



215 EAST ROOSEVELT AVE.
ZEELAND, MI 49464

Distributed by: McCoy's Building Supply
1350 I.H. 35 North
San Marcos, TX 78677

FIBERGLASS ENTRY DOOR IN SWING / OUT SWING "IMPACT"

EVALUATED FOR USE IN THE STATE OF TEXAS

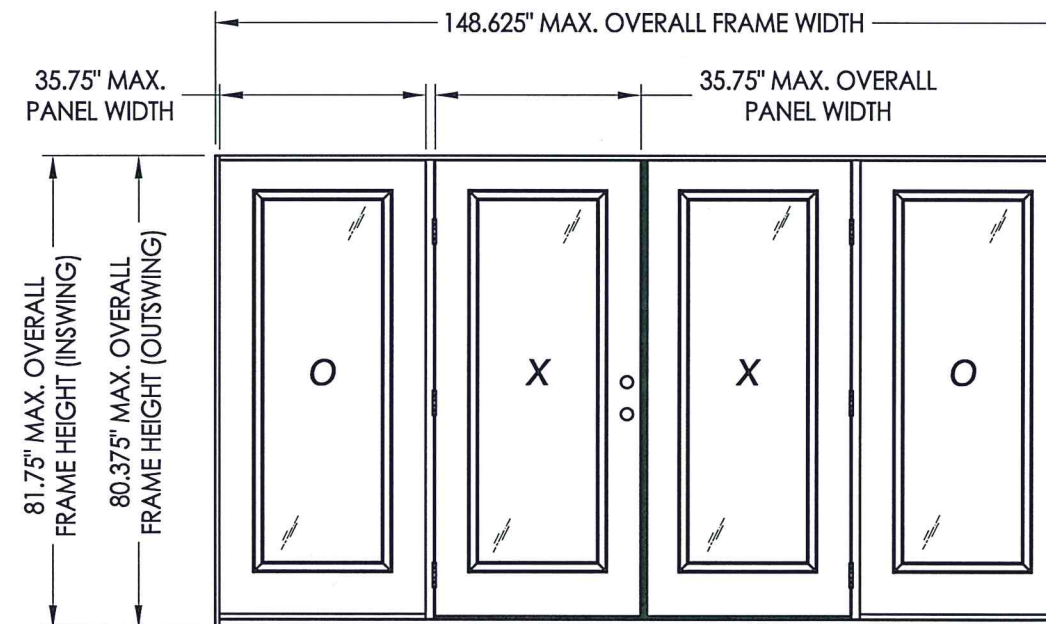
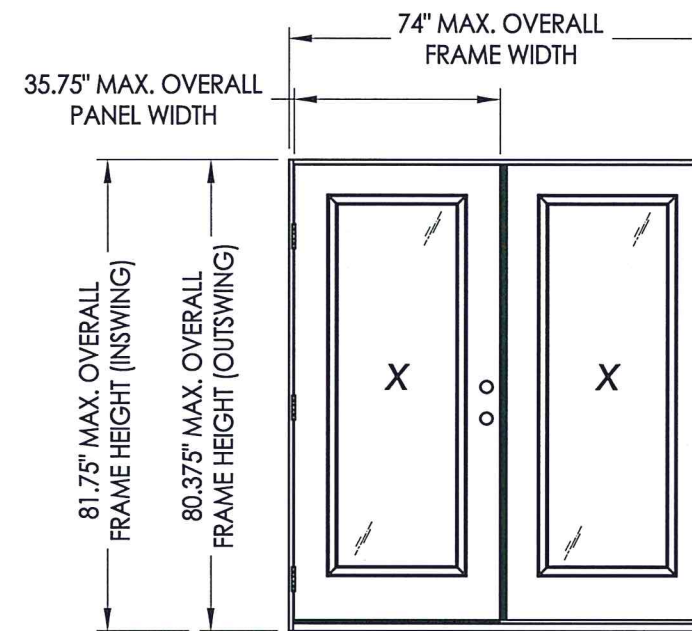
TDI DR-557

The Fiberglass Door system described herein complies with the 2018 International Residential Code (IRC), Sections R301 & R609 and the 2018 International Building Code (IBC), Sections 1404.13, 1609, 1709.5, 2403 and 2404 subject to the following conditions:

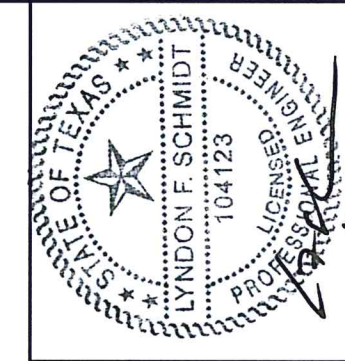
1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. This system has been tested and evaluated as a large missile impact protective system for installation in areas that require wind borne debris protection. This product meets missile level "D" as defined in ASTM E 1996.
3. Allowable design pressure requirements must be equal to or less than the design pressure rating shown in the design pressure chart, sheet 1 of this drawing.
4. Conditions not covered by this drawing are subject to further engineering analysis.

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SHEET #	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Door panel details
3	Sidelite panel details
4	Lite frame and glazing details
5	Elevations
6	Horizontal cross sections
7	Vertical cross sections
8	Vertical cross sections
9	Frame anchoring
10	Astragal details
11	Bill of materials & components



CONFIGURATION	MAX. FRAME DIMENSION	ASTRAGAL	DESIGN PRESSURE (PSF) INSWING		DESIGN PRESSURE (PSF) OUTSWING	
			POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XX	74.0" x 81.75"	COLUMBIA	+40.0	-50.0	+40.0	-40.0
	74.0" x 81.75"	DLP	+50.0	-50.0	+50.0	-50.0
OXXO	148.625" x 81.75"	DLP	+50.0	-50.0	+50.0	-50.0



Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

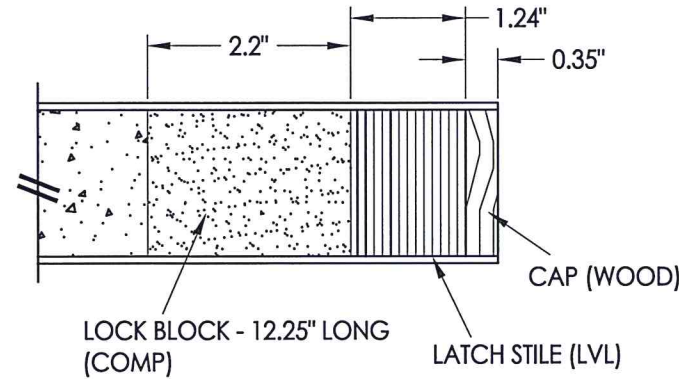
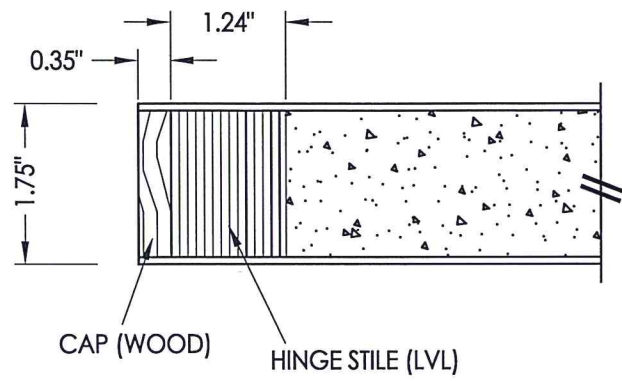
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL, 33595
Phone No.: 813.659.9197

TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

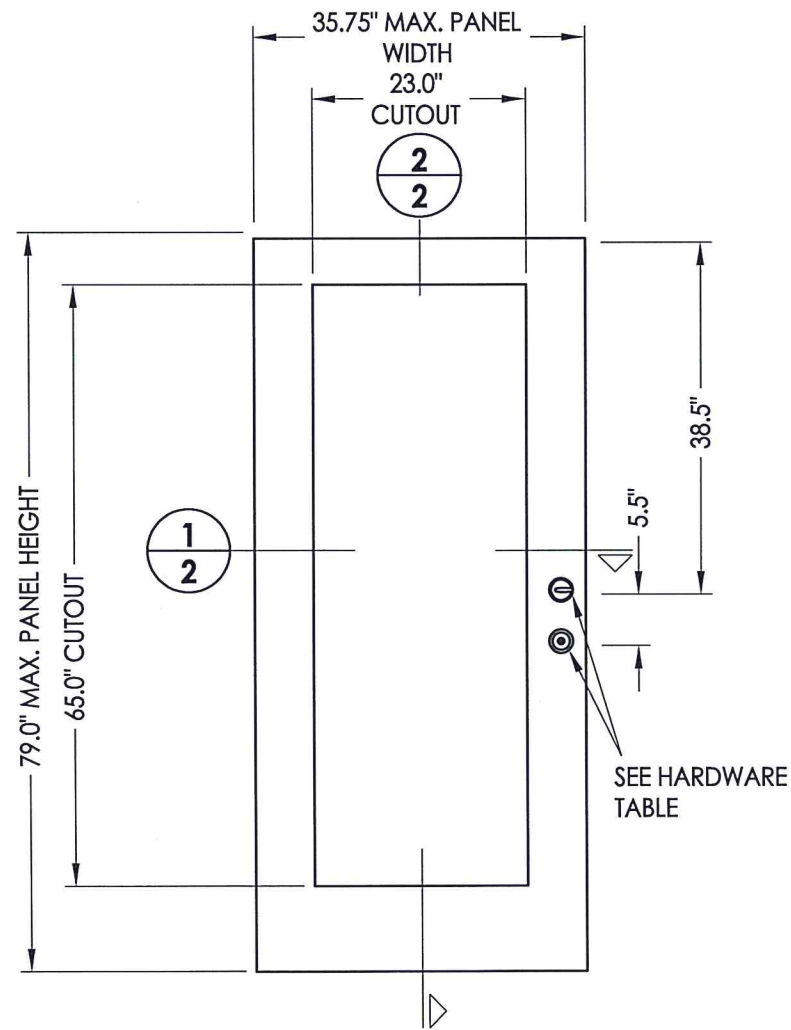
PRODUCT: FIBERGLASS DOOR
PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

NO.	DATE	REVISIONS
4	10/21/21	UPDATE TO 2018 IRC/IBC
3	5/16/18	ADD FLAT FRAME LITE PROFILE
2	12/14/15	ADD H.S. GLAZING OPTION
1	11/27/12	REVISED GLAZING/HARDWARE

DATE: 06/20/12
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4170
SHEET 1 OF 11



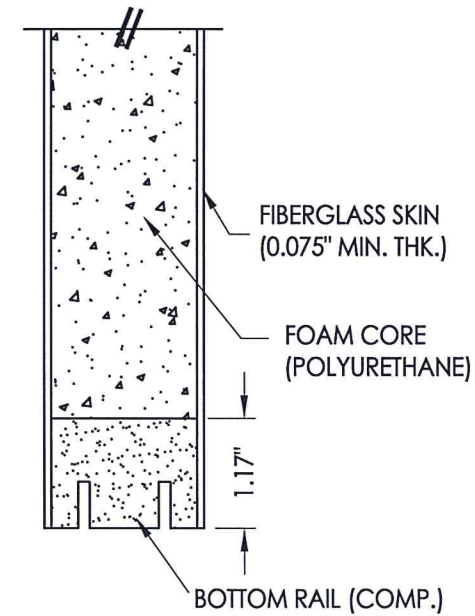
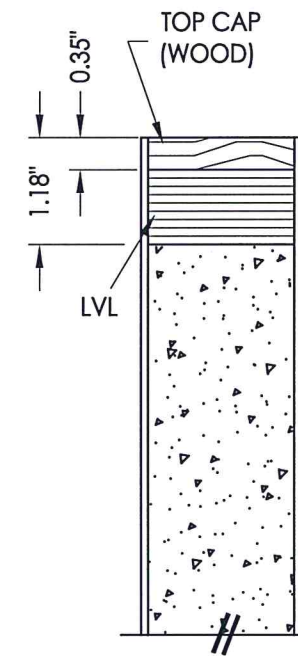
1
2 HORIZONTAL CROSS SECTION



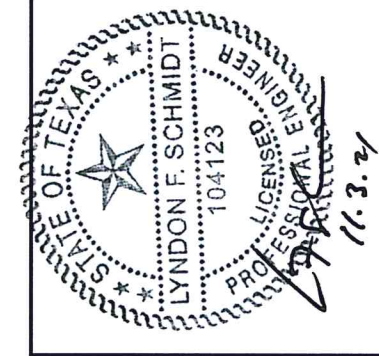
40 DOOR PANEL
Masonite

HARDWARE TABLE		
MANUFACTURER	MODEL	
KWIKSET	KNOB:	SIGNATURE SERIES
	DEADBOLT:	SIGNATURE SERIES (980)
SCHLAGE	KNOB:	"F" SERIES (F60)
	DEADBOLT:	"B" SERIES (B60/62)
PAMEX*	KNOB:	"FT" SERIES
	DEADBOLT:	"FD7" SERIES

* MAX. DESIGN PRESSURE FOR PAMEX LOCK
INSWING = +40/-50 PSF
OUTSWING = +40/-40 PSF



2
2 VERTICAL CROSS SECTION



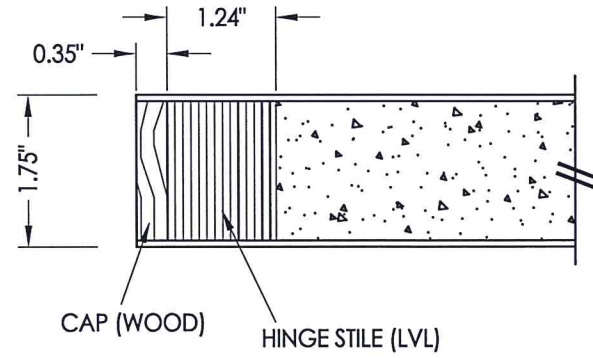
Documents Prepared By: Lyndon F. Schmidt, P.E.
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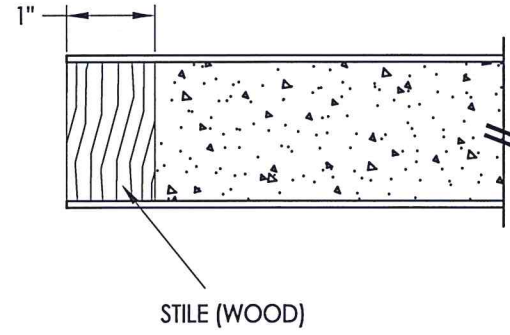
PRODUCT:	FIBERGLASS DOOR
PART OR ASSEMBLY:	DOOR PANEL DETAILS

NO.	DATE	REVISIONS
4	10/21/21	UPDATE TO 2018 IBC/IRC
3	5/16/18	ADD FLAT FRAME LITE PROFILE
2	12/14/15	ADD H.S. GLAZING OPTION
1	11/27/12	REVISED GLAZING/HARDWARE

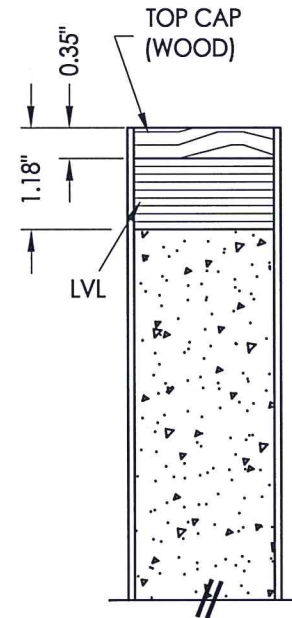
DATE:	06/20/12
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4170
SHEET	2 OF 11



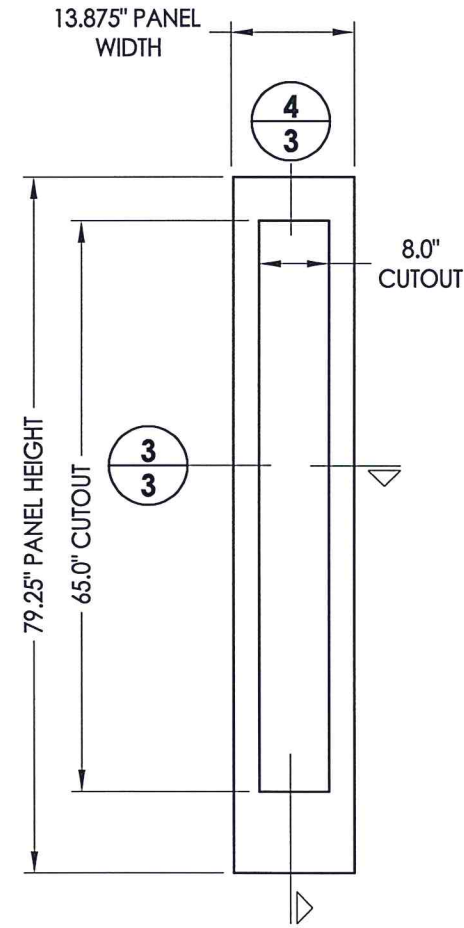
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3 HORIZONTAL CROSS SECTION



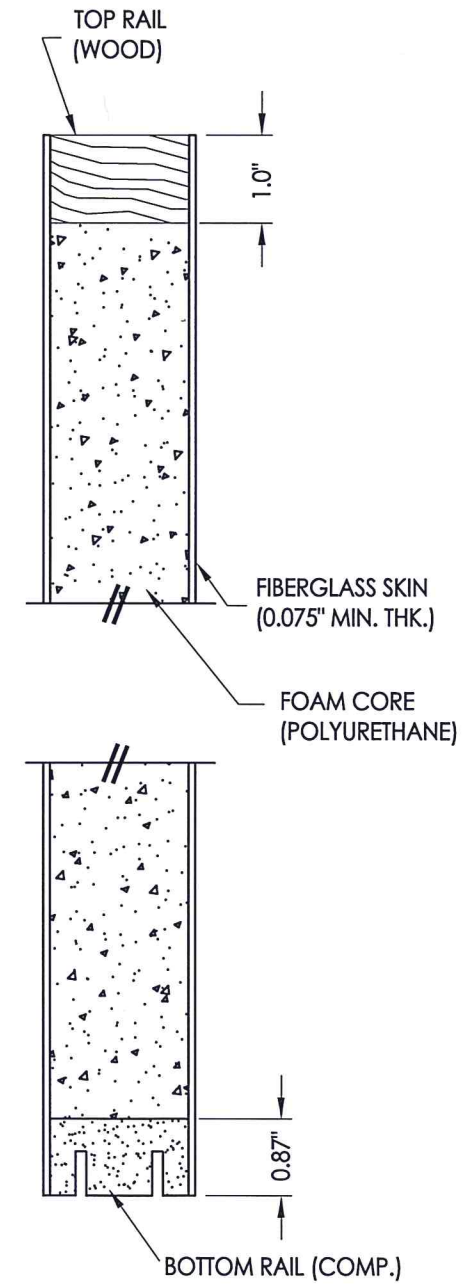
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3 HORIZONTAL CROSS SECTION



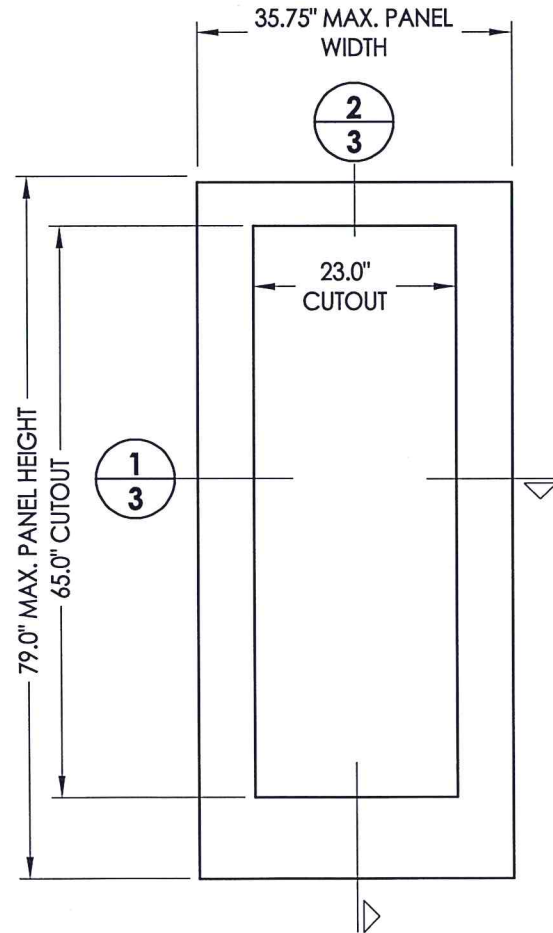
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3 VERTICAL CROSS SECTION



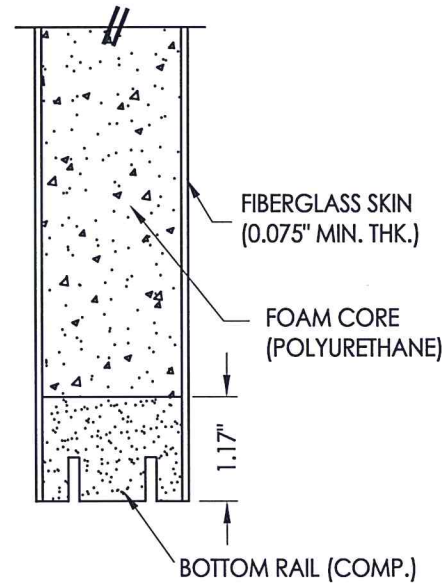
51
3 SIDELITE PANEL (14" NOM.)
Masonite



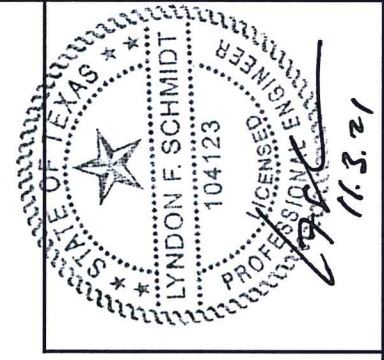
4
3 VERTICAL CROSS SECTION



50
3 SIDELITE PANEL (36" NOM.)
Masonite



2
3 VERTICAL CROSS SECTION



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PRODUCT: FIBERGLASS DOOR

PART OR ASSEMBLY: SIDELITE PANEL DETAILS

NO.	DATE	REVISIONS
4	10/21/21	UPDATE TO 2018 IBC/IRC
3	5/16/18	ADD FLAT FRAME LITE PROFILE
2	12/14/15	ADD H.S. GLAZING OPTION
1	11/27/12	REVISED GLAZING/HARDWARE

DATE: 06/20/12

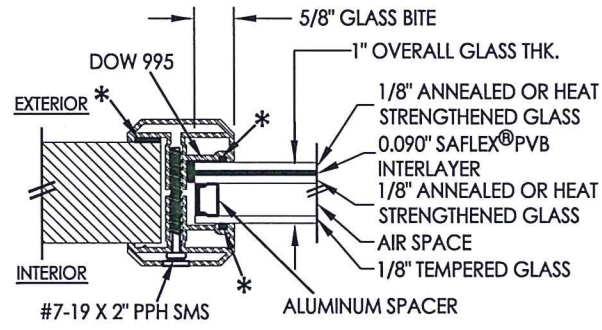
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DWG. BY: JK

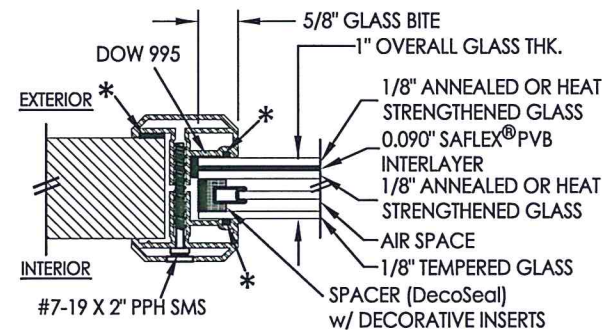
CHK. BY: LFS

DRAWING NO.: TX-4170

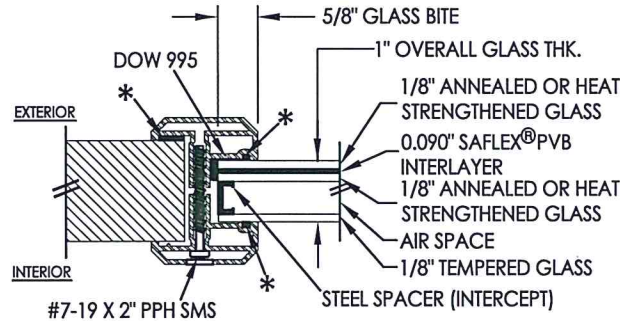
SHEET 3 OF 11



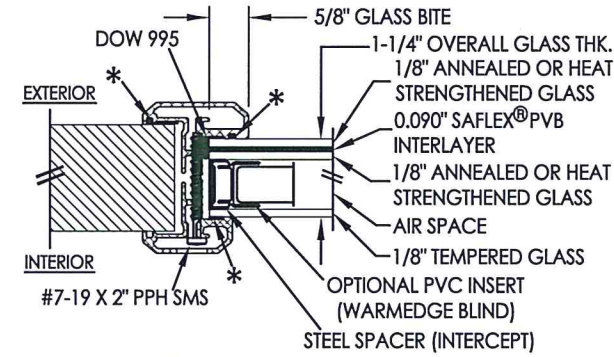
G1 GLAZING DETAIL
Flat Frame Profile



G3 GLAZING DETAIL
Flat Frame Profile

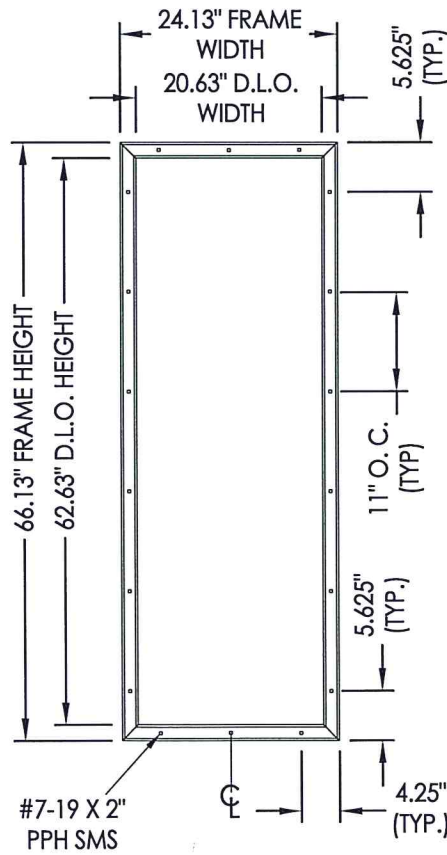


G2 GLAZING DETAIL
Flat Frame Profile

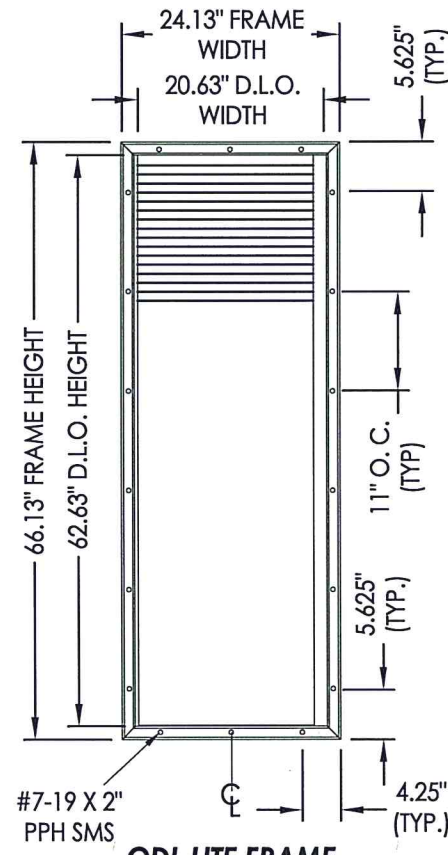


G4 GLAZING DETAIL
Flat Frame Profile
w/ Blinds Between Glass

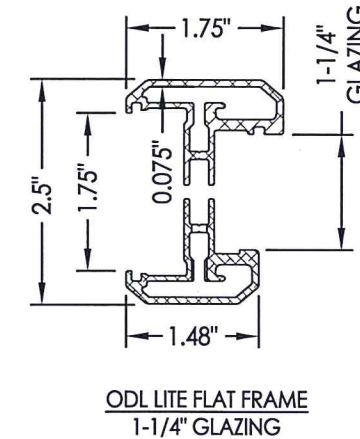
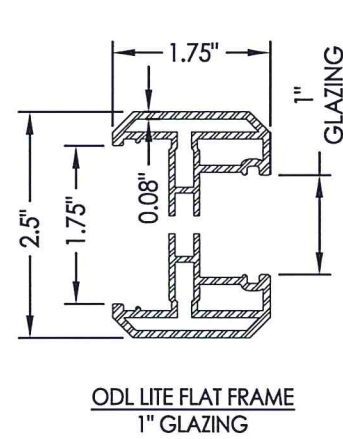
* NON-STRUCTURAL
BACKBEDDING
(READI-SEAL)



ODL LITE FRAME
"Flat Frame" Aluminum



ODL LITE FRAME
"Flat Frame" Aluminum
w/ Blinds Between Glass



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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: FIBERGLASS DOOR

PART OR ASSEMBLY:
LITE FRAME &
GLAZING DETAILS

NO.	DATE	REVISIONS
4	10/21/21	UPDATE TO 2018 IBC/IRC
3	5/16/18	ADD FLAT FRAME LITE PROFILE
2	12/14/15	ADD H.S. GLAZING OPTION
1	11/27/12	REVISED GLAZING/HARDWARE

DATE: 06/20/12

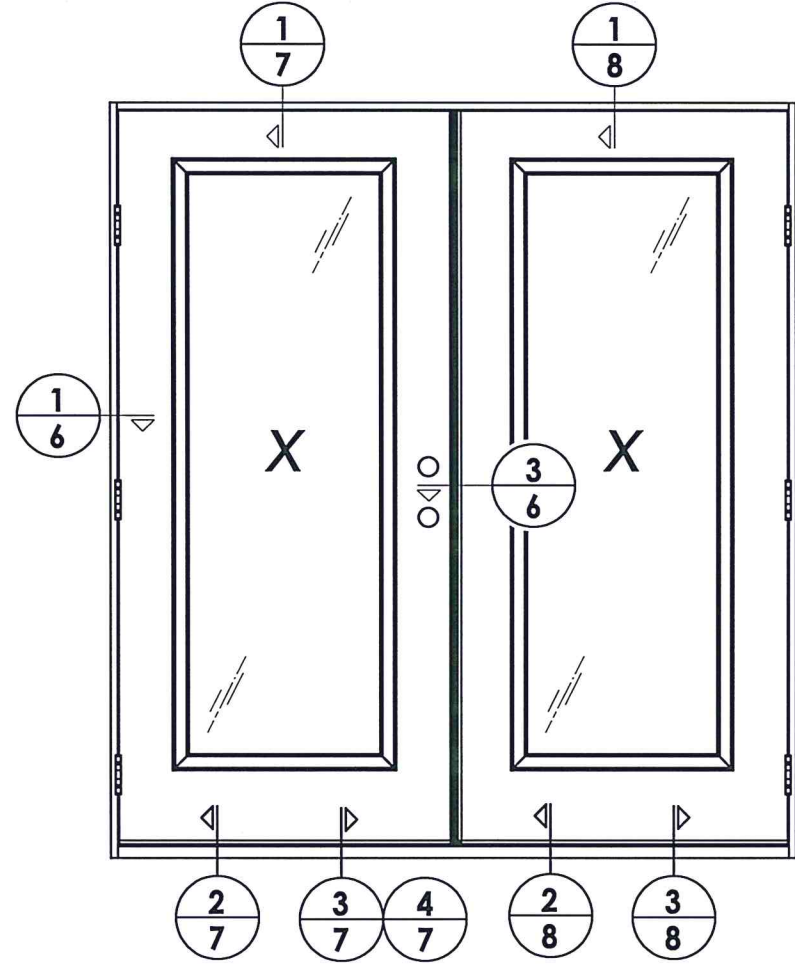
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DWG. BY: JK

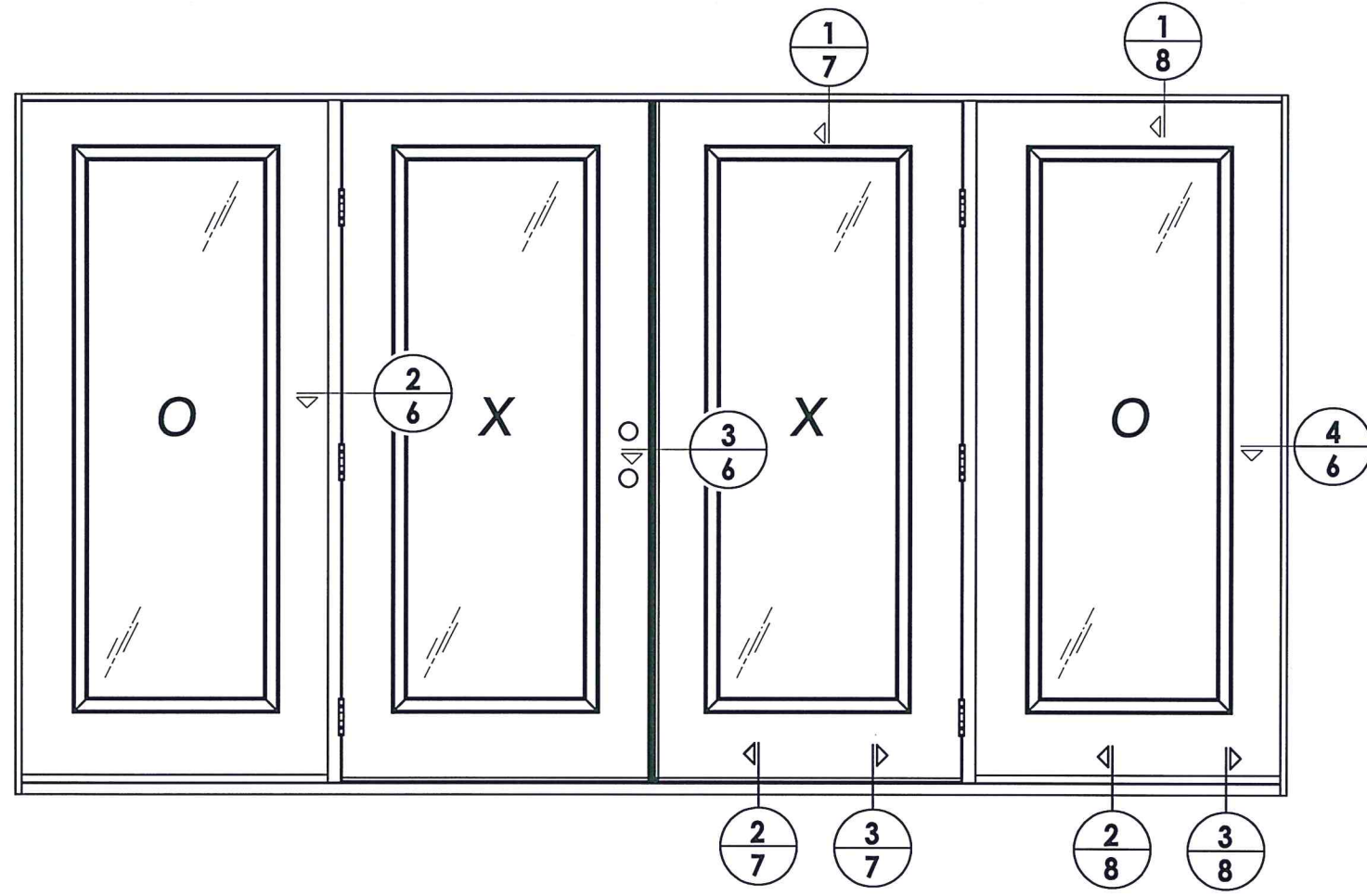
CHK. BY: LFS

DRAWING NO.: TX-4170

SHEET 4 OF 11



ELEVATION (XX)



ELEVATION (OXXO)

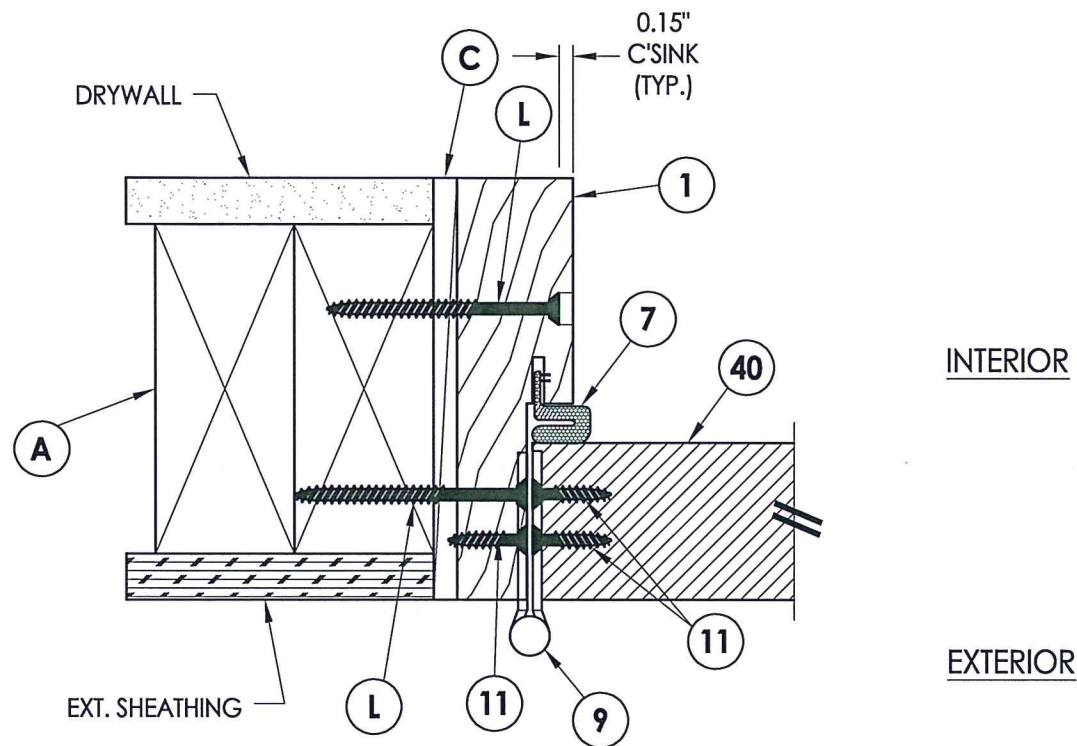


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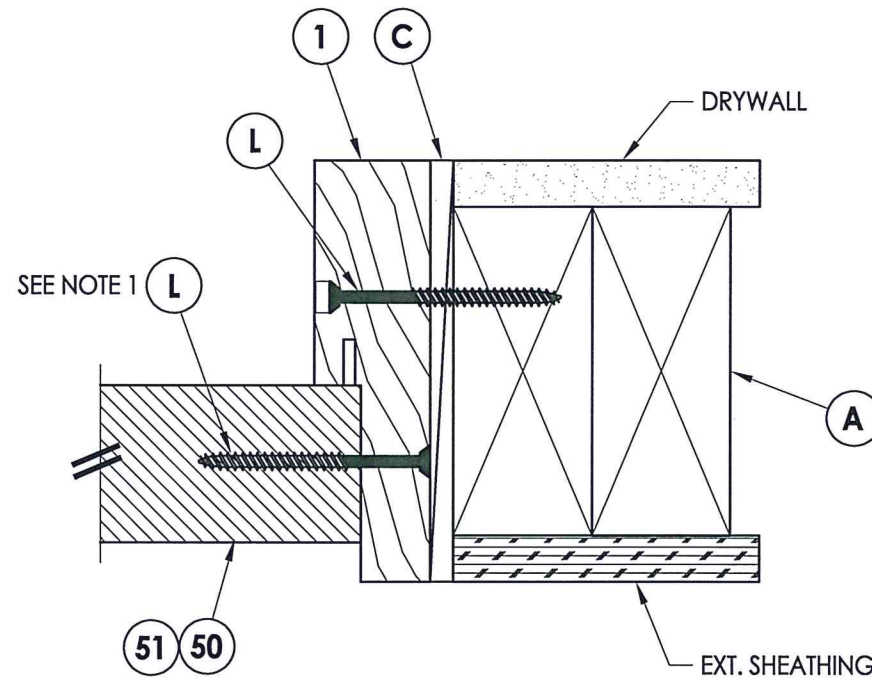
RW BUILDING CONSULTANTS, INC.
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CERTIFICATE OF REGISTRATION # F-11852

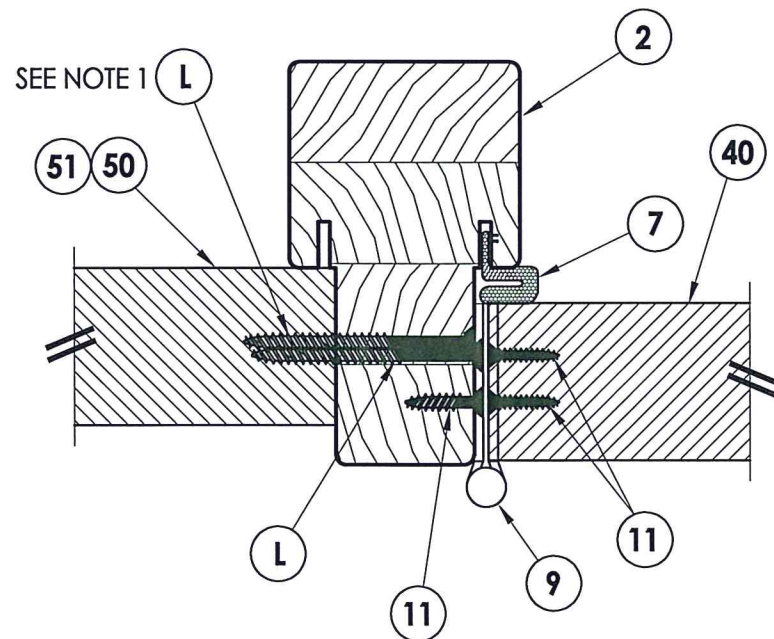
PRODUCT:		FIBERGLASS DOOR	
PART OR ASSEMBLY:		ELEVATIONS	
NO.	DATE	BY	REVISIONS
4	10/21/21	LFS	UPDATE TO 2018 IBC/IRC
3	5/16/18	LFS	ADD FLAT FRAME LITE PROFILE
2	12/14/15	JK	ADD H.S. GLAZING OPTION
1	11/27/12	LFS	REVISED GLAZING/HARDWARE
DATE: 06/20/12		SCALE: N.T.S.	
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DRAWING NO.: TX-4170		SHEET 5 OF 11	



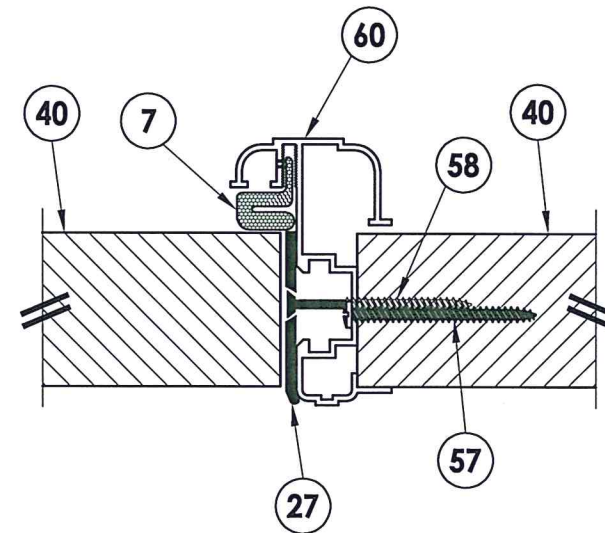
1 HORIZONTAL CROSS SECTION
6 Outswing shown - Inswing also approved



4 HORIZONTAL CROSS SECTION
6 Outswing shown - Inswing also approved

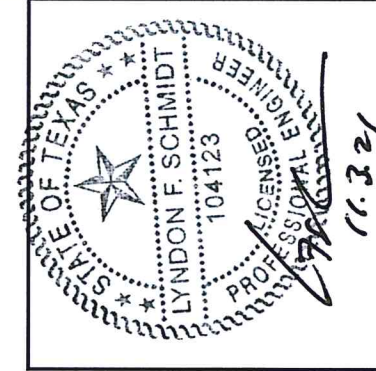


2 HORIZONTAL CROSS SECTION
6 Outswing shown - Inswing also approved



3 HORIZONTAL CROSS SECTION
6 Outswing shown - Inswing also approved

NOTE:
1. Sidelite panel screws located 6" from each end and equally spaced (4 screws total)



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CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: FIBERGLASS DOOR
PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

NO.	DATE	REVISIONS
4	10/21/21	UPDATE TO 2018 IBC/IRC
3	5/16/18	ADD FLAT FRAME LITE PROFILE
2	12/14/15	ADD H.S. GLAZING OPTION
1	11/27/12	REVISED GLAZING/HARDWARE
		BY

DATE: 06/20/12

SCALE: N.T.S.

DWG. BY: JK

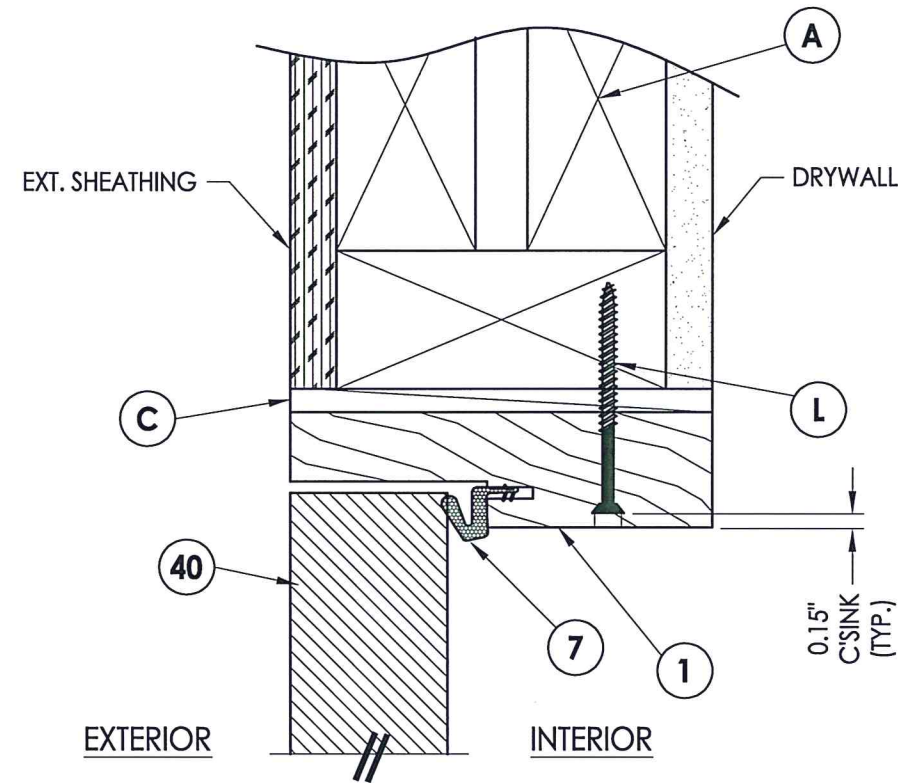
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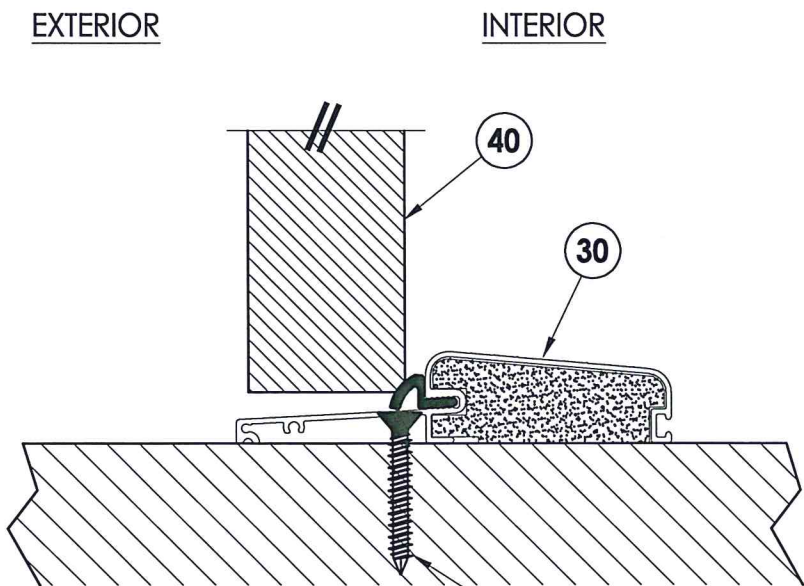
TX-4170

SHEET 6 OF 11

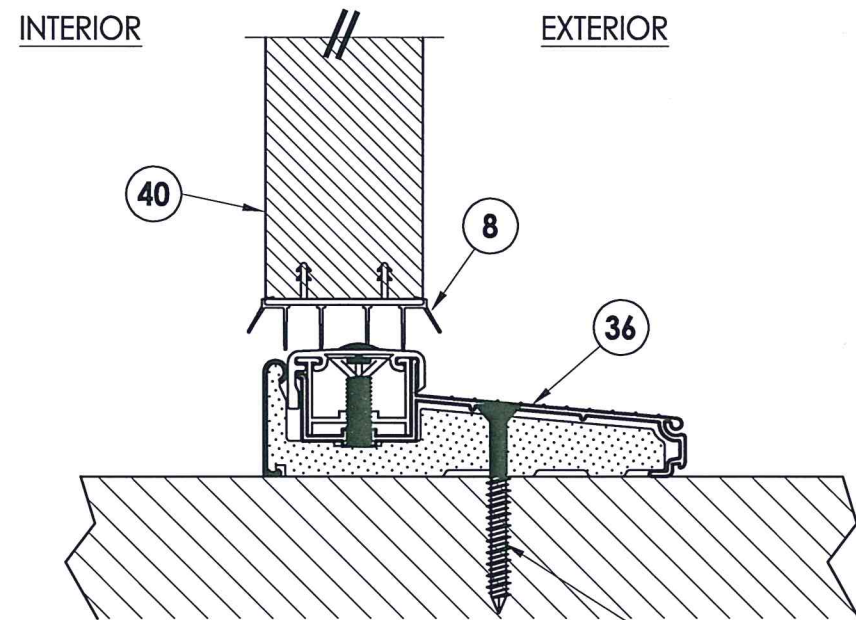
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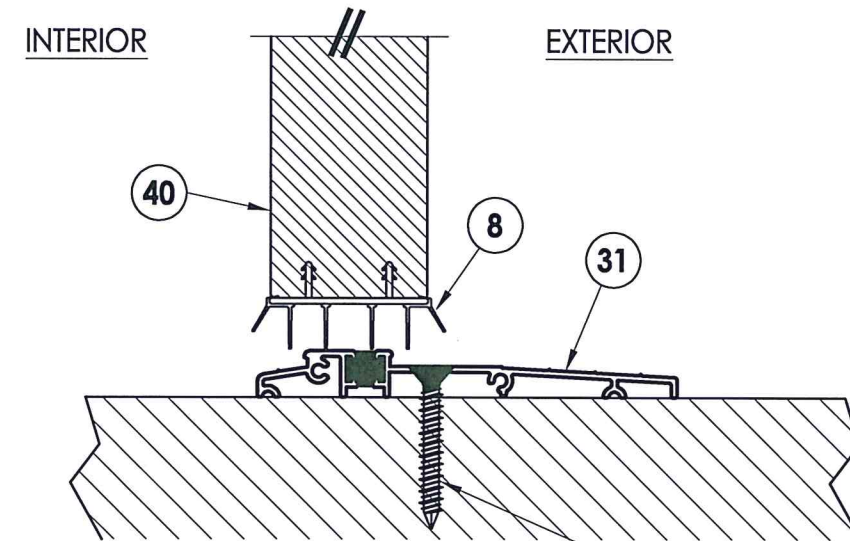
1 VERTICAL CROSS SECTION
7 Outswing shown - inswing also approved



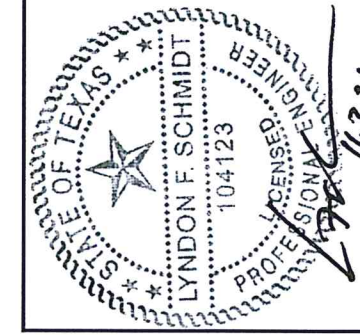
2 VERTICAL CROSS SECTION
7 Outswing configuration
J WOOD
D CONCRETE



3 VERTICAL CROSS SECTION
7 Inswing configuration
J WOOD
D CONCRETE



4 VERTICAL CROSS SECTION
7 For use on Double Door (XX) only
J WOOD
D CONCRETE



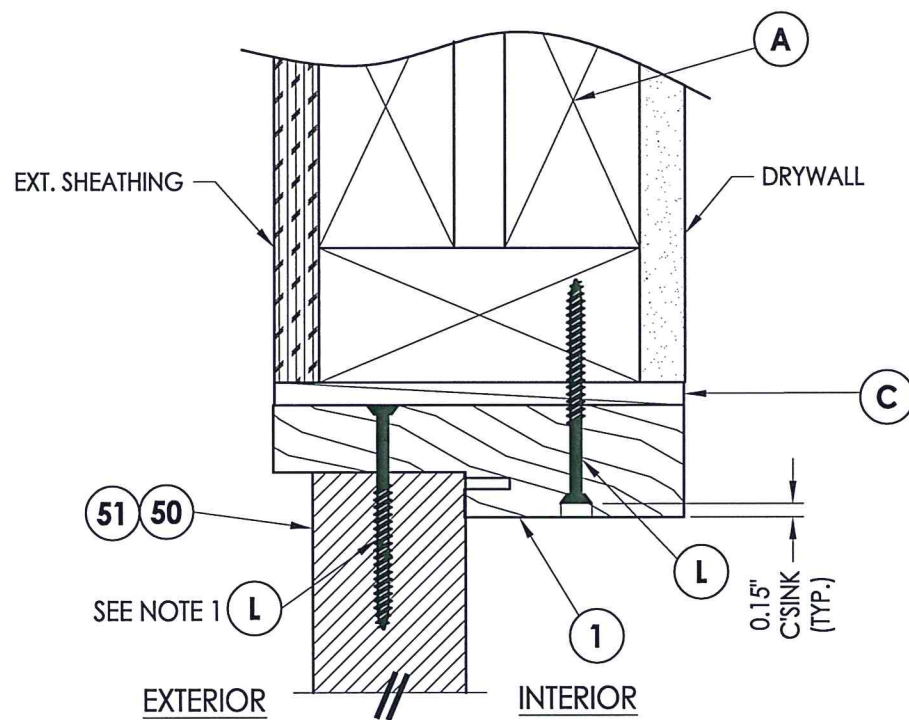
Documents Prepared By: Lyndon F. Schmidt, P.E.
 TEXAS P.E. #104123

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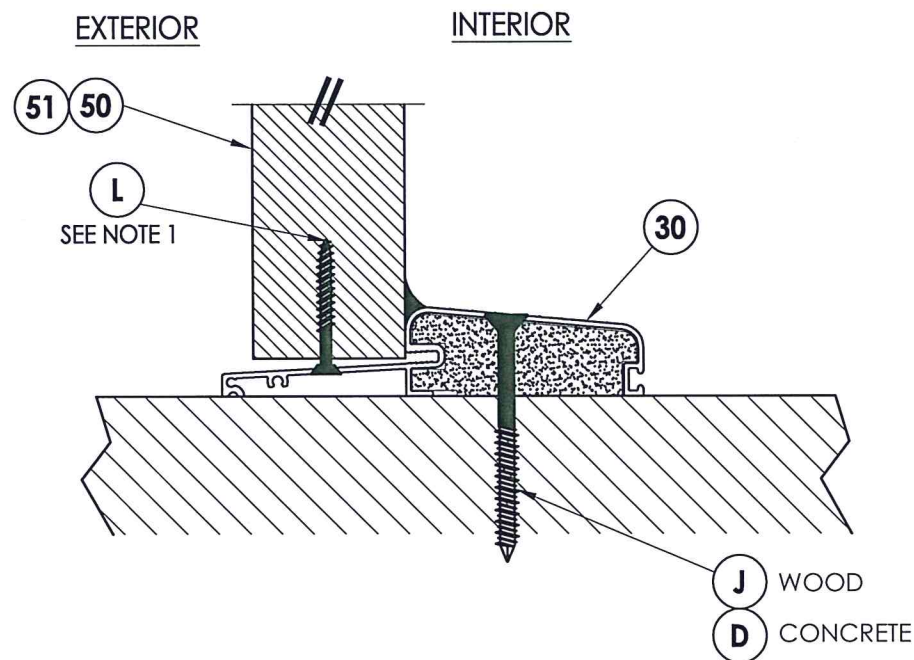
PRODUCT: FIBERGLASS DOOR
 PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
4	10/21/21	UPDATE TO 2018 IBC/IRC
3	5/16/18	ADD FLAT FRAME LITE PROFILE
2	12/14/15	ADD H.S. GLAZING OPTION
1	11/27/12	REVISED GLAZING/HARDWARE

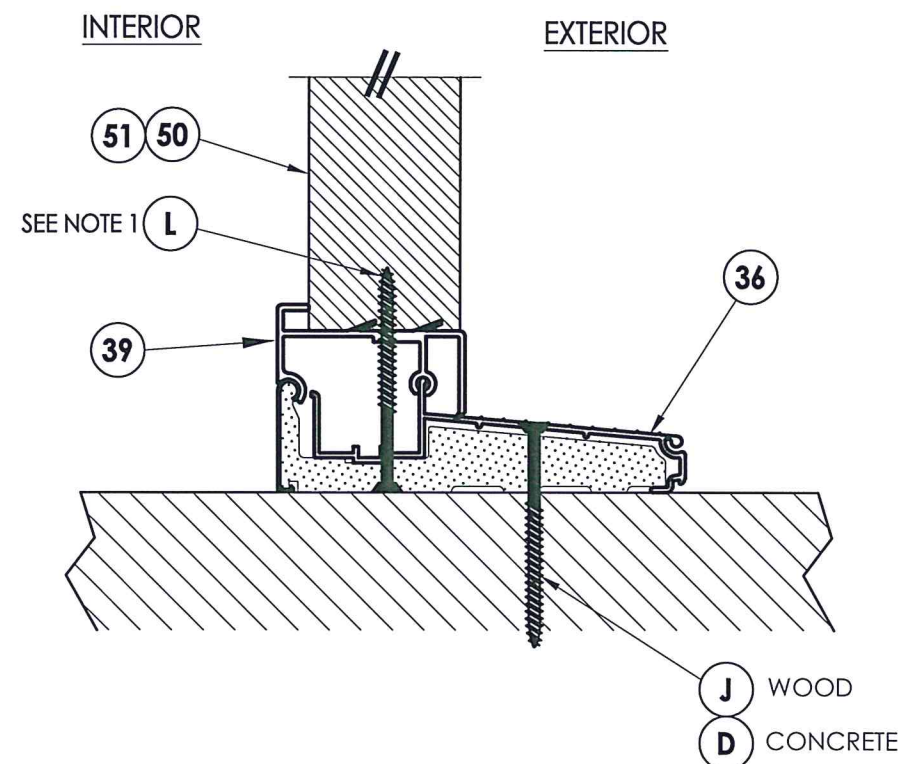
DATE: 06/20/12
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: TX-4170
 SHEET 7 OF 11



1 VERTICAL CROSS SECTION
8 Outswing shown - Inswing also approved



2 VERTICAL CROSS SECTION
8 Outswing shown



3 VERTICAL CROSS SECTION
8 Inswing shown

NOTE:
 1. Sidelite panel screws located 3" from each end (2 Total). Not required for Sidelites less than 14" in width.



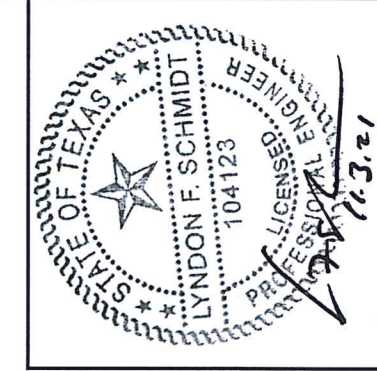
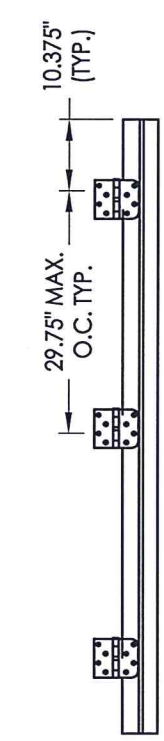
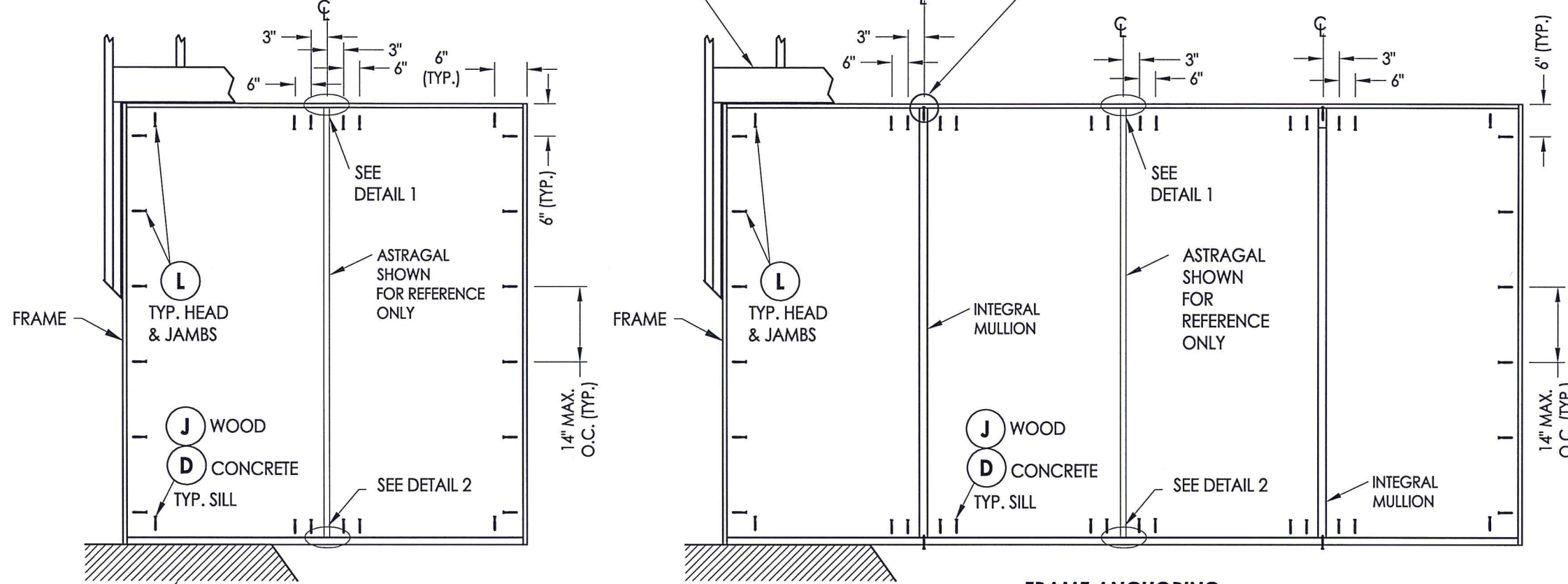
Documents Prepared By: Lyndon F. Schmidt, P.E.
 TEXAS P.E. #104123
 RW BUILDING CONSULTANTS, INC.
 P.O. Box 230 Valrico FL 33595
 Phone No.: 813.659.9197
 TEXAS BOARD OF PROFESSIONAL ENGINEERS
 CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	FIBERGLASS DOOR	
PART OR ASSEMBLY:	VERTICAL CROSS SECTIONS	
NO.	DATE	REVISIONS
4	10/21/21	UPDATE TO 2018 IBC/IRC
3	5/16/18	ADD FLAT FRAME LITE PROFILE
2	12/14/15	ADD H.S. GLAZING OPTION
1	11/27/12	REVISED GLAZING/HARDWARE
DATE:	06/20/12	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4170	
SHEET	8	OF 11

Z:\Clients\ODL, Inc. PERMANENT\B - Texas Dept of Ins\TDL - 55\Drawings\TX-4168-70.dwg

2X FRAMING TO BE DESIGNED BY THE ENGINEER OR ARCHITECT OF RECORD BASED ON WIND LOADS AND THE CLADDING BEING USED (TYP.).

SEE INTEGRAL MULLION ATTACHMENT DETAIL (TYP. EACH END OF EACH MULLION)



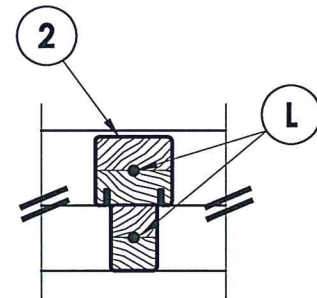
Documents Prepared By: Lyndon F. Schmidt, P.E.
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CERTIFICATE OF REGISTRATION # F-11852

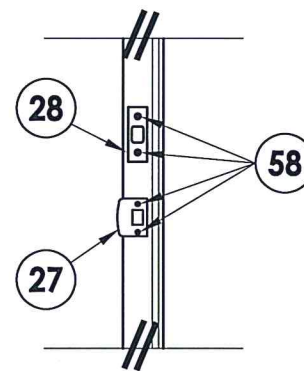
FRAME ANCHORING
XX

FLOOR SUBSTRATE MATERIAL (TYP.)
CONCRETE (MIN. 3000 PSI)
WOOD (G >= 0.42)

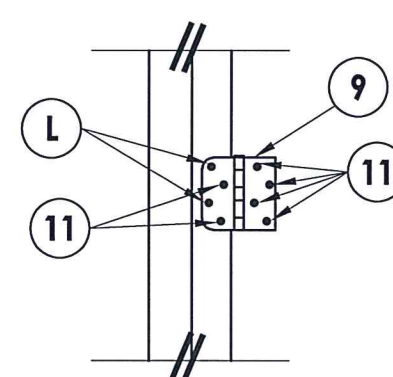


INTEGRAL MULLION ATTACHMENT DETAIL

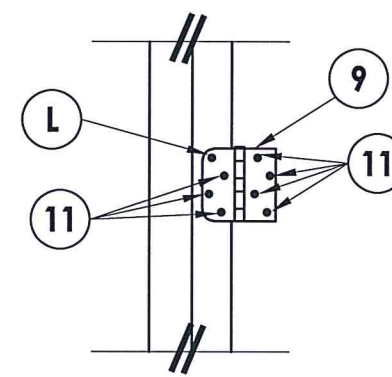
FRAME ANCHORING
OXXO



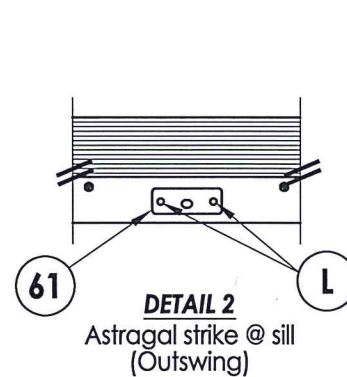
LATCH & DEAD BOLT DETAIL
Kwikset / Schlage / Pamex



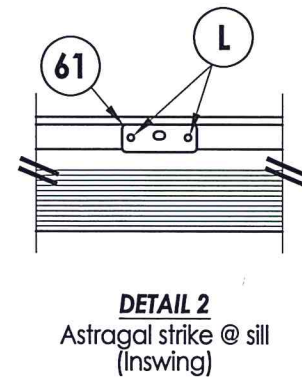
HINGE DETAIL
Inswing



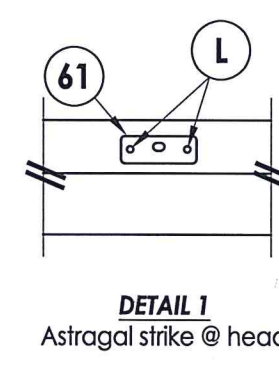
HINGE DETAIL
Outswing



DETAIL 2
Astragal strike @ sill
(Outswing)



DETAIL 2
Astragal strike @ sill
(Inswing)



DETAIL 1
Astragal strike @ head

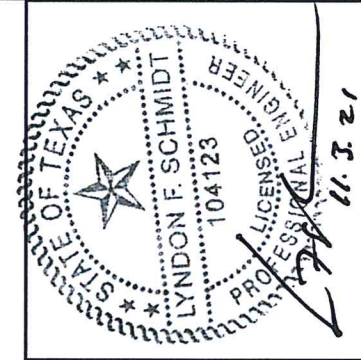
CONCRETE ANCHOR NOTES:

- 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:

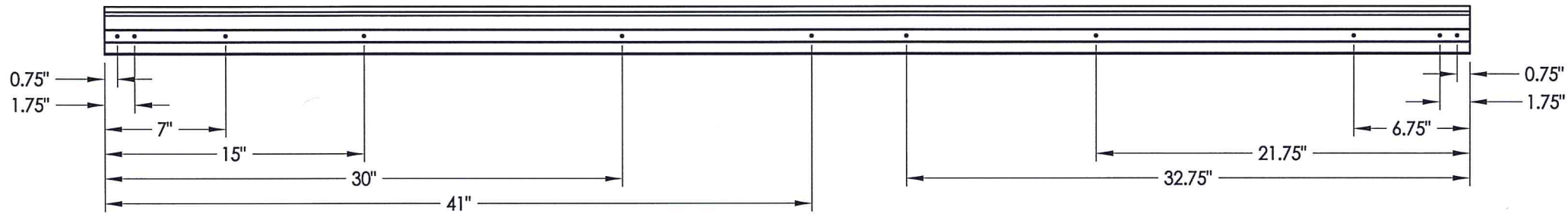
ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW TAPCON®	1/4"	1-1/4"	2-1/2"	3"

PRODUCT:	FIBERGLASS DOOR	
PART OR ASSEMBLY:	FRAME ANCHORING	
NO.	DATE	BY
4	10/21/21	UPDATE TO 2018 IBC/IRC
3	5/16/18	ADD FLAT FRAME LITE PROFILE
2	12/14/15	ADD H.S. GLAZING OPTION
1	11/27/12	REVISED GLAZING/HARDWARE
REVISIONS		
DATE:	06/20/12	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4170	
SHEET	9	OF 11

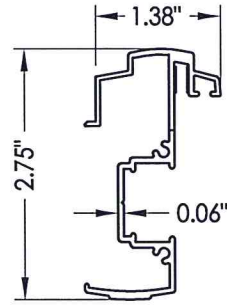


Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

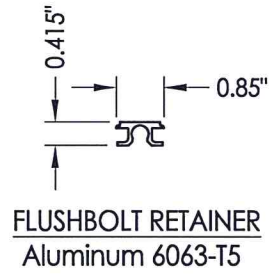


ASTRAGAL SCREW LOCATIONS

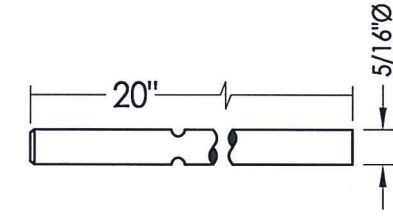


60 ASTRAGAL
Columbia

6'8 ALUMINUM ASTRAGAL ASSEMBLY
By Columbia



FLUSHBOLT RETAINER
Aluminum 6063-T5



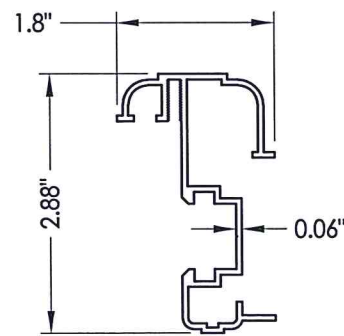
FLUSHBOLT ROD
Steel
(2" throw)

PRODUCT: FIBERGLASS DOOR

PART OR ASSEMBLY: ASTRAGAL DETAILS

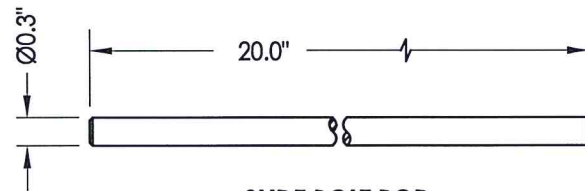


ASTRAGAL SCREW LOCATIONS

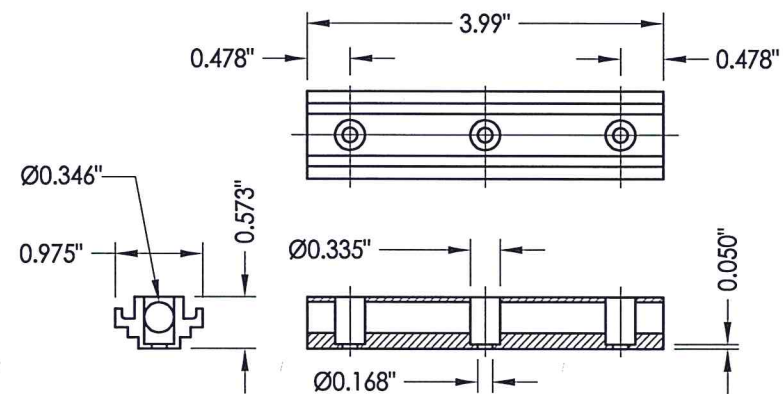


60 ASTRAGAL
DLP

6'8 ALUMINUM ASTRAGAL ASSEMBLY
By DLP



SLIDE BOLT ROD
Typ. top & bottom of astragal
(2" throw)



CONCEALED STIFFENER

NO.	DATE	REVISIONS
4	10/21/21	UPDATE TO 2018 IBC/IRC
3	5/16/18	ADD FLAT FRAME LITE PROFILE
2	12/14/15	ADD H.S. GLAZING OPTION
1	11/27/12	REVISED GLAZING/HARDWARE

DATE: 06/20/12

SCALE: N.T.S.

DWG. BY: JK

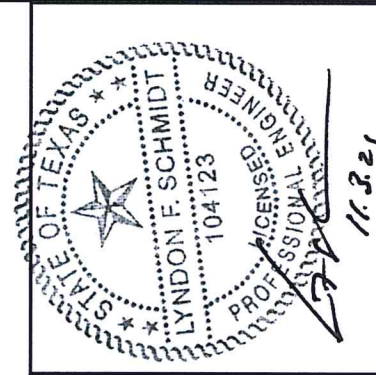
CHK. BY: LFS

DRAWING NO.: TX-4170

SHEET 10 of 11

BILL OF MATERIALS

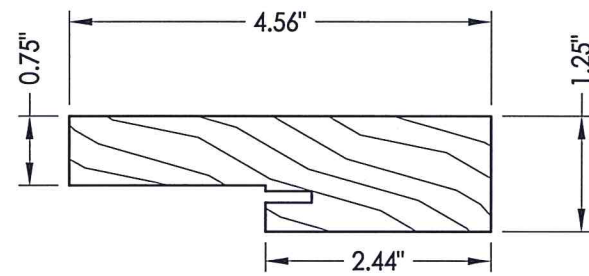
ITEM #	DESCRIPTION	MATERIAL
A	2X FRAMING (G >= 0.42)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" PFH ITW CONCRETE SCREW (1-3/4" MIN. EMB.)	STEEL
J	#10 X 3" PFH WOOD SCREW	STEEL
L	#10 X 2-1/2" PFH WOOD SCREW	STEEL
1	HEAD & JAMB - FINGER-JOINT PINE	WOOD
2	INTEGRAL MULLION - FAT BOY (PINE)	WOOD
7	WEATHERSTRIP (Q'LON QEBD-650)	FOAM
8	DOOR BOTTOM SWEEP	VINYL
9	4" X 4" BUTT HINGE	STEEL
11	#9 X 3/4" PFH WOOD SCREW	STEEL
27	LATCH STRIKE PLATE	STEEL
28	DEADBOLT STRIKE PLATE	STEEL
30	OUTSWING THRESHOLD	ALUM/COMP
31	ADA THRESHOLD	ALUM
36	INSWING THRESHOLD	ALUM/COMP
39	SIDELITE SPACER - INSWING	PVC
40	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR DETAILS	-
50	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR DETAILS	-
51	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR DETAILS	-
57	#8 X 2" PPH SMS	STEEL
58	#8 X 2-1/2" PFH WOOD SCREW	STEEL
60	ASTRAGAL (DLP OR COLUMBIA)	ALUM
61	ASTRAGAL STRIKE PLATE	STEEL



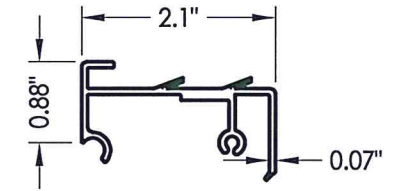
Documents Prepared By: Lyndon F. Schmidt, P.E.
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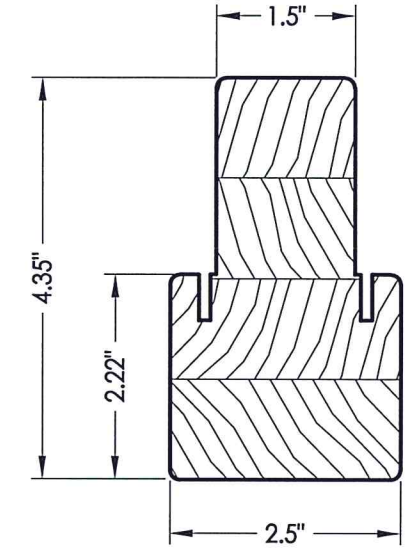
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852



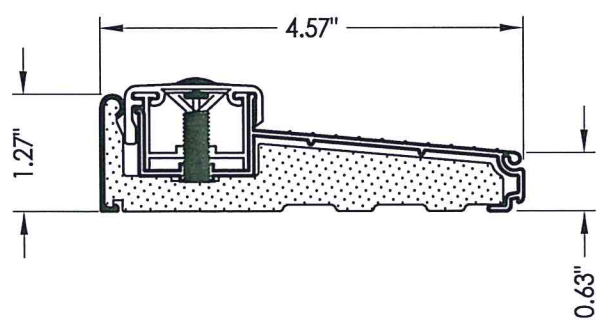
1 HEAD & JAMB
Finger joint pine



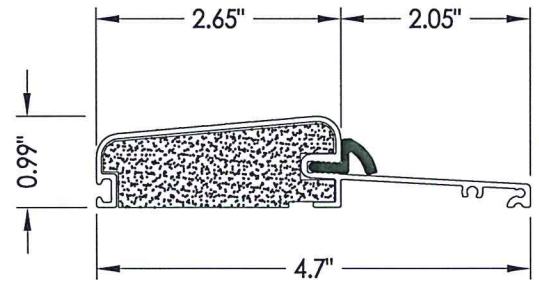
39 SIDELITE SPACER
Inswing



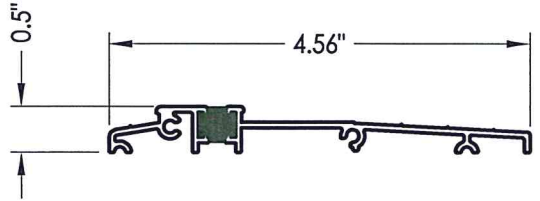
2 INTEGRAL MULLION



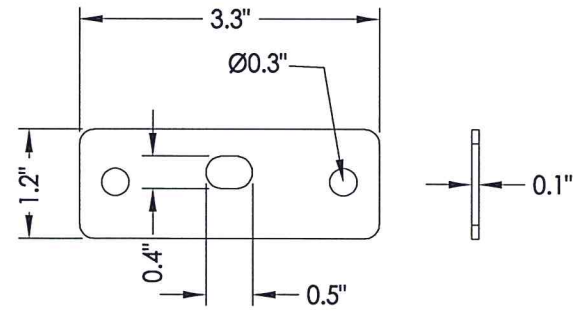
36 INSWING THRESHOLD
Columbia 900 Series



30 OUTSWING THRESHOLD
Columbia 775 Series
w/ Composite Substrate



31 ADA THRESHOLD
Columbia



61 ASTRAGAL STRIKE PLATE
Head & sill

PRODUCT:		FIBERGLASS DOOR	
PART OR ASSEMBLY:		BILL OF MATERIALS & COMPONENTS	
NO.	DATE	BY	REVISIONS
4	10/21/21	LFS	UPDATE TO 2018 IBC/IRC
3	5/16/18	LFS	ADD FLAT FRAME LITE PROFILE
2	12/14/15	JK	ADD H.S. GLAZING OPTION
1	11/27/12	LFS	REVISED GLAZING/HARDWARE

DATE: 06/20/12
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4170
SHEET 11 OF 11