

TRINITY GLASS
INTERNATIONAL
33615 1st Way S, Federal Way, WA 98003

GLAZED FIBERGLASS DOUBLE DOOR w/ or w/out SIDELITES OUTSWING "IMPACT"

EVALUATED FOR USE IN THE STATE OF TEXAS

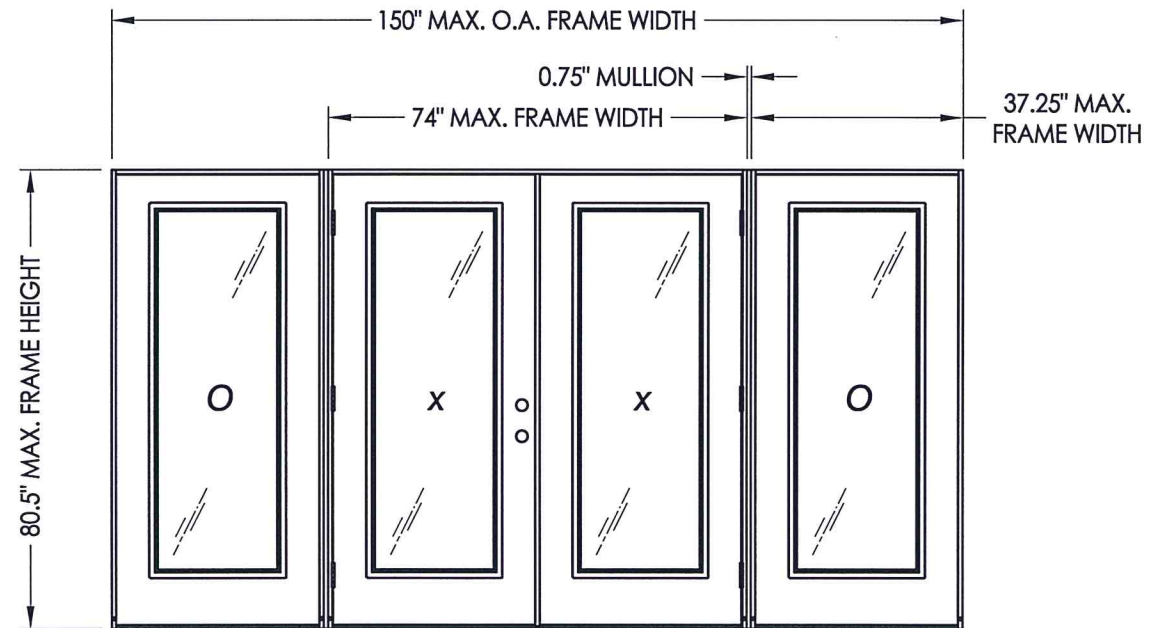
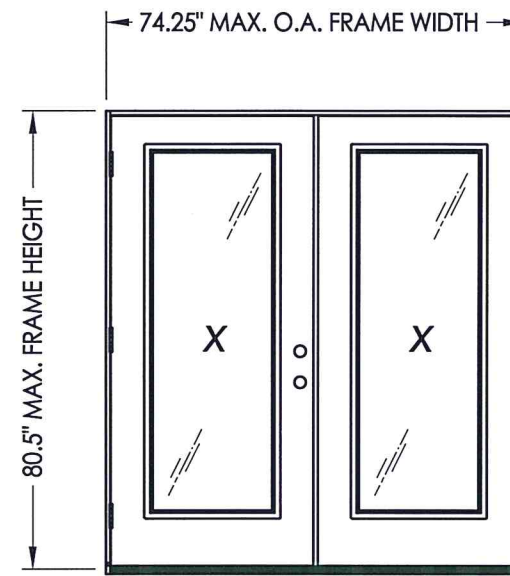
DR-273

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:

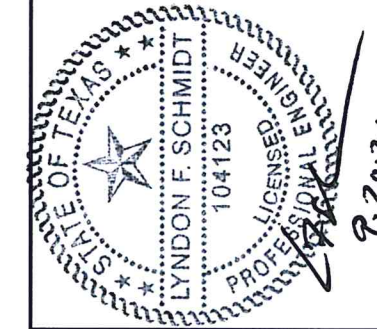
1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. This system has been tested and evaluated as a large missile impact protective system for installation in areas requiring wind-borne debris protection. This 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
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4	Sidelite panel details and glazing details
5	Elevations
6	Horizontal cross sections
7	Vertical cross sections
8	Vertical cross sections
9	Frame anchoring (XX)
10	Frame anchoring (OXXO)
11	Components
12	Bill of materials



CONFIGURATION	MAX. FRAME DIMENSION	DESIGN PRESSURE (PSF)	
		POSITIVE	NEGATIVE
XX	74.25" x 80.5"	+ 50.0	- 50.0
OXXO	150.0" x 80.5"	+ 50.0	- 50.0



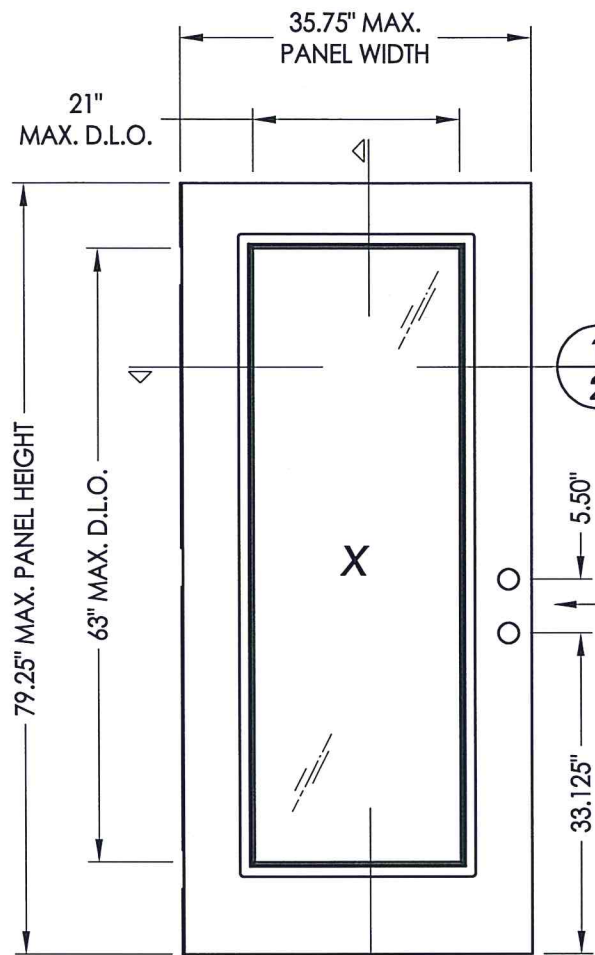
Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123
R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: TRINITY GLASS INT'L
PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

NO.	DATE	BY	REVISIONS
1	8/10/21	LFS	UPDATE TO 2018 IBC/IRC

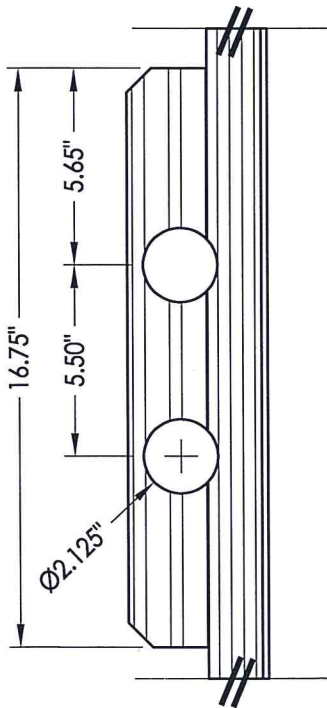
DATE: 5/10/12
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4157
SHEET 1 OF 12

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2
2

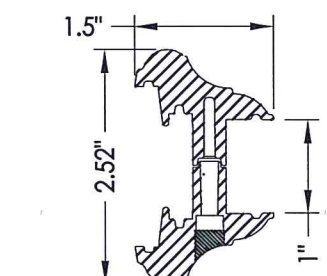
40 DOOR PANEL
Full life



DETAIL 1

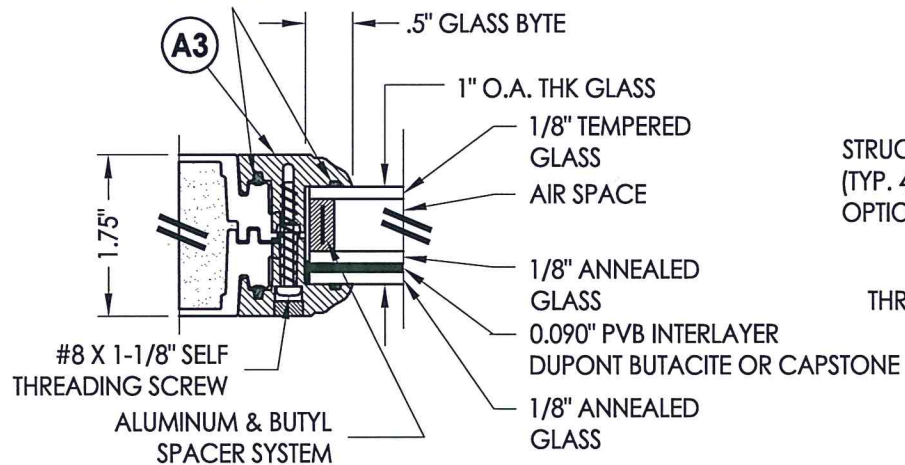
A3 FLUSH GLAZED FRAME
ABS or PC/ASA

B3 MAHOGANY LITE FRAME
ABS or PC/ASA



DETAIL 2

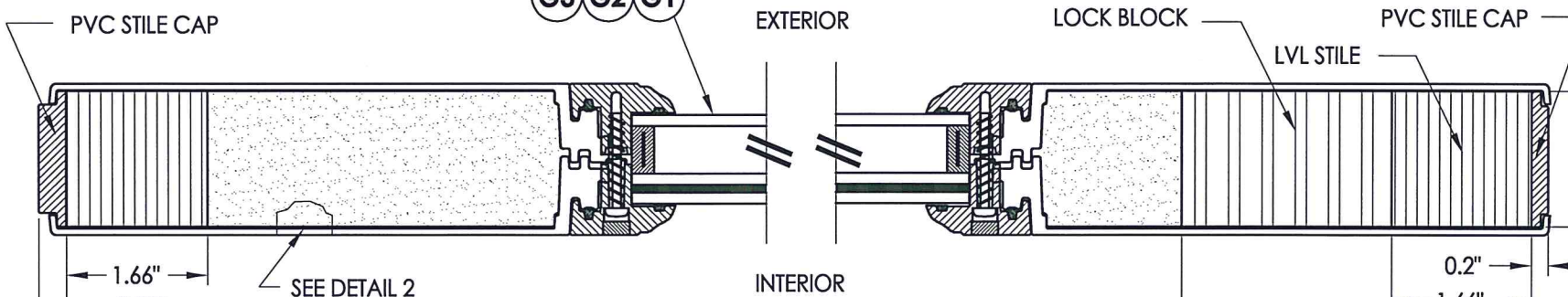
STRUCTURAL SILICONE
(TYP. 4 PLCS.) SEE
OPTIONS BELOW



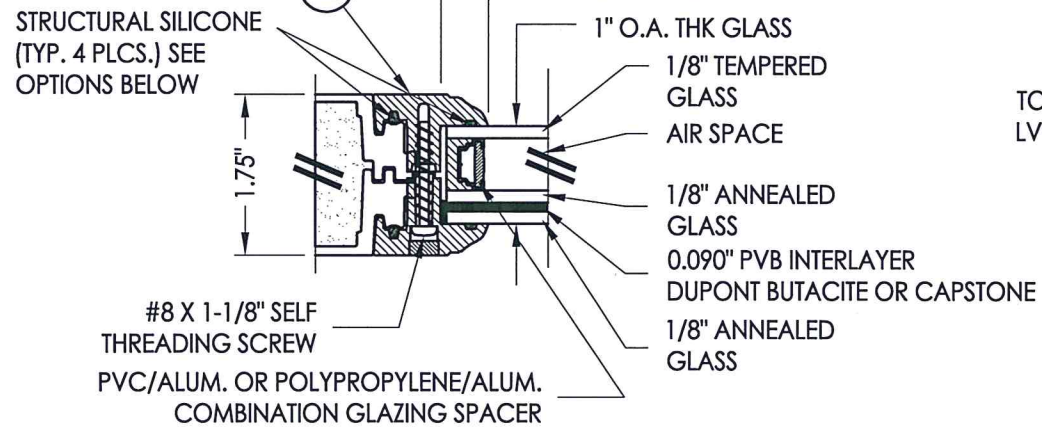
G1 GLAZING DETAIL

LITE FRAME SCREW SPACING:
At each corner plus 6 more along sides (11\"/>

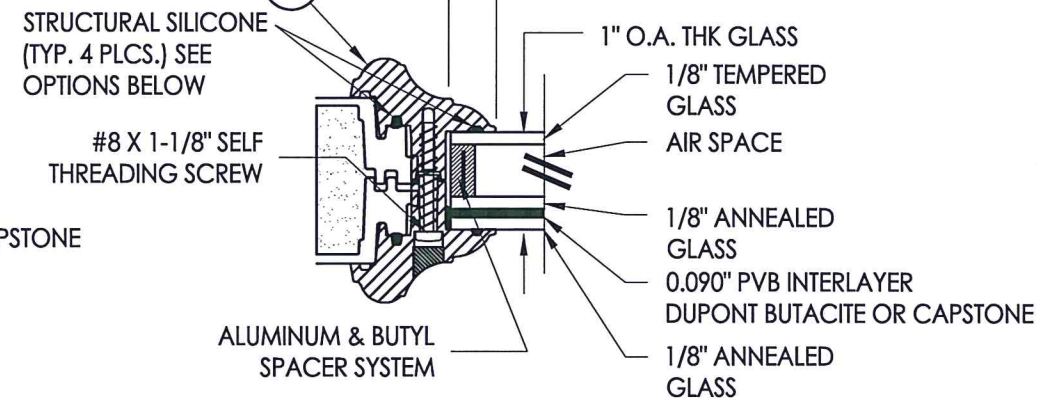
1
2 HORIZONTAL CROSS SECTION



1
2

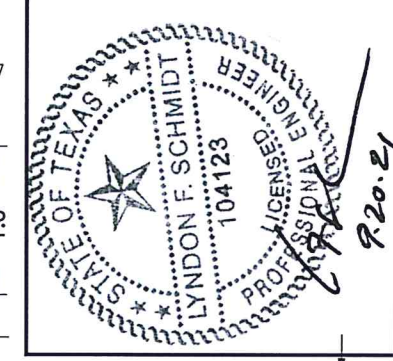


G2 GLAZING DETAIL



G3 GLAZING DETAIL

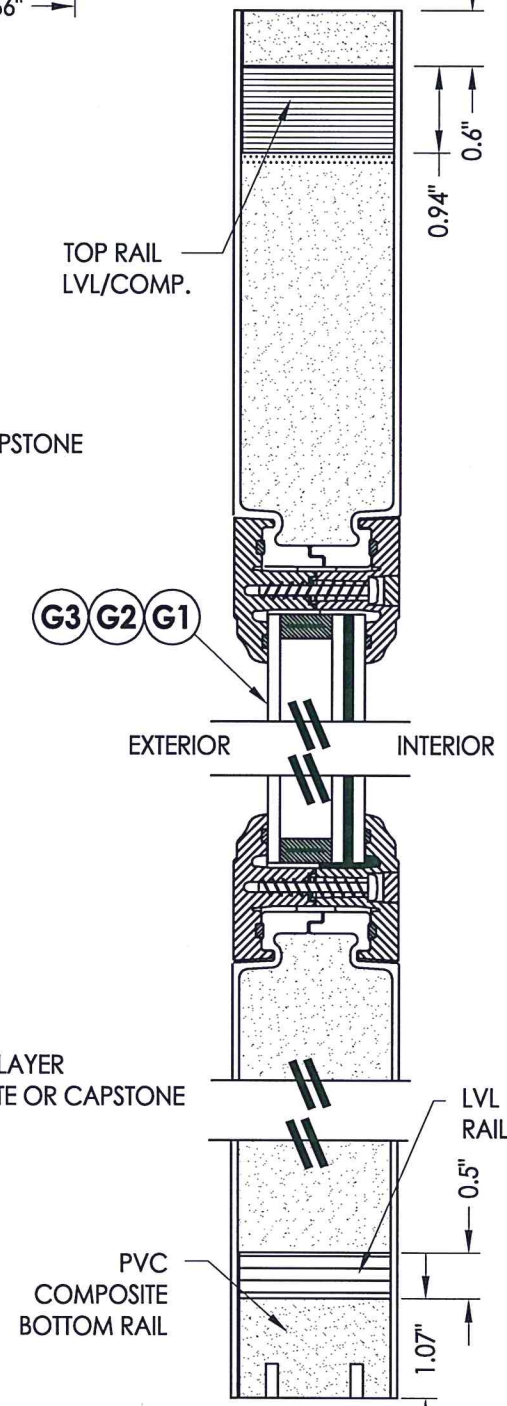
STRUCTURAL SILICONE OPTIONS:
SILICONE BY CAPSTONE (4PL)
DOW 995 STRUCTURAL SILICONE
SILICONE BY DONGYANG SILICONE CO.



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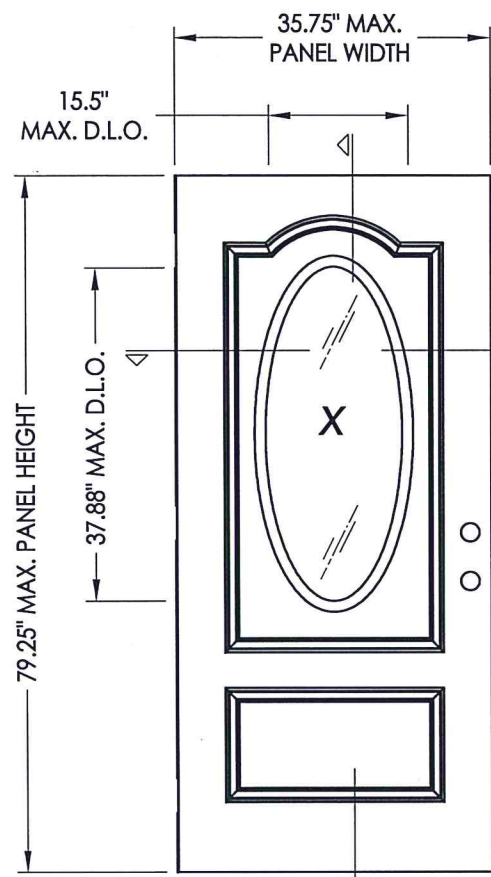


2
2 VERTICAL CROSS SECTION

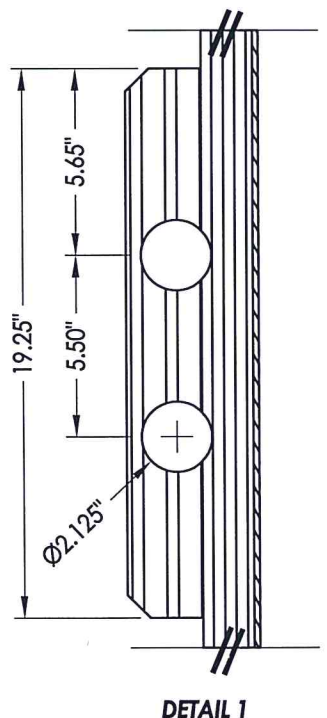
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PART OR ASSEMBLY:	DOOR PANEL DETAILS				
NO.	1	DATE	8/10/21	UPDATE TO	IBC/IRC
BY	LFS	DATE		DATE	
REVISIONS					
DATE:	5/10/12				
SCALE:	N.T.S.				
DWG. BY:	JK				
CHK. BY:	LFS				
DRAWING NO.:	TX-4157				
SHEET	2 OF 12				

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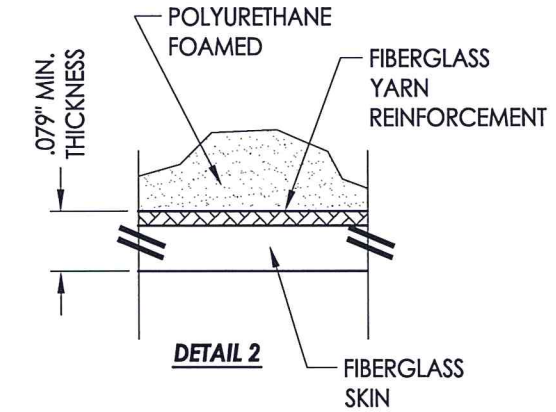
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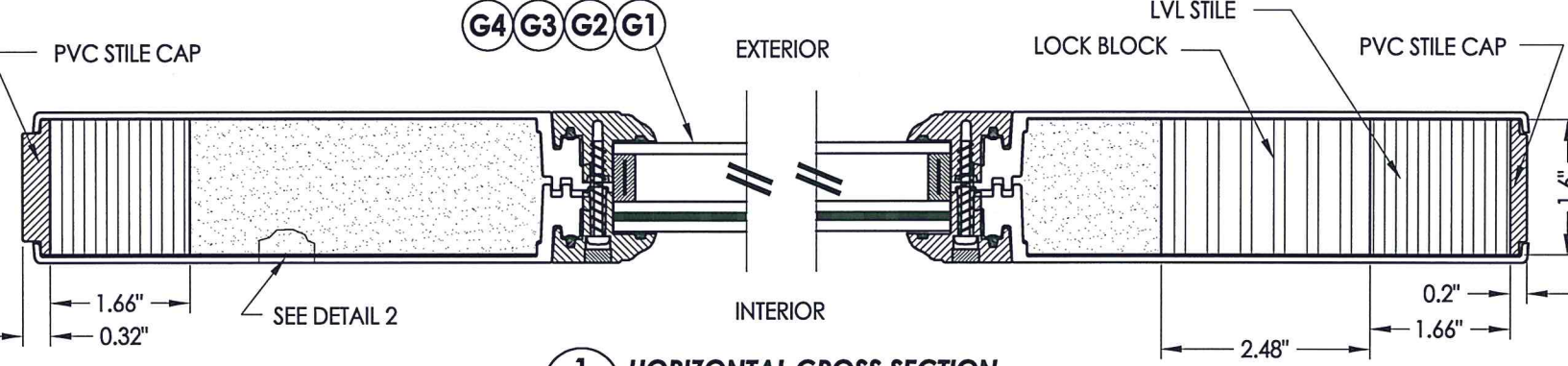
2
3
41 DOOR PANEL
Oval lite



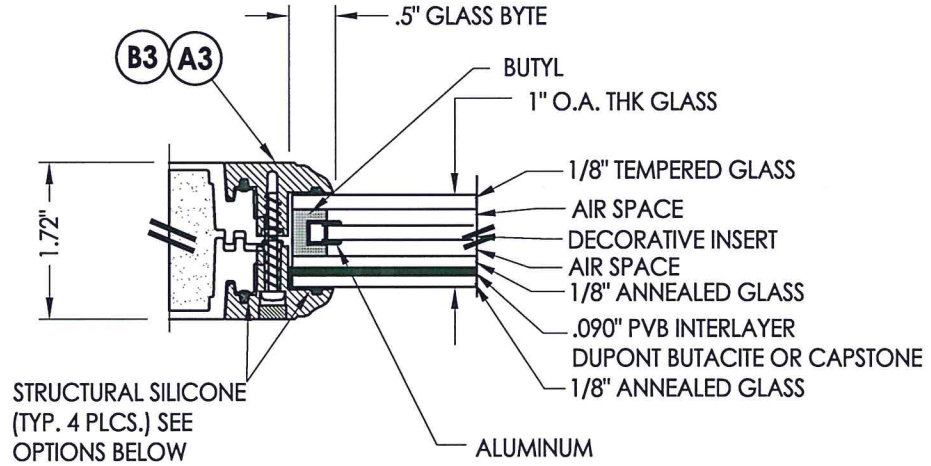
DETAIL 1



DETAIL 2



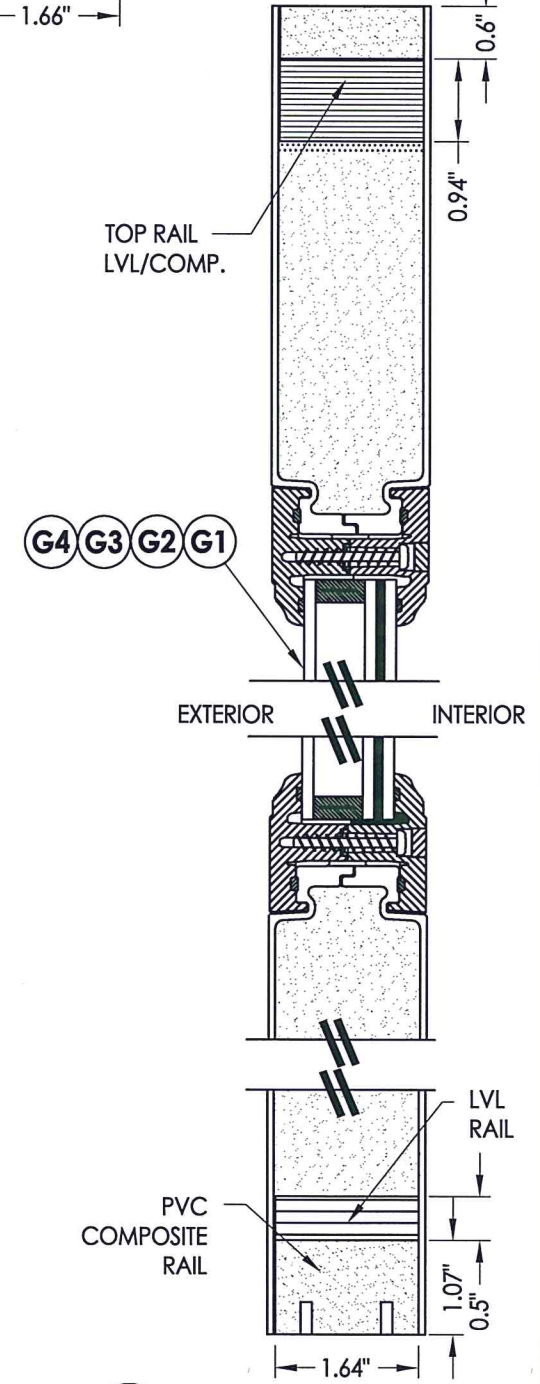
1
3 **HORIZONTAL CROSS SECTION**



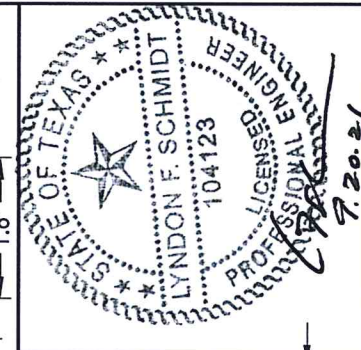
G4 **GLAZING DETAIL**

LITE FRAME SCREW SPACING:
At each corner plus 6 more along sides (11" max. o.c.) & 2 more along top & bottom (8" max. o.c.).

STRUCTURAL SILICONE OPTIONS:
SILICONE BY CAPSTONE (4PL)
DOW 995 STRUCTURAL SILICONE
SILICONE BY DONGYANG SILICONE CO.



2
3 **VERTICAL CROSS SECTION**



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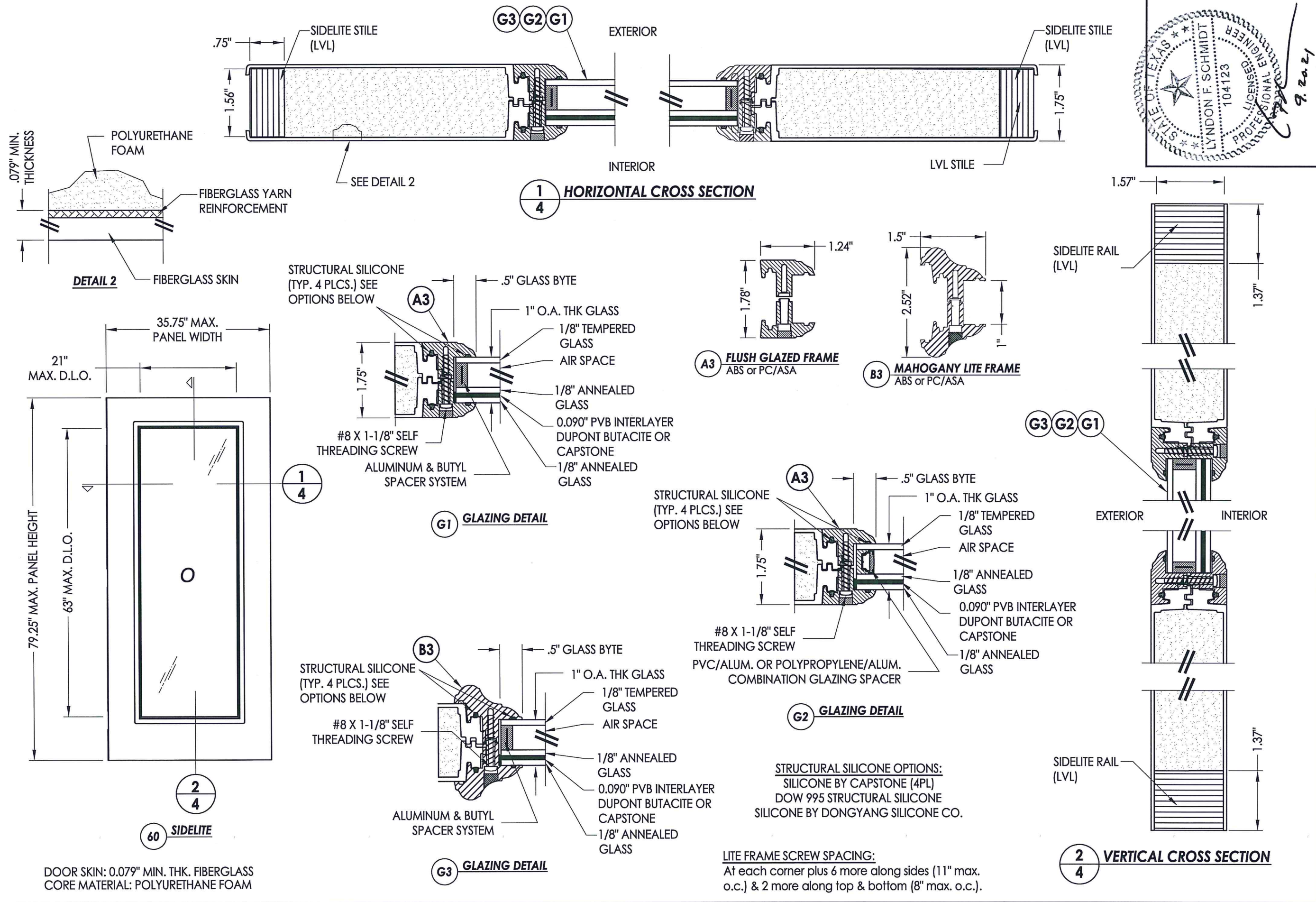
PRODUCT:	TRINITY GLASS INT'L
PART OR ASSEMBLY:	DOOR PANEL DETAILS AND GLAZING DETAILS

NO.	DATE	BY	REVISIONS
1	8/10/21	LFS	UPDATE TO 2018 IBC/IRC

DATE:	5/10/12
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4157
SHEET	3 OF 12

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PRODUCT: TRINITY GLASS INT'L

PART OR ASSEMBLY: SIDELITE PANEL DETAILS AND GLAZING DETAILS

NO.	DATE	BY	REVISIONS
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DATE: 5/10/12

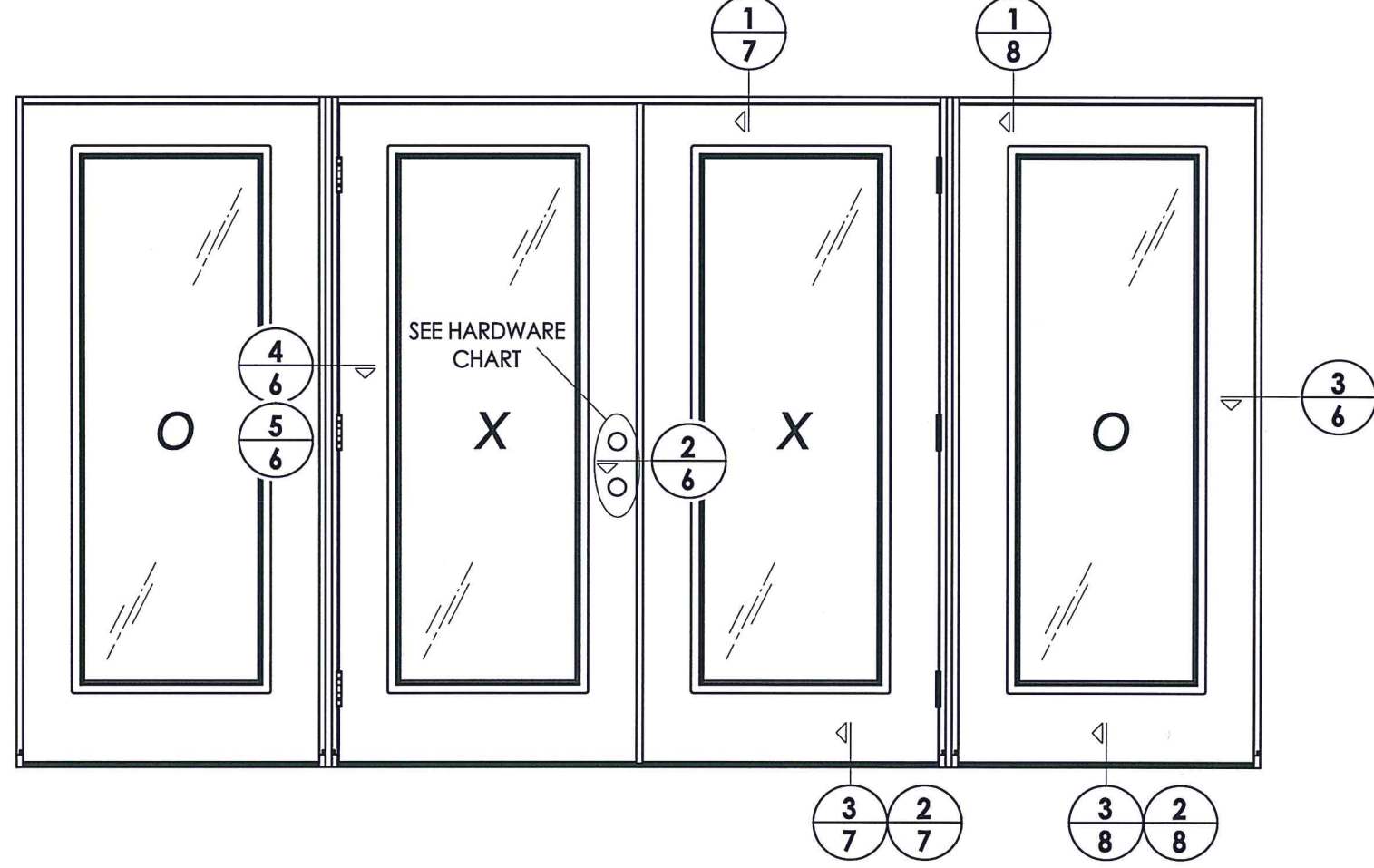
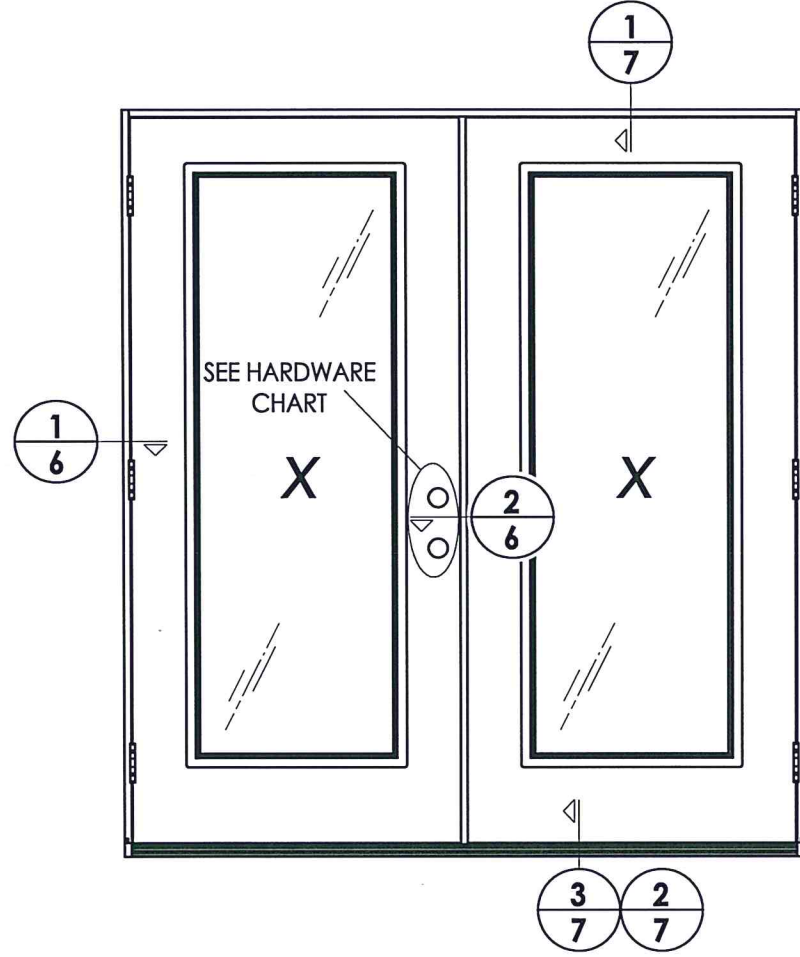
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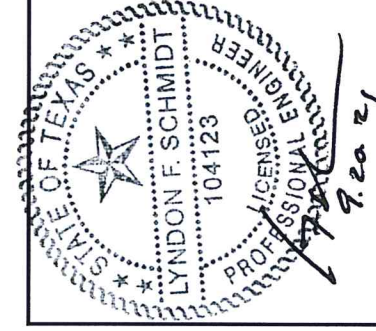
CHK. BY: LFS

DRAWING NO.: TX-4157

SHEET 4 OF 12



HARDWARE CHART	
MANUFACTURER	MODEL
KWIKSET	KNOB: KWIKSET SERIES (660) DEADBOLT: KWIKSET SERIES (660)
KWIKSET	KNOB: SIGNATURE SERIES (740) DEADBOLT: SIGNATURE SERIES (780)
KWIKSET	KNOB: SIGNATURE SERIES (740) DEADBOLT: SIGNATURE SERIES (980)



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PRODUCT: TRINITY GLASS INT'L

PART OR ASSEMBLY: ELEVATIONS

NO.	DATE	BY
1	8/10/21	LFS

DATE: 5/10/12

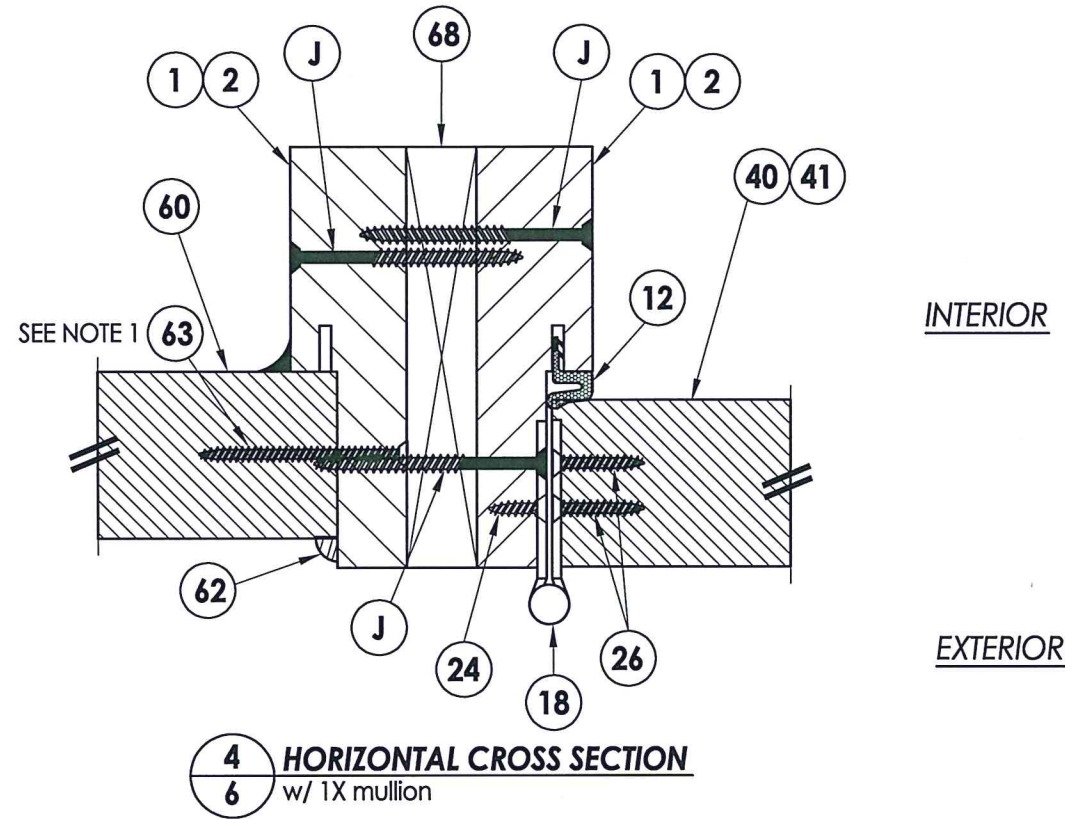
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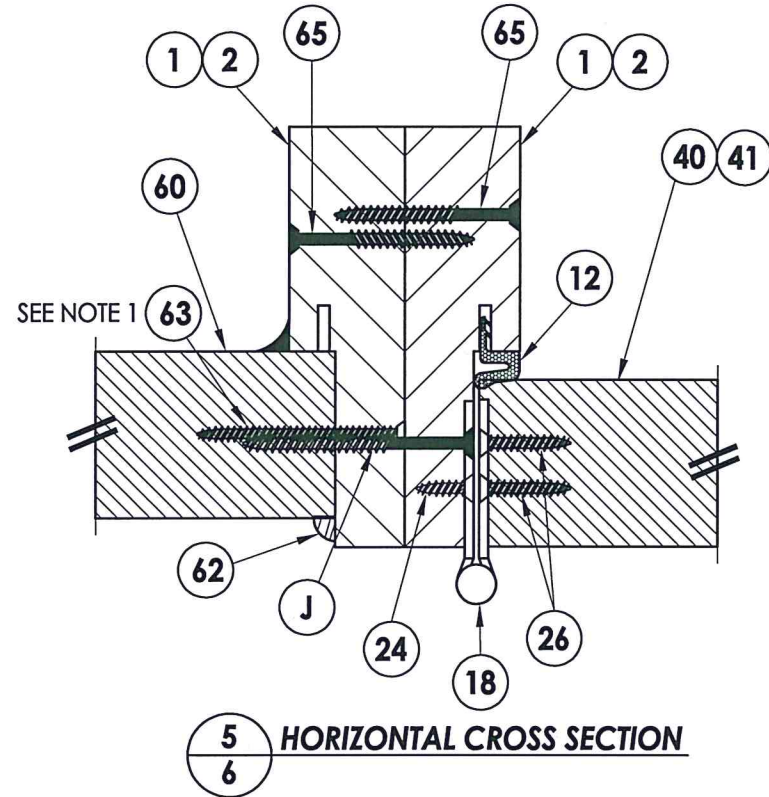
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DRAWING NO.: TX-4157

SHEET 5 OF 12



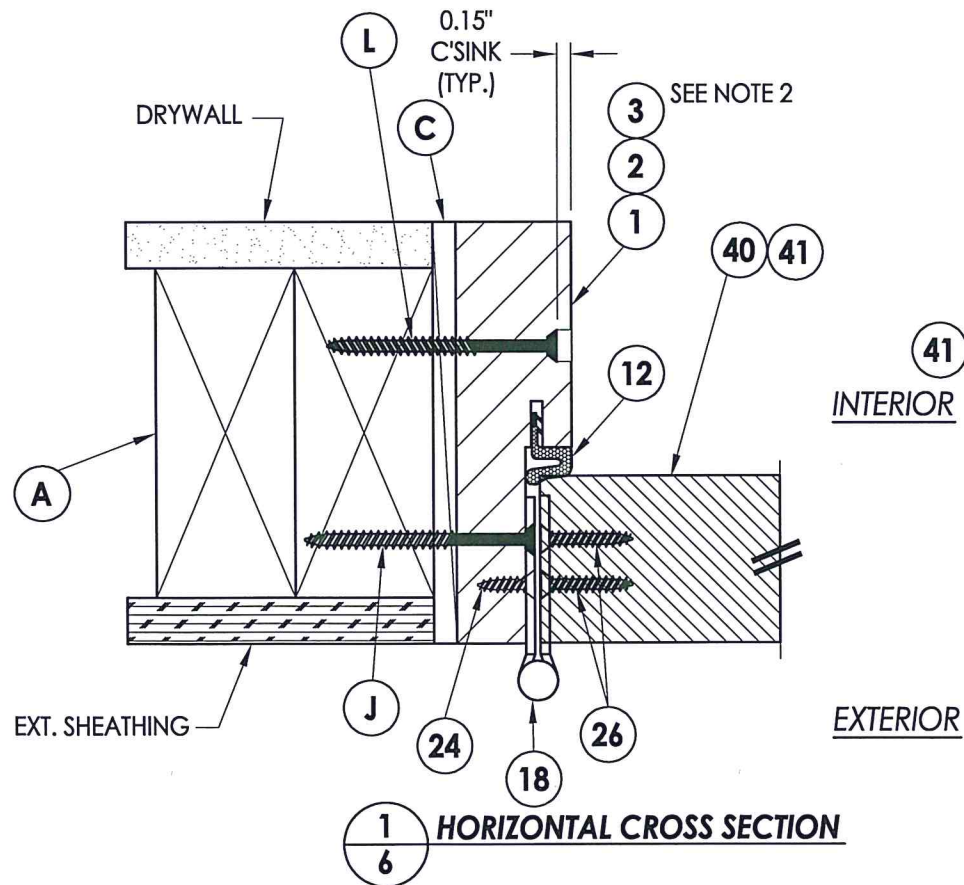
4 HORIZONTAL CROSS SECTION
6 w/ 1X mullion



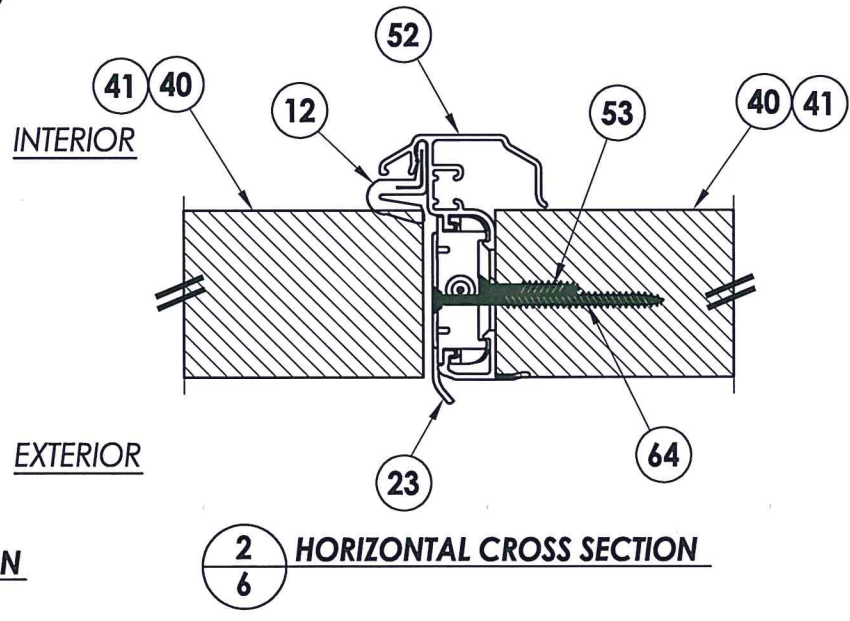
5 HORIZONTAL CROSS SECTION
6

NOTE:

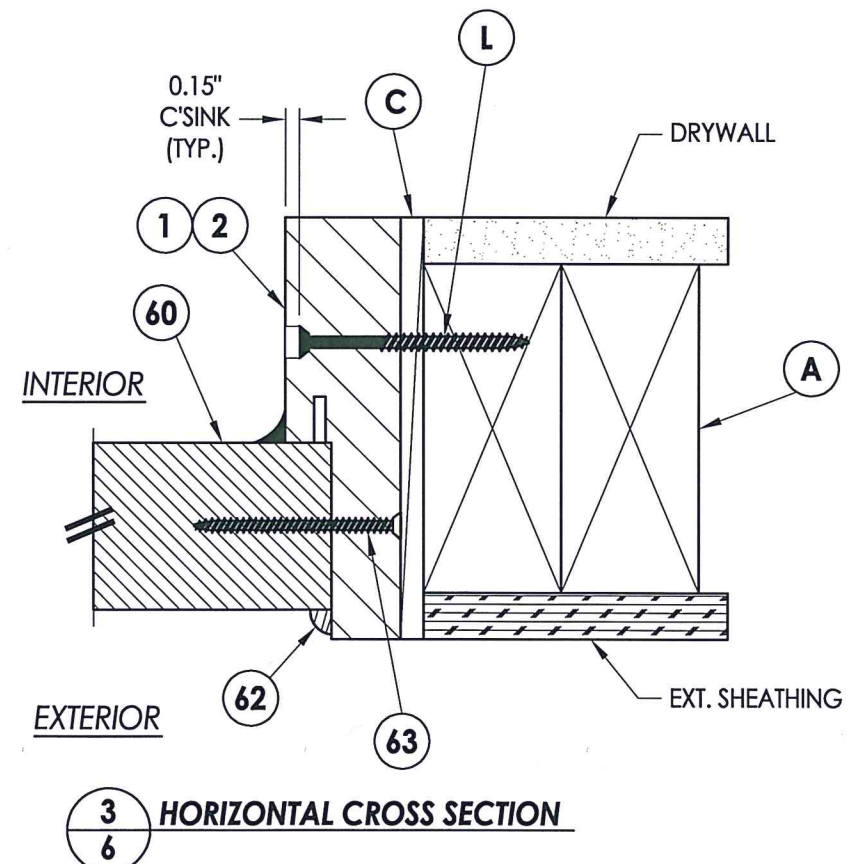
- Item #63 located 6" from each end and 3 more equally spaced (5 total).
- PVC frame may be used with double door without sidelites only.



1 HORIZONTAL CROSS SECTION
6



2 HORIZONTAL CROSS SECTION
6



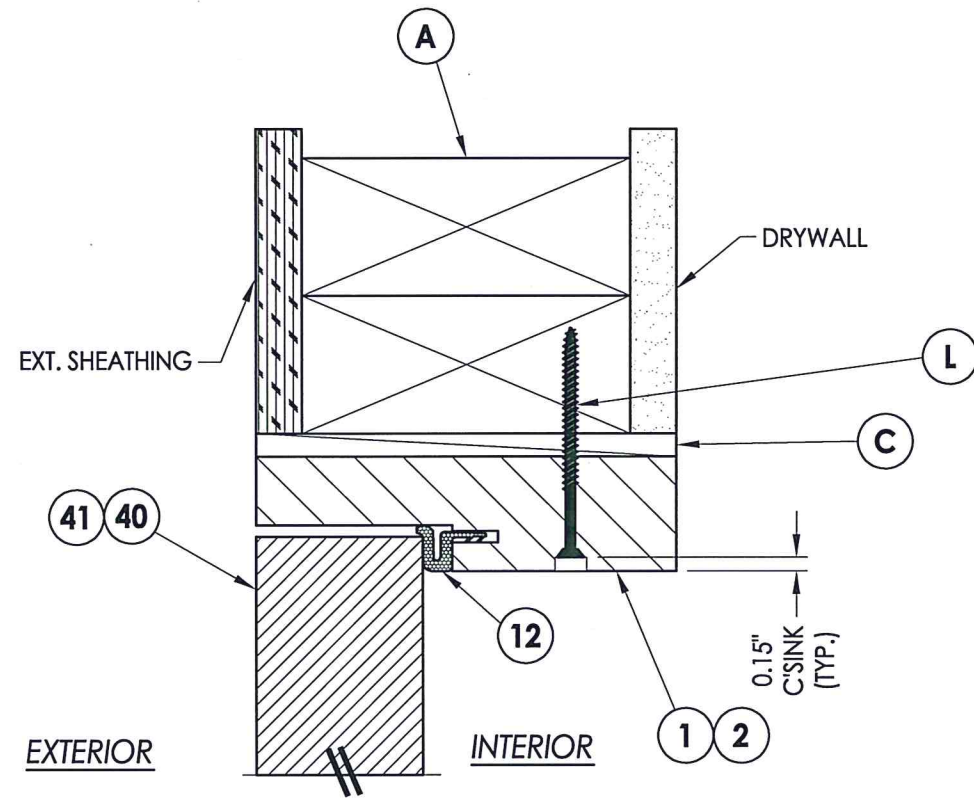
3 HORIZONTAL CROSS SECTION
6



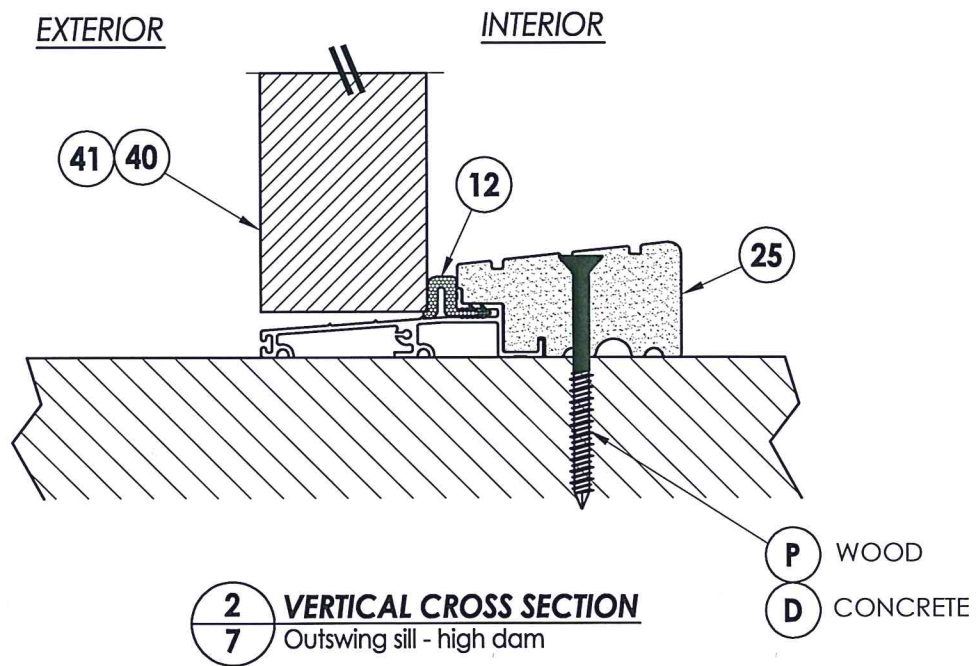
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PRODUCT:		TRINITY GLASS INT'L	
PART OR ASSEMBLY:		HORIZONTAL CROSS SECTIONS	
NO.	DATE	REVISIONS	
1	8/10/21	UPDATE TO 2018 IBC/IRC	LFS
			BY
DATE: 5/10/12			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: TX-4157			
SHEET 6 OF 12			

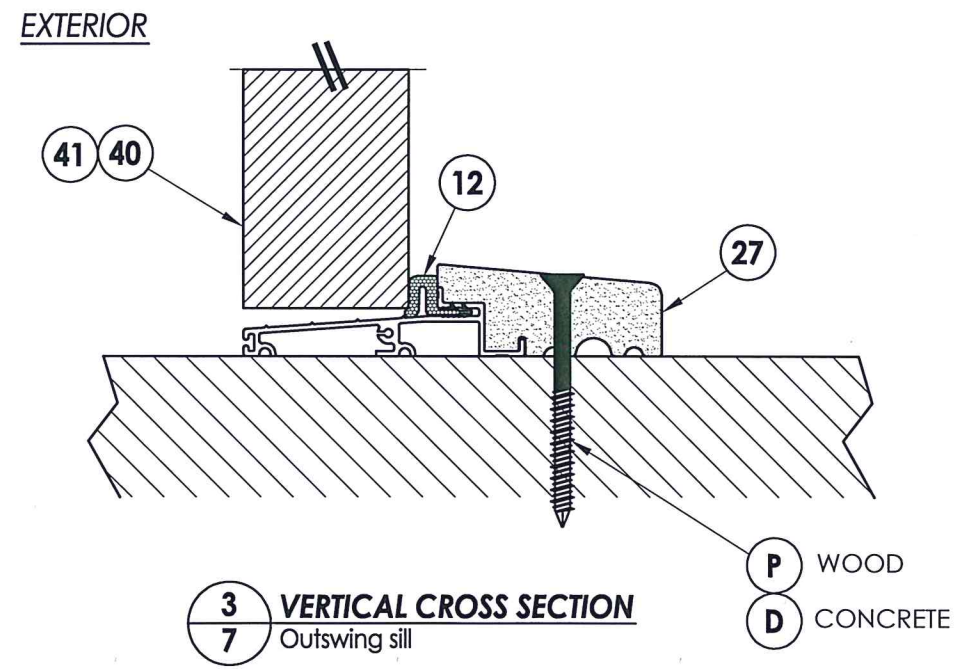


1
7 VERTICAL CROSS SECTION



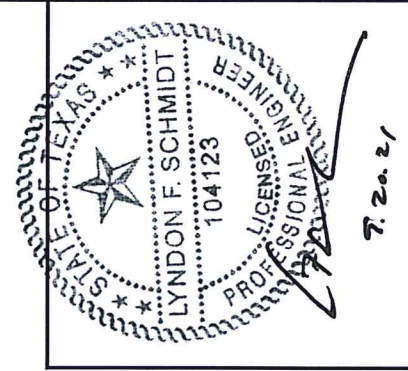
2
7 VERTICAL CROSS SECTION
Outswing sill - high dam

P WOOD
D CONCRETE



3
7 VERTICAL CROSS SECTION
Outswing sill

P WOOD
D CONCRETE



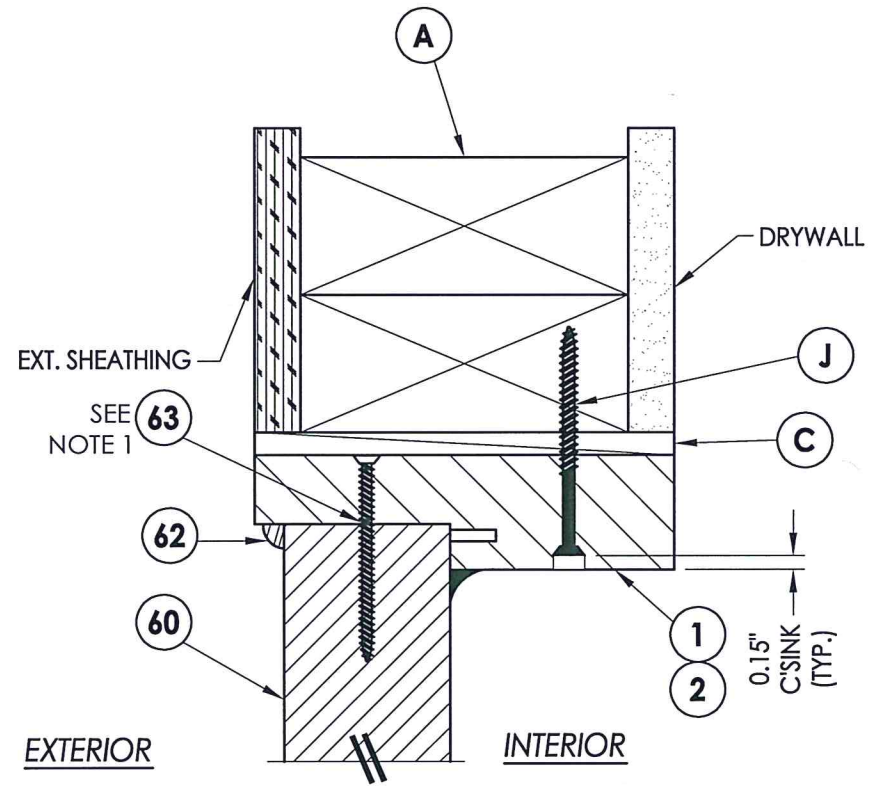
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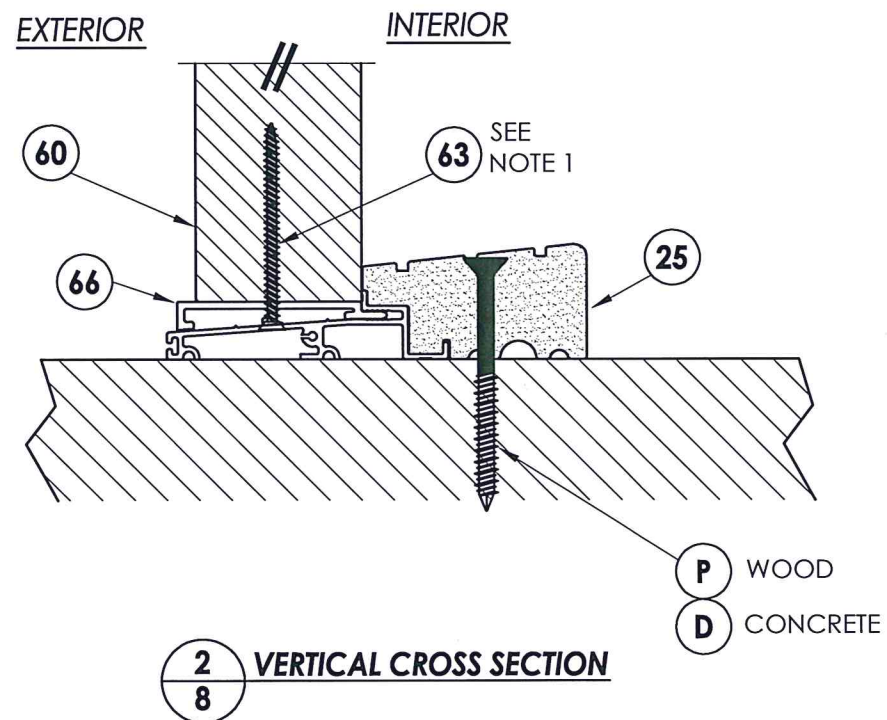
PRODUCT:	TRINITY GLASS INT'L
PART OR ASSEMBLY:	VERTICAL CROSS SECTIONS

NO.	DATE	DESCRIPTION	BY
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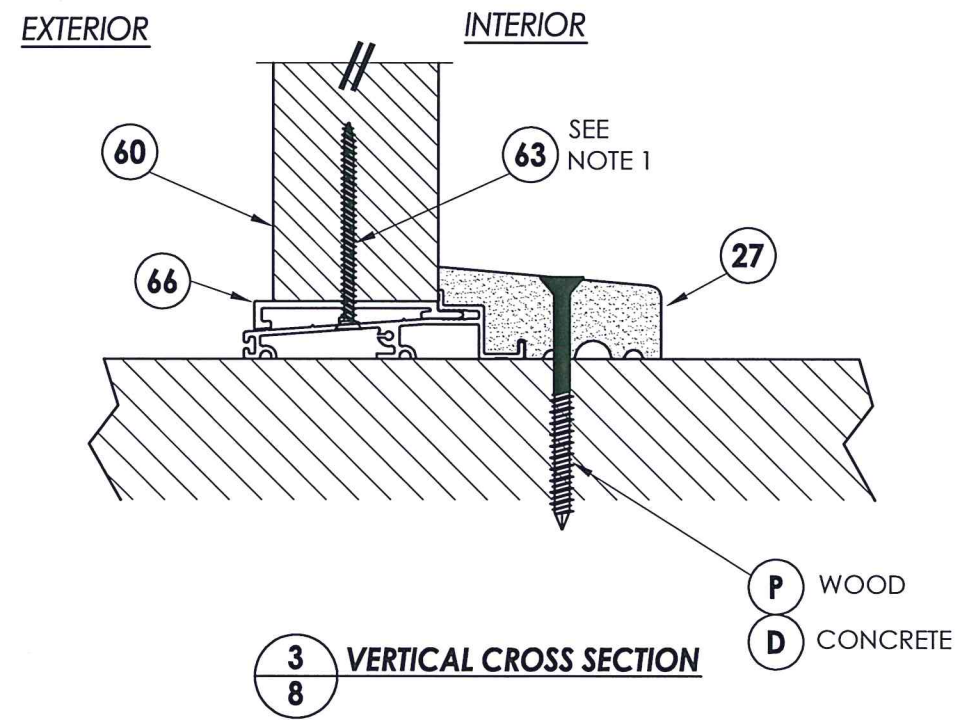
DATE:	5/10/12
SCALE:	N.T.S.
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CHK. BY:	LFS
DRAWING NO.:	TX-4157
SHEET	7 OF 12



1
8 VERTICAL CROSS SECTION



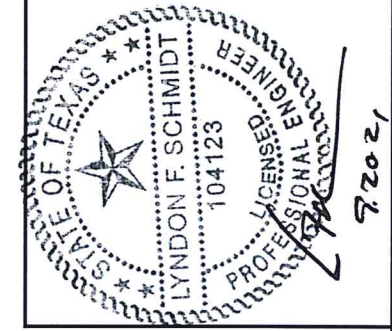
2
8 VERTICAL CROSS SECTION



3
8 VERTICAL CROSS SECTION

NOTE:

1. Screws thru head and sill jamb located 3" from each end and O.C. (TYP.) line.



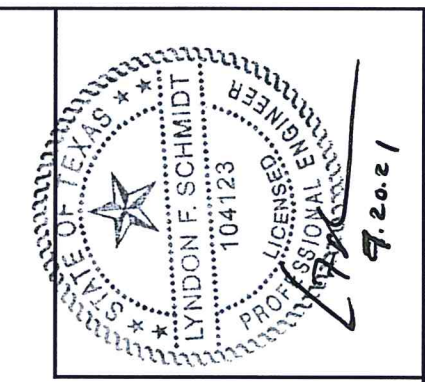
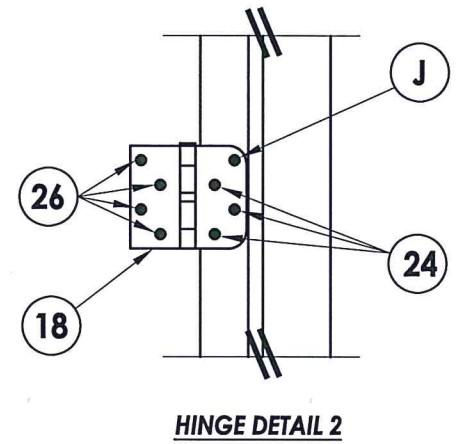
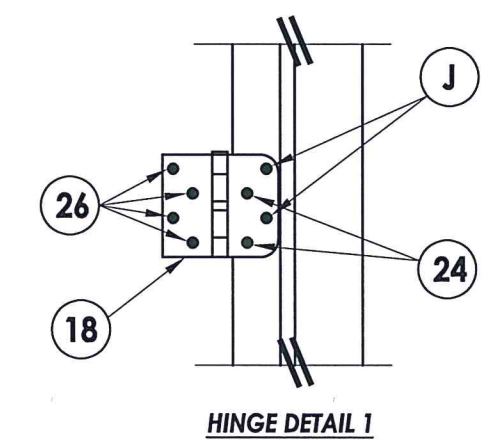
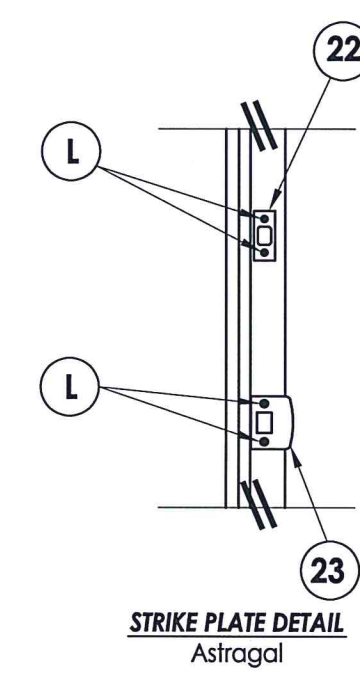
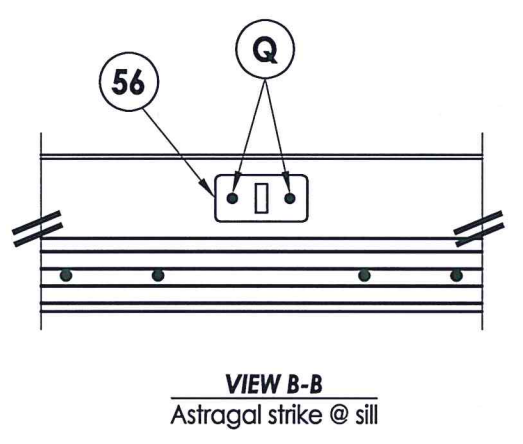
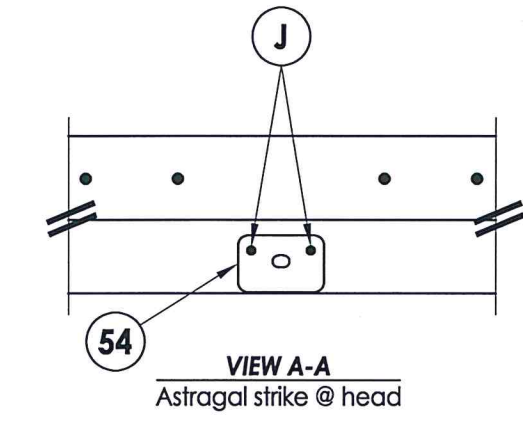
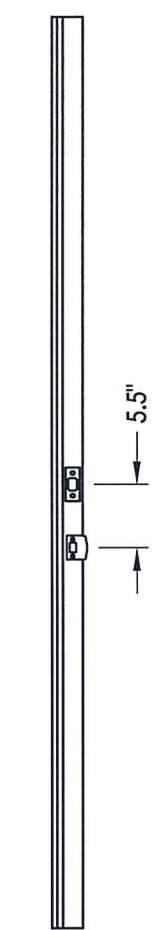
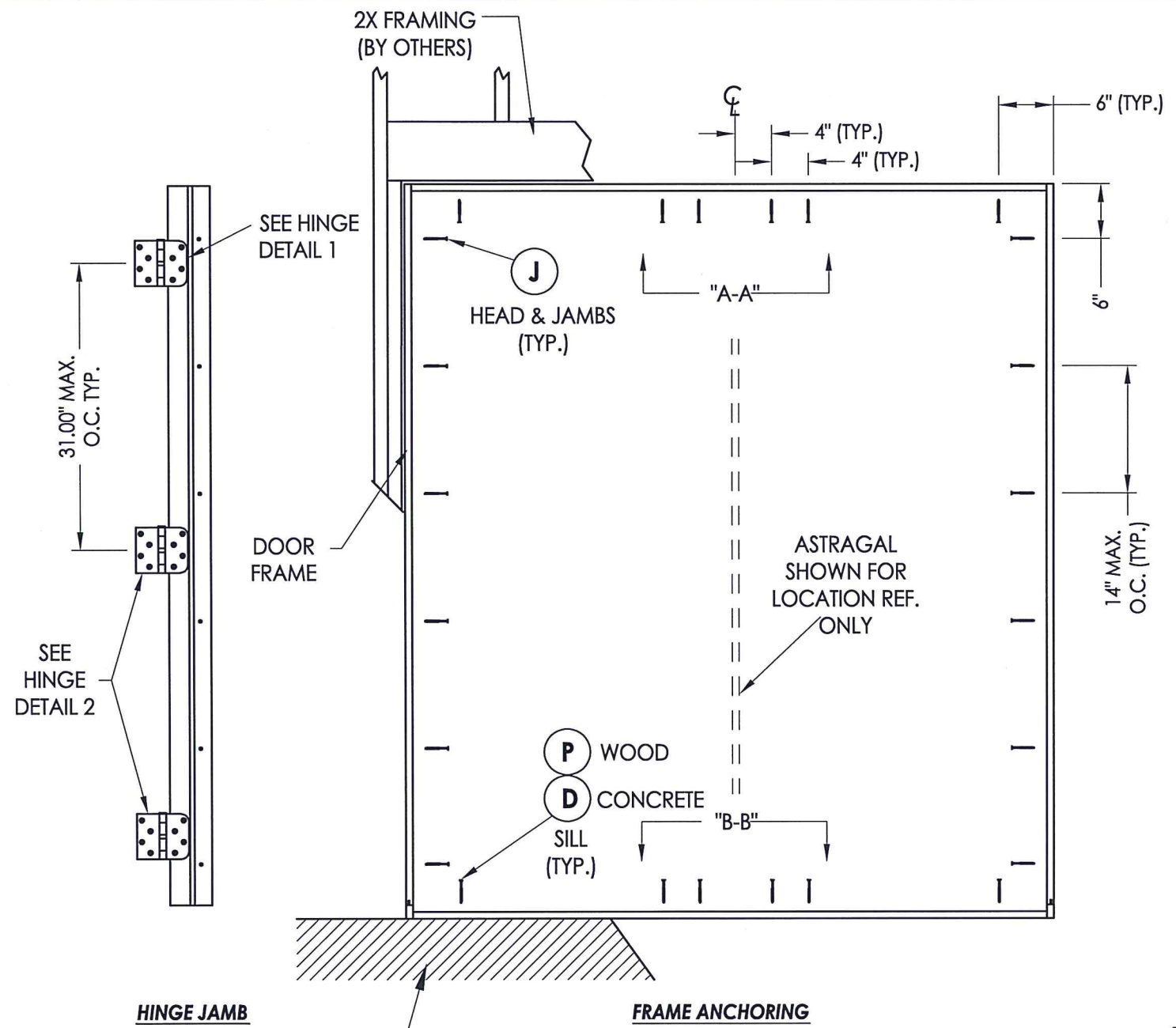
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PRODUCT:	TRINITY GLASS INT'L
PART OR ASSEMBLY:	VERTICAL CROSS SECTIONS

NO.	DATE	BY	REVISIONS
1	8/10/21	LFS	UPDATE TO 2018 IBC/IRC

DATE:	5/10/12
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4157
SHEET	8 OF 12



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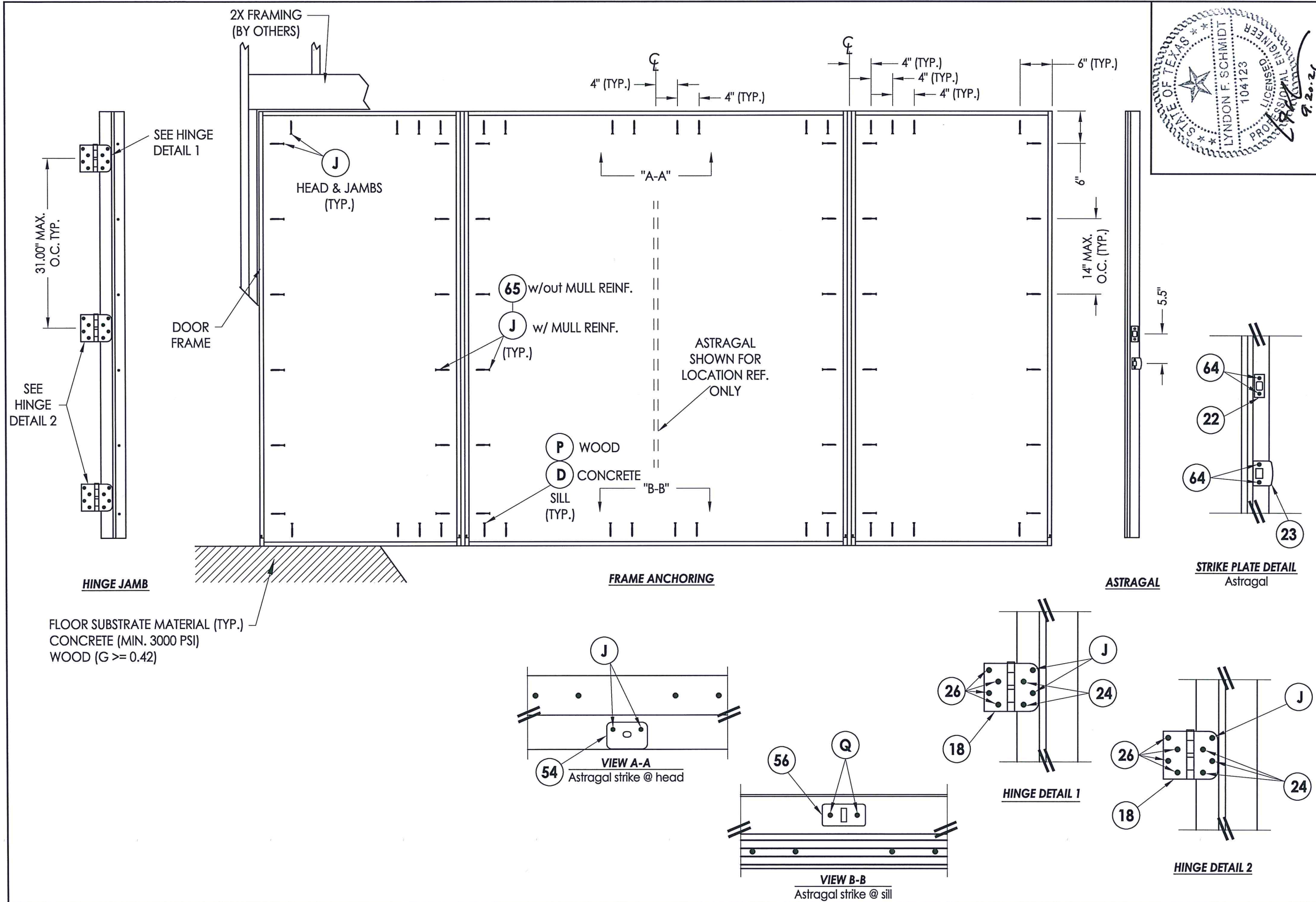
PRODUCT: TRINITY GLASS INT'L

PART OR ASSEMBLY: FRAME ANCHORING (XX)

NO.	DATE	REVISIONS
1	8/10/21	UPDATE TO 2018 IBC/IRC

DATE: 5/10/12
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4157
SHEET 9 OF 12

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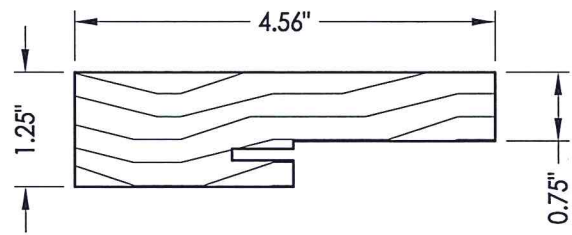
PRODUCT: TRINITY GLASS INT'L

PART OR ASSEMBLY: FRAME ANCHORING (OXXO)

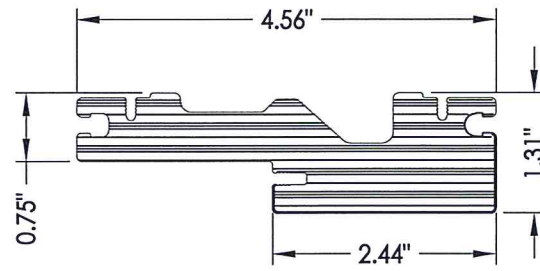
NO.	DATE	BY	REVISIONS
1	8/10/21	LFS	UPDATE TO 2018 IBC/IRC

DATE: 5/10/12
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 SHEET 10 OF 12

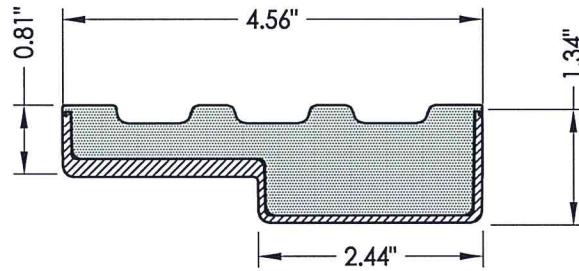
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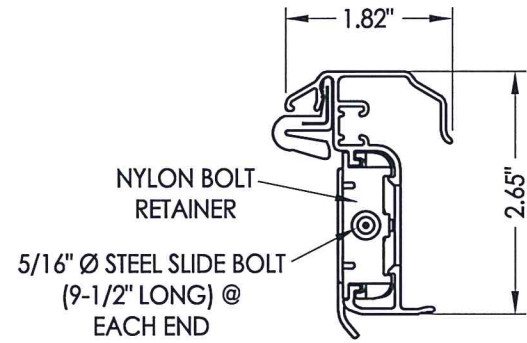
1 HEAD & JAMBS
Wood



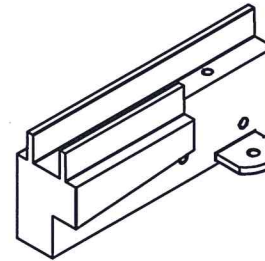
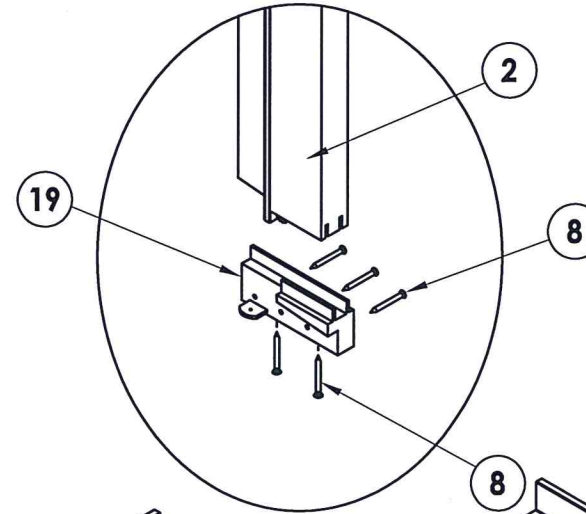
3 HEAD & JAMBS
PVC



2 HEAD & JAMBS
Composite PVC Base
w/ Fiberglass Wrap



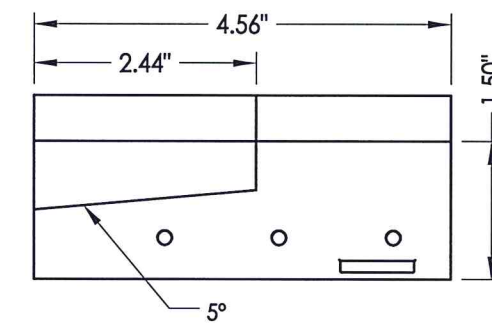
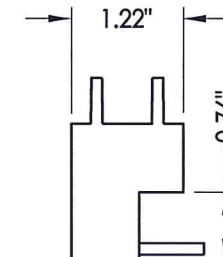
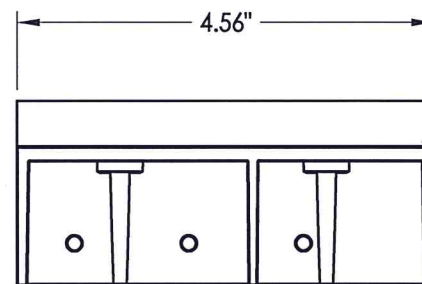
52 ULTIMATE HURRICANE ASTRAGAL
Endura Products



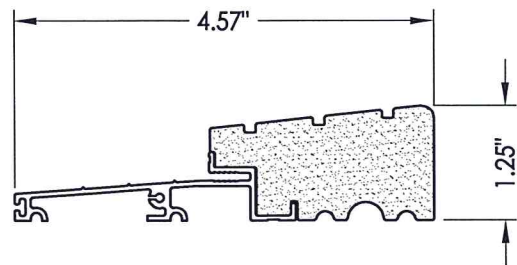
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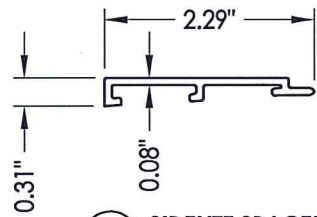
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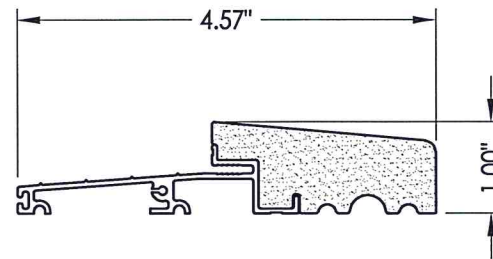
19 SILLKEY DETAILS
Optional



25 OUTSWING THRESHOLD
High-dam option



66 SIDELITE SPACER
Outswing



27 OUTSWING THRESHOLD



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: TRINITY GLASS INT'L

PART OR ASSEMBLY: COMPONENTS

NO.	DATE	DESCRIPTION	BY
1	8/10/21	UPDATE TO 2018 IBC/IRC	LFS
REVISIONS			

DATE: 5/10/12

SCALE: N.T.S.

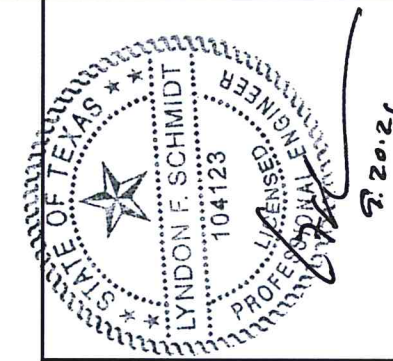
DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4157

SHEET 11 OF 12

BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	2X FRAMING (G >= 0.55)	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" PFH DeWALT OR ITW CONCRETE SCREW	STEEL
J	#9 X 2-1/4" PFH WS	STEEL
L	#8 X 2-1/2" PFH WS	STEEL
P	#10 X 3" PFH WS	STEEL
Q	3/16" X 2-3/4" PFH ITW CONCRETE SCREW	STEEL
1	HEAD & JAMBS (FINGER-JOINT PINE: G >= 0.42)	WOOD
2	HEAD & JAMBS (FIBERGLASS/COMPOSITE)	FIBERGLASS/COMP
3	HEAD & JAMBS (PVC)	PVC
5	INSWING THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUMINUM
6	DOOR BOTTOM SWEEP	PVC
8	#6 X 1-1/4" PFH DRYWALL SCREW	STEEL
12	WEATHER STRIP QEBD650 Q-LON	-
18	4" X 4" HINGE	STEEL
19	SILLKEY	PC/ASA
22	DEADBOLT STRIKE PLATE	STEEL
23	STRIKE PLATE	STEEL
24	#9 X 5/8" PFH WS	STEEL
25	OUTSWING HIGH-DAM THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUM./ COMP.
26	#9 X 1" PFH WS	STEEL
27	OUTSWING THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUM./ COMP.
40	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
52	ENDURA ULTIMATE HURRICANCE ASTRAGAL	ALUM.
53	#8 X 1" PFH SMS	STEEL
54	ASTRAGAL STRIKE @ HEAD	STEEL
56	ASTRAGAL STRIKE @ SILL	STEEL
60	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
62	QUARTER ROUND	WOOD
63	#8 X 2-1/4" PFH WOOD SCREW	STEEL
64	#8 X 2" PFH WOOD SCREW	STEEL
65	#10 X 2" PFH WOOD SCREW	STEEL
66	SIDELITE SPACER	PVC
68	1X MULLION (G >= 0.42)	WOOD



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CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: TRINITY GLASS INT'L

PART OR ASSEMBLY: BILL OF MATERIALS

NO.	DATE	DESCRIPTION	LFS	BY
1	8/10/21	UPDATE TO 2018 IBC/IRC		

DATE: 5/10/12

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: TX-4157

SHEET 12 OF 12

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. O.C. (TYP.)" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. O.C. (TYP.)" 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®	3/16" 1/4"	1-3/4" 1-3/4"	3" 2"	1-1/2" 4"
DeWALT ULTRACON+®	1/4"	1-3/4"	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.