

Clark Hall Iron Doors

GLAZED IRON SINGLE DOOR w/ & w/out SIDELITES

INSWING/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 excluding the "High Velocity Hurricane Zone" (HVHZ).
2.

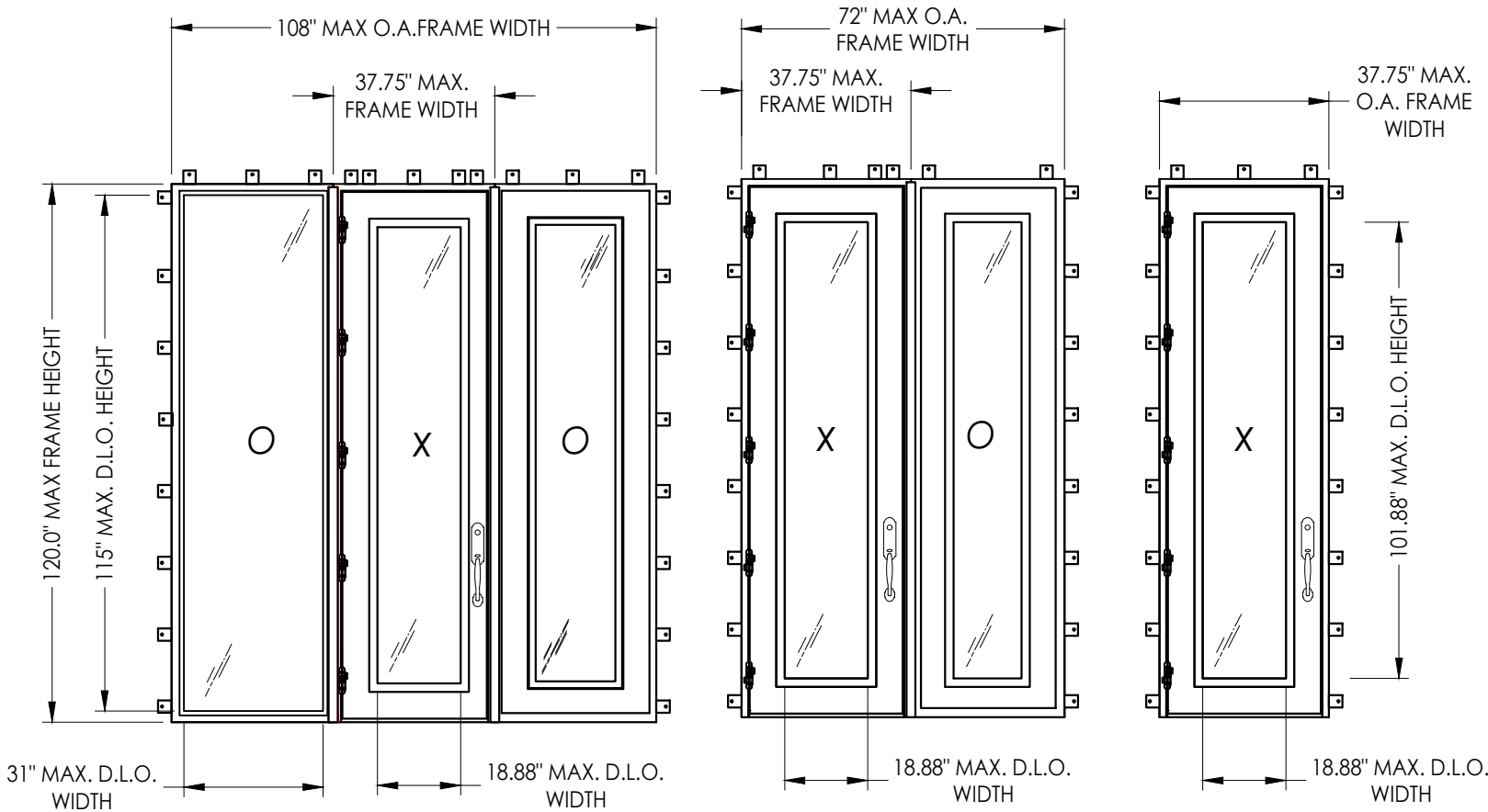
Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
3.

When used in areas 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 E1996 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.
4.

For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
5.

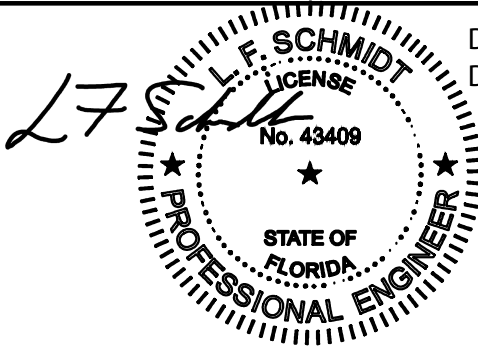
Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.

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SHEET#	DESCRIPTION
1	Typical elevations, design pressures, & general notes
2	Door panel details
3	Sidelite panel details
4	Glazing details
5	Elevations
6	Horizontal cross sections
7	Vertical cross sections
8	Buck anchoring
9	Frame anchoring
10	Components
11	Bill of materials & components



CONFIGURATION	OVERALL FRAME DIMENSION	DESIGN PRESSURE (PSF)			
		INSWING		OUTSWING	
		POS.	NEG.	POS.	NEG.
X	37.75" x 120.0"	+75.0	-75.0	+75.0	-75.0
OX or XO	72.0" x 120.0"	+75.0	-75.0	+75.0	-75.0
OXO	72.0" x 120.0"	+75.0	-75.0	+75.0	-75.0

NOTE: See Sheets 4 & 5 for glazing and lock hardware design pressure limitations.



Digitally signed by Lyndon F Schmidt
Date: 2023.07.05 08:29:04 -04'00'

This item has been digitally signed and sealed by
L. F. Schmidt, P.E. on the date adjacent to the seal.
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THIS PRODUCT APPROVAL IS VALID
ONLY FOR THE STATE OF FLORIDA

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

PRODUCT:
CLARK HALL IRON DOORS

DATE: 10/30/13

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:
FL-16663.8

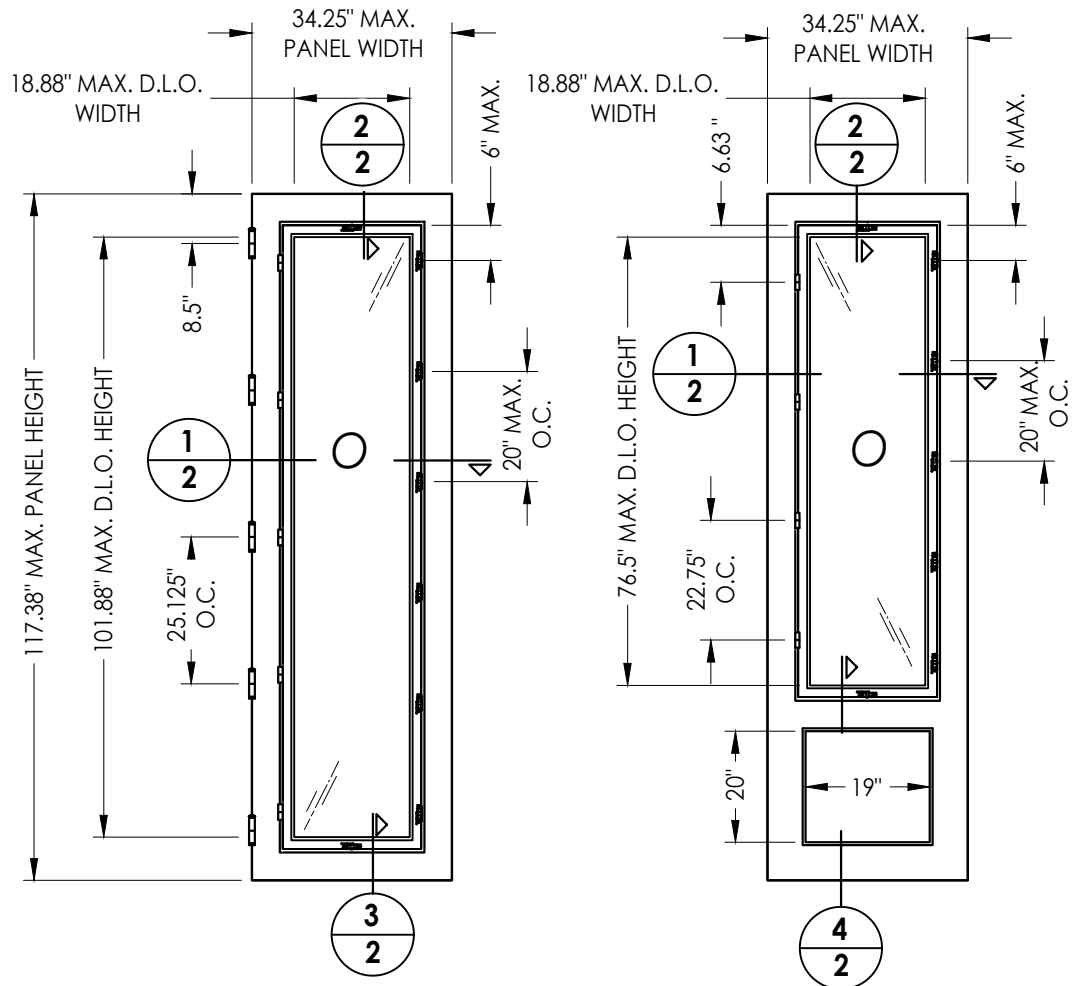
SHEET 1 OF 11

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

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

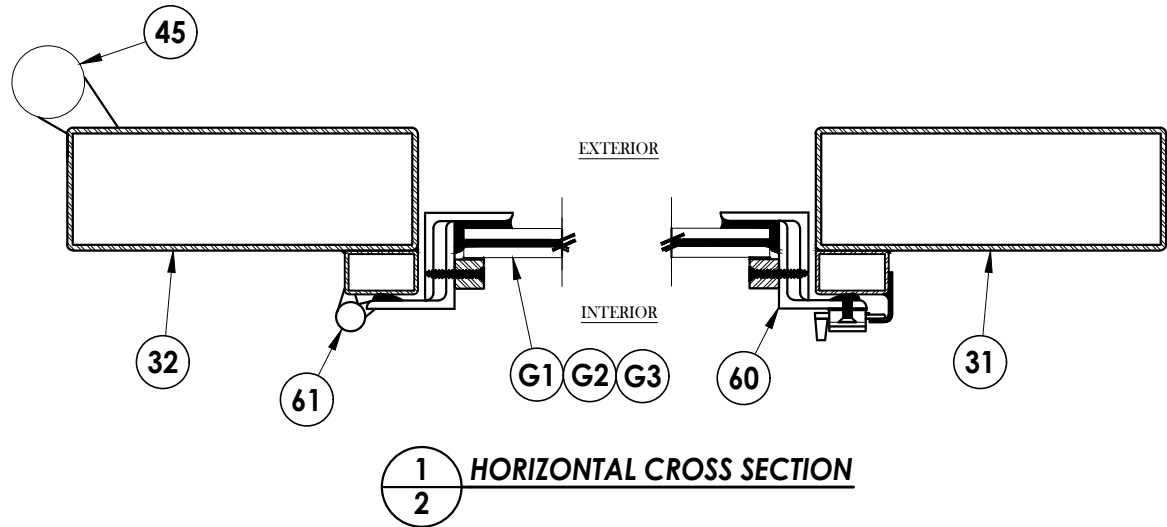
REVISIONS

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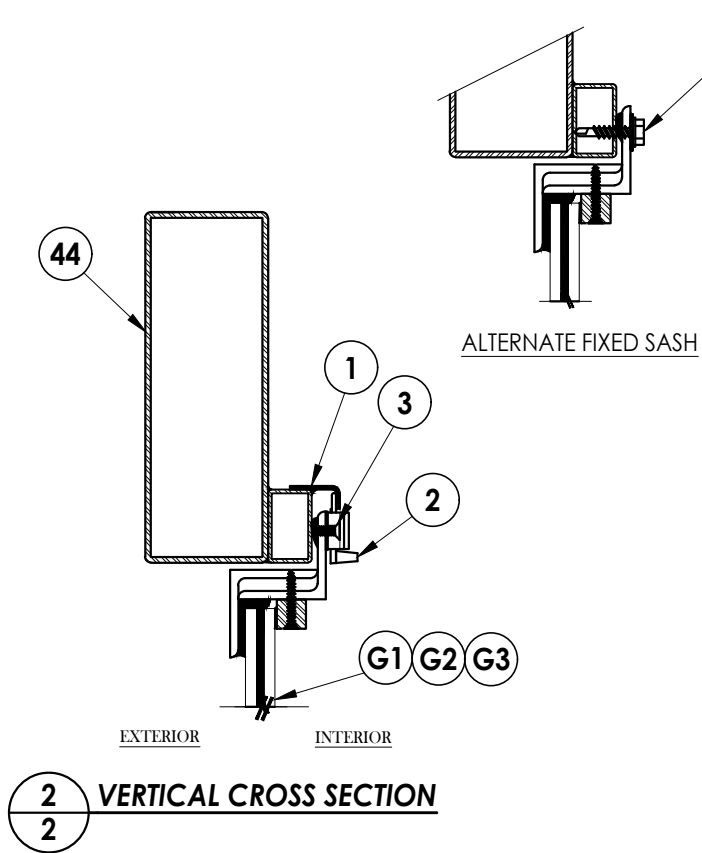


30 DOOR PANEL
w/ Operable Sash

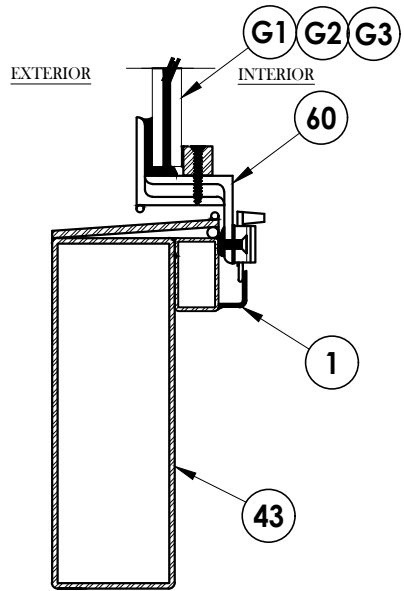
40 3/4 LITE DOOR PANEL
w/ Operable Sash



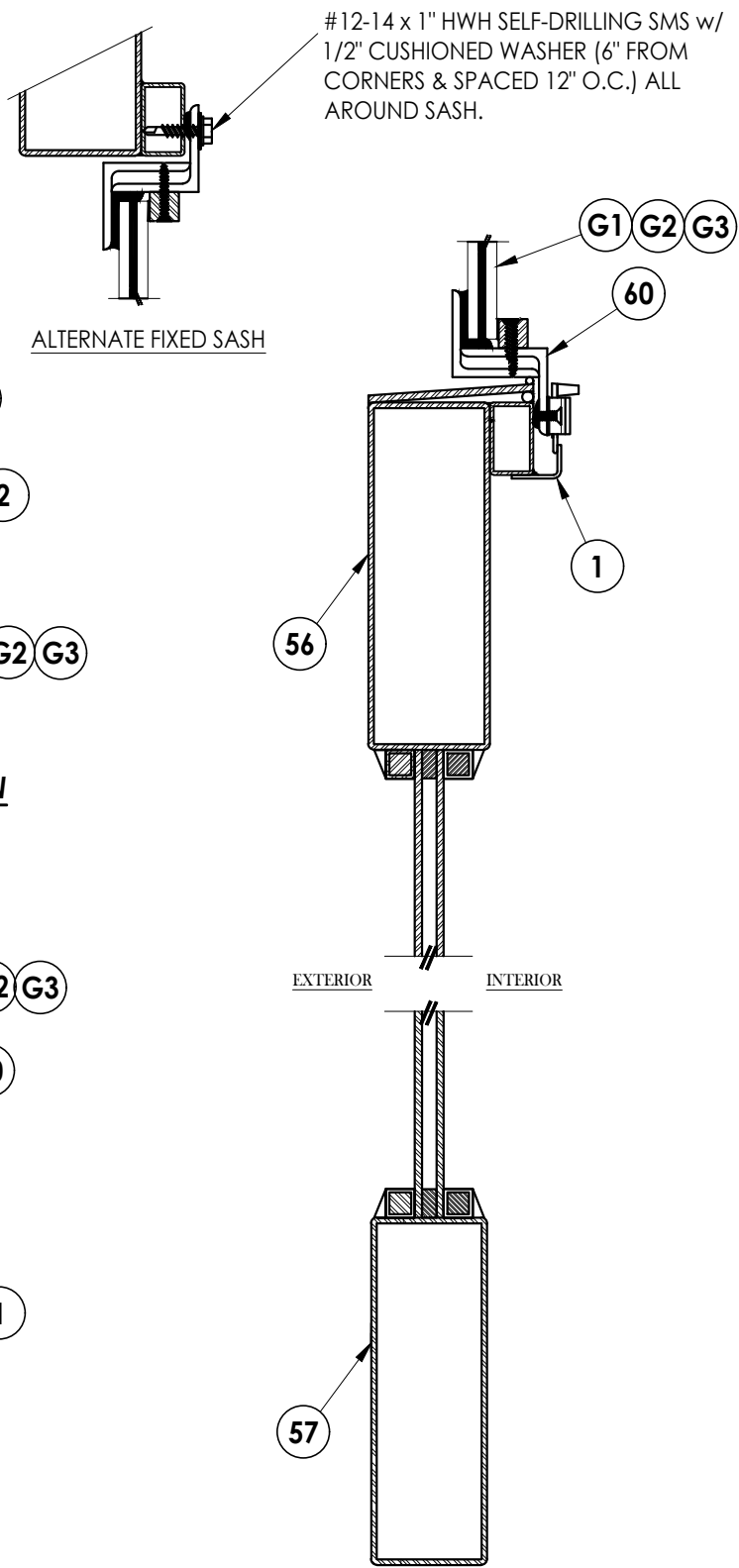
1/2 HORIZONTAL CROSS SECTION



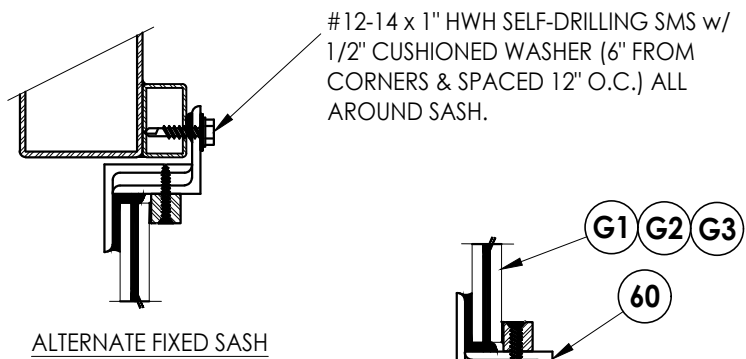
2/2 VERTICAL CROSS SECTION



3/2 VERTICAL CROSS SECTION



4/2 VERTICAL CROSS SECTION



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PRODUCT:
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NO.	DATE	REVISIONS
4	7/05/23	UPDATE TO 8TH ED. (2023) FBC
3	9/09/20	UPDATE TO 7TH ED. (2020) FBC
2	8/30/17	UPDATE TO 6TH ED. (2017) FBC
1	8/17/15	UPDATE TO 5TH ED. (2014) FBC

DATE: 11/8/13

SCALE: N.T.S.

DWG. BY: JK

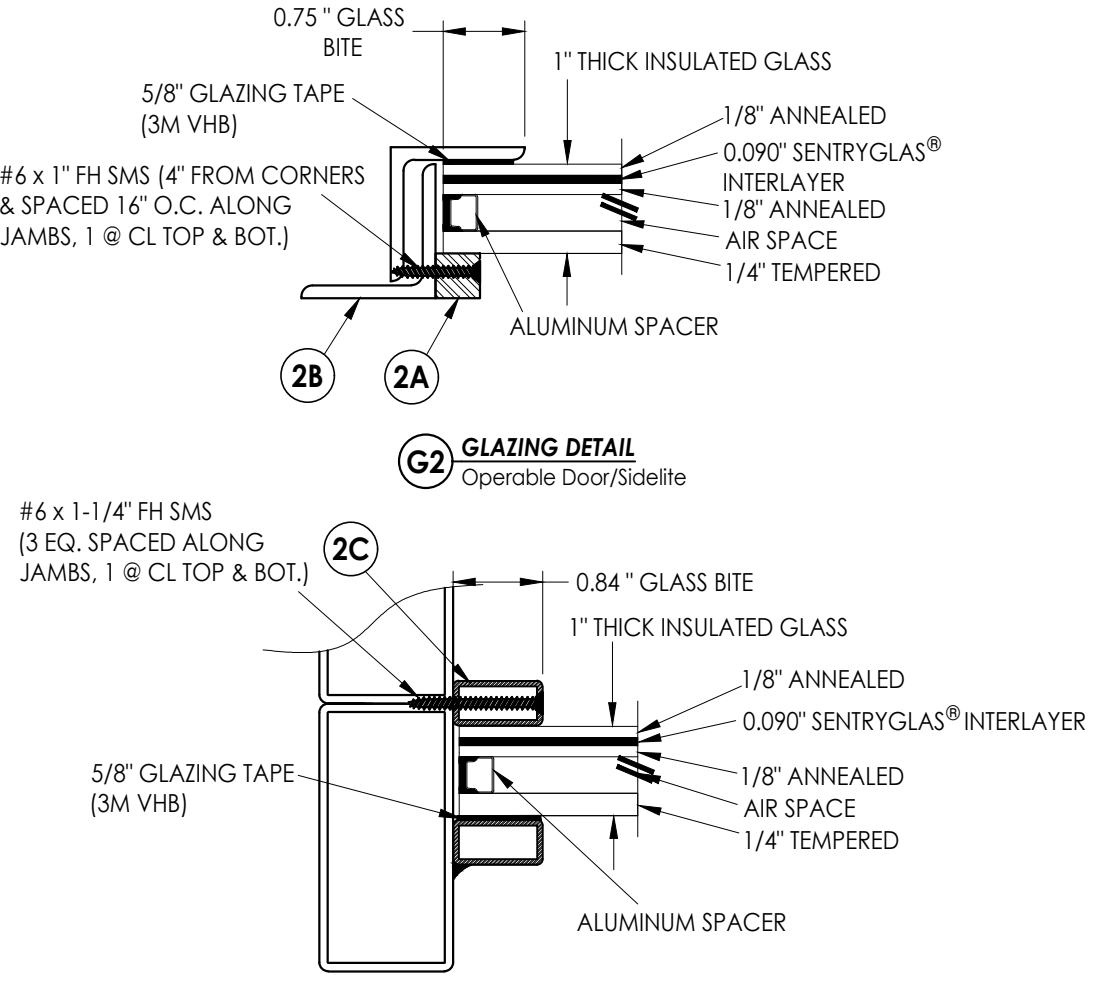
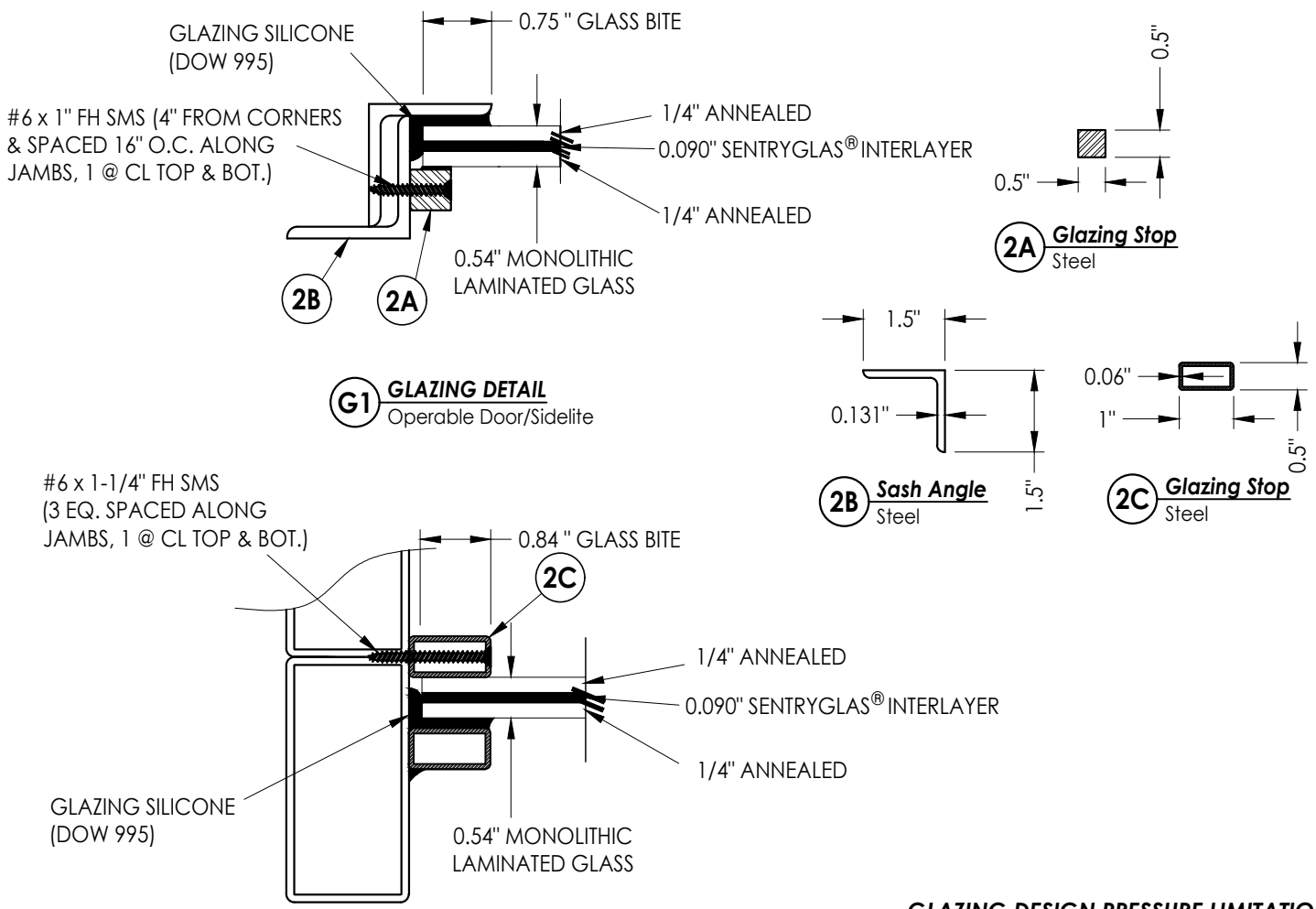
CHK. BY: LFS

DRAWING NO.: FL-16663.8

SHEET 2 OF 11

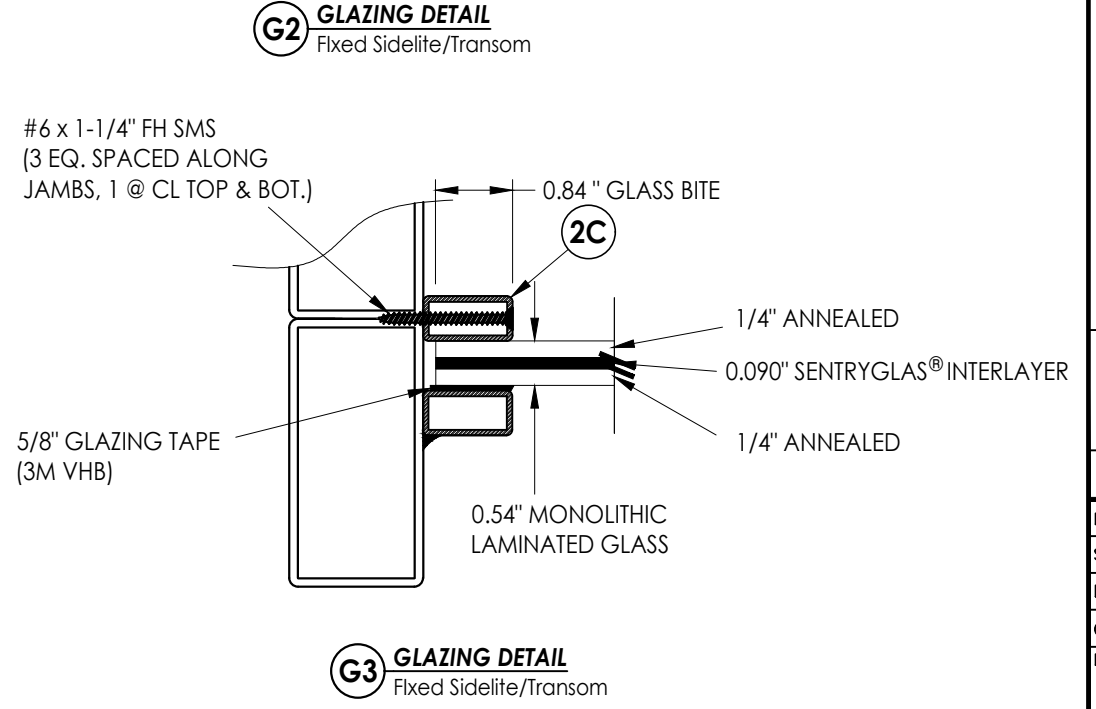
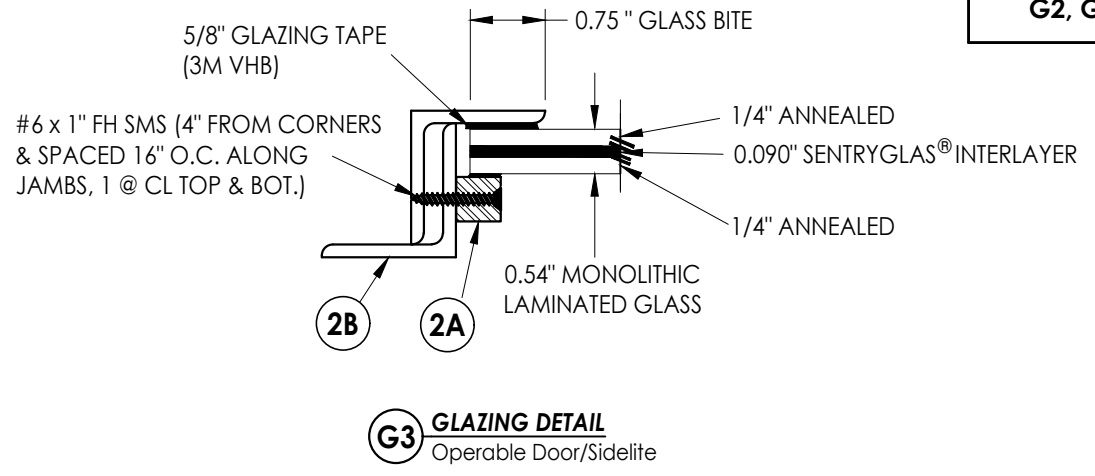
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GLAZING DESIGN PRESSURE LIMITATIONS

GLAZING	MAX. DESIGN PRESSURE (PSF)	
	POS.	NEG.
G1	+75.0	-75.0
G2, G3	+65.0	-65.0



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CLARK HALL IRON DOORS

GLAZING DETAILS

4	7/05/23	UPDATE TO 8TH ED. (2023)	FBC	LFS
3	9/09/20	UPDATE TO 7TH ED. (2020)	FBC	LFS
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1	8/17/15	UPDATE TO 5TH ED. (2014)	FBC	LFS
NO.	DATE			BY

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DATE: 11/8/13

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SHEET 4 OF 11

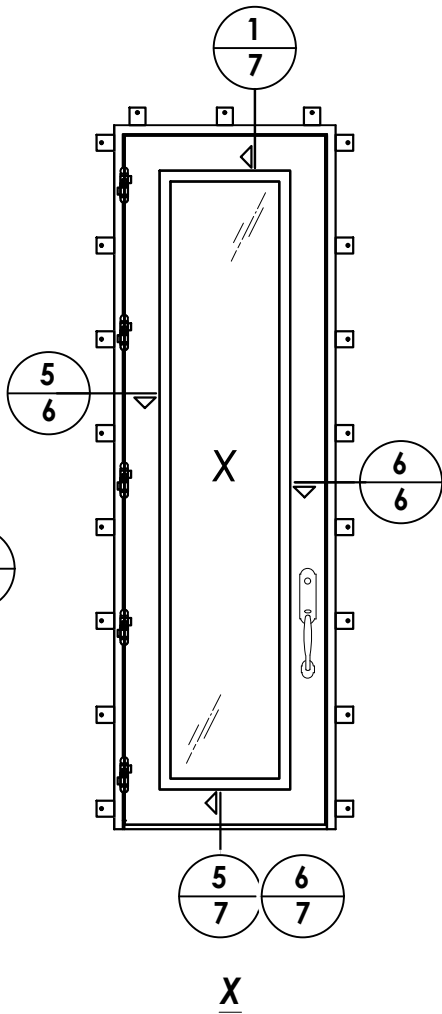
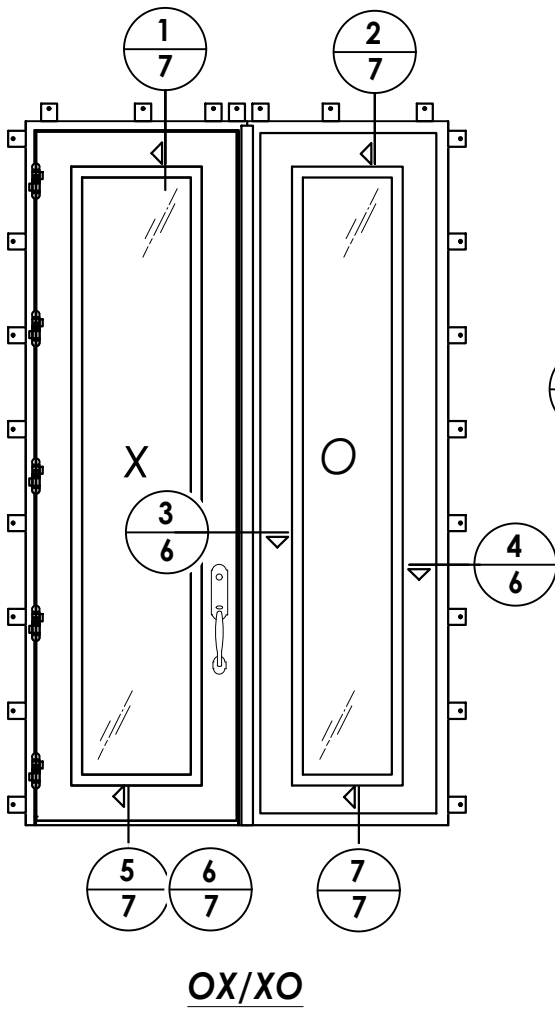
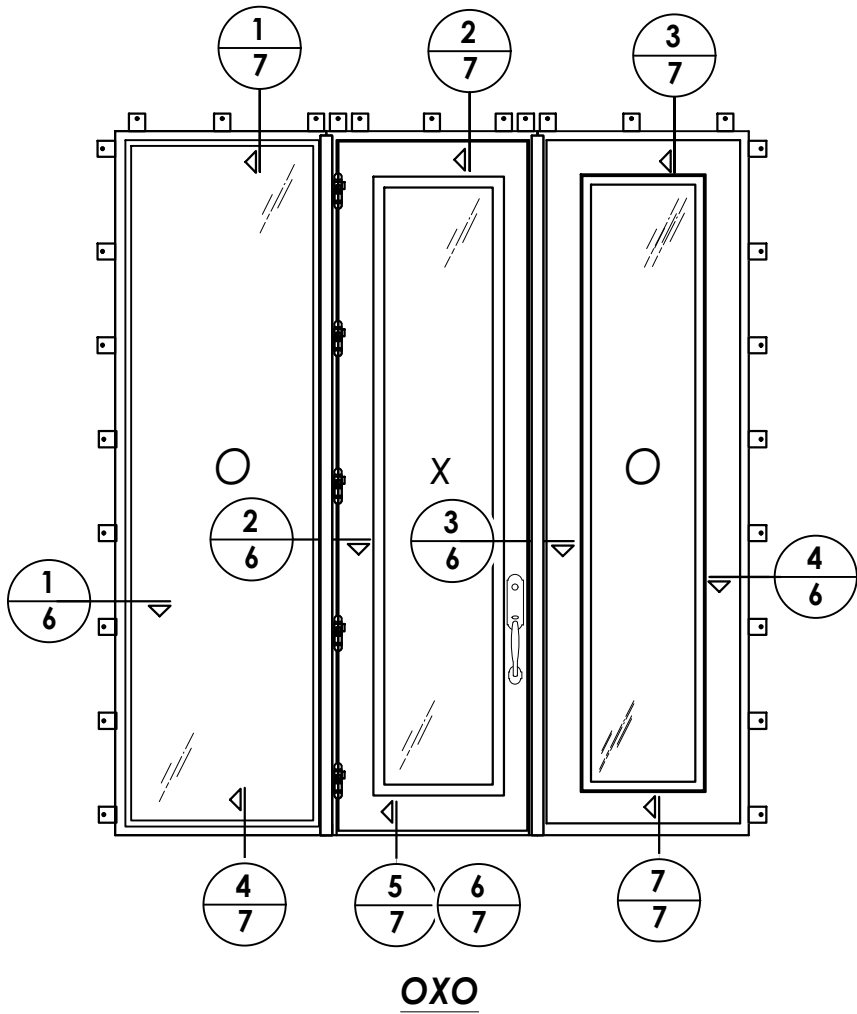
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LOCK HARDWARE DESIGN PRESSURE LIMITATIONS

MANUFACTURER	MODEL	MAX. DESIGN PRESSURE (PSF)	
		POS.	NEG.
EMTEK	TUBULAR ENTRY SET (SHERIDAN - 451812)	+75.0	-75.0
SUN VALLEY BRONZE ACCURATE LOCK & HARDWARE	LEVER/KNOB ENTRY SET (RIDGE: CS-421PLD) MORTISE LOCK	+65.0	-65.0
ASHLEY NORTON	TUBULAR ENTRY SET (SQTUB w/ 900 SERIES KNOB)	+65.0	-65.0
ASHLEY NORTON ACCURATE LOCK & HARDWARE	MORTISE LOCK (SQMOR w/ 900 SERIES KNOB) MORTISE LOCK	+65.0	-65.0



NO.	DATE	REVISIONS	
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1	8/17/15	UPDATE TO 5TH ED. (2014) FBC	LFS

DATE: 10/30/13

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FL-16663.8

SHEET 5 OF 11

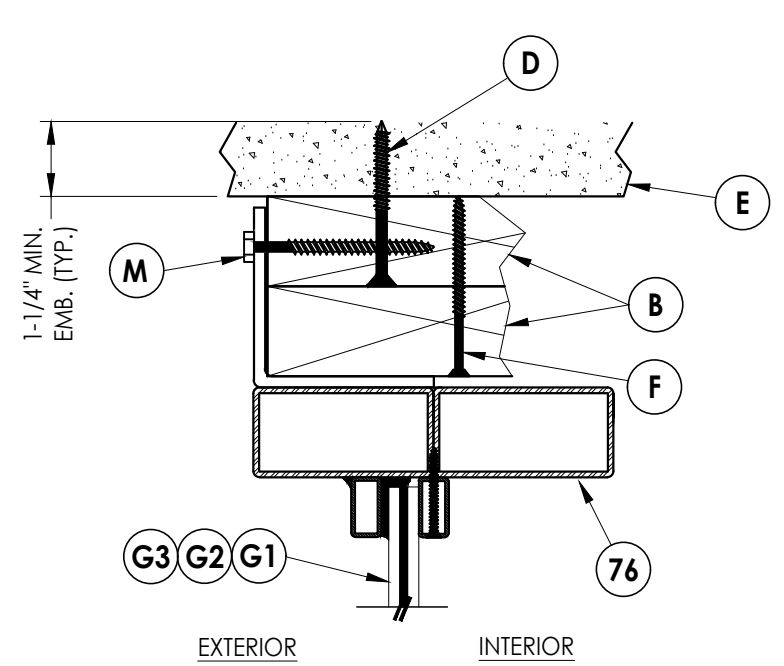
PRODUCT:
CLARK HALL IRON DOORS

PART OR ASSEMBLY:
ELEVATIONS

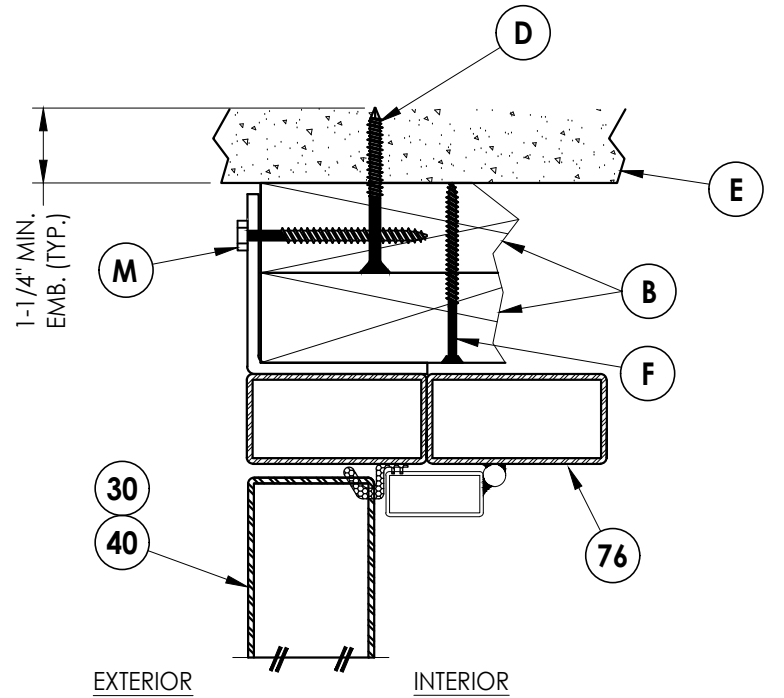
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

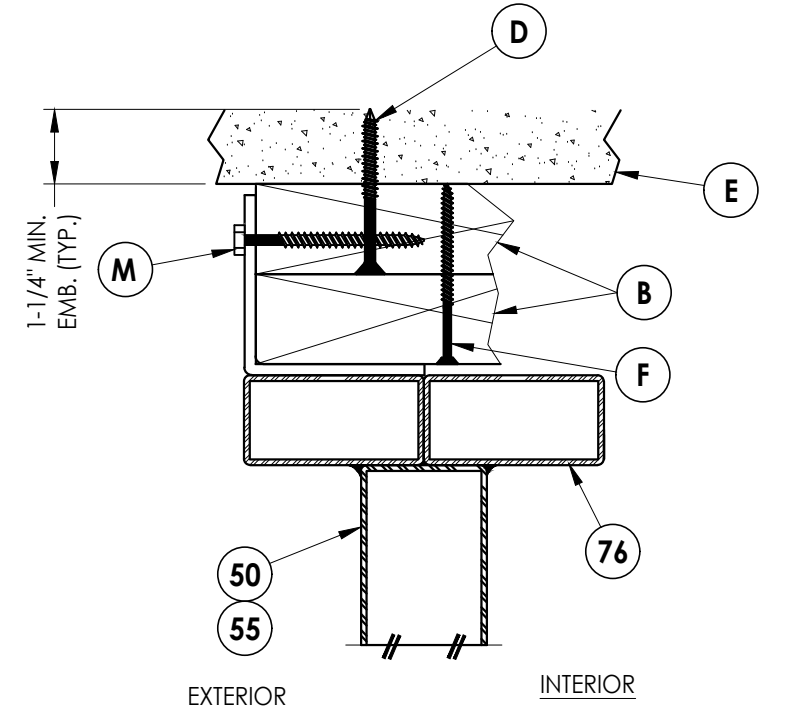
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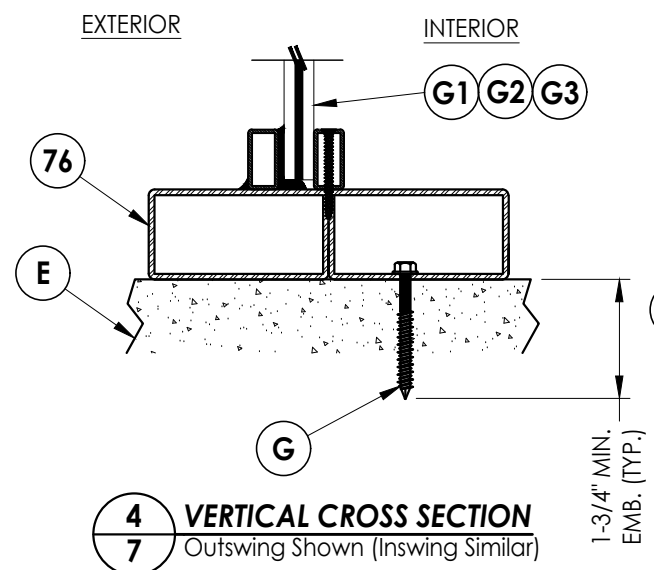
1
7 VERTICAL CROSS SECTION
Outswing Shown (Inswing Similar)



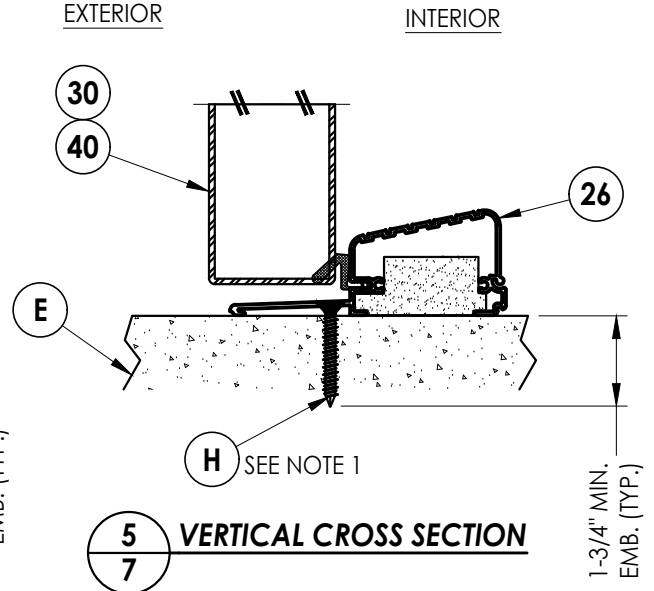
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7 VERTICAL CROSS SECTION
Outswing Shown (Inswing Similar)



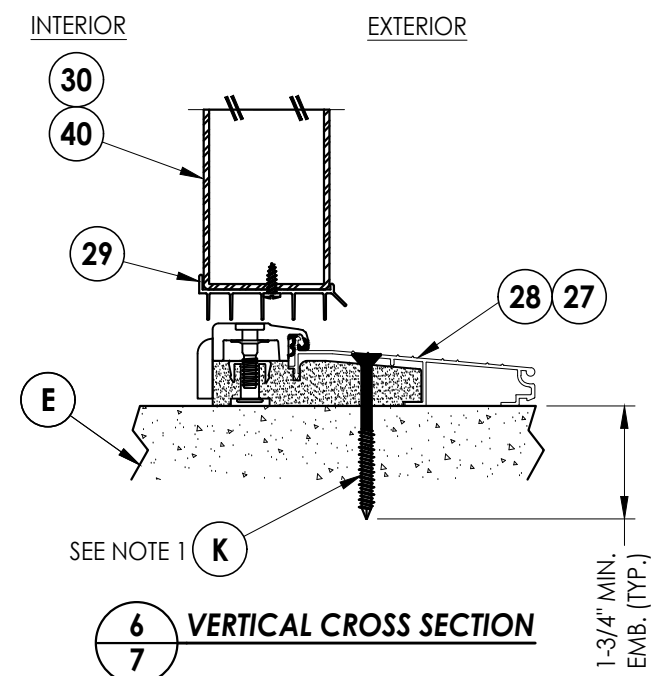
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7 VERTICAL CROSS SECTION
Outswing Shown (Inswing Similar)



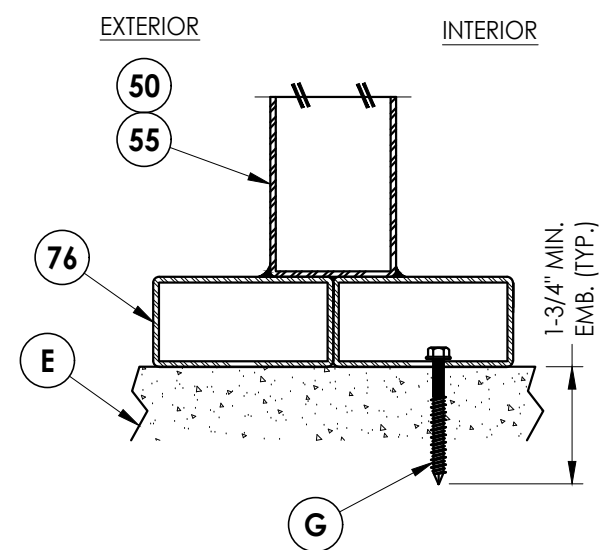
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7 VERTICAL CROSS SECTION
Outswing Shown (Inswing Similar)



5
7 VERTICAL CROSS SECTION



6
7 VERTICAL CROSS SECTION

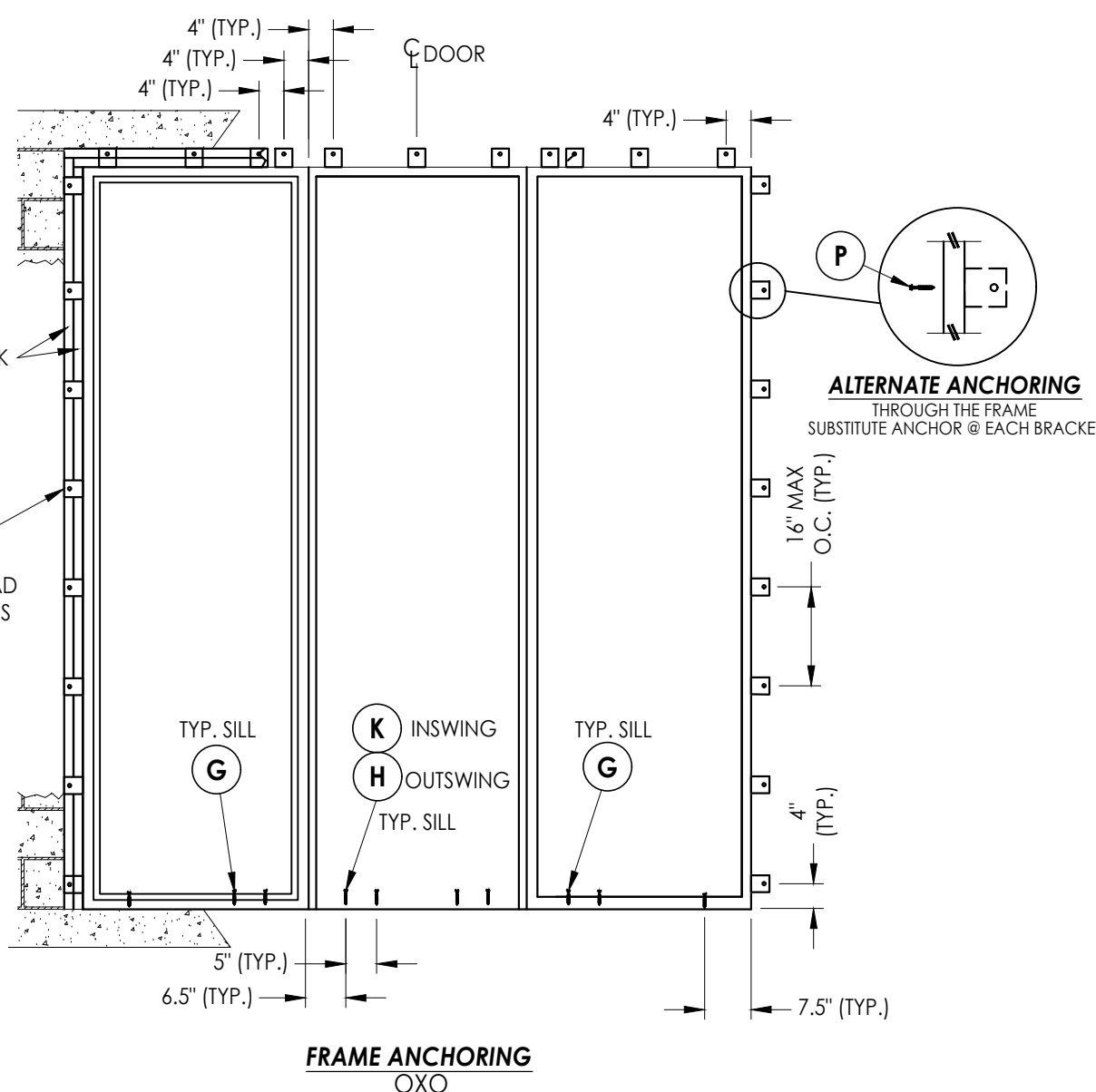
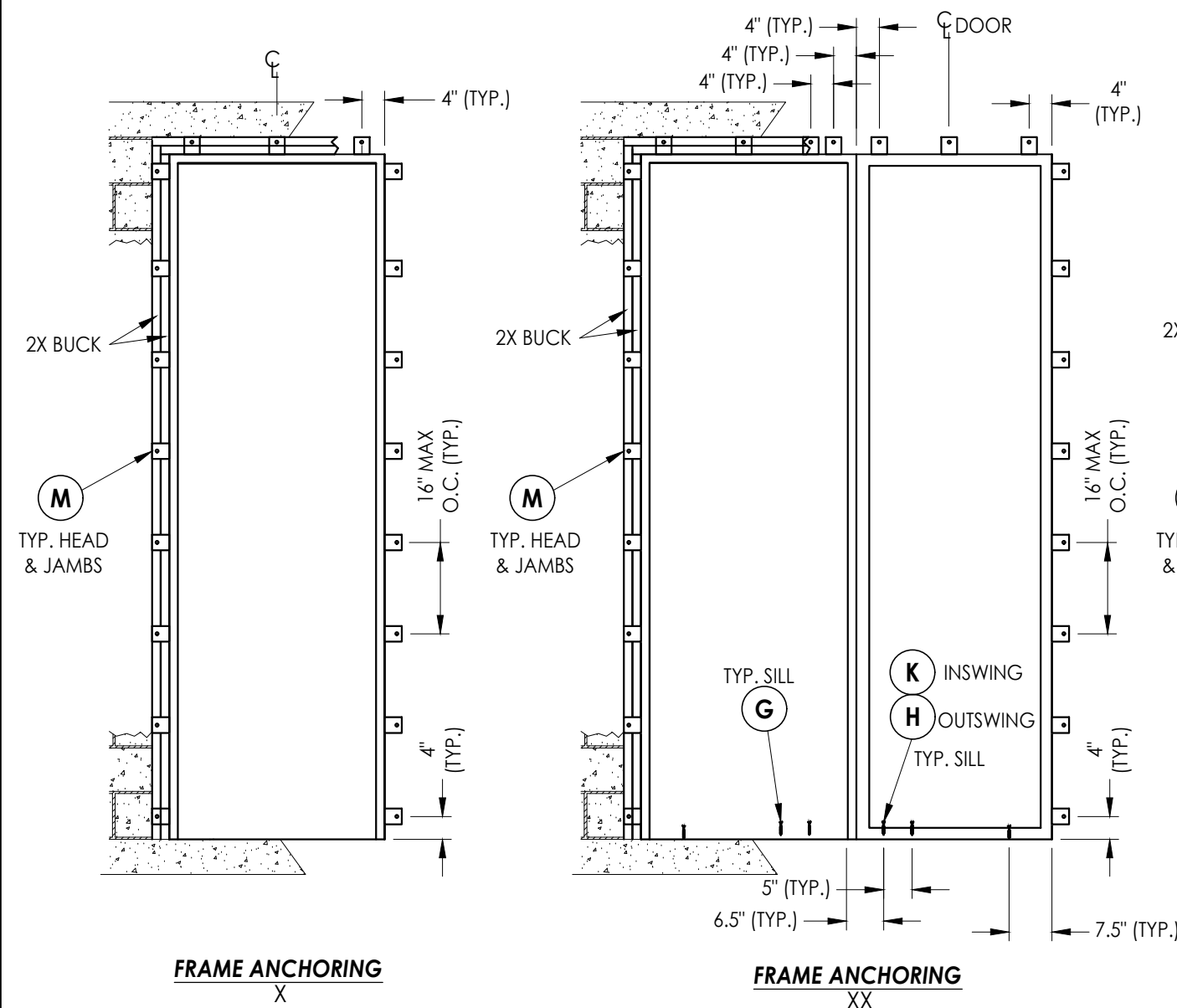


7
7 VERTICAL CROSS SECTION
Outswing Shown (Inswing Similar)

NOTE:
1. Sill anchor is not required for Single Door (X).

Documents Prepared By:		Lyndon F. Schmidt		P.E. No. 43409	
PRODUCT:		CLARK HALL IRON DOORS		BUILDING CONSULTANTS, INC.	
PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS		P.O. Box 230, Valrico, FL 33595	
REVISONS		NO.		DATE	
4		7/05/23		UPDATE TO 8TH ED. (2023) FBC	
3		9/09/20		UPDATE TO 7TH ED. (2020) FBC	
2		8/30/17		UPDATE TO 6TH ED. (2017) FBC	
1		8/17/15		UPDATE TO 5TH ED. (2014) FBC	
DATE		10/30/13		DATE	
SCALE:		N.T.S.		DWG. BY: JK	
CHK. BY:		LFS		DRAWING NO.: FL-16663.8	
SHEET		7		OF 11	

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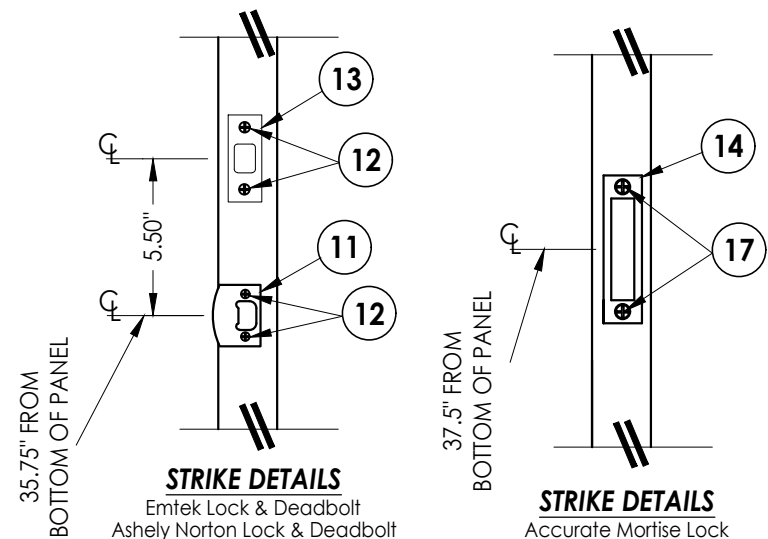
CONCRETE ANCHOR NOTES:

- 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 TAPCON®	5/16" (XL)	1-3/4"	2-1/2"	5"
DeWALT 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.



Documents Prepared By:
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P.E. No. 43409

PRODUCT:
CLARK HALL IRON DOORS

PART OR ASSEMBLY:
FRAME ANCHORING

4	7/05/23	UPDATE TO 8TH ED. (2023)	FBC	LFS
3	9/09/20	UPDATE TO 7TH ED. (2020)	FBC	LFS
2	8/30/17	UPDATE TO 6TH ED. (2017)	FBC	LFS
1	8/17/15	UPDATE TO 5TH ED. (2014)	FBC	LFS
NO.	DATE	REVISIONS		

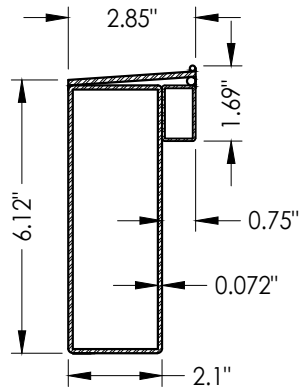
DATE: 10/30/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-16663.8
SHEET 9 OF 11

RW

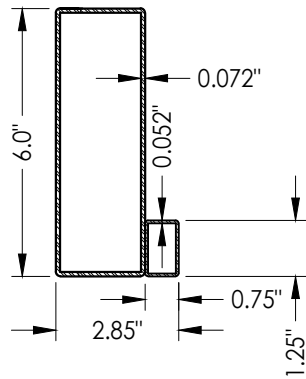
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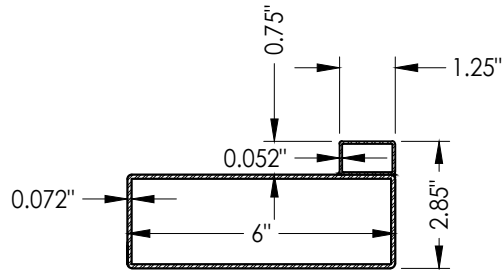
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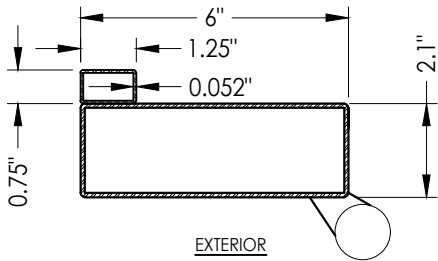
43 Full Lite Door Panel
Bottom Rail



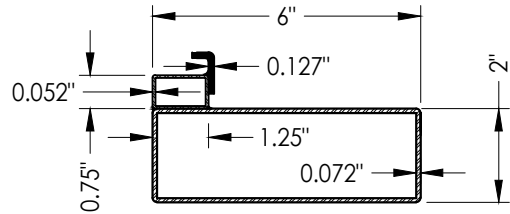
44 Full Lite Door Panel
Top Rail



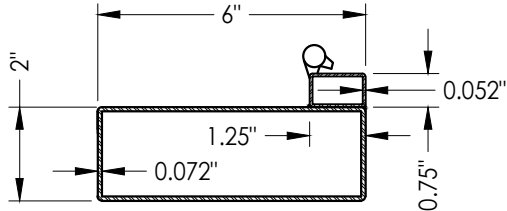
32 Full Lite Door Panel
Active Latch Stile



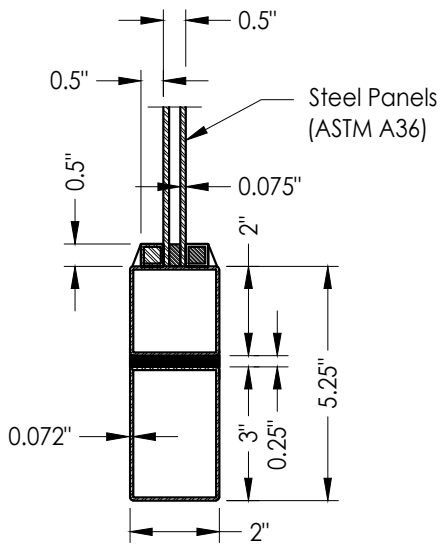
31 Full Lite Door Panel
Active Hinge Stile



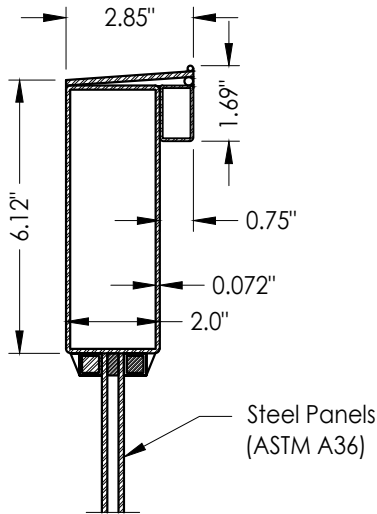
52 Sidelite Panel
Operable Sash Latch Stile



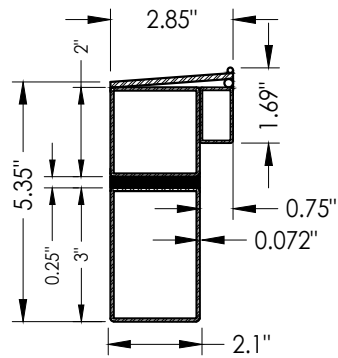
51 Sidelite Panel
Operable Sash Hinge Stile



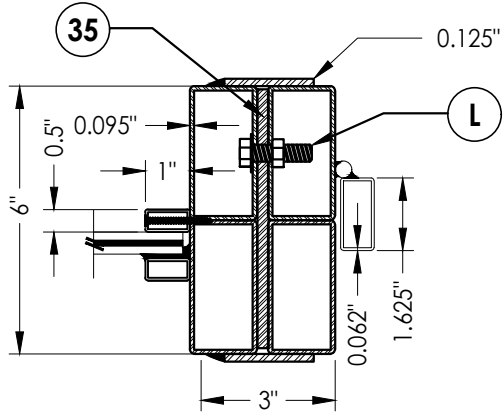
54 Bottom Rail
3/4 Lite Sidelite Panel



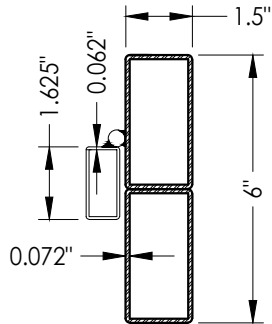
56 Mid Rail
3/4 Lite Sidelite Panel



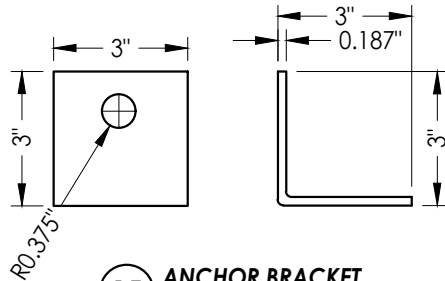
53 Bottom Rail
Sidelite Panel



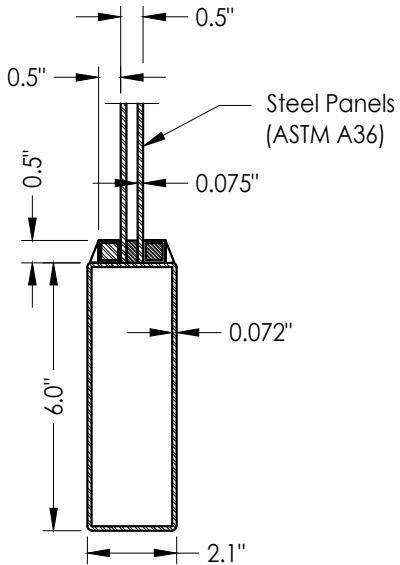
75 MULLION
Vertical with Direct Set Sidelite shown
(Horizontal Mullion Similar)



76 Jamb



15 ANCHOR BRACKET



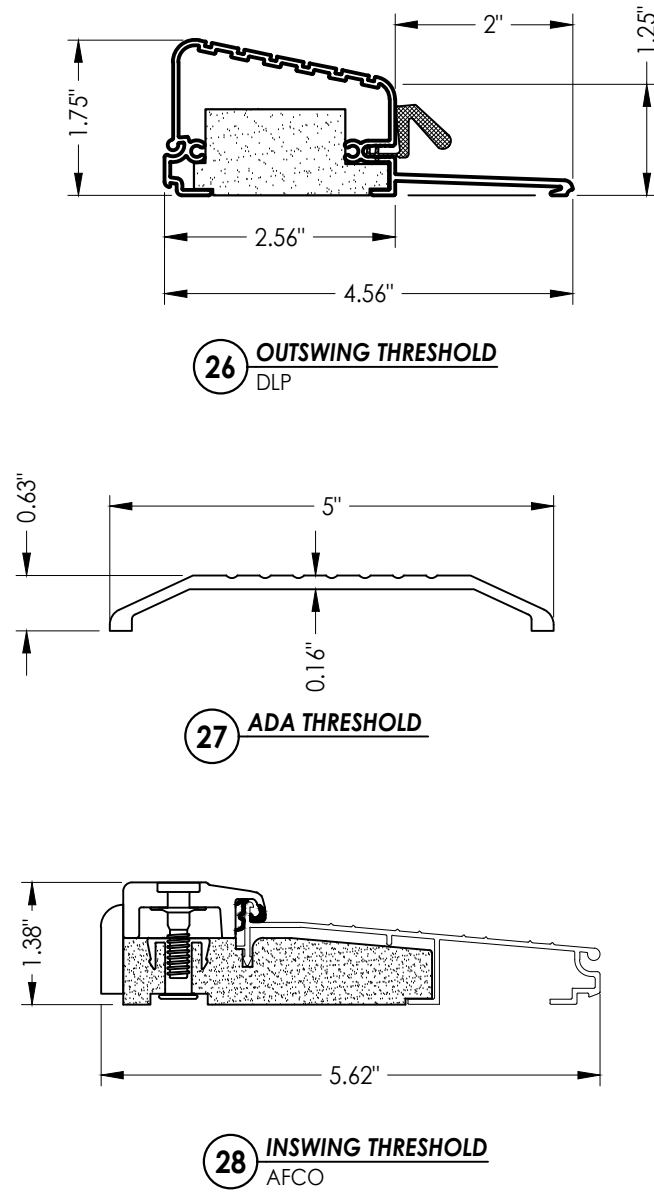
57 Bottom Rail
3/4 Lite Door Panel

DATE: 10/30/13		SCALE: N.T.S.		DWG. BY: JK		CHK. BY: LFS		DRAWING NO.: FL-16663.8		SHEET 10 OF 11	
NO.		DATE		BY		LFS		FBC		FBC	
4		7/05/23		UPDATE TO 8TH ED. (2023)		FBC		FBC		FBC	
3		9/09/20		UPDATE TO 7TH ED. (2020)		FBC		FBC		FBC	
2		8/30/17		UPDATE TO 6TH ED. (2017)		FBC		FBC		FBC	
1		8/17/15		UPDATE TO 5TH ED. (2014)		FBC		FBC		FBC	
NO.		DATE		BY		LFS		FBC		FBC	
NO.		DATE		BY		LFS		FBC		FBC	

PRODUCT: CLARK HALL IRON DOORS		PART OR ASSEMBLY: COMPONENTS	
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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	
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BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
B	2X BUCK SG >= 0.55	WOOD
D	1/4" X 2-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	#10 X 3" PFH WOOD SCREW	STEEL
G	5/16" X 2-1/4" HH DeWALT OR ITW CONCRETE SCREW	STEEL
H	5/16" X 2-1/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
K	5/16" X 2-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
L	5/16-18 X 1-1/2" HH BOLT (GR. 5) w/ LOCK WASHER & NUT	STEEL
M	3/8" X 3" HH LAG SCREW (2-3/4" MIN. EMBEDMENT)	STEEL
P	#12 X 1-1/2" HWH SMS (1-3/16" MIN. EMBEDMENT)	STEEL
1	SASH LATCH STRIKE	STEEL
2	SASH LATCH	STEEL
3	#8 X 1/4" PFH SMS	STEEL
4	WEATHERSTRIP (QLON)	FOAM
11	LATCH STRIKE PLATE	STEEL
12	#8 X 3/4" PFH SMS	STEEL
13	DEADBOLT STRIKE PLATE	STEEL
14	MORTISE STRIKE PLATE	STEEL
15	ANCHORING BRACKET	STEEL
17	#12-24 X 13/16" PFH COMBINATION WOOD/MACHINE SCREW	STEEL
20	FLIP BOLT	STEEL
25	#6 X 1/2" PWH SELF TAPPING SMS	STEEL
26	OUTSWING THRESHOLD (DLP)	ALUM/COMP
27	ADA THRESHOLD	ALUM
28	INSWING THRESHOLD (AFCO)	ALUM/COMP
29	DOOR SWEEP (w/ #8 x 3/4" SMS)	-
30	DOOR PANEL (FULL LITE)	-
31	HINGE STILE (ACTIVE DOOR)	ASTM A36 STEEL
32	LATCH STILE (ACTIVE DOOR)	ASTM A36 STEEL
35	MULLION REINFORCEMENT	ASTM A36 STEEL
40	DOOR PANEL (3/4 LITE)	-
43	BOTTOM RAIL (FULL LITE)	ASTM A36 STEEL
44	TOP RAIL (FULL LITE)	ASTM A36 STEEL
45	DOOR PANEL HINGE	STEEL
50	SIDELITE PANEL W/ OPERABLE SASH	-
51	SIDELITE HINGE STILE	ASTM A36 STEEL
52	SIDELITE LATCH STILE	ASTM A36 STEEL
53	BOTTOM RAIL (SIDELITE PANEL)	ASTM A36 STEEL
54	BOTTOM RAIL (3/4 LITE SIDELITE PANEL)	ASTM A36 STEEL
55	3/4 SIDELITE PANEL W/ OPERABLE SASH	-
56	MID RAIL (3/4 LITE SIDELITE PANEL)	ASTM A36 STEEL
57	BOTTOM RAIL (3/4 LITE SIDELITE PANEL)	ASTM A36 STEEL
60	SASH LITE FRAME	STEEL
61	SASH HINGE	STEEL
75	VERTICAL MULL	ASTM A36 STEEL
76	JAMB	ASTM A36 STEEL



DATE: 10/30/13		PRODUCT:		Documents Prepared By:	
SCALE: N.T.S.		CLARK HALL IRON DOORS		Lyndon F. Schmidt	
DWG. BY: JK				P.E. No. 43409	
CHK. BY: LFS				 BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813	
DRAWING NO.: FL-16663.8		PART OR ASSEMBLY:			
		BILL OF MATERIALS & COMPONENTS			
SHEET 11 OF 11		REVISIONS			
		4 7/05/23 UPDATE TO 8TH ED. (2023) FBC		LFS	
		3 9/09/20 UPDATE TO 7TH ED. (2020) FBC		LFS	
		2 8/30/17 UPDATE TO 6TH ED. (2017) FBC		LFS	
		1 8/17/15 UPDATE TO 5TH ED. (2014) FBC		LFS	
		NO. DATE		BY	