

**COASTAL
PERFORMANCE**
by Sunrise Windows, LTD.

**Tru-Grain Composit
OPAQUE FIBERGLASS DOOR
IN SWING / OUT SWING
"IMPACT"**

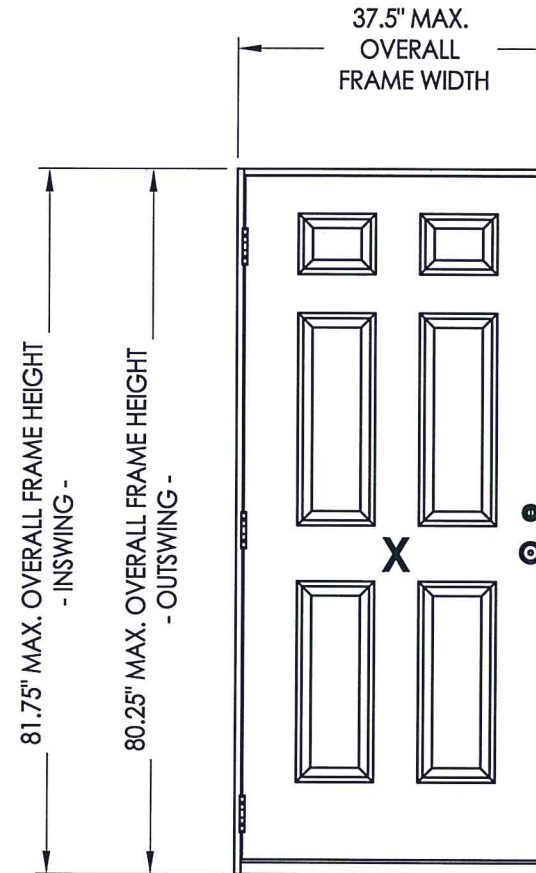
EVALUATED FOR USE IN THE STATE OF TEXAS

The Fiberglass Door & Sidelites described herein comply 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:

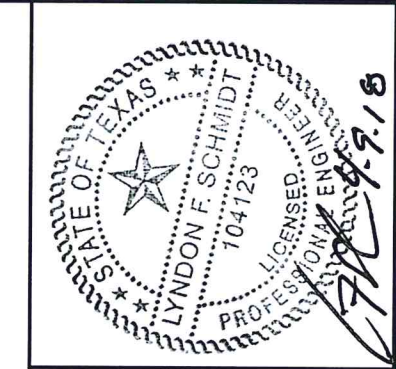
1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. This product has been tested and evaluated as a large missile impact protective system for installation in the Seaward, Inland I and Inland II areas. The opaque doors meet 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 details |
| 3 | Horizontal & Vertical Cross Sections (2X Stud) |
| 4 | Horizontal & Vertical Cross Sections (1X Buck) |
| 5 | Horizontal & Vertical Cross Sections (Direct to Masonry) |
| 6 | Vertical Cross Sections (Thresholds) |
| 7 | Frame anchoring |
| 8 | Bill of materials and components |



| CONFIGURATION | MAX. FRAME DIMENSION | DESIGN PRESSURE (PSF) INSWING | | DESIGN PRESSURE (PSF) OUTSWING | |
|---------------|----------------------|-------------------------------|----------|--------------------------------|----------|
| | | POSITIVE | NEGATIVE | POSITIVE | NEGATIVE |
| X | 37.5" x 81.75" | +100.0 | -100.0 | +100.0 | -100.0 |



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

CERTIFICATE OF REGISTRATION # F-11852

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

| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
| | | | |
| | | | |
| | | | |

DATE: 3/28/18

SCALE: N.T.S.

DWG. BY: JK

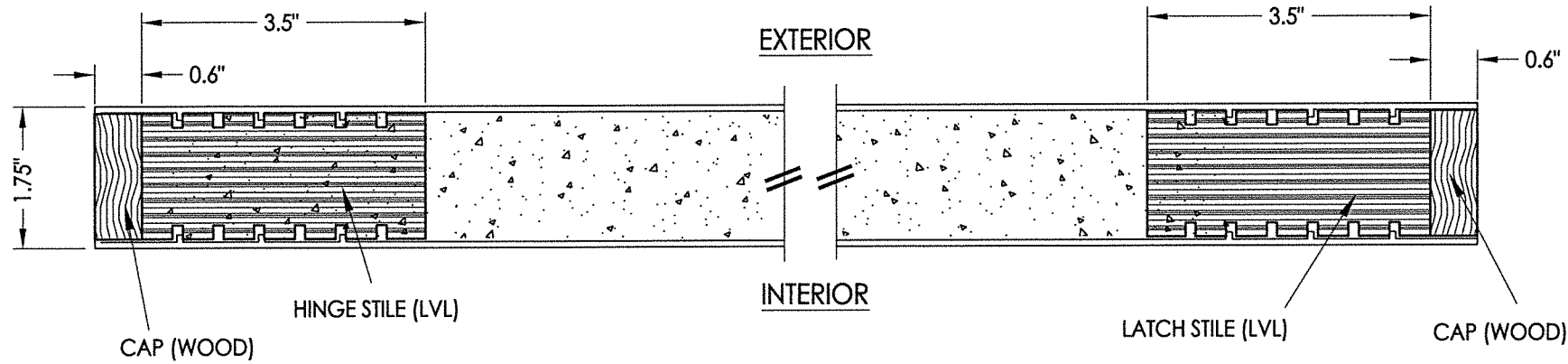
CHK. BY: LFS

DRAWING NO.:

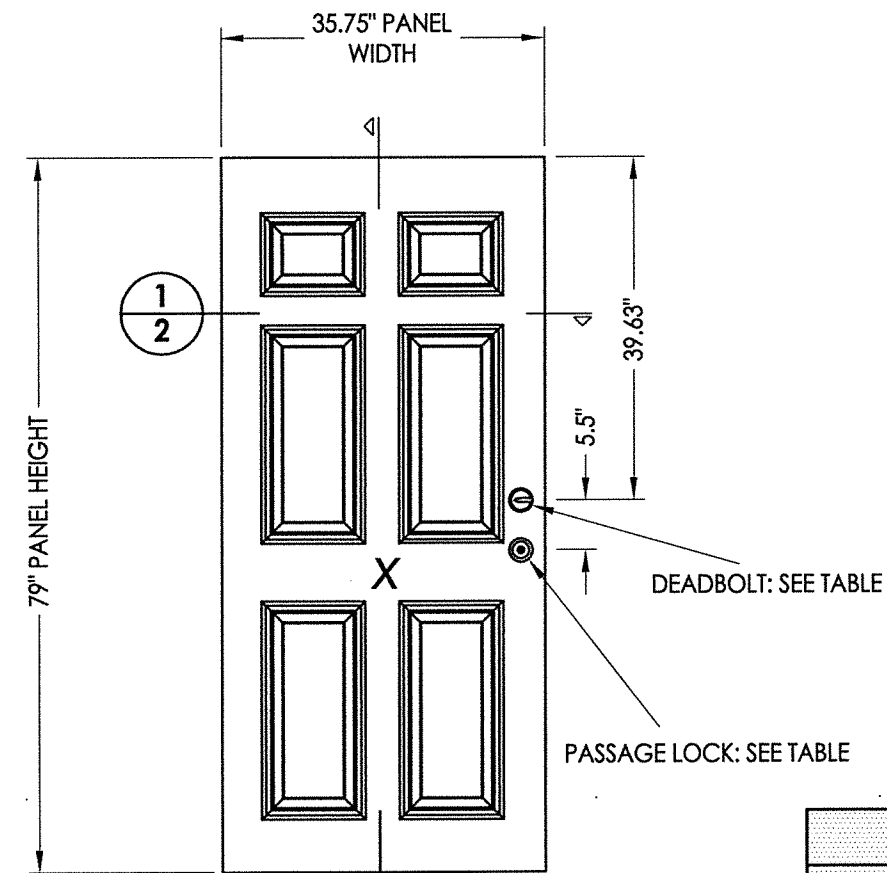
TX-4801

SHEET 1 OF 8

R:\Clients\Sunrise Windows\B - Texas Dept of Ins\TDI - XXX Fiberglass Door - Opaque, Impact (Tru-Grain Composite)\Drawings\TX-4801.dwg, 2

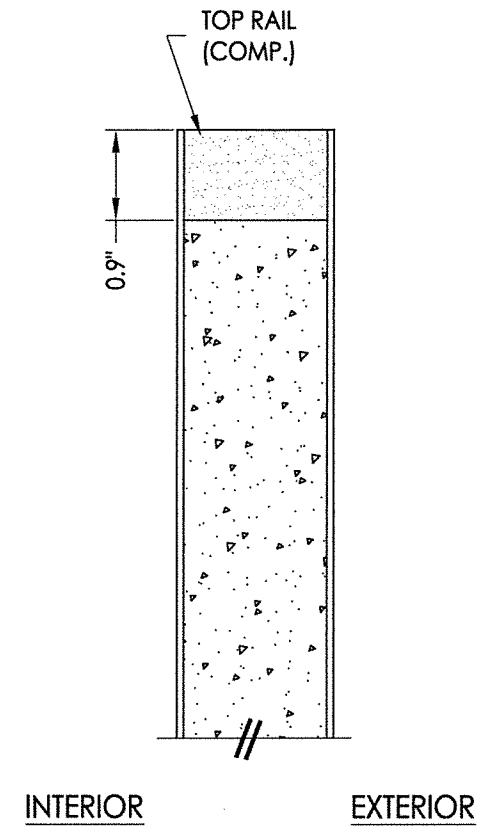


1
2 **HORIZONTAL CROSS SECTION**

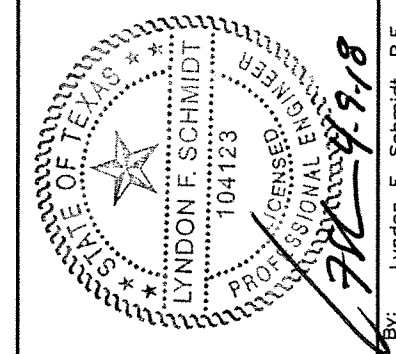


40 **DOOR PANEL**
Taylor Door
w/ Mastergrain Fiberglass skins

| HARDWARE TABLE | | |
|----------------|-------------|--------------------------------|
| MANUFACTURER | MODEL | |
| KWIKSET | KNOB: | KWIKSET SIGNATURE SERIES |
| | DEADBOLT: | KWIKSET SIGNATURE SERIES (980) |
| SCHLAGE | KNOB/LEVER: | "F" SERIES |
| | DEADBOLT: | B60/62 |



2
2 **VERTICAL CROSS SECTION**



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

CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: SUNRISE FIBERGLASS DOOR
PART OR ASSEMBLY: DOOR PANEL DETAILS

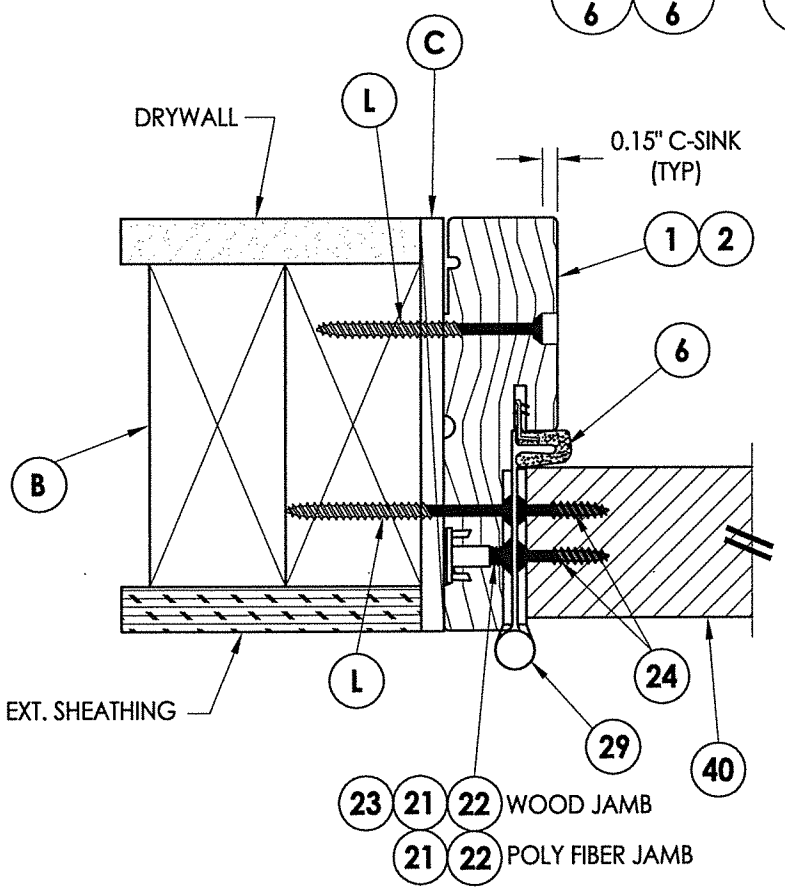
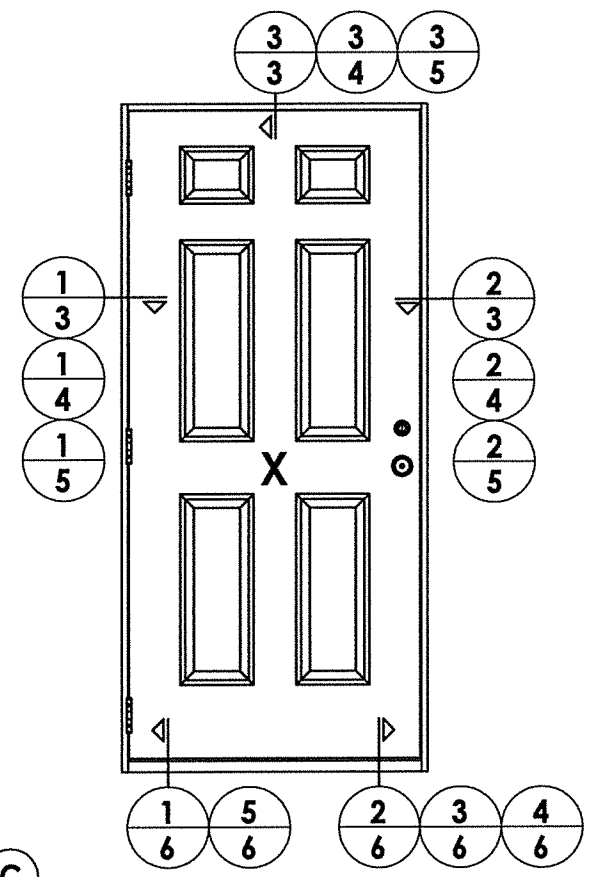
| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
| | | | |
| | | | |
| | | | |
| | | | |

DATE: 3/28/18
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4801
SHEET 2 OF 8

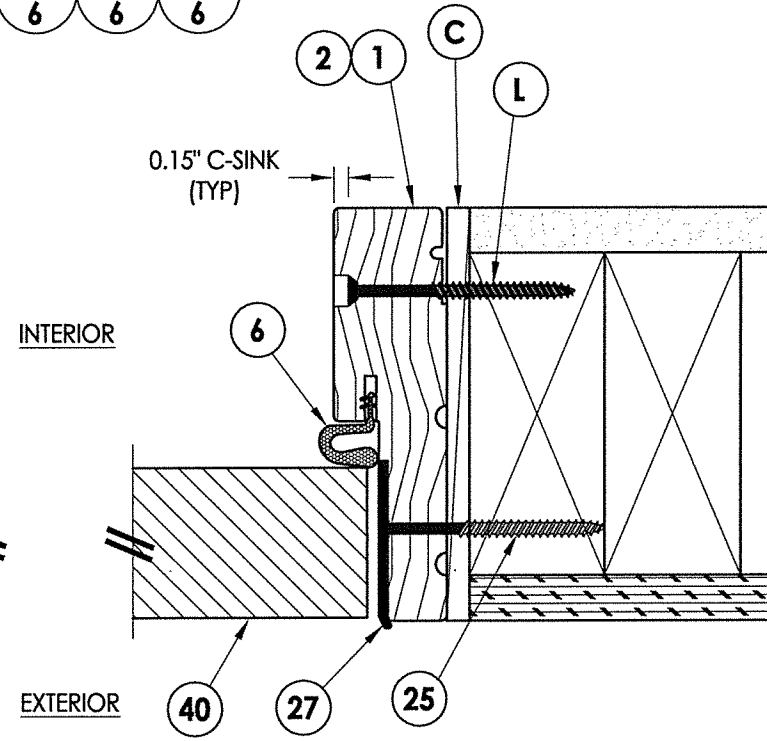
© 2018 R.W. BUILDING CONSULTANTS INC.

LL

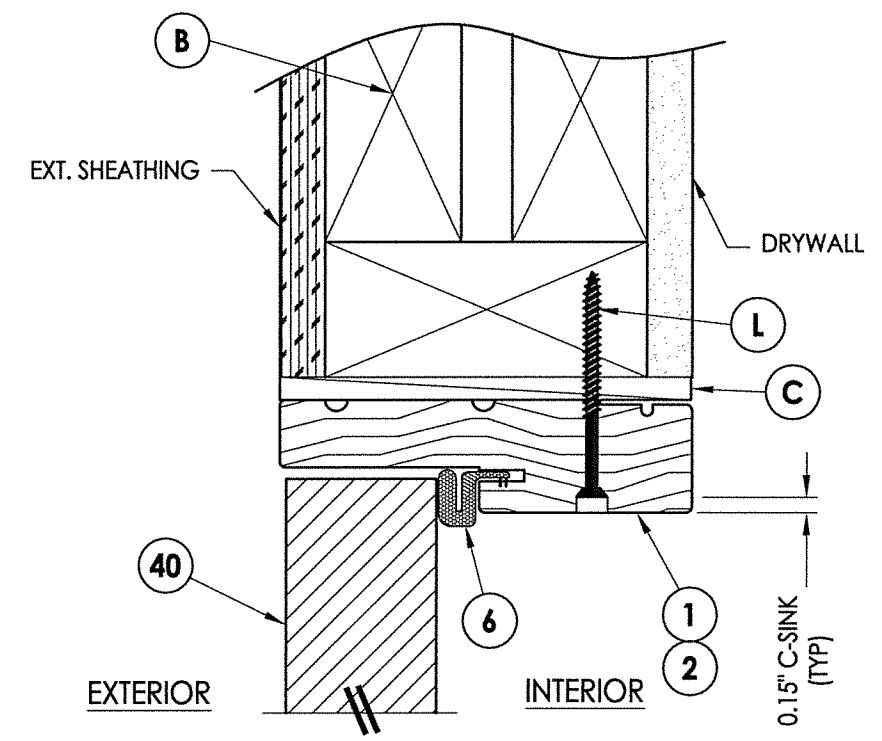
R:\Clients\Sunrise Windows\B - Texas Dept of Ins\YDI - XXX Fiberglass Door - Opaque, Impact (Tru-Grain Composite)\Drawings\TX-4801.dwg, 3



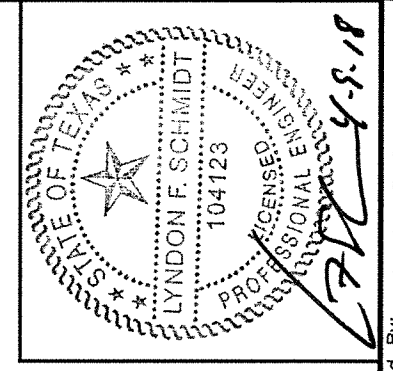
1 HORIZONTAL CROSS SECTION
3 Outswing shown (Inswing similar)



2 HORIZONTAL CROSS SECTION
3 Outswing shown (Inswing similar)



3 VERTICAL CROSS SECTION
3 Outswing shown (Inswing similar)



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

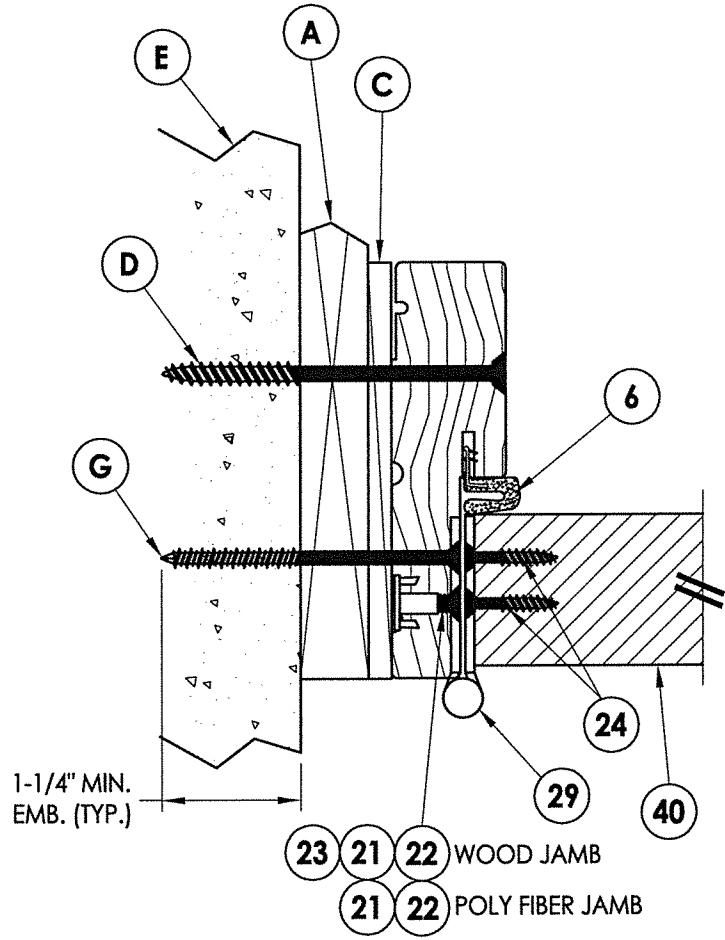
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: SUNRISE FIBERGLASS DOOR
PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS (2X FRAME)

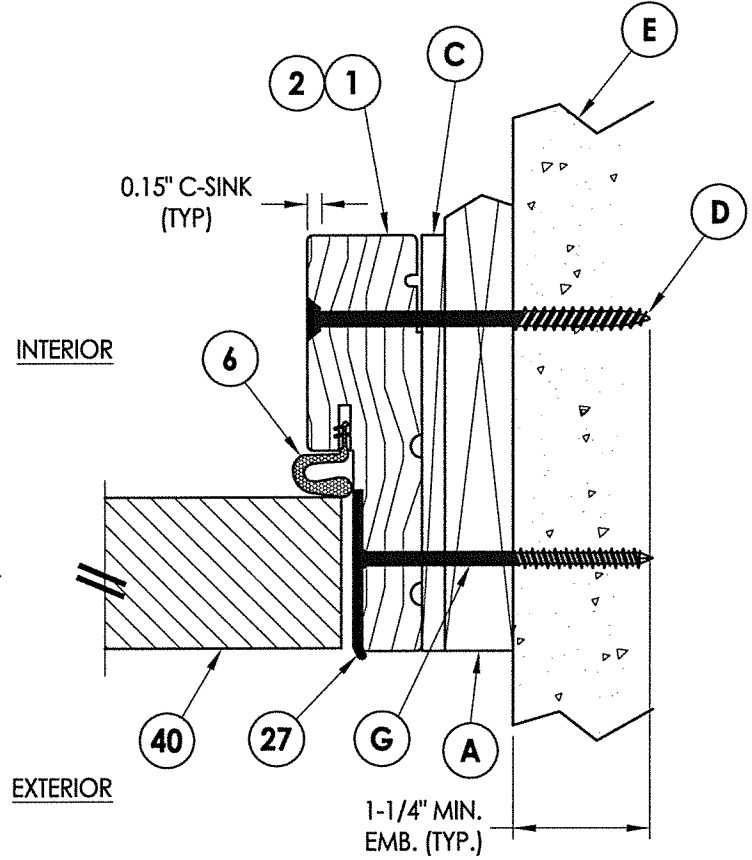
| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
| | | | |
| | | | |
| | | | |

DATE: 3/28/18
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4801
SHEET 3 OF 8

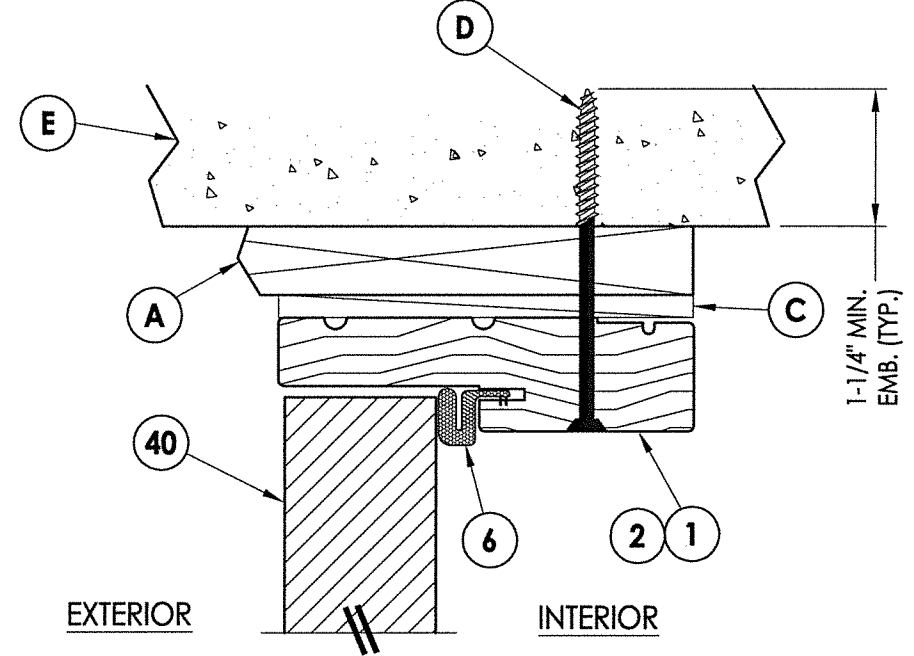
© 2018 R.W. BUILDING CONSULTANTS INC.



1 HORIZONTAL CROSS SECTION
4 Shown w/ 1X sub-buck
 Outswing shown (Inswing similar)



2 HORIZONTAL CROSS SECTION
4 Shown w/ 1X sub-buck
 Outswing shown (Inswing similar)



3 VERTICAL CROSS SECTION
4 Shown w/ 1X sub-buck
 Outswing shown (Inswing similar)

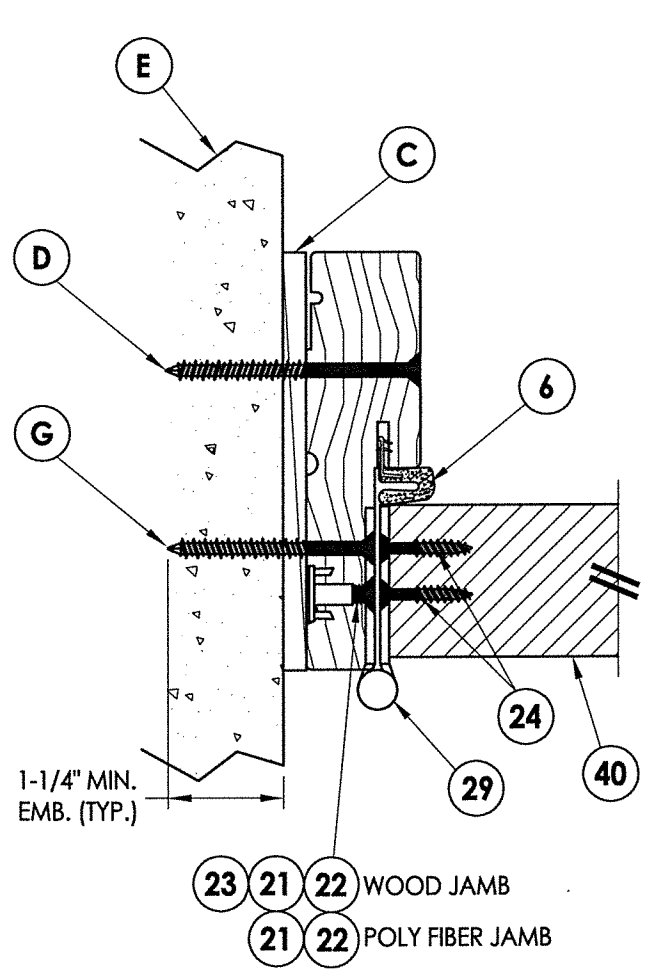


Documents Prepared By: Lyndon F. Schmidt, P.E.
 TEXAS P.E. #104123
R.W. BUILDING CONSULTANTS, INC.
 P.O. Box 230 Valrico FL, 33595
 Phone No.: 813.659.9197
 CERTIFICATE OF REGISTRATION # F-11852

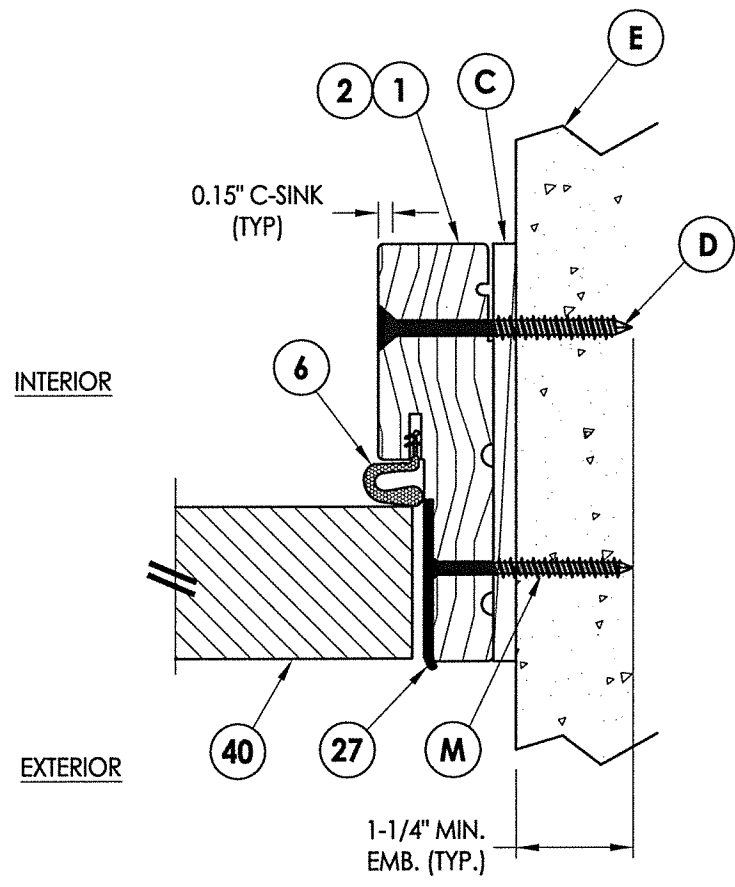
PRODUCT: SUNRISE FIBERGLASS DOOR
 PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS (1X BUCK)

| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
| | | | |
| | | | |
| | | | |

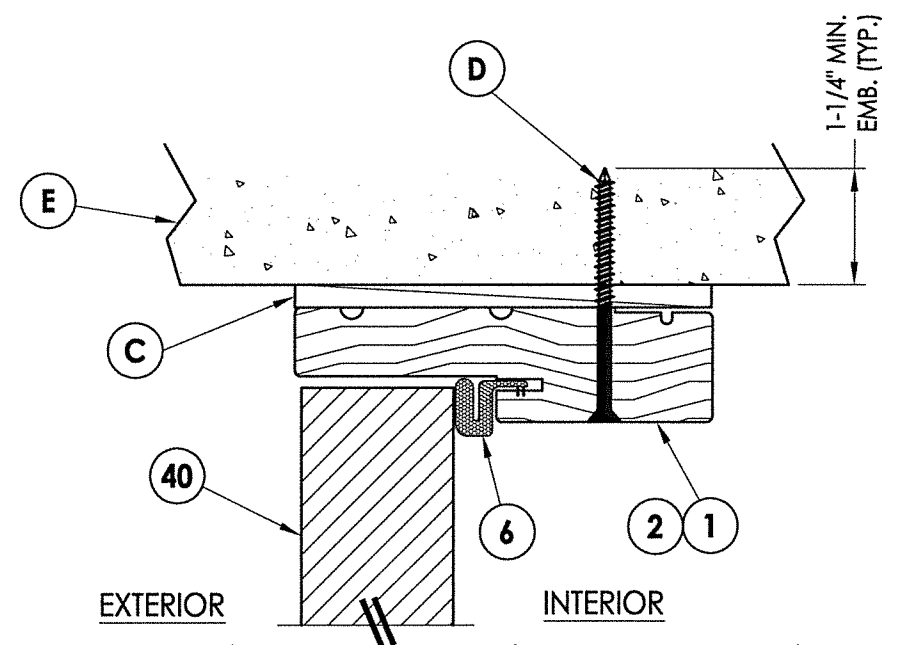
DATE: 3/28/18
 SCALE: N.T.S.
 DWG. BY: JK
 CHK. BY: LFS
 DRAWING NO.: TX-4801
 SHEET 4 OF 8



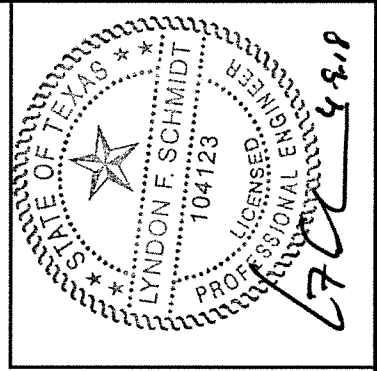
1 HORIZONTAL CROSS SECTION
5 Shown Direct to Masonry
 Outswing shown (Inswing similar)



2 HORIZONTAL CROSS SECTION
5 Shown Direct to Masonry
 Outswing shown (Inswing similar)



3 VERTICAL CROSS SECTION
5 Shown Direct to Masonry
 Outswing shown (Inswing similar)

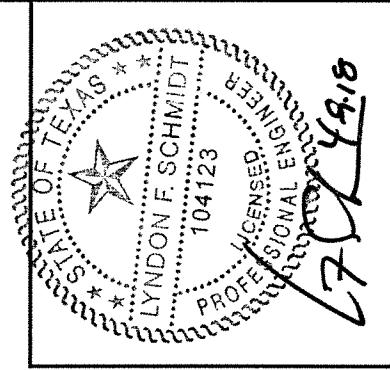
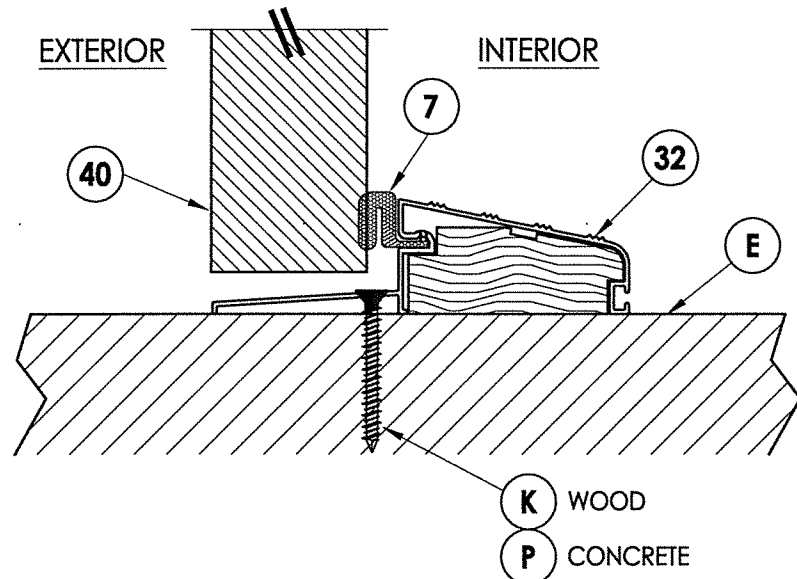
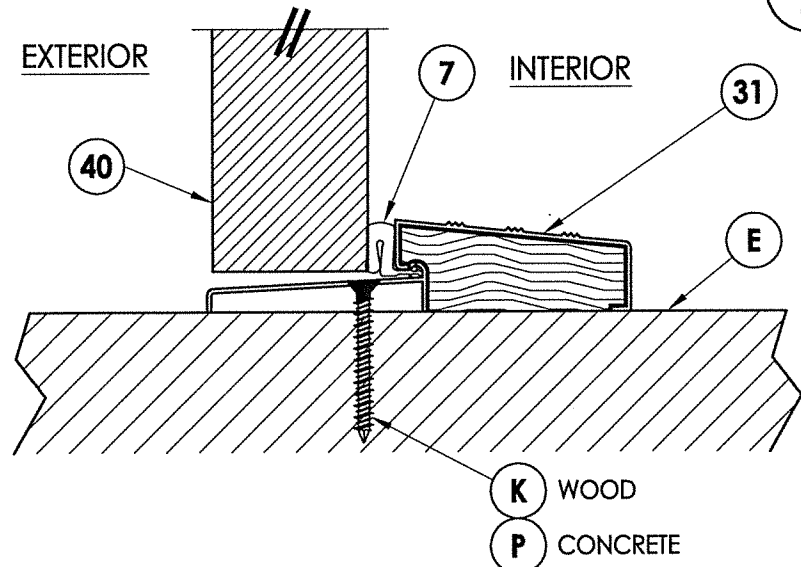
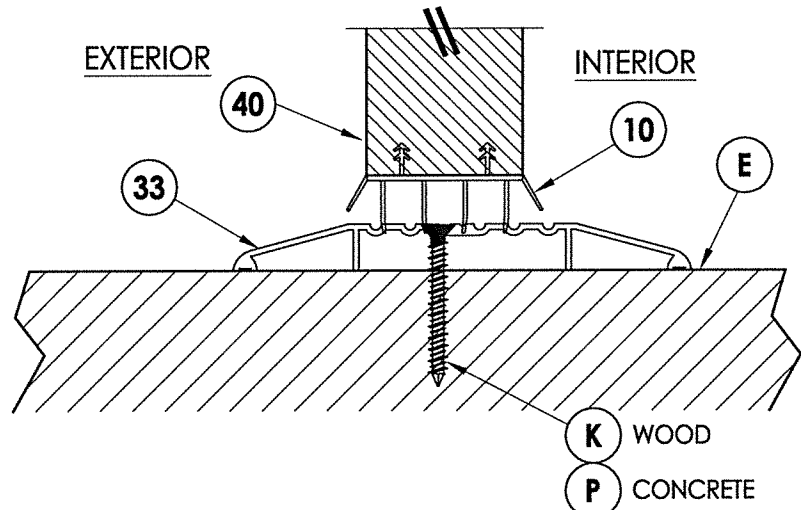
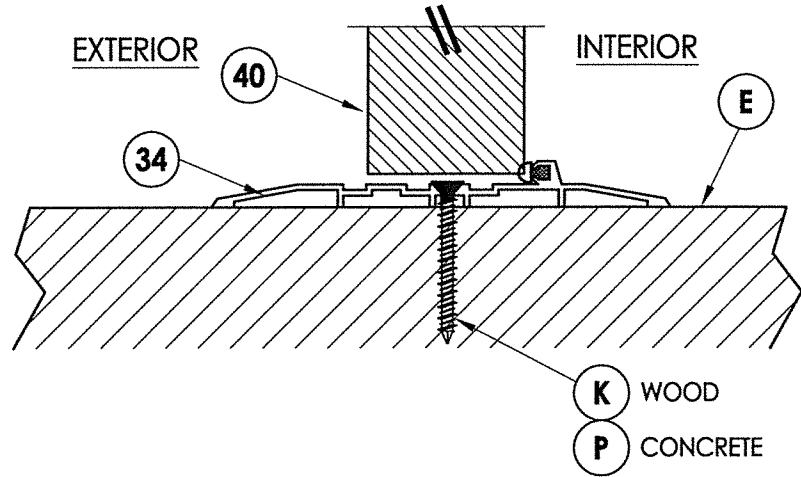
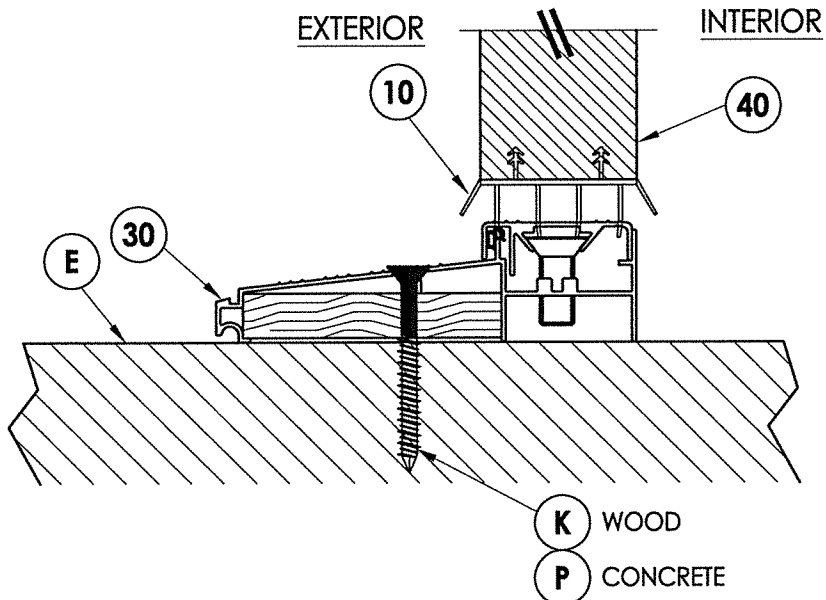


Documents Prepared By: Lyndon F. Schmidt, P.E.
 TEXAS P.E. #104123

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

CERTIFICATE OF REGISTRATION # F-11852

| | |
|----------------------------------------------------------------------------|-----------|
| PRODUCT: SUNRISE FIBERGLASS DOOR | |
| PART OR ASSEMBLY: HORIZONTAL & VERTICAL CROSS SECTIONS (DIRECT TO MASONRY) | |
| NO. | DATE |
| BY | REVISIONS |
| DATE: 3/28/18 | |
| SCALE: N.T.S. | |
| DWG. BY: JK | |
| CHK. BY: LFS | |
| DRAWING NO.: TX-4801 | |
| SHEET 5 OF 8 | |



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

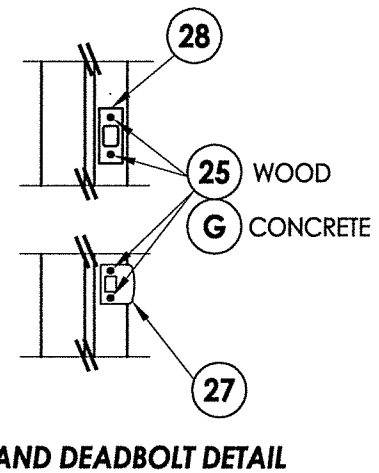
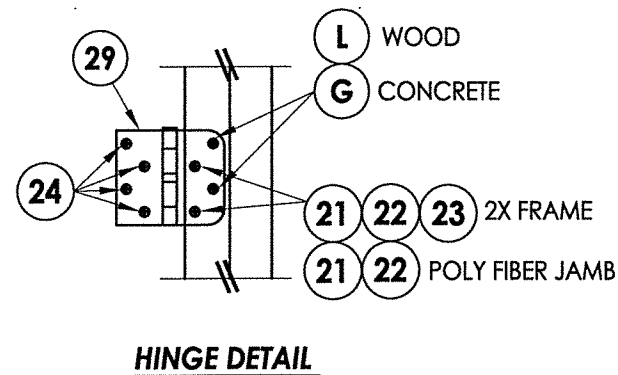
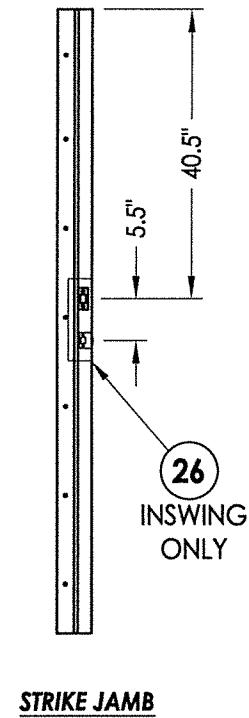
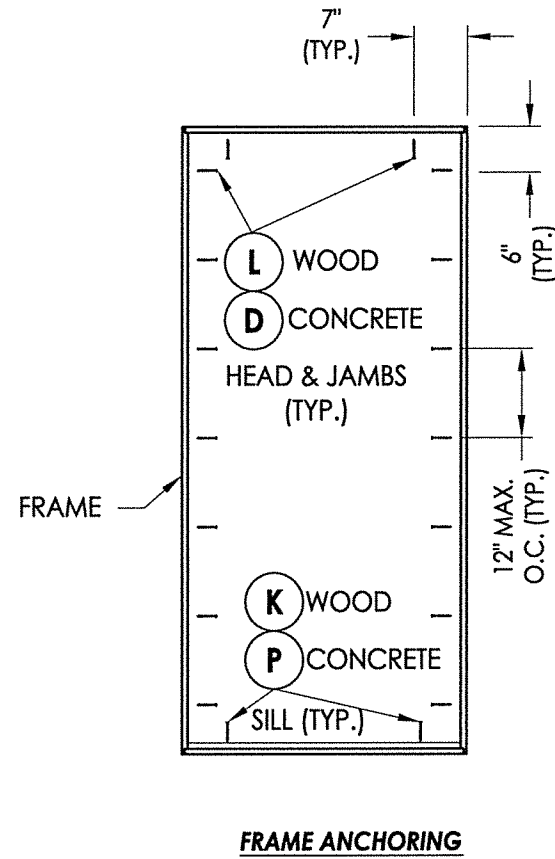
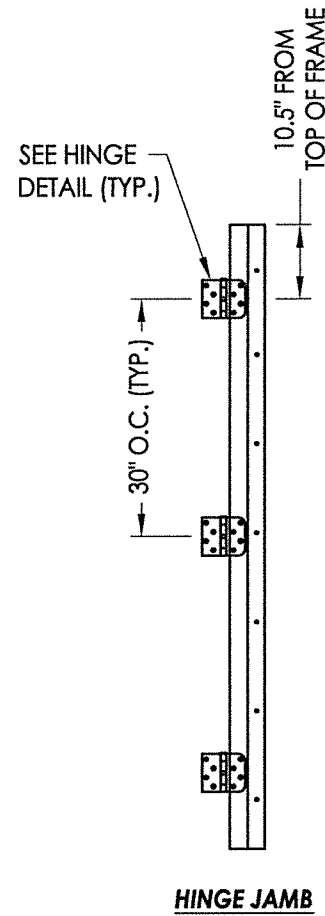
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL 33595
Phone No.: 813.659.9197

CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: SUNRISE FIBERGLASS DOOR
PART OR ASSEMBLY: VERTICAL CROSS SECTIONS (THRESHOLDS)

| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
| | | | |
| | | | |
| | | | |
| | | | |

DATE: 3/28/18
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4801
SHEET 6 OF 8



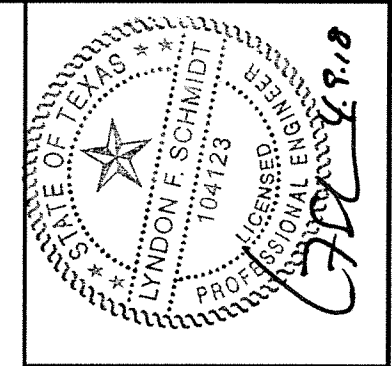
CONCRETE ANCHOR NOTES:

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 TAPCON® | 1/4" | 1-1/4" | 2" | 4" |
| ELCO ULTRACON® | 1/4" | 1-1/4" | 1" | 4" |
| ITW TAPCON® | 3/16" | 1-1/4" | 3" | 1-1/2" |

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.
TEXAS P.E. #104123

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

CERTIFICATE OF REGISTRATION # F-11852

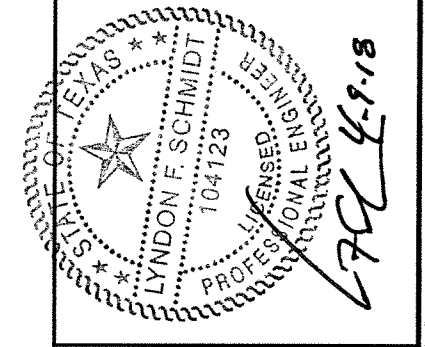
| | |
|---------------------------------------|-----------|
| PRODUCT: SUNRISE FIBERGLASS DOOR | |
| PART OR ASSEMBLY: FRAME ANCHORING (X) | |
| NO. | DATE |
| BY | REVISIONS |
| DATE: 3/28/18 | |
| SCALE: N.T.S. | |
| DWG. BY: JK | |
| CHK. BY: LFS | |
| DRAWING NO.: TX-4801 | |
| SHEET 7 OF 8 | |

BILL OF MATERIALS

| ITEM # | DESCRIPTION | MATERIAL |
|--------|------------------------------------------------------------------------------------------------|----------|
| A | 1X BUCK (SG >= 0.42) | WOOD |
| B | 2X STUD (SG >= 0.42) | WOOD |
| C | 1/4" MAX. SHIM SPACE | - |
| D | 1/4" PFH ELCO OR ITW CONCRETE SCREW (1.375" MIN. EMBEDMENT) | STEEL |
| E | MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90 | CONCRETE |
| G | 3/16" ITW CONCRETE SCREW (1-1/4" MIN. EMBEDMENT) | STEEL |
| K | #10 PFH WOOD SCREW (1.5" MIN. EMBEDMENT) | STEEL |
| L | #10 X 2-1/2" PFH WOOD SCREW (1.15" MIN. EMBEDMENT) | STEEL |
| P | 1/4" PFH ELCO OR ITW CONCRETE SCREW (1-3/4" MIN. EMBEDMENT) | STEEL |
| X | 2X REINFORCEMENT (SG >= 0.55) | WOOD |
| 1 | JAMB (FINGER JOINT PINE w/ VINYL WRAP) | WOOD |
| 2 | JAMB (POLY FIBER) | COMP. |
| 6 | WEATHERSTRIP (MEDIUM REACH) | FOAM |
| 7 | WEATHERSTRIP (LONG REACH) | FOAM |
| 10 | SWEEP | VINYL |
| 21 | #10-24 X 5/8" M.S. w/ 1/2" STAFAST INSERT P/N D102413 | STEEL |
| 22 | #10-24 X 5/8" M.S. w/ 3/8" STAFAST PRONG TEE NUT | STEEL |
| 23 | #10 x 3/4" PFH WOOD SCREW | STEEL |
| 24 | #10 x 1" PFH WOOD SCREW | STEEL |

BILL OF MATERIALS

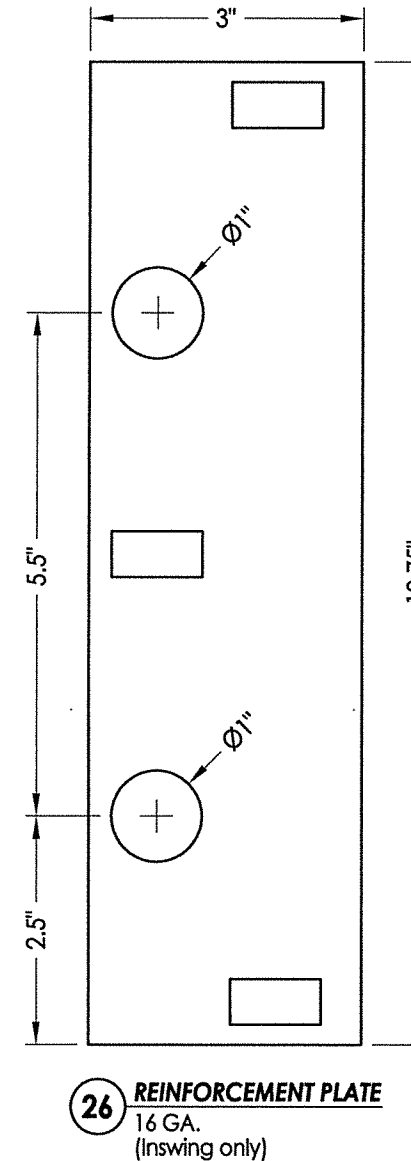
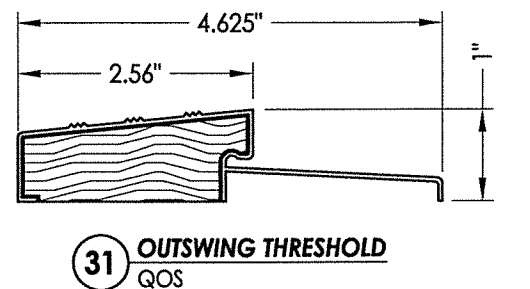
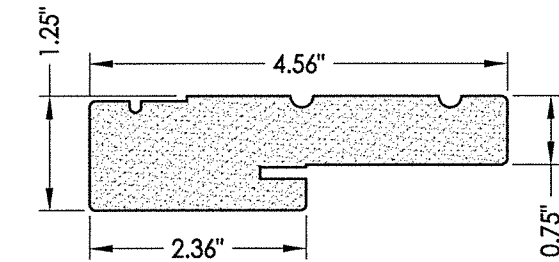
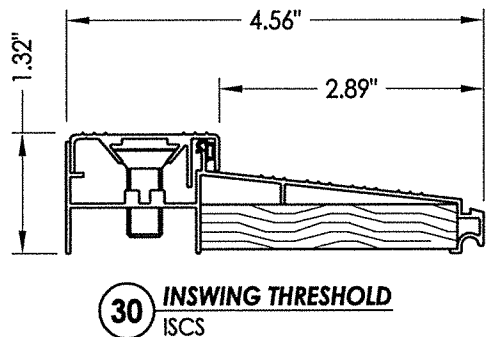
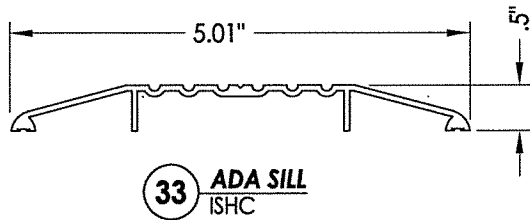
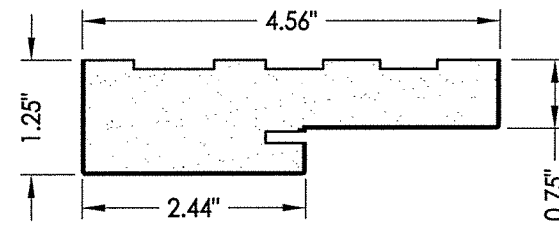
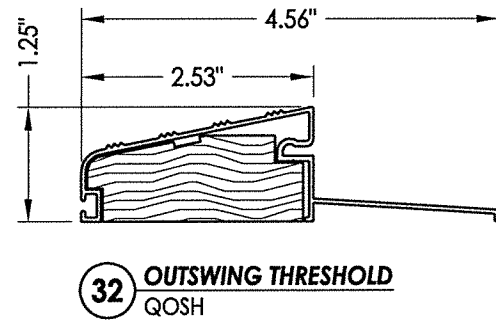
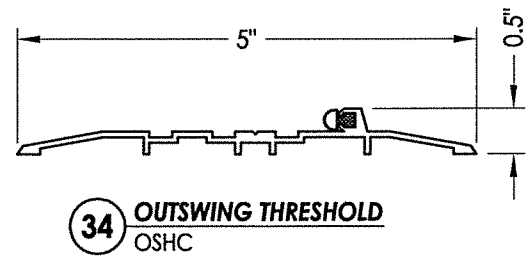
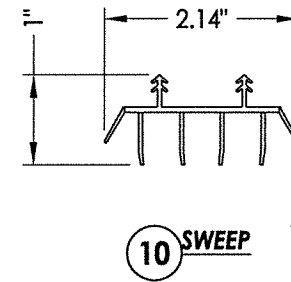
| ITEM # | DESCRIPTION | MATERIAL |
|--------|----------------------------|-----------|
| 25 | #8 x 2-1/2" PFH WOOD SCREW | STEEL |
| 26 | REINFORCEMENT PLATE | STEEL |
| 27 | LATCH STRIKE PLATE | STEEL |
| 28 | DEADBOLT STRIKE PLATE | STEEL |
| 29 | 4" X 4" HINGE | STEEL |
| 30 | INSWING THRESHOLD | ALUM/COMP |
| 31 | OUTSWING THRESHOLD | ALUM/COMP |
| 32 | OUTSWING THRESHOLD | ALUM/COMP |
| 33 | ADA THRESHOLD | ALUM |
| 34 | ADA BUMP THRESHOLD | ALUM |
| 40 | DOOR PANEL | - |



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

CERTIFICATE OF REGISTRATION # F-11852



| | |
|-------------------------------------------------------|-----------|
| PRODUCT: SUNRISE DOOR FIBERGLASS DOOR | |
| PART OR ASSEMBLY: BILL OF MATERIALS AND COMPONENTS | |
| NO. | DATE |
| BY | REVISIONS |
| DATE: 3/28/18 | |
| SCALE: N.T.S. | |
| DWG. BY: JK | |
| CHK. BY: LFS | |
| DRAWING NO.: TX-4801 | |
| SHEET 8 OF 8 | |