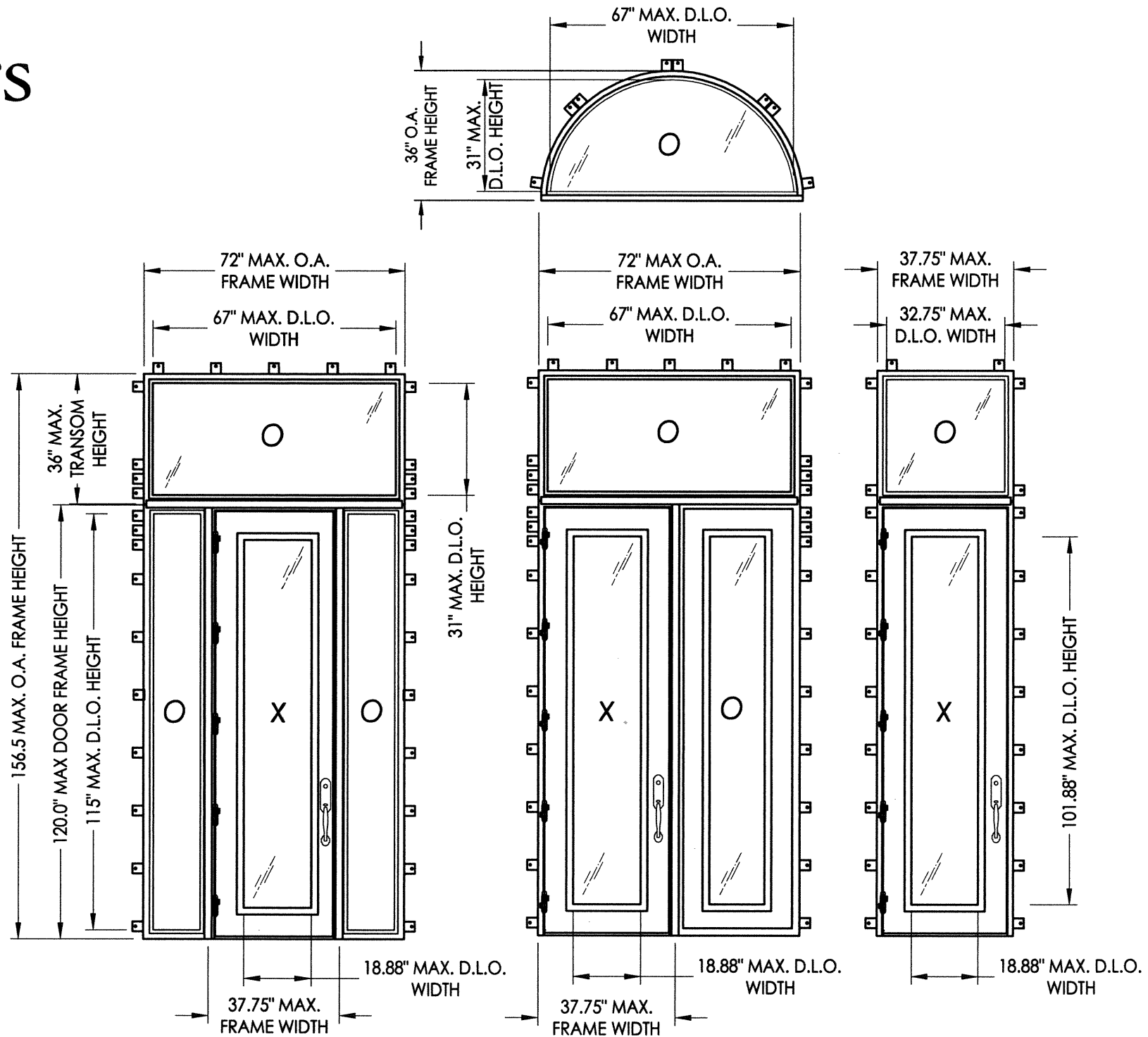


Clark Hall Iron Doors

GLAZED IRON SINGLE DOOR w/ TRANSOM w/ & w/out SIDELITES IN SWING/OUT SWING "IMPACT"



GENERAL NOTES

1. This product has been evaluated and is in compliance with the 2010 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 Section 1609.1.2 of the FBC 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 Section 1609.1.2.4 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	Frame anchoring
11	Components
12	Bill of materials & components

CONFIGURATION	OVERALL FRAME DIMENSION	DESIGN PRESSURE (PSF)			
		IN SWING		OUT SWING	
		POS.	NEG.	POS.	NEG.
$\frac{O}{X}$	37.75" x 156.5"	+75.0	-75.0	+75.0	-75.0
$\frac{O}{OX}$ or $\frac{O}{XO}$	72.0" x 156.5"	+75.0	-75.0	+75.0	-75.0
$\frac{O}{OXO}$	72.0" x 156.5"	+75.0	-75.0	+75.0	-75.0

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

Documents Prepared By:

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Florida Board of Professional Engineers
Certificate of Authorization No. 9813
17-12-30-13
Lyndon F. Schmidt, P.E. No. 43409

PRODUCT: CLARK HALL IRON DOORS

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

REVISIONS

NO. DATE

DATE: 11/8/13

SCALE: N.T.S.

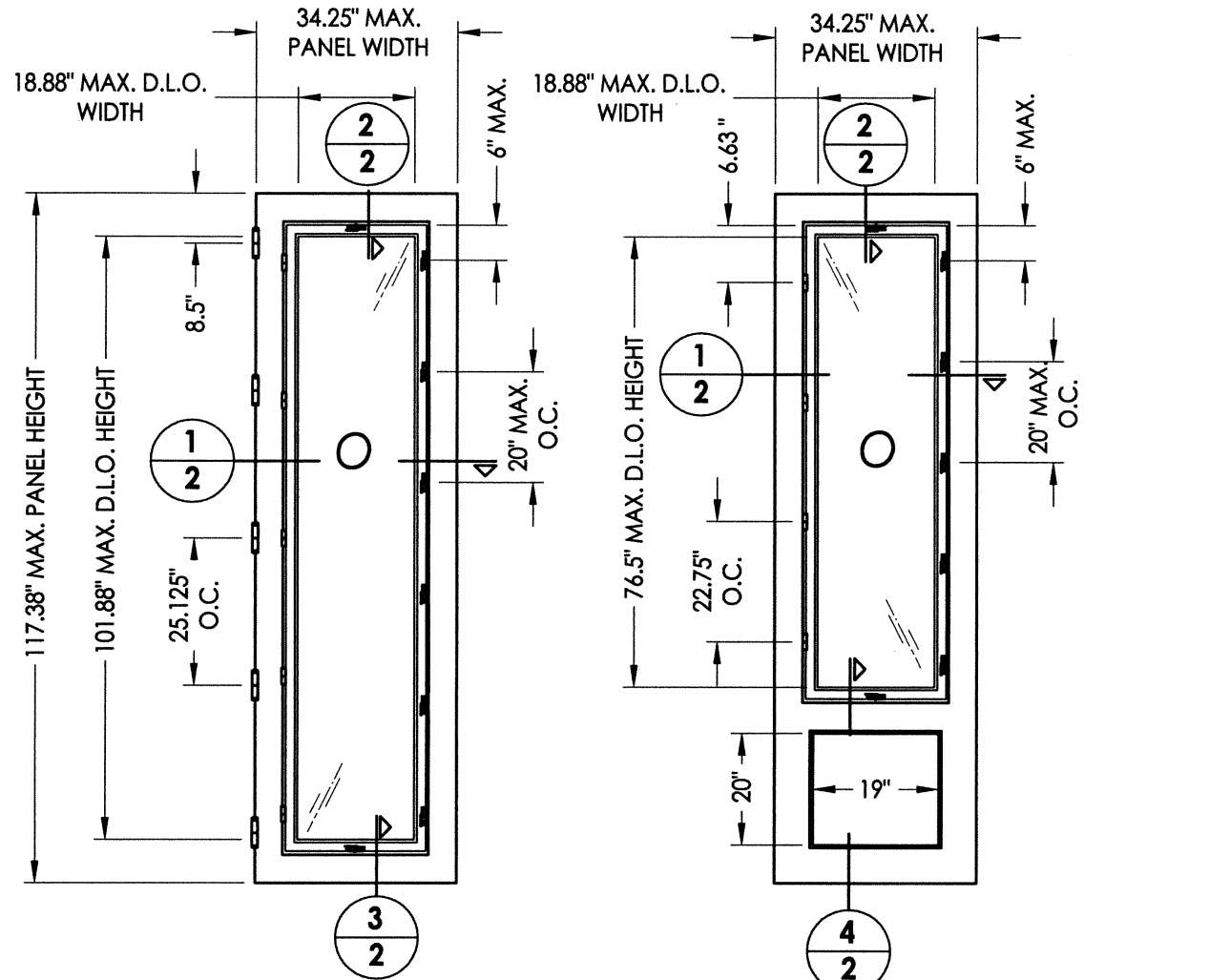
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:

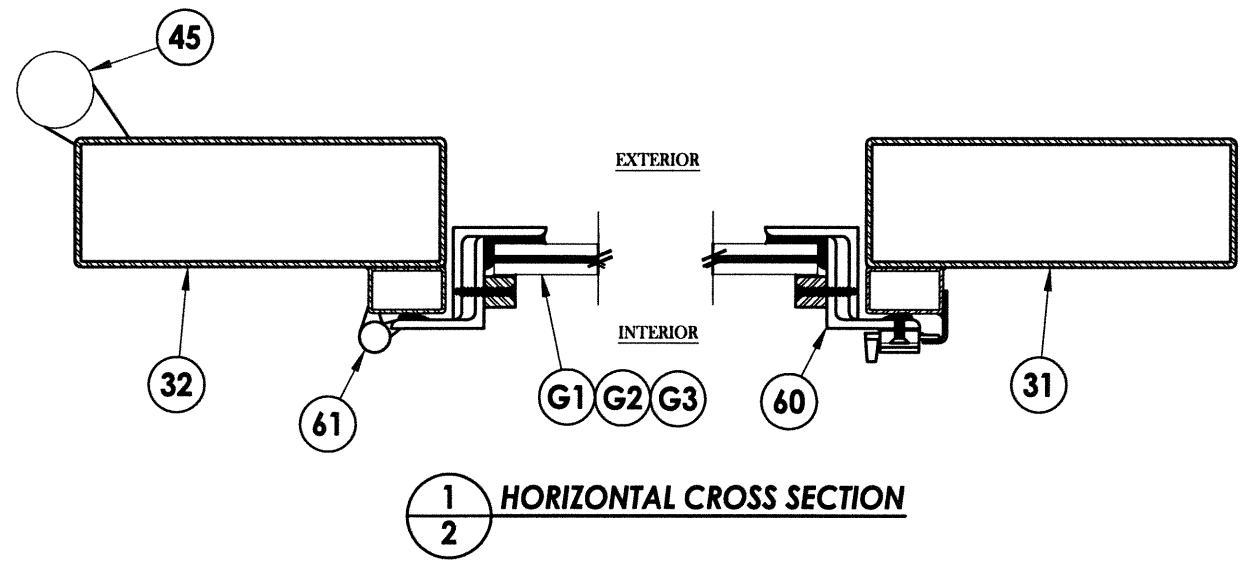
FL-16663.9

SHEET 1 OF 12

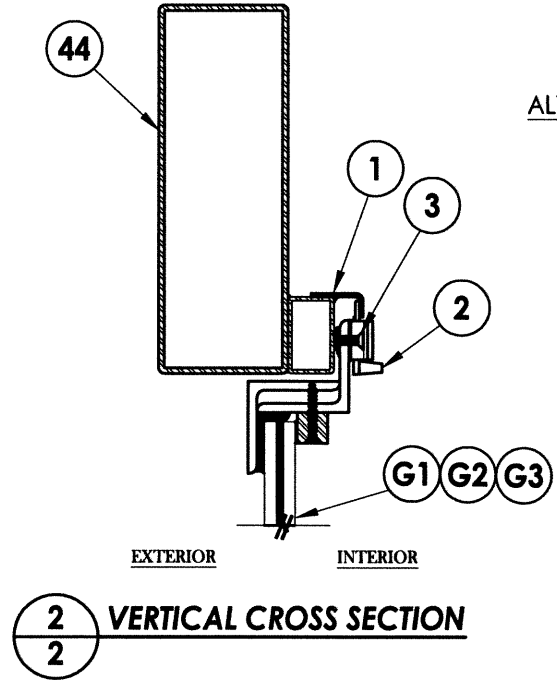


30 DOOR PANEL
w/ Operable Sash

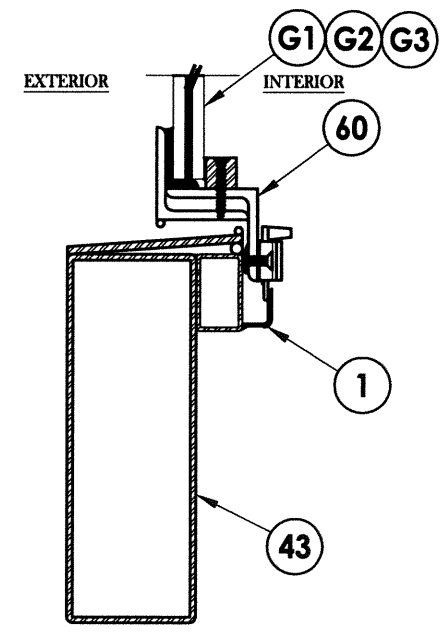
40 3/4 LITE DOOR PANEL
w/ Operable Sash



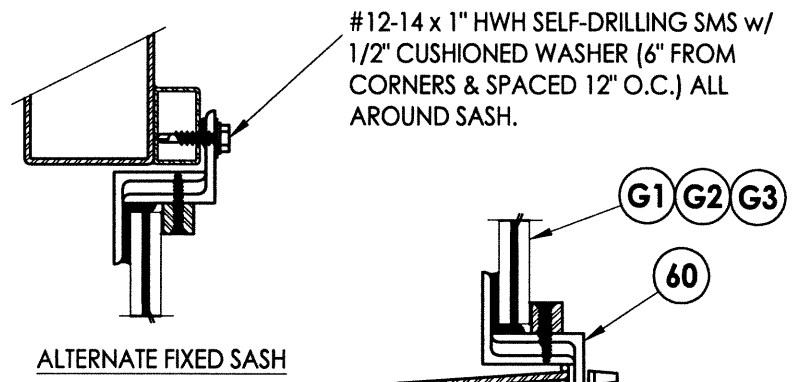
1 HORIZONTAL CROSS SECTION



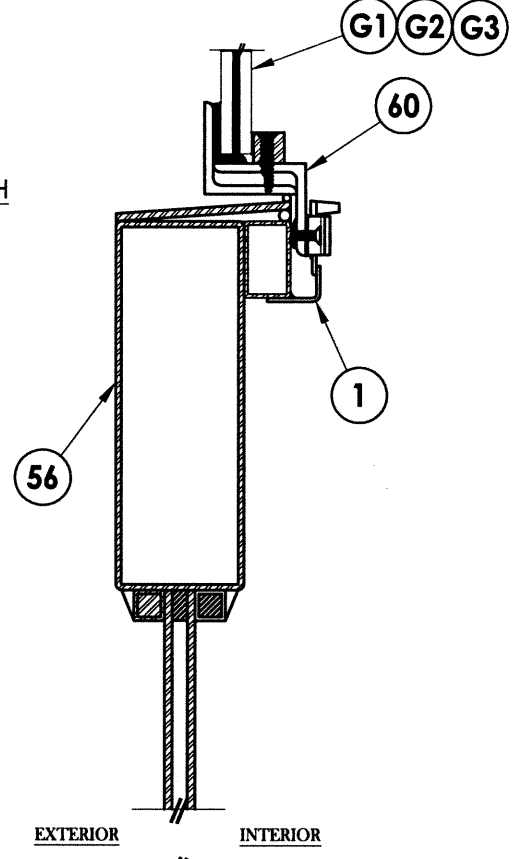
2 VERTICAL CROSS SECTION



3 VERTICAL CROSS SECTION

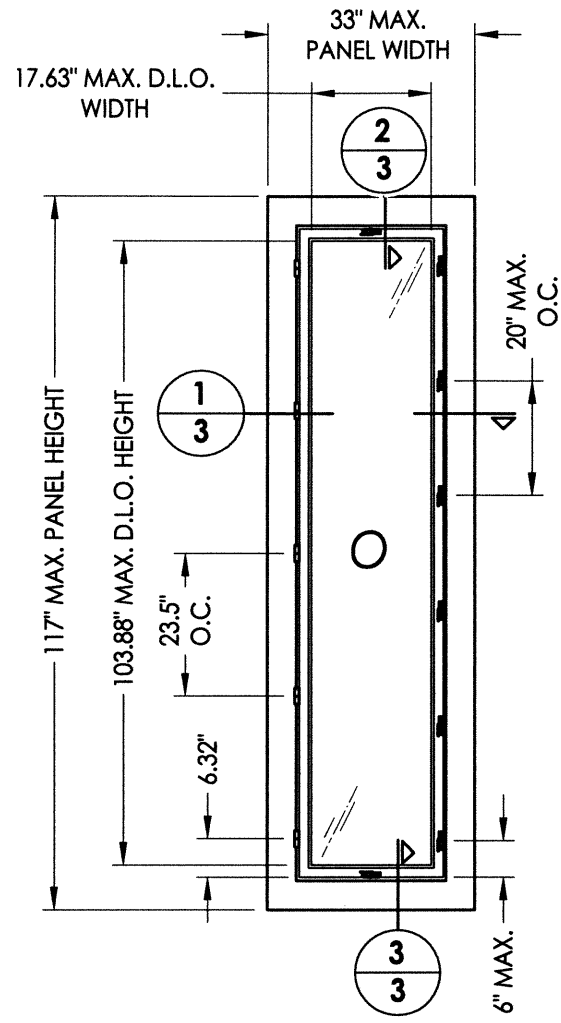


ALTERNATE FIXED SASH

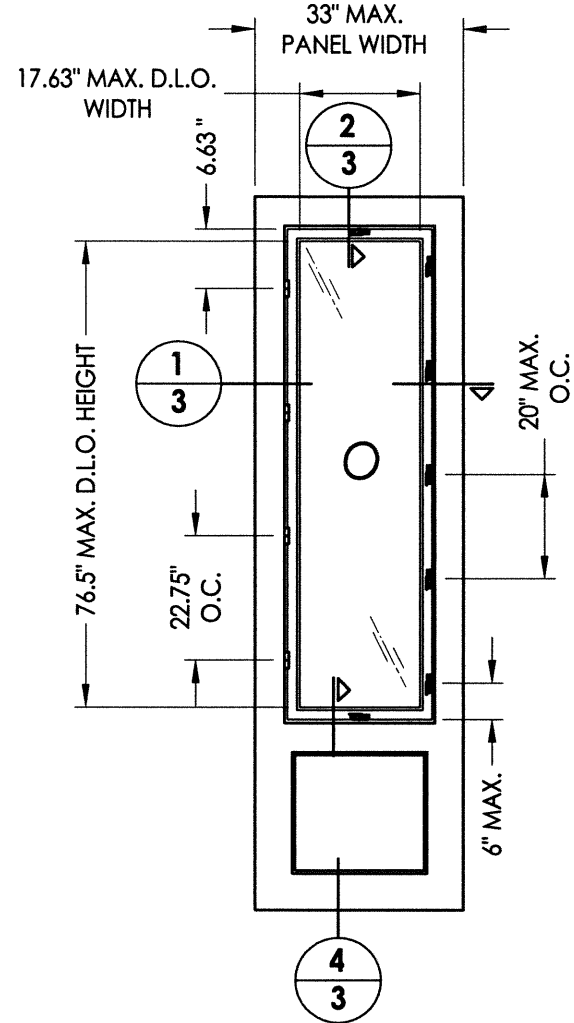


4 VERTICAL CROSS SECTION

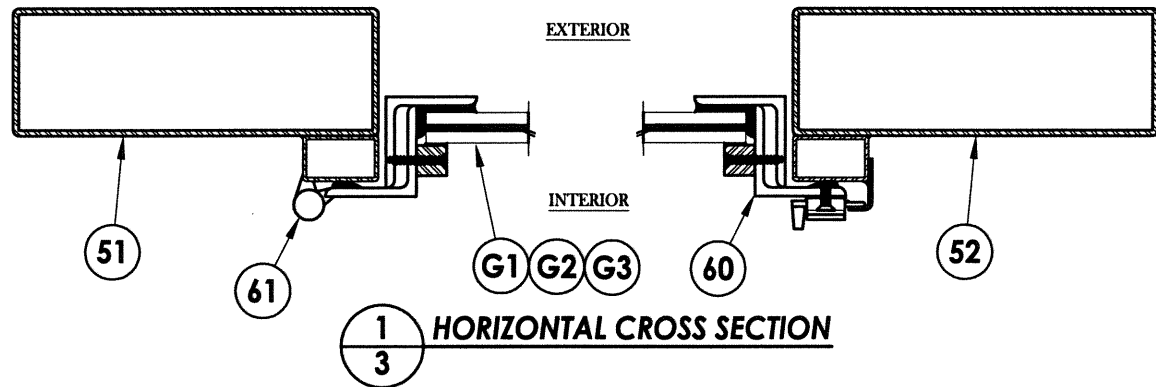
Documents Prepared By: RW BUILDING CONSULTANTS, INC. P.O. Box 230 Valrico FL 33595 Phone No.: 813.659.9197 Florida Board of Professional Engineers Certificate Of Authorization No. 9813 <i>RF</i> 12-30-13 Lyndon F. Schmidt, P.E. No. 43409	
PRODUCT: CLARK HALL IRON DOORS	PART OR ASSEMBLY: DOOR PANEL DETAILS
NO.	DATE
	BY
REVISIONS	
DATE: 11/8/13	
SCALE: N.T.S.	
DWG. BY: JK	
CHK. BY: LFS	
DRAWING NO.: FL-16663.9	
SHEET 2 OF 12	



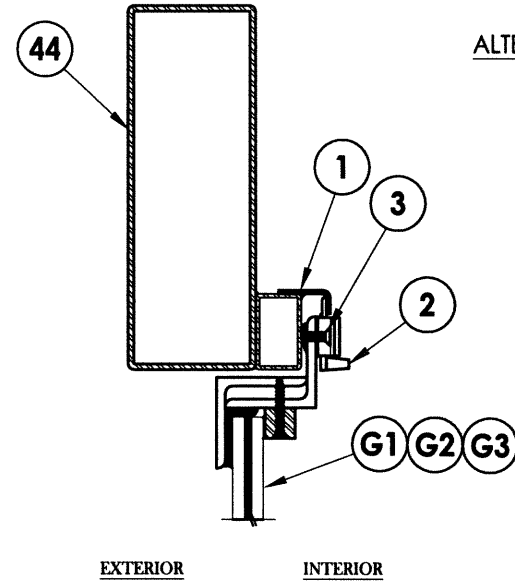
50 SIDELITE PANEL
w/ Operable Sash



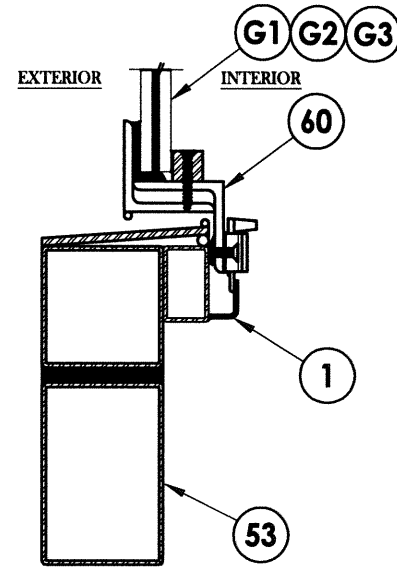
55 3/4 SIDELITE PANEL
w/ Operable Sash & Fixed Panel



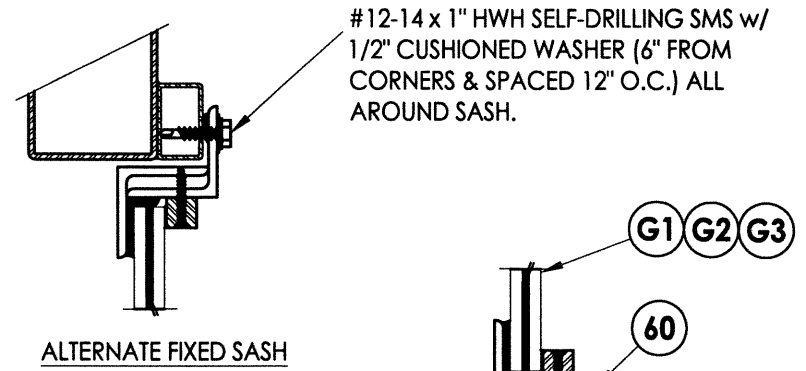
1/3 HORIZONTAL CROSS SECTION



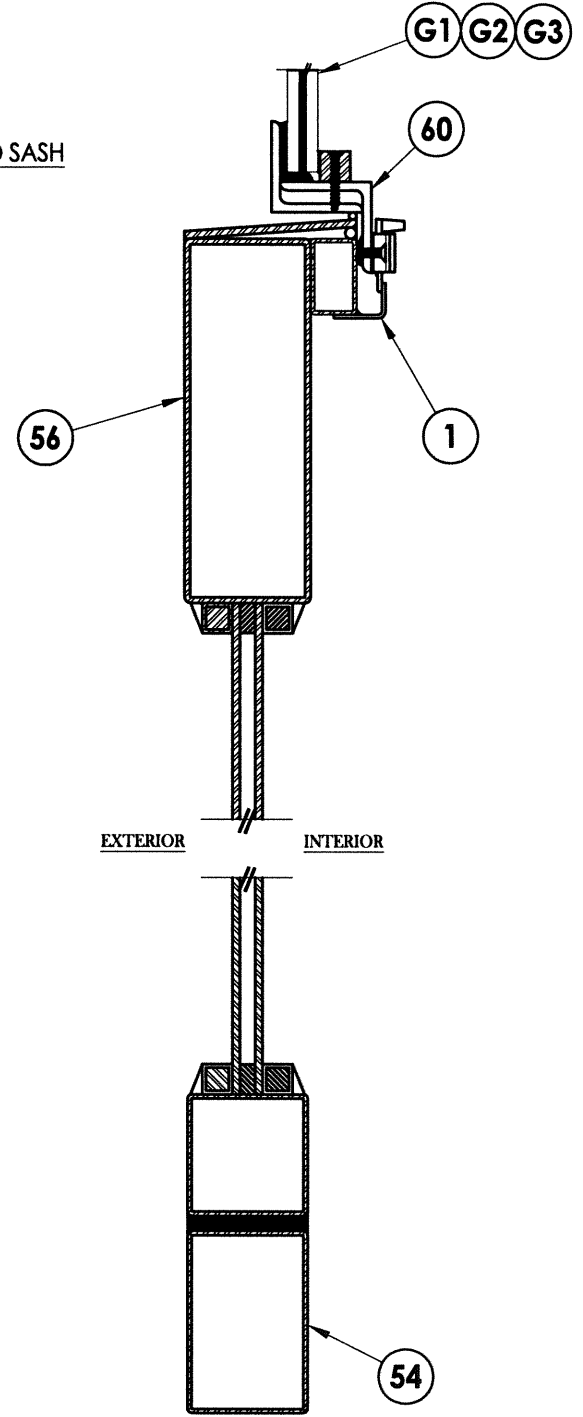
2/3 VERTICAL CROSS SECTION



3/3 VERTICAL CROSS SECTION



ALTERNATE FIXED SASH



4/3 VERTICAL CROSS SECTION

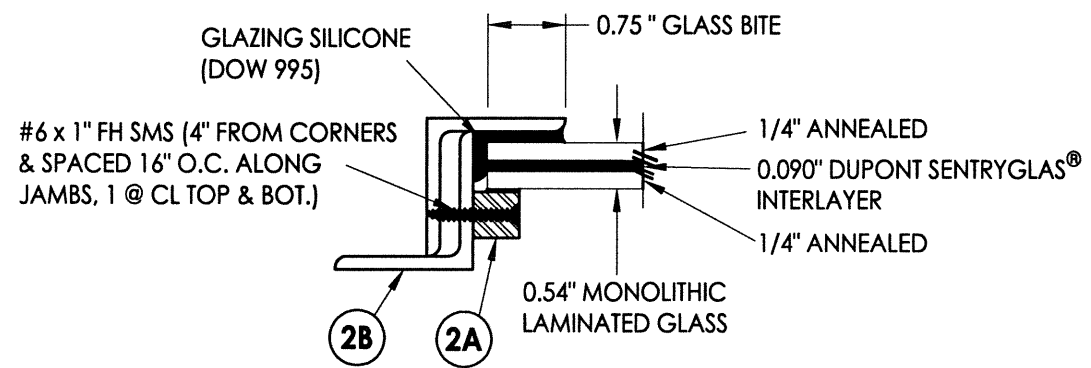
PRODUCT: CLARK HALL IRON DOORS
PART OR ASSEMBLY: SIDELITE PANEL DETAILS

NO.	DATE	BY

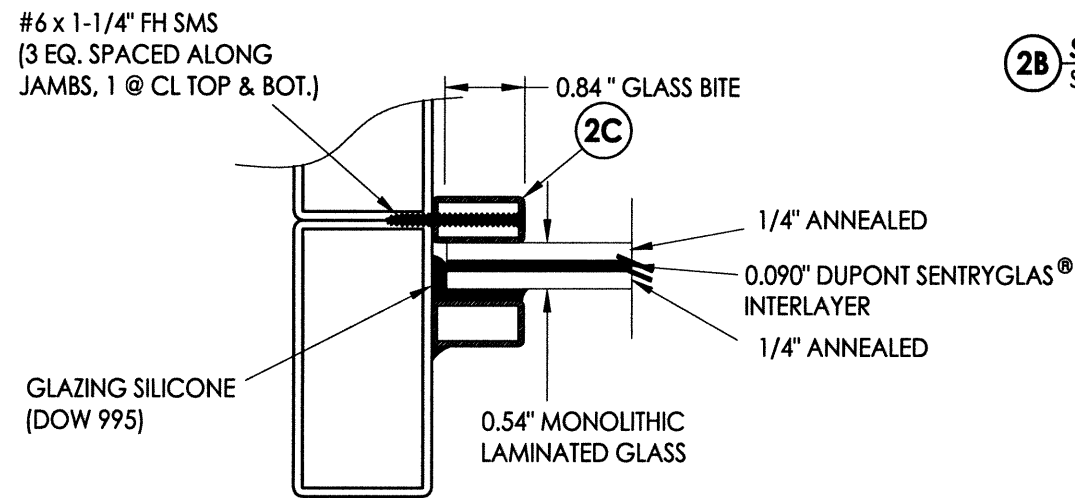
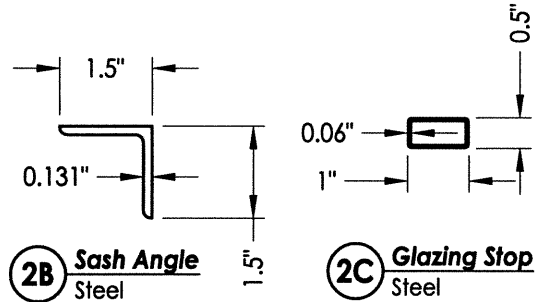
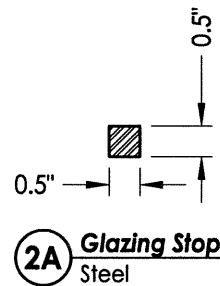
DATE: 11/8/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-16663.9
SHEET 3 OF 12

Documents Prepared By:
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Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate of Authorization No. 9813
17 Feb 12 3:00 13
Lyndon F. Schmidt, P.E. No. 43409

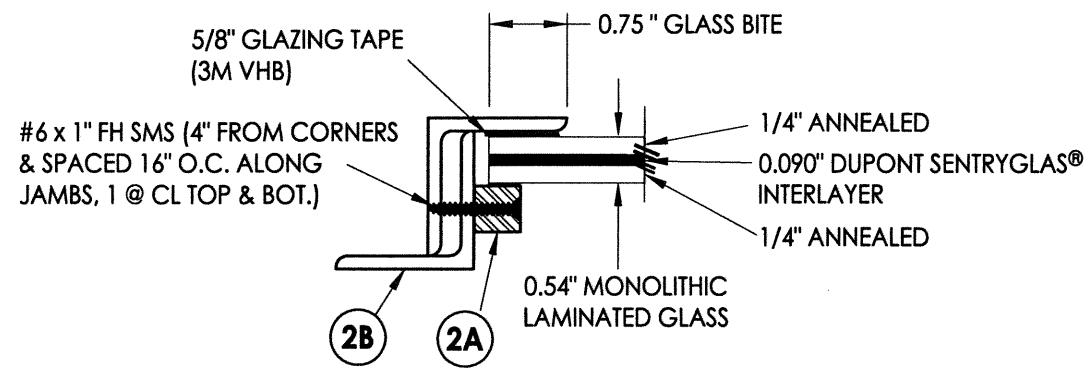
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G1 GLAZING DETAIL
Operable Door/Sidelite



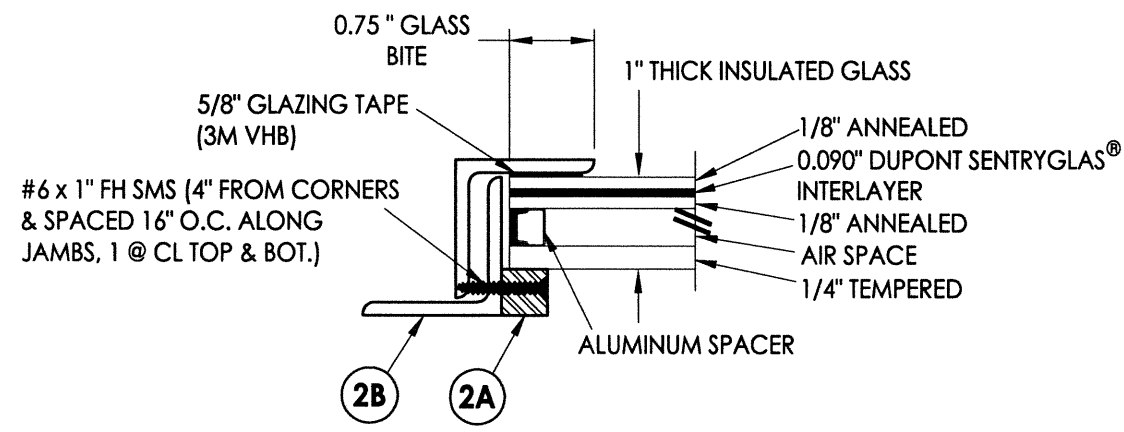
G1 GLAZING DETAIL
Fixed Sidelite/Transom



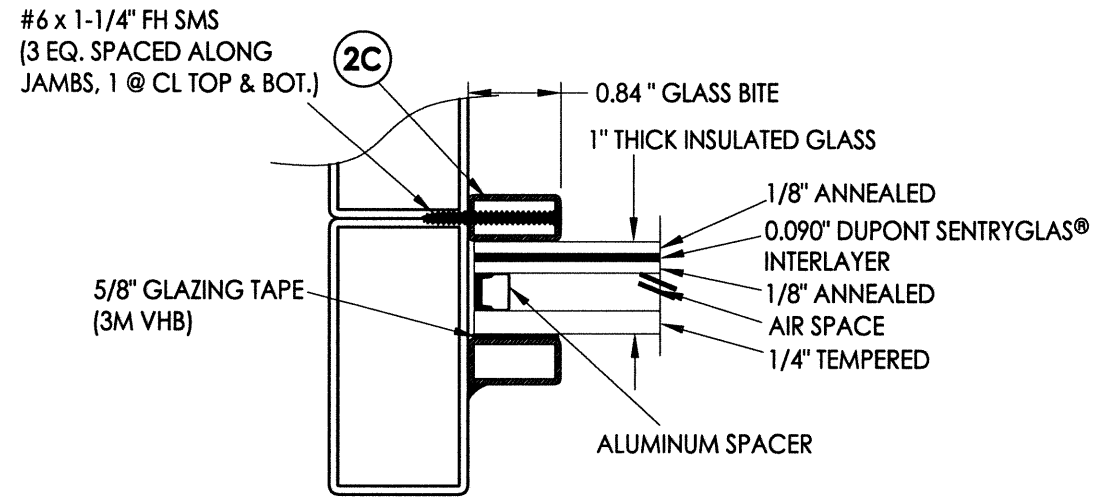
G3 GLAZING DETAIL
Operable Door/Sidelite

GLAZING DESIGN PRESSURE LIMITATIONS

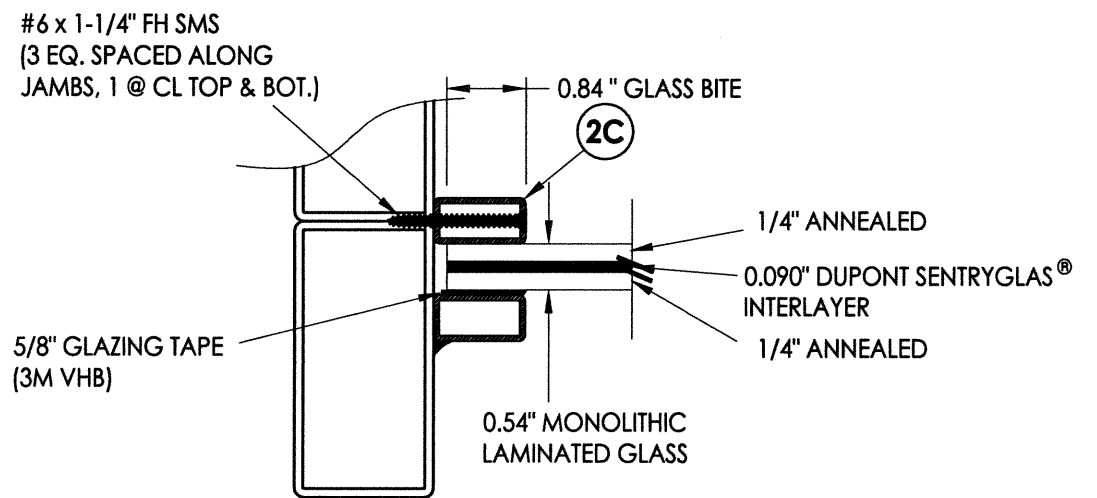
GLAZING	MAX. DESIGN PRESSURE (PSF)	
	POS.	NEG.
G1	+75.0	-75.0
G2, G3	+65.0	-65.0



G2 GLAZING DETAIL
Operable Door/Sidelite



G2 GLAZING DETAIL
Fixed Sidelite/Transom



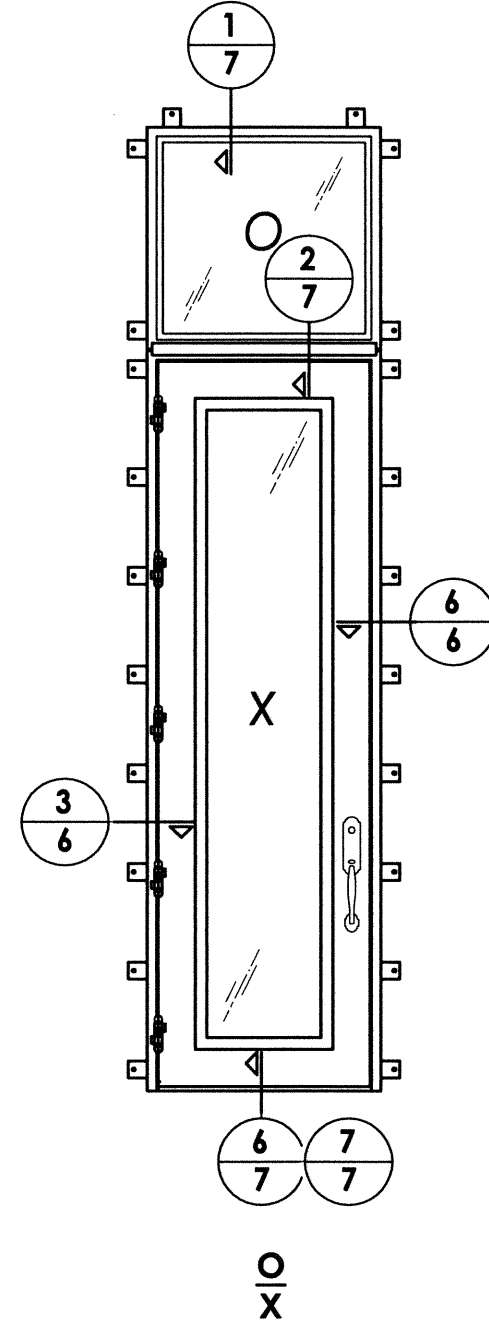
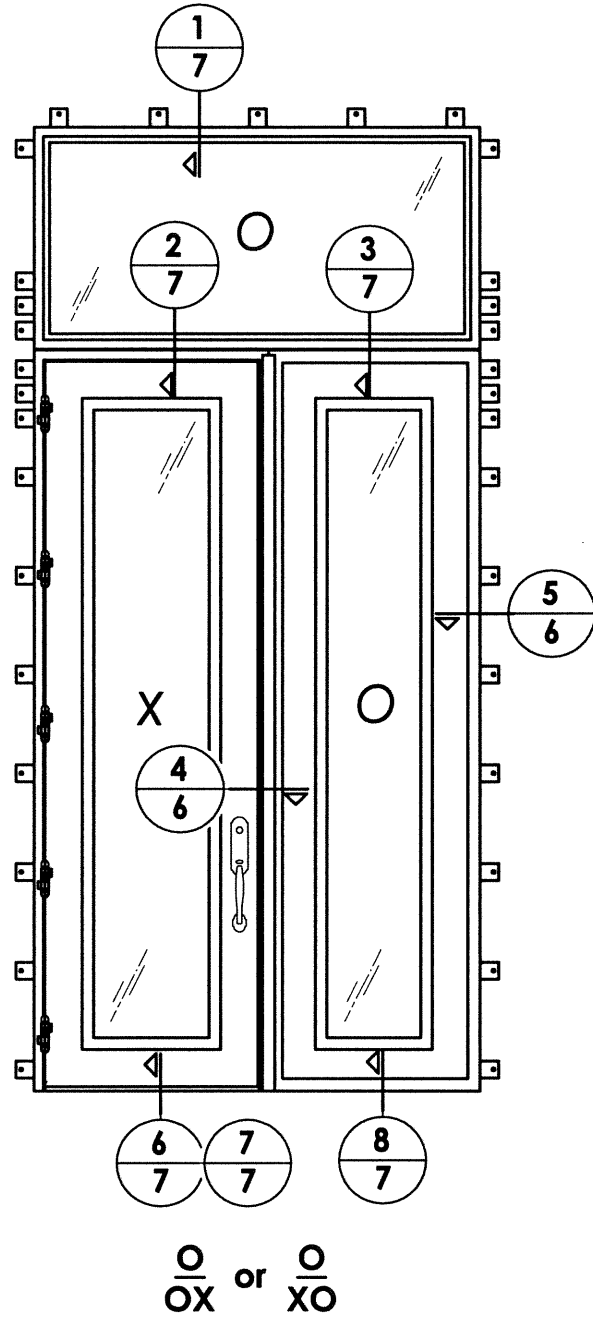
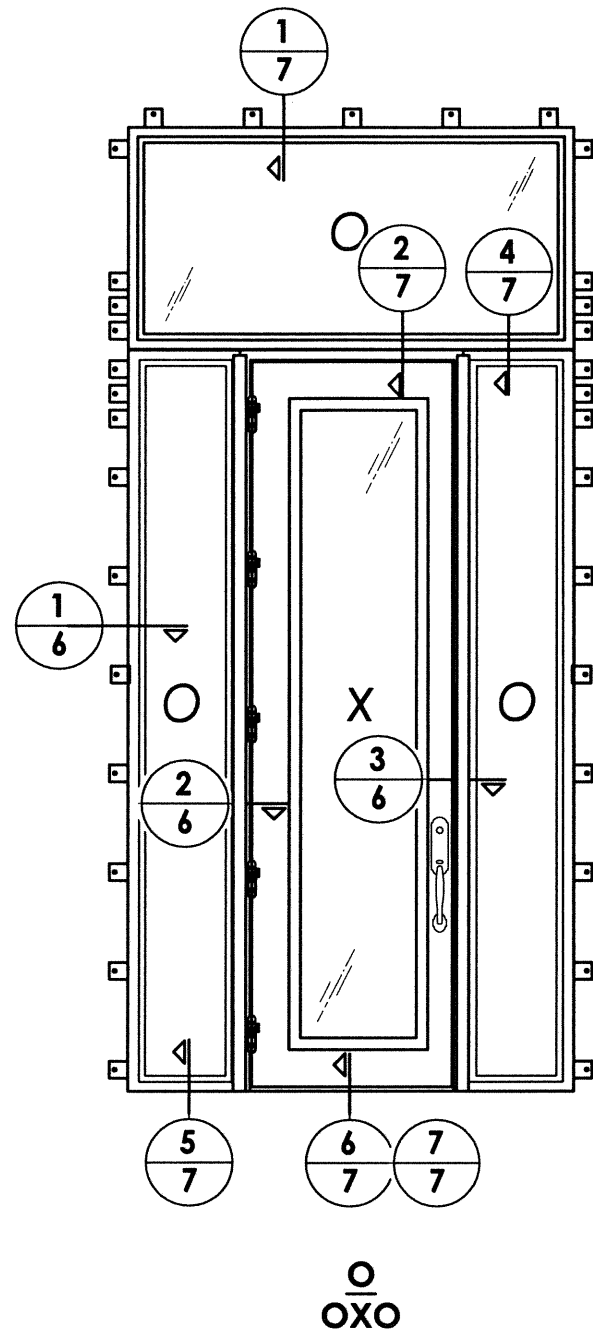
G3 GLAZING DETAIL
Fixed Sidelite/Transom

Documents Prepared By:
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 Florida Board of Professional Engineers
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 Lyndon F. Schmidt, P.E. No. 43409

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

NO.	DATE	BY

DATE: 11/8/13
 SCALE: N.T.S.
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 CHK. BY: LFS
 DRAWING NO.: FL-16663.9
 SHEET 4 OF 12



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

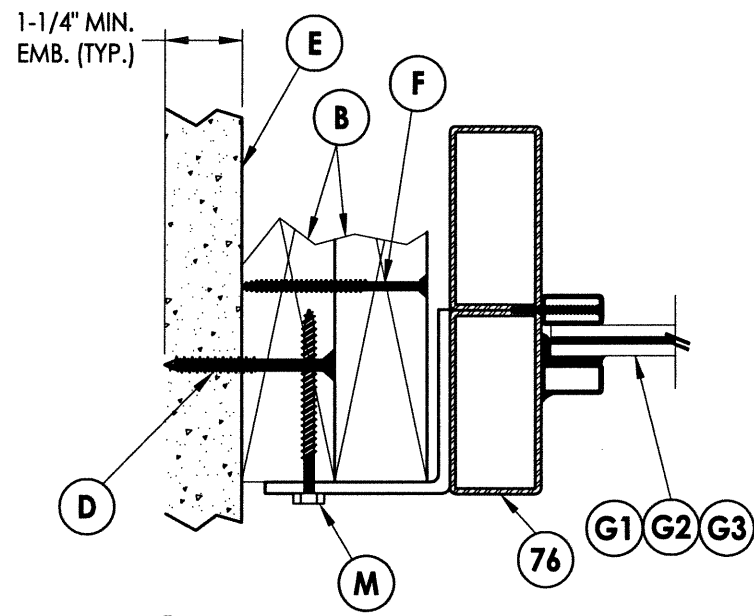
Documents Prepared By:
RW BUILDING CONSULTANTS, INC.
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LFS 12-30-13
 Lyndon F. Schmidt, P.E. No. 43409

PRODUCT: CLARK HALL IRON DOORS
 PART OR ASSEMBLY: ELEVATIONS

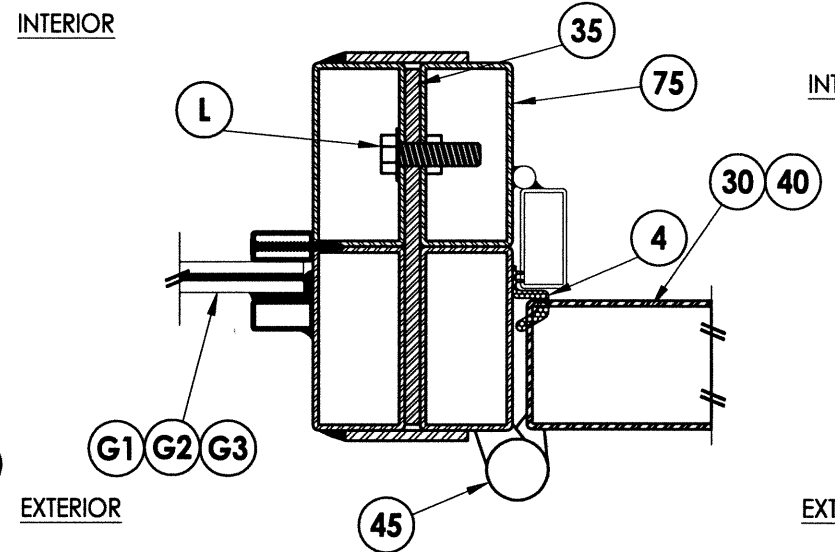
NO.	DATE	BY

DATE: 11/8/13
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: FL-16663.9
 SHEET 5 OF 12

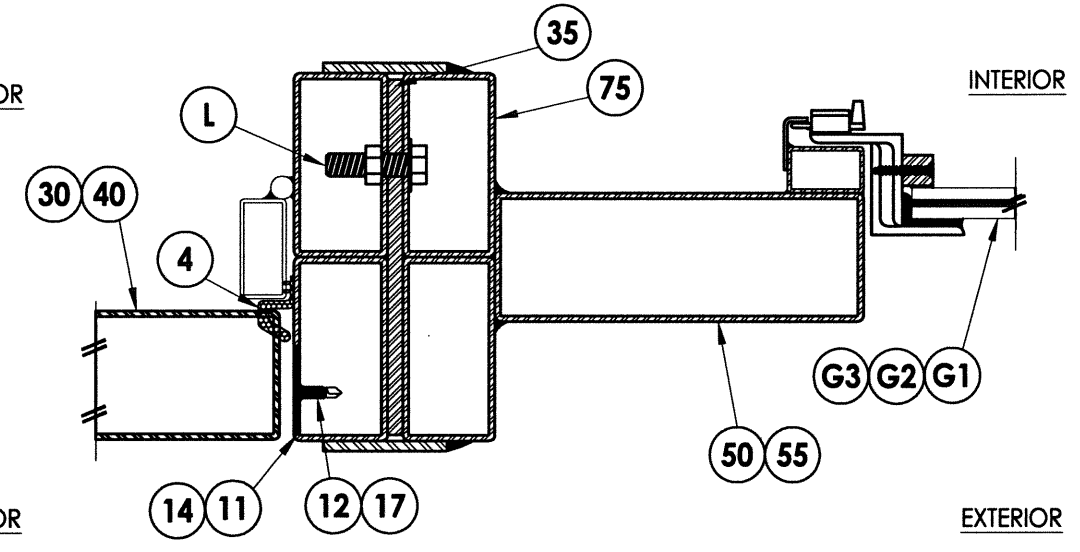
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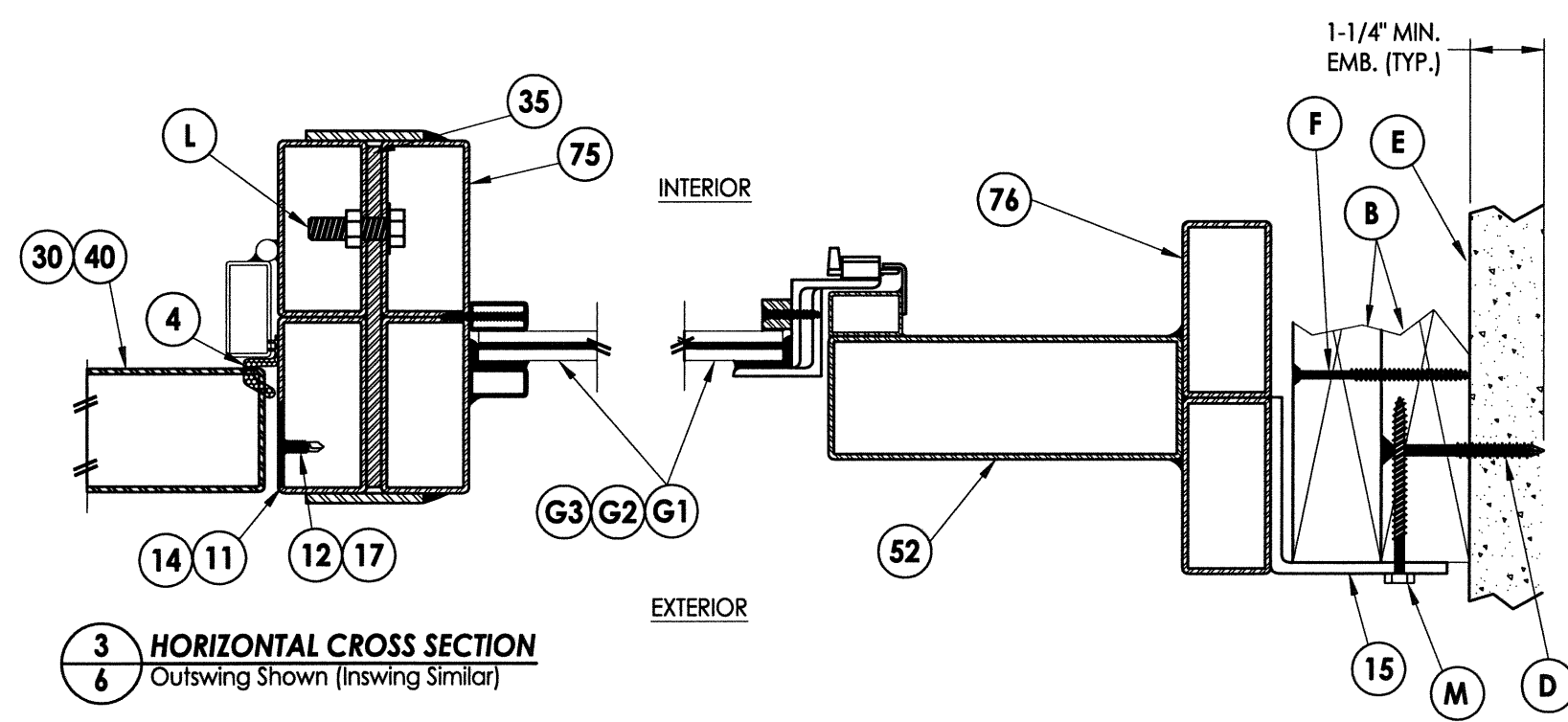
1 HORIZONTAL CROSS SECTION
6 Outswing Shown (Inswing Similar)



2 HORIZONTAL CROSS SECTION
6 Outswing Shown (Inswing Similar)

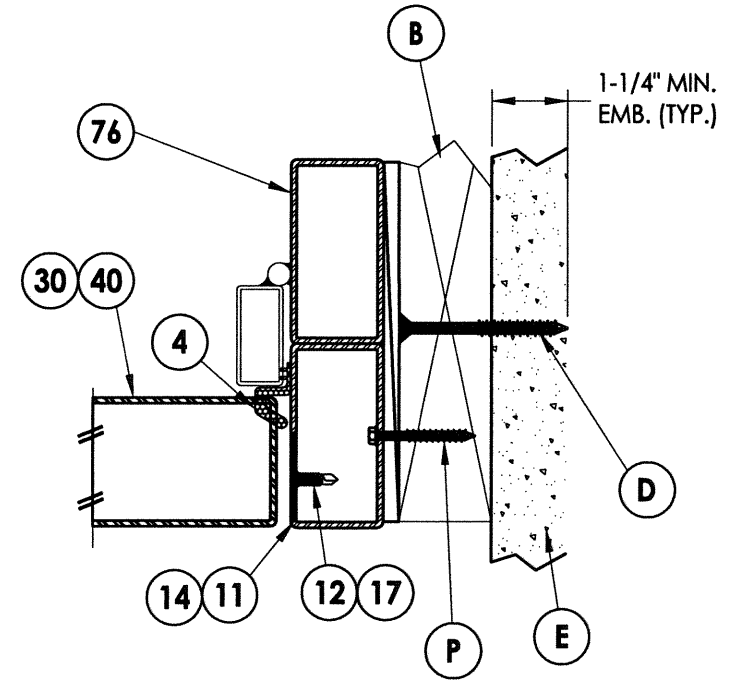


4 HORIZONTAL CROSS SECTION
6 Outswing Shown (Inswing Similar)



3 HORIZONTAL CROSS SECTION
6 Outswing Shown (Inswing Similar)

5 HORIZONTAL CROSS SECTION
6 Outswing Shown (Inswing Similar)



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

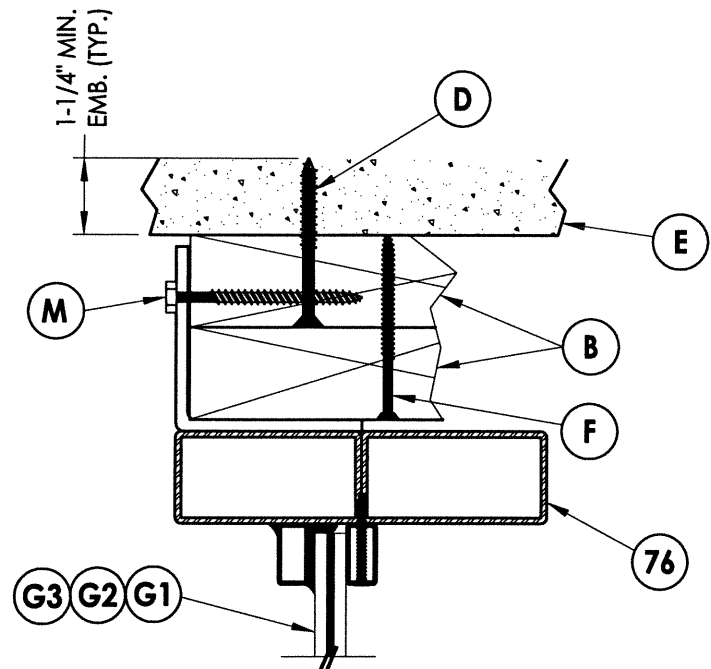
Documents Prepared By:
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 Florida Board of Professional Engineers
 Certificate Of Authorization No. 9813
 Lyndon F. Schmidt, P.E. No. 43409

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

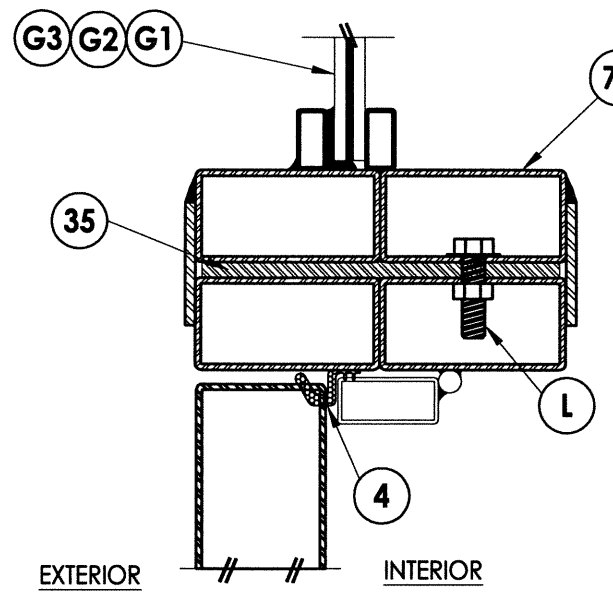
NO.	DATE	BY

DATE: 11/8/13
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: FL-16663.9
 SHEET 6 OF 12

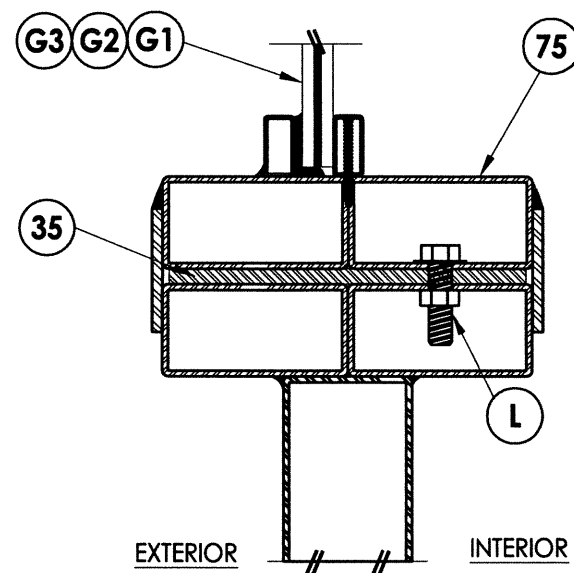
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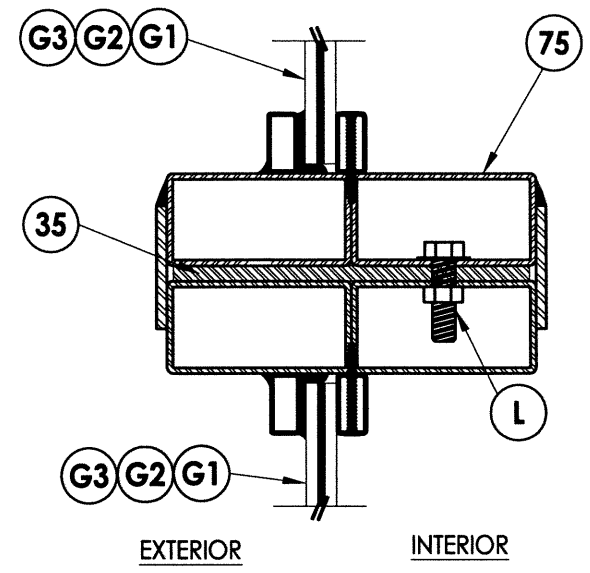
1 VERTICAL CROSS SECTION
7 Outswing Shown (Inswing Similar)



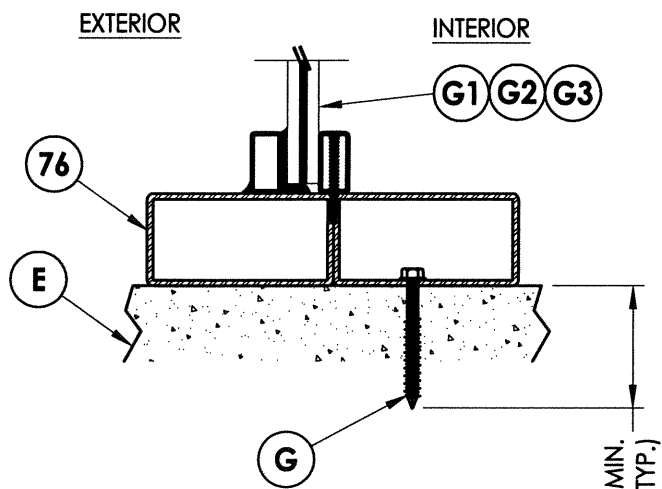
2 VERTICAL CROSS SECTION
7 Outswing Shown (Inswing Similar)



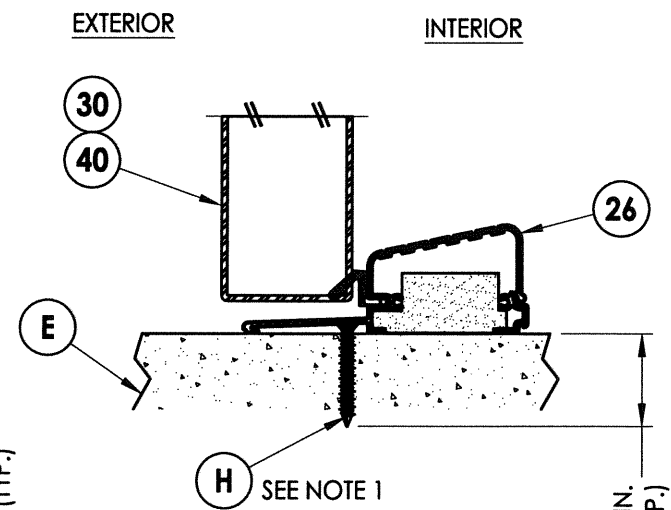
3 VERTICAL CROSS SECTION
7 Outswing Shown (Inswing Similar)



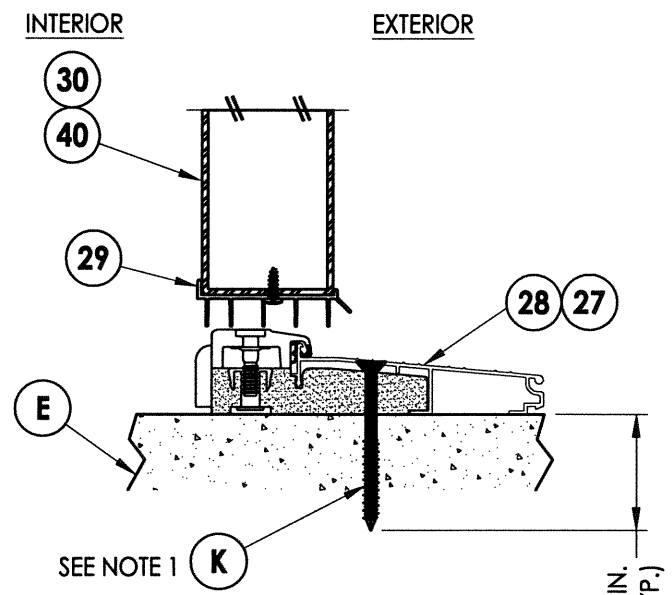
4 VERTICAL CROSS SECTION
7 Outswing Shown (Inswing Similar)



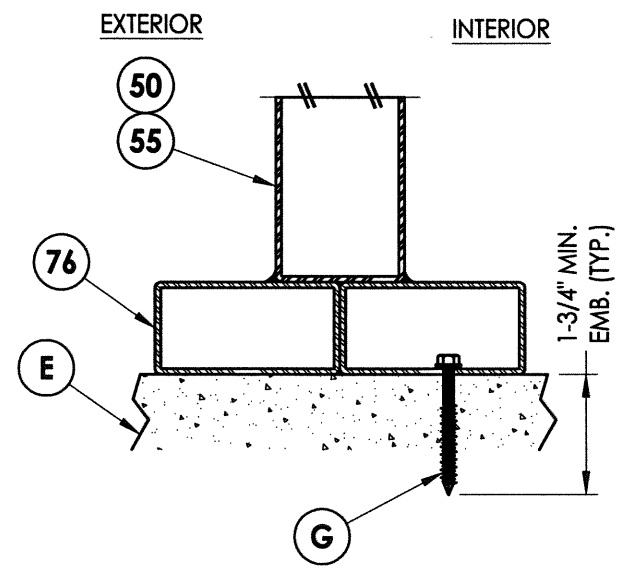
5 VERTICAL CROSS SECTION
7 Outswing Shown (Inswing Similar)



6 VERTICAL CROSS SECTION
7 Outswing Sill



7 VERTICAL CROSS SECTION
7 Inswing Sill



8 VERTICAL CROSS SECTION
7 Outswing Shown (Inswing Similar)

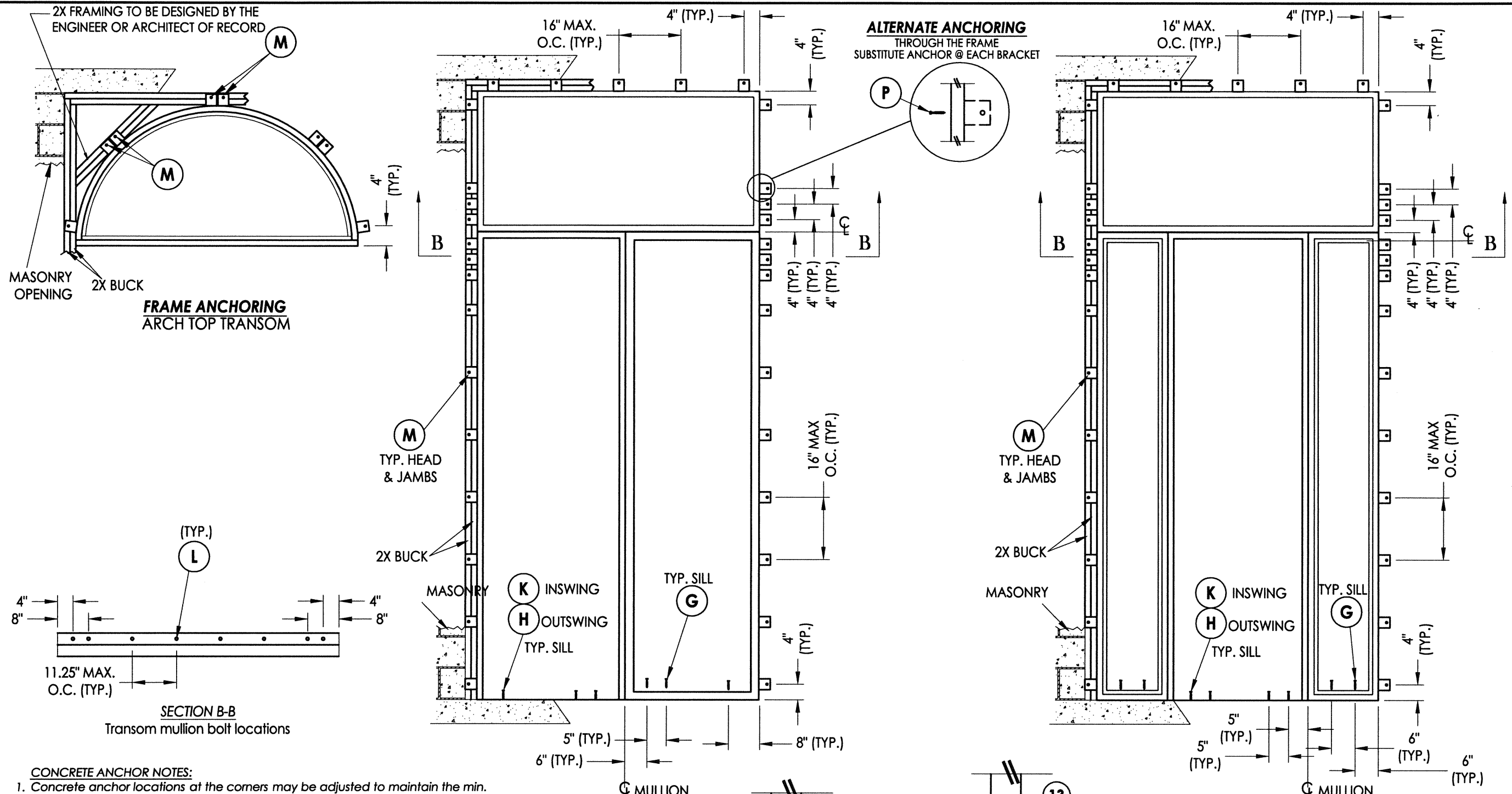
NOTE:
1. Sill anchor is not required for Single Door w/ Transom (O/X).

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Certificate Of Authorization No. 9813
LFS 12-30-13
Lyndon F. Schmidt, P.E. No. 43409

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

NO.	DATE	BY

DATE: 11/8/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-16663.9
SHEET 7 OF 12



ALTERNATE ANCHORING
THROUGH THE FRAME
SUBSTITUTE ANCHOR @ EACH BRACKET

FRAME ANCHORING
ARCH TOP TRANSOM

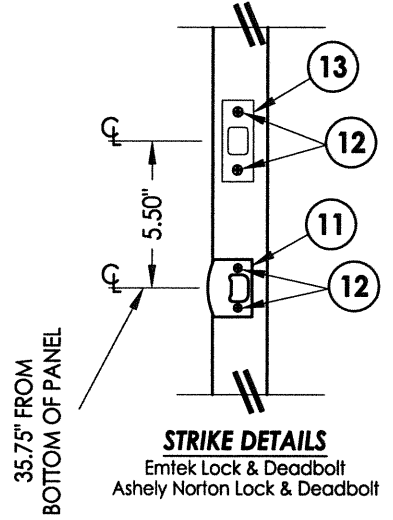
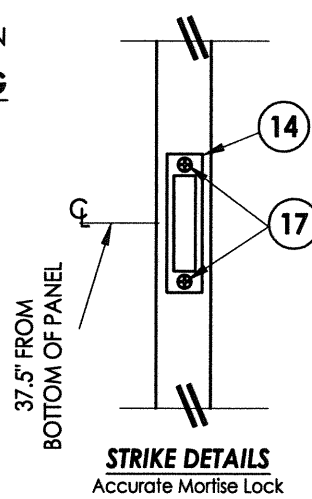
SECTION B-B
Transom mullion bolt locations

FRAME ANCHORING

FRAME ANCHORING

- 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"



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Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate Of Authorization No. 9813
12.30.13
Lynden F. Schmidt, P.E. No. 43409

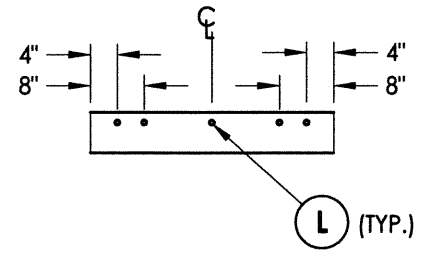
PRODUCT: CLARK HALL IRON DOORS
PART OR ASSEMBLY: FRAME ANCHORING

NO.	DATE	BY

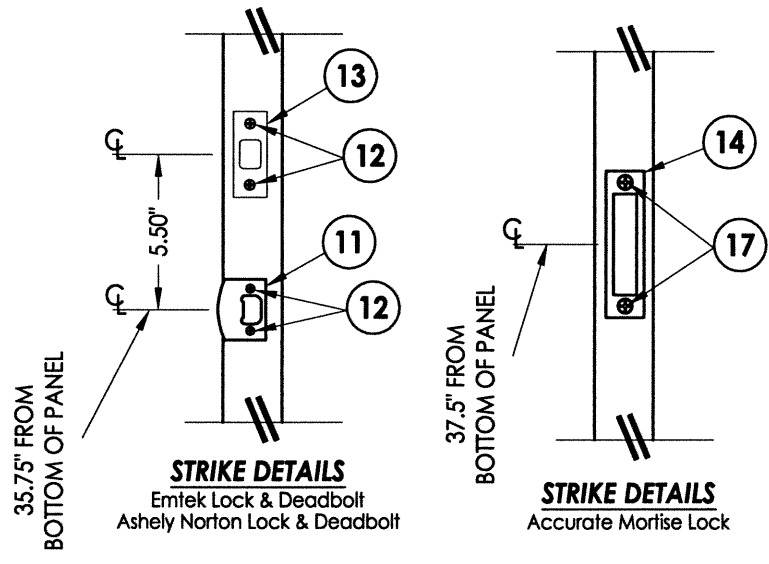
REVISIONS

DATE: 11/8/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-16663.9
SHEET 9 OF 12

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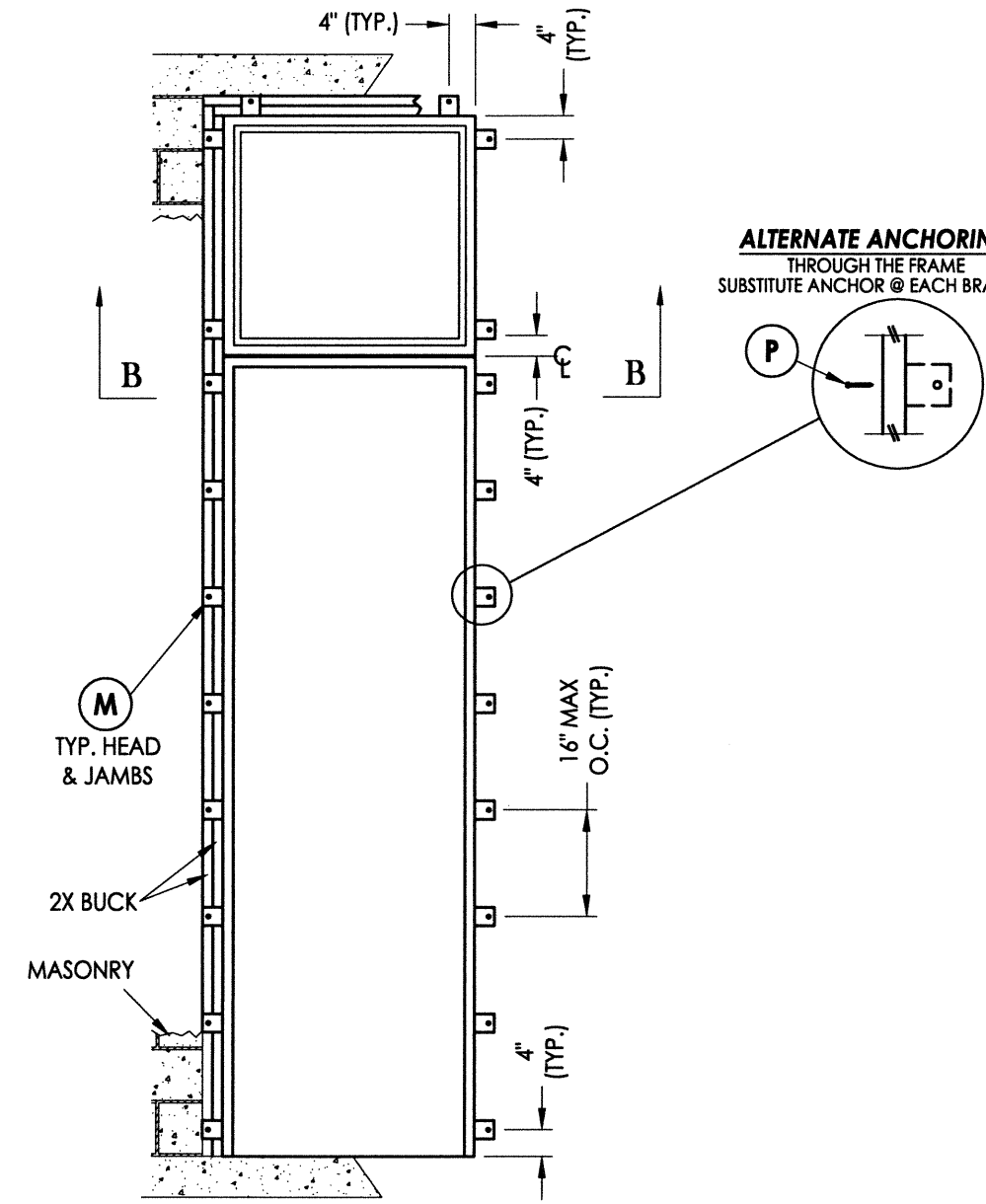
SECTION B-B
Transom mullion bolt locations



STRIKE DETAILS
Emtek Lock & Deadbolt
Ashely Norton Lock & Deadbolt

37.5" FROM
BOTTOM OF PANEL

STRIKE DETAILS
Accurate Mortise Lock



FRAME ANCHORING

O
X

ALTERNATE ANCHORING
THROUGH THE FRAME
SUBSTITUTE ANCHOR @ EACH BRACKET

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:

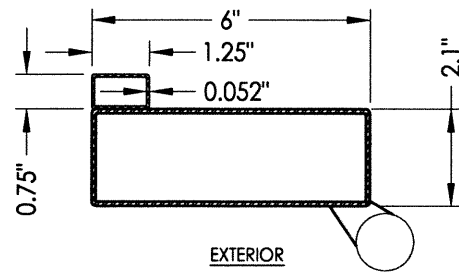
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2-1/2"	4"
ELCO ULTRACON®	1/4"	1-1/4"	2-1/2"	4"

Documents Prepared By:
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 Phone No.: 813.659.9197
 Florida Board of Professional Engineers
 Certificate Of Authorization No. 9813
LFS 12.30.13
 Lyndon F. Schmidt, P.E. No. 43409

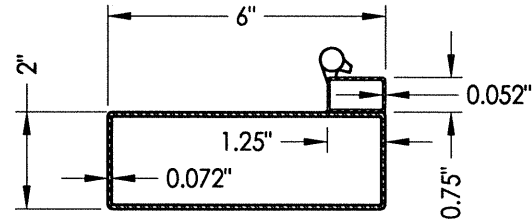
PRODUCT: CLARK HALL IRON DOORS
 PART OR ASSEMBLY: FRAME ANCHORING

NO.	DATE	BY

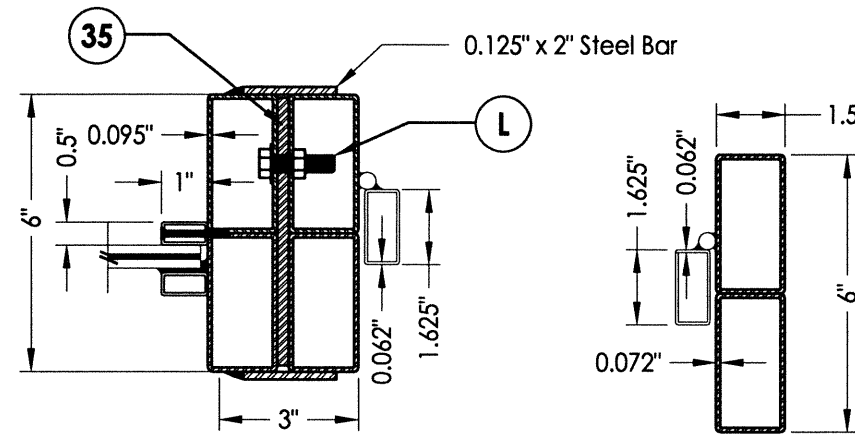
DATE: 11/8/13
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: FL-16663.9
 SHEET 10 OF 12



31 Full Lite Door Panel
Active Hinge Stile

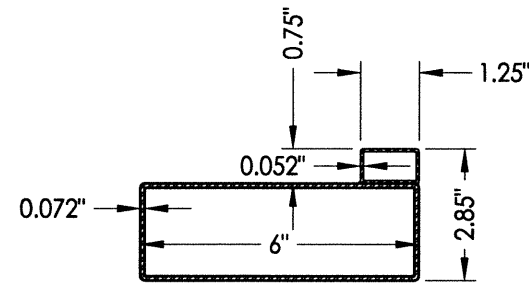


51 Sidelite Panel
Operable Sash Hinge Stile

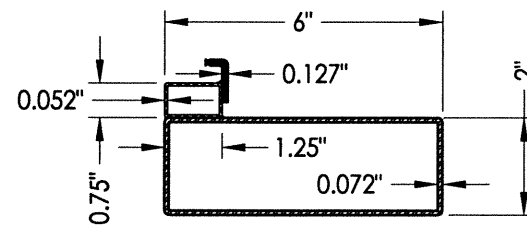


75 MULLION
Vertical with Direct Set Sidelite shown
(Horizontal Mullion Similar)

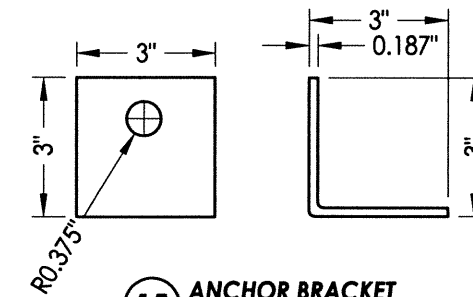
76 Jamb



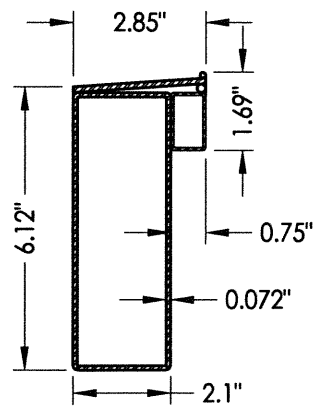
32 Full Lite Door Panel
Active Latch Stile



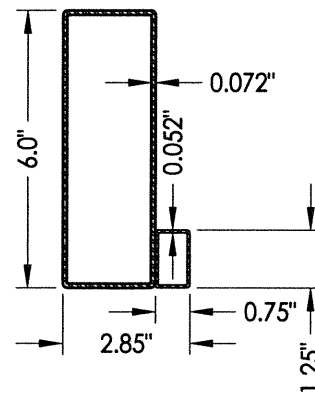
52 Sidelite Panel
Operable Sash Latch Stile



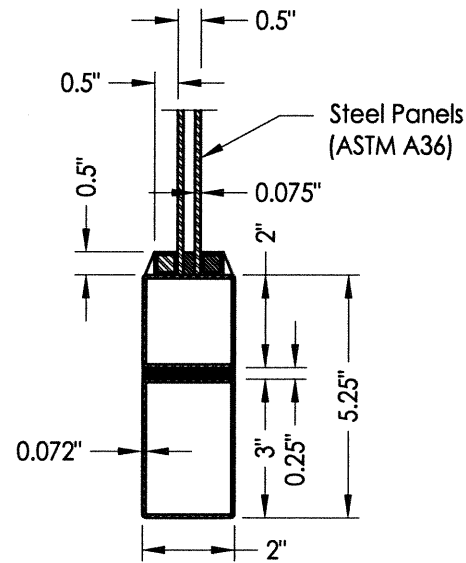
15 ANCHOR BRACKET



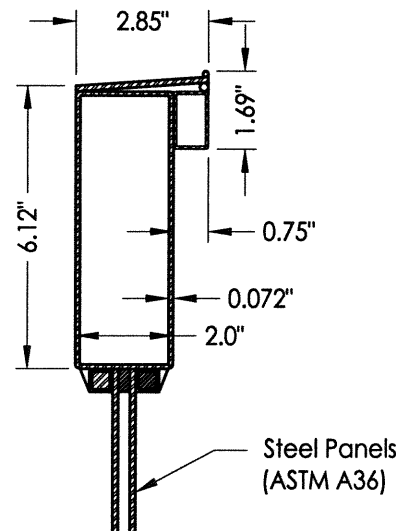
43 Full Lite Door Panel
Bottom Rail



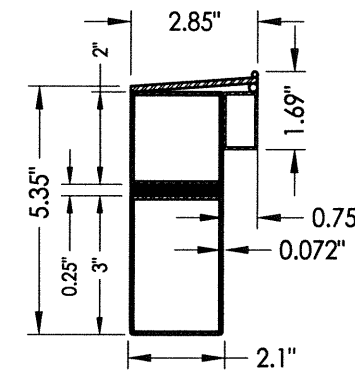
44 Full Lite Door Panel
Top Rail



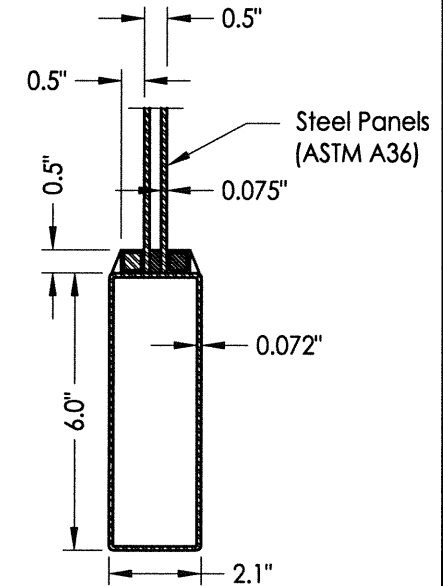
54 Bottom Rail
3/4 Lite Sidelite Panel



56 Mid Rail
3/4 Lite Sidelite Panel



53 Bottom Rail
Sidelite Panel



57 Bottom Rail
3/4 Lite Door Panel

PRODUCT:	CLARK HALL IRON DOORS
PART OR ASSEMBLY:	COMPONENTS

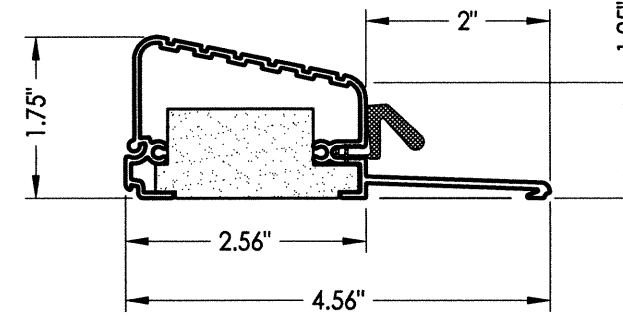
NO.	DATE	BY

DATE:	11/8/13
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-16663.9
SHEET	11 OF 12

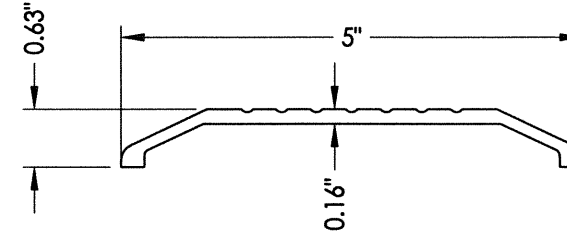
Documents Prepared By:
RW BUILDING CONSULTANTS, INC.
 P.O. Box 230 Valrico FL, 33595
 Phone No.: 813.659.9197
 Florida Board of Professional Engineers
 Certificate of Authorization No. 9813
 1701 12-30-13
 Lyndon F. Schmidt, P.E. No. 43409

BILL OF MATERIALS

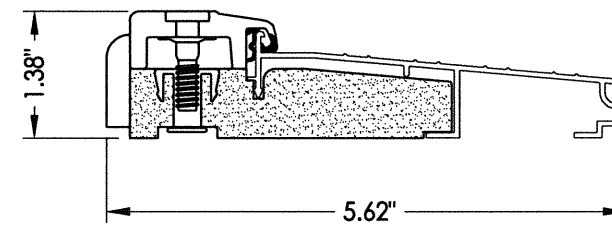
ITEM #	DESCRIPTION	MATERIAL
B	2X BUCK SG >= 0.55	WOOD
D	1/4" X 2-3/4" PFH ELCO OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	#10 X 3" PFH WOOD SCREW	STEEL
G	5/16" X 2-1/4" HH ELCO OR ITW CONCRETE SCREW	STEEL
H	5/16" 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 (1/4" X 6" STEEL BAR)	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

Documents Prepared By:

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PRODUCT: CLARK HALL IRON DOORS

PART OR ASSEMBLY: BILL OF MATERIALS & COMPONENTS

NO.	DATE	BY	REVISIONS

DATE: 11/8/13
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DWG. BY: JK
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SHEET 12 OF 12