



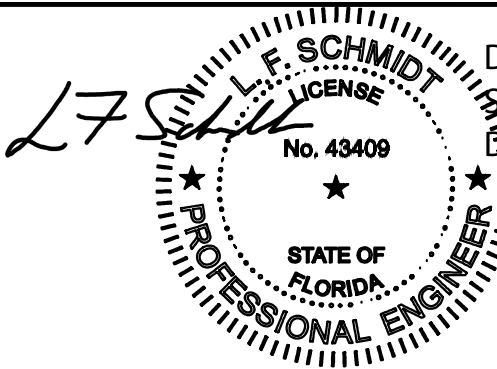
CLINE ALUMINUM DOORS, INC.
112 32nd AVENUE WEST, BRADENTON, FL 34205-8096
Telephone (800) 648-6736

SERIES 100BE
ALUMINUM DOUBLE DOOR
OUTSWING
"IMPACT"

GENERAL NOTES

1. This product has been evaluated and is in compliance with the 8th Edition (2023) Florida Building Code (FBC) structural requirements including the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
3. When used in the "HVHZ" this product complies with Section 1626 of the Florida Building Code and does not require an impact resistant covering.
4. When used in areas outside of the "HVHZ" requiring wind borne debris protection this product complies with FBC Sections 1609.1.2 & R301.2.1.2 and does not require an impact resistant covering. This product meets missile level "D" and includes Wind Zone 4 as defined in ASTM E 1996 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.
5. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
6. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.
7. Outswing configurations do not meet the water infiltration requirements for the "HVHZ" and shall be installed only in non-habitable areas or at habitable locations protected by an overhang or canopy such that the angle between the edge of canopy or overhang to sill is less than 45 degrees.
8. Aluminum components, including fasteners, shall meet the requirements of FBC Section 2003.

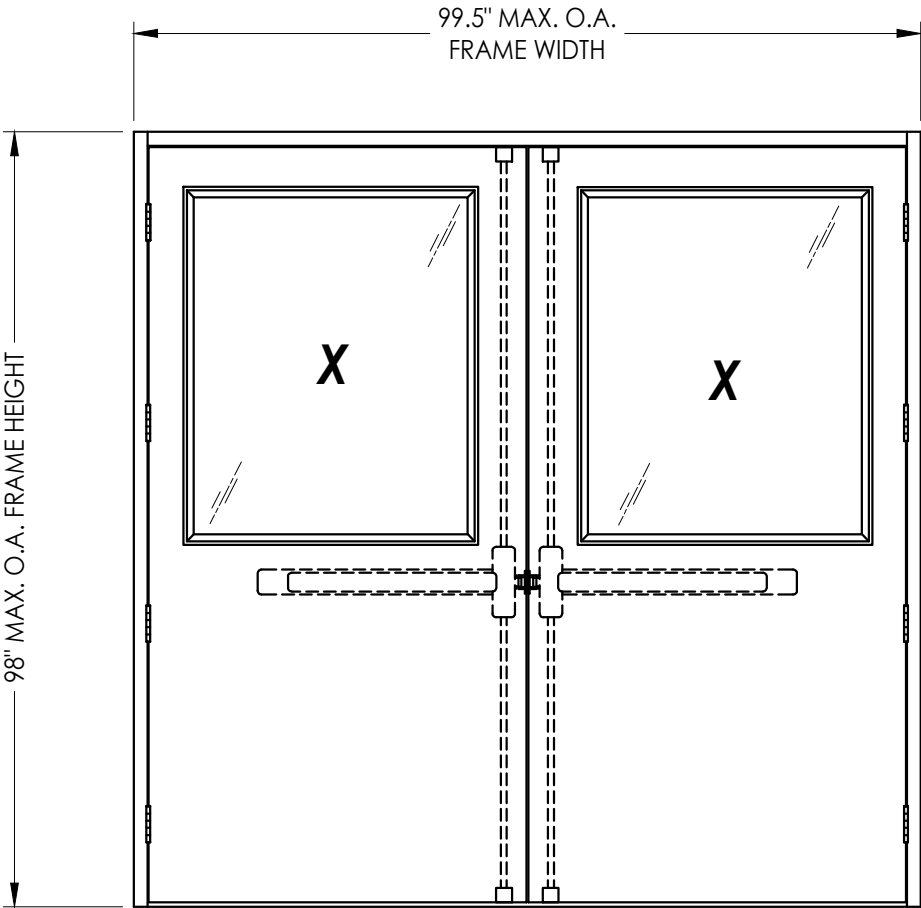
TABLE OF CONTENTS	
SHEET#	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Door panel details and glazing detail
3	Horizontal cross sections
4	Vertical cross sections
5	Buck anchoring
6	Frame anchoring
7	Buck anchoring
8	Frame anchoring
9	Bill of materials and components



Digitally signed by Lyndon F Schmidt
Date: 2023.07.05 09:11:06 -04'00'

This item has been digitally signed and sealed by L. F. Schmidt, P.E. on the date adjacent to the seal.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

THIS PRODUCT APPROVAL IS VALID ONLY FOR THE STATE OF FLORIDA



GLAZED DOOR PANEL
Opaque panel also approved

LOCK HARDWARE	MAX. FRAME DIMENSION	MAX. DOOR D.L.O. DIMENSION	DESIGN PRESSURE (PSF)	
			POSITIVE	NEGATIVE
CORBIN RUSSWIN FE5400S SERIES MULTI-POINT EXIT DEVICE	76.0" x 88.0"	22.63" X 32.63"	+90.0	-90.0
	99.5" x 98.0"	34.88" X 44.88"	+80.0	-80.0

Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

CLINE DOORS

PART OR ASSEMBLY:
TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

5	7/05/23	UPDATE TO 8TH ED. (2023)	FBC	LFS
4	8/11/20	UPDATE TO 7TH ED. (2020)	FBC	DAC
3	7/7/17	UPDATE TO 6TH ED. (2017)	FBC	JK
2	9/9/15	ADD OPAQUE DOOR & NEW SIZE	JK	JK
1	1/27/15	UPDATE TO 5TH ED. (2014)	FBC	JK
	DATE			BY

REVISIONS

DATE: 9/5/13

SCALE: N.T.S.

DWG. BY: JK

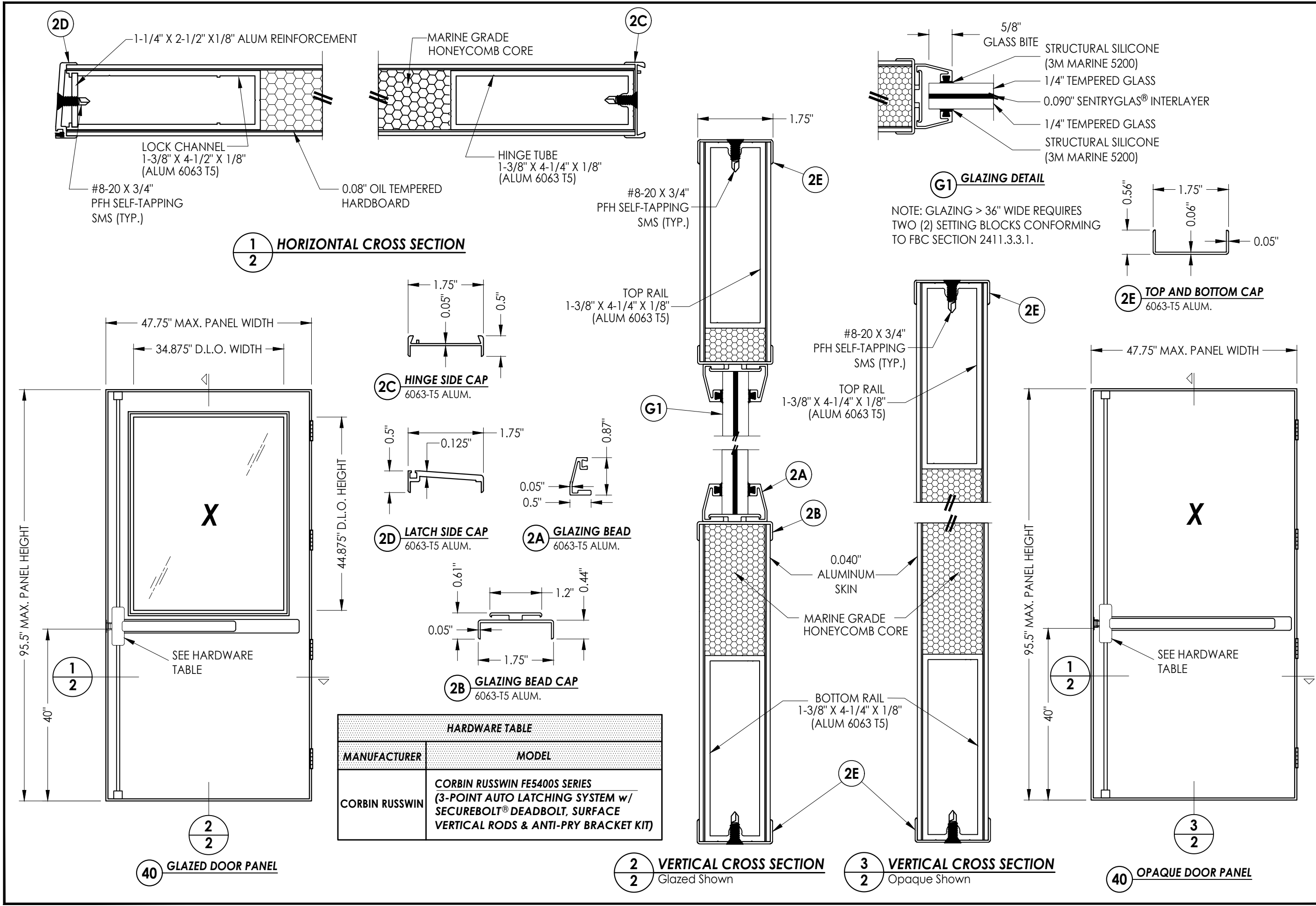
CHK. BY: LFS

DRAWING NO.: FL-6336.8

SHEET 1 OF 9

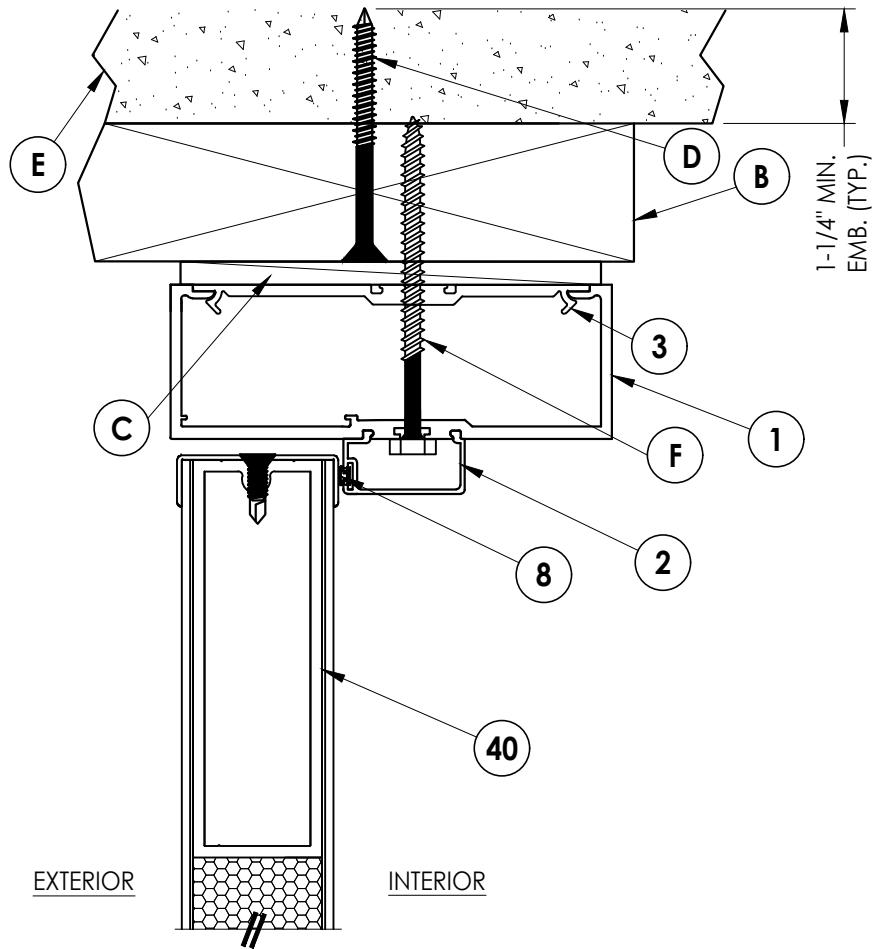
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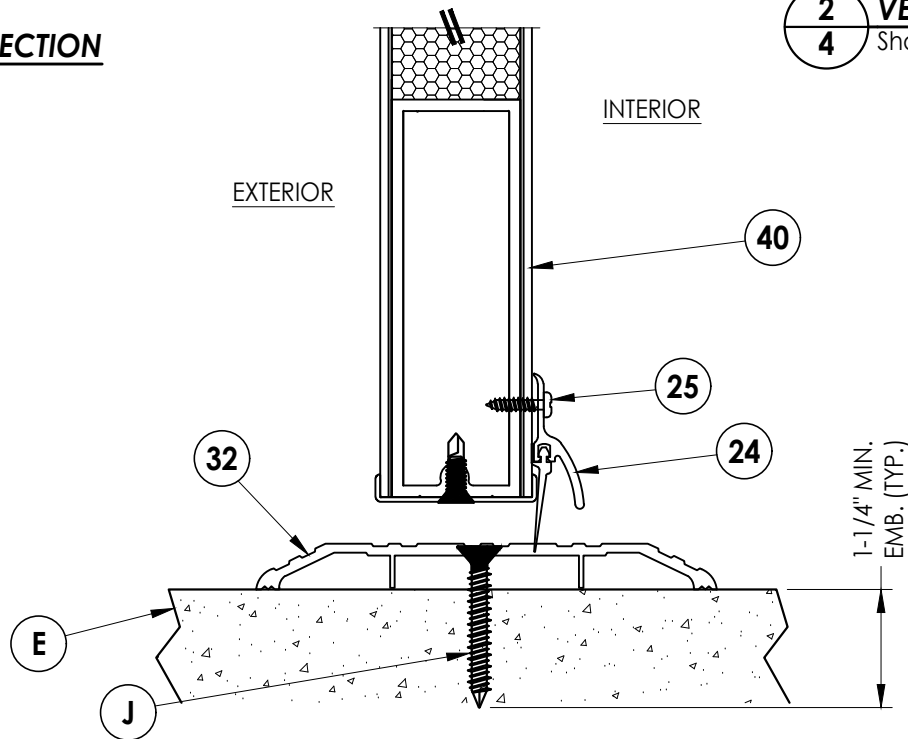


Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409		BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813	
PRODUCT: CLINE DOORS		PART OR ASSEMBLY: DOOR PANEL DETAILS AND GLAZING DETAIL	
5	7/05/23	UPDATE TO 8TH ED. (2023)	LFS
4	8/11/20	UPDATE TO 7TH ED. (2020)	DAC
3	7/7/17	UPDATE TO 6TH ED. (2017)	FBC
2	9/9/15	ADD OPAQUE DOOR & NEW SIZE	JK
1	1/27/15	UPDATE TO 5TH ED. (2014)	FBC
NO.	DATE	REVISIONS	
DATE: 9/5/13			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-6336.8			
SHEET 2 OF 9			

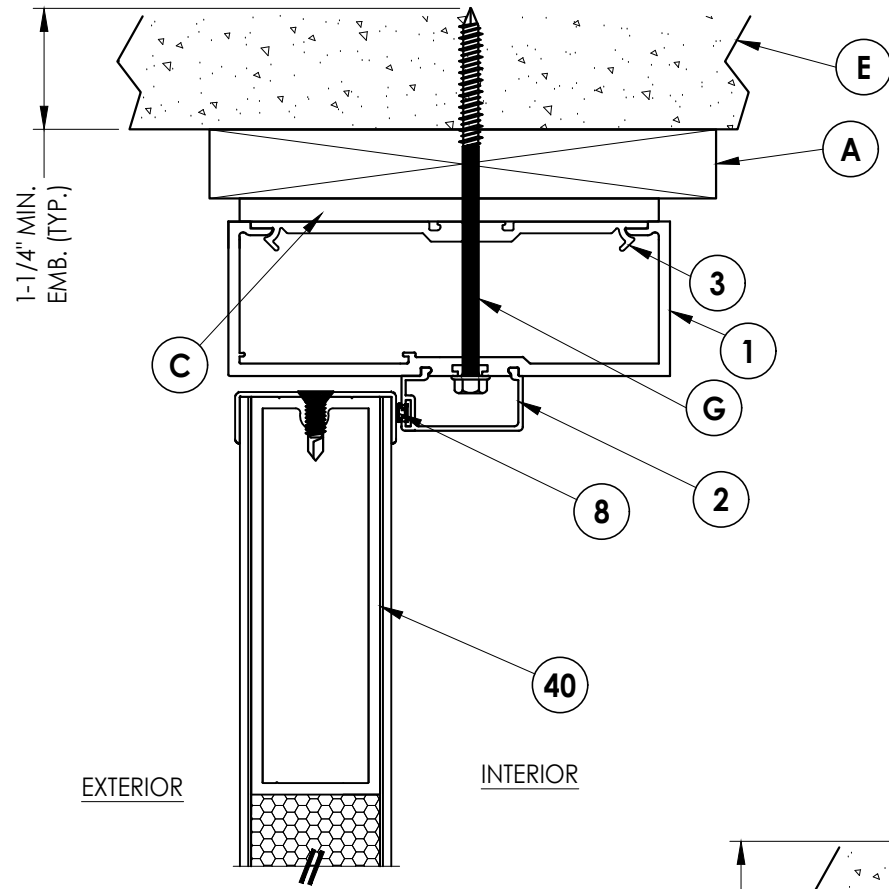
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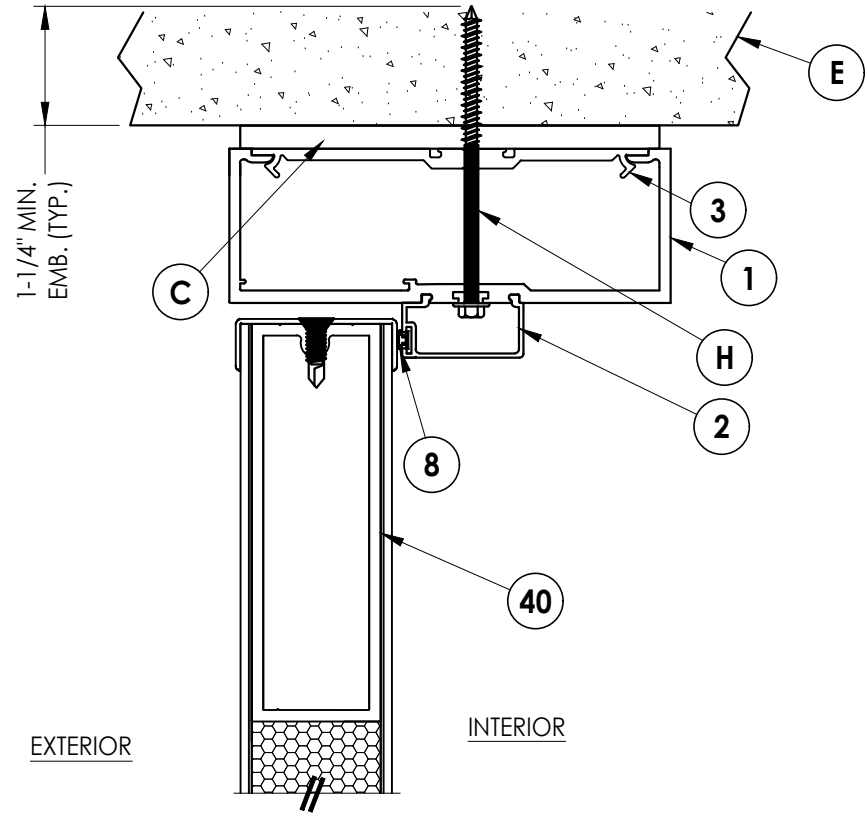
1
4 **VERTICAL CROSS SECTION**
2X Buck Construction



4
4 **VERTICAL CROSS SECTION**



2
4 **VERTICAL CROSS SECTION**
Shown w/1X sub-buck



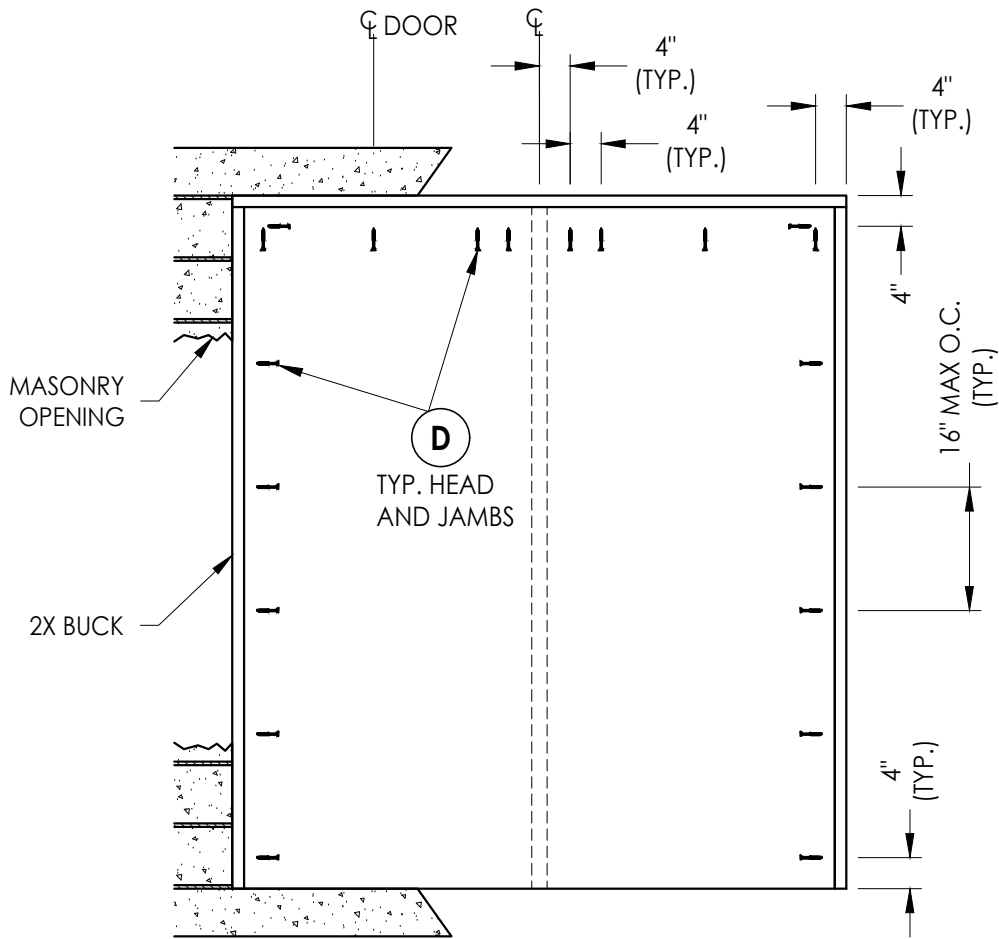
3
4 **VERTICAL CROSS SECTION**
Direct to Masonry

PRODUCT:		CLINE DOORS		PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS	
NO.	DATE	REVISIONS	NO.	DATE	REVISIONS	NO.	DATE
5	7/05/23	UPDATE TO 8TH ED. (2023)	FBC	LFS			
4	8/11/20	UPDATE TO 7TH ED. (2020)	FBC	DAC			
3	7/7/17	UPDATE TO 6TH ED. (2017)	FBC	JK			
2	9/9/15	ADD OPAQUE DOOR & NEW SIZE	JK				
1	1/27/15	UPDATE TO 5TH ED. (2014)	FBC	JK			
				BY			

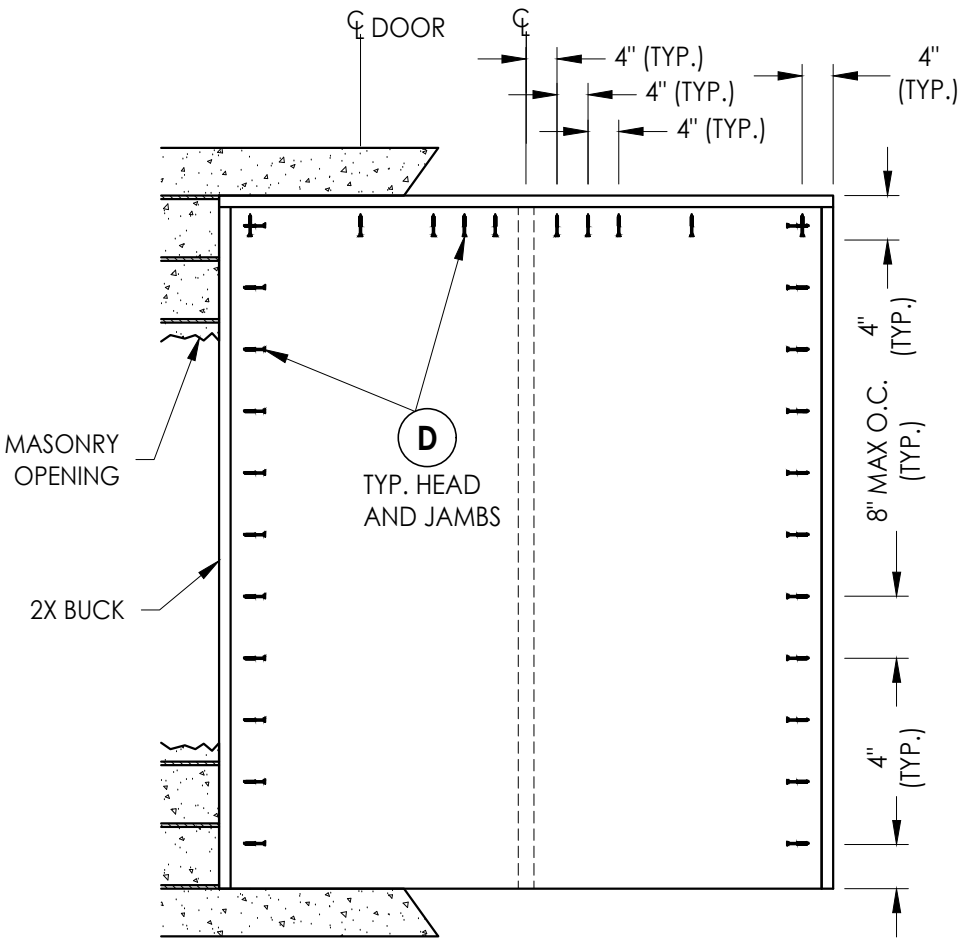
DATE: 9/5/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-6336.8
SHEET 4 OF 9

Documents Prepared By:
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FBPE Registry No. 9813

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BUCK ANCHORING
Max. D.P. <= 55 PSF



BUCK ANCHORING
Max. D.P. <= 90 PSF

MAX. FRAME DIMENSION 76" X 88.0"

CONCRETE ANCHOR NOTES:

- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
- Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON CENTER" dimension are not exceeded.
- Concrete anchor table:

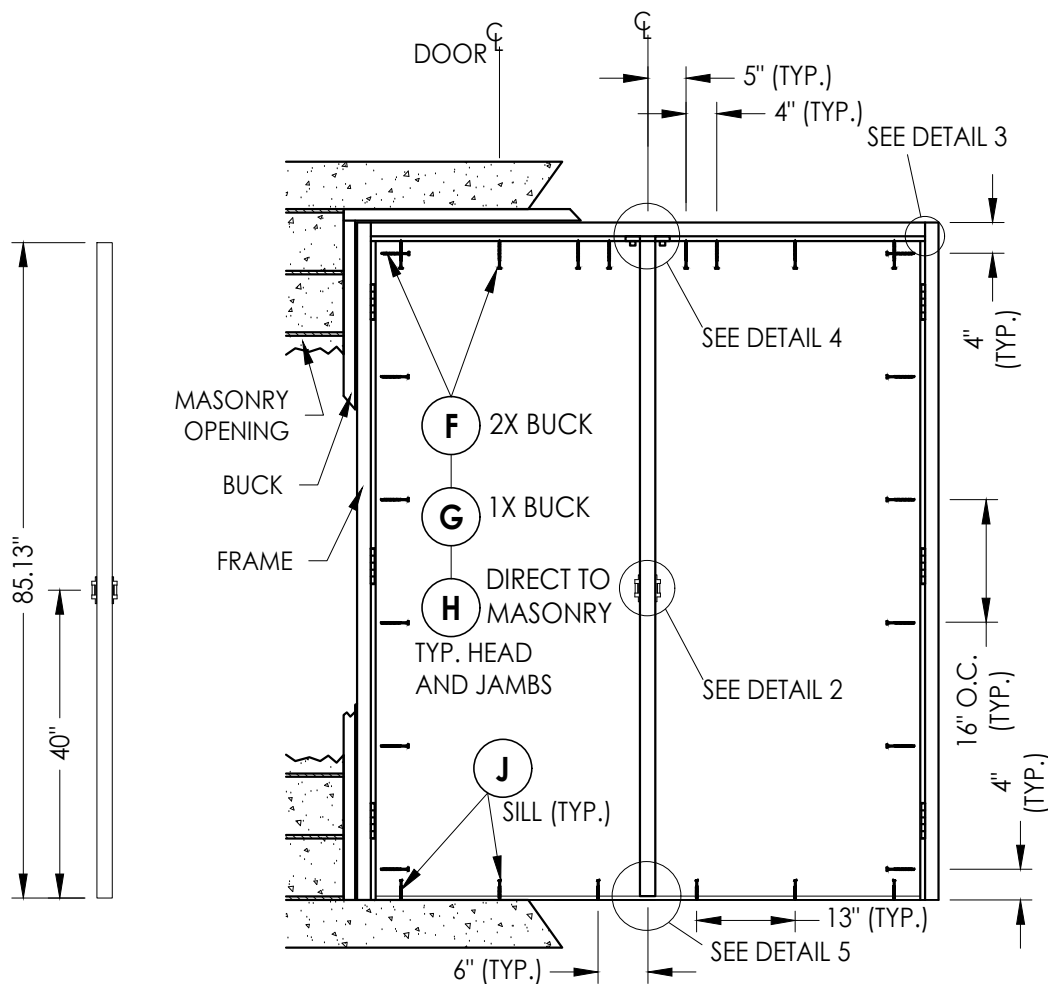
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW BUILDEX TAPCON®	1/4"	1-1/4"	2-1/2"	4"
DeWALT ULTRACON®	1/4"	1-1/4"	2-1/2"	4"

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FBPE Registry No. 9813

PRODUCT:		CLINE DOORS	
PART OR ASSEMBLY:		BUCK ANCHORING	
5	7/05/23	UPDATE TO 8TH ED. (2023)	FBC LFS
4	8/11/20	UPDATE TO 7TH ED. (2020)	FBC DAC
3	7/7/17	UPDATE TO 6TH ED. (2017)	FBC JK
2	9/9/15	ADD OPAQUE DOOR & NEW SIZE	JK
1	1/27/15	UPDATE TO 5TH ED. (2014)	FBC JK
NO.	DATE		
REVISIONS			
DATE: 9/5/13			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-6336.8			
SHEET 5 OF 9			

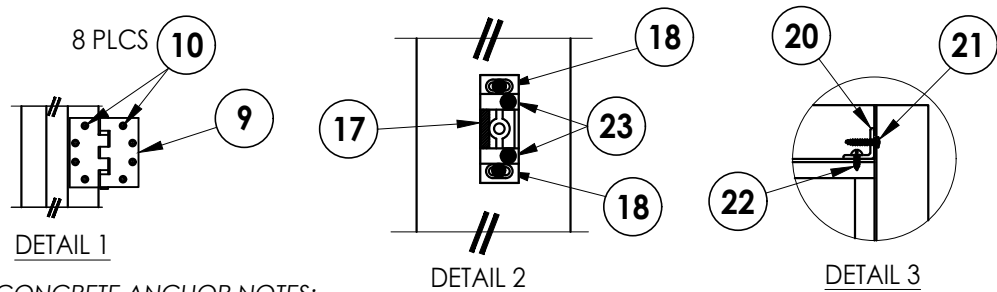
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LATCH MULLION

FRAME ANCHORING

Max. D.P. <= 55 PSF



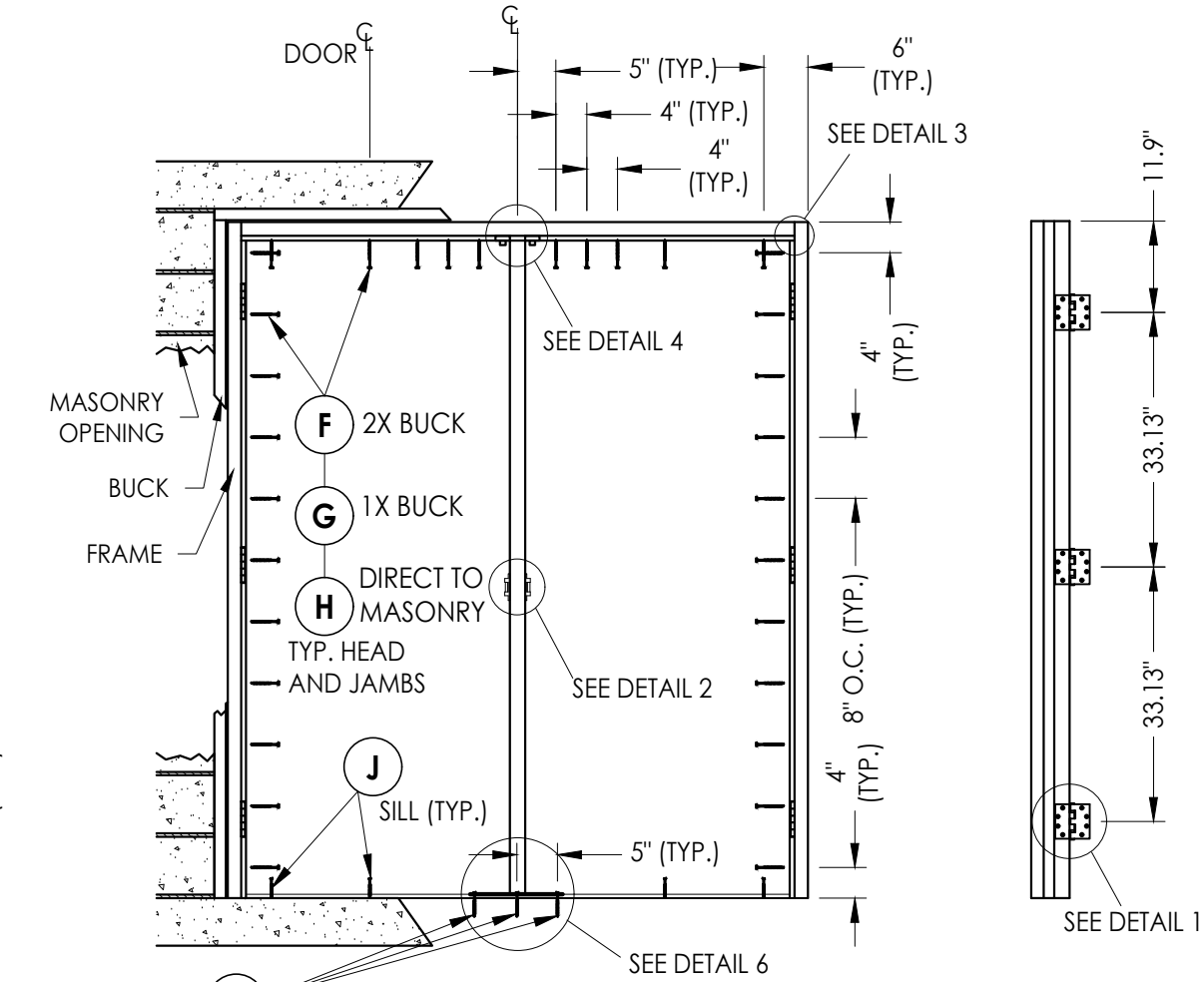
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- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
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- Concrete anchor table:

ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW BUILDEX TAPCON®	1/4"	1-1/4"	2-1/2"	4"
DeWALT ULTRACON®	1/4"	1-1/4"	2-1/2"	4"
ULTRACON®	3/16"	1-3/4"	2-1/2"	1-3/4"
ULTRACON®	5/16"	1-3/4"	2-1/2"	5"

WOOD SCREW INSTALLATION NOTES:

- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.

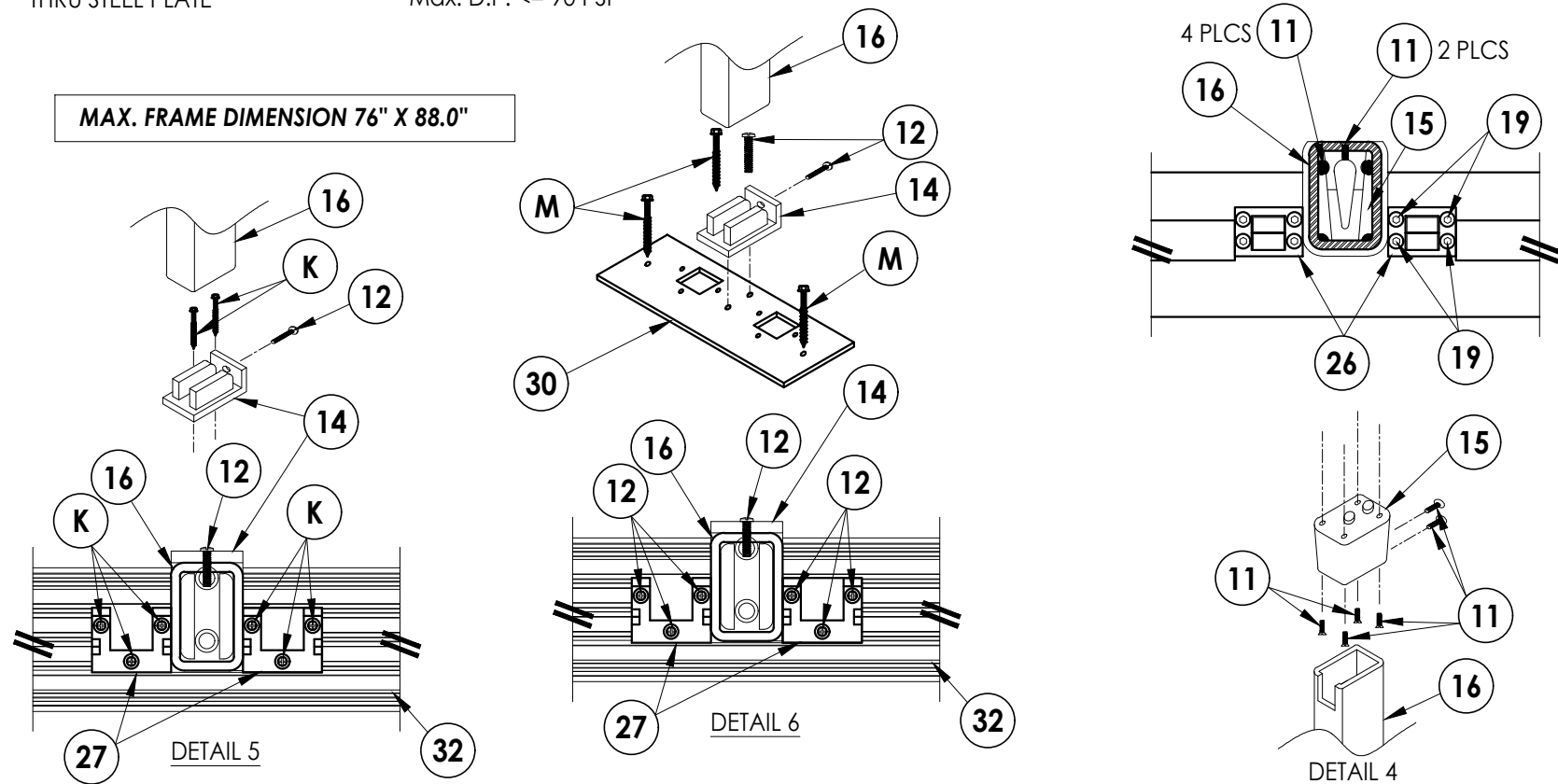


SILL ANCHORS THRU STEEL PLATE

FRAME ANCHORING

Max. D.P. <= 90 PSF

HINGE JAMB



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FBPE Registry No. 9813

PRODUCT:
CLINE DOORS

PART OR ASSEMBLY:
FRAME ANCHORING

NO.	DATE	REVISIONS
5	7/05/23	UPDATE TO 8TH ED. (2023) FBC
4	8/11/20	UPDATE TO 7TH ED. (2020) FBC
3	7/7/17	UPDATE TO 6TH ED. (2017) FBC
2	9/9/15	ADD OPAQUE DOOR & NEW SIZE
1	1/27/15	UPDATE TO 5TH ED. (2014) FBC

DATE: 9/5/13

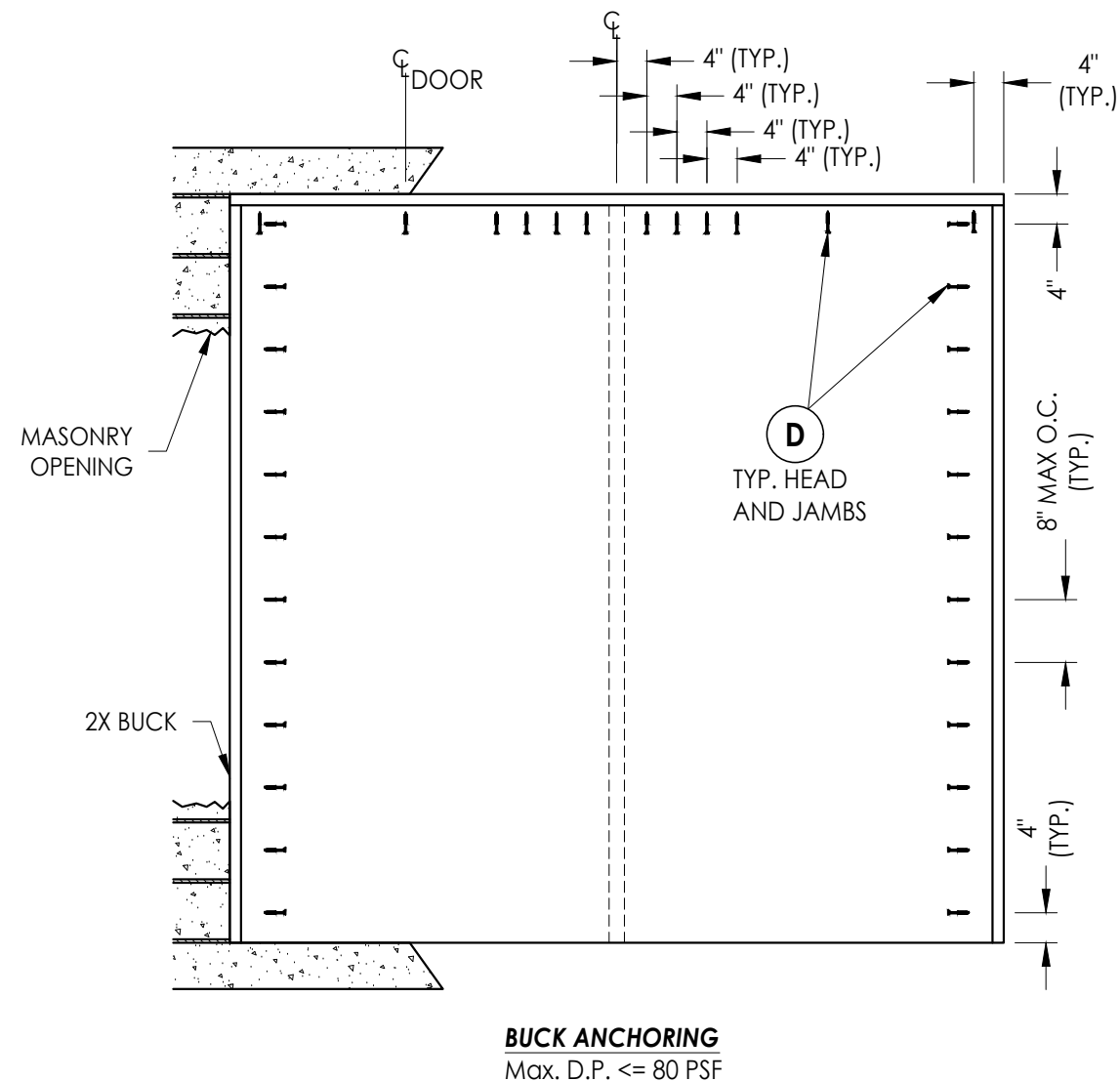
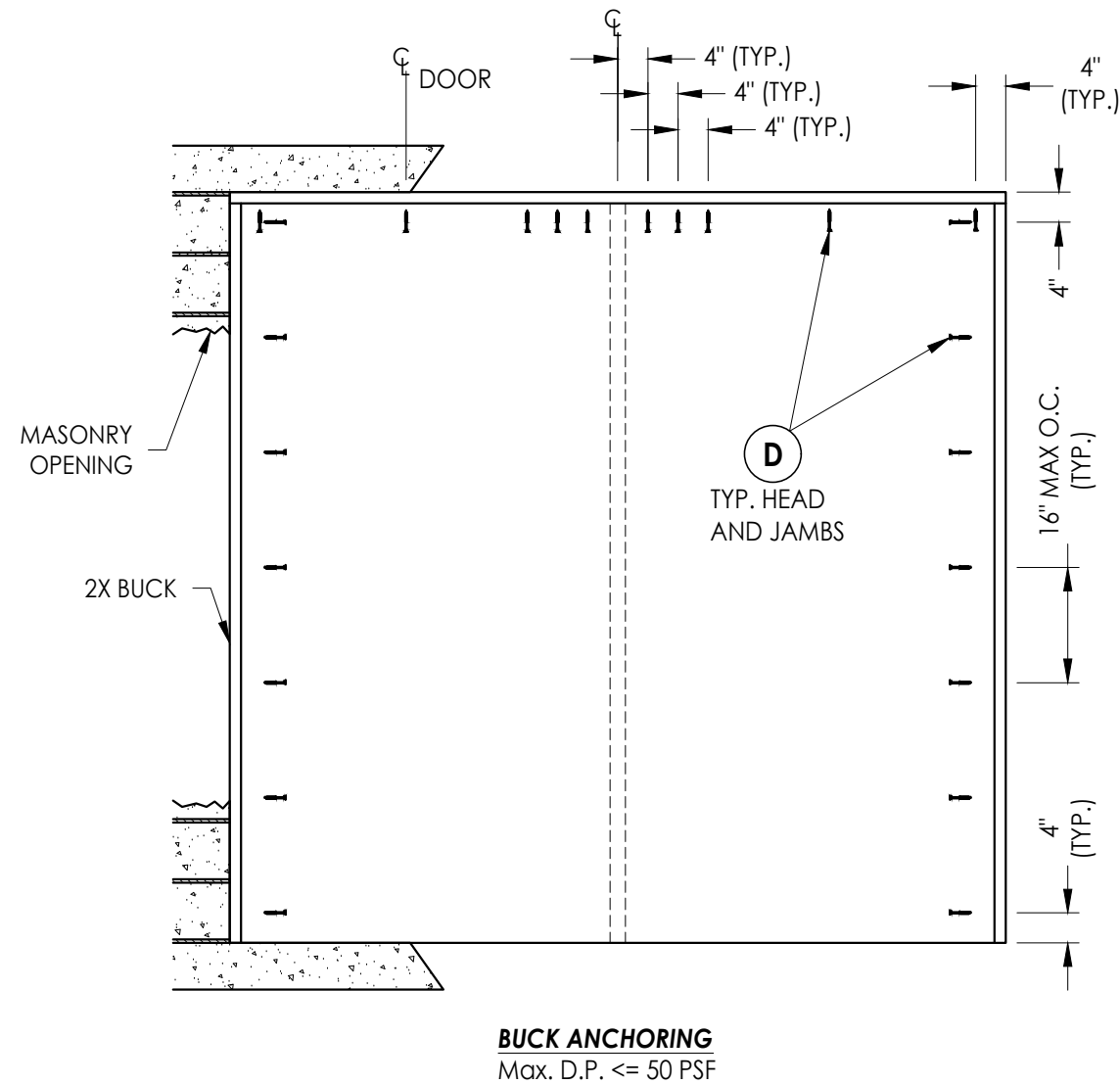
SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-6336.8

SHEET 6 OF 9



BUCK ANCHORING
Max. D.P. <= 50 PSF

BUCK ANCHORING
Max. D.P. <= 80 PSF

MAX. FRAME DIMENSION 99.5" X 98.0"

CONCRETE ANCHOR NOTES:

1. Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
2. Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON CENTER" dimension are not exceeded.
3. Concrete anchor table:

ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW BUILDEX TAPCON®	1/4"	1-1/4"	2-1/2"	4"
DeWALT® ULTRACON+	1/4"	1-1/4"	2-1/2"	4"

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2	9/9/15	ADD OPAQUE DOOR & NEW SIZE	JK	JK
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NO.	DATE	REVISIONS		

DATE: 9/5/13

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: *LFS*

DRAWING NO.:

FL-6336.8

CLINE DOORS

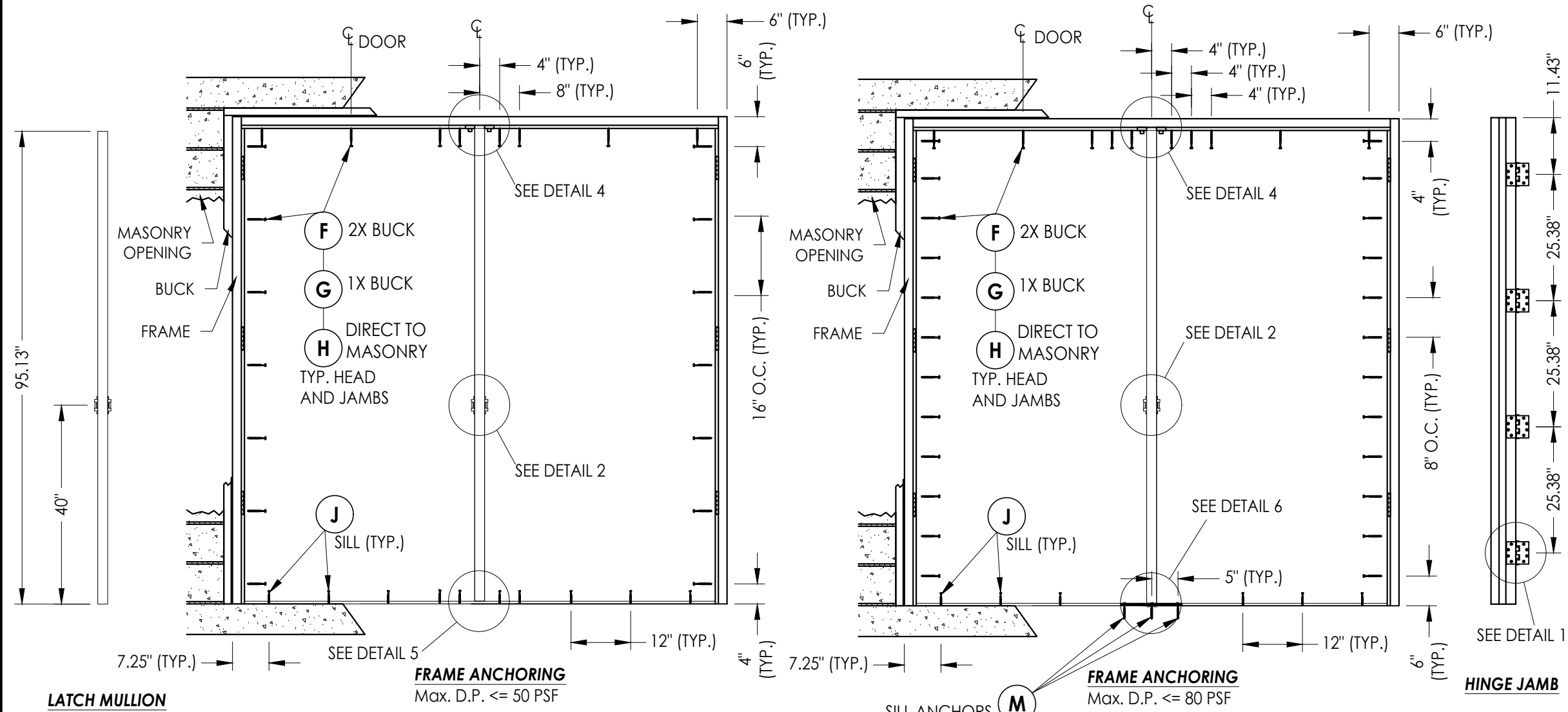
ASSEMBLY:
BUCK ANCHORING

Documents Prepared By:
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P.E. No. 43409

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Phone No.: 813.659.9197
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MAX. FRAME DIMENSION 99.5" X 98.0"

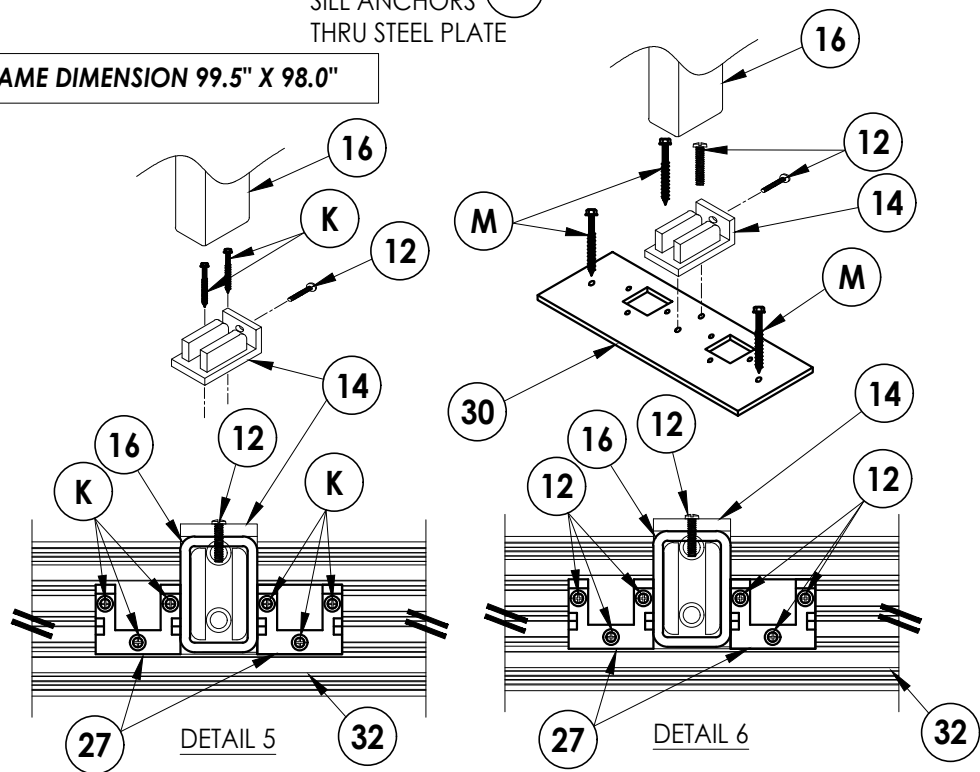
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- Concrete anchor table:

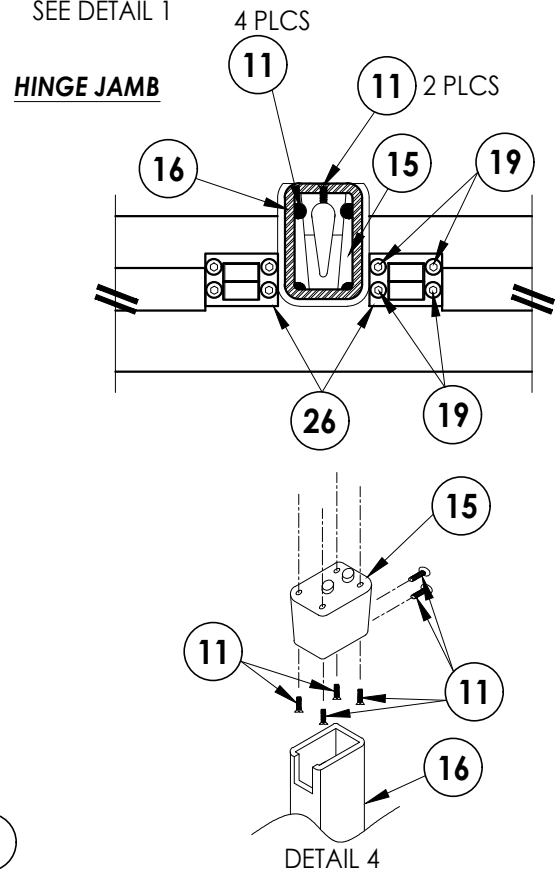
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW BUILDEX TAPCON®	1/4"	1-1/4"	2-1/2"	4"
DeWALT ULTRACON®	1/4"	1-1/4"	2-1/2"	4"
ULTRACON®	3/16"	1-3/4"	2-1/2"	1-3/4"
ULTRACON®	5/16"	1-3/4"	2-1/2"	5"

WOOD SCREW INSTALLATION NOTES:

- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.



HINGE JAMB



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Lyndon F. Schmidt
P.E. No. 43409

CLINE DOORS

PART OR ASSEMBLY:
FRAME ANCHORING

7/05/23

UPDATE TO 8TH ED. (2023)

FBC

LFS

8/11/20

UPDATE TO 7TH ED. (2020)

FBC

DAC

7/7/17

UPDATE TO 6TH ED. (2017)

FBC

JK

9/9/15

ADD OPAQUE DOOR & NEW SIZE

JK

JK

1/27/15

UPDATE TO 5TH ED. (2014)

FBC

BY

NO.

DATE

REVISIONS

DATE:

9/5/13

SCALE:

N.T.S.

DWG. BY:

JK

CHK. BY:

LFS

DRAWING NO.:

FL-6336.8

SHEET

8

OF

9

Building Consultants, Inc.

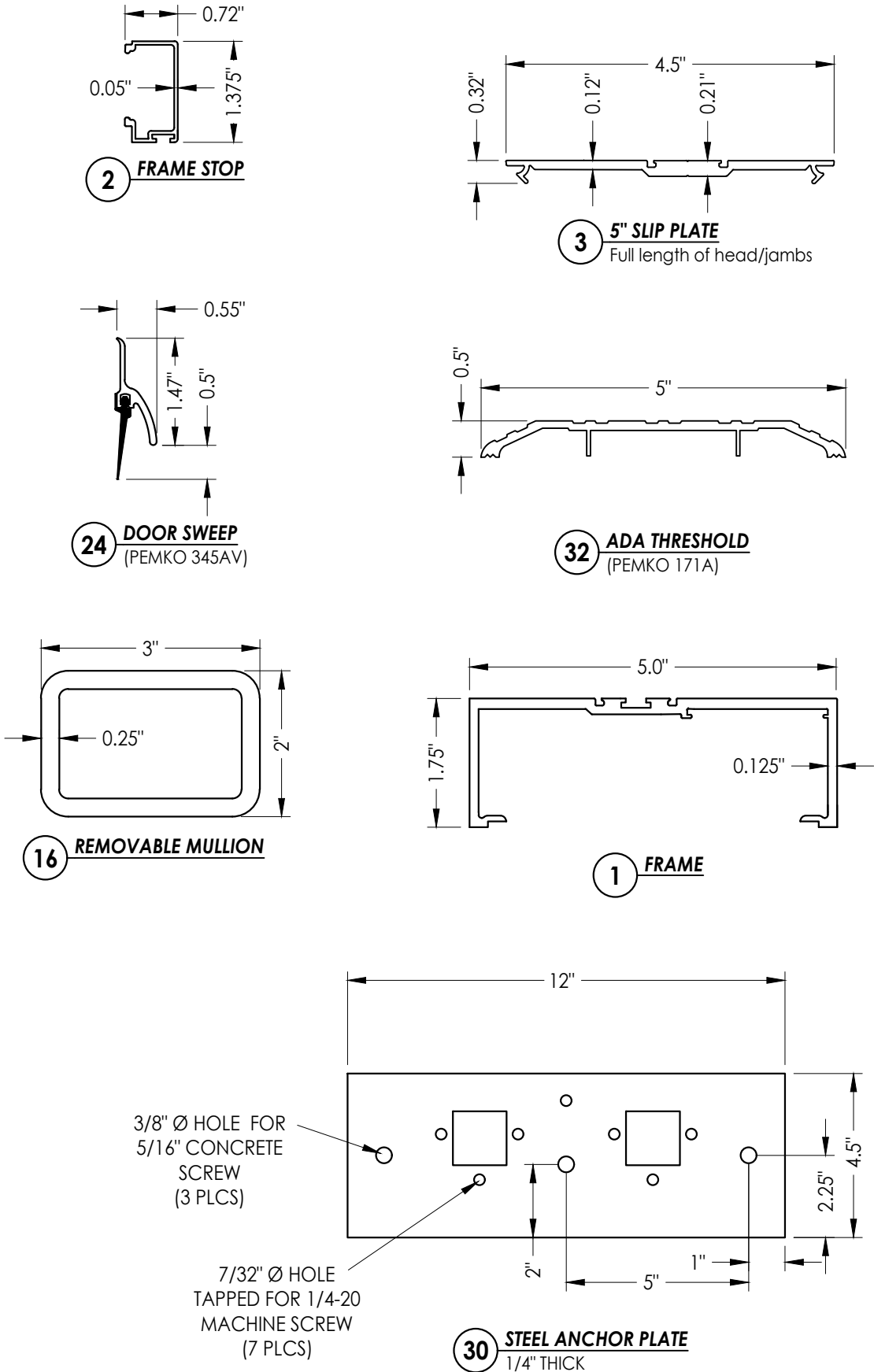
P.O. Box 230, Valrico, FL 33595

Phone No.: 813.659.9197

FBPE Registry No. 9813

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BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK SG >= 0.55	WOOD
B	2X BUCK SG >= 0.55	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	1/4" X 3-1/2" HH LAG SCREW (1.5" MIN. EMBEDMENT)	STEEL
G	1/4" X 4" HWH DeWALT OR ITW CONCRETE SCREW	STEEL
H	1/4" x 3-1/4" HWH DeWALT OR ITW CONCRETE SCREW	STEEL
J	1/4" x 1-3/4" HWH DeWALT OR ITW CONCRETE SCREW	STEEL
K	3/16" x 2-1/4" PFH DeWALT CONCRETE SCREW	STEEL
M	5/16" x 2-1/4" HWH DeWALT CONCRETE SCREW	STEEL
1	FRAME	ALUM 6063 T5
2	FRAME STOP	ALUM 6063 T5
3	5" SLIP PLATE	ALUM 6063 T5
4	HINGE REINFORCEMENT	ALUM
7	WEATHERSTRIP	PVC
8	WOOL PILE WEATHERSTRIP	-
9	4-1/2" X 4-1/2" HINGE	STEEL
10	1/4 - 20 x 1/2" PFH MACHINE SCREW	STEEL
11	1/4 - 20 x 5/8" PFH MACHINE SCREW	STEEL
12	1/4 - 20 x 1-1/4" PPH MACHINE SCREW	STEEL
14	BOTTOM MULLION BRACKET	STEEL
15	TOP MULLION BRACKET	STEEL
16	REMOVABLE MULLION (FE708A)	STEEL
17	CENTER BOLT ROLLER STRIKE PLATE	STEEL
18	#12-24 X 2" FH MACHINE SCREW	STEEL
19	1/4 - 20 x 1" PFH MACHINE SCREW	STEEL
20	CORNER REINFORCEMENT (1" X 1" X 1/2" X 4.75" LONG ANGLE)	ALUM
21	#10 X 1" PPH SMS	STEEL
22	#10 X 1/2" PPH SMS	STEEL
23	#8 X 2" CAP SCREW	STEEL
24	DOOR SWEEP (PEMKO 345AV)	-
25	#6 X 5/8" PPH SMS	STEEL
26	TOP LATCH STRIKE HOUSING	STEEL
27	BOTTOM BOLT STRIKE PLATE	STEEL
30	STEEL PLATE (1/4" x 4-1/2" x 12") ASTM A36	STEEL
32	ADA THRESHOLD (PEMKO 171A)	ALUM
40	DOOR PANEL (SEE DOOR PANEL DETAILS)	-



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FBPE Registry No. 9813

PRODUCT: CLINE DOORS

PART OR ASSEMBLY:
BILL OF MATERIALS
& COMPONENTS

NO.	DATE	REVISIONS			
		DATE	BY	JK	LFS
5	7/05/23	UPDATE TO 8TH ED. (2023)	FBC	LFS	
4	8/11/20	UPDATE TO 7TH ED. (2020)	FBC	DAC	
3	7/7/17	UPDATE TO 6TH ED. (2017)	FBC	JK	
2	9/9/15	ADD OPAQUE DOOR & NEW SIZE	JK	JK	
1	1/27/15	UPDATE TO 5TH ED. (2014)	FBC	JK	

DATE: 9/5/13

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

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SHEET 9 OF 9