



TRINITY GLASS
INTERNATIONAL

33615 1st Way S, Federal Way, WA 98003

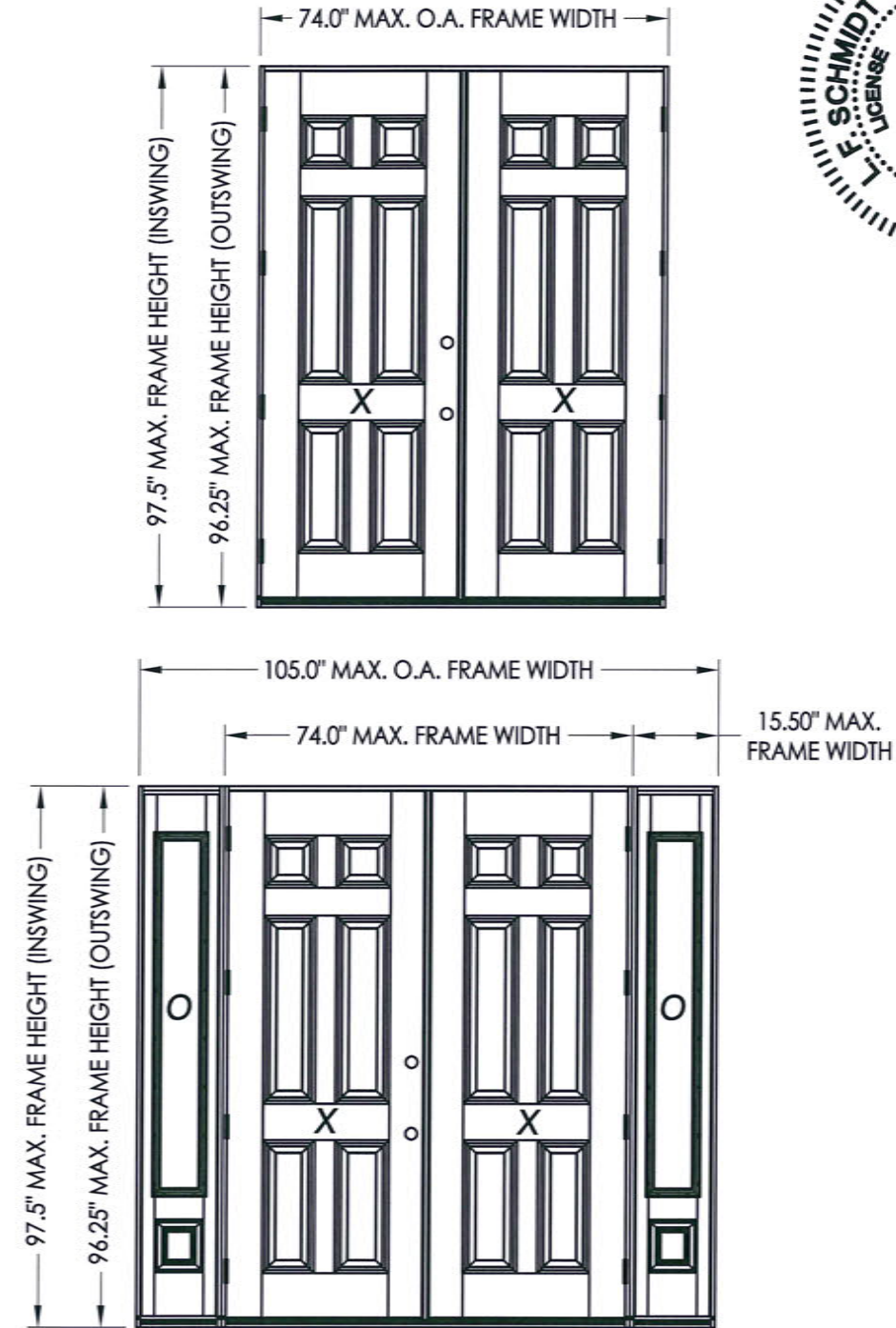
**OPAQUE FIBERGLASS
"IMPACT" DOUBLE DOOR
WITH or WITHOUT
"NON-IMPACT" SIDELITES
IN SWING / OUTSWING**

GENERAL NOTES

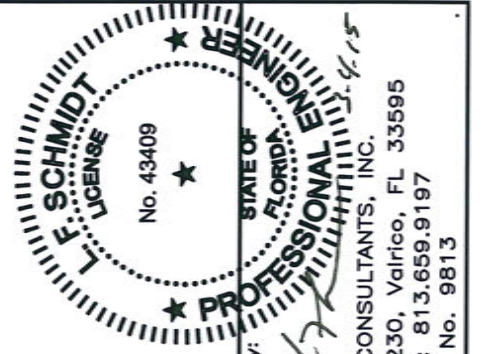
1. This product has been evaluated and is in compliance with the 5th Edition (2014) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.
3. When used in areas requiring wind borne debris protection the opaque door complies with Section 1609.1.2 of the 2010 FBC and does not need to be protected with an impact resistant covering. This product meets missile level "D" and includes Wind Zone 4 as defined in ASTM E 1996 and Section 1609.1.2.2 of the FBC. The sidelite is req'd to be protected with an impact resistant covering that complies with Section 1609.1.2 of the FBC.
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.

TABLE OF CONTENTS

SHEET#	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Door panel details
3	Sidelite panel details
4	Elevations
5	Horizontal cross section
6	Vertical cross sections
7	Vertical cross sections
8	Buck anchoring
9	Frame anchoring
10	Astragal details (TRC)
11	Astragal details (Endura)
12	Components
13	Bill of materials



CONFIGURATION	MAX. FRAME DIMENSION	DESIGN PRESSURE (PSF) ENDURA ASTRAGAL		DESIGN PRESSURE (PSF) TRC ASTRAGAL	
		POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
XX	74.0" x 97.5"	+ 47.0	- 47.0	+ 60.0	- 60.0
OXXO	105.0" x 97.5"	+ 47.0	- 47.0	+47.0	- 47.0



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 C.A. No. 9813

PRODUCT: TRINITY GLASS INT'L

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

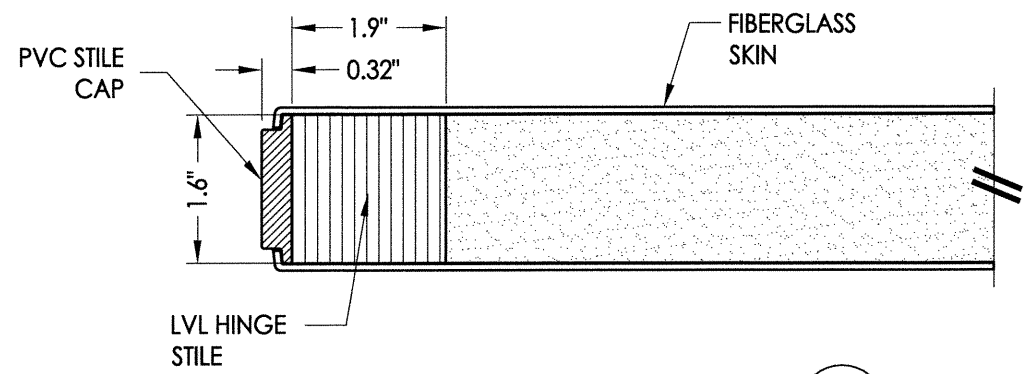
NO.	DATE	REVISIONS
1	03/02/15	UPDATE TO 5TH ED. (2014) FBC

DATE: 1/18/12
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-15129.16
SHEET 1 OF 13

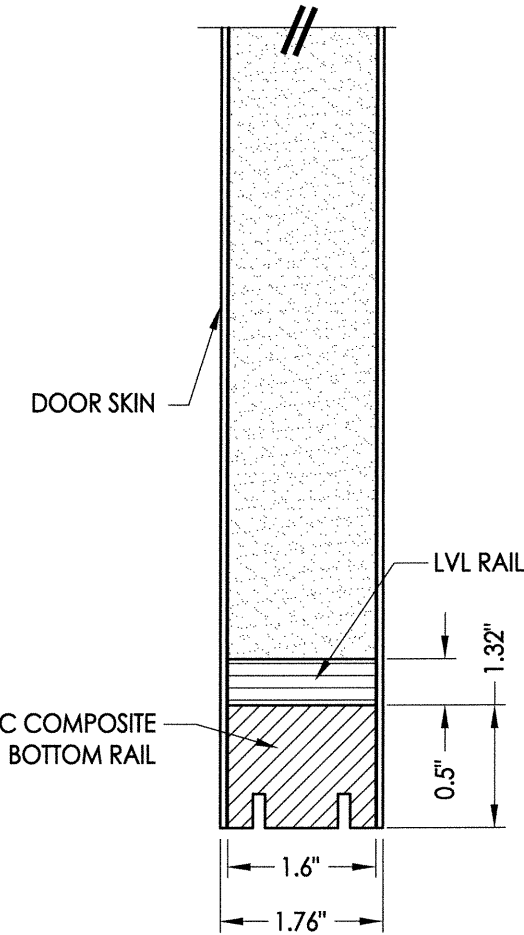
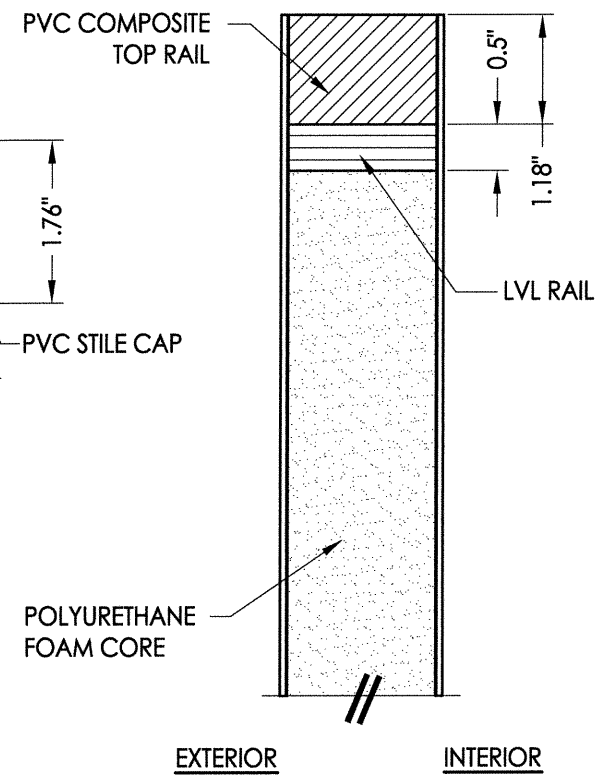
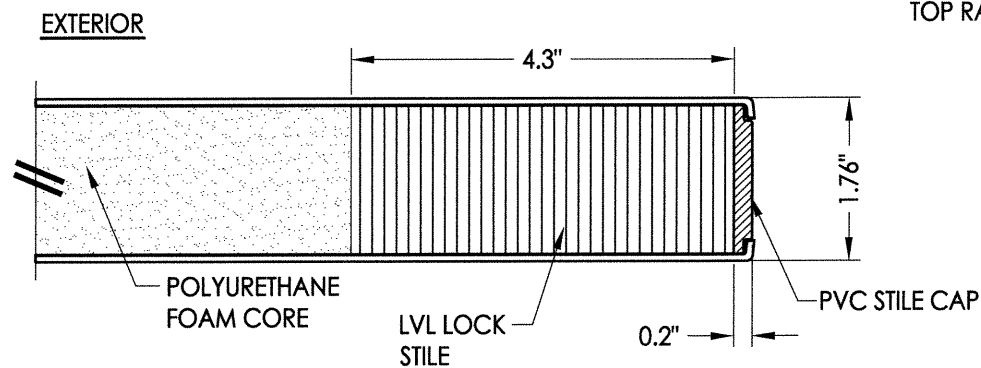
R:\Clients\Trinity PERMANENT\Florida Product Approvals\FL-15129\Drawings\Current\FL-15129.13-20.dwg, FL-15129.16

© 2012 R.W. BUILDING CONSULTANTS INC.

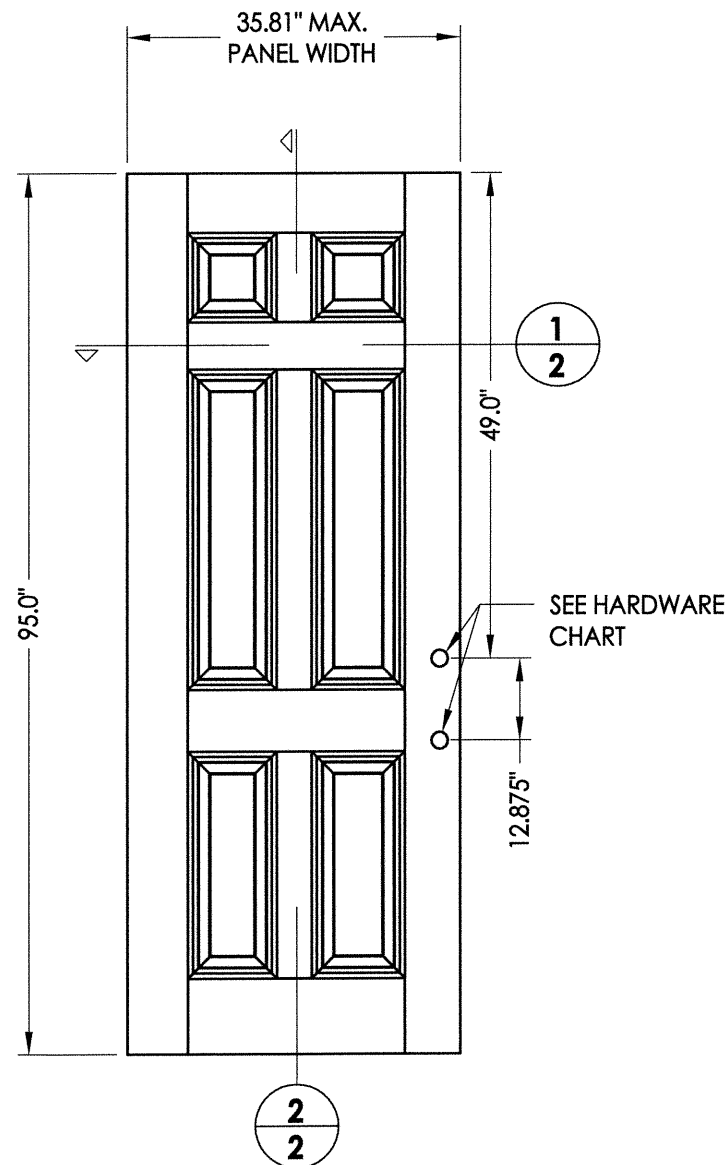
R:\Clients\Trinity PERMANENT\Florida Product Approvals\FL-15129\Drawings\Current\FL-15129.13-20.dwg, 2.16



1 HORIZONTAL CROSS SECTION



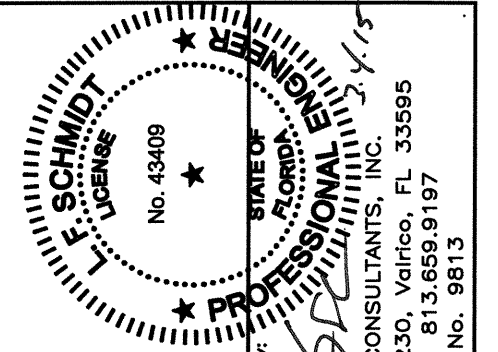
2 VERTICAL CROSS SECTION



40 PREMIUM OPAQUE DOOR "IMPACT"

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

DOOR SKIN: 0.079" MIN. THK. FIBERGLASS
CORE MATERIAL: POLYURETHANE FOAM

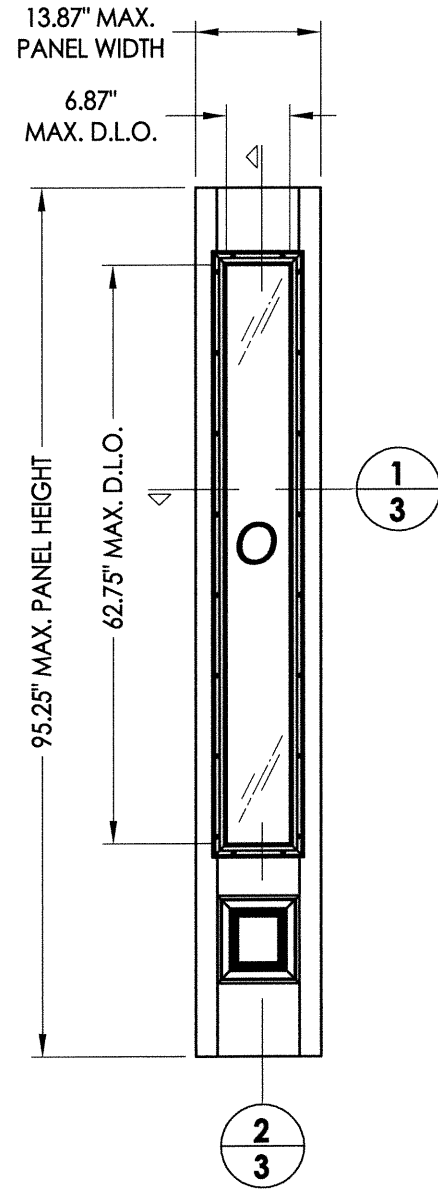


Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409
R.W.
BUILDING CONSULTANTS, INC.
P.O. Box 230, Valrico, FL 33595
Phone No.: 813.659.9197
FBPE C.A. No. 9813

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

NO.	DATE	REVISIONS
1	03/02/15	UPDATE TO 5TH ED. (2014) FBC
JK		
BY		

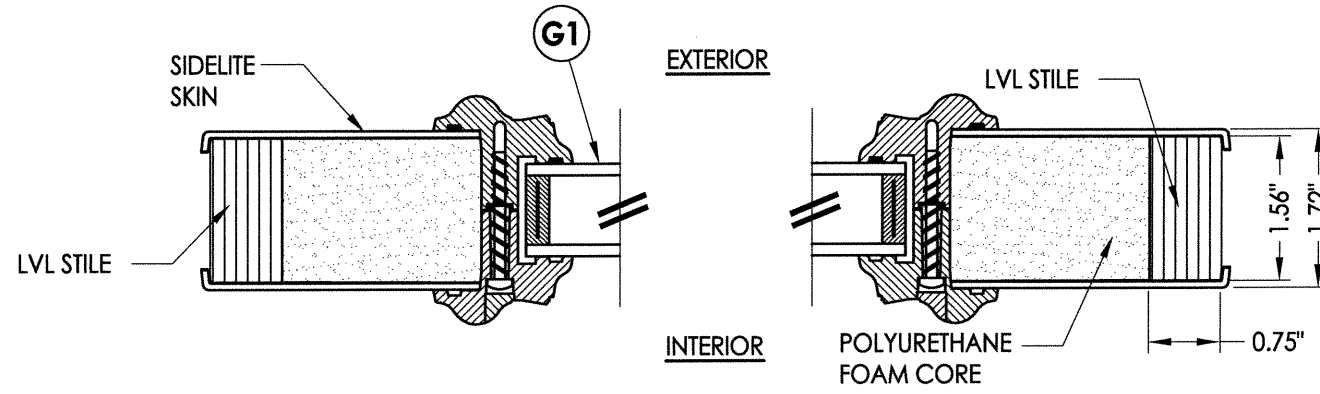
DATE: 1/18/12
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-15129.16
SHEET 2 OF 13



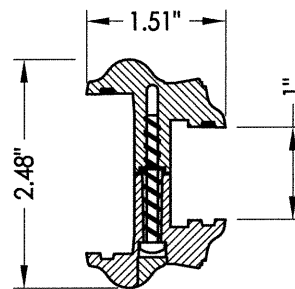
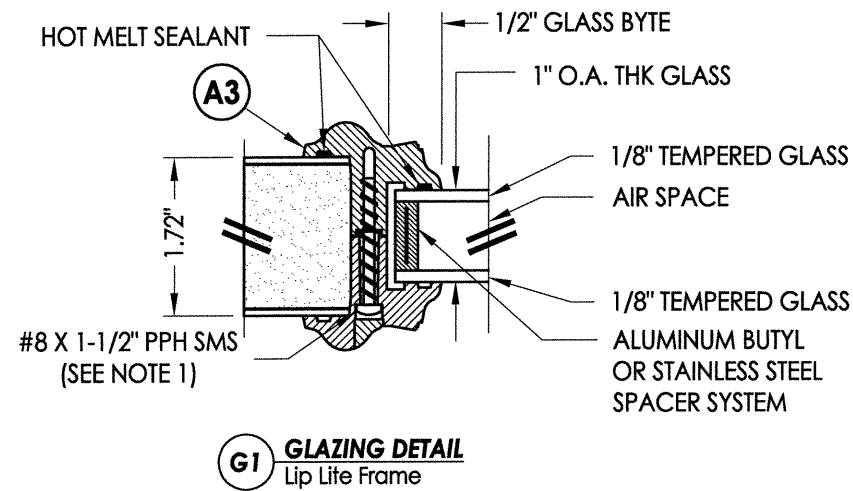
41 FIBERGLASS SIDELITE
"NON-IMPACT"

NOTE:
1. Spacing for life frame screw is as follows:
Top and Bottom: 2" from each corner (2 total)
Sides: 2" from each corner and equally spaced thereafter (8 total)

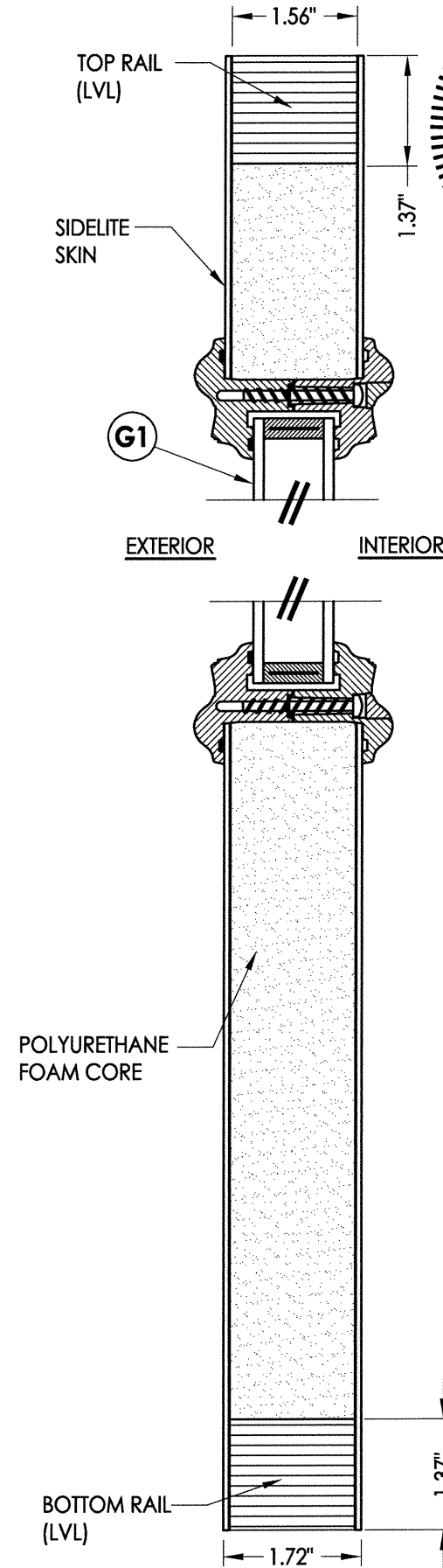
DOOR SKIN: 0.079" MIN. THK. FIBERGLASS
CORE MATERIAL: POLYURETHANE FOAM



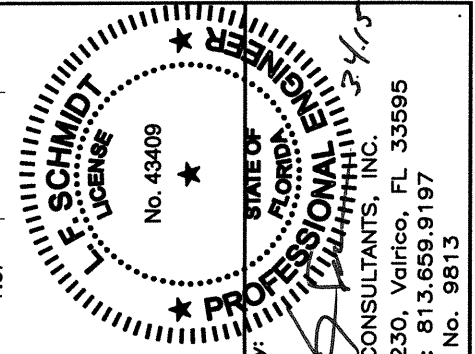
1 HORIZONTAL CROSS SECTION



A3 LIP LITE FRAME
ABS or PC/ASA

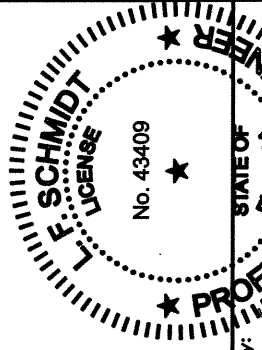
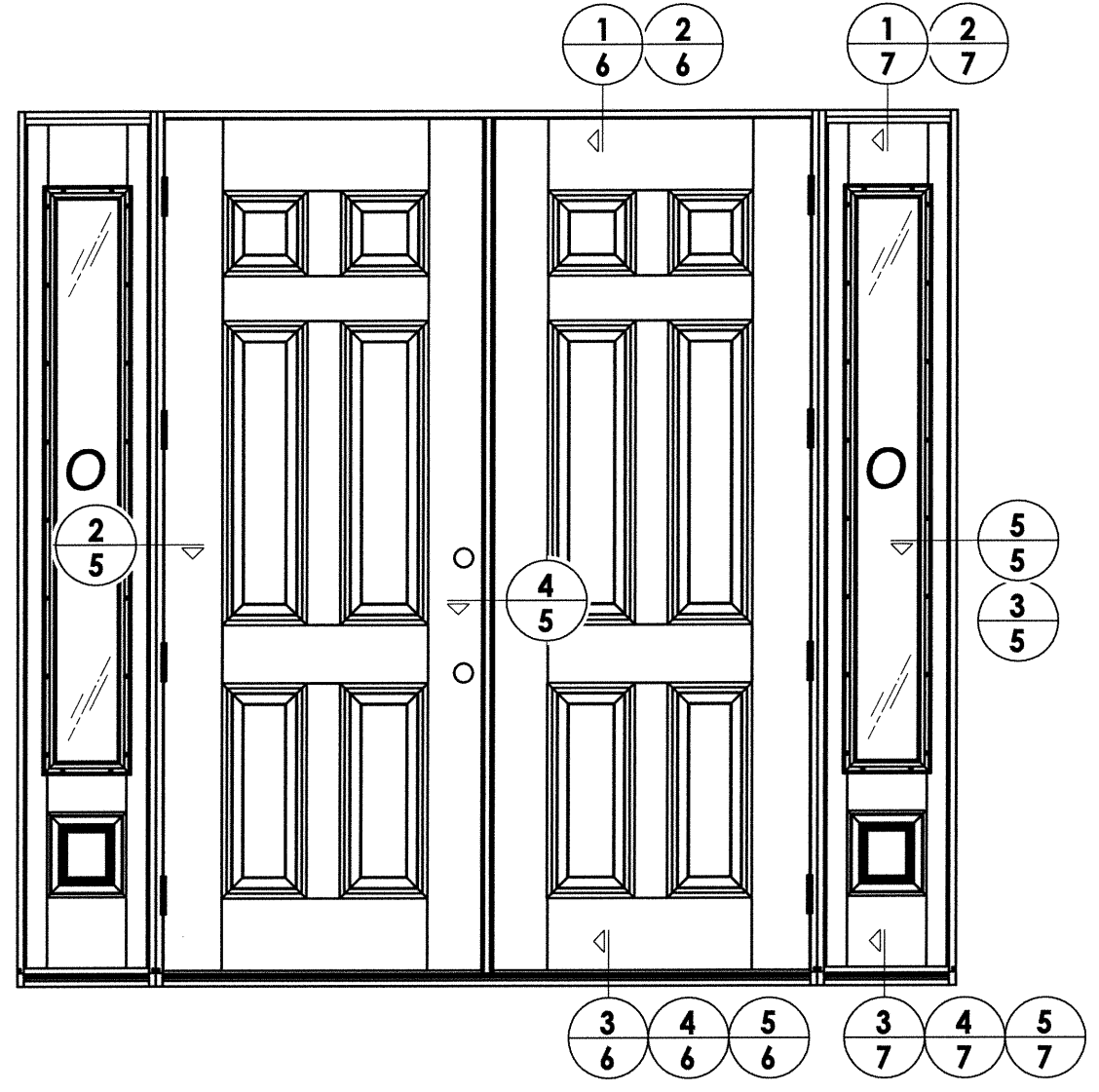
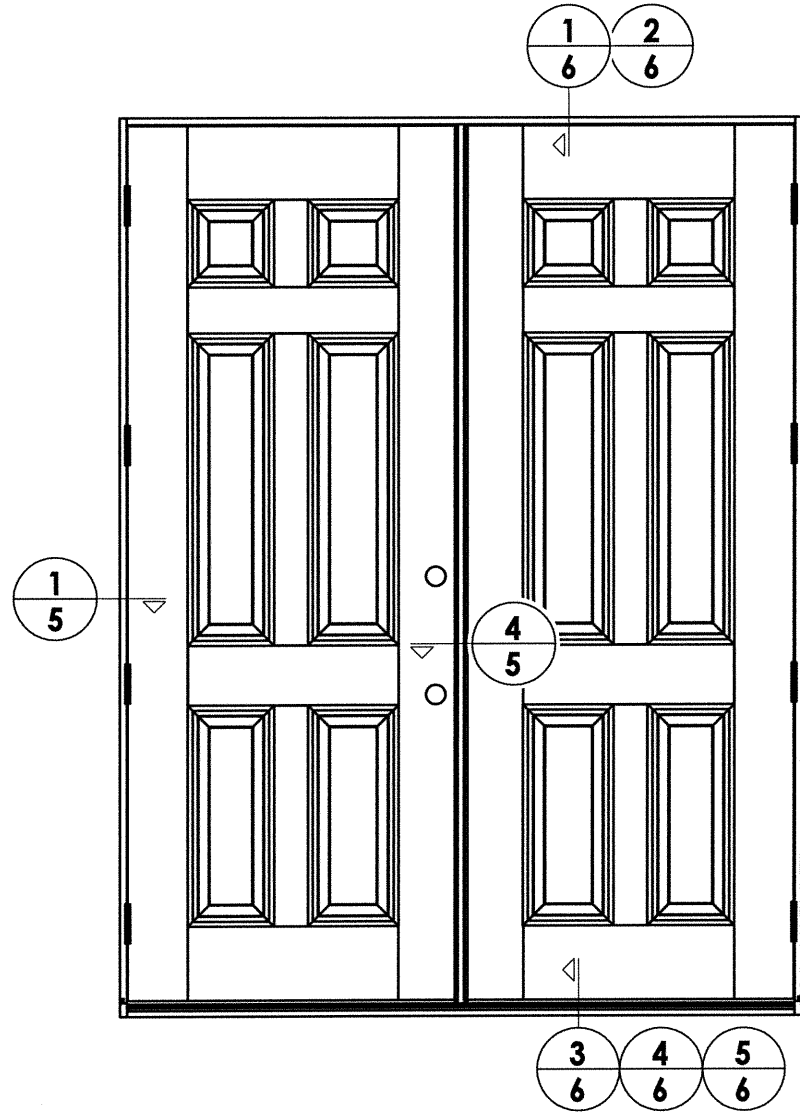


2 VERTICAL CROSS SECTION



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 C.A. No. 9813

PRODUCT:	TRINITY GLASS INT'L	
PART OR ASSEMBLY:	SIDELITE PANEL DETAILS	
DATE:	1/18/12	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	FL-15129.16	
SHEET	3 OF 13	
NO.	DATE	REVISIONS
1	03/02/15	UPDATE TO 5TH ED. (2014) FBC
JK	BY	

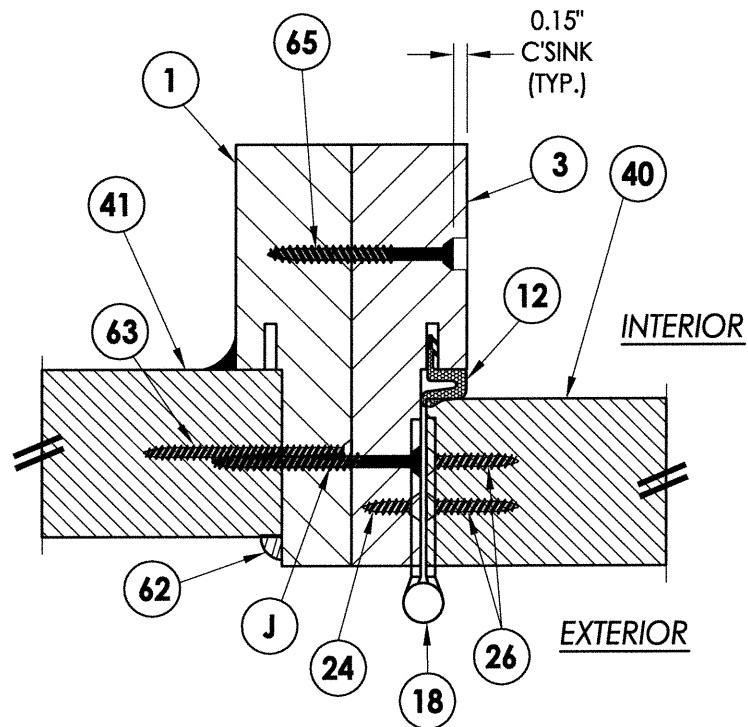


Documents Prepared By:
 Lyndon F. Schmidt
 P.E. No. 43409
 R.W.
 BUILDING CONSULTANTS, INC.
 P.O. Box 230, Valrico, FL 33595
 Phone No.: 813.659.9197
 FBPE C.A. No. 9813

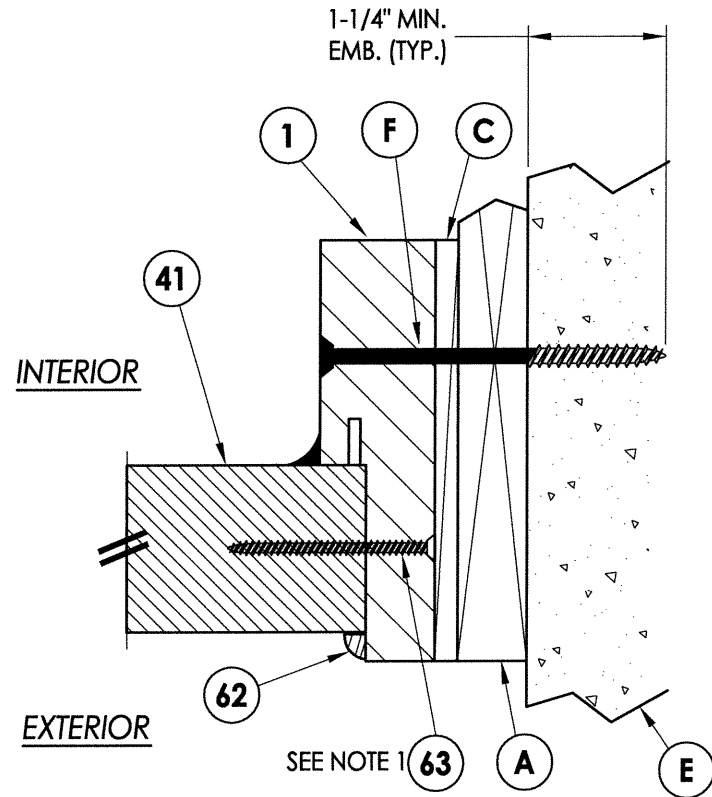
PRODUCT: TRINITY GLASS INT'L
 PART OR ASSEMBLY: ELEVATIONS

NO.	DATE	DESCRIPTION	BY
1	03/02/15	UPDATE TO 5TH ED. (2014) FBC	JK

DATE: 1/18/12
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: FL-15129.16
 SHEET 4 OF 13

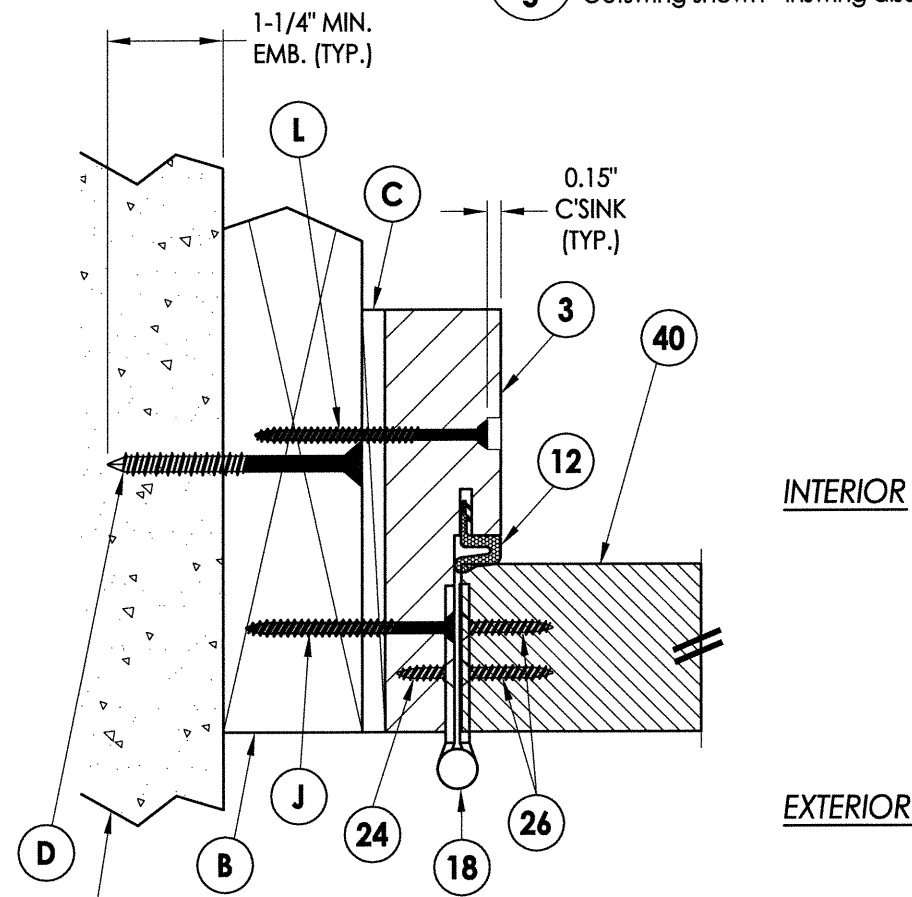


2 HORIZONTAL CROSS SECTION
5 Outswing shown - Inswing also approved

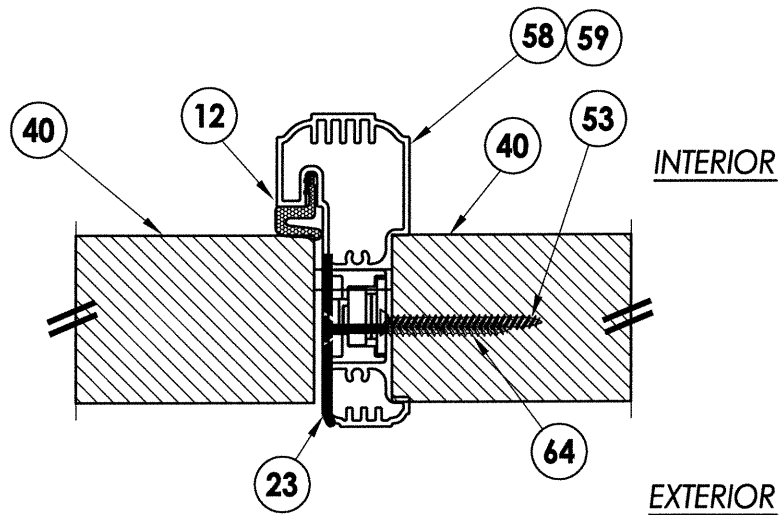


3 HORIZONTAL CROSS SECTION
5 Shown w/1X sub-buck

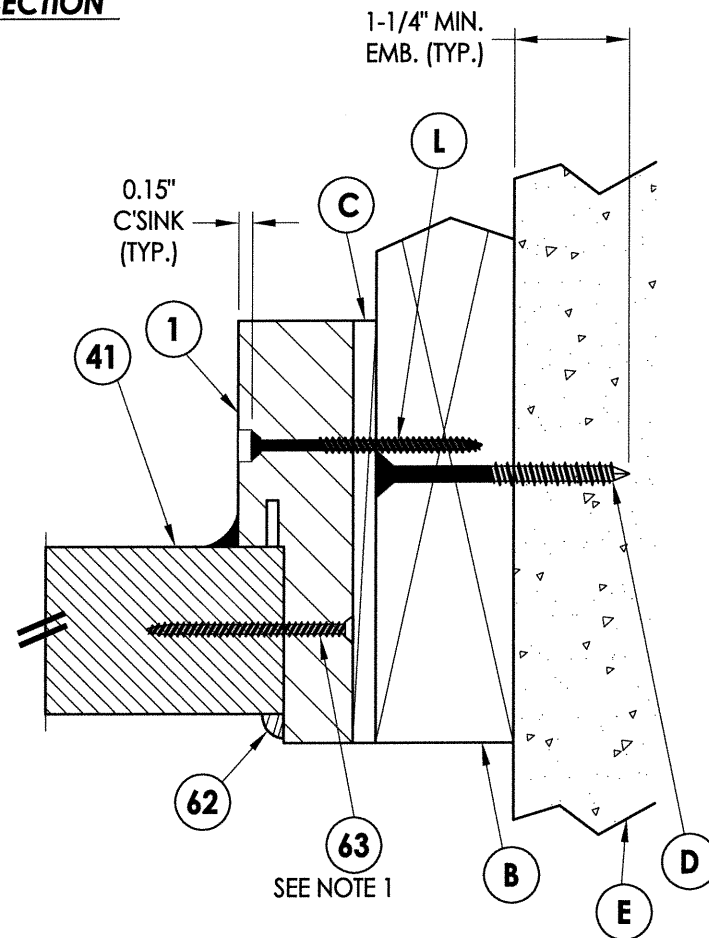
NOTE:
 1. Item #63 - #8 x 2-1/4" PFH screws thru jamb into sidelite located @ 6", 27", 50-1/4", & 72-1/8" from top of frame typ. both side jambs.



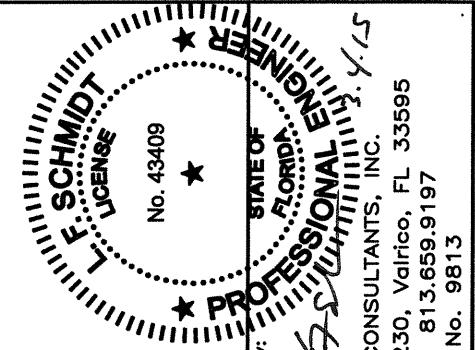
1 HORIZONTAL CROSS SECTION
5 Outswing shown - Inswing also approved



4 HORIZONTAL CROSS SECTION
5 Outswing shown - Inswing also approved



5 HORIZONTAL CROSS SECTION
5 Outswing shown - Inswing also approved



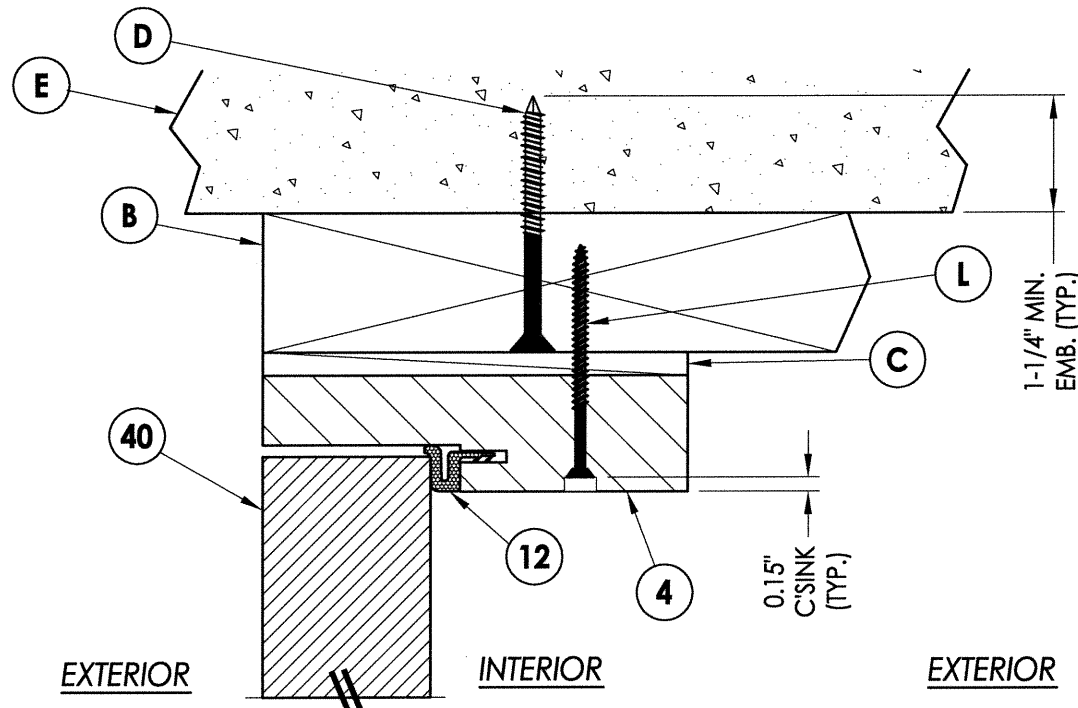
Documents Prepared By:
 Lyndon F. Schmidt
 P.E. No. 43409
 R.W. BUILDING CONSULTANTS, INC.
 P.O. Box 230, Vairco, FL 33595
 Phone No.: 813.659.9197
 FBPE C.A. No. 9813

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

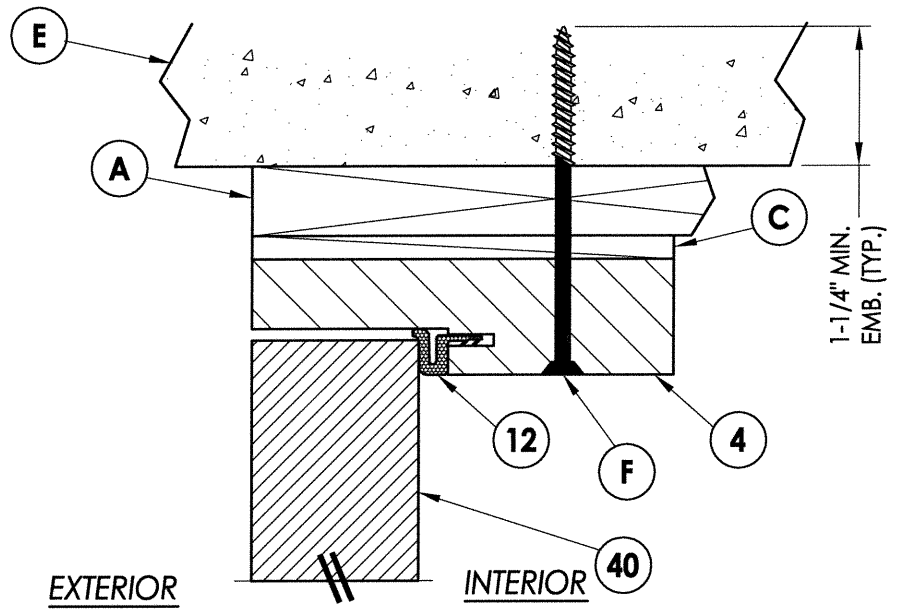
NO.	DATE	REVISIONS
1	03/02/15	UPDATE TO 5TH ED. (2014) FBC

DATE: 1/18/12
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: FL-15129.16
 SHEET 5 OF 13

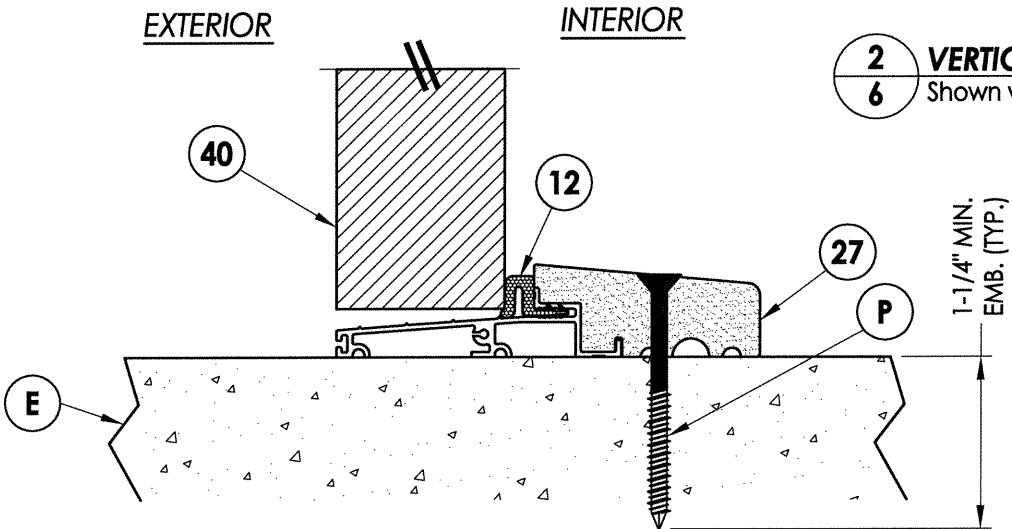
R:\Clients\Trinity PERMANENT\Florida Product Approvals\FL-15129\Drawings\Current\FL-15129.13-20.dwg, 6.16



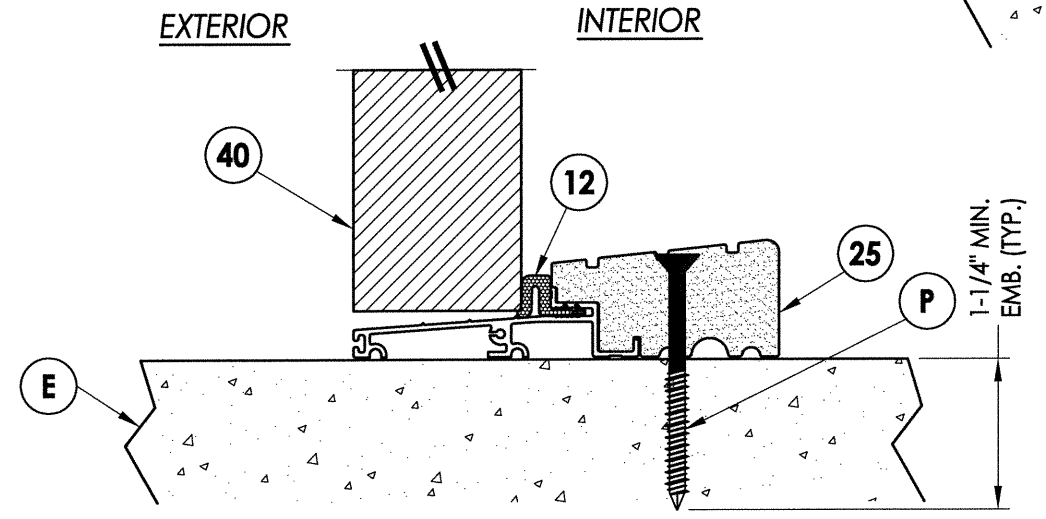
1 VERTICAL CROSS SECTION
6 Outswing shown
 Inswing also approved



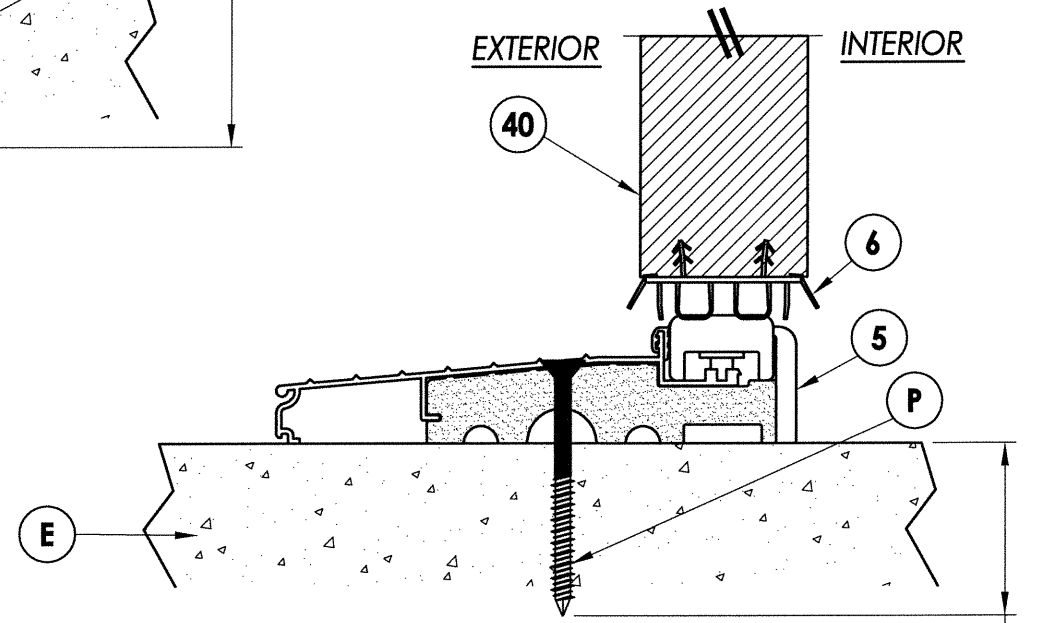
2 VERTICAL CROSS SECTION
6 Shown w/1X sub-buck



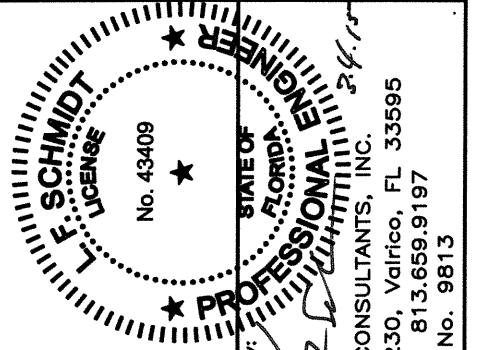
4 VERTICAL CROSS SECTION
6 Outswing sill



3 VERTICAL CROSS SECTION
6 Outswing sill - high dam



5 VERTICAL CROSS SECTION
6 Inswing sill



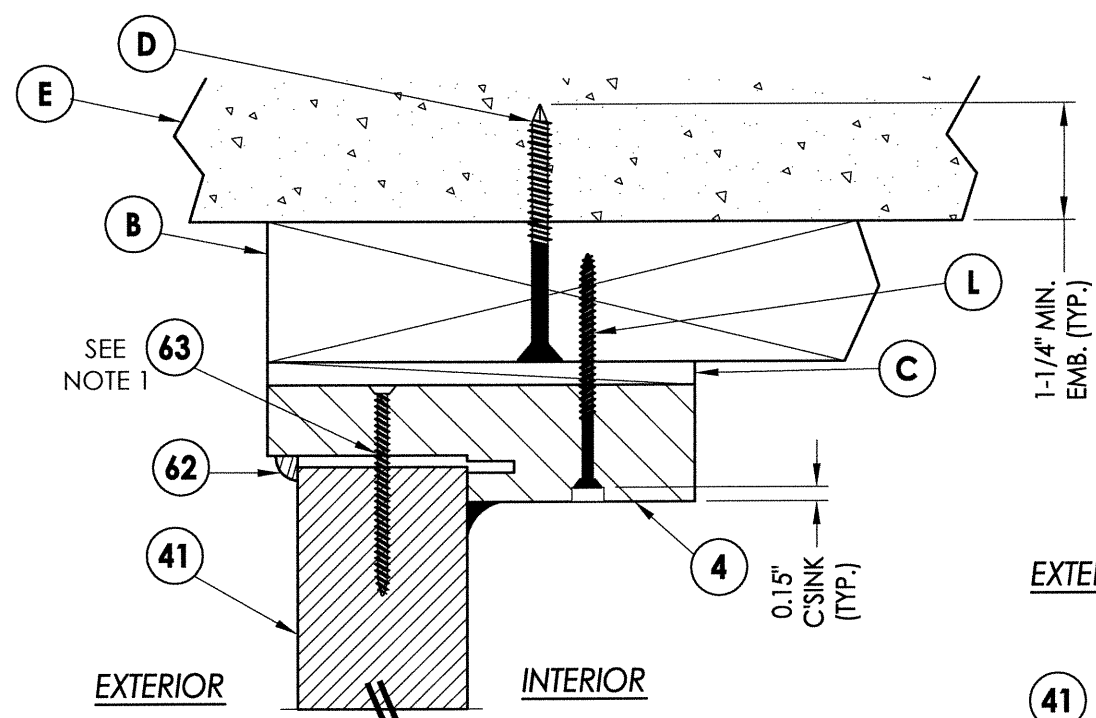
Documents Prepared By:
 Lyndon F. Schmidt
 P.E. No. 43409
 R.W. BUILDING CONSULTANTS, INC.
 P.O. Box 230, Valrico, FL 33595
 Phone No.: 813.659.9197
 FBPE C.A. No. 9813

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

NO.	DATE	BY
1	03/02/15	JK
UPDATE TO 5TH ED. (2014) FBC		
REVISIONS		

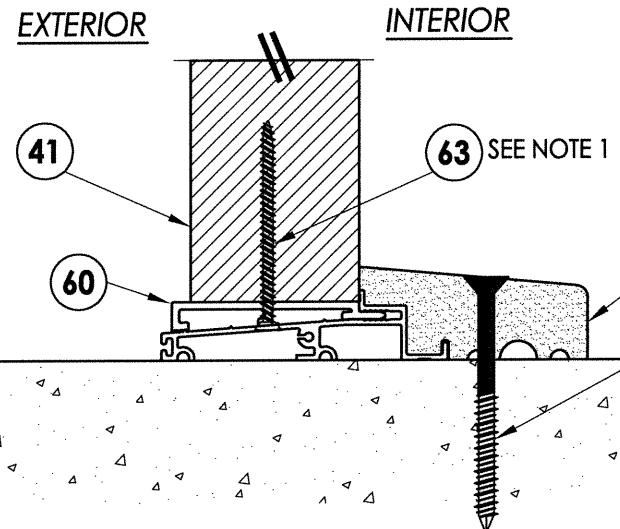
DATE:	1/18/12
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-15129.16
SHEET	6 of 13

R:\Clients\Trinity PERMANENT\Florida Product Approvals\FL-15129\Drawings\Current\FL-15129.13-20.dwg, 7.16

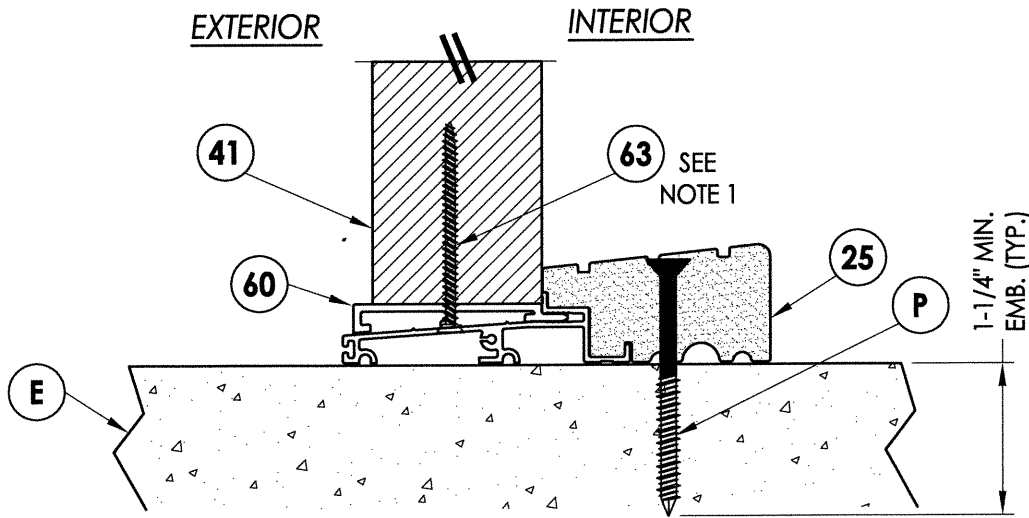


1 VERTICAL CROSS SECTION
7

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

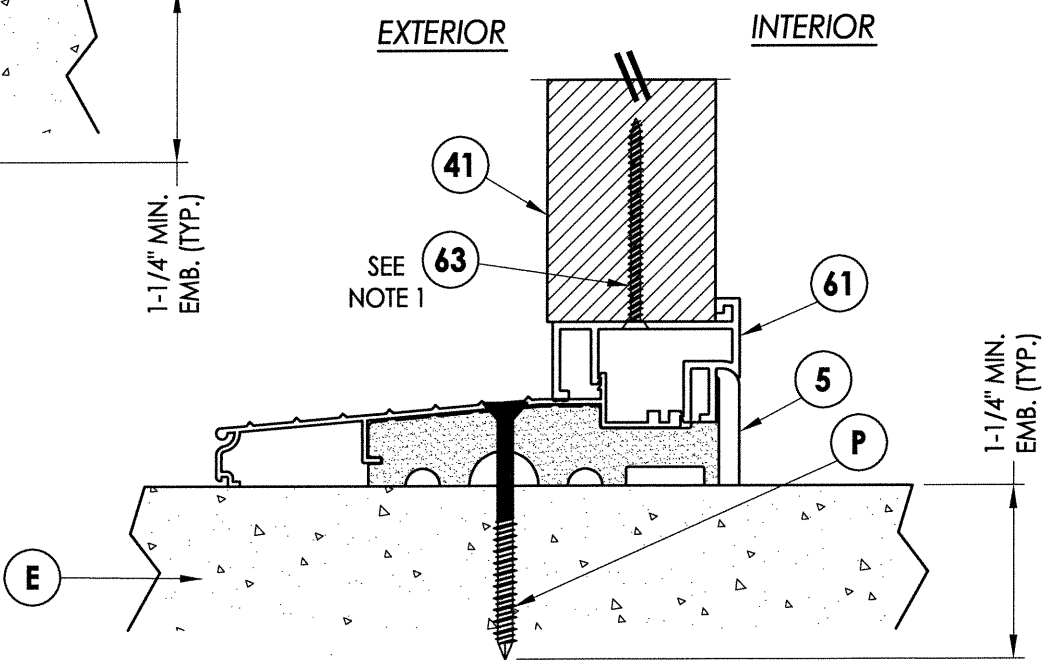


2 VERTICAL CROSS SECTION
7 Shown w/1X sub-buck

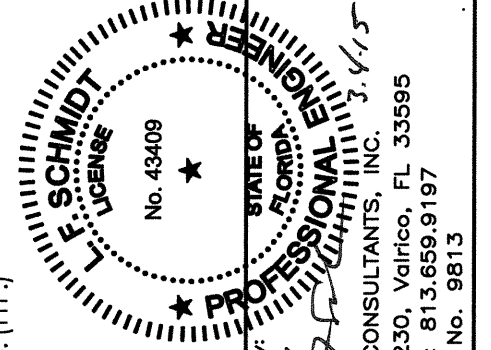


3 VERTICAL CROSS SECTION
7 Outswing sill - high dam

4 VERTICAL CROSS SECTION
7 Outswing sill



5 VERTICAL CROSS SECTION
7 Inswing sill

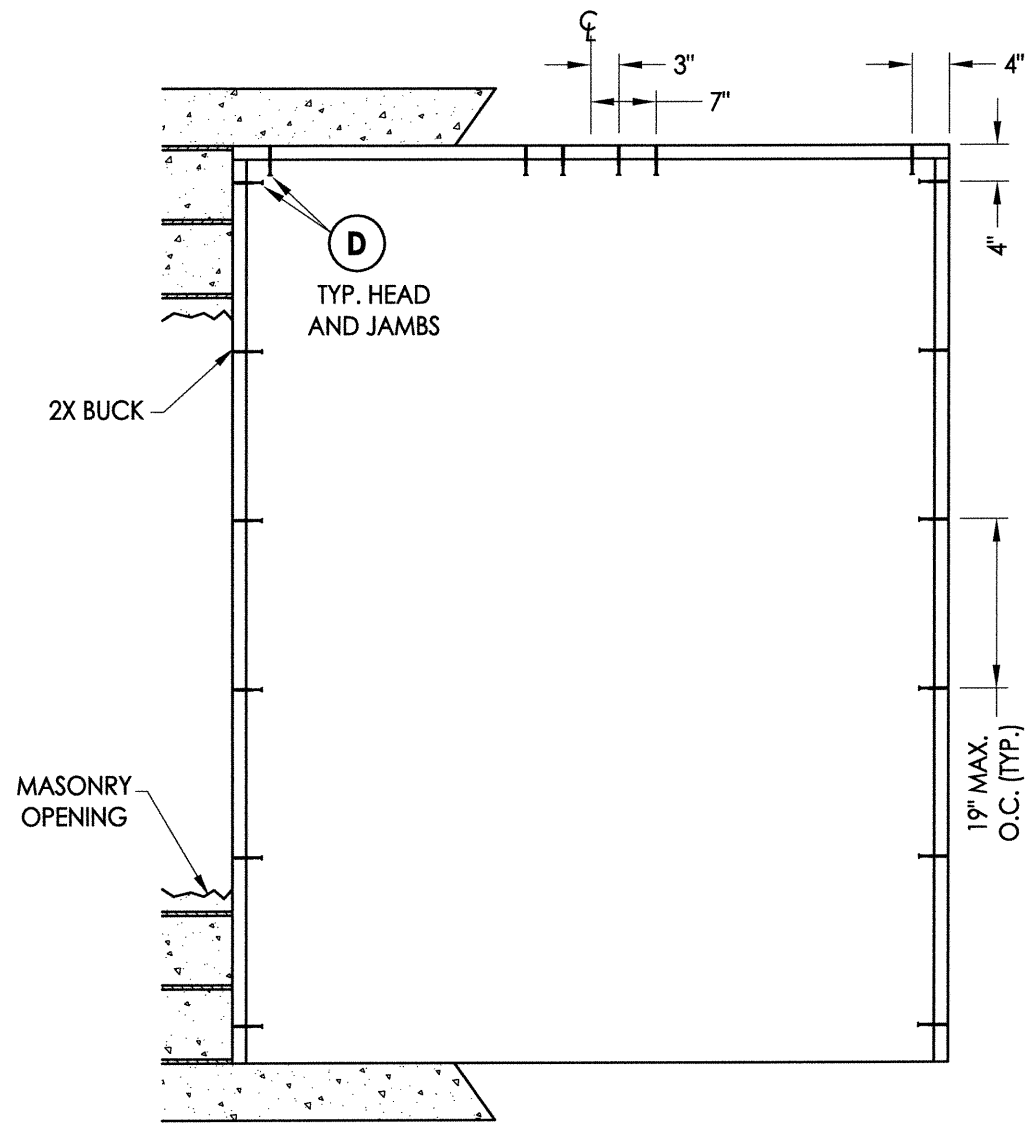


Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409
R.W.
BUILDING CONSULTANTS, INC.
P.O. Box 230, Vairico, FL 33595
Phone No.: 813.659.9197
FBPE C.A. No. 9813

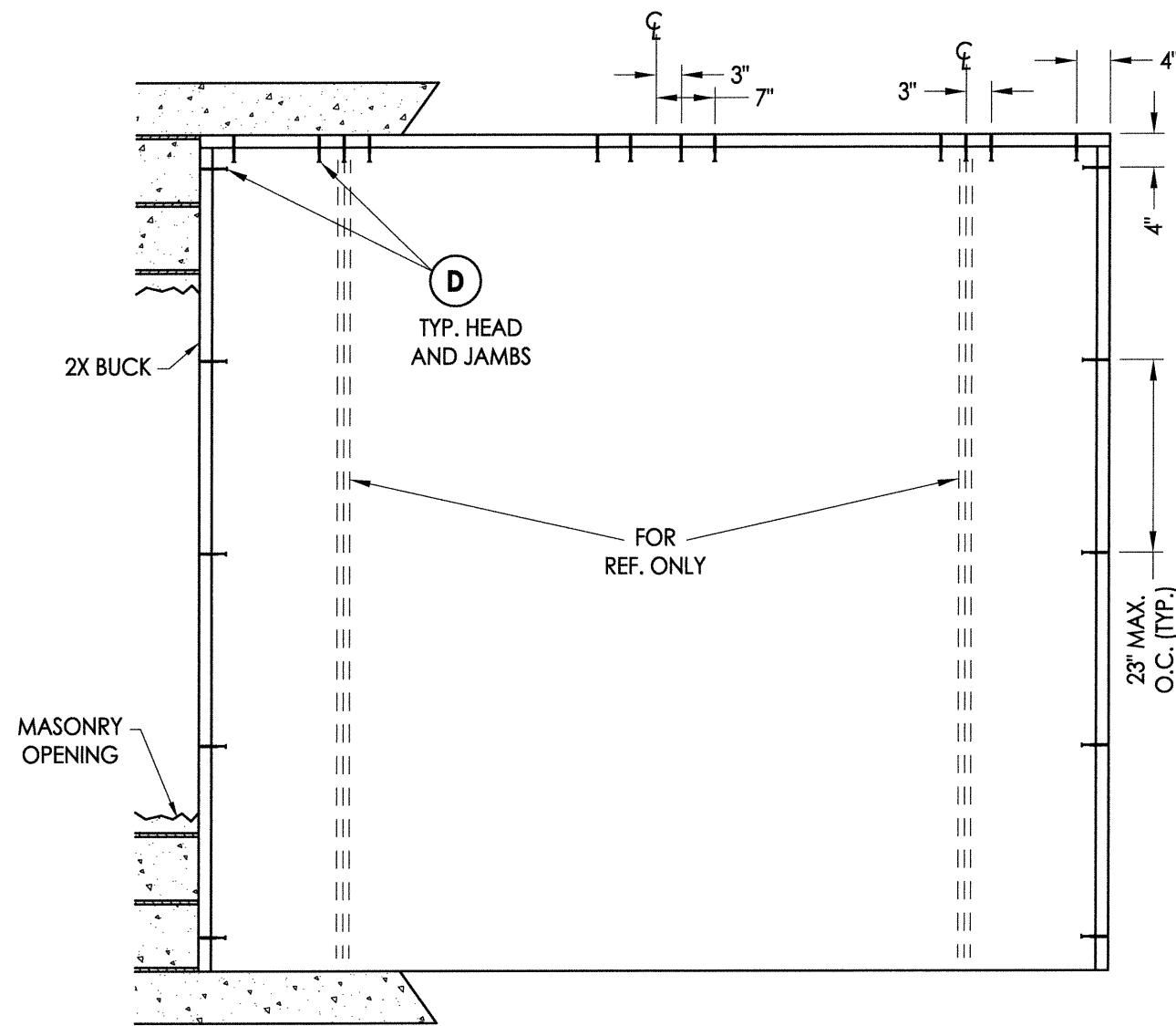
PRODUCT: TRINITY GLASS INT'L
PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	REVISIONS
1	03/02/15	UPDATE TO 5TH ED. (2014) FBC
JK	BY	

DATE: 1/18/12
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: FL-15129.16
SHEET 7 OF 13



BUCK ANCHORING



BUCK ANCHORING

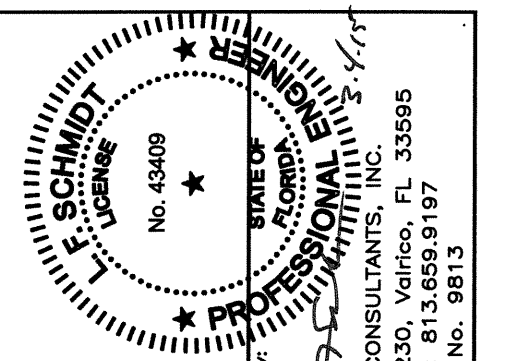
CONCRETE ANCHOR NOTES:

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 BUILDEX TAPCON®	1/4"	1-1/4"	2"	4"
ELCO ULTRACON®	1/4"	1-1/4"	1"	4"

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.



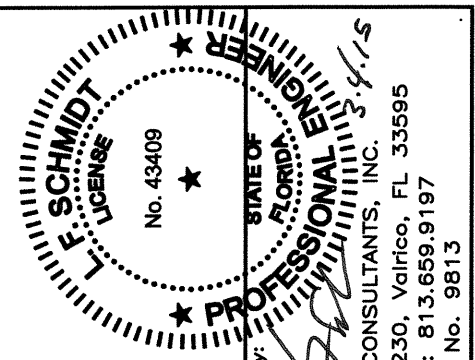
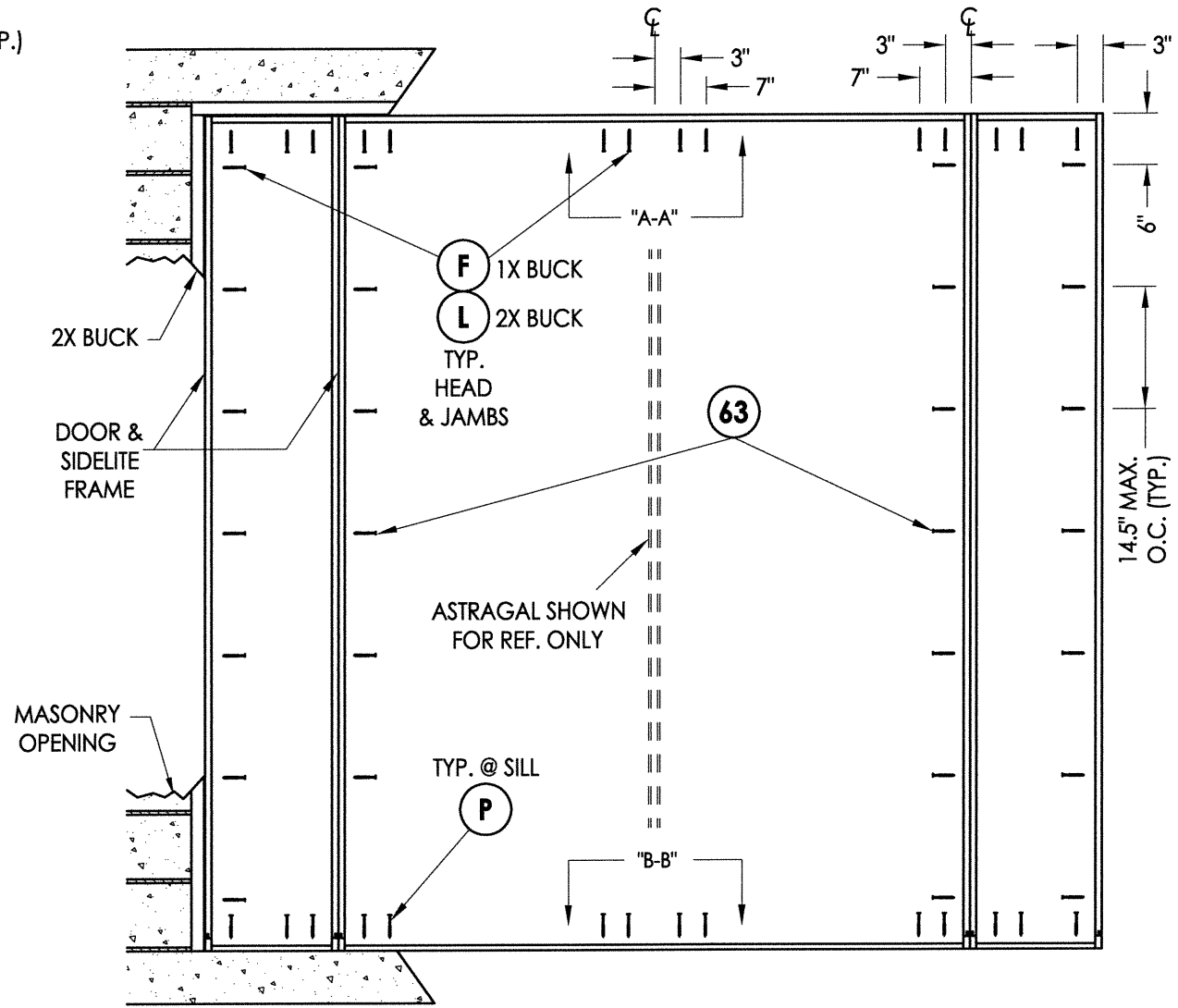
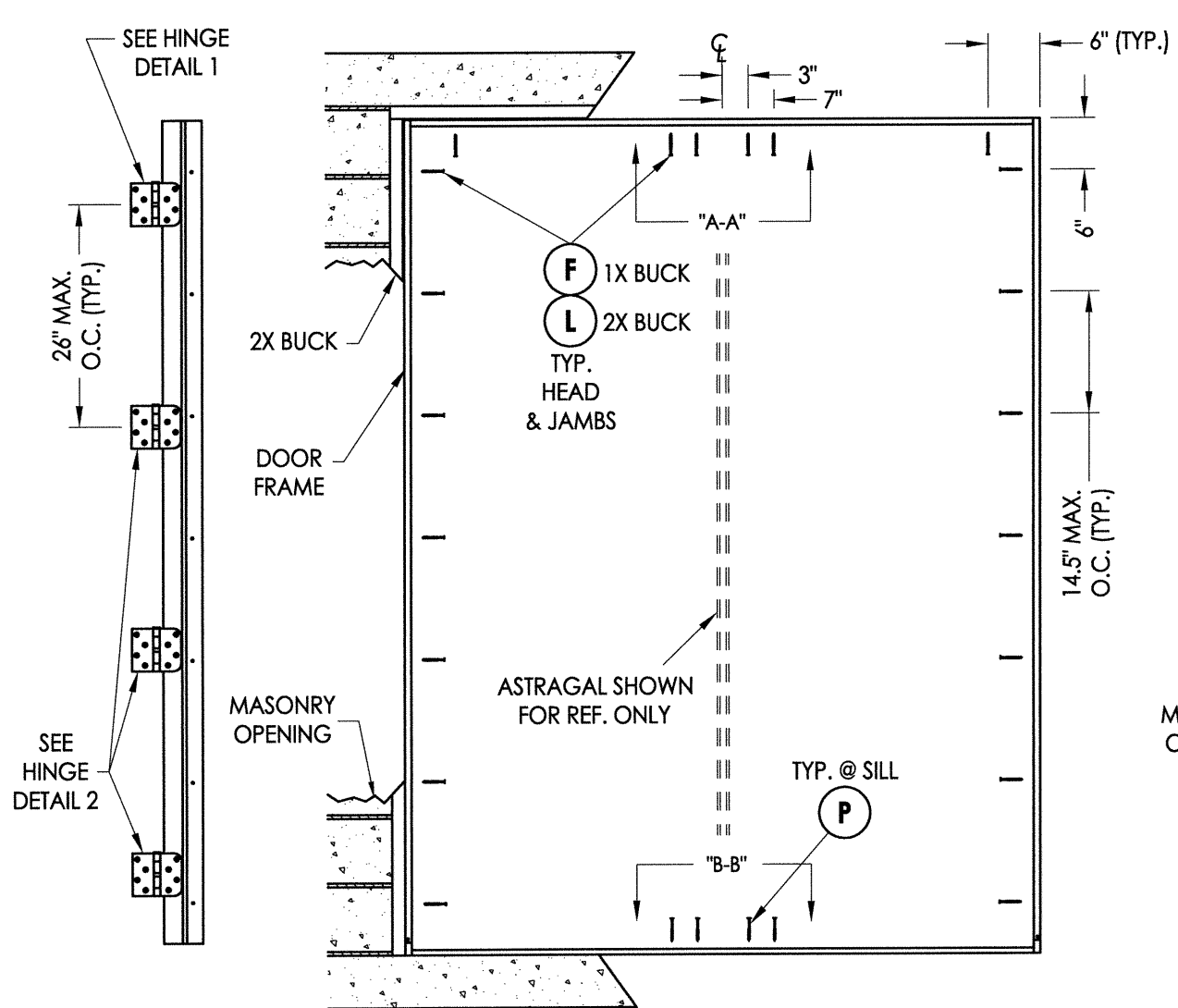
Documents Prepared By:
 Lyndon F. Schmidt
 P.E. No. 43409
 R.W. BUILDING CONSULTANTS, INC.
 P.O. Box 230, Vairico, FL 33595
 Phone No.: 813.659.9197
 FBPE C.A. No. 9813

PRODUCT: TRINITY GLASS INT'L
 PART OR ASSEMBLY: BUCK ANCHORING

NO.	DATE	BY	REVISIONS
1	03/02/15	JK	UPDATE TO 5TH ED. (2014) FBC

DATE: 1/18/12
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: FL-15129.16
 SHEET 8 OF 13

R:\Clients\Trinity PERMANENT\Florida Product Approvals\FL-15129\Drawings\Current\FL-15129.13-20.dwg, 9.16



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 C.A. No. 9813

PRODUCT: TRINITY GLASS INT'L

PART OR ASSEMBLY: FRAME ANCHORING

NO.	DATE	REVISIONS
1	03/02/15	UPDATE TO 5TH ED. (2014) FBC
		JK BY

DATE: 1/18/12
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: FL-15129.16
 SHEET 9 OF 13

HINGE JAMB

FRAME ANCHORING

CONCRETE ANCHOR NOTES:

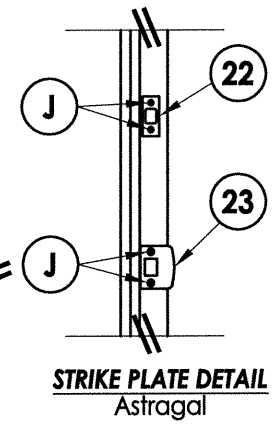
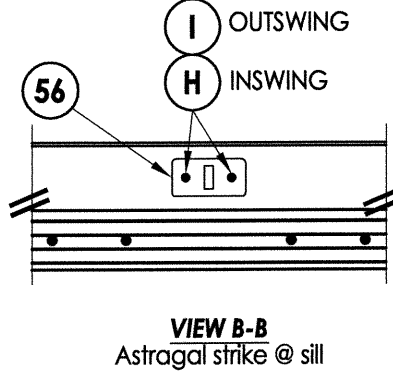
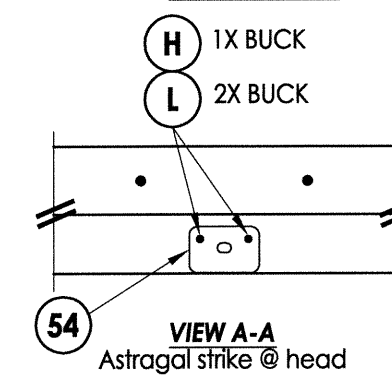
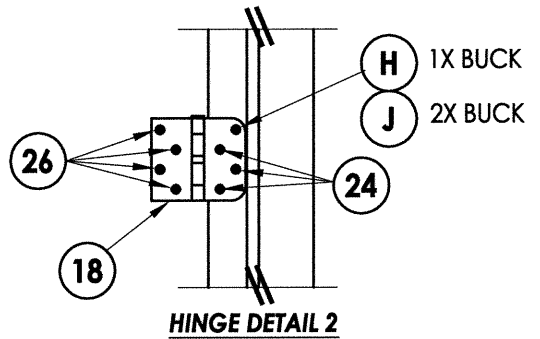
- Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints.
- Concrete anchor locations noted as "MAX. ON CENTER" must be adjusted to maintain the min. edge distance to mortar joints, additional concrete anchors may be required to ensure the "MAX. ON 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"
ELCO ULTRACON®	1/4"	1-1/4"	1"	4"

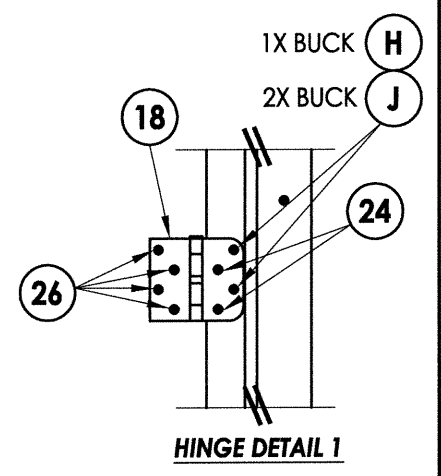
WOOD SCREW INSTALLATION NOTES:

- Maintain a minimum 5/8" edge distance, 1" end distance, & 1" o.c. spacing of wood screws to prevent the splitting of wood.

FRAME ANCHORING



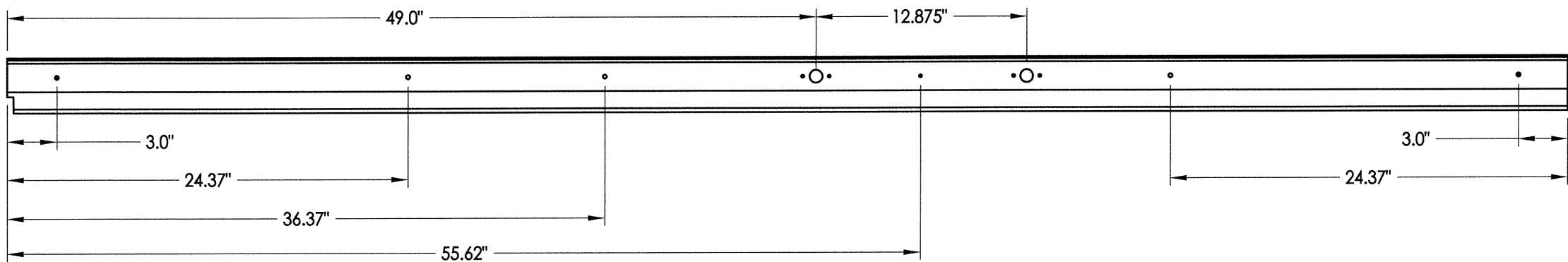
ASTRAGAL STRIKE JAMB



© 2012 R.W. BUILDING CONSULTANTS INC.

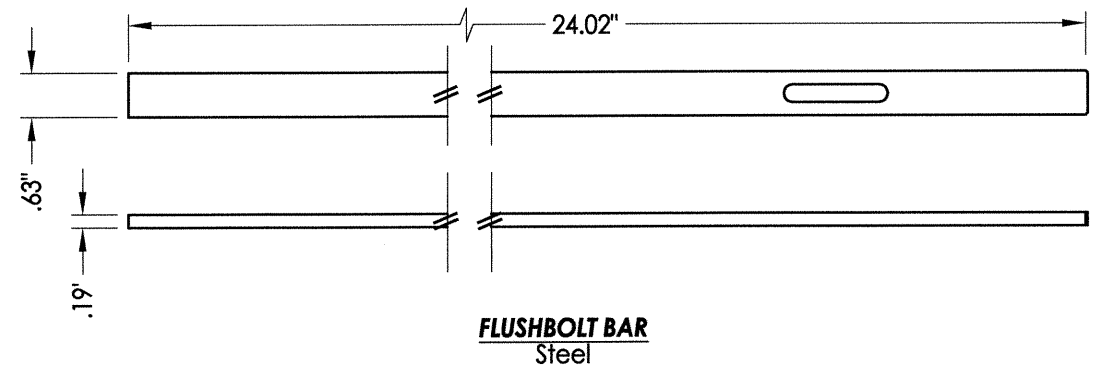
R:\Clients\Trinity PERMANENT\Florida Product Approvals\FL-15129\Drawings\Current\FL-15129.13-20.dwg, 10.16

B-B
TOP
BOTTOM

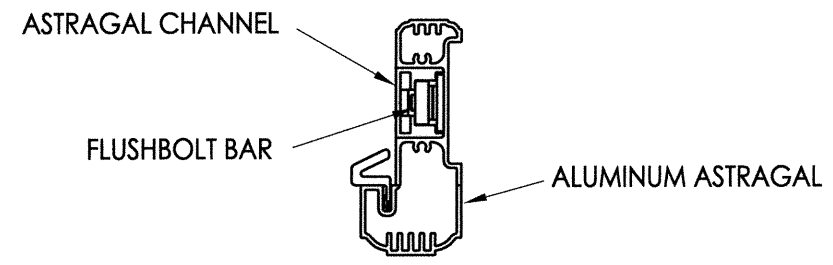


DEAD BOLT THRU HOLE LATCH THRU HOLE

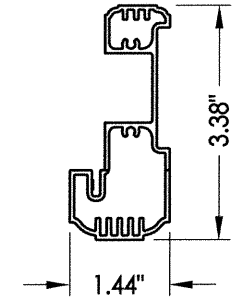
8'0 ALUMINUM ASTRAGAL ASSEMBLY
By TRC



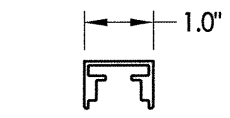
FLUSHBOLT BAR
Steel



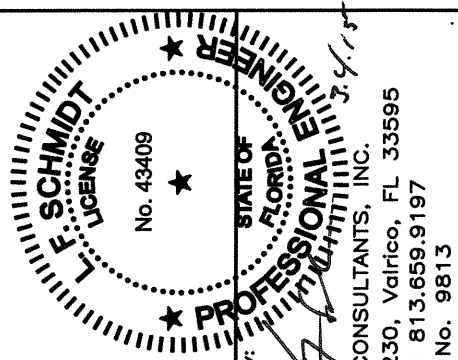
VIEW B-B
Aluminum Astragal Assembly



58 ALUMINUM ASTRAGAL
By TRC



ASTRAGAL CHANNEL
Aluminum



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

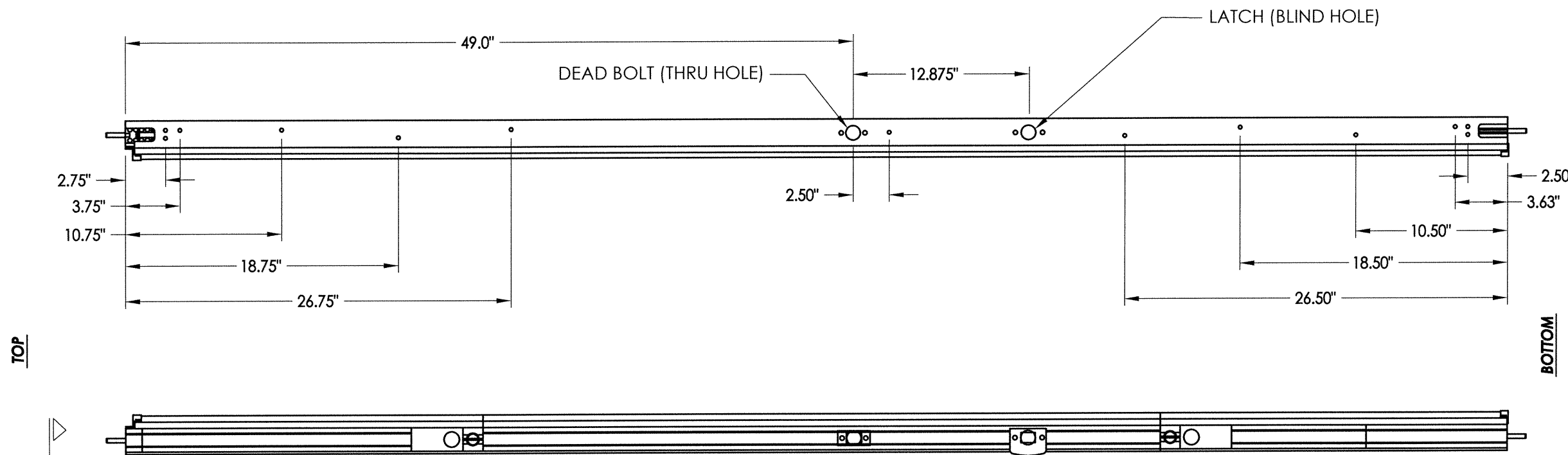
RW

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

PRODUCT:	TRINITY GLASS INT'L
PART OR ASSEMBLY:	ASTRAGAL DETAILS (TRC)

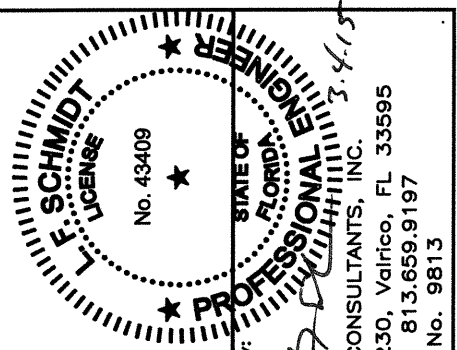
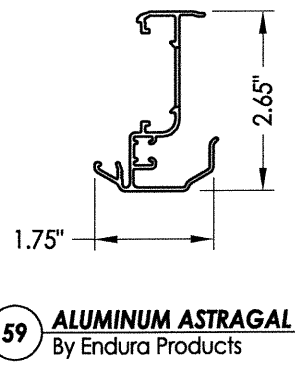
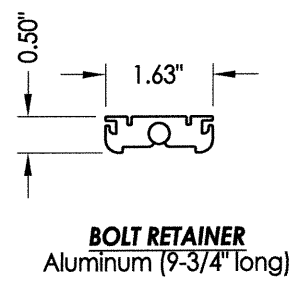
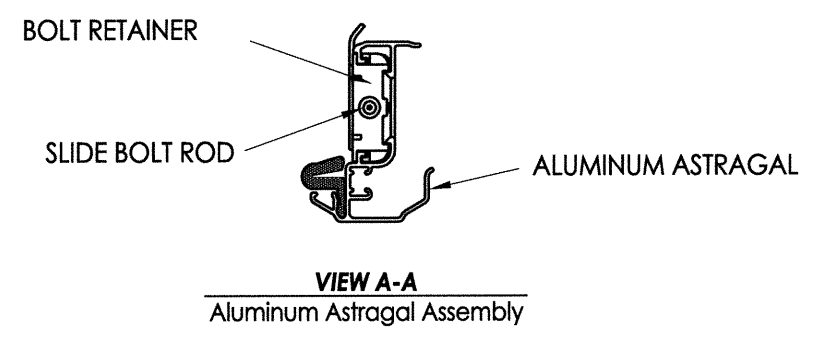
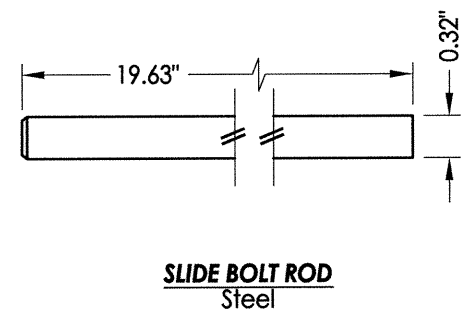
NO.	DATE	BY
1	03/02/15	JK
	UPDATE TO 5TH ED. (2014) FBC	BY

DATE:	1/18/12
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-15129.16
SHEET	10 OF 13



8'-0" ALUMINUM ASTRAGAL ASSEMBLY
By Endura Products

A-A

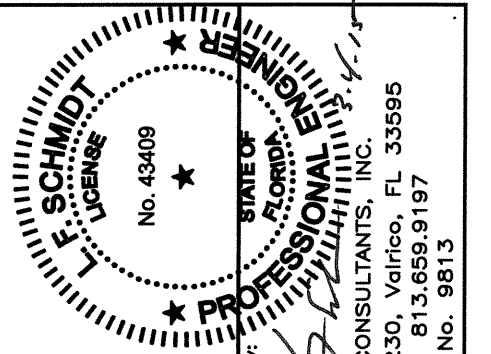
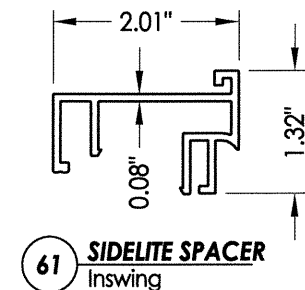
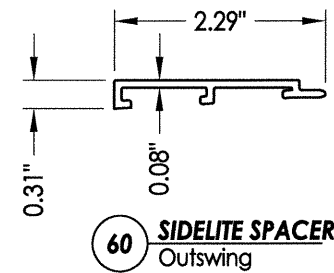
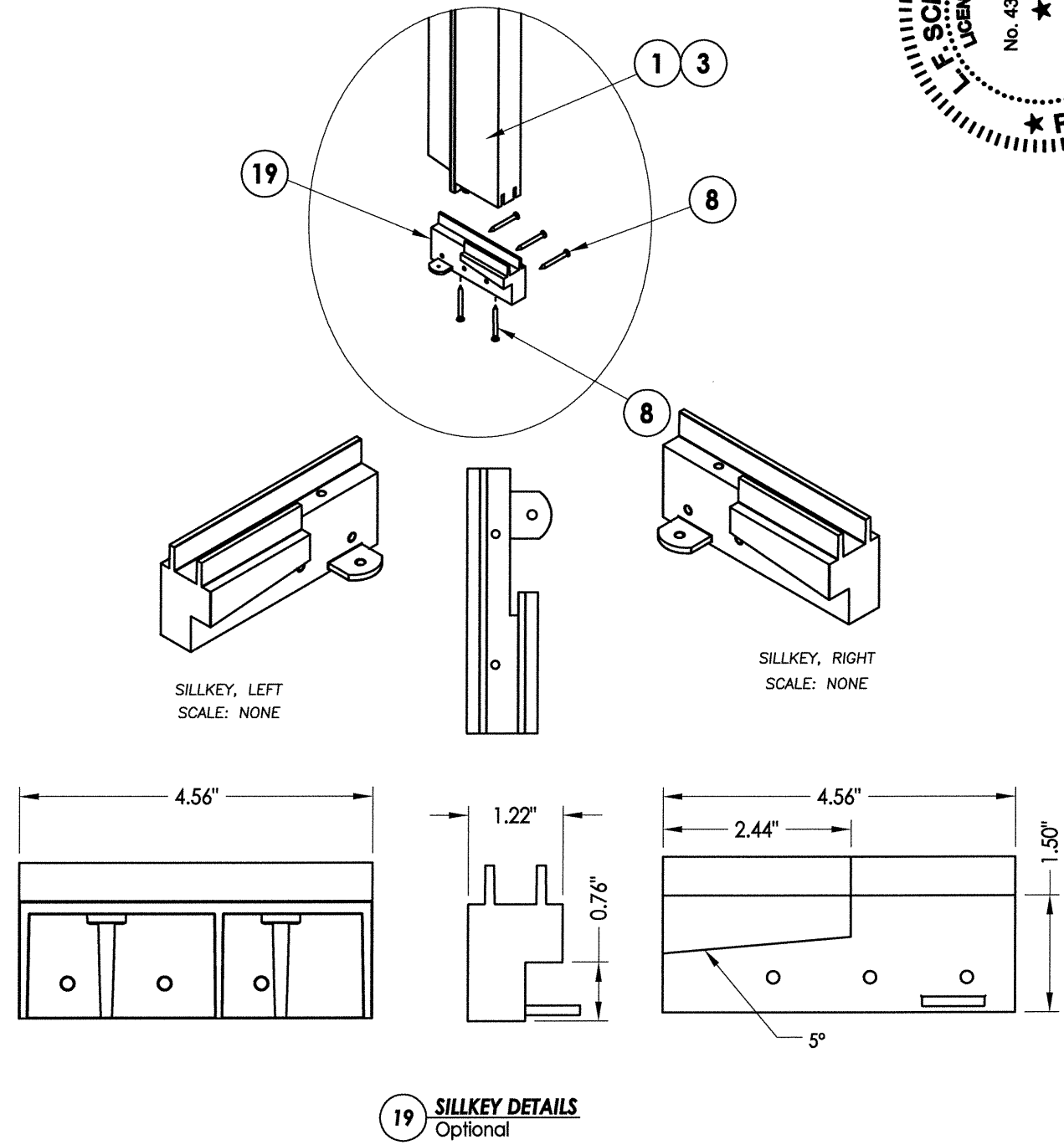
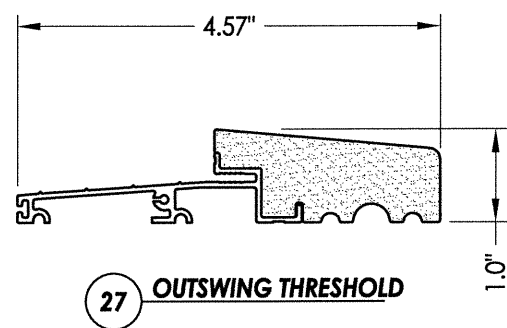
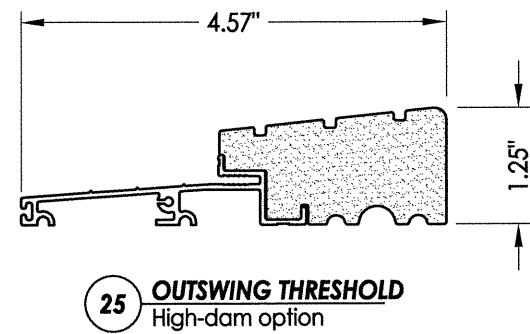
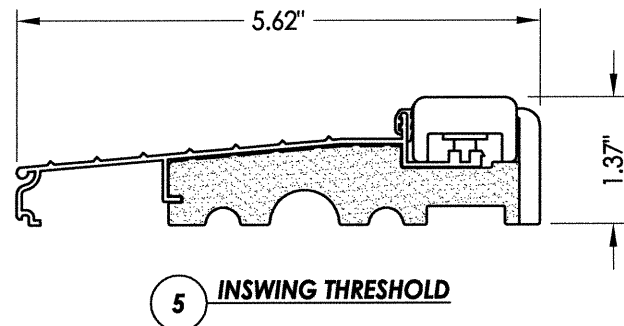
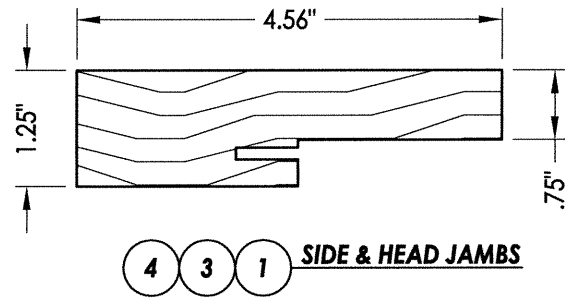


Documents Prepared By:
Lyndon F. Schmidt
P.E. No. 43409
R.W.
BUILDING CONSULTANTS, INC.
P.O. Box 230, Vairco, FL 33595
Phone No.: 813.659.9197
FBPE C.A. No. 9813

PRODUCT:	TRINITY GLASS INT'L
PART OR ASSEMBLY:	ASTRAGAL DETAILS (ENDURA)

NO.	DATE	REVISIONS	BY
1	10/3/02/15	UPDATE TO 5TH ED. (2014) FBC	JK

DATE:	1/18/12
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-15129.16
SHEET	11 OF 13



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

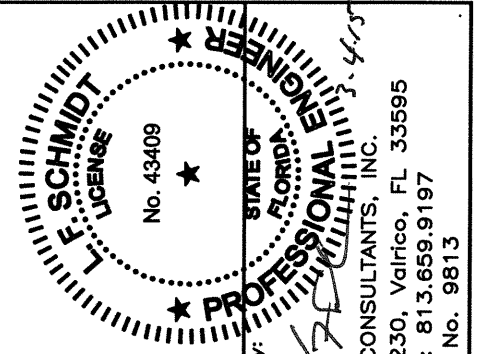
RW
 BUILDING CONSULTANTS, INC.
 P.O. Box 230, Valrico, FL 33595
 Phone No.: 813.659.9197
 FBPE C.A. No. 9813

PRODUCT:	TRINITY GLASS INT'L
PART OR ASSEMBLY:	COMPONENTS

NO.	DATE	REVISIONS
1	03/02/15	UPDATE TO 5TH ED. (2014) FBC

DATE:	1/18/12
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	FL-15129.16
SHEET	12 OF 13

BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
A	1X BUCK SG >= 0.55	WOOD
B	2X BUCK SG >= 0.55	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" PFH ELCO 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	1/4" X 3-3/4" ITW PFH CONCRETE SCREW	STEEL
H	3/16" X 3-1/4" ITW PFH CONCRETE SCREW	STEEL
I	3/16" X 1-1/4" ITW PFH CONCRETE SCREW	STEEL
J	#9 X 2-1/4" PFH WS	STEEL
L	#8 X 2-1/2" PFH WS	STEEL
P	1/4" X 2-3/4" ITW PFH CONCRETE SCREW	STEEL
1	STRIKE JAMB - FINGER-JOINT PINE - SG >= 0.42	WOOD
3	HINGE JAMB - FINGER-JOINT PINE - SG >= 0.42	WOOD
4	HEAD - FINGER-JOINT PINE - SG >= 0.42	WOOD
5	INSWING THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUMINUM
6	DOOR BOTTOM SWEEP	PVC
8	#6 X 1-1/4 PFH DRYWALL SCREW	STEEL
9	#9 X 2-1/4" PFH SMS	STEEL
12	WEATHER STRIP QEBD650 Q-LON	-
18	3.983" X 4.0" HINGE MIN 0.098" THICK	STEEL
19	SILLKEY	PC/ASA
22	DEADBOLT STRIKE PLATE	STEEL
23	LATCH 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 1.0" PFH WS	STEEL
27	OUTSWING THRESHOLD ALUMINUM W/ COMPOSITE SUBSTRATE	ALUM./ COMP.
40	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
41	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
53	#8 X 1-3/4" PFH SMS	STEEL
54	ASTRAGAL STRIKE @ HEAD	STEEL
56	ASTRAGAL STRIKE @ SILL	STEEL
58	ASTRAGAL (TRC)	ALUMINUM
59	ASTRAGAL (ENDURA)	ALUMINUM
60	SIDELITE SPACER - OUTSWING	PVC
61	SIDELITE SPACER - INSWING	PVC
62	QUARTER ROUND	WOOD
63	#8 X 2-1/4" PFH WOOD SCREW	STEEL
64	#8 X 2" PFH WOOD SCREW	STEEL



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 C.A. No. 9813

PRODUCT: TRINITY GLASS INT'L

PART OR ASSEMBLY: BILL OF MATERIALS

NO.	DATE	BY	JK
1	03/02/15	UPDATE TO 5TH ED. (2014) FBC	

REVISIONS

DATE: 1/18/12
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: FL-15129.16
 SHEET 13 OF 13