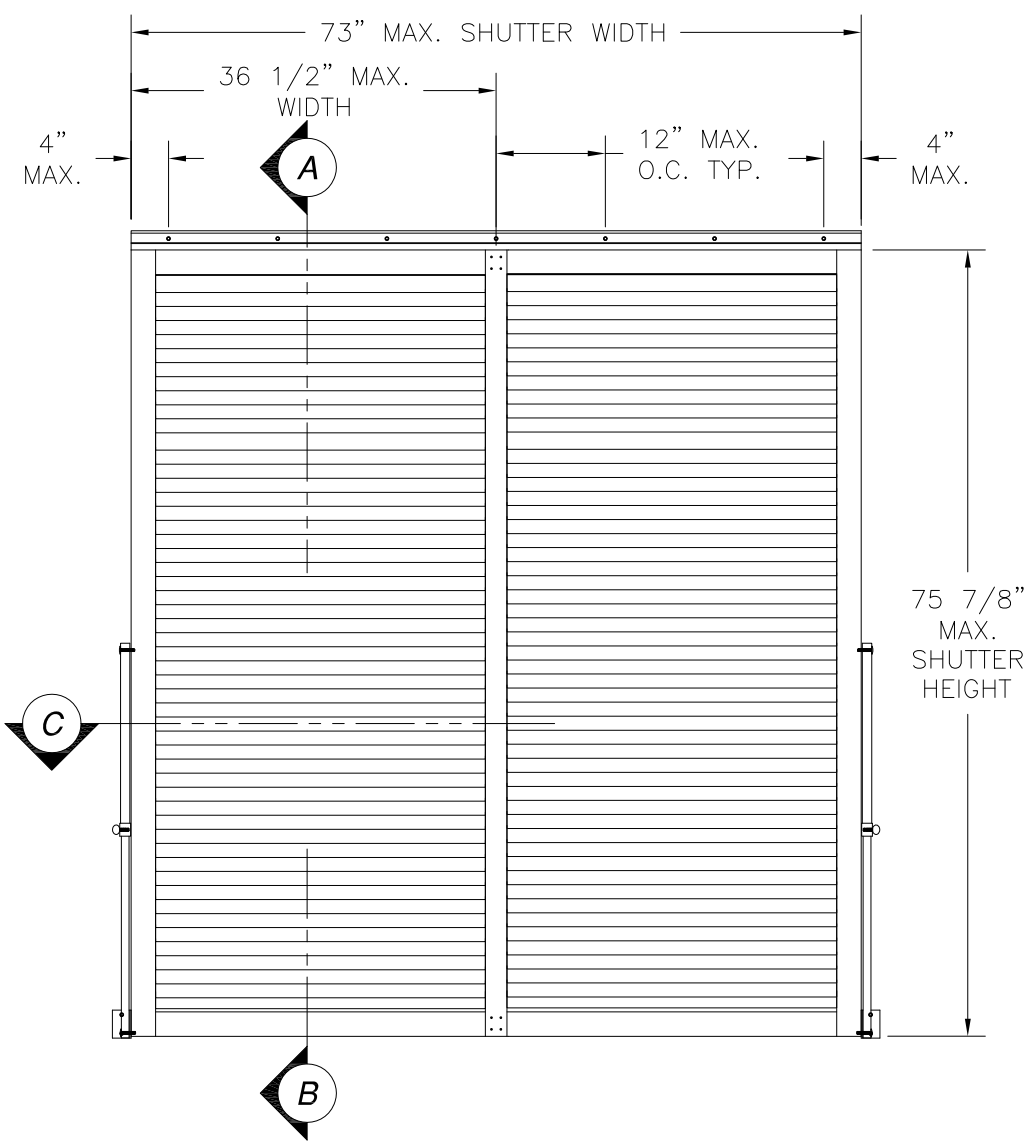
BAHAMA SHUTTER
LARGE & SMALL MISSILE IMPACT RATED
DOUBLE MULLED ELEVATION AND NOTES

DRAWN: V.L.	DWG NO. 08-02482	REV A
SCALE NTS	DATE 09/09/14	SHEET 1 OF 11



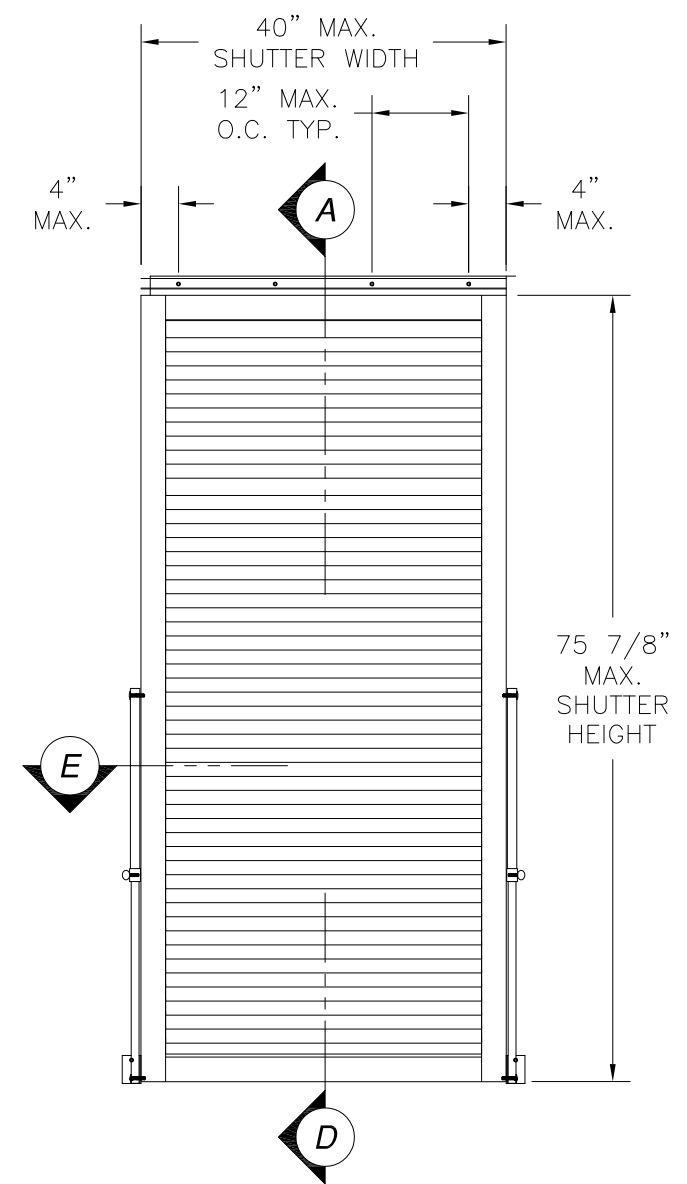
Luis R. Lomas P.E.
TX No.: 101889

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED GLASS SEPARATION	10/28/15	R.L.



BAHAMA SHUTTER - SINGLE MULLED
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±45.0PSF	LARGE AND SMALL MISSILE IMPACT



BAHAMA SHUTTER - SINGLE PANEL
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±50.0PSF	LARGE AND SMALL MISSILE IMPACT

- GLASS SEPARATION NOTES:
1. DOUBLE MULLED UNITS SHALL HAVE A 2 5/8" MINIMUM SEPARATION FROM EXISTING GLASS.
 2. SINGLE MULLED UNITS SHALL HAVE A 2 1/8" MINIMUM SEPARATION FROM EXISTING GLASS.
 3. SINGLE PANEL UNITS SHALL HAVE A 1 5/8" MINIMUM SEPARATION FROM EXISTING GLASS.

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

BAHAMA SHUTTER
LARGE & SMALL MISSILE IMPACT RATED
SINGLE MULLED & SINGLE PANEL ELEVATIONS

DRAWN: V.L.	DWG NO. 08-02482	REV A
SCALE NTS	DATE 09/09/14	SHEET 2 OF 11

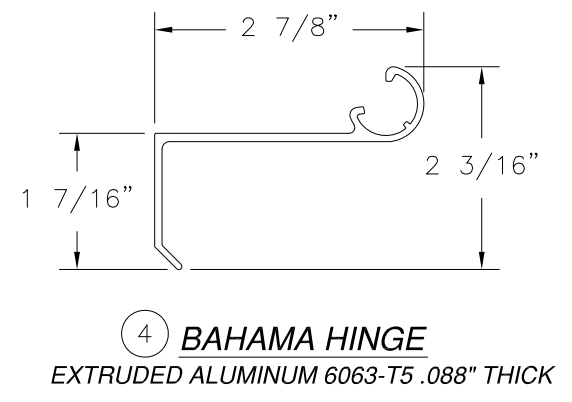
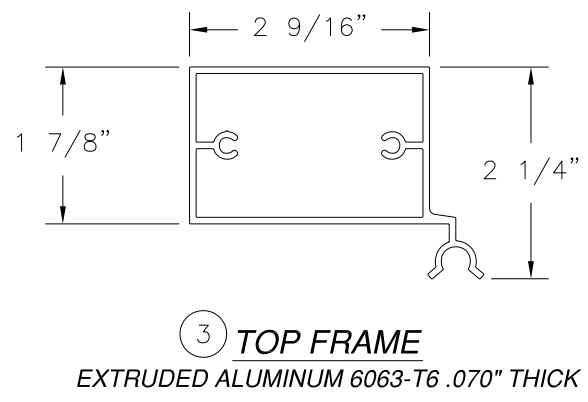
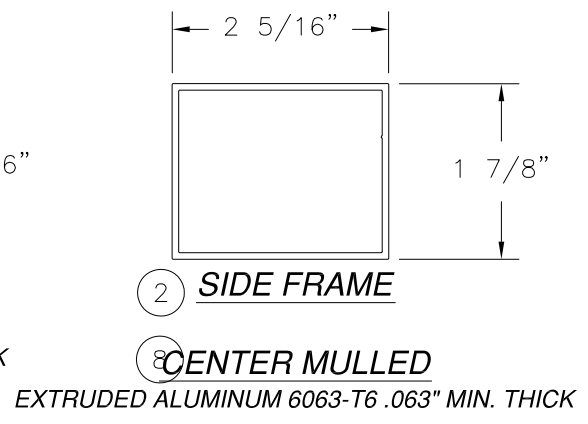
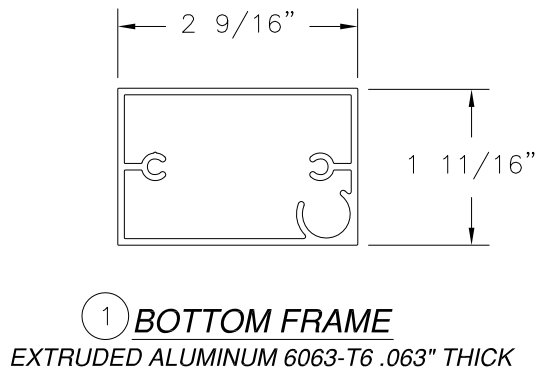
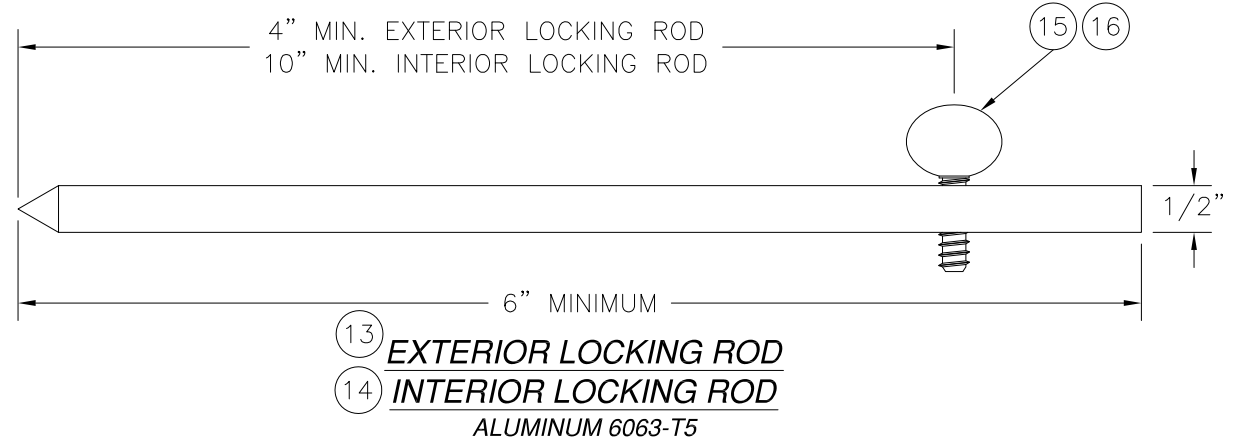
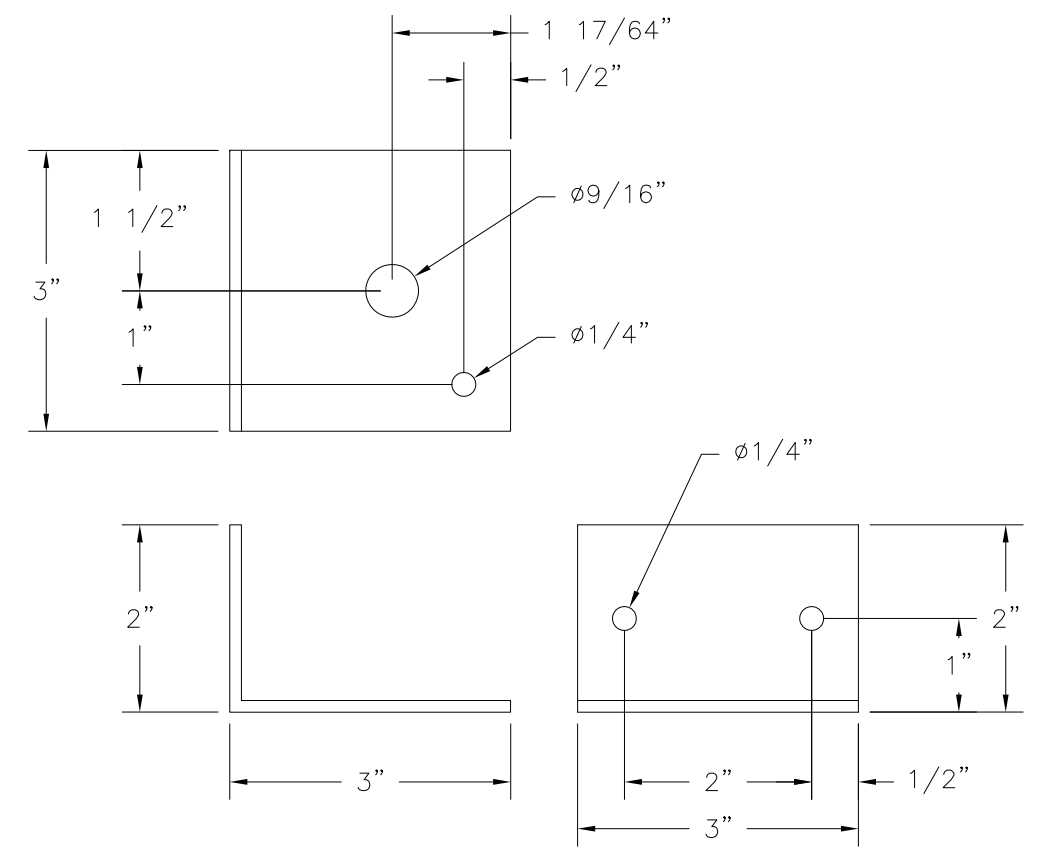
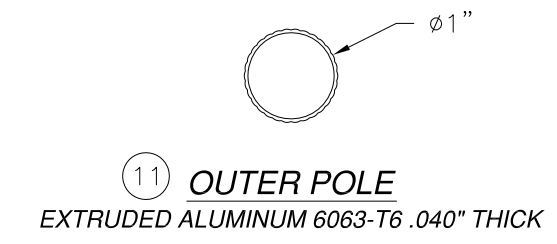
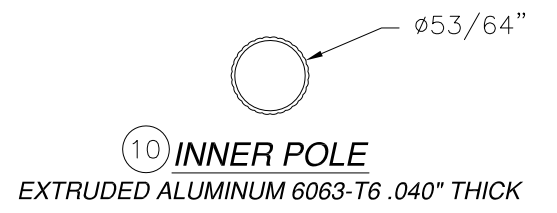
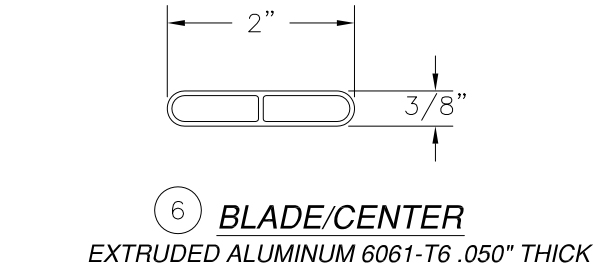
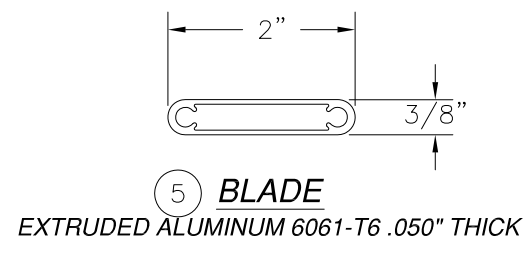
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BILL OF MATERIALS				
ITEM NO.:	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1	AF-3398	BOTTOM FRAME	LAS	ALUMINUM 6063-T6
2	AF-3400	SIDE FRAME	LAS	ALUMINUM 6063-T6
3	AF-3399	TOP FRAME	LAS	ALUMINUM 6063-T6
4	11792	2 7/8" BAHAMA HINGE	LAS	ALUMINUM 6063-T6
5	LAS 8	.050 BLADE #14 COGS	LAS	ALUMINUM 6061-T6
6	LAS 9	.050 BLADE CENTER - WALL	LAS	ALUMINUM 6061-T6
7		2"x3"x3" ANGLE 1/8" THICK	AEI	ALUMINUM 6063-T6
8	AF-3400	CENTER MULL	LAS	ALUMINUM 6063-T6
9		3"x3"x3" ANGLE 1/8" THICK	SAPA	ALUMINUM 6063-T6
10	12156	INNER POLE	LAS	ALUMINUM 6063-T6
11	12157	OUTER POLE	LAS	ALUMINUM 6063-T6
12	12155	1/2" PIN	LAS	ALUMINUM 6063-T6
13	LP 12	EXTERIOR LOCKING ROD	ALL POINTS	ALUMINUM 6063-T5
14	LP 12	INTERIOR LOCKING ROD	ALL POINTS	ALUMINUM 6063-T5
15		1/4-20 x 1" THUMB SCREW	ALL POINTS	
16		1/4" SIDEWALK BOLT	ALL POINTS	
17	LP 12	SUPPORT POLE COLLAR	ALL POINTS	ALUMINUM 6063-T5
18		2"x3"x4" ANGLE 1/8" THICK	LAS	ALUMINUM 6063-T5
19		3"x3"x5 1/2" ANGLE 1/8" THICK	LAS	ALUMINUM 6063-T5

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED GLASS SEPARATION	10/28/15	R.L.



LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

BAHAMA SHUTTER
LARGE & SMALL MISSILE IMPACT RATED
B.O.M. & COMPONENTS

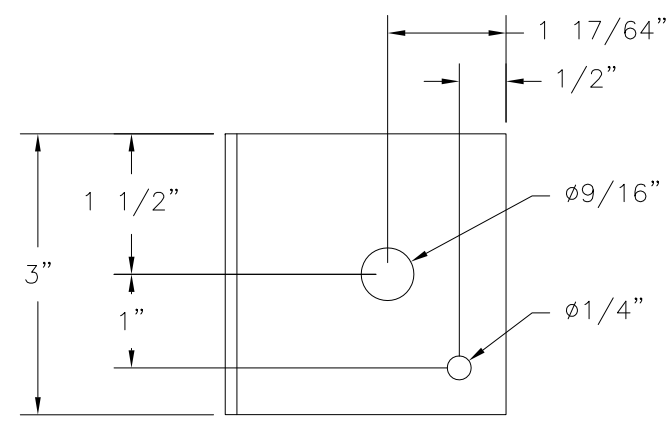
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SCALE NTS DATE 09/09/14 SHEET 3 OF 11

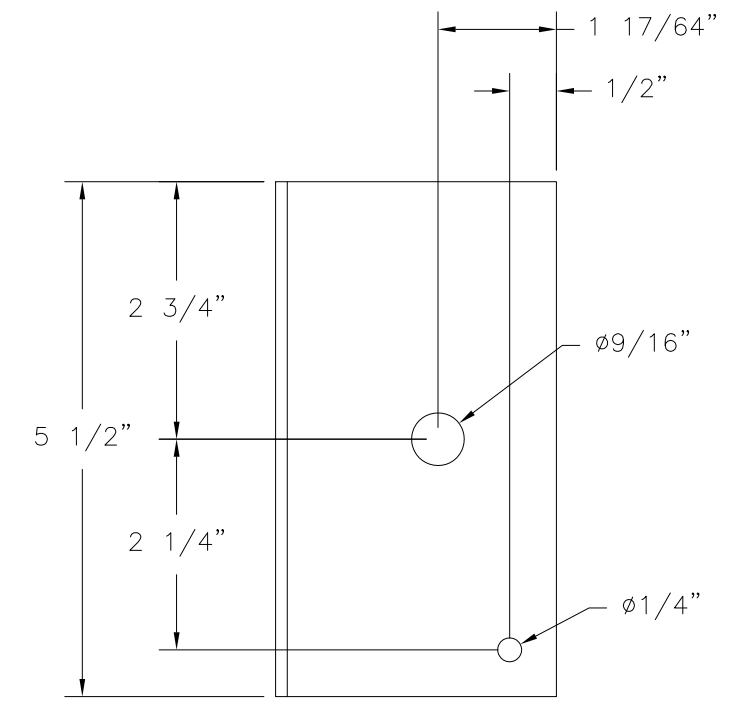
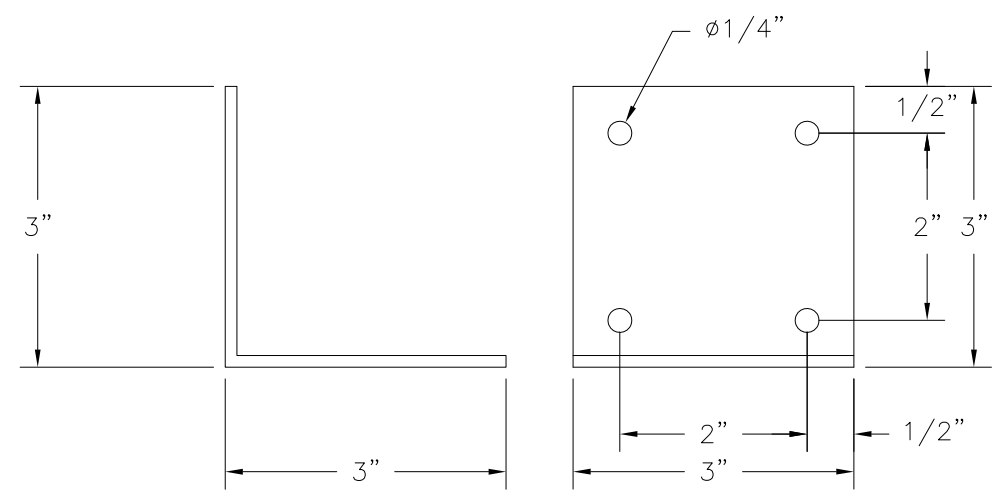
SIGNED: 10/28/2015

Luis R. Lomas P.E.
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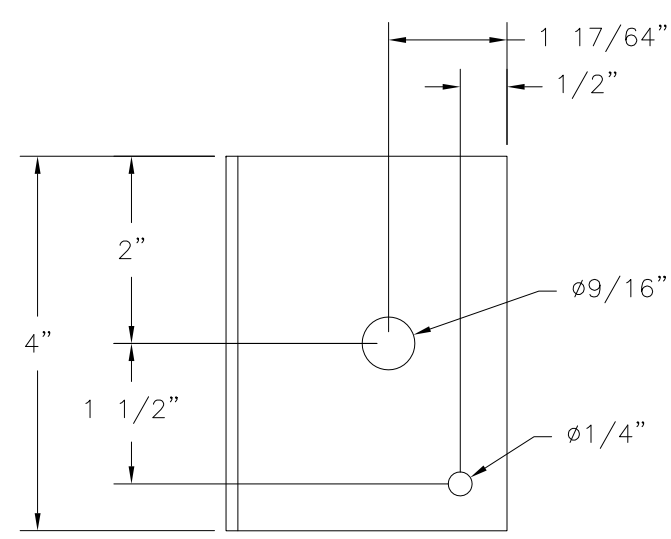
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REV	DESCRIPTION	DATE	APPROVED
A	ADDED GLASS SEPARATION	10/28/15	R.L.



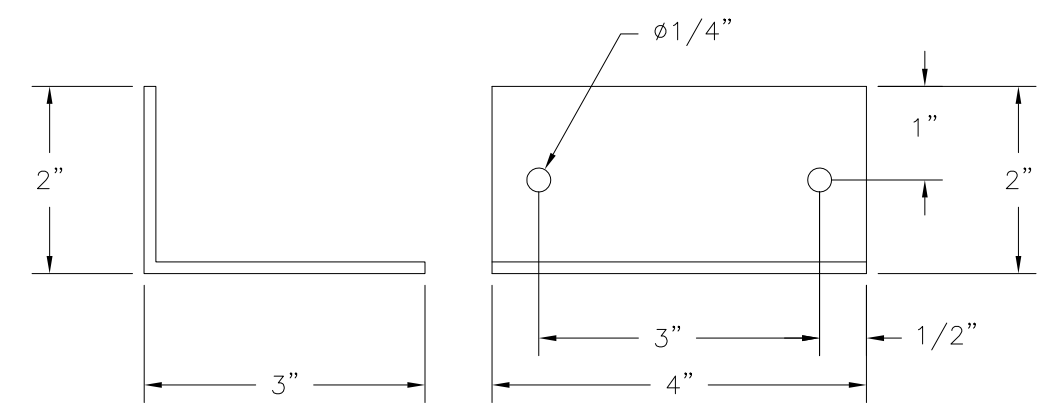
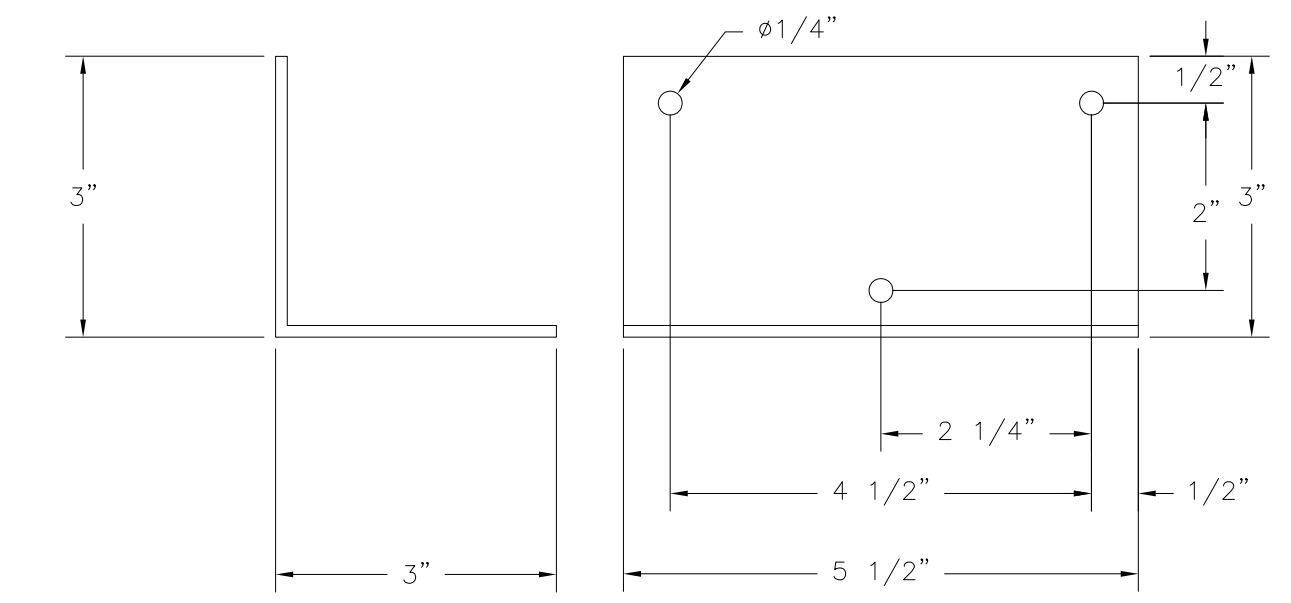
⑨ **INSTALLATION ANGLE**
EXTRUDED ALUMINUM 6063-T5 .125" THICK



⑰ **INSTALLATION ANGLE**
EXTRUDED ALUMINUM 6063-T5 .125" THICK



⑱ **INSTALLATION ANGLE**
EXTRUDED ALUMINUM 6063-T5 .125" THICK

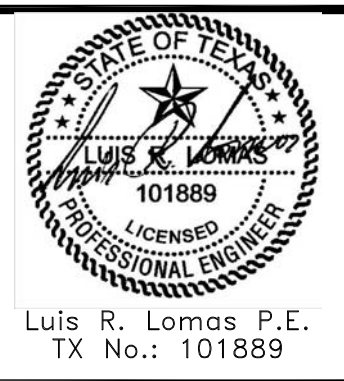


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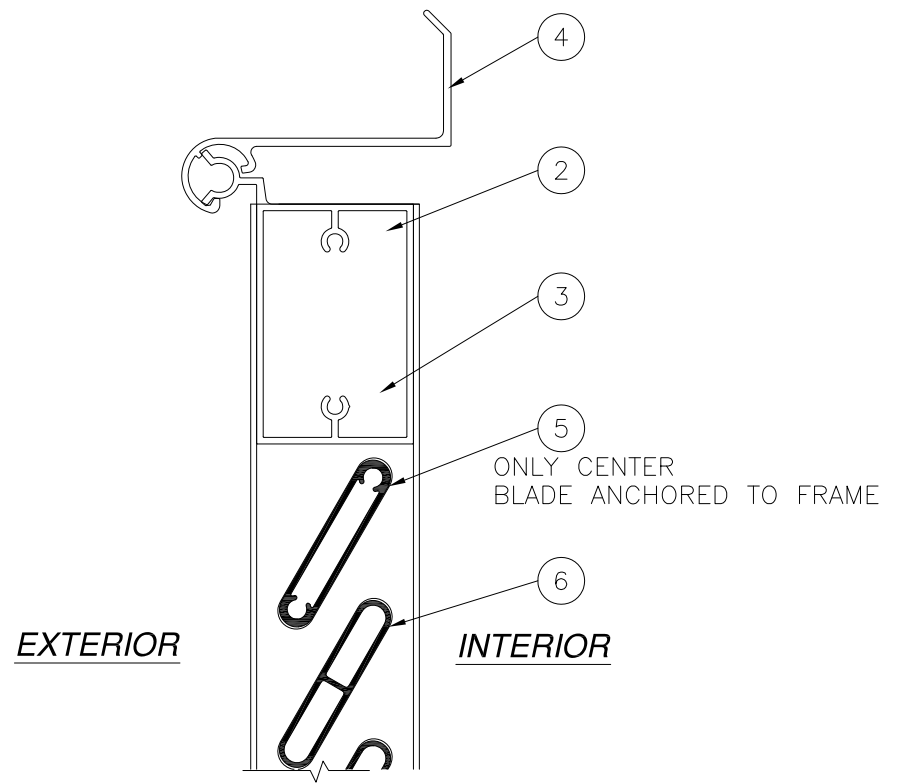
LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

BAHAMA SHUTTER
LARGE & SMALL MISSILE IMPACT RATED
COMPONENTS

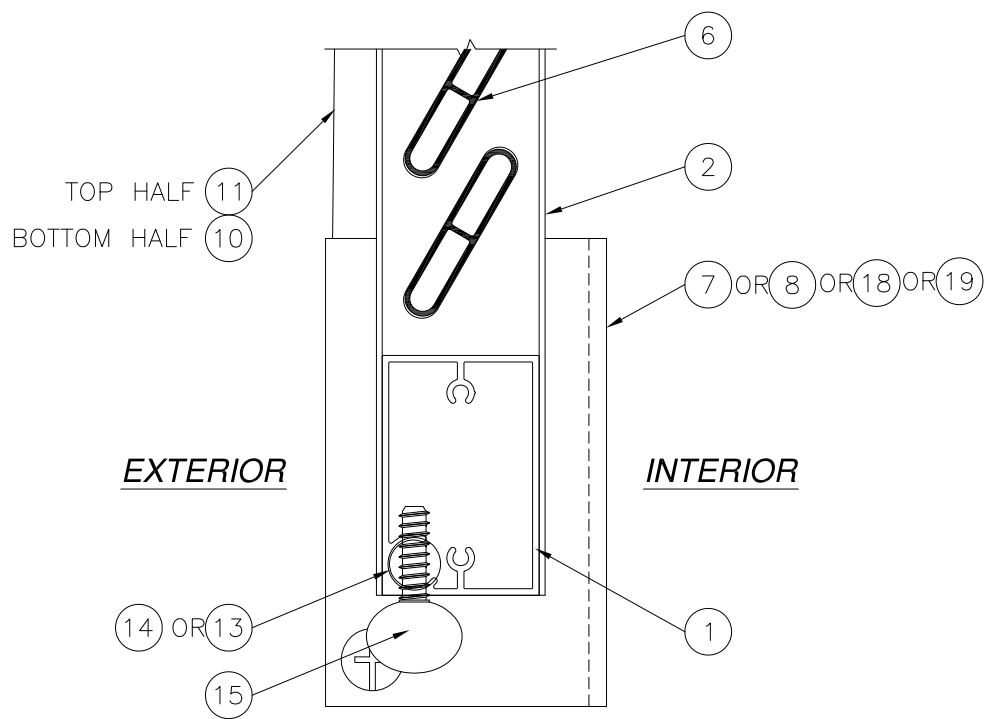
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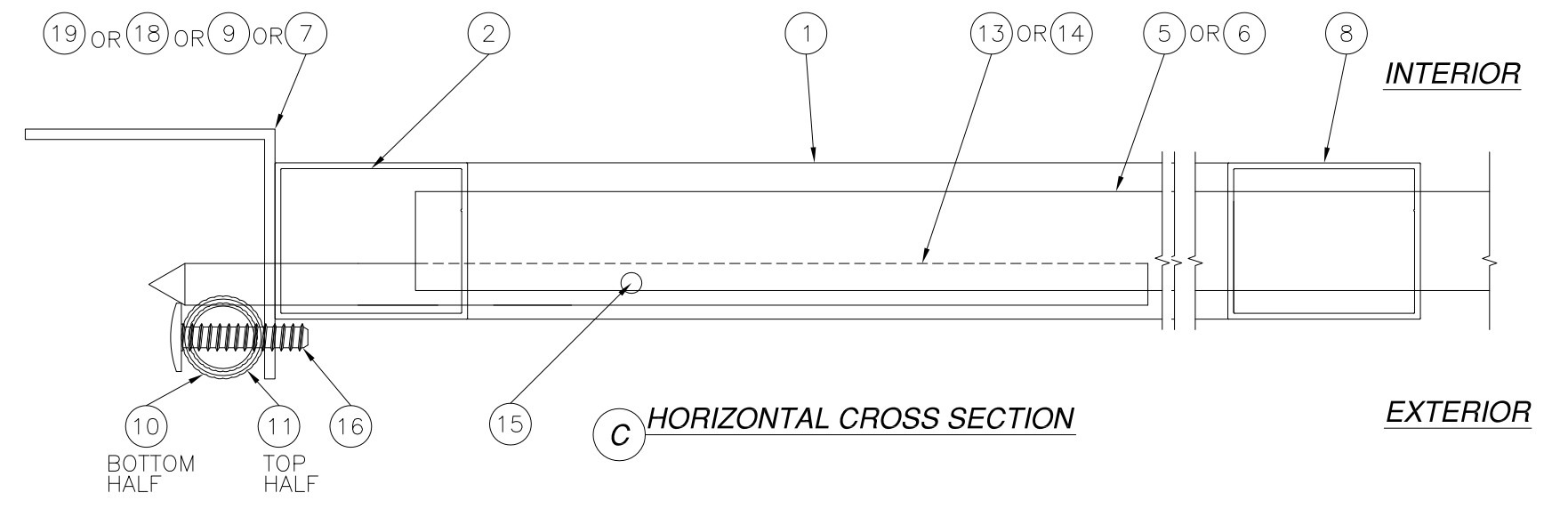
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REV	DESCRIPTION	DATE	APPROVED
A	ADDED GLASS SEPARATION	10/28/15	R.L.



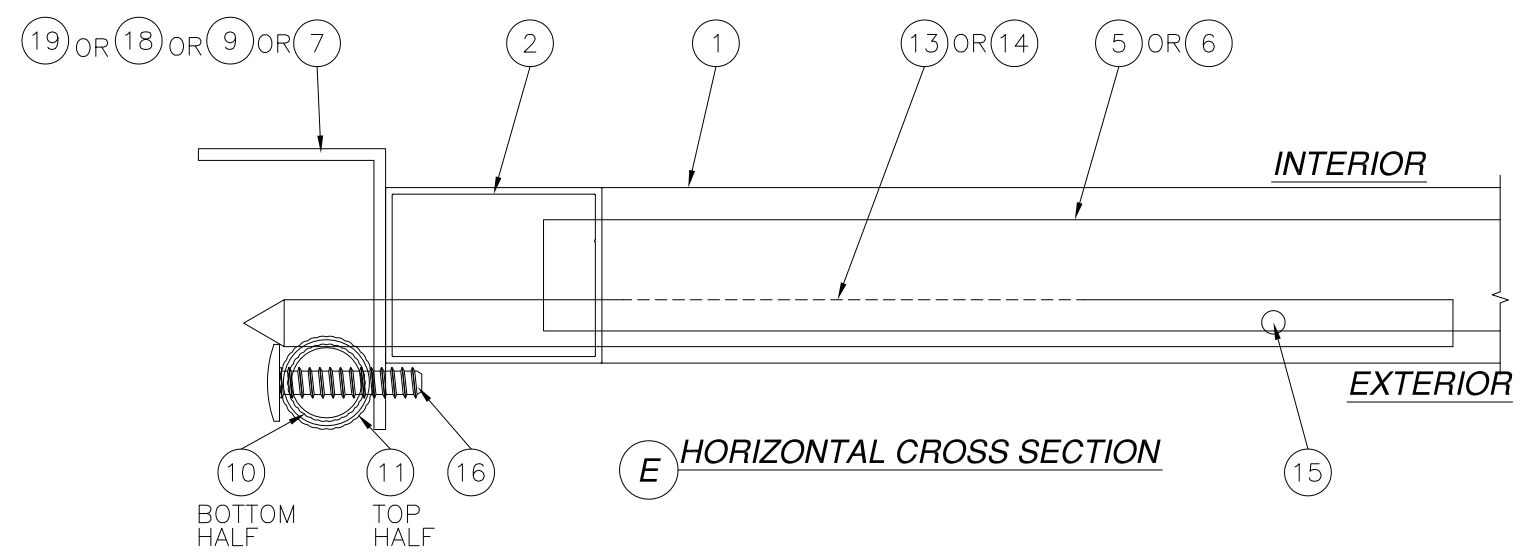
A VERTICAL CROSS SECTION



B VERTICAL CROSS SECTION



C HORIZONTAL CROSS SECTION



E HORIZONTAL CROSS SECTION

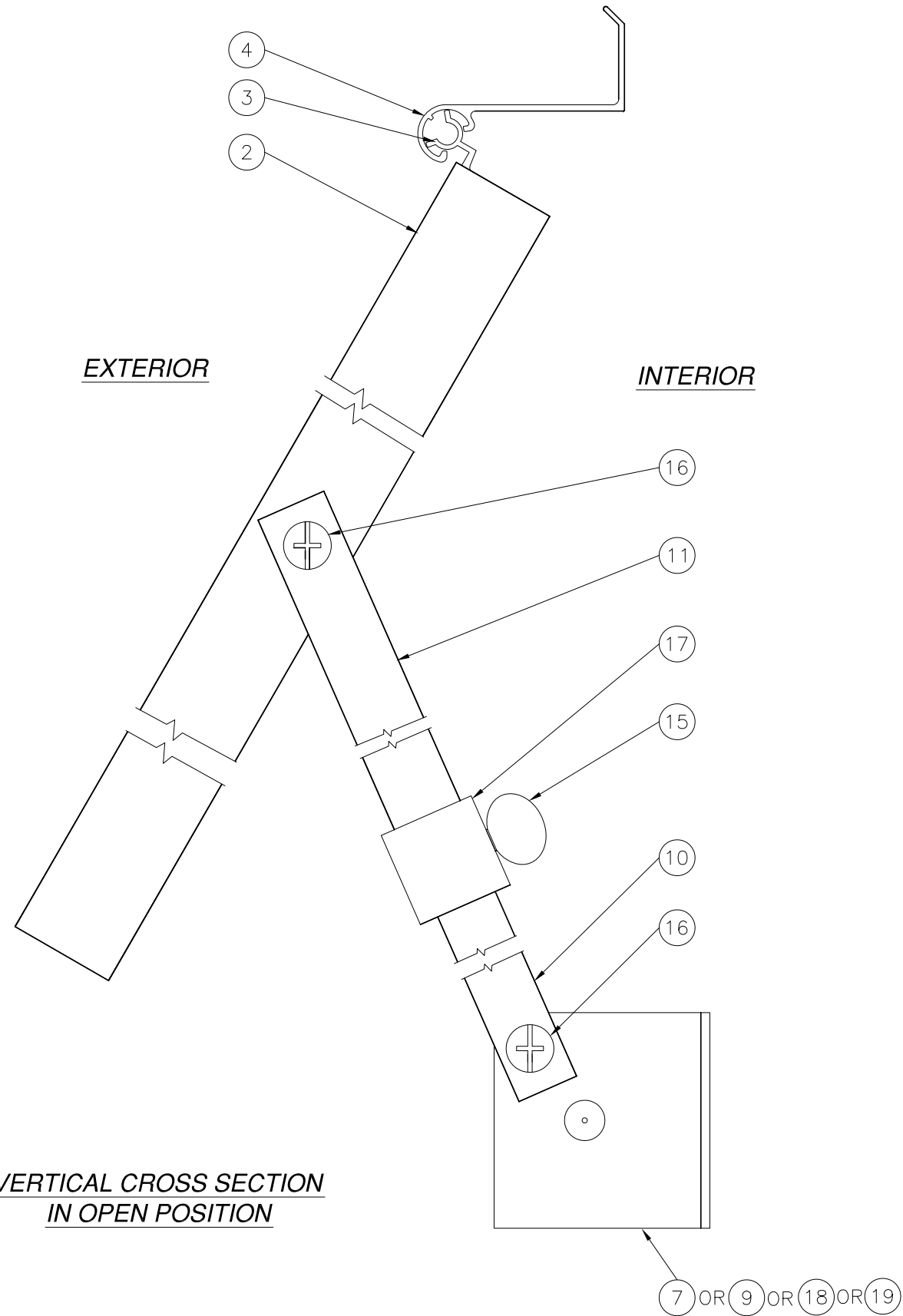
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LAS ENTERPRISES 2413 L & A ROAD METAIRIE, LA 70001		
BAHAMA SHUTTER LARGE & SMALL MISSILE IMPACT RATED CROSS SECTIONS		
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REVISIONS			
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A	ADDED GLASS SEPARATION	10/28/15	R.L.



VERTICAL CROSS SECTION
IN OPEN POSITION

SIGNED: 10/28/2015

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

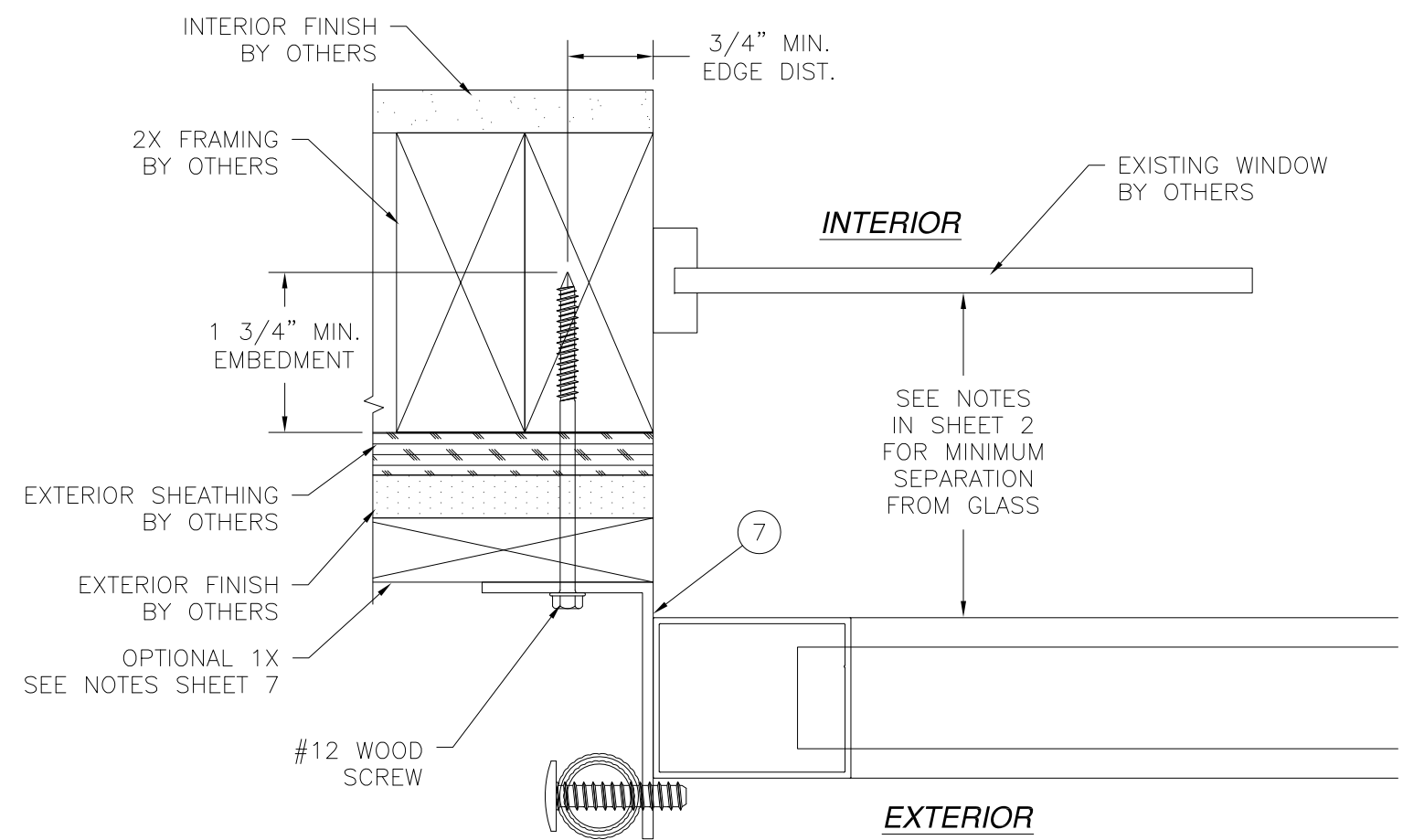
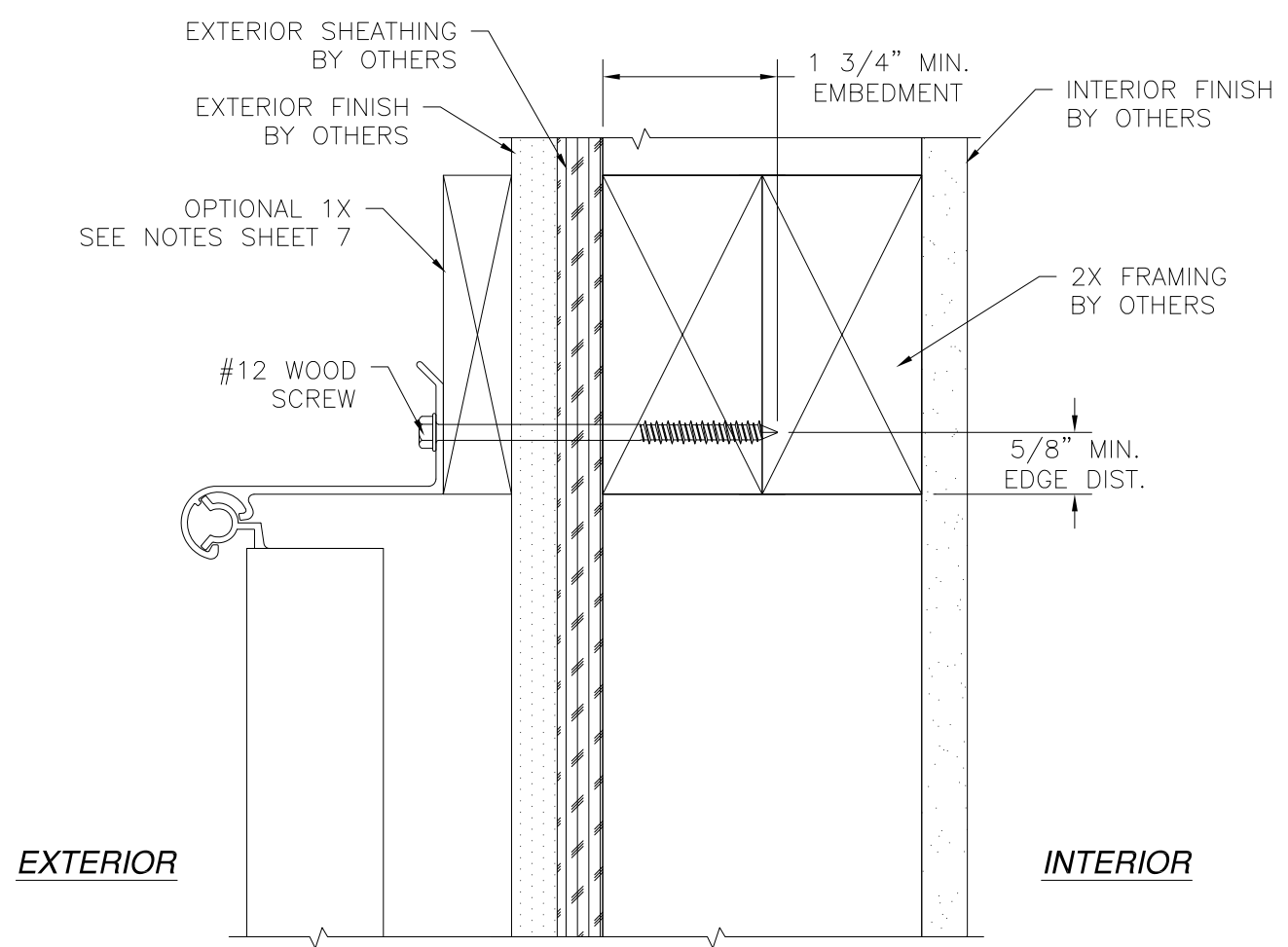
BAHAMA SHUTTER
LARGE & SMALL MISSILE IMPACT RATED
CROSS SECTIONS

DRAWN: V.L.	DWG NO. 08-02482	REV A
SCALE NTS	DATE 09/09/14	SHEET 6 OF 11

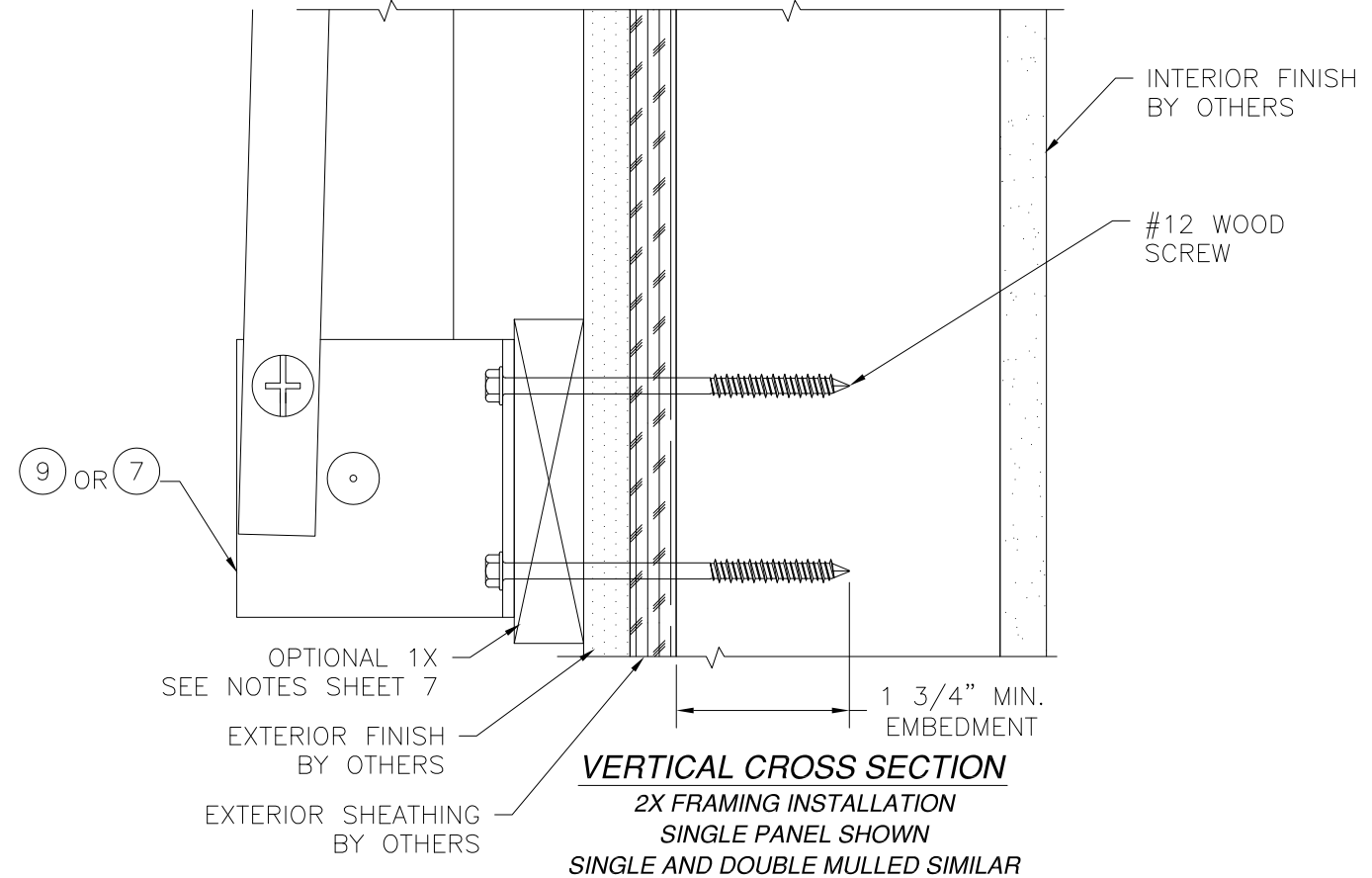


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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED GLASS SEPARATION	10/28/15	R.L.



HORIZONTAL CROSS SECTION
2X FRAMING INSTALLATION
SINGLE PANEL SHUTTER



1X INSTALLATION NOTES:

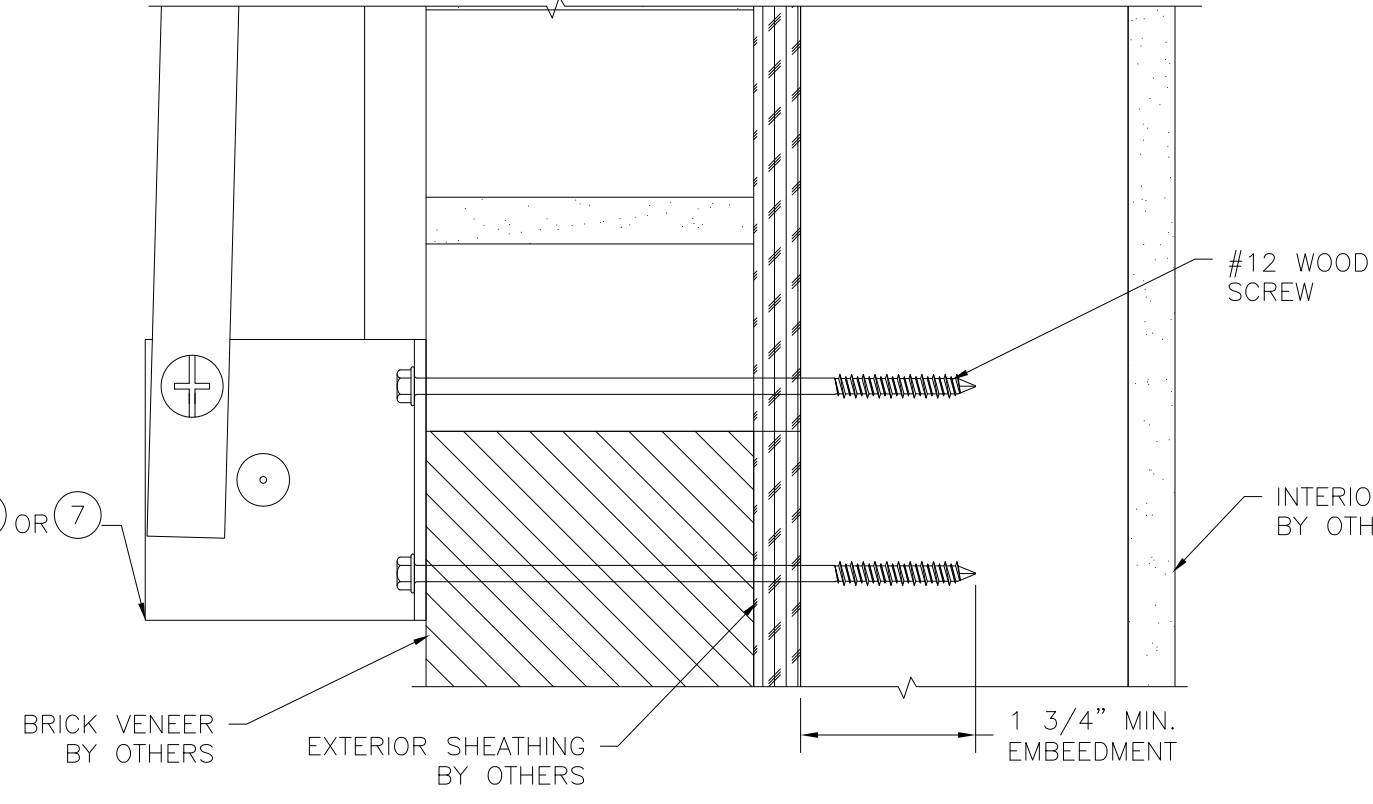
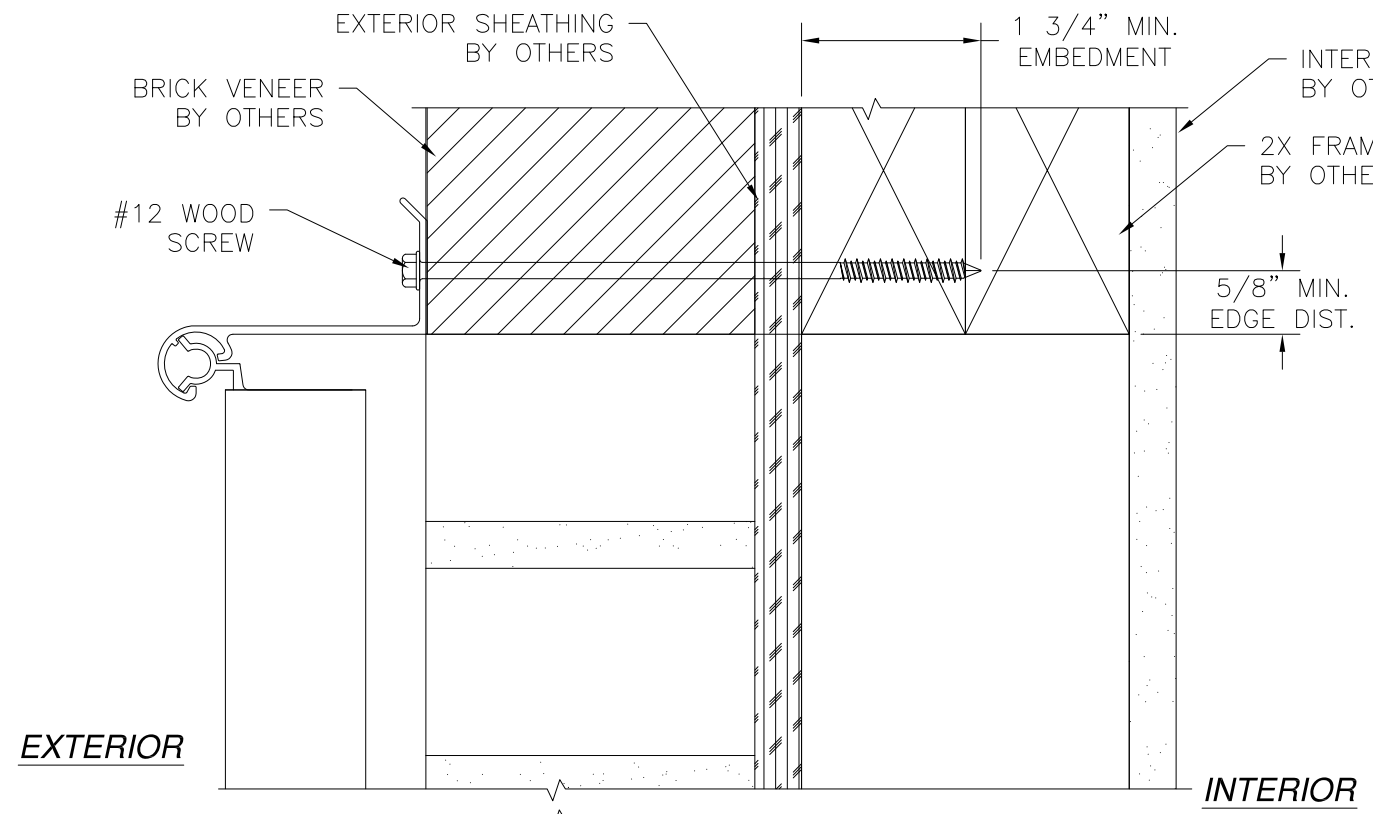
- 1) 1X BUCK TO BE INSTALLED WHEN EXTERIOR FINISH IS NOT ABLE TO WITHSTAND LOAD FROM SHUTTER.
- 2) ANCHOR 1X BUCK TO 2X FRAMING USING #10 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT. LOCATE ANCHORS 4" FROM EACH CORNER AND 16" MAXIMUM O.C. THEREAFTER.
- 3) ANCHOR 1X BUCK TO MASONRY USING 3/16" TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT. LOCATE ANCHORS 4" FROM EACH CORNER AND 16" MAXIMUM O.C. THEREAFTER.

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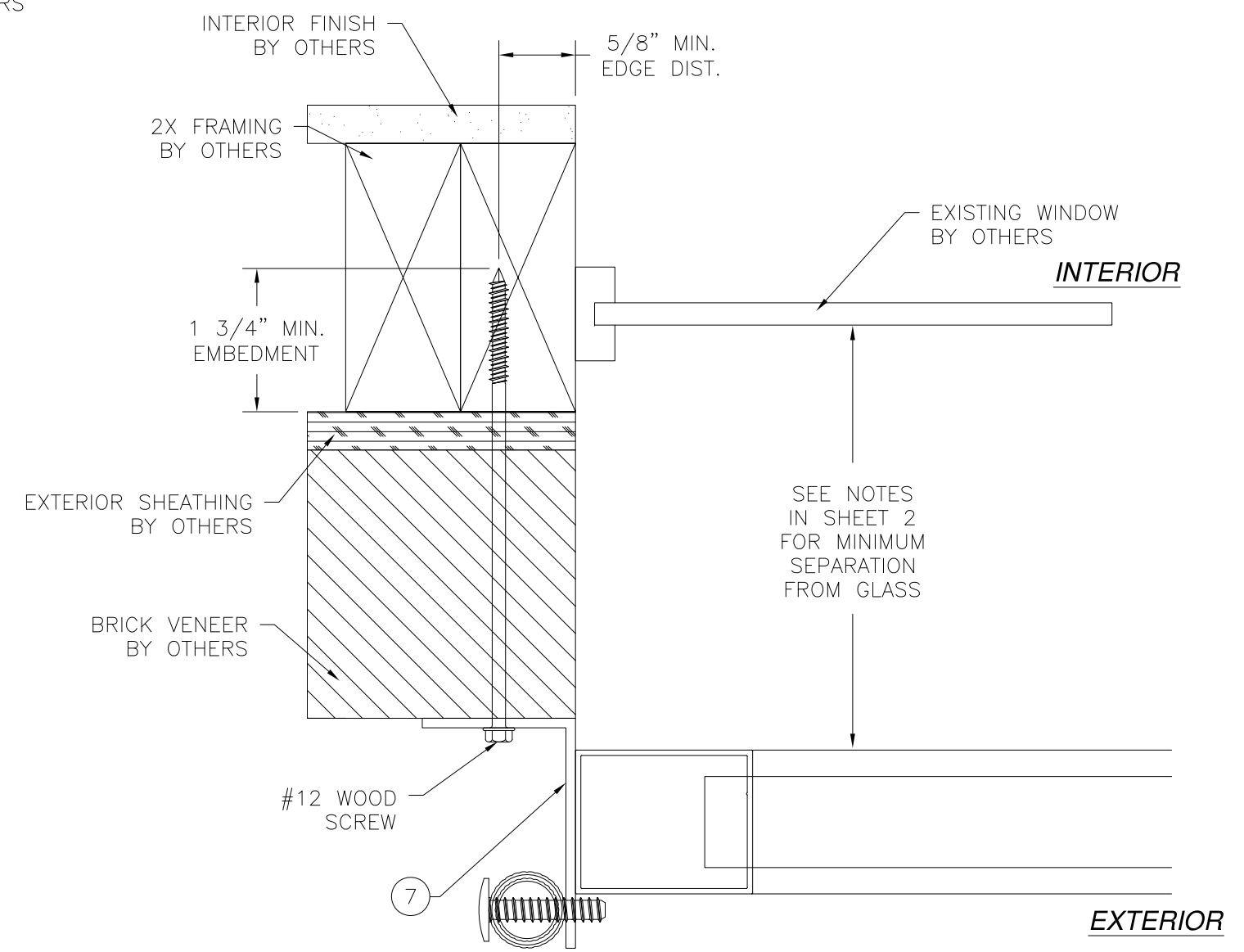
LAS ENTERPRISES 2413 L & A ROAD METAIRIE, LA 70001		
BAHAMA SHUTTER LARGE & SMALL MISSILE IMPACT RATED INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-02482	REV A
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED GLASS SEPARATION	10/28/15	R.L.



VERTICAL CROSS SECTION
 2X FRAMING W/BRICK VENEER INSTALLATION
 SINGLE PANEL SHUTTER SHOWN,
 SINGLE AND DOUBLE MULLED SHUTTER SIMILAR



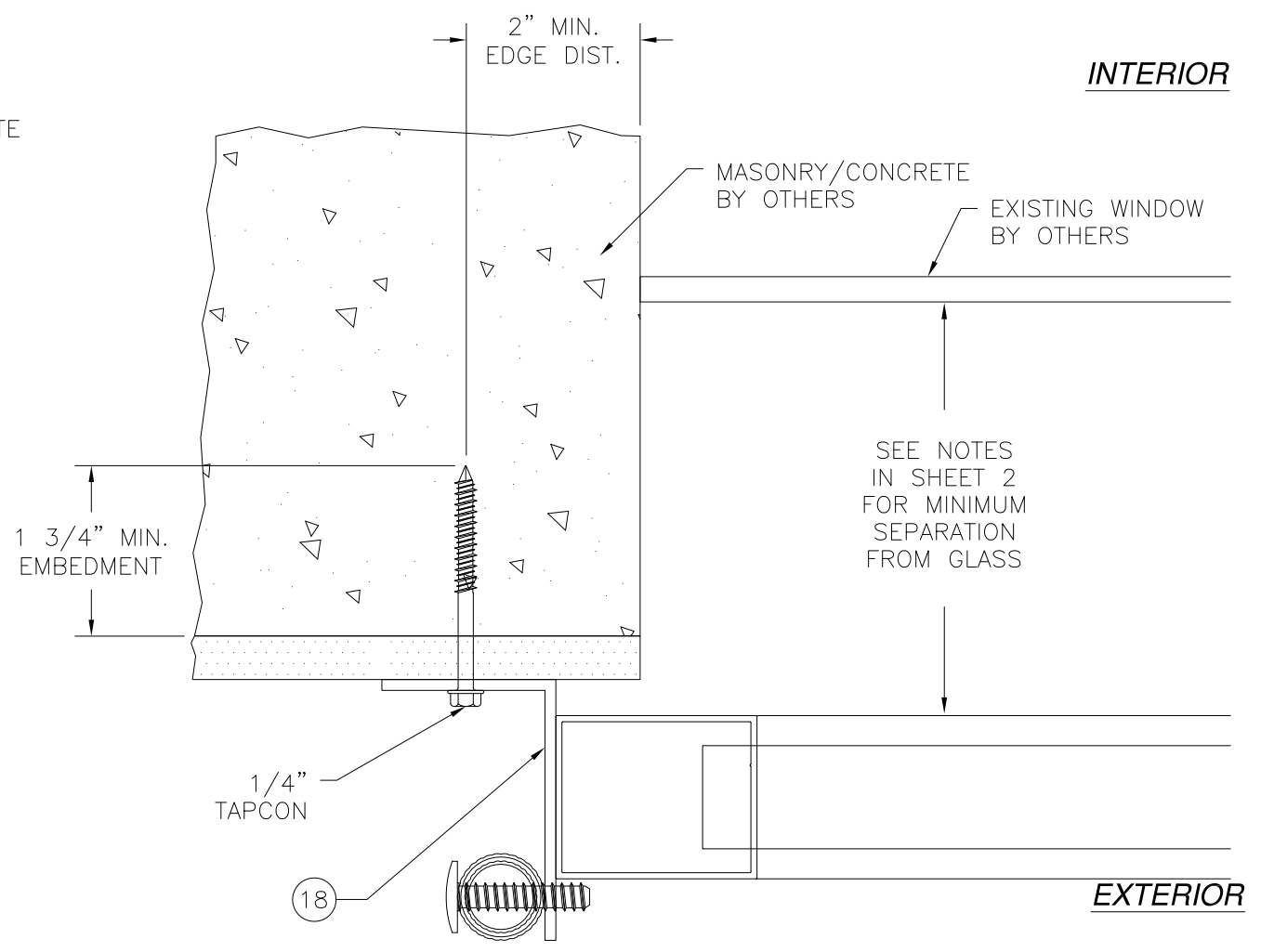
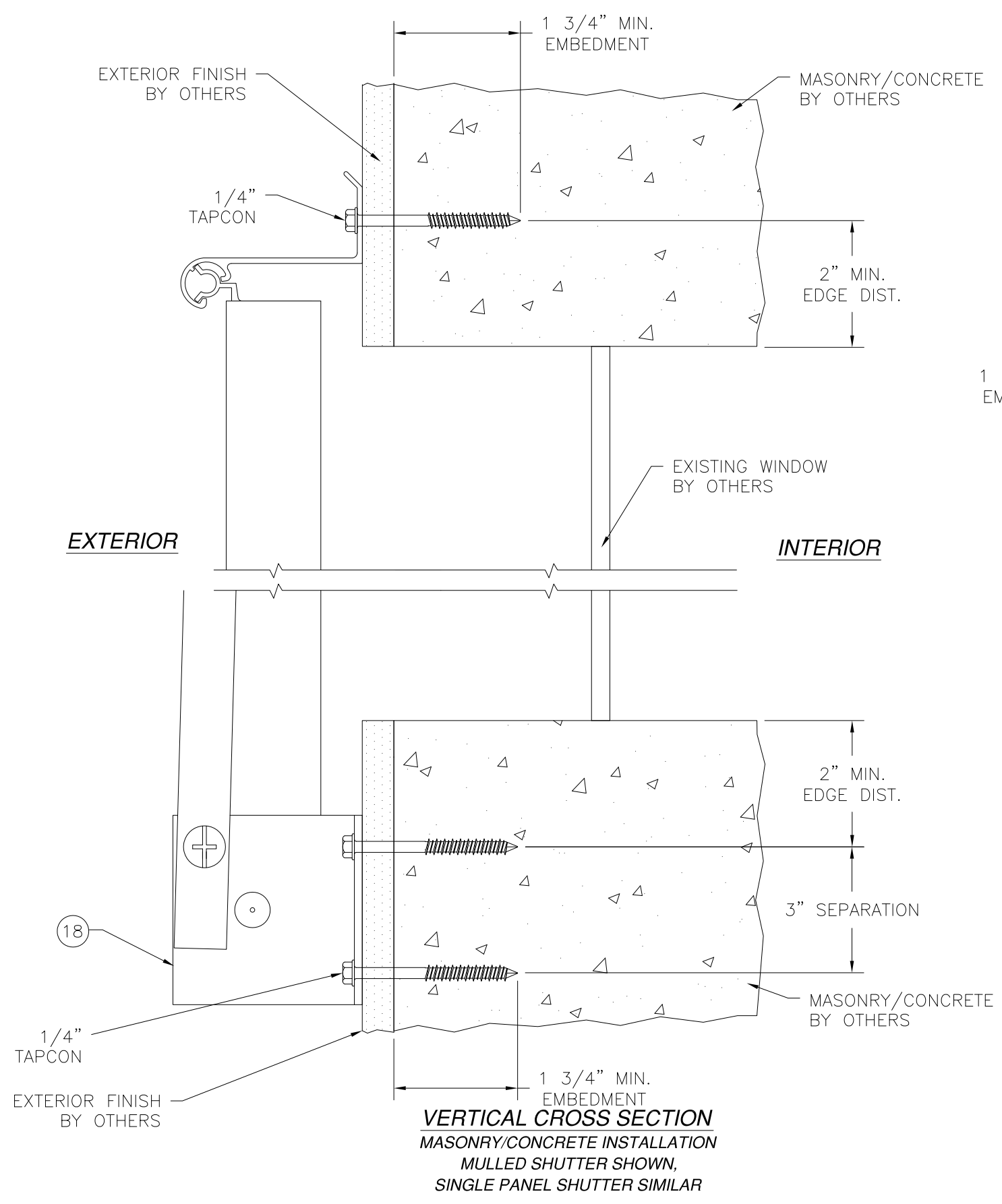
HORIZONTAL CROSS SECTION
 2X FRAMING W/BRICK VENEER INSTALLATION
 SINGLE PANEL

SIGNED: 10/28/2015

LAS ENTERPRISES 2413 L & A ROAD METAIRIE, LA 70001		
BAHAMA SHUTTER LARGE & SMALL MISSILE IMPACT RATED INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-02482	REV A
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REVISIONS			
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A	ADDED GLASS SEPARATION	10/28/15	R.L.



HORIZONTAL CROSS SECTION
 MASONRY/CONCRETE INSTALLATION
 SINGLE PANEL SHUTTER SHOWN
 SINGLE MULLED SIMILAR

VERTICAL CROSS SECTION
 MASONRY/CONCRETE INSTALLATION
 MULLED SHUTTER SHOWN,
 SINGLE PANEL SHUTTER SIMILAR

SIGNED: 10/28/2015

LAS ENTERPRISES
 2413 L & A ROAD
 METAIRIE, LA 70001

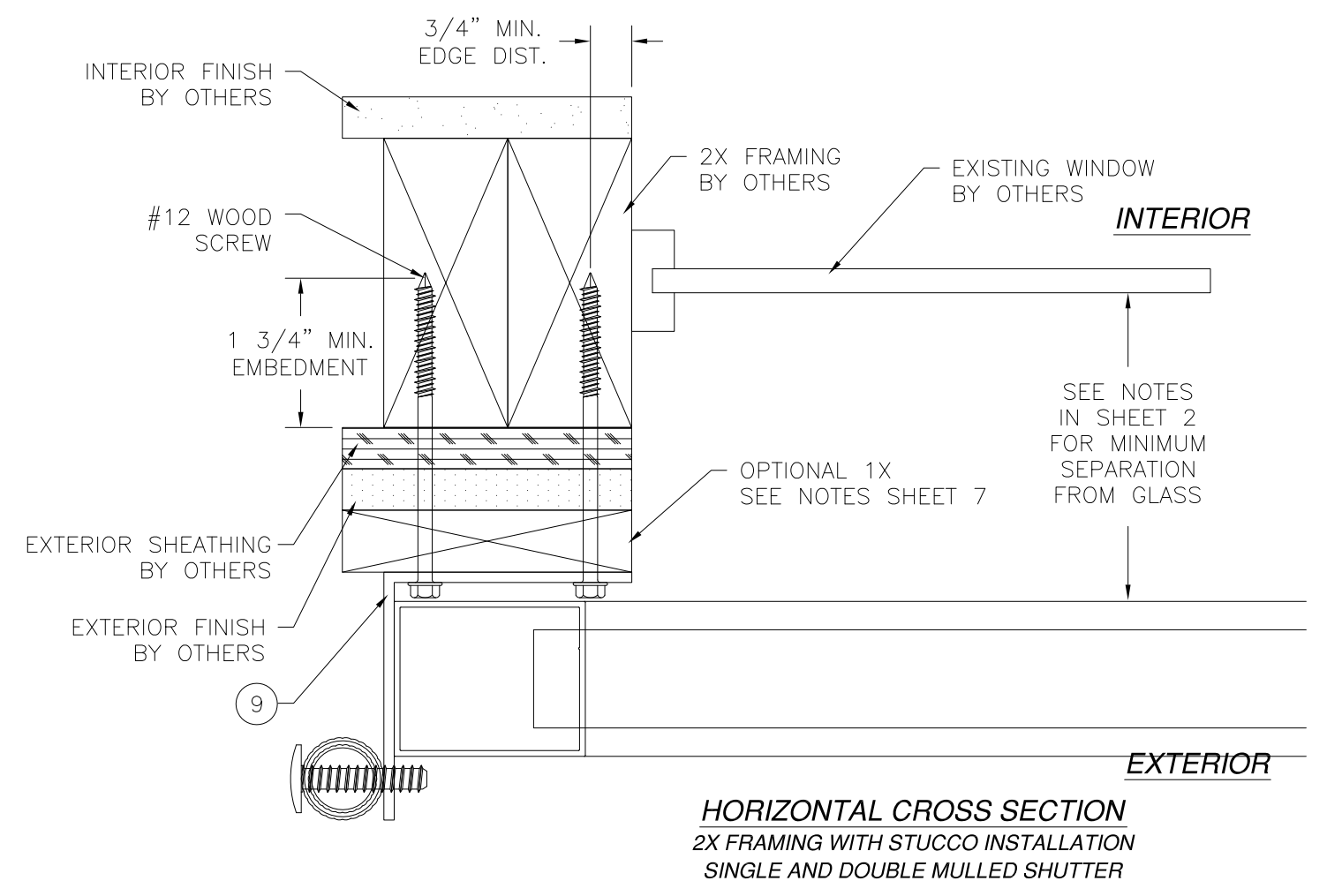
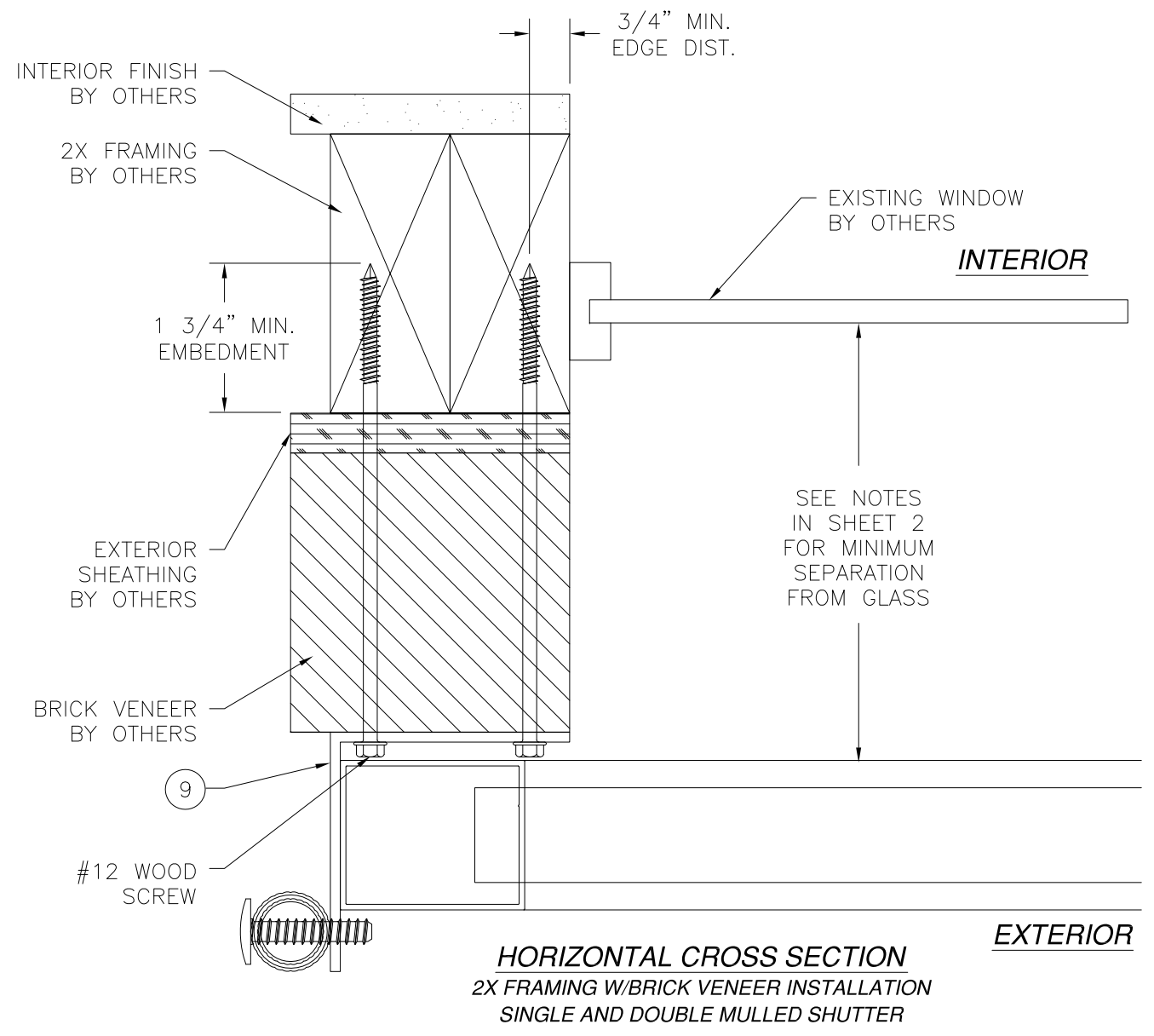
BAHAMA SHUTTER
 LARGE & SMALL MISSILE IMPACT RATED
 INSTALLATION DETAILS



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DRAWN: V.L.	DWG NO. 08-02482	REV A
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED GLASS SEPARATION	10/28/15	R.L.



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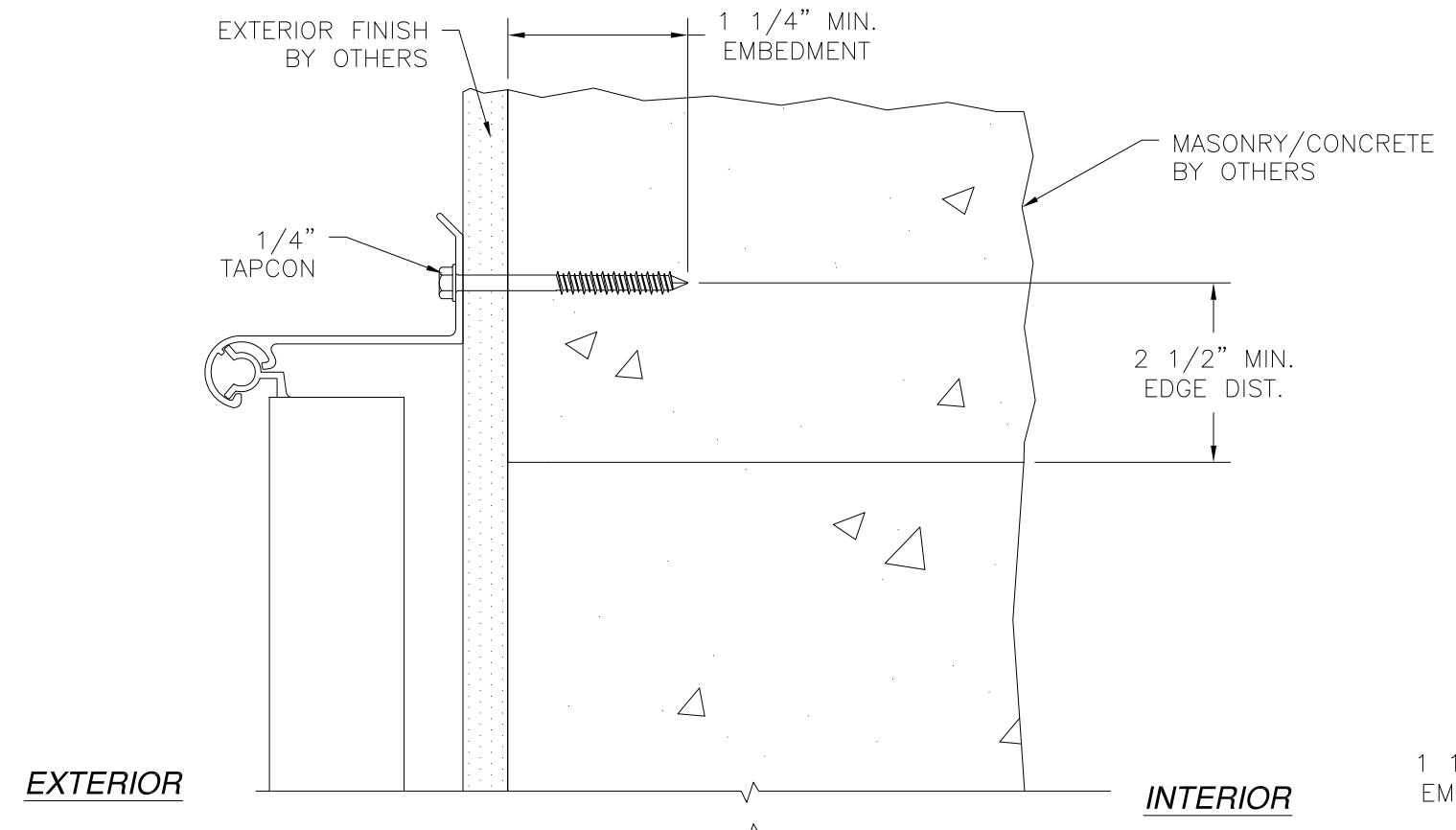
LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

BAHAMA SHUTTER
LARGE & SMALL MISSILE IMPACT RATED
INSTALLATION DETAILS

DRAWN: V.L.	DWG NO. 08-02482	REV A
SCALE NTS	DATE 09/09/14	SHEET 10 OF 11

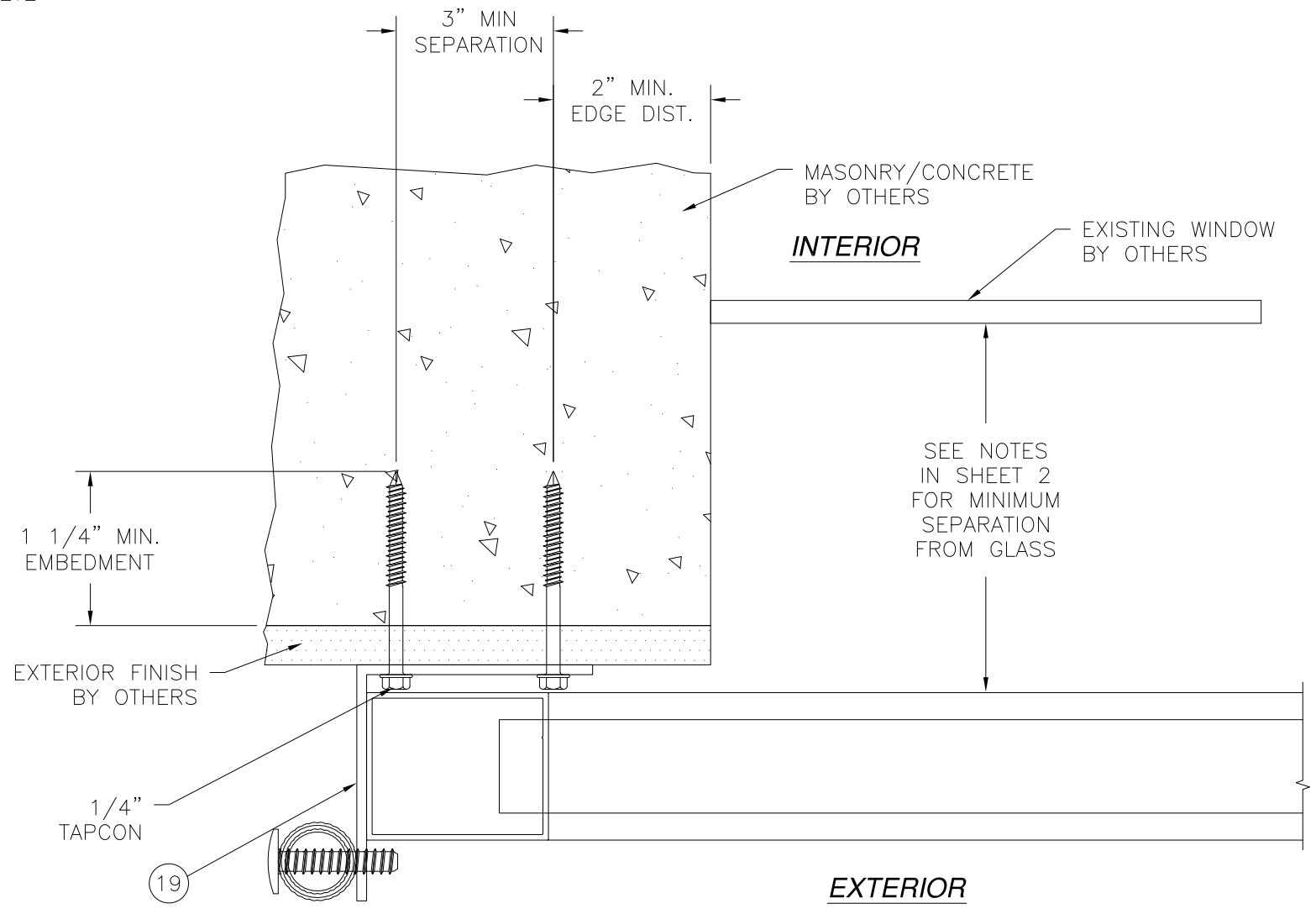
Luis R. Lomas P.E.
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	ADDED GLASS SEPARATION	10/28/15	R.L.



EXTERIOR

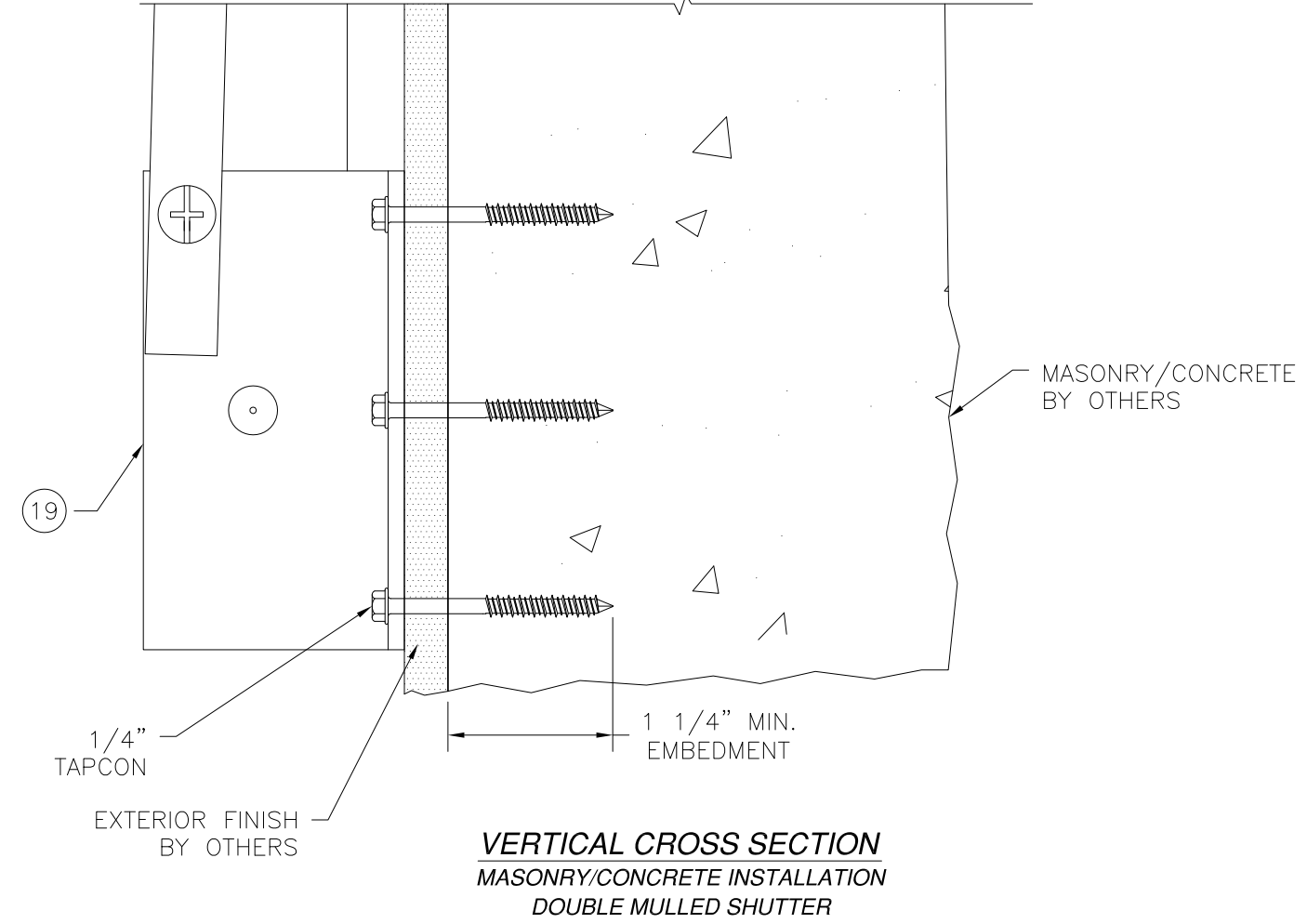
INTERIOR



INTERIOR

EXTERIOR

HORIZONTAL CROSS SECTION
MASONRY/CONCRETE INSTALLATION
DOUBLE MULLED SHUTTER



VERTICAL CROSS SECTION
MASONRY/CONCRETE INSTALLATION
DOUBLE MULLED SHUTTER

LAS ENTERPRISES 2413 L & A ROAD METAIRIE, LA 70001		
BAHAMA SHUTTER LARGE & SMALL MISSILE IMPACT RATED INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-02482	REV A
SCALE NTS	DATE 09/09/14	SHEET 11 OF 11

SIGNED: 10/28/2015



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