

R:\Clients\Doers PERMANENT\A - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 (2020)\FL-19007.1-10.dwg, FL-19007.3



## DIAMOND DOOR SERIES

### FLUSH GLAZED FIBERGLASS DOOR w/ SIDELITES

#### INSWING / OUTSWING

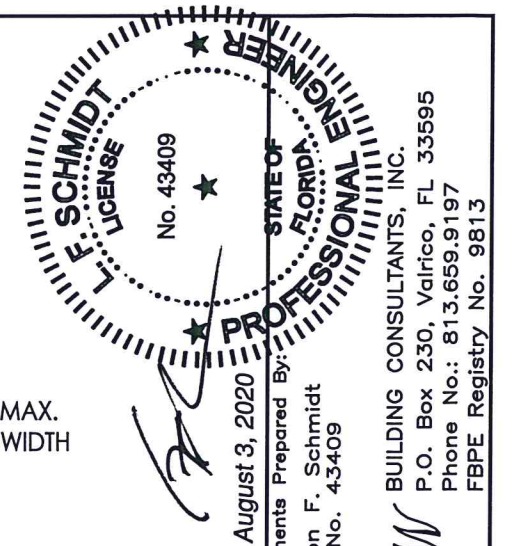
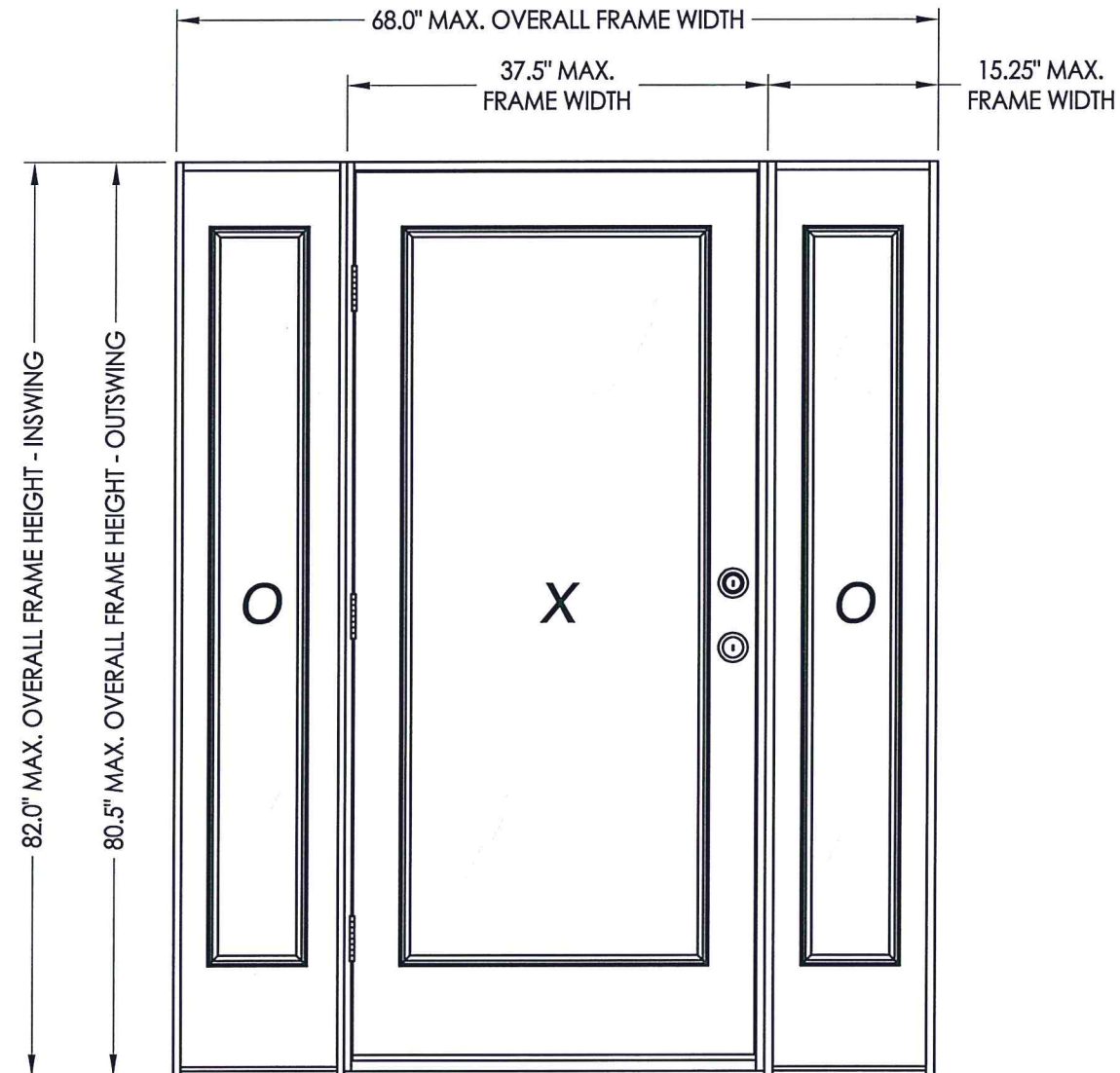
#### "NON-IMPACT"

#### GENERAL NOTES

1. This product has been evaluated and is in compliance with the 7th Edition (2020) 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 this product is required to be protected with an impact resistant covering that complies with FBC Sections 1609.1.2 & R301.2.1.2.
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 elevation, design pressures, & general notes    |
| 2                 | Door panel details                                      |
| 3                 | Sidelite panel details                                  |
| 4                 | Horizontal cross sections                               |
| 5                 | Vertical cross sections                                 |
| 6                 | Vertical cross sections                                 |
| 7                 | Buck and frame anchoring - 2X buck masonry construction |
| 8                 | Frame anchoring - 1X buck masonry construction          |
| 9                 | Bill of materials, glazing detail & components          |

| SWING    | OVERALL FRAME DIMENSION | DOOR D.L.O. DIMENSION | SIDELITE D.L.O. DIMENSION | GLASS TYPE | DESIGN PRESSURE (PSF) |          |
|----------|-------------------------|-----------------------|---------------------------|------------|-----------------------|----------|
|          |                         |                       |                           |            | POSITIVE              | NEGATIVE |
| INSWING  | 68.0" x 82.0"           | 26.25" x 65.93"       | 7.0" x 65.93"             | G1         | +48.0                 | -50.0    |
| OUTSWING | 68.0" x 80.5"           | 26.25" x 65.93"       | 7.0" x 65.93"             |            | +50.0                 | -54.0    |



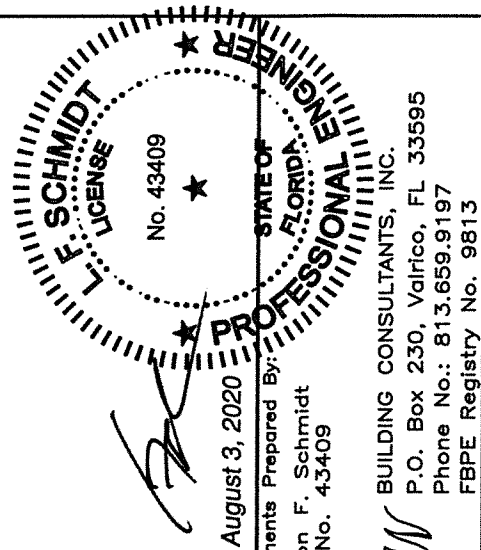
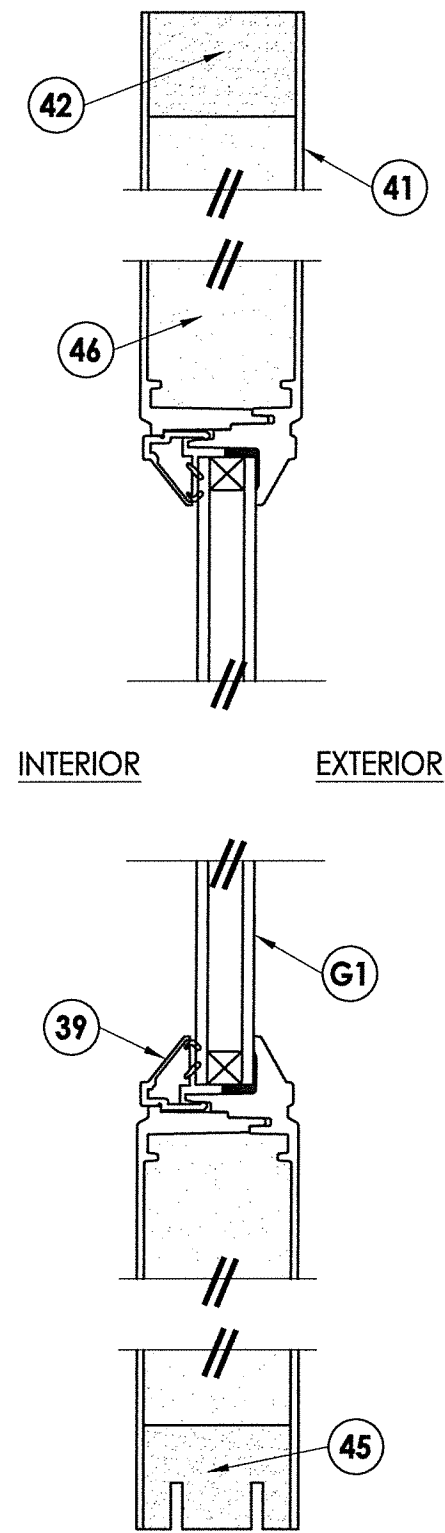
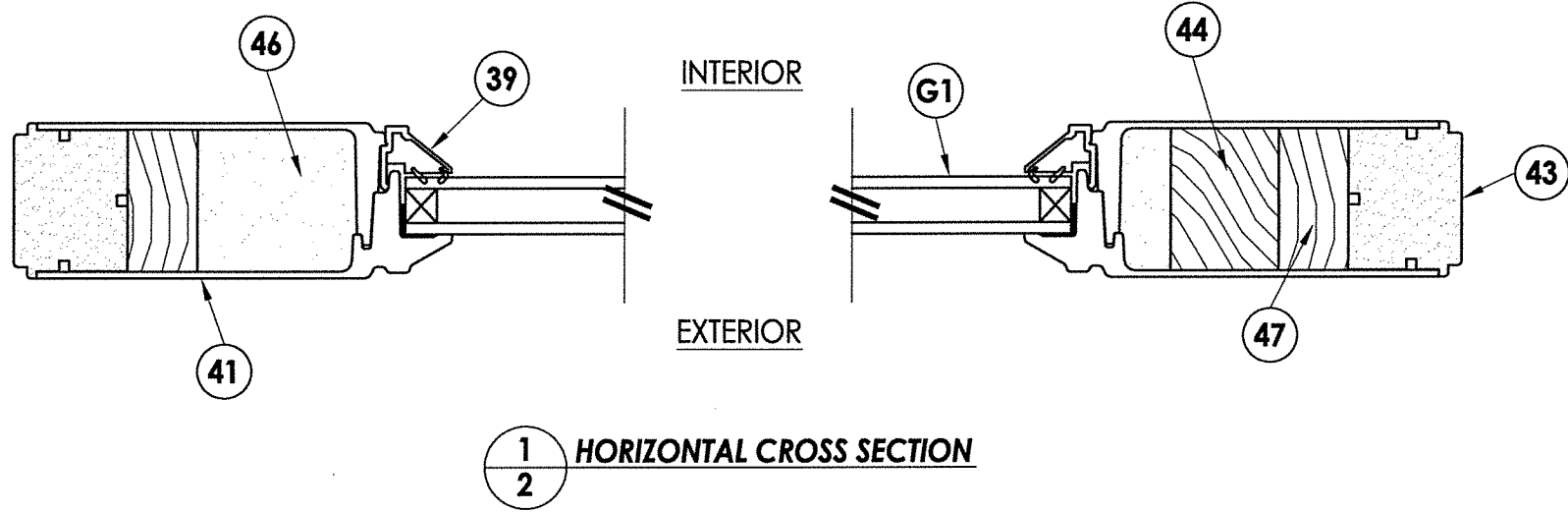
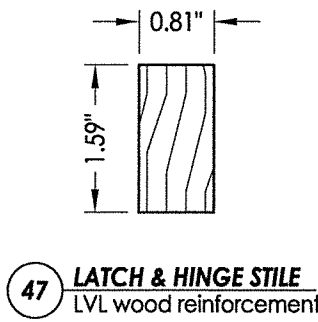
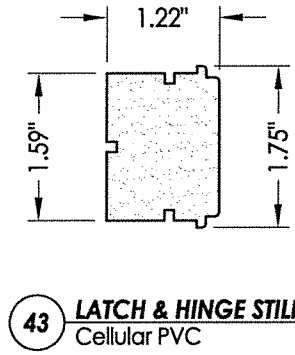
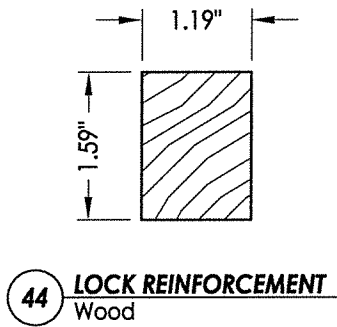
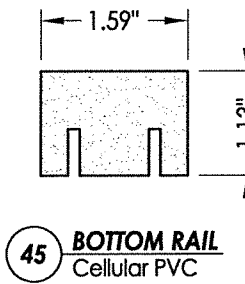
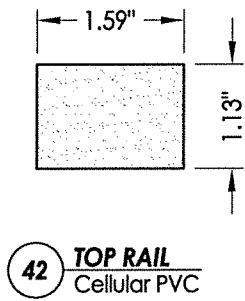
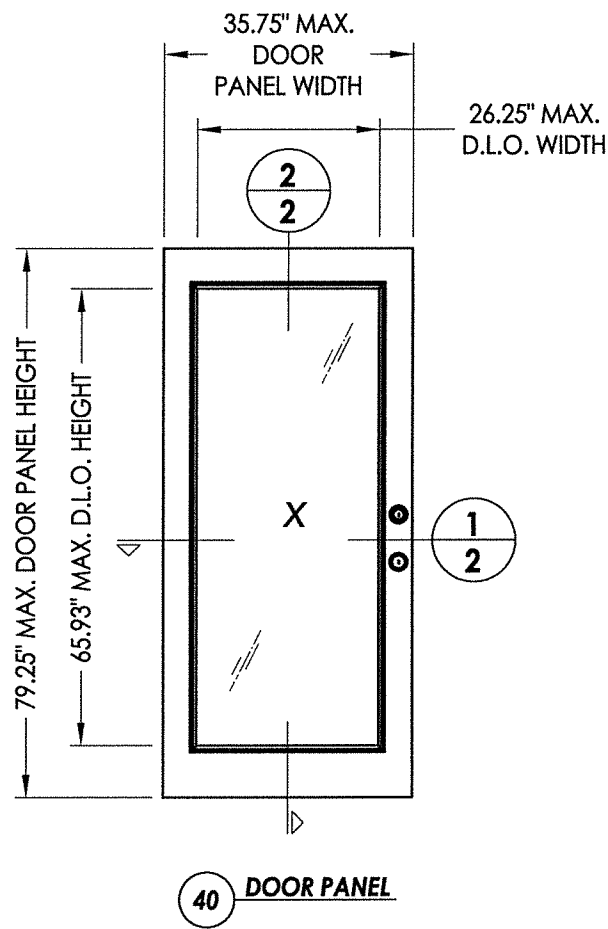
August 3, 2020  
Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

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

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

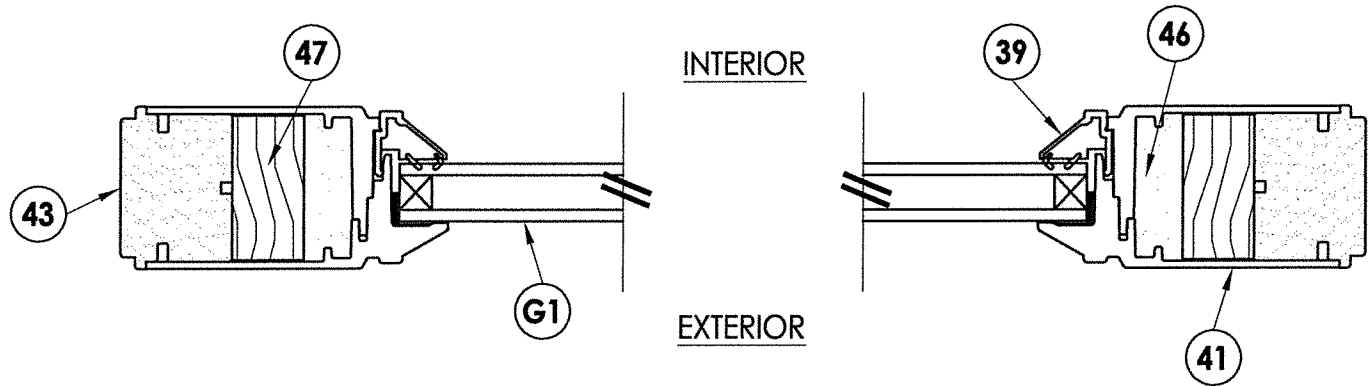
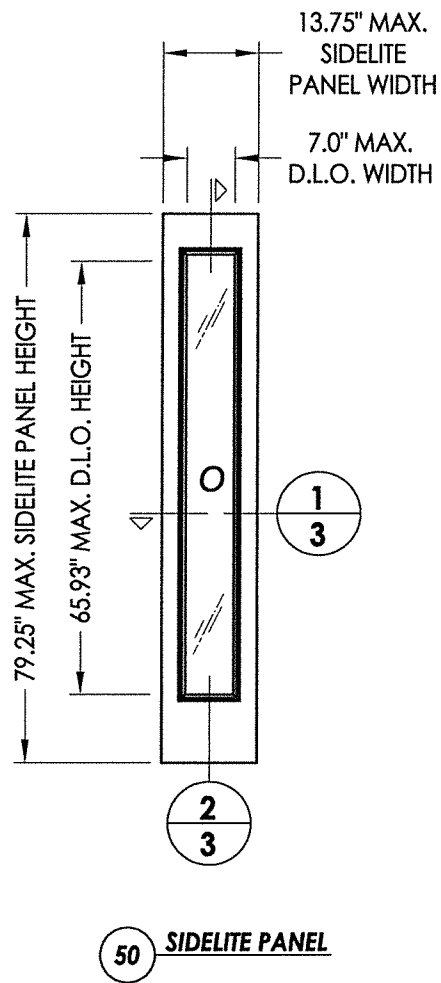
| NO. | DATE    | REVISIONS                    |     |           |
|-----|---------|------------------------------|-----|-----------|
|     |         | DATE                         | BY  | REVISIONS |
| 3   | 7/30/20 | UPDATE TO 7TH ED. (2020) FBC | LFS |           |
| 2   | 5/15/19 | ADD STEEL STUD ANCHORING     | LFS |           |
| 1   | 9/26/17 | UPDATE TO 6TH ED. (2017) FBC | JK  |           |

DATE: 09/22/15  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: FL-19007.3  
SHEET 1 OF 9

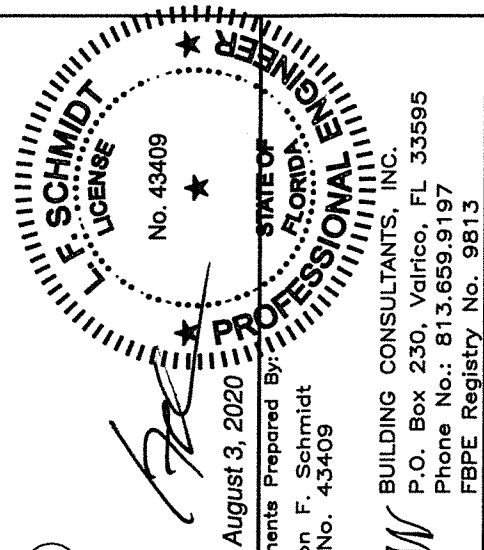
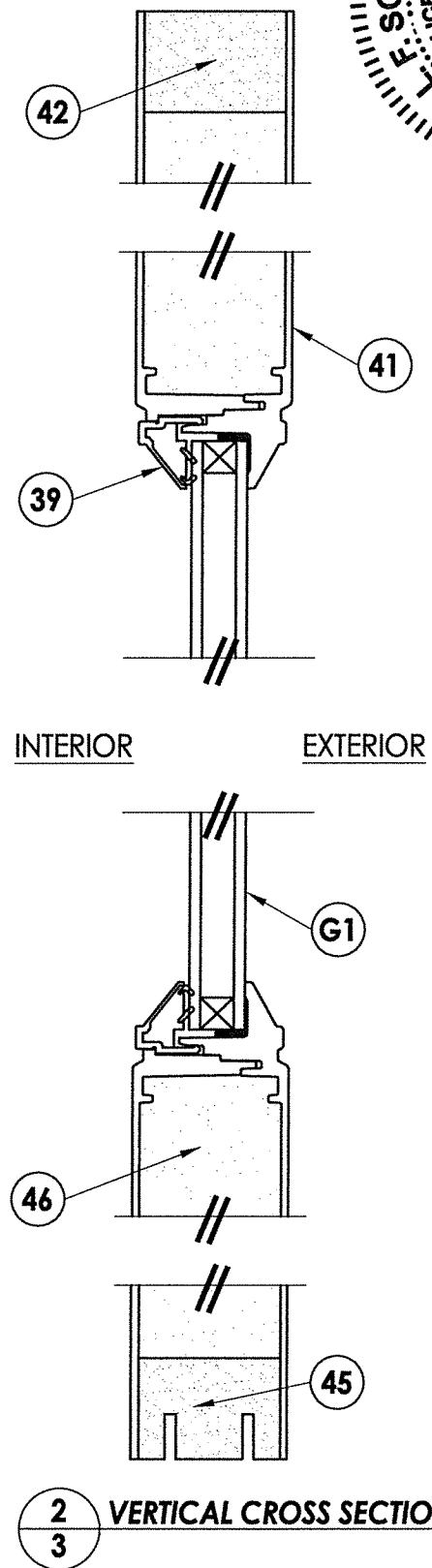
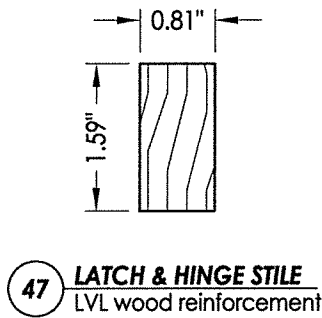
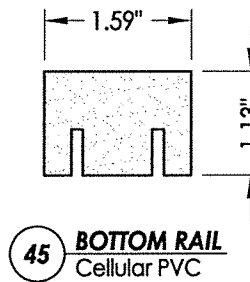
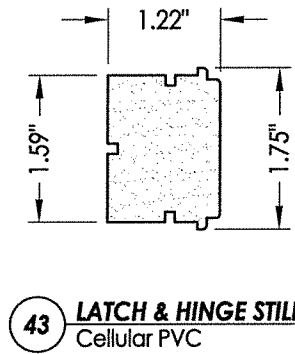
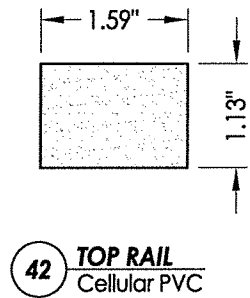


| PRODUCT:          |         | DOERS<br>FIBERGLASS DOOR     |           |
|-------------------|---------|------------------------------|-----------|
| PART OR ASSEMBLY: |         | DOOR PANEL DETAILS           |           |
| NO.               | DATE    | BY                           | REVISIONS |
| 3                 | 7/30/20 | UPDATE TO 7TH ED. (2020) FBC | LFS       |
| 2                 | 5/15/19 | ADD STEEL STUD ANCHORING     | LFS       |
| 1                 | 9/26/17 | UPDATE TO 6TH ED. (2017) FBC | JK        |

DATE: 09/22/15  
SCALE: N.T.S.  
DWG. BY: JK  
CHK. BY: LFS  
DRAWING NO.: FL-19007.3  
SHEET 2 OF 9



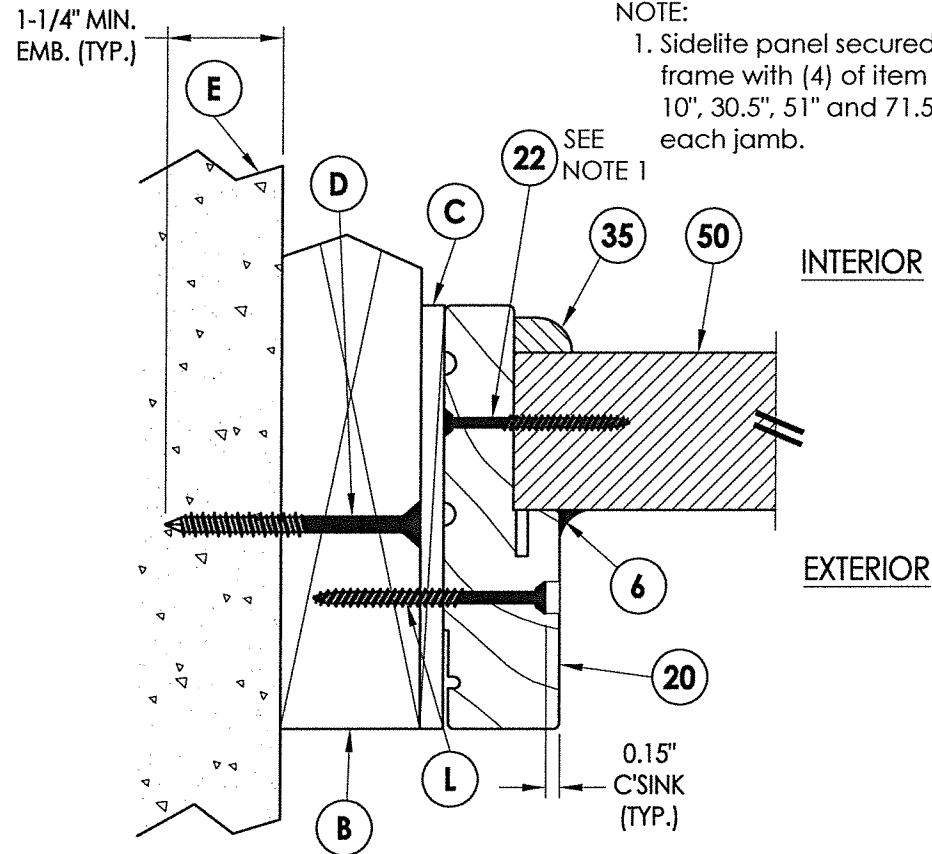
1  
3 HORIZONTAL CROSS SECTION



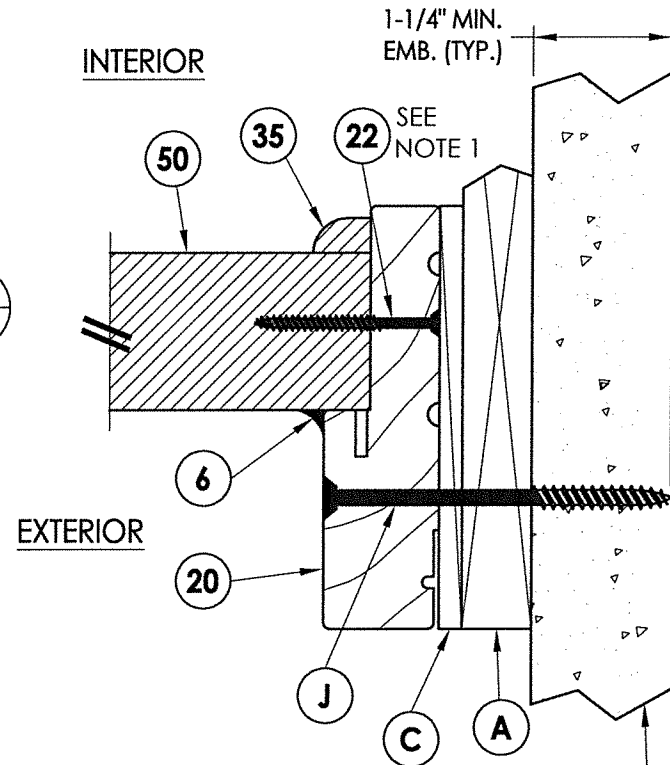
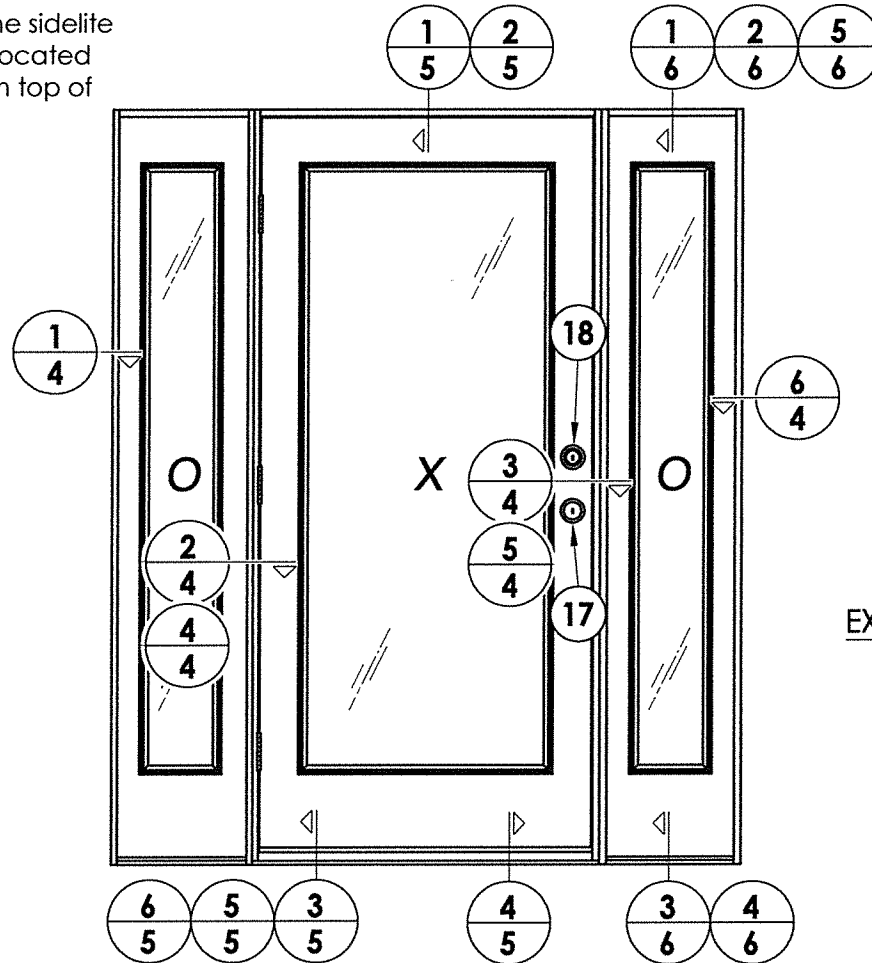
Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409  
August 3, 2020  
R.W. BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

| PRODUCT:                |         | DOERS<br>FIBERGLASS DOOR |                              |
|-------------------------|---------|--------------------------|------------------------------|
| PART OR ASSEMBLY:       |         | SIDELITE PANEL DETAILS   |                              |
| NO.                     | DATE    | BY                       | REVISIONS                    |
| 3                       | 7/30/20 | LFS                      | UPDATE TO 7TH ED. (2020) FBC |
| 2                       | 5/15/19 | LFS                      | ADD STEEL STUD ANCHORING     |
| 1                       | 9/26/17 | JK                       | UPDATE TO 6TH ED. (2017) FBC |
| NO.                     | DATE    | BY                       |                              |
| DATE: 09/22/15          |         | SCALE: N.T.S.            |                              |
| DWG. BY: JK             |         | CHK. BY: LFS             |                              |
| DRAWING NO.: FL-19007.3 |         | SHEET 3 OF 9             |                              |

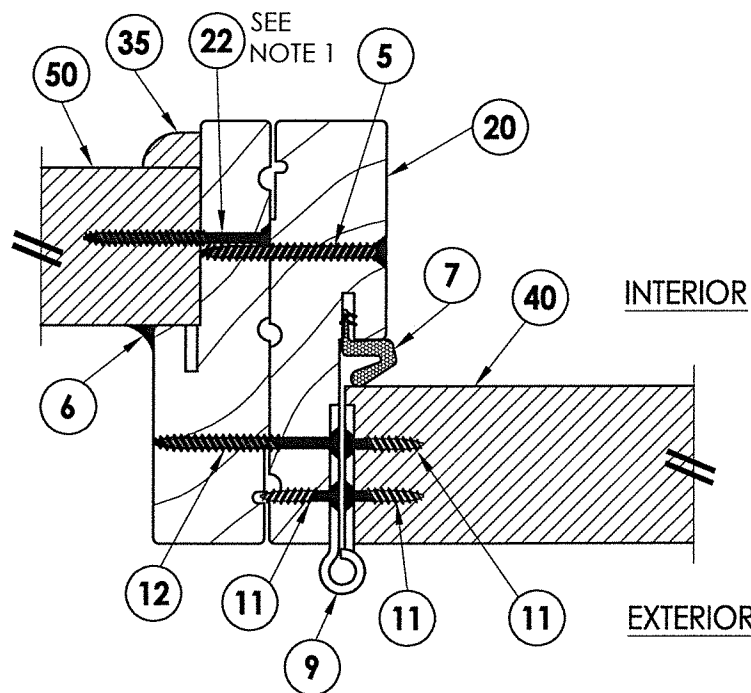
R:\Clients\Doers Permanent\A - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 (2020)\FL-19007.1-10.dwg, 4.3



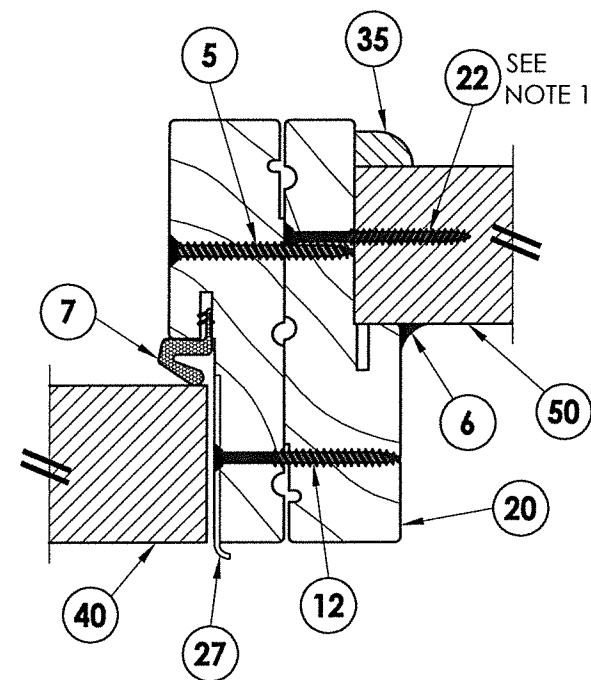
**1**  
**4** **HORIZONTAL CROSS SECTION**  
Outswing shown - inswing also approved



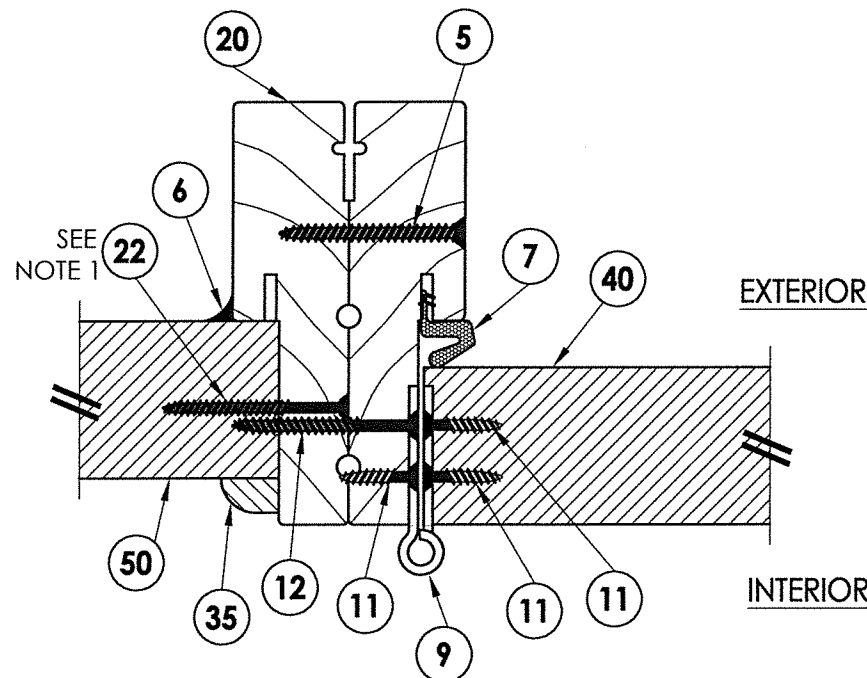
**6**  
**4** **HORIZONTAL CROSS SECTION**  
Shown w/1X sub-buck



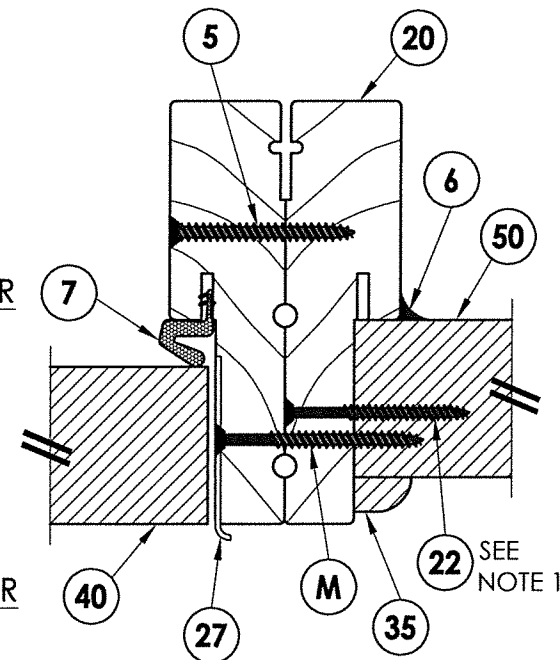
**2**  
**4** **HORIZONTAL CROSS SECTION**  
Outswing configuration



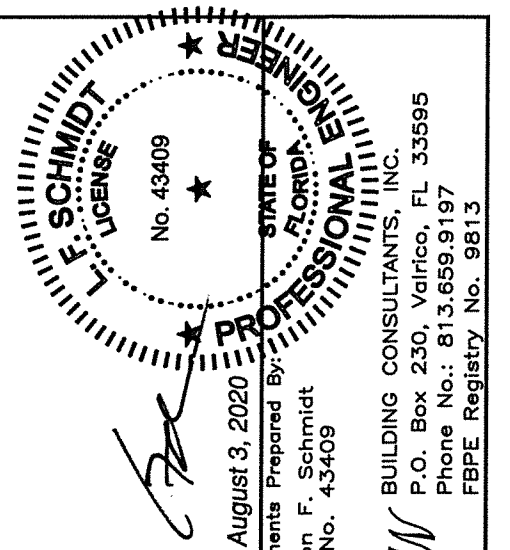
**3**  
**4** **HORIZONTAL CROSS SECTION**  
Outswing configuration



**4**  
**4** **HORIZONTAL CROSS SECTION**  
Inswing configuration

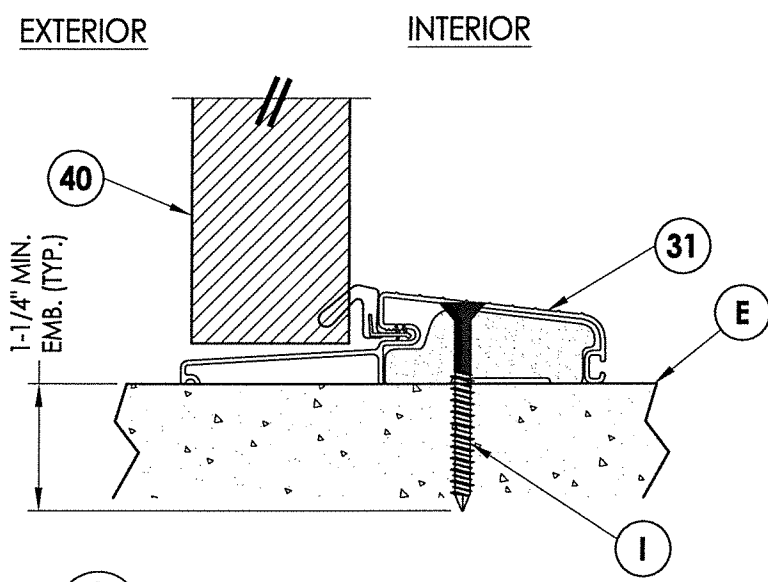


**5**  
**4** **HORIZONTAL CROSS SECTION**  
Inswing configuration



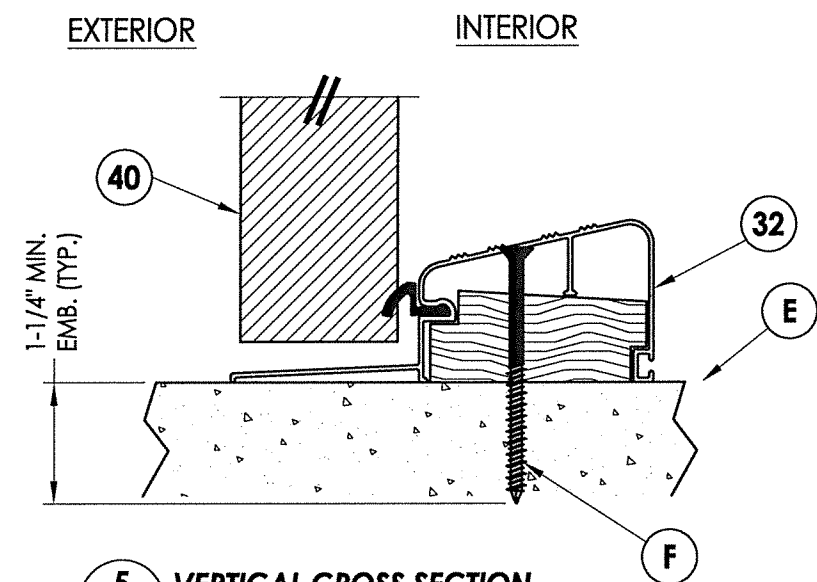
| PRODUCT:                |         | DOERS FIBERGLASS DOOR        |           |
|-------------------------|---------|------------------------------|-----------|
| PART OR ASSEMBLY:       |         | HORIZONTAL CROSS SECTIONS    |           |
| NO.                     | DATE    | BY                           | REVISIONS |
| 3                       | 7/30/20 | UPDATE TO 7TH ED. (2020) FBC | LFS       |
| 2                       | 5/15/19 | ADD STEEL STUD ANCHORING     | LFS       |
| 1                       | 9/26/17 | UPDATE TO 6TH ED. (2017) FBC | JK        |
| DATE                    |         |                              |           |
| DATE: 09/22/15          |         |                              |           |
| SCALE: N.T.S.           |         |                              |           |
| DWG. BY: JK             |         |                              |           |
| CHK. BY: LFS            |         |                              |           |
| DRAWING NO.: FL-19007.3 |         |                              |           |
| SHEET 4 OF 9            |         |                              |           |

1-1/4" MIN.  
EMB. (TYP.)

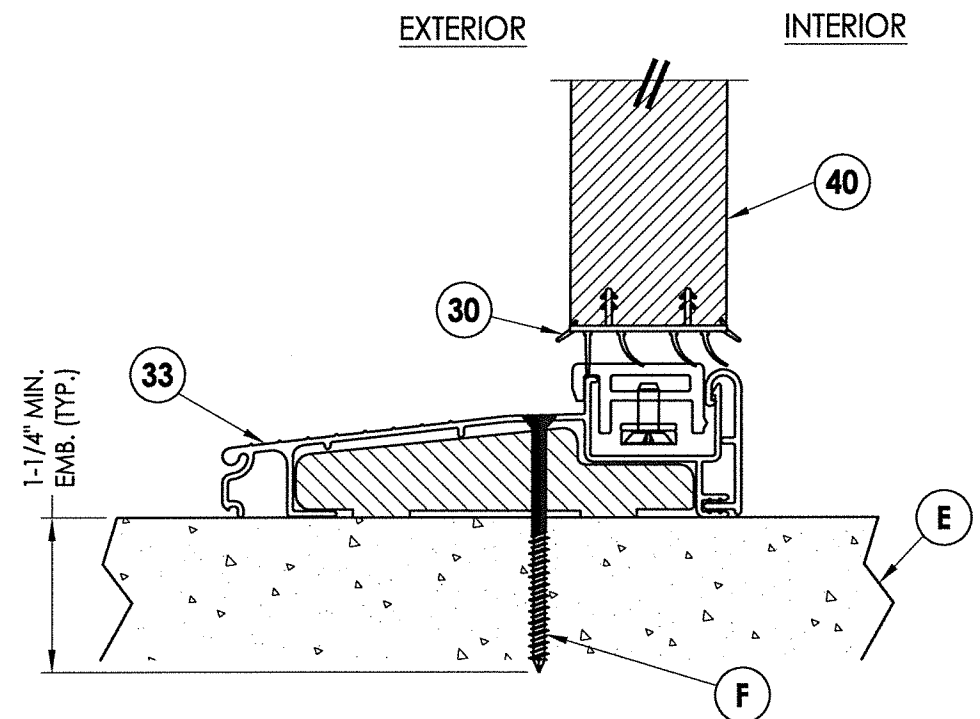


### 3 VERTICAL CROSS SECTION

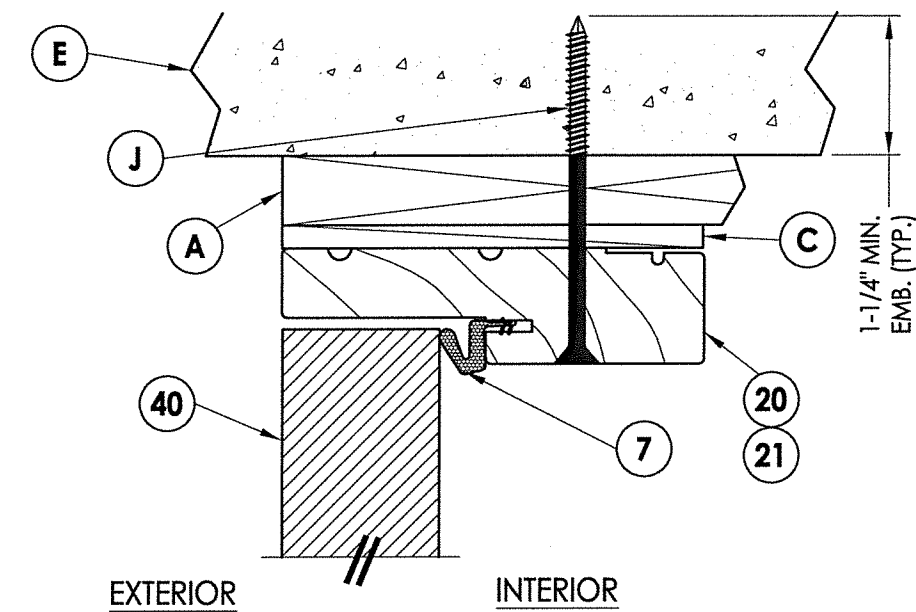
#### 5 Outswing configuration



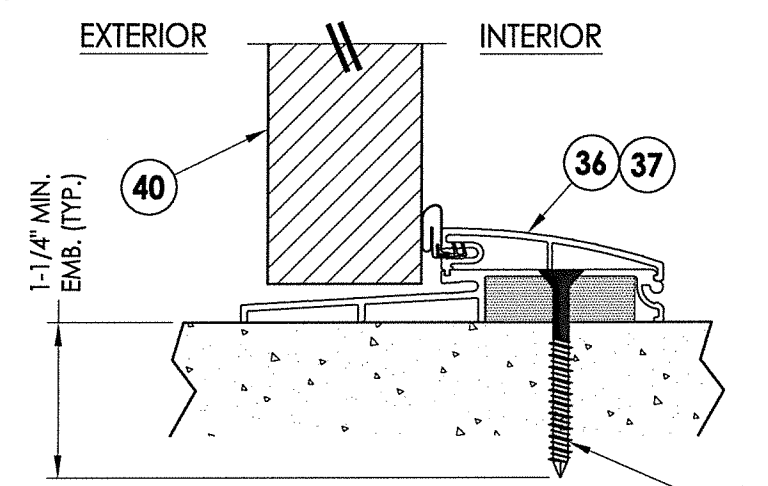
**5 VERTICAL CROSS SECTION**  
**5** Outswing configuration  
 (Where water infiltration requirements are specified)



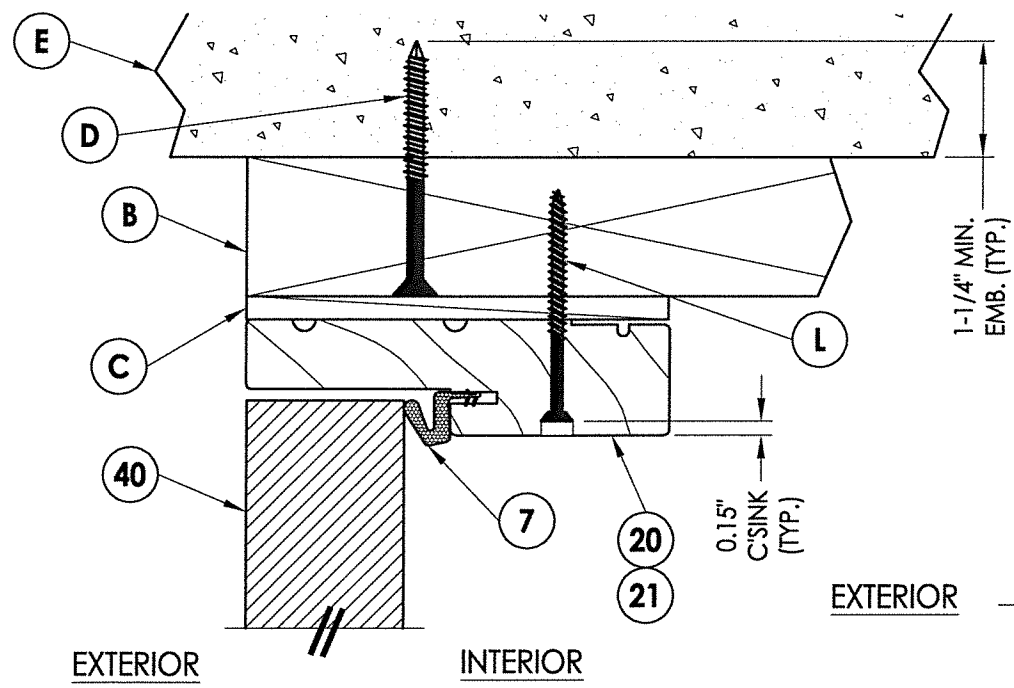
**4 VERTICAL CROSS SECTION**  
**5** Inswing configuration



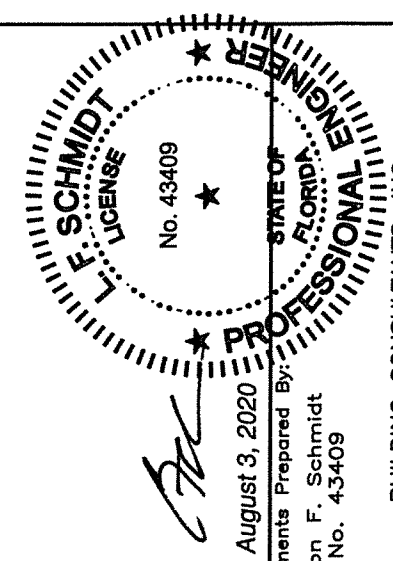
**2 VERTICAL CROSS SECTION**  
5 Shown w/1X sub-buck



**6 VERTICAL CROSS SECTION**  
**5** Outswing configuration



**1** **VERTICAL CROSS SECTION**  
**5** Outswing shown - inswing  
also approved



August 3, 2020

August 3, 2020  
Documents Prepared By

Lyndon F. Schmidt

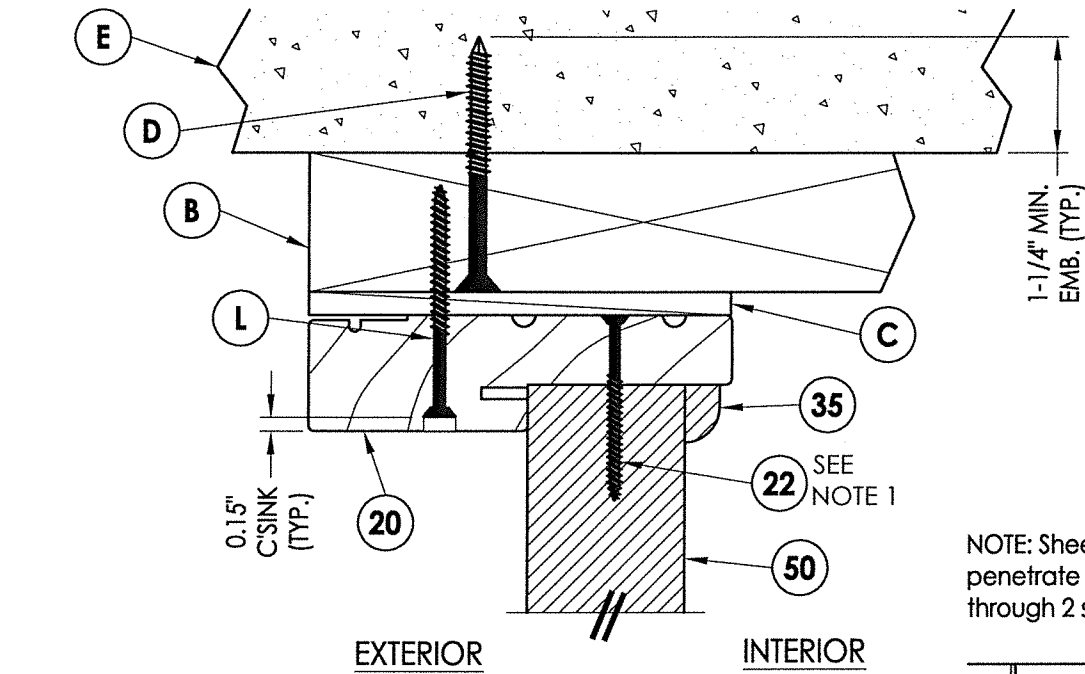
RW

**BUILDING CONSULTANTS, INC.**  
P.O. Box 230, Valrico, FL 33595

P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

[illegible]

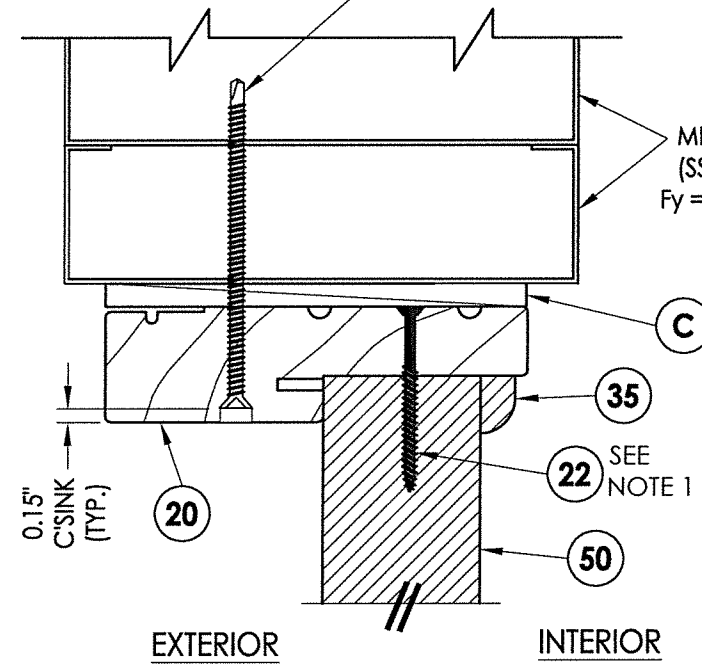
R:\Clients\Doers PERMANENTVA - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 (2020)\FL-19007.1-10.dwg, 6.3



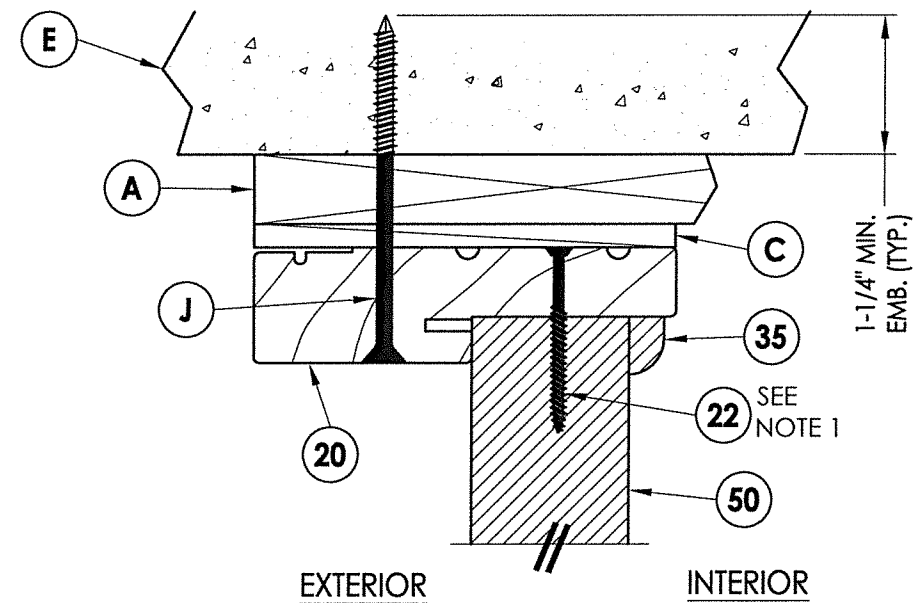
**1 VERTICAL CROSS SECTION**  
6 Outswing shown - inswing also approved

NOTE:  
1. Sidelite panel secured to the sidelite frame with (2) of item #22 in the head and sill 3" from each end.

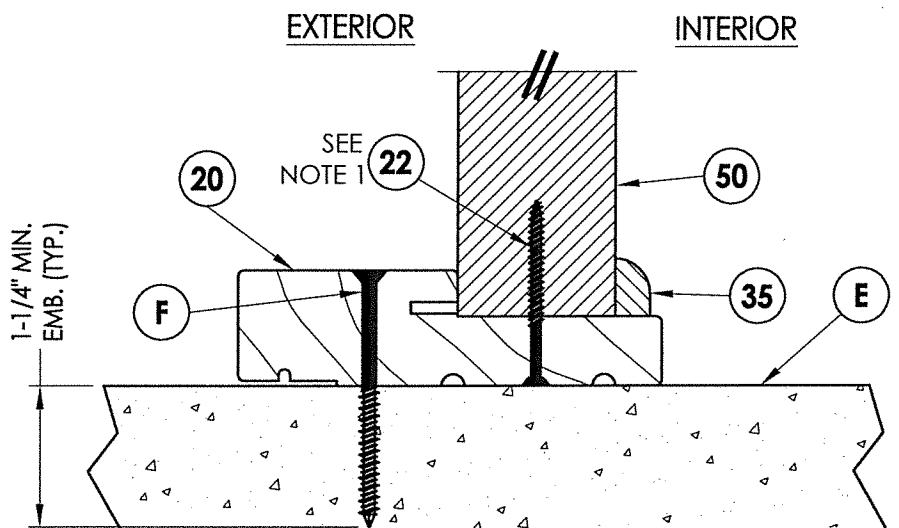
NOTE: Sheet Metal Screws must penetrate a min. of 3 threads through 2 sheets of metal.



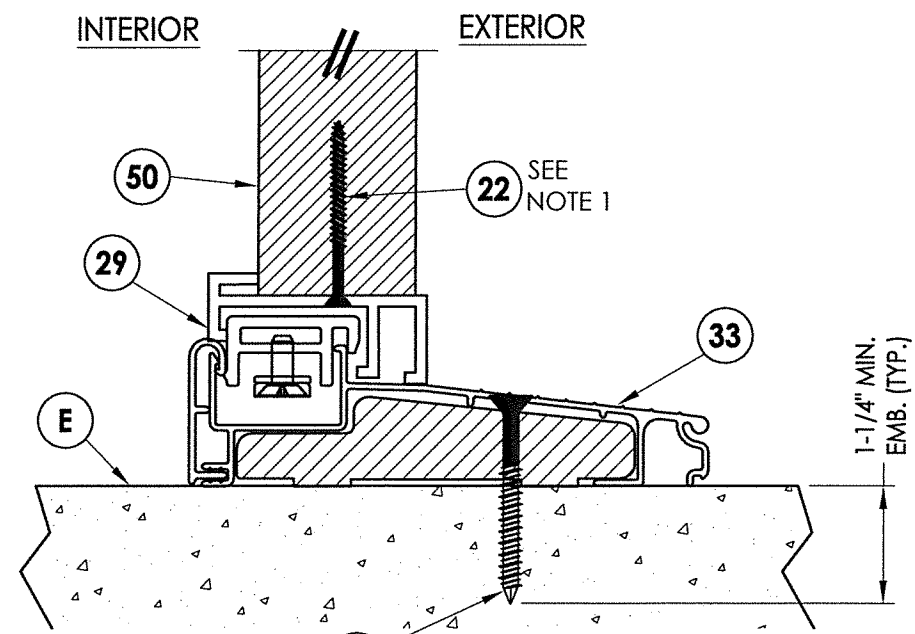
**5 VERTICAL CROSS SECTION**  
6 Shown w/ Steel Stud Framing Option



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



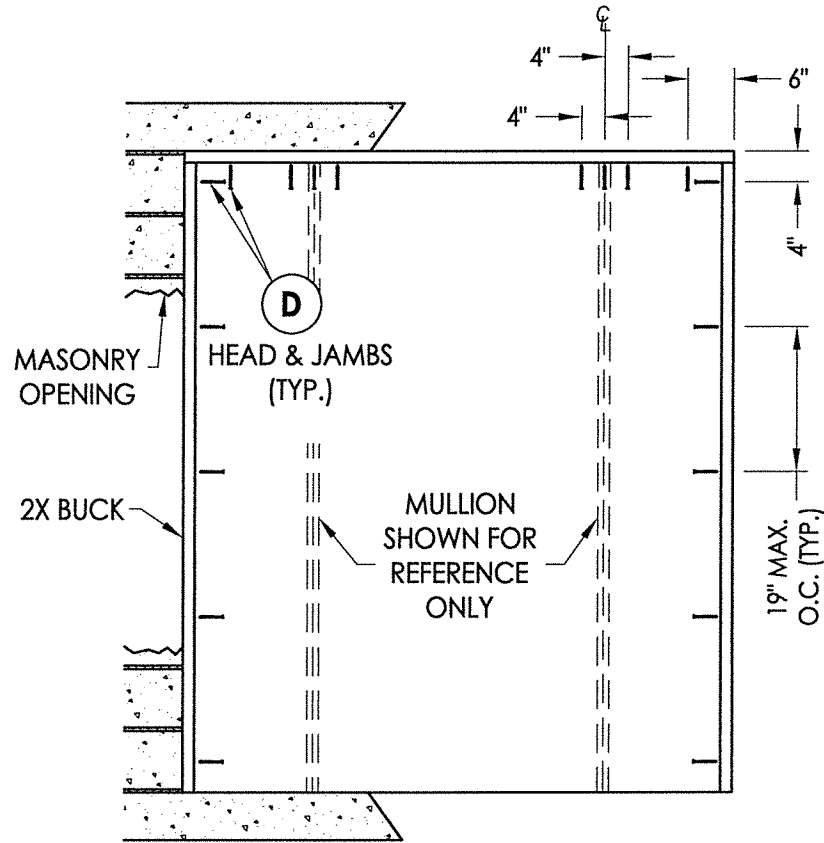
**3 VERTICAL CROSS SECTION**  
6 Outswing configuration



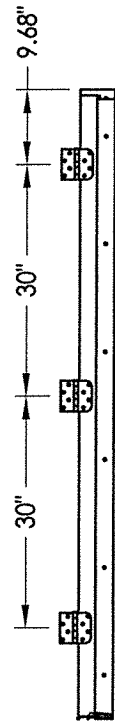
**4 VERTICAL CROSS SECTION**  
6 Inswing configuration

August 3, 2020  
Documents Prepared By: Lyndon F. Schmidt  
P.E. No. 43409  
No. 43409  
F. SCHMIDT  
FL LICENSE  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
R.W. BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

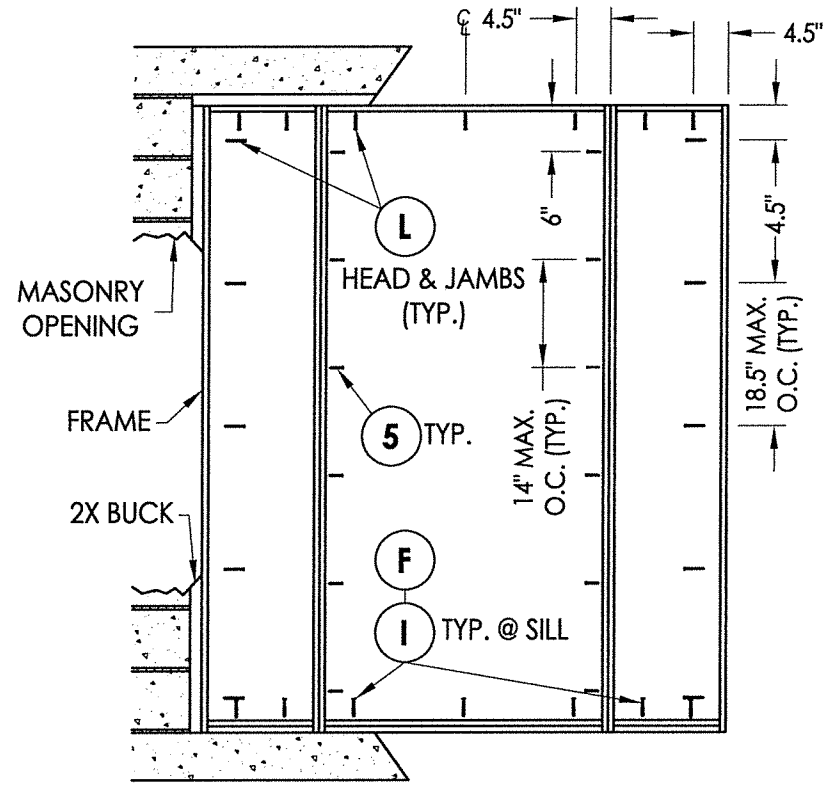
|                         |         |                              |     |
|-------------------------|---------|------------------------------|-----|
| PRODUCT:                |         | DOERS FIBERGLASS DOOR        |     |
| PART OR ASSEMBLY:       |         | VERTICAL CROSS SECTIONS      |     |
| REVISIONS               |         |                              |     |
| NO.                     | DATE    | BY                           |     |
| 3                       | 7/30/20 | UPDATE TO 7TH ED. (2020) FBC | LFS |
| 2                       | 5/15/19 | ADD STEEL STUD ANCHORING     | LFS |
| 1                       | 9/26/17 | UPDATE TO 6TH ED. (2017) FBC | JK  |
| DATE: 09/22/15          |         |                              |     |
| SCALE: N.T.S.           |         |                              |     |
| DWG. BY: JK             |         |                              |     |
| CHK. BY: LFS            |         |                              |     |
| DRAWING NO.: FL-19007.3 |         |                              |     |
| SHEET 6 OF 9            |         |                              |     |



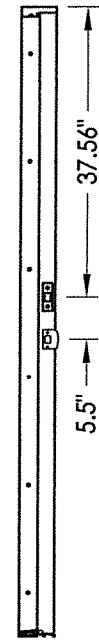
**BUCK ANCHORING**



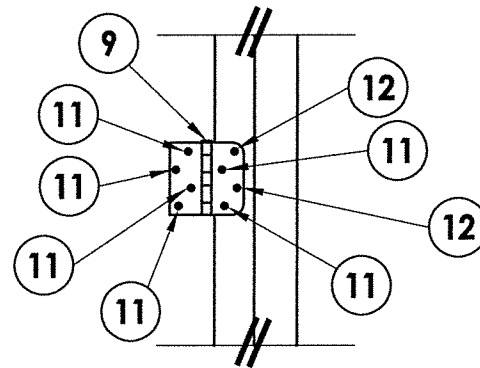
**HINGE JAMB**



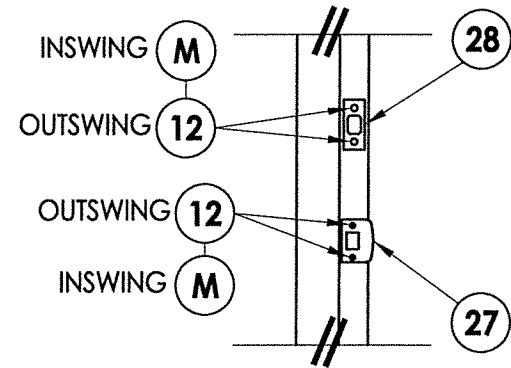
**FRAME ANCHORING**  
Masonry 2X buck construction



**STRIKE JAMB**



**HINGE DETAIL**



**LATCH & DEADBOLT DETAIL**

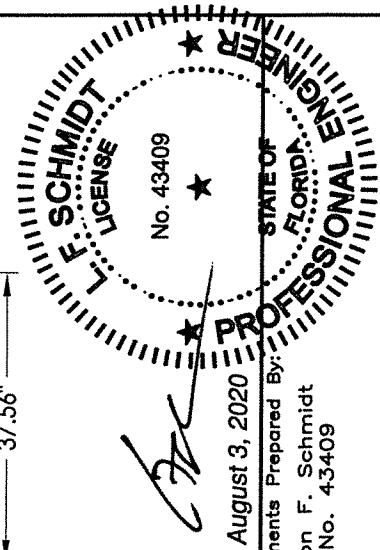
**CONCRETE ANCHOR NOTES:**

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"                                |

**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.

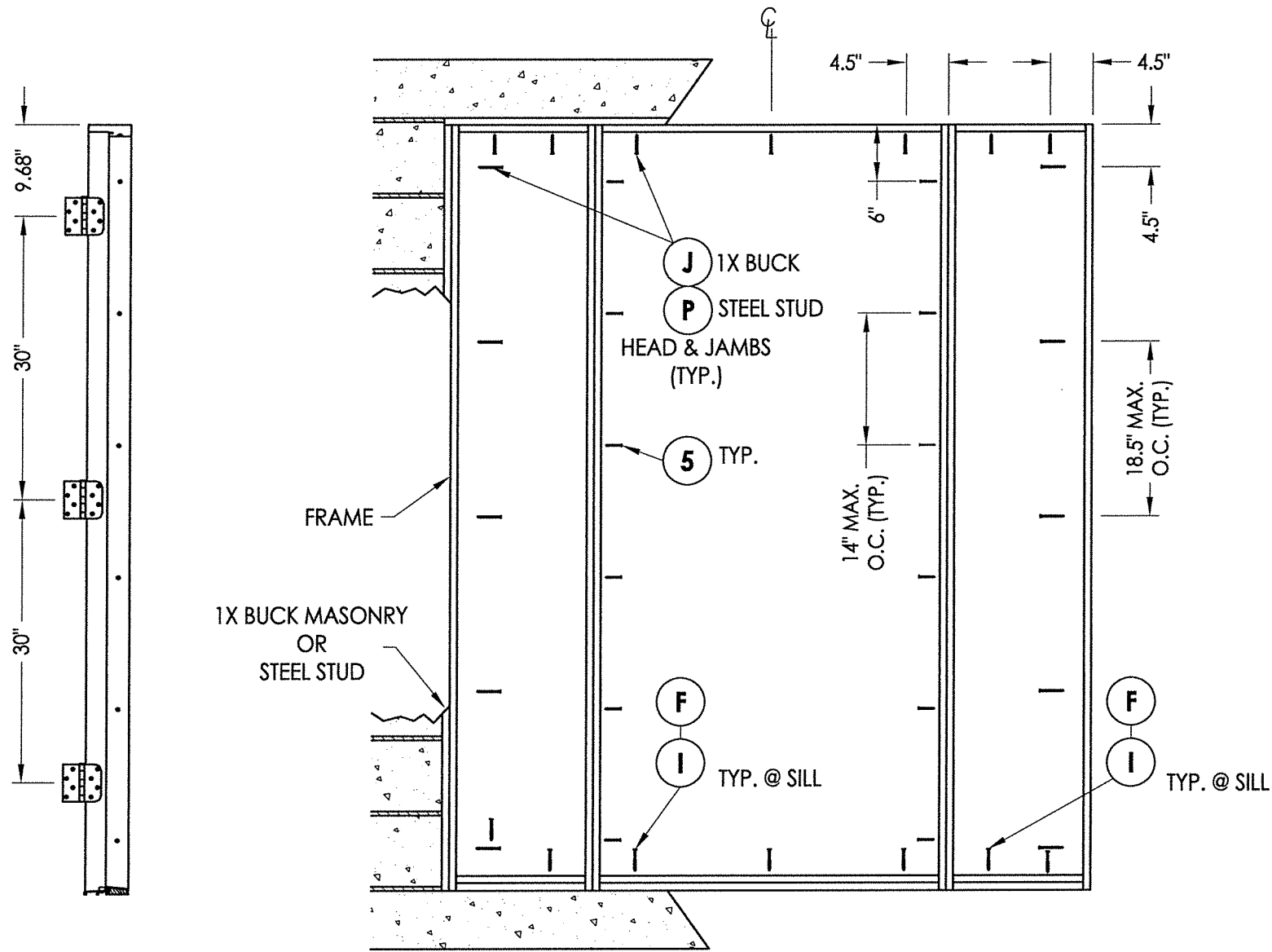


August 3, 2020

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 Registry No. 9813

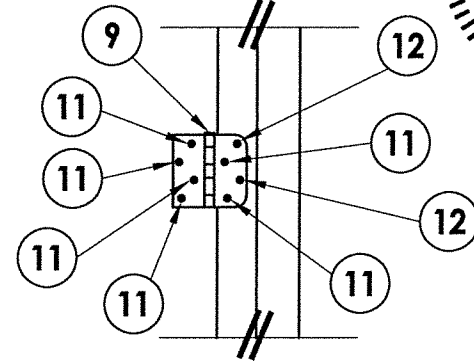
| PRODUCT:                |  | DOERS                     |         | FIBERGLASS DOOR              |     |
|-------------------------|--|---------------------------|---------|------------------------------|-----|
| PART OR ASSEMBLY:       |  | BUCK & FRAME ANCHORING 2X |         | BUCK MASONRY CONSTRUCTION    |     |
| REVISIONS               |  | NO.                       | DATE    | BY                           |     |
|                         |  | 3                         | 7/30/20 | UPDATE TO 7TH ED. (2020) FBC | LFS |
|                         |  | 2                         | 5/15/19 | ADD STEEL STUD ANCHORING     | LFS |
|                         |  | 1                         | 9/26/17 | UPDATE TO 6TH ED. (2017) FBC | JK  |
| DATE: 09/22/15          |  |                           |         |                              |     |
| SCALE: N.T.S.           |  |                           |         |                              |     |
| DWG. BY: JK             |  |                           |         |                              |     |
| CHK. BY: LFS            |  |                           |         |                              |     |
| DRAWING NO.: FL-19007.3 |  |                           |         |                              |     |
| SHEET 7 OF 9            |  |                           |         |                              |     |



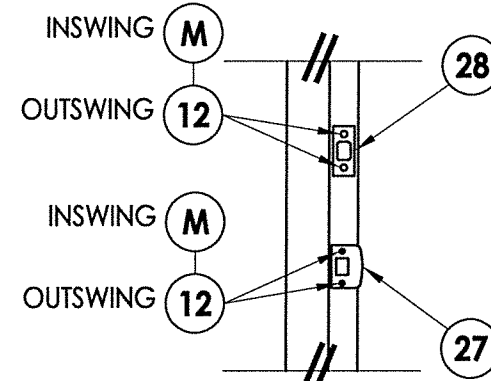
HINGE JAMB

FRAME ANCHORING  
Masonry 1X buck Construction  
Steel Stud Construction

STRIKE JAMB



HINGE DETAIL



LATCH & DEADBOLT DETAIL

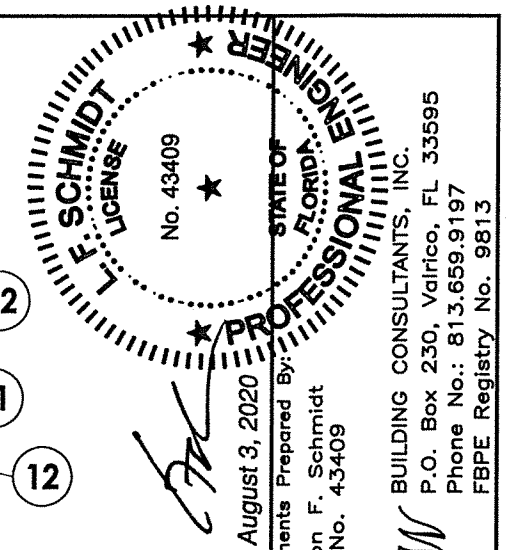
CONCRETE ANCHOR NOTES:

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"                                |
| 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.



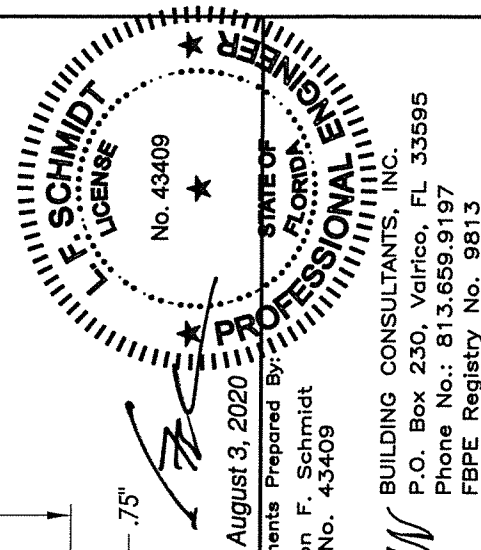
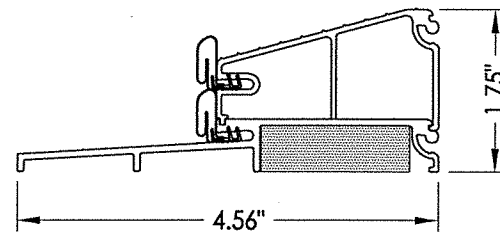
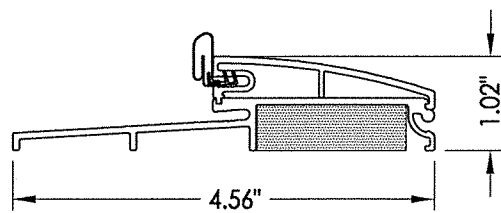
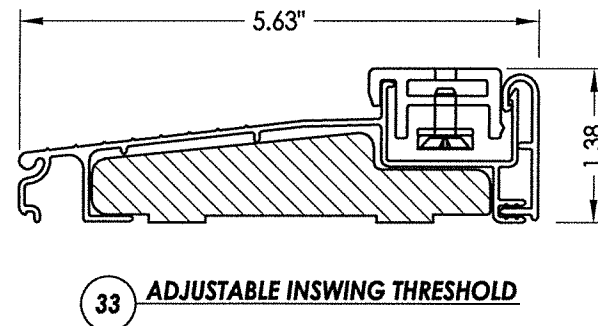
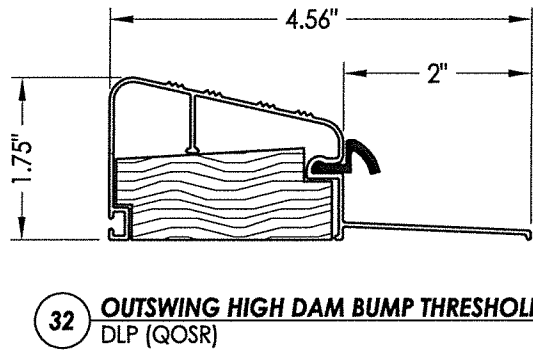
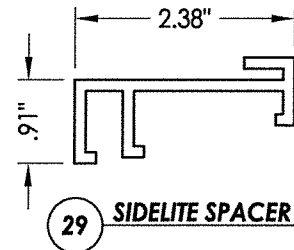
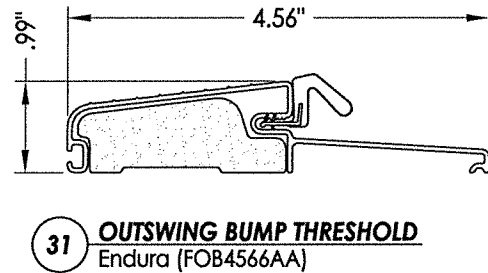
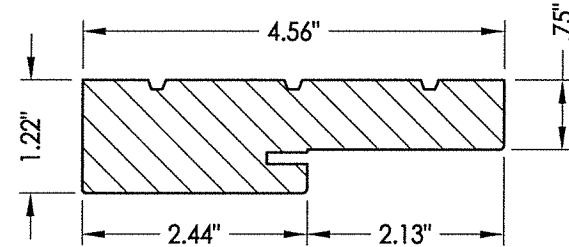
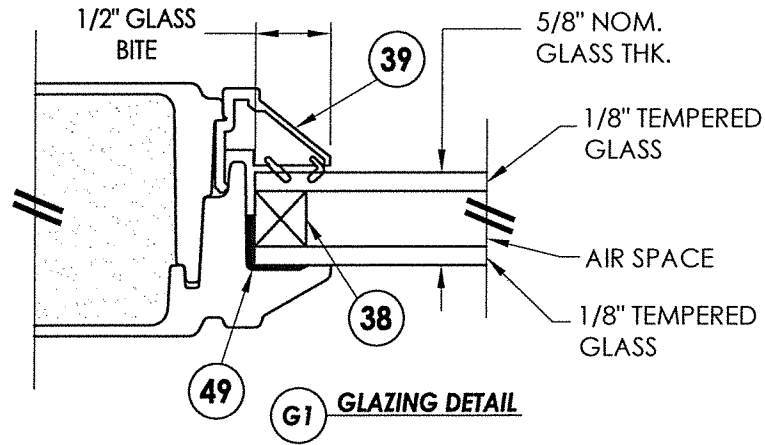
Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

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

| PRODUCT:                |         | DOERS FIBERGLASS DOOR                        |                              |
|-------------------------|---------|----------------------------------------------|------------------------------|
|                         |         | PART OR ASSEMBLY:                            |                              |
|                         |         | FRAME ANCHORING 1X BUCK MASONRY CONSTRUCTION |                              |
| NO.                     | DATE    | BY                                           | REVISIONS                    |
| 3                       | 7/30/20 | LFS                                          | UPDATE TO 7TH ED. (2020) FBC |
| 2                       | 5/15/19 | LFS                                          | ADD STEEL STUD ANCHORING     |
| 1                       | 9/26/17 | JK                                           | UPDATE TO 6TH ED. (2017) FBC |
| DATE: 09/22/15          |         |                                              |                              |
| SCALE: N.T.S.           |         |                                              |                              |
| DWG. BY: JK             |         |                                              |                              |
| CHK. BY: LFS            |         |                                              |                              |
| DRAWING NO.: FL-19007.3 |         |                                              |                              |
| SHEET 8 OF 9            |         |                                              |                              |

R:\Clients\Doers PERMANENT\A - Florida Product Approvals\FL-19007 Doors - Glazed\C - Drawings\FL 19007 (2020)\FL-19007.1-10.dwg, 9.3

| 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 2-3/4" PFH ITW CONCRETE SCREW                                                           | STEEL         |
| I                 | 1/4" X 2-1/4" PFH ITW CONCRETE SCREW                                                           | STEEL         |
| J                 | 1/4" X 3-3/4" PFH ITW CONCRETE SCREW                                                           | STEEL         |
| L                 | #10 X 2-1/2" PFH WOOD SCREW (1-3/8" MIN. EMBEDMENT)                                            | STEEL         |
| M                 | #9 X 2-1/4" PFH WOOD SCREW                                                                     | STEEL         |
| P                 | #10-16 PFH SELF-DRILLING SMS                                                                   | STEEL         |
| 5                 | #10 X 2" PFH SCREW                                                                             | STEEL         |
| 6                 | SEALANT                                                                                        | SILICONE      |
| 7                 | Q-LON 650 WEATHERSTRIP SCHLEGEL                                                                | FOAM          |
| 9                 | 4" X 4" BUTT HINGE                                                                             | STEEL         |
| 11                | #9 X 3/4" PFH WOOD SCREW                                                                       | STEEL         |
| 12                | #9 X 2" PFH WOOD SCREW                                                                         | STEEL         |
| 17                | KWIKSET KEYED ENTRY - SIGNATURE SERIES                                                         | STEEL         |
| 18                | KWIKSET DEADBOLT - SIGNATURE SERIES (780)                                                      | STEEL         |
| 20                | FINGER JOINTED PINE FRAME, HEAD & HINGE JAMBS                                                  | WOOD          |
| 22                | #8 X 2" PFH WOOD SCREW                                                                         | STEEL         |
| 27                | LATCH STRIKE PLATE                                                                             | STEEL         |
| 28                | DEADBOLT STRIKE PLATE                                                                          | STEEL         |
| 29                | SIDELITE SPACER                                                                                | PVC           |
| 30                | WEATHER-STOP 3647 HOLM INDUSTRIES                                                              | VINYL         |
| 31                | OUTSWING BUMP THRESHOLD                                                                        | ALUM. / PVC   |
| 32                | OUTSWING HIGH DAM BUMP THRESHOLD                                                               | ALUM. / WOOD  |
| 33                | INSWING ADJUSTABLE THRESHOLD                                                                   | ALUM. / WOOD  |
| 35                | SHOE MOULD 5/8" X 3/8"                                                                         | WOOD          |
| 36                | OUTSWING BASE SILL w/ BUMPER THRESHOLD CAP                                                     | ALUM. / COMP. |
| 37                | OUTSWING BASE SILL w/ BUMPER THRESHOLD HIGH DAM CAP                                            | ALUM. / COMP. |
| 38                | GLAZING SPACER                                                                                 | ALUM.         |
| 39                | GLAZING BEAD                                                                                   | PVC           |
| 40                | DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS                              | -             |
| 41                | DOOR SKIN (MIN. 0.075" THICK)                                                                  | FIBERGLASS    |
| 42                | TOP RAIL                                                                                       | CELLULAR PVC  |
| 43                | LATCH & HINGE STILE                                                                            | CELLULAR PVC  |
| 44                | LOCK REINFORCEMENT                                                                             | WOOD          |
| 45                | BOTTOM RAIL                                                                                    | CELLULAR PVC  |
| 46                | POLYURETHANE FOAM                                                                              | POLYURETHANE  |
| 47                | CONTINUOUS LATCH & HINGE STILE REINFORCEMENT                                                   | WOOD          |
| 49                | GLAZING COMPOUND DOW 995                                                                       | SILICONE      |
| 50                | SIDELITE PANEL - SEE SIDELITE PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS                      | -             |



August 3, 2020  
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 Registry No. 9813

PRODUCT: DOERS FIBERGLASS DOOR  
PART OR ASSEMBLY: BILL OF MATERIALS, GLAZING DETAIL & COMPONENTS

| NO. | DATE    | REVISIONS                    |
|-----|---------|------------------------------|
| 3   | 7/30/20 | UPDATE TO 7TH ED. (2020) FBC |
| 2   | 5/15/19 | ADD STEEL STUD ANCHORING     |
| 1   | 9/26/17 | UPDATE TO 6TH ED. (2017) FBC |

DATE: 09/22/15

SCALE: N.T.S.

DWG. BY: JK

CHK. BY: LFS

DRAWING NO.: FL-19007.3

SHEET 9 OF 9