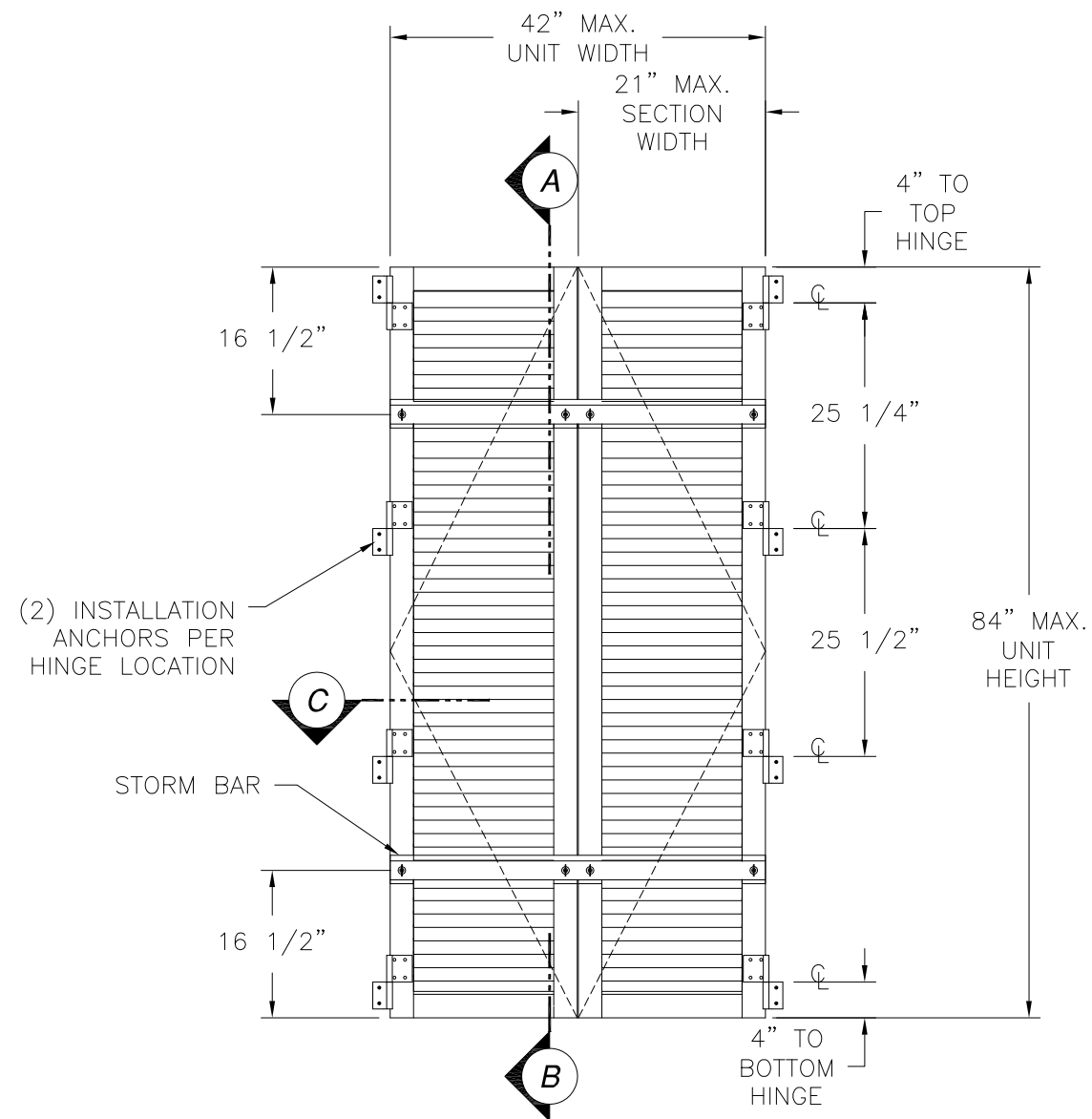


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED PER NEW REQUIREMENTS	12/29/2020	R.L.



**COLONIAL STANDARD SHUTTER**  
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±50PSF	LARGE AND SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4

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

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE 2018 IBC AND THE 2018 IRC.
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 AND BLADES MATERIAL: ALUMINUM 6063-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 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 5/16" MINIMUM EDGE DISTANCE AND 1 3/4" 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 #10 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).

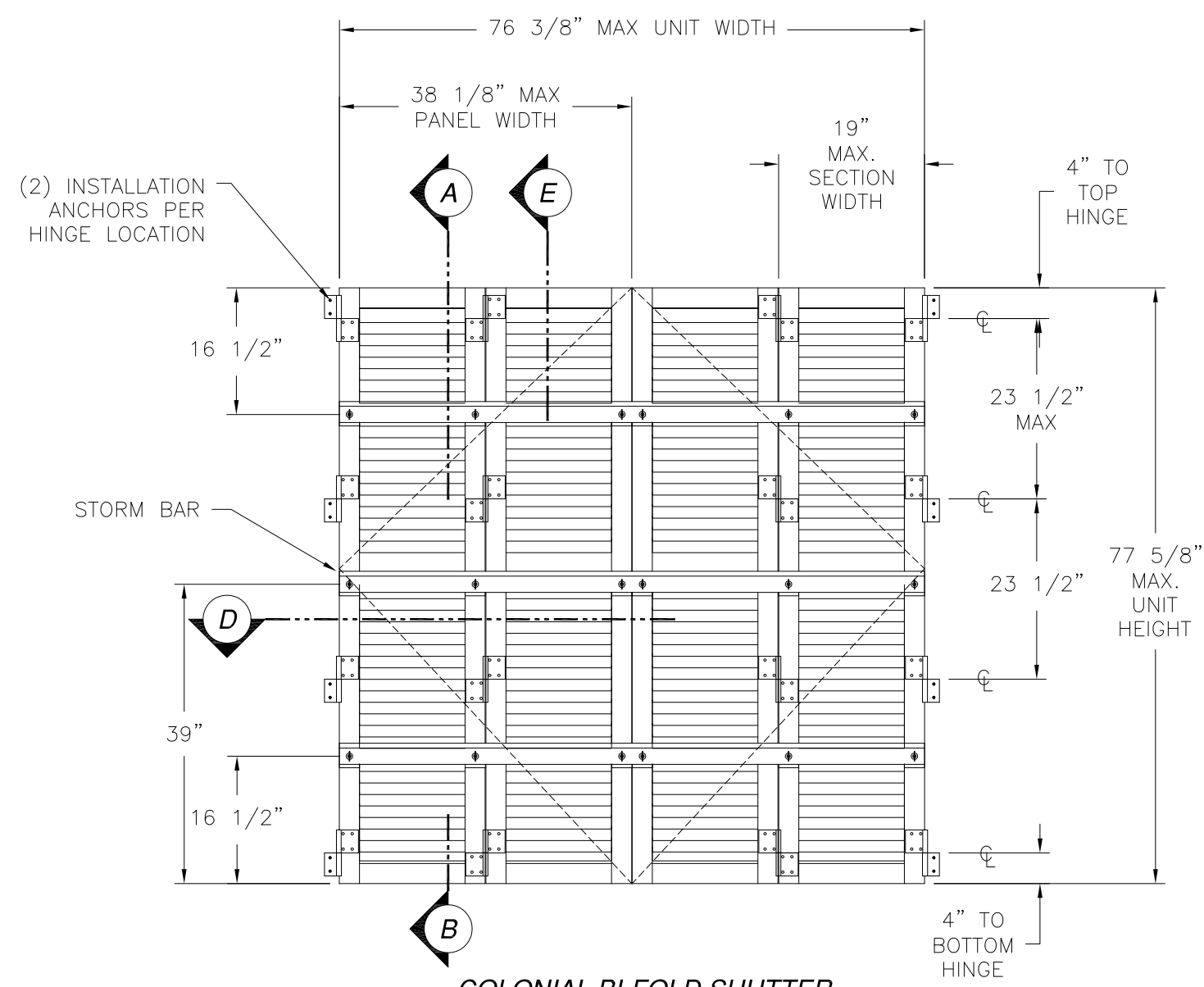
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<b>LAS ENTERPRISES</b> 2413 L & A ROAD METAIRIE, LA 70001		
COLONIAL SHUTTER BI-FOLD & STANDARD LMI & SMI STANDARD ELEVATION, ANCHORING AND NOTES		
DRAWN: V.L.	DWG NO. 08-02483	REV A
SCALE NTS	DATE 09/08/14	SHEET 1 OF 7
L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@rlomaspe.com		



Luis R. Lomas P.E.  
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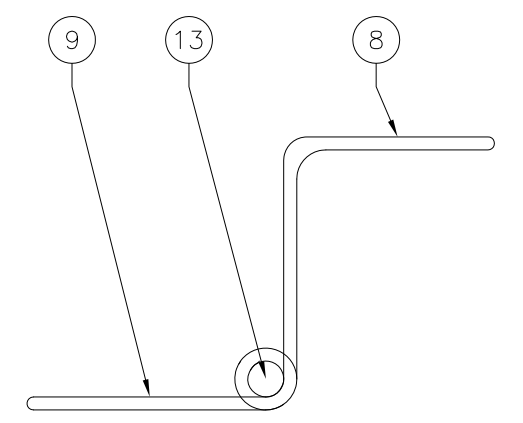
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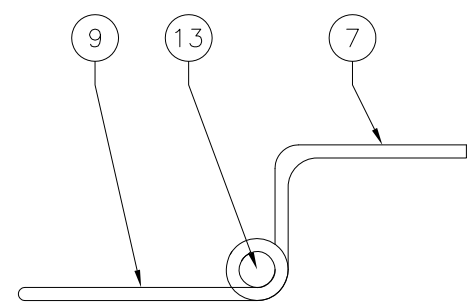
**COLONIAL BI-FOLD SHUTTER**  
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±50PSF	LARGE AND SMALL MISSILE IMPACT

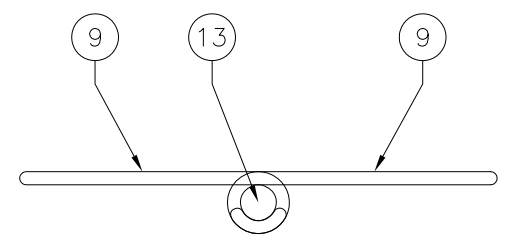
MISSILE LEVEL D, WIND ZONE 4



**DOUBLE WALL HINGE ASSY**



**STANDARD WALL HINGE**



**BI-FOLD INTERIOR HINGE ASSY**

SIGNED: 12/29/2020

LAS ENTERPRISES  
2413 L & A ROAD  
METAIRIE, LA 70001

COLONIAL SHUTTER  
BI-FOLD & STANDARD LMI & SMI  
BI-FOLD ELEVATION, ANCHORING AND NOTES

DRAWN: V.L.	DWG NO. 08-02483	REV A
SCALE NTS	DATE 09/08/14	SHEET 2 OF 7

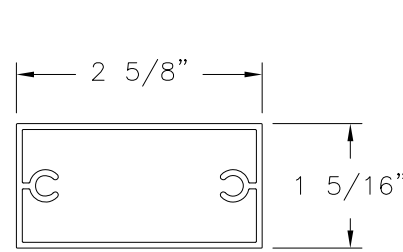
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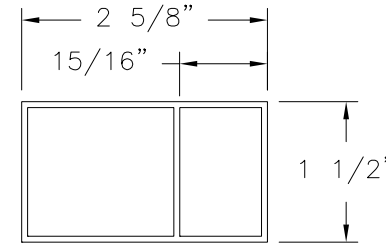
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PARTS LIST				
NO.	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1	11504A	FRAME TOP/BOTTOM	LAS ENTERPRISES	ALUMINUM 6063-T6
2	11761	FRAME SIDE	LAS ENTERPRISES	ALUMINUM 6063-T6
3		CLIP	GENESIS TEK, LLC	DELIN POM
4		BULLIT	GENESIS TEK, LLC	DELIN POM
5	11759	D/N COLBL W/SCREW COGS	LAS ENTERPRISES	ALUMINUM 6063-T6
6	11759 ALT	D/N COLBL W/O SCREW COGS	LAS ENTERPRISES	ALUMINUM 6063-T6
7	11404	STANDARD WALL HINGE	LAS ENTERPRISES	ALUMINUM 6063-T6
8	11403	BI-FOLD WALL HINGE	LAS ENTERPRISES	ALUMINUM 6063-T6
9	11405	BI-FOLD INTERMEDIATE HINGE	LAS ENTERPRISES	ALUMINUM 6063-T6
10	12115	F-TRACK	LAS ENTERPRISES	ALUMINUM 6063-T6
11		#14 x 2" PAN HEAD SMS		

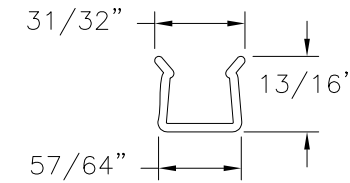
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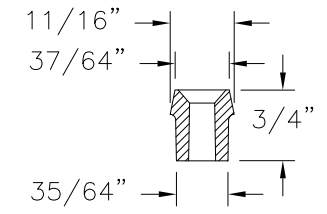
① **FRAME TOP/BOTTOM**  
ALUMINUM 6063-T6 .063" THICK



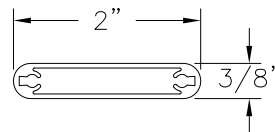
② **FRAME SIDE**  
ALUMINUM 6063-T6 .063" THICK



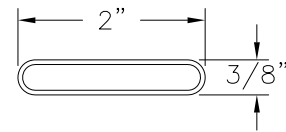
③ **CLIP**  
DELIN POM .091" THICK



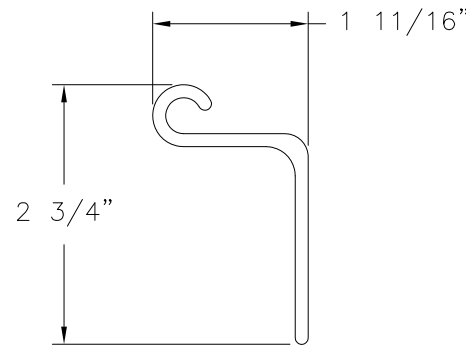
④ **BULLIT**  
DELIN POM



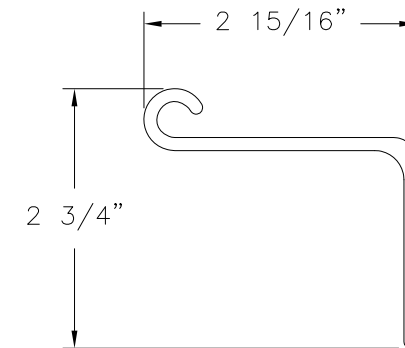
⑤ **D/N COLBL W/SCREW COGS**  
ALUMINUM 6063-T6 .050" THICK



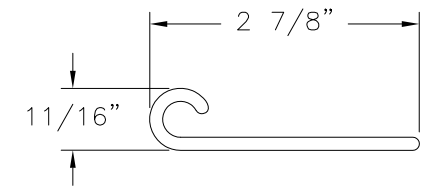
⑥ **D/N COLBL W/O SCREW COGS**  
ALUMINUM 6063-T6 .055" THICK



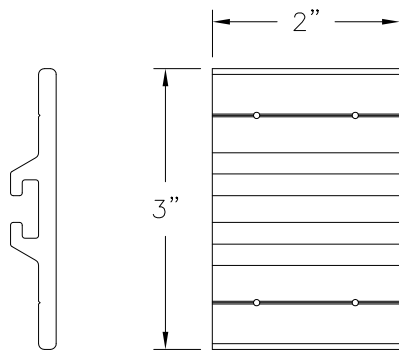
⑦ **STANDARD SHUTTER TIE DOWN**  
ALUMINUM 6063-T6 .139" THICK



⑧ **BI-FOLD SHUTTER TIE DOWN**  
ALUMINUM 6063-T6 .139" THICK



⑨ **BI-FOLD INTERIOR HINGE**  
ALUMINUM 6063-T6 .139" THICK



⑩ **F-TRACK**  
ALUMINUM 6063-T6 .1875" THICK

LAS ENTERPRISES  
2413 L & A ROAD  
METAIRIE, LA 70001

COLONIAL SHUTTER  
BI-FOLD & STANDARD LMI & SMI  
B.O.M. & COMPONENTS

DRAWN: V.L.	DWG NO. 08-02483	REV A
SCALE NTS	DATE 09/08/14	SHEET 3 OF 7

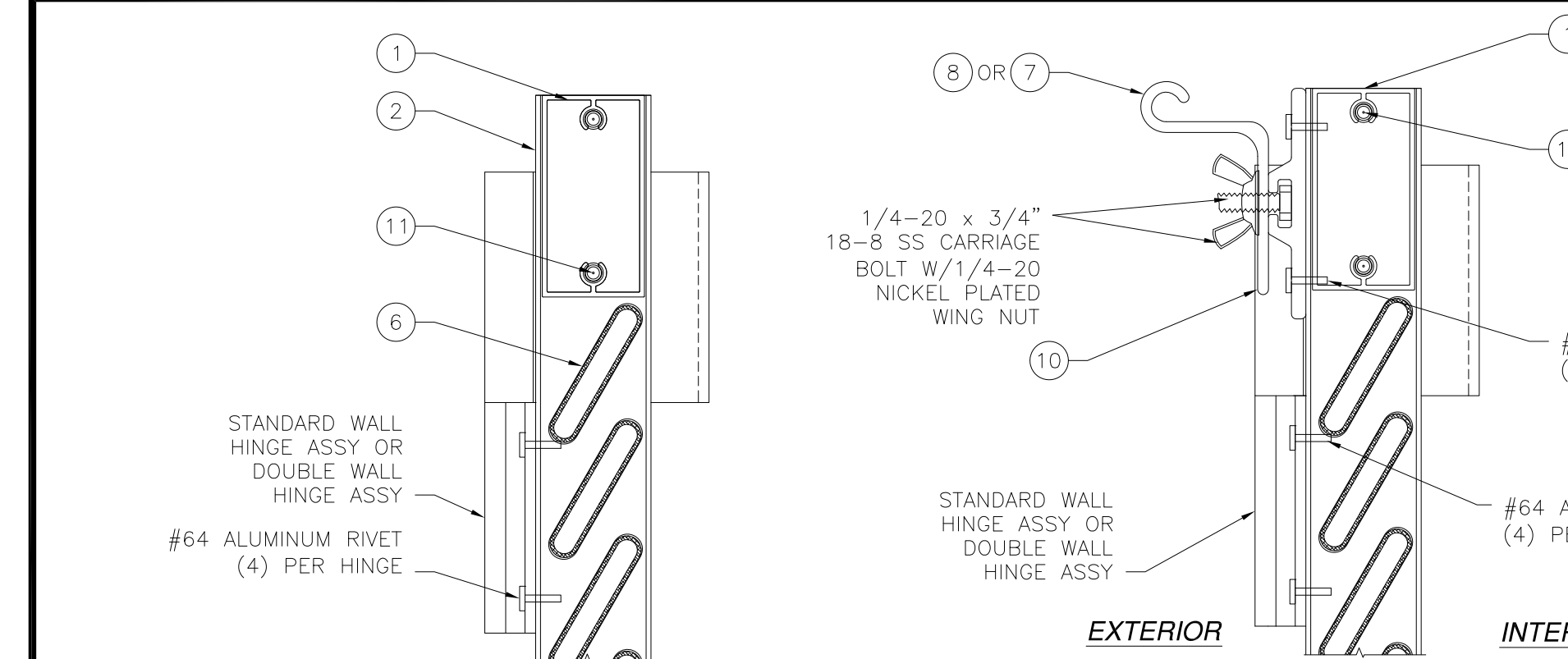
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1432 WOODFORD RD LEWISVILLE, NC 27023  
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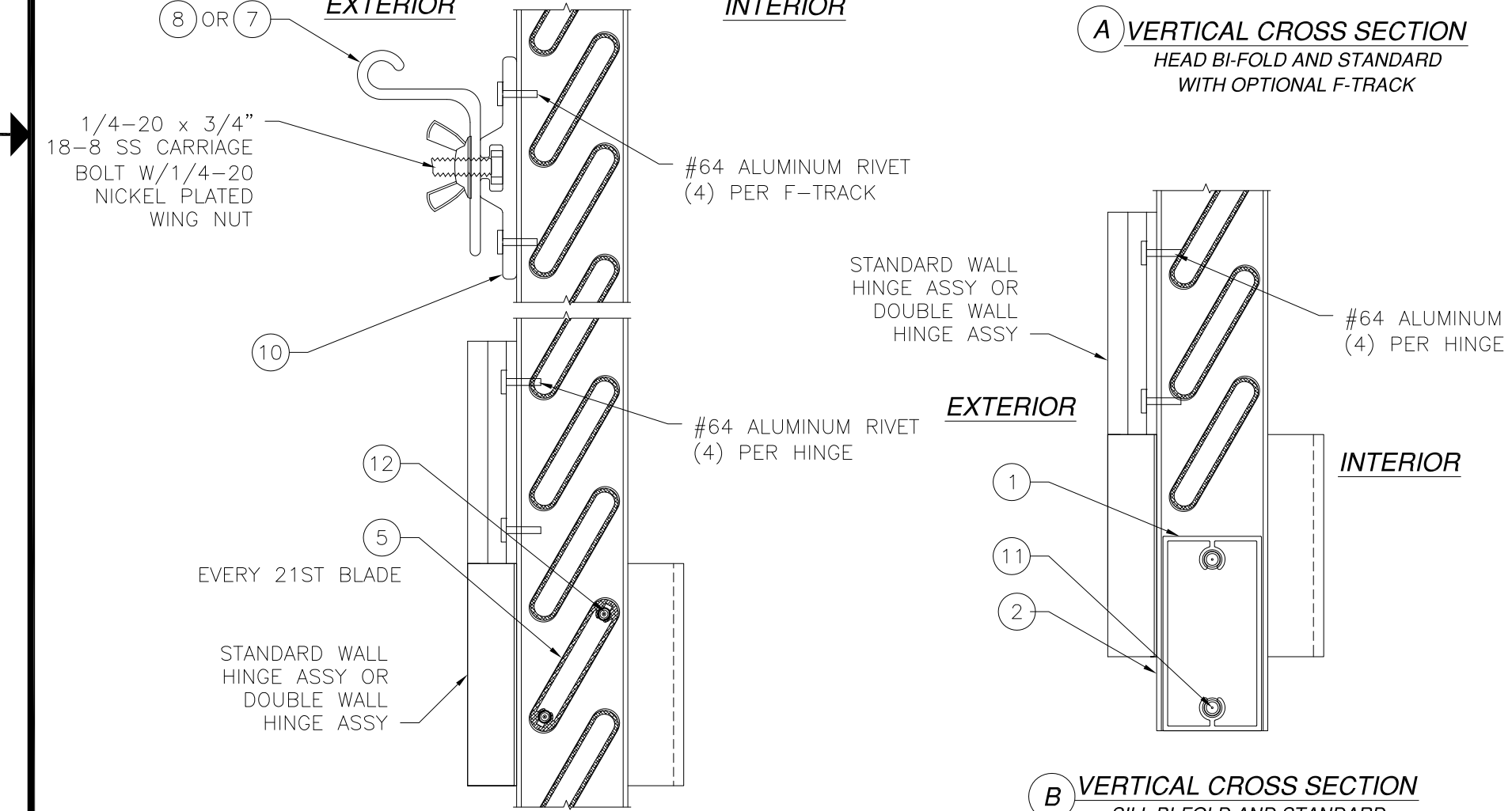


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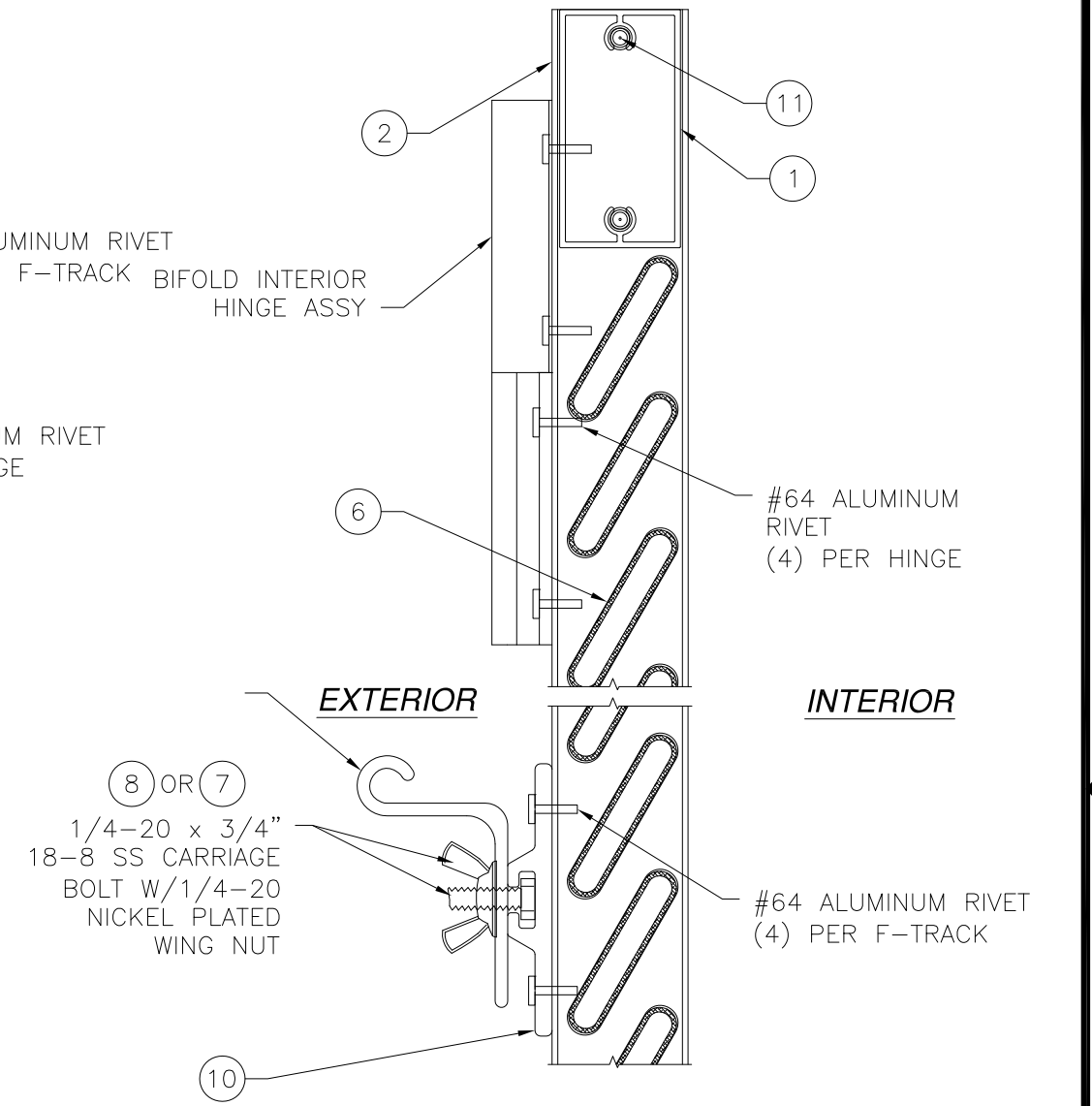
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**A** VERTICAL CROSS SECTION  
HEAD BI-FOLD AND STANDARD  
WITH OPTIONAL F-TRACK



**B** VERTICAL CROSS SECTION  
SILL BI-FOLD AND STANDARD



**E** VERTICAL CROSS SECTION  
HEAD BI-FOLD

**LAS ENTERPRISES**  
2413 L & A ROAD  
METAIRIE, LA 70001

COLONIAL SHUTTER  
BI-FOLD & STANDARD LMI & SMI  
VERTICAL CROSS SECTIONS

DRAWN: V.L.	DWG NO. 08-02483	REV A
SCALE NTS	DATE 09/08/14	SHEET 4 OF 7

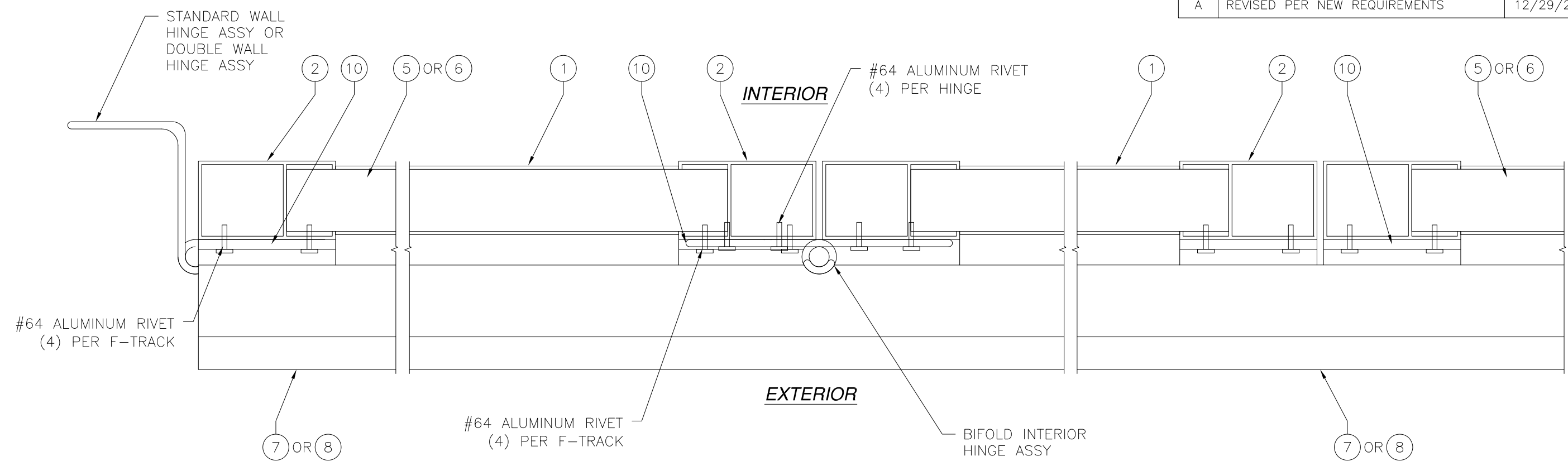
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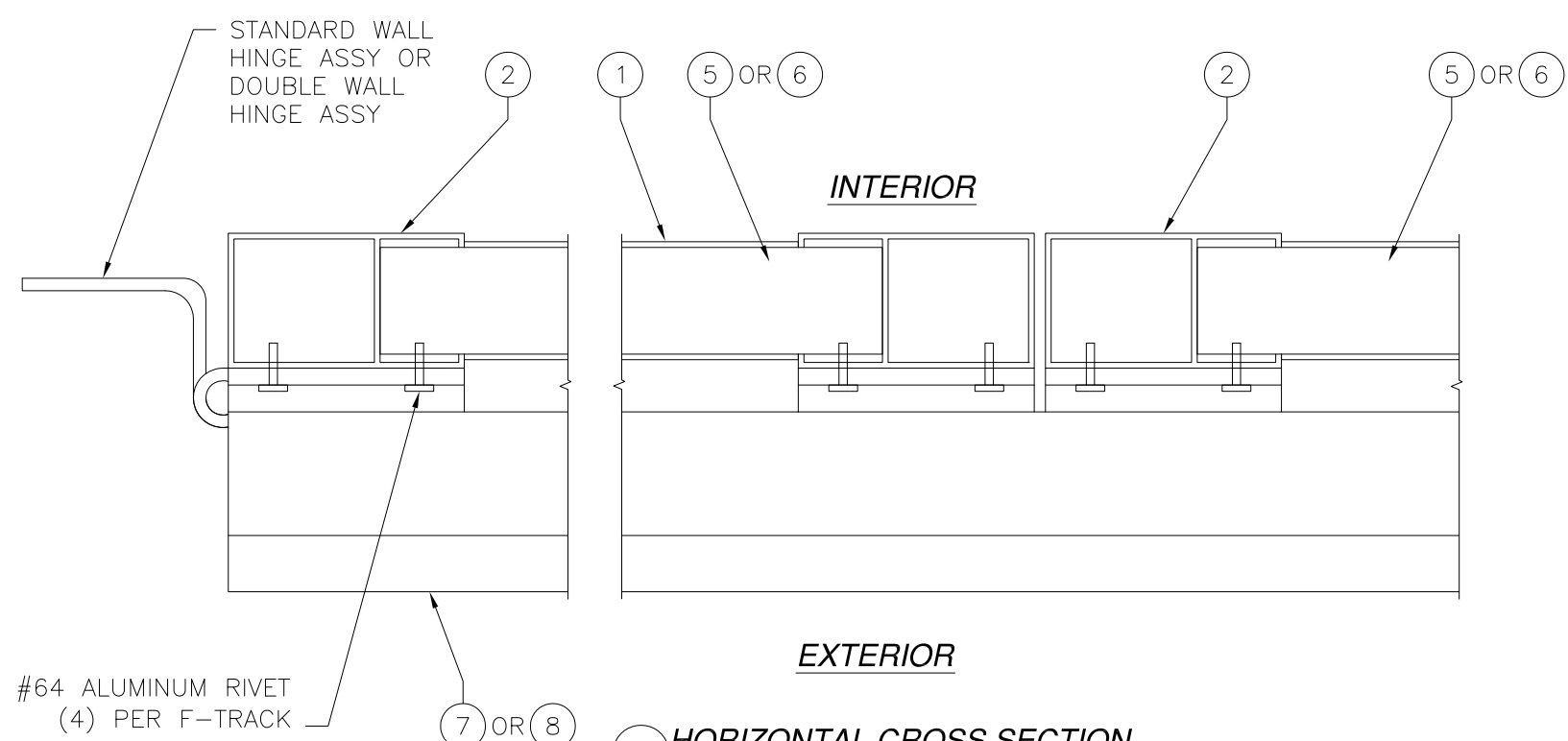


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**D** HORIZONTAL CROSS SECTION  
BI-FOLD SHUTTER



**C** HORIZONTAL CROSS SECTION  
STANDARD SHUTTER

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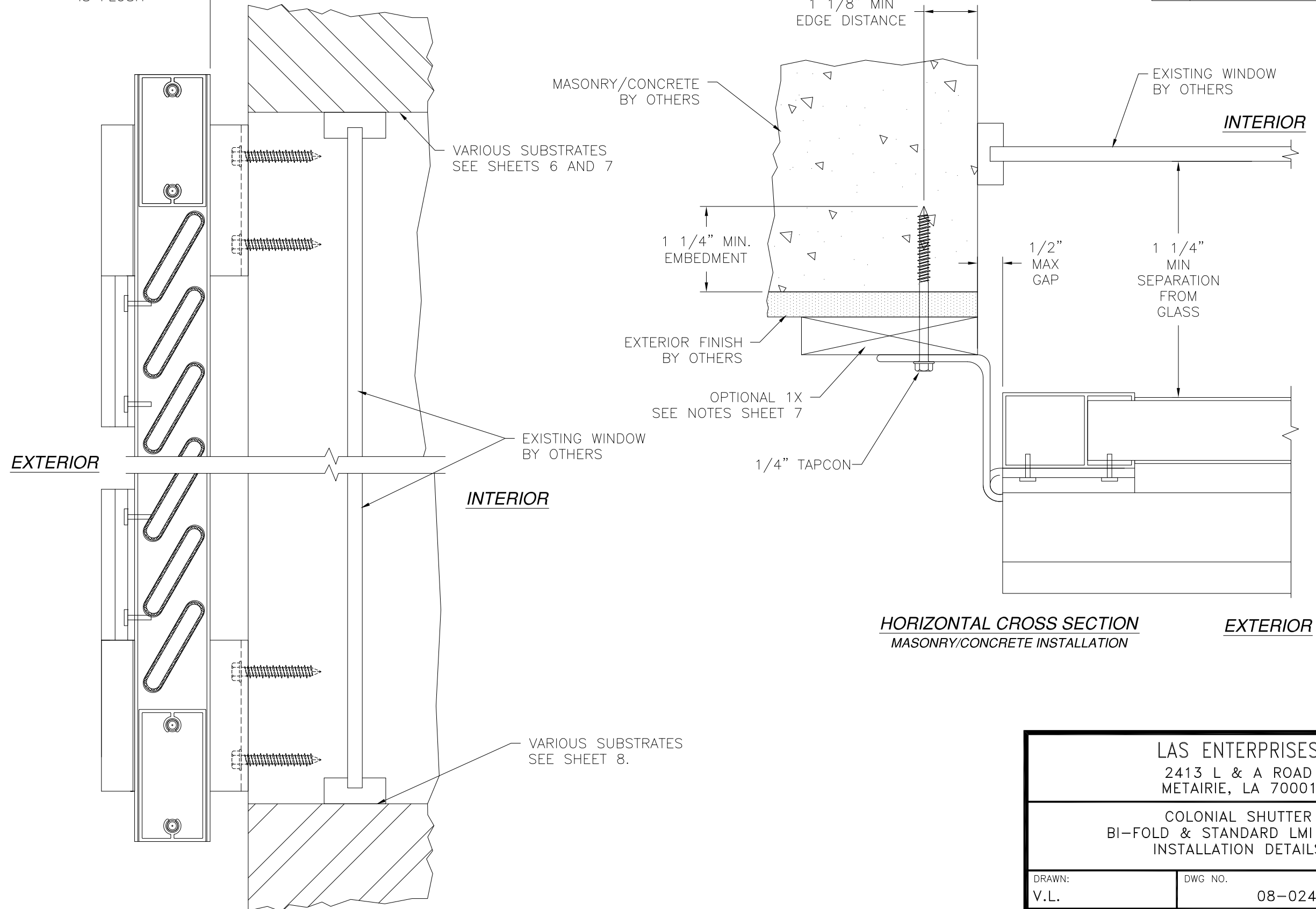
<b>LAS ENTERPRISES</b> 2413 L & A ROAD METAIRIE, LA 70001		
COLONIAL SHUTTER BI-FOLD & STANDARD LMI & SMI HORIZONTAL CROSS SECTIONS		
DRAWN: V.L.	DWG NO. 08-02483	REV A
SCALE NTS	DATE 09/08/14	SHEET 5 OF 7
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3/4" OFFSET BI-FOLD SHUTTER  
STANDARD SHUTTER IS FLUSH

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**VERTICAL CROSS SECTION**  
BI-FOLD SHUTTER SHOWN,  
STANDARD SHUTTER SIMILAR

**HORIZONTAL CROSS SECTION**  
MASONRY/CONCRETE INSTALLATION

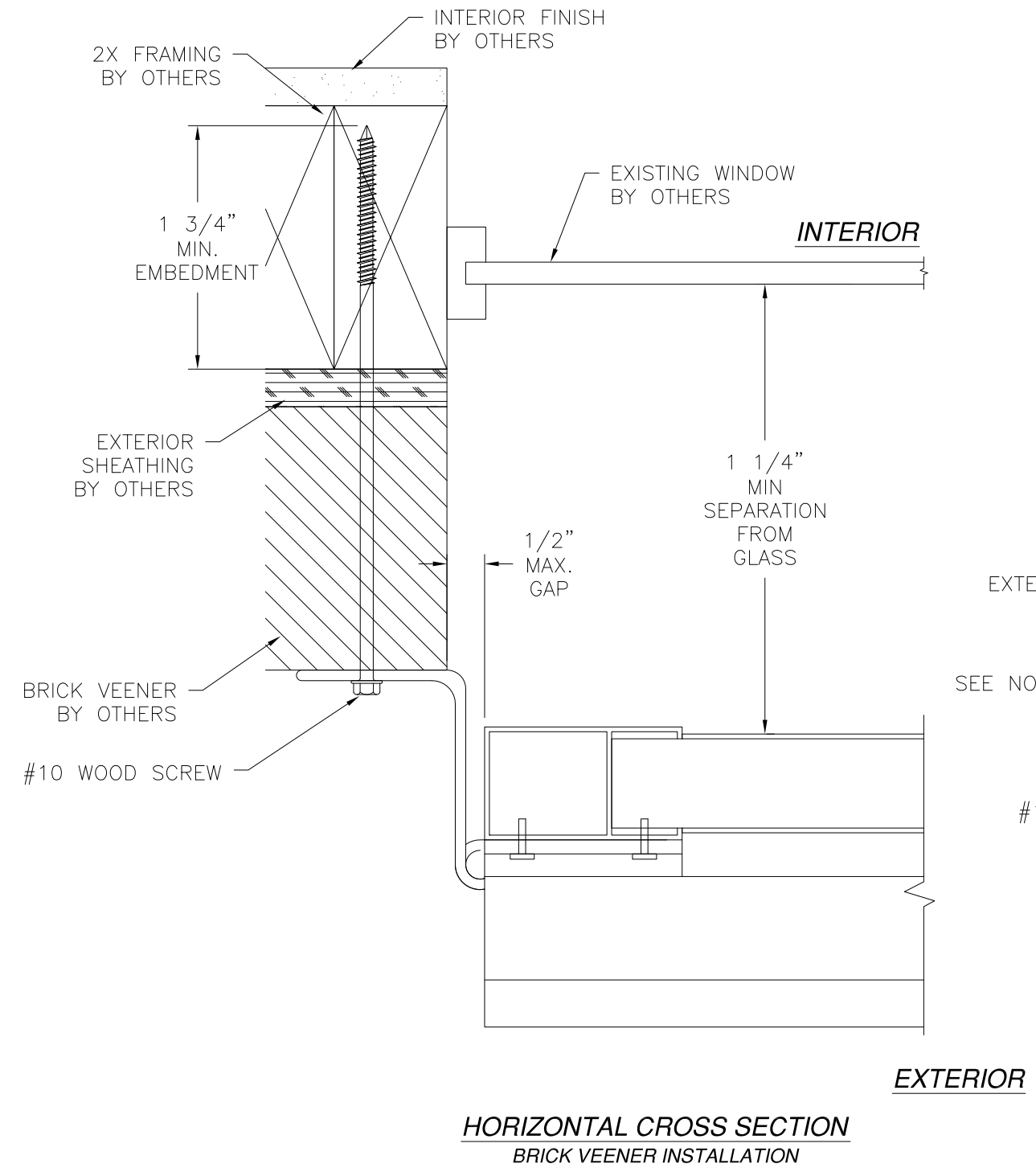
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<p><b>LAS ENTERPRISES</b> 2413 L &amp; A ROAD METAIRIE, LA 70001</p>		
<p>COLONIAL SHUTTER BI-FOLD &amp; STANDARD LMI &amp; SMI INSTALLATION DETAILS</p>		
<p>DRAWN: V.L.</p>	<p>DWG NO. 08-02483</p>	<p>REV A</p>
<p>SCALE NTS</p>	<p>DATE 09/08/14</p>	<p>SHEET 6 OF 7</p>
<p>L. ROBERTO LOMAS P.E. 1432 WOODFORD RD LEWISVILLE, NC 27023 434-688-0609 rllomas@lrlomaspe.com</p>		

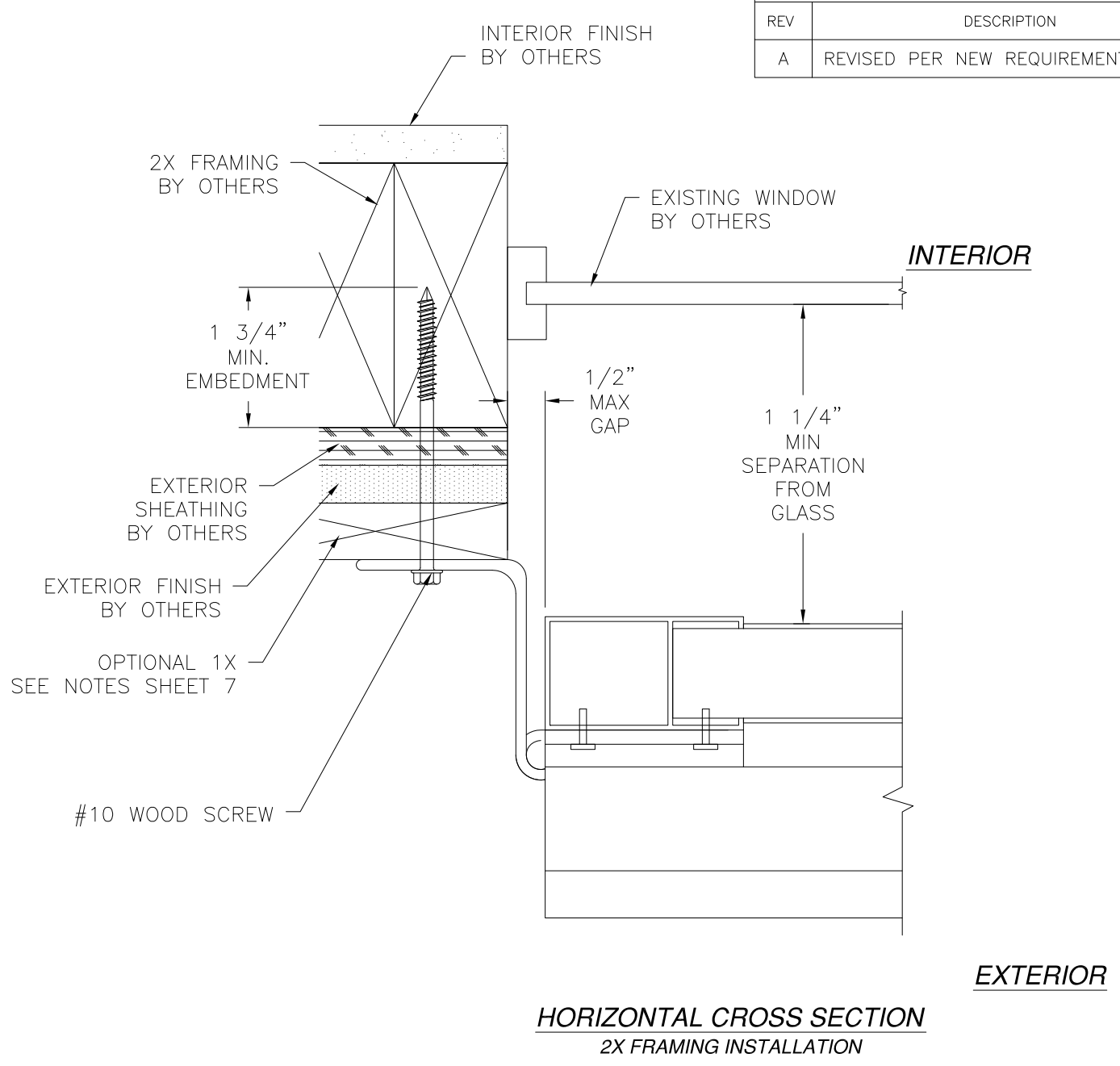


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**HORIZONTAL CROSS SECTION**  
BRICK VEENER INSTALLATION



**HORIZONTAL CROSS SECTION**  
2X FRAMING 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.

**LAS ENTERPRISES**  
2413 L & A ROAD  
METAIRIE, LA 70001

COLONIAL SHUTTER  
BI-FOLD & STANDARD LMI & SMI  
INSTALLATION DETAILS

DRAWN: V.L.	DWG NO. 08-02483	REV A
SCALE NTS	DATE 09/08/14	SHEET 7 OF 7

L. ROBERTO LOMAS P.E.  
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