

Clark Hall Iron Doors

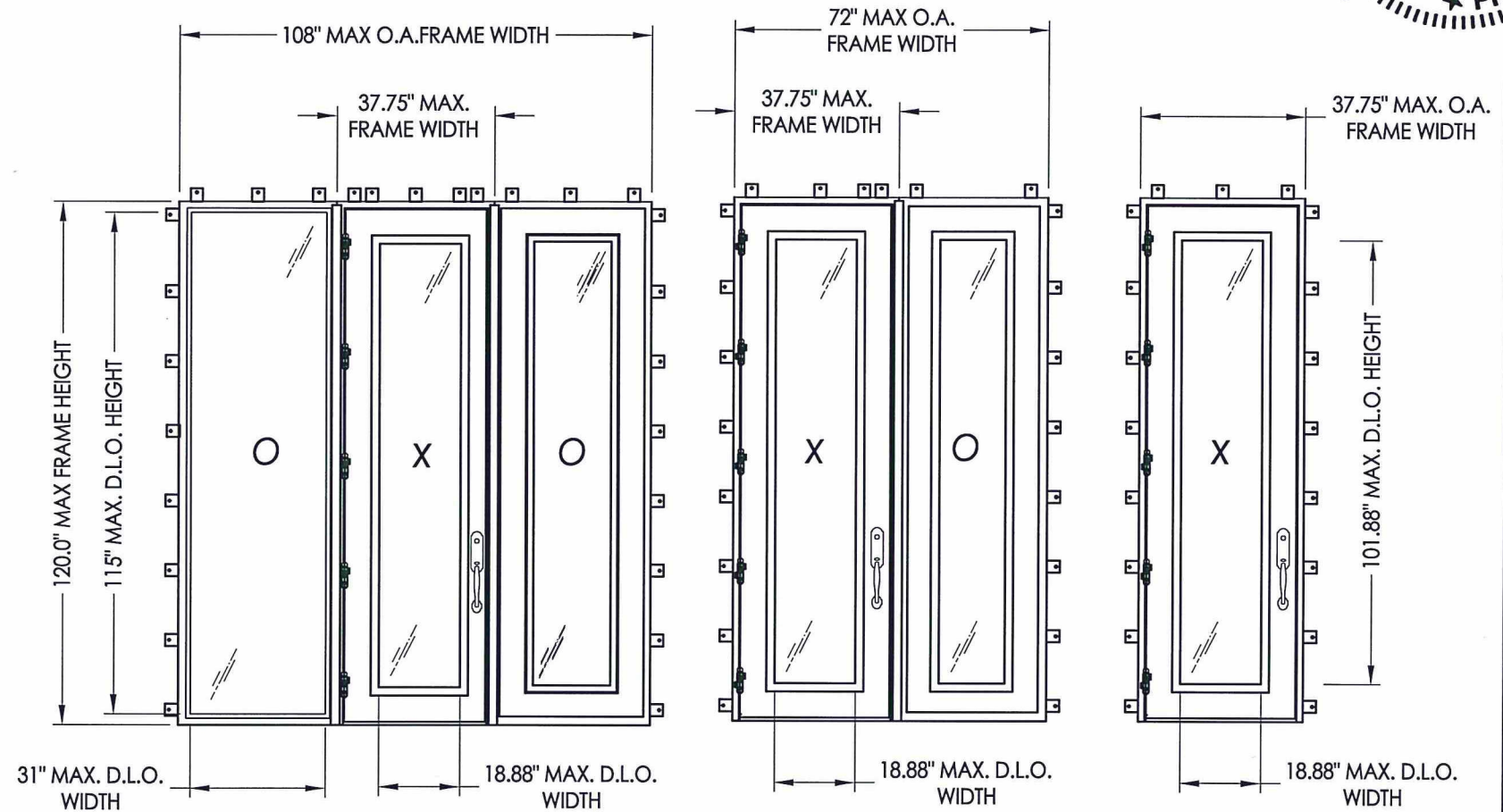
GLAZED IRON SINGLE DOOR w/ & w/out SIDELITES

IN SWING/OUT SWING "IMPACT"

GENERAL NOTES

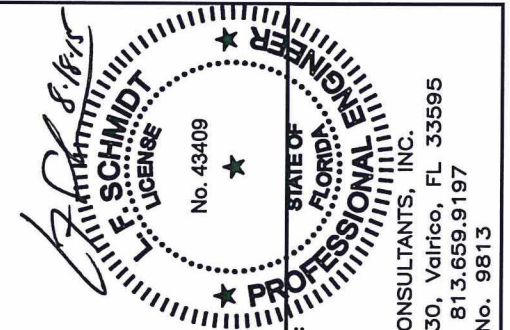
1. This product has been evaluated and is in compliance with the 5th Edition (2014) Florida Building Code (FBC) structural requirements including the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be 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. 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.
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. All steel shall be protected as specified in Section 2222.6 of the FBC.

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SHEET#	DESCRIPTION
1	Typical elevations, design pressures, & general notes
2	Door panel details
3	Sidelite panel details
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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)			
		IN SWING		OUT SWING	
		POS.	NEG.	POS.	NEG.
X	37.75" x 120.0"	+65.0	-65.0	+75.0	-75.0
OX or XO	72.0" x 120.0"	+65.0	-65.0	+75.0	-75.0
OXO	72.0" x 120.0"	+65.0	-65.0	+75.0	-75.0

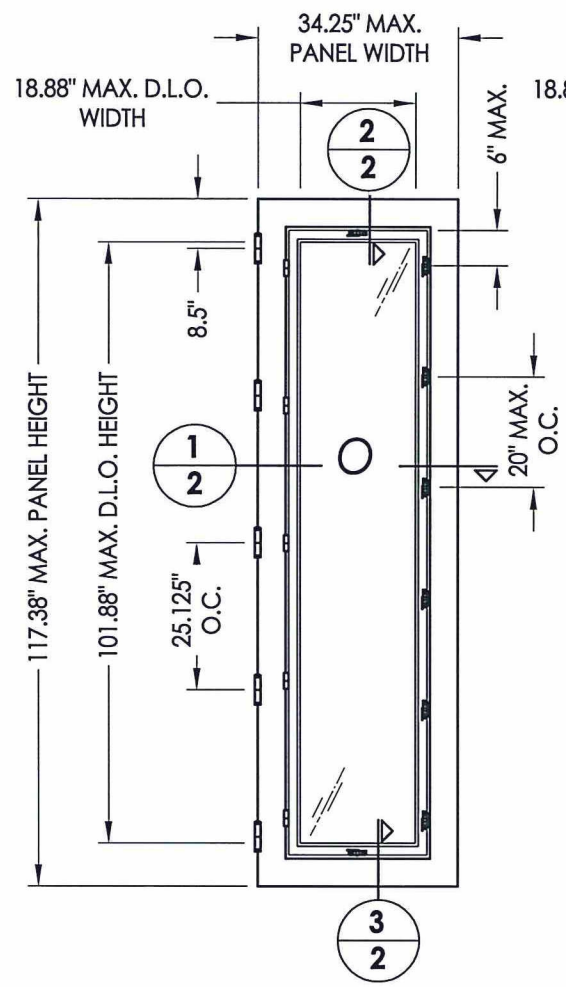
NOTE: See Sheets 4 & 5 for glazing and lock hardware design pressure limitations.



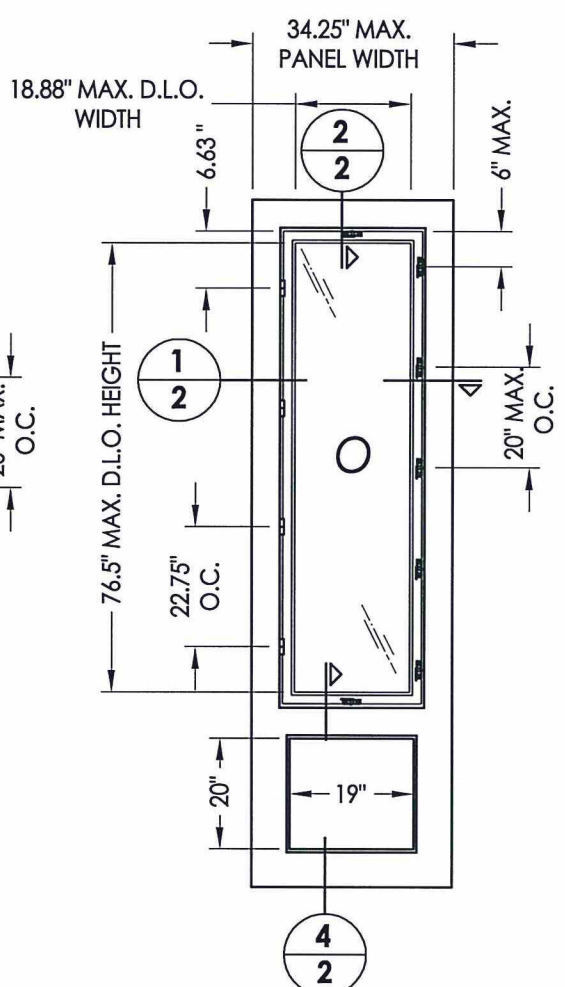
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

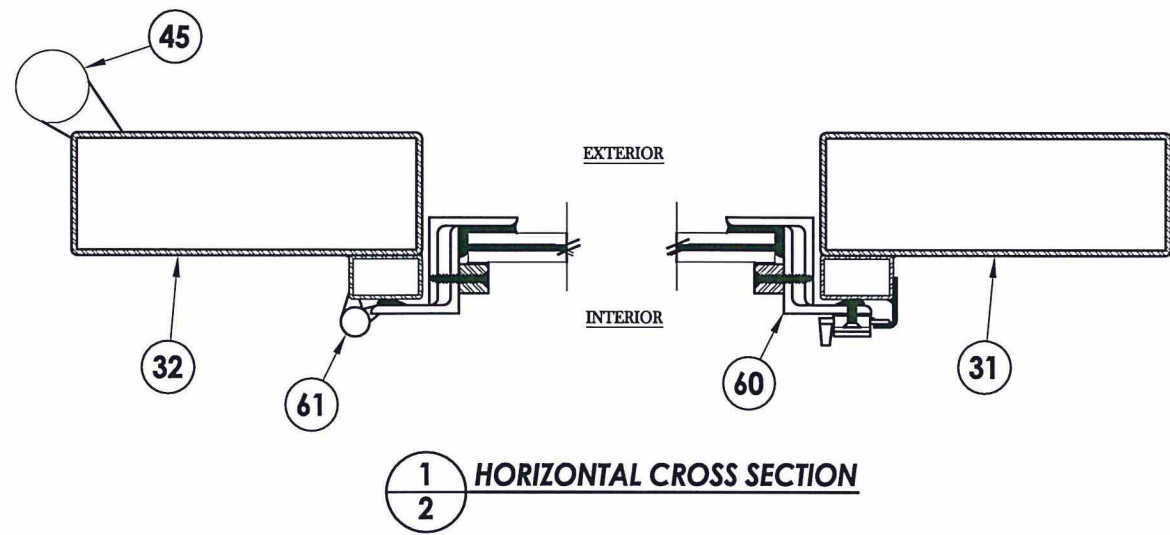
PRODUCT:	CLARK HALL IRON DOORS
PART OR ASSEMBLY:	TYPICAL ELEVATIONS, DESIGN PRESSURES & GENERAL NOTES
DATE:	10/30/13
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-16663.14
SHEET	1 OF 11



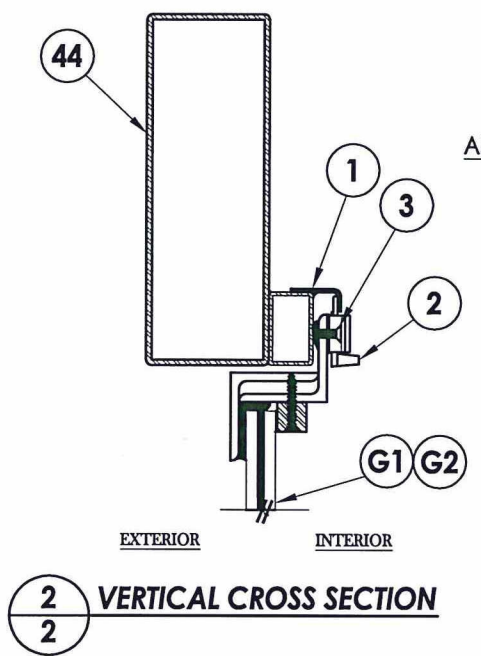
30 DOOR PANEL
w/ Operable Sash



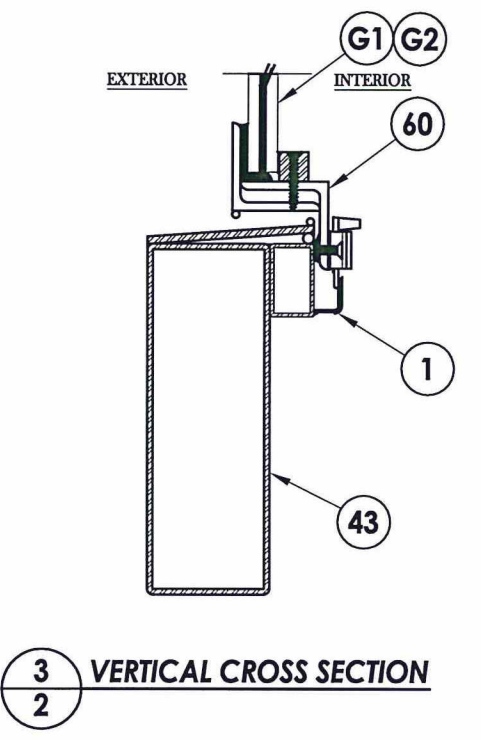
40 3/4 LITE DOOR PANEL
w/ Operable Sash



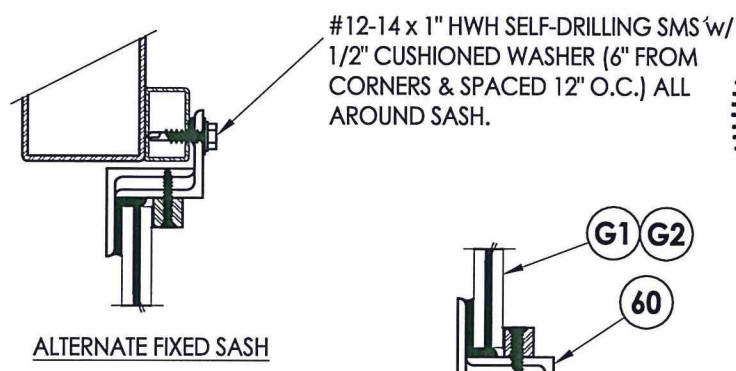
1 HORIZONTAL CROSS SECTION



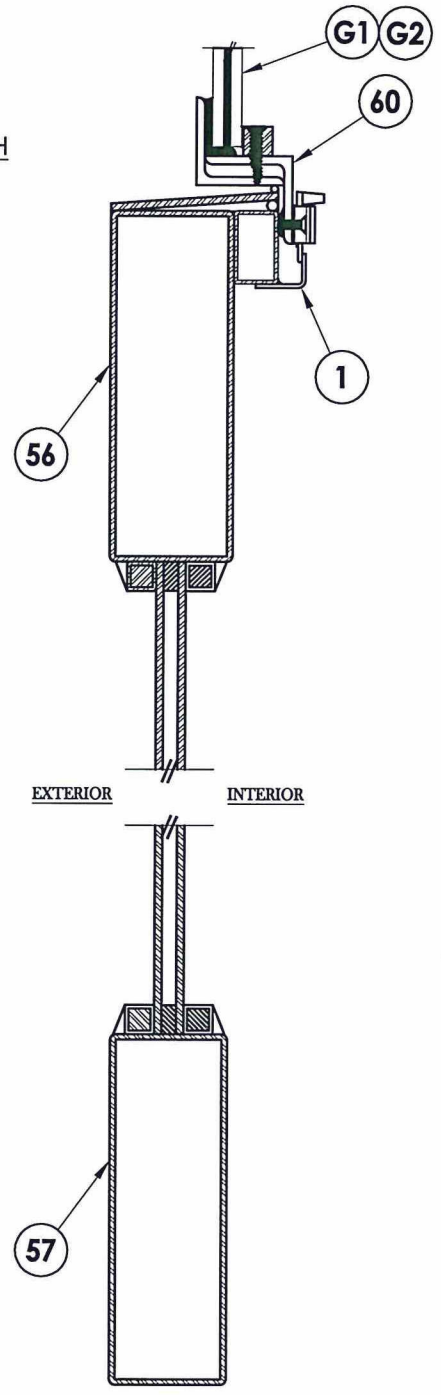
2 VERTICAL CROSS SECTION



3 VERTICAL CROSS SECTION



ALTERNATE FIXED SASH



4 VERTICAL CROSS SECTION

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

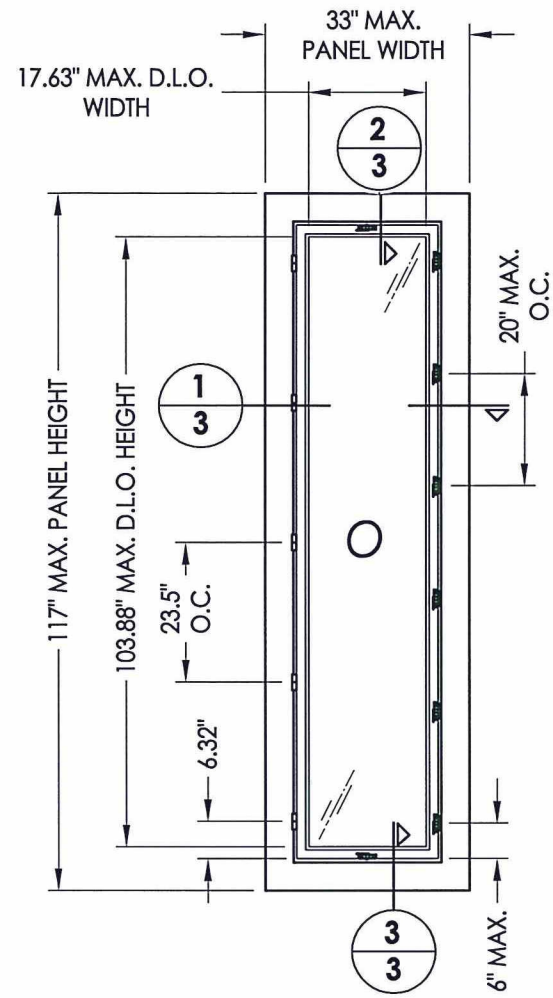
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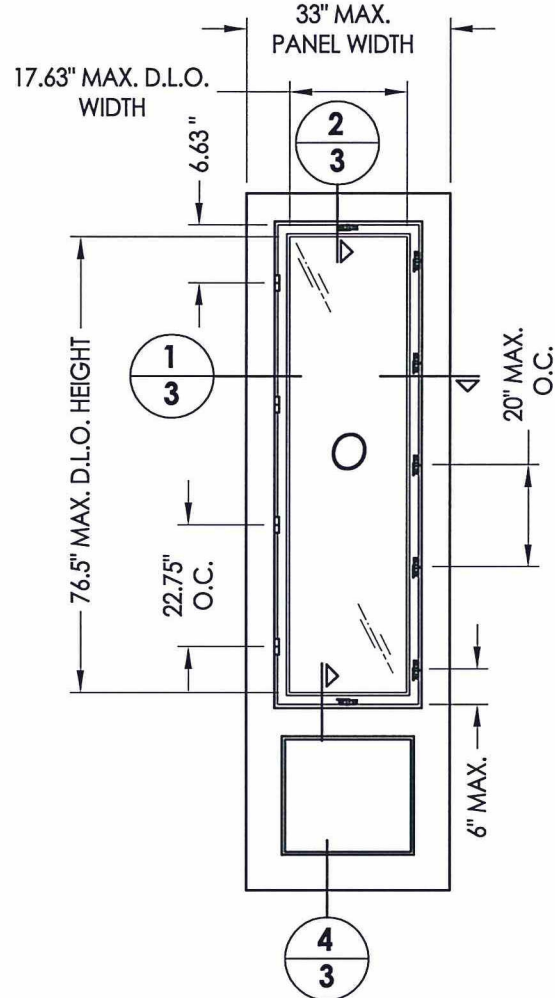
 Phone No.: 813.659.9197

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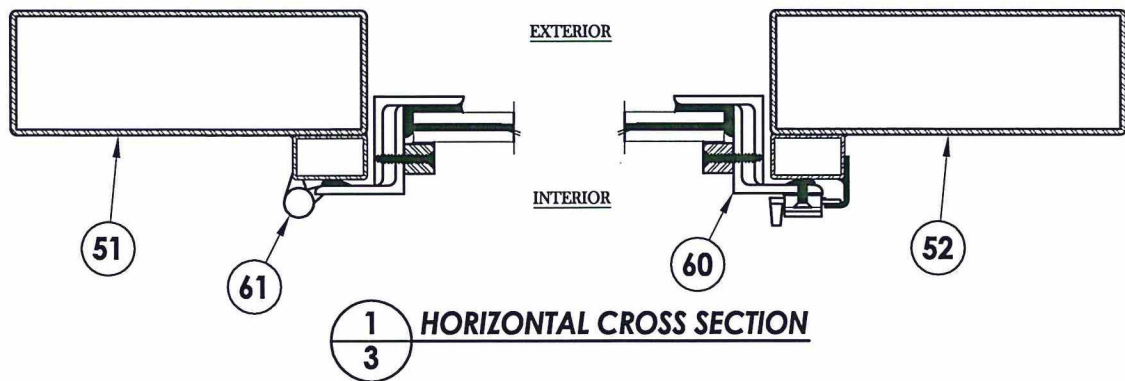
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NO.	DATE	BY	REVISIONS
1	8/17/15	LFS	UPDATE TO 5TH ED. (2014) FBC
DATE: 11/8/13			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-16663.14			
SHEET 2 OF 11			



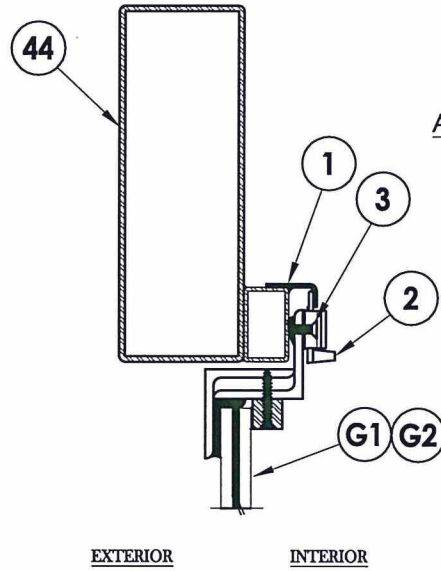
50 SIDELITE PANEL
w/ Operable Sash



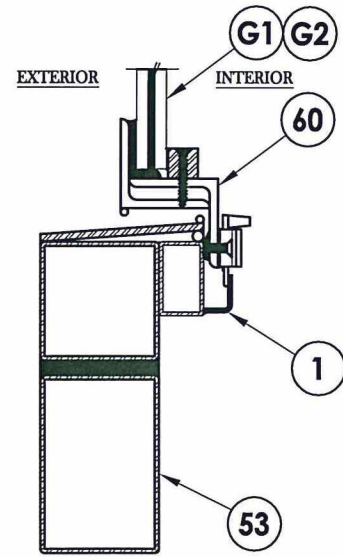
55 3/4 SIDELITE PANEL
w/ Operable Sash & Fixed Panel



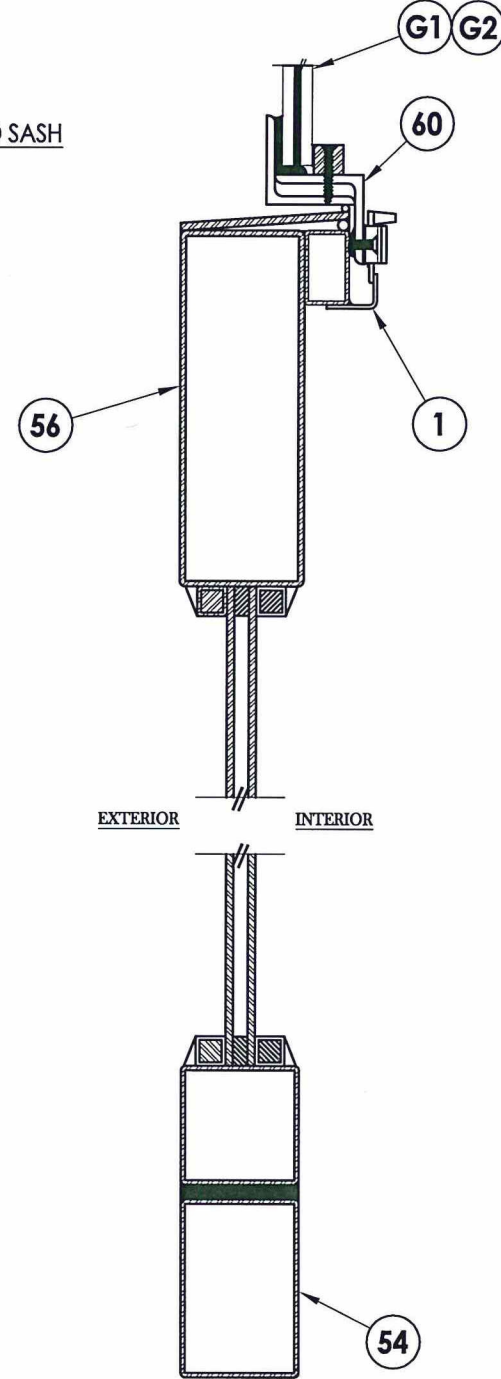
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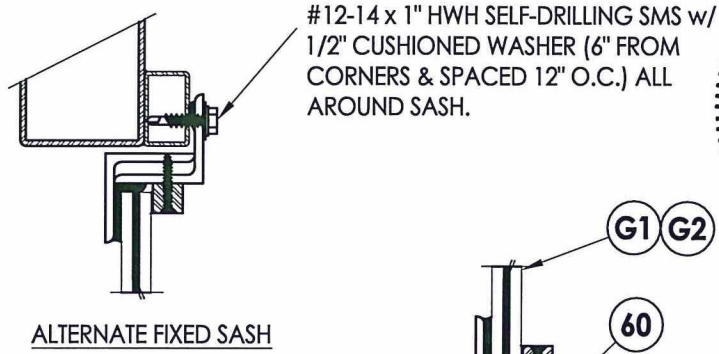
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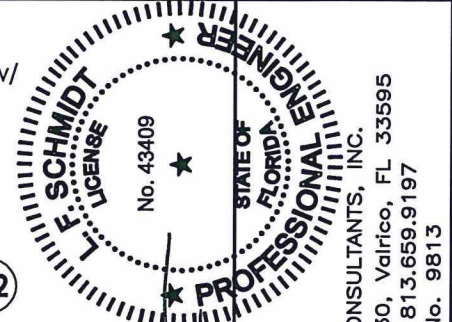
3 VERTICAL CROSS SECTION



4 VERTICAL CROSS SECTION



ALTERNATE FIXED SASH



Documents Prepared By:
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LFS
8/8/15

PRODUCT: CLARK HALL IRON DOORS

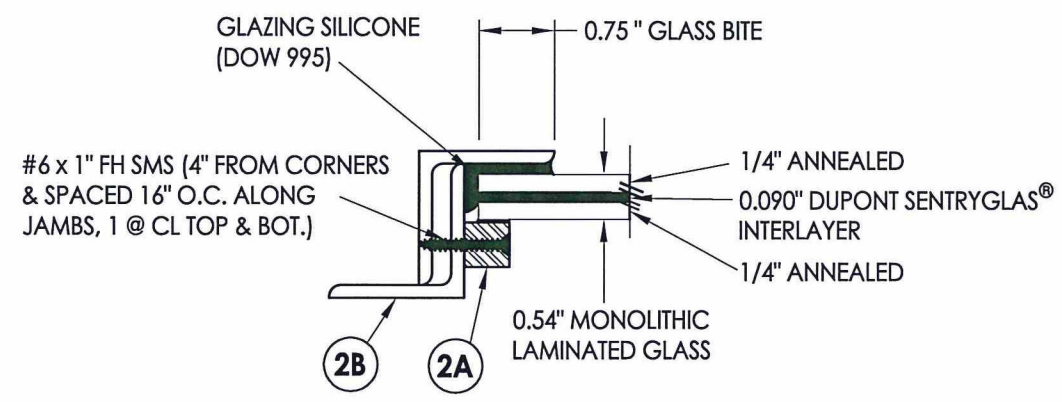
PART OR ASSEMBLY: SIDELITE PANEL DETAILS

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LFS		BY

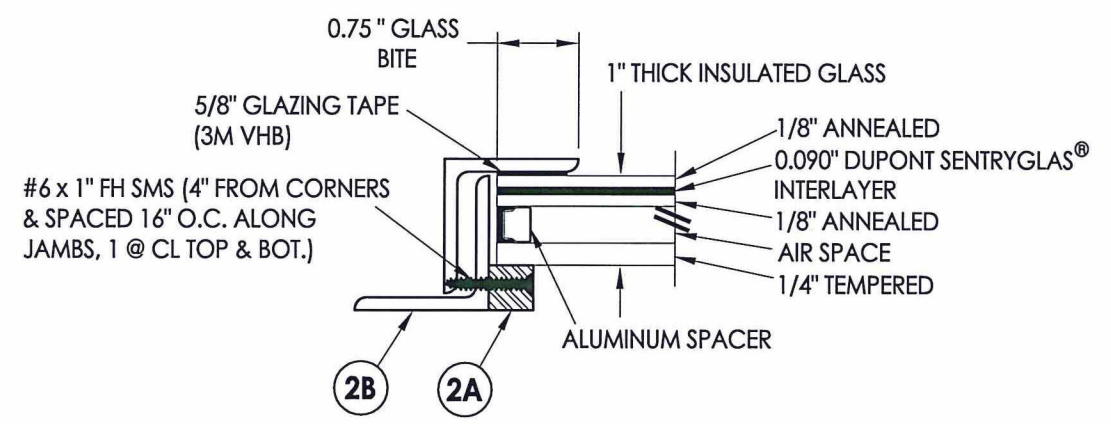
DATE: 11/8/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-16663.14
SHEET 3 OF 11

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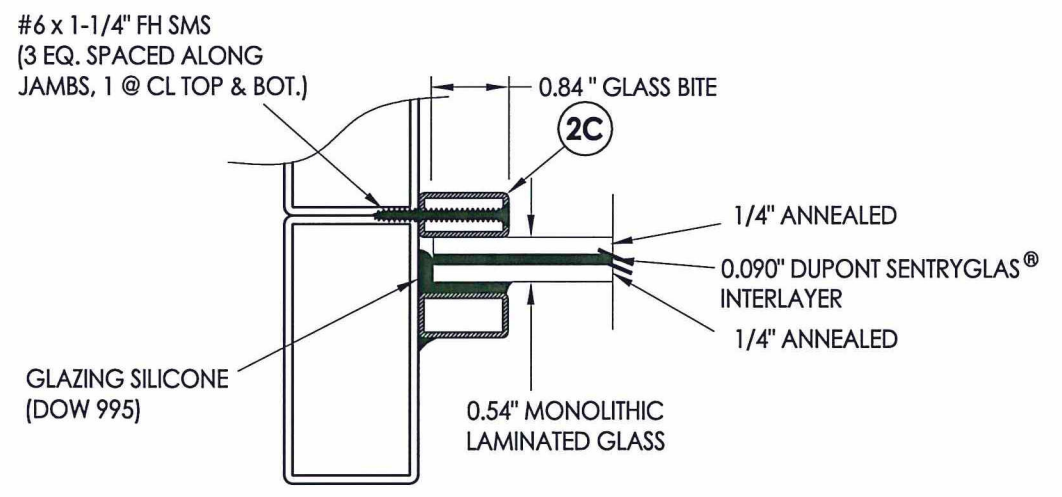
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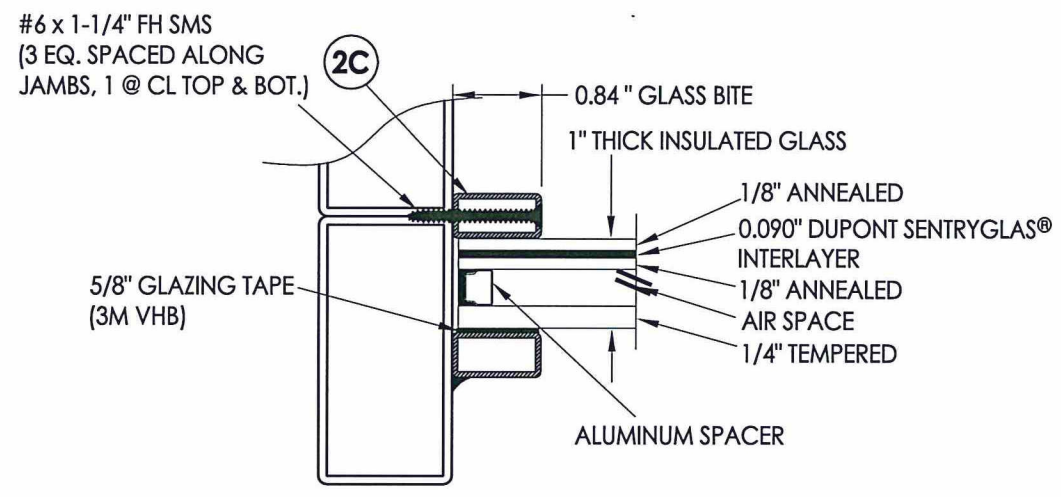
G1 GLAZING DETAIL
Operable Door/Sidelite



G2 GLAZING DETAIL
Operable Door/Sidelite



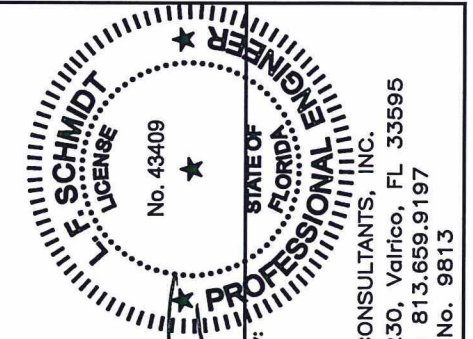
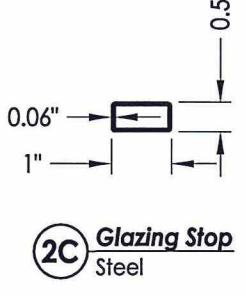
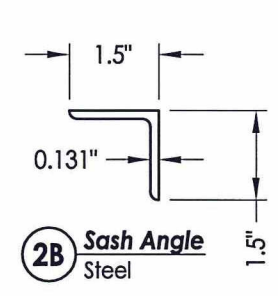
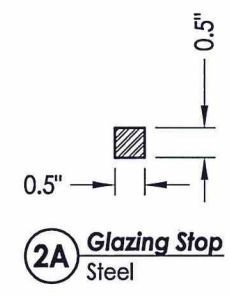
G1 GLAZING DETAIL
Fixed Sidelite/Transom



G2 GLAZING DETAIL
Fixed Sidelite/Transom

GLAZING DESIGN PRESSURE LIMITATIONS

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



F. Schmidt
8/18/13

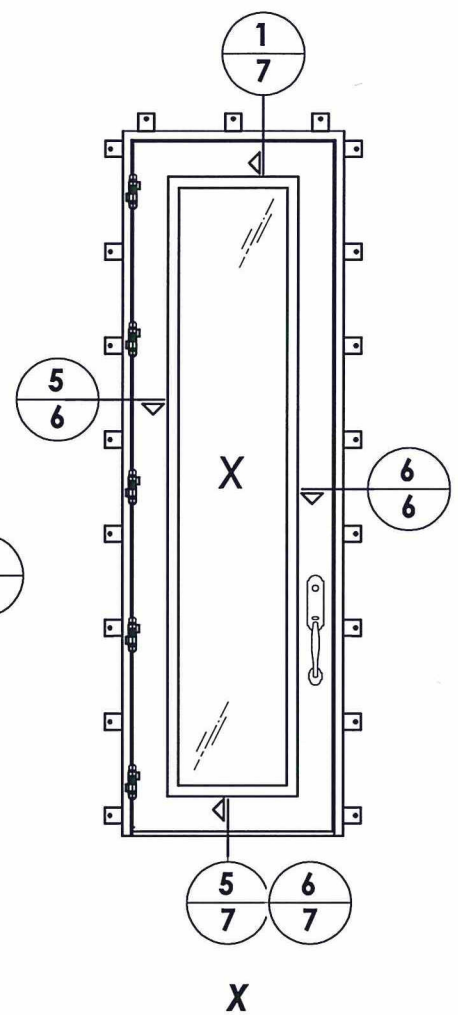
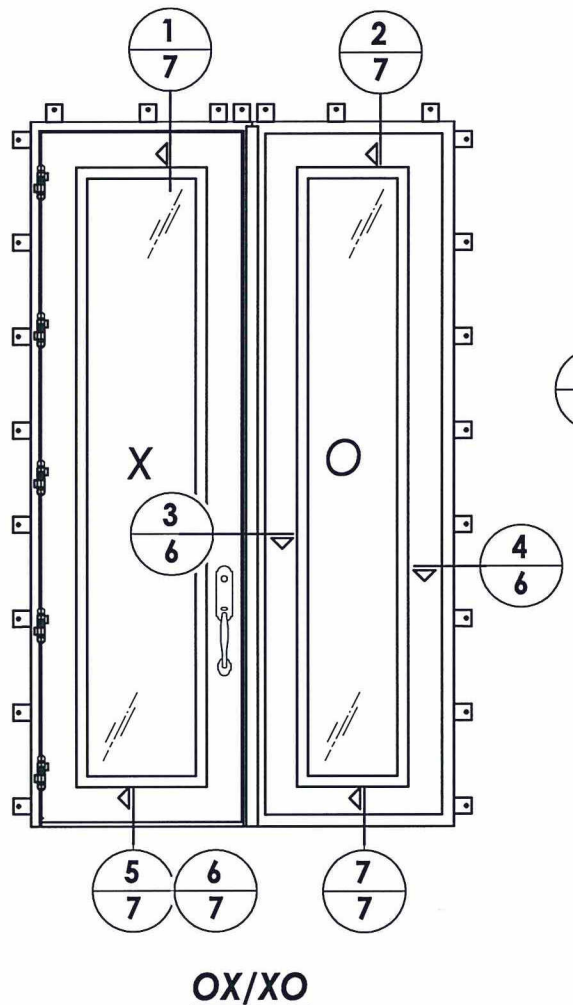
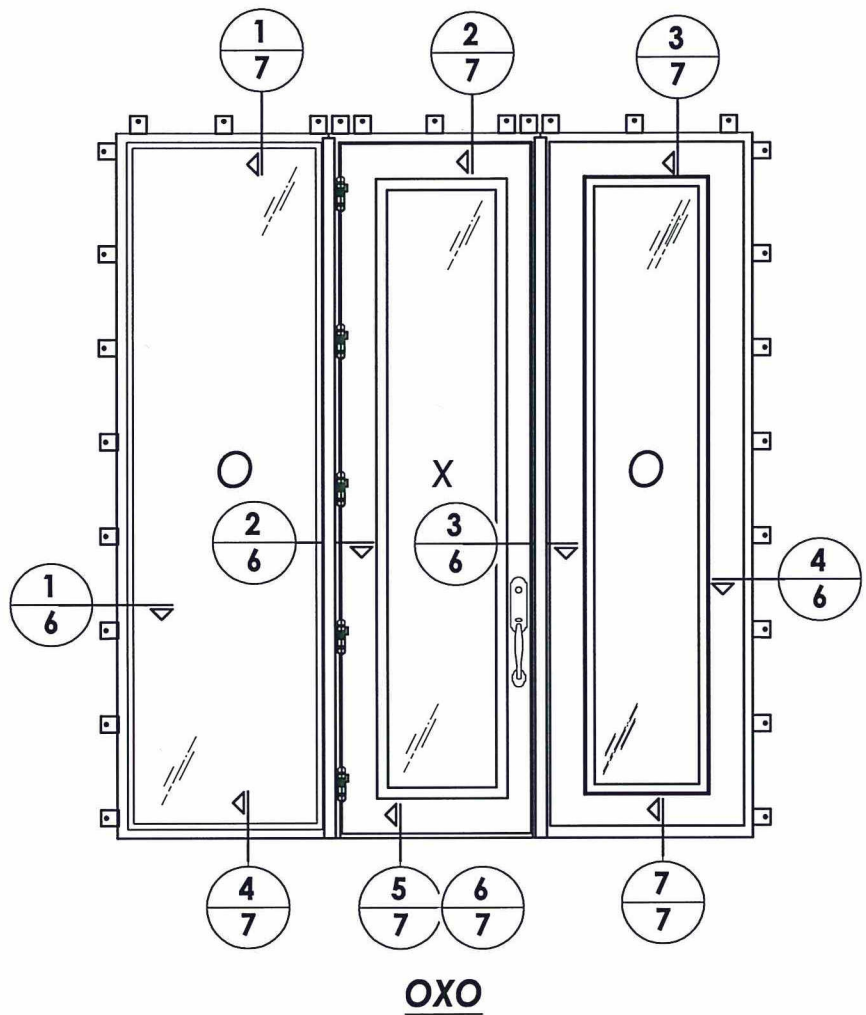
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PRODUCT: CLARK HALL IRON DOORS
PART OR ASSEMBLY: GLAZING DETAILS

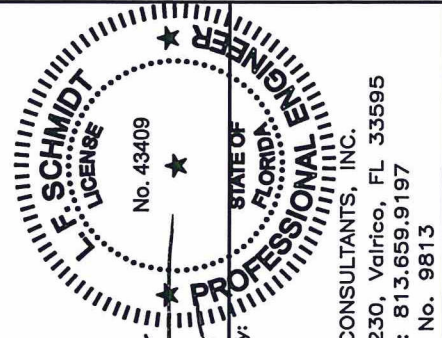
NO.	DATE	DESCRIPTION	LFS	BY
1	8/17/15	UPDATE TO 5TH ED. (2014) FBC		

DATE: 11/8/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-16663.14
SHEET 4 OF 11



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

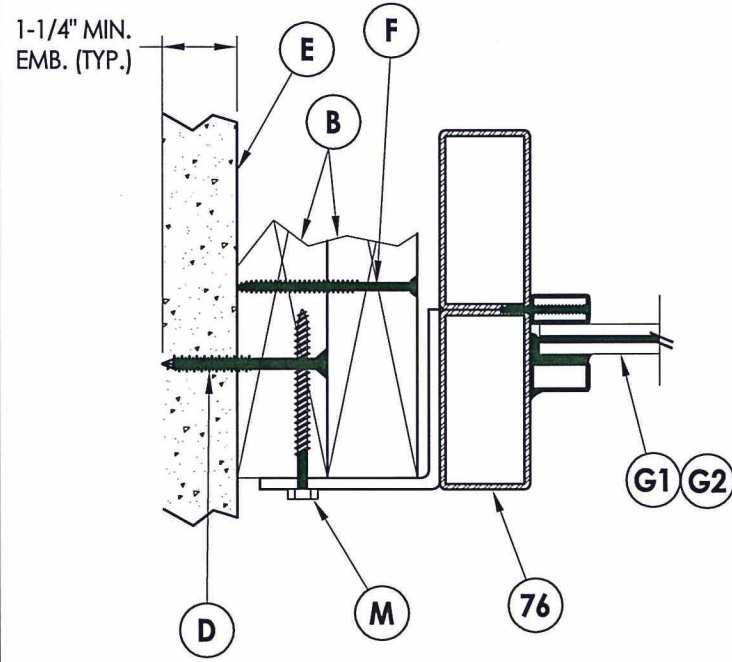


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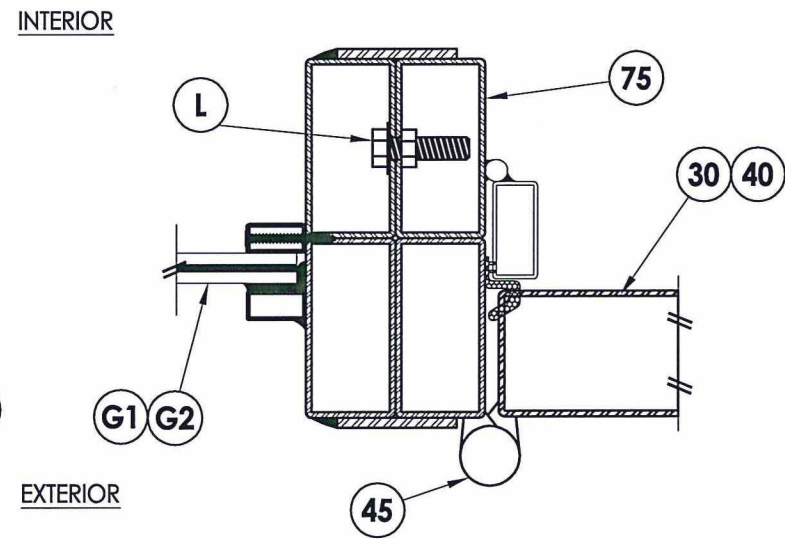
PRODUCT: CLARK HALL IRON DOORS
 PART OR ASSEMBLY: ELEVATIONS

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

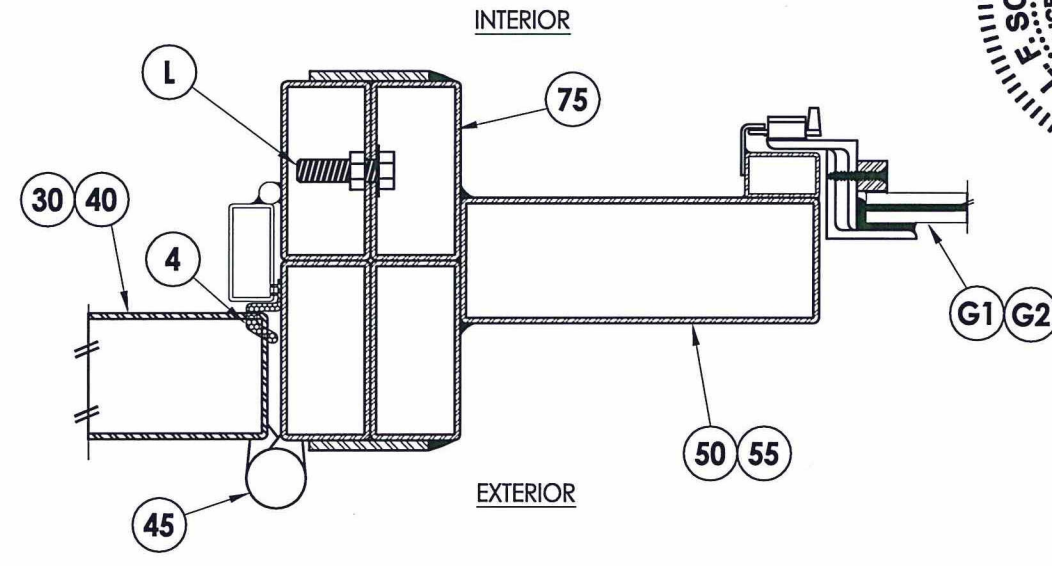
DATE: 10/30/13
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: FL-16663.14
 SHEET 5 OF 11



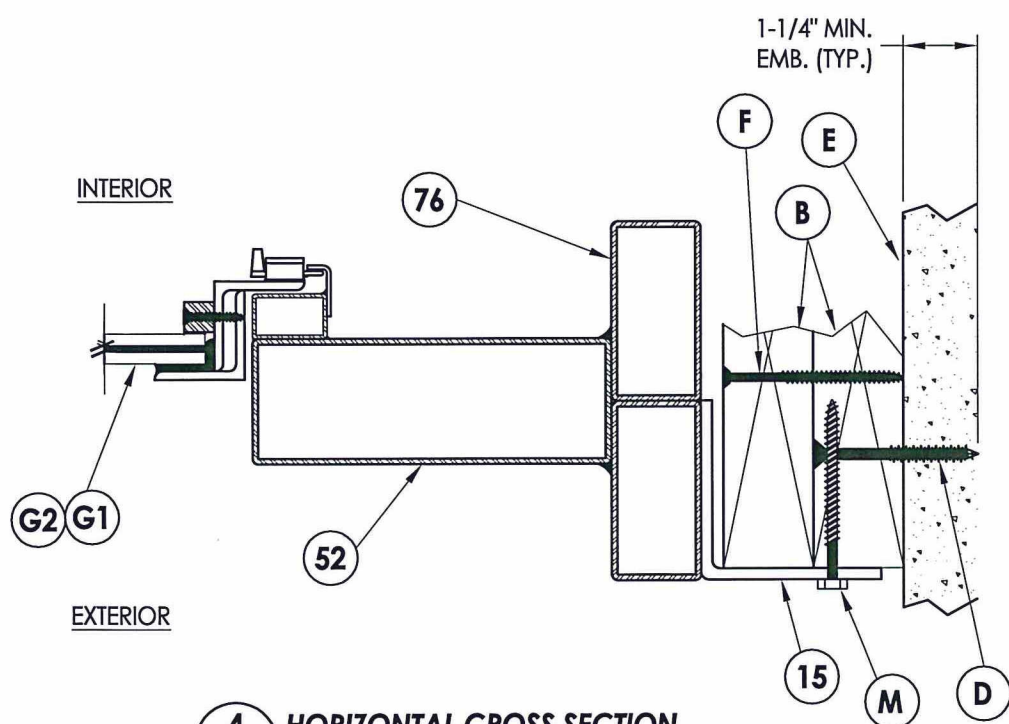
1
6 HORIZONTAL CROSS SECTION



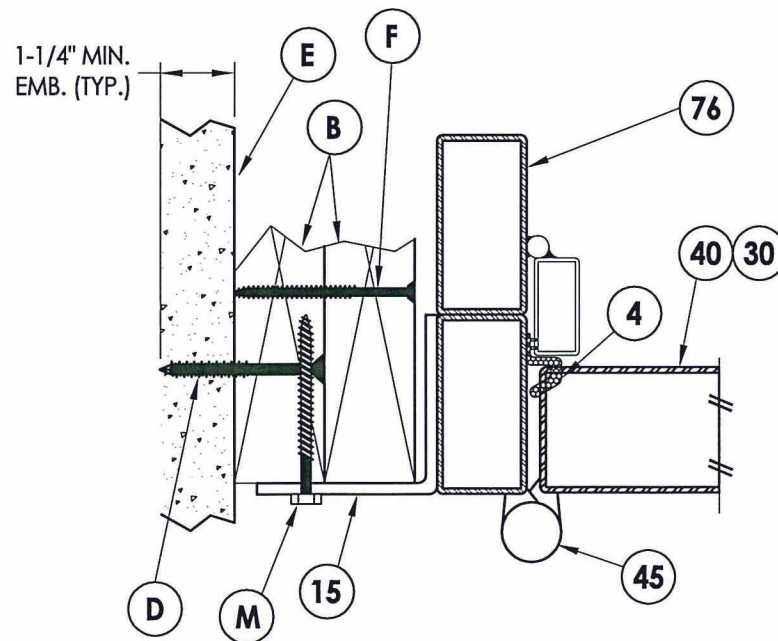
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6 HORIZONTAL CROSS SECTION
Outswing Shown (Inswing Similar)



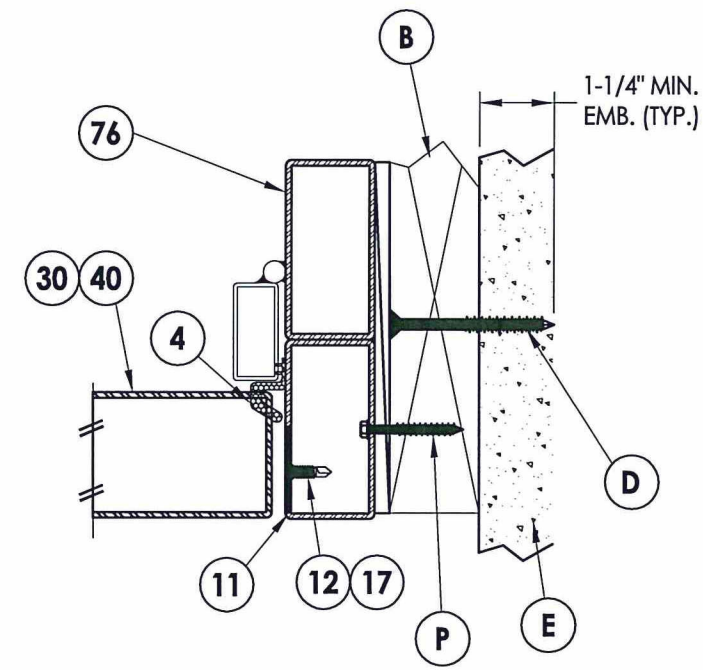
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6 HORIZONTAL CROSS SECTION
Outswing Shown (Inswing Similar)



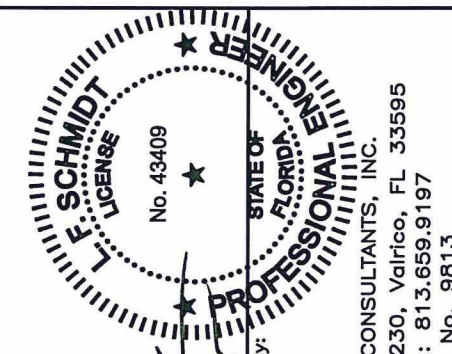
4
6 HORIZONTAL CROSS SECTION
Outswing Shown (Inswing Similar)



5
6 HORIZONTAL CROSS SECTION
Outswing Shown (Inswing Similar)



6
6 HORIZONTAL CROSS SECTION
Shown w/ Optional Through the Frame Anchoring



LFS
8/18/15

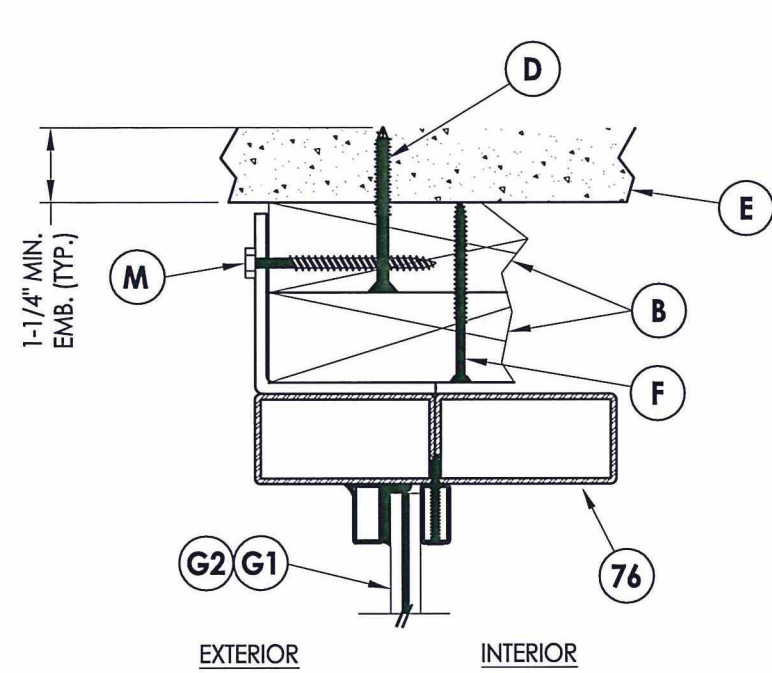
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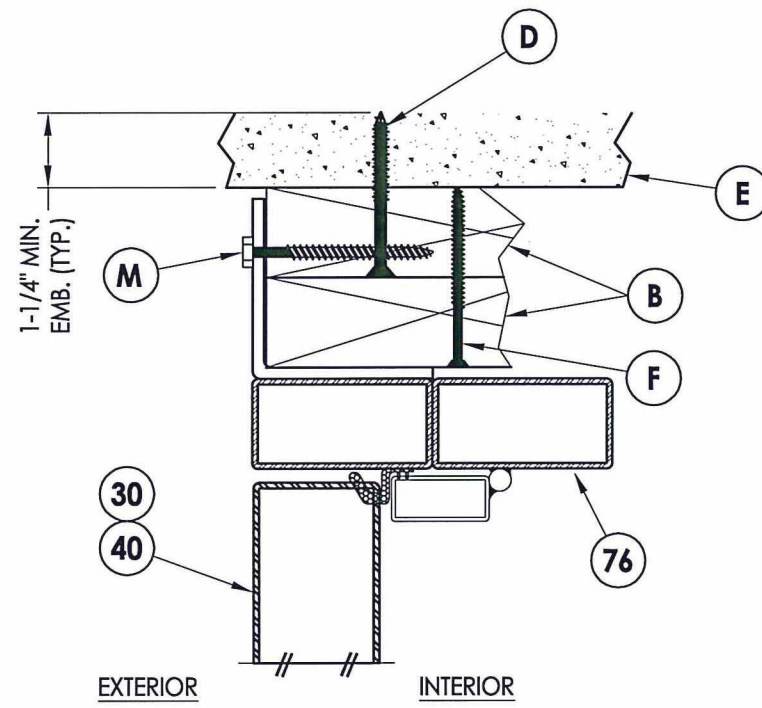
PRODUCT: CLARK HALL IRON DOORS
PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

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

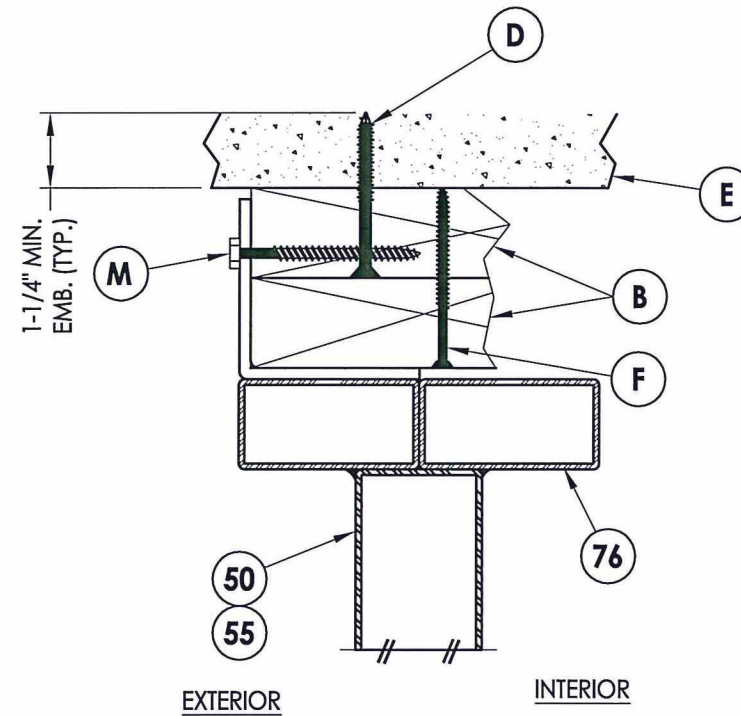
DATE: 10/30/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-16663.14
SHEET 6 OF 11



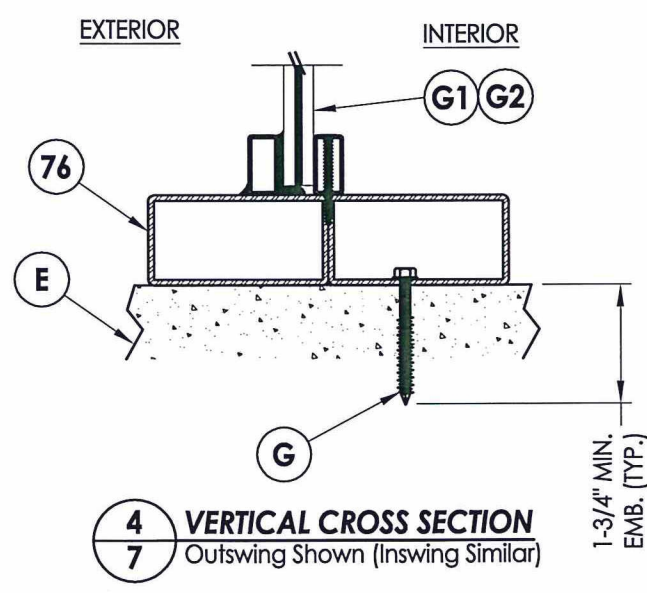
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7 **VERTICAL CROSS SECTION**
Outswing Shown (Inswing Similar)



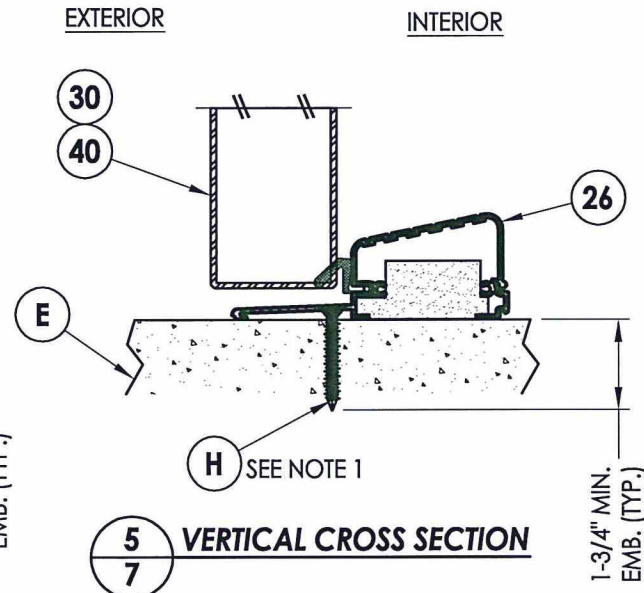
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7 **VERTICAL CROSS SECTION**
Outswing Shown (Inswing Similar)



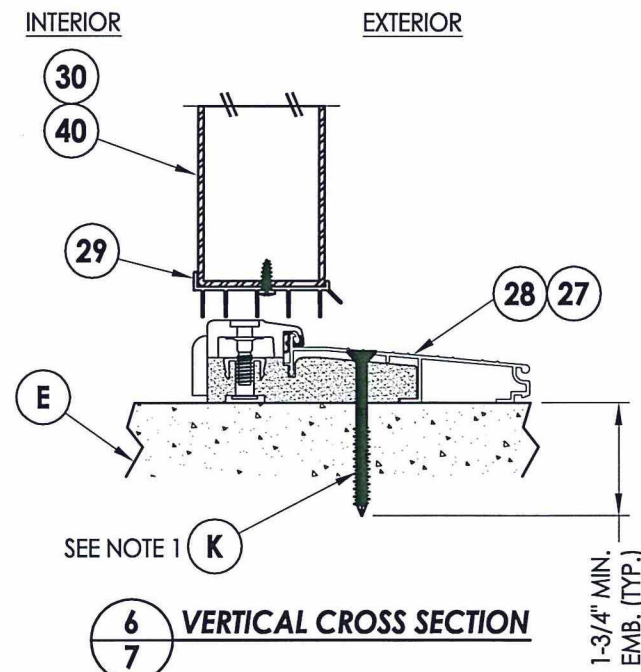
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7 **VERTICAL CROSS SECTION**
Outswing Shown (Inswing Similar)



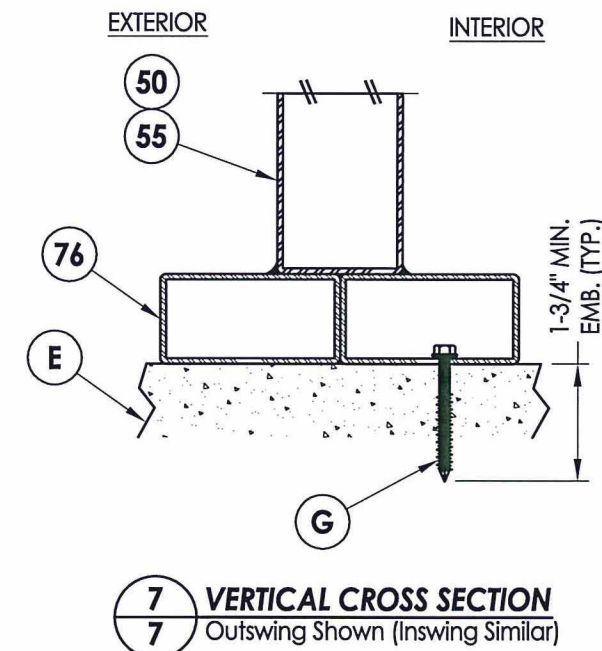
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7 **VERTICAL CROSS SECTION**
Outswing Shown (Inswing Similar)



5
7 **VERTICAL CROSS SECTION**
SEE NOTE 1

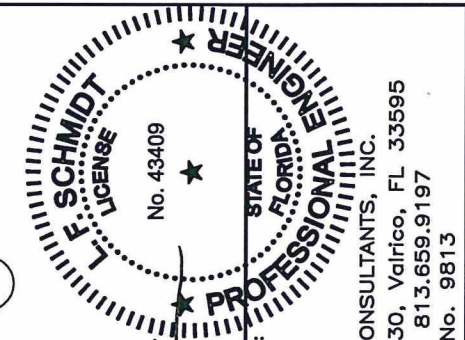


6
7 **VERTICAL CROSS SECTION**
SEE NOTE 1



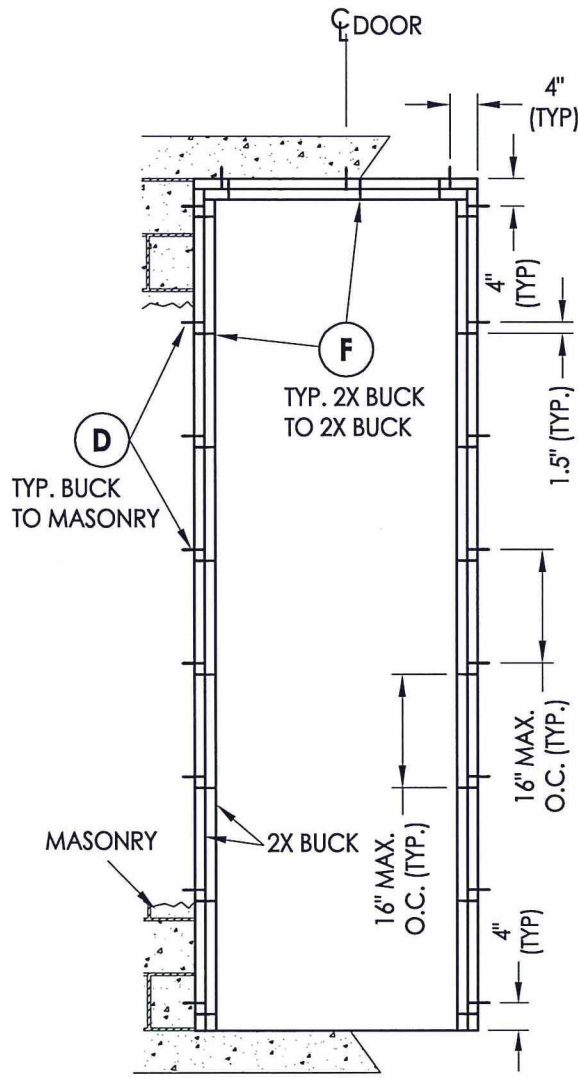
7
7 **VERTICAL CROSS SECTION**
Outswing Shown (Inswing Similar)

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

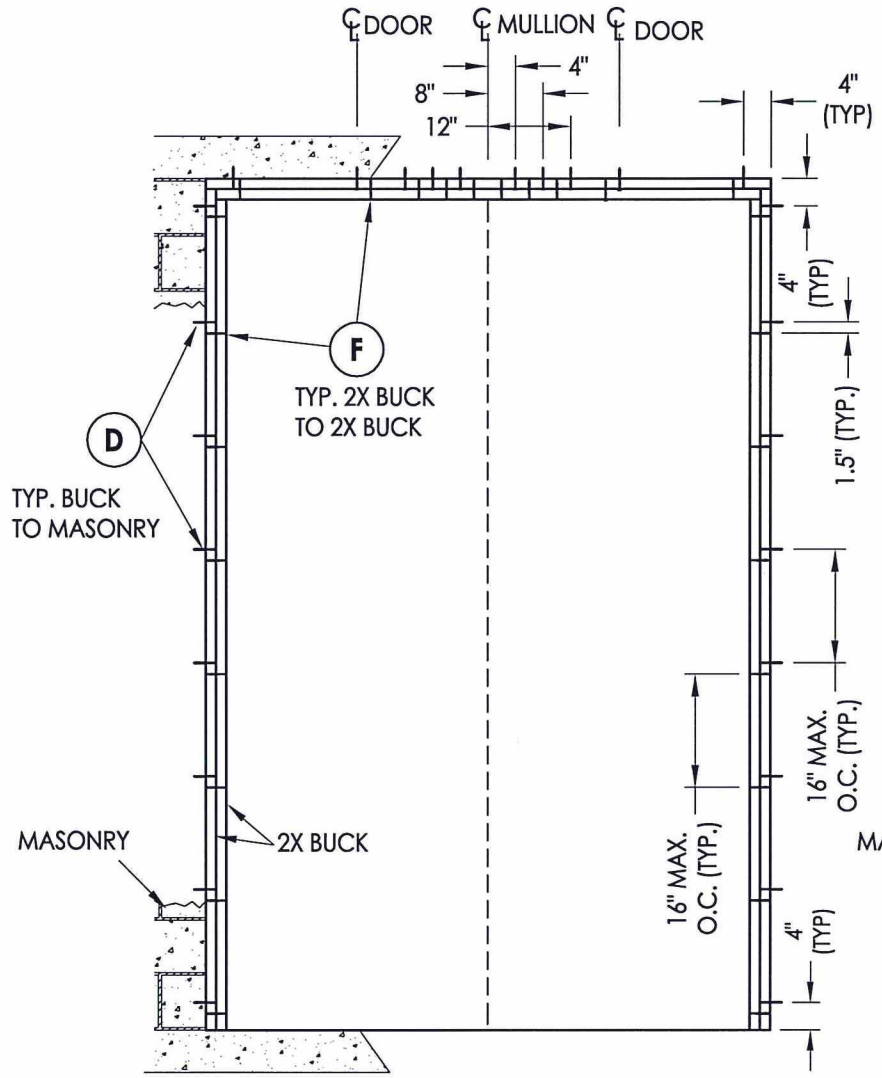


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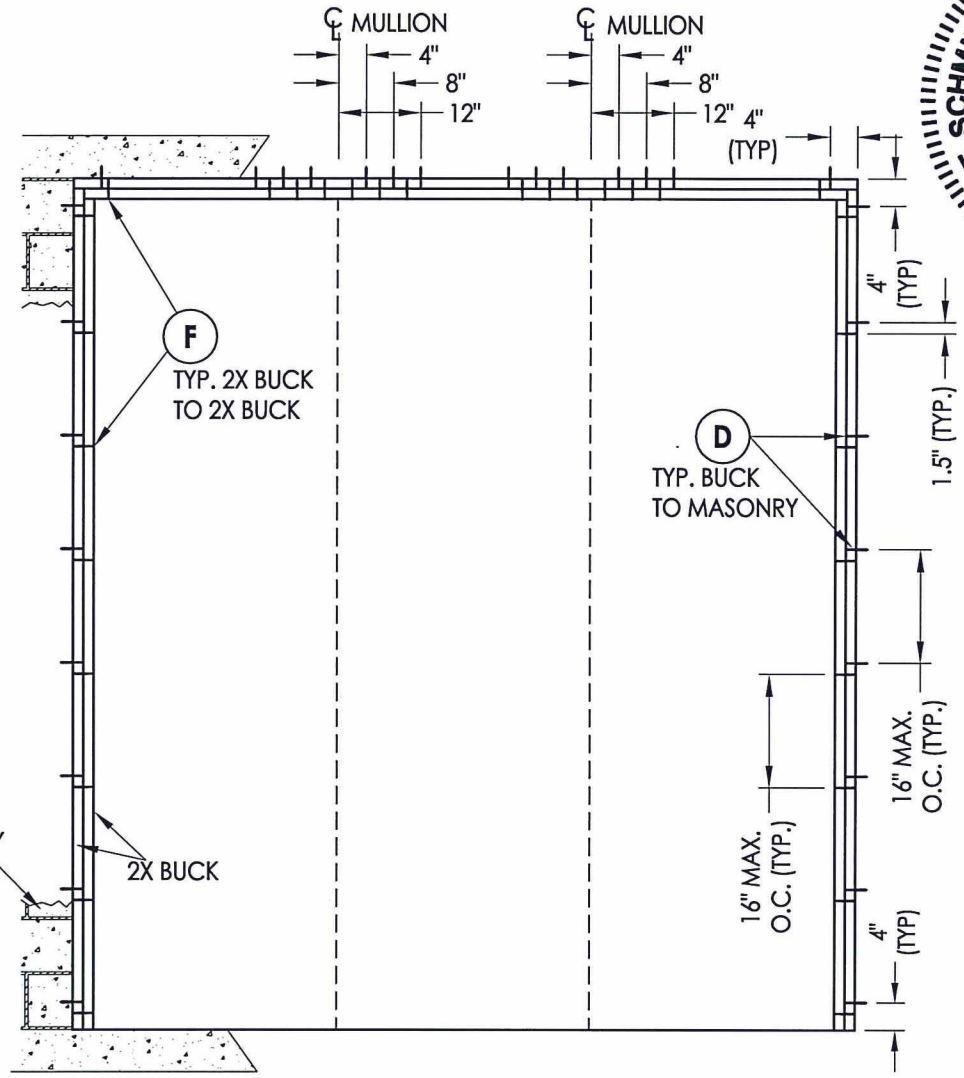
PRODUCT:		CLARK HALL IRON DOORS	
PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS	
DATE:	10/30/13	NO.	DATE
SCALE:	N.T.S.	BY	LFS
DWG. BY:	JK	REVISIONS	
CHK. BY:	LFS	1	8/17/15 UPDATE TO 5TH ED. (2014) FBC
DRAWING NO.:	FL-16663.14		
SHEET	7	OF	11



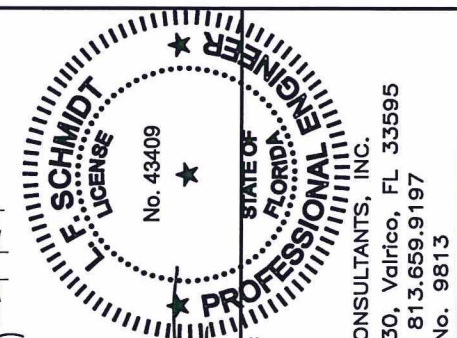
BUCK ANCHORING
X



BUCK ANCHORING
OX or XO



BUCK ANCHORING
OXO



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PRODUCT: CLARK HALL IRON DOORS

PART OR ASSEMBLY: BUCK ANCHORING

NO.	DATE	BY	REVISIONS
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DATE: 10/30/13
SCALE: N.T.S.
DWG. BY: JK
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DRAWING NO.: FL-16663.14
SHEET 8 OF 11

CONCRETE ANCHOR NOTES:

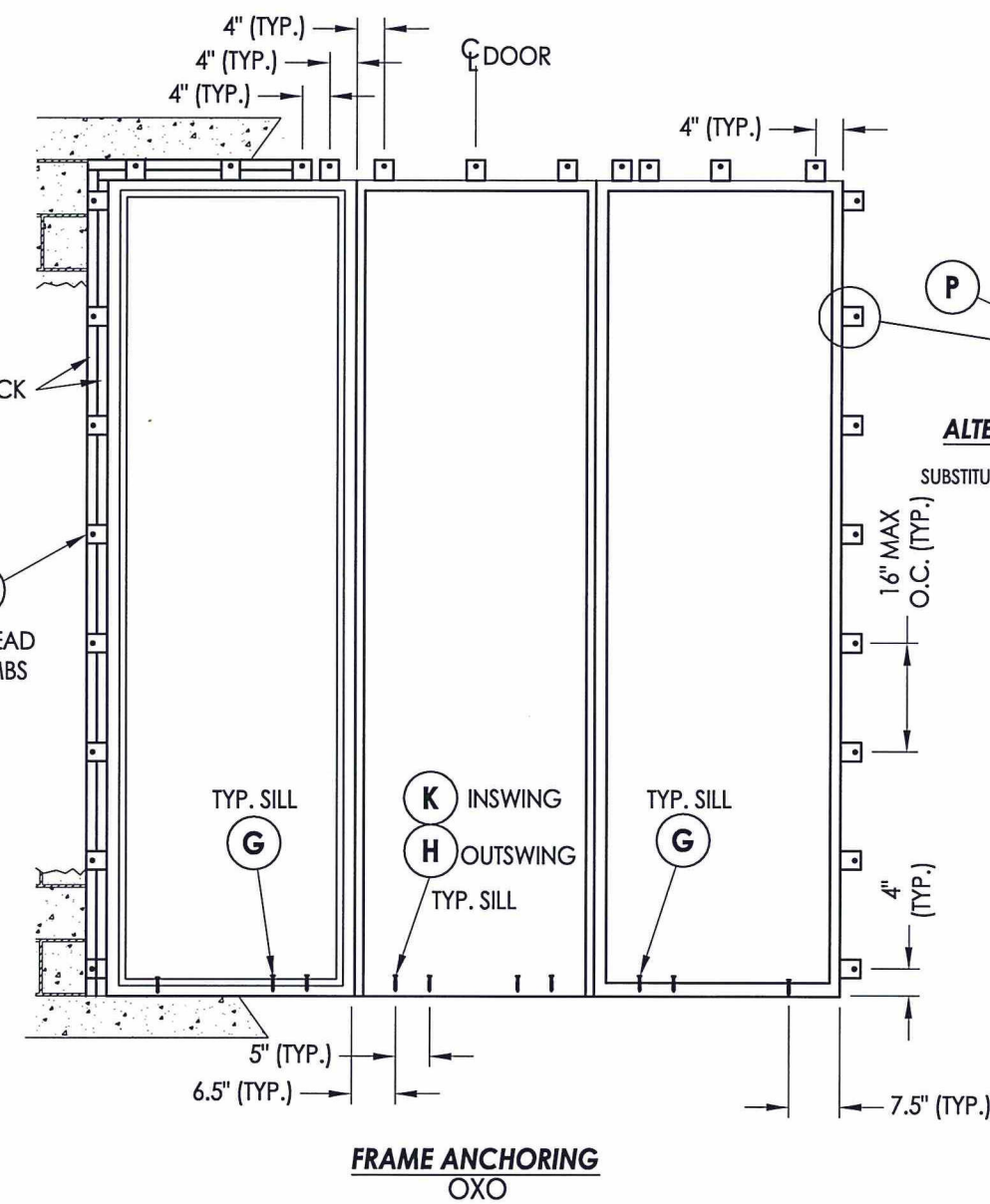
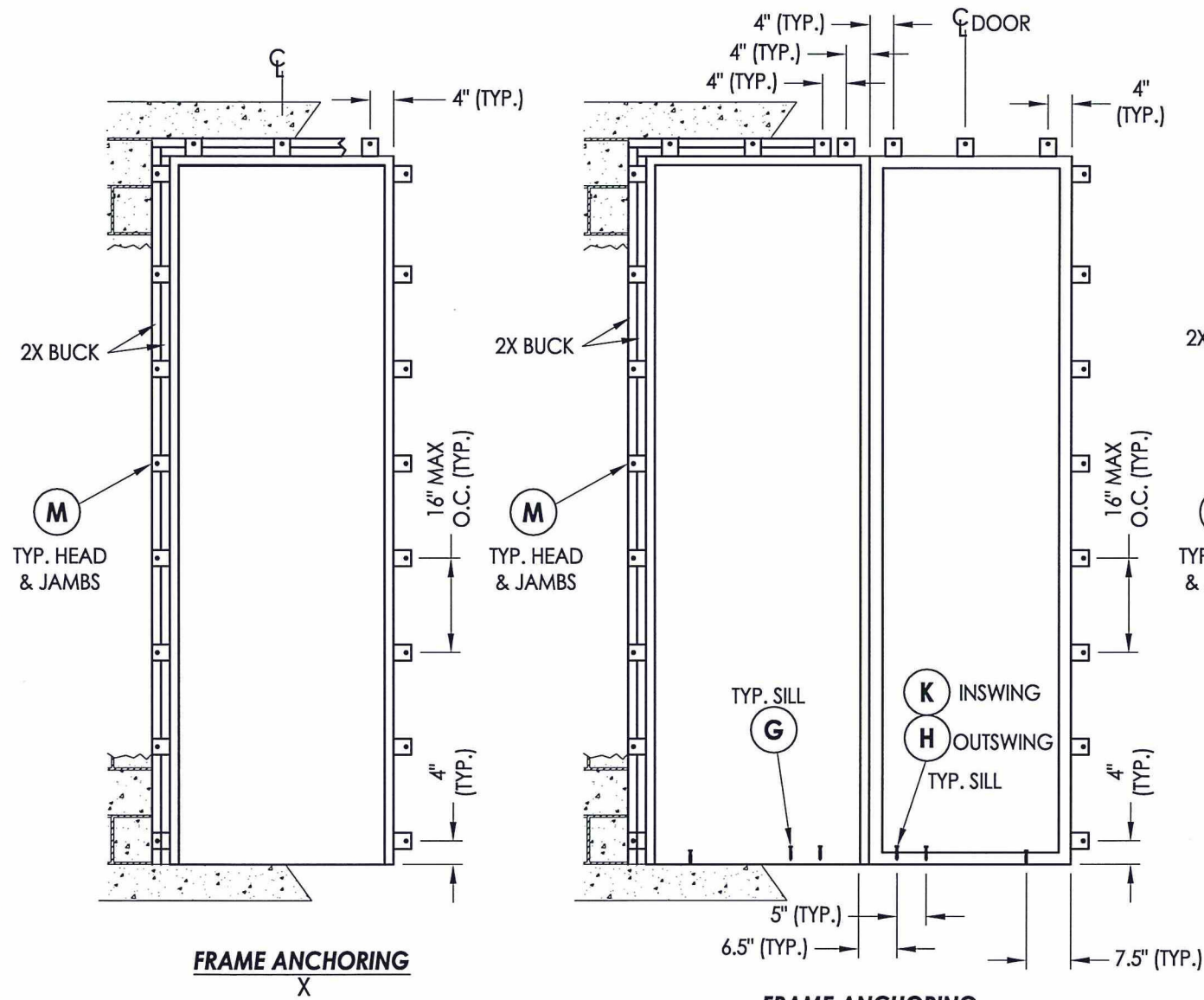
- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
- Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON 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®	1/4"	1-1/4"	2-1/2"	4"
ELCO ULTRACON®	1/4"	1-1/4"	2-1/2"	4"

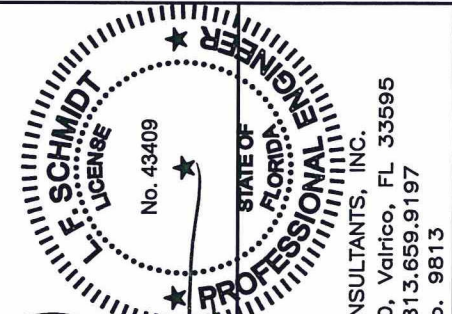
WOOD SCREW INSTALLATION NOTES:

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

NOTE FOR THROUGH THE FRAME ANCHORING ONLY ONE 2X BUCK IS REQUIRED, ANCHORED AS SHOWN.



ALTERNATE ANCHORING
THROUGH THE FRAME
SUBSTITUTE ANCHOR @ EACH BRACKET



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PRODUCT:	CLARK HALL IRON DOORS
PART OR ASSEMBLY:	FRAME ANCHORING

NO.	DATE	BY
1	8/17/15	LFS
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DATE:	10/30/13
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-16663.14
SHEET	9 of 11

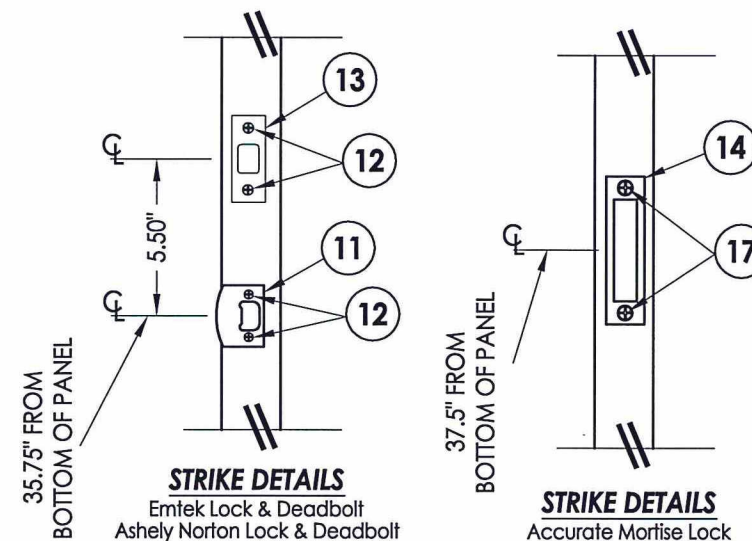
CONCRETE ANCHOR NOTES:

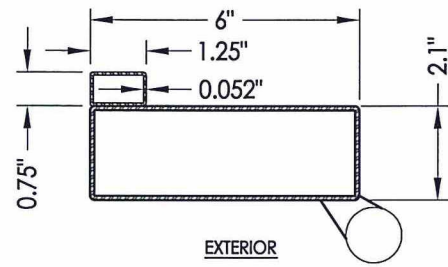
- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
- Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON 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®	3/16"	1-1/4"	3"	2-1/2"
	1/4"	1-1/4"	2-1/2"	4"
	5/16" (XL)	1-3/4"	2-1/2"	5"
ELCO ULTRACON®	1/4"	1-1/4"	2-1/2"	4"
	5/16"	1-3/4"	2-1/2"	5"

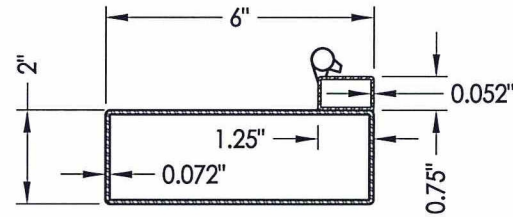
WOOD SCREW INSTALLATION NOTES:

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

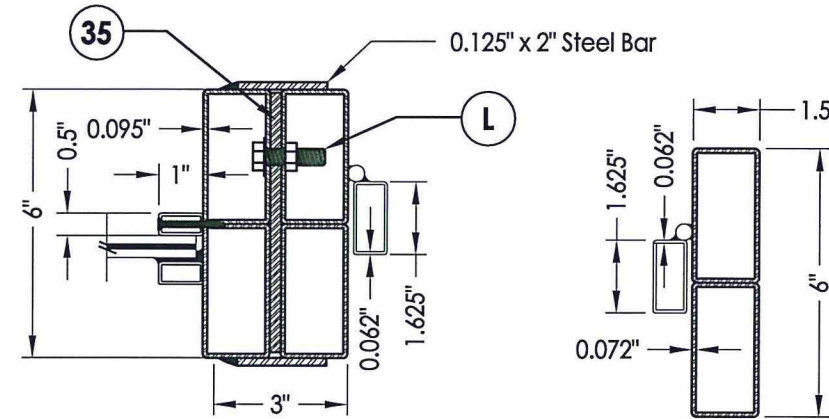




31 Full Lite Door Panel
Active Hinge Stile

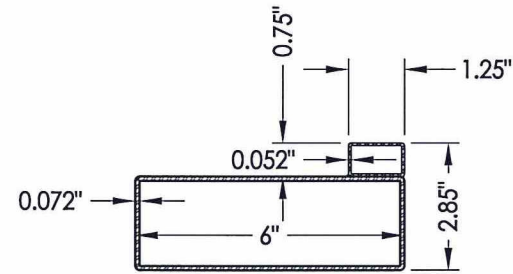


51 Sidelite Panel
Operable Sash Hinge Stile

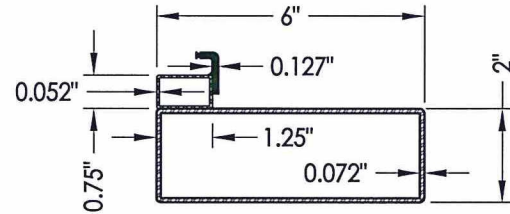


75 MULLION
Vertical with Direct Set Sidelite shown
(Horizontal Mullion Similar)

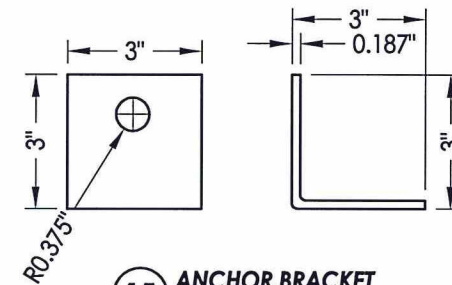
76 Jamb



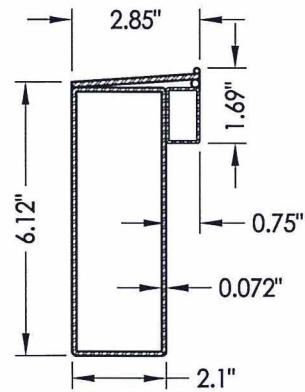
32 Full Lite Door Panel
Active Latch Stile



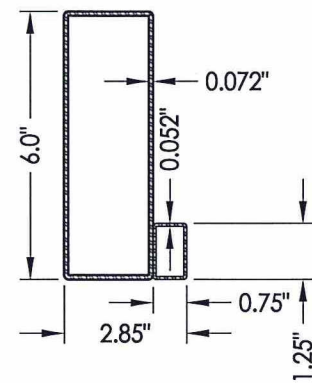
52 Sidelite Panel
Operable Sash Latch Stile



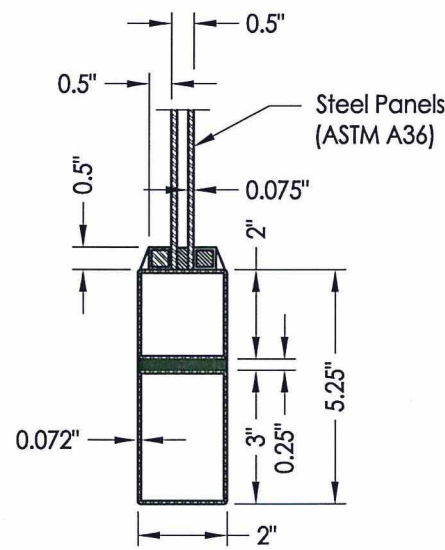
15 ANCHOR BRACKET



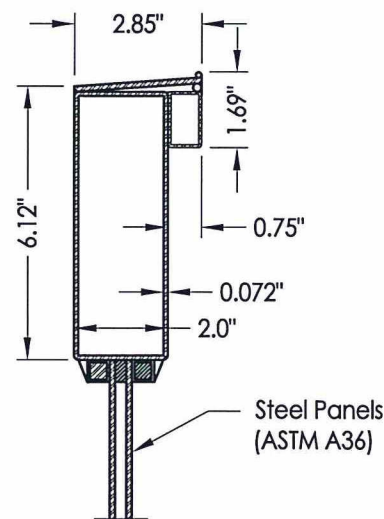
43 Full Lite Door Panel
Bottom Rail



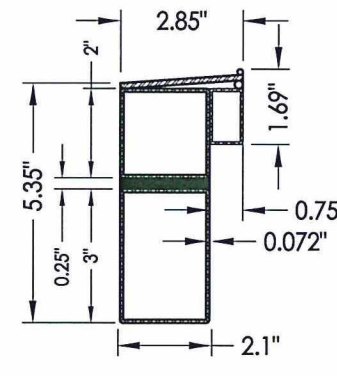
44 Full Lite Door Panel
Top Rail



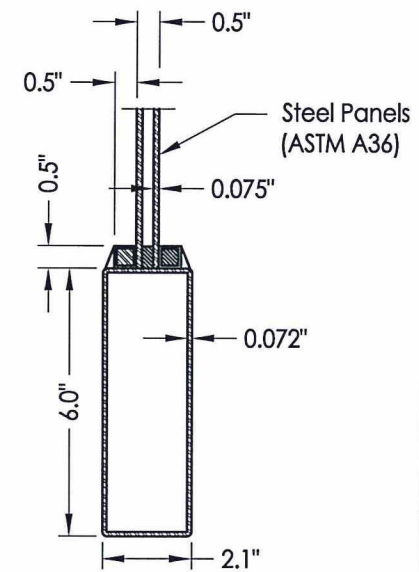
54 Bottom Rail
3/4 Lite Sidelite Panel



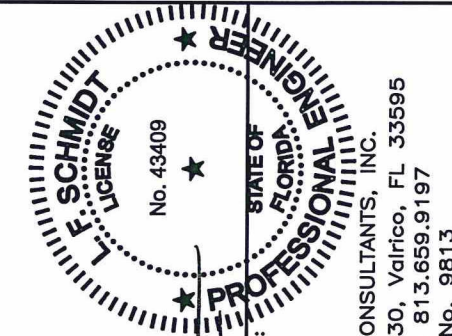
56 Mid Rail
3/4 Lite Sidelite Panel



53 Bottom Rail
Sidelite Panel



57 Bottom Rail
3/4 Lite Door Panel



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

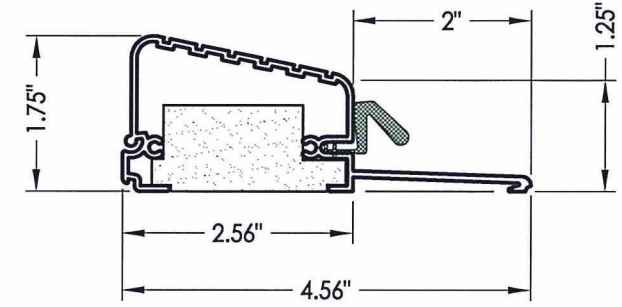
R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE C.A. No. 9813

PRODUCT:	CLARK HALL IRON DOORS
PART OR ASSEMBLY:	COMPONENTS

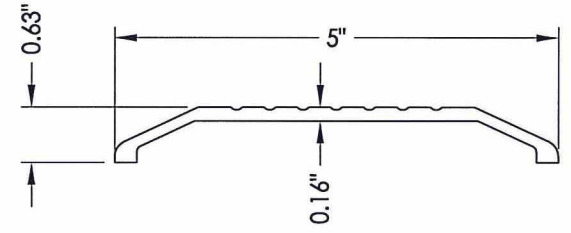
NO.	DATE	REVISIONS
1	8/17/15	UPDATE TO 5TH ED. (2014) FBC
		LFS
		BY

DATE:	10/30/13
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-16663.14
SHEET	10 OF 11

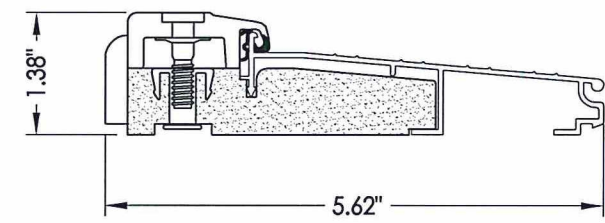
BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
B	2X BUCK SG >= 0.55	WOOD
D	1/4" X 2-3/4" PFH ELCO OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	#10 X 3" PFH WOOD SCREW	STEEL
G	5/16" X 2-1/4" HH ELCO OR ITW CONCRETE SCREW	STEEL
H	5/16" X 2-1/4" PFH ELCO OR ITW CONCRETE SCREW	STEEL
J	3/16" X 2-1/4" PFH ITW CONCRETE SCREW	STEEL
K	5/16" X 2-3/4" PFH ELCO 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	STEEL
P	#12 X 1-1/2" HWH SMS	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



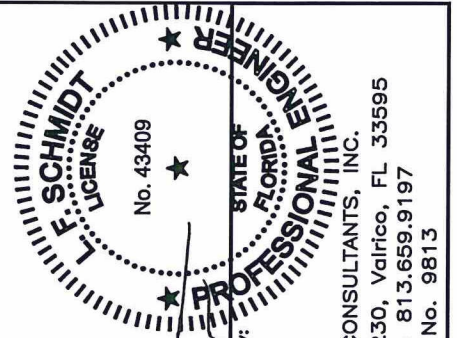
26 OUTSWING THRESHOLD
DLP



27 ADA THRESHOLD



28 INSWING THRESHOLD
AFCO



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SHEET 11 OF 11