

Z:\2023 FBC Drawings\Millwork 360\FL-21891 R5\FL-21891.6-8.dwg



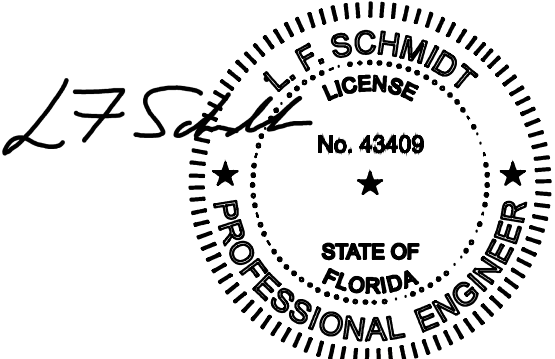
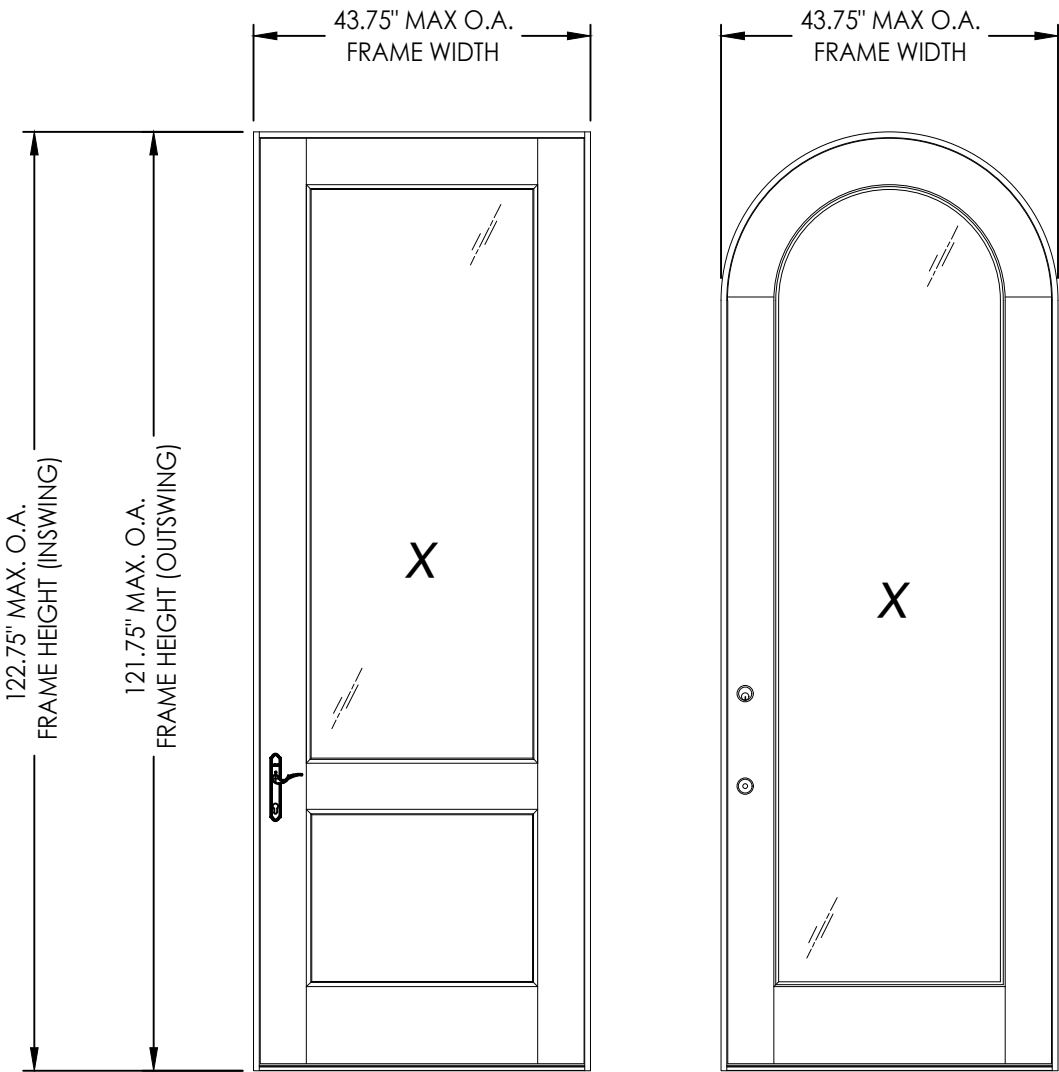
IMPACT 360 SERIES
WOOD GLAZED OR OPAQUE
SINGLE DOOR
INSWING/OUTSWING
"IMPACT"

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 Florida Building Code and does not require an impact resistant covering.
4. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
5. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.
6. Outswing configurations meet water infiltration requirements for "HVHZ".
7. Inswing configurations 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.

TABLE OF CONTENTS	
SHEET #	DESCRIPTION
1	Typical Elevations, Design Pressures & General Notes
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6	Elevations
7	Horizontal & Vertical Cross Sections (2X Buck)
8	Horizontal & Vertical Cross Sections (1X Buck)
9	Vertical Cross Sections (Thresholds)
10	Buck & Frame Anchoring
11	Hardware Details
12	Bill of Materials & Components

CONFIGURATION	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING (WATER INFILTRATION REQUIRED)		DESIGN PRESSURE (PSF) OUTSWING (WATER INFILTRATION NOT REQUIRED)	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
X (Arch Top)	+60.0	-70.0	+60.0	-60.0	+60.0	-60.0
X (Rectangular)	+60.0	-70.0	+60.0	-85.0	+75.0	-85.0



Digitally signed by Lyndon F Schmidt
Date: 2023.08.08 15:25:56 -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

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

PRODUCT: MILLWORK 360
WOOD DOOR

DATE: 03/27/17

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-21891.6

SHEET 1 OF 12

Part or Assembly:
TYPICAL ELEVATION, DESIGN
PRESSURES & GENERAL NOTES

REVISIONS

3 8/08/23 UPDATE TO 8TH ED. (2023) FBC LFS

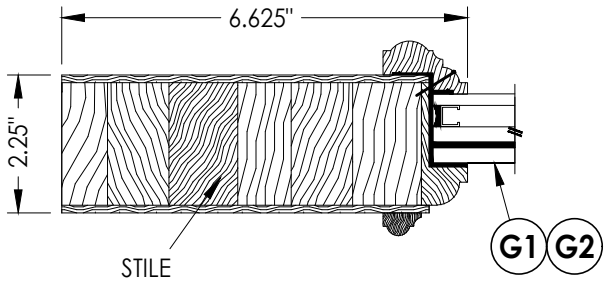
2 9/01/20 UPDATE TO 7TH ED. (2020) FBC LFS

1 10/03/17 UPDATE TO 6th ED. (2017) FBC JK

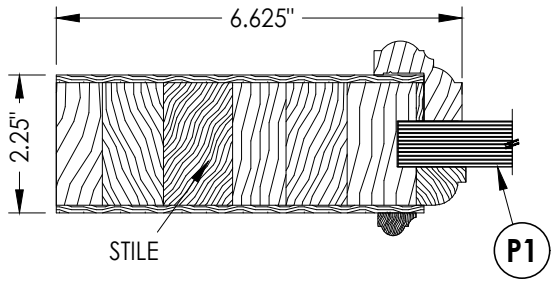
NO. DATE BY

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

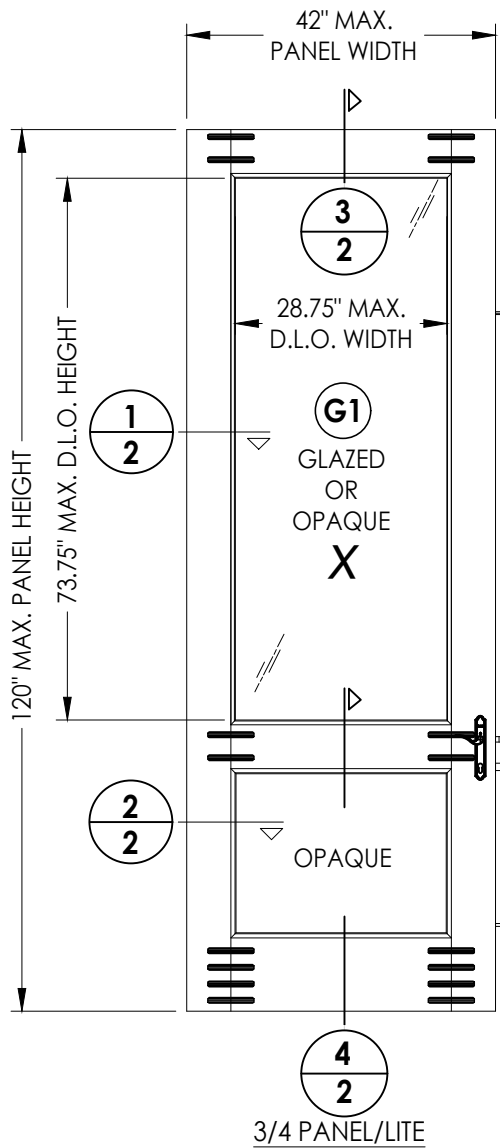
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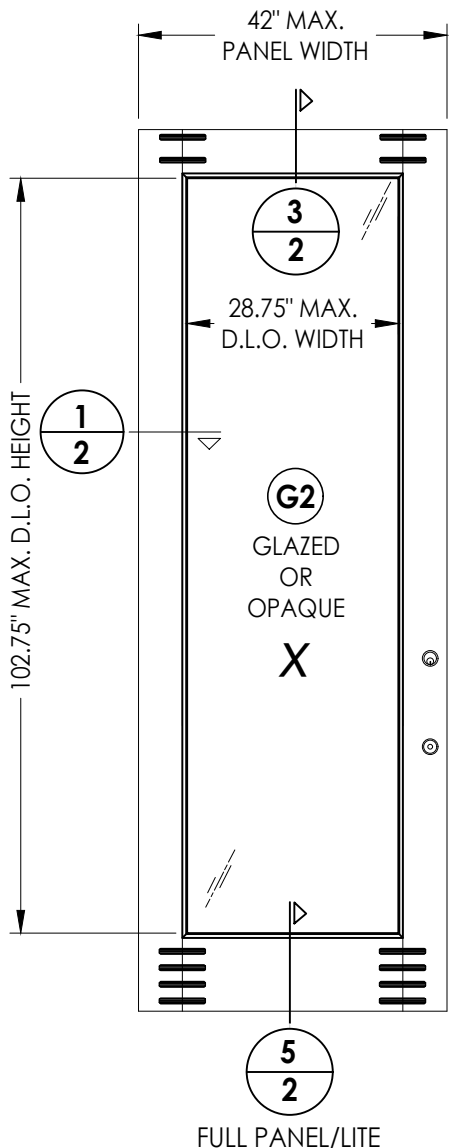
1
2 HORIZONTAL CROSS SECTION



2
2 HORIZONTAL CROSS SECTION



3/4 PANEL/LITE



FULL PANEL/LITE

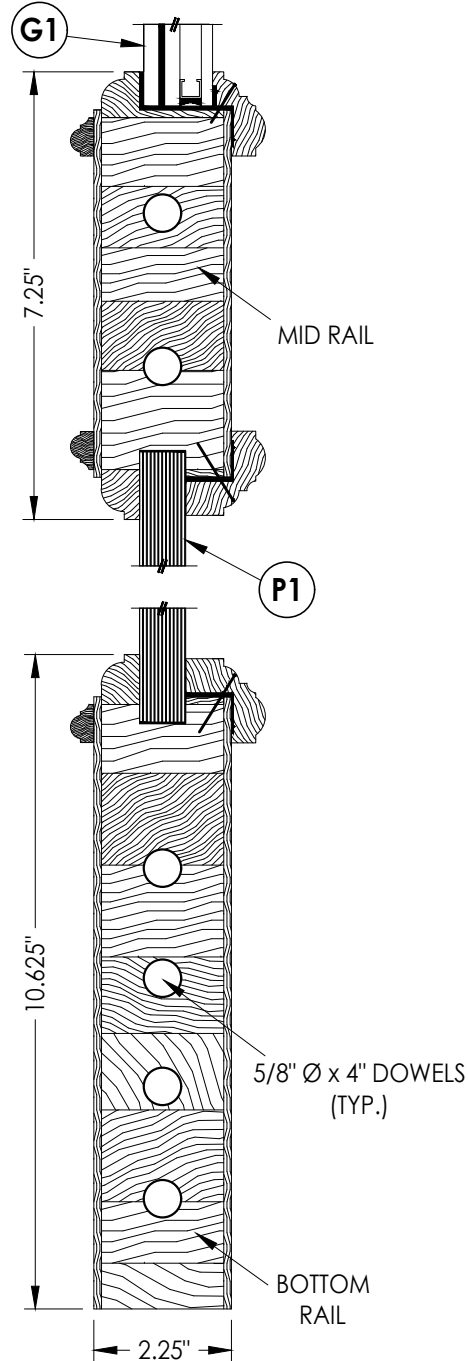
40 WOOD DOOR PANEL (3'-6")
Glazed or Opaque

WOOD DOOR COMPONENTS:

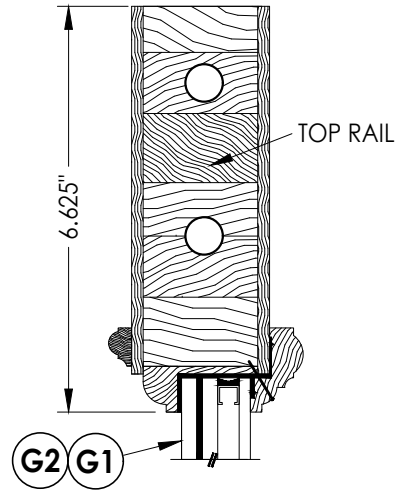
ENGINEERED STAVE CORE: SIPO (UTILE) (G = 0.53)

VENEER/EDGES: CYPRESS (G = 0.42)

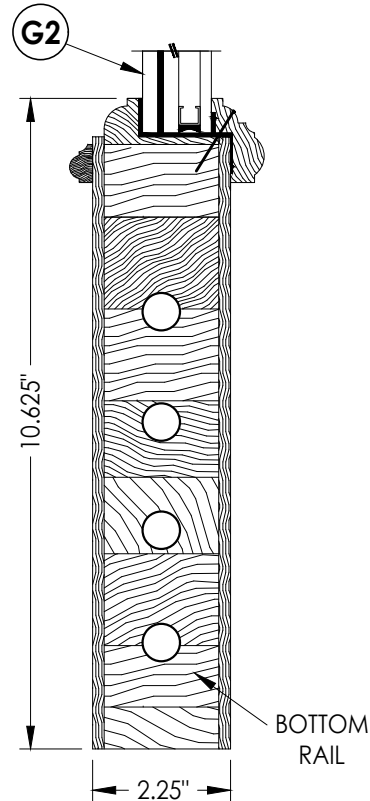
NOTE: VENEER/EDGE MAY INCLUDE OAK, CHERRY, WALNUT OR
OTHER OPTIONAL HARDWOOD SPECIES w/ G >= 0.42.



4
2 VERTICAL CROSS SECTION



3
2 VERTICAL CROSS SECTION



5
2 VERTICAL CROSS SECTION

Documents Prepared By:
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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:
MILLWORK 360
WOOD DOOR

PART OR ASSEMBLY:
DOOR PANEL
DETAILS

NO.	DATE	REVISIONS
3	8/08/23	UPDATE TO 8TH ED. (2023) FBC LFS
2	9/01/20	UPDATE TO 7TH ED. (2020) FBC LFS
1	10/03/17	UPDATE TO 6TH ED. (2017) FBC JK

DATE: 3/27/17

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-21891.6

SHEET 2 OF 12

Technical drawing of a Stile (P1). The drawing shows a cross-section of a door component. The overall width is 6.625" and the height is 2.25". The component is labeled "STILE" and "P1". The drawing includes a detail view of the end grain, showing a wood grain texture.

Diagram illustrating the dimensions and components of a double-hung window:

- 36" MAX. PANEL WIDTH**: Dimension across the top of the window frame.
- 120" MAX. PANEL HEIGHT**: Dimension along the left side of the window frame.
- 73.75" MAX. D.L.O. HEIGHT**: Dimension for the maximum depth of louver opening height.
- 22.75" MAX. D.L.O. WIDTH**: Dimension for the maximum depth of louver opening width.
- Callout 1/3**: Points to the upper sash.
- Callout 2/3**: Points to the lower sash.
- Callout 3/3**: Points to the bottom rail of the lower sash.
- Callout 4/3**: Points to the bottom rail of the lower sash.
- G3**: Label for the upper sash, indicating it is **GLAZED OR OPAQUE**.
- X**: Label for the lower sash, indicating it is **OPAQUE**.
- 3/4 PANEL/LITE**: Label for the bottom rail of the lower sash.

Diagram illustrating the dimensions and labels for a full panel/lite:

- 36" MAX. PANEL WIDTH**: Dimension across the top of the panel.
- 102.75" MAX. D.L.O. HEIGHT**: Dimension along the left side of the panel.
- 22.75" MAX. D.L.O. WIDTH**: Dimension across the middle of the panel.
- Labels and Markings**:
 - 3/3**: Label in the top center circle.
 - 1/3**: Label in the middle left circle.
 - G3**: Label in the bottom center circle.
 - GLAZED OR OPAQUE**: Text below the G3 label.
 - X**: Large letter X below the text.
 - 5/3**: Label in the bottom center circle.

The drawing shows two vertical wooden rail assemblies, labeled G1 and P1, with their dimensions and components.

Assembly G1:

- Overall height: 7.25"
- Top component: A vertical post or pin, labeled G1.
- Mid Rail: A horizontal rail section with two circular holes.
- Bottom component: A vertical post or pin, labeled P1.

Assembly P1:

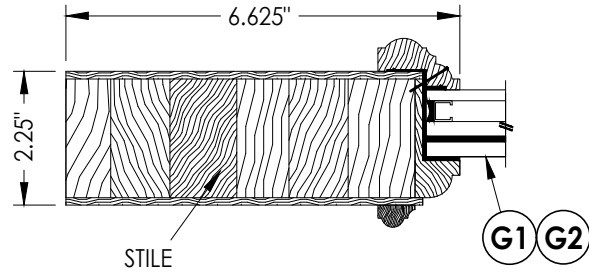
- Overall height: 10.625"
- Top component: A vertical post or pin, labeled P1.
- Mid Rail: A horizontal rail section with two circular holes.
- Bottom Rail: A horizontal rail section with two circular holes.
- 5/8" Ø x 4" DOWELS (TYP.): Two circular holes are shown in the bottom rail section, labeled with this text.
- Width: 2.25"

6.625"

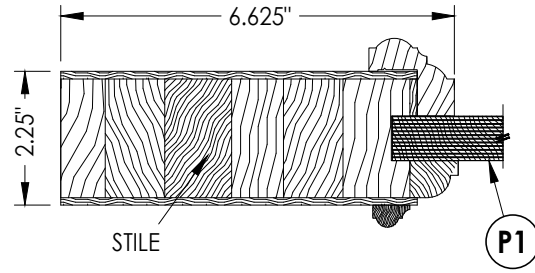
TOP RAIL

G3

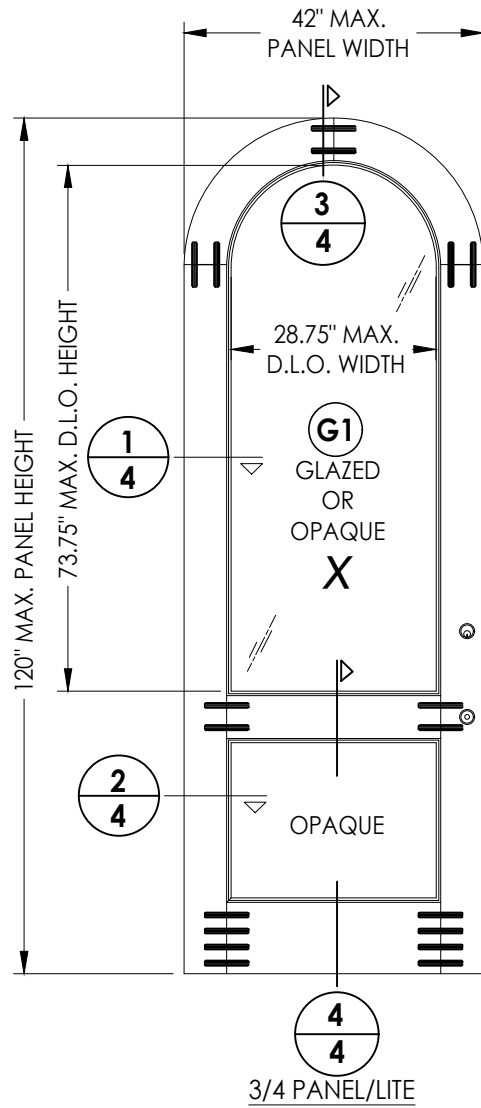
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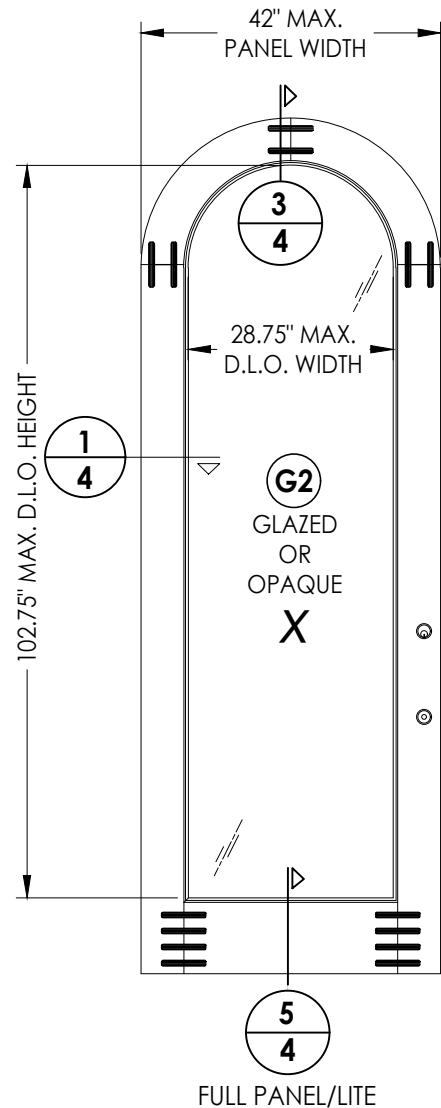
1 **HORIZONTAL CROSS SECTION**
4



2 **HORIZONTAL CROSS SECTION**



42 **WOOD DOOR PANEL (3'-6")**
Glazed or Opaque (Arch Top)



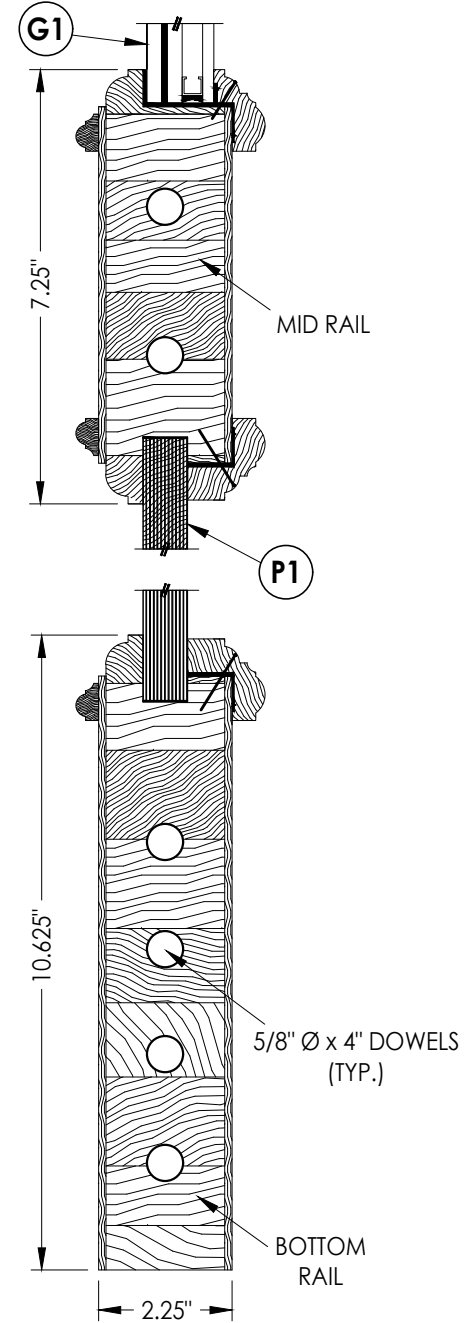
FULL PANEL/LITE

WOOD DOOR COMPONENTS:

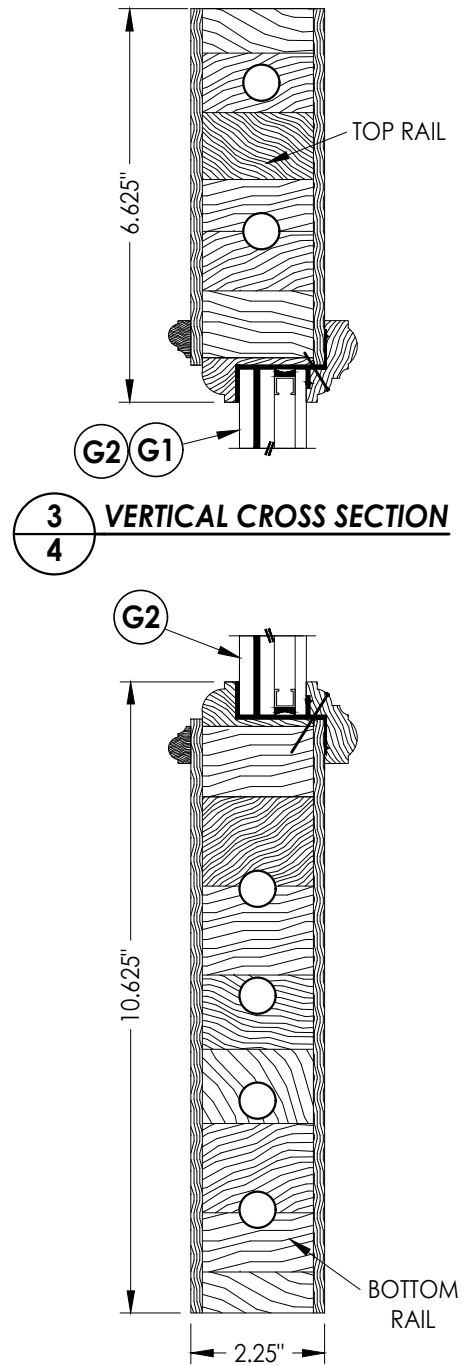
ENGINEERED STAVE CORE: SIPO (UTILE) ($G = 0.53$)

VENEER/EDGES: CYPRESS (G = 0.42)

NOTE: VENEER/EDGE MAY INCLUDE OAK, CHERRY, WALNUT OR OTHER OPTIONAL HARDWOOD SPECIES w/ $G \geq 0.42$.



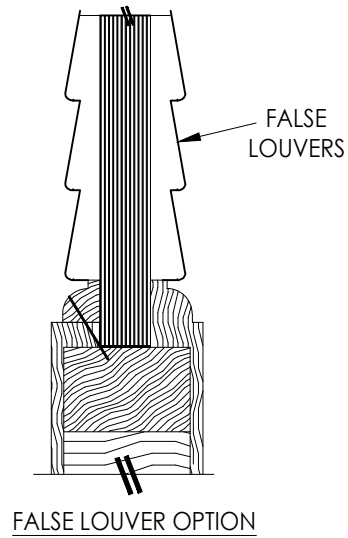
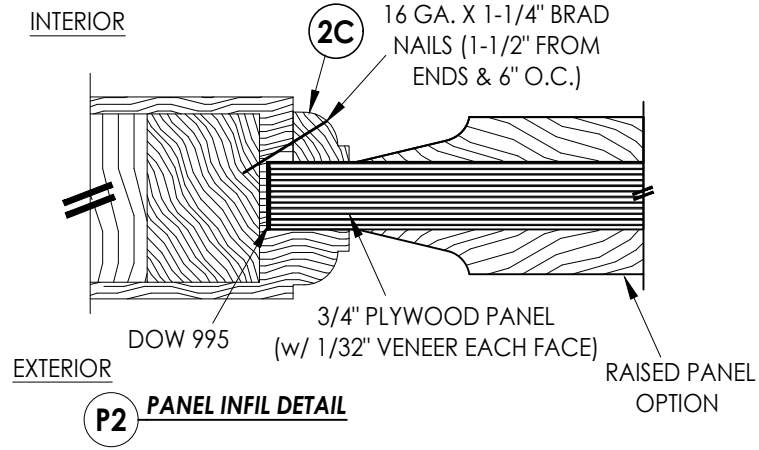
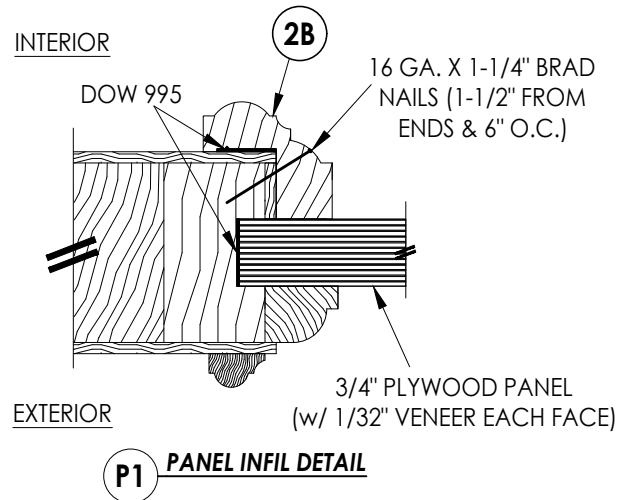
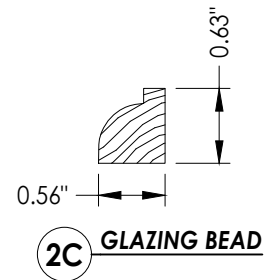
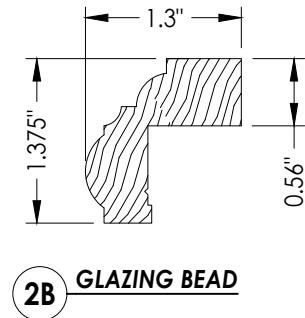
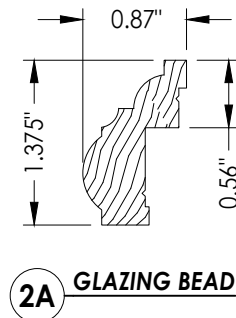
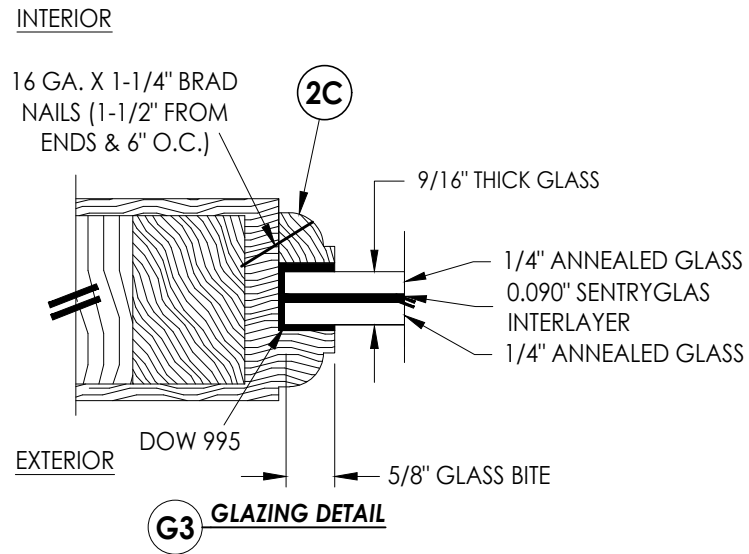
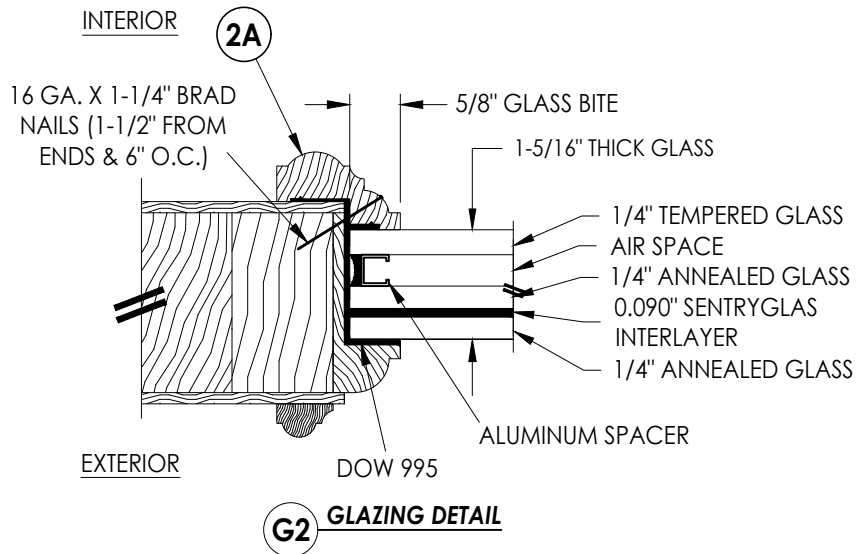
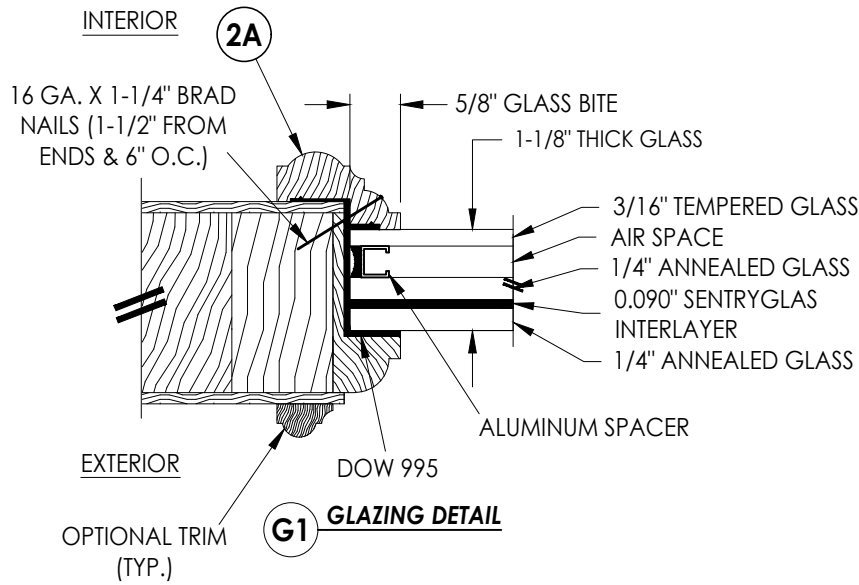
4 VERTICAL CROSS SECTION



5 VERTICAL CROSS SECTION
4

DATE: 3/27/17		PRODUCT: MILLWORK 360 WOOD DOOR PART OR ASSEMBLY: DOOR PANEL DETAILS REVISONS	
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: FL-21891.6			
SHEET 4 OF 12			

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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

PRODUCT:
MILLWORK 360
WOOD DOOR

PART OR ASSEMBLY:
GLAZING & PANEL INFIL
DETAILS

NO.	DATE	REVISIONS
3	8/08/23	UPDATE TO 8TH ED. (2023) FBC LFS
2	9/01/20	UPDATE TO 7TH ED. (2020) FBC LFS
1	10/03/17	UPDATE TO 6TH ED. (2017) FBC JK

DATE: 3/27/17

SCALE: N.T.S.

DWG. BY: JK

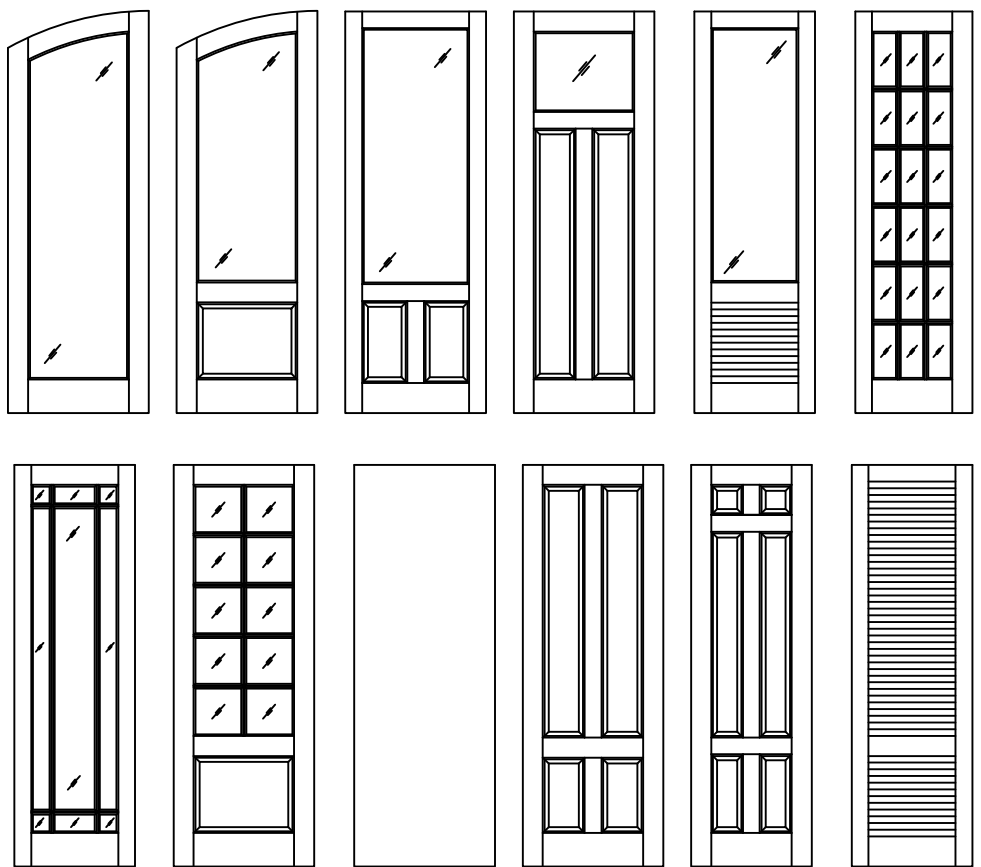
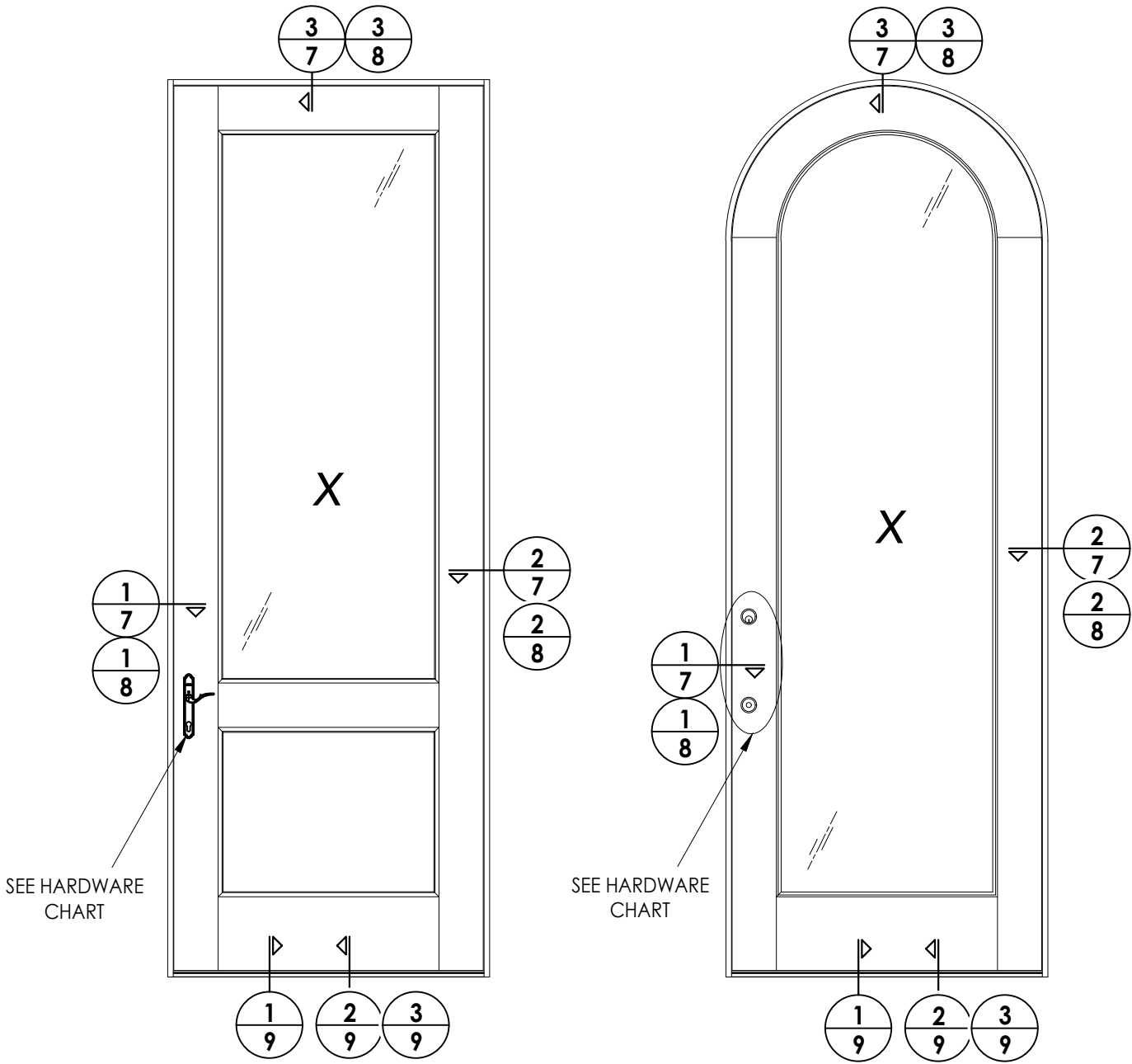
CHK. BY: LFS

DRAWING NO.:

FL-21891.6

SHEET 5 OF 12

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Millwork 360 Door Panel Options

Panel options shown are for illustration and are representative only.
Surface applied muntins are used for simulated divided lites shown.

HARDWARE TABLE		
MANUFACTURER	MODEL	MAX. DESIGN PRESSURE
HOPPE	MULTIPOINT HARDWARE: HLS 9000 SERIES MULTIPOINT LOCK ROUNDBOLT/SHOOTBOLT (5-PT.)	+75/-85 PSF
KWIKSET	KNOB: SIGNATURE SERIES DEADBOLT: SIGNATURE SERIES (980)	+60/-70 PSF

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

MILLWORK 360
WOOD DOOR

PART OR ASSEMBLY:
ELEVATIONS

3 8/08/23 UPDATE TO 8TH ED. (2023) FBC LFS

2 9/01/20 UPDATE TO 7TH ED. (2020) FBC LFS

1 10/03/17 UPDATE TO 6th ED. (2017) FBC JK

NO. DATE BY

DATE: 03/27/17

SCALE: N.T.S.

DWG. BY: JK

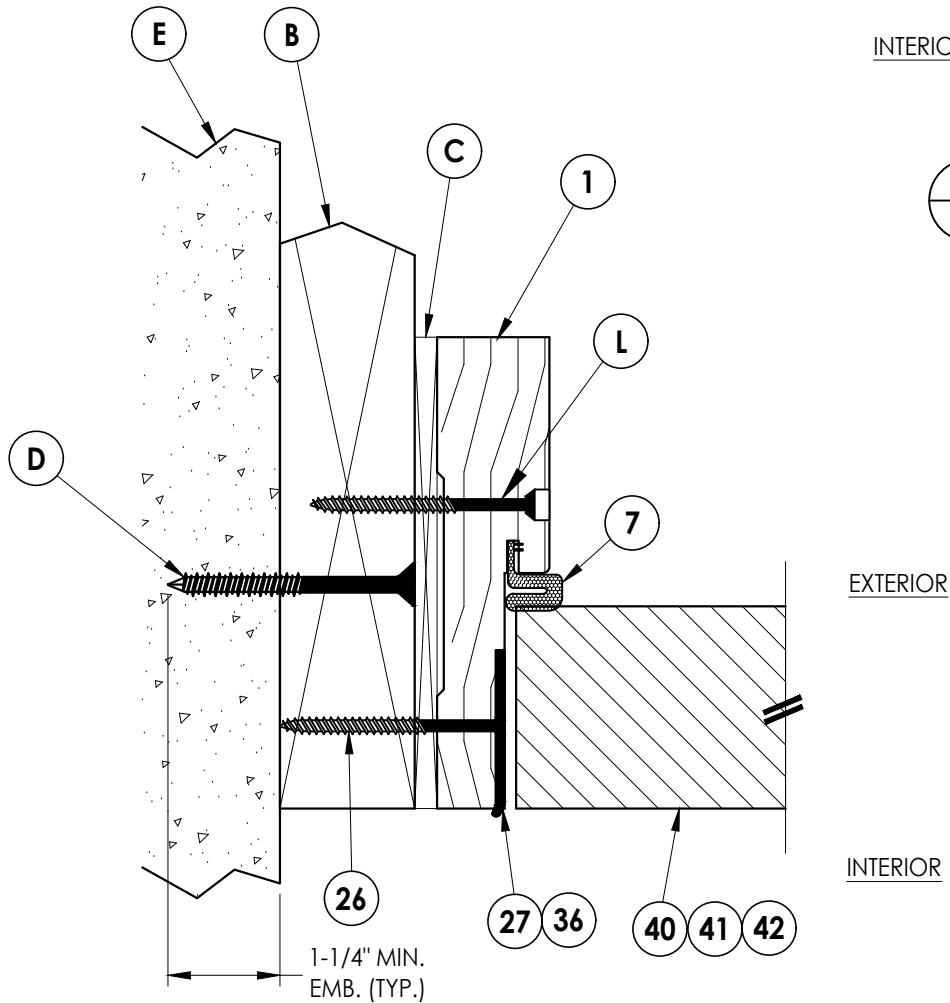
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DRAWING NO.: FL-21891.6

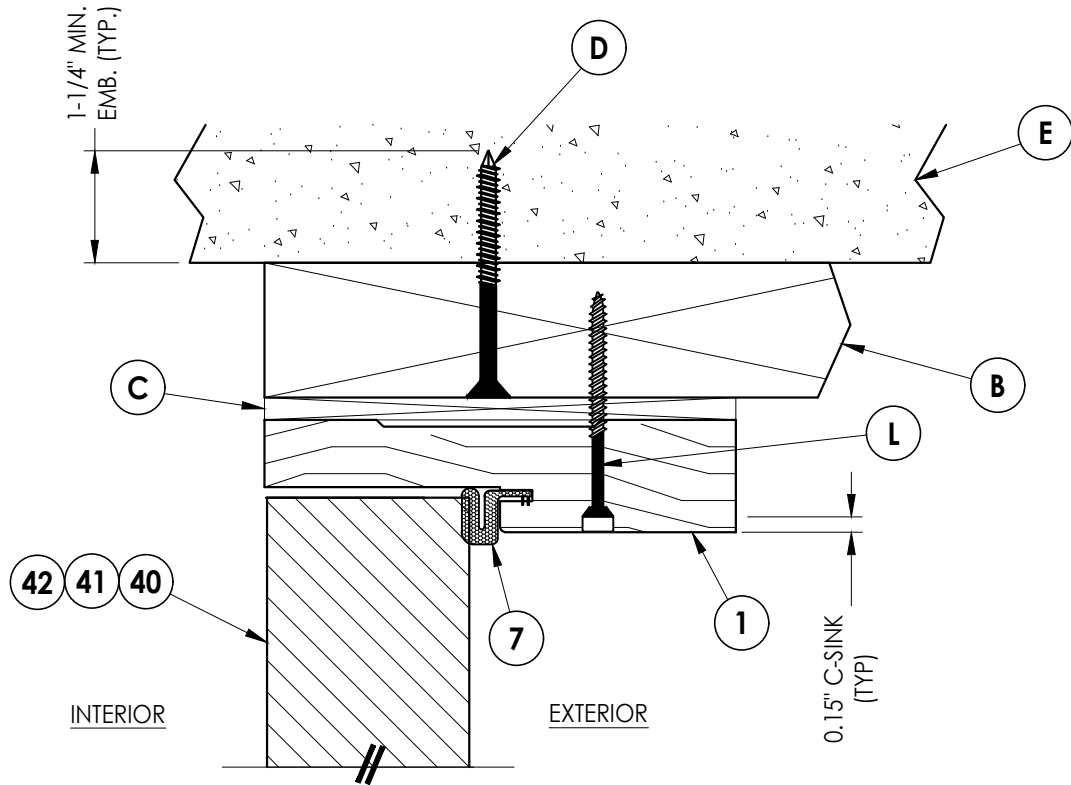
SHEET 6 OF 12

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FBPE Registry No. 98113

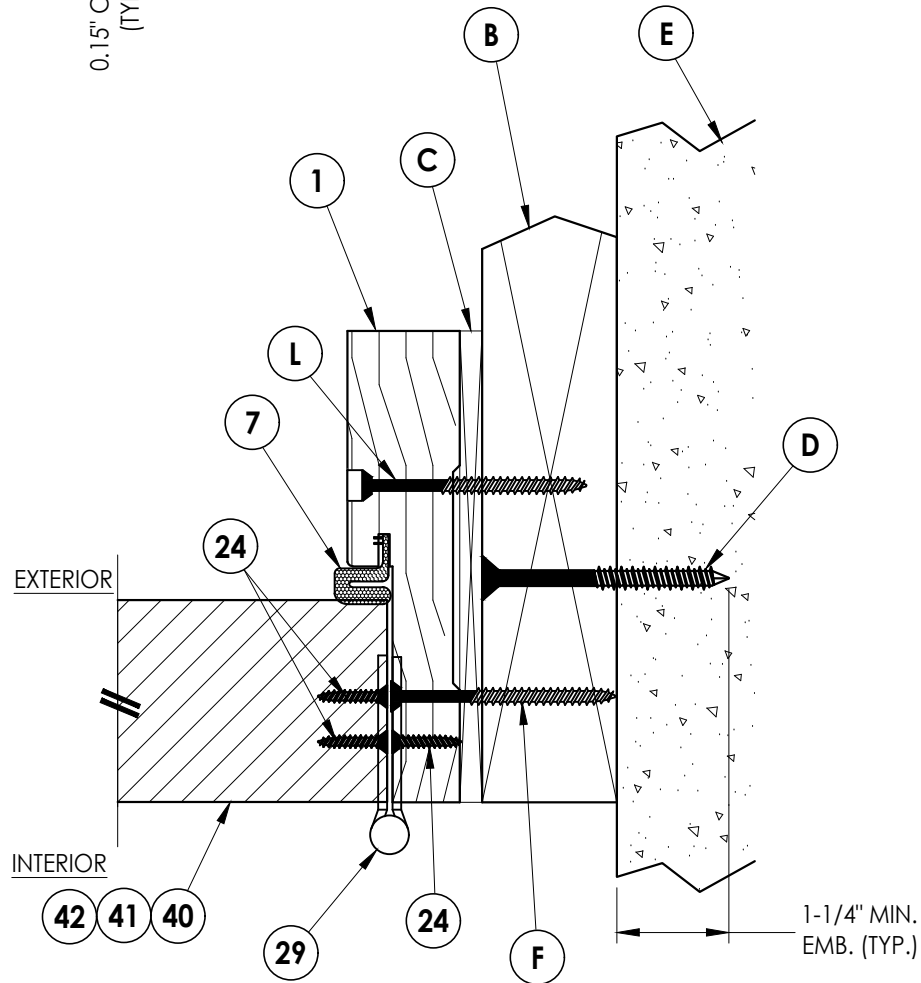
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1
7 **HORIZONTAL CROSS SECTION**
Shown w/ 2X Buck
Inswing shown (Outswing similar)



3
7 **VERTICAL CROSS SECTION**
Shown w/ 2X Buck
Inswing shown (Outswing similar)



2
7 **HORIZONTAL CROSS SECTION**
Shown w/ 2X Buck
Inswing shown (Outswing similar)

DATE: 03/27/17
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-21891.6
SHEET 7 OF 12

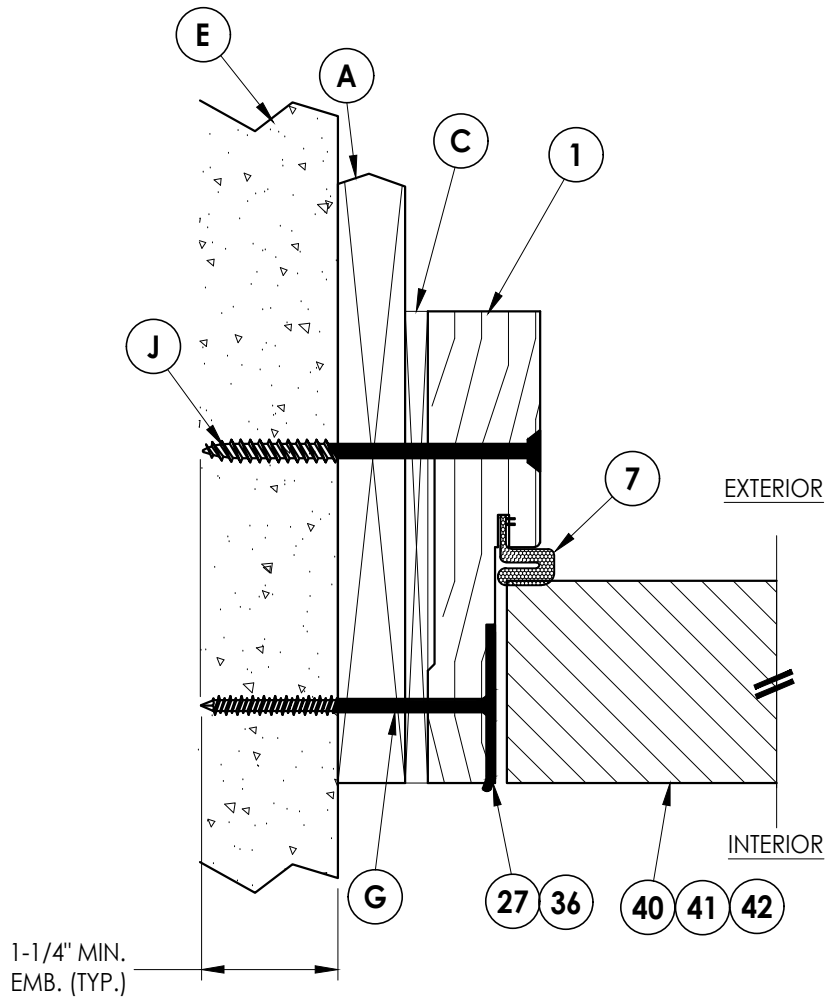
PRODUCT: MILLWORK 360 WOOD DOOR
PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS (2X BUCK)

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

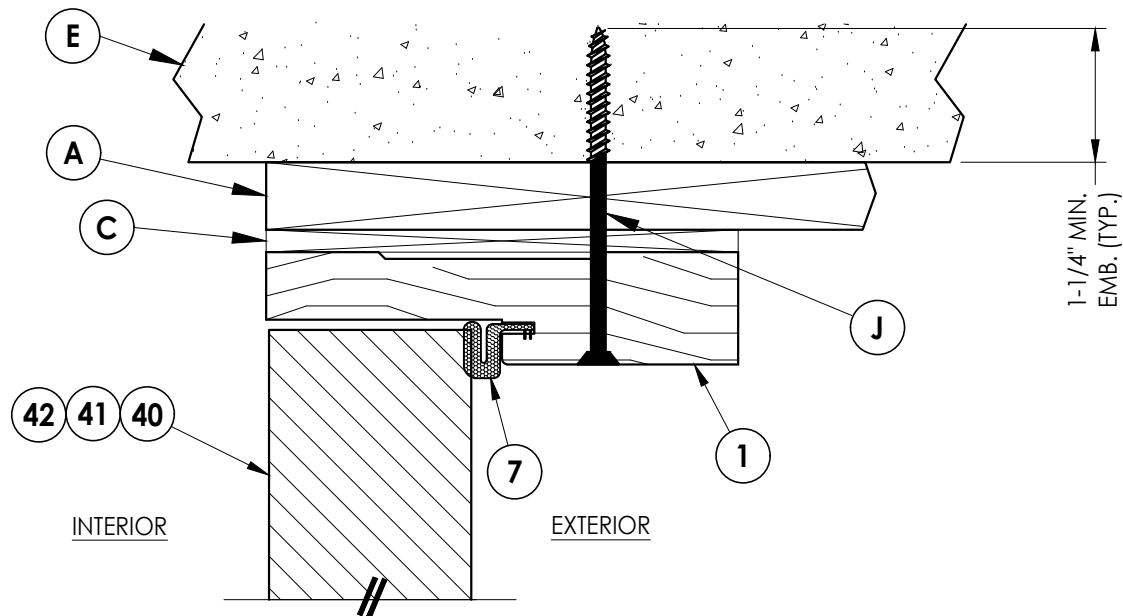
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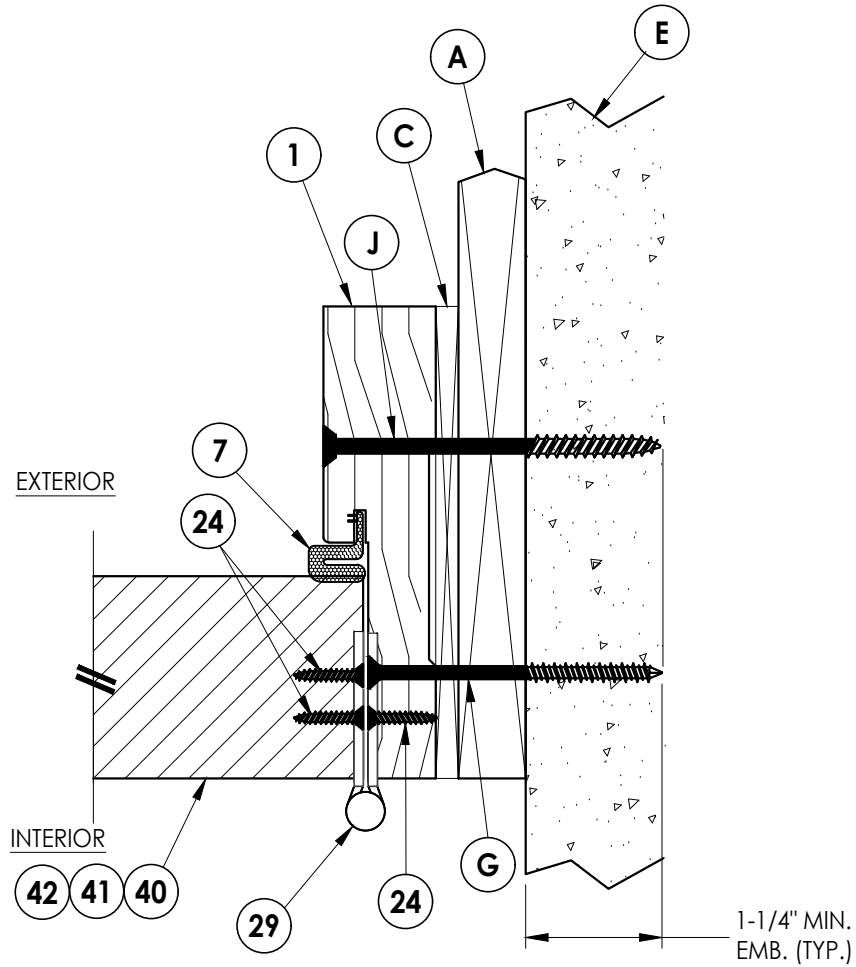
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1
8 **HORIZONTAL CROSS SECTION**
Shown w/ 1X sub-buck
Inswing shown (Outswing similar)



3
8 **VERTICAL CROSS SECTION**
Shown w/ 1X sub-buck
Inswing shown (Outswing similar)



2
8 **HORIZONTAL CROSS SECTION**
Shown w/ 1X sub-buck
Inswing shown (Outswing similar)

Documents Prepared By:
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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: MILLWORK 360
WOOD DOOR
PART OR ASSEMBLY:
HORIZONTAL & VERTICAL
CROSS SECTIONS (1X BUCK)

NO.	DATE	REVISIONS
3	8/08/23	UPDATE TO 8TH ED. (2023) FBC LFS
2	9/01/20	UPDATE TO 7TH ED. (2020) FBC LFS
1	10/03/17	UPDATE TO 6TH ED. (2017) FBC JK
NO.	DATE	BY

DATE: 03/27/17

SCALE: N.T.S.

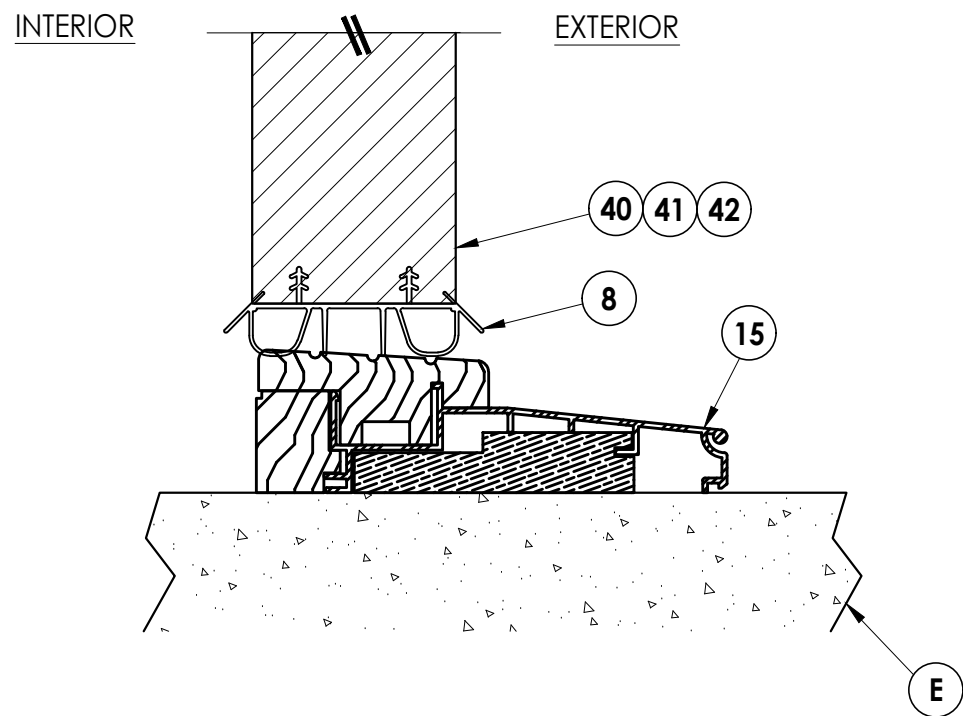
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CHK. BY: LFS

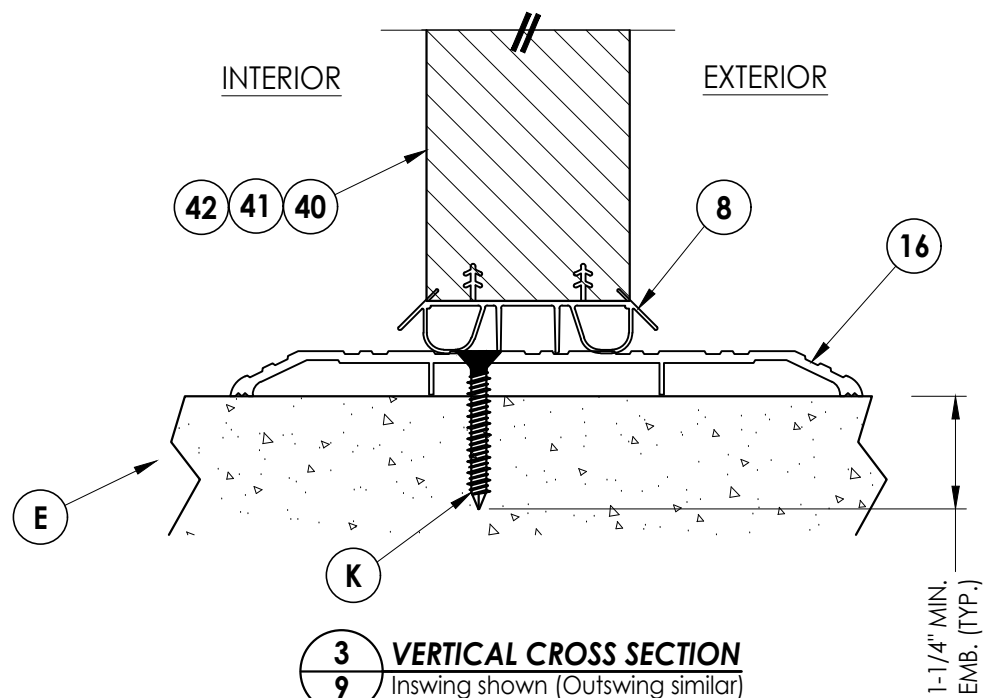
DRAWING NO.: FL-21891.6

SHEET 8 OF 12

1 9 VERTICAL CROSS SECTION Outswing



2 9 VERTICAL CROSS SECTION Inswing



3 **VERTICAL CROSS SECTION**
9 Inswing shown (Outswing similar)

[illegible]

DATE:	03/27/17
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-21891.6
SHEET	<u>9</u> OF <u>12</u>

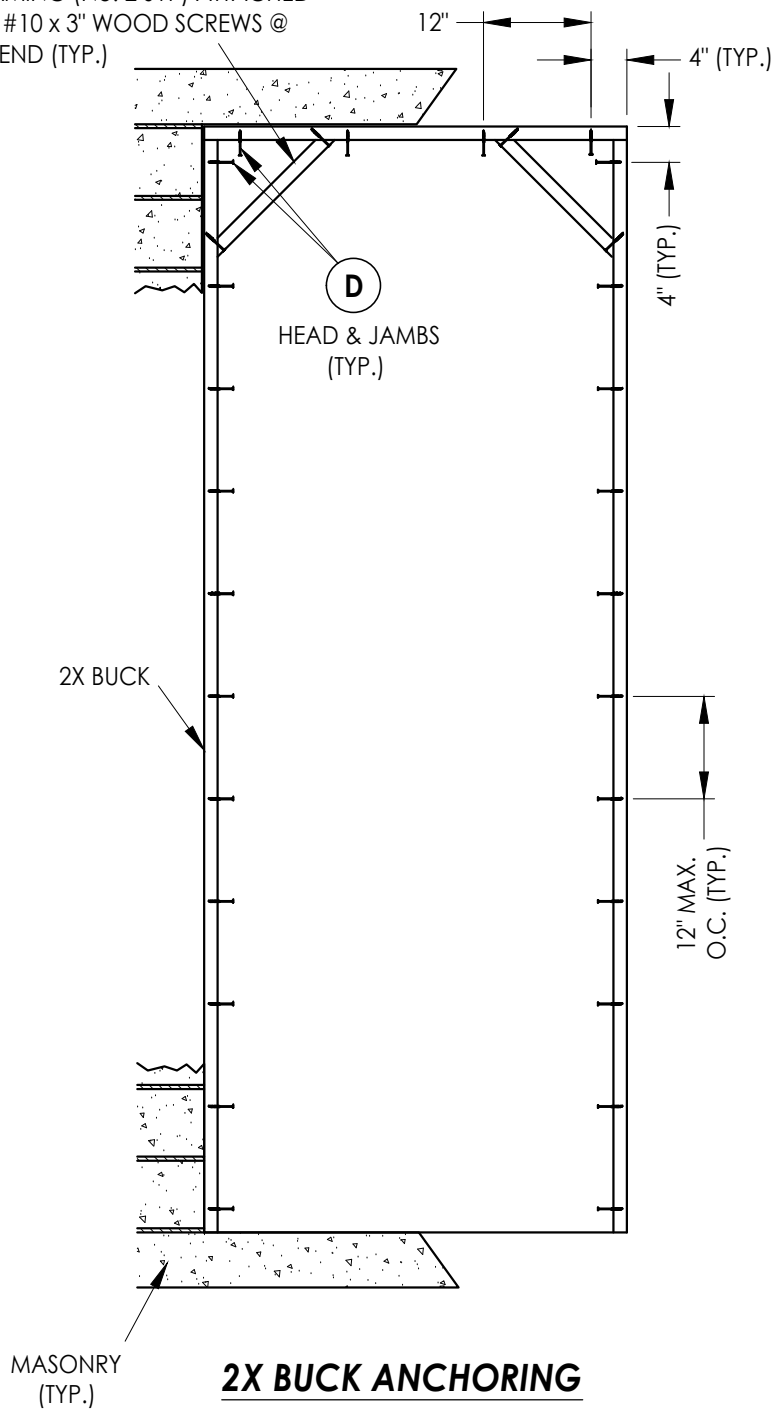
Documents Prepared By:
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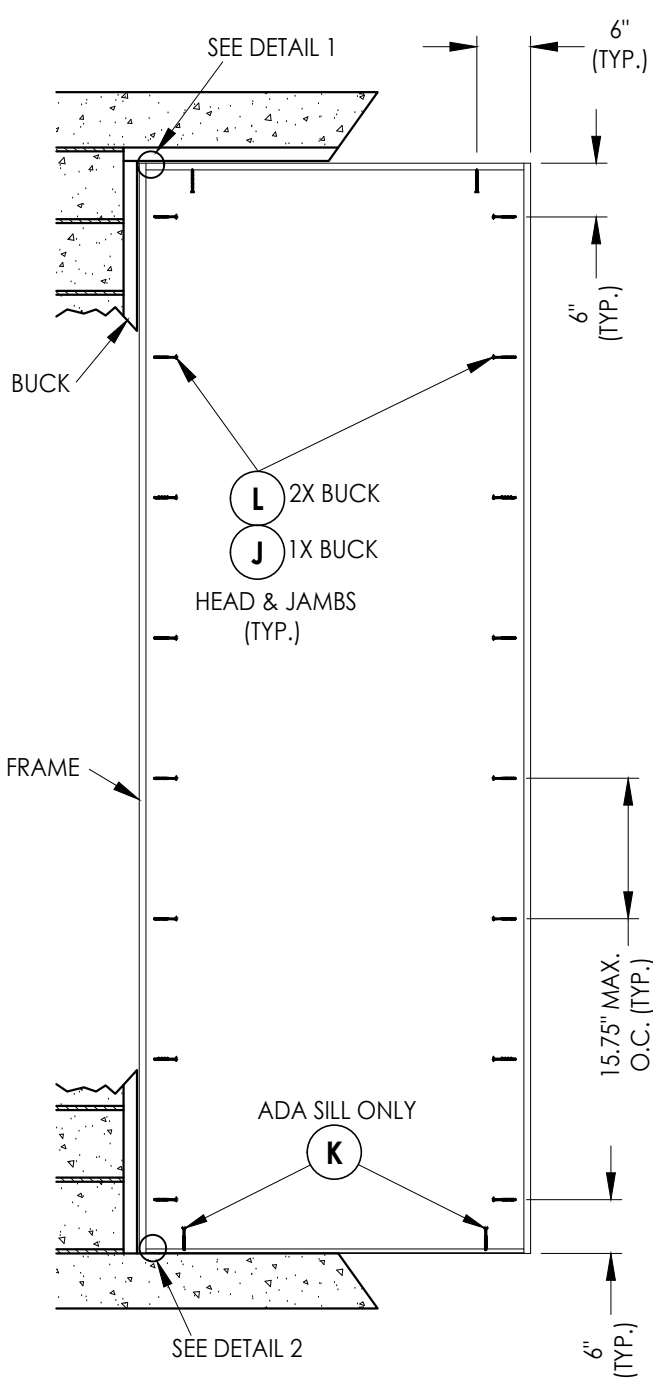
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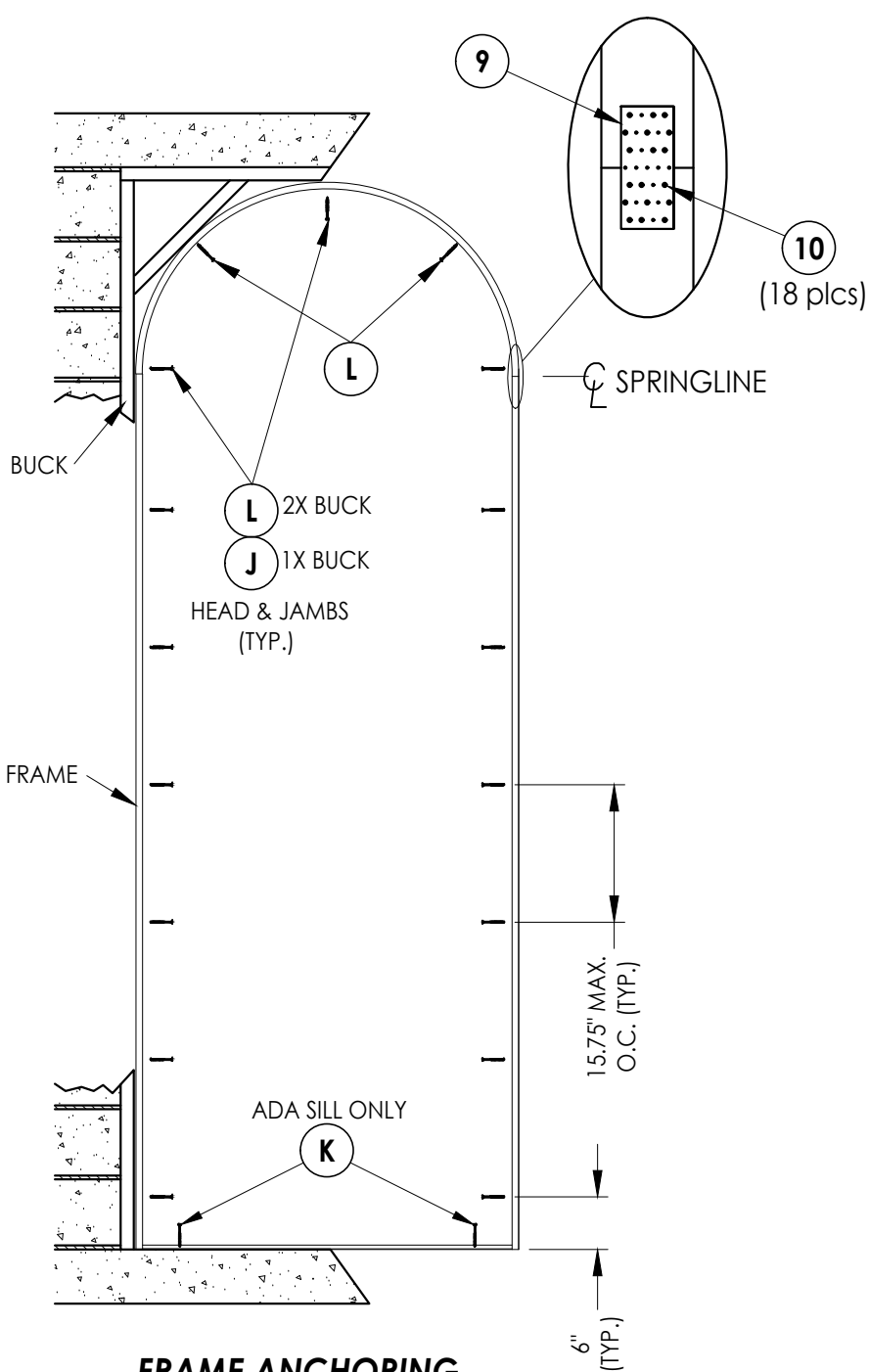
2X FRAMING (No. 2 SYP) ATTACHED
w/ (2) #10 x 3" WOOD SCREWS @
EACH END (TYP.)



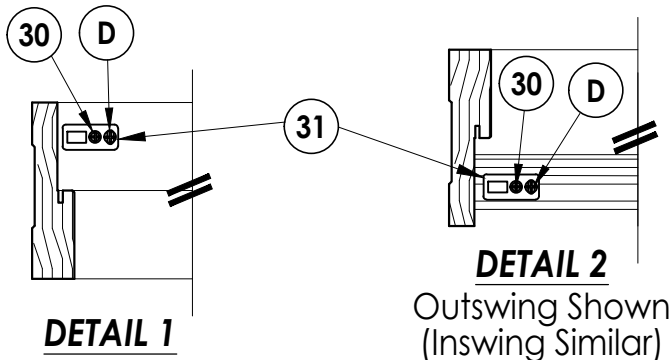
2X BUCK ANCHORING



FRAME ANCHORING



FRAME ANCHORING
Arch Top



DETAIL 2
Outswing Shown
(Inswing Similar)

NOTE:
1. ALL FRAME CORNERS SECURED WITH (3) #8 X 2-1/2" FH DEEP THREAD
WOOD SCREWS.

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

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

PRODUCT:
MILLWORK 360
WOOD DOOR

PART OR ASSEMBLY:
BUCK & FRAME ANCHORING

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DATE: 03/27/17

SCALE: N.T.S.

DWG. BY: JK

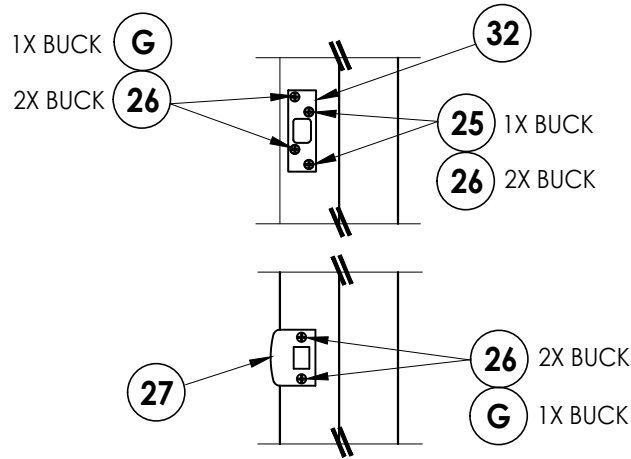
CHK. BY: LFS

DRAWING NO.:

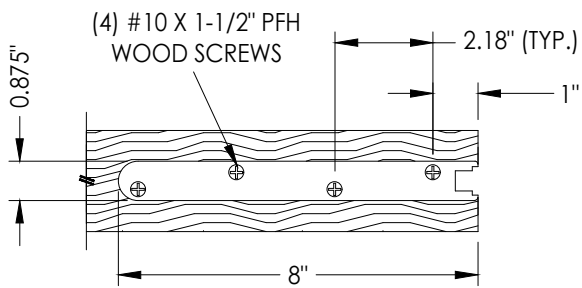
FL-21891.6

SHEET 10 OF 12

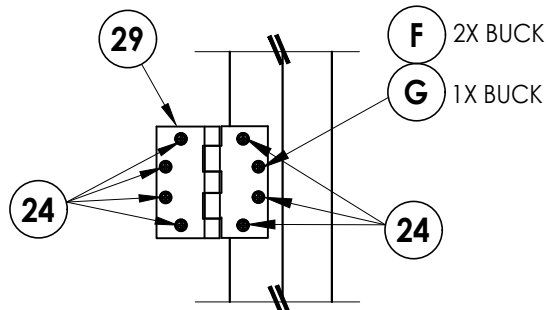
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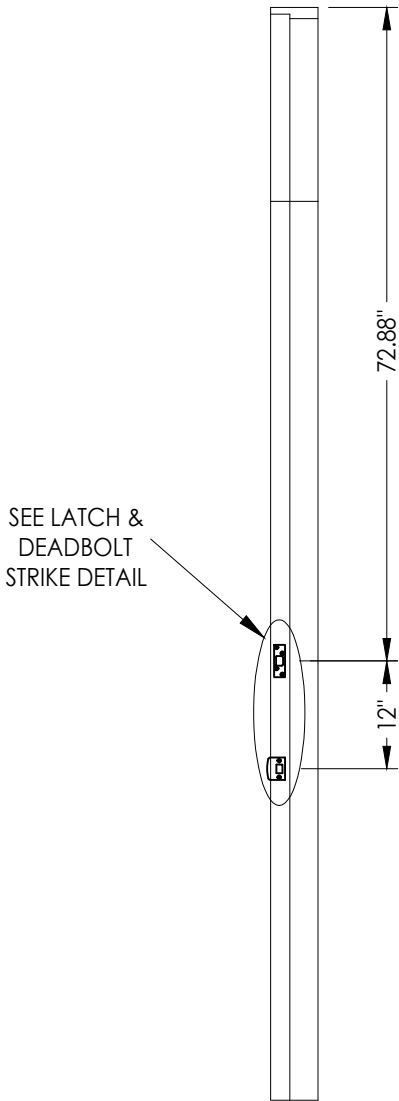
LATCH & DEADBOLT STRIKE DETAIL



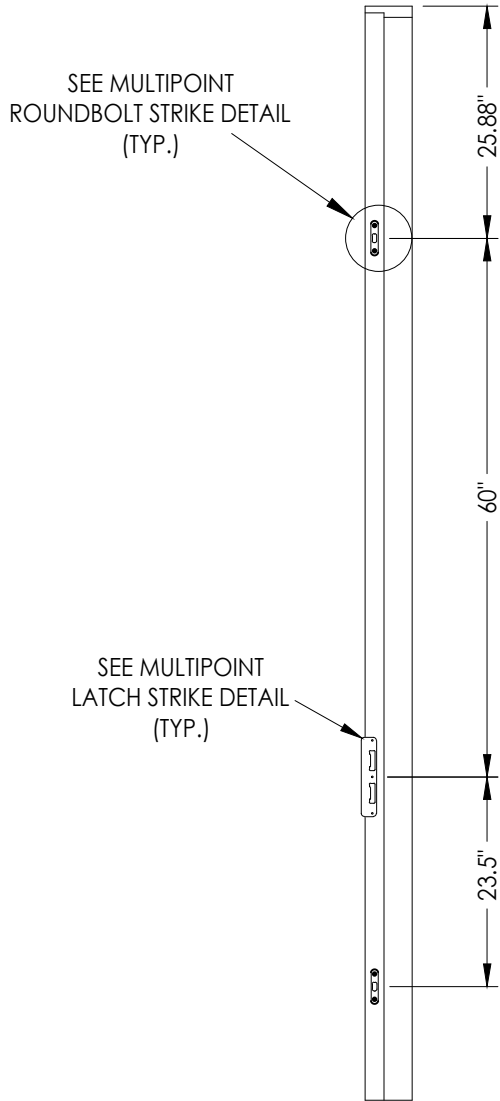
SHOOTBOLT REINFORCEMENT
AT TOP & BOTTOM OF DOOR PANEL
(1/8" THICK STEEL)



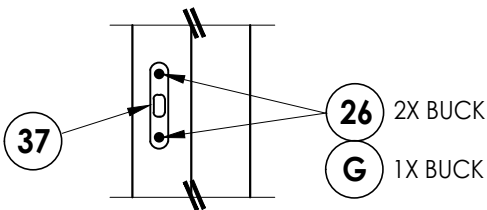
HINGE DETAIL



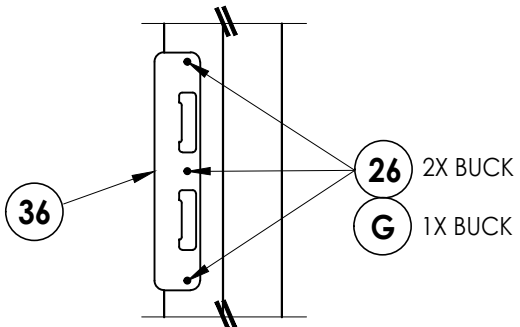
LATCH & DEADBOLT DETAILS



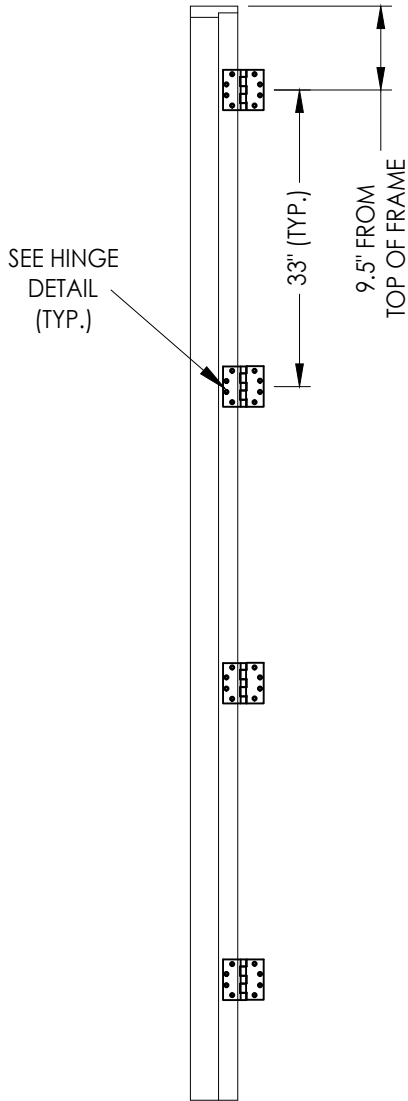
MULTIPOINT LOCK DETAILS



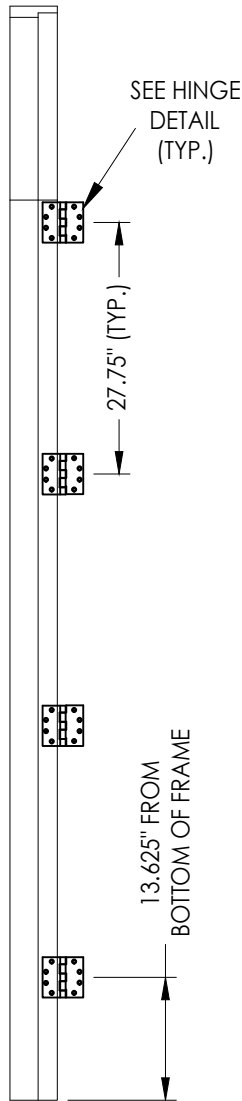
MULTIPOINT ROUND BOLT STRIKE DETAIL



MULTIPOINT STRIKE DETAIL



HINGE JAMB



HINGE JAMB
(Arch Top Door)

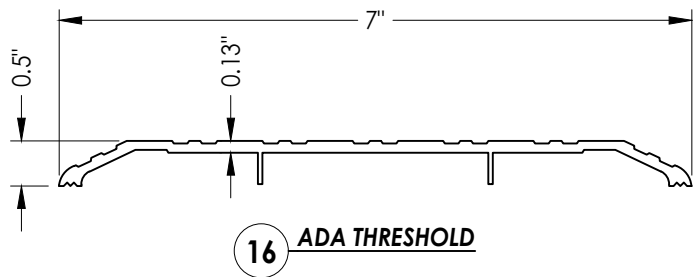
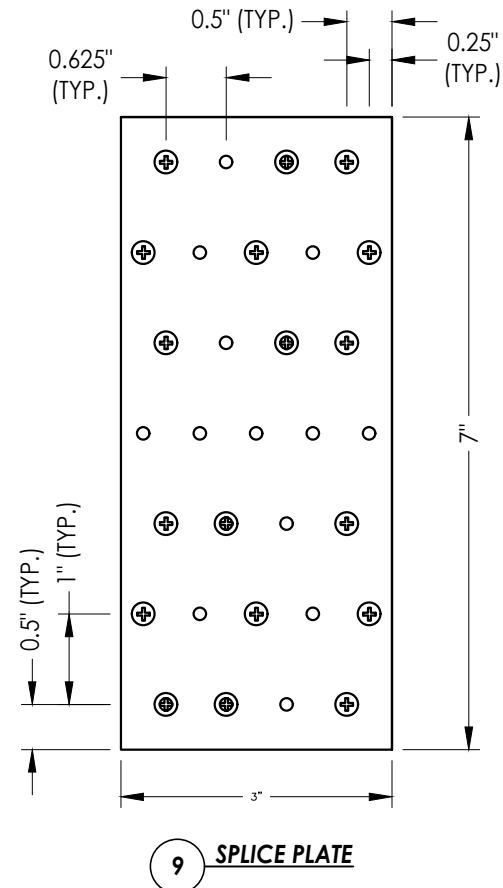
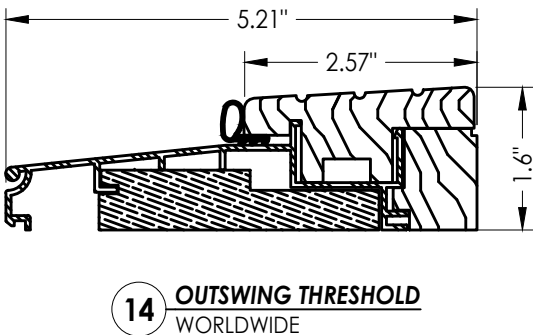
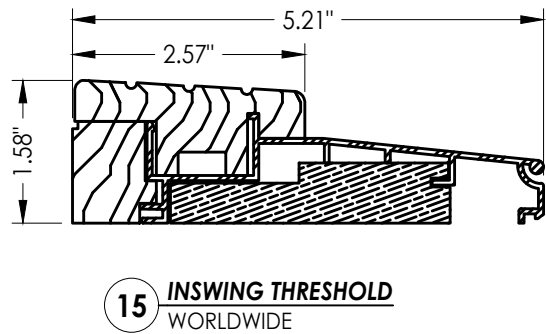
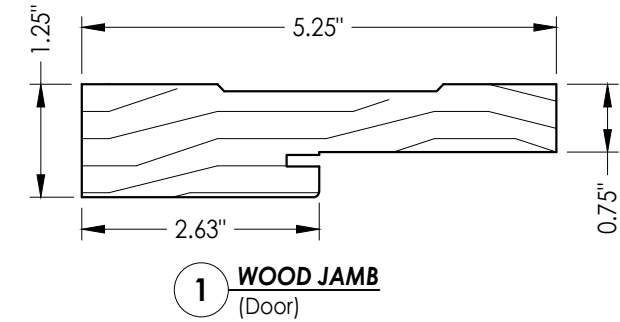
Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409

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

PRODUCT:		MILLWORK 360 WOOD DOOR		PART OR ASSEMBLY:		HARDWARE DETAILS	
NO.	DATE	REVISIONS	BY	JK	FBC	JK	BY
3	8/08/23	UPDATE TO 8TH ED. (2023)	FBC	LFS			
2	9/01/20	UPDATE TO 7TH ED. (2020)	FBC	LFS			
1	10/03/17	UPDATE TO 6th ED. (2017)	FBC	JK			
DATE: 03/27/17							
SCALE: N.T.S.							
DWG. BY: JK							
CHK. BY: LFS							
DRAWING NO.: FL-21891.6							
SHEET 11 OF 12							

BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK (SG >= 0.42)	WOOD
B	2X BUCK (SG >= 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	#12 X 2-1/2" PFH WOOD SCREW	STEEL
G	3/16" X 3-1/4" PFH ITW CONCRETE SCREW	STEEL
J	1/4" X 3-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
K	1/4" X 1-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
L	#10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMBEDMENT)	STEEL
1	JAMB (DOOR)	WOOD
7	WEATHERSTRIP	FOAM
8	SWEEP	VINYL
9	20 GA. SPLICE PLATE (USP NP37)	STEEL
10	#6 X 1/2" PPH WOOD SCREW	STEEL
14	OUTSWING THRESHOLD	ALUM/COMP
15	INSWING THRESHOLD	ALUM/COMP
16	ADA THRESHOLD	ALUM
22	#10 X 2" PFH WOOD SCREW	STEEL
24	#12 x 1" PFH WOOD SCREW	STEEL
25	#8 x 1-3/4" PFH WOOD SCREW	STEEL
26	#8 x 2-1/2" PFH WOOD SCREW	STEEL
27	LATCH STRIKE PLATE	STEEL
29	4.5" X 4.5" HINGE	STEEL
30	#8 x 3/4" FH SMS	STEEL
31	SHOOTBOLT STRIKE PLATE	STEEL
32	DEADBOLT SECURITY STRIKE PLATE	STEEL
36	MULTIPOINT STRIKE PLATE	STEEL
37	MULTIPOINT ROUND BOLT STRIKE DETAIL	STEEL
40	DOOR PANEL	WOOD
41	DOOR PANEL	WOOD
42	DOOR PANEL	WOOD

WOOD FRAME COMPONENTS: SIPO (UTILE) ($G = 0.53$)



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 TAPCON®	1/4"	1-1/4"	2"	4"
DeWALT ULTRACON®	1/4"	1-1/4"	1"	4"
ITW TAPCON®	3/16"	1-1/4"	3"	1-1/2"

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.

DATE: 03/27/17		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-21891.6		
SHEET 12 OF 12		
NO.	DATE	REVISIONS
3	8/08/23	UPDATE TO 8TH ED. (2023) FBC LFS
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1	10/03/17	UPDATE TO 6th ED. (2017) FBC JK
BY		
PART OR ASSEMBLY:		BILL OF MATERIALS & COMPONENTS
PRODUCT:		
MILLWORK 360 WOOD DOOR		
Documents Prepared By: Lyndon F. Schmidt P.E. No. 43409		