

Clark Hall Iron Doors

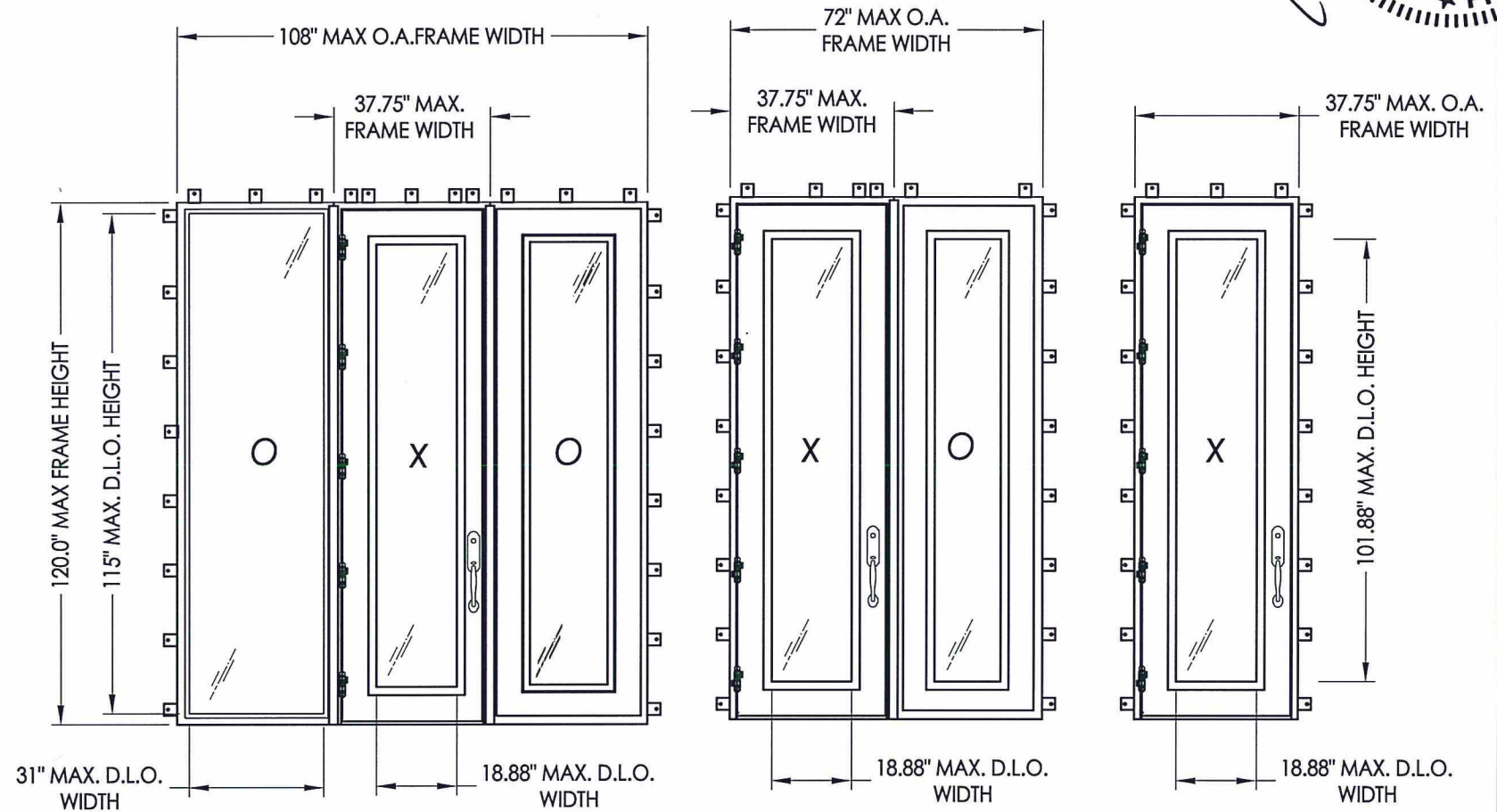
GLAZED IRON SINGLE DOOR w/ & w/out SIDELITES

INSWING/OUTSWING "NON-IMPACT"

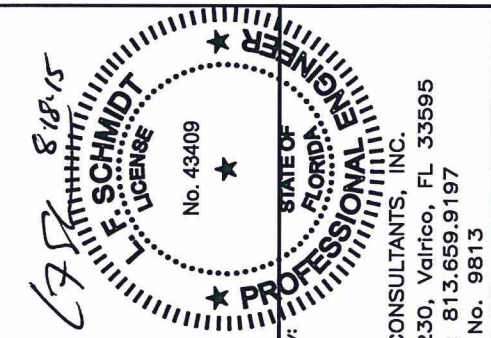
GENERAL NOTES

1. This product has been evaluated and is in compliance with the 5th Edition (2014) 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 is required to be protected with an impact resistant covering that complies with Section 1609.1.2 of the FBC.
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.

TABLE OF CONTENTS	
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"	+65.0	-65.0	+65.0	-65.0
OX or XO	72.0" x 120.0"	+65.0	-65.0	+65.0	-65.0
OXO	72.0" x 120.0"	+65.0	-65.0	+65.0	-65.0



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

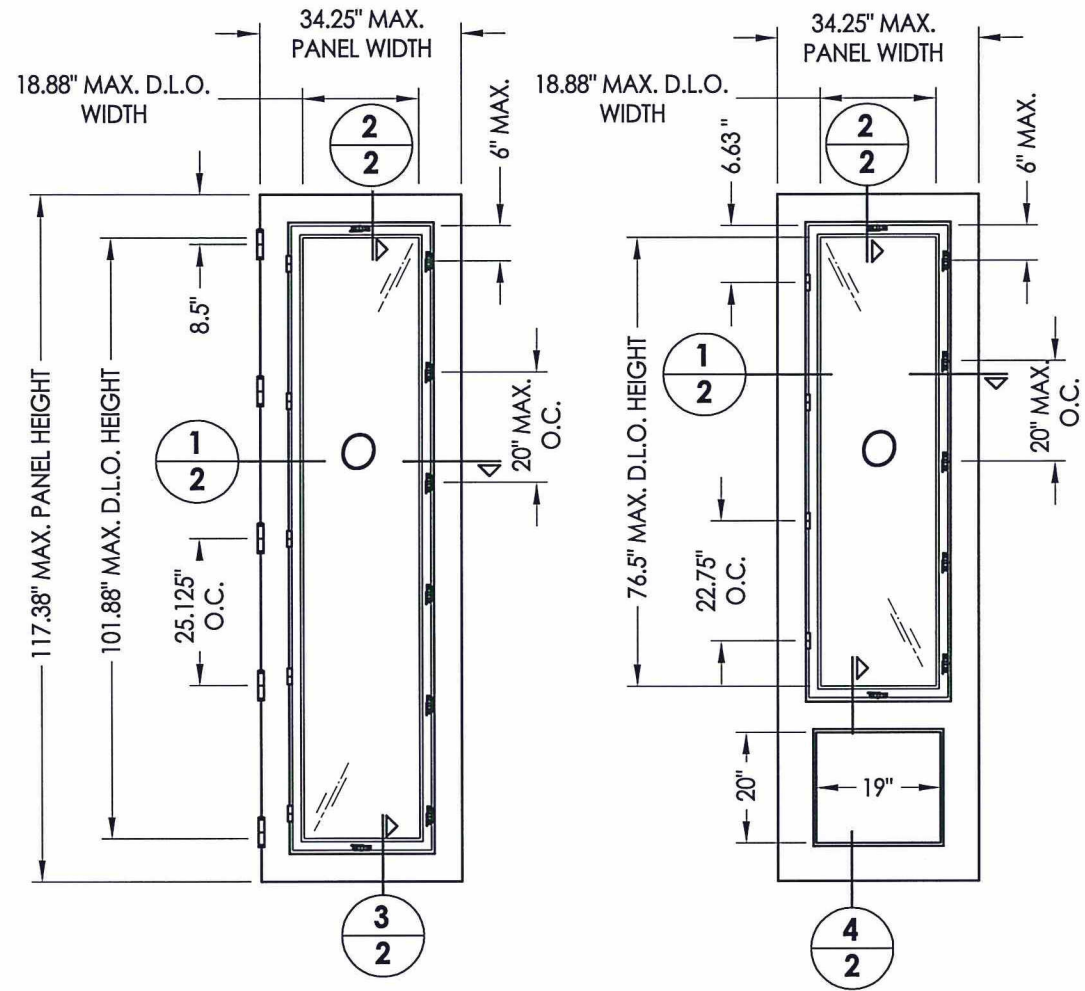
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE C.A. No. 9813

PRODUCT: CLARK HALL IRON DOORS

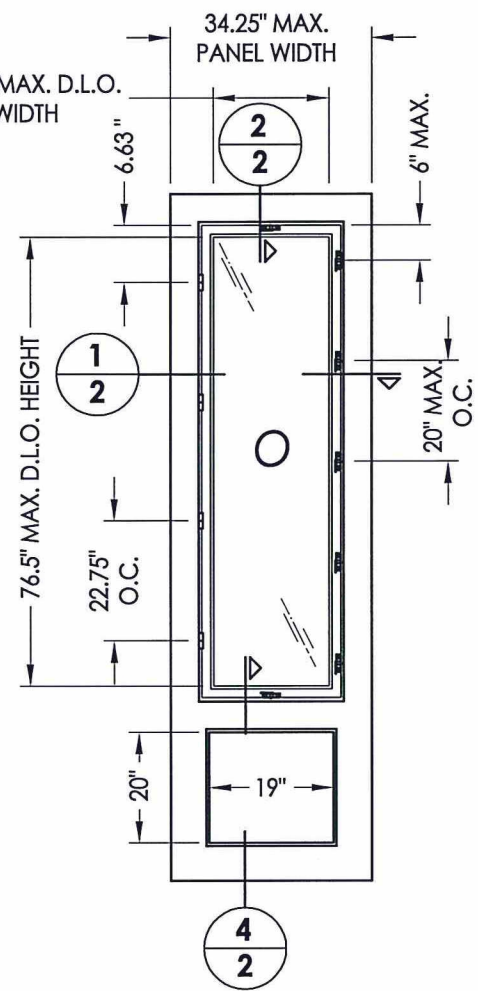
PART OR ASSEMBLY: TYPICAL ELEVATIONS, DESIGN PRESSURES & GENERAL NOTES

NO.	DATE	BY	REVISIONS
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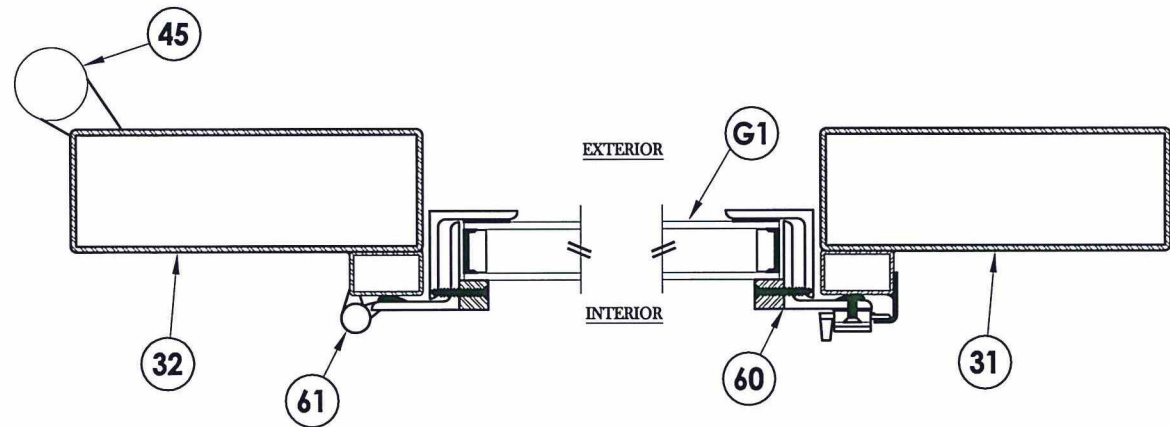
DATE: 10/30/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-16663.2
SHEET 1 OF 11



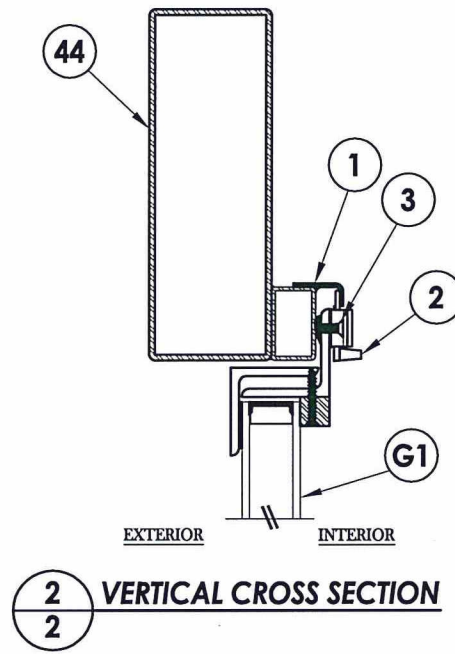
30 DOOR PANEL
w/ Operable Sash



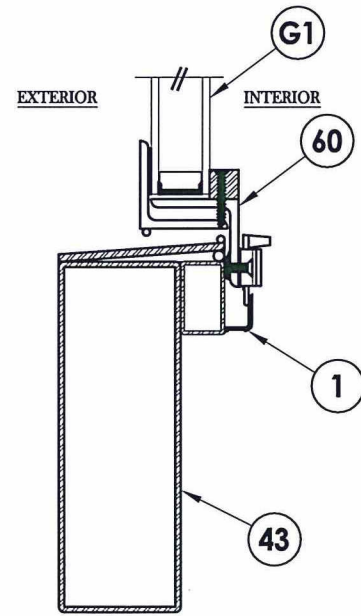
40 3/4 LITE DOOR PANEL
w/ Operable Sash



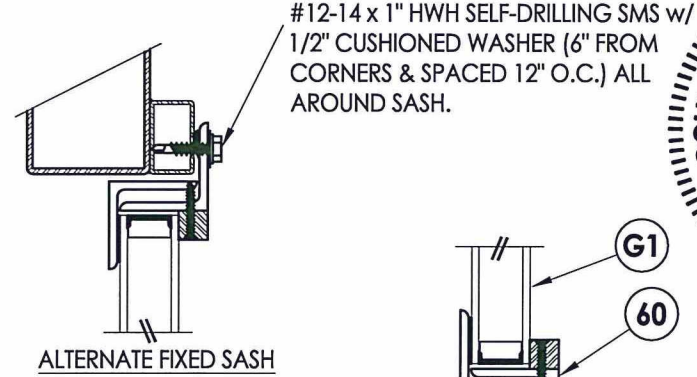
1 HORIZONTAL CROSS SECTION



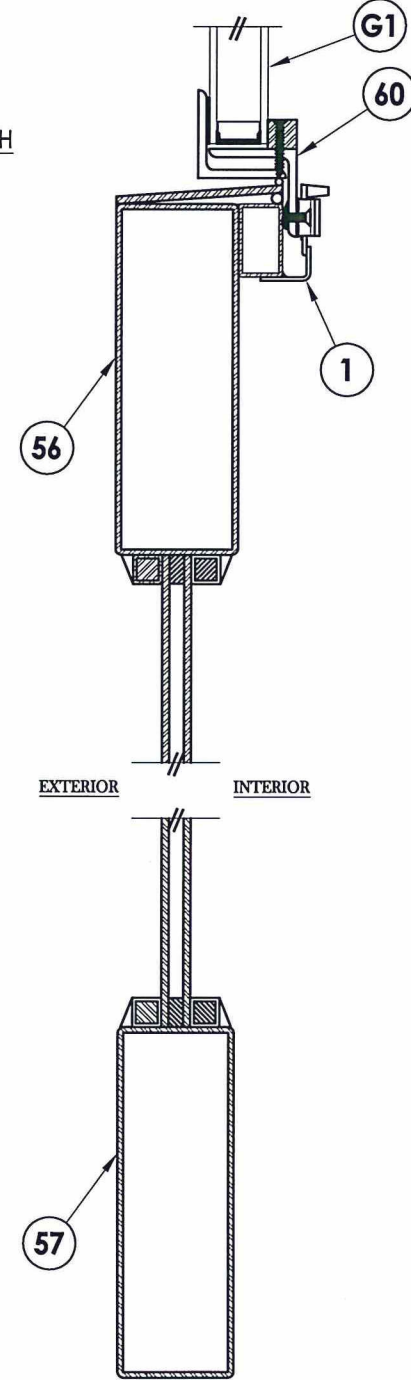
2 VERTICAL CROSS SECTION



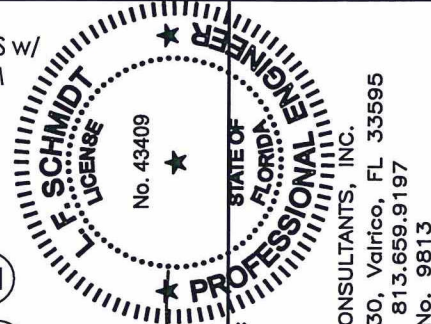
3 VERTICAL CROSS SECTION



ALTERNATE FIXED SASH



4 VERTICAL CROSS SECTION



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PRODUCT: CLARK HALL IRON DOORS

PART OR ASSEMBLY: DOOR PANEL DETAILS

NO.	DATE	BY
1	8/17/15	LFS

DATE: 11/8/13

SCALE: N.T.S.

DWG. BY: JK

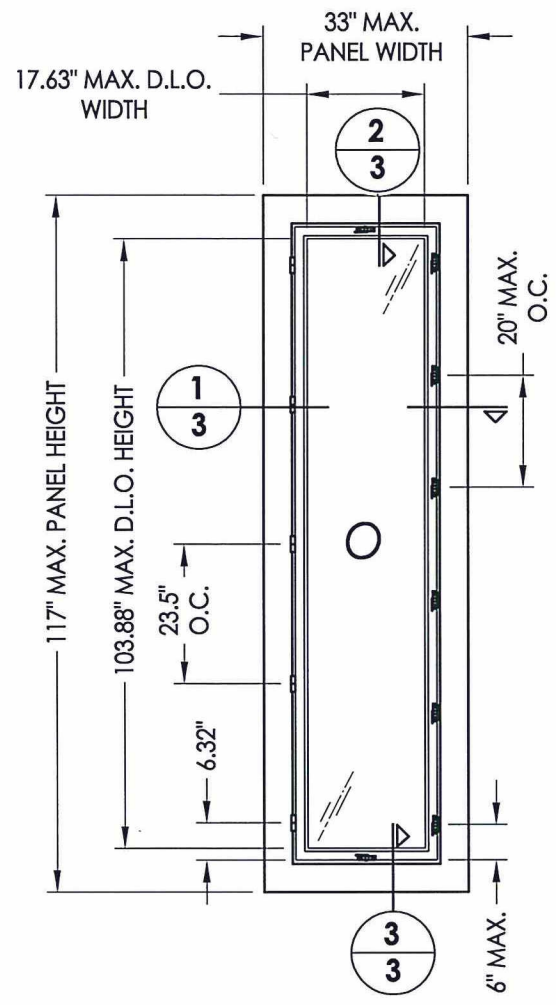
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DRAWING NO.:

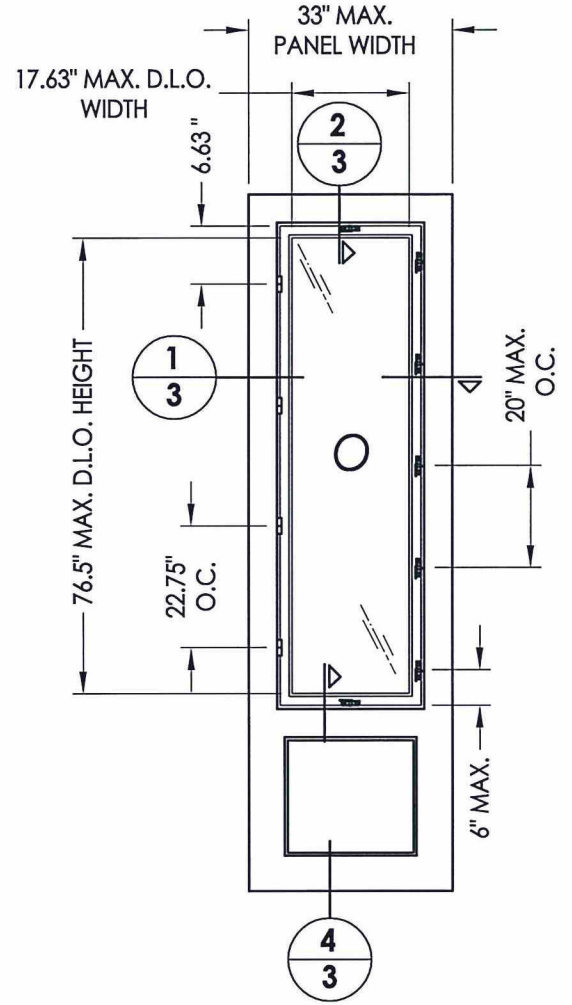
FL-16663.2

SHEET 2 OF 11

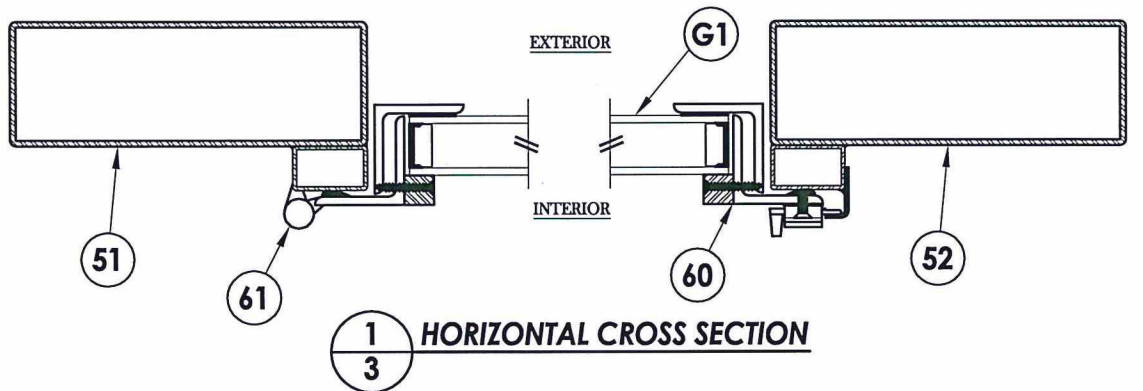
R:\Clients\Clark Hall Iron Doors PERMANENTVA - Florida Product Approvals\FL-16663 Exterior Doors - Iron Doors\C - Drawings\FL 16663 (2014)\FL-16663.1-3.dwg, 2.3



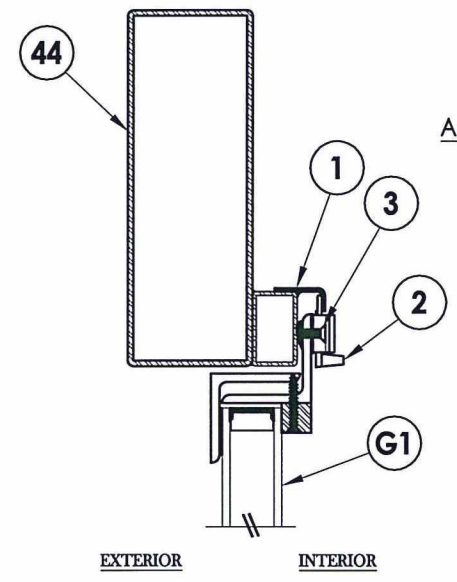
50 SIDELITE PANEL
w/ Operable Sash



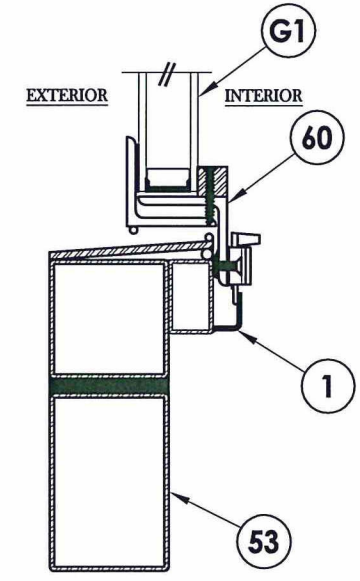
55 3/4 SIDELITE PANEL
w/ Operable Sash & Fixed Panel



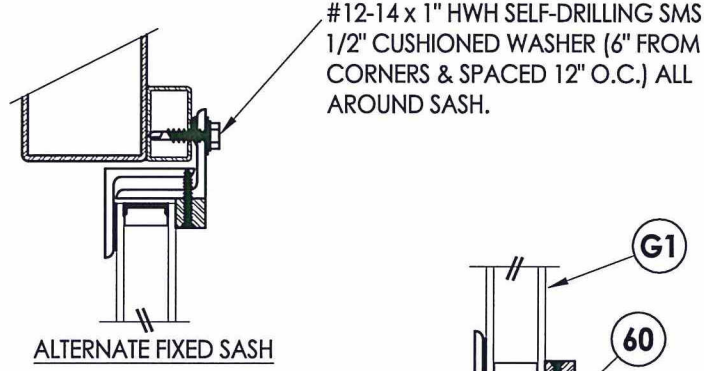
1 HORIZONTAL CROSS SECTION



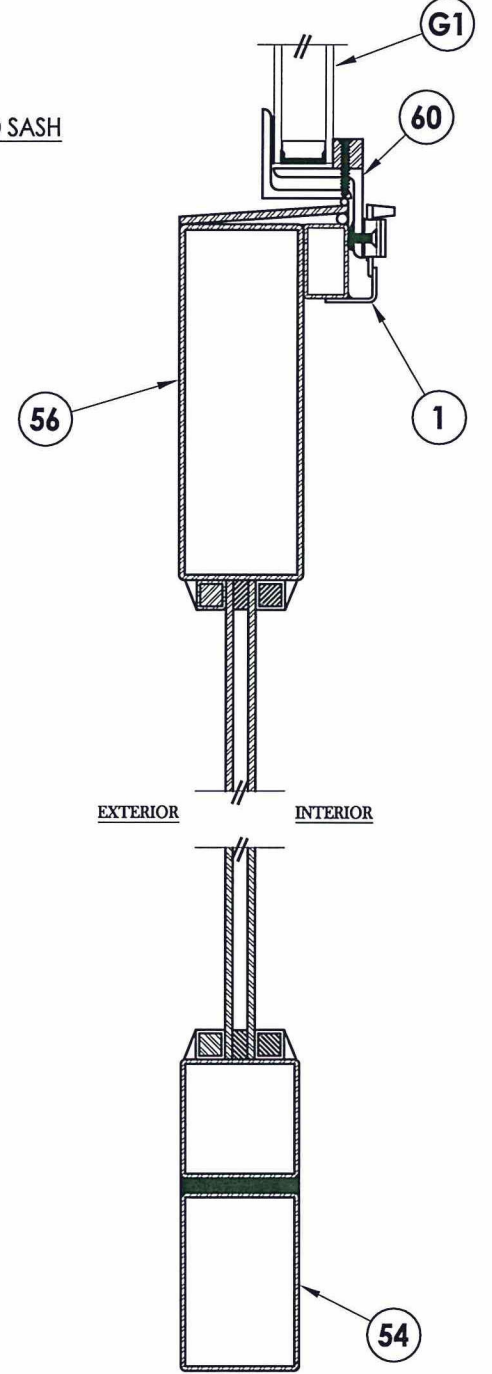
2 VERTICAL CROSS SECTION



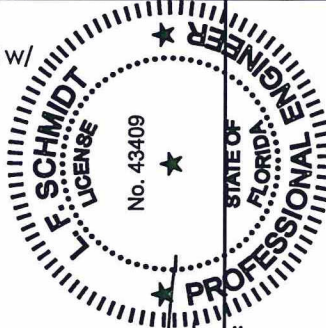
3 VERTICAL CROSS SECTION



ALTERNATE FIXED SASH



4 VERTICAL CROSS SECTION

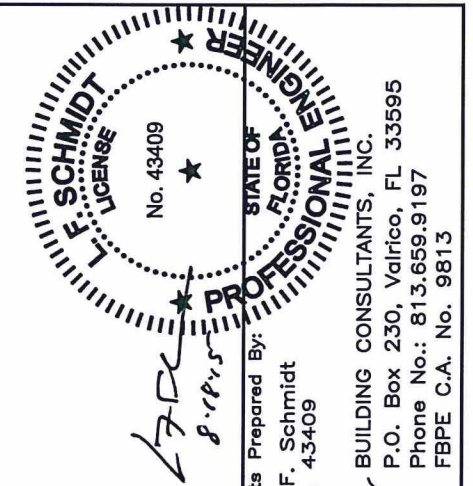
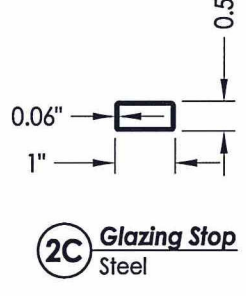
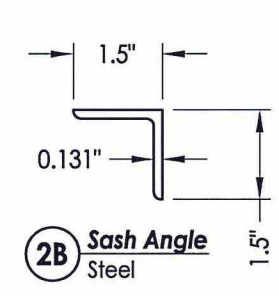
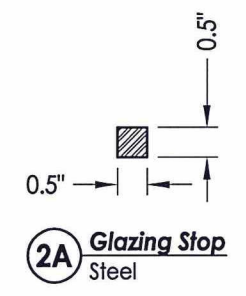
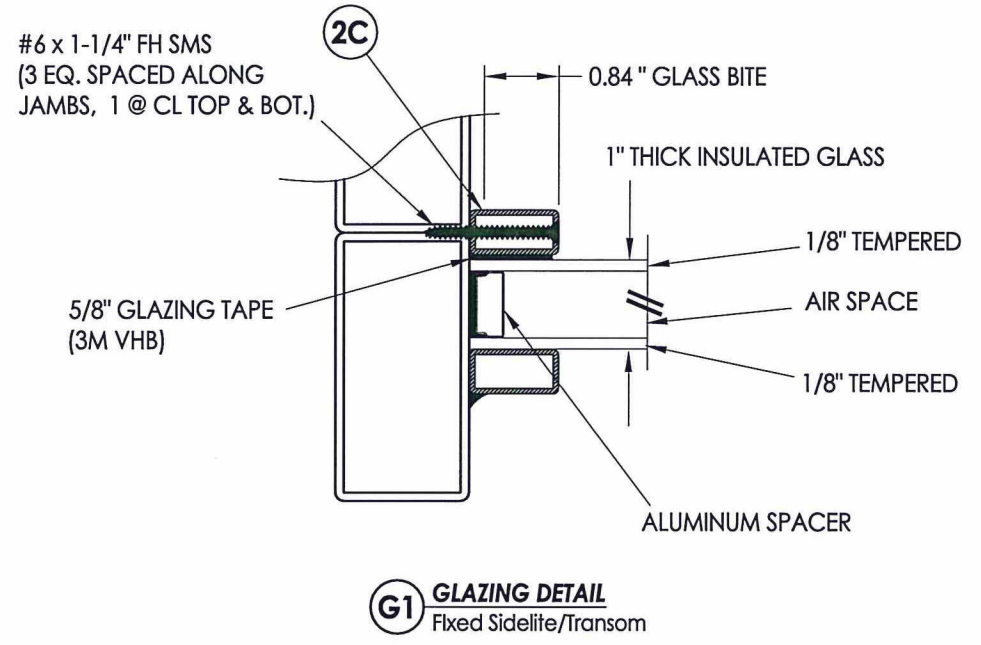
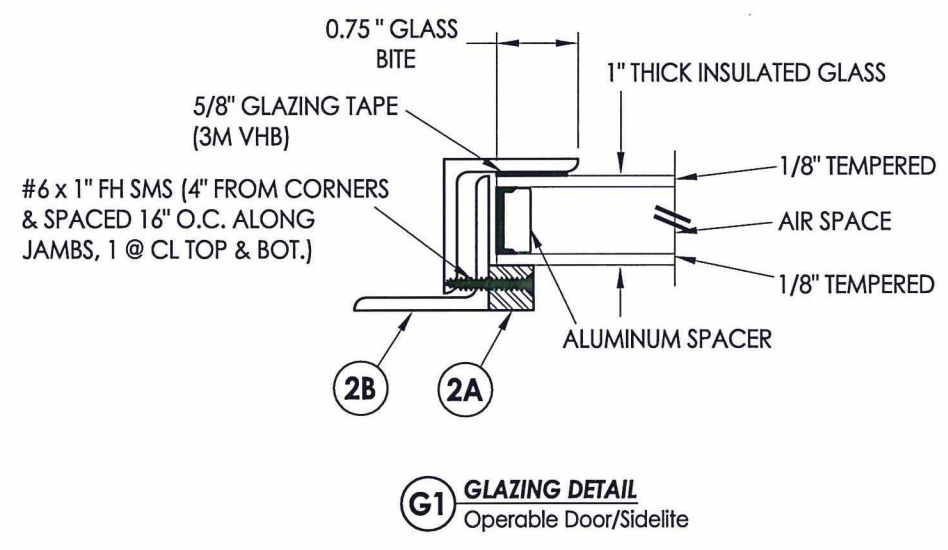


LFS
8.18.15

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FBPE C.A. No. 9813

PRODUCT:		CLARK HALL IRON DOORS	
PART OR ASSEMBLY:		SIDELITE PANEL DETAILS	
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-16663.2			
SHEET 3 OF 11			



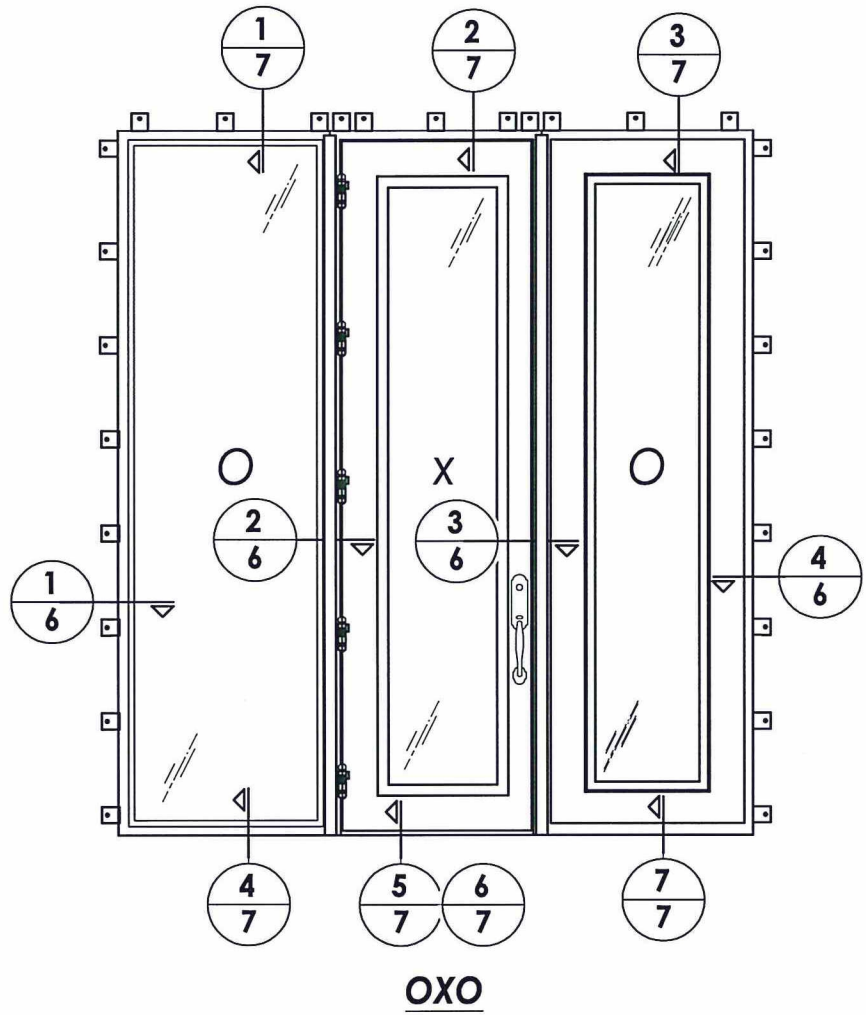
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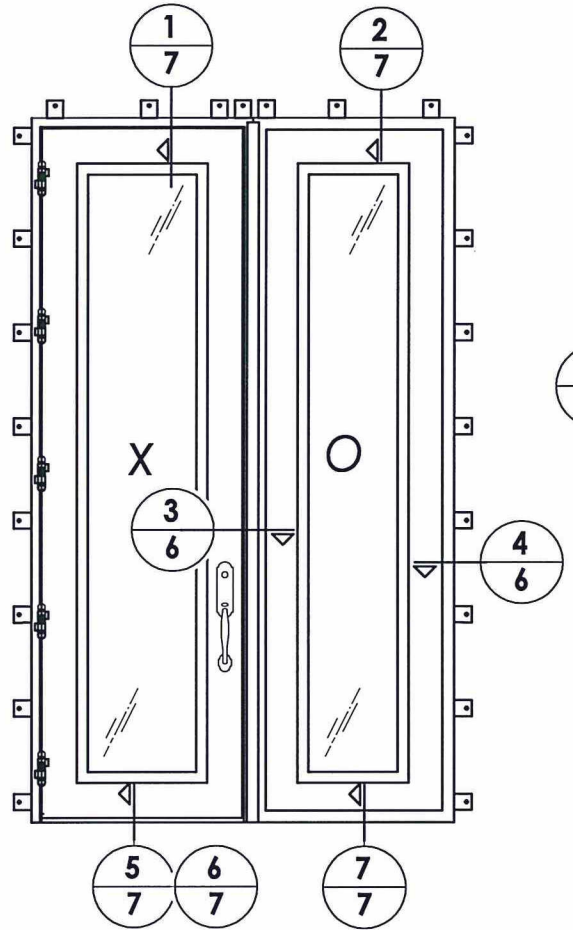
PRODUCT: CLARK HALL IRON DOORS
PART OR ASSEMBLY: GLAZING DETAILS

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

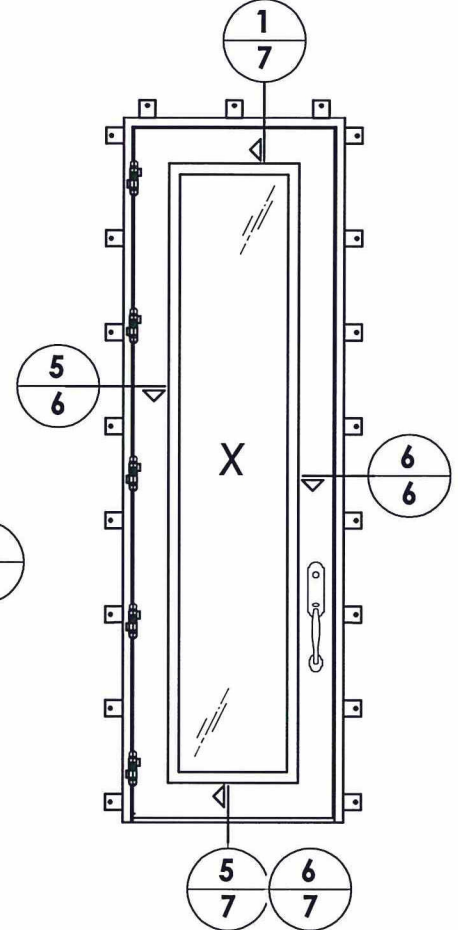
DATE: 11/8/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-16663.2
SHEET 4 OF 11



OXO



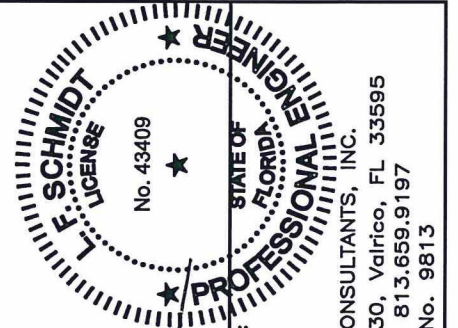
OX/XO



X

LOCK HARDWARE TABLE

MANUFACTURER	MODEL
EMTEK	TUBULAR ENTRY SET (SHERIDAN - 451812)
SUN VALLEY BRONZE ACCURATE LOCK & HARDWARE	LEVER/KNOB ENTRY SET (RIDGE: CS-421PLD) MORTISE LOCK
ASHLEY NORTON	TUBULAR ENTRY SET (SQTUB w/ 900 SERIES KNOB)
ASHLEY NORTON ACCURATE LOCK & HARDWARE	MORTISE LOCK (SQMOR w/ 900 SERIES KNOB) MORTISE LOCK



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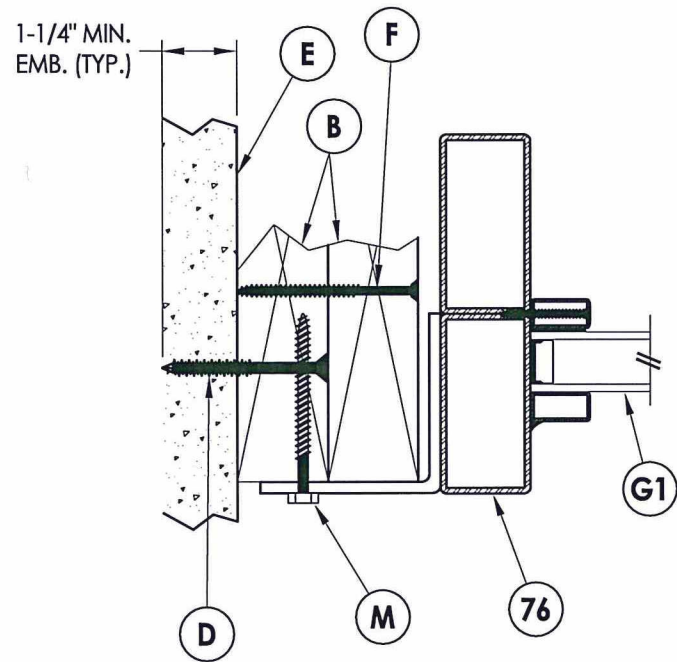
RW BUILDING CONSULTANTS, INC.
 P.O. Box 230, Vairico, FL 33595
 Phone No.: 813.659.9197
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PRODUCT: CLARK HALL IRON DOORS

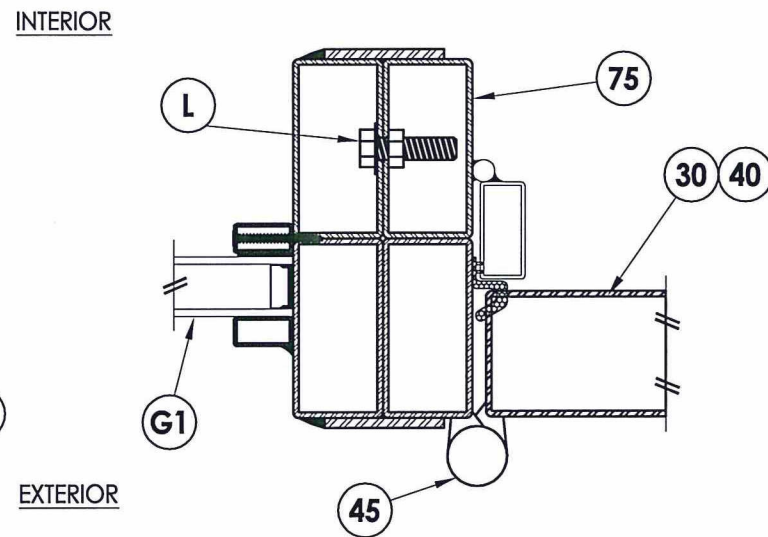
PART OR ASSEMBLY: ELEVATIONS

NO.	DATE	DESCRIPTION	LFS	BY
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REVISIONS				

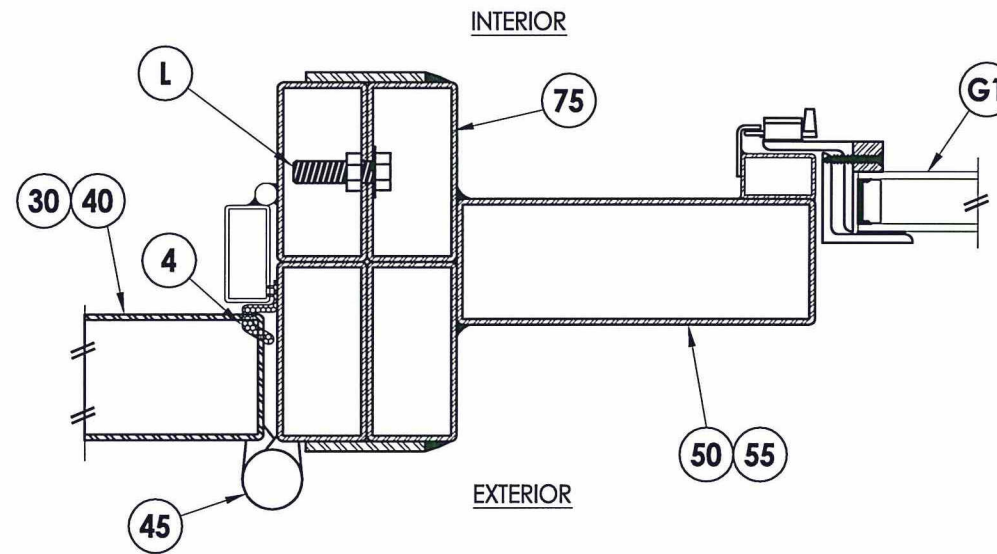
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 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: FL-16663.2
 SHEET 5 of 11



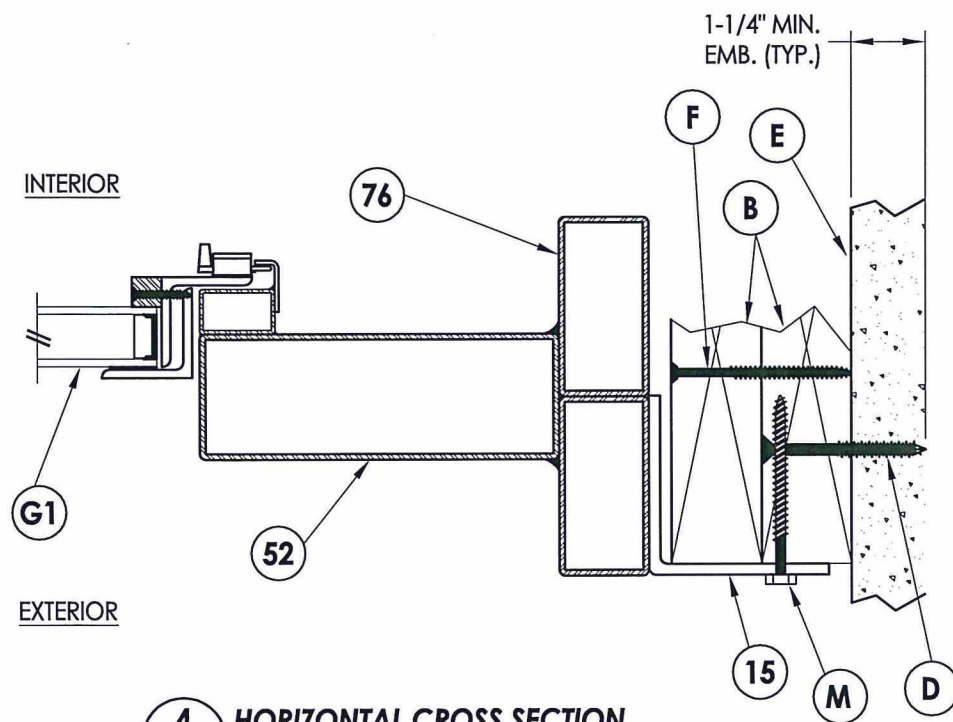
1
6 HORIZONTAL CROSS SECTION



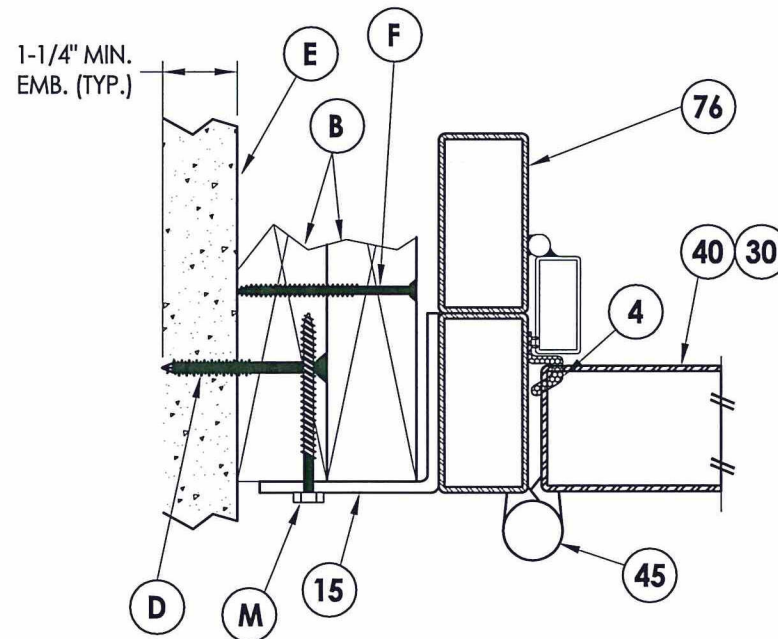
2
6 HORIZONTAL CROSS SECTION
Outswing Shown (Inswing Similar)



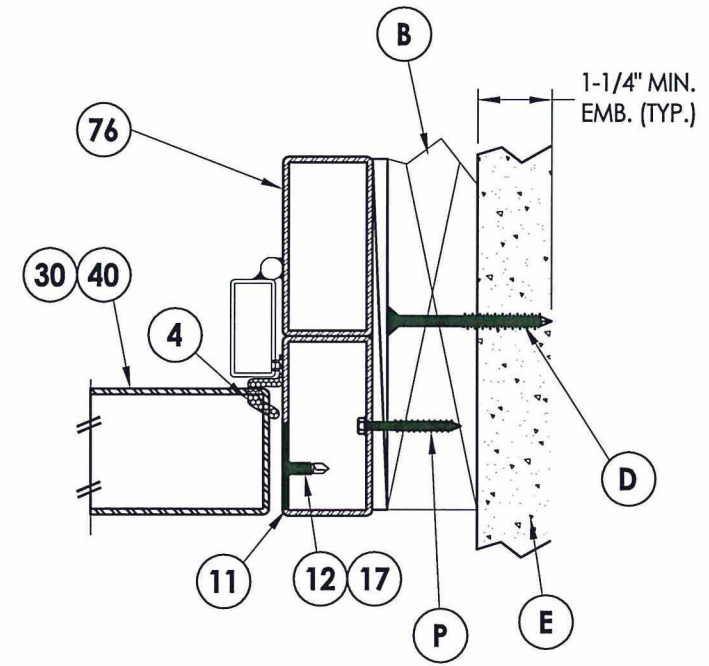
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6 HORIZONTAL CROSS SECTION
Outswing Shown (Inswing Similar)



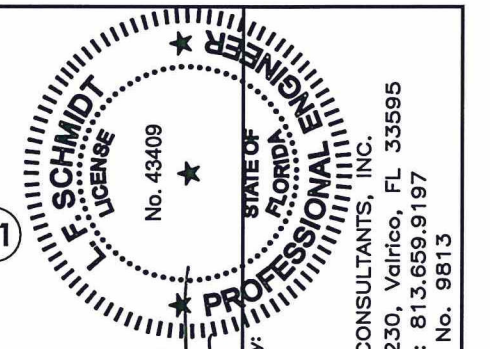
4
6 HORIZONTAL CROSS SECTION
Outswing Shown (Inswing Similar)



5
6 HORIZONTAL CROSS SECTION
Outswing Shown (Inswing Similar)



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



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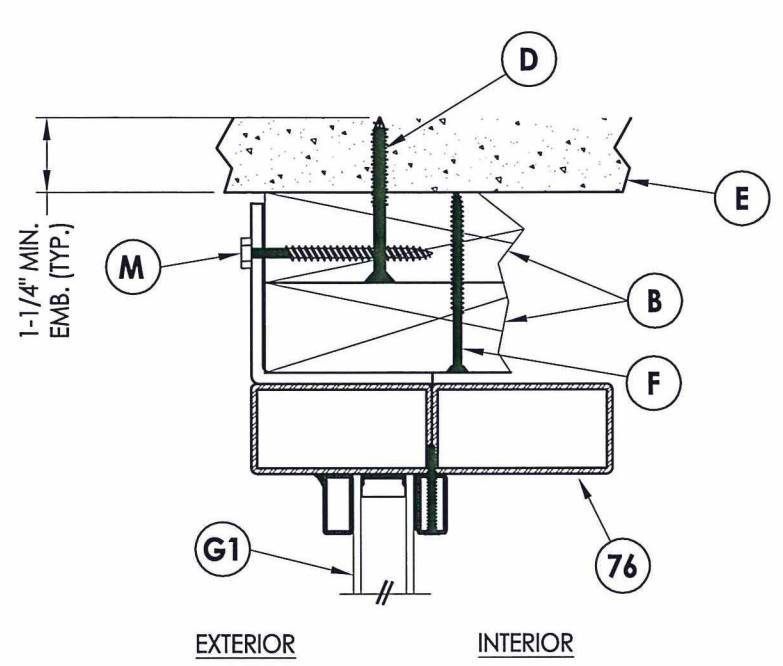
RW BUILDING CONSULTANTS, INC.
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FBPE C.A. No. 9813

PRODUCT: CLARK HALL IRON DOORS

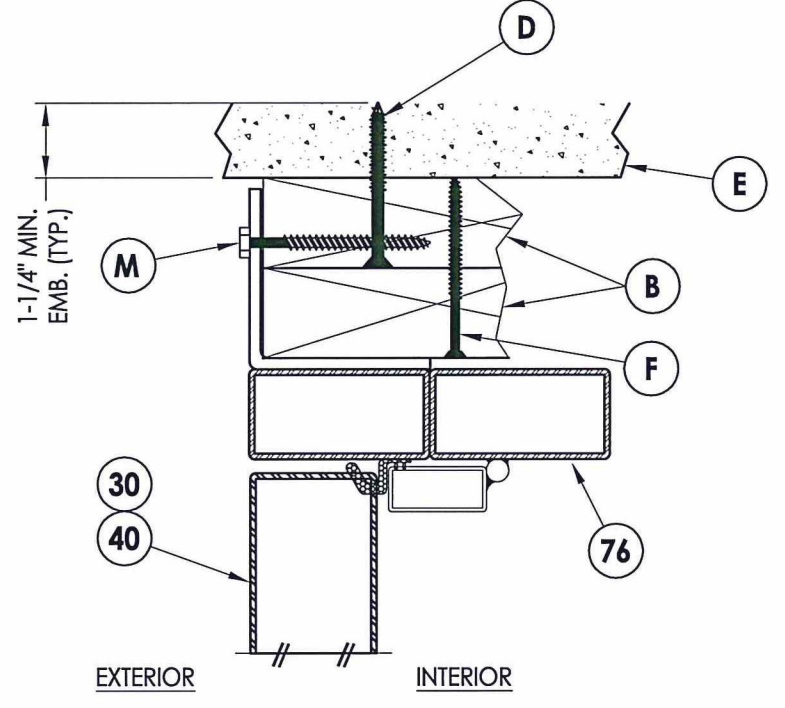
PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

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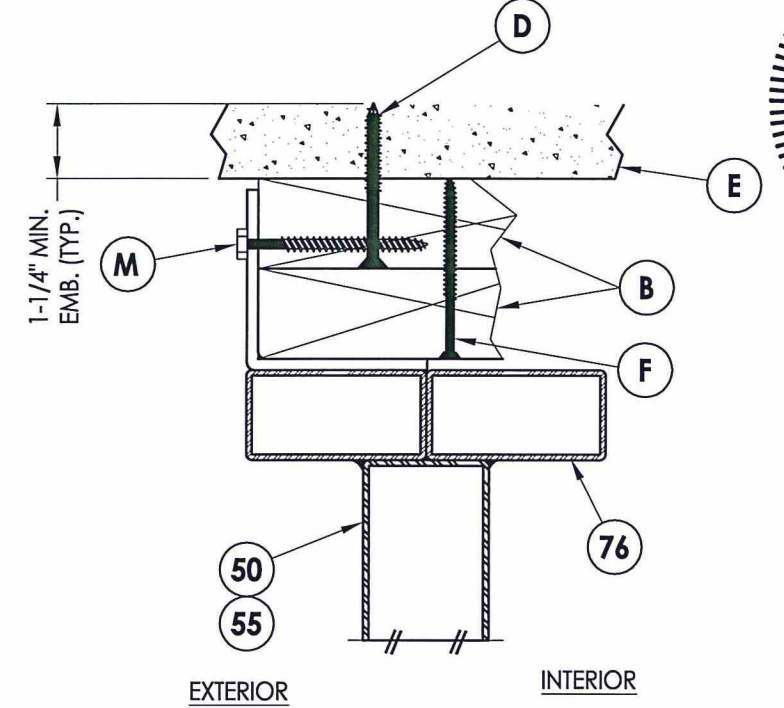
DATE: 10/30/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-16663.2
SHEET 6 OF 11



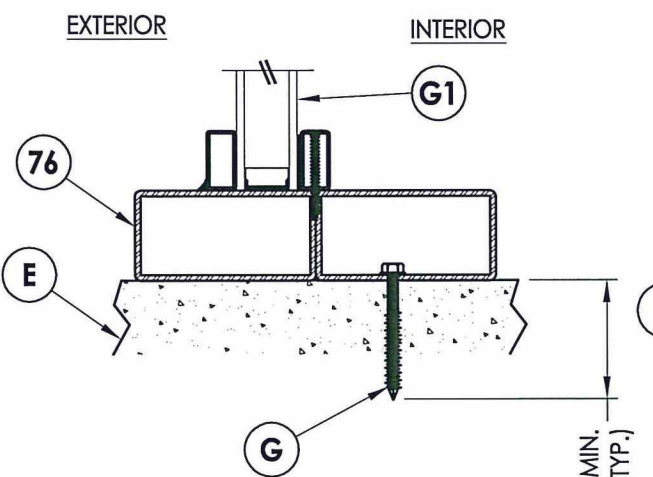
1 VERTICAL CROSS SECTION
7 Outswing Shown (Inswing Similar)



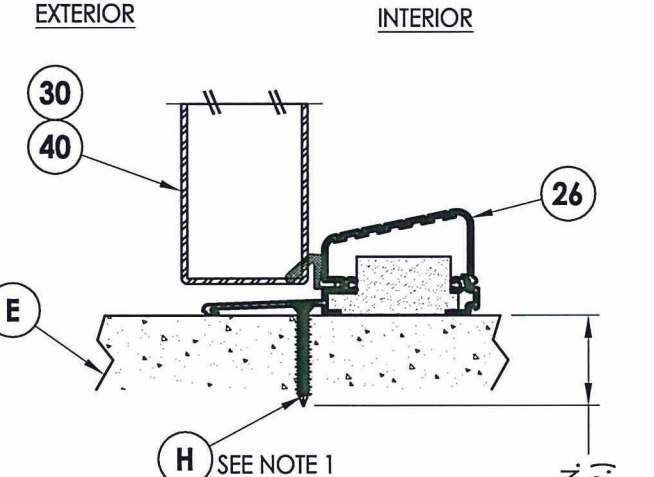
2 VERTICAL CROSS SECTION
7 Outswing Shown (Inswing Similar)



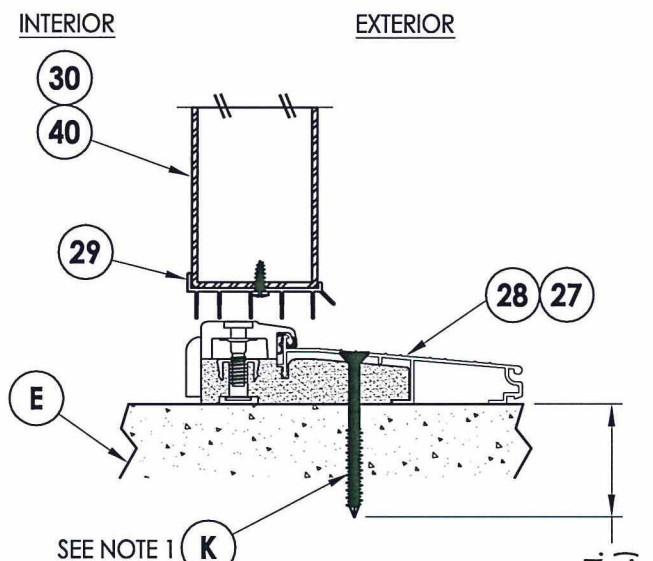
3 VERTICAL CROSS SECTION
7 Outswing Shown (Inswing Similar)



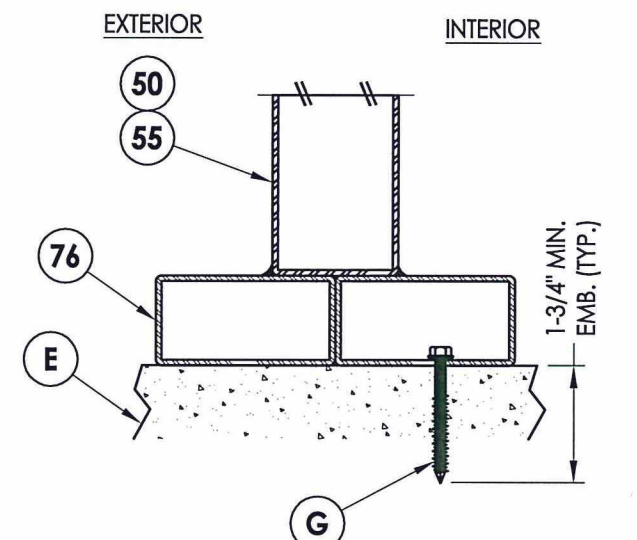
4 VERTICAL CROSS SECTION
7 Outswing Shown (Inswing Similar)



5 VERTICAL CROSS SECTION
7 Outswing Shown (Inswing Similar)

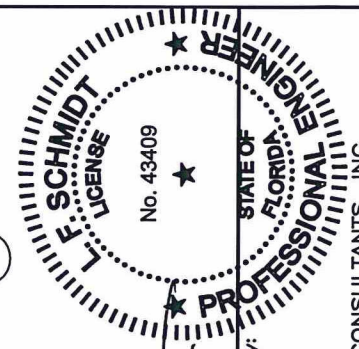


6 VERTICAL CROSS SECTION
7 Outswing Shown (Inswing Similar)



7 VERTICAL CROSS SECTION
7 Outswing Shown (Inswing Similar)

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



LFS
P.F.P.

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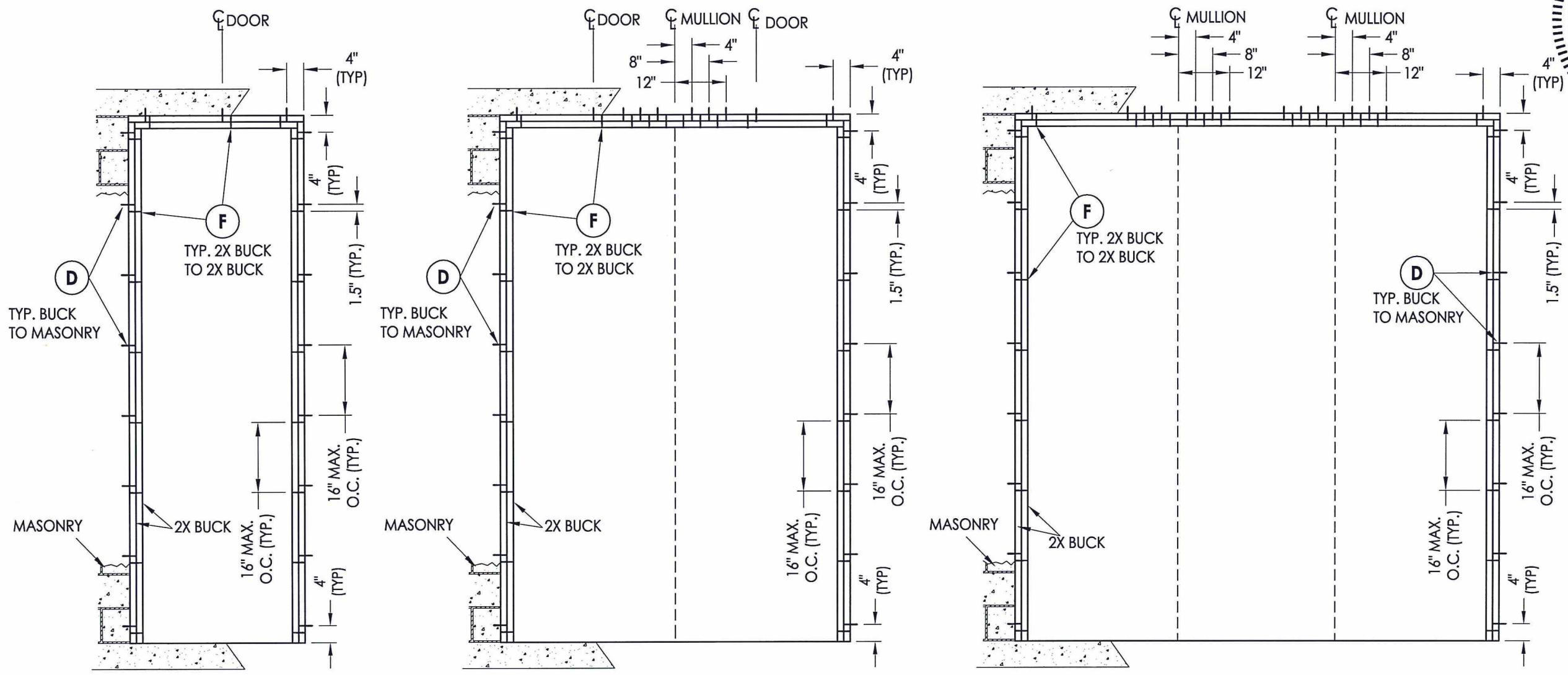
RW
 BUILDING CONSULTANTS, INC.
 P.O. Box 230, Vairico, FL 33595
 Phone No.: 813.659.9197
 FBPE C.A. No. 9813

PRODUCT:
 CLARK HALL IRON DOORS

PART OR ASSEMBLY:
 VERTICAL
 CROSS SECTIONS

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

DATE:	10/30/13
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-16663.2
SHEET	7 OF 11



BUCK ANCHORING
X

BUCK ANCHORING
OX or XO

BUCK ANCHORING
OXO

CONCRETE ANCHOR NOTES:

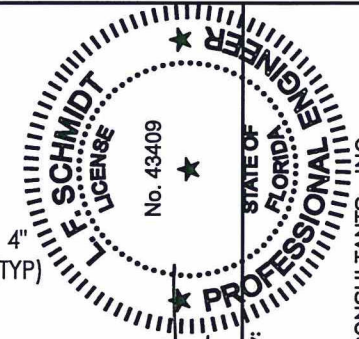
1. Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
2. Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX.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



E. Schmidt
8/18/15

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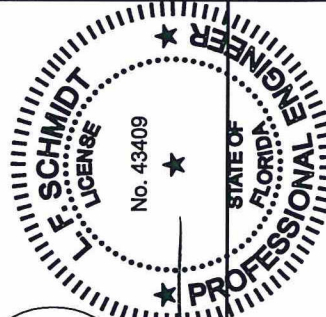
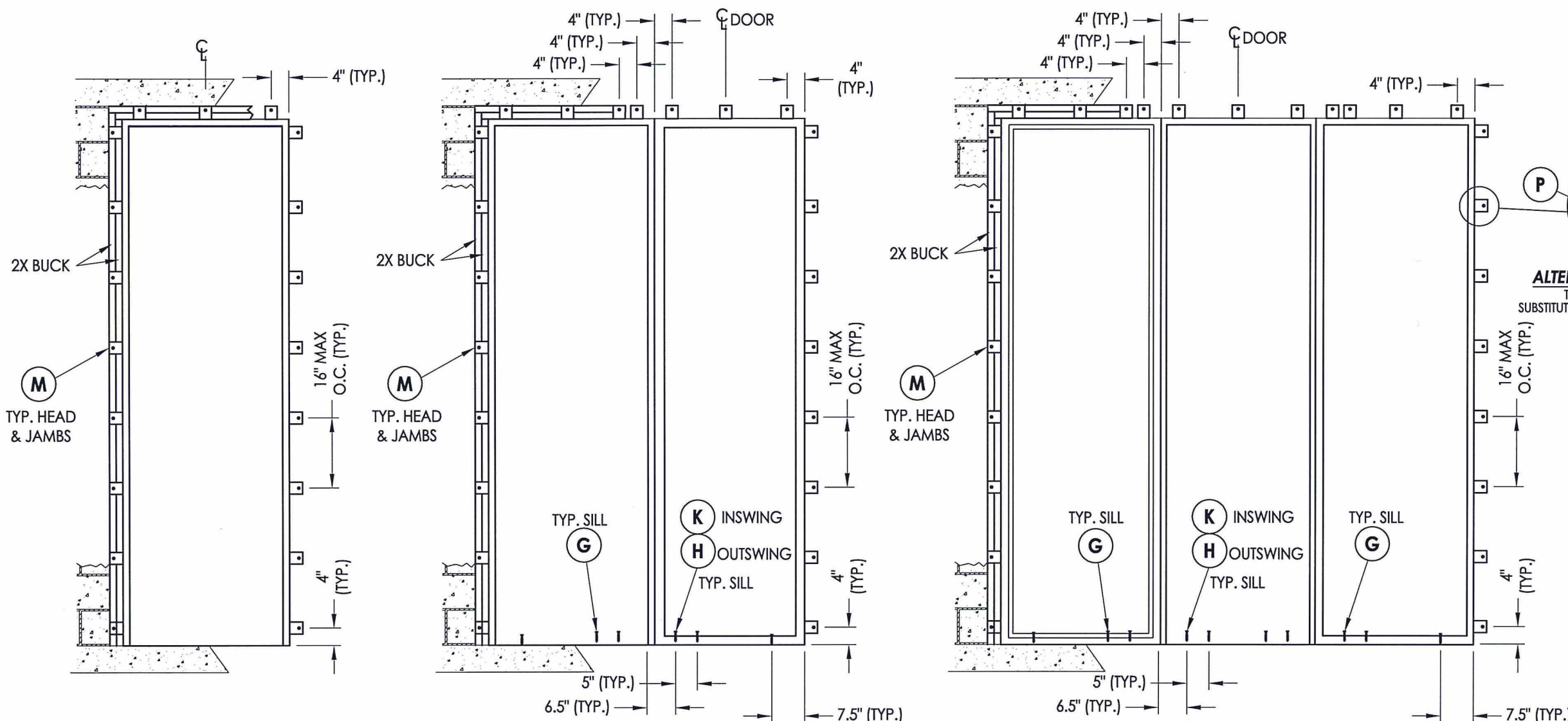
PRODUCT: CLARK HALL IRON DOORS

PART OR ASSEMBLY:
BUCK ANCHORING

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

DATE: 10/30/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-16663.2
SHEET 8 OF 11

R:\Clients\Clark Hall Iron Doors PERMANENTVA - Florida Product Approvals\FL-16663 Exterior Doors - Iron Doors\C - Drawings\FL 16663 (2014)\FL-16663.1-3.dwg, 2.9



ALTERNATE ANCHORING
THROUGH THE FRAME
SUBSTITUTE ANCHOR @ EACH BRACKET

Documents Prepared By:
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FBPE C.A. No. 9813

FRAME ANCHORING
X

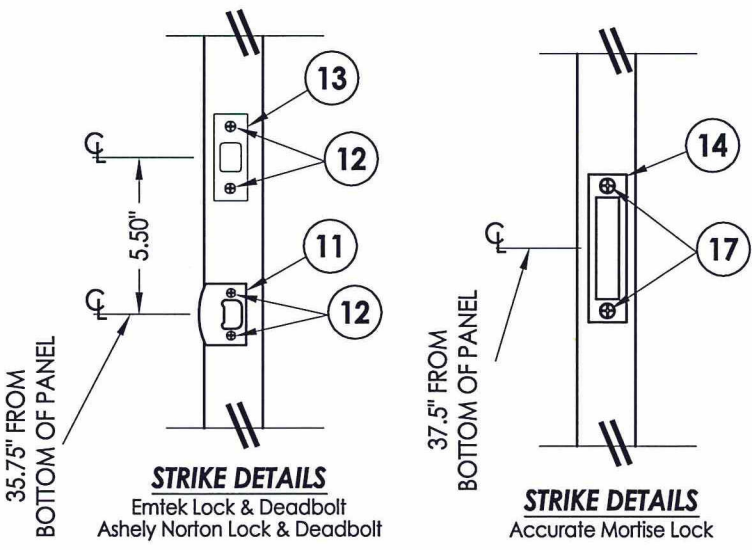
FRAME ANCHORING
XX

FRAME ANCHORING
OXO

- 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:

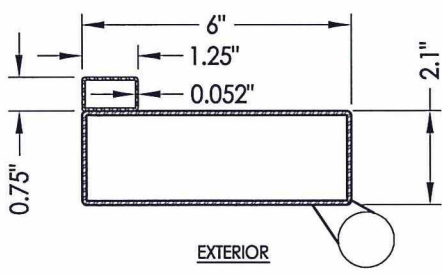
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	3/16"	1-1/4"	3"	2-1/2"
	1/4"	1-1/4"	2-1/2"	4"
	5/16" (XL)	1-3/4"	2-1/2"	5"
ELCO ULTRACON®	1/4"	1-1/4"	2-1/2"	4"
	5/16"	1-3/4"	2-1/2"	5"

- 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.

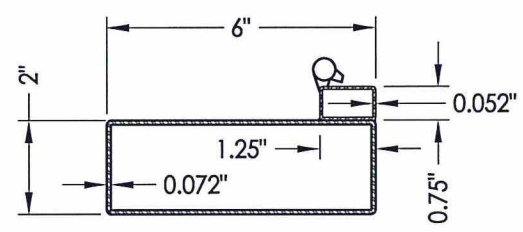


PRODUCT:	CLARK HALL IRON DOORS	
PART OR ASSEMBLY:	FRAME ANCHORING	
NO.	DATE	BY
1	8/17/15	LFS
UPDATE TO 5TH ED. (2014) FBC		
REVISIONS		
DATE:	10/30/13	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	FL-16663.2	
SHEET	9 OF 11	

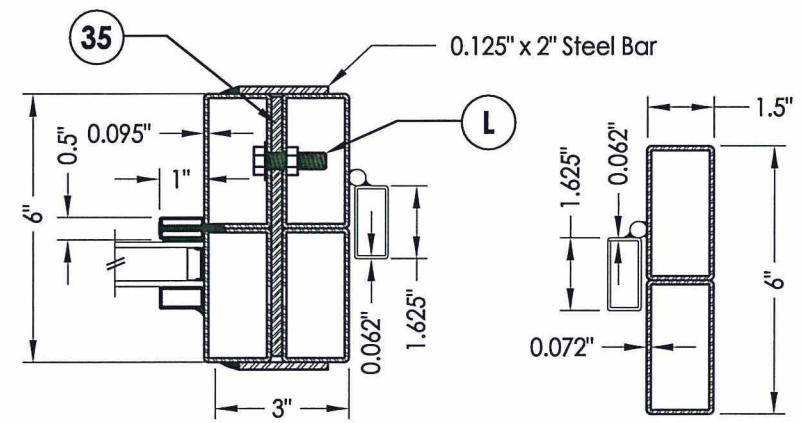
R:\Clients\Clark Hall Iron Doors PERMANENTVA - Florida Product Approvals\FL-16663 Exterior Doors - Iron Doors\C - Drawings\FL 16663 (2014)\FL-16663.1-3.dwg, 2.10



31 Full Lite Door Panel
Active Hinge Stile

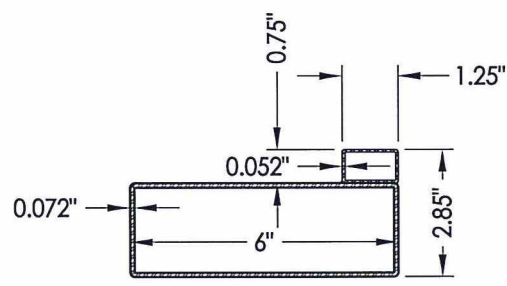


51 Sidelite Panel
Operable Sash Hinge Stile

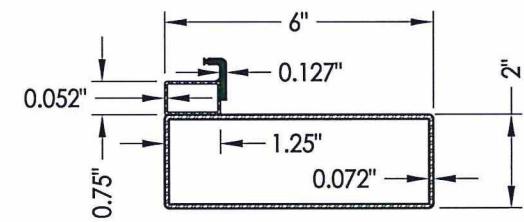


75 MULLION
Vertical with Direct Set Sidelite shown
(Horizontal Mullion Similar)

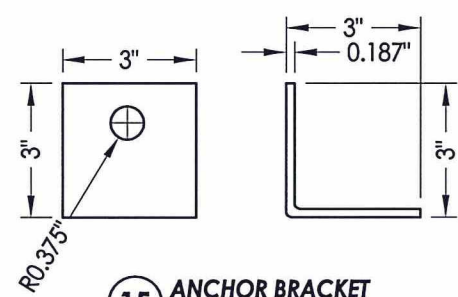
76 Jamb



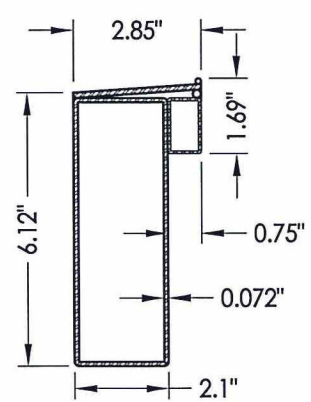
32 Full Lite Door Panel
Active Latch Stile



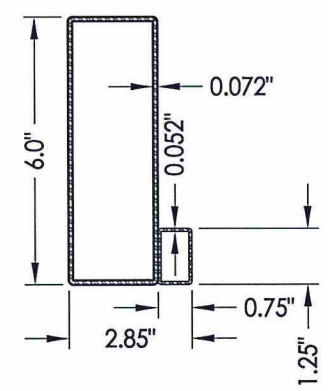
52 Sidelite Panel
Operable Sash Latch Stile



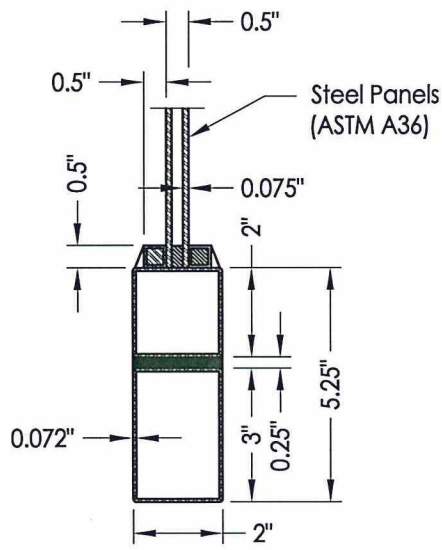
15 ANCHOR BRACKET



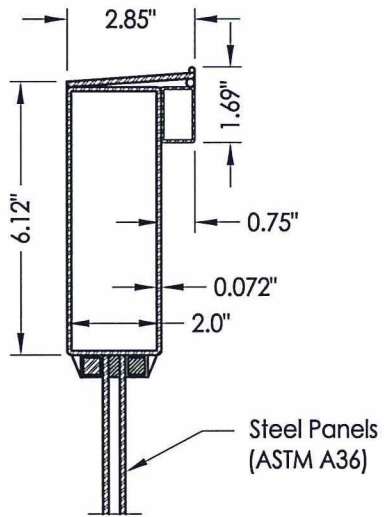
43 Full Lite Door Panel
Bottom Rail



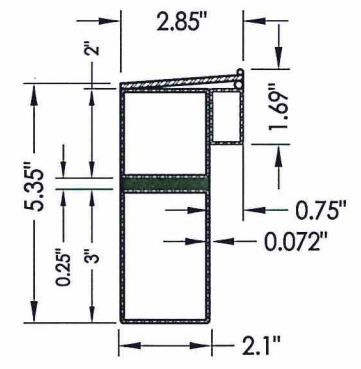
44 Full Lite Door Panel
Top Rail



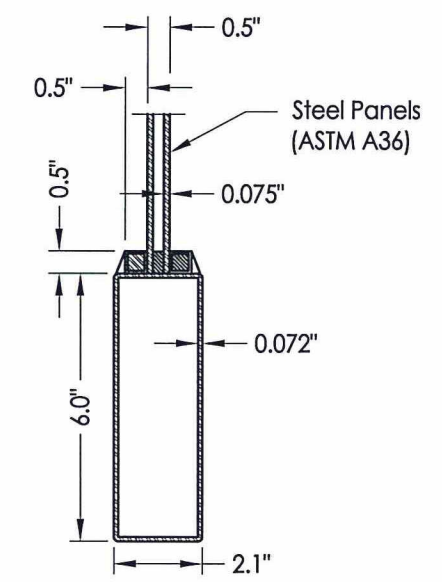
54 Bottom Rail
3/4 Lite Sidelite Panel



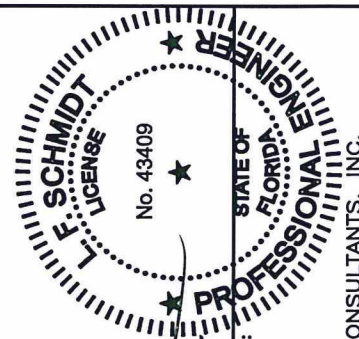
56 Mid Rail
3/4 Lite Sidelite Panel



53 Bottom Rail
Sidelite Panel



57 Bottom Rail
3/4 Lite Door Panel



LFS
8/18/15

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

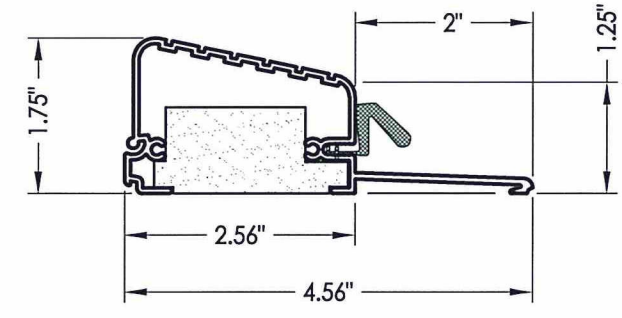
NO.	DATE	BY	LFS
1	8/17/15	FBC	

DATE:	10/30/13
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-16663.2
SHEET	10 OF 11

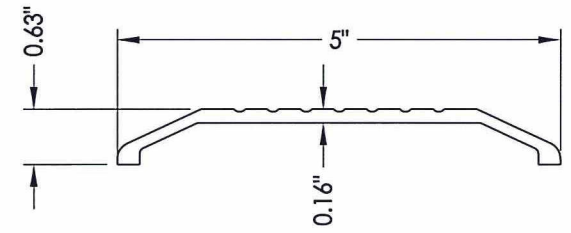
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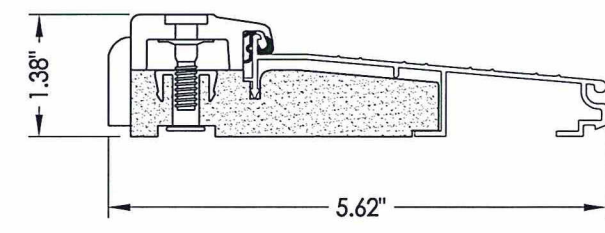
BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
B	2X BUCK SG >= 0.55	WOOD
D	1/4" X 2-3/4" PFH ELCO OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	#10 X 3" PFH WOOD SCREW	STEEL
G	5/16" X 2-1/4" HH ELCO OR ITW CONCRETE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



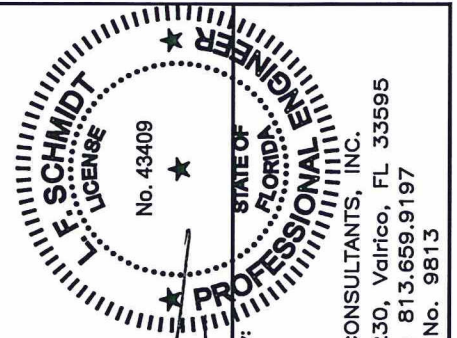
26 OUTSWING THRESHOLD
DLP



27 ADA THRESHOLD



28 INSWING THRESHOLD
AFCO



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SHEET	11 OF 11

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