

TRINITY GLASS
INTERNATIONAL

33615 1st Way S, Federal Way, WA 98003

GLAZED PREMIUM FIBERGLASS DOUBLE DOOR INSWING / OUTSWING "NON-IMPACT"

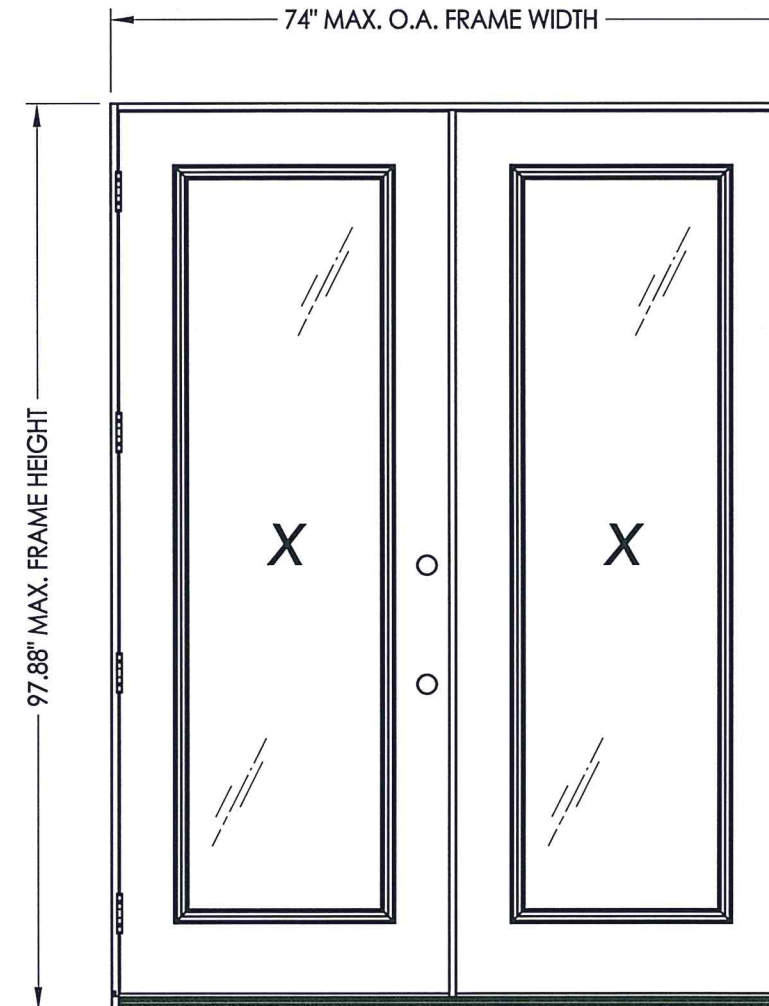
EVALUATED FOR USE IN THE STATE OF TEXAS

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. When used in wind borne debris regions, the opaque door panel has been tested and evaluated as an impact resistant product and does not require the use of an approved impact resistant covering. The sidelites must be protected with an impact resistant covering that complies with Sections R301.2.1.2 and 1609.1.2. This opaque door 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.

TABLE OF CONTENTS

SHEET #	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Door panel construction details & glazing details
3	Horizontal cross sections
4	Vertical cross sections
5	Frame anchoring
6	Components
7	Bill of materials



SWING	MAX. FRAME DIMENSION	GLASS TYPE	DESIGN PRESSURE PSF	
			POSITIVE	NEGATIVE
INSWING	74.0" x 97.88"	G1	+40.0	-40.0
OUTSWING	74.0" x 96.75"		+40.0	-40.0



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

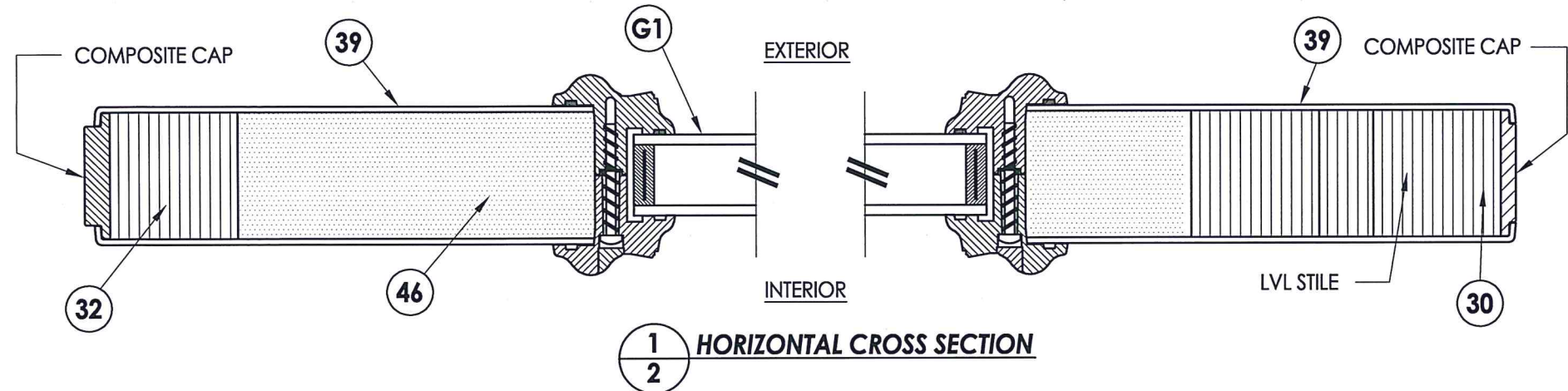
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: TRINITY GLASS INT'L
PREMIUM LIPLITE FIBERGLASS

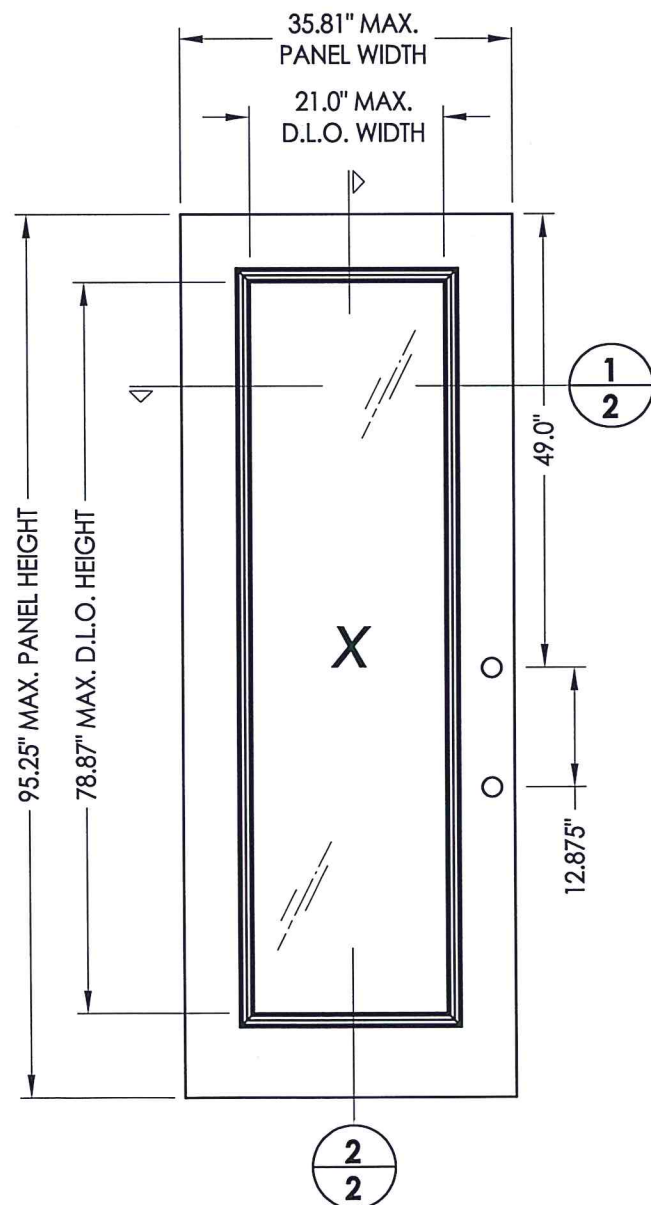
PART OR ASSEMBLY:
TYPICAL ELEVATION, DESIGN
PRESSURES & GENERAL NOTES

NO.	DATE	BY	REVISIONS

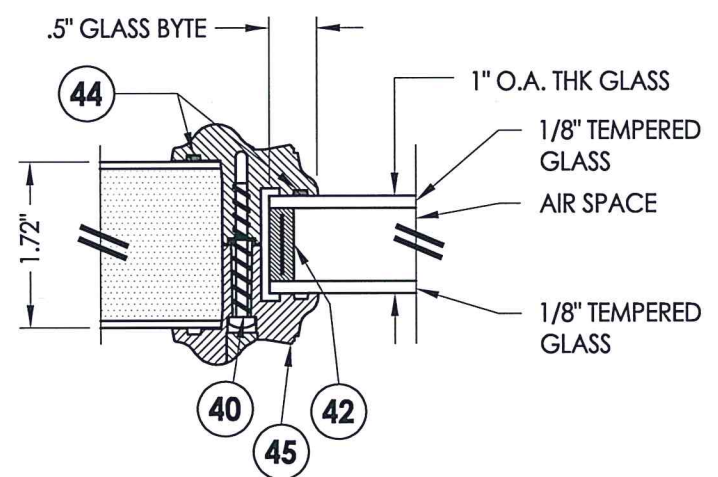
DATE: 8/11/21
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: TX-5233
SHEET 1 OF 7



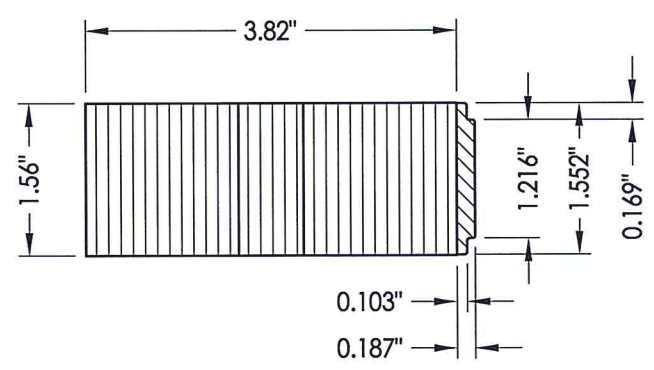
1
2 HORIZONTAL CROSS SECTION



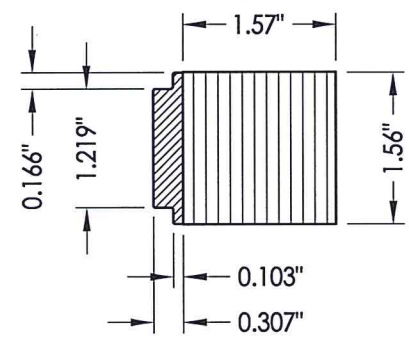
7 PREMIUM LIPLITE FIBERGLASS DOOR



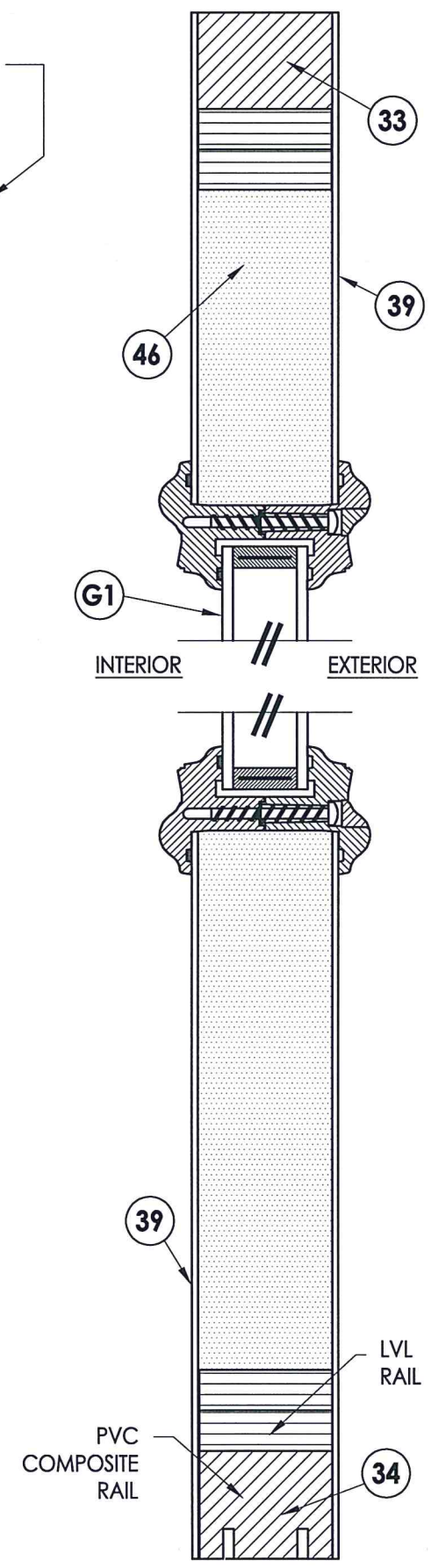
G1 GLAZING DETAIL



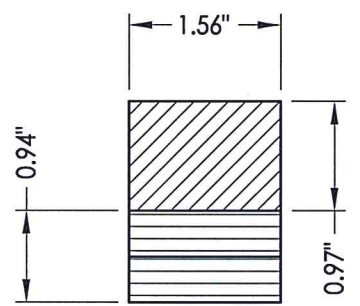
30 LATCH STILE



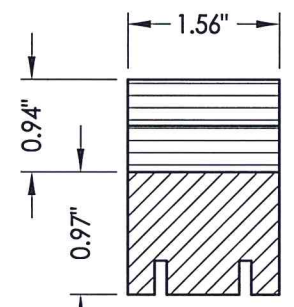
32 HINGE STILE



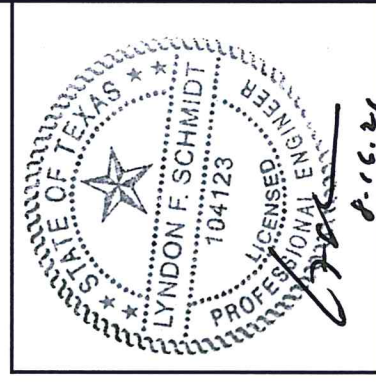
2
2 VERTICAL CROSS SECTION



33 TOP RAIL



34 BOTTOM RAIL



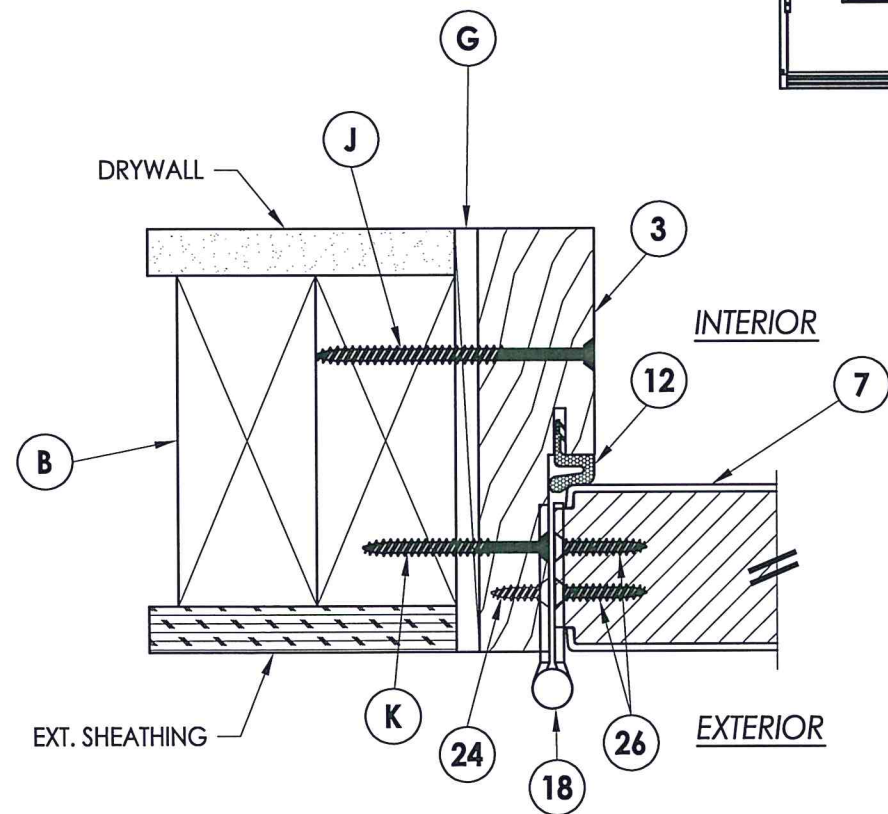
Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

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

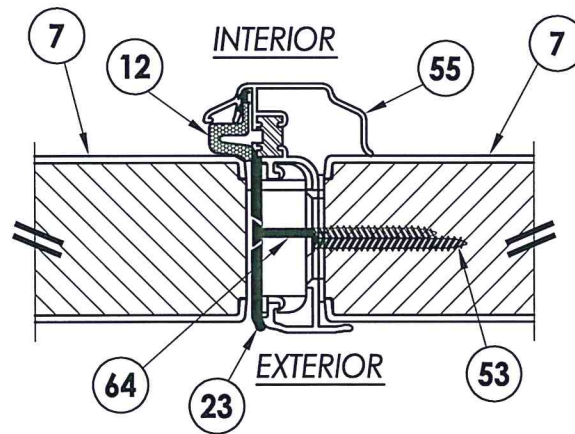
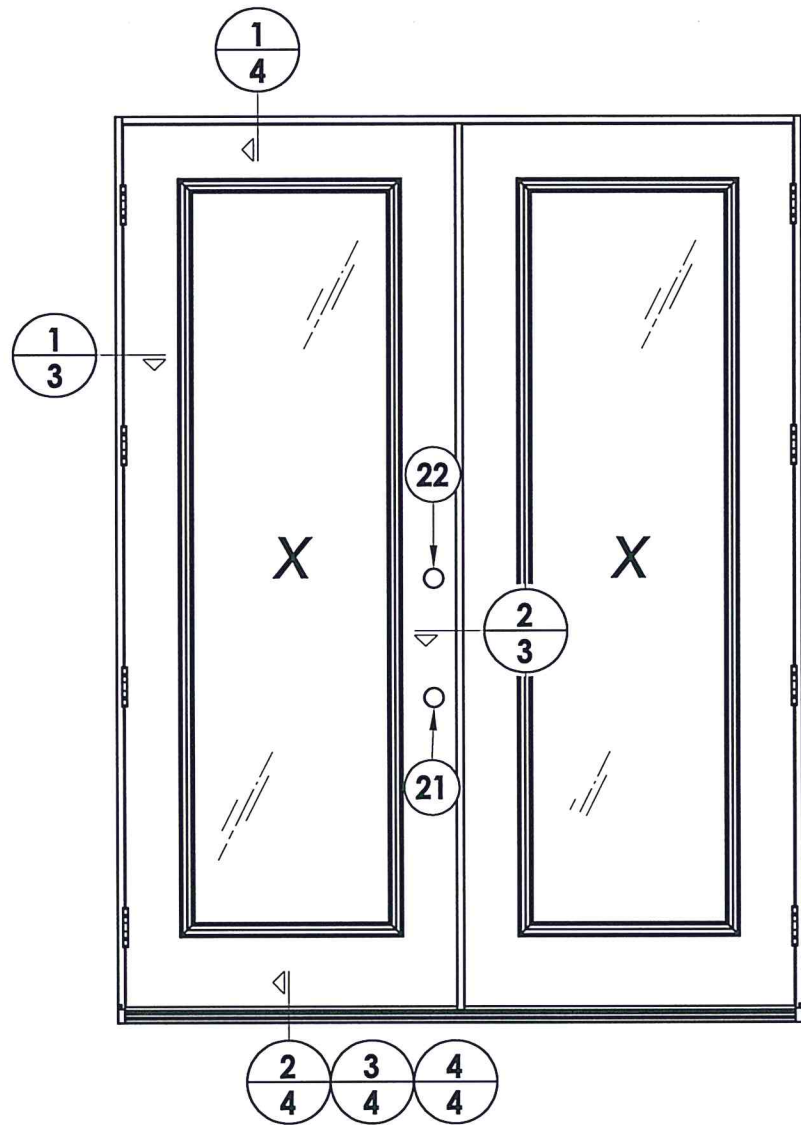
PRODUCT: TRINITY GLASS INT'L
PREMIUM LIPLITE FIBERGLASS
PART OR ASSEMBLY: DOOR PANEL CONSTRUCTION
DETAILS AND GLAZING DETAILS

NO.	DATE	BY	REVISIONS

DATE: 8/11/21
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: TX-5233
SHEET 2 OF 7



1 HORIZONTAL CROSS SECTION
3 Outswing shown
 Inswing also approved



2 HORIZONTAL CROSS SECTION
3 Endura astragal

LOCK & DEADBOLT RATINGS CHART		
MANUFACTURER	MODEL	ITEM #
KWIKSET	LOCK: 740	21
	DEADBOLT: 780	22



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

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

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

PRODUCT: TRINITY GLASS INT'L
 PREMIUM LIPLITE FIBERGLASS

PART OR ASSEMBLY:
 HORIZONTAL CROSS SECTIONS

NO.	DATE	BY

DATE: 8/11/21

SCALE: N.T.S.

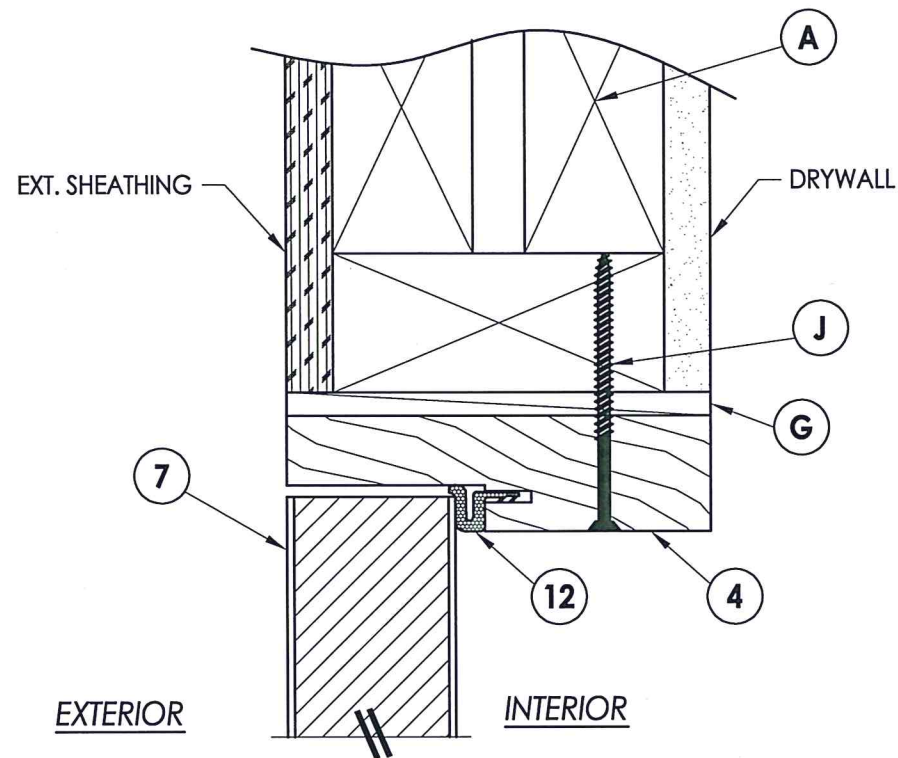
DWG. BY: RW

CHK. BY: LFS

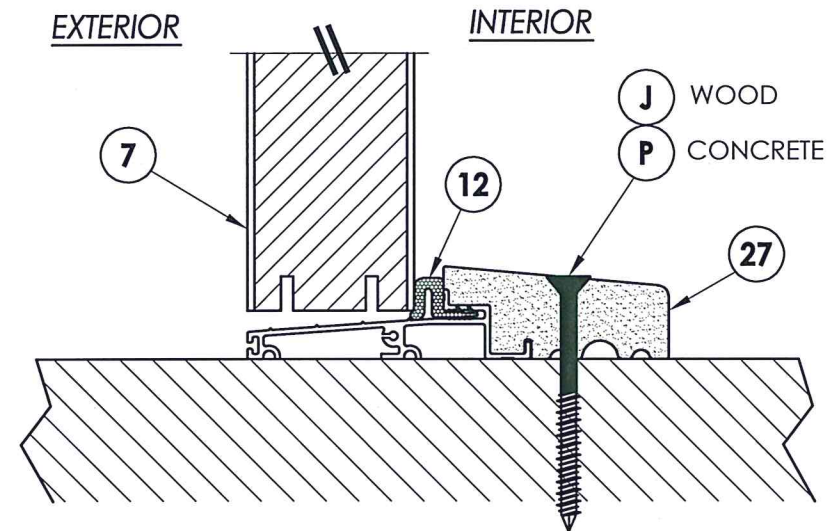
DRAWING NO.:
 TX-5233

SHEET 3 OF 7

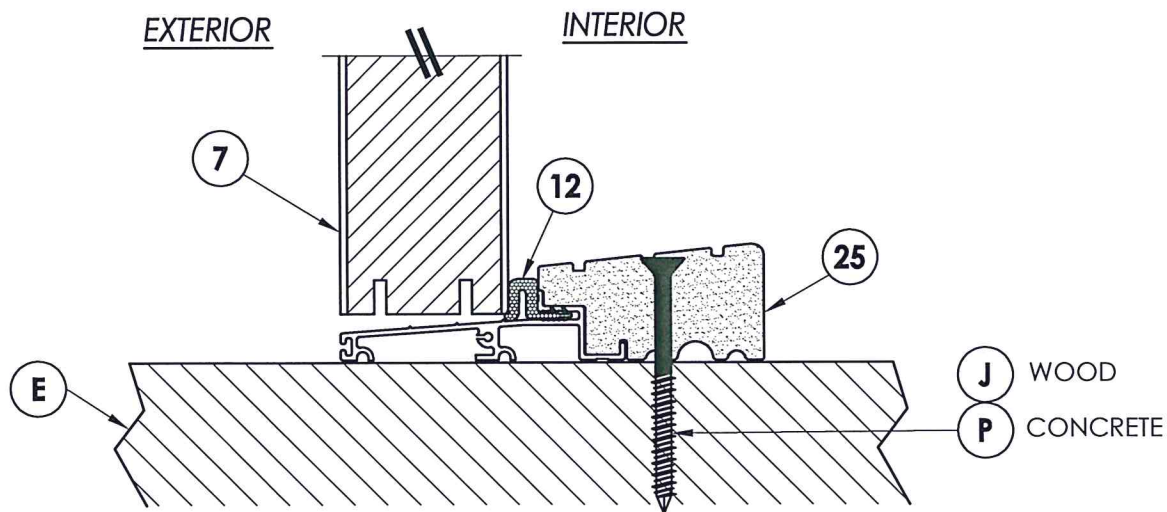
Z:\Clients\Trinity Glass PERMANENT B - Texas Dept of Ins\DR-213\Drawings\TX-5233.dwg



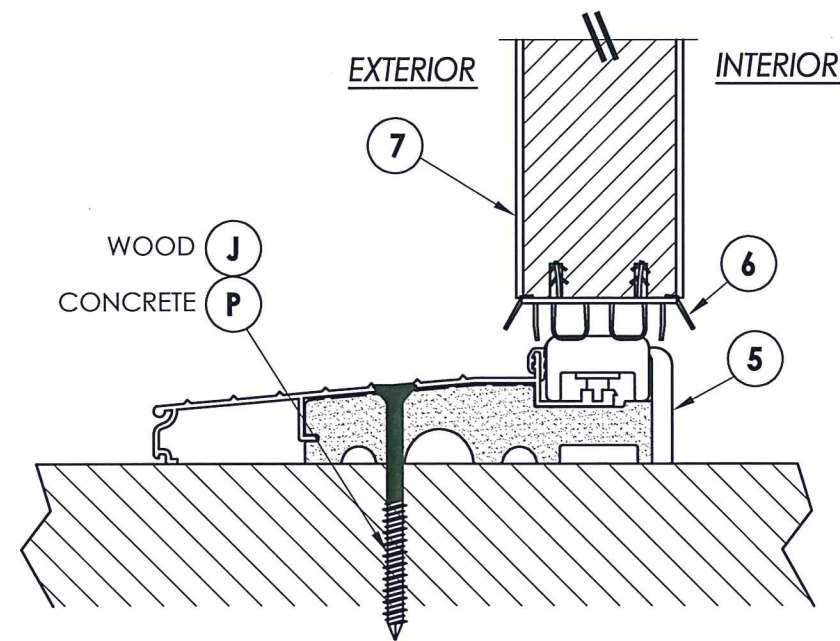
1 VERTICAL CROSS SECTION
4 Outswing shown
 Inswing also approved



2 VERTICAL CROSS SECTION
4 Outswing configuration



3 VERTICAL CROSS SECTION
4 Outswing configuration



4 VERTICAL CROSS SECTION
4 Inswing configuration



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

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

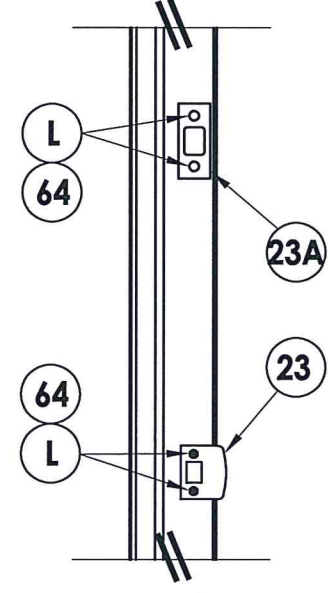
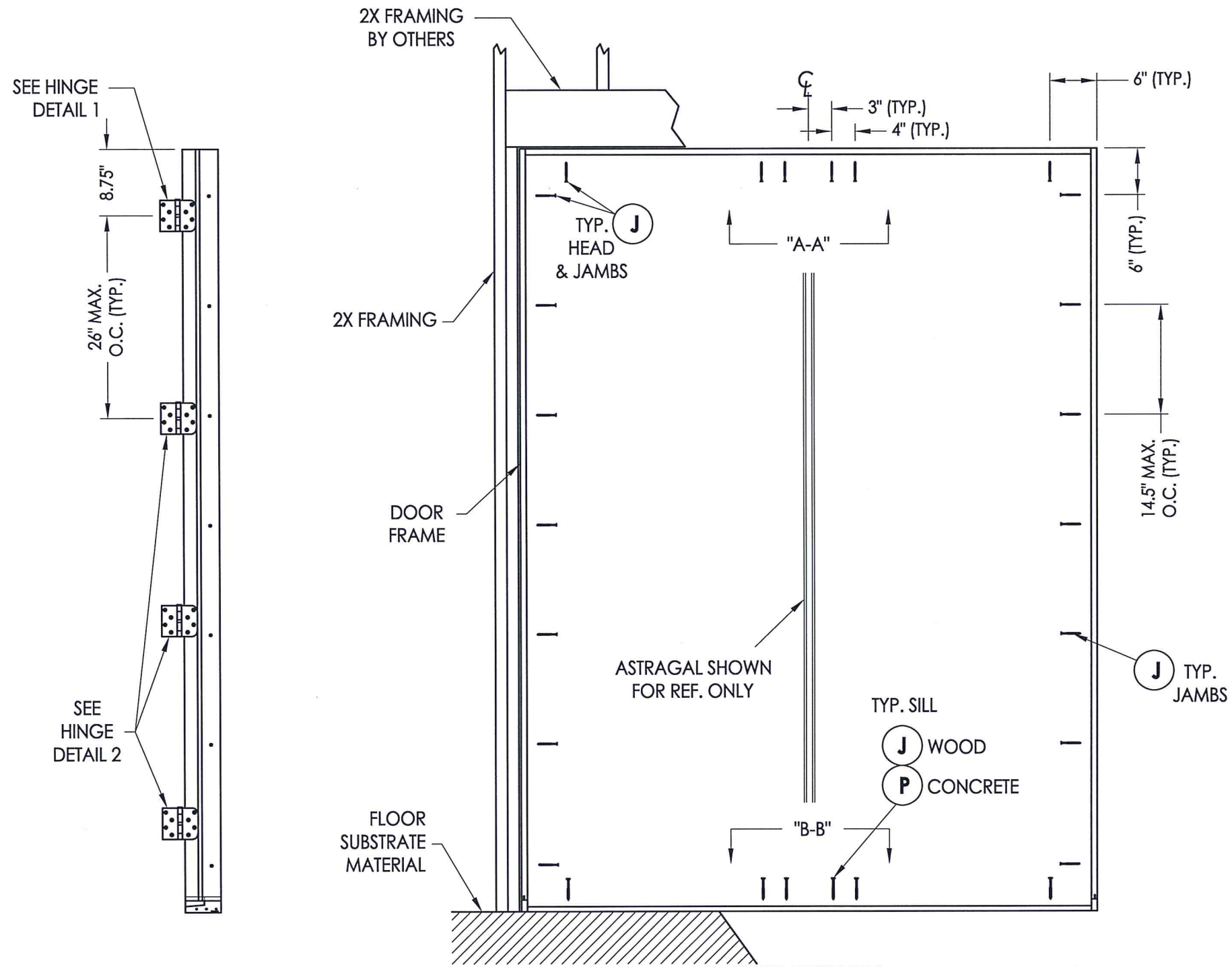
PRODUCT: TRINITY GLASS INT'L
 PREMIUM LIPLITE FIBERGLASS

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

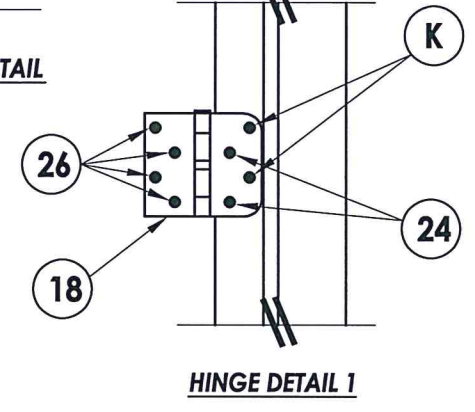
NO.	DATE	BY	REVISIONS

DATE: 8/11/21
 SCALE: N.T.S.
 DWG. BY: RW
 CHK. BY: LFS
 DRAWING NO.: TX-5233
 SHEET 4 OF 7

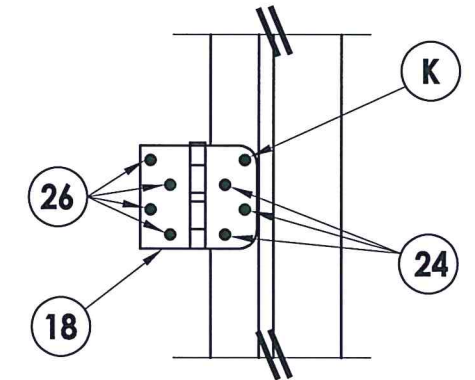
Z:\Clients\Trinity Glass PERMANENT\B - Texas Dept of Ins\DR-213\Drawings\TX-5233.dwg



STRIKE PLATE DETAIL
Astragal



HINGE DETAIL 1

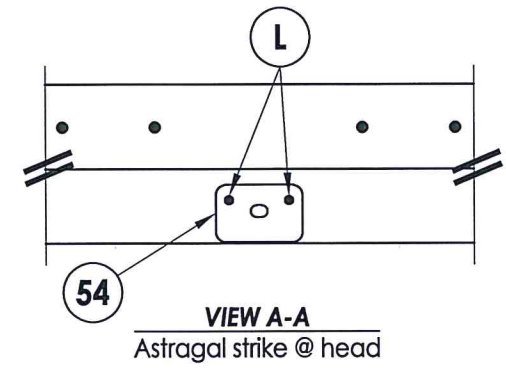


HINGE DETAIL 2

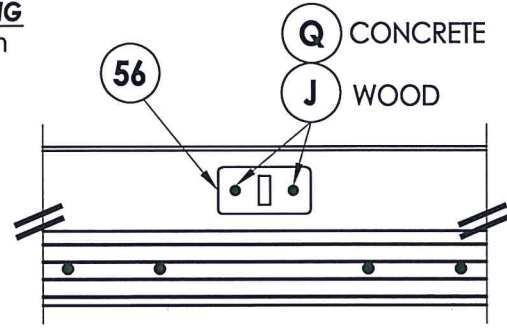
HINGE JAMB

FRAME ANCHORING
Stud construction

ASTRAGAL STRIKE



VIEW A-A
Astragal strike @ head



VIEW B-B
Astragal strike @ sill



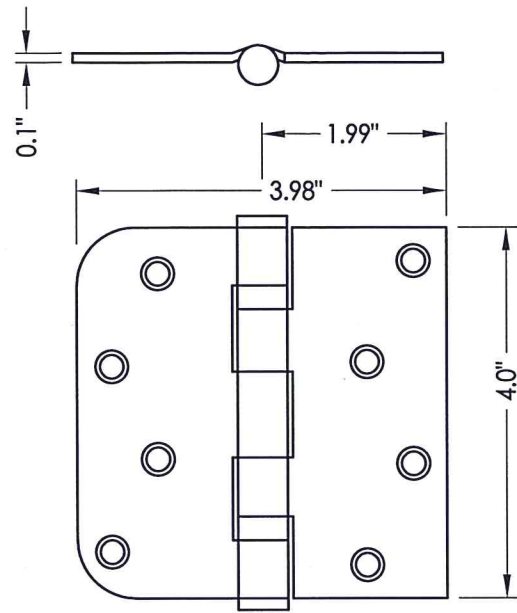
Documents Prepared By: Lyndon F. Schmidt, P.E.
TEXAS P.E. #104123

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

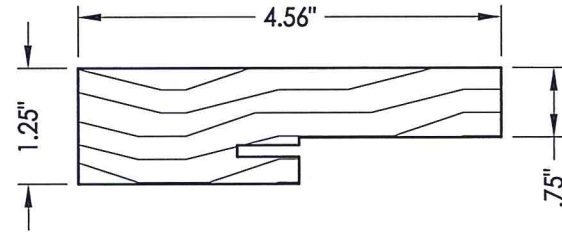
PRODUCT: TRINITY GLASS INT'L
PREMIUM LIPLITE FIBERGLASS
PART OR ASSEMBLY: FRAME ANCHORING

NO.	DATE	BY	REVISIONS

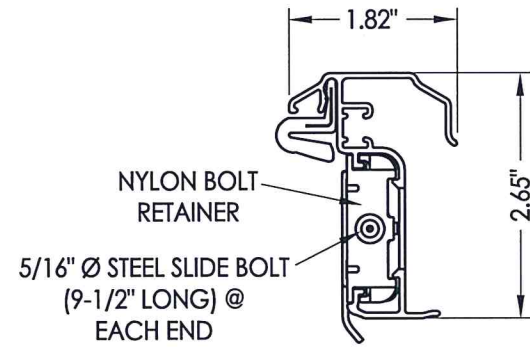
DATE: 8/11/21
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: TX-5233
SHEET 5 OF 7



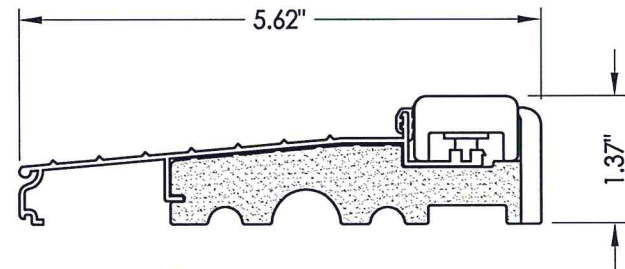
18 HINGE



4 3 SIDE & HEAD JAMBS



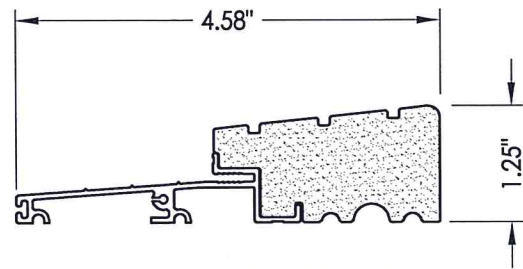
55 ULTIMATE HURRICANE ASTRAGAL
Endura Products



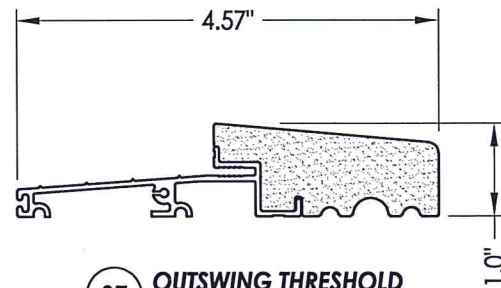
5 INSWING THRESHOLD



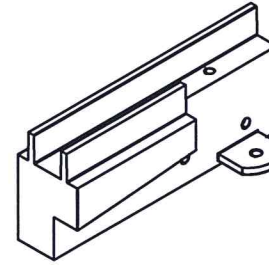
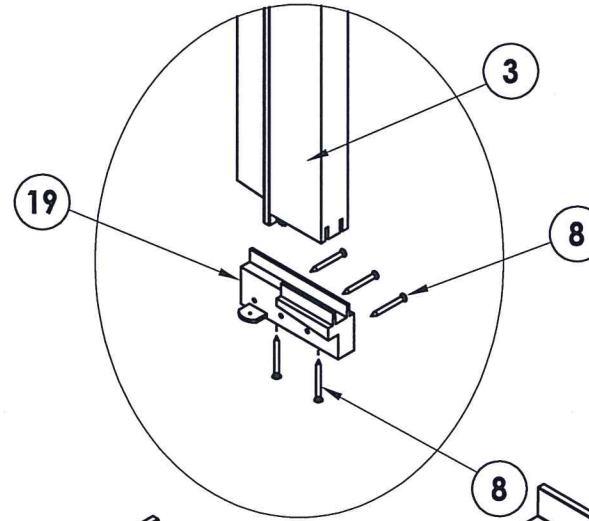
6 DOOR BOTTOM SWEEP



25 OUTSWING THRESHOLD
High-dam option



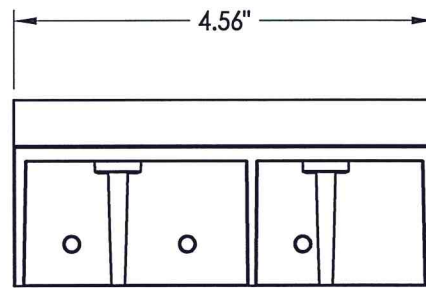
27 OUTSWING THRESHOLD



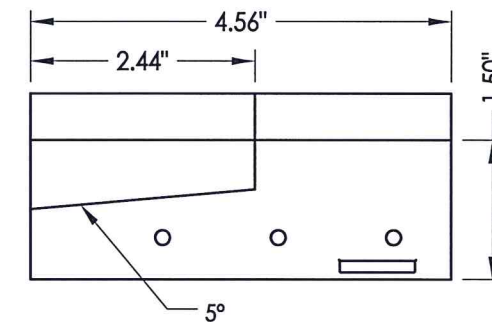
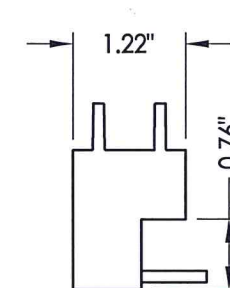
SILLKEY, LEFT
SCALE: NONE



SILLKEY, RIGHT
SCALE: NONE



19 SILLKEY DETAILS
Optional



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

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

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

PRODUCT:	TRINITY GLASS INT'L PREMIUM LIPLITE FIBERGLASS
PART OR ASSEMBLY:	COMPONENTS

NO.	DATE	BY	REVISIONS

DATE:	8/11/21
SCALE:	N.T.S.
DWG. BY:	RW
CHK. BY:	LFS
DRAWING NO.:	TX-5233
SHEET	6 OF 7

BILL OF MATERIALS

ITEM	DESCRIPTION	MATERIAL
A	2X HEADER FRAMING SG >= 0.42	WOOD
B	2X FRAMING SG >= 0.42	WOOD
G	MAX. 1/4" SHIM SPACE	WOOD
I	3/16" X 1-3/4" ITW CONCRETE SCREW	STEEL
J	#10 X 3" PFH WS (1-1/2" MIN. EMBEDMENT)	STEEL
K	#9 X 2" PFH WS	STEEL
L	#8 X 2-1/2" PFH WS	STEEL
P	1/4" FH DeWALT OR ITW CONCRETE SCREW (1-3/4" MIN. EMBEDMENT)	STEEL
Q	3/16" FH ITW CONCRETE SCREW (1-3/4" MIN. EMBEDMENT)	STEEL
3	HINGE JAMB - FINGER-JOINT PINE	WOOD
4	HEAD - FINGER-JOINT PINE	WOOD
5	INSWING THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUMINUM
6	DOOR BOTTOM SWEEP	PVC
7	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
8	#6 X 1-1/4" PFH DRYWALL SCREW	STEEL
12	WEATHER STRIP QEBD650 Q-LON	-
18	3.983" X 4" HINGE MIN 0.098" THICK	STEEL
19	SILLKEY	PC/ASA
21	LOCK (SEE LOCK & DEADBOLT RATINGS CHART)	STEEL
22	DEADBOLT (SEE LOCK & DEADBOLT RATINGS CHART)	STEEL
23	STRIKE PLATE	STEEL
23A	DEADBOLT PLATE	STEEL
24	#9 X 5/8" PFH SCREW	STEEL
25	OUTSWING HIGH-DAM THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUM./ COMP.
26	#9 X 1" PFH SCREW	STEEL
27	OUTSWING THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUM./ COMP.
30	LATCH STILE - SG >= 0.42	LVL/PVC
32	HINGE STILE - SG >= 0.42	LVL/PVC
33	TOP RAIL - POPLAR LVL & WPC COMBINATION	POPLAR/WPC
34	BOTTOM RAIL - POPLAR LVL & WPC COMBINATION	POPLAR/WPC
39	FIBERGLASS SKIN 0.079" MIN. THICKNESS	FIBERGLASS
40	#8 X 1-1/8" SELF THREADING SCREW	STEEL
42	ALUMINUM & BUTYL SPACER SYSTEM	ALUM./BUTYL
44	HOT MELT SEALANT / SILICONE	-
45	LITE FRAME	PC/ASA
46	INSULATING FOAM CORE	POLYURETHANE
53	#8 X 1-3/4" PFH SMS	STEEL
54	ASTRAGAL STRIKE @ HEAD	STEEL
55	ASTRAGAL BY ENDURA PRODUCT	ALUMINUM
56	ASTRAGAL STRIKE @ SILL	STEEL
64	#8 X 2" PFH WS	STEEL



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

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

PRODUCT: TRINITY GLASS INT'L
PREMIUM LIPLITE FIBERGLASS
PART OR ASSEMBLY: BILL OF MATERIALS

NO.	DATE	BY	REVISIONS

DATE: 8/11/21
SCALE: N.T.S.
DWG. BY: RW
CHK. BY: LFS
DRAWING NO.: TX-5233
SHEET 7 OF 7

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

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.