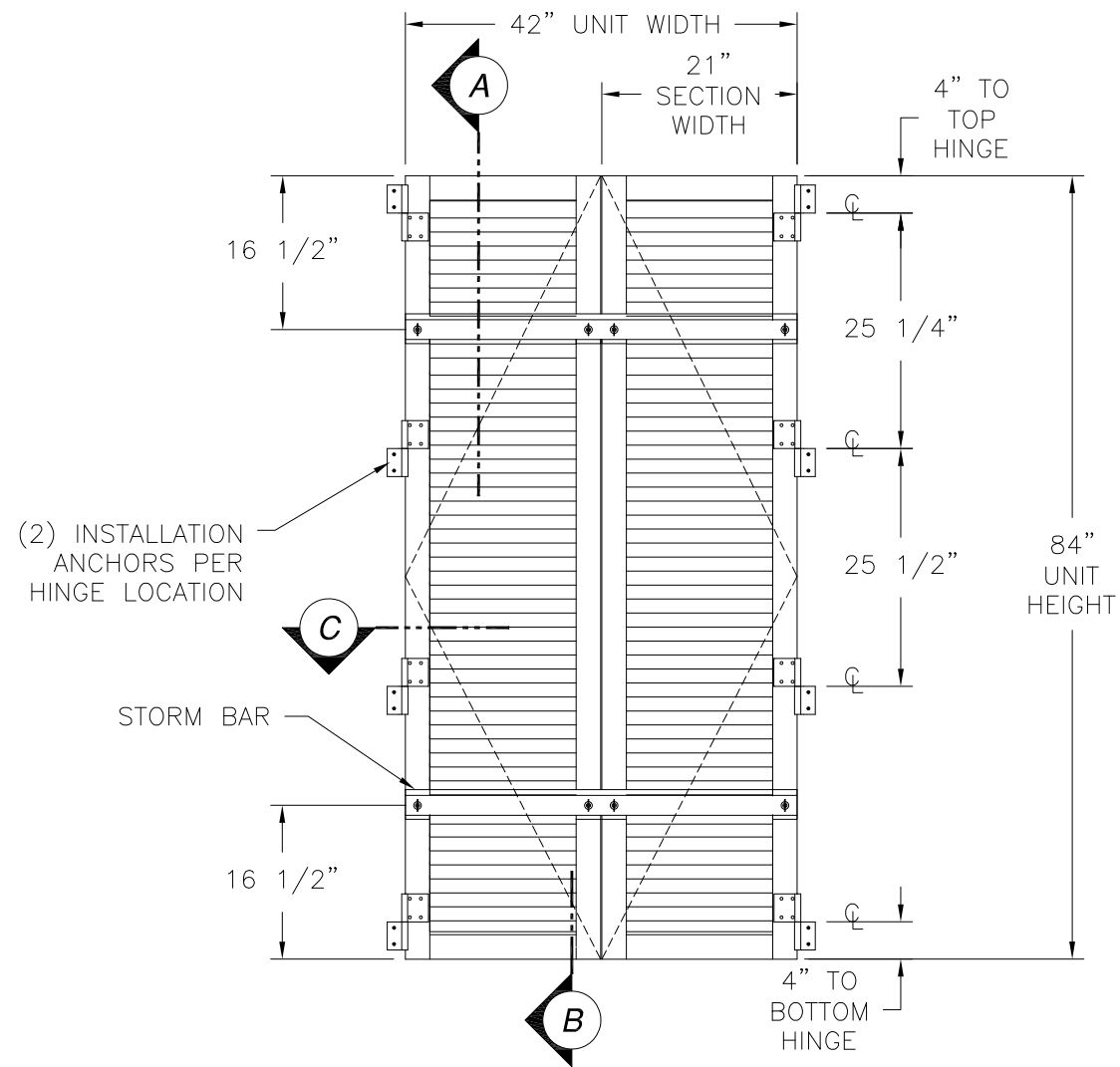


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED PER NEW CODE	08/16/2023	R.L.



COLONIAL STANDARD SHUTTER
EXTERIOR VIEW

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

MISSILE LEVEL D, WIND ZONE 4

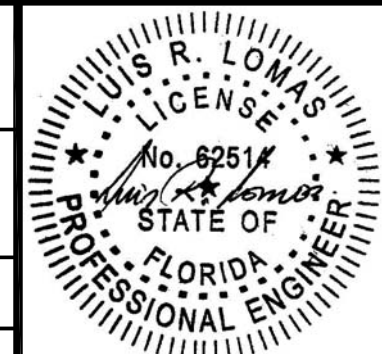
NOTES:

- THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
- 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.
- 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.
- SHUTTER FRAME AND BLADES MATERIAL: ALUMINUM 6063-T6.
- APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN DEBRIS REGIONS.
- 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.
- 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.
- FOR ANCHORING INTO MASONRY/CONCRETE USE 1/4" TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
- ALL FASTENERS TO BE CORROSION RESISTANT.
- 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:
 - WOOD – MINIMUM SPECIFIC GRAVITY OF G=0.42
 - CONCRETE – MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.
 - MASONRY – STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).

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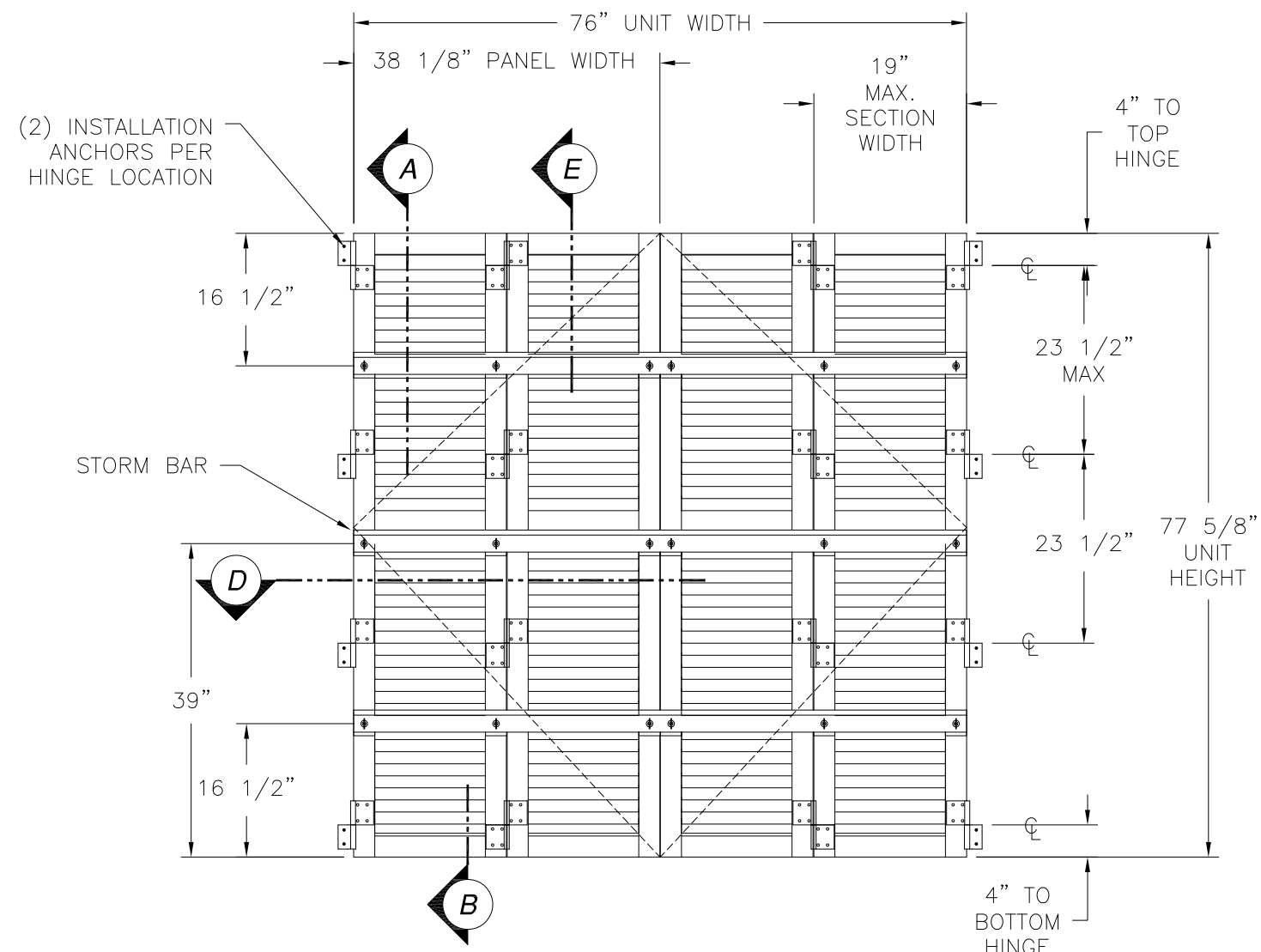
TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1 - 2	ELEVATIONS, ANCHORING AND NOTES
3	BILL OF MATERIALS AND COMPONENTS
4 - 5	CROSS SECTIONS
6 - 7	INSTALLATION DETAILS

LAS ENTERPRISES 2413 L & A ROAD METAIRIE, LA 70001		
COLONIAL SHUTTER BI-FOLD AND STANDARD LARGE MISSILE IMPACT STANDARD ELEVATION, ANCHORING AND NOTES		
DRAWN: TJH	DWG NO. 08-01234	REV C
SCALE NTS	DATE 05/03/11	SHEET 1 OF 7
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



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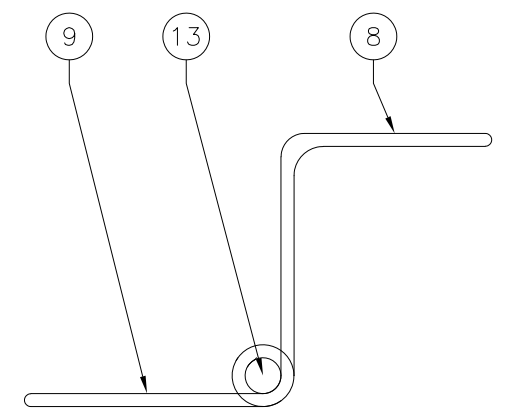
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
C	REVISED PER NEW CODE	08/16/2023	R.L.



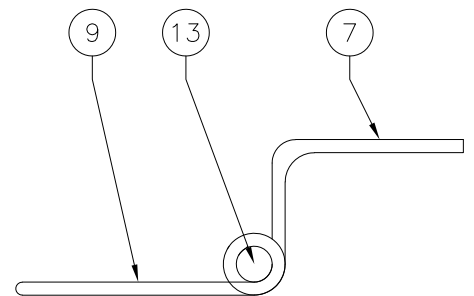
COLONIAL BI-FOLD SHUTTER
EXTERIOR VIEW

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

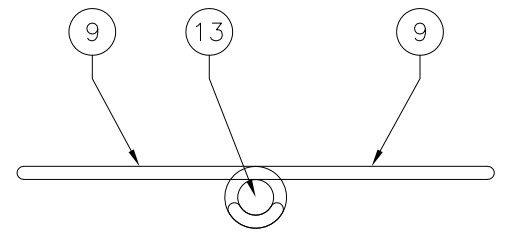
MISSILE LEVEL D, WIND ZONE 4



DOUBLE WALL HINGE ASSY



STANDARD WALL HINGE



BI-FOLD INTERIOR HINGE ASSY

SIGNED: 10/26/2023

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

COLONIAL SHUTTER
BI-FOLD AND STANDARD LARGE MISSILE IMPACT
BI-FOLD ELEVATION AND ANCHORING

DRAWN: TJH	DWG NO. 08-01234	REV C
SCALE NTS	DATE 05/03/11	SHEET 2 OF 7

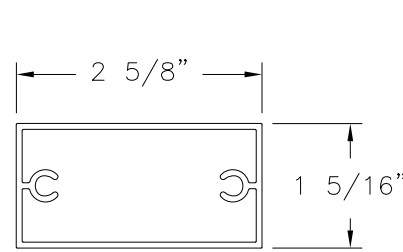
L. ROBERTO LOMAS P.E.
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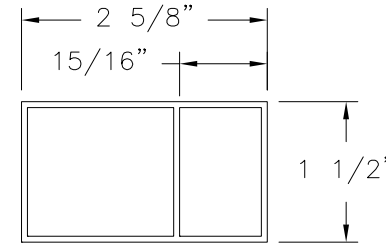
Luis R. Lomas P.E.
FL No.: 62514

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		

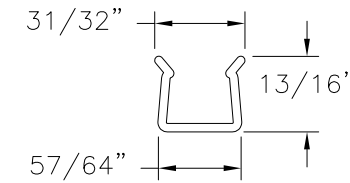
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REV	DESCRIPTION	DATE	APPROVED
C	REVISED PER NEW CODE	08/16/2023	R.L.



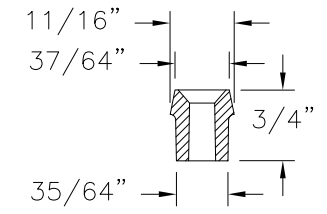
① **FRAME TOP/BOTTOM**
ALUMINUM 6063-T6 .063" THICK



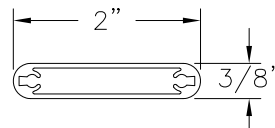
② **FRAME SIDE**
ALUMINUM 6063-T6 .063" THICK



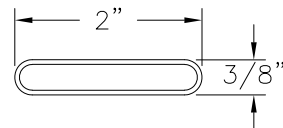
③ **CLIP**
DELIN POM .091" THICK



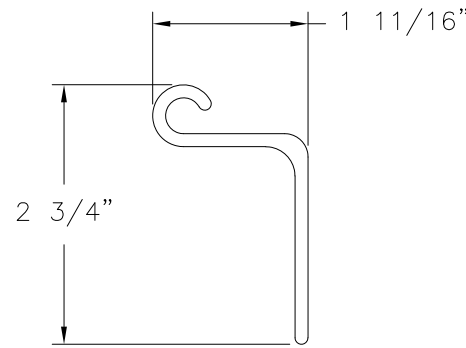
④ **BULLIT**
DELIN POM



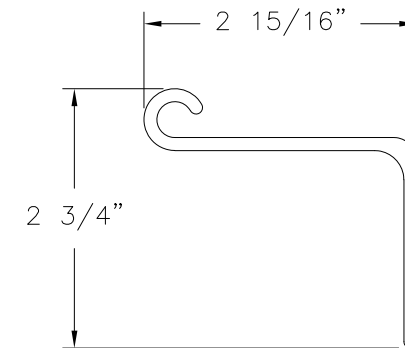
⑤ **D/N COLBL W/SCREW COGS**
ALUMINUM 6063-T6 .050" THICK



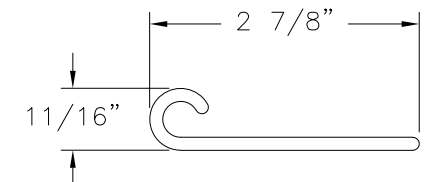
⑥ **D/N COLBL W/O SCREW COGS**
ALUMINUM 6063-T6 .055" THICK



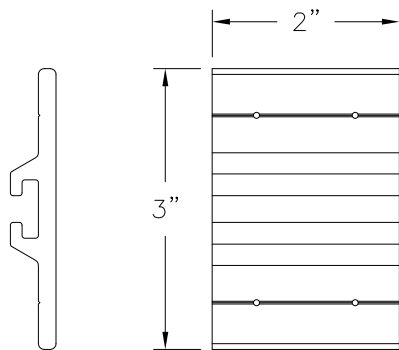
⑦ **STANDARD SHUTTER TIE DOWN**
ALUMINUM 6063-T6 .139" THICK



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

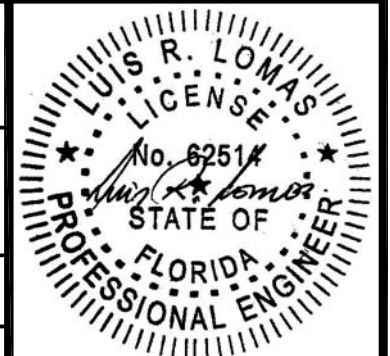
LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

COLONIAL SHUTTER
BI-FOLD AND STANDARD LARGE MISSILE IMPACT
BILL OF MATERIALS AND COMPONENTS

DRAWN: TJH	DWG NO. 08-01234	REV C
SCALE NTS	DATE 05/03/11	SHEET 3 OF 7

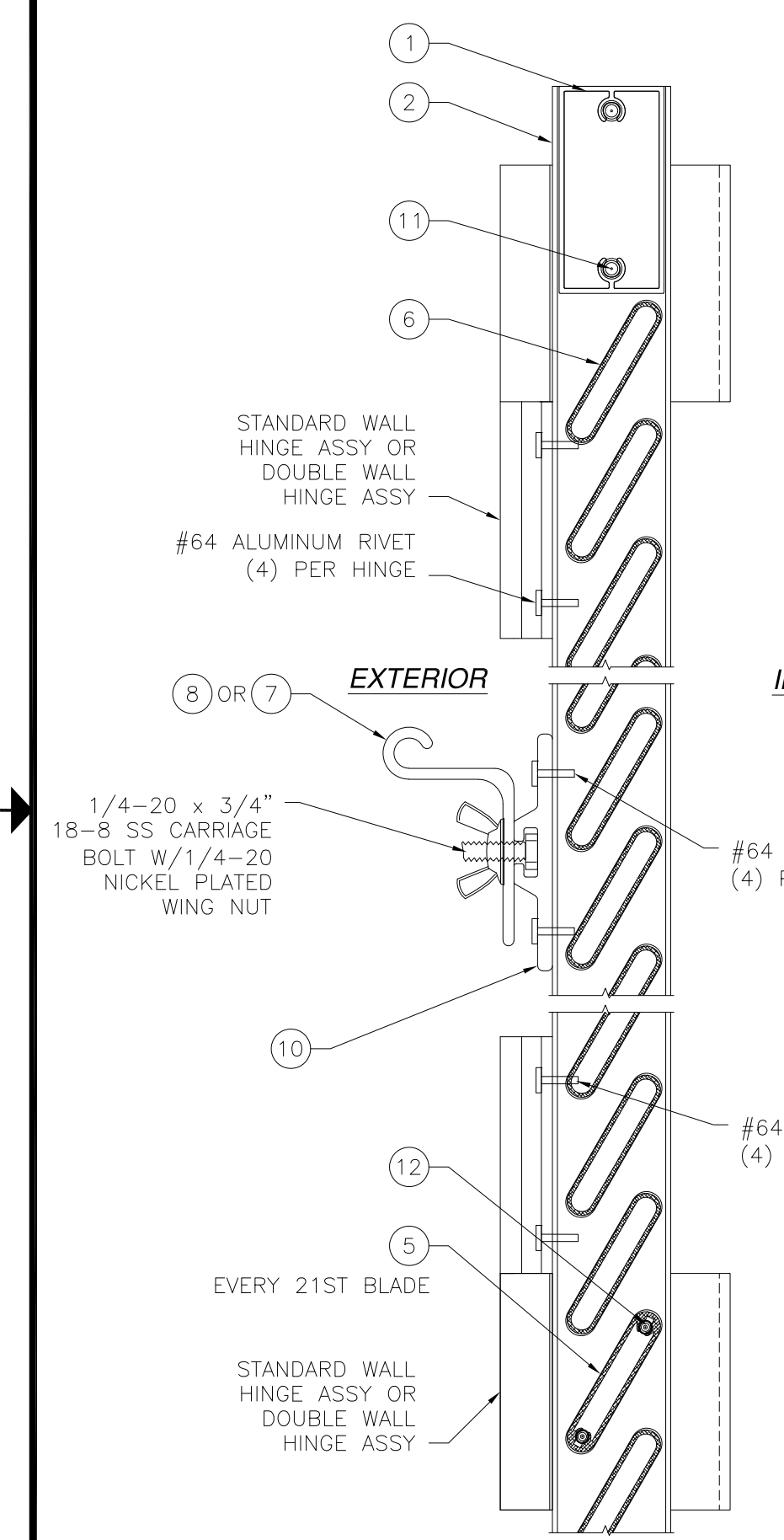
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208 7th Ave, INDIALANTIC, FL 32903
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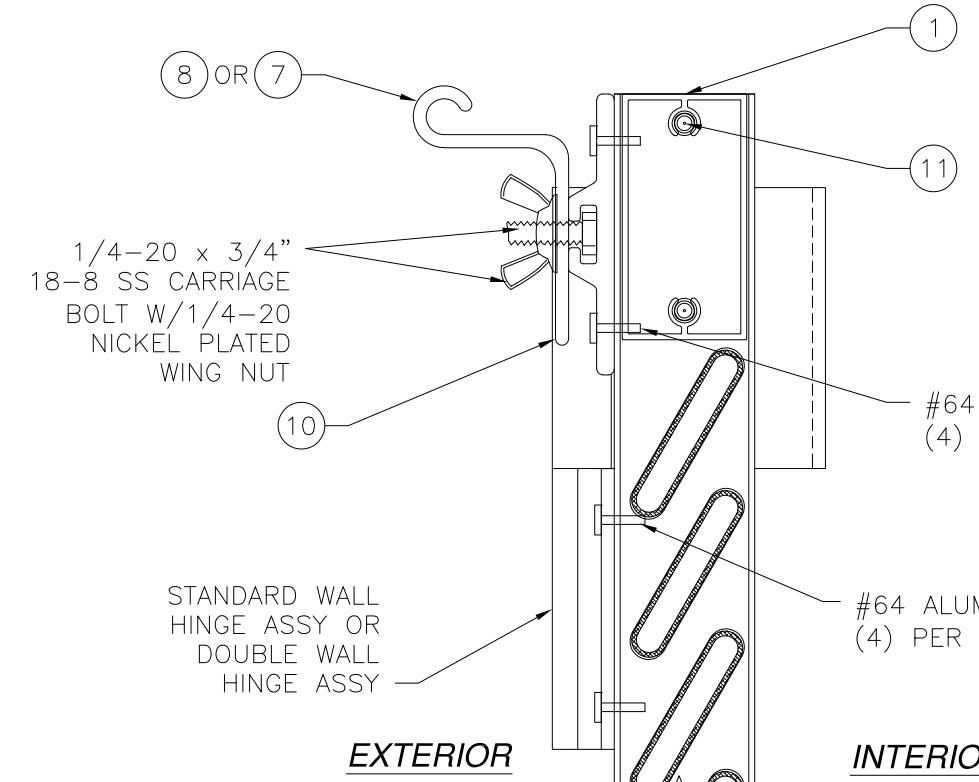


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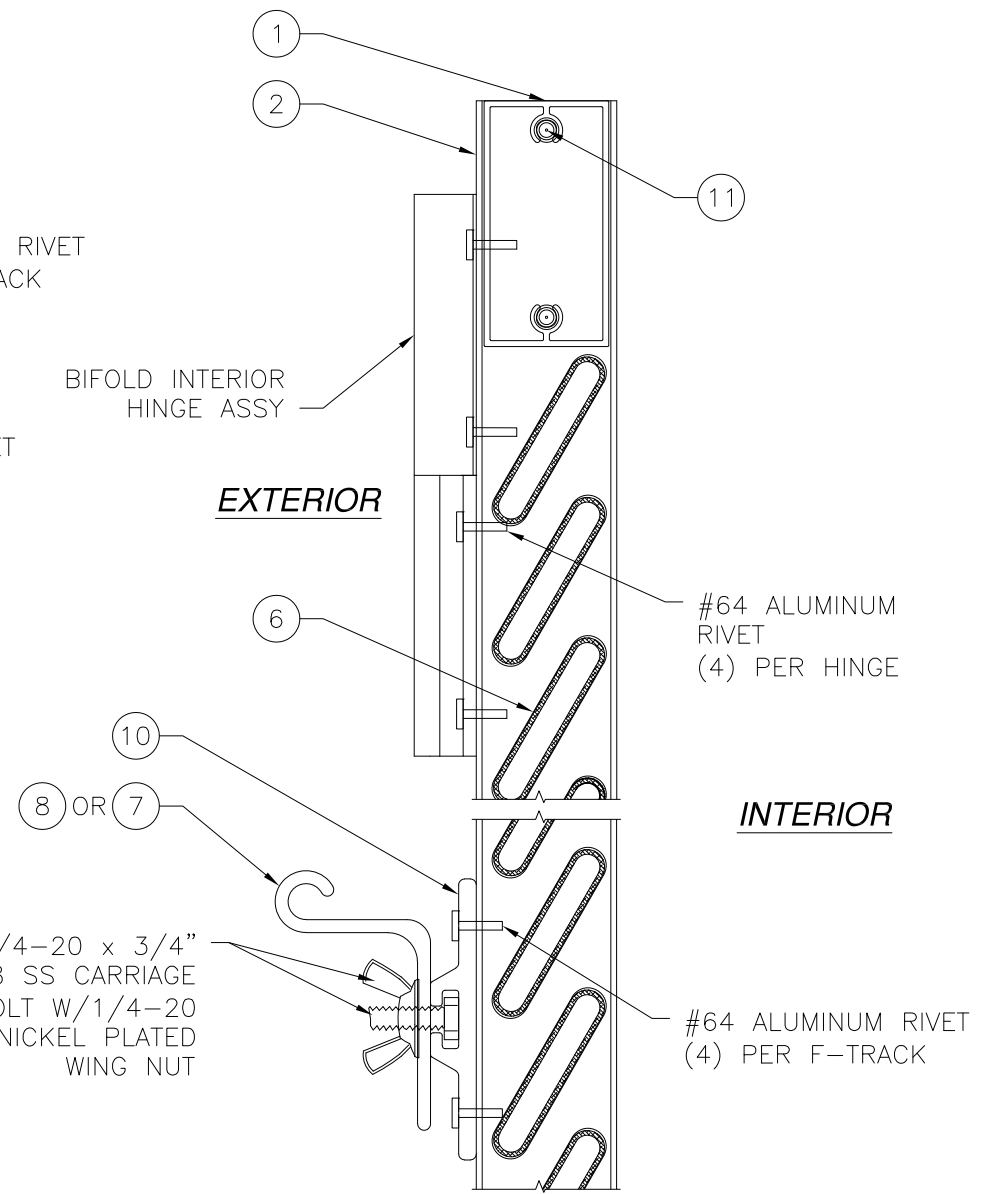
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C	REVISED PER NEW CODE	08/16/2023	R.L.



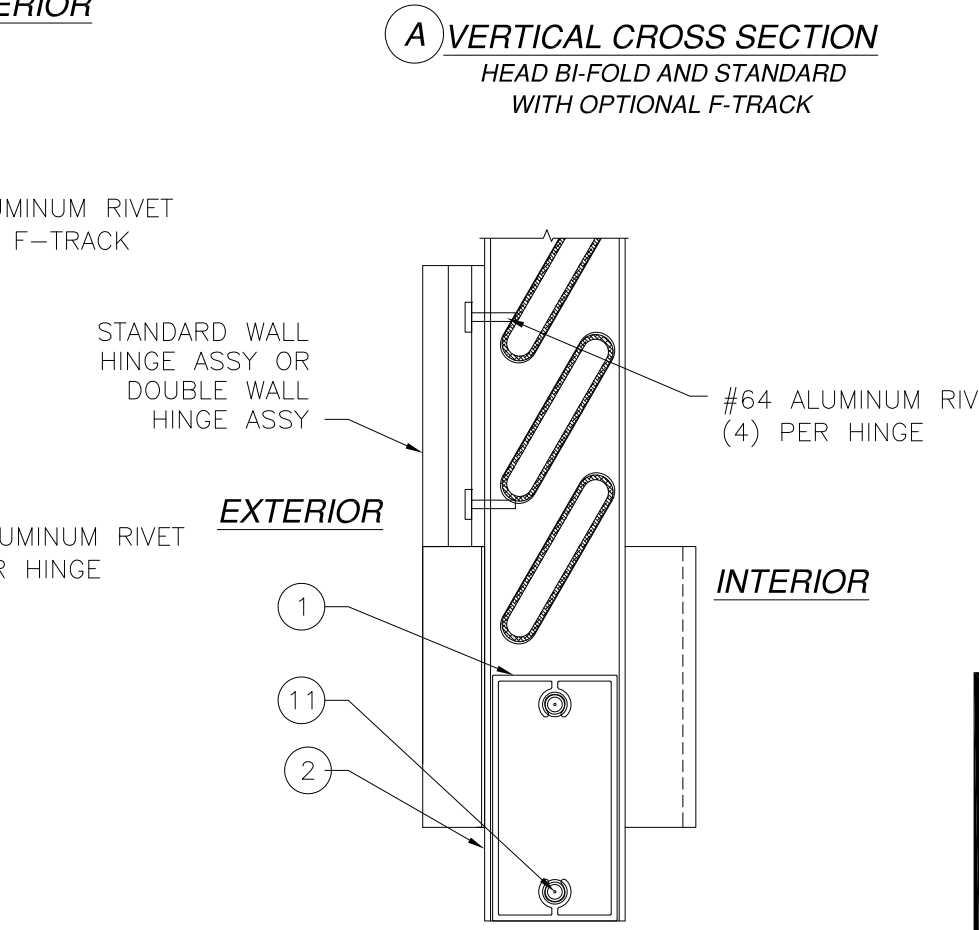
A VERTICAL CROSS SECTION
HEAD BI-FOLD AND STANDARD



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



E VERTICAL CROSS SECTION
HEAD BI-FOLD



B VERTICAL CROSS SECTION
SILL BI-FOLD AND STANDARD

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

COLONIAL SHUTTER
BI-FOLD AND STANDARD LARGE MISSILE IMPACT
VERTICAL CROSS SECTIONS

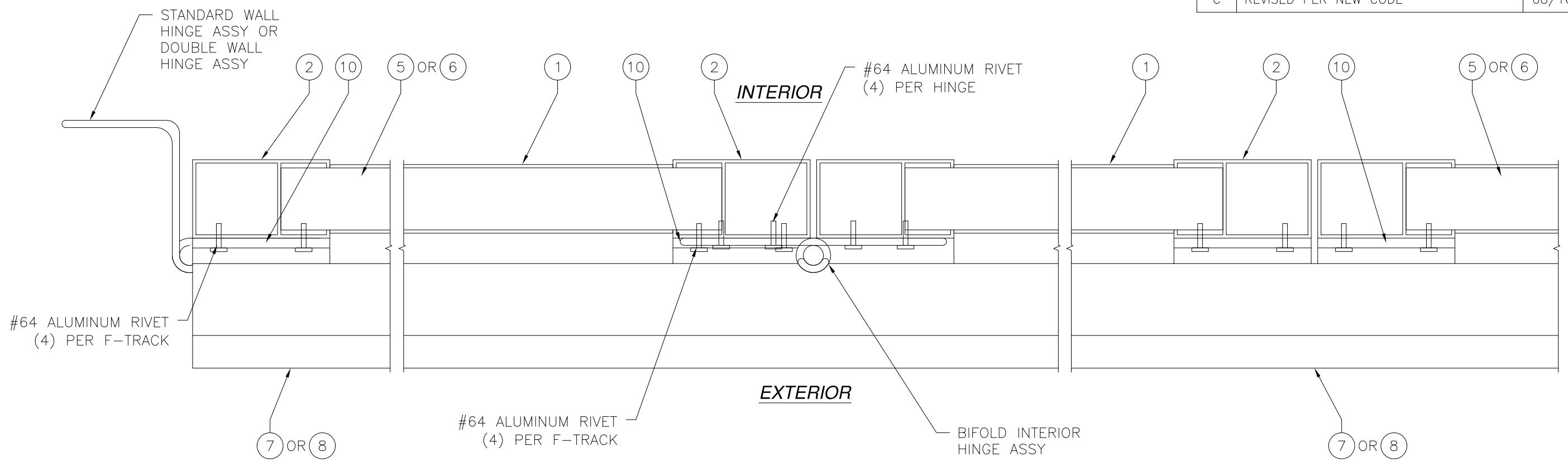
DRAWN: TJH	DWG NO. 08-01234	REV C
SCALE NTS	DATE 05/03/11	SHEET 4 OF 7

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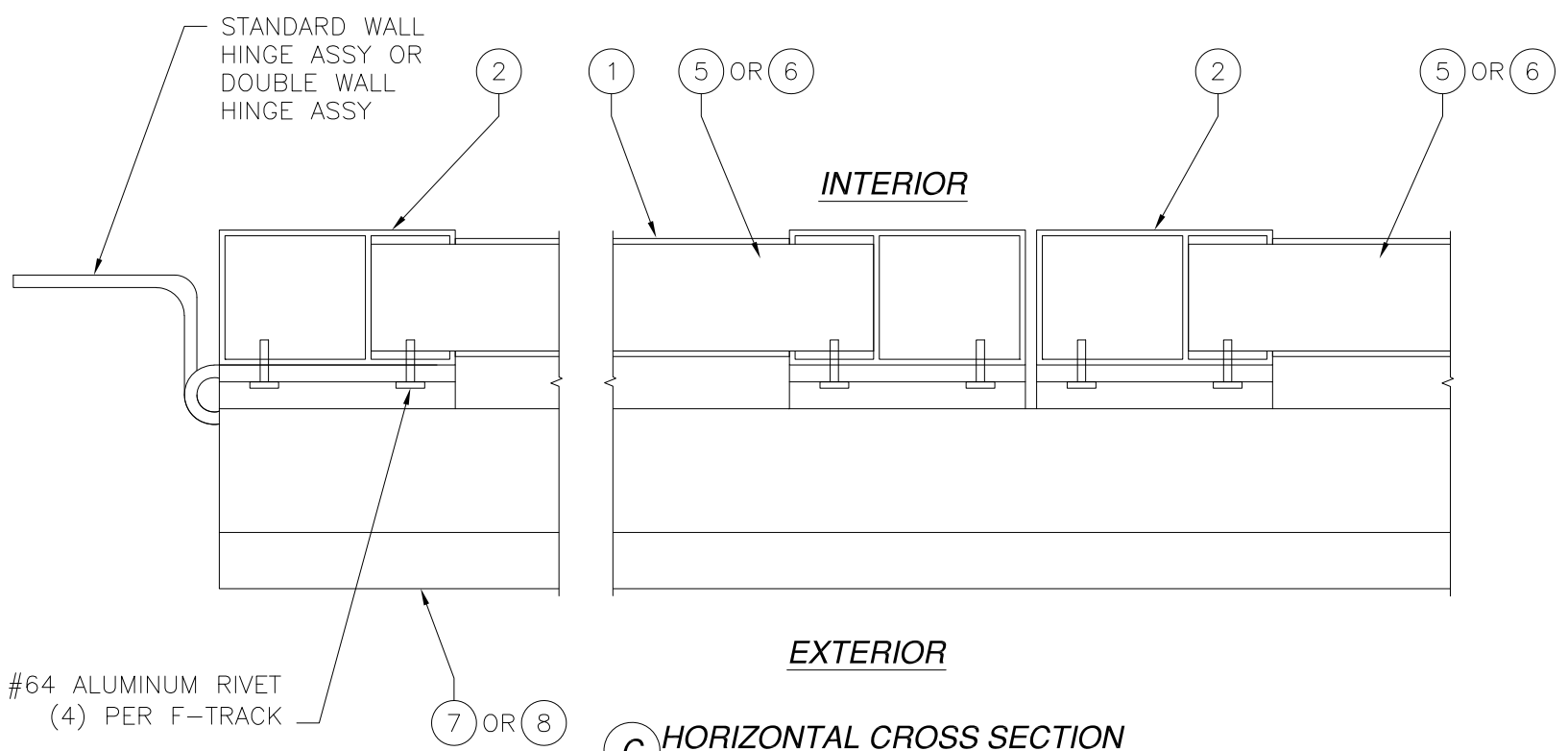
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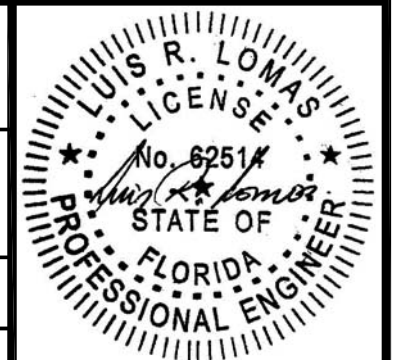
D HORIZONTAL CROSS SECTION
BI-FOLD SHUTTER



C HORIZONTAL CROSS SECTION
STANDARD SHUTTER

SIGNED: 10/26/2023

LAS ENTERPRISES 2413 L & A ROAD METAIRIE, LA 70001		
COLONIAL SHUTTER BI-FOLD AND STANDARD LARGE MISSILE IMPACT HORIZONTAL CROSS SECTIONS		
DRAWN: TJH	DWG NO. 08-01234	REV C
SCALE NTS	DATE 05/03/11	SHEET 5 OF 7
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

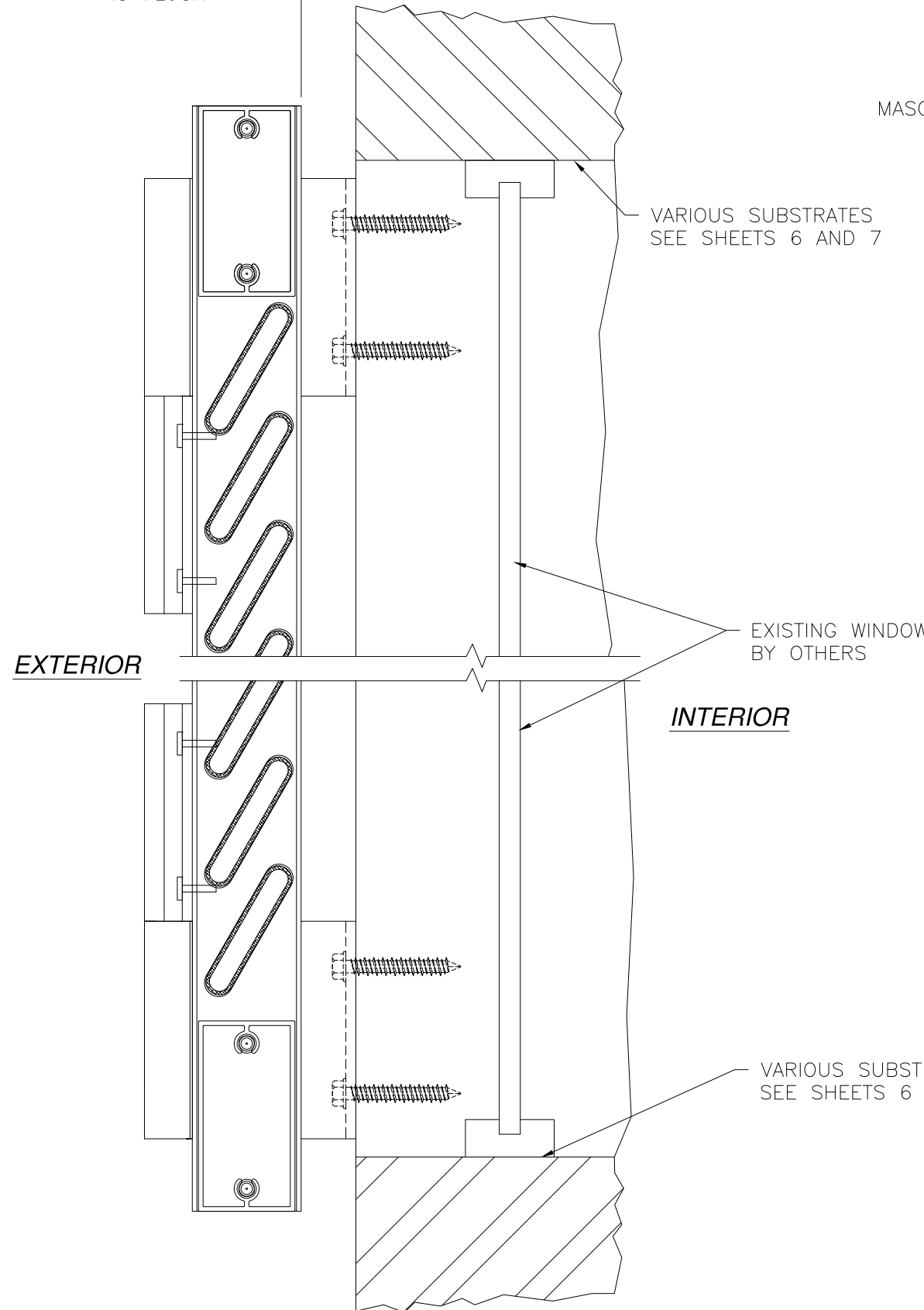


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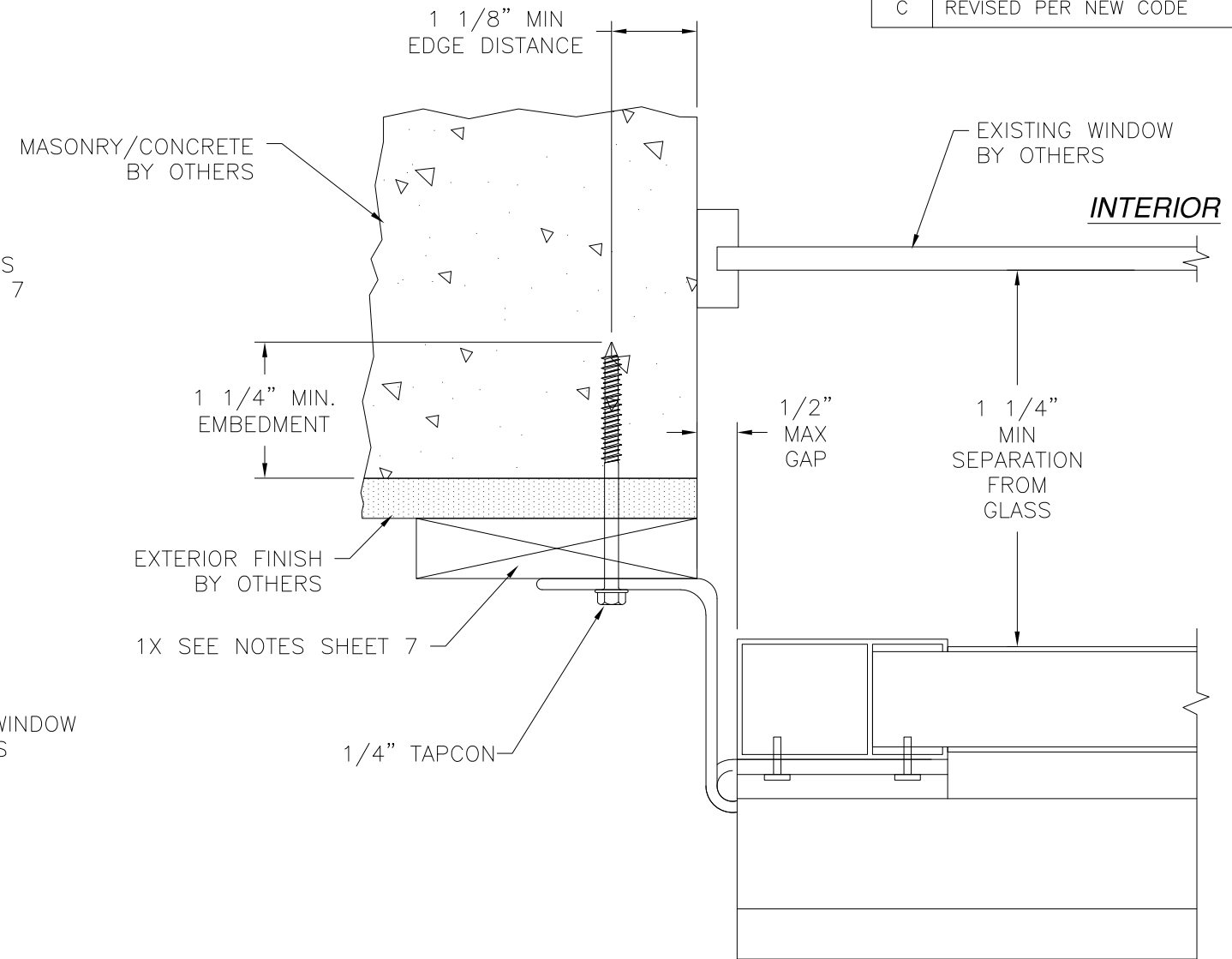
3/4" OFFSET BI-FOLD SHUTTER
STANDARD SHUTTER IS FLUSH

REVISIONS

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



HORIZONTAL CROSS SECTION
MASONRY/CONCRETE INSTALLATION

VARIOUS SUBSTRATES
SEE SHEETS 6 AND 7.

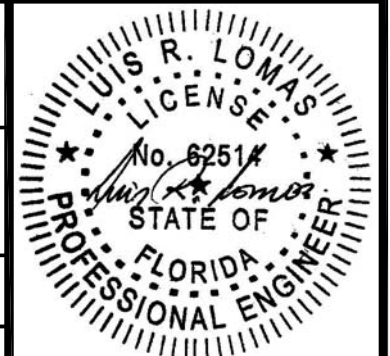
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LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

COLONIAL SHUTTER
BI-FOLD AND STANDARD LARGE MISSILE IMPACT
INSTALLATION DETAILS

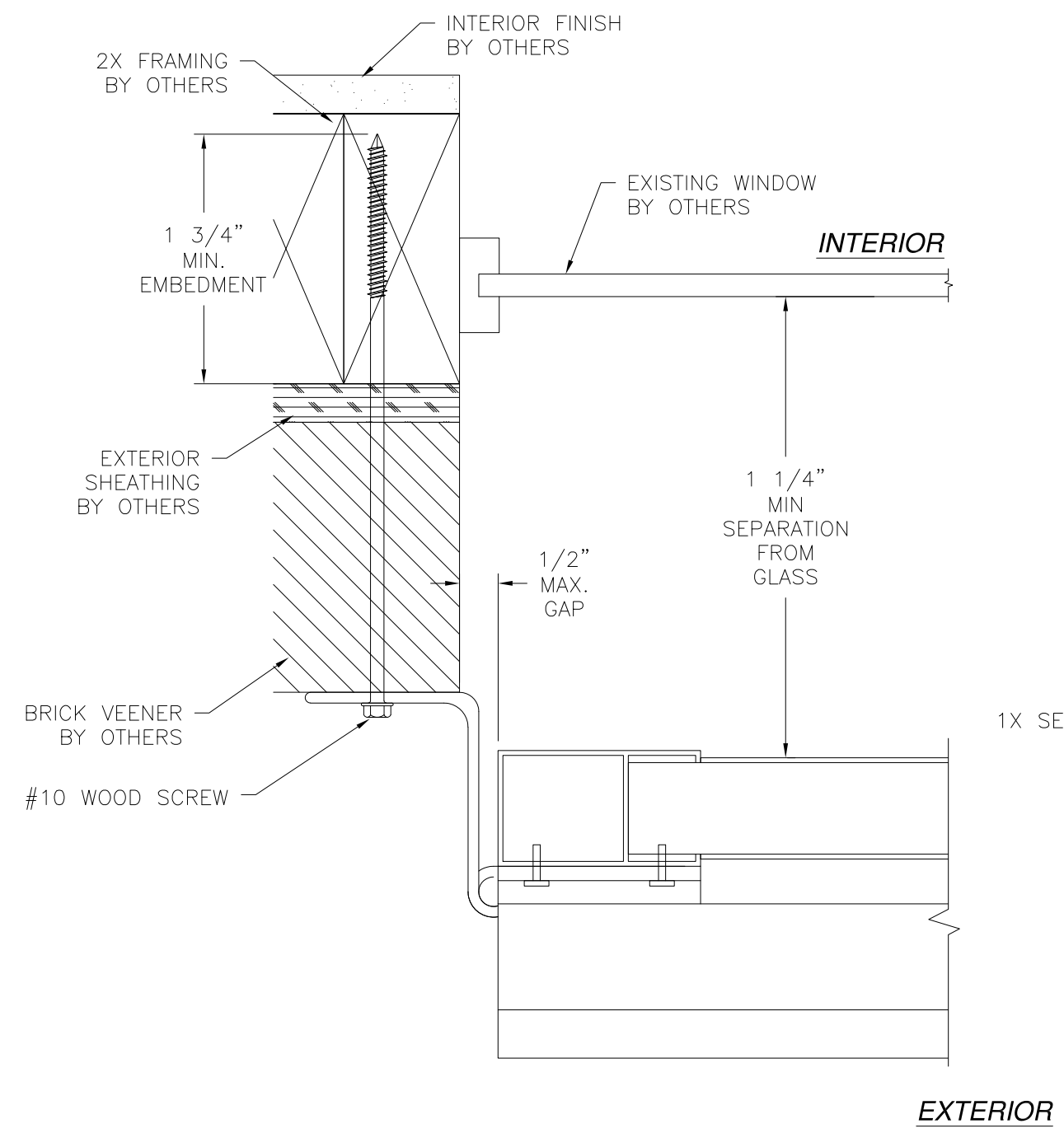
DRAWN: TJH	DWG NO. 08-01234	REV C
SCALE NTS	DATE 05/03/11	SHEET 6 OF 7

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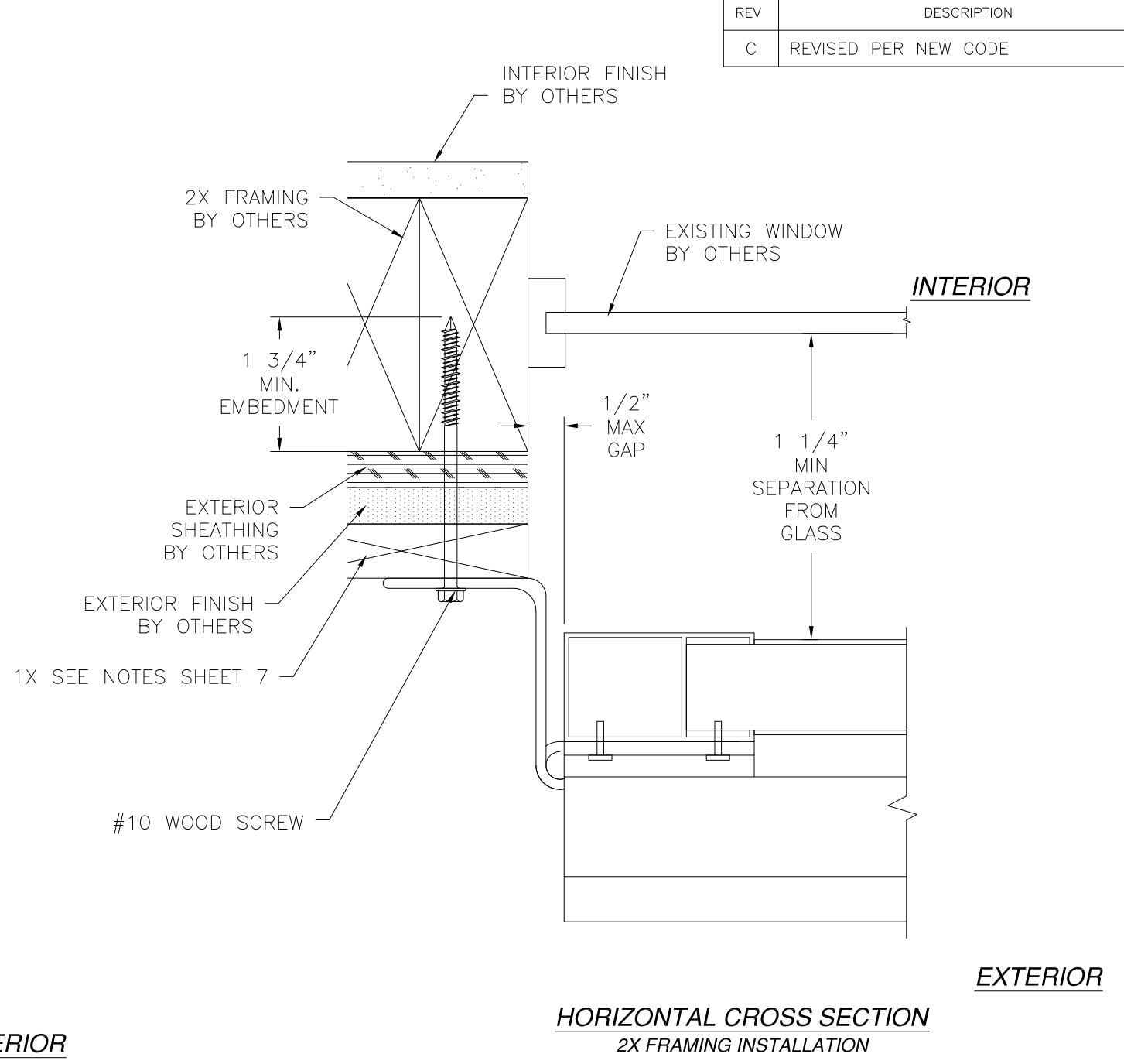


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HORIZONTAL CROSS SECTION
BRICK VEENER INSTALLATION



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.

SIGNED: 10/26/2023

LAS ENTERPRISES
2413 L & A ROAD
METAIRIE, LA 70001

COLONIAL SHUTTER
BI-FOLD AND STANDARD LARGE MISSILE IMPACT
INSTALLATION DETAILS

DRAWN: TJH	DWG NO. 08-01234	REV C
SCALE NTS	DATE 05/03/11	SHEET 7 OF 7

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