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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 8th Edition (2023) 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.

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

REDIFLEX TWO-PIECE

Digitally signed by Lyndon F Schmidt
Date: 2023.07.19 12:06:41 -04'00'

This item has been digitally signed and sealed by
L. F. Schmidt, P.E. on the date adjacent to the seal.
Printed copies of this document are not
considered signed and sealed and the signature
must be verified on any electronic copies.

THIS PRODUCT APPROVAL IS VALID
ONLY FOR THE STATE OF FLORIDA

L. F. SCHMIDT
LICENSE
No. 43409
★
STATE OF
FLORIDA
★
PROFESSIONAL ENGINEER

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

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:
TYPICAL ELEVATIONS, DESIGN
PRESSURES & GENERAL NOTES

5	7/06/23	UPDATE TO 8TH ED. (2023)	FBC	LFS
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 INSWING/REVISE ANCHORING		JK
1	3/23/15	UPDATE TO 5TH ED. (2014)	FBC	JK
NO	DATE	REVISIONS		

DATE: 3/14/12

SCALE: N.T.S.

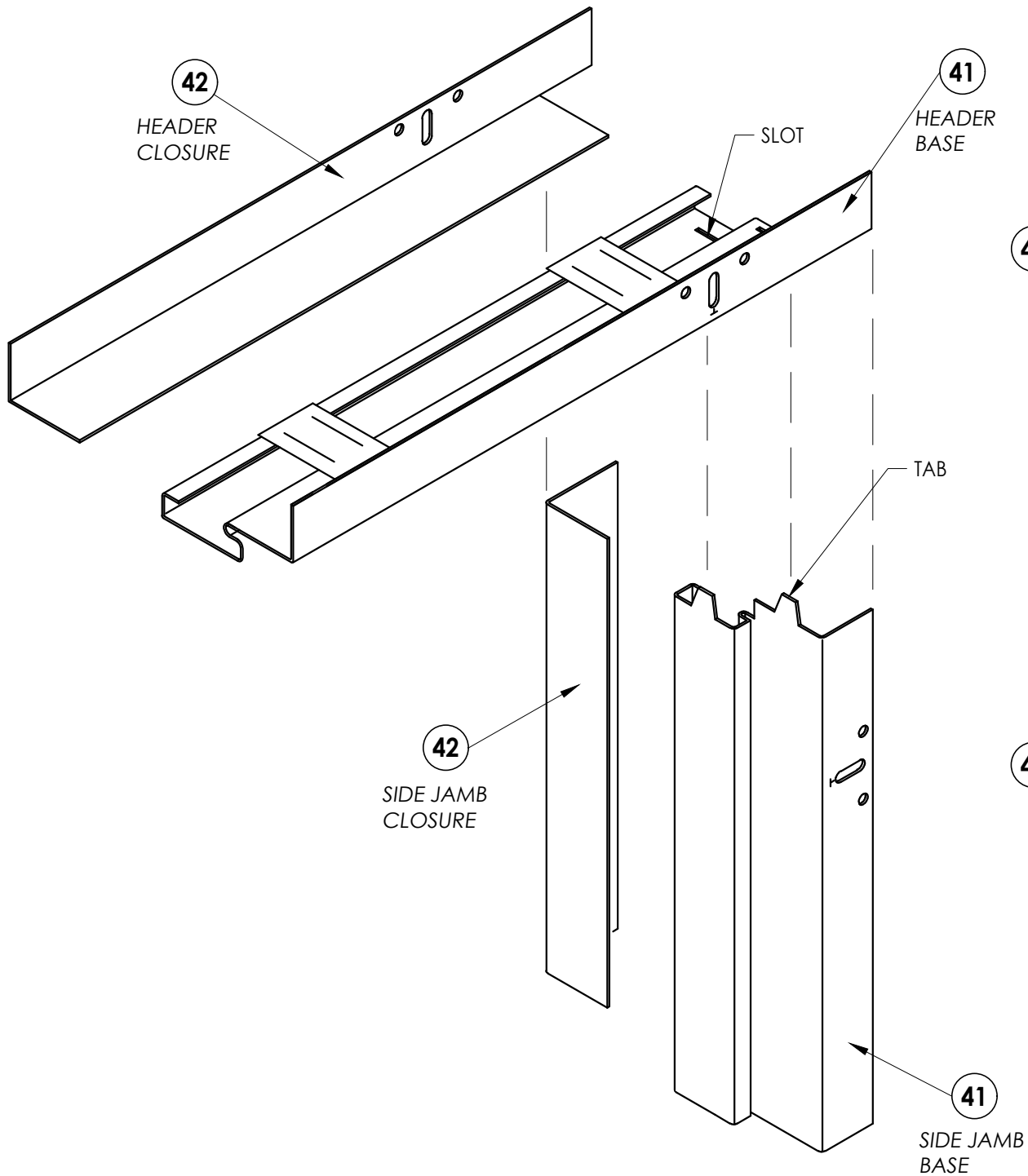
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CHK. BY: LFS

DRAWING NO.: FL-15341.4

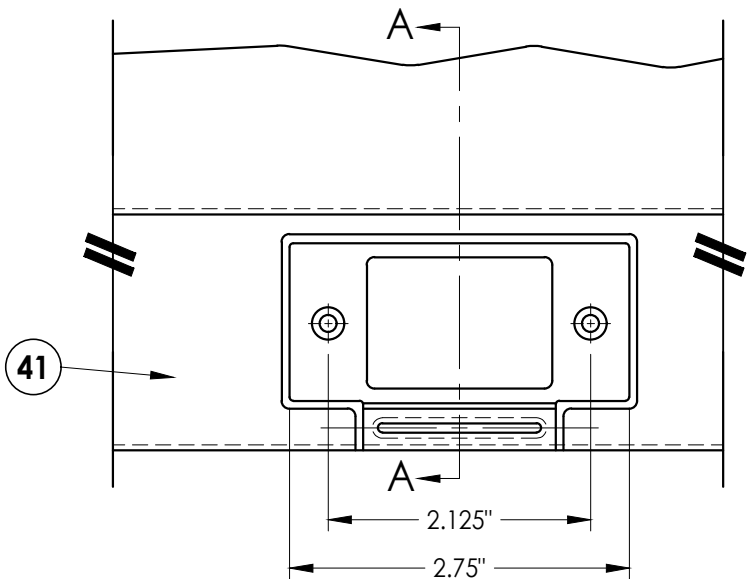
SHEET 1 OF 7

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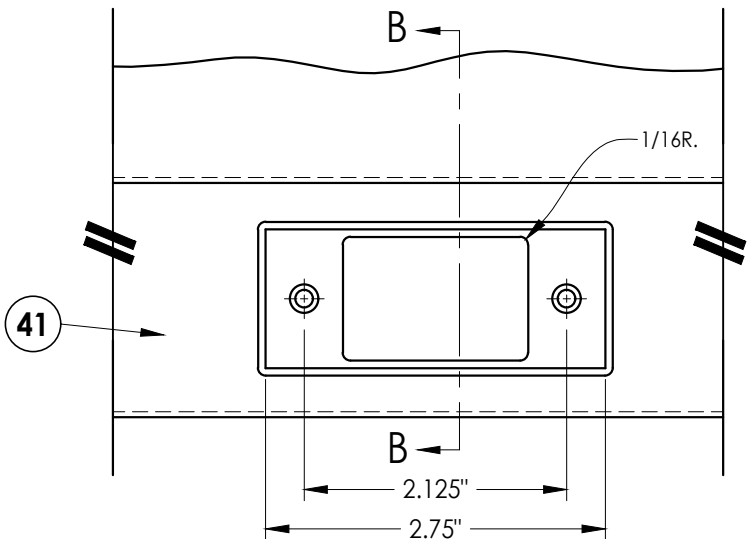


NOTES:

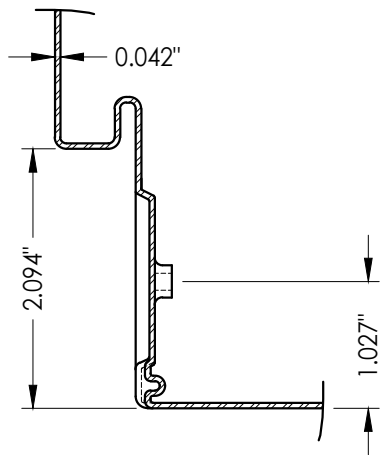
1. HEADER AND SIDE BASE JAMB (41) MINIMUM 18 GA. GALV. STEEL.
2. HEADER AND SIDE CLOSURE JAMB (42) MINIMUM 22 GA. GALV. STEEL.
3. FRAME SHOWN WITHOUT OPTIONAL STEEL TRIM CASING.
4. NON-KERF FRAMES DO NOT MEET AIR AND WATER CRITERIA.



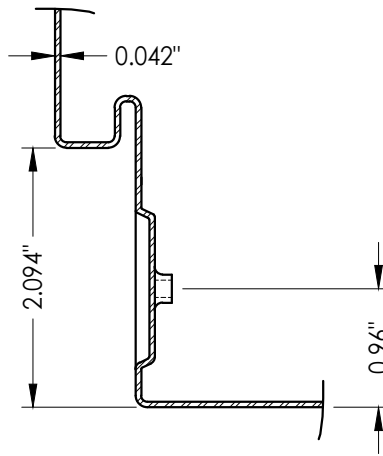
STRIKE AT LATCH



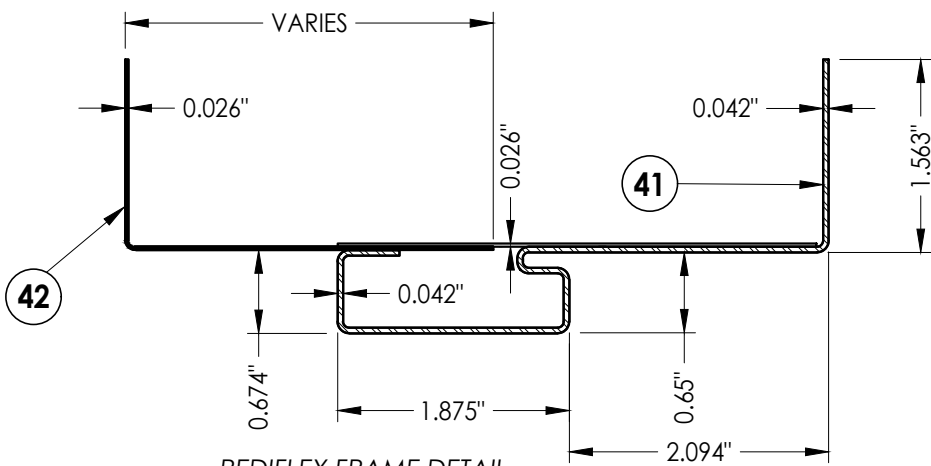
STRIKE AT DEADBOLT



SECTION A-A



SECTION B-B



REDIFLEX FRAME DETAIL

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FBPE Registry No. 9813

PRODUCT:

DUNBARTON REDIFLEX

TWO-PIECE STEEL FRAME

PART OR ASSEMBLY:

STEEL FRAME CROSS SECTIONS
& DETAILS

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DATE: 3/14/12

SCALE: N.T.S.

DWG. BY: JK

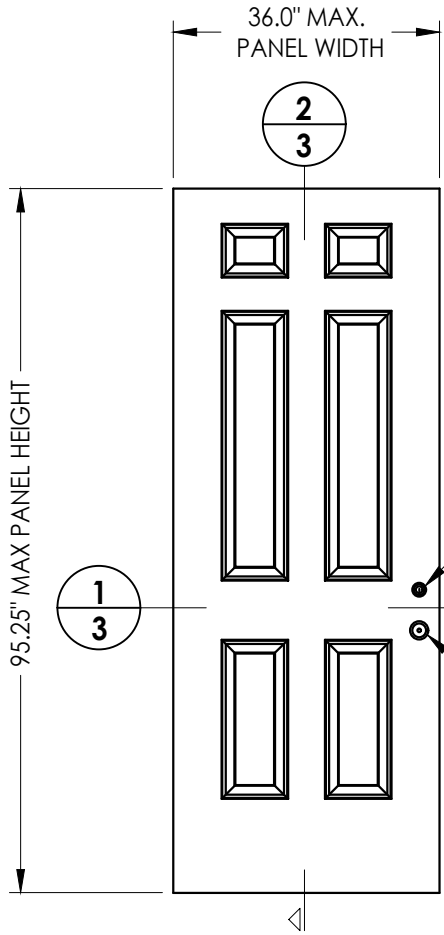
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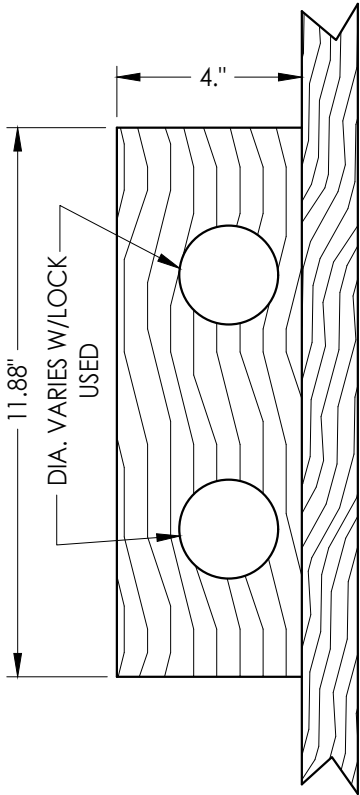
FL-15341.4

SHEET 2 OF 7

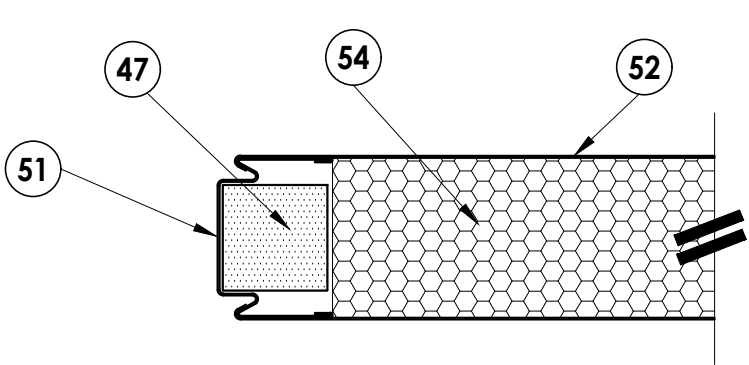
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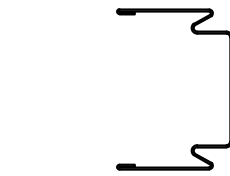
50 **DOOR PANEL**
JELD-WEN



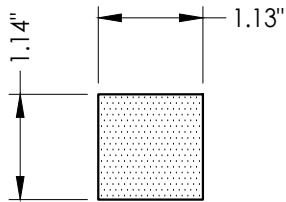
45 **LOCK BLOCK DETAIL**



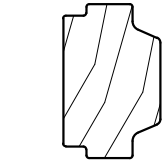
1 **HORIZONTAL CROSS SECTION**
3 Door panel



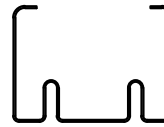
51 **LATCH / HINGE STILE**
& Top rail



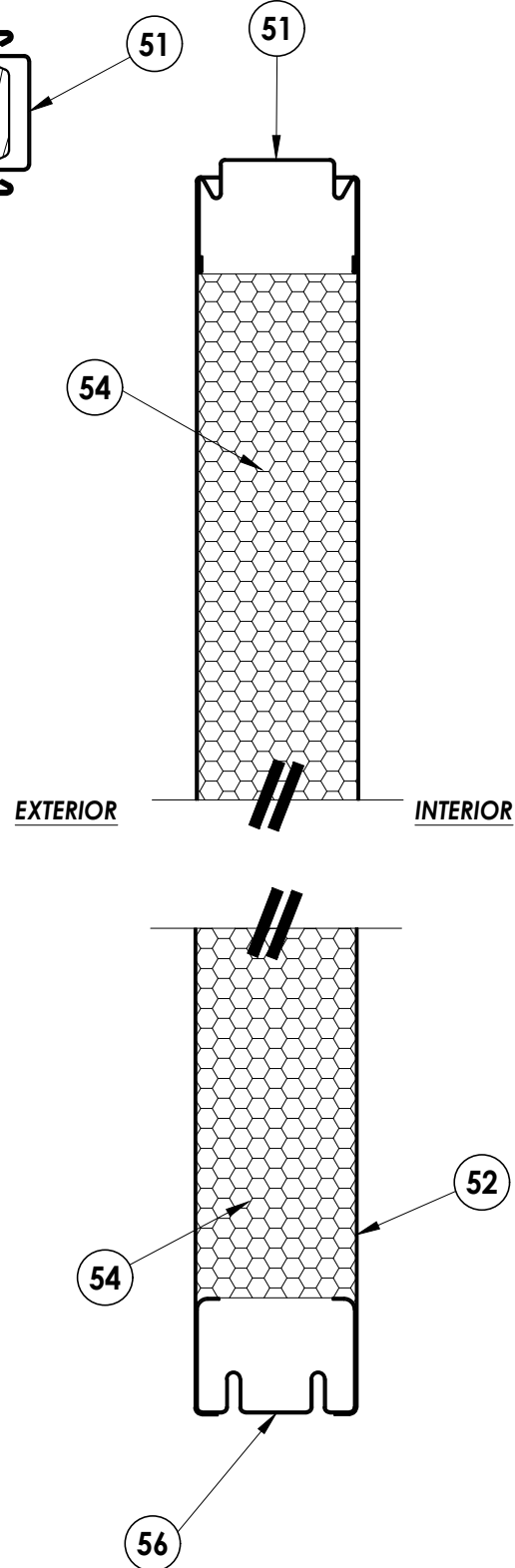
47 **HINGE STILE**
Reinforcement



53 **LATCH STILE**
Reinforcement



56 **BOTTOM RAIL**
Steel edge door



2 **VERTICAL CROSS SECTION**
3 Door panel

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		NO.	DATE	BY	
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SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-15341.4

SHEET 3 OF 7

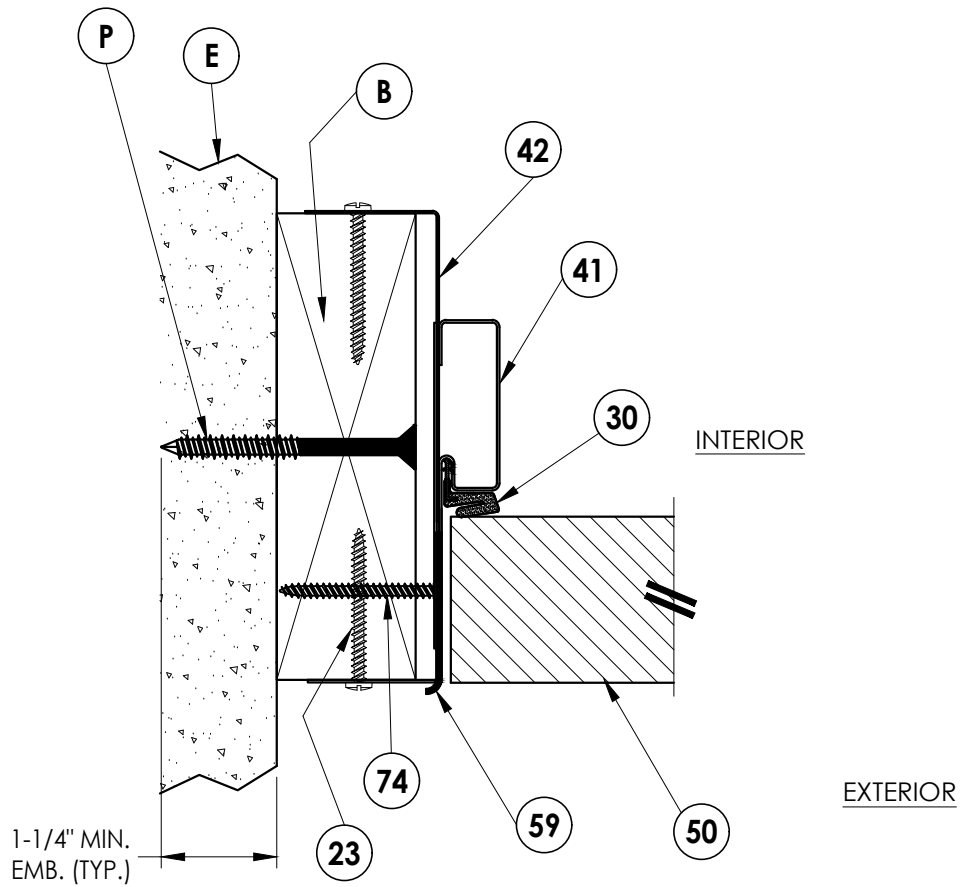
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FBPE Registry No. 9813

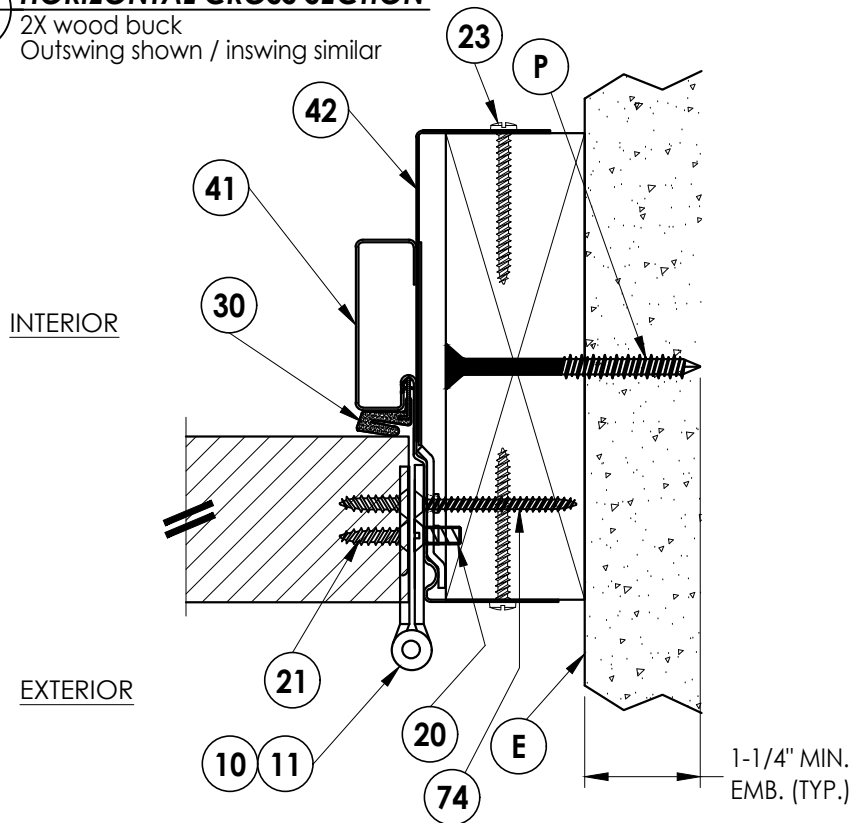
PRODUCT:
DUNBARTON REDIFLEX
TWO-PIECE STEEL FRAME

PART OR ASSEMBLY:
DOOR PANEL DETAILS

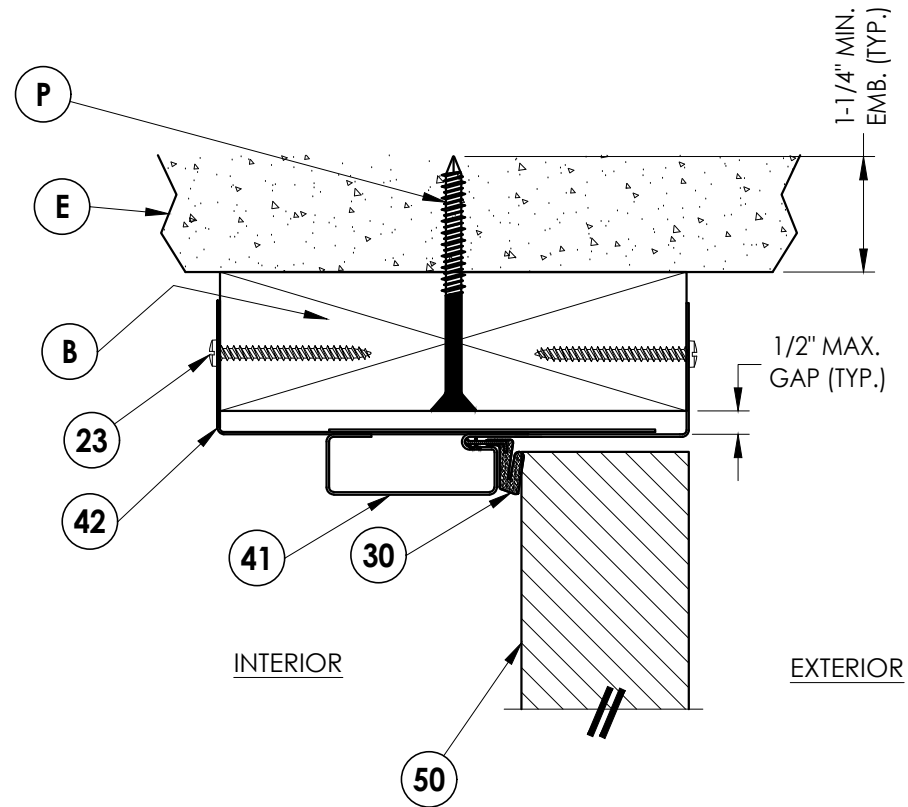
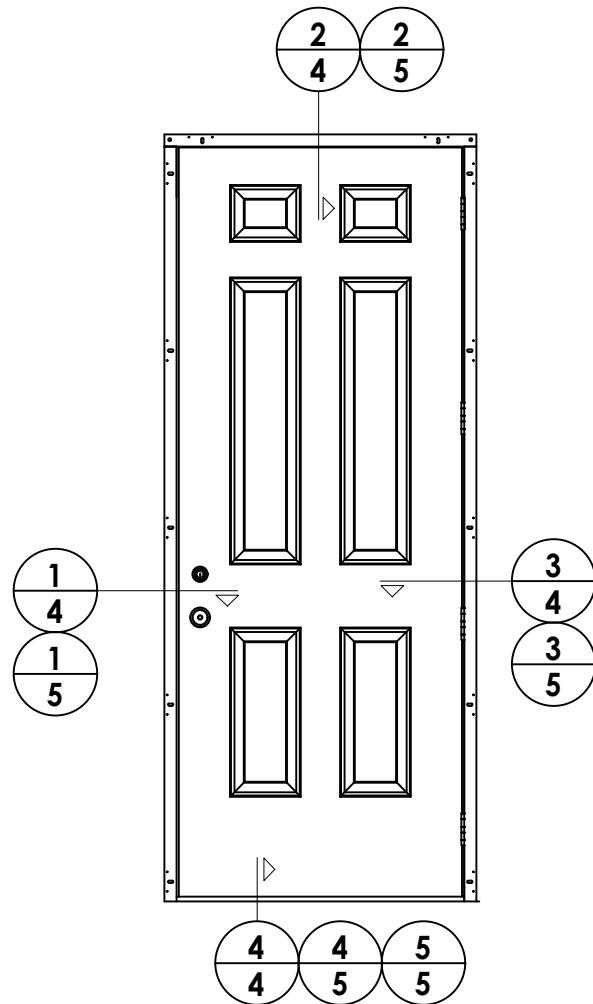
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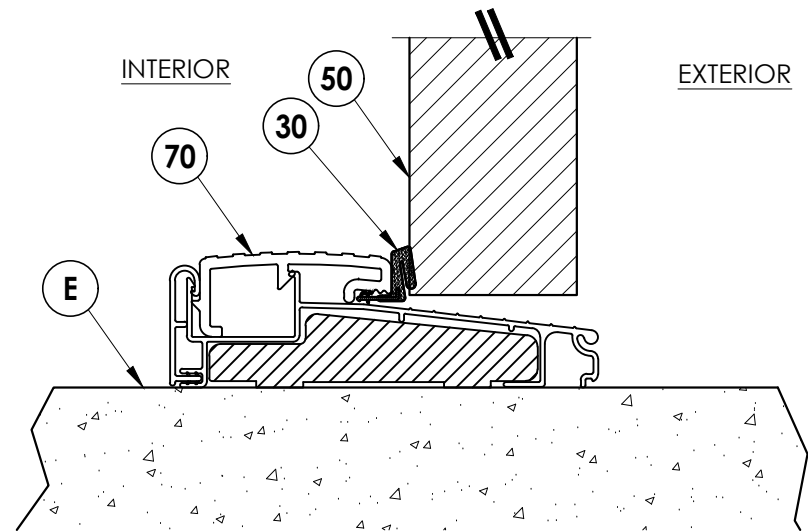
1
4 HORIZONTAL CROSS SECTION
2X wood buck
Outswing shown / inswing similar



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



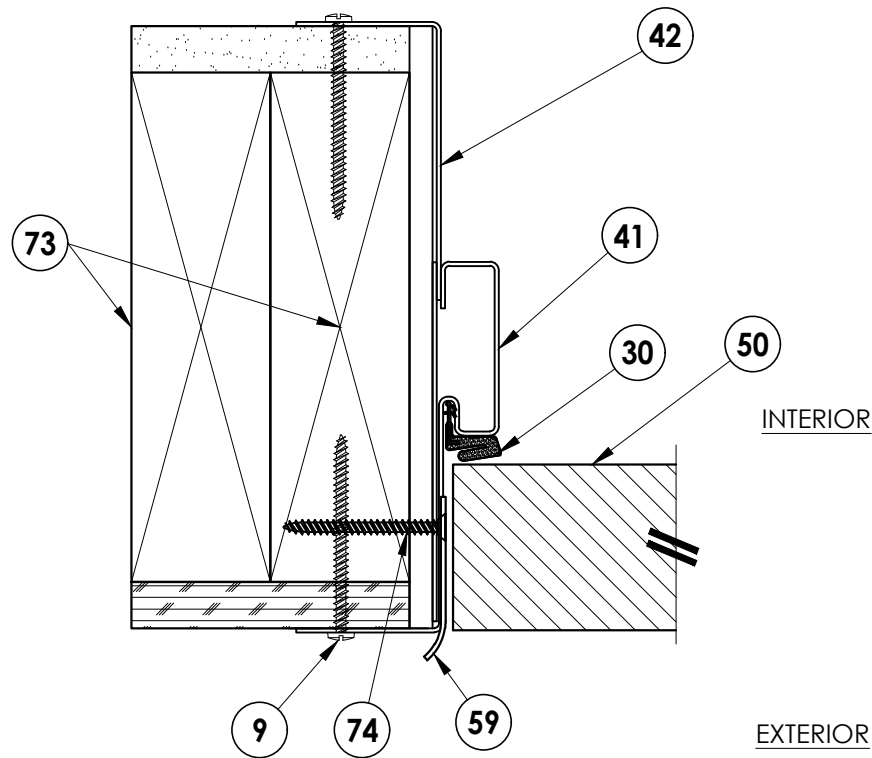
2
4 VERTICAL CROSS SECTION
2X wood buck
Outswing shown / inswing similar



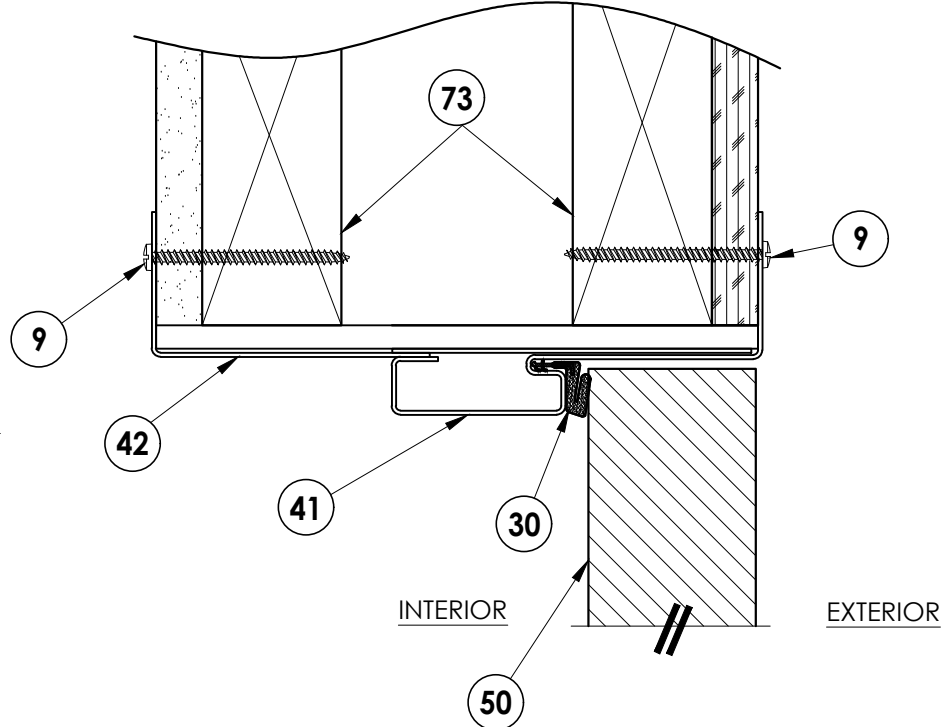
4
4 VERTICAL CROSS SECTION
Outswing Threshold

Documents Prepared By:		Lyndon F. Schmidt P.E. No. 43409		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	
5	7/06/23	UPDATE TO 8TH ED. (2023)	FBC	LFS	
4	8/11/20	UPDATE TO 7TH ED. (2020)	FBC	DAC	
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1	3/23/15	UPDATE TO 5TH ED. (2014)	FBC	JK	
NO.		DATE		REVISIONS	
DATE:		3/14/12			
SCALE:		N.T.S.			
DWG. BY:		JK			
CHK. BY:		LFS			
DRAWING NO.:		FL-15341.4			
SHEET		4		OF 7	

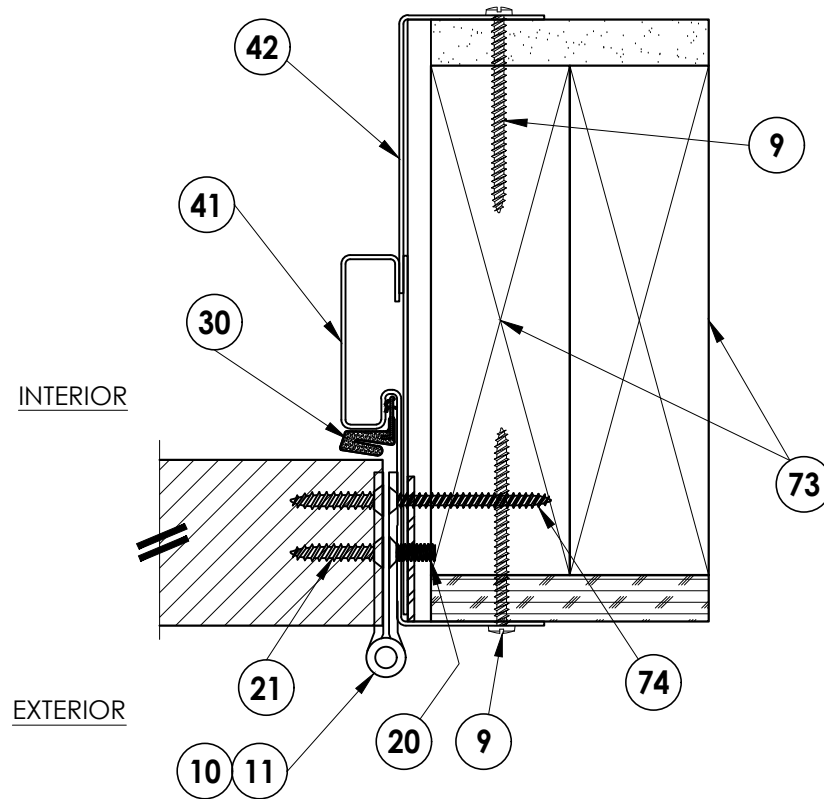
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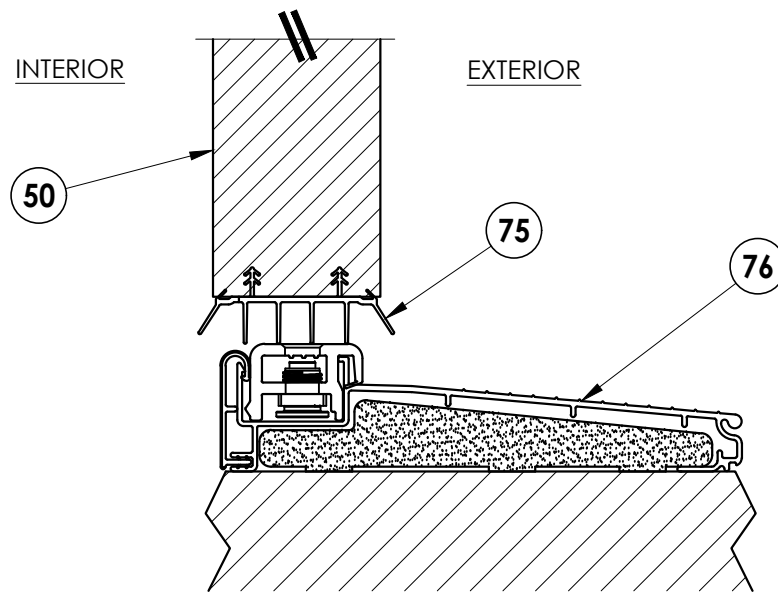
1 HORIZONTAL CROSS SECTION
5 Shown w/ stud construction
Outswing shown / inswing similar



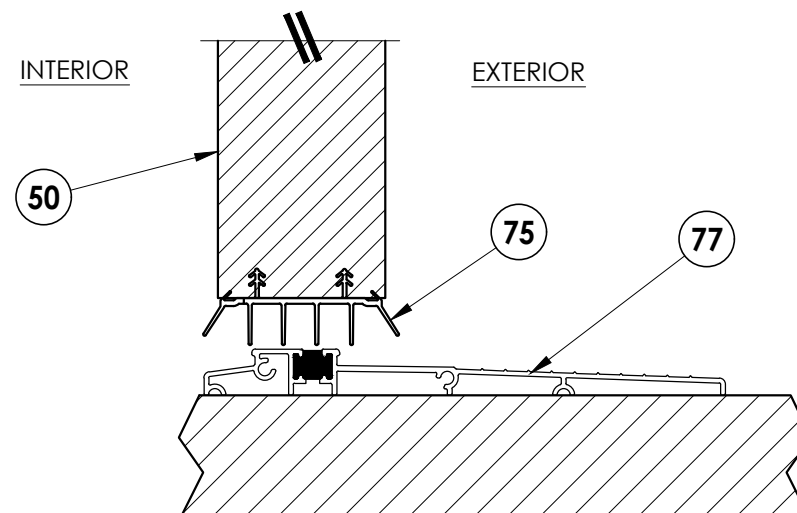
2 VERTICAL CROSS SECTION
5 Shown w/ stud construction
Outswing shown / inswing similar



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

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PRODUCT:
DUNBARTON REDIFLEX
TWO-PIECE STEEL FRAME
PART OR ASSEMBLY:
HORIZONTAL & VERTICAL
CROSS SECTIONS

NO.	DATE	REVISIONS
5	7/06/23	UPDATE TO 8TH ED. (2023) FBC LFS
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 INSWING/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

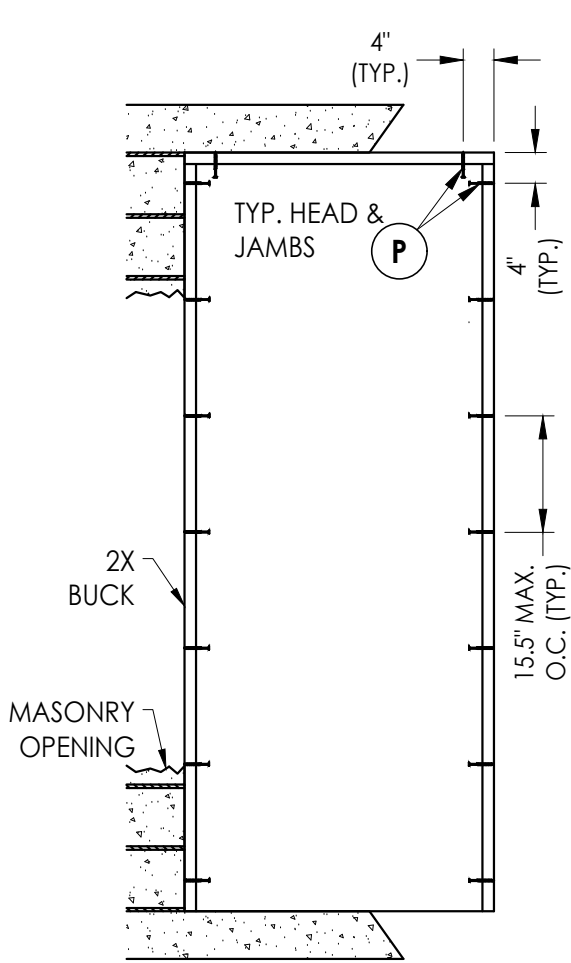
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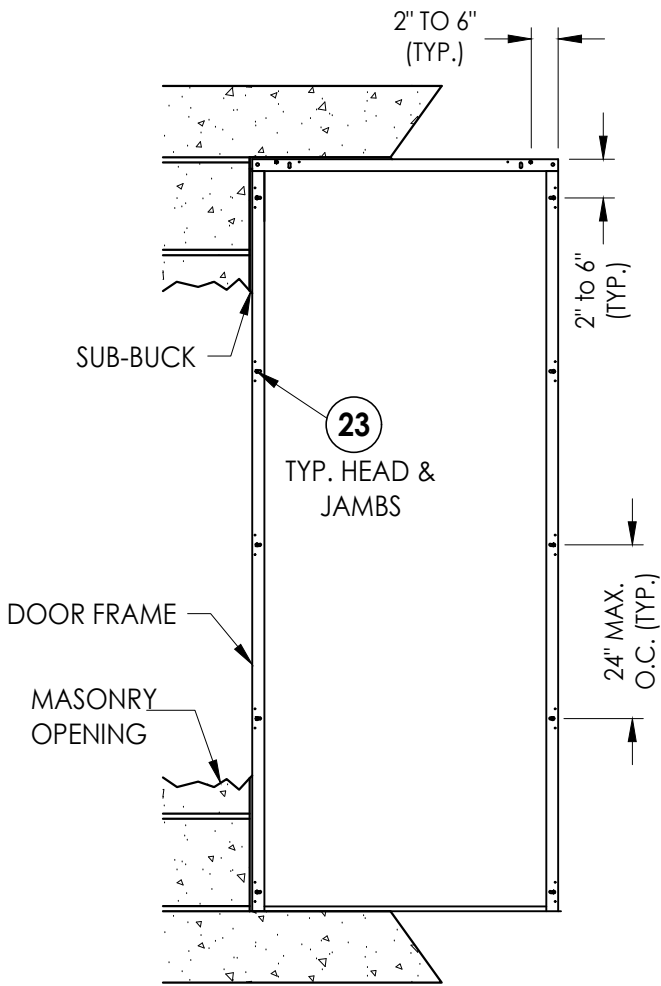
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SHEET 5 OF 7

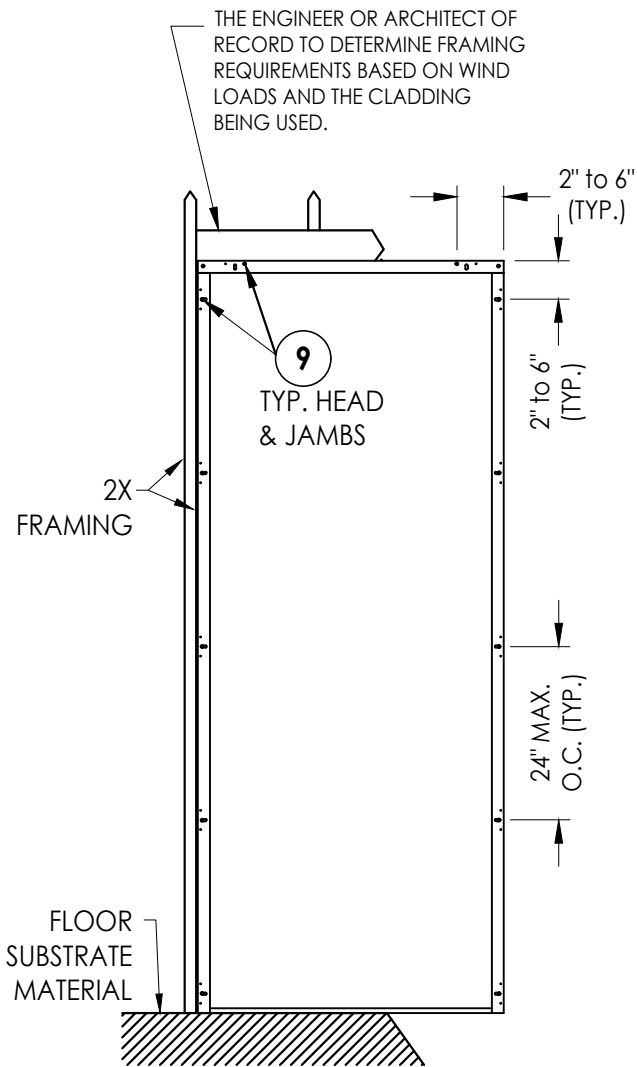
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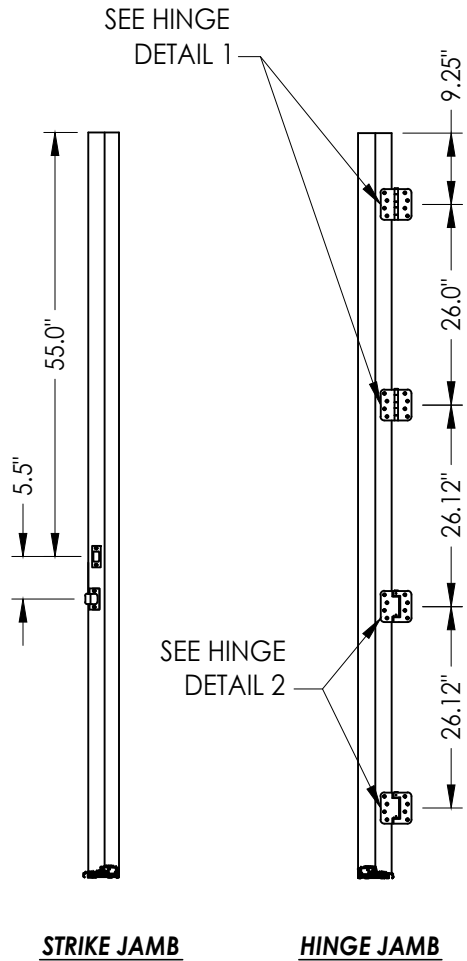
BUCK ANCHORING
Masonry



FRAME ANCHORING
Masonry construction



FRAME ANCHORING
2X Stud construction



STRIKE JAMB

HINGE JAMB

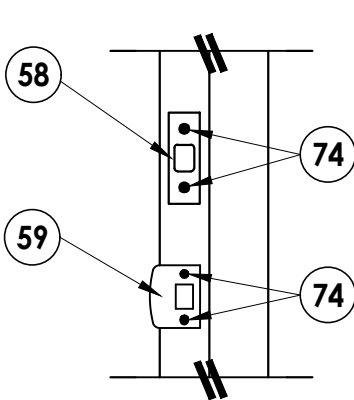
CONCRETE ANCHOR NOTES:

- 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:

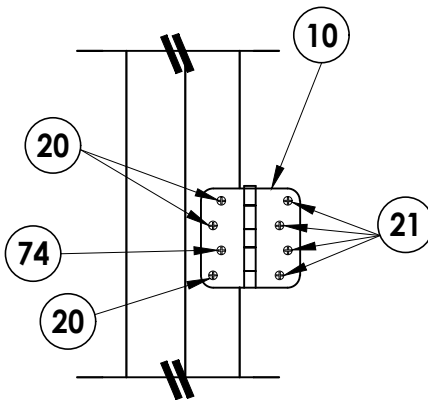
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2"	4"
DeWALT ULTRACON®	1/4"	1-1/4"	1"	4"

WOOD SCREW INSTALLATION NOTES:

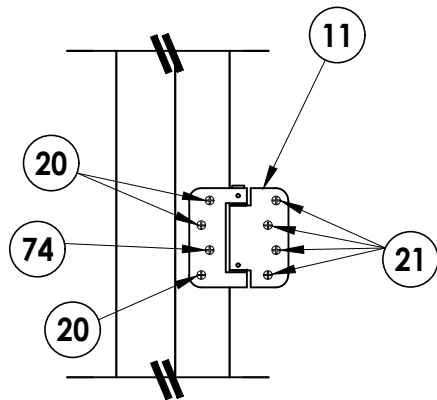
- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.



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

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5	7/06/23	UPDATE TO 8TH ED. (2023) FBC LFS
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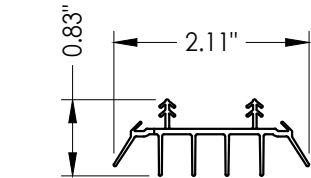
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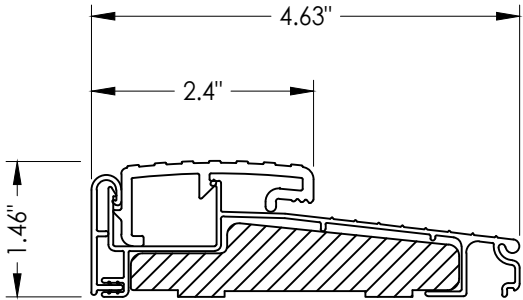
SHEET 6 OF 7

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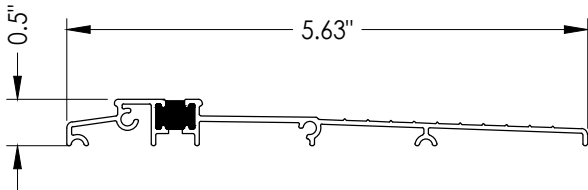
BILL OF MATERIALS		
ITEM	DESCRIPTION	MATERIAL
B	2X BUCK SG >= 0.55	WOOD
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90 OR ASTM A653 STEEL	CONCRETE
P	1/4" X 2-3/4" DeWALT OR ITW PFH CONCRETE SCREW	STEEL
9	#8 X 2-1/4" PPH SMS (1-1/2" MIN. EMBEDMENT)	STEEL
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.



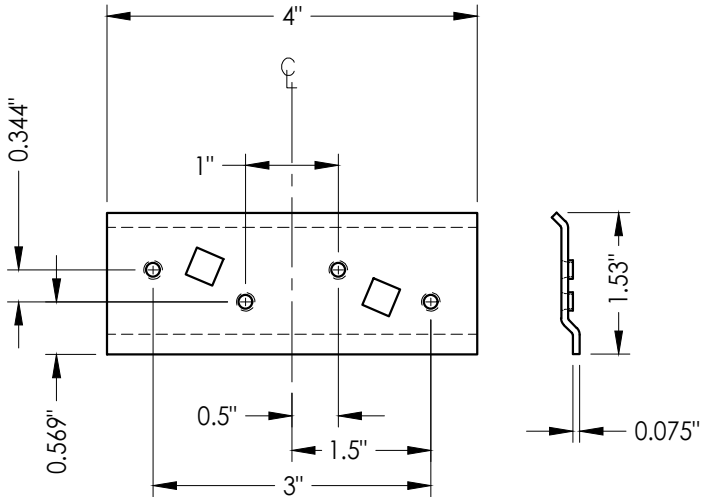
75 SWEEP



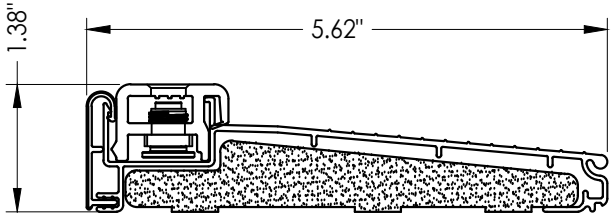
70 OUTSWING THRESHOLD



77 ADA THRESHOLD



29 HINGE REINFORCEMENT



76 INSWING THRESHOLD

DATE:	3/14/12
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SHEET	7 OF 7

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PART OR ASSEMBLY:	BILL OF MATERIALS & COMPONENTS

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