



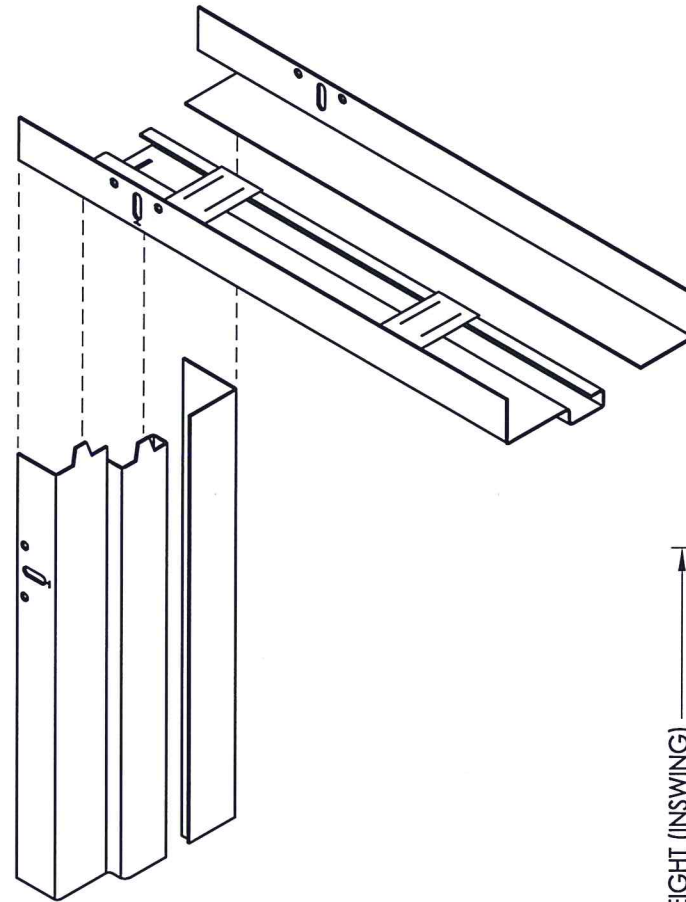
868 MURRAY ROAD, DOTHAN, AL 36303

# "REDIFLEX" TWO-PIECE STEEL FRAME SYSTEM UTILIZING A TAYLOR OPAQUE STEEL DOOR PANEL "IMPACT"

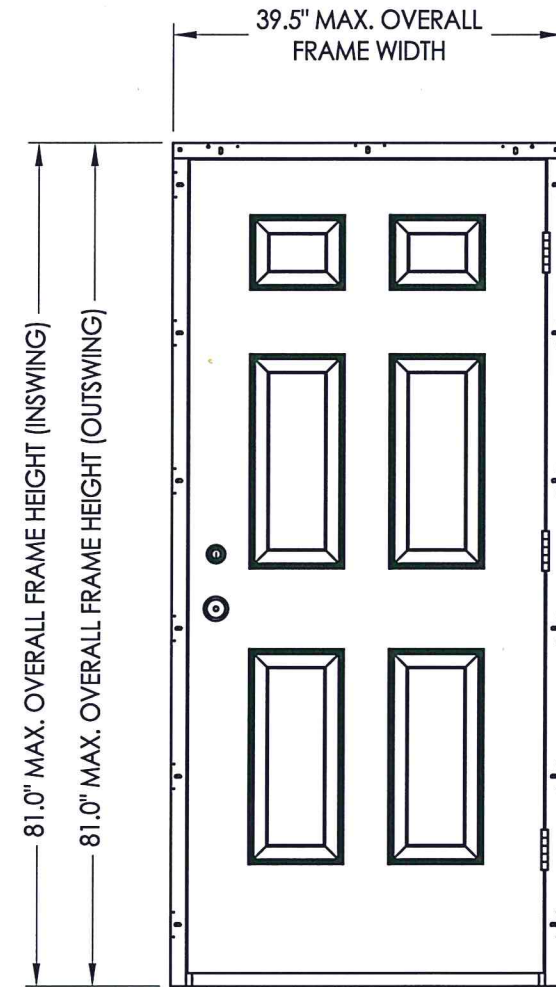
**GENERAL NOTES**

1. This product has been evaluated and is in compliance with the 7th Edition (2020) 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 FBC does not require an impact resistant covering.
4. When used in areas outside of the "HVHZ" requiring wind borne debris protection this product complies with FBC Sections 1609.1.2 & R301.2.1.2 does not require an impact resistant covering. This product meets missile level "D" and includes Wind Zone 4 as defined in ASTM E 1996 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.
5. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
6. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.
7. Outswing configurations using high water dam threshold item #70 meet water infiltration requirements for "HVHZ".
8. Inswing configurations and outswing configurations using sill item #71 and #72 do 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.
9. When used in the "HVHZ", all steel shall be protected as specified in Section 2222.6 of the FBC.

TABLE OF CONTENTS	
SHEET #	DESCRIPTION
1	Typical elevation, design pressures & general notes
2	Steel frame cross sections & details
3	Door panel details
4	Horizontal cross sections
5	Vertical cross sections
6	Buck & frame anchoring - masonry 2x buck
7	Buck & frame anchoring - steel/2x stud
8	Bill of materials and components

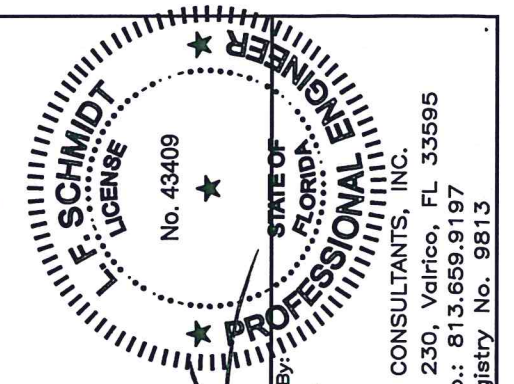


**REDIFLEX TWO-PIECE**



**INSWING / OUTSWING**

OVERALL FRAME DIMENSION	DESIGN PRESSURE (PSF)	
	POSITIVE	NEGATIVE
39.5" X 81.0"	+ 66.0	- 66.0



August 11, 2020  
Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

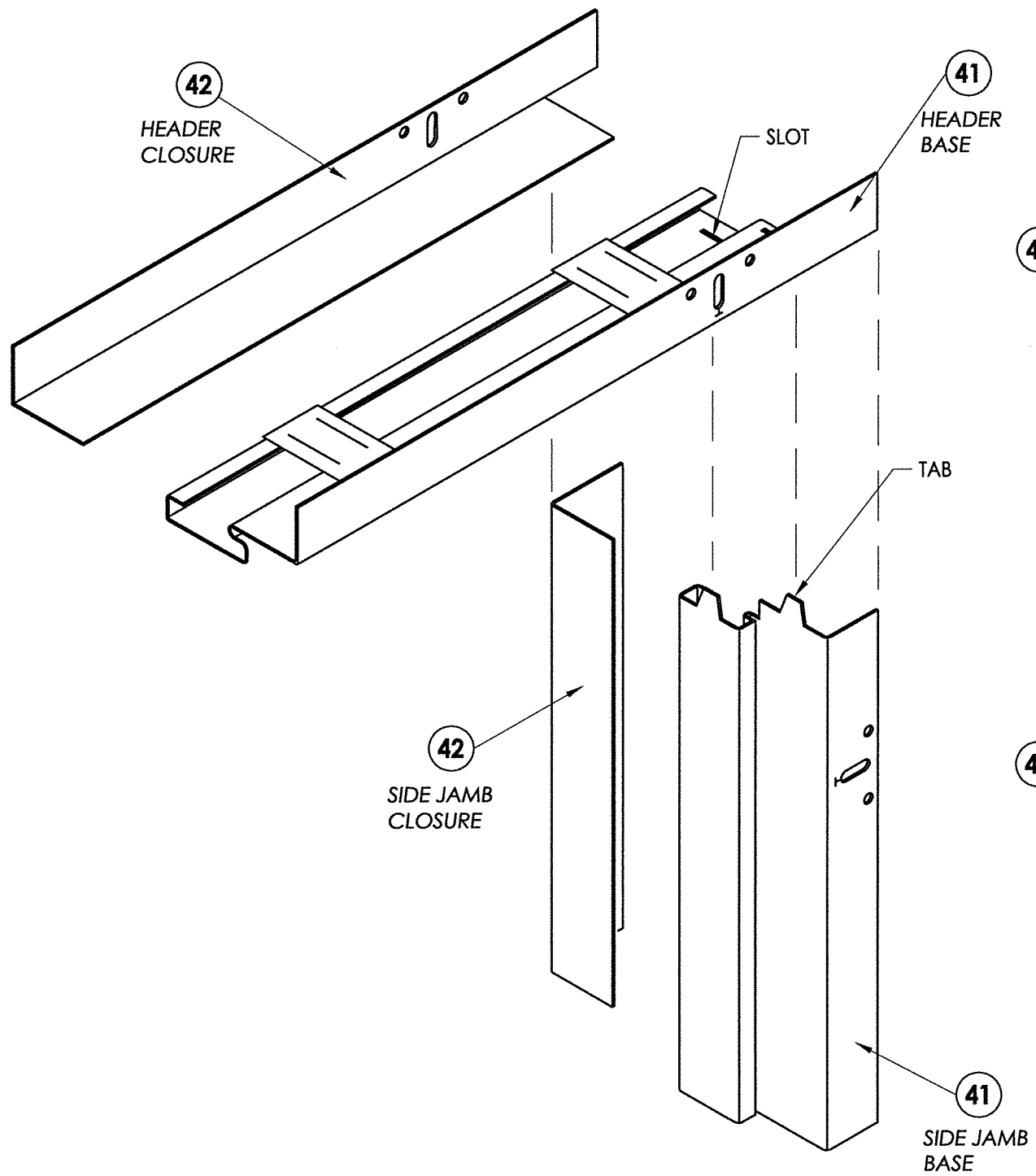
FLORIDA PROFESSIONAL ENGINEER

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

PRODUCT:  
DUNBARTON REDIFLEX  
TWO-PIECE STEEL FRAME  
PART OR ASSEMBLY:  
TYPICAL ELEVATION, DESIGN  
PRESSURES & GENERAL NOTES

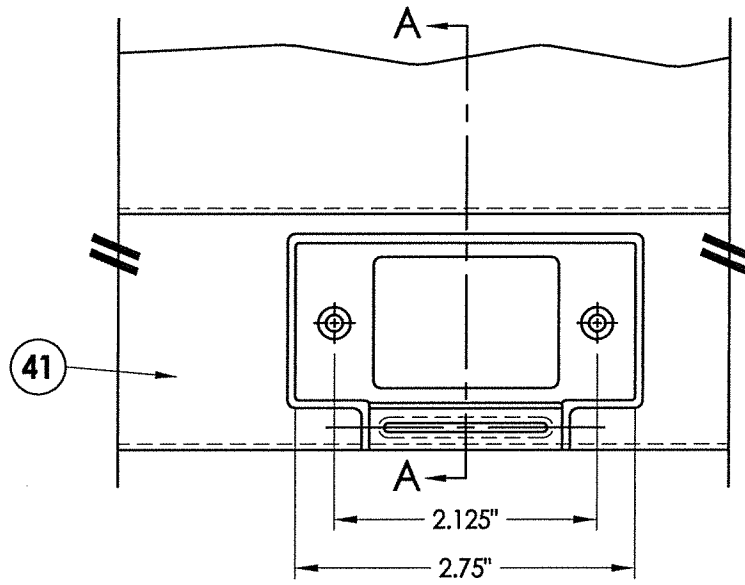
NO.	DATE	REVISIONS
4	8/11/20	UPDATE TO 7TH ED. (2020) FBC
3	9/30/17	UPDATE TO 6TH ED. (2017) FBC
2	1/27/16	REVISE ANCHORING
1	3/23/15	UPDATE TO 5TH ED. (2014) FBC

DATE: 3/14/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: FL-15341.1  
SHEET 1 OF 8

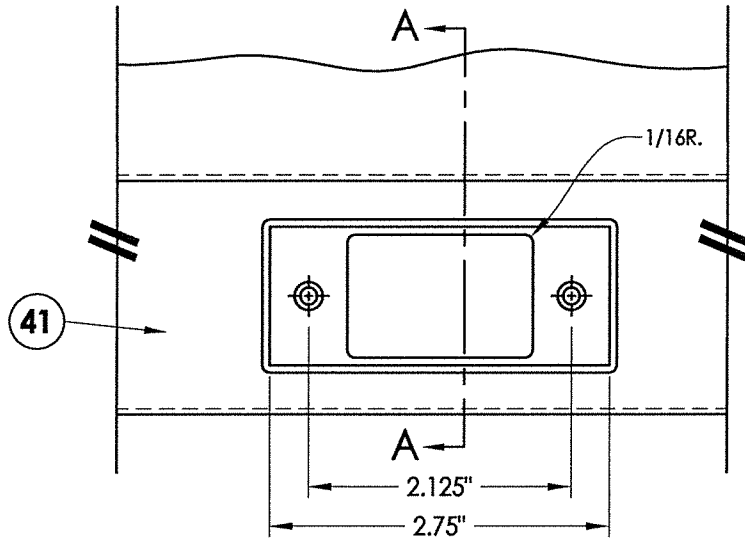


**NOTES:**

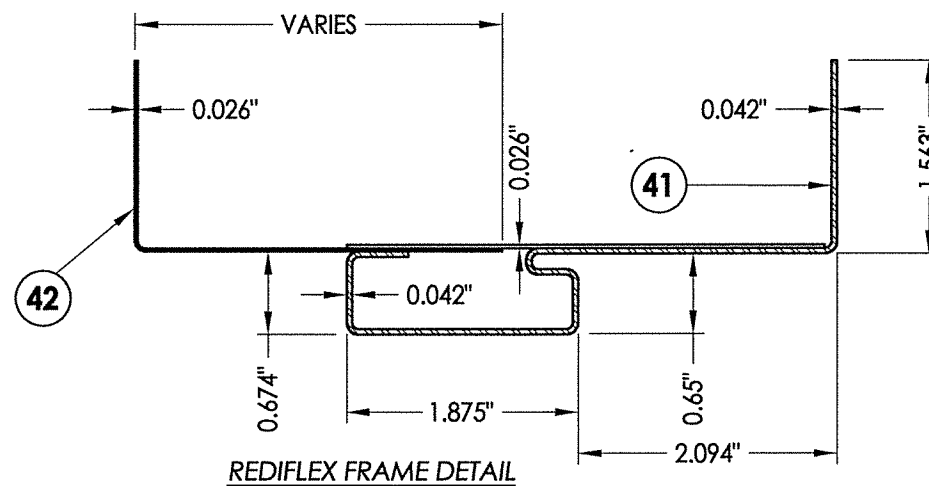
1. HEADER AND SIDE BASE JAMB (41) MINIMUM 18 GA. GALV. STEEL.
2. HEADER AND SIDE CLOSURE JAMB (42) MINIMUM 22 GA. GALV. STEEL.
3. FRAME SHOWN WITHOUT OPTIONAL STEEL TRIM CASING.
4. NON-KERF FRAMES DO NOT MEET AIR AND WATER CRITERIA.



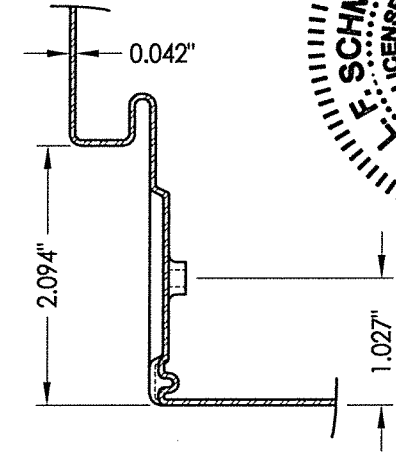
STRIKE AT LATCH



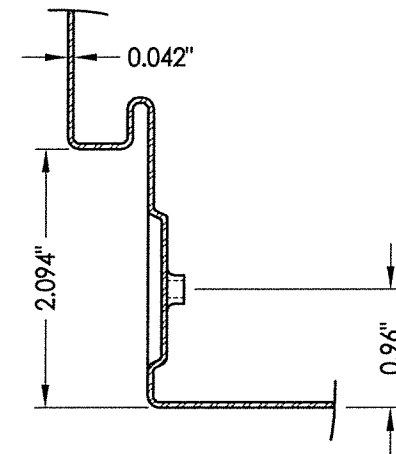
STRIKE AT DEADBOLT



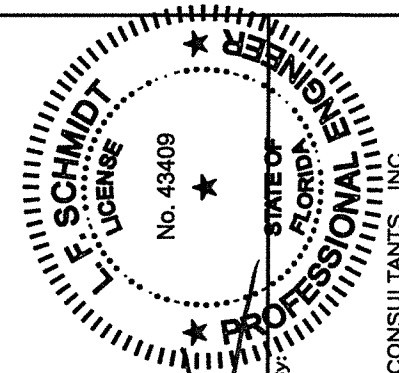
REDIFLEX FRAME DETAIL



SECTION A-A



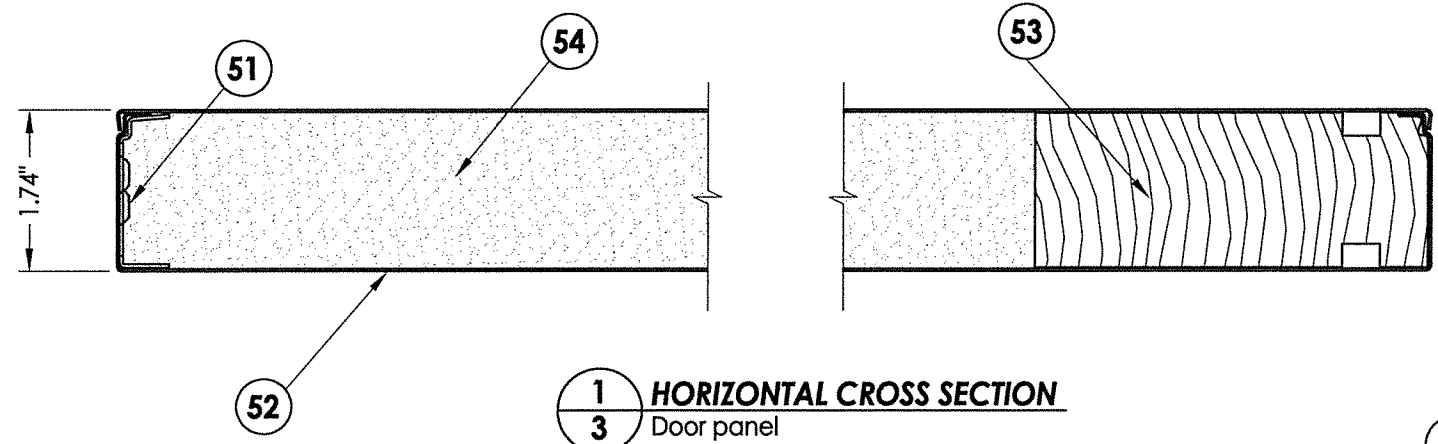
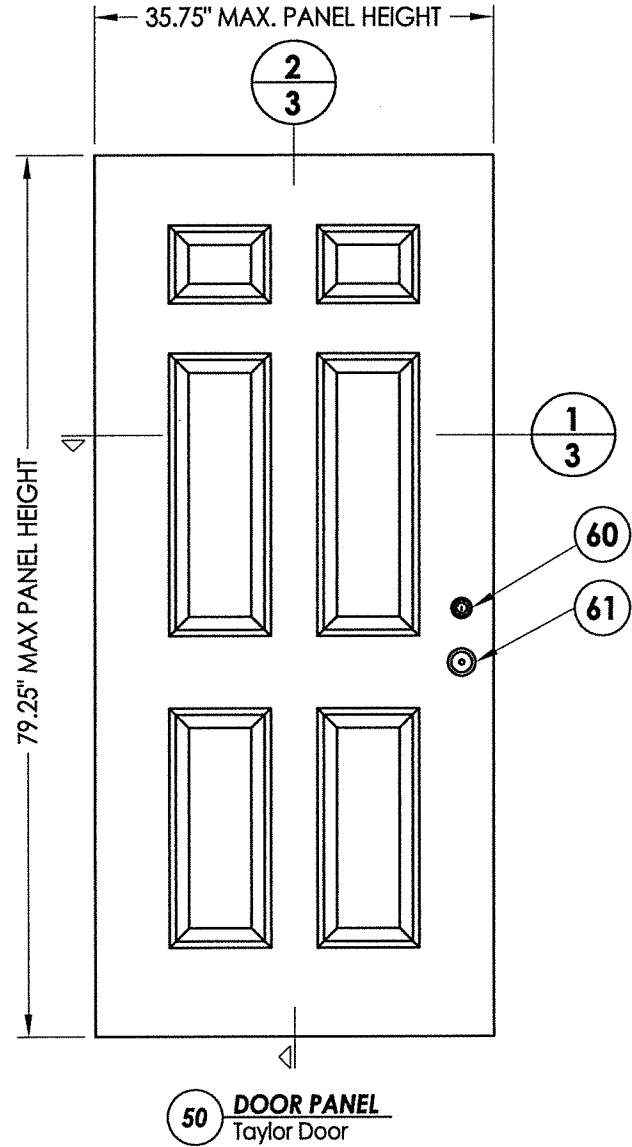
SECTION A-A



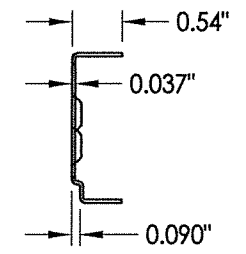
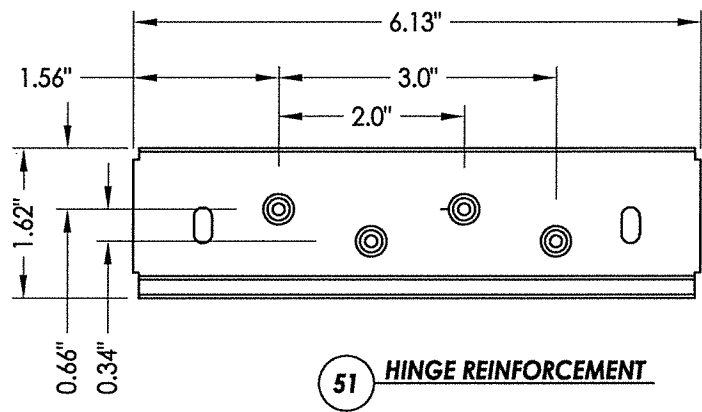
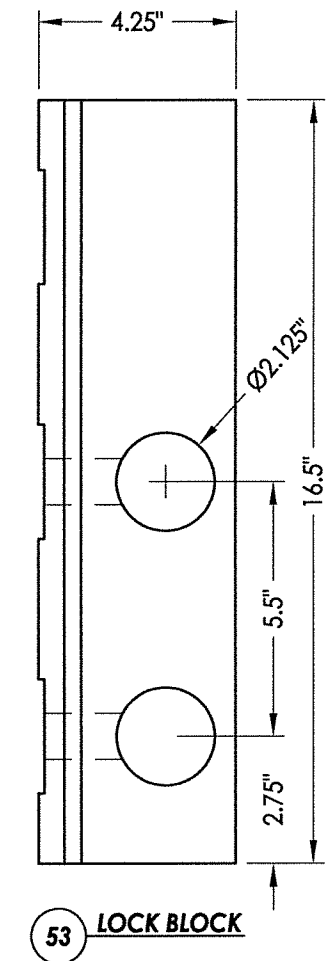
August 11, 2020  
 Documents Prepared By:  
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 P.E. No. 43409

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

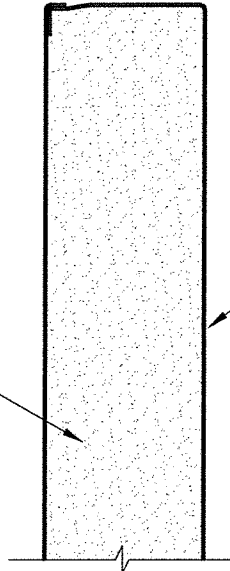
PRODUCT:		DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME			
PART OR ASSEMBLY:		STEEL FRAME CROSS SECTIONS & DETAILS			
NO.	DATE	BY	JK	BY	
4	8/11/20	UPDATE TO 7TH ED. (2020)	FBC	DAC	
3	9/30/17	UPDATE TO 6TH ED. (2017)	FBC	LFS	
2	1/27/16	REVISE ANCHORING	LFS	LFS	
1	3/23/15	UPDATE TO 5TH ED. (2014)	FBC	JK	
REVISIONS					
DATE:		3/14/12			
SCALE:		N.T.S.			
DWG. BY:		JK			
CHK. BY:		LFS			
DRAWING NO.:		FL-15341.1			
SHEET		2 OF 8			



1 HORIZONTAL CROSS SECTION  
3 Door panel

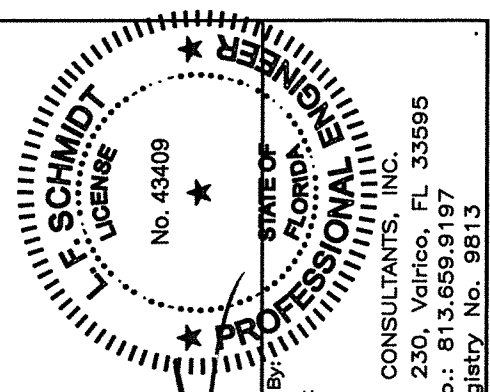


2 VERTICAL CROSS SECTION  
3 Door panel



54

54

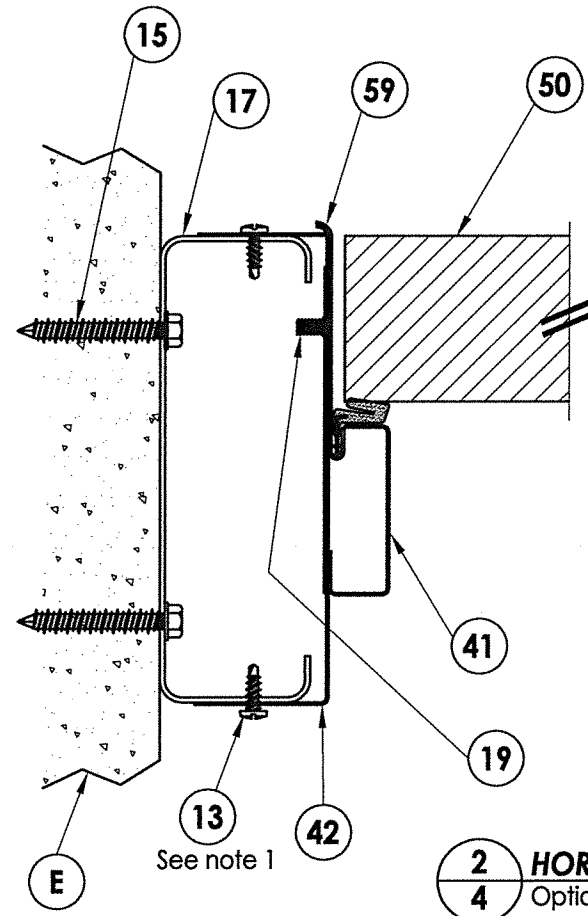
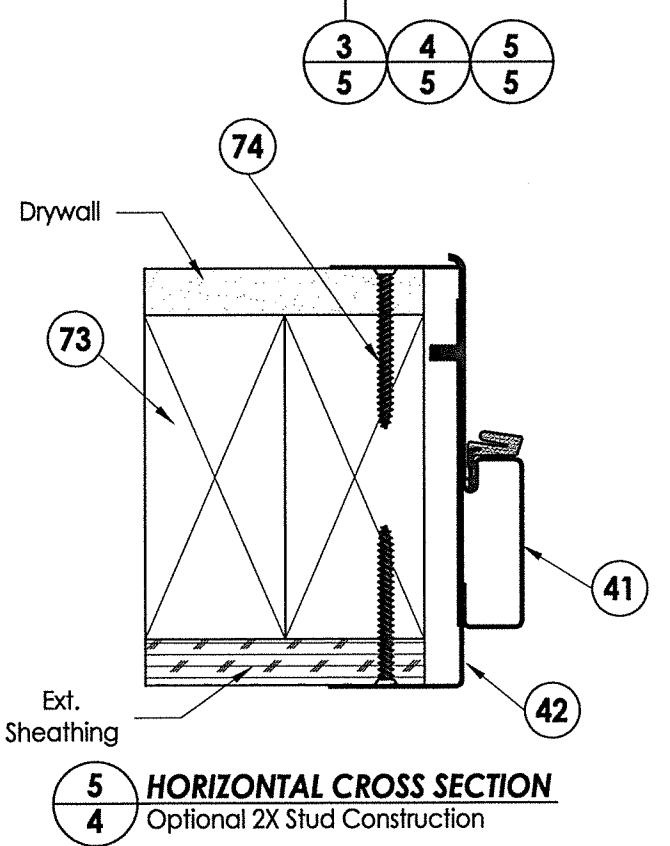
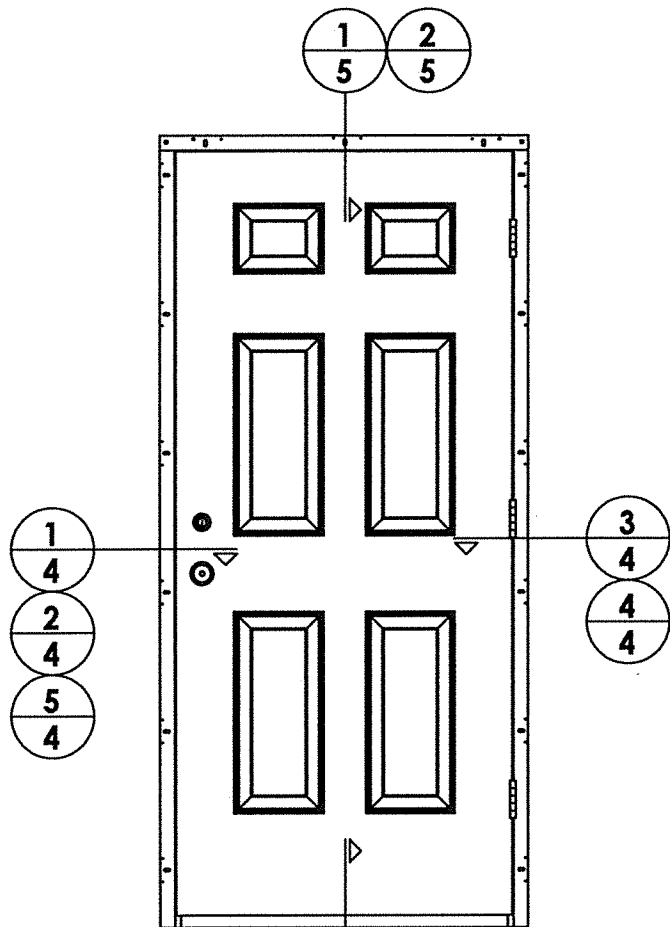


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Phone No.: 813.659.9197  
FBPE Registry No. 9813

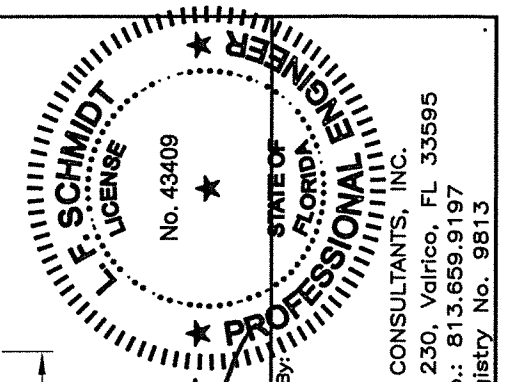
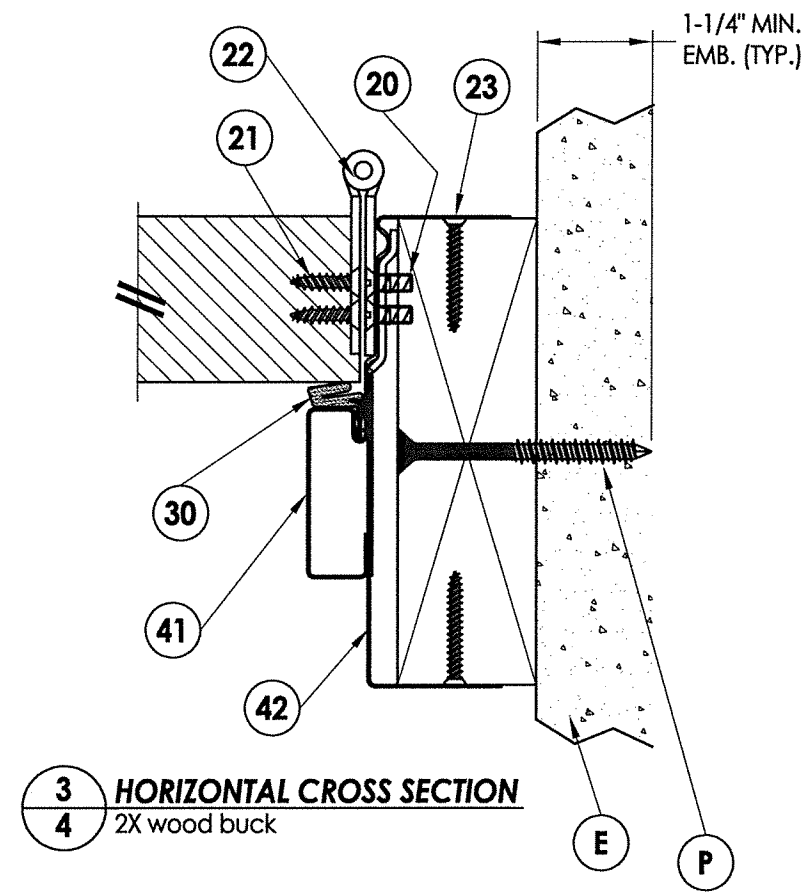
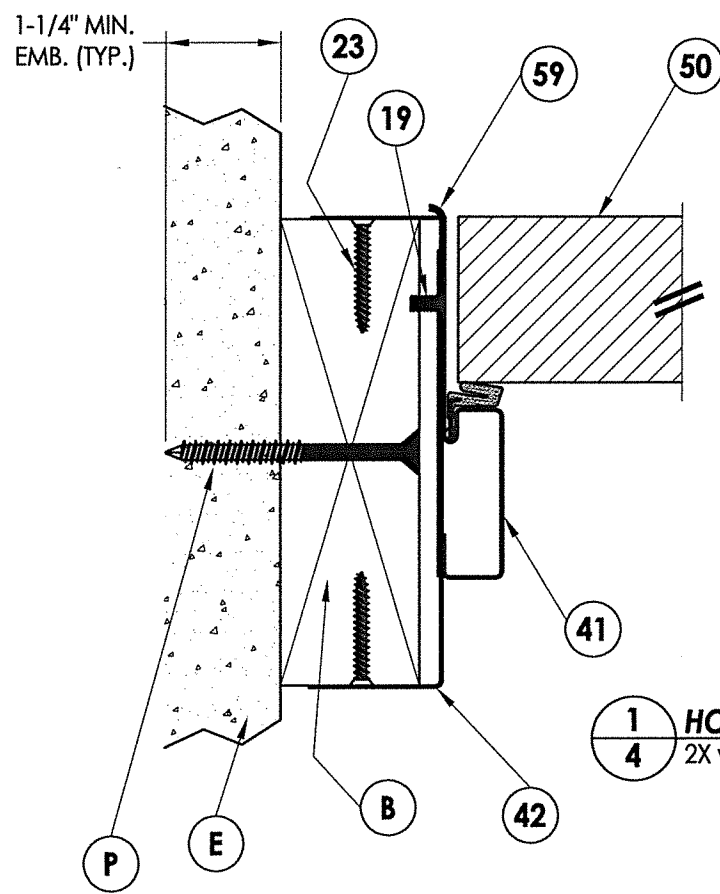
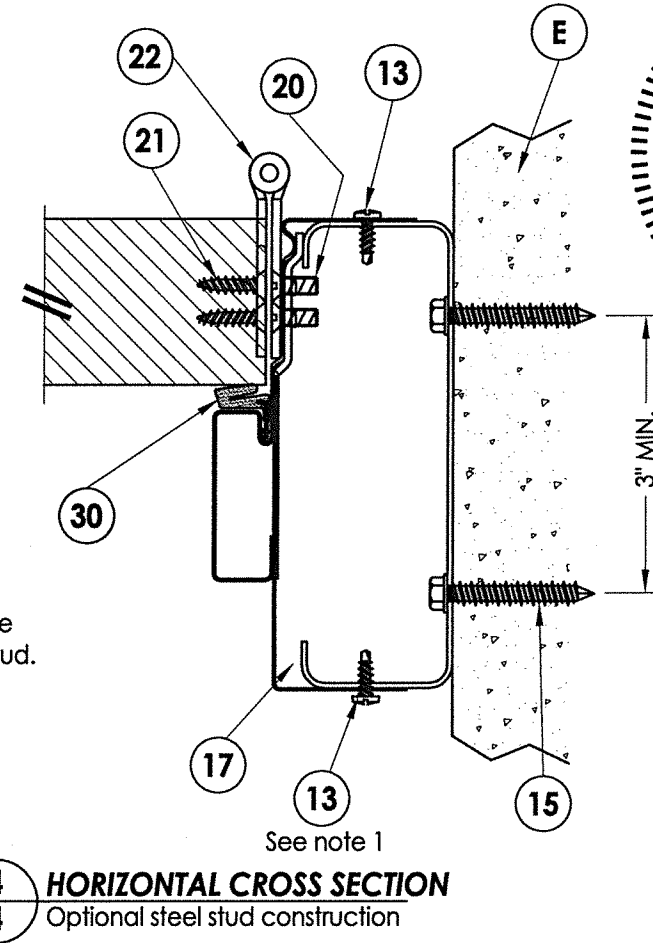
PRODUCT:  
DUNBARTON REDIFLEX  
TWO-PIECE STEEL FRAME  
PART OR ASSEMBLY:  
DOOR PANEL DETAILS

NO.	DATE	REVISIONS
4	8/11/20	UPDATE TO 7TH ED. (2020) FBC DAC
3	9/30/17	UPDATE TO 6TH ED. (2017) FBC LFS
2	1/27/16	REVISE ANCHORING LFS
1	3/23/15	UPDATE TO 5TH ED. (2014) FBC JK
		BY

DATE: 3/14/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: FL-15341.1  
SHEET 3 OF 8

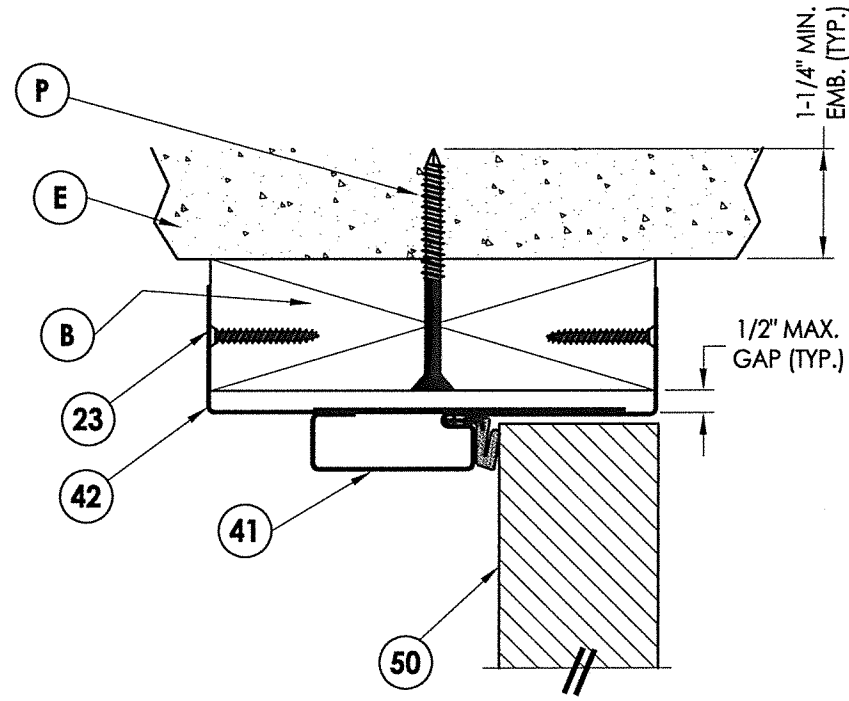


Note:  
1. A minimum of three threads must protrude completely through the supporting steel stud.

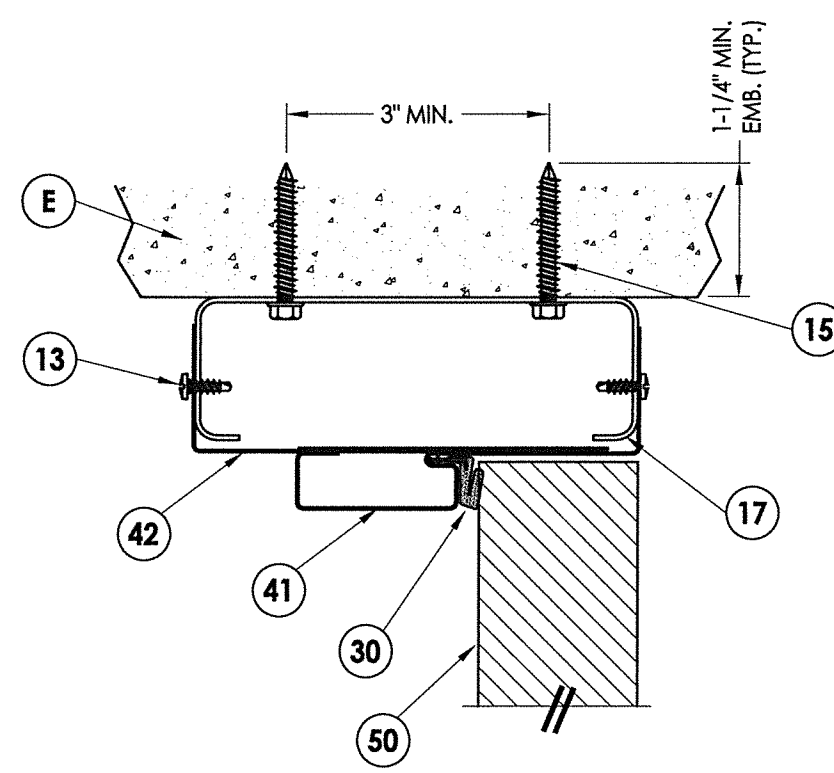


August 11, 2020  
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 Phone No.: 813.659.9197  
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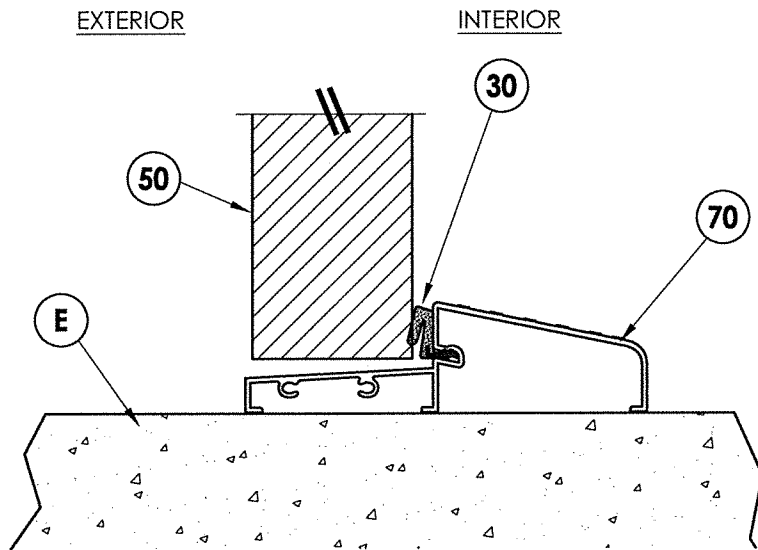
PRODUCT:		DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME	
PART OR ASSEMBLY:		HORIZONTAL CROSS SECTIONS	
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3	9/30/17	FBC	UPDATE TO 6TH ED. (2017)
2	1/27/16	LFS	REVISE ANCHORING
1	3/23/15	JK	UPDATE TO 5TH ED. (2014)
DATE: 3/14/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-15341.1			
SHEET 4 OF 8			



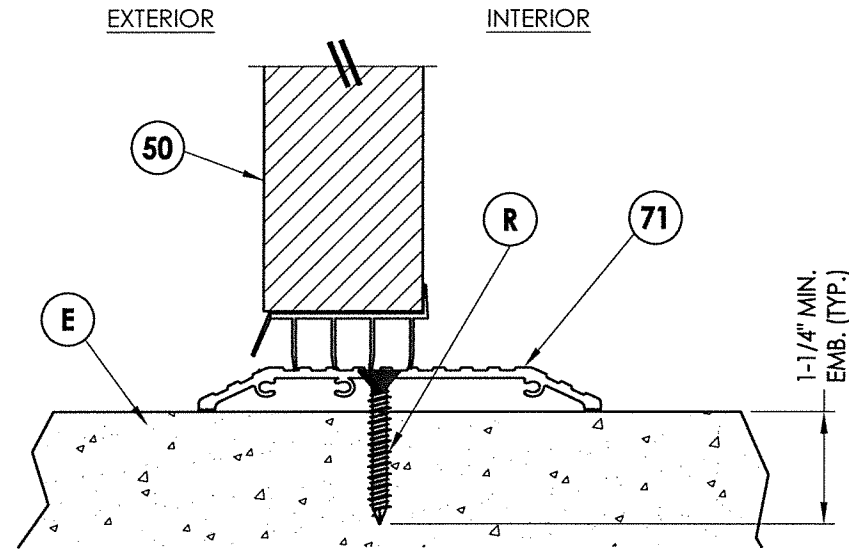
**1** VERTICAL CROSS SECTION  
**5** 2X wood buck



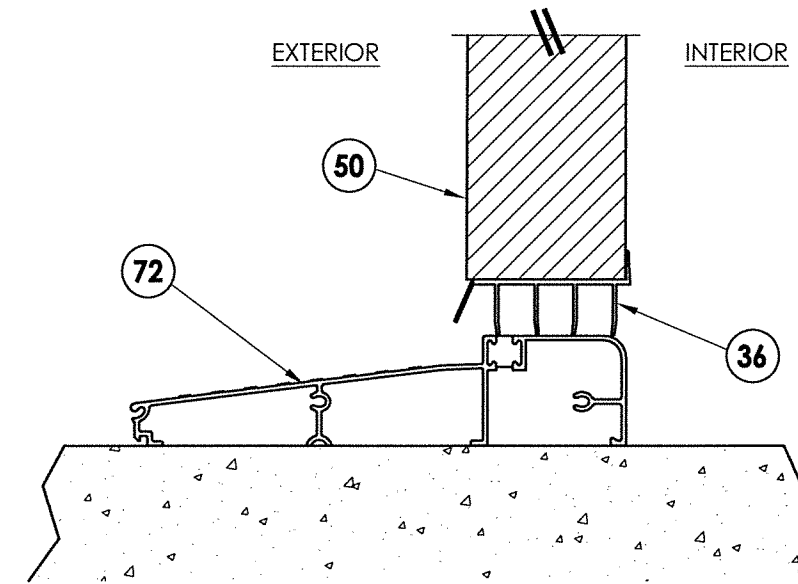
**2** VERTICAL CROSS SECTION  
**5** Optional steel stud construction



**3** VERTICAL CROSS SECTION  
**5** Outswing configuration  
 see general notes, sheet 1  
 for "HVHZ" water infiltration  
 requirements



**4** VERTICAL CROSS SECTION  
**5** Inswing configuration  
 see general notes, sheet 1  
 for "HVHZ" Water infiltration  
 requirements



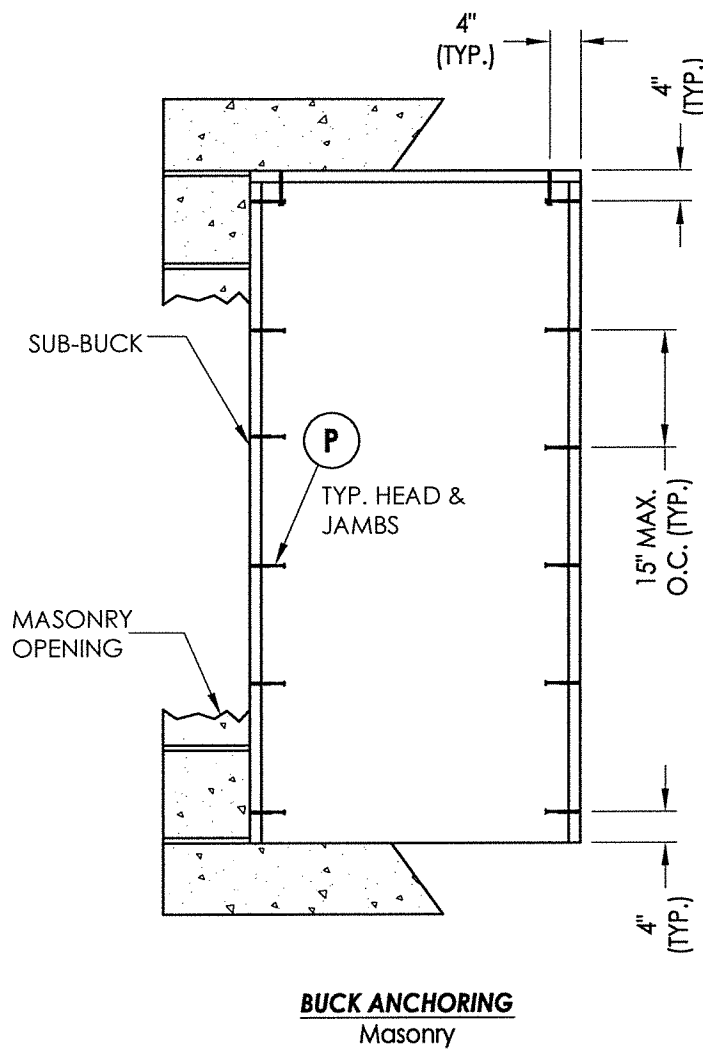
**5** VERTICAL CROSS SECTION  
**5** inswing configuration  
 see general notes, sheet 1  
 for "HVHZ" water infiltration  
 requirements

**L. SCHMIDT**  
 LICENSE No. 43409  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER

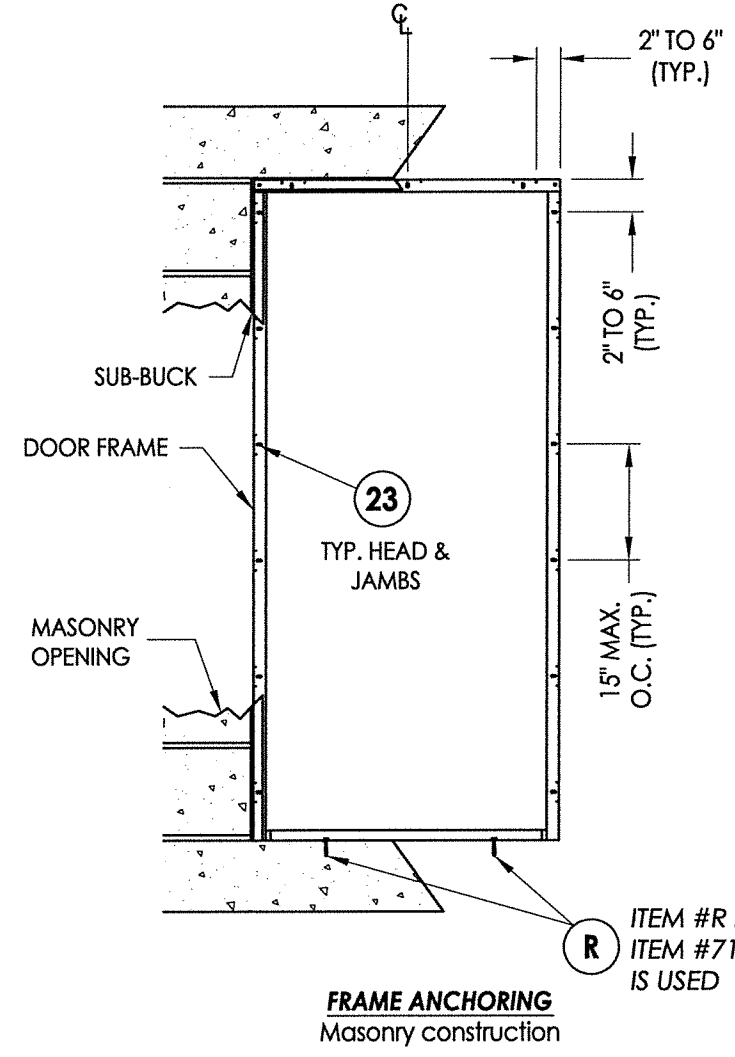
August 11, 2020  
 Documents Prepared By:  
 Lyndon F. Schmidt  
 P.E. No. 43409

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

PRODUCT:		DUNBARTON REDIFLEX	
		TWO-PIECE STEEL FRAME	
PART OR ASSEMBLY:		VERTICAL CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
4	8/11/20	DAC	UPDATE TO 7TH ED. (2020) FBC
3	9/30/17	LFS	UPDATE TO 6TH ED. (2017) FBC
2	1/27/16	JK	REVISE ANCHORING
1	3/23/15	JK	UPDATE TO 5TH ED. (2014) FBC
DATE: 3/14/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-15341.1			
SHEET 5 OF 8			

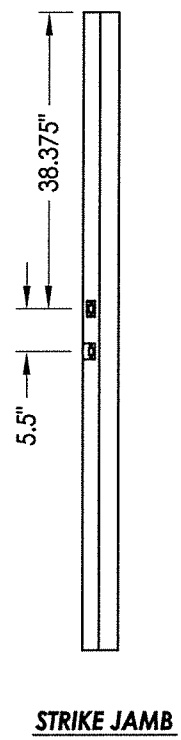


**BUCK ANCHORING**  
Masonry

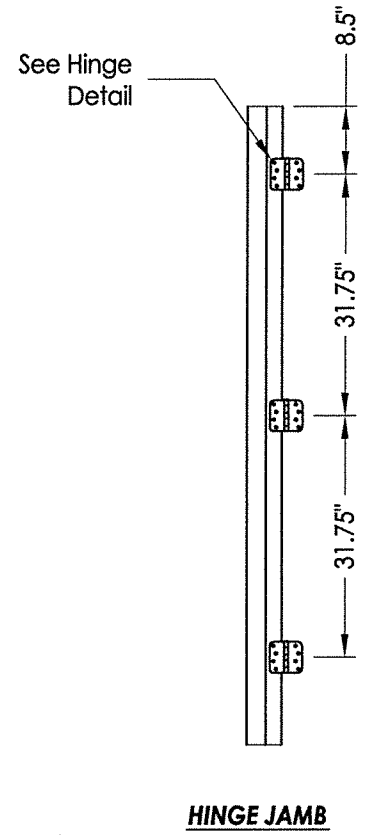


**FRAME ANCHORING**  
Masonry construction

**R** ITEM #R IS USED ONLY WHEN ITEM #71, THE ADA THRESHOLD IS USED



**STRIKE JAMB**



**HINGE JAMB**

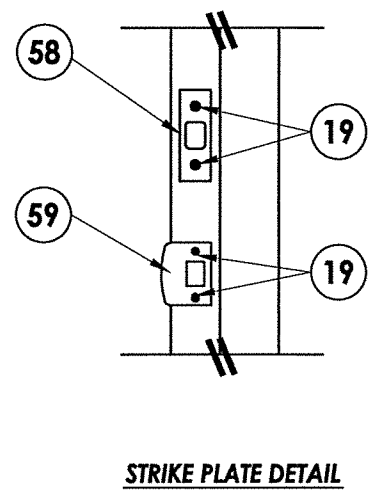
**CONCRETE ANCHOR NOTES:**

- 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:

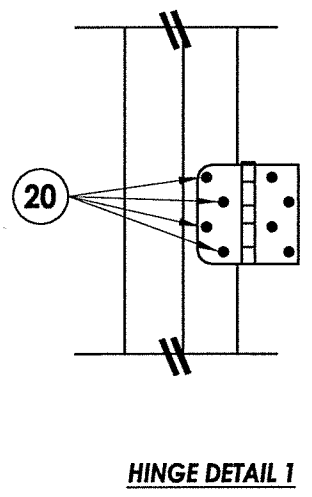
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2"	4"
DeWALT ULTRACON+®	1/4"	1-1/4"	1"	4"

**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.



**STRIKE PLATE DETAIL**



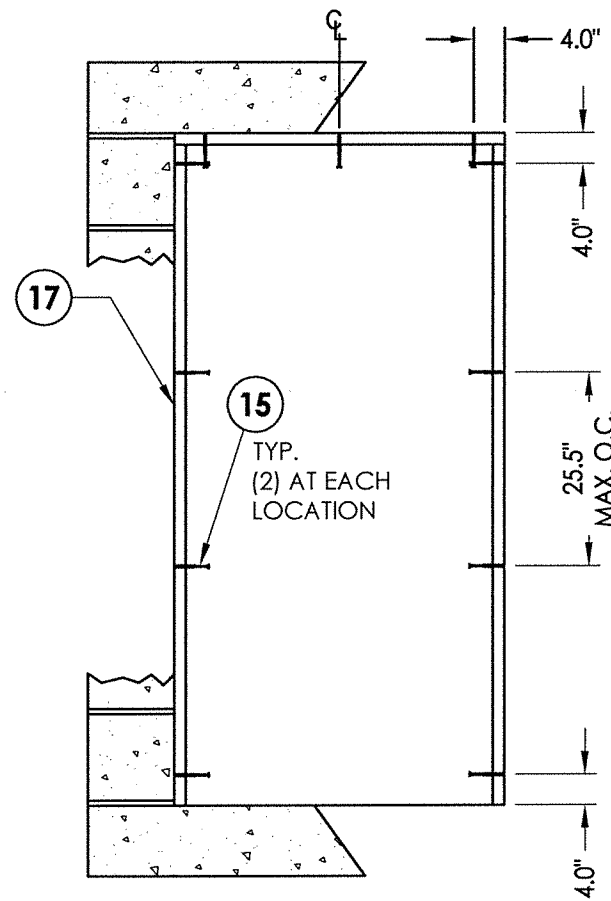
**HINGE DETAIL 1**

August 11, 2020  
 Documents Prepared By:  
 Lyndon F. Schmidt  
 P.E. No. 43409

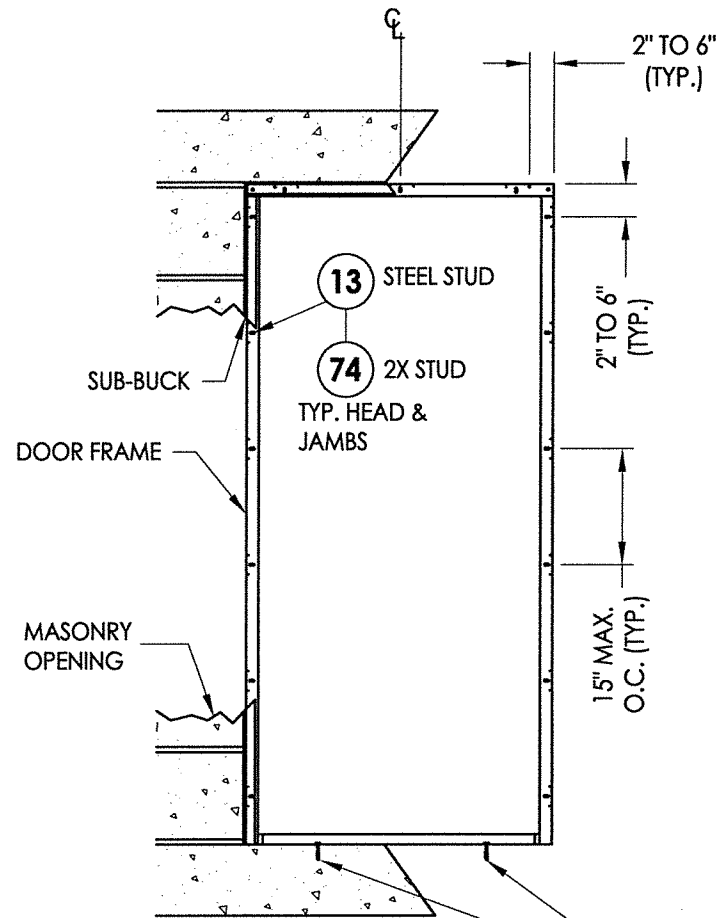
**PROFESSIONAL ENGINEER**  
 BUILDING CONSULTANTS, INC.  
 P.O. Box 230, Valrico, FL 33595  
 Phone No.: 813.659.9197  
 FBPE Registry No. 9813

PRODUCT:		DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME	
PART OR ASSEMBLY:		BUCK AND FRAME ANCHORING MASONRY 2X BUCK	
NO.	DATE	BY	REVISIONS
4	8/11/20	DAC	UPDATE TO 7TH ED. (2020)
3	9/30/17	FBC	UPDATE TO 6TH ED. (2017)
2	1/27/16	LFS	REVISE ANCHORING
1	3/23/15	FBC	UPDATE TO 5TH ED. (2014)

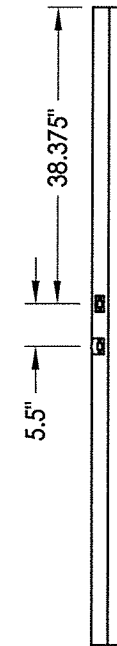
DATE: 3/14/12  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: FL-15341.1  
 SHEET 6 OF 8



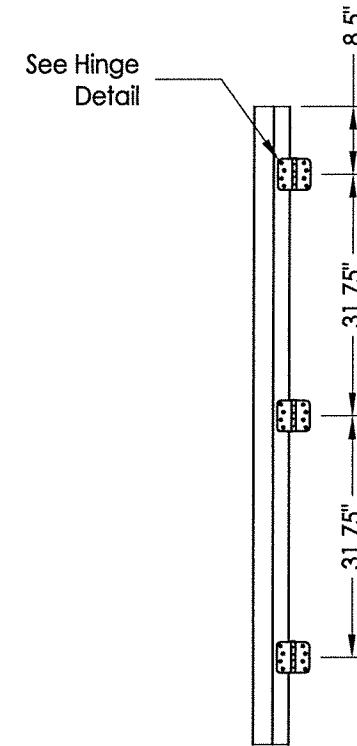
**BUCK ANCHORING**  
Steel stud



**FRAME ANCHORING**  
Stud construction

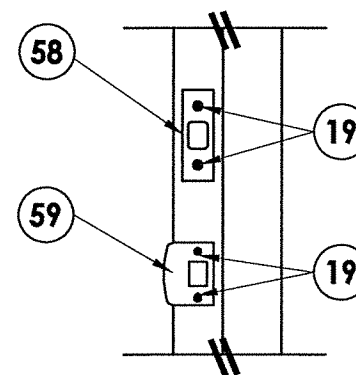


**STRIKE JAMB**

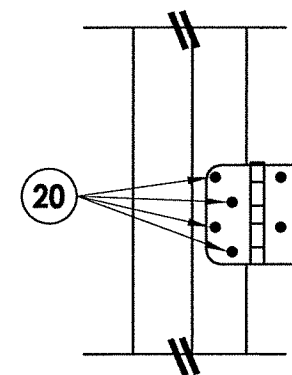


**HINGE JAMB**

**R** ITEM #R IS USED ONLY WHEN ITEM #71, THE ADA THRESHOLD IS USED



**STRIKE PLATE DETAIL**



**HINGE DETAIL 1**

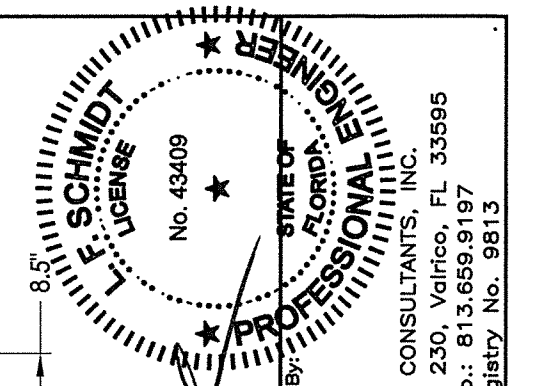
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- Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON CENTER" dimension are not exceeded.
- Concrete anchor table:

ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2"	4" / 3" (steel stud)
DeWALT ULTRACON®	1/4"	1-1/4"	1"	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.



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

**R.W.** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 98113

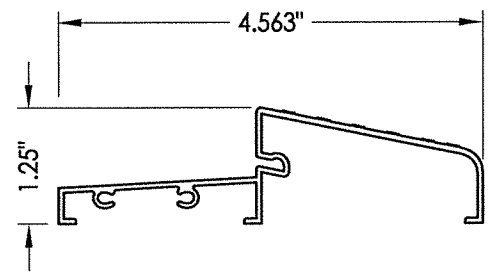
PRODUCT:		DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME	
PART OR ASSEMBLY:		BUCK & FRAME ANCHORING STEEL/2X STUD	
NO.	DATE	BY	REVISIONS
4	8/11/20	JK	UPDATE TO 7TH ED. (2020) FBC DAC
3	9/30/17	LFS	UPDATE TO 6TH ED. (2017) FBC
2	1/27/16	LFS	REVISE ANCHORING
1	3/23/15	JK	UPDATE TO 5TH ED. (2014) FBC

DATE: 3/14/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: FL-15341.1  
SHEET 7 OF 8

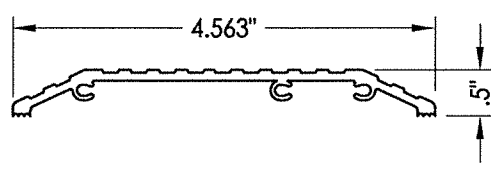
\\dc01\wbc\Clients\Dunbarton Permanent\A - Florida Product Approvals\FL-15341 - Exterior Door Components - Rediflex Steel Frames\C - Drawings\FL-15341 (2020)\FL-15341.1-4.dwg

**BILL OF MATERIALS**

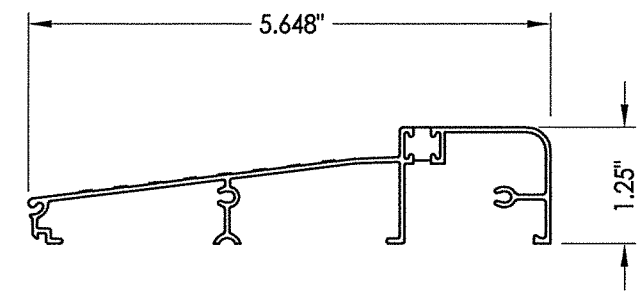
ITEM	DESCRIPTION	MATERIAL
B	2X BUCK SG >= 0.55	WOOD
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90 OR ASTM A653 STEEL	CONCRETE
P	1/4" X 2-3/4" DeWALT OR ITW PFH CONCRETE SCREW	STEEL
R	1/4" X 1-3/4" ITW PFH CONCRETE SCREW	STEEL
13	#10 X 3/4" HILTI KWIK-FLEX SELF-DRILLING SCREW	STEEL
15	1/4" X 1-3/4" HWH ITW CONCRETE SCREW	STEEL
17	SSMA STUD 550S162-54 (Fy = 33 ksi, Fu = 45 ksi)	STEEL
19	#8 x 3/8" PFH MACHINE SCREW	STEEL
20	10-24 X 1/2" FLAT HEAD SCREW	STEEL
21	#10 X 0.75" PFH WOOD SCREW	STEEL
22	4" X 4" BUTT HINGE	STEEL
23	#6 X 1-1/4" PFH WOOD SCREW (1-1/8" MIN. EMBEDMENT)	STEEL
29	JAMB HINGE REINF. 14 GA. 4" x 4" x 1.53" (.075" GALV. STEEL) BY DUNBARTON FR00505	STEEL
30	COMPRESSION WEATHERSTRIPPING QLON QDS 650 BY SCHLEGEL	FOAM
36	DOOR BOTTOM SWEEP by DUNBARTON	PVC
41	REDIFLEX JAMB BASE 18 GA. (.042" MIN. GALV. STEEL) BY DUNBARTON	STEEL
42	REDIFLEX JAMB CLOSURE 22 GA. (.026" MIN. GALV. STEEL) BY DUNBARTON	STEEL
50	STEEL DOOR PANEL - STEEL EDGE By Taylor	STEEL
51	STEEL DOOR HINGE REINFORCEMENT	STEEL
52	DOOR SKIN (0.020" THICK STEEL, Fy = 33,000 PSI MIN.)	STEEL
53	LOCK REINFORCEMENT BLOCK	WOOD
54	POLYURETHANE FOAM CORE (2.0 PCF DENSITY, BAYER 245)	POLYURETHANE
58	STRIKE PLATE - DEADBOLT	STEEL
59	STRIKE PLATE - LATCHBOLT	STEEL
60	SCHLAGE KEYED LOCK SET - F SERIES	STEEL
	KWIKSET SERIES LATCH	STEEL
61	SCHLAGE DEADBOLT - B60/62 SERIES	STEEL
	KWIKSET SERIES (660) DEADBOLT	STEEL
70	OUTSWING BUMP THRESHOLD by ENDURA	ALUM
71	ADA THRESHOLD by ENDURA	ALUM
72	INSWING FIXED THRESHOLD BY ENDURA	ALUM
73	2X FRAMING: SG >= 0.42	WOOD
74	#8 x 1-3/4" PFH SMS (1-1/8" MIN. EMBEDMENT)	STEEL



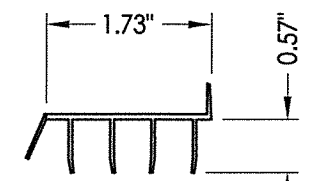
**70** OUTSWING THRESHOLD



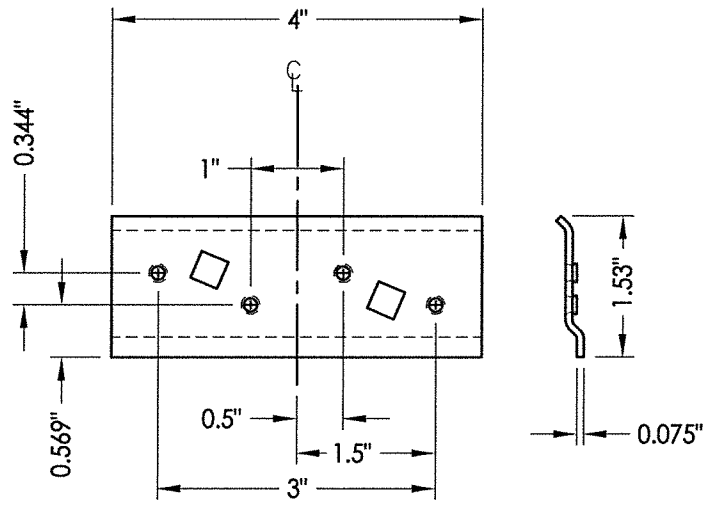
**71** ADA SILL



**72** INSWING ALUMINUM THRESHOLD



**36** FIN TYPE SWEEP



**29** HINGE REINFORCEMENT

August 11, 2020  
 Documents Prepared By:  
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BUILDING CONSULTANTS, INC.  
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 FBPE Registry No. 9813

PRODUCT:		DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME	
PART OR ASSEMBLY:		BILL OF MATERIAL & COMPONENTS	
NO.	DATE	BY	REVISIONS
4	8/11/20	JK	UPDATE TO 7TH ED. (2020)
3	9/30/17	LFS	UPDATE TO 6TH ED. (2017)
2	1/27/16	LFS	REVISE ANCHORING
1	3/23/15	JK	UPDATE TO 5TH ED. (2014)
DATE:		3/14/12	
SCALE:		N.T.S.	
DWG. BY:		JK	
CHK. BY:		LFS	
DRAWING NO.:		FL-15341.1	
SHEET		8 OF 8	