

# RightConcept™

2615 S. 80th STREET TACOMA, WA 98409

## PREMIUM OPAQUE FIBERGLASS DOOR w/ or w/o SIDELITES OUTSWING "IMPACT"

### EVALUATED FOR USE IN THE STATE OF TEXAS

The Right Concept Fiberglass Door described herein complies with the 2006 International Residential Code (IRC), Sections R301 & R613 and the 2006 International Building Code (IBC), Sections 1405.12, 1609, 1714.5, 2403 and 2404 (including Texas revisions) subject to the following conditions:

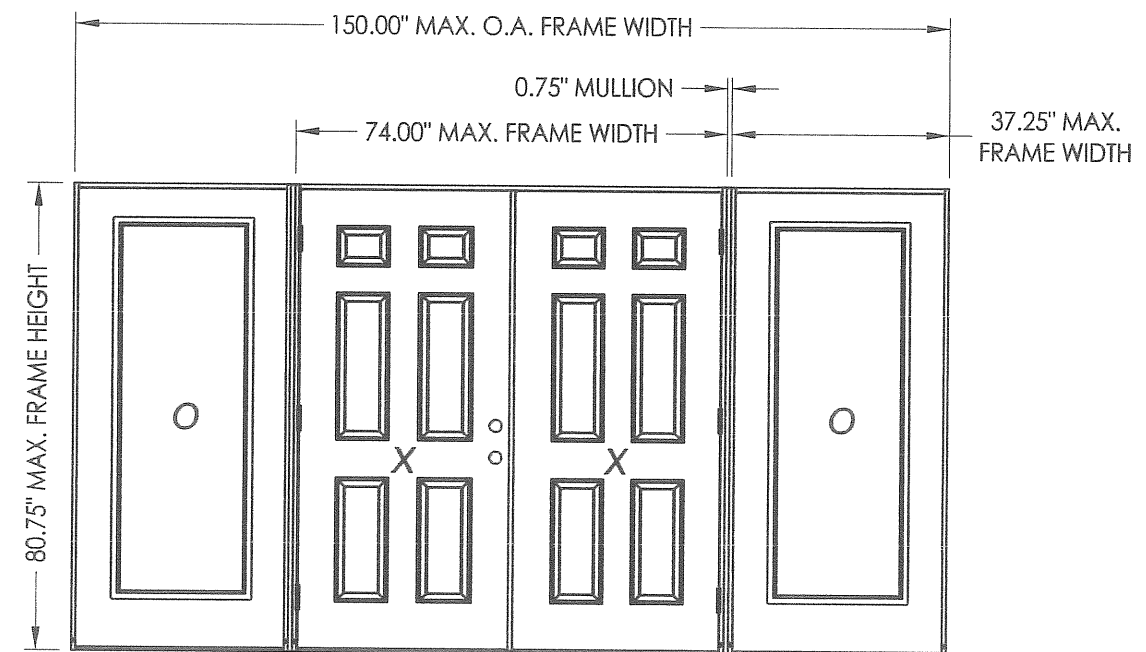
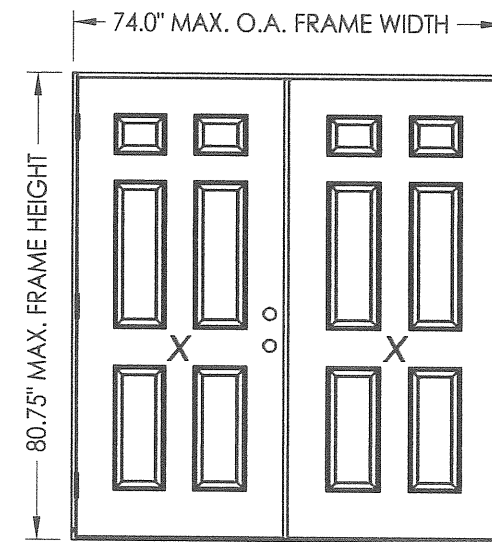
1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. This system has been tested and evaluated as a large missile impact protective system for installation in the Seaward, Inland I and Inland II areas. This product meets missile level "D" and includes Wind Zone 4 as defined in ASTM E1996.
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.

### SUPPORTING DOCUMENTS & EVIDENCE

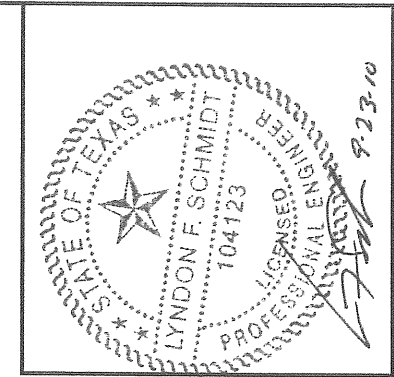
1. Testing per TAS 201, 202 & 203-94; AAMA/WDMA/CSA 101/I.S.2/A440-05, ASTM E 1886/1996:  
Testing Evaluation Laboratories, Inc. test report(s) #: TEL 06-0918-2, TEL 01370051 & TEL 08-1370021, 21-IC.
2. Calculations (Anchoring and Glass load resistance report ASTM E1300-04) prepared by Lyndon F. Schmidt, P.E.
3. Certificate of Participation issued by the National Accreditation and Management Institute, Inc., certifying that RightConcept is manufacturing products within a Quality Assurance program.

TABLE OF CONTENTS

SHEET#	DESCRIPTION
1	Typical elevations, design pressures & general notes
2	Door panel construction details
3	Sidelite panel construction details and glazing details
4	Elevations
5	Horizontal cross sections
6	Vertical cross sections
7	Vertical cross sections
8	Frame anchoring (XX)
9	Frame anchoring (OXXO)
10	Components
11	Endura astragal details
12	Trinity astragal details
13	Bill of materials



CONFIGURATION	MAX. O.A. FRAME DIMENSION	MAX. SIDELITE D.L.O. DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
				POSITIVE	NEGATIVE
XX	74.0" x 80.75"	21.0" x 63.0"	G1, G2 & G3	+60.0	-60.0
OXXO W/ MULL. REINF.	150.0" x 80.75"	21.0" x 63.0"	G1, G2 & G3	+60.0	-60.0
OXXO W/O MULL. REINF.	148.5" x 80.75"	21.0" x 63.0"	G1, G2 & G3	+55.0	-55.0



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

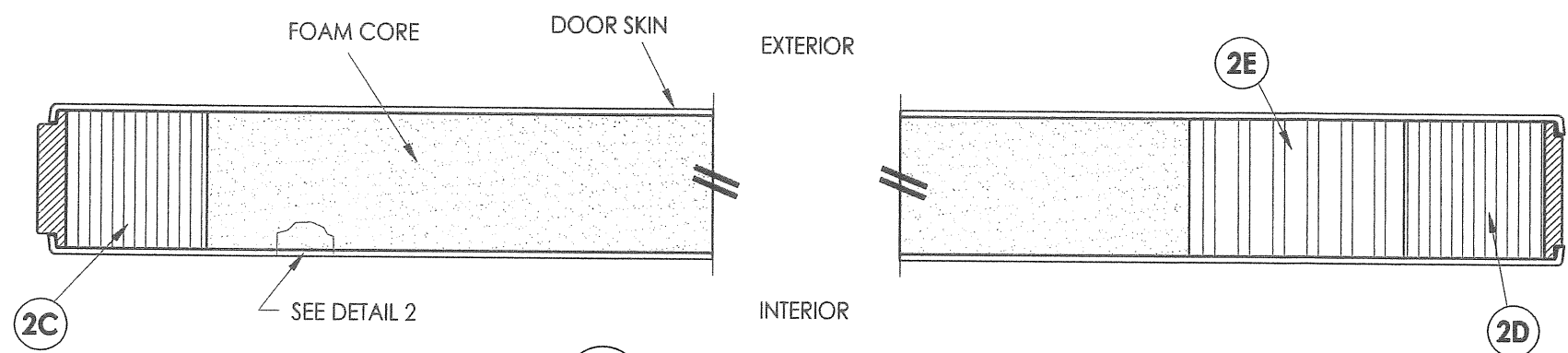
PRODUCT: RightConcept  
6'8 PREMIUM OPAQUE

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

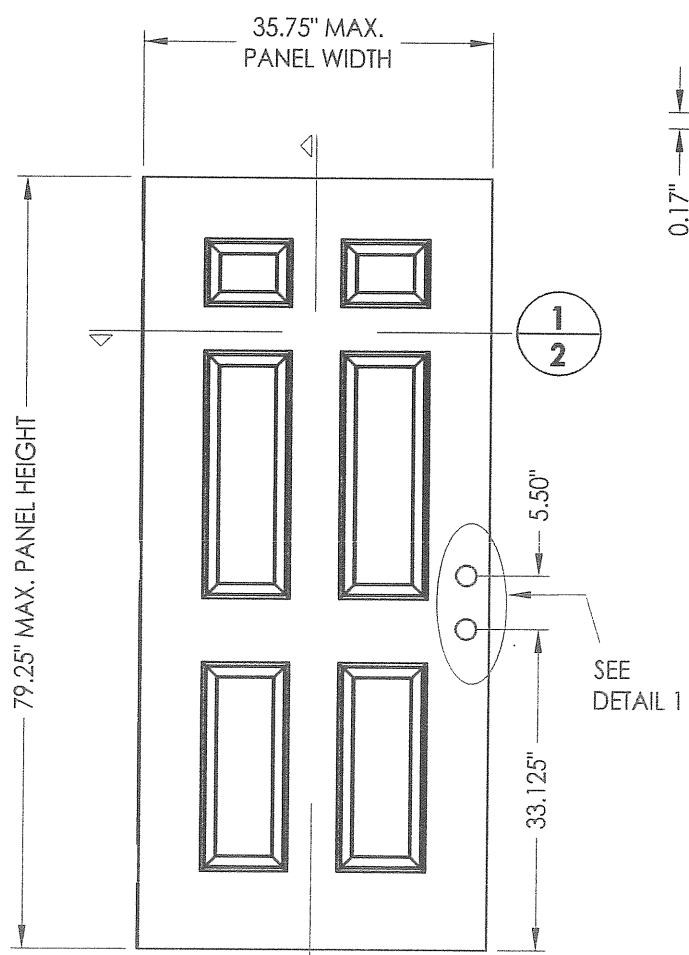
NO.	DATE	BY	REVISIONS

DATE: 9/21/10  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4109  
SHEET 1 OF 13

R:\A - Projects\Project Folders\Proj 1001-1100\pf1098\RWBC Drawings\TX-4107.dwg, 2.3

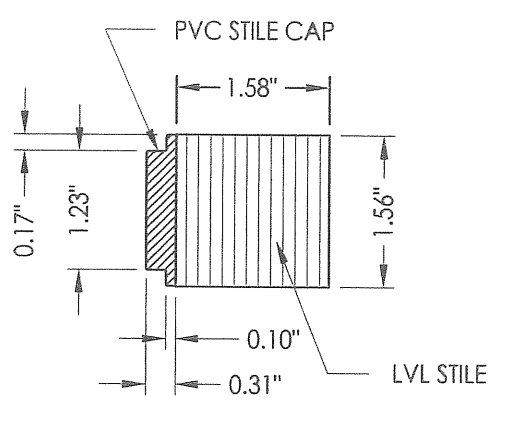


**1**  
**2** HORIZONTAL CROSS SECTION

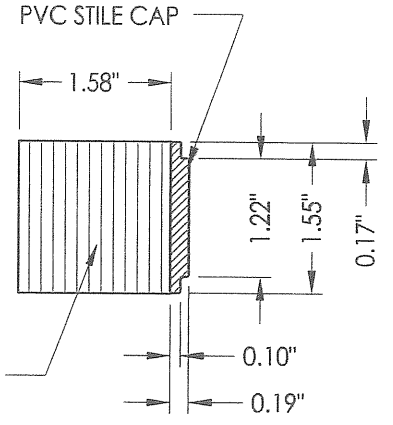


**7** DOOR PANEL  
Fiberglass

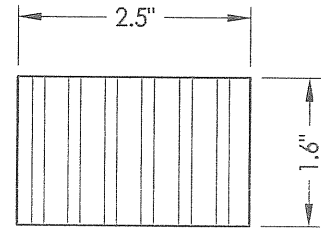
FIBERGLASS DOOR SKIN: MIN. 0.079\"/>



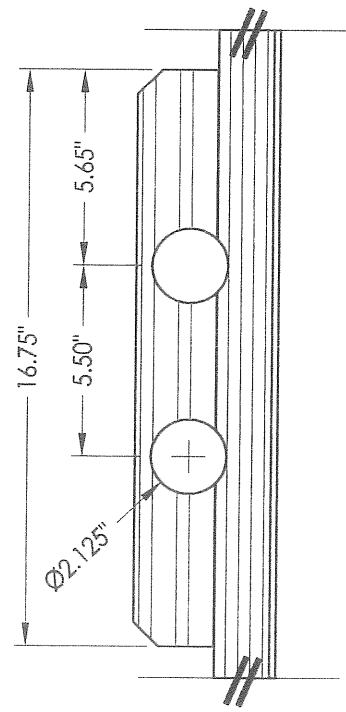
**2C** HINGE STILE  
PVC/LVL



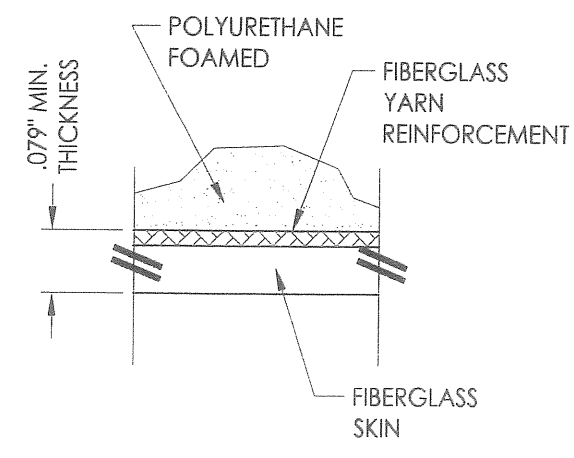
**2D** LATCH STILE  
PVC/LVL



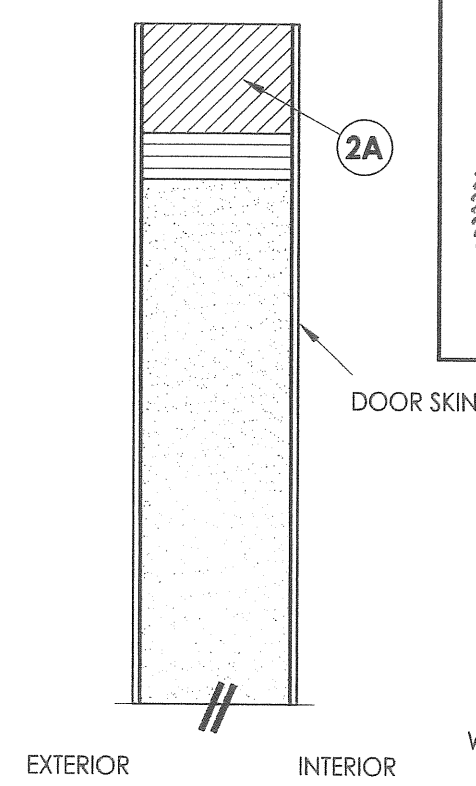
**2E** LOCK BLOCK  
LVL



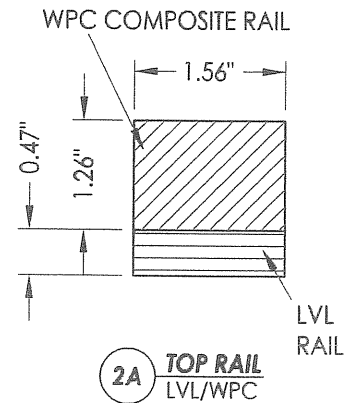
DETAIL 1



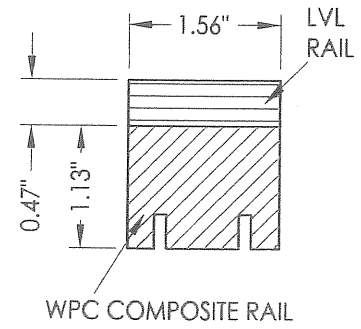
DETAIL 2



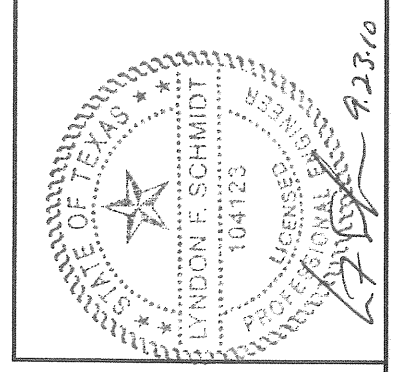
**2**  
**2** VERTICAL CROSS SECTION



**2A** TOP RAIL  
LVL/WPC



**2B** BOTTOM RAIL  
LVL/WPC

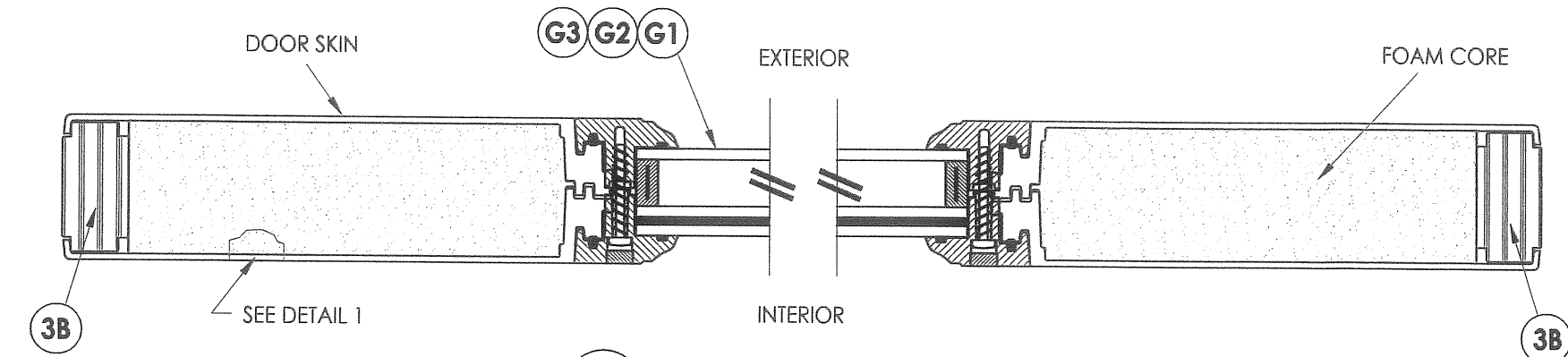


Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123  
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Vairico FL 33595  
Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

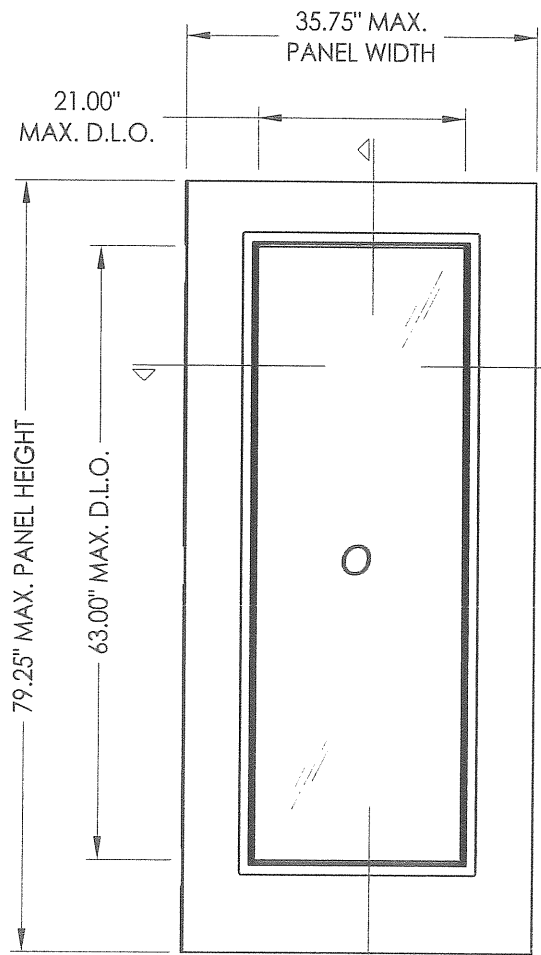
PRODUCT:	RightConcept 6'8 PREMIUM OPAQUE
PART OR ASSEMBLY:	DOOR PANEL CONSTRUCTION DETAILS

NO.	DATE	BY	REVISIONS

DATE:	9/21/10
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4109
SHEET	2 OF 13



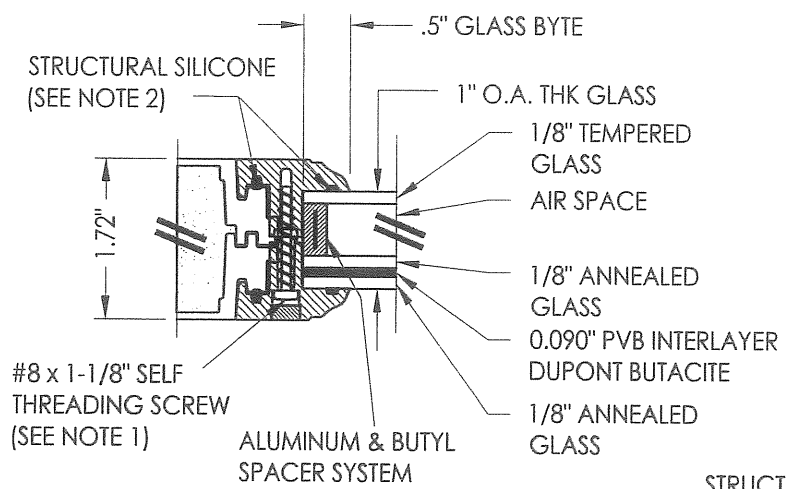
**1**  
**3** HORIZONTAL CROSS SECTION



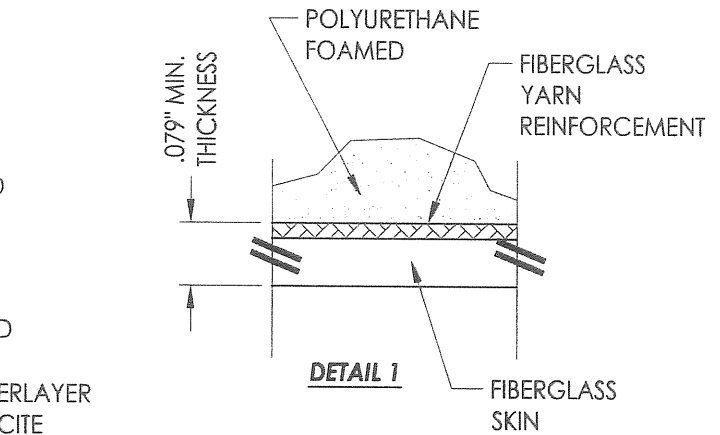
**2**  
**3**  
**66** SIDELITE PANEL  
Fiberglass

FIBERGLASS SIDELITE SKIN: MIN. 0.079\"/>

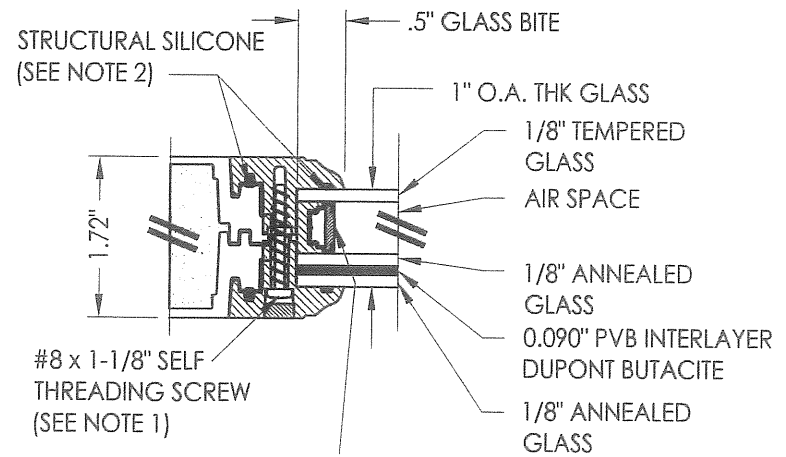
- NOTES:
- Spacing for lite frame screws is as follows:  
Sides: 11\"/>



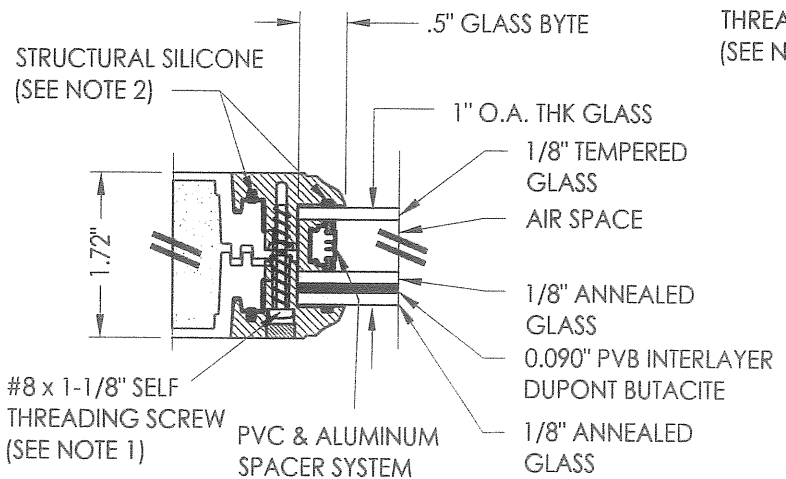
**G1** GLAZING DETAIL  
Flushed Glazed Lite Frame (Trinity)  
PC/ASA



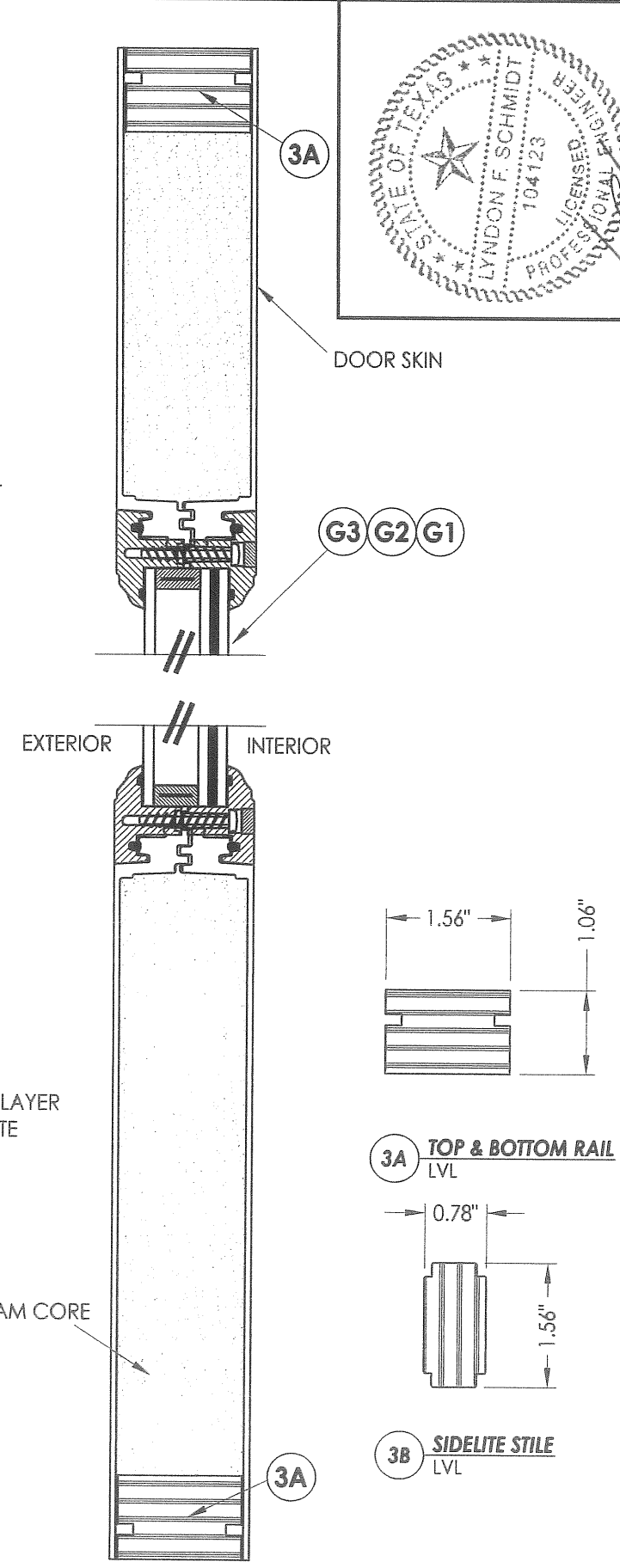
DETAIL 1



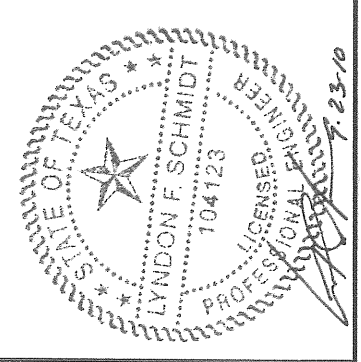
**G2** GLAZING DETAIL  
Flushed Glazed Lite Frame (Trinity)  
PC/ASA



**G3** GLAZING DETAIL  
Flushed Glazed Lite Frame (Trinity)  
PC/ASA



**2**  
**3** VERTICAL CROSS SECTION



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: RightConcept  
6'8\"/>

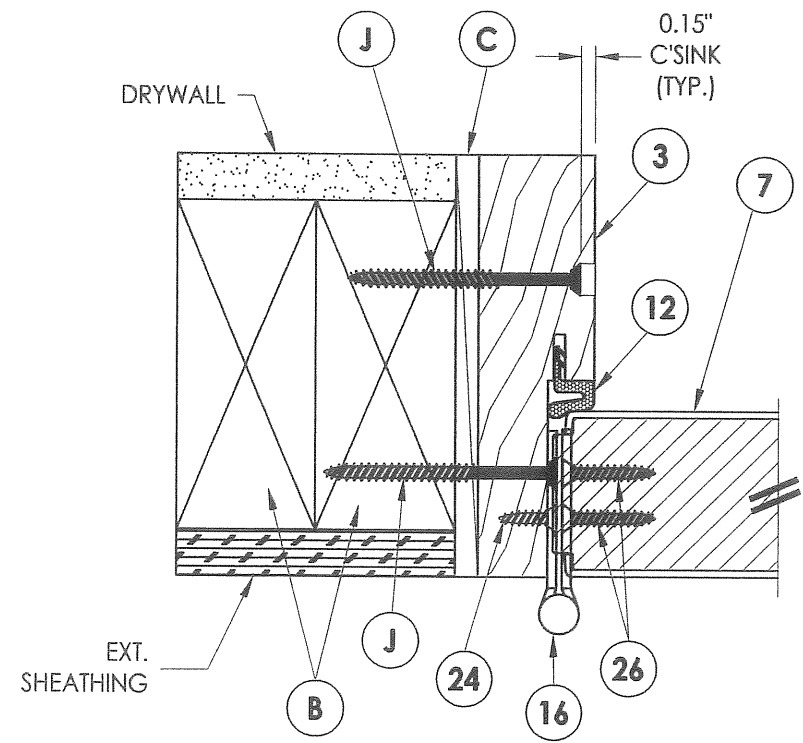
PART OR ASSEMBLY:  
SIDELITE PANEL CONSTRUCTION  
DETAILS AND GLAZING DETAILS

NO.	DATE	BY	REVISIONS

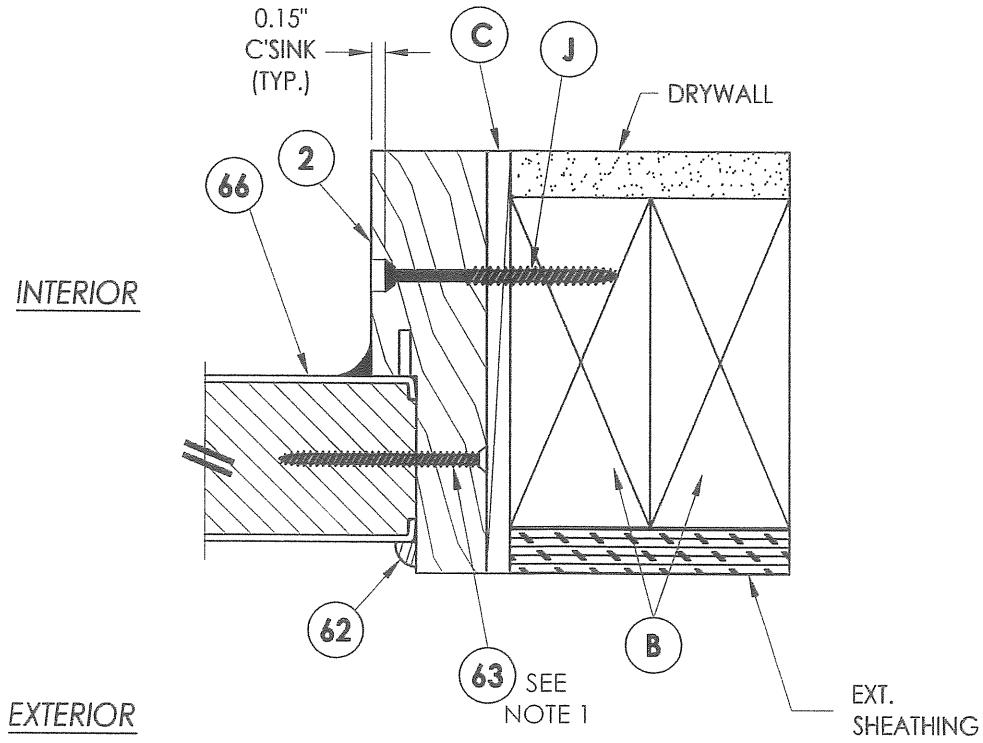
DATE: 9/21/10  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4109  
SHEET 3 OF 13



R:\A - Projects\Project Folders\Proj\_1001-1100\pf1098\RWBC Drawings\TX-4107.dwg, 5.3

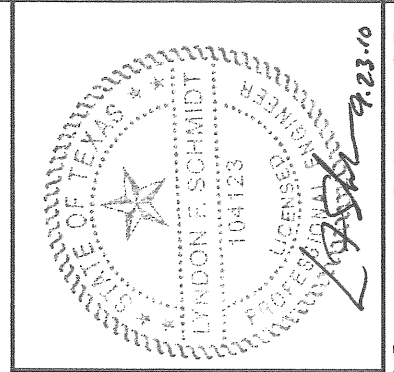


**1** HORIZONTAL CROSS SECTION  
**5**

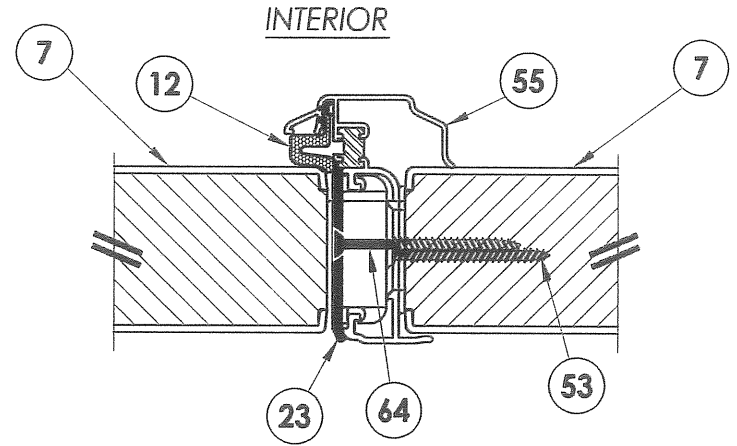


**4** HORIZONTAL CROSS SECTION  
**5**

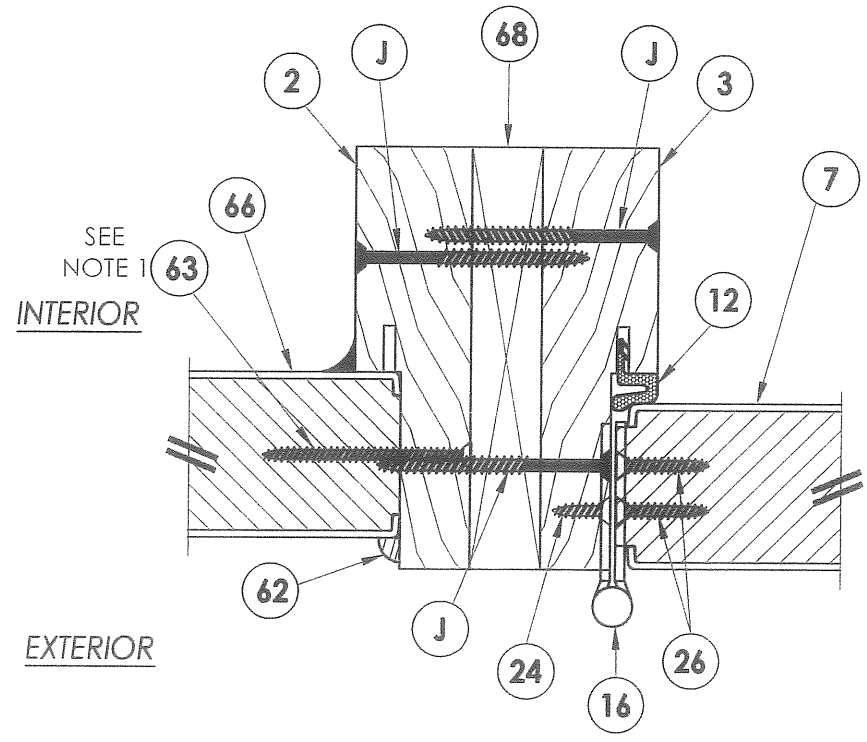
**NOTE:**  
1. Sidelite screws (item #63) located at 6" from each end then 3 equal spaces for a total of 4 screws.



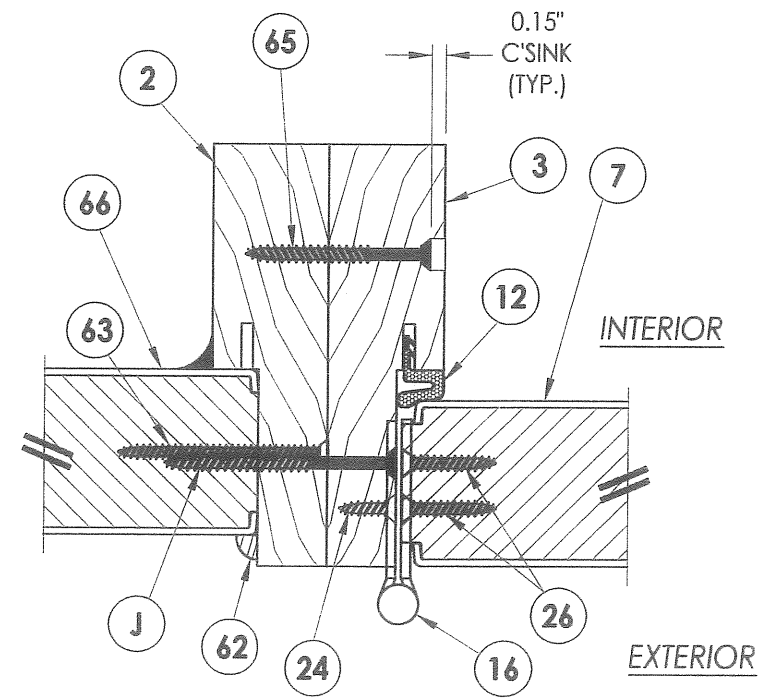
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123  
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852



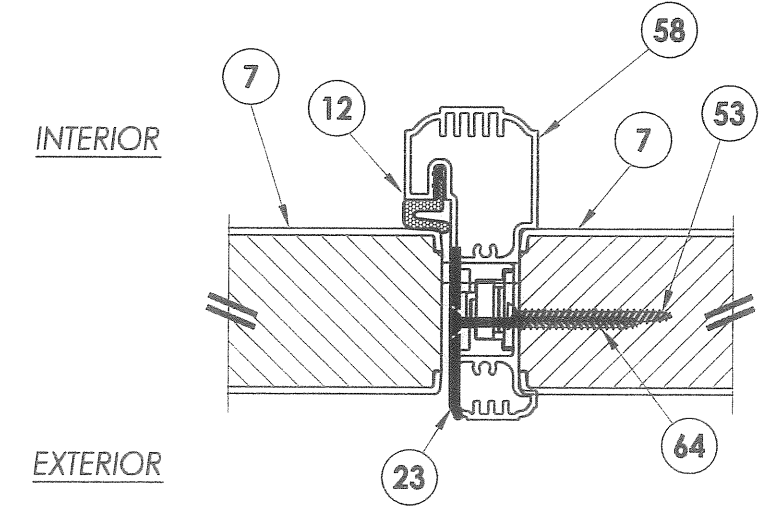
**6** HORIZONTAL CROSS SECTION  
**5** Endura astragal



**2** HORIZONTAL CROSS SECTION  
**5** W/ 1x mullion reinforcement



**3** HORIZONTAL CROSS SECTION  
**5**

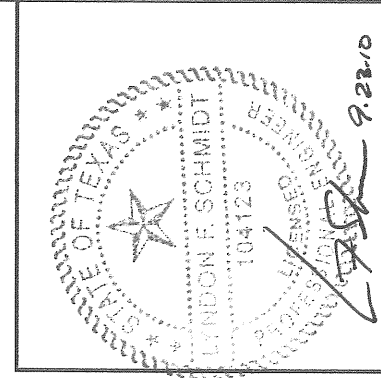
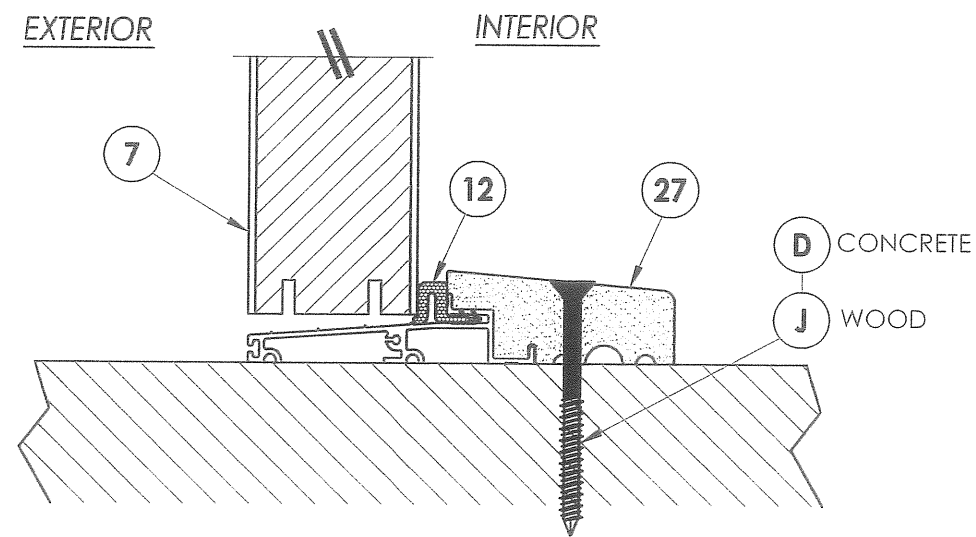
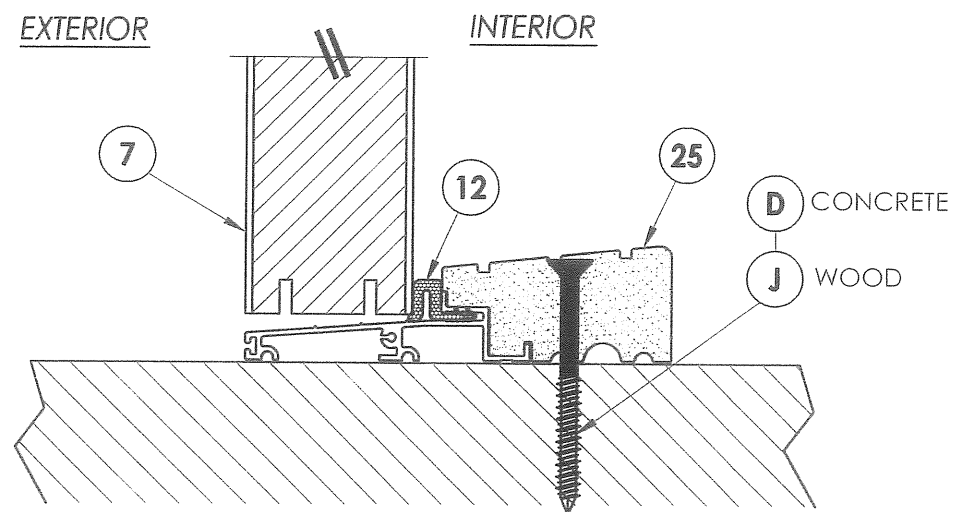
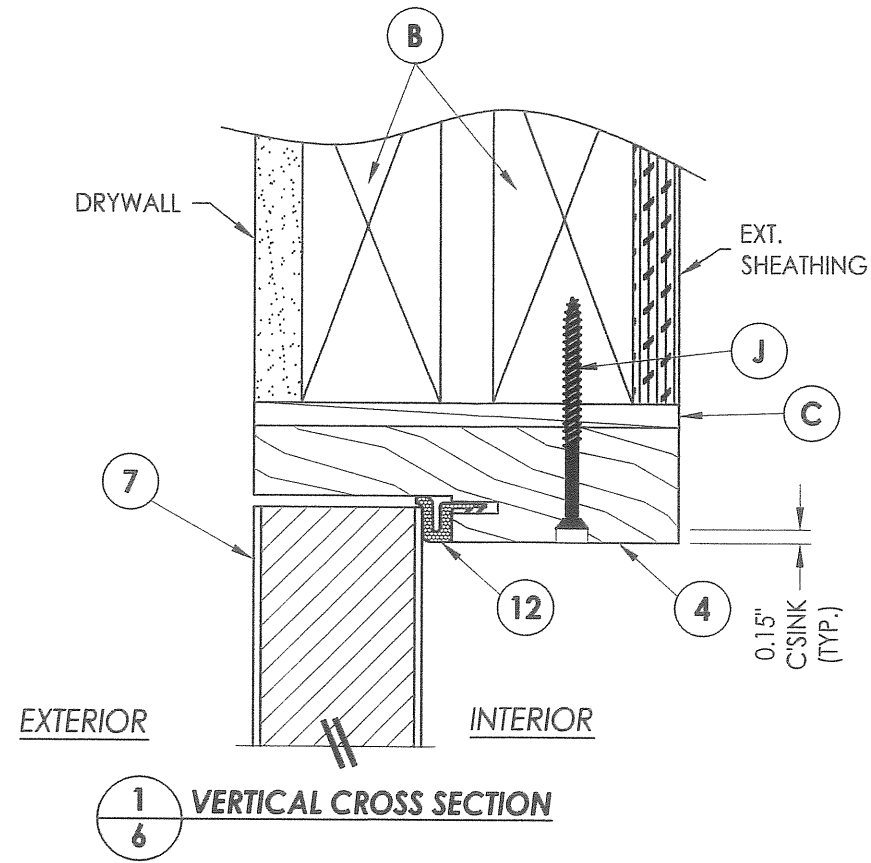


**5** HORIZONTAL CROSS SECTION  
**5** Astragal by TRC

PRODUCT:	RightConcept 6'8 PREMIUM OPAQUE	
PART OR ASSEMBLY:	HORIZONTAL CROSS SECTIONS	
NO.	DATE	BY
REVISIONS		
DATE:	9/21/10	
SCALE:	N.T.S.	
DWG. BY:	JK	
CHK. BY:	LFS	
DRAWING NO.:	TX-4109	
SHEET	5 of 13	



R:\A - Projects\Project Folders\Proj 1001-1100\pf1098\RWBC Drawings\TX-4107.dwg, 6.3



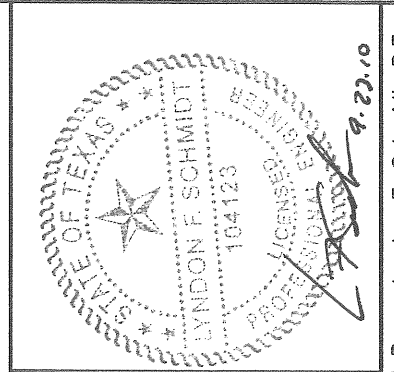
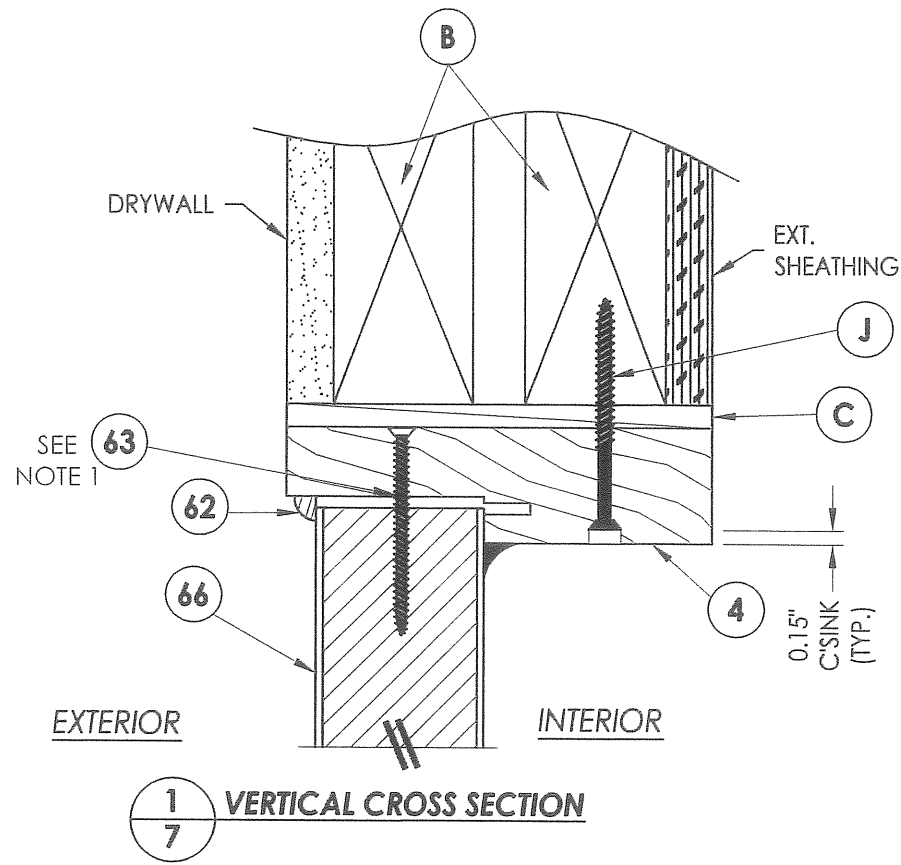
Documents Prepared By: Lyndon F. Schmidt, P.E.  
TEXAS P.E. #104123

**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: RightConcept  
6'8 PREMIUM OPAQUE  
PART OR ASSEMBLY:  
VERTICAL CROSS SECTIONS

NO.	DATE	BY	REVISIONS

DATE: 9/21/10  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4109  
SHEET 6 OF 13



NOTE:

- Sidelite screws (item #63) located at 3" from each end and on center line.

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

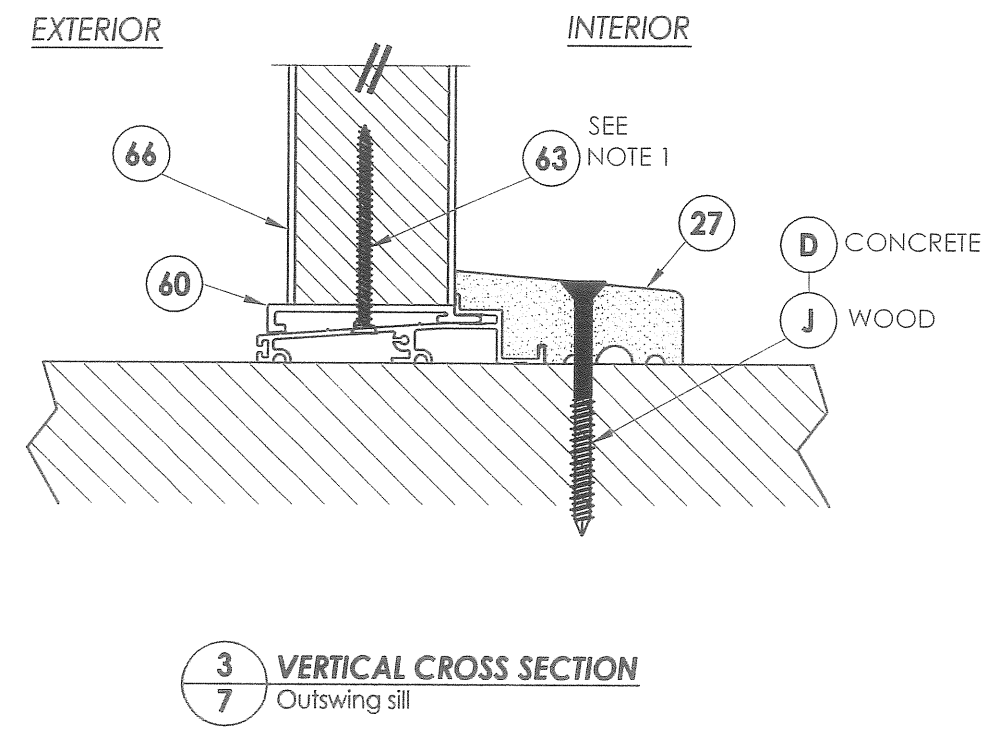
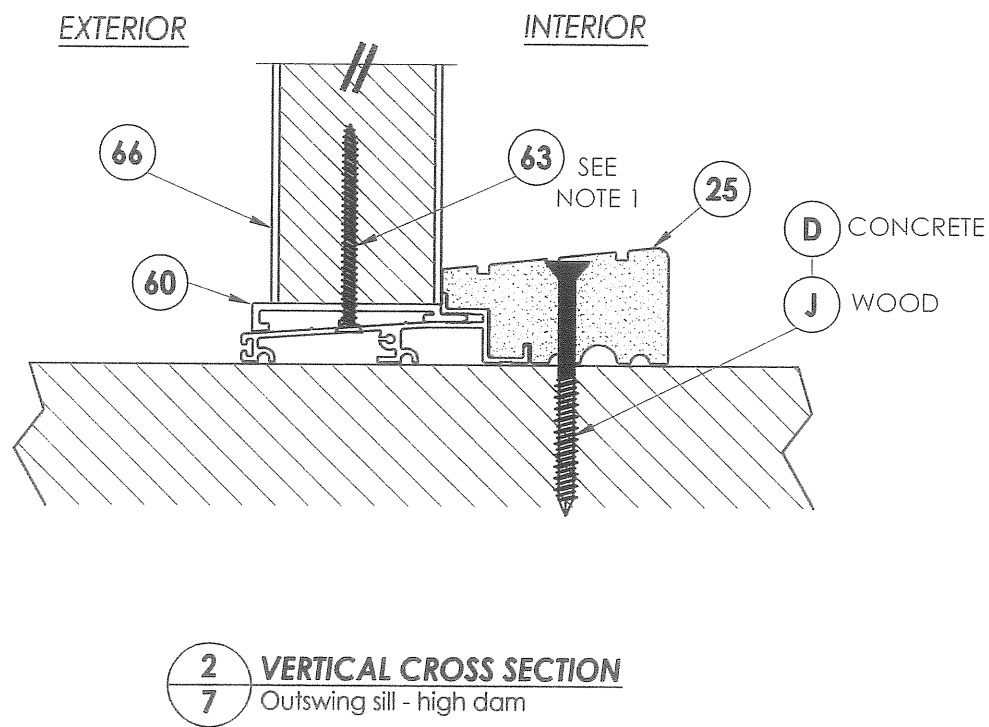
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Valrico FL 33595  
Phone No.: 813.659.9197

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

PRODUCT:	RightConcept 6'8 PREMIUM OPAQUE
PART OR ASSEMBLY:	VERTICAL CROSS SECTIONS

NO.	DATE	BY	REVISIONS

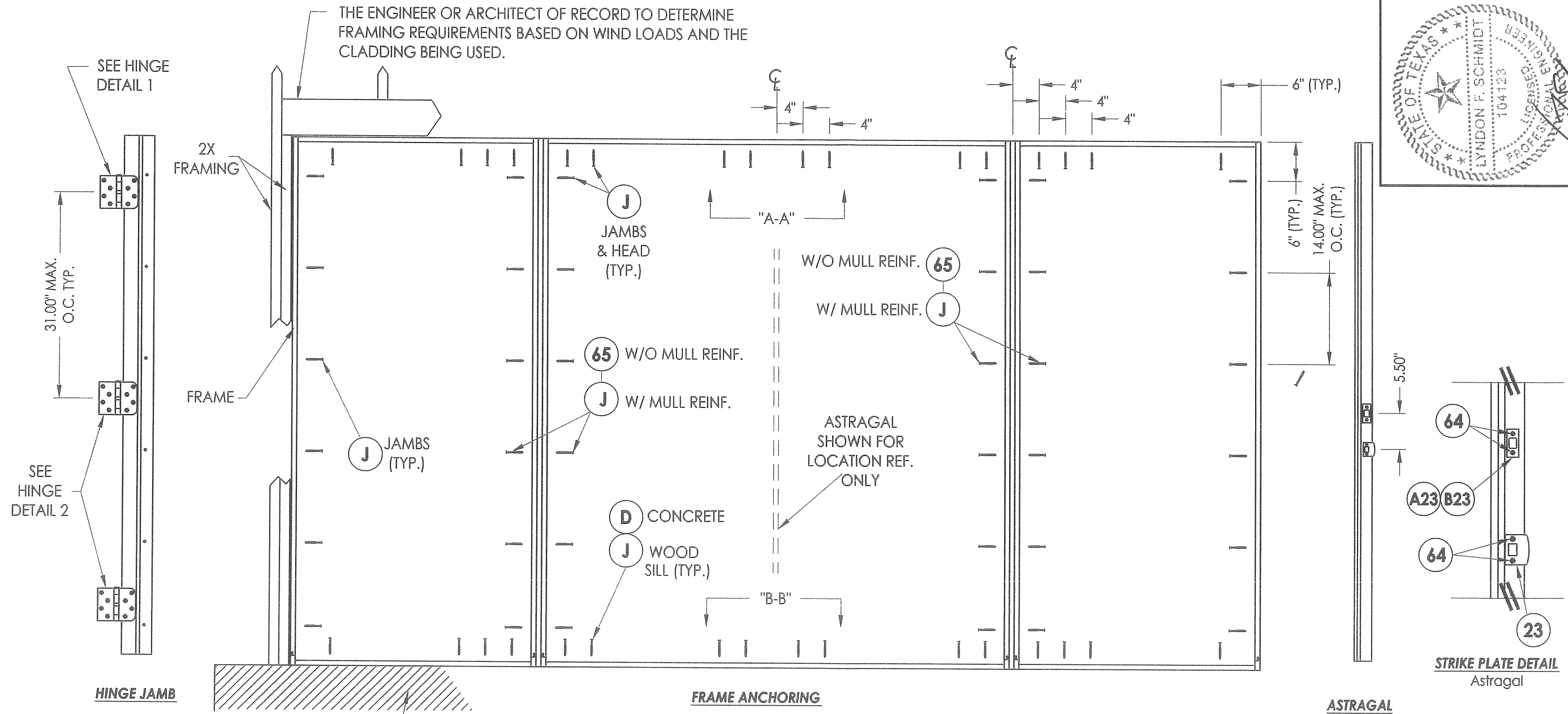
DATE:	9/21/10
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4109
SHEET	7 OF 13



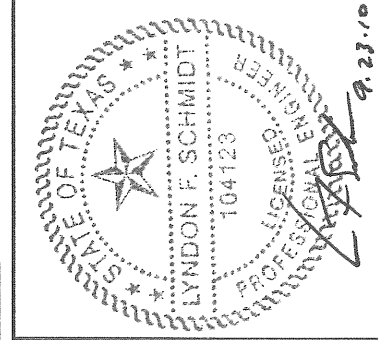
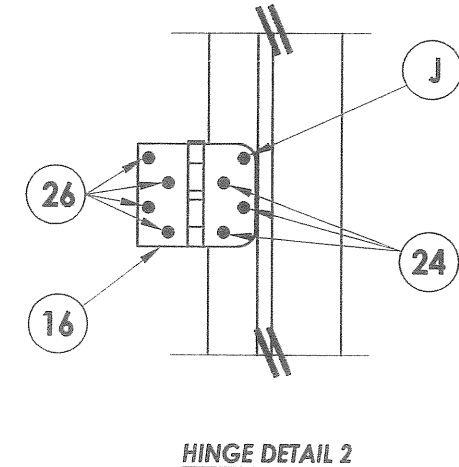
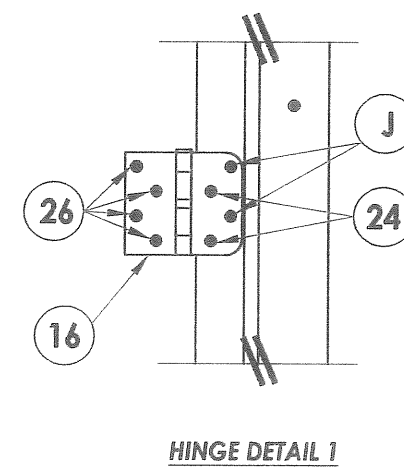
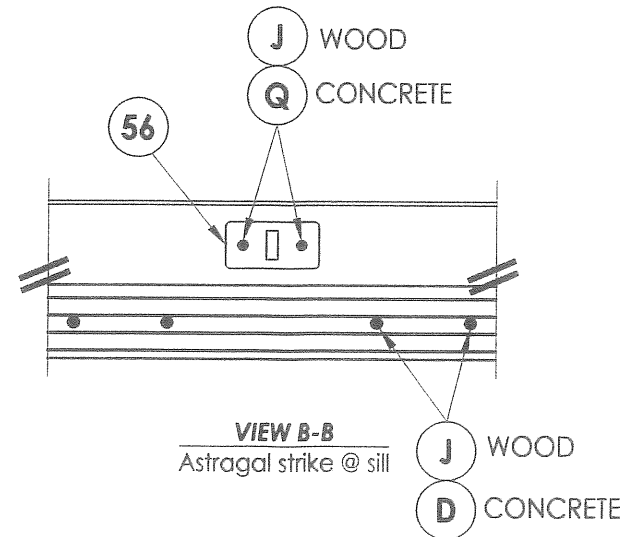
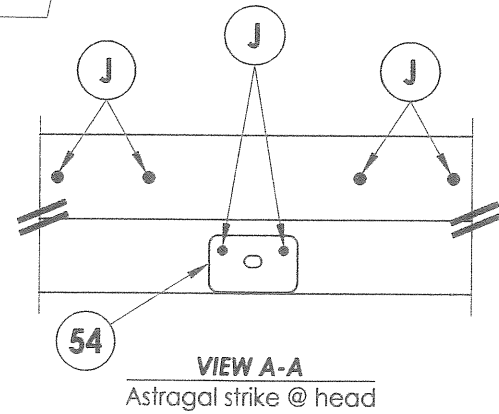




R:\A - Projects\Project Folders\Proj 1001-1100\pf1098\RWBC Drawings\TX-4107.dwg, 9.3



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



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: RightConcept  
 6'8 PREMIUM OPAQUE

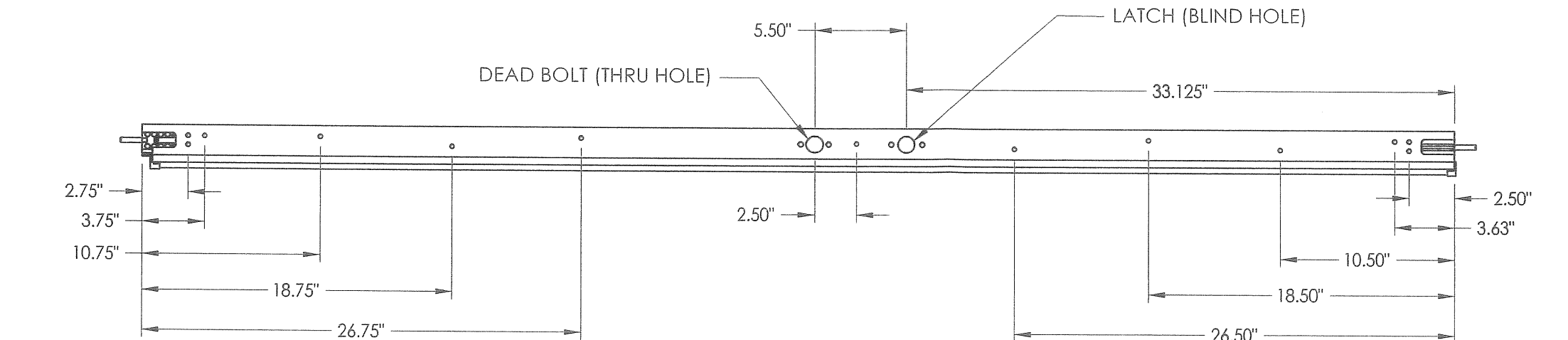
PART OR ASSEMBLY:  
 FRAME ANCHORING (OXXO)

NO.	DATE	BY	REVISIONS

DATE: 9/21/10  
 SCALE: N.T.S.  
 DWG. BY: JK  
 CHK. BY: LFS  
 DRAWING NO.: TX-4109  
 SHEET 9 OF 13

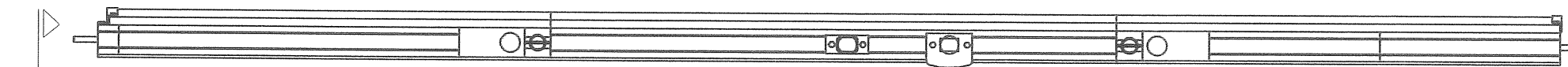


R:\A - Projects\Project Folders\Proj 1001-1100\pf1098\RWBC Drawings\TX-4107.dwg, 11.3



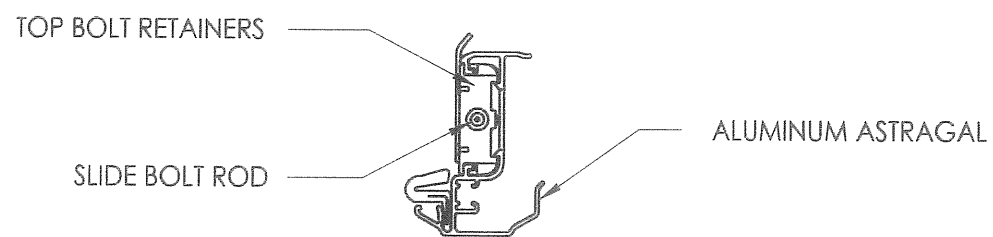
TOP

BOTTOM

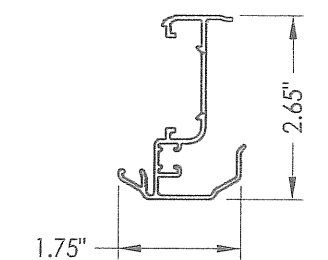


A-A

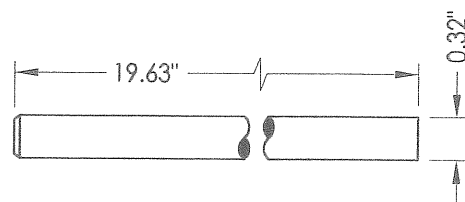
**6'8 ALUMINUM ASTRAGAL ASSEMBLY**  
By Endura Product



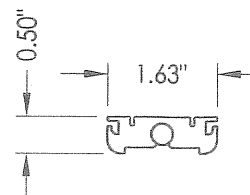
**VIEW A-A**  
Aluminum Astragal Assembly



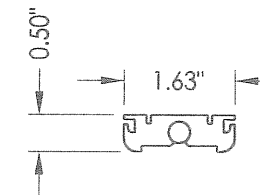
**51 ALUMINUM ASTRAGAL**  
By Endura Products



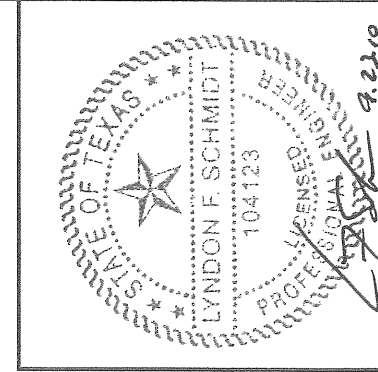
**SLIDE BOLT ROD**  
MATL: Steel



**TOP BOLT RETAINER**  
MATL: 9-3/4" Aluminum



**TOP BOLT RETAINER**  
MATL: 4-3/4" HDPE



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

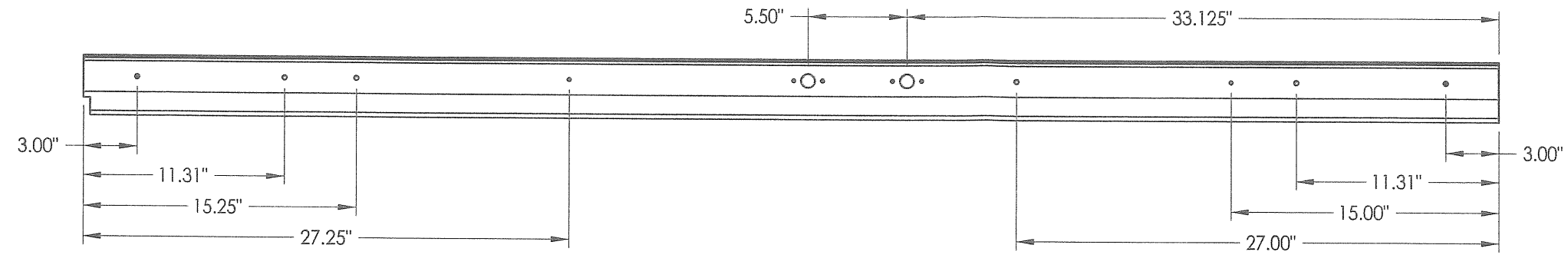
**RW** BUILDING CONSULTANTS, INC.  
P.O. Box 230 Vairico FL, 33595  
Phone No.: 813.659.9197  
TEXAS BOARD OF PROFESSIONAL ENGINEERS  
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT:	RightConcept 6'8 PREMIUM OPAQUE
PART OR ASSEMBLY:	ENDURA ASTRAGAL DETAILS

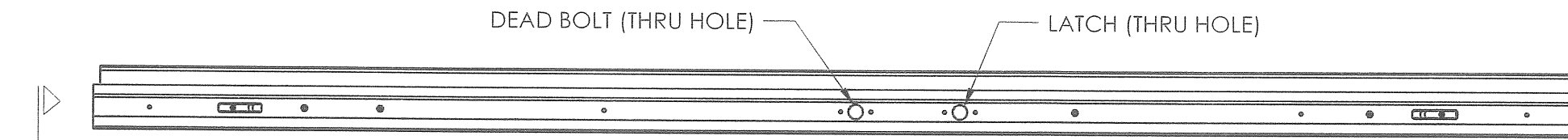
NO.	DATE	BY	REVISIONS

DATE:	9/21/10
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4109
SHEET	11 OF 13

TOP

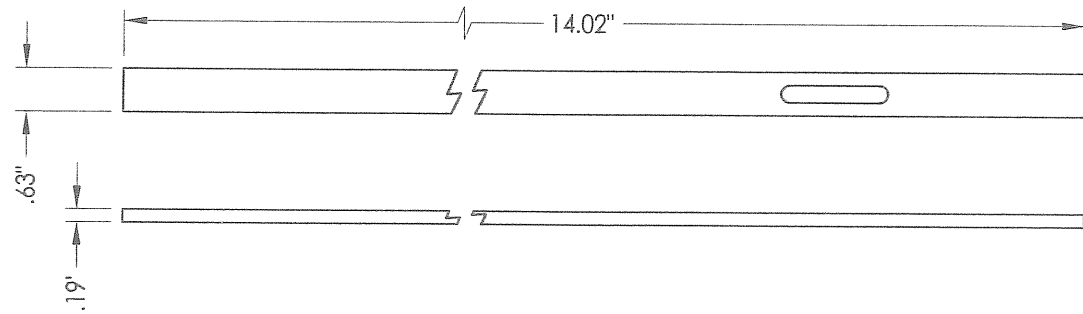


BOTTOM

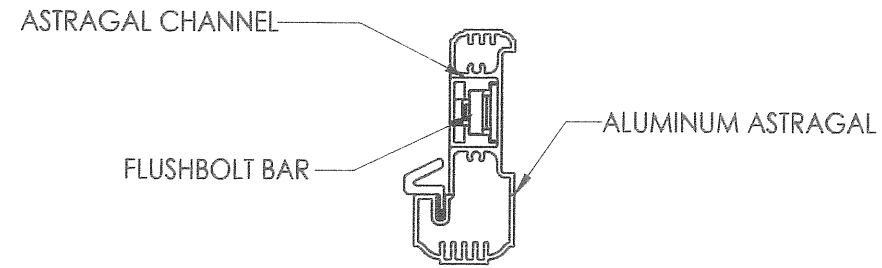


**6'8 ALUMINUM ASTRAGAL ASSEMBLY**  
By TRC

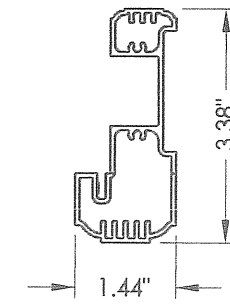
B-B



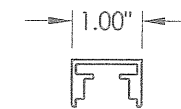
**FLUSHBOLT BAR**  
MATL: Steel



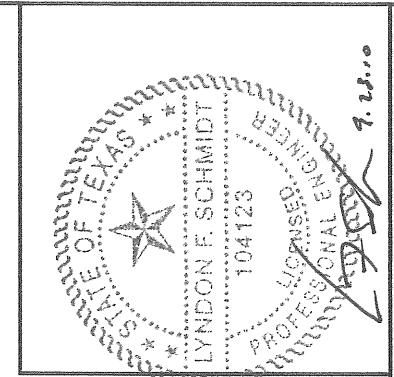
**VIEW B-B**  
Aluminum Astragal Assembly



**58 ALUMINUM ASTRAGAL**  
BY TRC



**ASTRAGAL CHANNEL**  
BY TRC



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:	RightConcept 6'8 PREMIUM OPAQUE
PART OR ASSEMBLY:	TRINITY ASTRAGAL DETAILS

NO.	DATE	BY	REVISIONS

DATE:	9/21/10
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	TX-4109
SHEET	12 OF 13

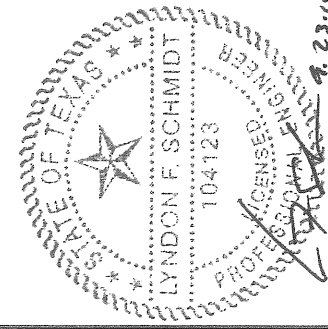
**BILL OF MATERIALS**

ITEM #	DESCRIPTION	MATERIAL
B	2X BUCK SG >= 0.55	WOOD
C	1/4" MAX. SHIM SPACE	-
D	1/4" X 2-3/4" ELCO OR ITW CONCRETE SCREW	STEEL
J	#10 X 2-1/2" PFH WOOD SCREW	STEEL
Q	3/16" X 3-1/4" ITW CONCRETE SCREW	STEEL
2	STRIKE JAMB - FINGER-JOINT PINE (4 - 9/16") - SG >= 0.42	WOOD
3	HINGE JAMB - FINGER-JOINT PINE (4 - 9/16") - SG >= 0.42	WOOD
4	HEAD - FINGER-JOINT PINE (4 - 9/16") - SG >= 0.42	WOOD
7	DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
8	#6 X 1-1/4 PFH DRYWALL SCREW	STEEL
9	#9 X 2-1/4" PFH WOOD SCREW	STEEL
12	WEATHER STRIP QEBD650 Q-LON	-
16	3.983" X 4.0" HINGE MIN 0.098" THICK	STEEL
19	SILLKEY (OPTIONAL)	PC/ASA
23	STRIKE PLATE	STEEL
A23	DEADBOLT PLATE (2-HOLE)	STEEL
B23	DEADBOLT PLATE (4-HOLE)	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.
43	PVC & ALUMINUM SPACER SYSTEM	PVC/ ALUM.
51	ASTRAGAL BY ENDURA PRODUCTS	ALUMINUM
53	#8 X 1-3/4" PFH SMS	STEEL
54	ASTRAGAL STRIKE @ HEAD	STEEL
56	ASTRAGAL STRIKE @ SILL	STEEL
58	ASTRAGAL BY TRC	ALUMINUM
60	SIDELITE SPACER - OUTSWING	PVC
62	QUARTER ROUND	WOOD
63	#9 x 2-1/4" PFH SCREW	STEEL
64	#8 x 2" PFH SCREW	STEEL
66	SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	-
68	1X MULLION REINFORCEMENT SG >= 0.42	WOOD

CONCRETE ANCHOR NOTES:

1. Substitution of equal concrete anchors from a different supplier may have different edge distance and center distance requirements.
2. Concrete anchor locations at the corners may be adjusted to maintain the min. edge distance to mortar joints. If 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" dimensions are not exceeded.
3. Concrete anchor table:

ANCHOR TYPE	ANCHOR SIZE	MIN. EMBEDMENT	MIN. CLEARANCE TO MASONRY EDGE	MIN. CLEARANCE TO ADJACENT ANCHOR
ITW	1/4"	1-1/4"	2-1/2"	3"
ELCO	1/4"	1-1/4"	1"	4"
ITW	3/16"	1-1/4"	2-5/8"	2-1/4"



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: RightConcept  
6'8 PREMIUM OPAQUE  
PART OR ASSEMBLY:  
BILL OF MATERIALS

NO.	DATE	BY	REVISIONS

DATE: 9/21/10  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: TX-4109  
SHEET 13 OF 13