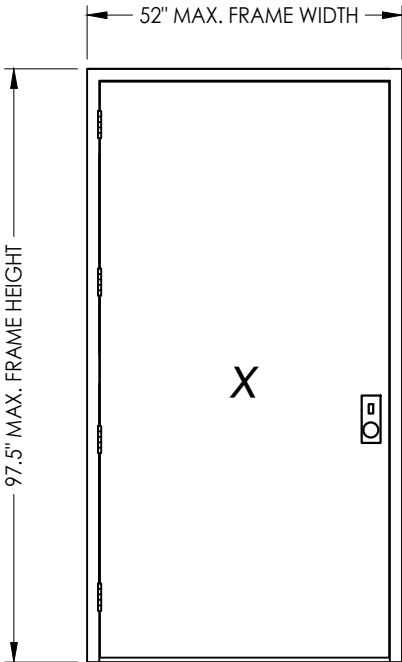


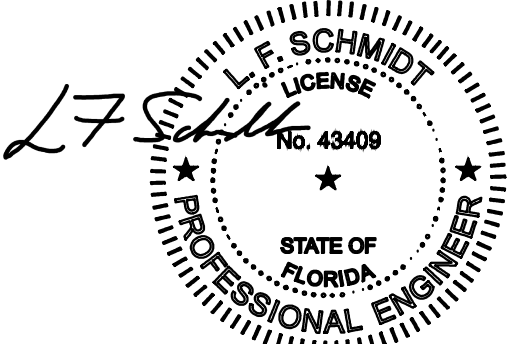
Vision Hollow Metal Limited

400 Zenway Blvd. Unit #1
Woodbridge, ON L4H OS7

LS1875 STEEL DOOR
OUTSWING
"IMPACT"



MORTISE LOCK & DEADBOLT



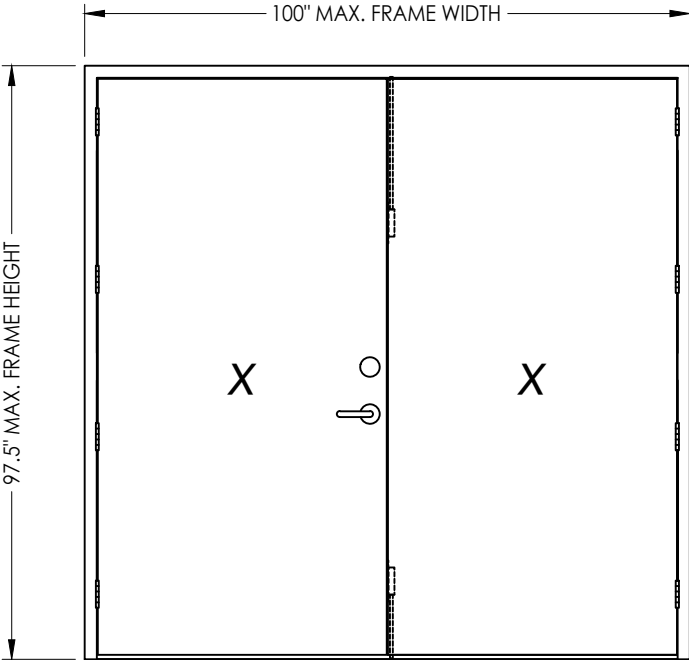
Digitally signed by Lyndon F Schmidt
Date: 2023.07.05 15:55:57 -04'00'

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.

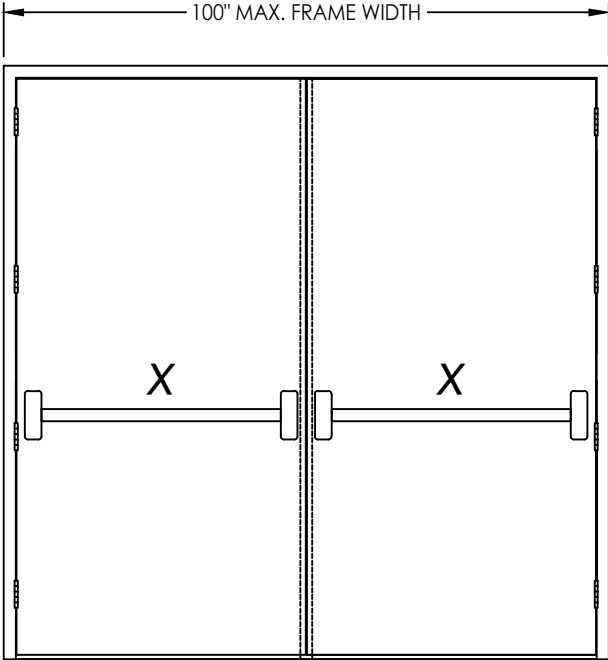
THIS PRODUCT APPROVAL IS VALID ONLY FOR THE STATE OF FLORIDA

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. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.
- 5. This product meets water infiltration requirements for the "HVHZ".
- 6. All steel shall be protected as specified in Section 2222.6 of the FBC.



CYLINDRICAL LOCK & DEADBOLT



PANIC BAR EXIT DEVICE w/ REMOVABLE MULLION

TABLE OF CONTENTS	
SHEET#	DESCRIPTION
1	Typical elevation, design pressures & general notes
2	Door panel details
3	Elevations
4	Horizontal cross sections
5	Horizontal & vertical cross sections
6	Frame anchoring
7	Frame anchoring
8	Frame anchoring
9	Hardware Details
10	Bill of materials and components

CONFIGURATION	MAX. OVERALL DIMENSION	DESIGN PRESSURE (PSF)	
		POSITIVE	NEGATIVE
X	52" X 97.5"	+75.0	-75.0
XX	100" X 97.5"	+75.0	-75.0

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

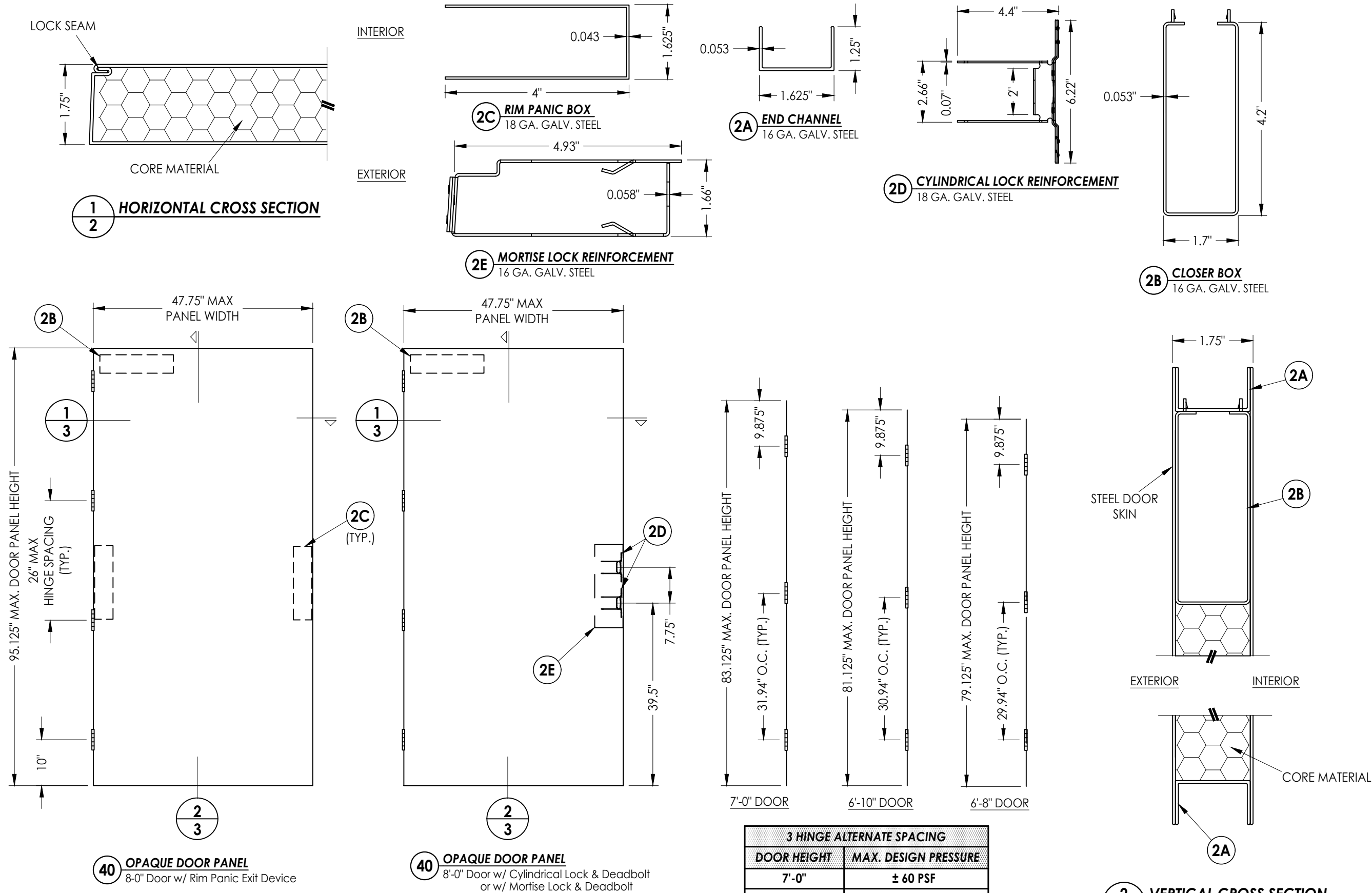
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT: VISION HOLLOW METAL
PART OR ASSEMBLY: TYPICAL ELEVATIONS, DESIGN PRESSURES & GENERAL NOTES

NO.	DATE	REVISIONS				
		LFS	FBC	(2023)	FBC	LFS
6	7/05/23	UPDATE TO 8TH ED.	(2023)	FBC		
5	9/08/20	UPDATE TO 7TH ED.	(2020)	FBC		
4	11/5/19	ADJUST ANCHOR SPACING				
3	8/15/19	ADD 3 HINGE OPTIONS				
2	8/13/18	CLARIFY ANCHORING				
1	7/13/17	UPDATE TO 6TH ED.	(2017)	FBC		

DATE: 12/7/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19036.4
SHEET 1 OF 10

Z:\2023 FBC Drawings\Vision Hollow Metal\FL-19036 R9\FL-190364.dwg



STEEL DOOR SKIN: 18 GA. (MIN. 0.044" THK.) GALV. STEEL (Fy = 54,000 PSI MIN.)
CORE MATERIAL: EPS FOAM (POLYSTYRENE - 1.0 PCF MIN. DENSITY)

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

R_W BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:
VISION HOLLOW METAL

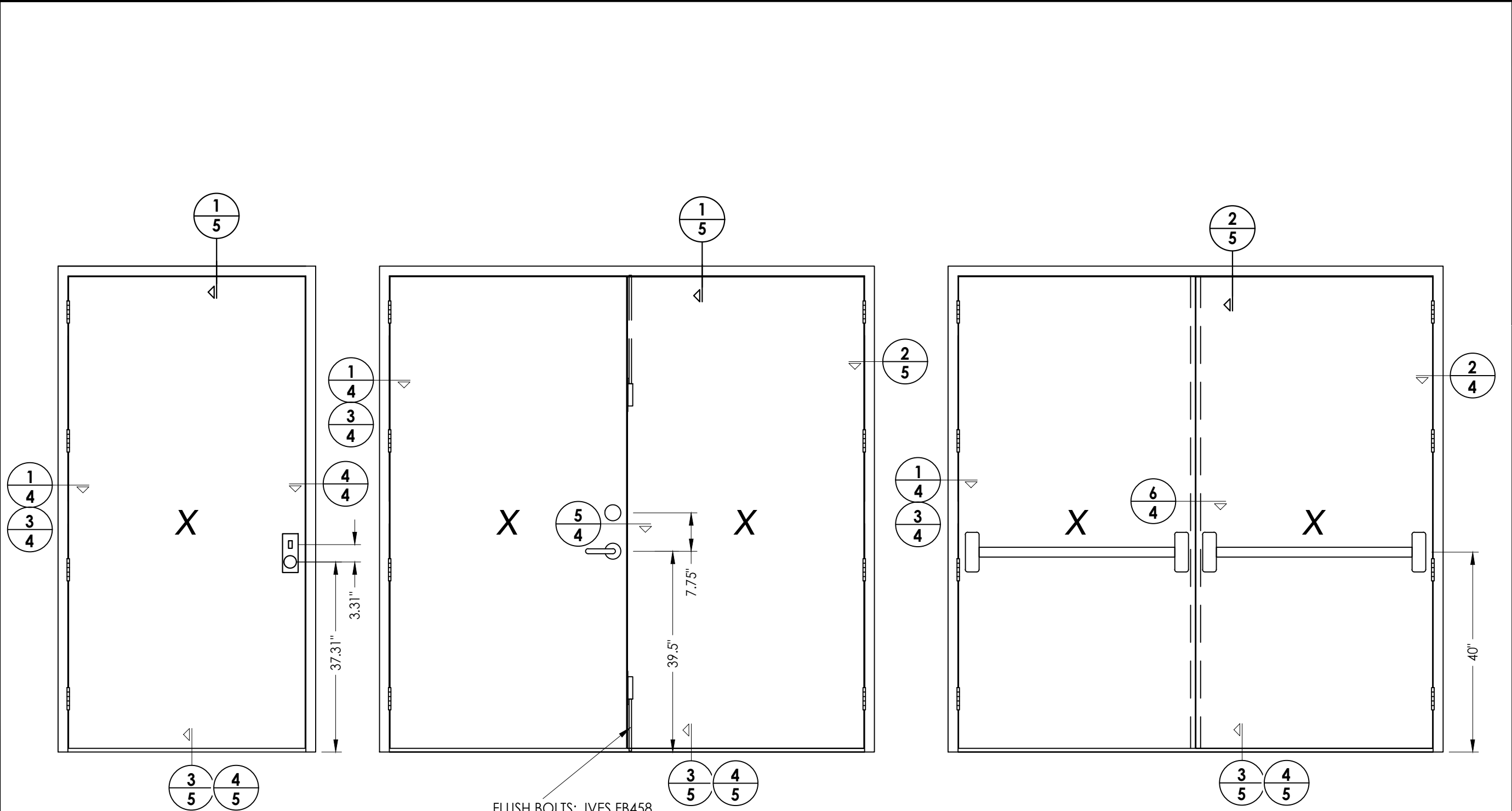
PART OR ASSEMBLY:

DOOR
PANEL DETAILS

NO.	DATE	REVISIONS	BY
6	7/05/23	UPDATE TO 8TH ED. (2023) FBC	LFS
5	9/08/20	UPDATE TO 7TH ED. (2020) FBC	LFS
4	11/5/19	ADJUST ANCHOR SPACING	LFS
3	8/13/18	ADD 3 HINGE OPTIONS	LFS
2	8/13/18	CLARIFY ANCHORING	LFS
1	7/13/17	UPDATE TO 6TH ED. (2017) FBC	LFS

DATE: 12/7/15
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-19036.4
SHEET 2 OF 10

Z:\2023 FBC Drawings\Vision Hollow Metal\FL-19036 R9\FL-19036.4.dwg



LOCK HARDWARE
MORTISE LOCK w/ DEADBOLT: SCHLAGE L9453P

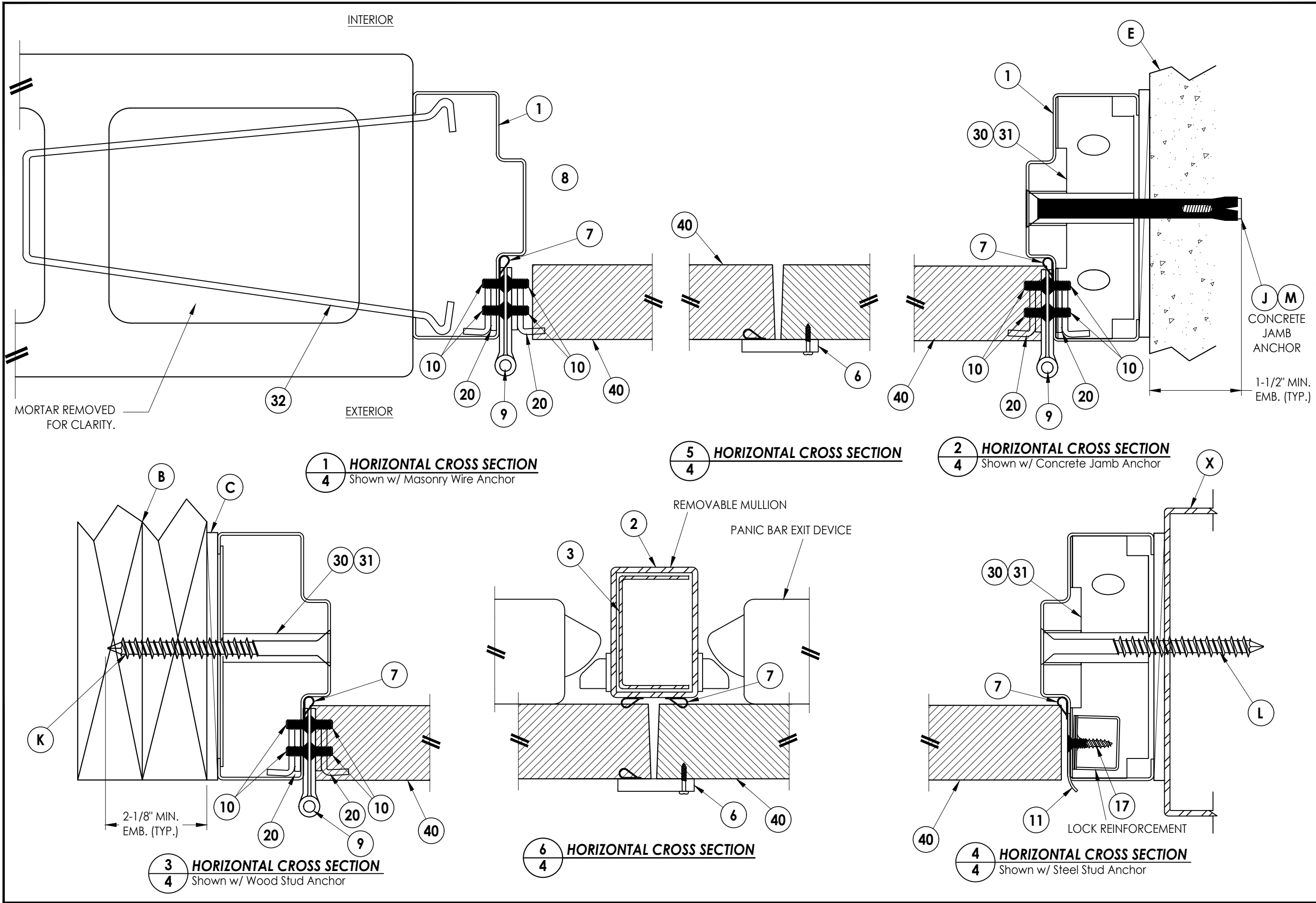
LOCK HARDWARE
CYLINDRICAL LOCK: SCHLAGE AL53PD
DEADBOLT: SCHLAGE B660P

LOCK HARDWARE
RIM PANIC EXIT DEVICE: DESIGN HARDWARE 2000 SERIES
REMOVABLE MULLION: LOCKWOOD MG 950F

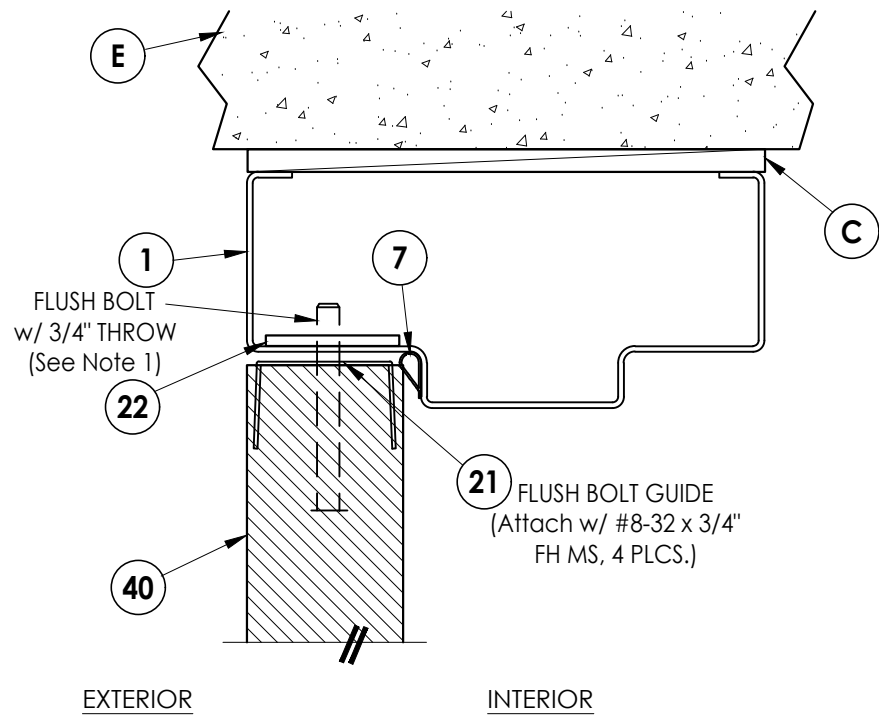
NOTE: ALL LOCK HARDWARE SHOWN MAY BE UTILIZED ON SINGLE DOOR OR ACTIVE DOUBLE DOOR

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: VISION HOLLOW METAL		PART OR ASSEMBLY: ELEVATIONS	
6	7/05/23	UPDATE TO 8TH ED. (2023) FBC	LFS
5	9/08/20	UPDATE TO 7TH ED. (2020) FBC	LFS
4	11/5/19	ADJUST ANCHOR SPACING	LFS
3	8/13/18	ADD 3 HINGE OPTIONS	LFS
2	8/13/18	CLARIFY ANCHORING	LFS
1	7/13/17	UPDATE TO 6TH ED. (2017) FBC	LFS
NO.	DATE		BY
REVISIONS			
DATE: 12/7/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19036.4			
SHEET 3 OF 10			

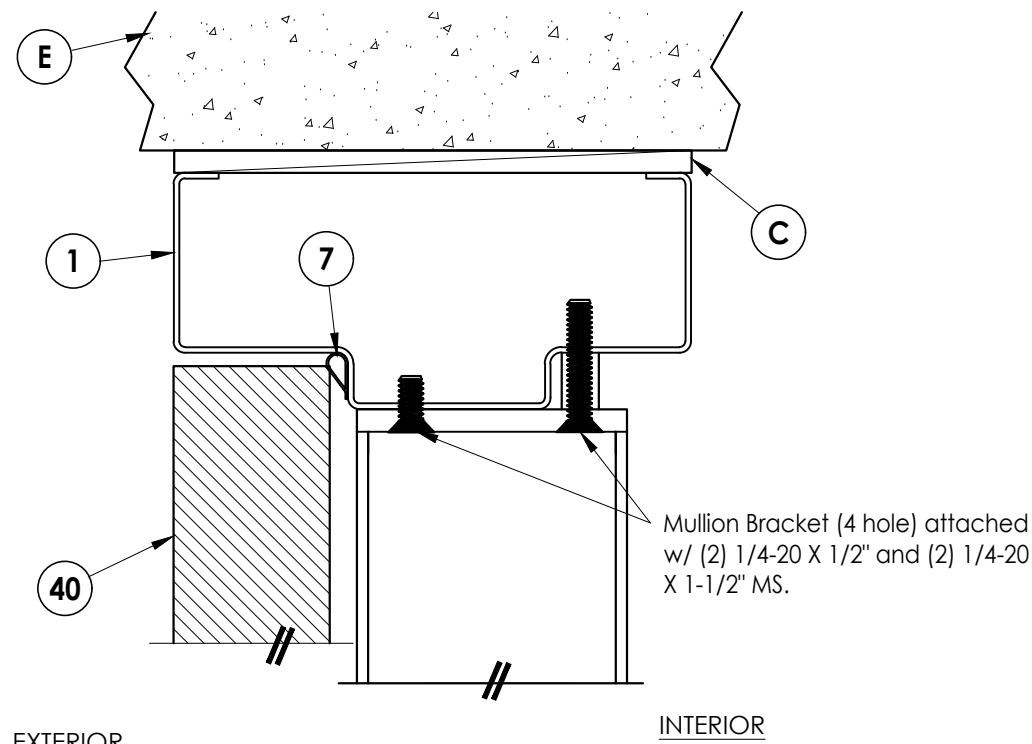
Z:\2023 FBC Drawings\Vision Hollow Metal\FL-19036 R9\FL-19036.4.dwg



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: VISION HOLLOW METAL		PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS	
LFS	7/05/23	UPDATE TO 8TH ED. (2023) FBC	REVISIONS
LFS	9/08/20	UPDATE TO 7TH ED. (2020) FBC	
LFS	11/5/19	ADJUST ANCHOR SPACING	
LFS	8/15/19	ADD 3 HINGE OPTIONS	
LFS	8/13/18	CLARIFY ANCHORING	
LFS	7/13/17	UPDATE TO 6TH ED. (2017) FBC	
BY	NO.	DATE	
DATE: 12/7/15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-19036.4			
SHEET 4 OF 10			

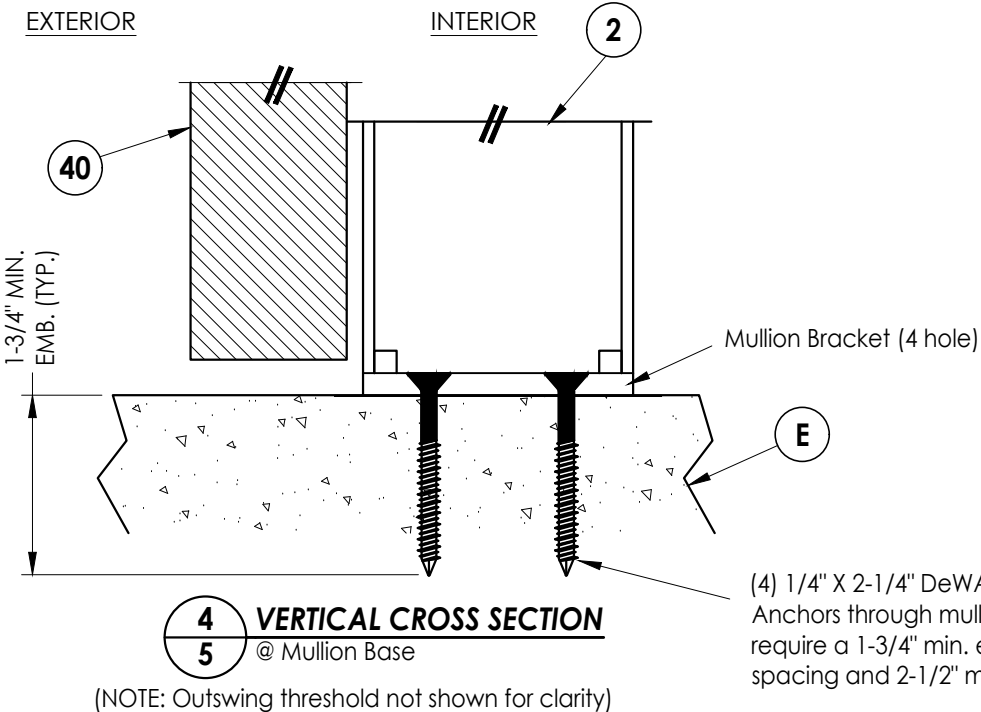
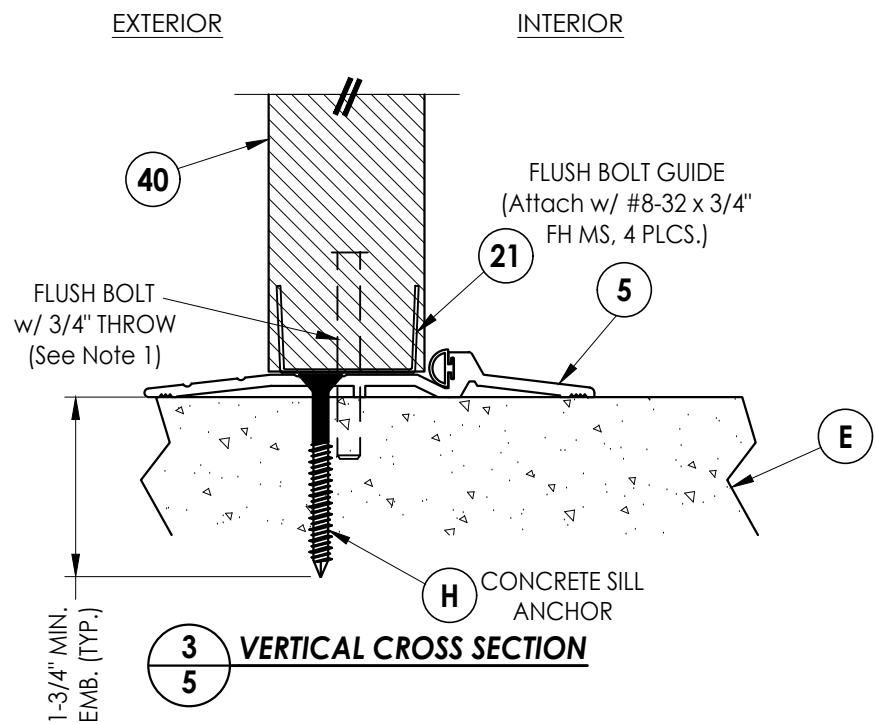


1
5 VERTICAL CROSS SECTION



2
5 VERTICAL CROSS SECTION

Note 1:
Flush Bolt required for inactive door
panel w/ Mortise and Cylindrical
Lock & Deadbolt only.



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

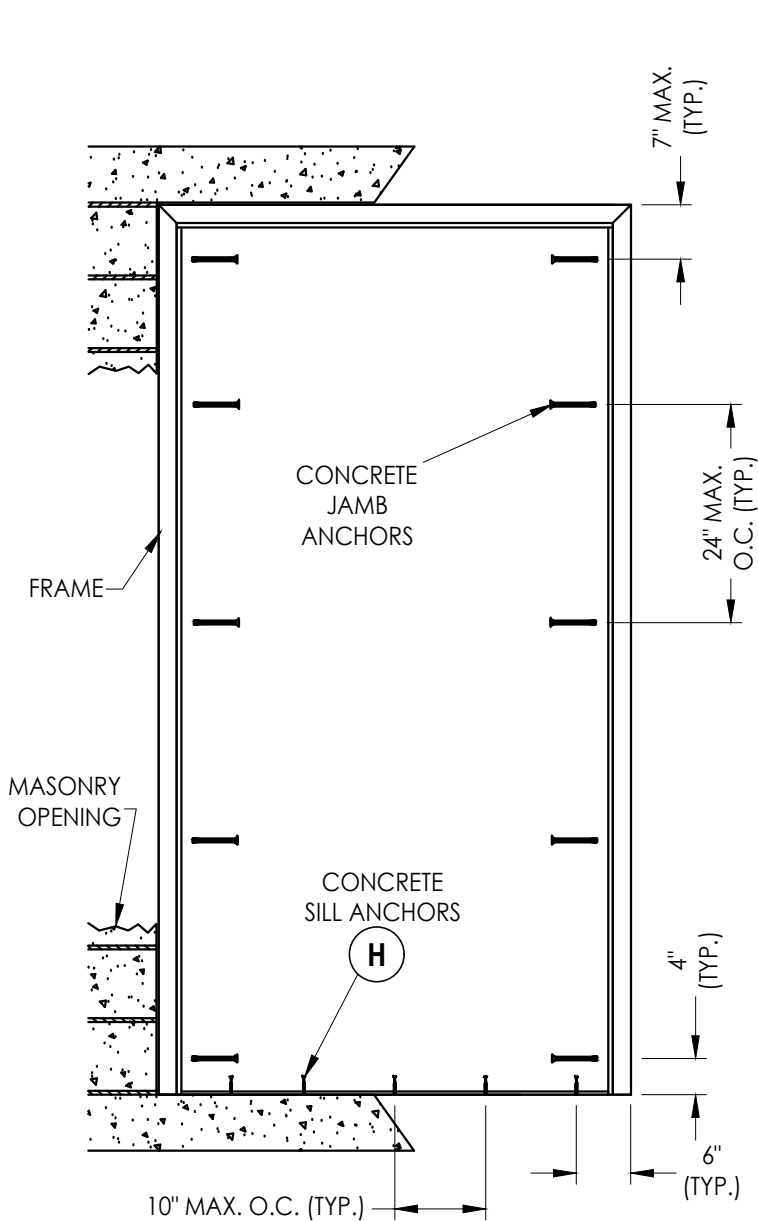
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:	VISION HOLLOW METAL
PART OR ASSEMBLY:	HORIZONTAL & VERTICAL CROSS SECTIONS

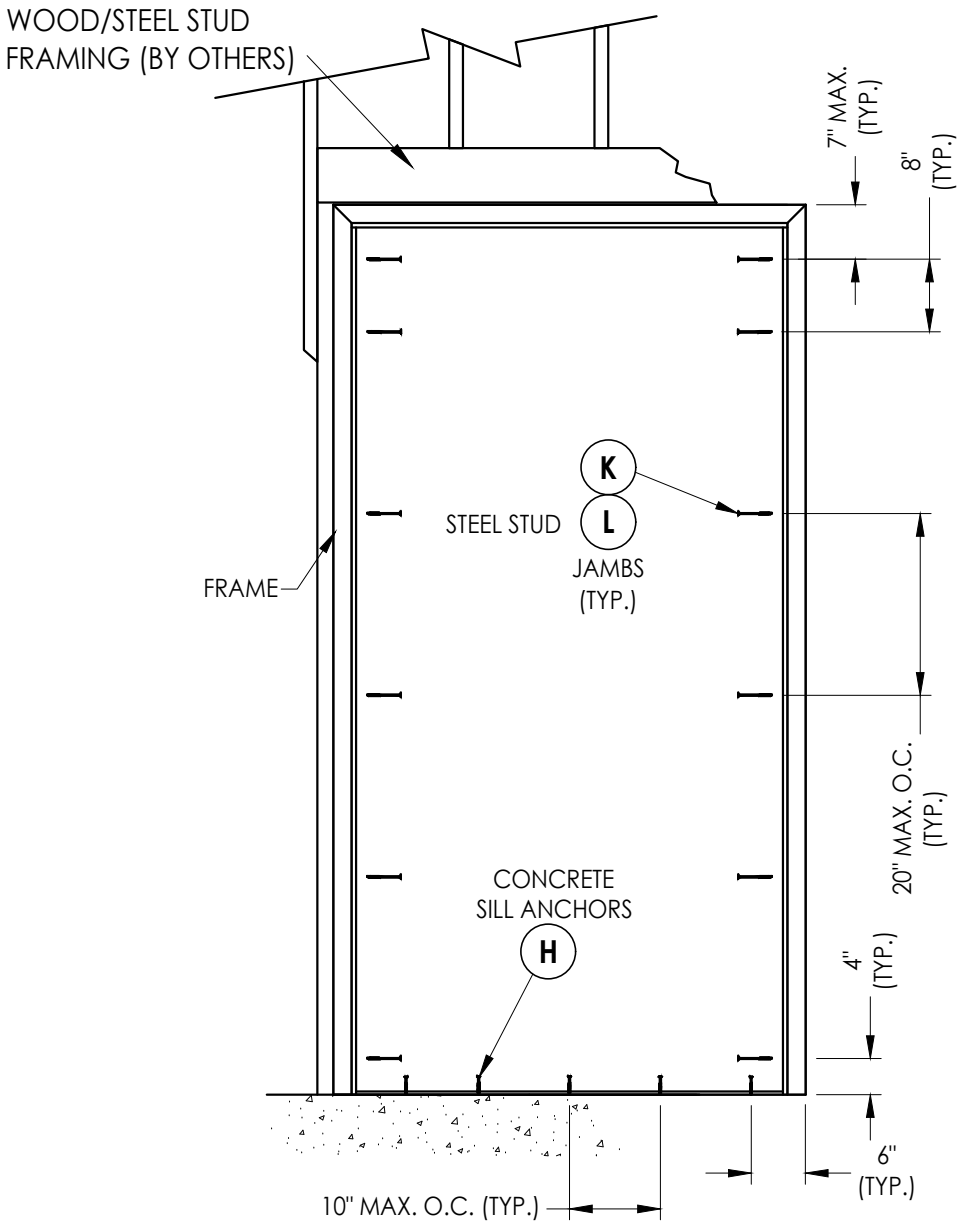
LFS	FBC	UPDATE TO 8TH ED. (2023)	DATE
LFS	FBC	UPDATE TO 7TH ED. (2020)	12/7/15
LFS	FBC	ADJUST ANCHOR SPACING	9/08/20
LFS	FBC	ADD 3 HINGE OPTIONS	11/5/19
LFS	FBC	CLARIFY ANCHORING	8/13/18
LFS	FBC	UPDATE TO 6TH ED. (2017)	7/13/17
BY			

DATE:	12/7/15
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-19036.4
SHEET	5 OF 10

Z:\2023 FBC Drawings\Vision Hollow Metal\FL-19036 R9\FL-190364.dwg



FRAME ANCHORING
Masonry Construction
Concrete Anchors



FRAME ANCHORING
Wood/Steel Stud

CONCRETE ANCHOR NOTES:

- Concrete screw locations at the corners may be adjusted to maintain a minimum 1" edge distance to mortar joints. If concrete screw locations noted as "MAX. O.C." must be adjusted to maintain the minimum edge distance to mortar joints, additional concrete screws may be required to ensure the maximum on center dimension is not exceeded.
- Concrete anchor table:

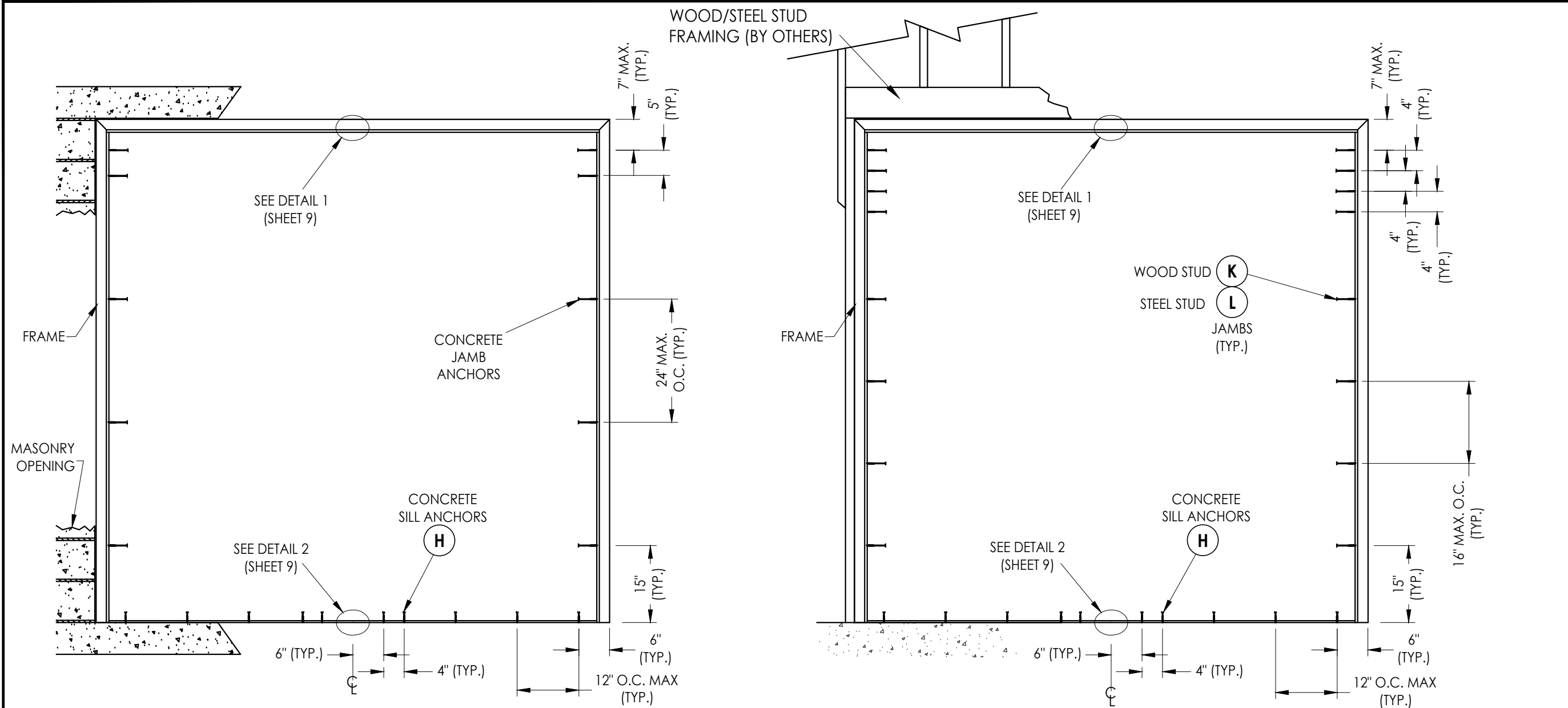
ANCHOR TYPE	ANCHOR LOCATION	ANCHOR SIZE	MANUFACTURER	MIN. EDGE DISTANCE	MIN. EMBEDMENT
CONCRETE ANCHOR SCREW	JAMBS	3/8"	LDT TAPCON® (ITW BUILDEX)	3"	1-1/2"
	SILL	1/4"	TAPCON® (ITW BUILDEX) ULTRAACON+® (DeWALT) TAPPER+® (POWERS)	2-1/2"	1-3/4"
CONCRETE SLEEVE ANCHOR	JAMBS	3/8"	DYNABOLT SLEEVE ANCHOR® (ITW REDHEAD)	2-1/4"	1-1/2"

6	7/05/23	UPDATE TO 8TH ED. (2023)	FBC	LFS
5	9/08/20	UPDATE TO 7TH ED. (2020)	FBC	LFS
4	11/5/19	ADJUST ANCHOR SPACING		LFS
3	8/15/19	ADD 3 HINGE OPTIONS		LFS
2	8/13/18	CLARIFY ANCHORING		LFS
1	7/13/17	UPDATE TO 6TH ED. (2017)	FBC	LFS
NO.	DATE			BY
REVISIONS				
DATE: 12/7/15				
SCALE: N.T.S.				
DWG. BY: JK				
CHK. BY: LFS				
DRAWING NO.: FL-19036.4				
SHEET 6 OF 10				

PRODUCT:	LS18 STEEL DOOR
PART OR ASSEMBLY:	FRAME ANCHORING

Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409	RW BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813
---	--

Z:\2023 FBC Drawings\Vision Hollow Metal\FL-19036 R9\FL-19036.4.dwg



FRAME ANCHORING
Masonry Construction
Concrete Anchors

FRAME ANCHORING
Wood/Steel Stud

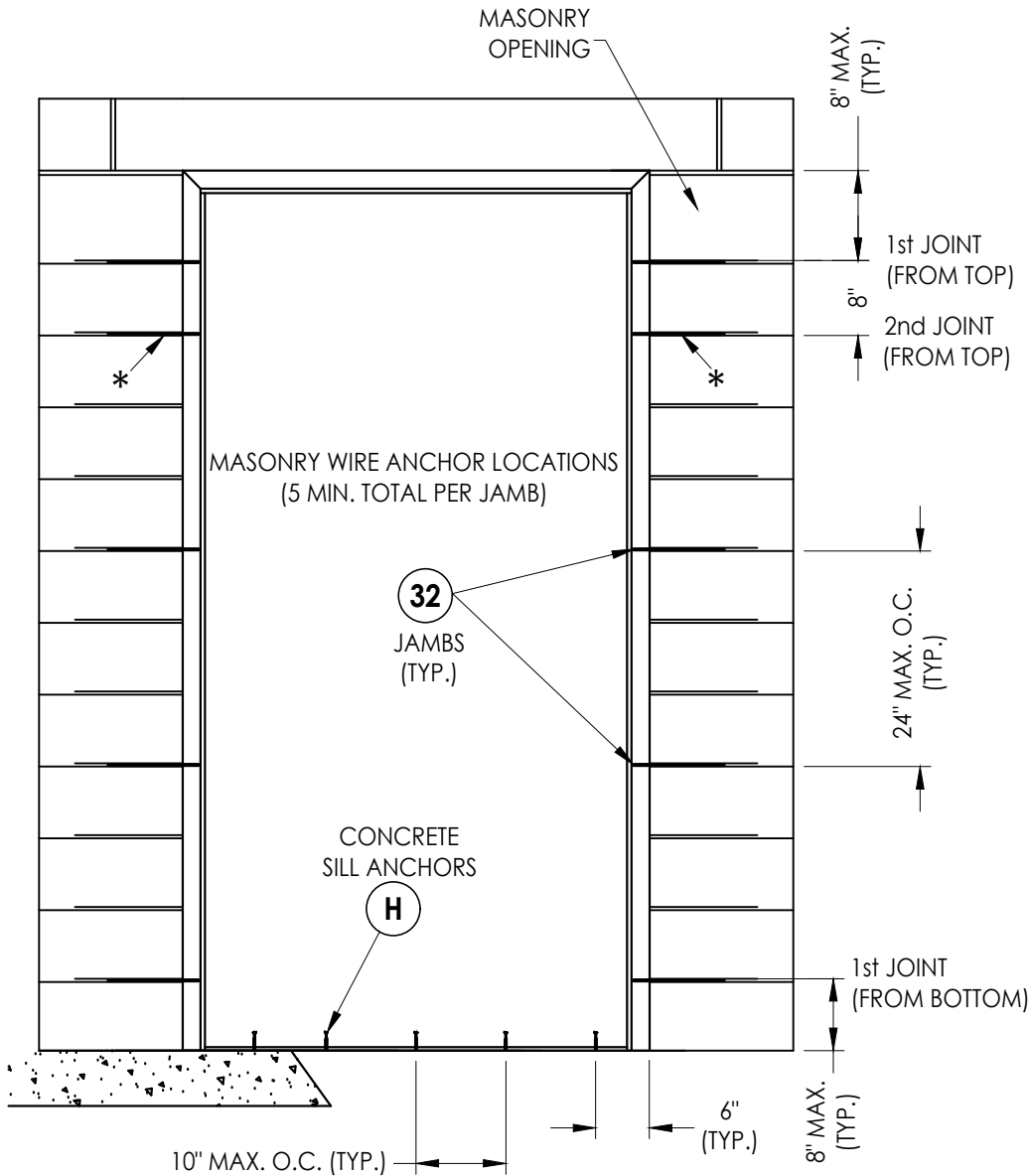
CONCRETE ANCHOR NOTES:

- Concrete screw locations at the corners may be adjusted to maintain a minimum 1" edge distance to mortar joints. If concrete screw locations noted as "MAX. O.C." must be adjusted to maintain the minimum edge distance to mortar joints, additional concrete screws may be required to ensure the maximum on center dimension is not exceeded.
- Concrete anchor table:

ANCHOR TYPE	ANCHOR LOCATION	ANCHOR SIZE	MANUFACTURER	MIN. EDGE DISTANCE	MIN. EMBEDMENT
CONCRETE ANCHOR SCREW	JAMBS	3/8"	LDT TAPCON® (ITW BUILDEX)	3"	1-1/2"
	SILL	1/4"	TAPCON® (ITW BUILDEX) ULTRACON+® (DeWALT) TAPPER+® (POWERS)	2-1/2"	1-3/4"
CONCRETE SLEEVE ANCHOR	JAMBS	3/8"	DYNABOLT SLEEVE ANCHOR® (ITW REDHEAD)	2-1/4"	1-1/2"

Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409		PRODUCT:		LFS	UPDATE TO 8TH ED. (2023)	FBC
		VISION HOLLOW METAL		LFS	UPDATE TO 7TH ED. (2020)	FBC
BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813		PART OR ASSEMBLY:		LFS	ADJUST ANCHOR SPACING	
		FRAME ANCHORING		LFS	ADD 3 HINGE OPTIONS	
REVISIONS		NO.		DATE	DATE	DATE
		1		7/13/17	UPDATE TO 6TH ED. (2017)	FBC
DATE: 12/7/15						
SCALE: N.T.S.						
DWG. BY: JK						
CHK. BY: LFS						
DRAWING NO.: FL-19036.4						
SHEET 7 OF 10						

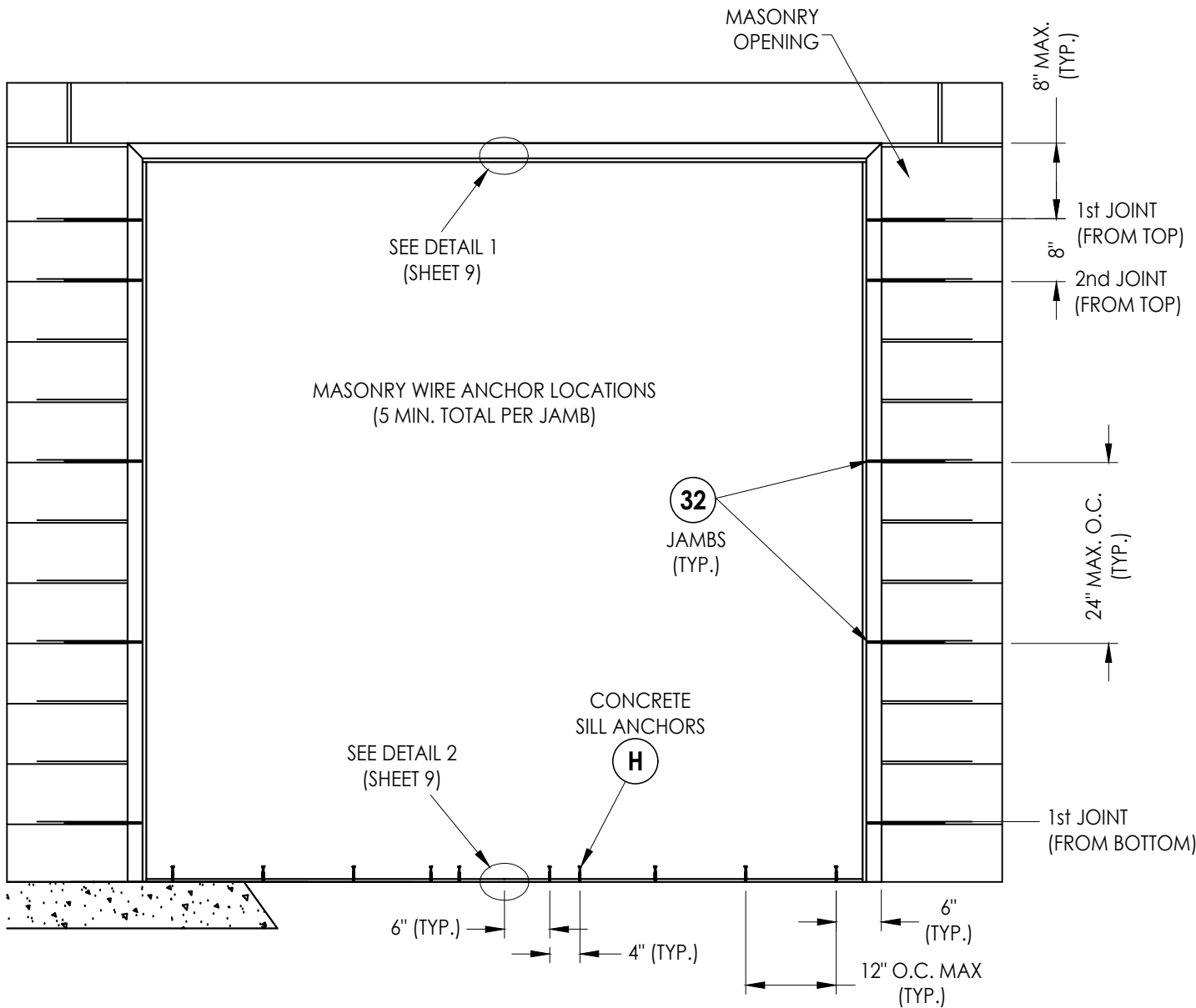
Z:\2023 FBC Drawings\Vision Hollow Metal\FL-19036 R9\FL-19036.4.dwg



FRAME ANCHORING

Masonry Construction
Masonry Wire Anchors

* THIS ANCHOR REQUIRED FOR
DESIGN PRESSURES > 50 PSF ONLY.



FRAME ANCHORING

Masonry Construction
Masonry Wire Anchors

CONCRETE ANCHOR NOTES:

- Concrete screw locations at the corners may be adjusted to maintain a minimum 1" edge distance to mortar joints. If concrete screw locations noted as "MAX. O.C." must be adjusted to maintain the minimum edge distance to mortar joints, additional concrete screws may be required to ensure the maximum on center dimension is not exceeded.
- Concrete anchor table:

ANCHOR TYPE	ANCHOR LOCATION	ANCHOR SIZE	MANUFACTURER	MIN. EDGE DISTANCE	MIN. EMBEDMENT
CONCRETE ANCHOR SCREW	SILL	1/4"	TAPCON® (ITW BUILDEX) ULTRACON+® (DeWALT) TAPPER+® (POWERS)	2-1/2"	1-3/4"

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

PRODUCT:
VISION HOLLOW METAL

DATE: 12/7/15

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

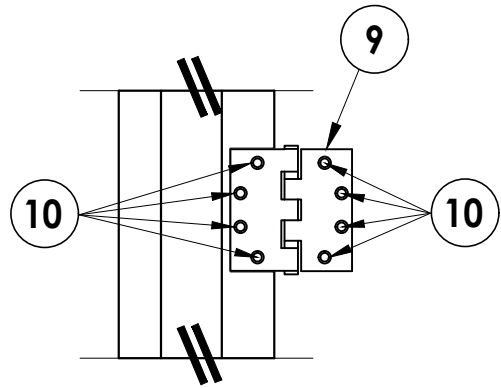
FL-19036.4

SHEET 8 OF 10

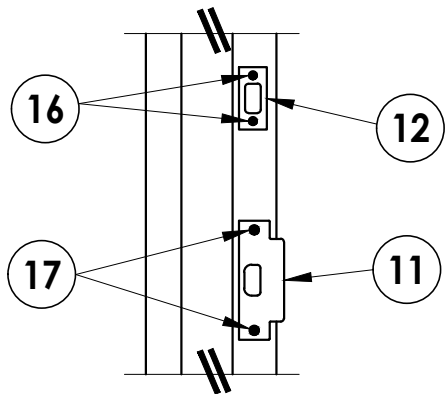
Building Consultants, Inc.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PART OR ASSEMBLY:
FRAME ANCHORING

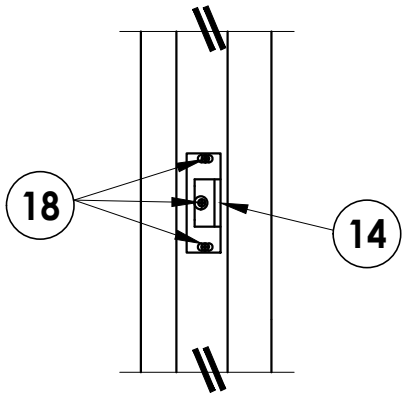
REVISIONS



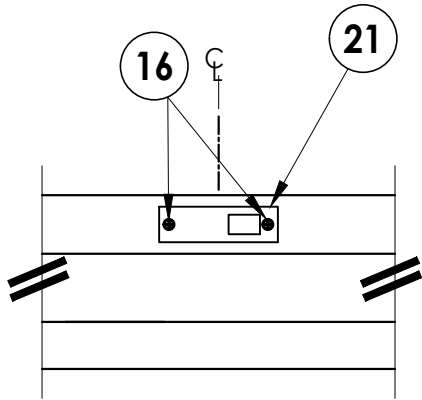
HINGE DETAIL



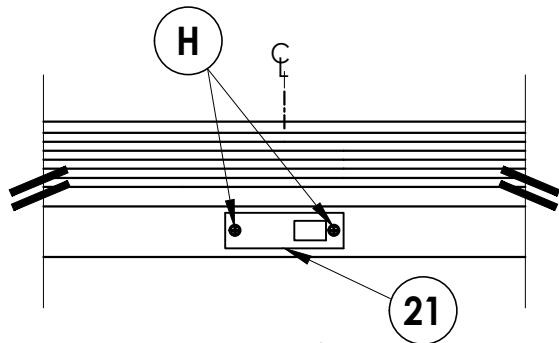
STRIKE DETAIL
Latch & Deadbolt



STRIKE DETAIL
Rim Exit Device



DETAIL 1
Flush Bolt Strike Plate @ Head
(Inactive Door Panel)



DETAIL 2
Flush Bolt Strike Plate @ Sill
(Inactive Door Panel)

DATE:	12/7/15
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-19036.4
SHEET	9 OF 10

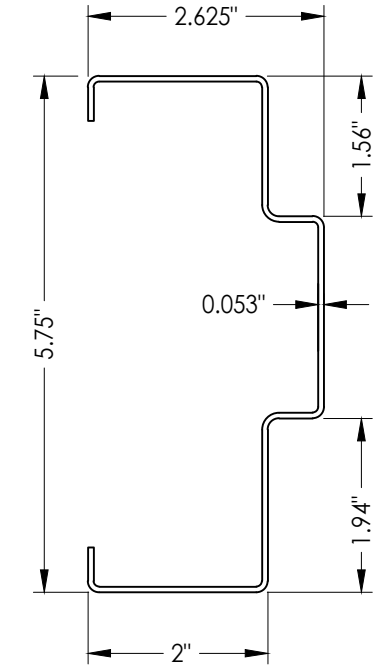
NO.	DATE	REVISIONS
6	7/05/23	UPDATE TO 8TH ED. (2023) FBC
5	9/08/20	UPDATE TO 7TH ED. (2020) FBC
4	11/5/19	ADJUST ANCHOR SPACING
3	8/15/19	ADD 3 HINGE OPTIONS
2	8/13/18	CLARIFY ANCHORING
1	7/13/17	UPDATE TO 6TH ED. (2017) FBC
NO.	DATE	BY

PRODUCT:	VISION HOLLOW METAL
PART OR ASSEMBLY:	HARDWARE DETAILS

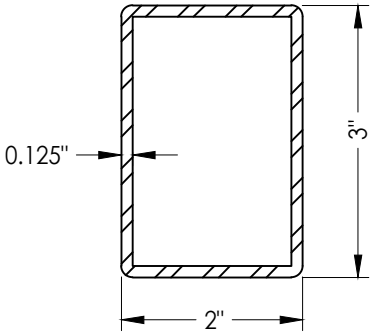
Documents Prepared By:	Lyndon F. Schmidt P.E. No. 43409
	<i>RW</i> BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813

Z:\2023 FBC Drawings\Vision Hollow Metal\FL-19036 R9\FL-19036.4.dwg

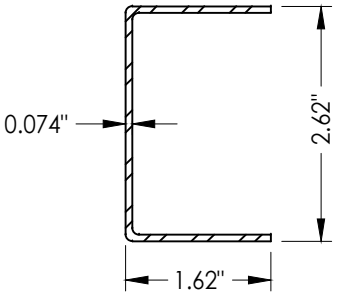
BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
B	2X STUD FRAMING (G>= 0.55)	WOOD
C	1/4" MAX. SHIM SPACE	-
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK (GROUT FILLED) CONFORMING TO ASTM C90	CONCRETE
H	1/4" X 1-3/4" PFH CONCRETE SCREW (SEE CONCRETE ANCHOR TABLE)	STEEL
J	3/8" X 5" PFH DYNABOLT SLEEVE ANCHOR (SEE CONCRETE ANCHOR TABLE)	STEEL
K	3/8" X 5" FH LAG SCREW (2-1/8" MIN. EMBEDMENT)	STEEL
L	3/8" Ø SMS (MUST PENETRATE MIN. 3 THREADS THROUGH STEEL STUD)	STEEL
M	3/8" X 5" LDT TAPCON CONCRETE SCREW (SEE CONCRETE ANCHOR TABLE)	STEEL
X	STEEL STUD (0.125" MIN. THK, Fu = 50 ksi, Fy = 33 ksi)	STEEL
1	HOLLOW METAL FRAME	-
2	REMOVABLE MULLION	STEEL
3	MULLION REINFORCEMENT (ASTM A36 STEEL)	STEEL
5	OUTSWING BUMP THRESHOLD	ALUM
6	ASTRAGAL	STEEL
7	WEATHERSTRIP (HAGER 736 PRESS-ON)	-
9	HINGE 4.5" X 4.5"	STEEL
10	#12-24 x 1/2" FH MACHINE SCREW	STEEL
11	LATCH STRIKE PLATE	STEEL
12	DEADBOLT STRIKE PLATE	STEEL
13	VERTICAL ROD STRIKE PLATE	STEEL
14	RIM EXIT DEVICE STRIKE	STEEL
16	#8 x 3/4" FH SCREWS	STEEL
17	#12 x 1" FH SCREWS	STEEL
18	#12 x 1-1/8" PH SMS	STEEL
20	HINGE REINFORCEMENT (10 GA.)	STEEL
21	FLUSH BOLT GUIDE (0.050" THK.)	STEEL
22	FLUSH BOLT FRAME REINFORCMENT (16 GA)	STEEL
30	EMA PIPE ANCHOR (18 GA)	STEEL
31	EMA BUTTERFLY ANCHOR (18 GA)	STEEL
32	MASONRY WIRE ANCHOR	STEEL
40	STEEL DOOR PANEL (8'-0" DOOR)	STEEL



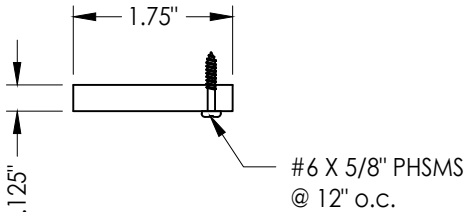
1 HOLLOW METAL FRAME



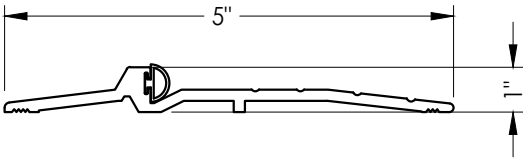
2 MULLION
LOCKWOOD MG 950F



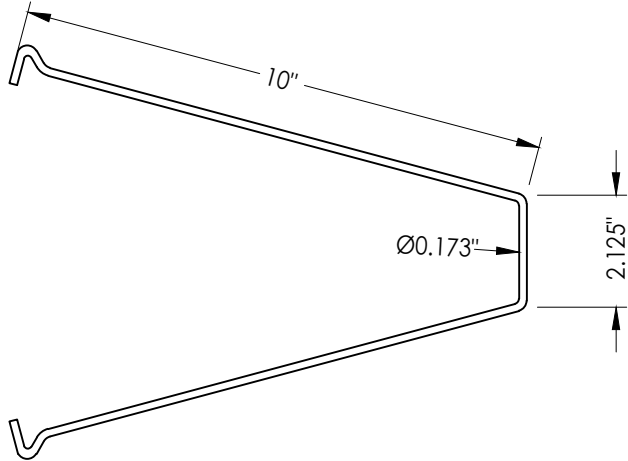
3 MULLION REINFORCEMENT



6 ASTRAGAL



5 OUTSWING BUMP THRESHOLD
HAGER 520S



32 MASONRY WIRE ANCHOR
60 KSI MIN.

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

RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:

VISION HOLLOW METAL

PART OR ASSEMBLY:

BILL OF MATERIALS
& COMPONENTS

NO.	DATE	REVISIONS
6	7/05/23	UPDATE TO 8TH ED. (2023) FBC
5	9/08/20	UPDATE TO 7TH ED. (2020) FBC
4	11/5/19	ADJUST ANCHOR SPACING
3	8/13/18	ADD 3 HINGE OPTIONS
2	8/13/18	CLARIFY ANCHORING
1	7/13/17	UPDATE TO 6TH ED. (2017) FBC

DATE: 12/7/15

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-19036.4

SHEET 10 OF 10