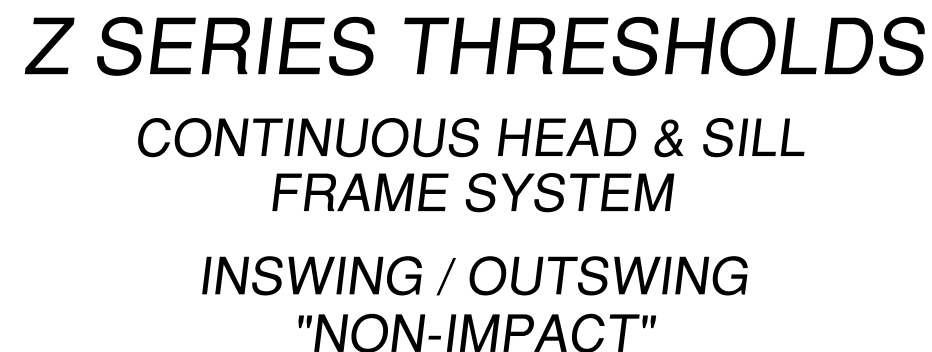
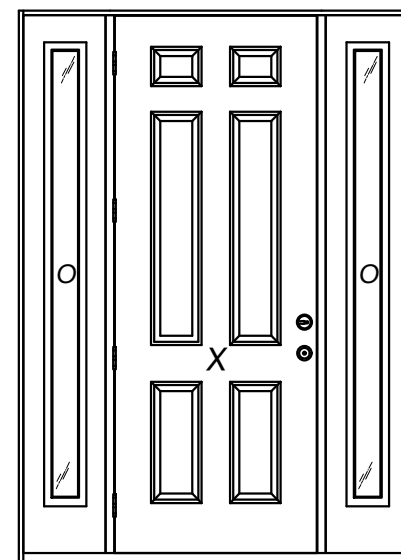




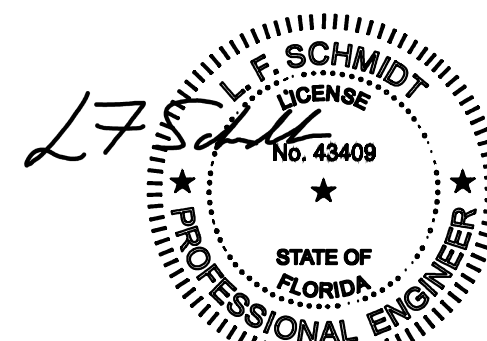
1. This product has been evaluated and is in compliance with the 8th Edition (2023) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be 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.

Technical drawings of various 4565 series extrusion profiles, arranged in a grid. Each drawing shows a side profile of the extrusion with its internal structure. The profiles are labeled as follows:

- ZAIL4565
- ZAI4565FN
- ZAILAA4565
- ZAIAA4565FN
- ZAI4565RDS
- ZACL4565
- ZAC4565FN
- ZACLAA4565
- ZACAA4565FN
- ZAC4565RDS
- ZOBL4565
- ZOB4565FN
- ZOB4565RDS



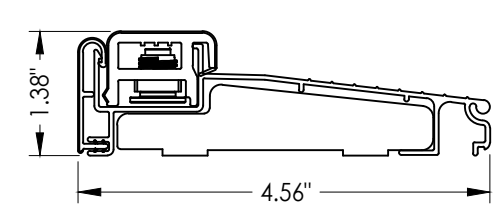
THERMA-TRU OPAQUE FIBERGLASS SINGLE DOOR w/ SIDELITE(S)



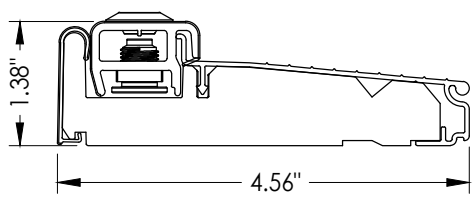
Digitally signed by Lyndon F
Schmidt
Date: 2023.07.12 11:50:55 -04'00'

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.

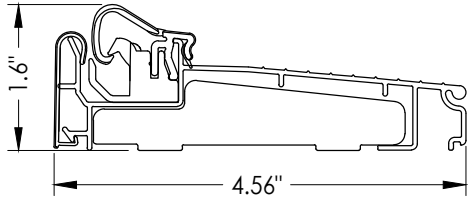
DATE: 5/26/16		Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409 BUILDING CONSULTANTS, INC. P.O. Box 230, Valrico, FL 33595 Phone No.: 813.659.9197 FBPE Registry No. 9813			
SCALE: N.T.S.					
DWG. BY: JK					
CHK. BY: LFS					
DRAWING NO.: FL-20698.19					
SHEET 1 OF 10		PRODUCT: ENDURA PART OR ASSEMBLY: TYPICAL ELEVATION & GENERAL NOTES			
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	LFS		
BY					



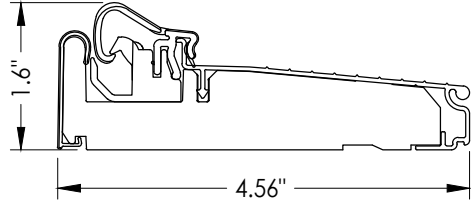
T1 INSWING ADJUSTABLE THRESHOLD
ZAIL4565



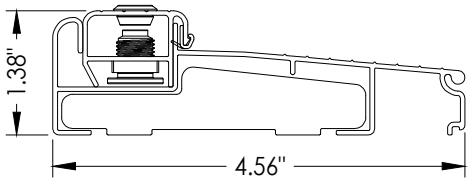
T2 INSWING ADJUSTABLE THRESHOLD
ZAI4565FN



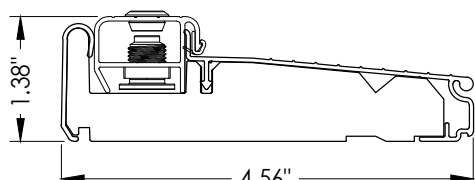
T6 INSWING ARTICULATING THRESHOLD
ZACL4565



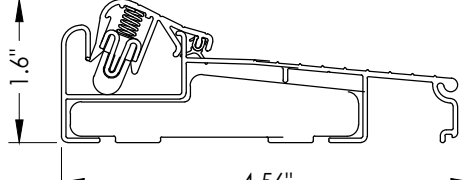
T7 INSWING ARTICULATING THRESHOLD
ZAC4565FN



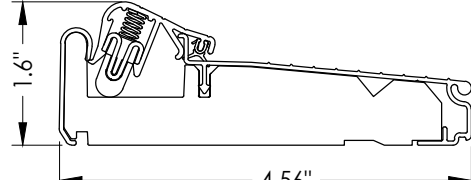
T3 INSWING ADJUSTABLE THRESHOLD
ZAILAA4565



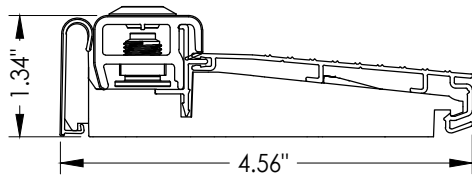
T4 INSWING ADJUSTABLE THRESHOLD
ZIAAA4565FN



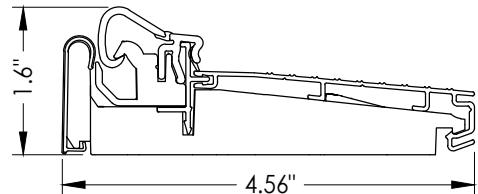
T8 INSWING ARTICULATING THRESHOLD
ZACLAA4565



T9 INSWING ARTICULATING THRESHOLD
ZACAA4565FN



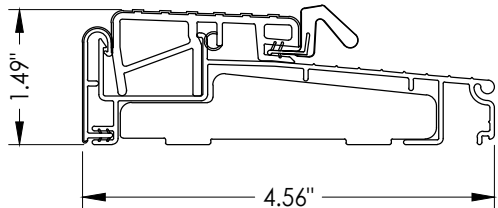
T5 INSWING ADJUSTABLE THRESHOLD
ZAI4565RDS



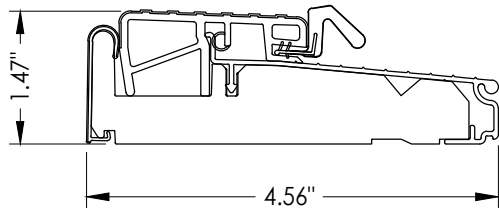
T10 INSWING ARTICULATING THRESHOLD
ZAC4565RDS

INSWING ADJUSTABLE THRESHOLD				
DOOR PANEL	CONFIGURATION	MAXIMUM FRAME SIZE	DESIGN PRESSURE RATING (PSF)	
			POSITIVE	NEGATIVE
THERMA-TRU OPAQUE FIBERGLASS	OX / XO	53.38" X 97.94"	+55.0	-60.0
	OXO	68.97" X 97.94"		

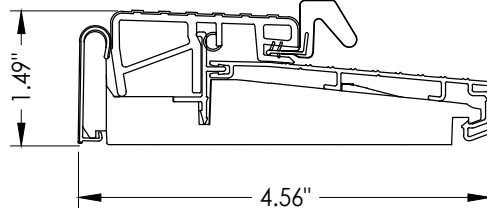
INSWING ARTICULATING THRESHOLD				
DOOR PANEL	CONFIGURATION	MAXIMUM FRAME SIZE	DESIGN PRESSURE RATING (PSF)	
			POSITIVE	NEGATIVE
THERMA-TRU OPAQUE FIBERGLASS	OX / XO	53.38" X 97.94"	+50.0	-50.0
	OXO	68.97" X 97.94"		



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 OPAQUE FIBERGLASS	OX / XO	53.38" X 97.13"	+45.0	-45.0
	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 OPAQUE 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

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FBPE Registry No. 9813

PRODUCT: ENDURA

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

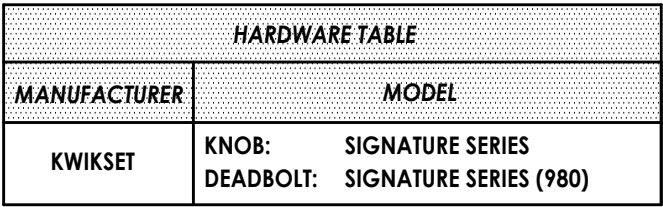
SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

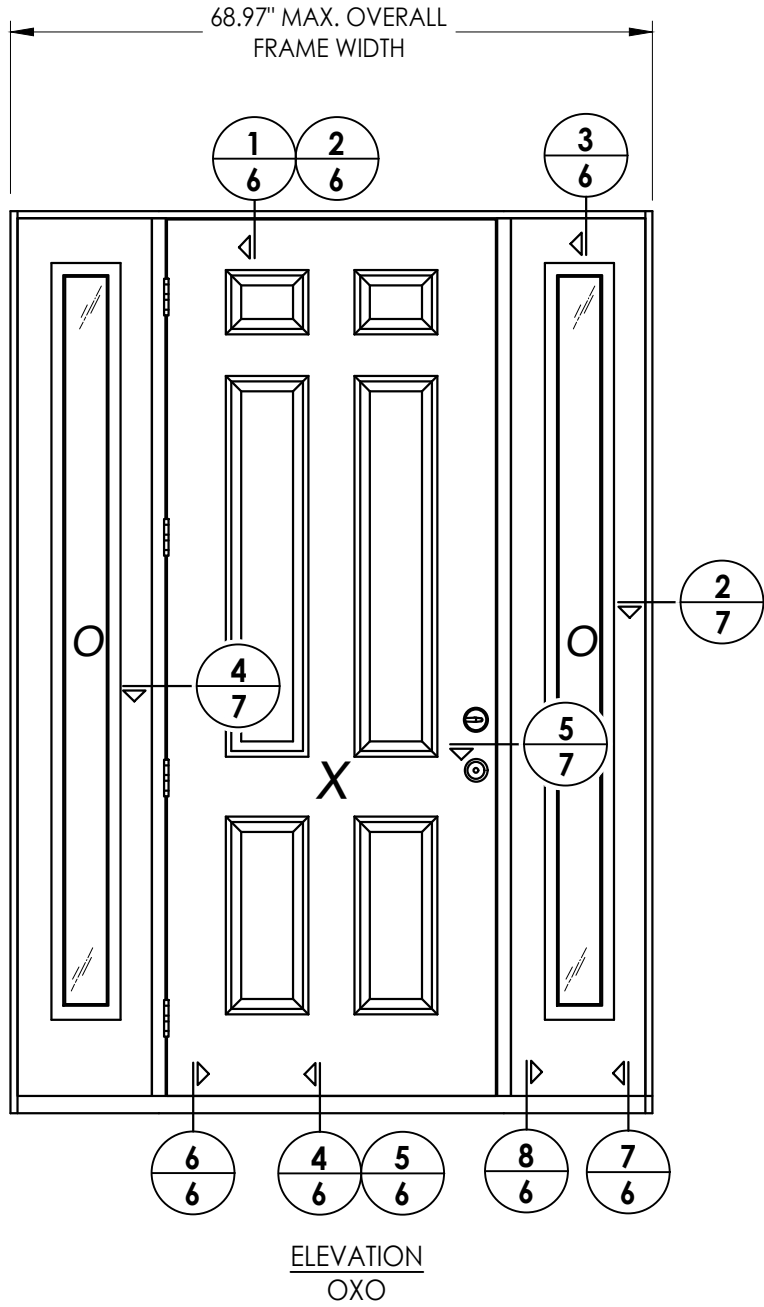
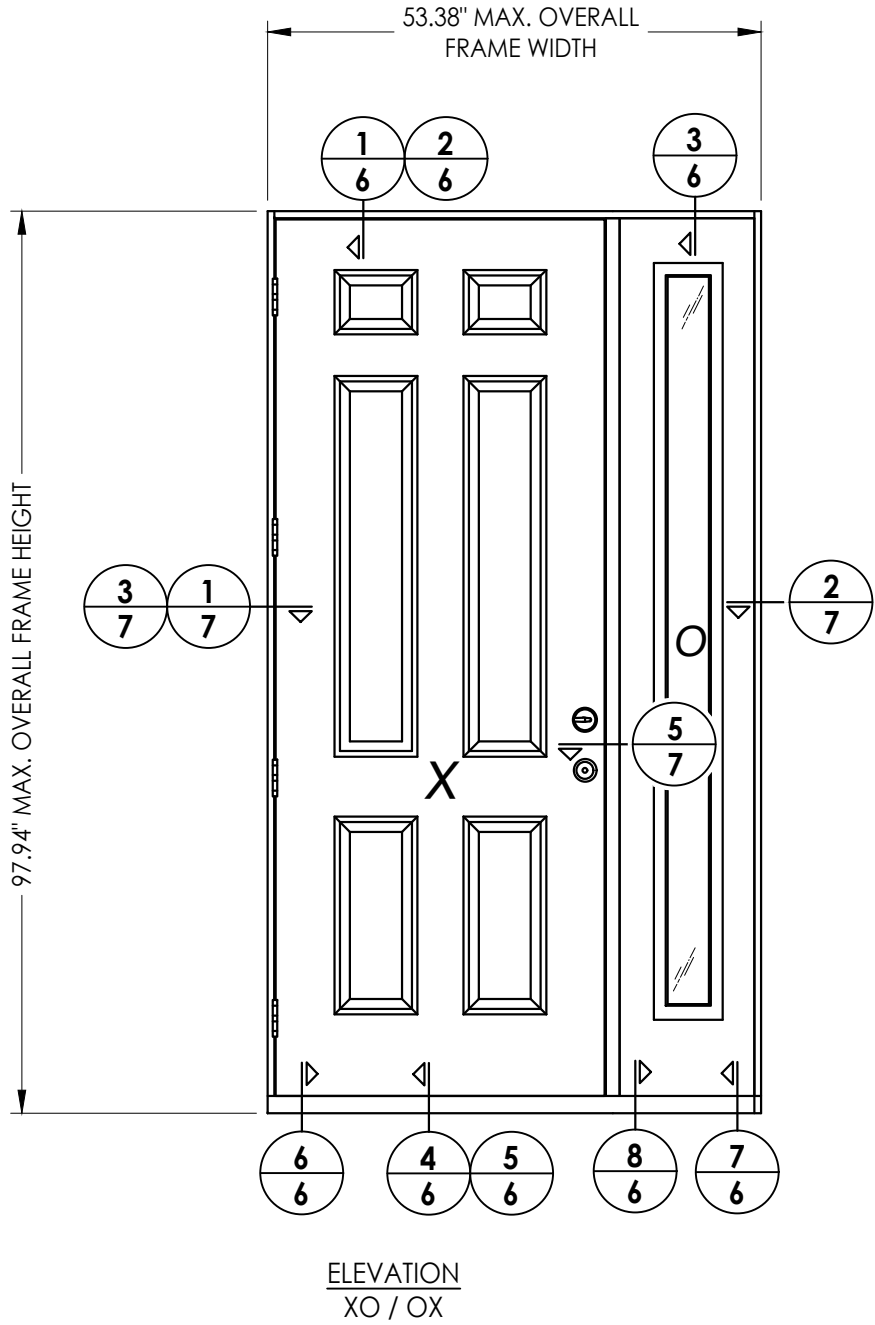
DRAWING NO.: FL-20698.19

SHEET 2 OF 10

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

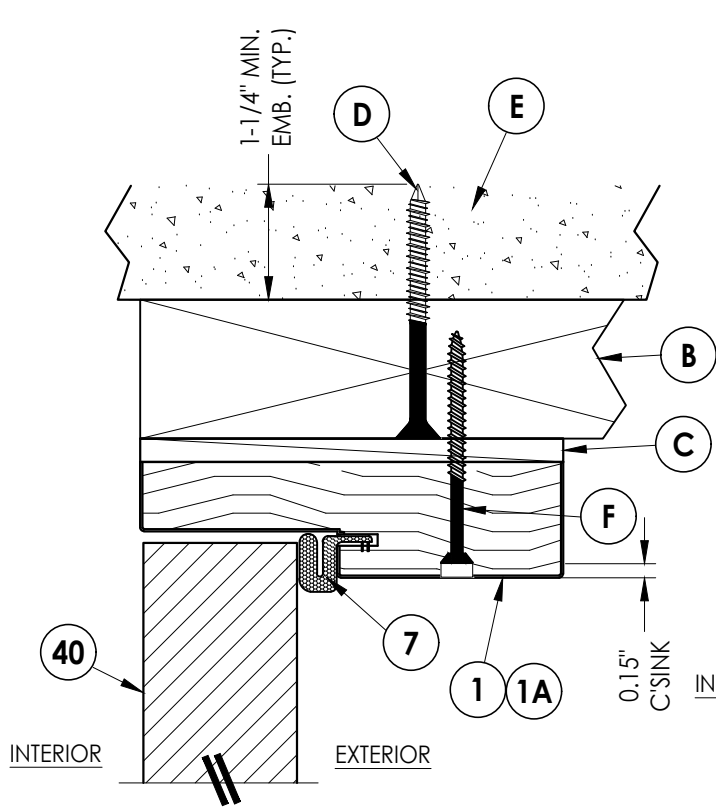


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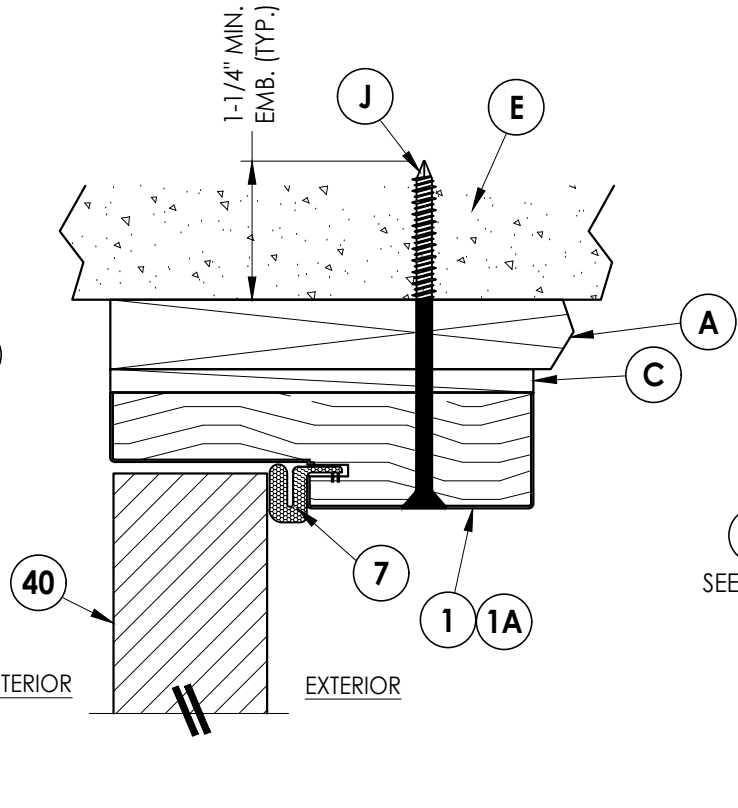
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

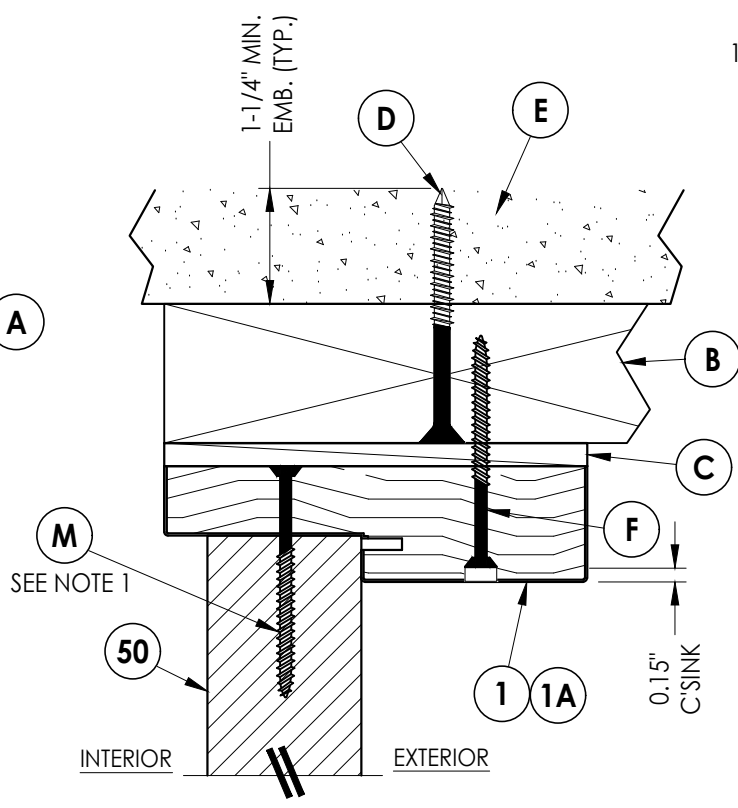
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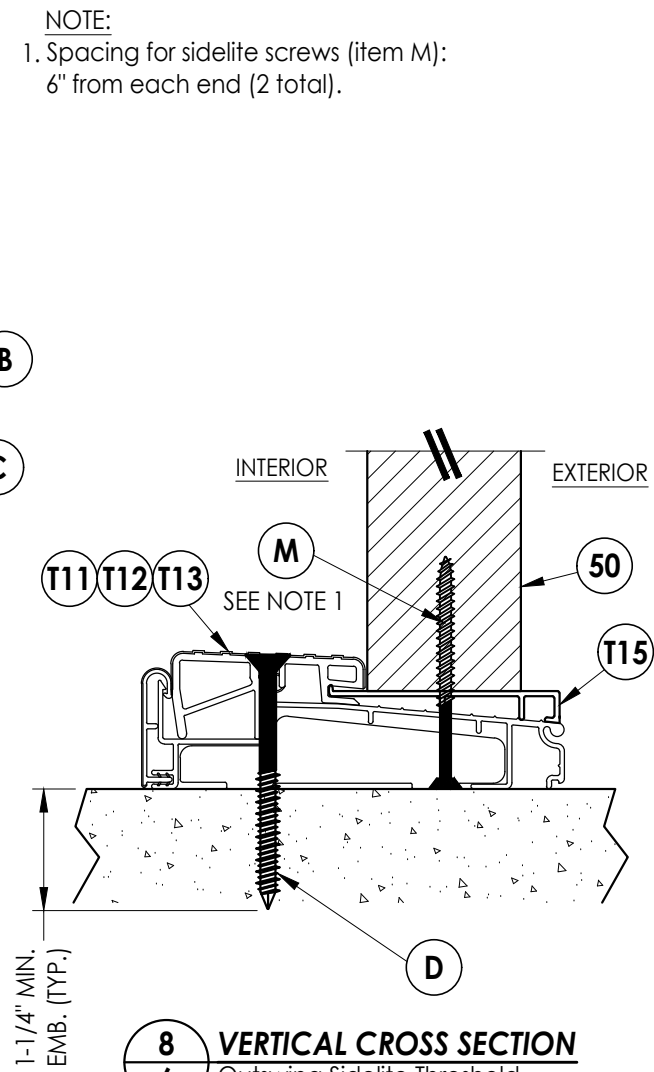
1
6 **VERTICAL CROSS SECTION**
Inswing shown (Outswing similar)
2X Buck Construction



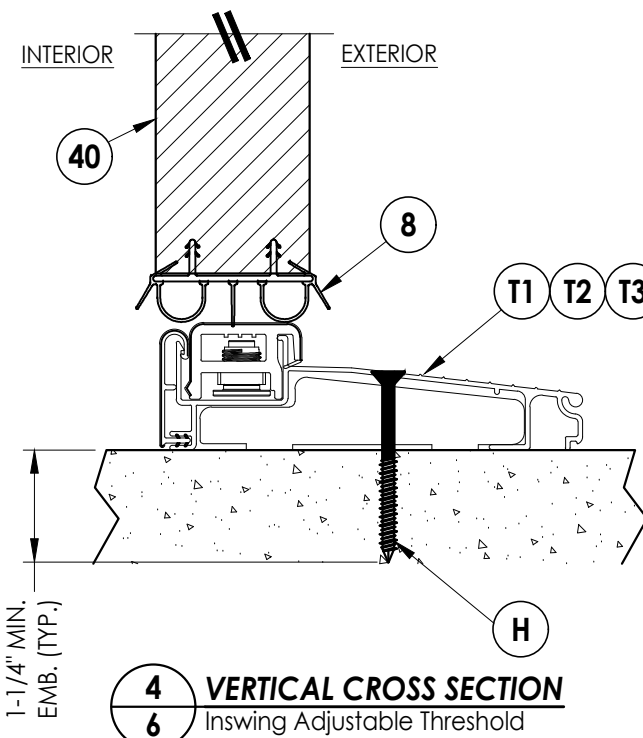
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6 **VERTICAL CROSS SECTION**
Inswing shown (Outswing similar)
1X Buck Construction



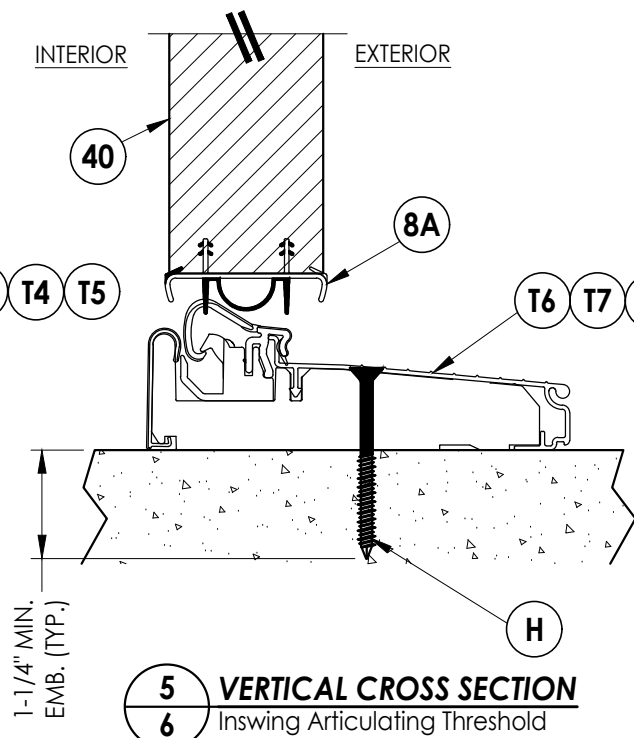
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6 **VERTICAL CROSS SECTION**
Inswing shown (Outswing similar)
2X Buck Construction



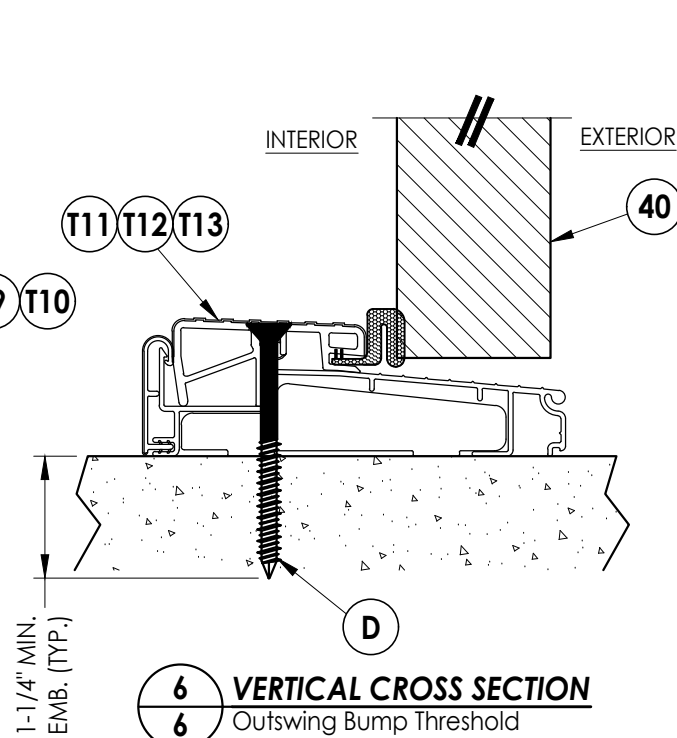
8
6 **VERTICAL CROSS SECTION**
Outswing Sidelite Threshold



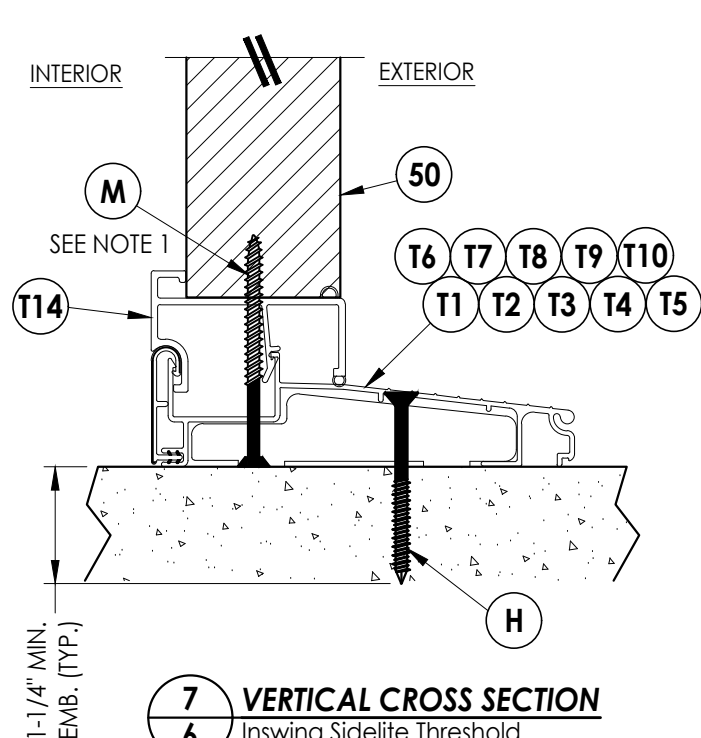
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6 **VERTICAL CROSS SECTION**
Inswing Adjustable Threshold



5
6 **VERTICAL CROSS SECTION**
Inswing Articulating Threshold



6
6 **VERTICAL CROSS SECTION**
Outswing Bump Threshold



7
6 **VERTICAL CROSS SECTION**
Inswing Sidelite Threshold

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

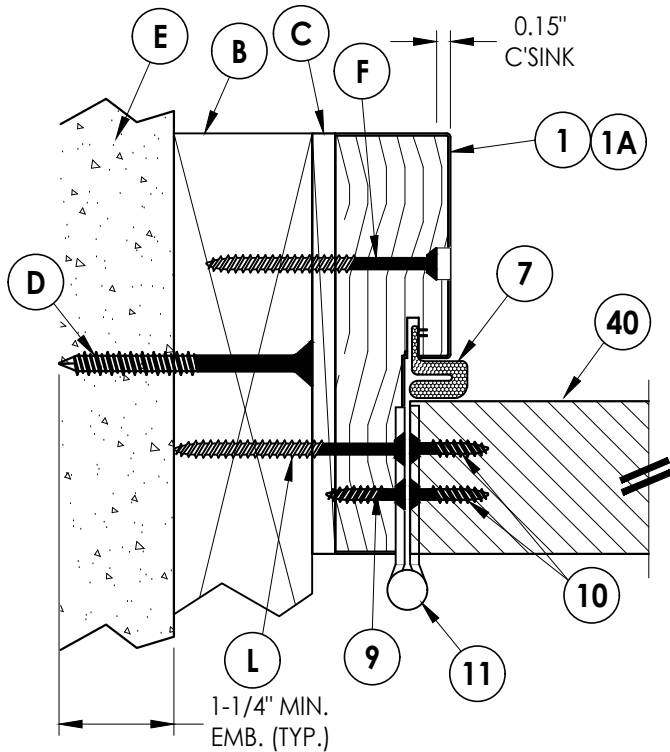
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

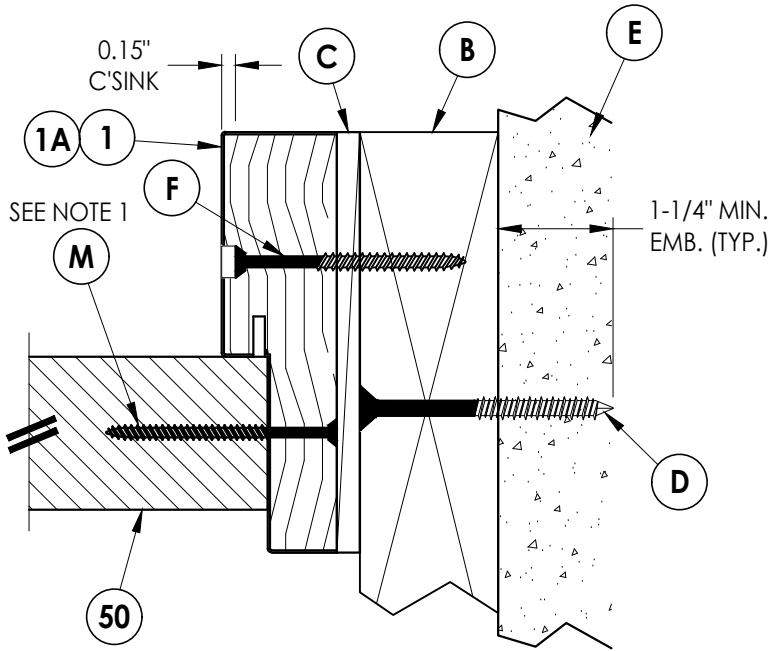
PRODUCT:		PART OR ASSEMBLY:	
ENDURA		VERTICAL CROSS SECTIONS	
NO.	DATE	REVISIONS	
3	7/06/23	UPDATE TO 8TH ED. (2023)	FBC LFS
2	8/06/20	UPDATE TO 7th ED. (2020)	FBC DAC
1	12/13/17	REVISE FRAME ANCHORING	LFS

DATE:	5/26/16
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-20698.19
SHEET	6 OF 10

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

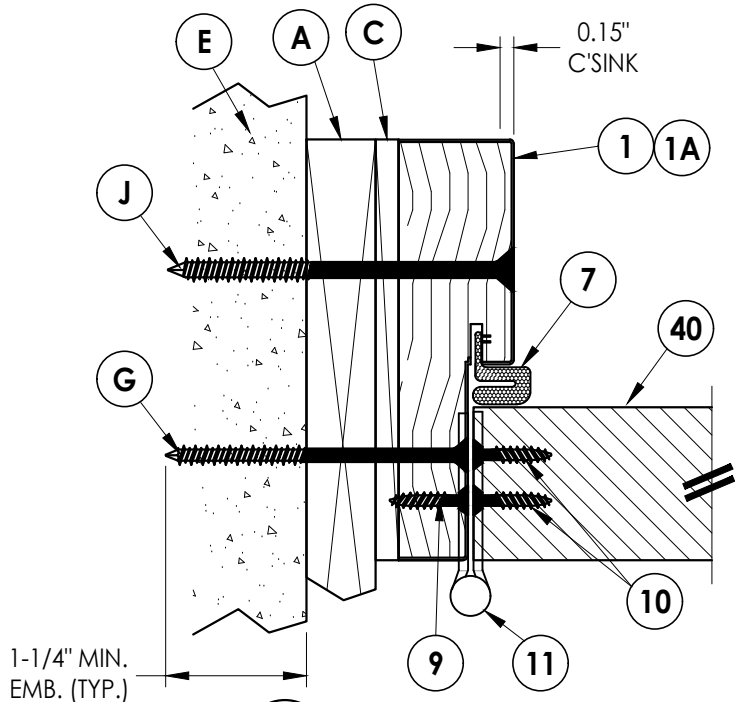


1 **HORIZONTAL CROSS SECTION**
7 Inswing shown (Outswing similar)
2X Buck Construction



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

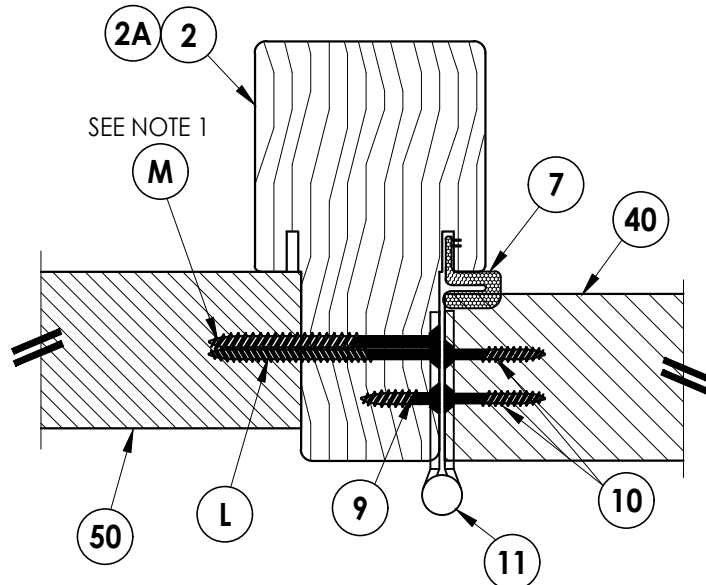
NOTE:
1. Spacing for sidelite screws (item M): 6.5", 32.5",
57.25" and 85" from head to sill (4 total).



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

EXTERIOR

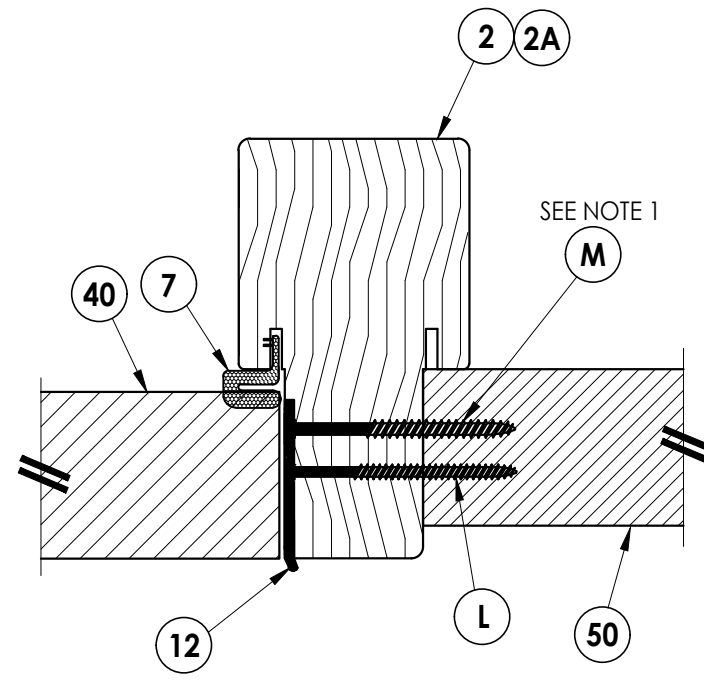
INTERIOR



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

EXTERIOR

INTERIOR



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

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:
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

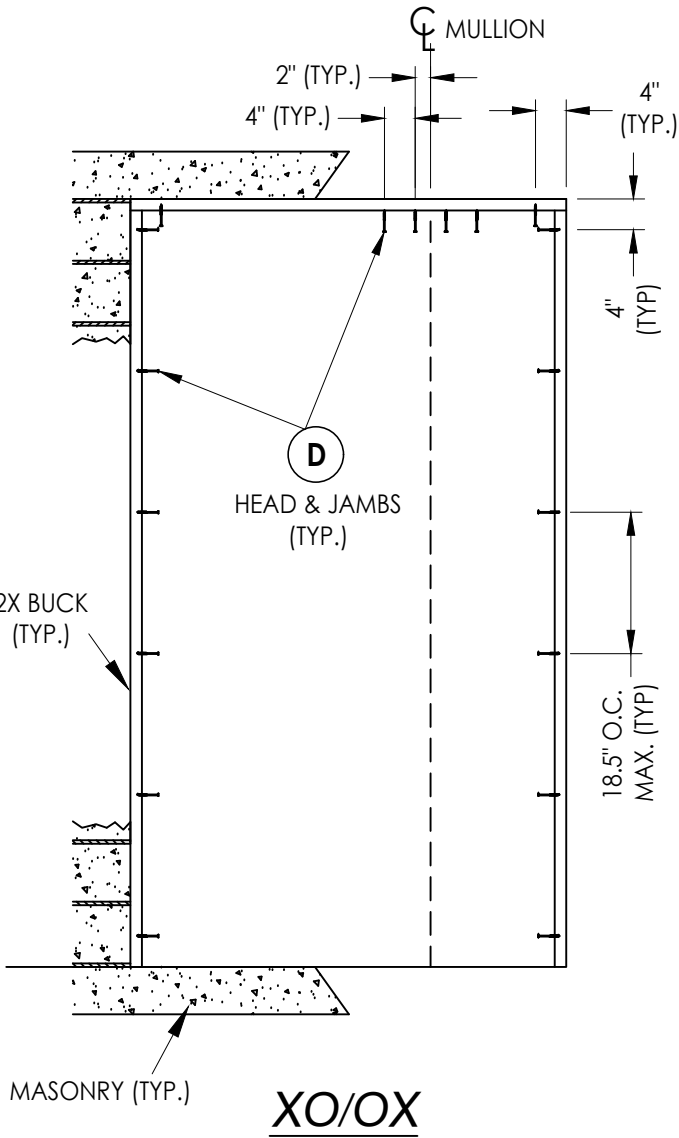
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DWG. BY: JK

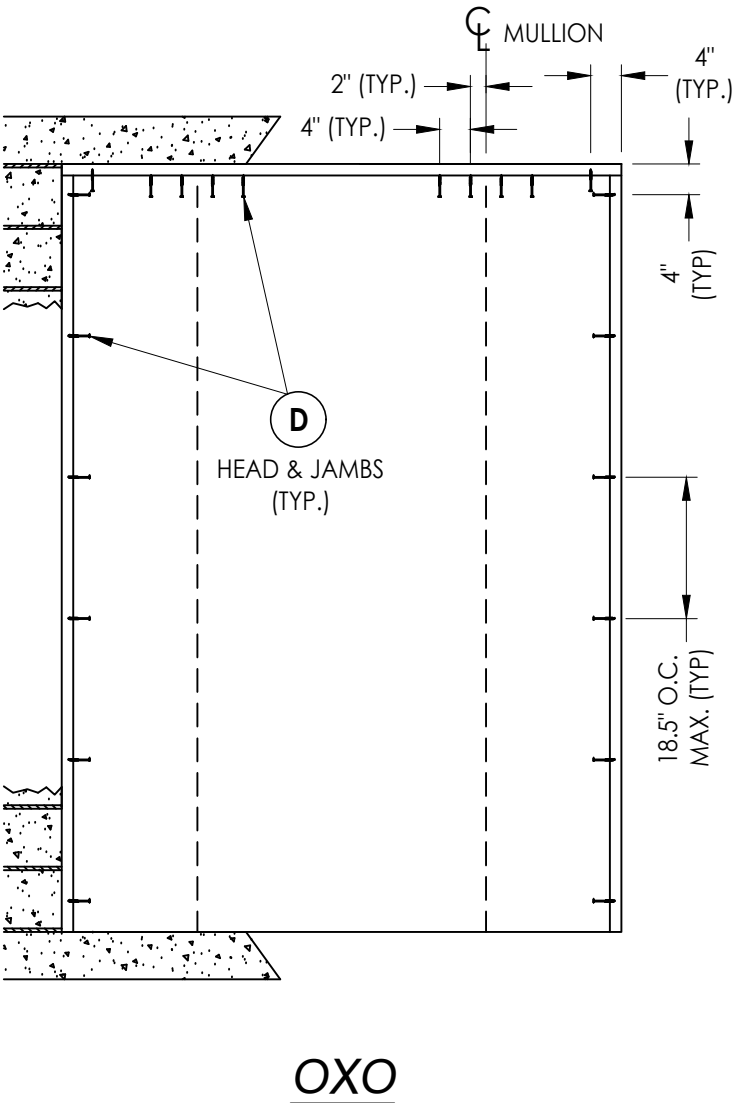
CHK. BY: LFS

DRAWING NO.: FL-20698.19

SHEET 7 OF 10



2X BUCK ANCHORING



OXO

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	
NO.	DATE			BY	

DATE:	5/26/16
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-20698.19
SHEET	8 of 10

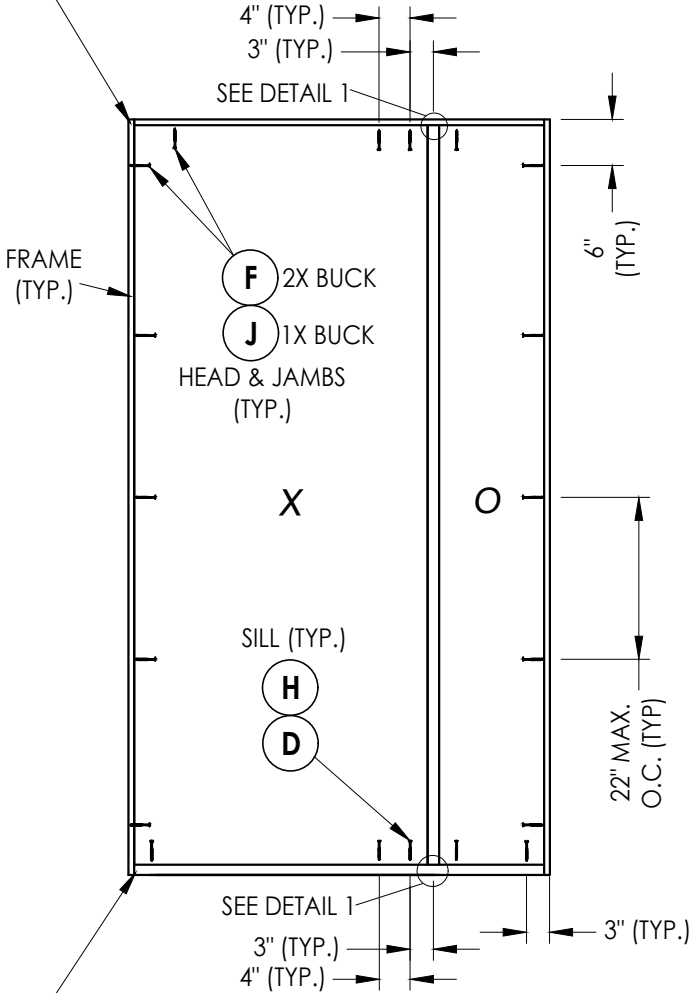
PRODUCT:	ENDURA
PART OR ASSEMBLY:	BUCK ANCHORING

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

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

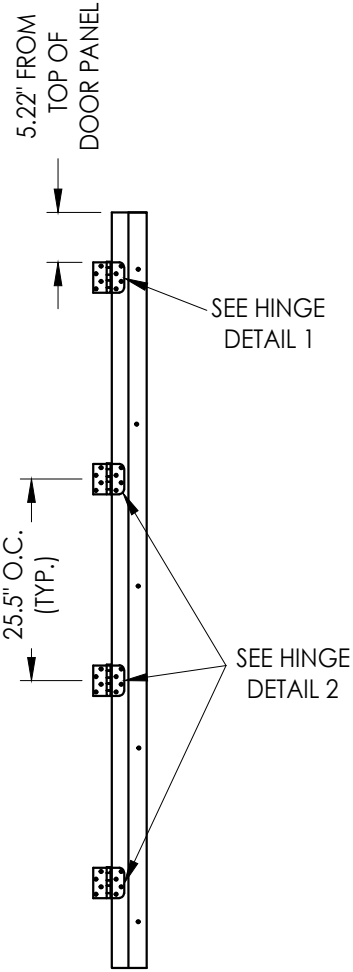
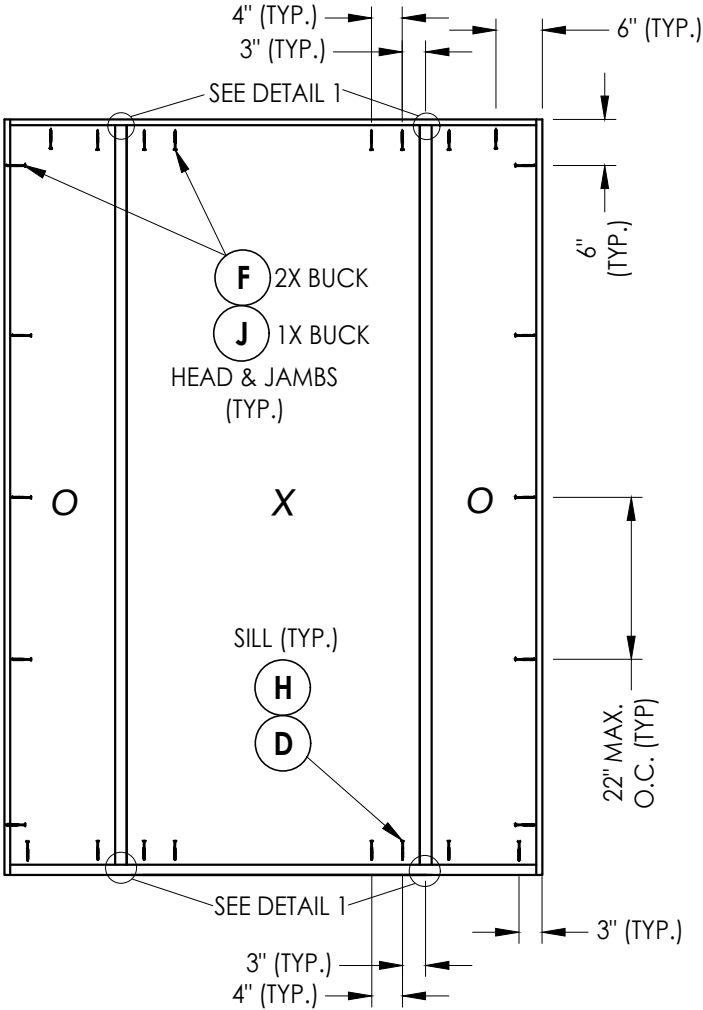
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The head is attached to the jamb w/ (3)
7/16" x 2" (16 GA) steel crown staples (TYP.)

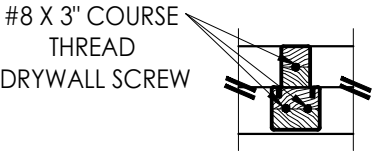


The threshold is attached to the jamb w/
(3) 7/16" x 2" (16 GA) steel crown staples
& (1) #8 x 1-5/8" wood screw (TYP.)

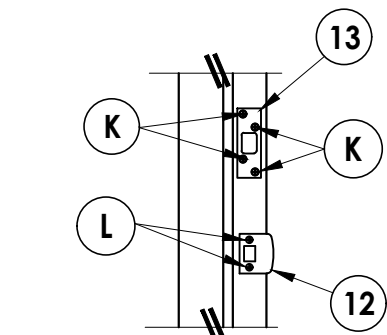
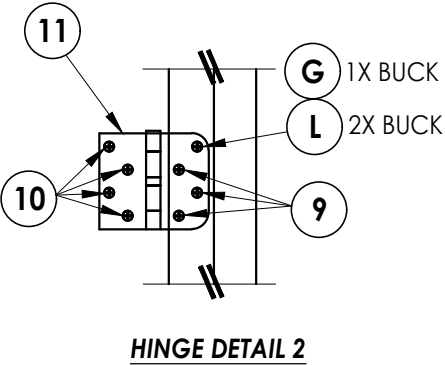
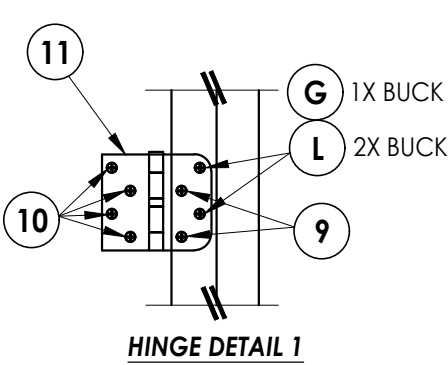
FRAME ANCHORING



HINGE JAMB



DETAIL 1
Integral mullion attachment



LATCH & DEADBOLT STRIKE PLATE DETAILS

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 BUILDEX TAPCON®	3/16"	1-1/4"	3"	1-1/2"
	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.

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:
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

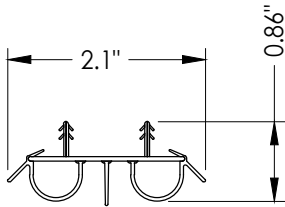
CHK. BY: LFS

DRAWING NO.: FL-20698.19

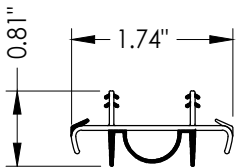
SHEET 9 OF 10

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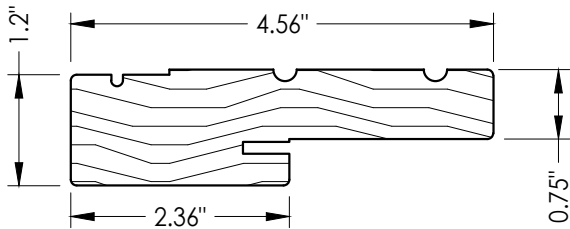
BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK (G >= 0.42)	WOOD
B	2X BUCK (G >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	#10 X 2-1/2" 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	-



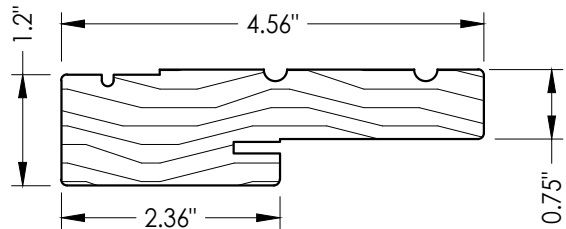
8 SWEEP



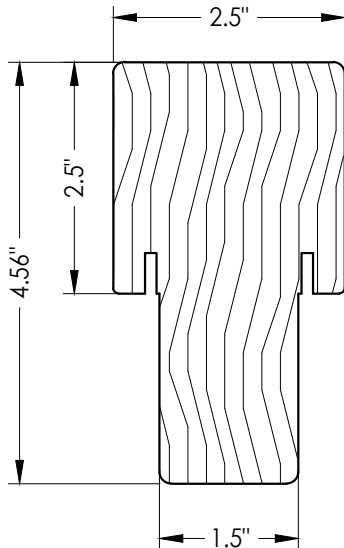
8A ARTICULATING SWEEP



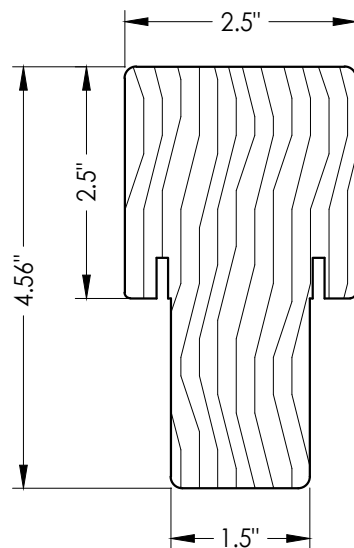
1 WOOD JAMB



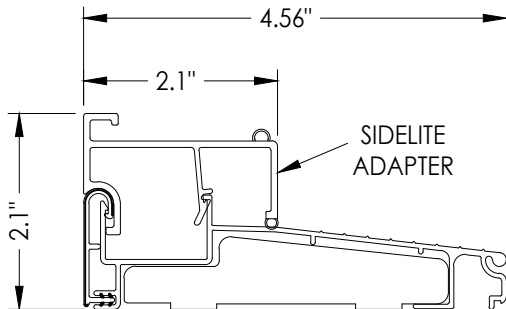
1A WOOD JAMB
FrameSaver (Endura)



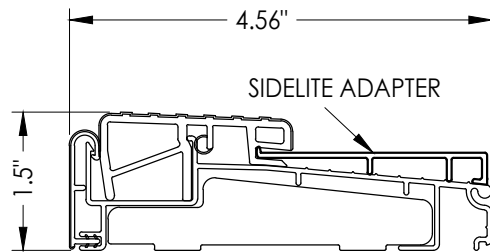
2 INTEGRAL MULLION



2A INTEGRAL MULLION
FrameSaver (Endura)



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



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

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PRODUCT: ENDURA		PART OR ASSEMBLY: BILL OF MATERIALS & COMPONENTS	
		LFS	BY
		DAC	
		LFS	
		NO. 1	DATE
		REVISIONS	
		DATE: 5/26/16	
		SCALE: N.T.S.	
		DWG. BY: JK	
		CHK. BY: LFS	
		DRAWING NO.: FL-20698.19	
		SHEET 10 OF 10	