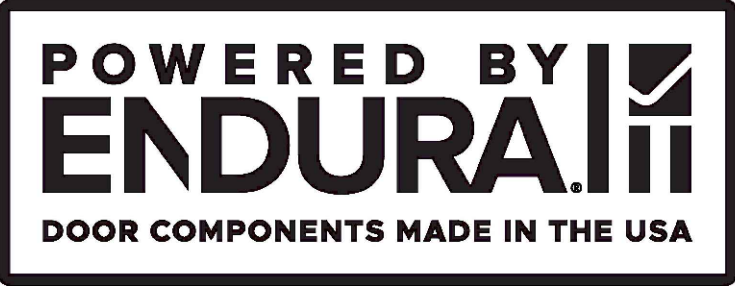


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Z SERIES THRESHOLDS

CONTINUOUS HEAD & SILL

FRAME SYSTEM

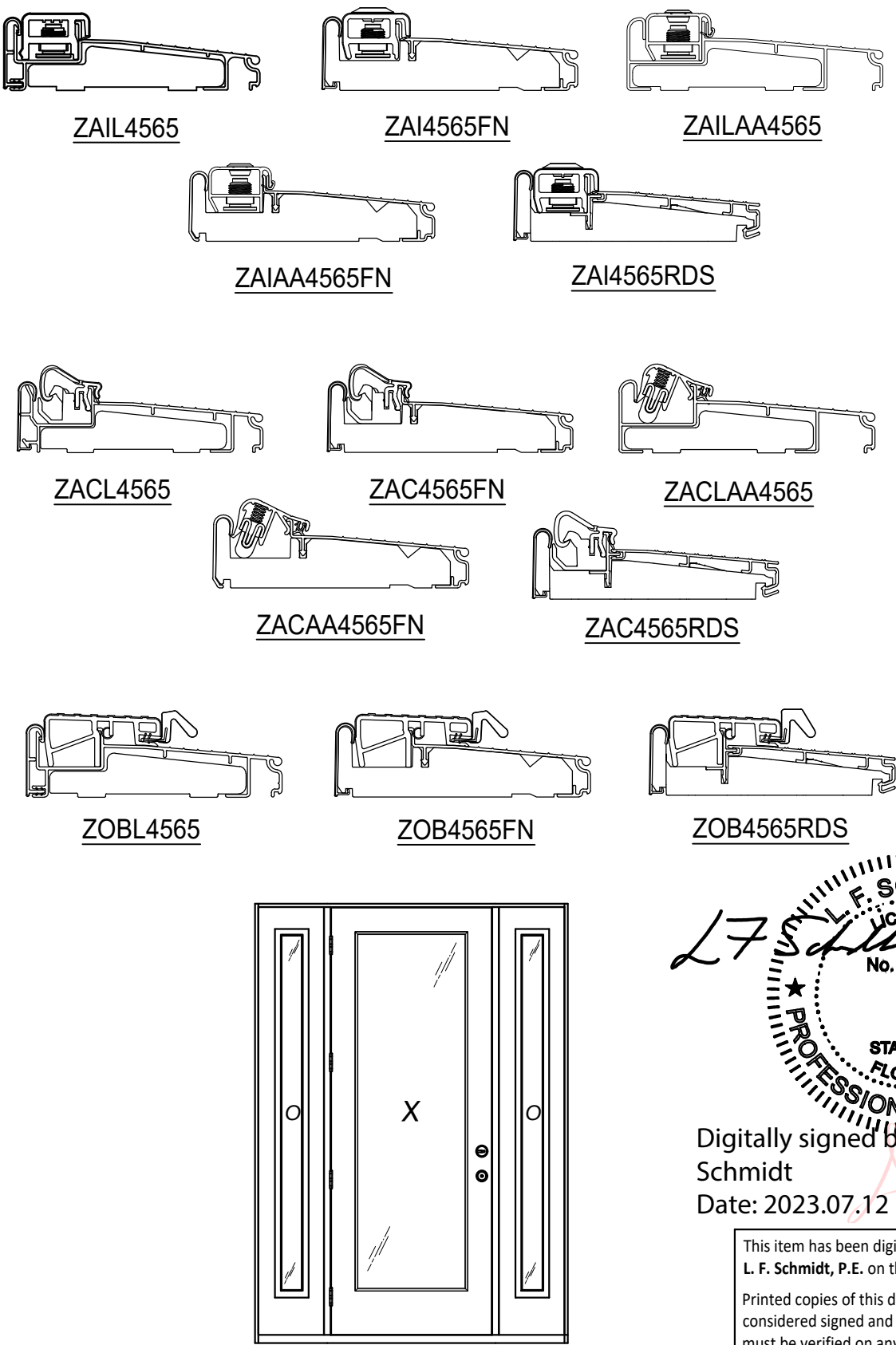
INSWING / OUTSWING

"NON-IMPACT"

GENERAL NOTES

1. This product has been evaluated and is in compliance with the 8th Edition (2023) 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 FBC Sections 1609.1.2 & R301.2.1.2.
4. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
5. This product has been tested and is approved for use in the door panels as specified in this approval. Substitution into a similar product that possess a comparable current Florida Statewide product approval may be approved for use by the local Authority Having Jurisdiction.
6. 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 Elevation & General Notes
2	Z Series Threshold Details & Design Pressures
3	Door Panel Details
4	Sidelite Panel Details
5	Elevations
6	Vertical Cross Sections
7	Horizontal Cross Sections
8	Buck Anchoring
9	Frame Anchoring & Hardware Details
10	Bill of Materials & Components



Digitally signed by Lyndon F Schmidt
Date: 2023.07.12 11:50:40 -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.

THERMA-TRU FLUSH GLAZED FIBERGLASS
SINGLE DOOR w/ SIDELITE(S)

THIS PRODUCT APPROVAL IS VALID
ONLY FOR THE STATE OF FLORIDA

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

ENDURA

PRODUCT:

Building Consultants, Inc.
P.O. Box 230, Vairico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

Part or Assembly:
TYPICAL ELEVATION
& GENERAL NOTES

REVISIONS

DATE: 5/26/16

SCALE: N.T.S.

DWG. BY: JK

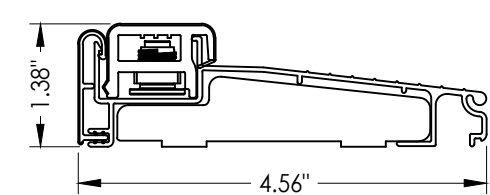
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DRAWING NO.: FL-20698.20

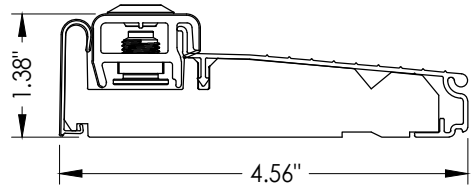
SHEET 1 OF 10

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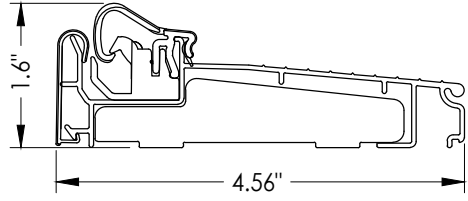
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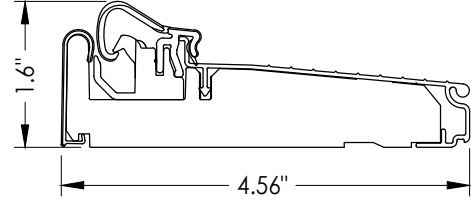
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ZAIL4565



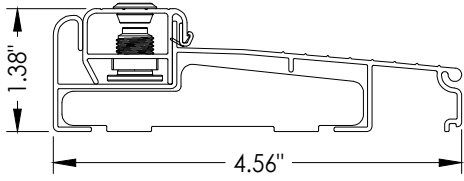
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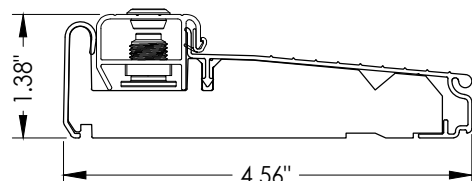
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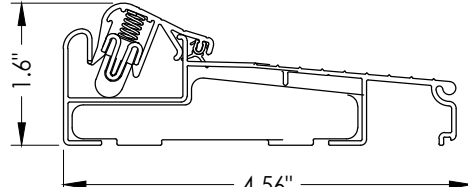
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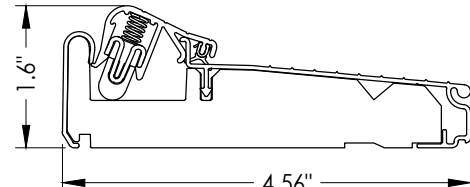
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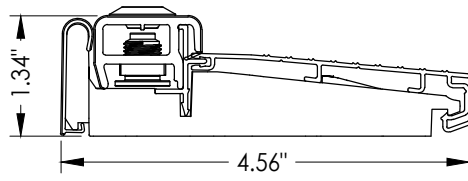
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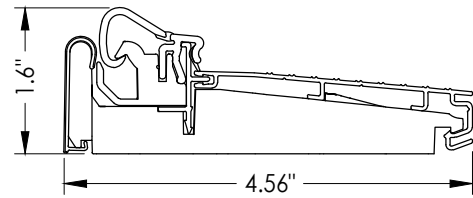
T8 INSWING ARTICULATING THRESHOLD
ZACLAA4565



T9 INSWING ARTICULATING THRESHOLD
ZACAA4565FN



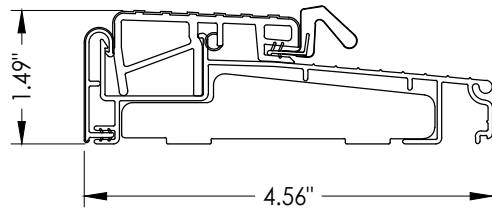
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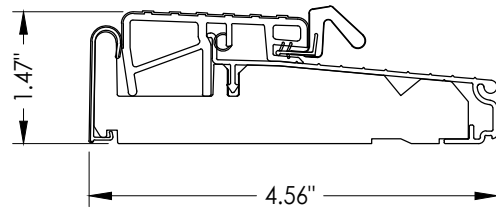
T10 INSWING ARTICULATING THRESHOLD
ZAC4565RDS

INSWING ADJUSTABLE THRESHOLD				
DOOR PANEL	CONFIGURATION	MAXIMUM FRAME SIZE	DESIGN PRESSURE RATING (PSF)	
			POSITIVE	NEGATIVE
THERMA-TRU GLAZED FIBERGLASS	OX / XO	53.38" X 97.94"	+50.0	-55.0
	OXO	68.97" X 97.94"		

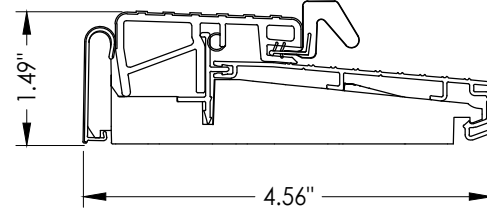
INSWING ARTICULATING THRESHOLD				
DOOR PANEL	CONFIGURATION	MAXIMUM FRAME SIZE	DESIGN PRESSURE RATING (PSF)	
			POSITIVE	NEGATIVE
THERMA-TRU GLAZED FIBERGLASS	OX / XO	53.38" X 97.94"	+50.0	-55.0
	OXO	68.97" X 97.94"		



T11 OUTSWING THRESHOLD
ZOBL4565



T12 OUTSWING THRESHOLD
ZOB4565FN



T13 OUTSWING THRESHOLD
ZOB4565RDS

OUTSWING FIXED BUMPER THRESHOLD				
DOOR PANEL	CONFIGURATION	MAXIMUM FRAME SIZE	DESIGN PRESSURE RATING (PSF)	
			POSITIVE	NEGATIVE
THERMA-TRU GLAZED FIBERGLASS	OX / XO	53.38" X 97.13"	+55.0	-55.0
	OXO	68.97" X 97.13"		

OUTSWING FIXED BUMPER THRESHOLD (RDS)				
DOOR PANEL	CONFIGURATION	MAXIMUM FRAME SIZE	DESIGN PRESSURE RATING (PSF)	
			POSITIVE	NEGATIVE
THERMA-TRU GLAZED FIBERGLASS	OX / XO	53.38" X 97.13"	+45.0	-45.0
	OXO	68.97" X 97.13"		

Documents Prepared By:

Lyndon F. Schmidt
P.E. No. 43409

PRODUCT: ENDURA

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

PART OR ASSEMBLY:
Z SERIES THRESHOLD DETAILS
& DESIGN PRESSURES

NO.	DATE	REVISIONS
3	7/06/23	UPDATE TO 8TH ED. (2023) FBC LFS
2	8/06/20	UPDATE TO 7th ED. (2020) FBC DAC
1	12/13/17	REVISE FRAME ANCHORING LFS

DATE: 5/26/16

SCALE: N.T.S.

DWG. BY: JK

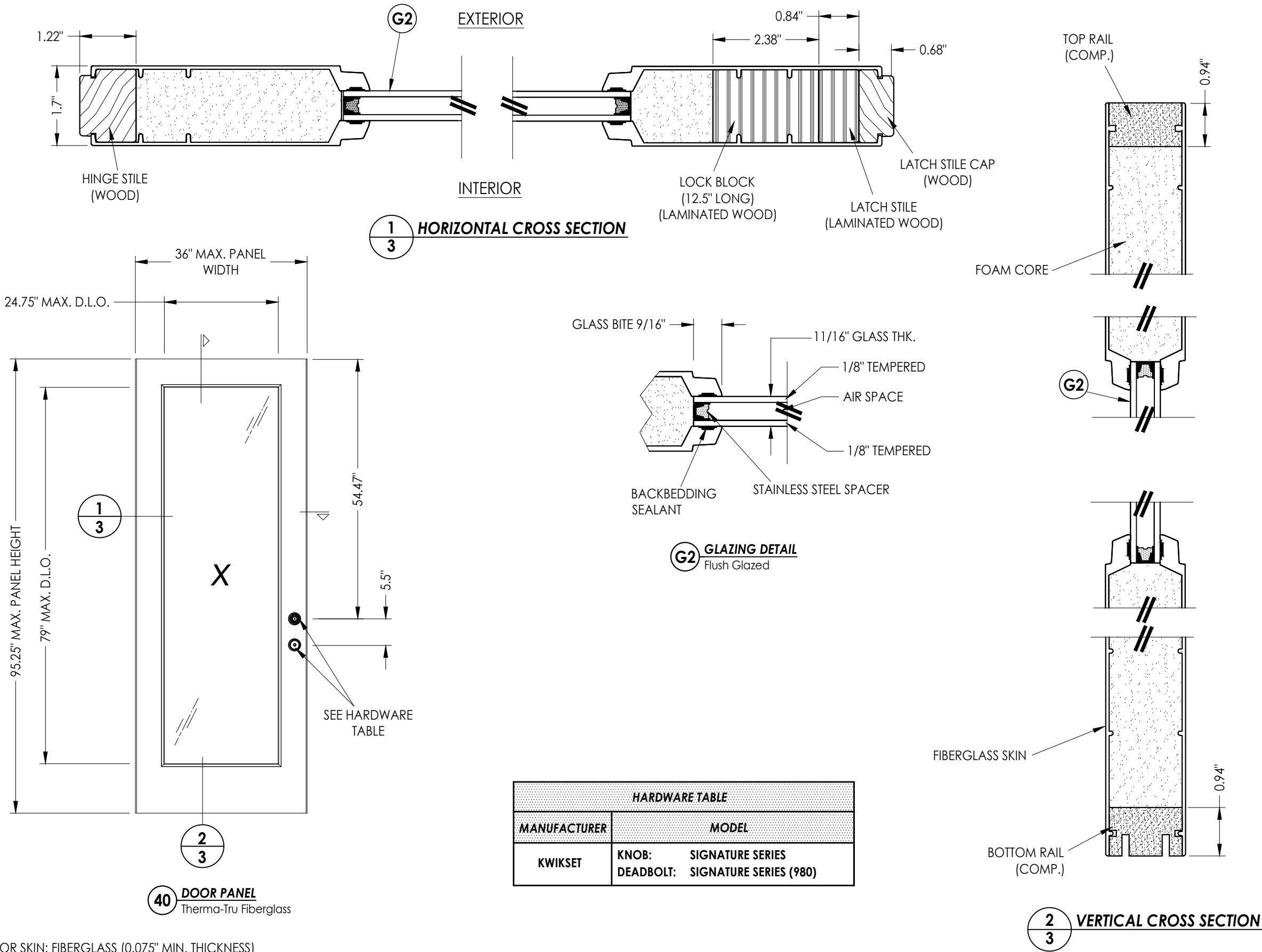
CHK. BY: LFS

DRAWING NO.:

FL-20698.20

SHEET 2 OF 10

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DOOR SKIN: FIBERGLASS (0.075" MIN. THICKNESS)
CORE MATERIAL: POLYURETHANE FOAM

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

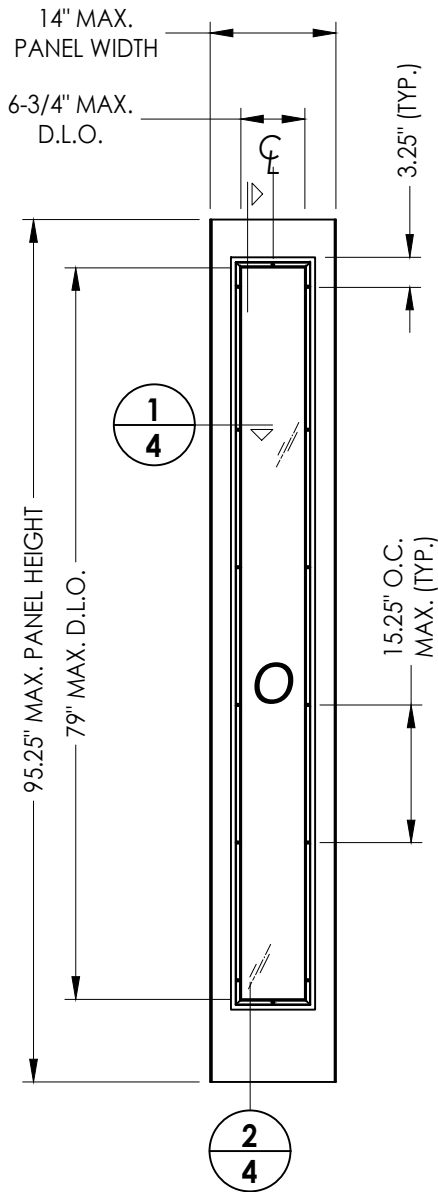
RW BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE Registry No. 9813

PRODUCT:	ENDURA	
	DOOR PANEL DETAILS	

REVISIONS			
NO.	DATE	BY	
3	7/06/23	LFS	UPDATE TO 8TH ED. (2023) FBC
2	8/06/20	DAC	UPDATE TO 7th ED. (2020) FBC
1	12/13/17	LFS	REVISE FRAME ANCHORING

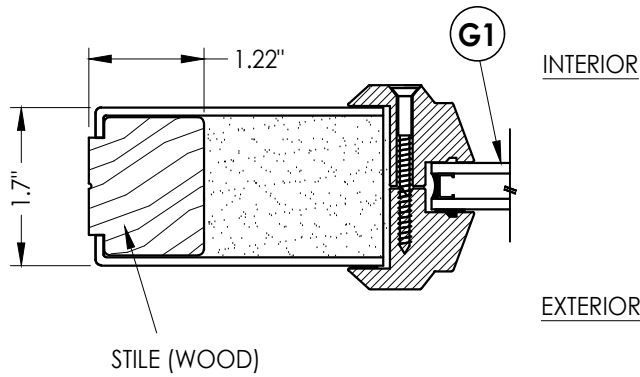
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SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-20698.20
SHEET	3 OF 10

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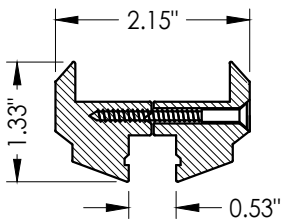
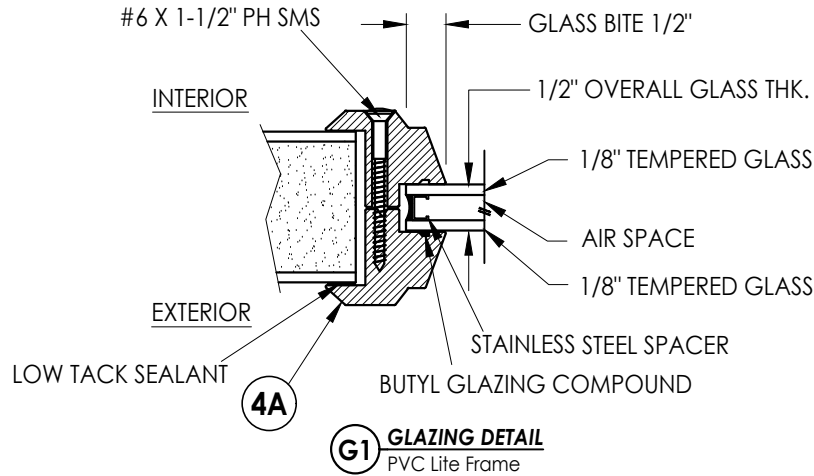


40 SIDELITE PANEL
Therma-Tru Fiberglass

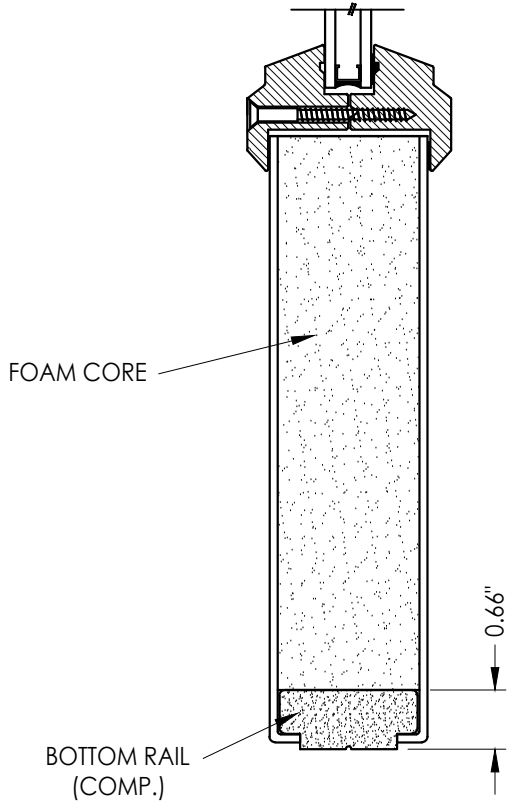
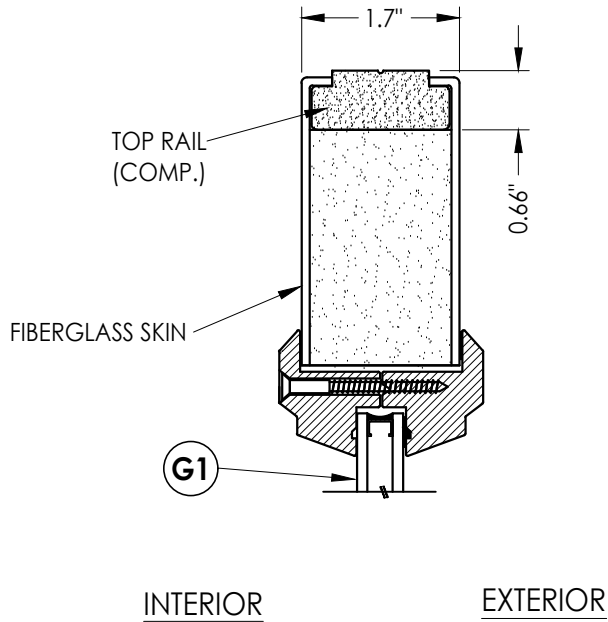
SIDELITE SKIN: FIBERGLASS (0.075" MIN. THICKNESS)
CORE MATERIAL: POLYURETHANE FOAM



1 HORIZONTAL CROSS SECTION



4A PVC LITE FRAME



2 VERTICAL CROSS SECTION

PRODUCT:		ENDURA	
PART OR ASSEMBLY:		SIDELITE PANEL DETAILS	
NO.	DATE	REVISIONS	
		BY	LFS
3	7/06/23	UPDATE TO 8TH ED. (2023)	FBC LFS
2	8/06/20	UPDATE TO 7th ED. (2020)	FBC DAC
1	12/13/17	REVISE FRAME ANCHORING	LFS

DATE: 5/26/16

SCALE: N.T.S.

DWG. BY: JK

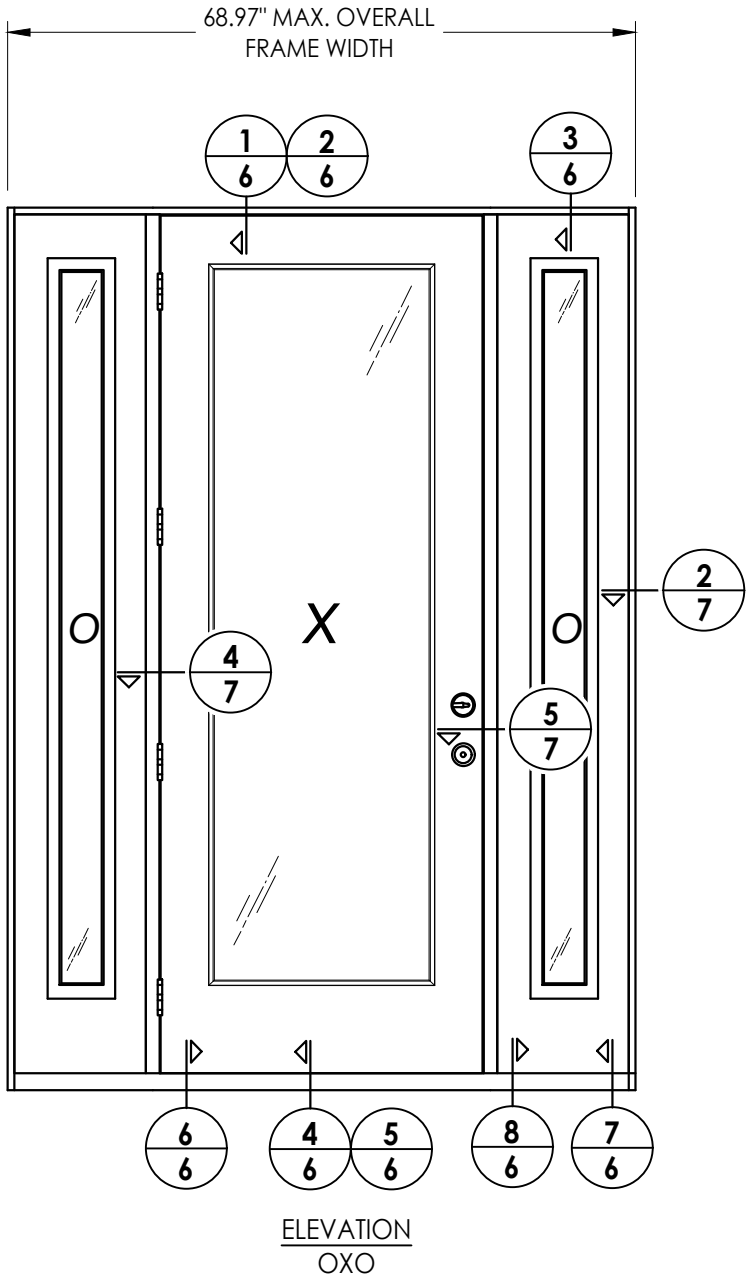
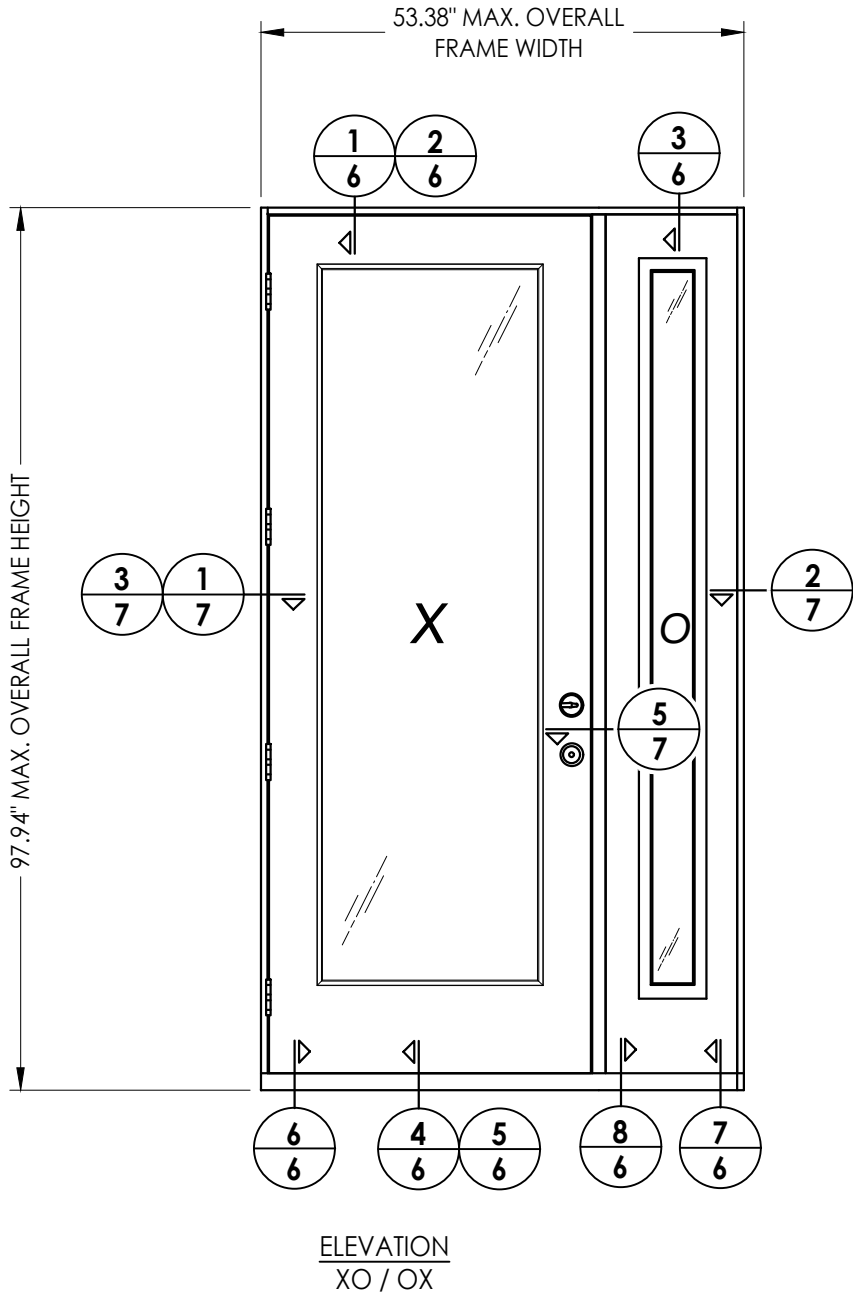
CHK. BY: LFS

DRAWING NO.: FL-20698.20

SHEET 4 OF 10

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

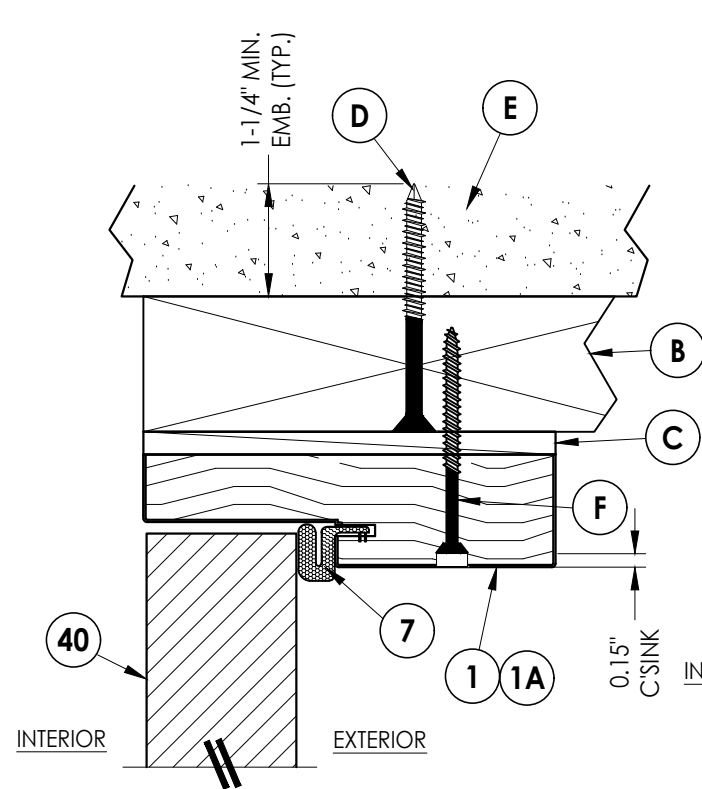


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SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-20698.20
SHEET	5 OF 10

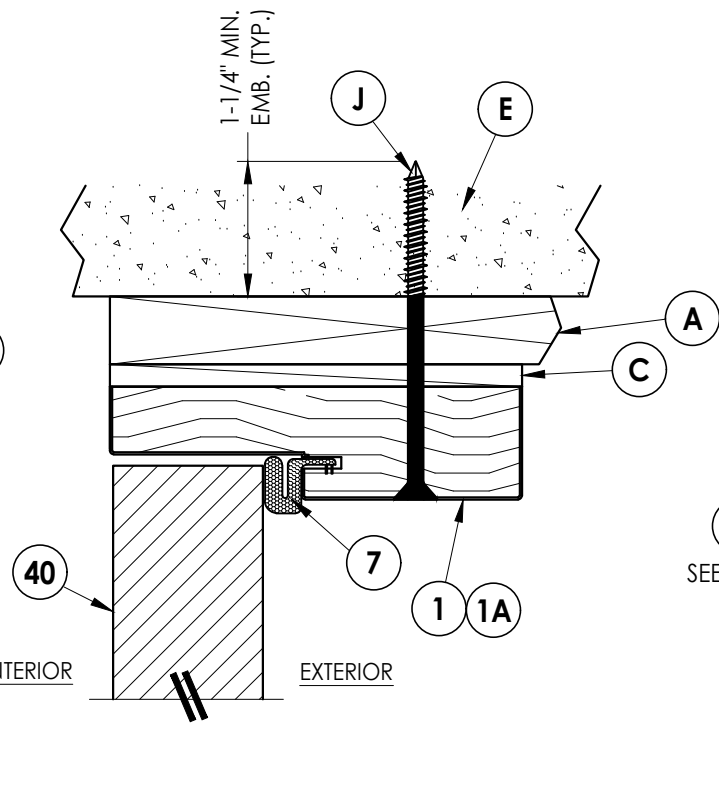
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2	8/06/20	UPDATE TO 7th ED. (2020)	FBC	DAC	
1	12/13/17	REVISE FRAME ANCHORING		LFS	
NO.	DATE				BY
REVISIONS					

PRODUCT:	ENDURA
PART OR ASSEMBLY:	ELEVATIONS

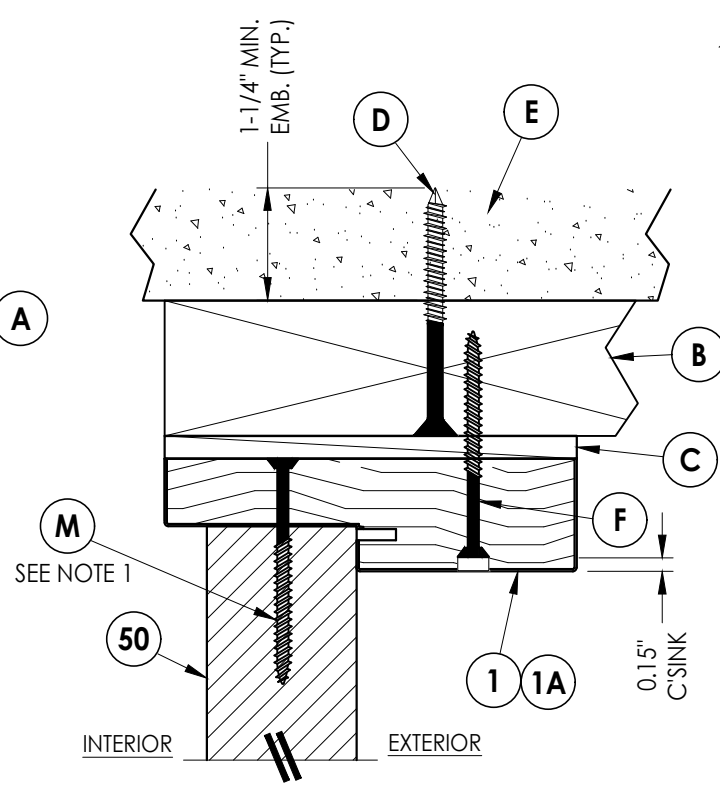
Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409	<i>RW</i> BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813
---	--



1 **VERTICAL CROSS SECTION**
6 Inswing shown (Outswing similar)
 2X Buck Construction



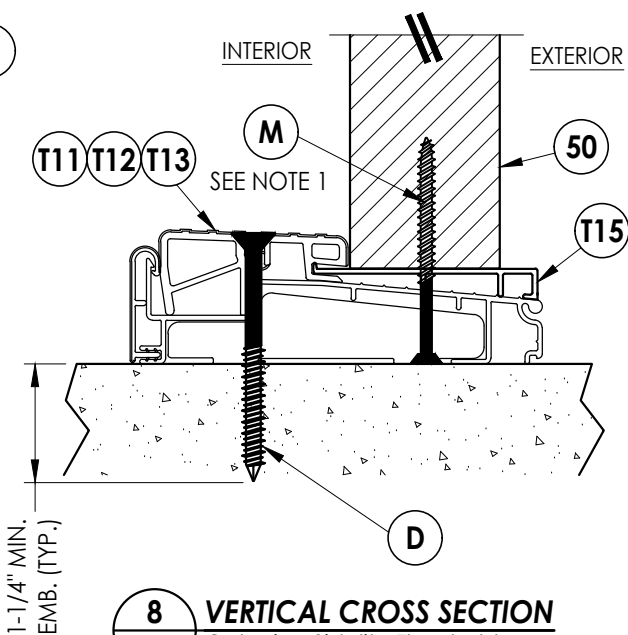
2 **VERTICAL CROSS SECTION**
6 Inswing shown (Outswing similar)
 1X Buck Construction



3 **VERTICAL CROSS SECTION**
6 Inswing shown (Outswing similar)
 2X Buck Construction

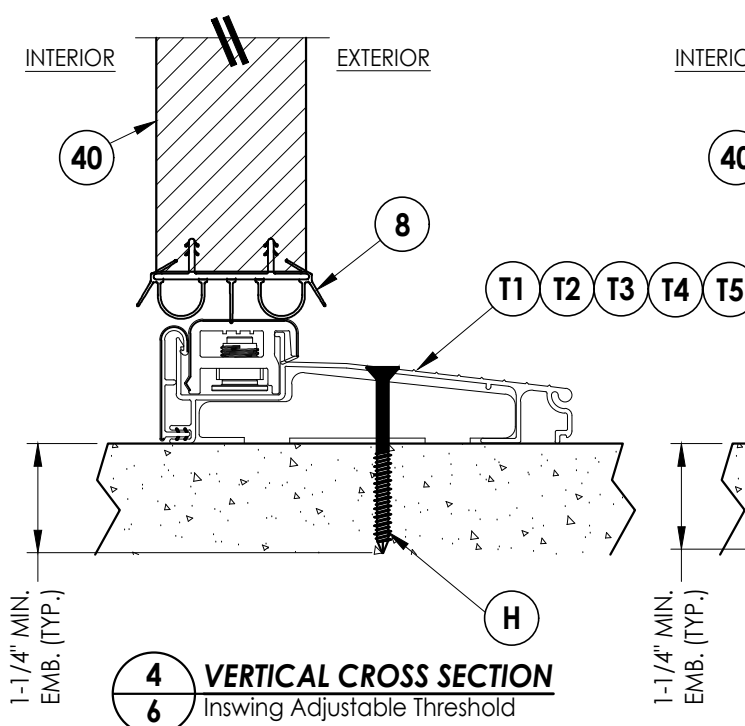
NOTE:

1. Spacing for sidelite screws (item M):
6" from each end (2 total).



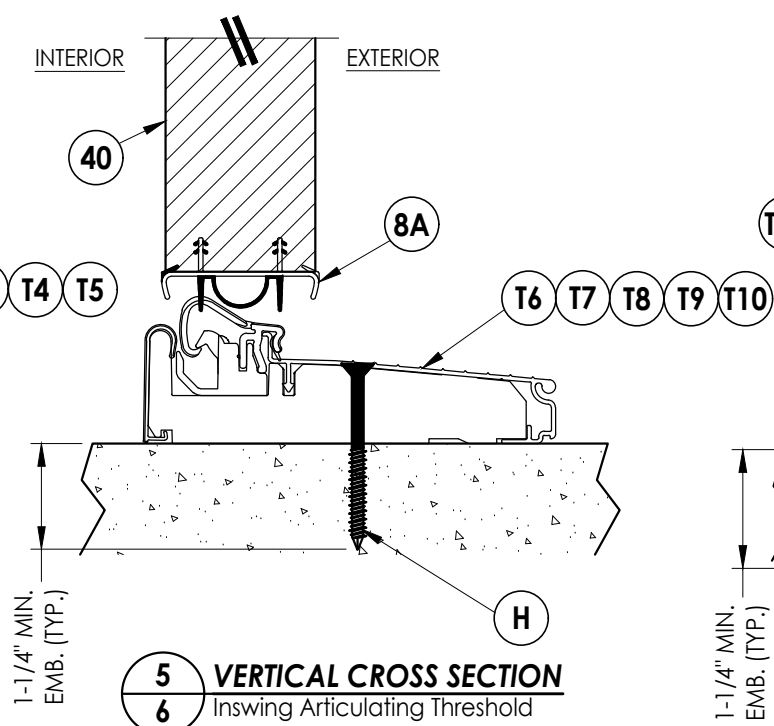
8 VERTICAL CROSS SECTION

6 Outswing Sidelite Threshold



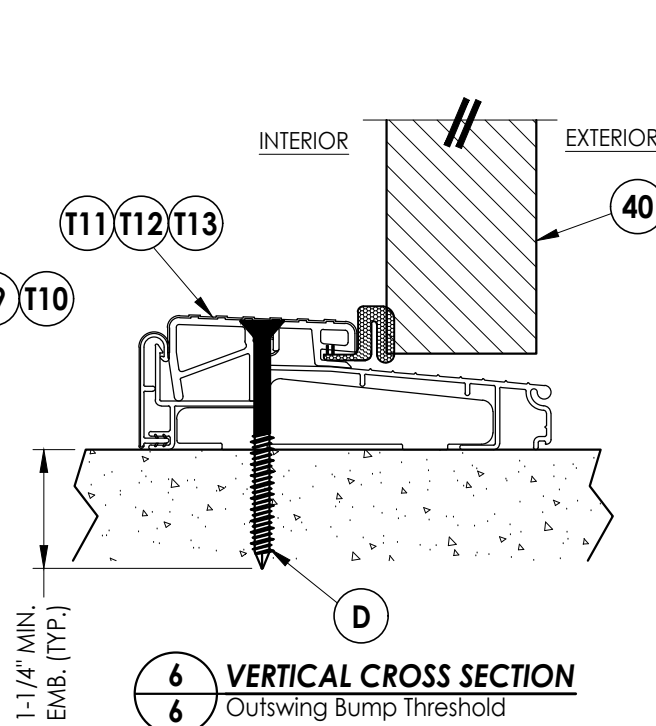
4 VERTICAL CROSS SECTION

6 Inswing Adjustable Threshold

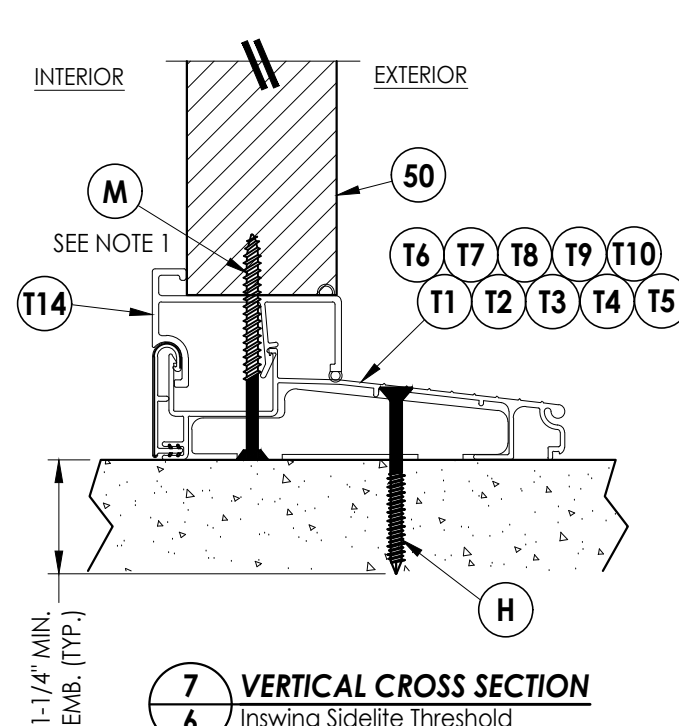


5 VERTICAL CROSS SECTION

6 Inswing Articulating Threshold



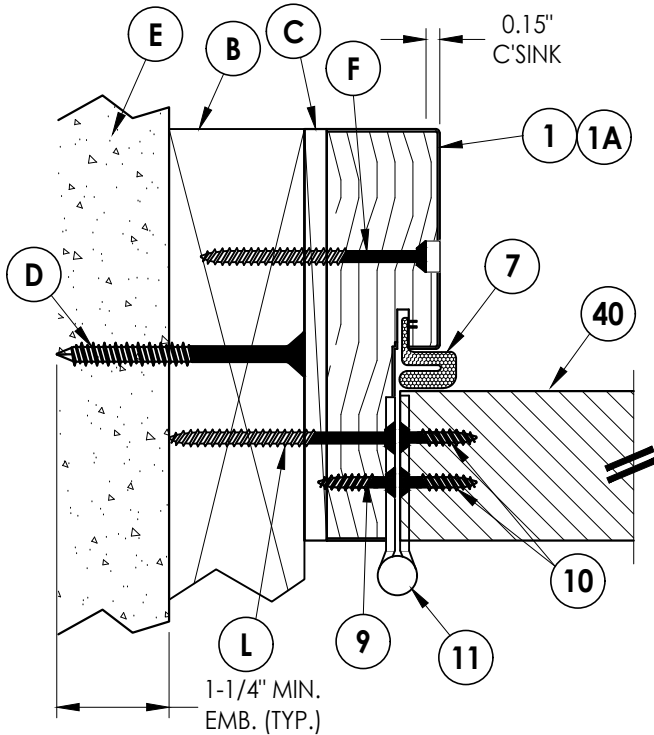
6 VERTICAL CROSS SECTION
 6 Outswing Bump Threshold



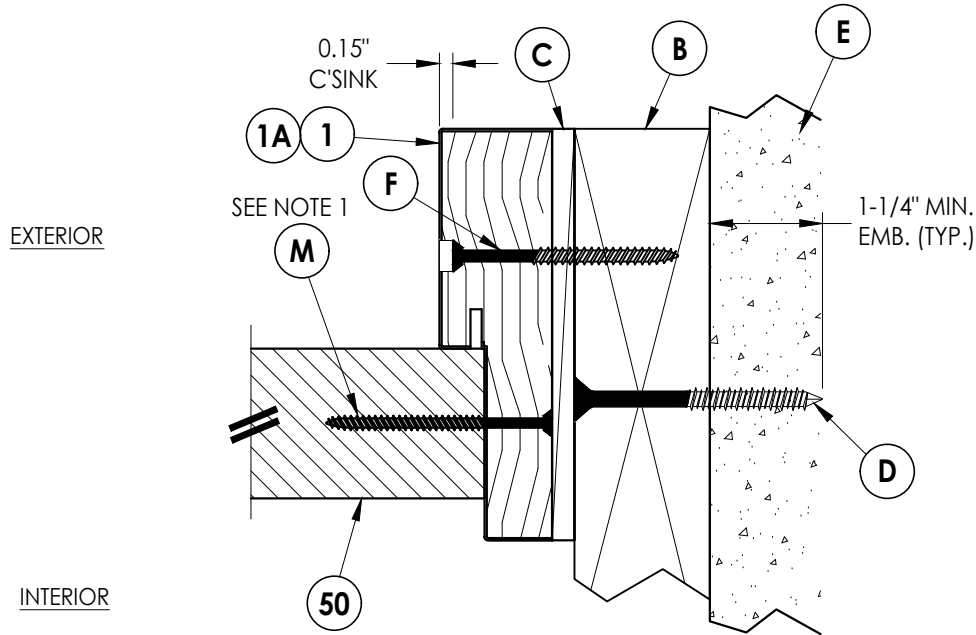
7 VERTICAL CROSS SECTION
6 Inswing Sidelite Threshold

[illegible]

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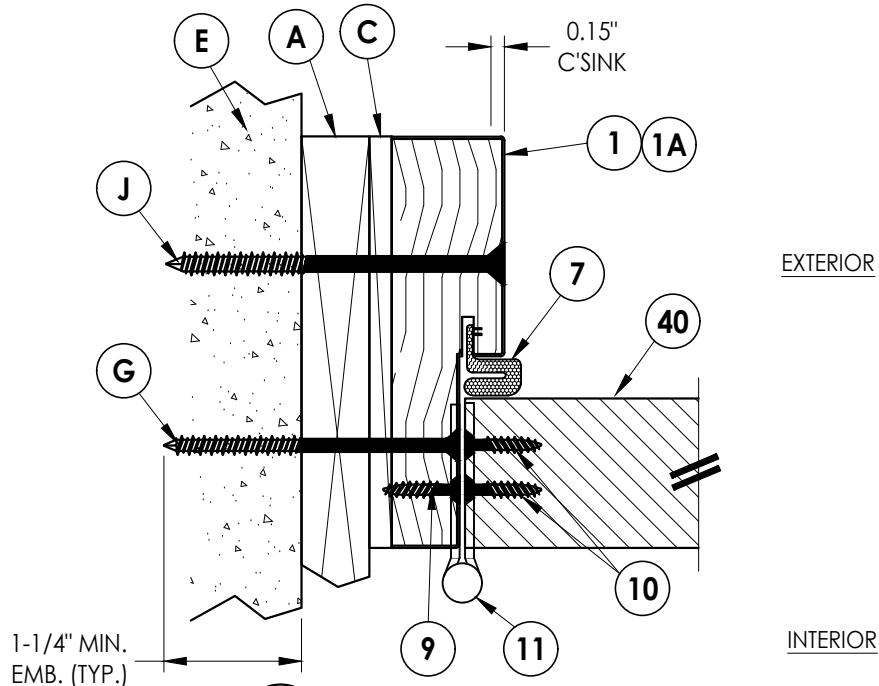


1
7 **HORIZONTAL CROSS SECTION**
Inswing shown (Outswing similar)
2X Buck Construction

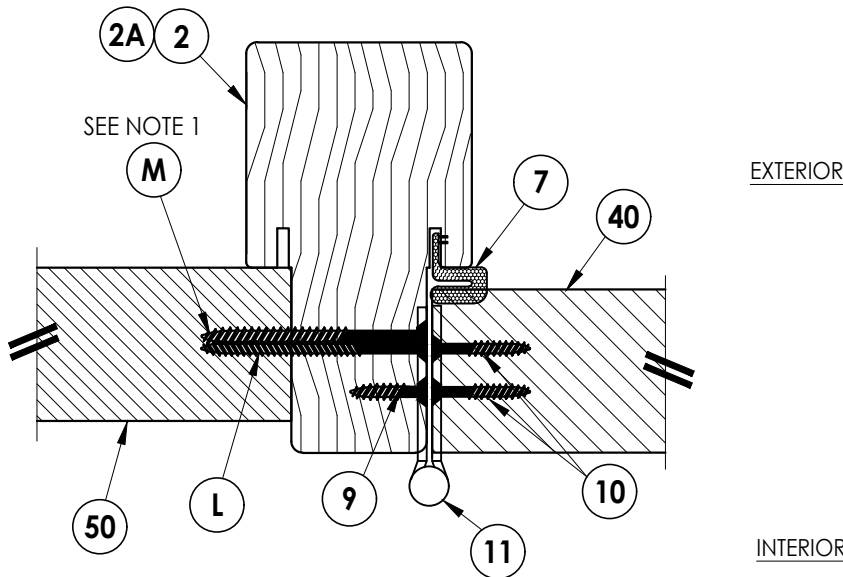


2
7 **HORIZONTAL CROSS SECTION**
Inswing shown (Outswing similar)
2X Buck Construction

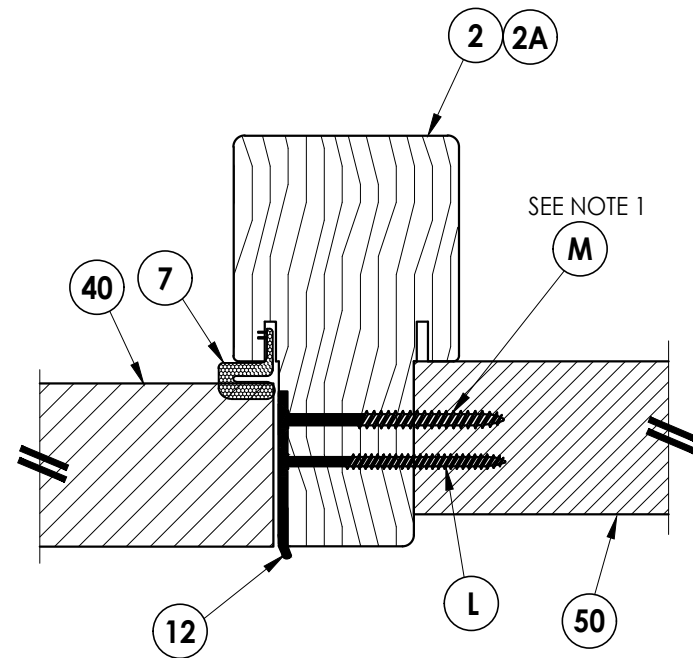
NOTE:
1. Spacing for sidelite screws (item M): 6.5", 32.5", 57.25" and 85" from head to sill (4 total).



3
7 **HORIZONTAL CROSS SECTION**
Inswing shown (Outswing similar)
1X Buck Construction



4
7 **HORIZONTAL CROSS SECTION**
Inswing shown (Outswing similar)



5
7 **HORIZONTAL CROSS SECTION**
Inswing shown (Outswing similar)

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: ENDURA

PART OR ASSEMBLY:
HORIZONTAL CROSS
SECTIONS

NO.	DATE	REVISIONS
3	7/06/23	UPDATE TO 8TH ED. (2023) FBC LFS
2	8/06/20	UPDATE TO 7th ED. (2020) FBC DAC
1	12/13/17	REVISE FRAME ANCHORING LFS

DATE: 5/26/16

SCALE: N.T.S.

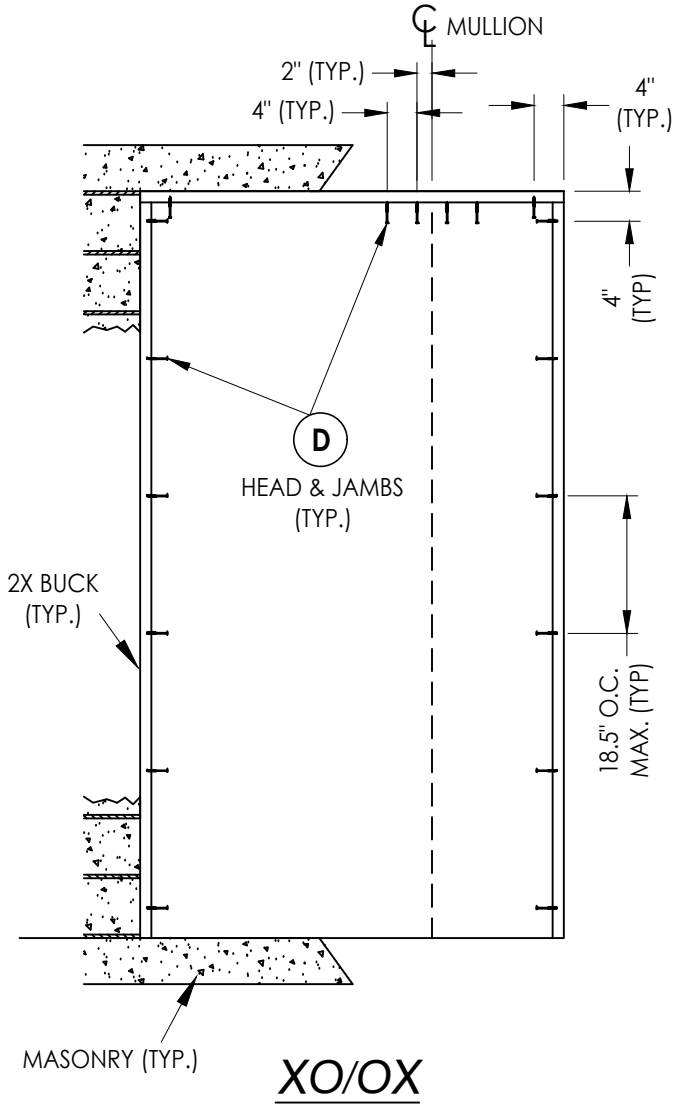
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CHK. BY: LFS

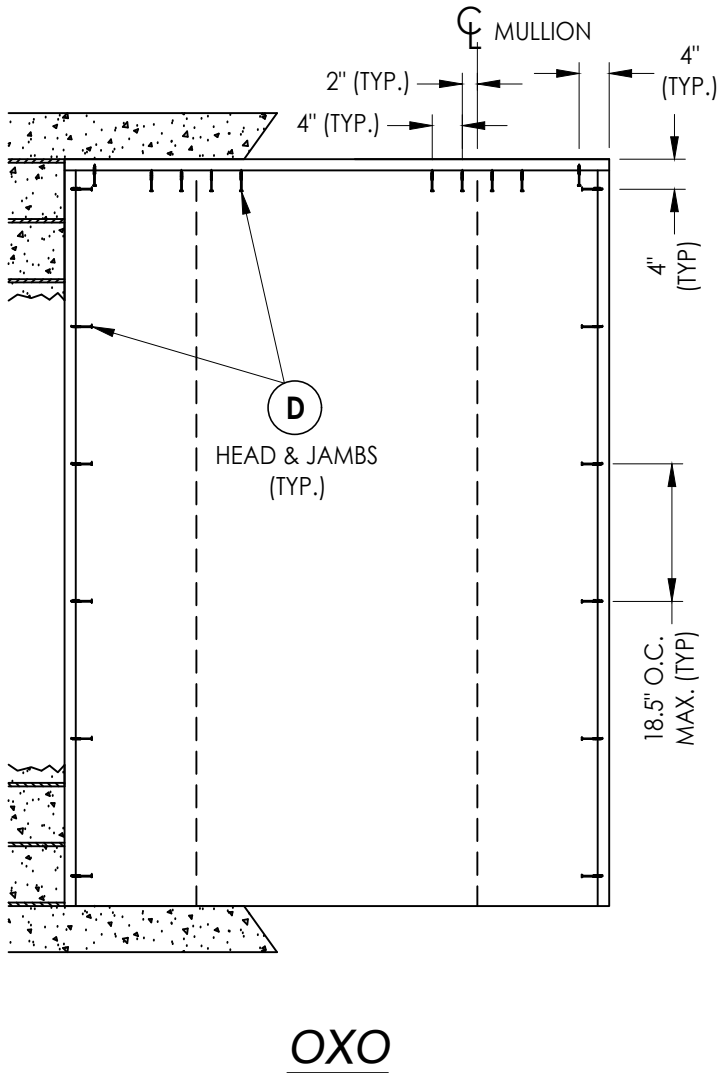
DRAWING NO.:

FL-20698.20

SHEET 7 OF 10



2X BUCK ANCHORING



OXO

DATE: 5/26/16	
SCALE: N.T.S.	
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.: FL-20698.20	
SHEET	8 OF 10

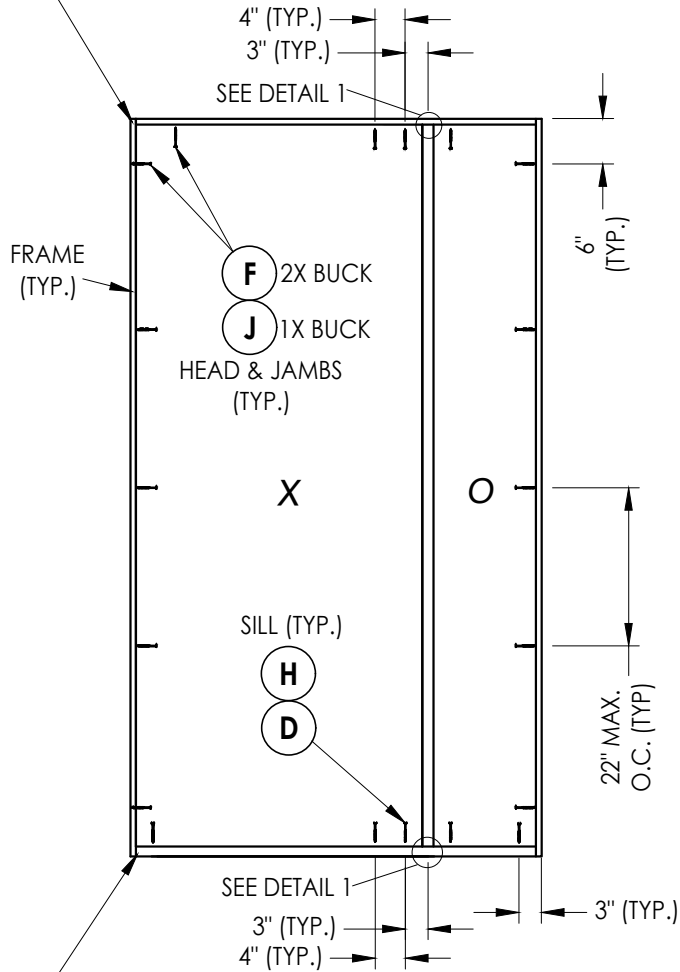
NO.	DATE	REVISIONS	
3	7/06/23	UPDATE TO 8TH ED. (2023)	FBC LFS
2	8/06/20	UPDATE TO 7th ED. (2020)	FBC DAC
1	12/13/17	REVISE FRAME ANCHORING	LFS
			BY

PRODUCT:	ENDURA
PART OR ASSEMBLY:	BUCK ANCHORING

Documents Prepared By:		<i>RW</i> BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813
Lyndon F. Schmidt P.E. No. 43409		

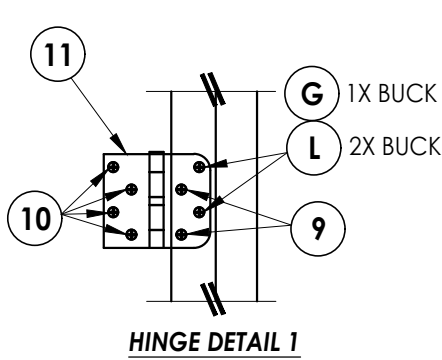
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The head is attached to the jamb w/
(3) 7/16" x 2" (16 GA) steel crown staples (TYP.)

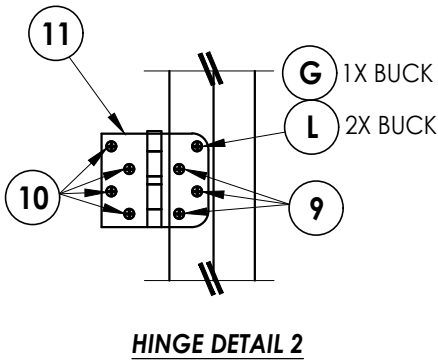


The threshold is attached to the jamb w/
(3) 7/16" x 2" (16 GA) steel crown staples
& (1) #8 x 1-5/8" wood screw (TYP.)

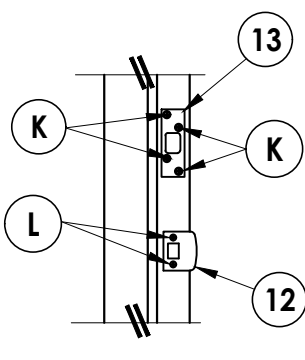
FRAME ANCHORING



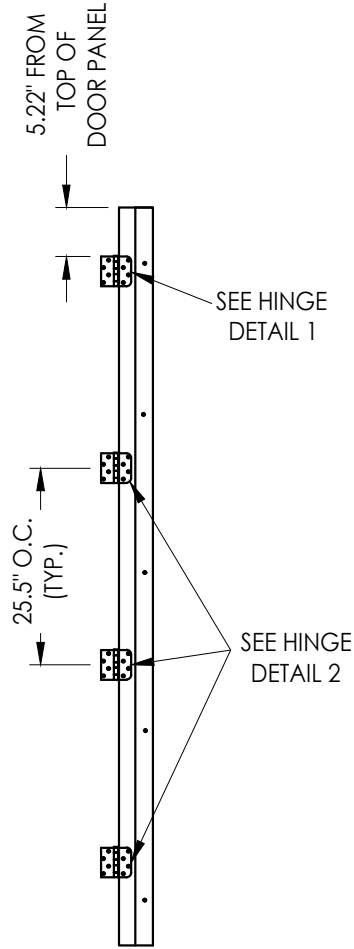
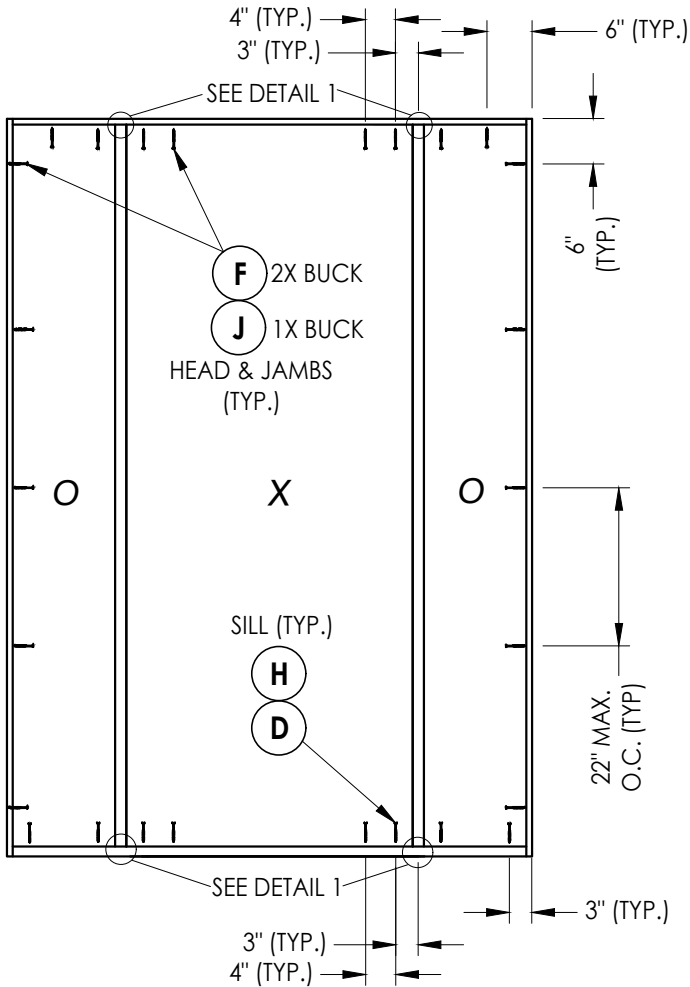
HINGE DETAIL 1



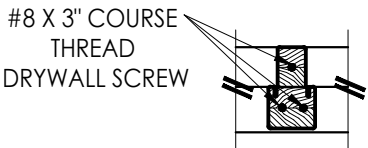
HINGE DETAIL 2



LATCH & DEADBOLT STRIKE PLATE DETAILS



HINGE JAMB



DETAIL 1

Integral mullion attachment

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 BUILDEX TAPCON®	3/16"	1-1/4"	3"	1-1/2"
	1/4"	1-1/4"	2"	4"
DeWALT ULTRA-CON®	1/4"	1-1/4"	1"	4"

WOOD SCREW INSTALLATION NOTES:

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

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: ENDURA

PART OR ASSEMBLY:
FRAME ANCHORING
& HARDWARE DETAILS

NO.	DATE	REVISIONS
3	7/06/23	UPDATE TO 8TH ED. (2023) FBC LFS
2	8/06/20	UPDATE TO 7th ED. (2020) FBC DAC
1	12/13/17	REVISE FRAME ANCHORING LFS

DATE: 5/26/16

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

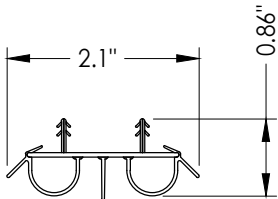
DRAWING NO.:

FL-20698.20

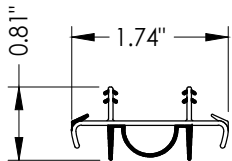
SHEET 9 of 10

Z:\2023 FBC Drawings\Endura Products\FL-20698 R5\FL-20698.19-20.dwg

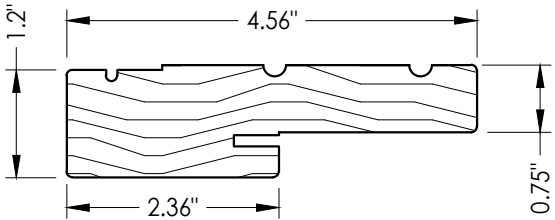
BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK (G >= 0.42)	WOOD
B	2X BUCK (G >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMBEDMENT)	STEEL
G	3/16" X 3-1/4" PFH ITW CONCRETE SCREW	STEEL
H	1/4" X 2-1/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
J	1/4" X 3-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
K	#10 X 3" PFH WOOD SCREW	STEEL
L	#8 X 2-1/2" PFH WOOD SCREW	STEEL
M	#8 X 2-1/2" PFH COURSE THREAD DRYWALL SCREW	STEEL
P	#10 X 1-3/4" PFH WOOD SCREW	STEEL
T1	INSWING ADJUSTABLE THRESHOLD	ALUM/COMP
T2	INSWING ADJUSTABLE THRESHOLD	ALUM/COMP
T3	INSWING ADJUSTABLE THRESHOLD	ALUM/COMP
T4	INSWING ADJUSTABLE THRESHOLD	ALUM/COMP
T5	INSWING ADJUSTABLE THRESHOLD	ALUM/COMP
T6	INSWING ARTICULATING THRESHOLD	ALUM/COMP
T7	INSWING ARTICULATING THRESHOLD	ALUM/COMP
T8	INSWING ARTICULATING THRESHOLD	ALUM/COMP
T9	INSWING ARTICULATING THRESHOLD	ALUM/COMP
T10	INSWING ARTICULATING THRESHOLD	ALUM/COMP
T11	OUTSWING THRESHOLD	ALUM/COMP
T12	OUTSWING THRESHOLD	ALUM/COMP
T13	OUTSWING THRESHOLD	ALUM/COMP
T14	INSWING THRESHOLD w/ SIDELITE ADAPTER	ALUM/COMP
T15	OUTSWING THRESHOLD w/ SIDELITE ADAPTER	ALUM/COMP
1	FINGER JOINT PINE JAMB (G >= 0.42)	WOOD
1A	FINGER JOINTED PINE JAMB (SG >= 0.42) (FrameSaver)	WOOD/COMP
2	INTEGRAL MULLION (ENDURA FATBOY - PINE, G >= 0.42)	WOOD
2A	INTEGRAL MULLION (SG >= 0.42) (FrameSaver)	WOOD/COMP
7	WEATHERSTRIP (ENDURA)	FOAM
8	DOOR BOTTOM SWEEP	VINYL
8A	ARTICULATING SWEEP	VINYL
9	#8 X 3/4" PFH WOOD SCREW	STEEL
10	#8 X 1" PFH WOOD SCREW	STEEL
11	4" X 4" BUTT HINGE	STEEL
12	LATCH STRIKE PLATE	STEEL
13	DEADBOLT STRIKE PLATE (SECURITY)	STEEL
40	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR DETAILS	-
50	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR DETAILS	-



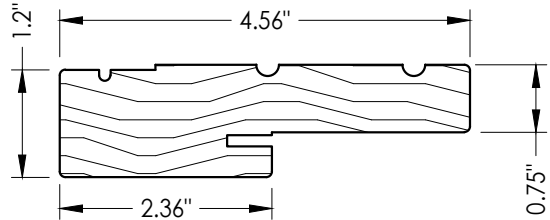
8 SWEEP



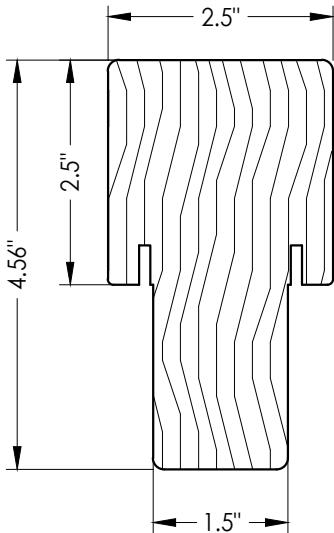
8A ARTICULATING SWEEP



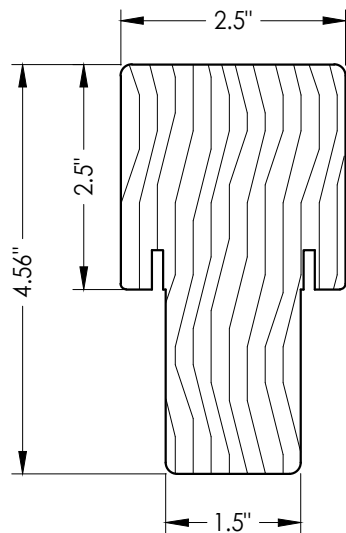
1 WOOD JAMB



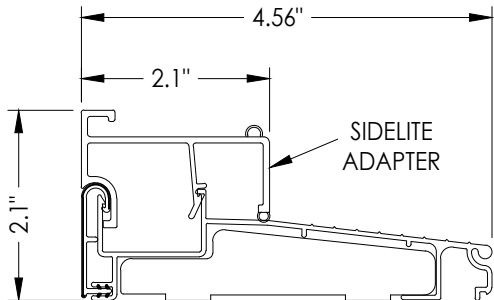
1A WOOD JAMB
FrameSaver (Endura)



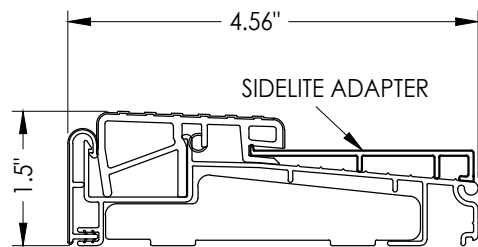
2 INTEGRAL MULLION



2A INTEGRAL MULLION
FrameSaver (Endura)



T14 INSWING THRESHOLD w/ SIDELITE ADAPTER
Endura (Z-Series)



T15 OUTSWING THRESHOLD w/ SIDELITE ADAPTER
Endura (Z-Series)

Documents Prepared By:
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FBPE Registry No. 9813

PRODUCT: ENDURA

PART OR ASSEMBLY:
BILL OF MATERIALS
& COMPONENTS

NO.	DATE	REVISIONS
3	7/06/23	UPDATE TO 8TH ED. (2023) FBC
2	8/06/20	UPDATE TO 7th ED. (2020) FBC
1	12/13/17	REVISE FRAME ANCHORING
NO.	DATE	BY

DATE: 5/26/16

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.:
FL-20698.20

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