

Vision Hollow Metal Limited

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

LS2075 STEEL DOOR
IN swing / OUT swing
"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.

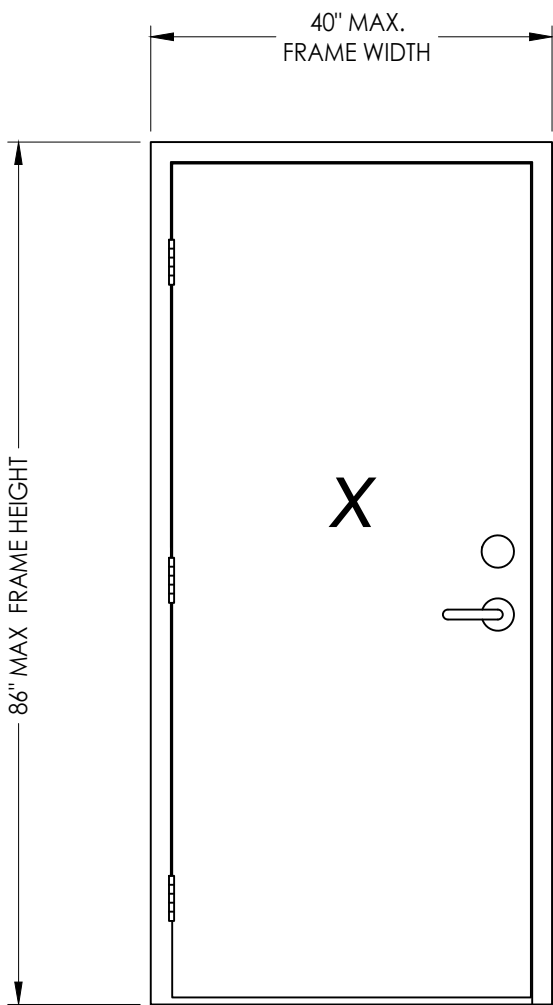
When used in areas outside of the "HVHZ" requiring wind borne debris protection, this product complies with FBC Sections 1609.1.2 & R301.2.1.2 and does not require an impact resistant covering. This product meets missile level "D" and includes Wind Zone 4 as defined in ASTM E 1996 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.
5.

Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.
6.

This product does 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.
7.

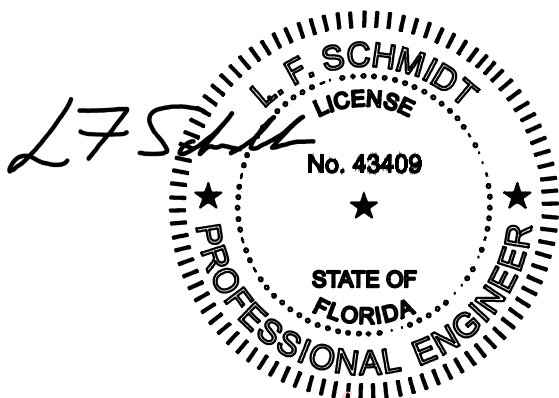
When used in the "HVHZ", steel must be protected as specified in FBC Section 2222.6

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



CYLINDRICAL LOCK & DEADBOLT

MAX. OVERALL DIMENSION	DESIGN PRESSURE (PSF) IN swing		DESIGN PRESSURE (PSF) OUT swing	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
40.0" X 86.0"	+50.0	-60.0	+55.0	-55.0



Digitally signed by Lyndon F Schmidt
Date: 2023.07.05 15:55:32 -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

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

PRODUCT:
VISION HOLLOW METAL

37/05/23UPDATE TO 8TH ED. (2023) FBC

29/08/20UPDATE TO 7TH ED. (2020) FBC

111/5/19ADJUST ANCHOR SPACING

NO. DATE

REVISIONS

Part or Assembly:
TYPICAL ELEVATIONS, DESIGN PRESSURES & GENERAL NOTES

DATE: 7/08/18

SCALE: N.T.S.

DWG. BY: JK

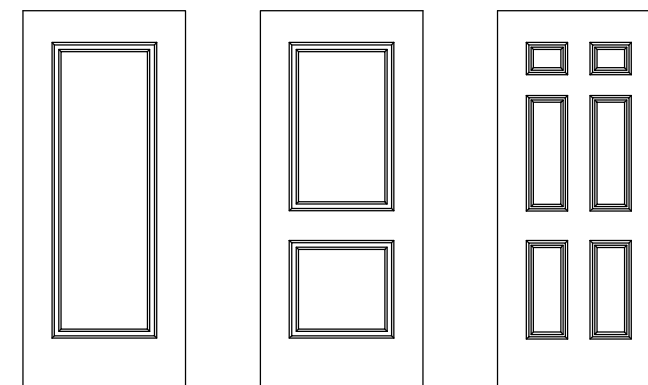
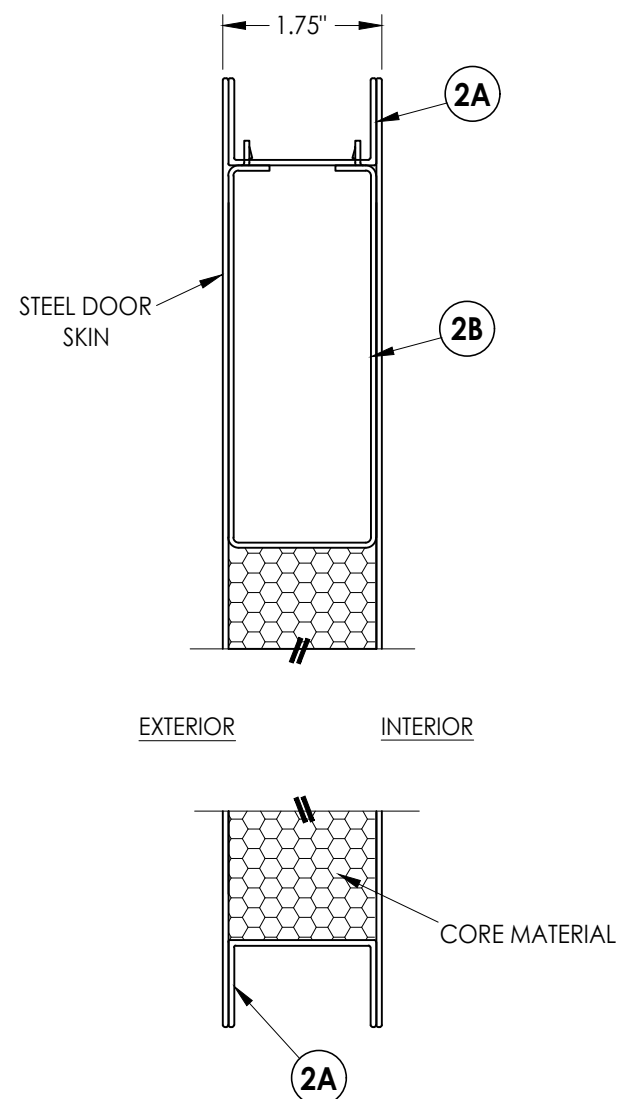
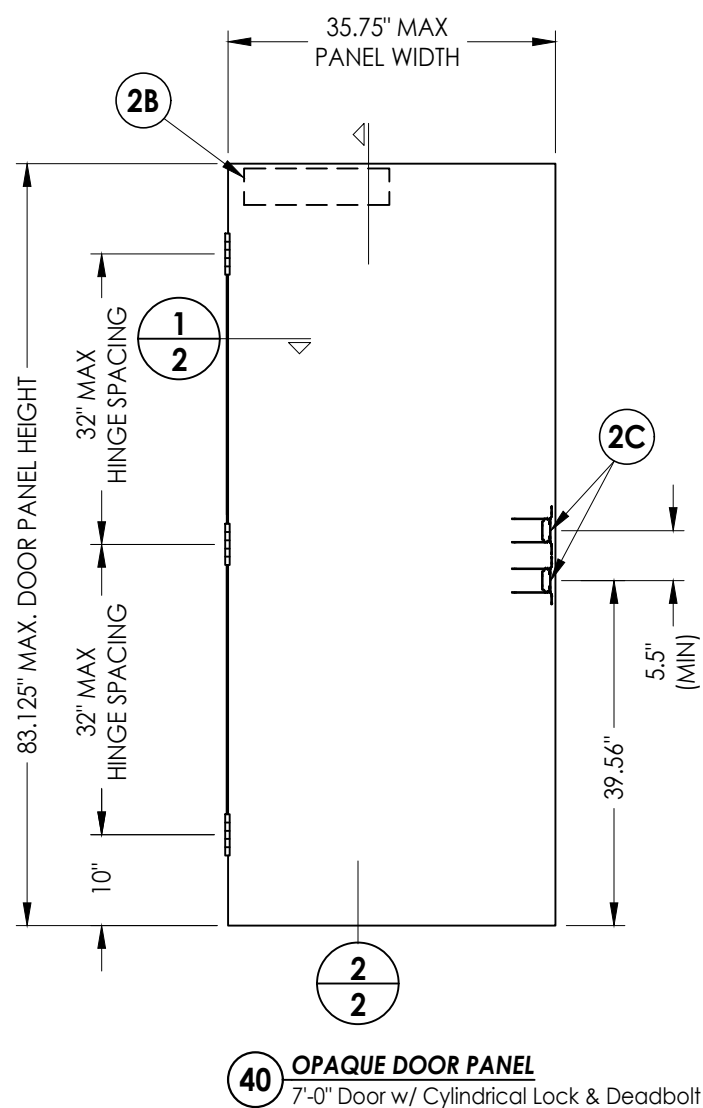
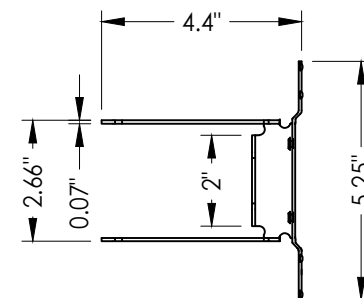
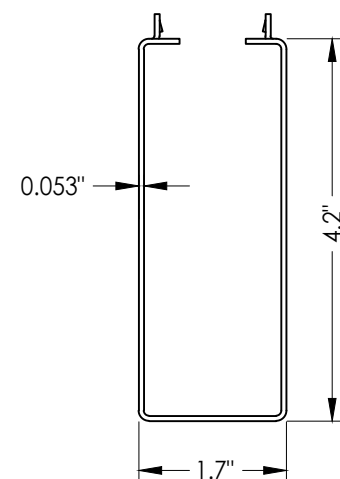
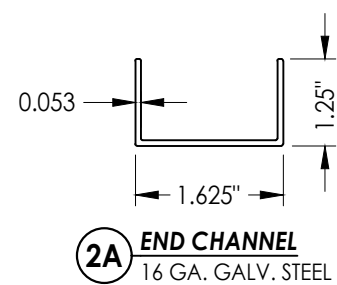
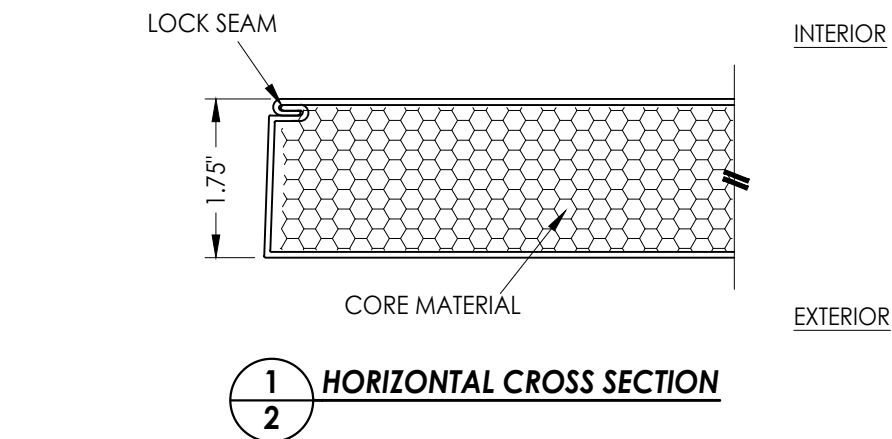
CHK. BY: LFS

DRAWING NO.: FL-19036.5

SHEET 1 OF 8

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

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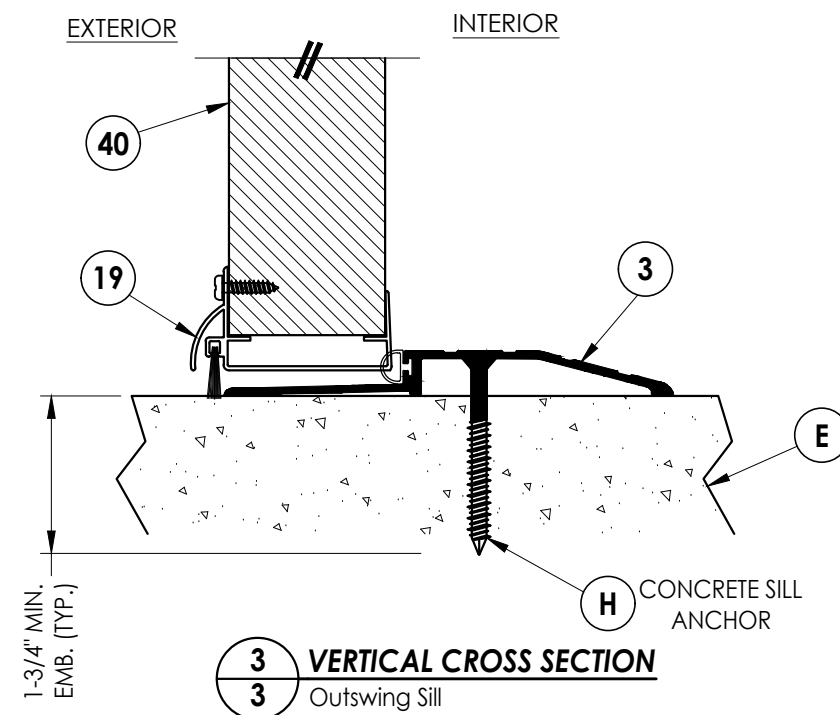
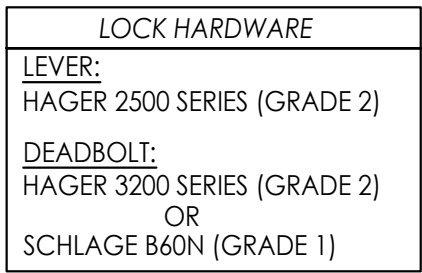
OPTIONAL EMBOSSED PANELS

STEEL DOOR SKIN: 20 GA. (MIN. 0.032" THK.) GALV. STEEL (Fy = 50,700 PSI MIN.)
CORE MATERIAL: HONEYCOMB CORE OR EPS FOAM (POLYSTYRENE - 1.0 PCF MIN. DENSITY)

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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

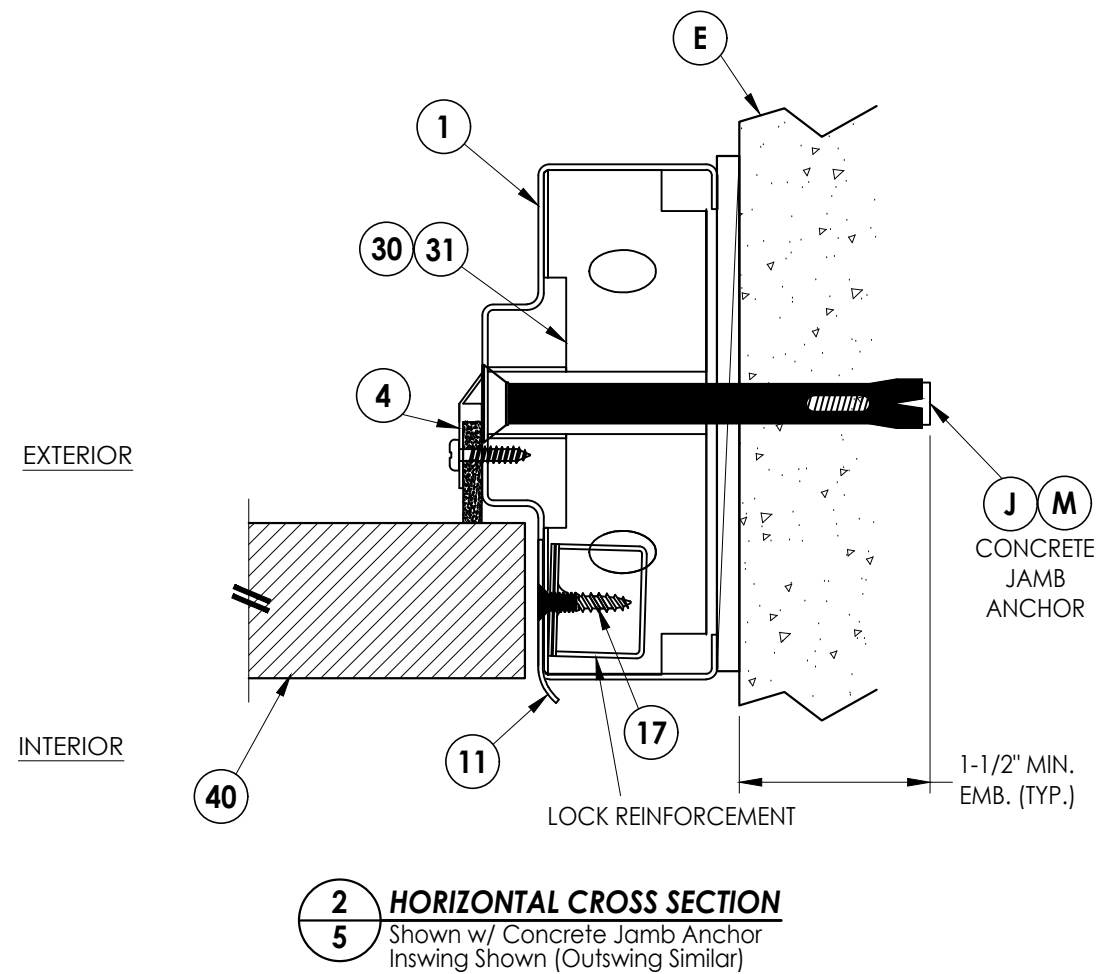
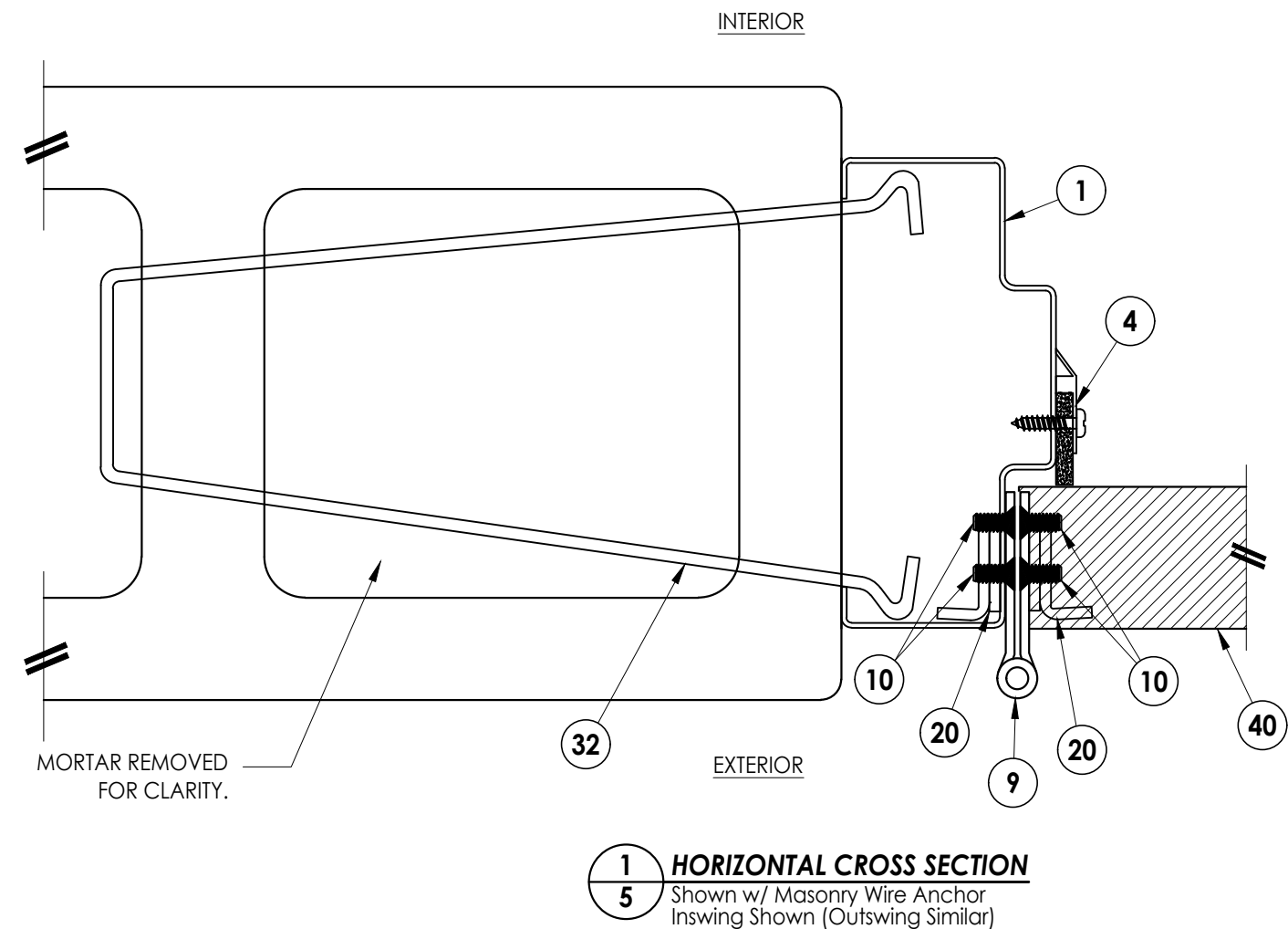
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This diagram illustrates a horizontal cross-section of a window assembly. The exterior side (top) features a layer of DRYWALL, a CAULK TYP.) joint, and a window frame. The interior side (bottom) shows the window frame, a window pane, and a layer of EXT. SHEATHING. Various components are labeled with circled numbers: 1 (top exterior frame), 33 (interior frame), 10 (window pane), 20 (window pane), 9 (window pane), and 40 (interior frame). Callouts X, B, P, and F point to specific details on the exterior side.

NOTE: THE WOOD/STEEL STUD STRAP ANCHOR IS NOT QUALIFIED FOR USE IN THE "HVHZ".

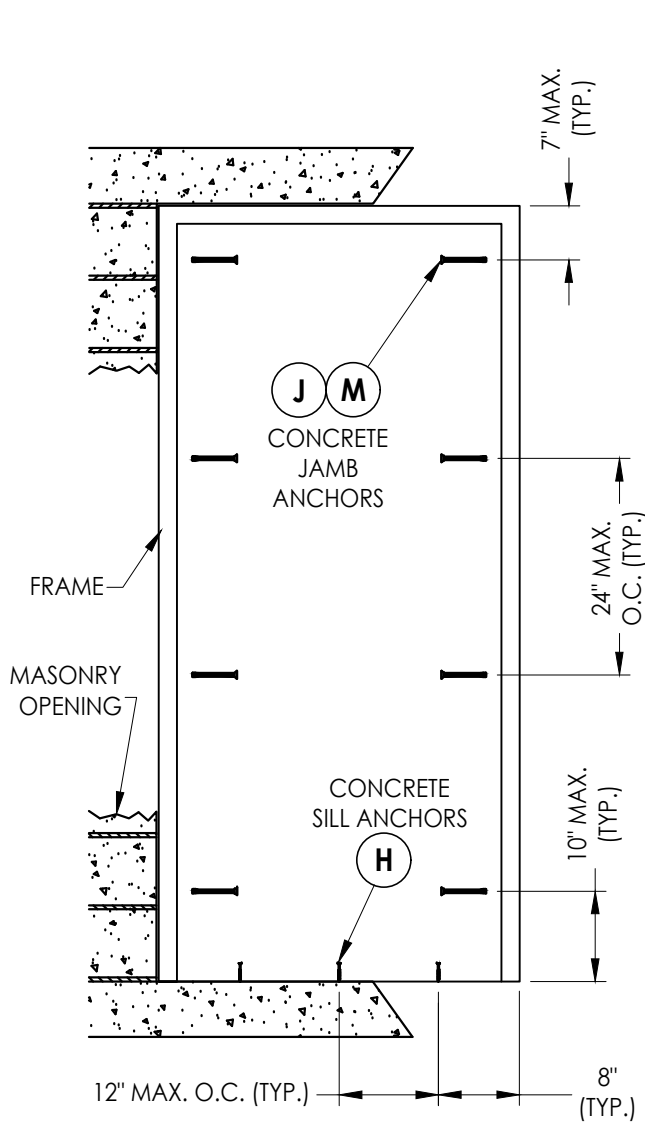
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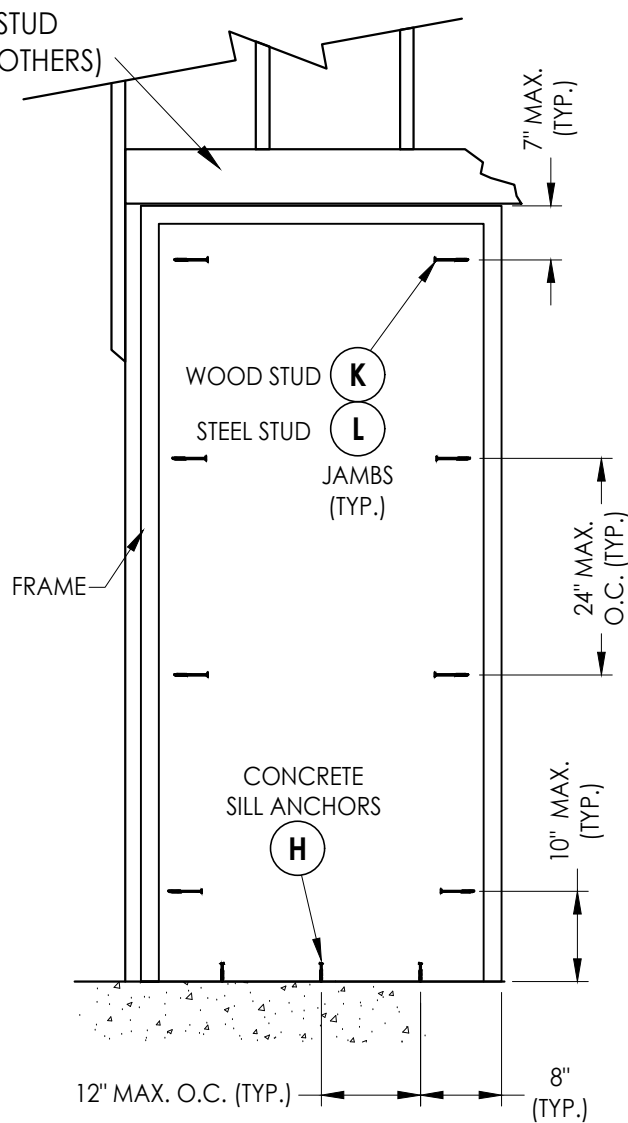
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Z:\2023 FBC Drawings\Vision Hollow Metal\FL-19036 R9\FL-19036.5.dwg



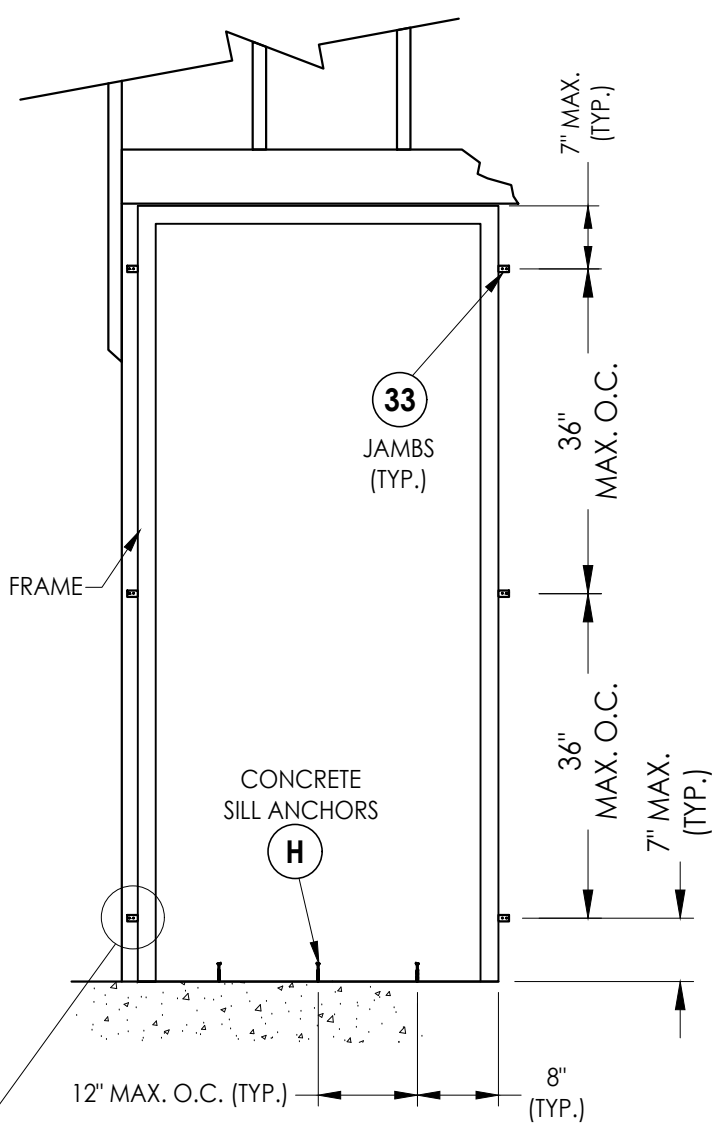
FRAME ANCHORING

Masonry Construction
Concrete Anchors



FRAME ANCHORING

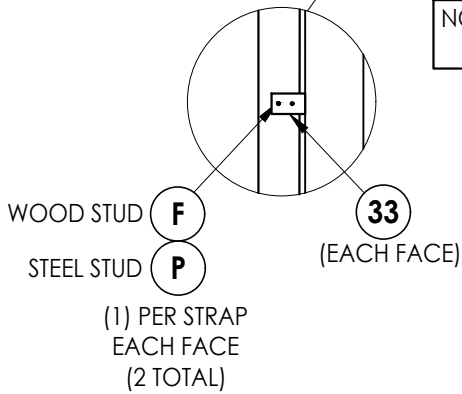
Wood/Steel Stud
Through the Frame



FRAME ANCHORING

Wood/Steel Stud
Strap Anchors

NOTE: WOOD/STEEL STUD STRAP ANCHOR INSTALLATION
IS NOT QUALIFIED FOR USE IN THE "HVHZ"



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"

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PRODUCT:
VISION HOLLOW METAL

PART OR ASSEMBLY:
FRAME ANCHORING

NO.	DATE	REVISIONS
3	7/05/23	UPDATE TO 8TH ED. (2023) FBC LFS
2	9/08/20	UPDATE TO 7TH ED. (2020) FBC LFS
1	11/5/19	ADJUST ANCHOR SPACING LFS
		BY

DATE: 7/08/18

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:
FL-19036.5

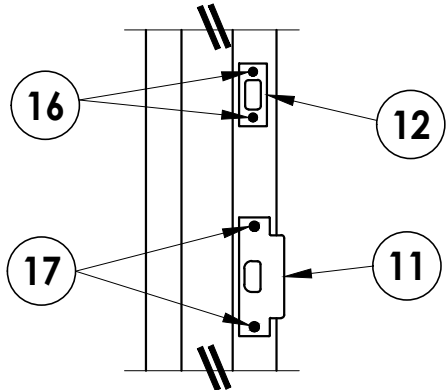
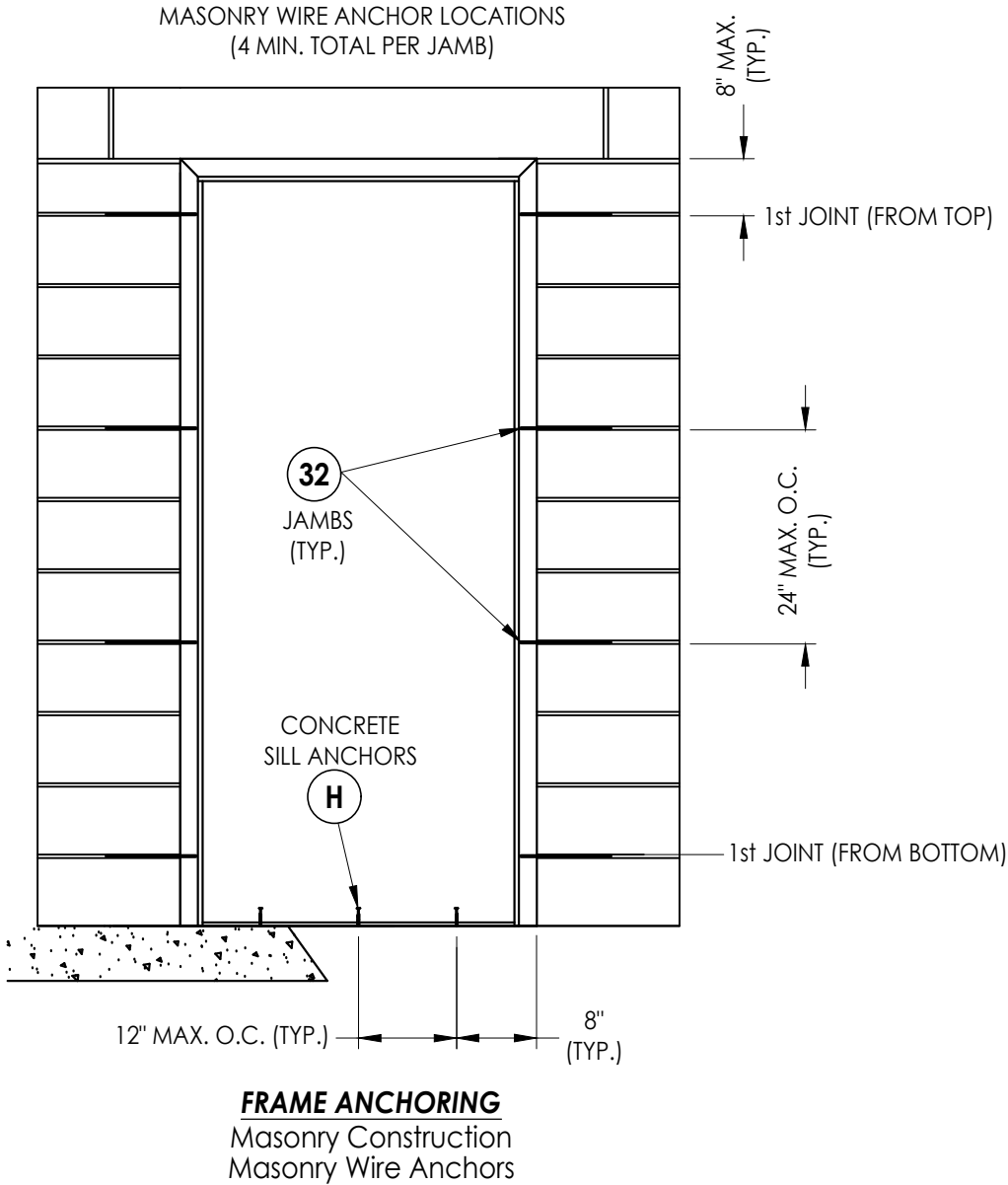
SHEET 6 OF 8

Z:\2023 FBC Drawings\Vision Hollow Metal\FL-19036 R9\FL-19036.5.dwg

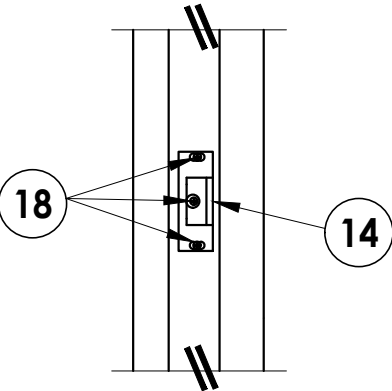
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2. Concrete anchor table:

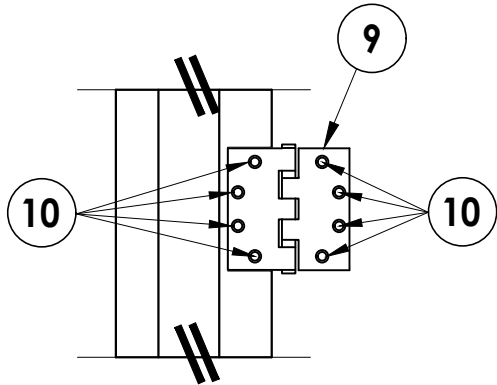
ANCHOR TYPE	ANCHOR LOCATION	ANCHOR SIZE	MANUFACTURER	MIN. EDGE DISTANCE	MIN. EMBEDMENT
CONCRETE ANCHOR SCREW	SILL	1/4"	TAPCON® (ITW BUILDEX) ULTRACON+® (DeWALT) TAPPER+® (POWERS)	2-1/2"	1-3/4"



STRIKE DETAIL
Latch & Deadbolt



STRIKE DETAIL
Rim Exit Device



HINGE DETAIL

Documents Prepared By:
Lyndon F. Schmidt
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PART OR ASSEMBLY:
FRAME ANCHORING

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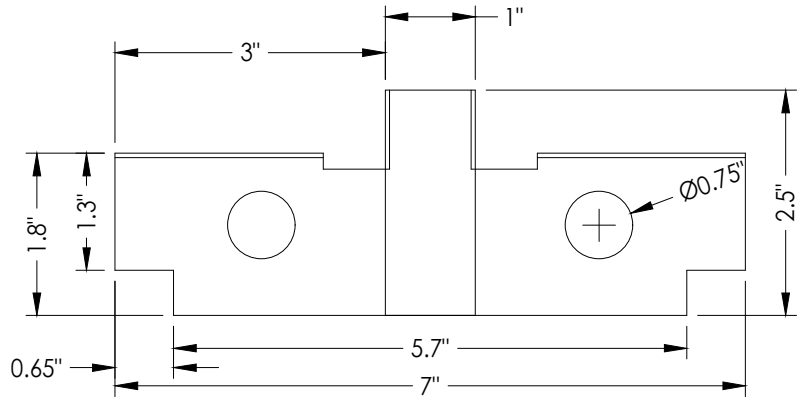
CHK. BY: LFS

DRAWING NO.:
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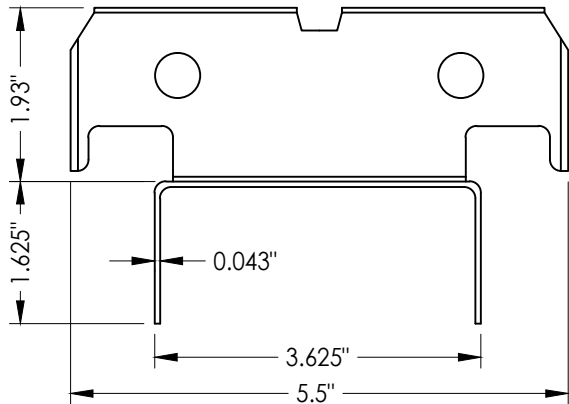
SHEET 7 OF 8

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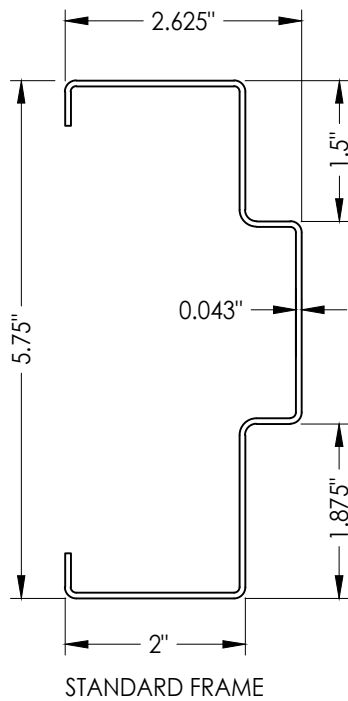
BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
B	2X STUD FRAMING (G>= 0.55)	WOOD
C	1/4" MAX. SHIM SPACE	-
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK (GROUT FILLED) CONFORMING TO ASTM C90	CONCRETE
F	#8 X 1-1/2" PFH WOOD SCREW (1-3/8" MIN. EMBEDMENT)	STEEL
H	1/4" X 1-3/4" 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
P	#10 X 1-1/2" FH SELF-DRILLING SMS (MUST PENETRATE MIN. 3 THREADS THROUGH STEEL STUD)	STEEL
X	STEEL STUD (0.125" MIN. THK, Fu = 50 ksi, Fy = 33 ksi)	STEEL
1	HOLLOW METAL FRAME	STEEL
3	OUTSWING THRESHOLD (HAGER 477S)	ALUM
4	FRAME WEATHERSTRIP (HAGER 875S)	-
5	ADA THRESHOLD	ALUM
6	WEATHERSTRIP (Q-LON)	-
7	WEATHERSTRIP (HAGER 736 PRESS-ON)	-
8	DOOR BOTTOM WEATHERSTRIP	-
9	HINGE (4" X 4" OR 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
16	#8 x 3/4" FH SCREWS	STEEL
17	#12 x 1" FH SCREWS	STEEL
18	#12 x 1-1/8" PH SMS	STEEL
19	DOOR BOTTOM SHOE (NGP 95WH)	-
20	HINGE REINFORCEMENT (10 GA.)	STEEL
30	EMA PIPE ANCHOR (18 GA)	STEEL
31	EMA BUTTERFLY ANCHOR (18 GA)	STEEL
32	MASONRY WIRE ANCHOR	STEEL
33	STUD STRAP ANCHOR	STEEL
40	STEEL DOOR PANEL (7'-0" DOOR)	STEEL



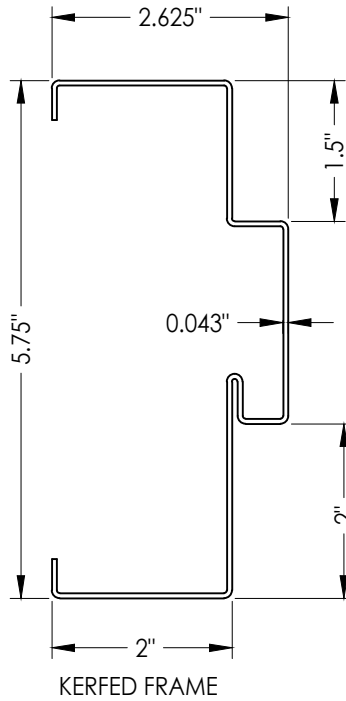
31 EMA BUTTERFLY FRAME ANCHOR



33 STUD STRAP ANCHOR

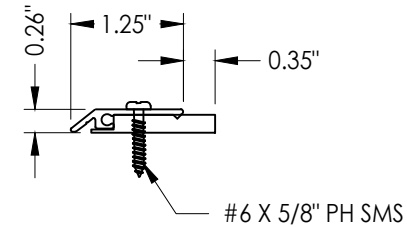


STANDARD FRAME

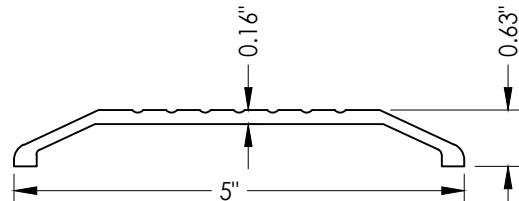


KERFED FRAME

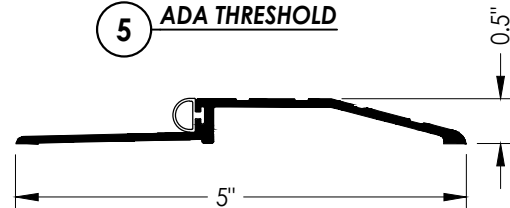
1 HOLLOW METAL FRAME



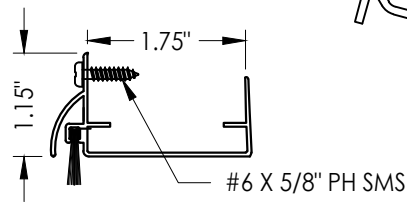
4 FRAME WEATHERSTRIP



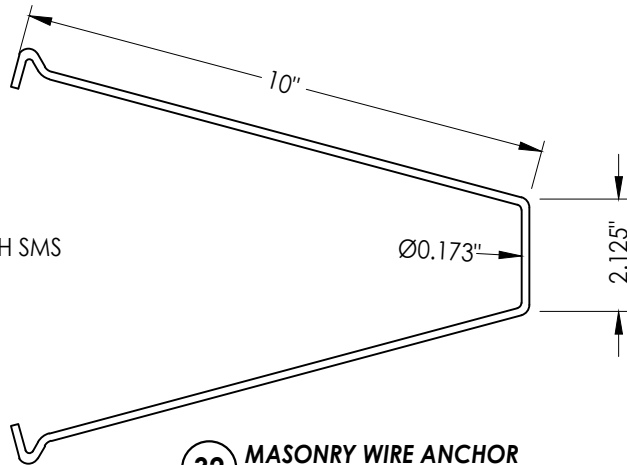
5 ADA THRESHOLD



3 OUTSWING BUMP THRESHOLD



19 FRAME WEATHERSTRIP



32 MASONRY WIRE ANCHOR
60 KSI MIN.

Documents Prepared By:
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P.O. Box 230, Valrico, FL 33595
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FBPE Registry No. 9813

PRODUCT:
VISION HOLLOW METAL

PART OR ASSEMBLY:
BILL OF MATERIALS
& COMPONENTS

NO.	DATE	BY	REVISIONS
3	7/05/23	LFS	UPDATE TO 8TH ED. (2023) FBC
2	9/08/20	LFS	UPDATE TO 7TH ED. (2020) FBC
1	11/5/19	LFS	ADJUST ANCHOR SPACING

DATE: 7/08/18

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

FL-19036.5

SHEET 8 OF 8