

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	02/06/2024	R.L.

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING THE HVHZ.
2. WOOD FRAMING, METAL STRUCTURE 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. WHERE SHIM OR BUCK THICKNESS IS LESS THAN 1–1/2” UNITS MUST BE ANCHORED THROUGH THE FRAME IN ACCORDANCE WITH MANUFACTURER’S PUBLISHED INSTALLATION INSTRUCTIONS. ANCHORS SHALL BE SECURELY FASTENED DIRECTLY INTO MASONRY, CONCRETE OR OTHER STRUCTURAL SUBSTRATE MATERIAL.
4. WHERE WOOD BUCK THICKNESS IS 1–1/2” OR GREATER, BUCK SHALL BE SECURELY FASTENED TO MASONRY, CONCRETE OR OTHER STRUCTURAL SUBSTRATE. UNITS MAY BE ANCHORED THROUGH FRAME TO SECURED WOOD BUCK IN ACCORDANCE WITH MANUFACTURER’S PUBLISHED INSTALLATION INSTRUCTIONS.
5. WHERE 1X BUCK IS NOT USED DISSIMILAR MATERIALS MUST BE SEPARATED WITH APPROVED COATING OR MEMBRANE. SELECTION OF COATING OR MEMBRANE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
6. BUCKS SHALL EXTEND BEYOND UNIT FRAME INTERIOR FACE SO THAT FULL FRAME SUPPORT IS PROVIDED.
7. SHIM AS NEEDED AT EACH ANCHOR LOCATION WITH LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16” OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4”.
8. SHIMS SHALL BE LOCATED, APPLIED AND MADE FROM MATERIALS AND THICKNESS CAPABLE OF SUSTAINING APPLICABLE LOADS.
9. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
10. FRAME MATERIAL: WOOD SPECIFIC GRAVITY G=0.59 MINIMUM (INCLUDES BUT IS NOT LIMITED TO: LARCH, SIPO, MERANTI, MAHOGANY, WHITE OAK, WALNUT)
11. UNITS MUST BE GLAZED PER ASTM E1300, SEE SHEET 3 FOR GLASS DETAILS.
12. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.

13. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #12 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8” MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
14. FOR ANCHORING INTO METAL STRUCTURE USE #12 SMS OR SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
15. ALL FASTENERS TO BE CORROSION RESISTANT.
16. 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:

16.1. WOOD: MINIMUM SPECIFIC GRAVITY OF G=0.42

16.2. METAL STRUCTURE: STEEL 18GA (.048”) FY=33KSI/FU=52KSI OR ALUMINUM 6063–T5 FU=30KSI 1/8” THICK MINIMUM
17. OPTIONAL RAIL MAYBE LOCATED AT ANY HEIGHT IN PANEL.
18. SIMULATED DIVIDED LITES MUNTINS ARE OPTIONAL.

TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	NOTES
2	ELEVATIONS
3	APPROVED CONFIGURATIONS & GLAZING DETAILS
4 – 5	CROSS SECTIONS & GLAZING DETAILS
6 – 7	INSTALLATION DETAILS
8 – 9	COMPONENTS

BILDAU & BUSSMANN GMBH

GERICHTSTRASSE 23

DE 13347 BERLIN, GERMANY

SERIES FRENCH DOOR IMPACT GLAZED WOOD

IN–SWING SIDE HINGED DOORS

NOTES

DRAWN:

V.L.

DWG NO.

08–01353

REV

B

SCALE

NTS

DATE

08/06/12

SHEET

1

OF

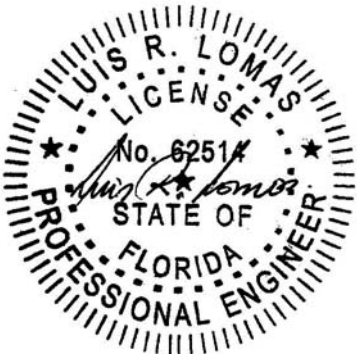
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L. ROBERTO LOMAS P.E.

208 7th Ave, INDIALANTIC, FL 32903

434-688-0609 rllomas@lrlomaspe.com

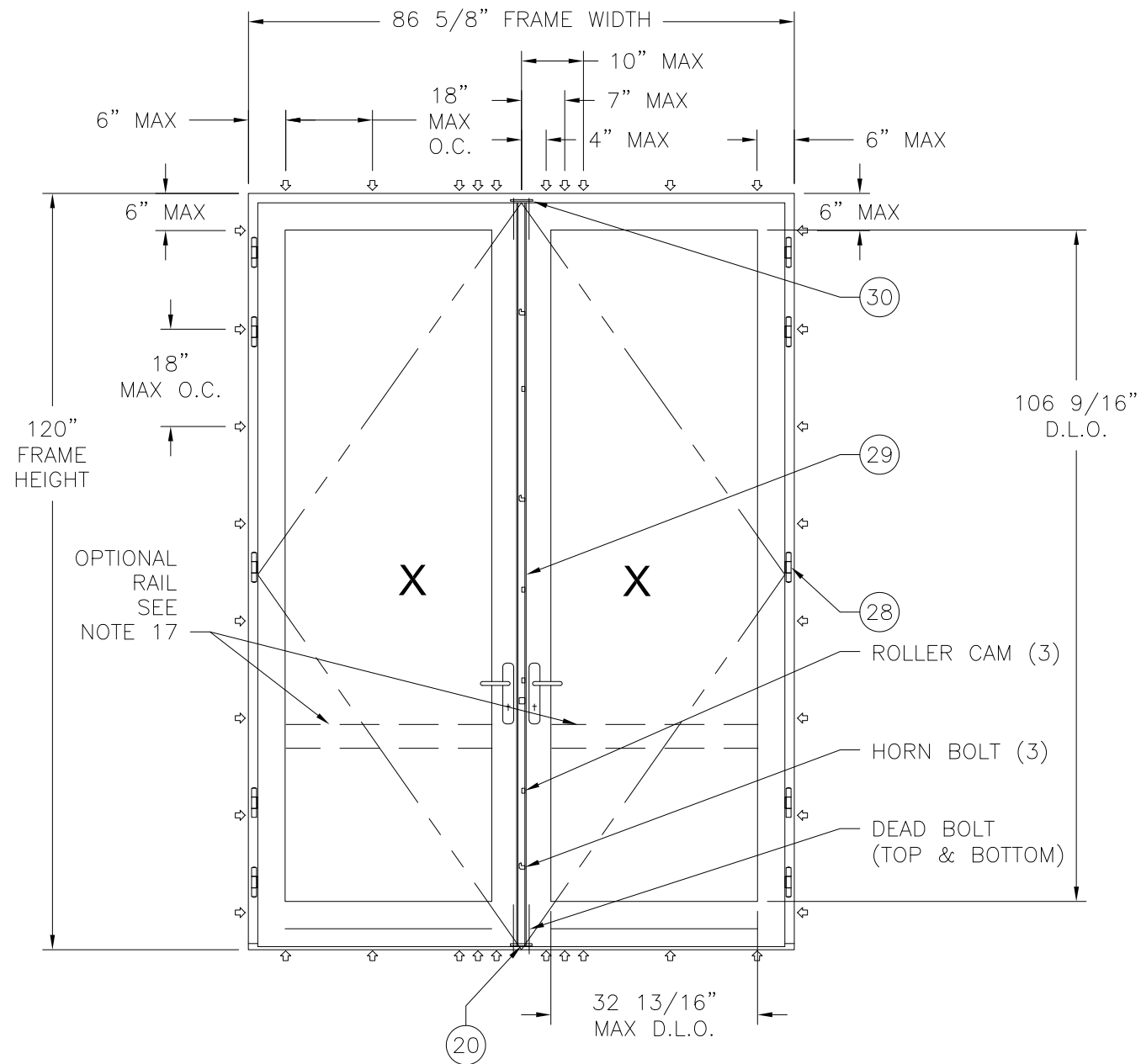
SIGNED: 02/06/2024



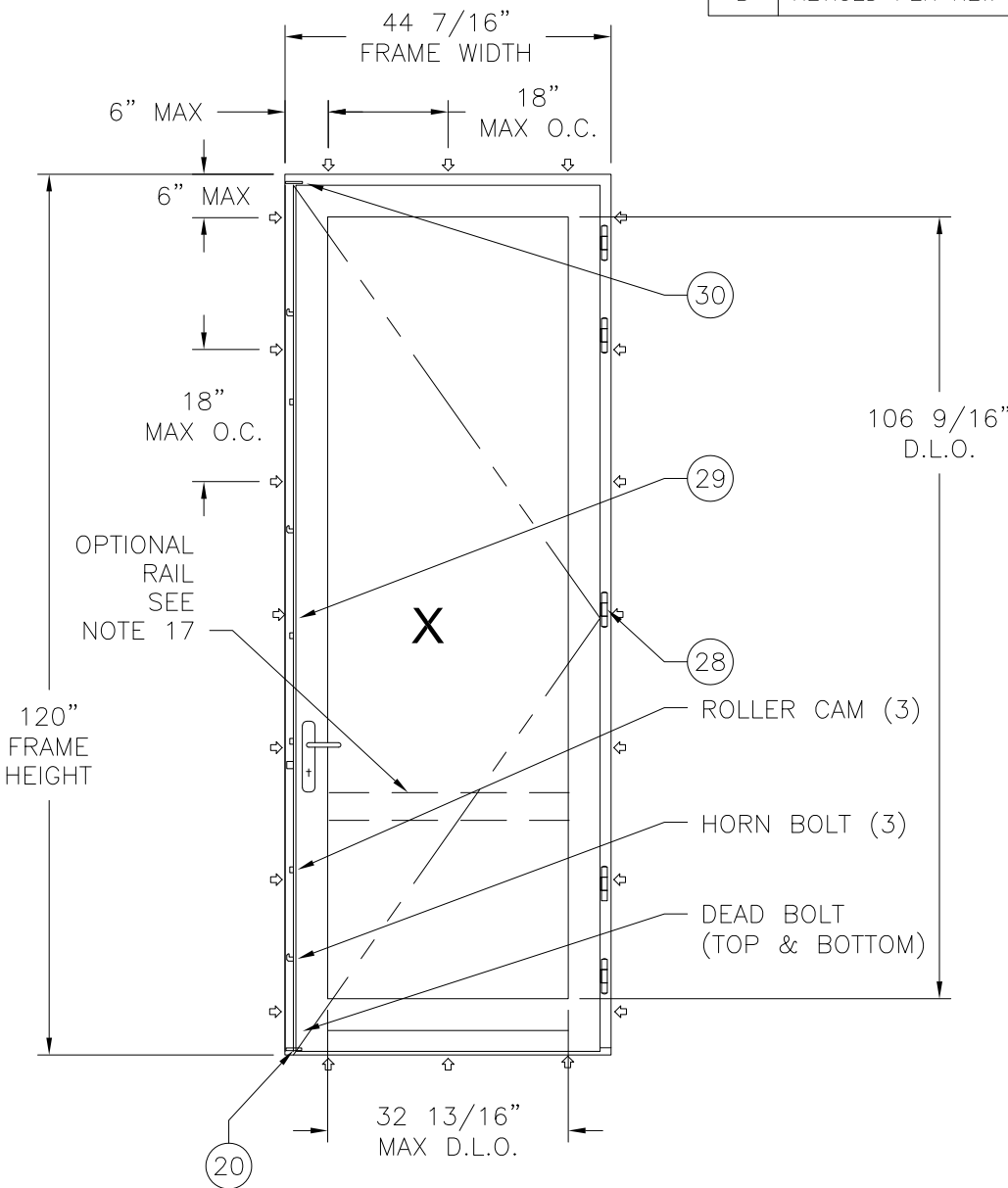
Luis R. Lomas P.E.

FL No.: 62514

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INSWING DOOR - DOUBLE
EXTERIOR VIEW



INSWING DOOR - SINGLE
EXTERIOR VIEW

NOTES:
1. PANEL SIZE: 43 1/2" X 118"
2. D.L.O.: 32 13/16" X 106 9/16"

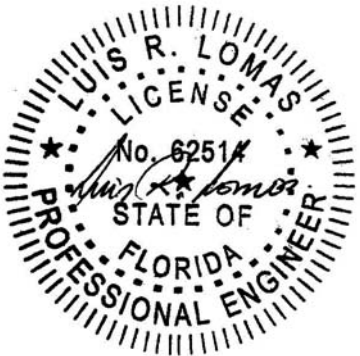
DESIGN PRESSURE RATING	IMPACT RATING
±70PSF	LARGE AND SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4, AND HVHZ
43 1/2" X 118" PANELS SHOWN, OTHER PANEL SIZES ARE APPROVED AS LONG AS
PANEL AREA DOES NOT EXCEED 35.6 FT²

HARDWARE SCHEDULE
A. (5) 3D HINGES BY SIMONSWERK
B. MULTIPOINT LOCK SERIES 8556 BY FUHR
C. ALUMINUM THRESHOLD BY BILDAU & BUSSMANN
D. BRONZE THRESHOLD BY ZERO (OPTIONAL)
E. DEAD BOLT & STRIKERS BY BILDAU & BUSSMANN

BILDAU & BUSSMANN GMBH GERICHTSTRASSE 23 DE 13347 BERLIN, GERMANY		
SERIES FRENCH DOOR IMPACT GLAZED WOOD IN-SWING SIDE HINGED DOORS ELEVATIONS		
DRAWN: V.L.	DWG NO. 08-01353	REV B
SCALE NTS	DATE 08/06/12	SHEET 2 OF 9
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

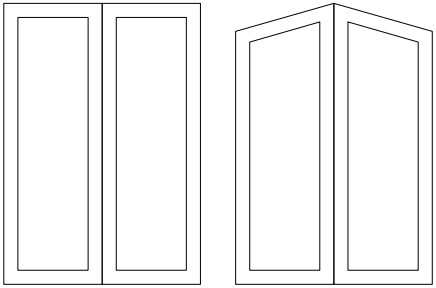
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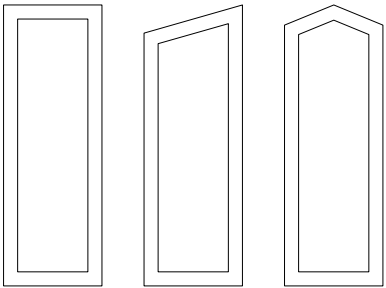
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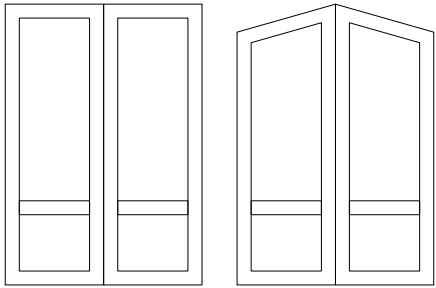
APPROVED CONFIGURATIONS



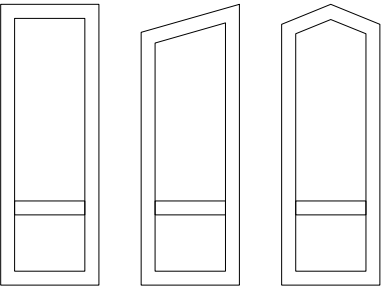
FULL LITE DOUBLE DOOR UNITS



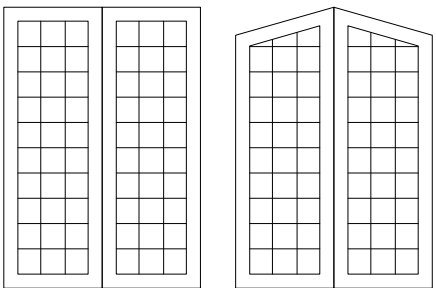
FULL LITE SINGLE DOOR UNITS



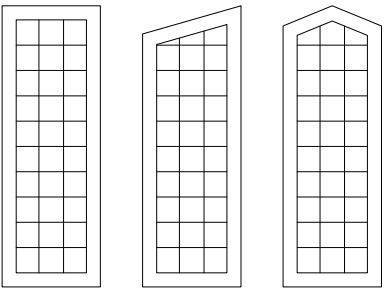
DOUBLE DOOR UNITS WITH HORIZONTAL RAIL



SINGLE DOOR UNITS WITH HORIZONTAL RAIL

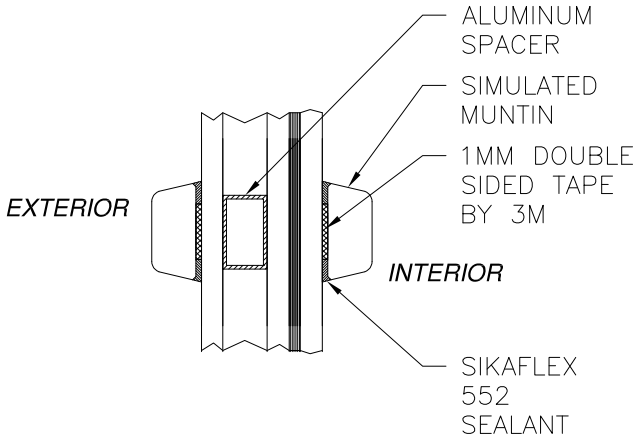


DOUBLE DOOR UNITS SDL

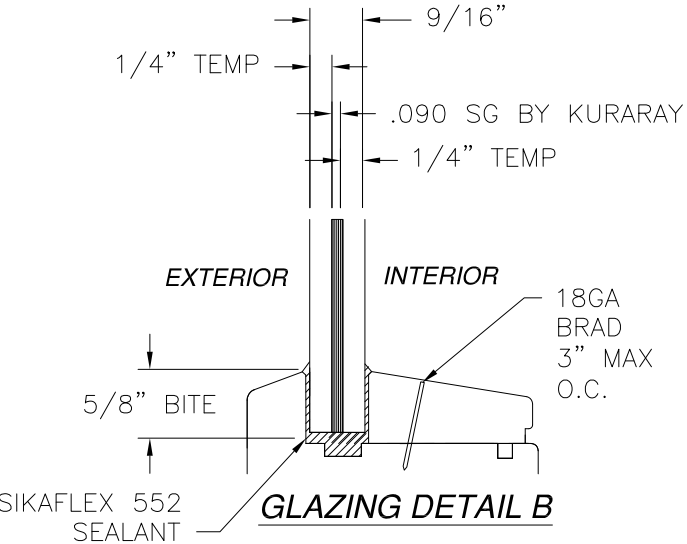
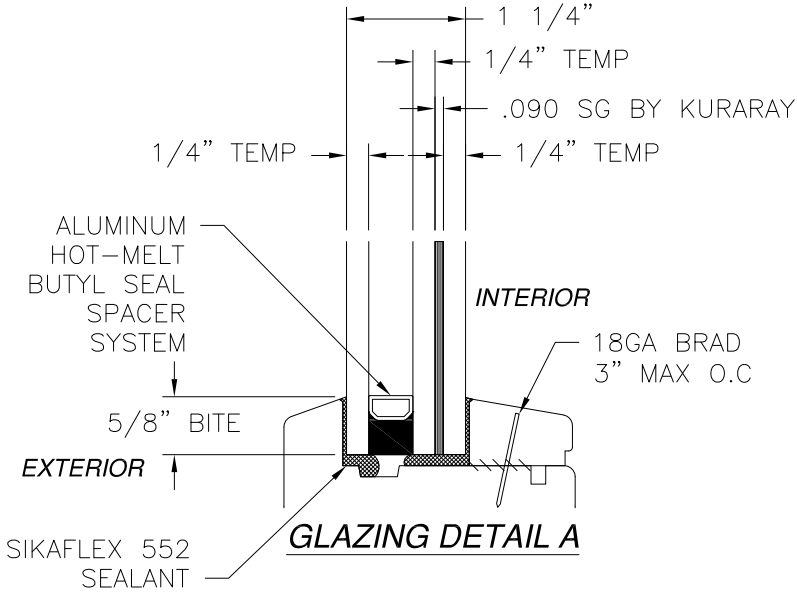


SINGLE DOOR UNITS WITH SDL

NOTE:
APPROVED CONFIGURATIONS AS SHOWN MUST NOT
EXCEED APPROVED SIZES. SEE SHEET 2.



SIMULATED DIVIDED LITE (SDL)
CROSS SECTION

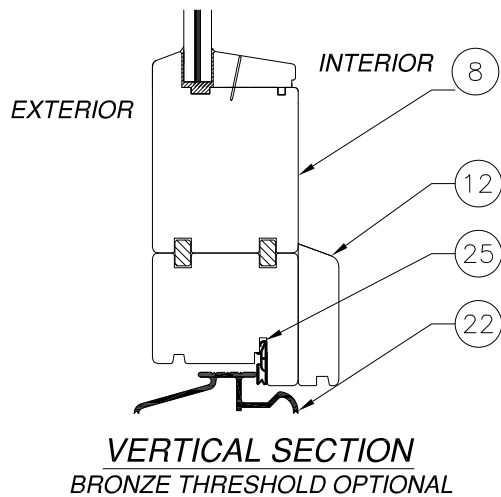
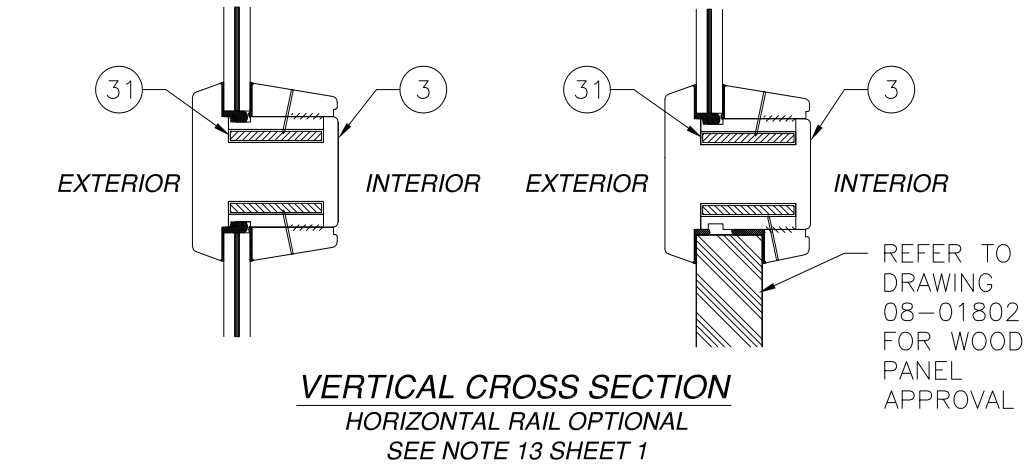
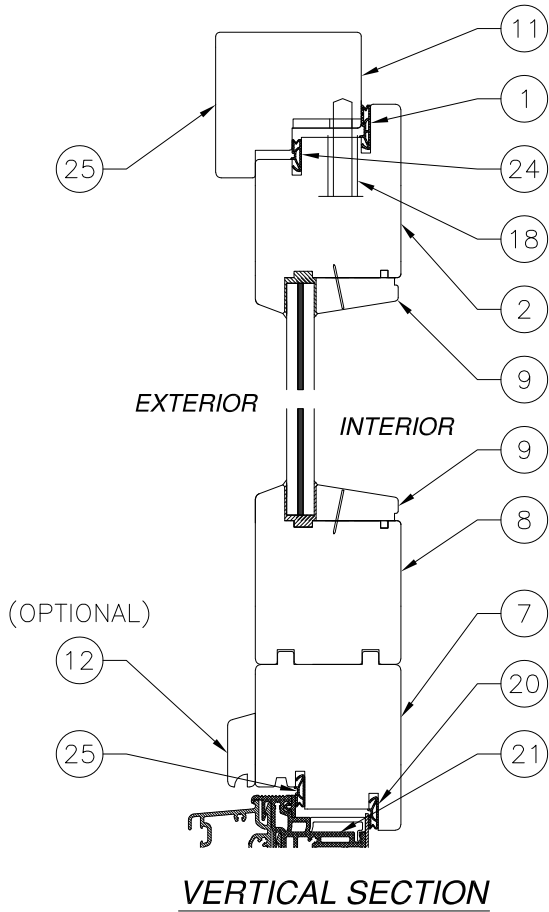


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BILDAU & BUSSMANN GMBH GERICHTSTRASSE 23 DE 13347 BERLIN, GERMANY		
SERIES FRENCH DOOR IMPACT GLAZED WOOD IN-SWING SIDE HINGED DOORS APPROVED CONFIGURATIONS & GLAZING DETAILS		
DRAWN: V.L.	DWG NO. 08-01353	REV B
SCALE NTS	DATE 08/06/12	SHEET 3 OF 9
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

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PARTS LIST				
NO.	PART NUMBER	DESCRIPTION	MANUFACTURER	MATERIAL
1		FRAME JAMB & HEAD	B&B	WOOD (SEE NOTE 5)
2		SASH HINGE STILE & TOP RAIL	B&B	WOOD (SEE NOTE 5)
3		SASH MIDDLE RAIL	B&B	WOOD (SEE NOTE 5)
4		SASH MEETING STILE	B&B	WOOD (SEE NOTE 5)
5		INACTIVE MEETING STILE	B&B	WOOD (SEE NOTE 5)
6		INACTIVE MEETING STILE	B&B	WOOD (SEE NOTE 5)
7		SASH BOTTOM RAIL	B&B	WOOD (SEE NOTE 5)
8		SASH BOTTOM RAIL	B&B	WOOD (SEE NOTE 5)
9		GLASS STOP	B&B	WOOD (SEE NOTE 5)
10		GLASS STOP	B&B	WOOD (SEE NOTE 5)
11		NOT USED		
12		DRIP BATTEN	B&B	WOOD (SEE NOTE 5)
13		NOT USED		
14		FLAT ASTRAGAL WIDE	B&B	WOOD (SEE NOTE 5)
15		NOT USED		
16		T-ASTRAGAL	B&B	WOOD (SEE NOTE 5)
17		STEEL REINFORCEMENT	B&B	STEEL
18	E556	ACTIVE SASH MULTI-POINT LOCK	FUHR	
19	8556	INACTIVE SASH MULTI-POINT LOCK	FUHR	
20		THRESHOLD STEEL STRIKER	B&B	
21		ALUMINUM THRESHOLD EIFEL	B&B	
22	76B	BRONZE THRESHOLD	ZERO	BRONZE
23		STEEL BRAD		
24	DS112	WEATHERSTRIP	DEVENTER	EPDM 75 SHORE A
25	DS185	WEATHERSTRIP	DEVENTER	EPDM 75 SHORE A
26	SV103	WEATHERSTRIP	DEVENTER	EPDM 75 SHORE A
27	DS9609	WEATHERSTRIP	DEVENTER	EPDM 75 SHORE A
28		3D HINGE	SIMONSWERK	
29	8556	INACTIVE SASH SYSTEM	FUHR	
30		HEADER STEEL STRIKER	B&B	STEEL
31		STEEL REINFORCEMENT	B&B	STEEL EN S275
32		CLIP		GALVANIZED STEEL
33		FILLER	B&B	WOOD (SEE NOTE 5)
34		GLASS STOP (OPTIONAL)	B&B	WOOD (SEE NOTE 5)
35		GLASS STOP (OPTIONAL)	B&B	WOOD (SEE NOTE 5)
36	M24	CLIP (ALTERNATE)	STRONG TIE	GALVANIZED STEEL
37	HL33	CLIP (ALTERNATE)	STRONG TIE	GALVANIZED STEEL
38	A33	CLIP (ALTERNATE)	STRONG TIE	GALVANIZED STEEL



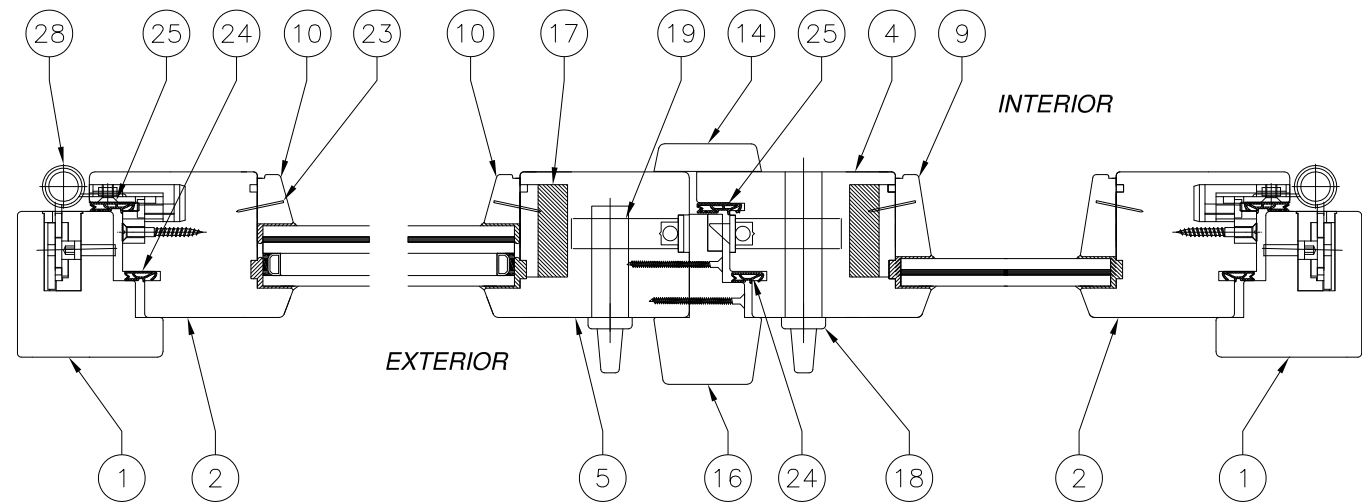
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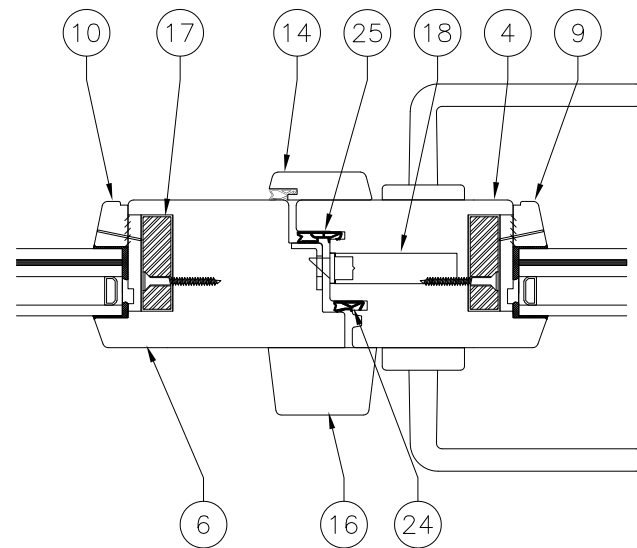


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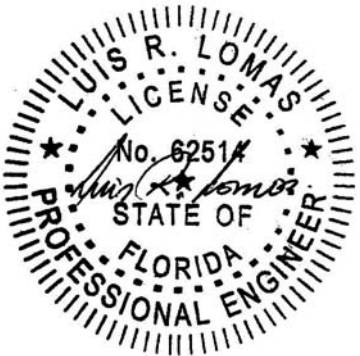
HORIZONTAL SECTION



HORIZONTAL SECTION
FLAT ASTRAGAL (OPTIONAL)

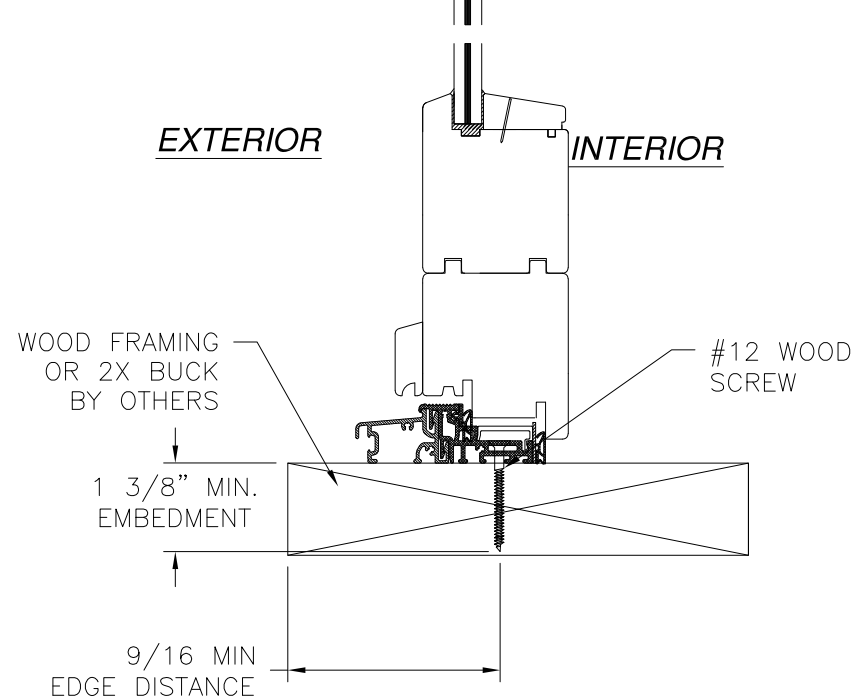
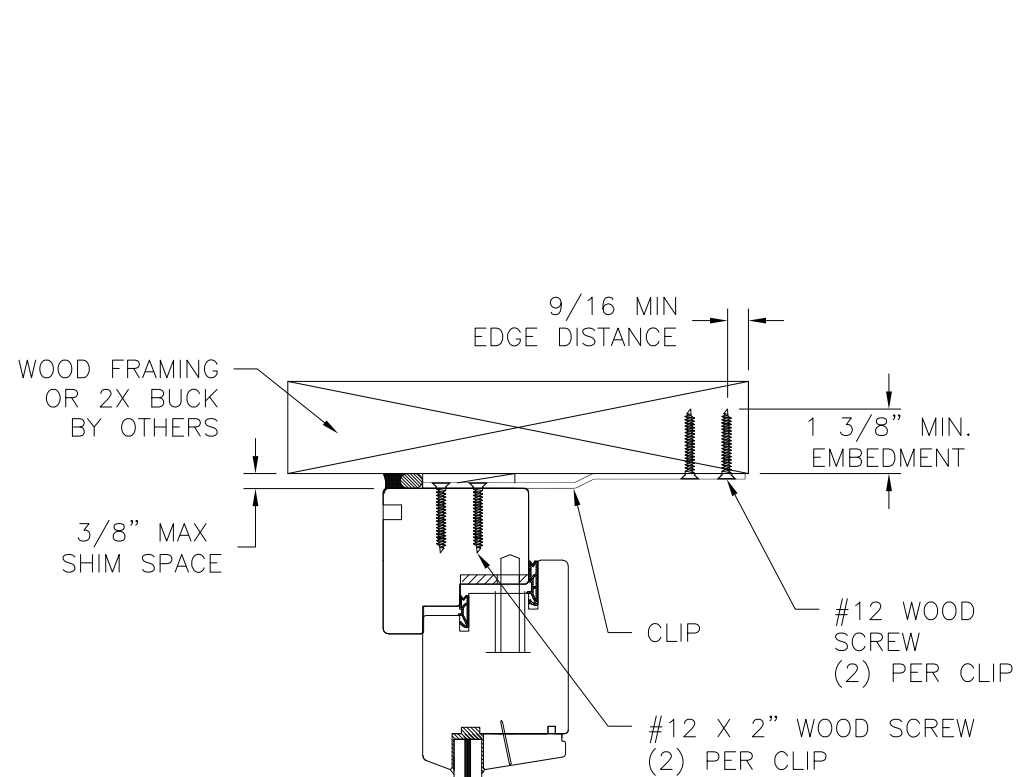
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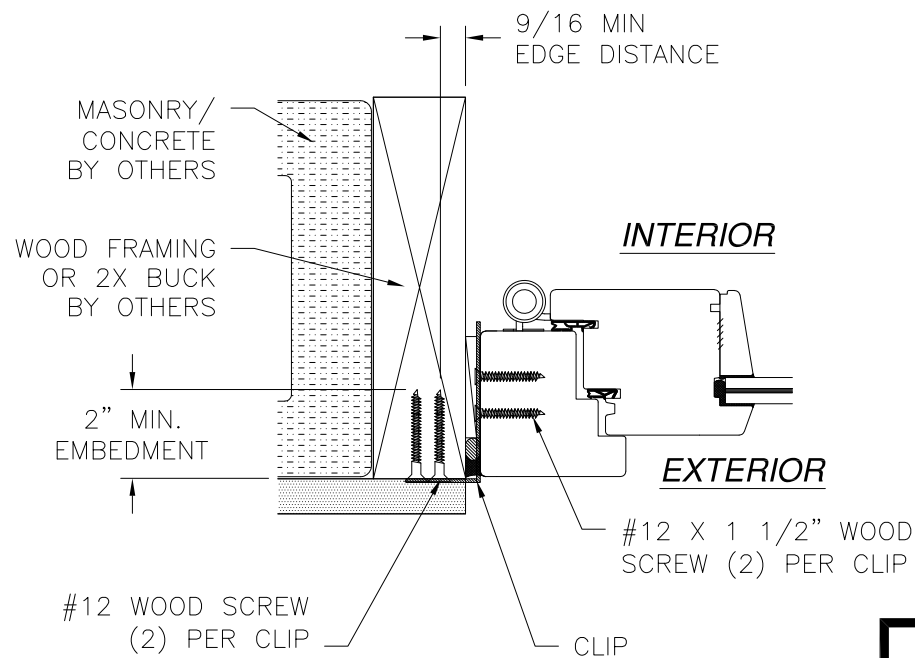
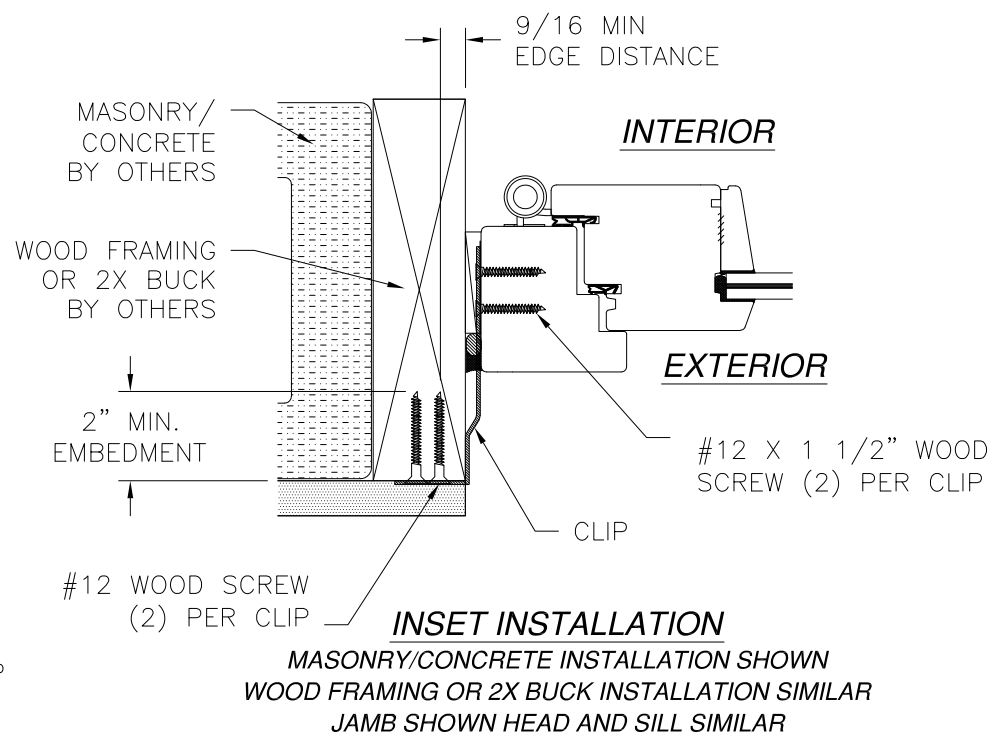
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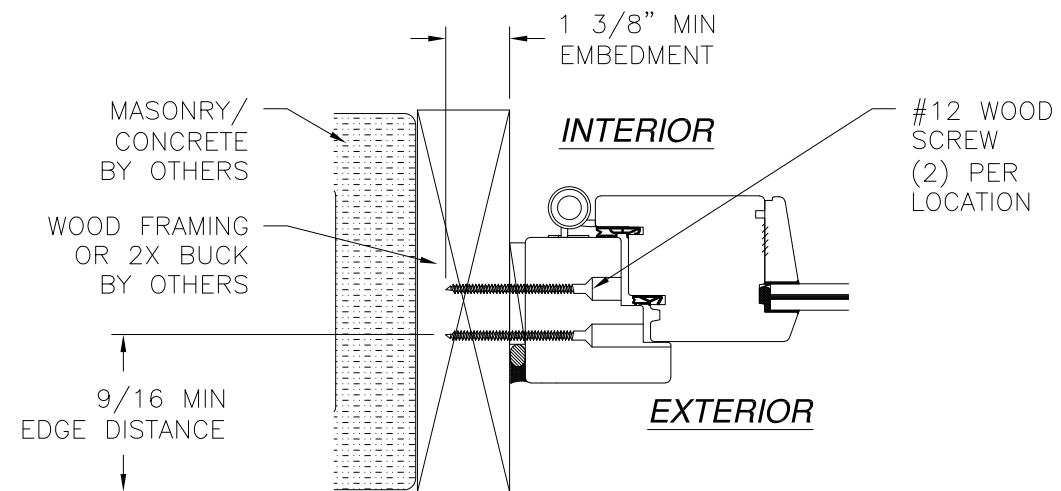


VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION
HEAD & SILL SHOWN JAMB SIMILAR

NOTE:
INTERIOR AND EXTERIOR TRIM, BY OTHERS, NOT SHOWN FOR CLARITY.
WHEN INSTALLING INTO MASONRY OR CONCRETE 2X BUCK TO BE USED. 2X BUCK TO BE PROPERLY SECURED TO STRUCTURE



FLUSH INSTALLATION
MASONRY/CONCRETE INSTALLATION SHOWN
WOOD FRAMING OR 2X BUCK INSTALLATION SIMILAR
JAMB SHOWN HEAD AND SILL SIMILAR



INSET FRAME INSTALLATION
MASONRY/CONCRETE INSTALLATION SHOWN
WOOD FRAMING OR 2X BUCK INSTALLATION SIMILAR
JAMB SHOWN HEAD AND SILL SIMILAR

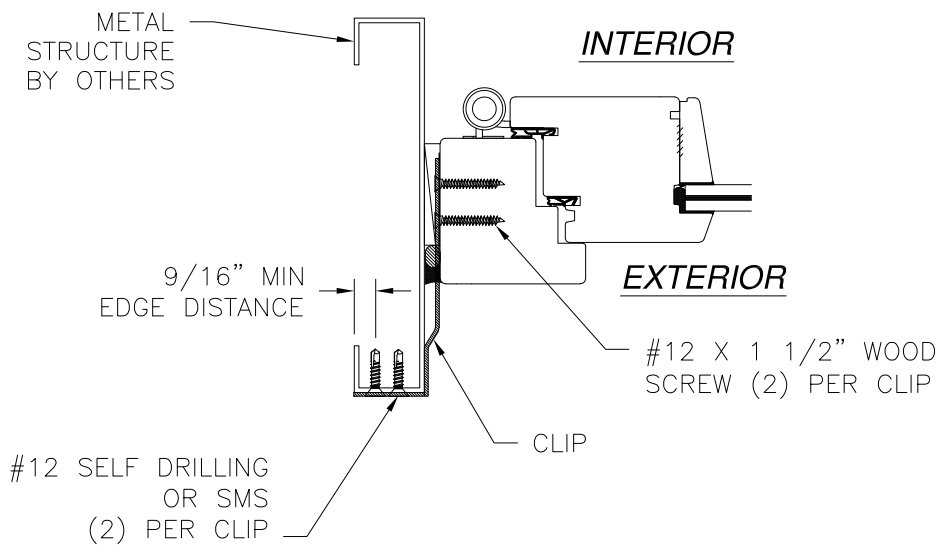
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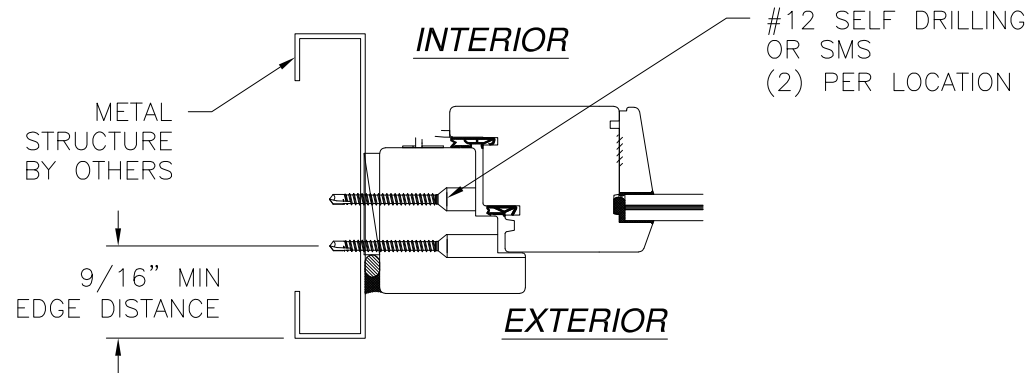


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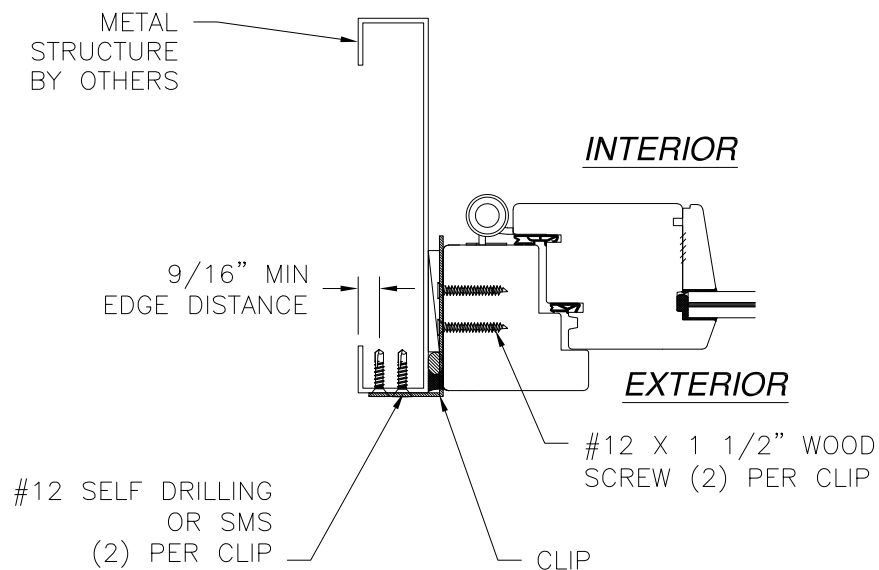
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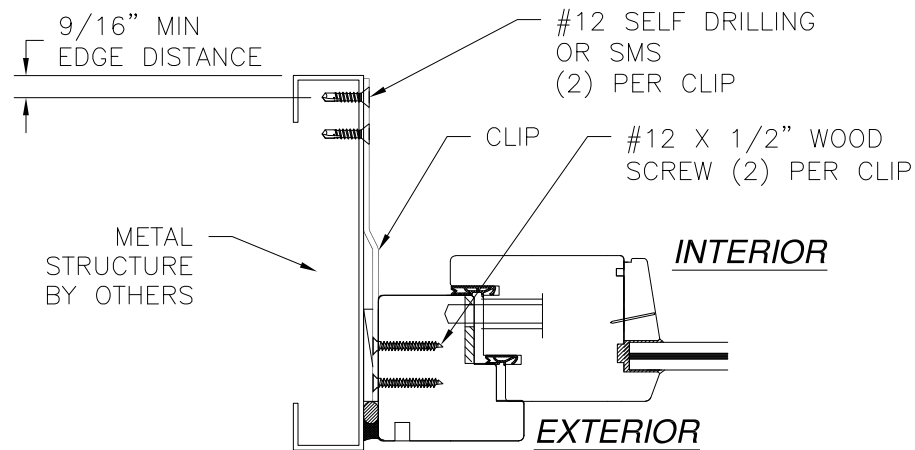
INSET INSTALLATION
METAL STRUCTURE INSTALLATION
JAMB SHOWN HEAD AND SILL SIMILAR



INSET FRAME INSTALLATION
METAL STRUCTURE INSTALLATION
JAMB SHOWN HEAD AND SILL SIMILAR



FLUSH INSTALLATION
METAL STRUCTURE INSTALLATION
JAMB SHOWN HEAD AND SILL SIMILAR

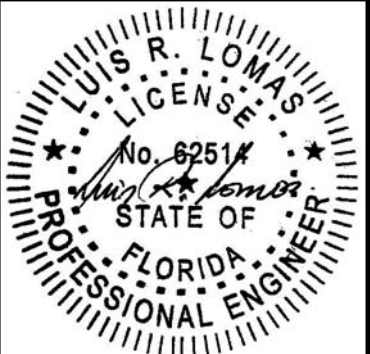


FLUSH INSTALLATION
METAL STRUCTURE INSTALLATION
JAMB SHOWN HEAD AND SILL SIMILAR

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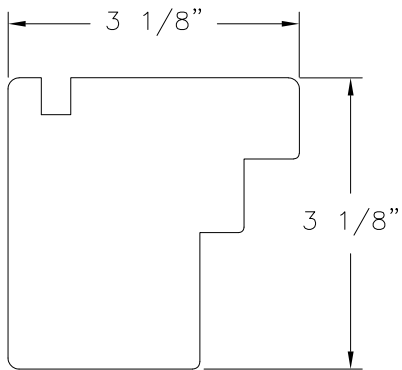
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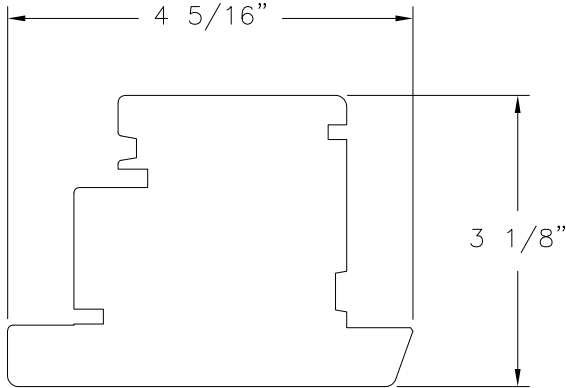


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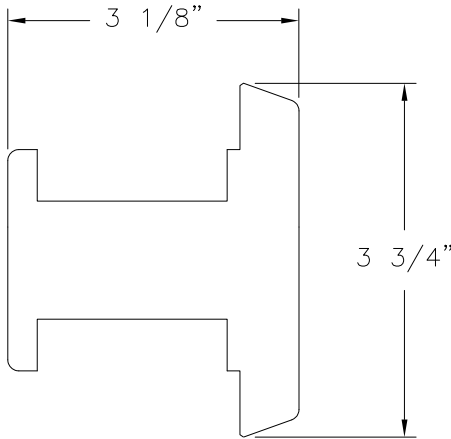
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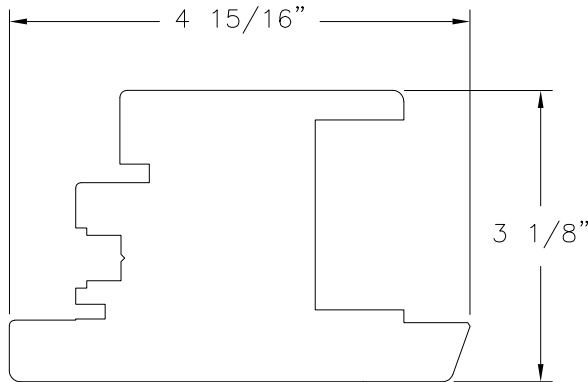
① **FRAME**
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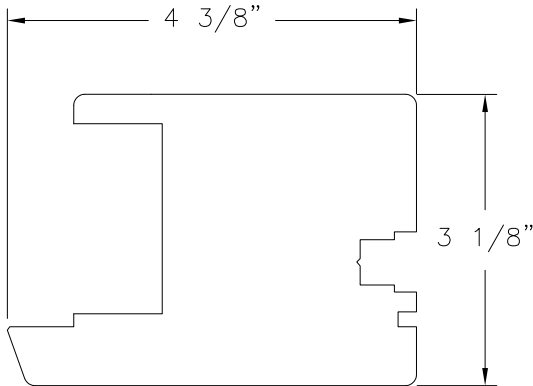
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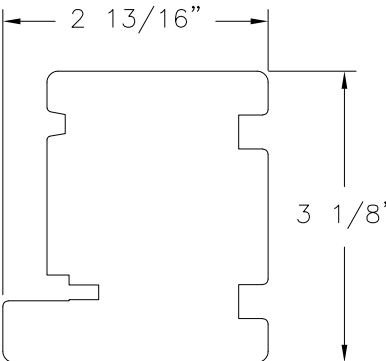
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WOOD SPECIFIC GRAVITY G=0.59 MIN.



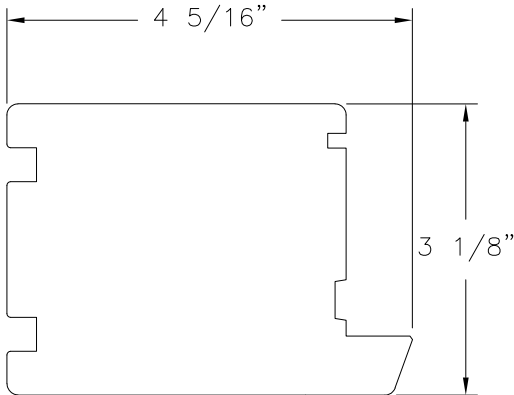
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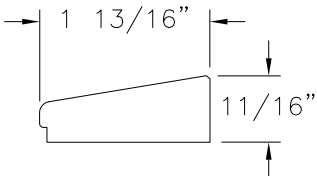
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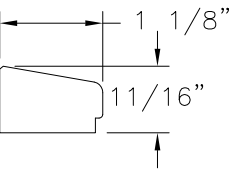
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WOOD SPECIFIC GRAVITY G.59 MIN.



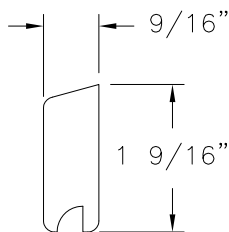
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WOOD SPECIFIC GRAVITY G.59 MIN.



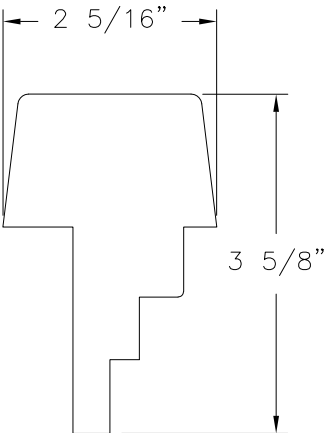
⑨ **GLASS STOP**
WOOD SPECIFIC GRAVITY G.59 MIN.



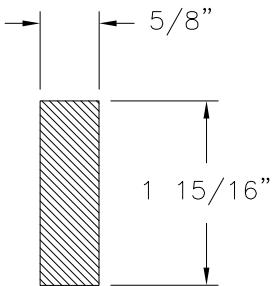
⑩ **GLASS STOP**
WOOD SPECIFIC GRAVITY G.59 MIN.



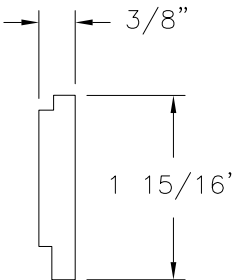
⑫ **DRIP BATTEN**
WOOD SPECIFIC GRAVITY G.59 MIN.



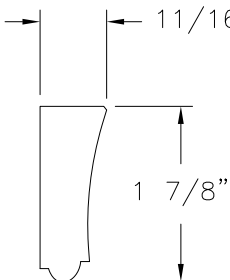
⑯ **T-ASTRAGAL**
WOOD SPECIFIC GRAVITY G.59 MIN.



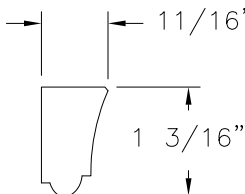
⑰ **REINFORCEMENT**
STEEL EN S275



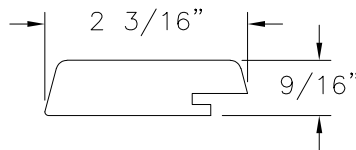
⑳ **FILLER**
WOOD SPECIFIC GRAVITY G.59 MIN



㉓ **GLASS STOP**
WOOD SPECIFIC GRAVITY G.59 MIN



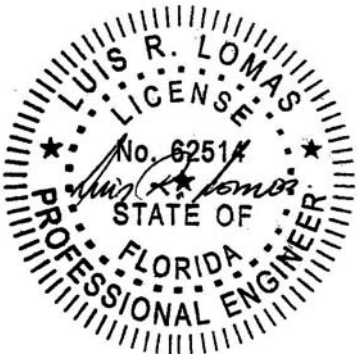
㉔ **GLASS STOP**
WOOD SPECIFIC GRAVITY G.59 MIN



㉒ **ASTRAGAL**
WOOD SPECIFIC GRAVITY G.59 MIN.

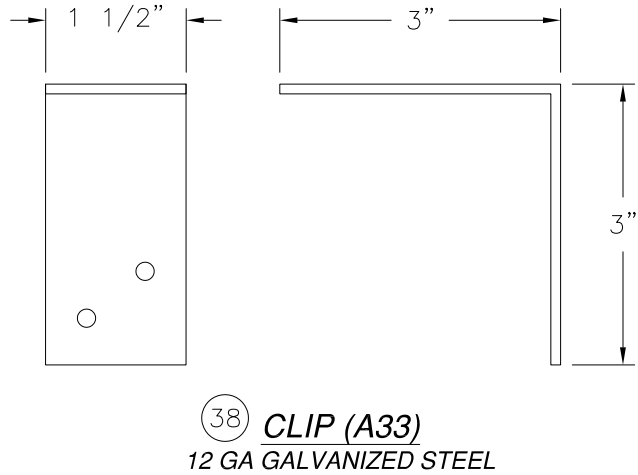
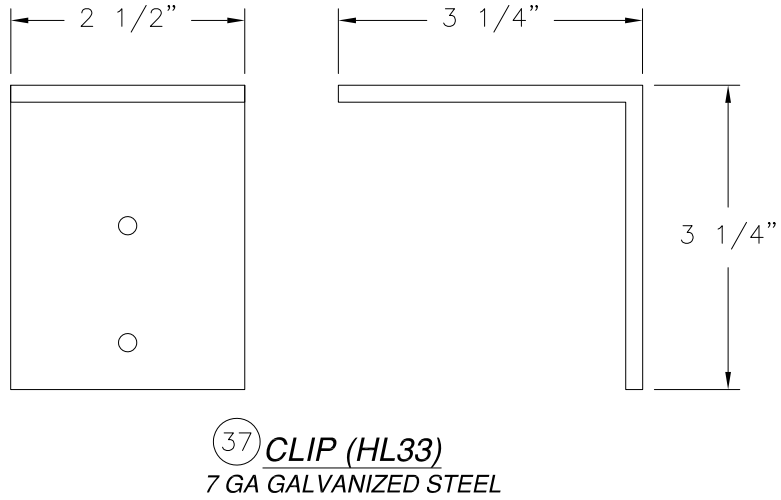
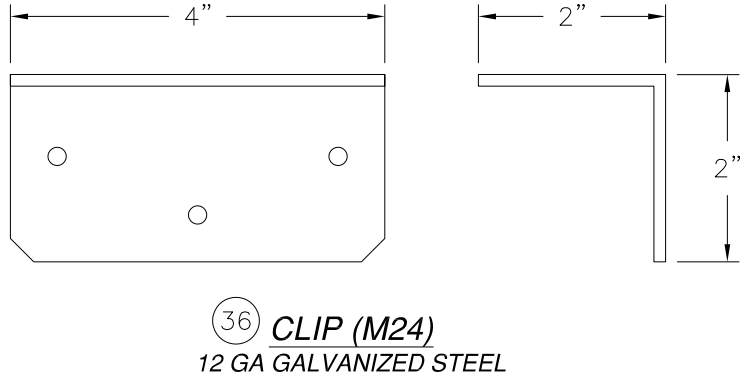
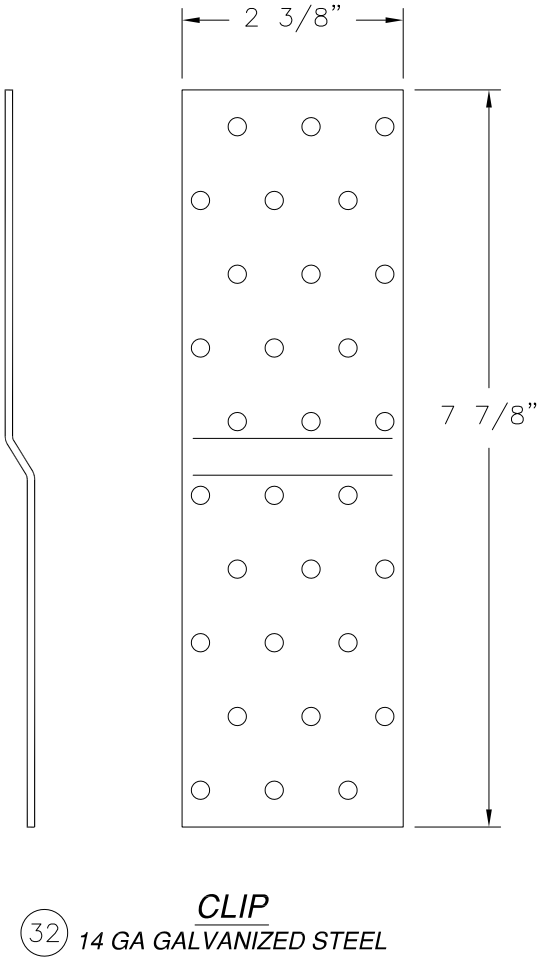
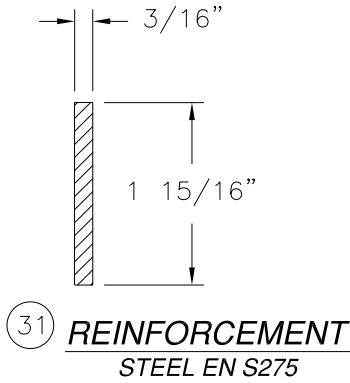
SIGNED: 02/06/2024

BILDAU & BUSSMANN GMBH GERICHTSTRASSE 23 DE 13347 BERLIN, GERMANY		
SERIES FRENCH DOOR IMPACT GLAZED WOOD IN-SWING SIDE HINGED DOORS COMPONENTS		
DRAWN: V.L.	DWG NO. 08-01353	REV B
SCALE NTS	DATE 08/06/12	SHEET 8 OF 9
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
B	REVISED PER NEW CODE	02/06/2024	R.L.



SIGNED: 02/06/2024

BILDAU & BUSSMANN GMBH
GERICHTSTRASSE 23
DE 13347 BERLIN, GERMANY

SERIES FRENCH DOOR IMPACT GLAZED WOOD
IN-SWING SIDE HINGED DOORS
COMPONENTS

DRAWN:
V.L.

DWG NO.
08-01353

REV
B

SCALE NTS

DATE 08/06/12

SHEET 9 OF 9

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