

\\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

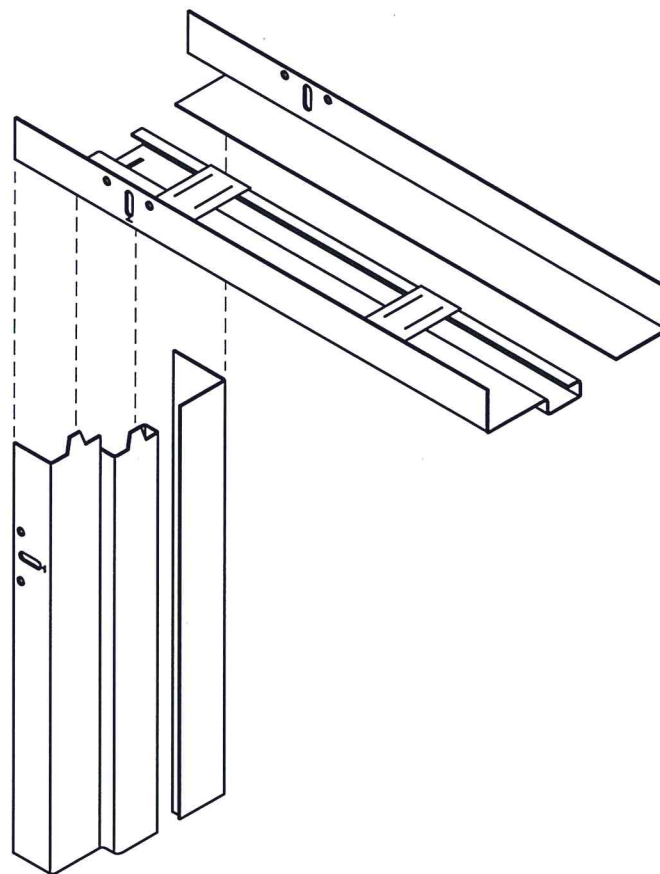


868 MURRAY ROAD, DOTHAN, AL 36303

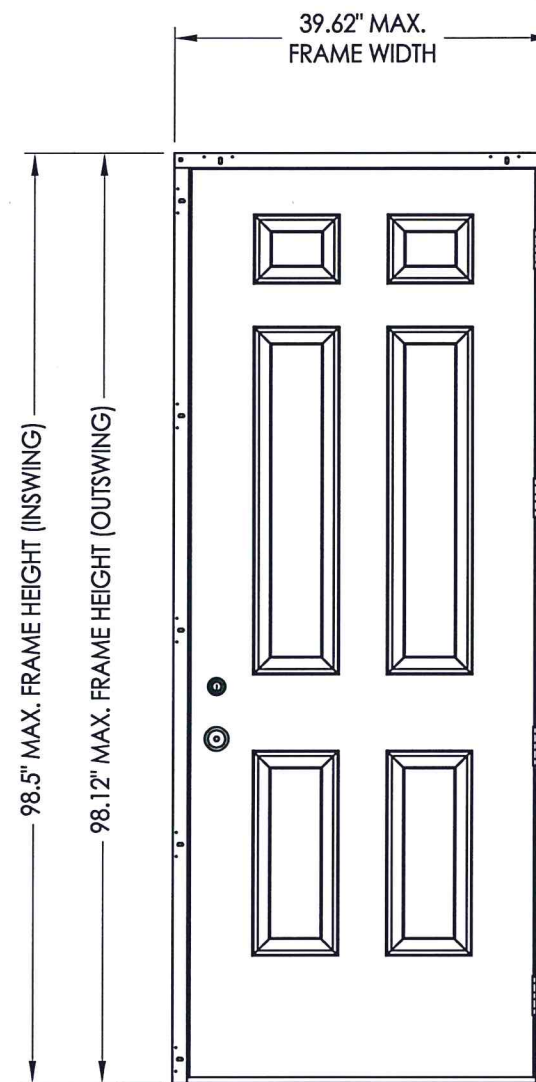
## "REDIFLEX" TWO-PIECE STEEL FRAME SYSTEM UTILIZING A JELD-WEN OPAQUE STEEL DOOR PANEL "IMPACT"

GENERAL NOTES

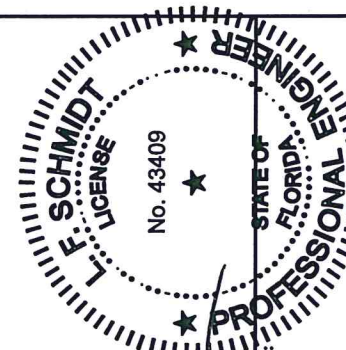
1. This product has been evaluated and is in compliance with the 7th Edition (2020) Florida Building Code (FBC) structural requirements including the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be 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 threshold item #70 meet water infiltration requirements for "HVHZ".
8. Configurations using inswing threshold item #76 and ADA threshold item #77 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.



**REDIFLEX TWO-PIECE**



**INSWING / OUTSWING**



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

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

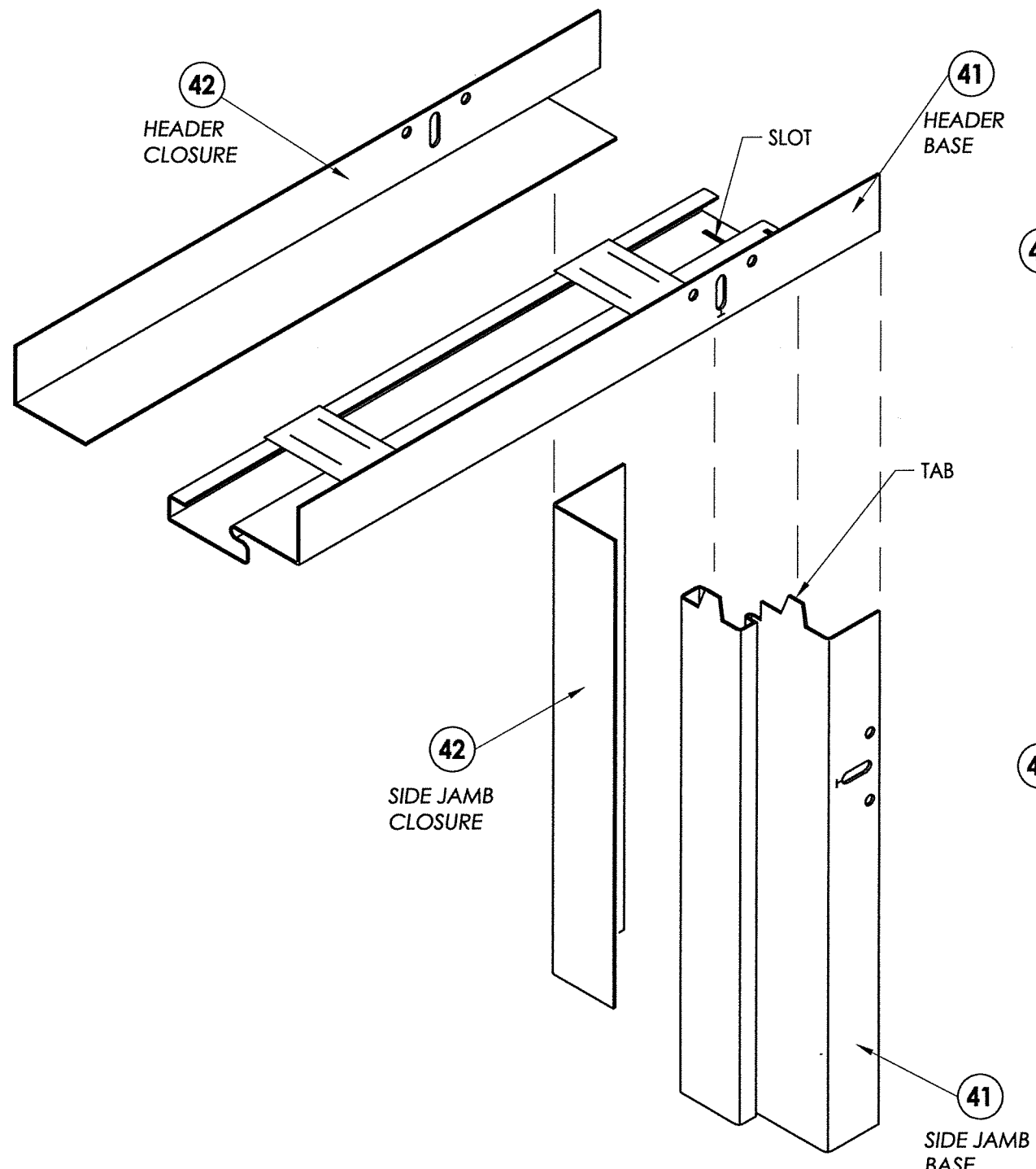
PRODUCT:  
 DUNBARTON REDIFLEX  
 TWO-PIECE STEEL FRAME  
 PART OR ASSEMBLY:  
 TYPICAL ELEVATIONS, DESIGN  
 PRESSURES & GENERAL NOTES

NO.	DATE	REVISIONS
4	8/11/20	UPDATE TO 7TH ED. (2020) FBC
3	9/30/17	UPDATE TO 6TH ED. (2017) FBC
2	8/28/15	ADD INSWING/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-15341.4  
 SHEET 1 OF 7

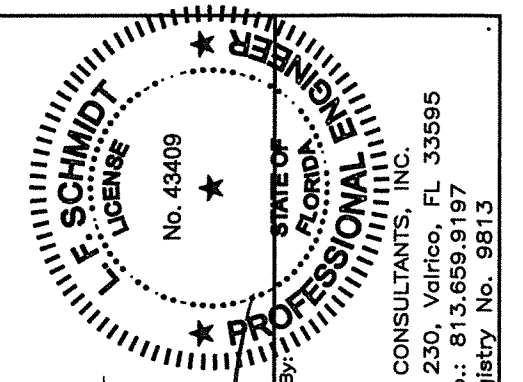
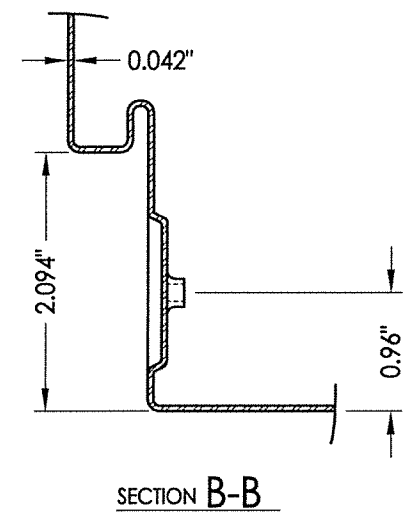
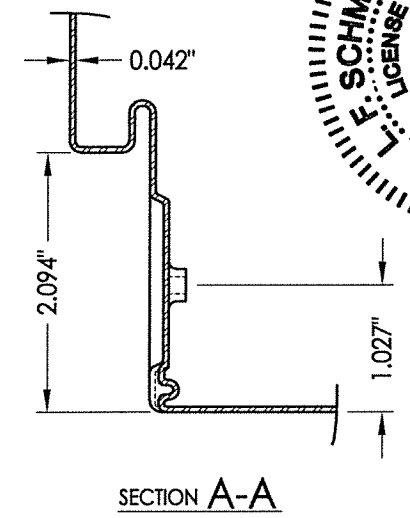
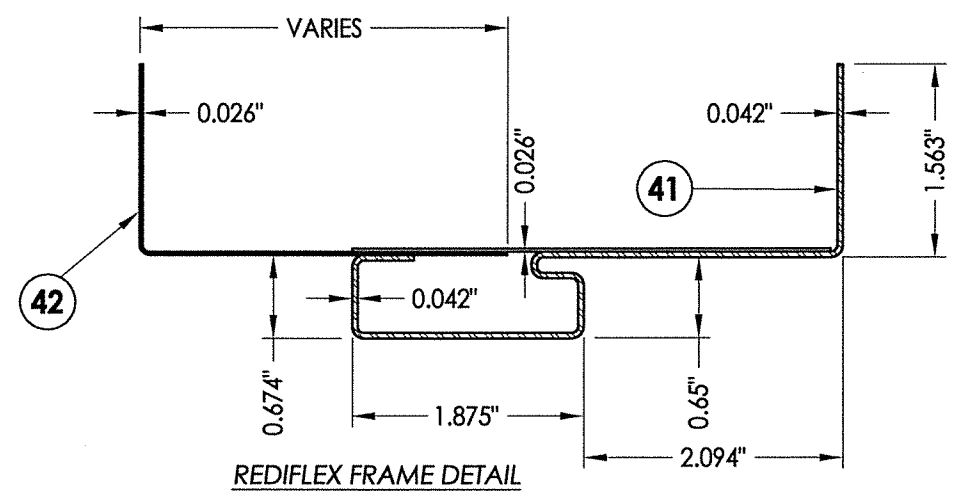
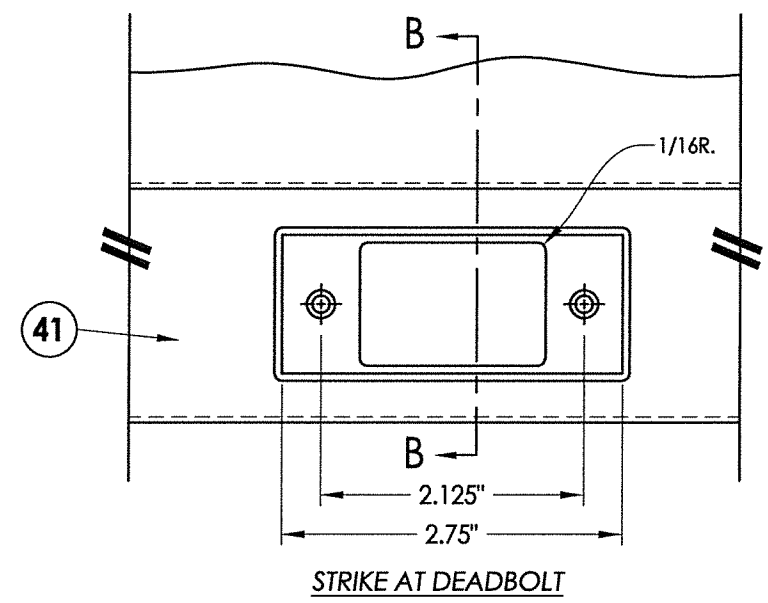
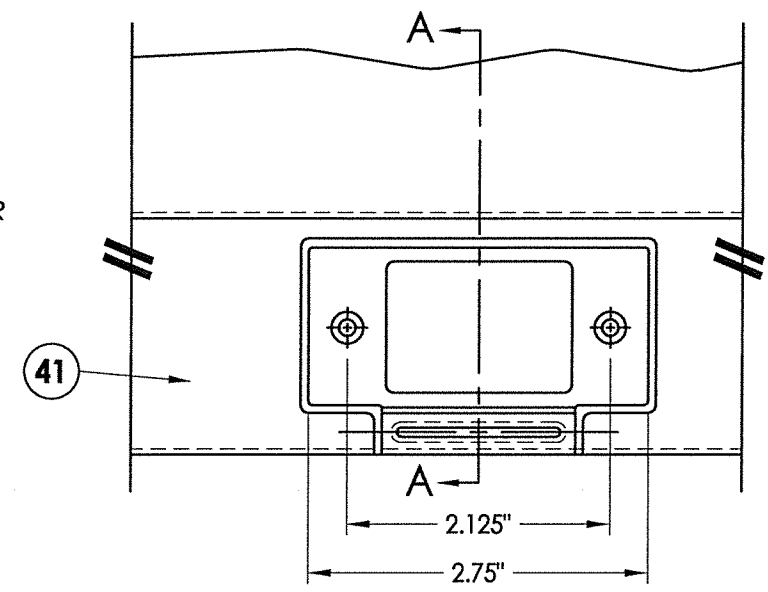
TABLE OF CONTENTS	
SHEET #	DESCRIPTION
1	Typical elevation, design pressures & general notes
2	Steel frame cross sections & details
3	Door panel details
4	Horizontal & vertical cross sections
5	Horizontal & vertical cross sections
6	Buck & frame anchoring
7	Bill of materials and components

SWING	OVERALL FRAME DIMENSION	DESIGN PRESSURE (PSF)	
		POSITIVE	NEGATIVE
OUTSWING	39.62" X 98.12"	+ 55.0	- 55.0
INSWING	39.62" X 98.5"	+ 60.0	- 65.0



**NOTES:**

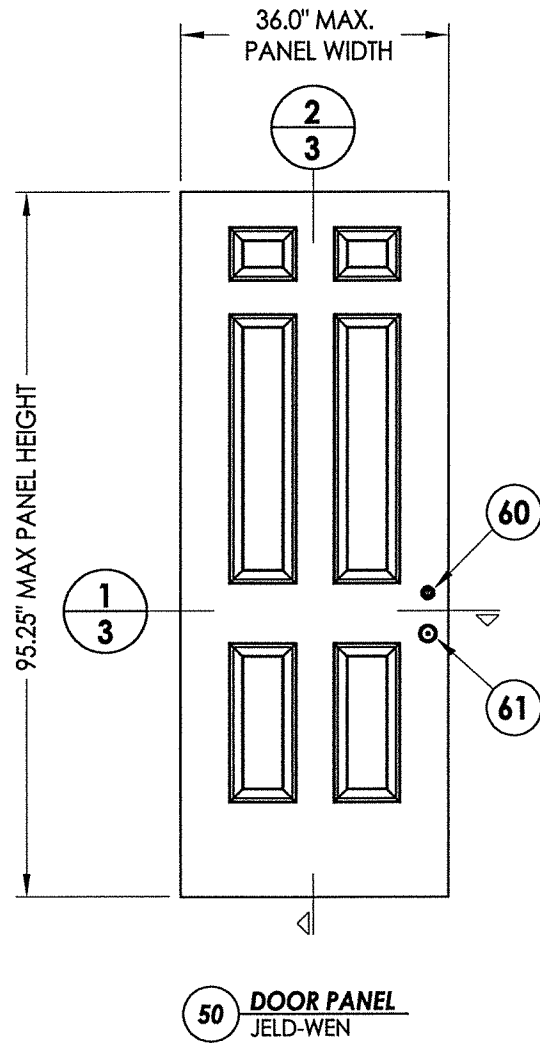
1. HEADER AND SIDE BASE JAMB (41) MINIMUM 18 GA. GALV. STEEL.
2. HEADER AND SIDE CLOSURE JAMB (42) MINIMUM 22 GA. GALV. STEEL.
3. FRAME SHOWN WITHOUT OPTIONAL STEEL TRIM CASING.
4. NON-KERF FRAMES DO NOT MEET AIR AND WATER CRITERIA.



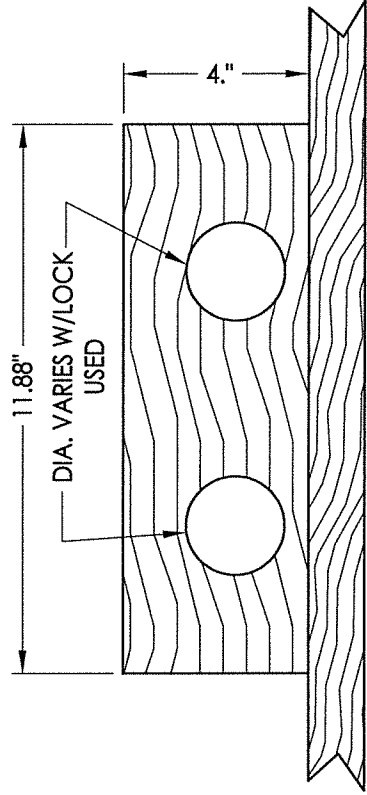
August 11, 2020  
 Documents Prepared By:  
 Lyndon F. Schmidt  
 P.E. No. 43409

**R.W.** BUILDING CONSULTANTS, INC.  
 P.O. Box 230, Valrico, FL 33595  
 Phone No.: 813.659.9197  
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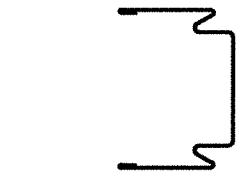
PRODUCT:		DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME	
PART OR ASSEMBLY:		STEEL FRAME CROSS SECTIONS & DETAILS	
NO.	DATE	BY	REVISIONS
4	8/11/20	JK	UPDATE TO 7TH ED. (2020)
3	9/30/17	JK	UPDATE TO 6TH ED. (2017)
2	8/28/15	JK	ADD INSURING/REVISE ANCHORING
1	3/23/15	JK	UPDATE TO 5TH ED. (2014)
DATE	3/14/12		
SCALE	N.T.S.		
DWG. BY:	JK		
CHK. BY:	LFS		
DRAWING NO.:	FL-15341.4		
SHEET	2	OF	7



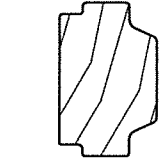
**50 DOOR PANEL**  
JELD-WEN



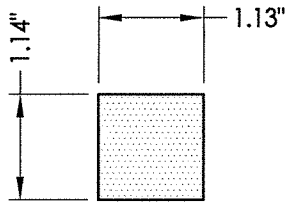
**45 LOCK BLOCK DETAIL**



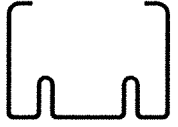
**51 LATCH / HINGE STILE**  
& Top rail



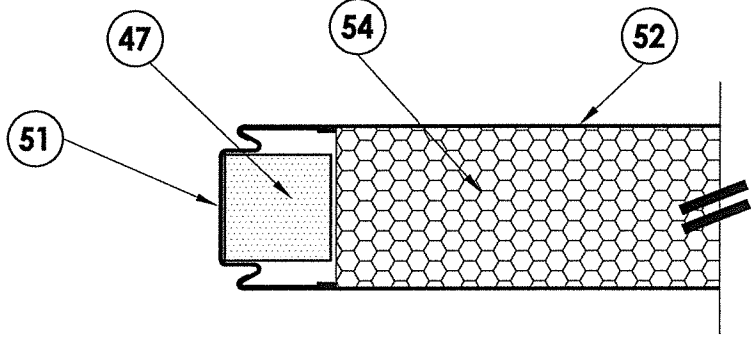
**53 LATCH STILE**  
Reinforcement



**47 HINGE STILE**  
Reinforcement

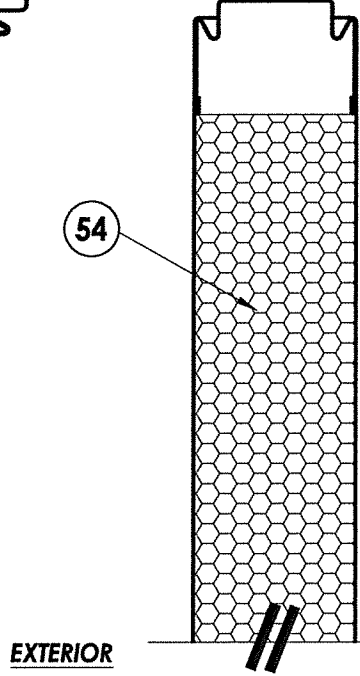
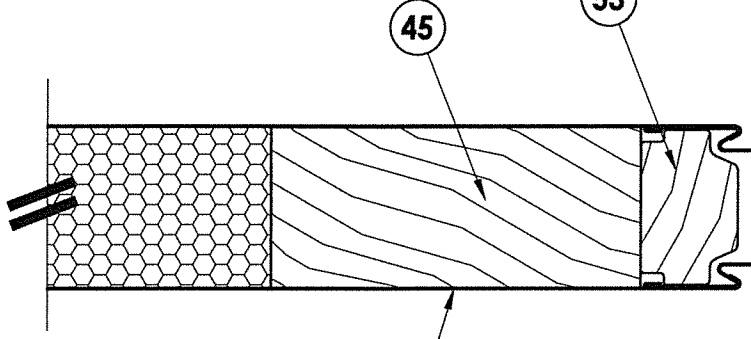


**56 BOTTOM RAIL**  
Steel edge door



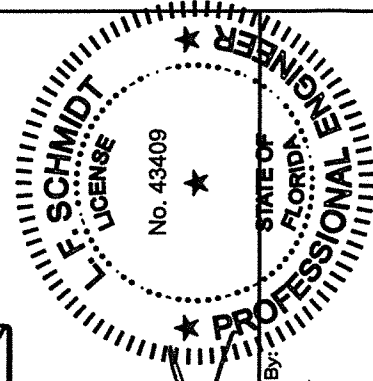
INTERIOR  
EXTERIOR

**1 HORIZONTAL CROSS SECTION**  
**3** Door panel



EXTERIOR  
INTERIOR

**2 VERTICAL CROSS SECTION**  
**3** Door panel



August 11, 2020  
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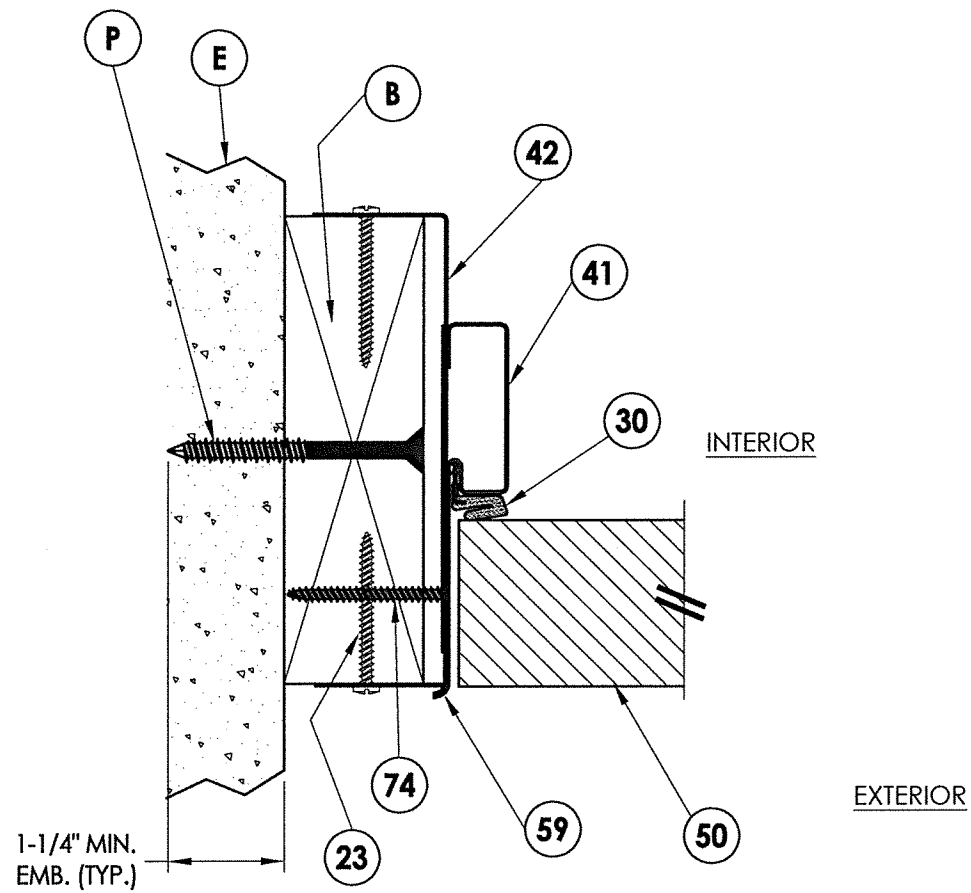
**R.W.**  
BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

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

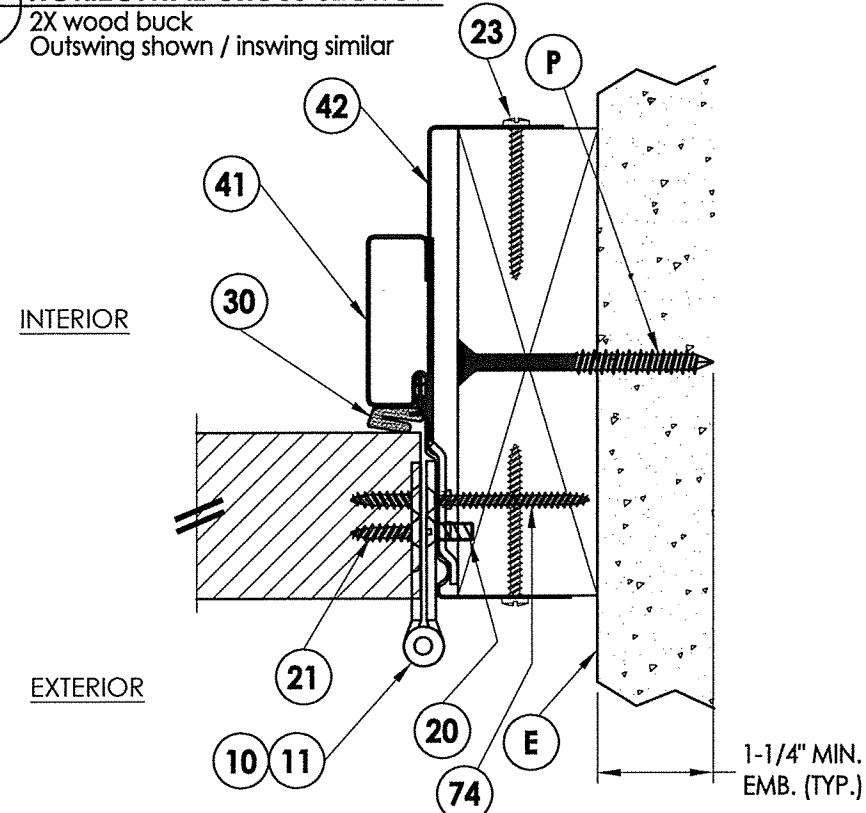
NO.	DATE	REVISIONS
4	8/11/20	UPDATE TO 7TH ED. (2020) FBC DAC
3	9/30/17	UPDATE TO 6TH ED. (2017) FBC LFS
2	8/28/15	ADD INSURING/REVISE ANCHORING JK
1	3/23/15	UPDATE TO 5TH ED. (2014) FBC JK

DATE: 3/14/12  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: FL-15341.4  
SHEET 3 OF 7

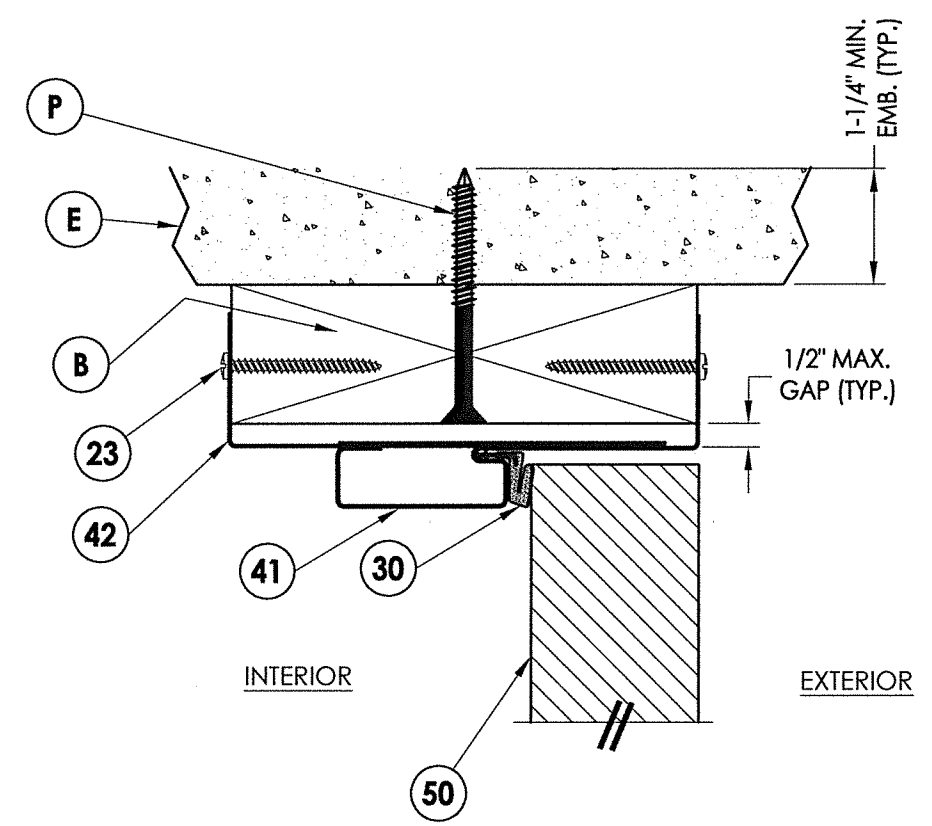
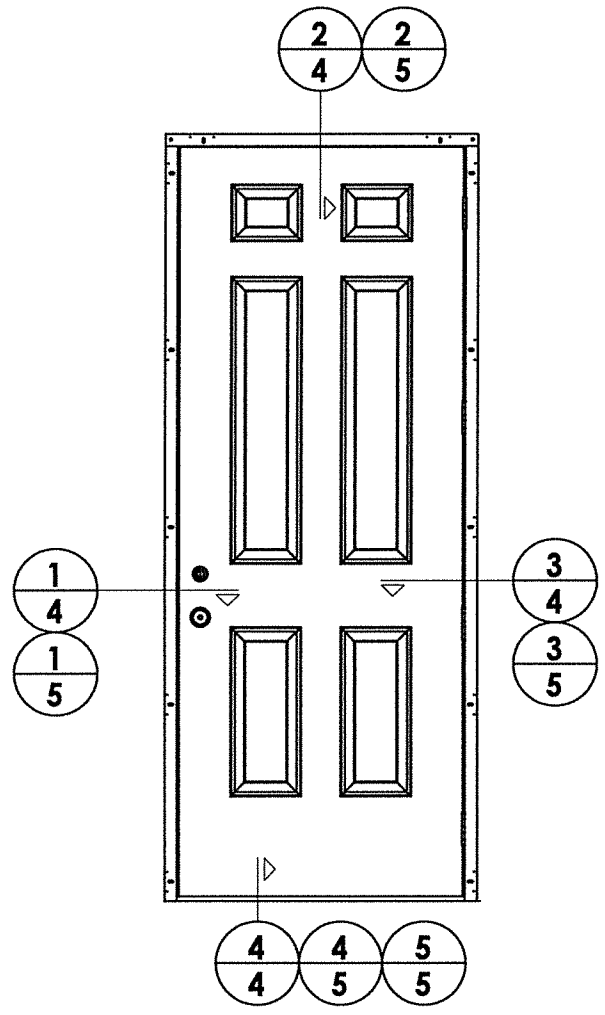




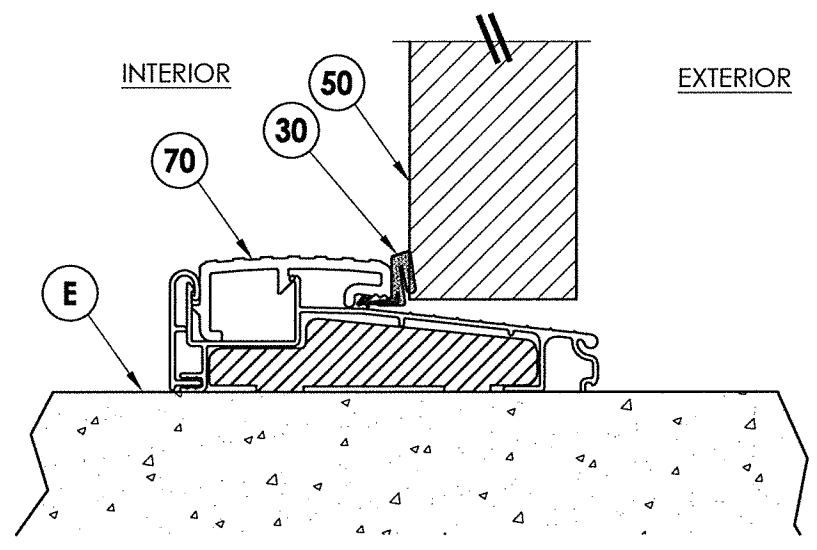
**1**  
**4** **HORIZONTAL CROSS SECTION**  
2X wood buck  
Outswing shown / inswing similar



**3**  
**4** **HORIZONTAL CROSS SECTION**  
2X wood buck  
Outswing shown / inswing similar



**2**  
**4** **VERTICAL CROSS SECTION**  
2X wood buck  
Outswing shown / inswing similar



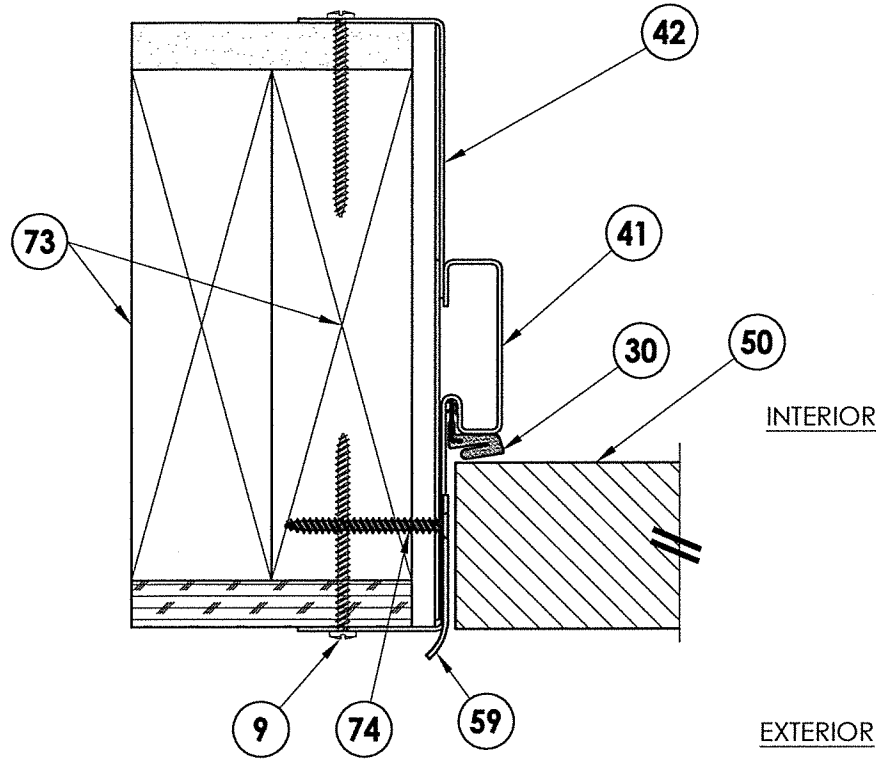
**4**  
**4** **VERTICAL CROSS SECTION**  
Outswing Threshold

**FLORIDA PROFESSIONAL ENGINEER**  
L. F. SCHMIDT  
LICENSE No. 43409

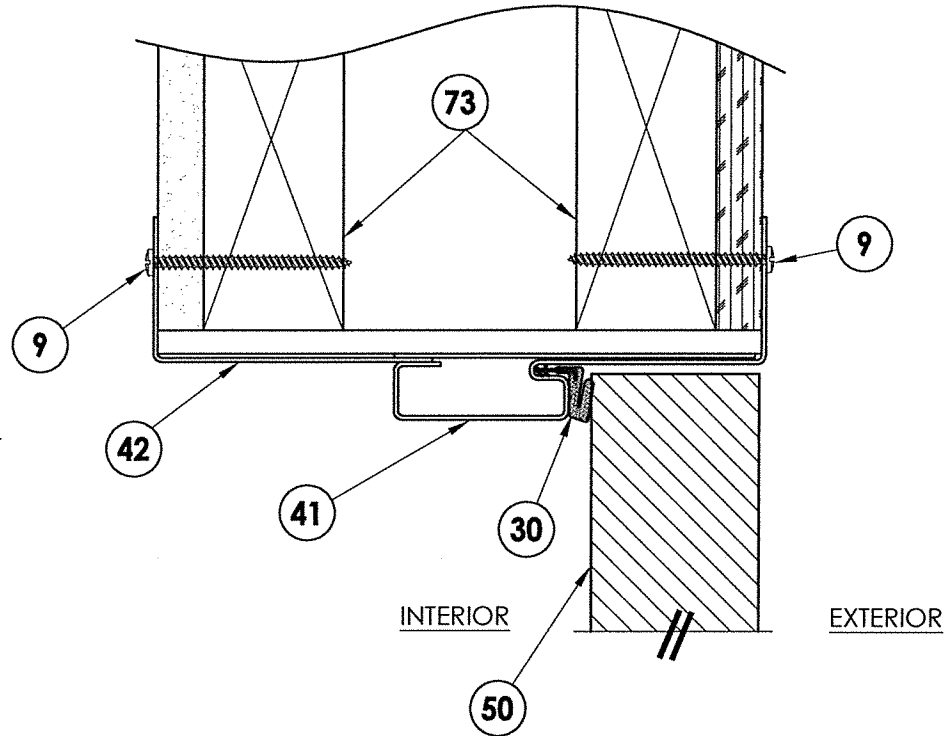
August 11, 2020  
Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

*RW*  
BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
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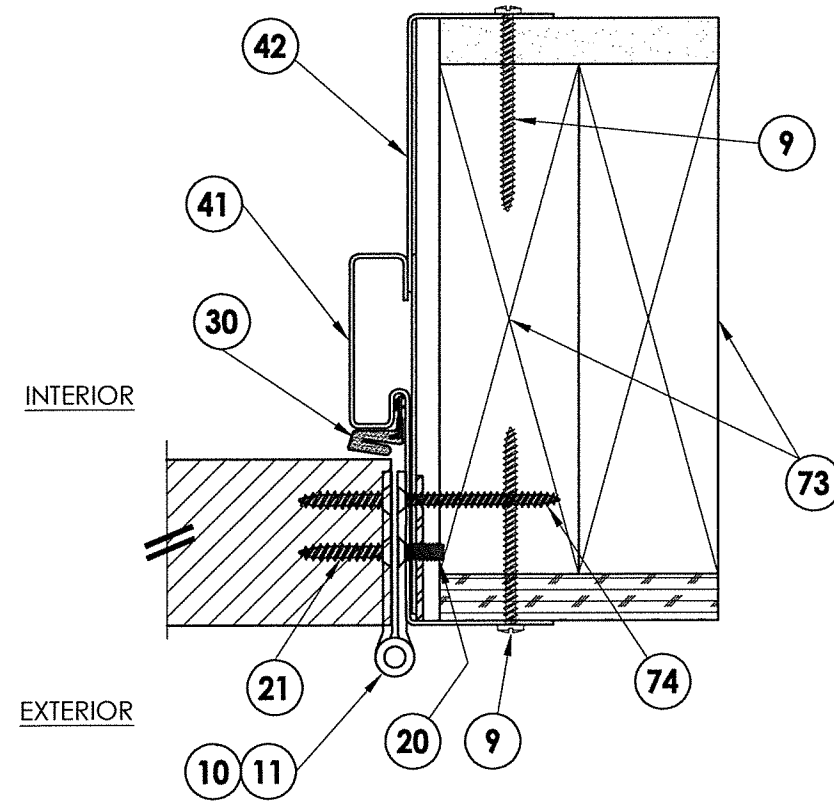
PRODUCT:		DUNBARTON REDIFLEX	
		TWO-PIECE STEEL FRAME	
PART OR ASSEMBLY:		HORIZONTAL & VERTICAL CROSS SECTIONS	
NO.	DATE	BY	REVISIONS
4	8/11/20	DAC	UPDATE TO 7TH ED. (2020)
3	9/30/17	FBC	UPDATE TO 6TH ED. (2017)
2	8/28/15	LFS	ADD INSWING/REVISE ANCHORING
1	3/23/15	JK	UPDATE TO 5TH ED. (2014)
DATE: 3/14/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-15341.4			
SHEET 4 of 7			



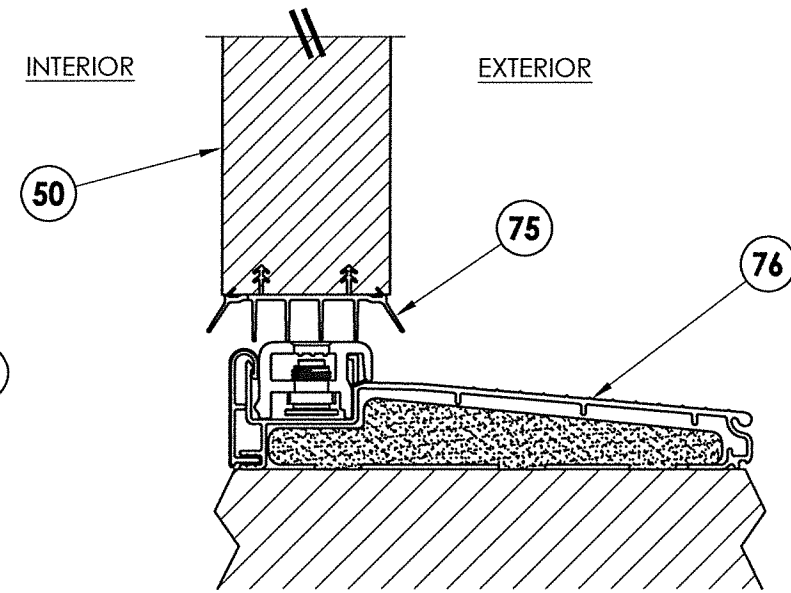
**1 HORIZONTAL CROSS SECTION**  
**5** Shown w/ stud construction  
 Outswing shown / inswing similar



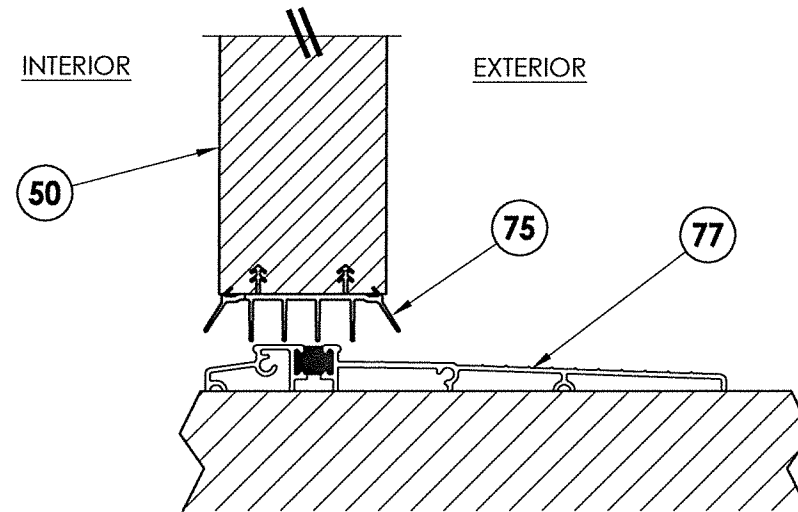
**2 VERTICAL CROSS SECTION**  
**5** Shown w/ stud construction  
 Outswing shown / inswing similar



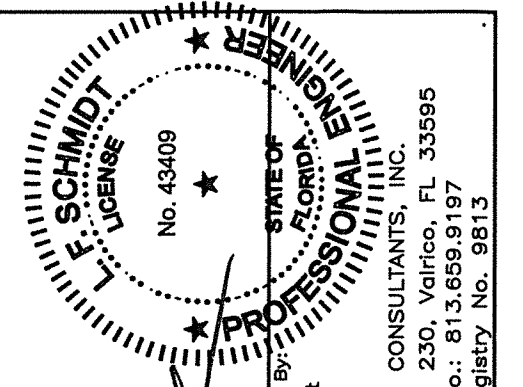
**3 HORIZONTAL CROSS SECTION**  
**5** Shown w/ stud construction  
 Outswing shown / inswing similar



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



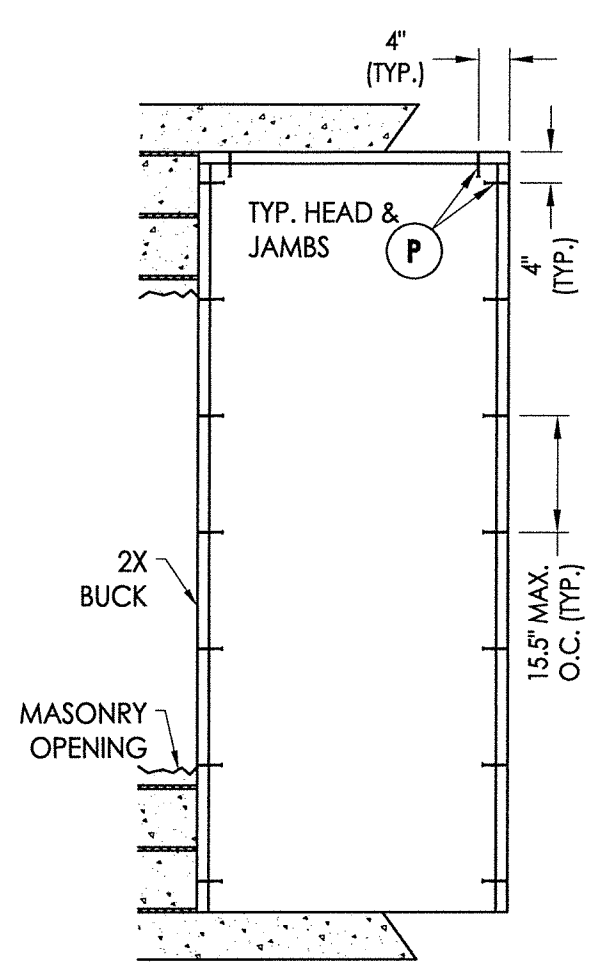
**5 VERTICAL CROSS SECTION**  
**5** Inswing shown / Outswing similar  
 see general notes, sheet 1  
 for "HVHZ" Water infiltration  
 requirements



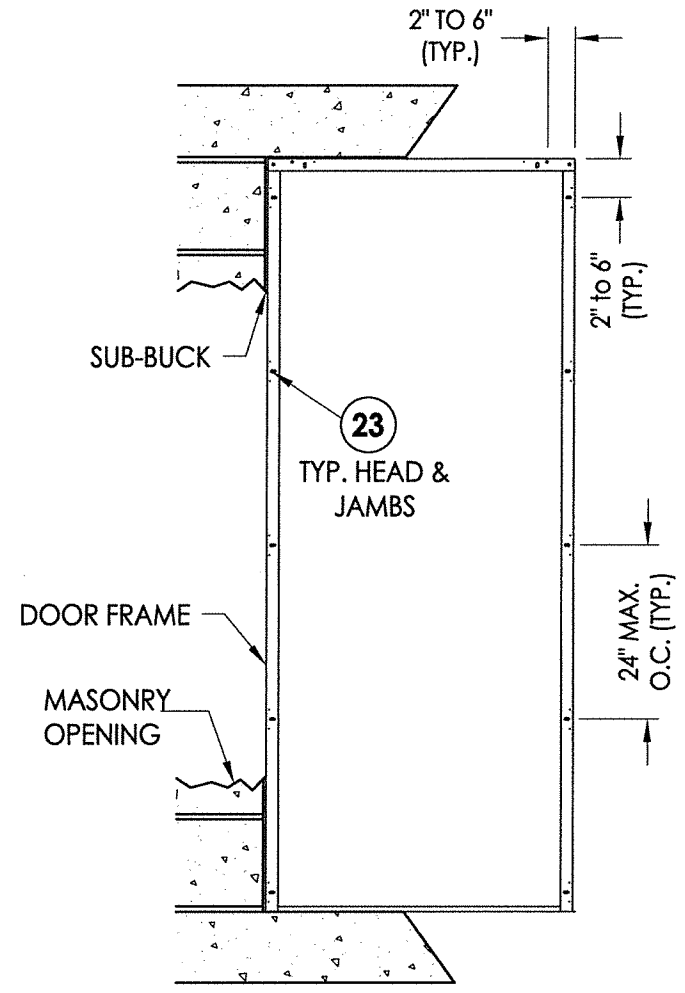
August 11, 2020  
 Documents Prepared By:  
 Lyndon F. Schmidt  
 P.E. No. 43409  
 R.W. BUILDING CONSULTANTS, INC.  
 P.O. Box 230, Valrico, FL 33595  
 Phone No.: 813.659.9197  
 FBPE Registry No. 9813

PRODUCT:		DUNBARTON REDIFLEX	
		TWO-PIECE STEEL FRAME	
PART OR ASSEMBLY:		HORIZONTAL & VERTICAL CROSS SECTIONS	
		DAC	FBC
4	8/11/20	UPDATE TO 7TH ED. (2020)	FBC
3	9/30/17	UPDATE TO 6TH ED. (2017)	FBC
2	8/28/15	ADD INSWING/REVISE ANCHORING	JK
1	3/23/15	UPDATE TO 5TH ED. (2014)	FBC
NO.	DATE	JK	BY
			REVISIONS
DATE:		3/14/12	
SCALE:		N.T.S.	
DWG. BY:		JK	
CHK. BY:		LFS	
DRAWING NO.:		FL-15341.4	
SHEET		5 OF 7	

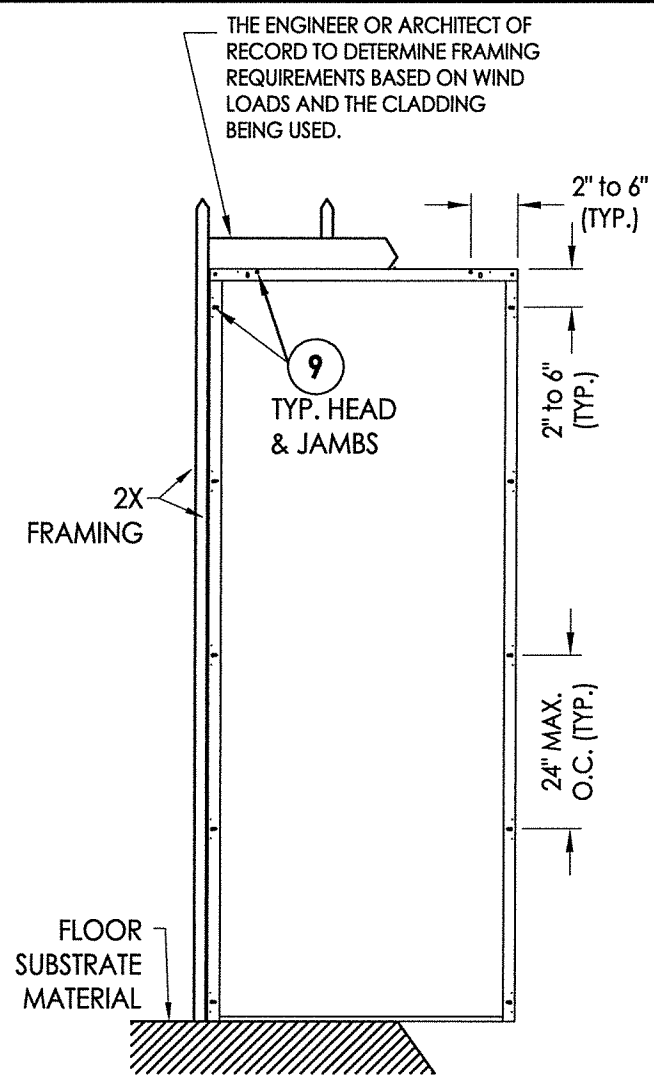
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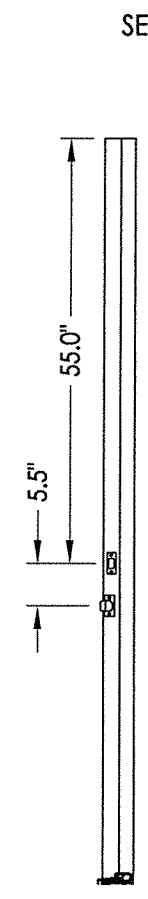
**BUCK ANCHORING**  
Masonry



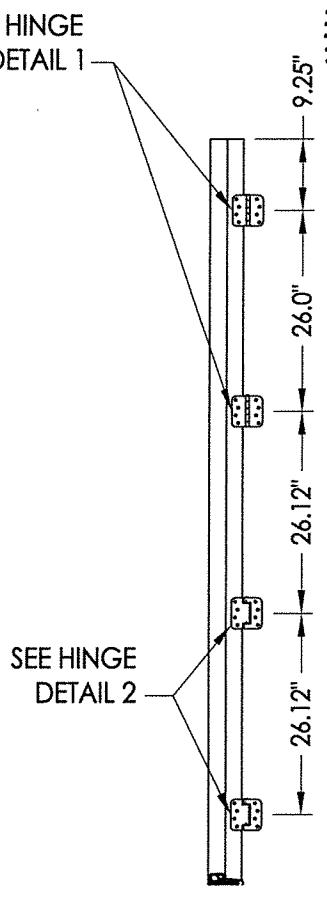
**FRAME ANCHORING**  
Masonry construction



**FRAME ANCHORING**  
2X Stud construction



**STRIKE JAMB**



**HINGE JAMB**

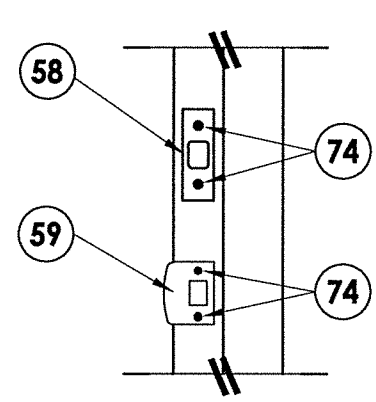
**CONCRETE ANCHOR NOTES:**

- 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:

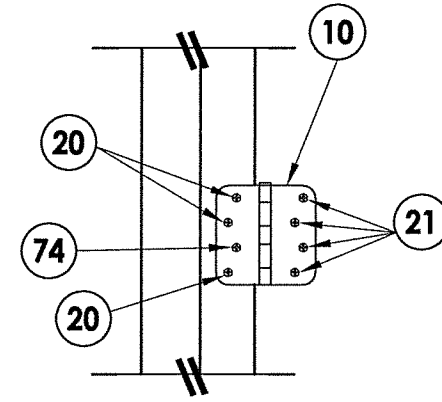
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2"	4"
DeWALT ULTRACON+®	1/4"	1-1/4"	1"	4"

**WOOD SCREW INSTALLATION NOTES:**

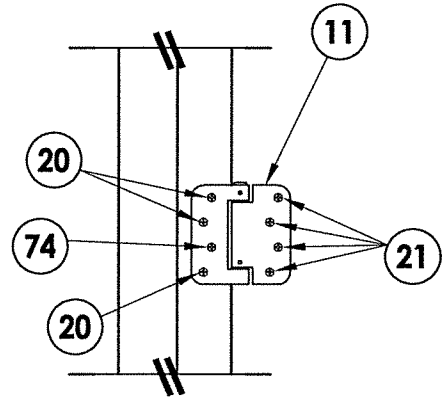
- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.



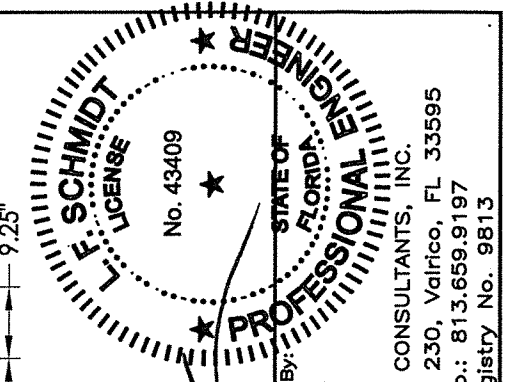
**STRIKE PLATE DETAIL**



**HINGE DETAIL 1**



**HINGE DETAIL 2**

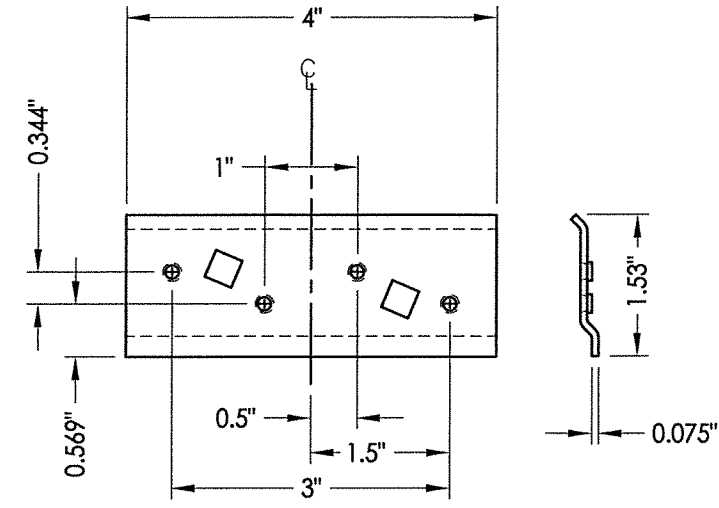


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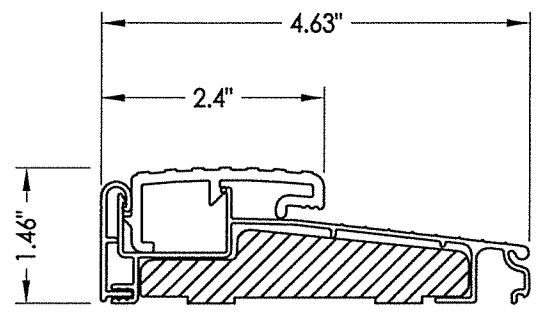
PRODUCT:		DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME	
PART OR ASSEMBLY:		BUCK AND FRAME ANCHORING	
NO.	DATE	BY	REVISIONS
4	8/11/20	JK	UPDATE TO 7TH ED. (2020) FBC DAC
3	9/30/17	JK	UPDATE TO 6TH ED. (2017) FBC LFS
2	8/28/15	JK	ADD INSURING/REVISE ANCHORING
1	3/23/15	JK	UPDATE TO 5TH ED. (2014) FBC
DATE: 3/14/12			
SCALE: N.T.S.			
DWG. BY: JK			
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DRAWING NO.: FL-15341.4			
SHEET 6 OF 7			

\\dc01\rbw\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

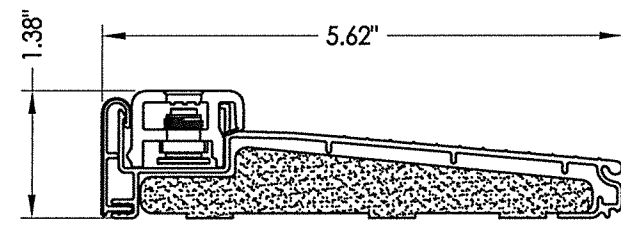
BILL OF MATERIALS		
ITEM	DESCRIPTION	MATERIAL
B	2X BUCK SG >= 0.55	WOOD
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90 OR ASTM A653 STEEL	CONCRETE
P	1/4" X 2-3/4" DeWALT OR ITW PFH CONCRETE SCREW	STEEL
9	#8 X 2-1/4" PPH SMS (1-1/2" MIN. EMBEDMENT)	STEEL
10	HINGE	STEEL
11	SPRING HINGE	STEEL
20	10-24 X 1/2" FLAT HEAD SCREW	STEEL
21	#9 X 1.0" PFH WOOD SCREW	STEEL
23	#8 X 1-3/4" PFH SMS (1-1/2" MIN. EMBEDMENT)	STEEL
29	JAMB HINGE REIN. 14 GA. 4" x 4" x 1.53" (.075" GALV. STEEL) BY DUNBARTON FR00505	STEEL
30	COMPRESSION WEATHERSTRIPPING QLON QDS 650 BY SCHLEGEL	FOAM
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
45	LOCK BLOCK	WOOD
47	HINGE STILE REINFORCEMENT	WOOD/COMP.
50	STEEL DOOR PANEL - by JELD-WEN	STEEL
51	HINGE / LATCH STILE & TOP RAIL	STEEL
52	STEEL SKIN (.020" THK.) (Fy = 27,500 psi min.)	STEEL
53	LATCH STILE REINFORCEMENT	WOOD
54	FOAM CORE - EPS 1.0 LBS. PER CUBIC FOOT DENSITY	POLYSTYRENE
56	BOTTOM RAIL	STEEL
58	STRIKE PLATE - DEADBOLT	STEEL
59	STRIKE PLATE - LATCHBOLT	STEEL
60	KWIKSET SERIES (660) DEADBOLT	STEEL
61	KWIKSET SERIES LATCH	STEEL
70	OUTSWING THRESHOLD (ENDURA)	ALUM./WOOD
73	2X FRAMING: SG >= 0.43	WOOD
74	#8 x 1-3/4" PFH SMS	STEEL
75	SWEEP	PVC
76	INSWING THRESHOLD (ENDURA)	ALUM./COMP
77	ADA THRESHOLD (ENDURA)	ALUM.



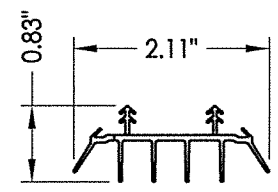
29 HINGE REINFORCEMENT



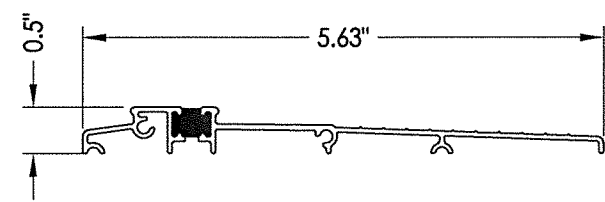
70 OUTSWING THRESHOLD



76 INSWING THRESHOLD



75 SWEEP



77 ADA THRESHOLD

August 11, 2020  
 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. 9813

PRODUCT:		DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME	
PART OR ASSEMBLY:		BILL OF MATERIALS & COMPONENTS	
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	8/28/15	JK	ADD INSWING/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-15341.4  
 SHEET 7 OF 7