



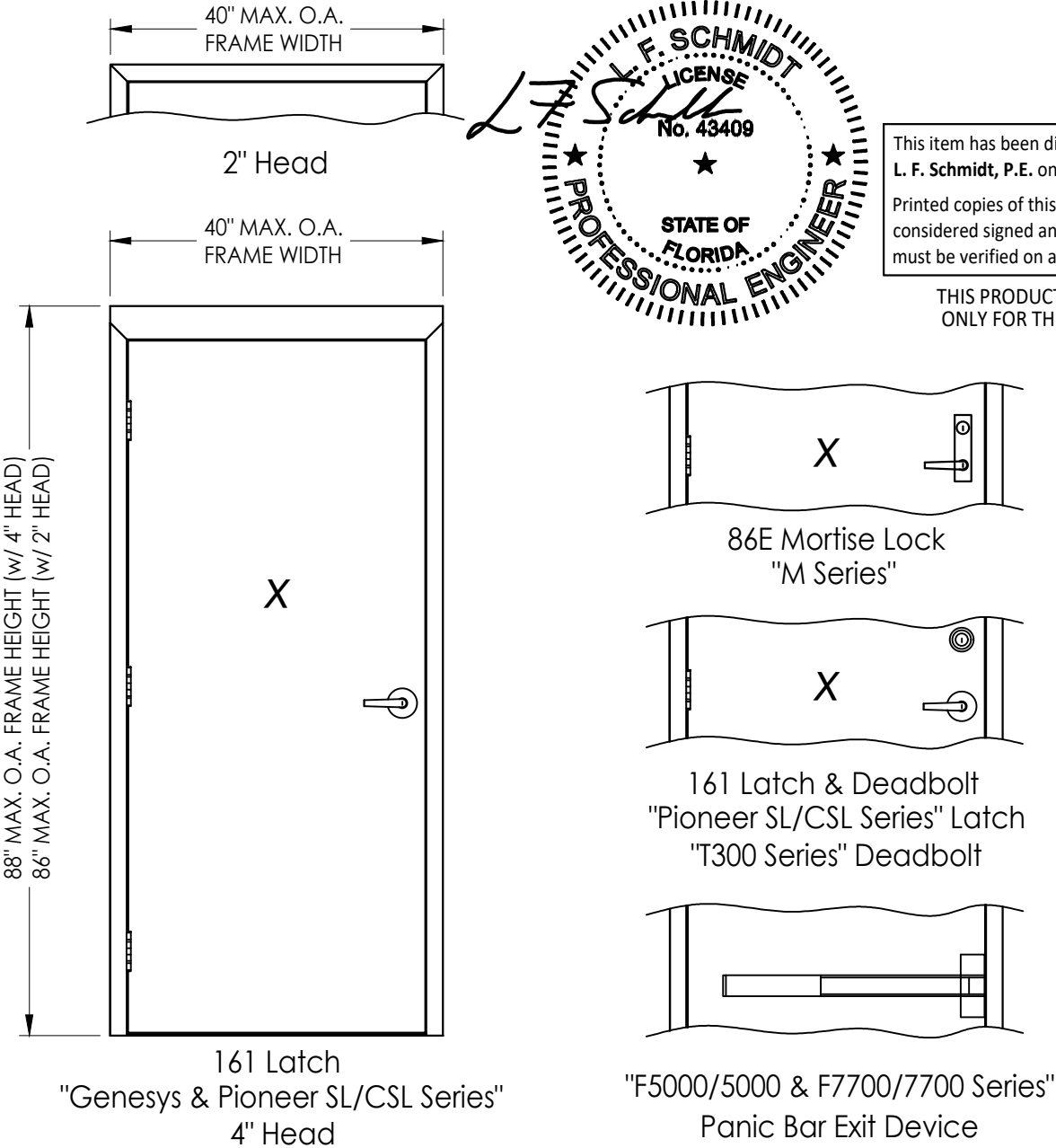
STEEL DOOR & FRAME SYSTEMS, INC.

DKS SERIES 1800  
STEEL COMMERCIAL SINGLE DOOR  
INSWING / OUTSWING  
"IMPACT"

GENERAL NOTES

1. This product has been evaluated and is in compliance with the 8th Edition (2023) 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 complies with FBC Sections 1609.1.2 & R301.2.1.2 and does not require an impact resistant covering. This product meets missile level "D" and excludes Wind Zone 4 as defined in ASTM E1996 and FBC Sections 1609.1.2.2 & R301.2.1.2.1.
4. This door achieves a Class I Stiffness classification per Section 8.2.2 of ANSI A250.13.
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                 | Horizontal cross sections                           |
| 4                 | Vertical cross sections                             |
| 5                 | Frame anchoring                                     |
| 6                 | Frame anchoring details                             |
| 7                 | Components                                          |
| 8                 | Bill of materials and components                    |



| MAX<br>FRAME<br>DIMENSION | LOCK TYPE                                              | DESIGN PRESSURE (PSF)<br>INSWING |          | DESIGN PRESSURE (PSF)<br>OUTSWING |          |
|---------------------------|--------------------------------------------------------|----------------------------------|----------|-----------------------------------|----------|
|                           |                                                        | POSITIVE                         | NEGATIVE | POSITIVE                          | NEGATIVE |
| 40.0" x 88.0"             | 161 LATCH<br>"Pioneer SL/CSL Series"                   | +55.0                            | -55.0    | +55.0                             | -55.0    |
| 40.0" x 88.0"             | 161 LATCH & DEADBOLT<br>"Pioneer SL/CSL & T300 Series" | +55.0                            | -55.0    | +55.0                             | -55.0    |
| 40.0" x 88.0"             | 161 LATCH<br>"Genesys Series"                          | +70.0                            | -70.0    | +70.0                             | -70.0    |
| 40.0" x 88.0"             | PANIC BAR EXIT DEVICE<br>"F5000/5000 Series"           | N/A                              | N/A      | +50.0                             | -50.0    |
| 40.0" x 88.0"             | PANIC BAR EXIT DEVICE<br>"F7700/7700 Series"           | N/A                              | N/A      | +70.0                             | -70.0    |
| 40.0" x 88.0"             | 86E Mortise Lock<br>"M Series"                         | +80.0                            | -80.0    | +80.0                             | -80.0    |

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

PRODUCT:  
DKS  
STEEL COMMERCIAL DOOR

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

DATE: 3/21/22

SCALE: N.T.S.

DWG. BY: LFS

CHK. BY: RW

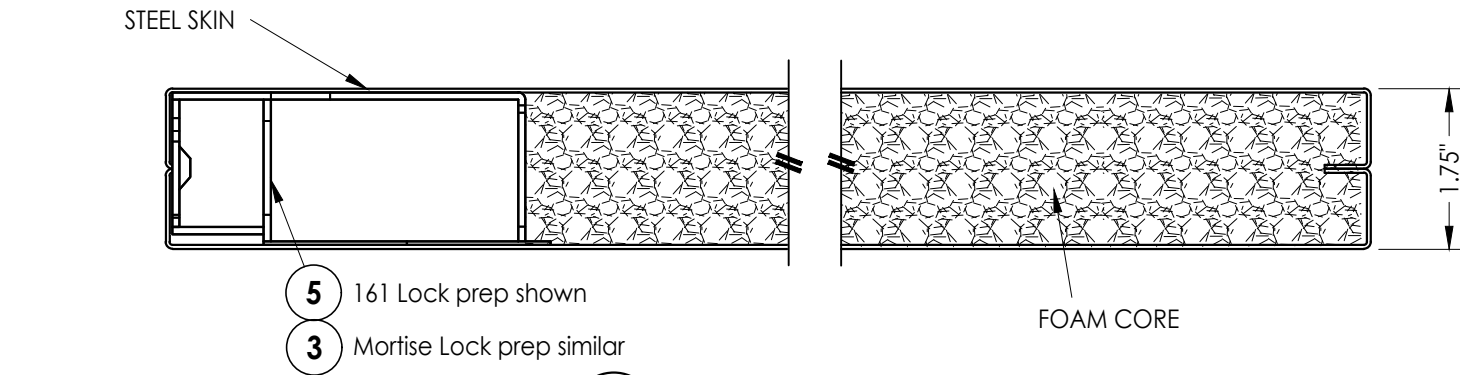
DRAWING NO.:  
FL-41130.3

SHEET 1 OF 8

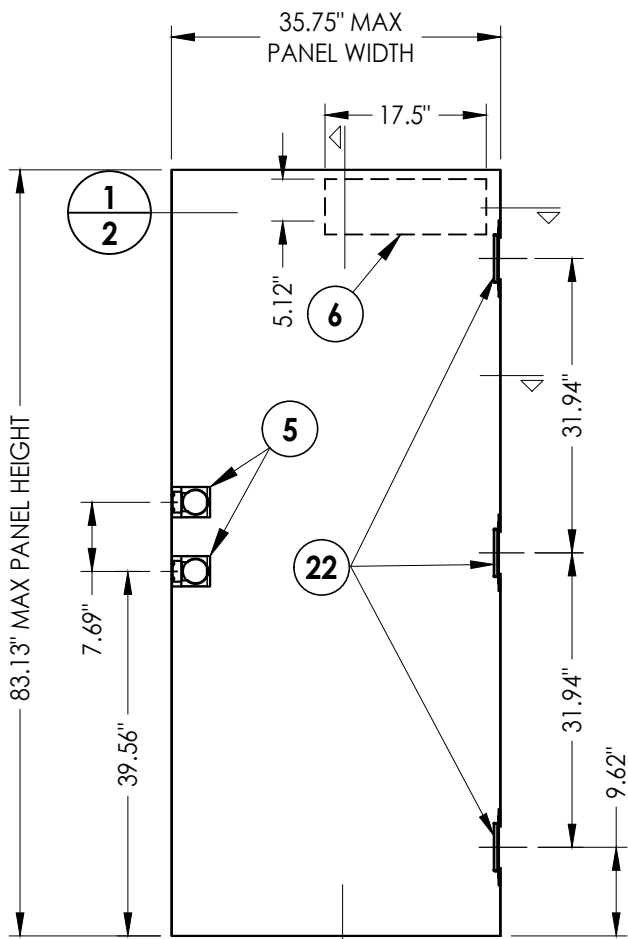
Building Consultants, Inc.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

REVISIONS

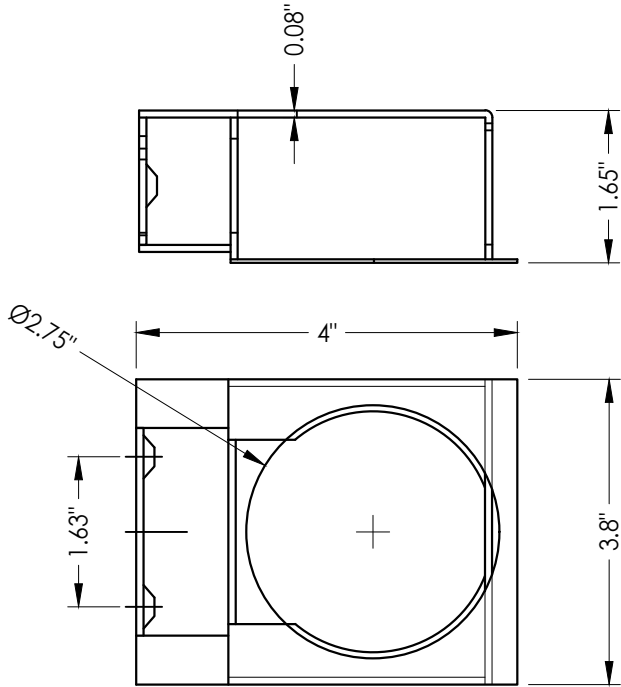
Z:\2023 FBC Drawings\DKS Steel Door & Frames Systems\FL-41130 R1\FL-41130.3-6.dwg



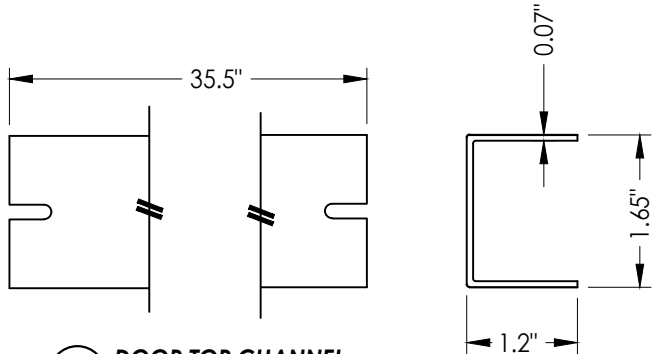
1  
2 **HORIZONTAL CROSS SECTION**



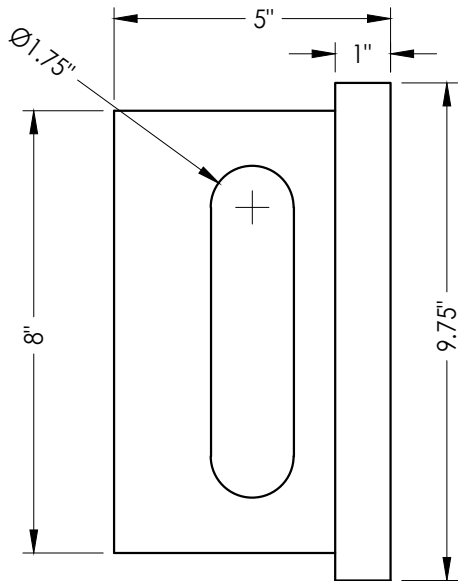
1  
2 **DKS STEEL DOOR PANEL**



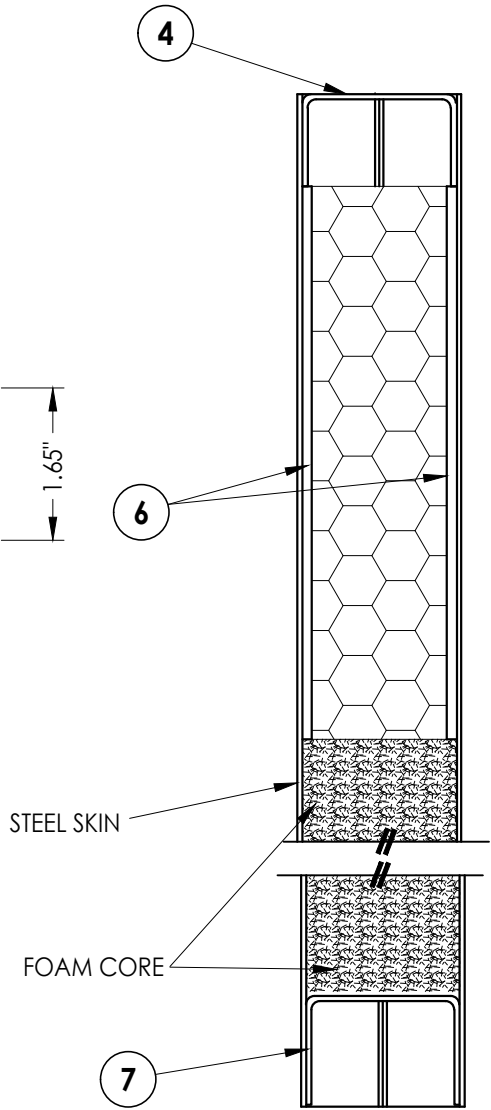
5 **STEEL LOCK BOX REINFORCEMENT**  
161 Lock Prep



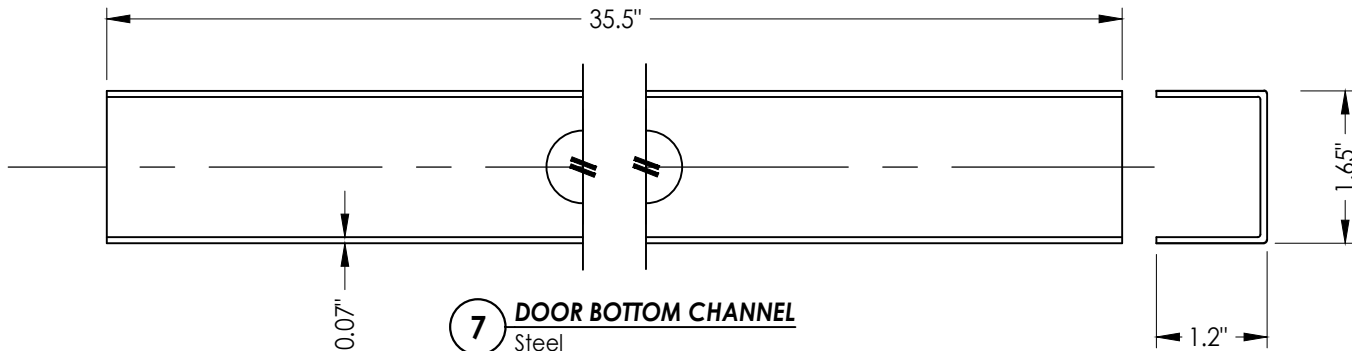
4 **DOOR TOP CHANNEL**  
Steel



3 **STEEL LOCK BOX REINFORCEMENT**  
Mortise Lock prep only



2  
2 **VERTICAL CROSS SECTION**



7 **DOOR BOTTOM CHANNEL**  
Steel

STEEL DOOR SKIN (18 GA.): MIN. 0.045" THK.  
STEEL GRADE: ASTM A1008 GALV. STEEL (Fy = 33,000 PSI MIN.)  
CORE MATERIAL: EPS FOAM (POLYSTYRENE - 1.0 PCF MIN. DENSITY)

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

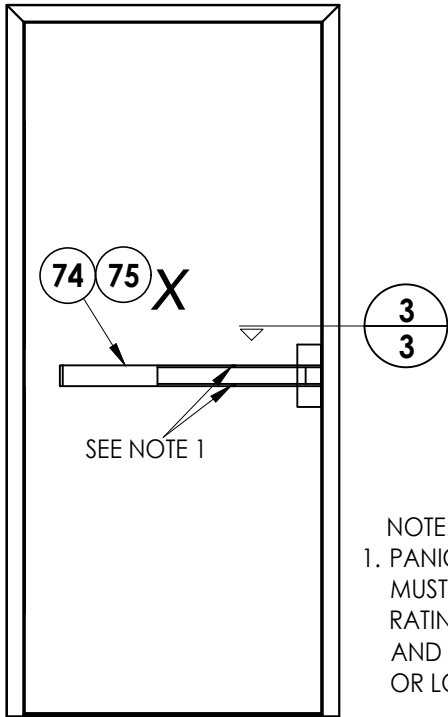
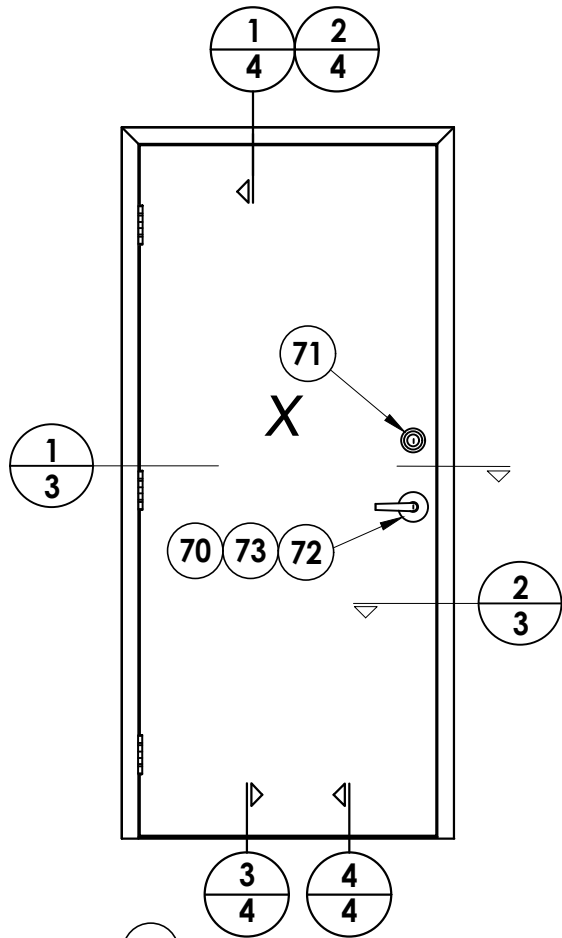
PRODUCT: DKS  
STEEL COMMERCIAL DOOR

PART OR ASSEMBLY:  
DOOR PANEL DETAILS

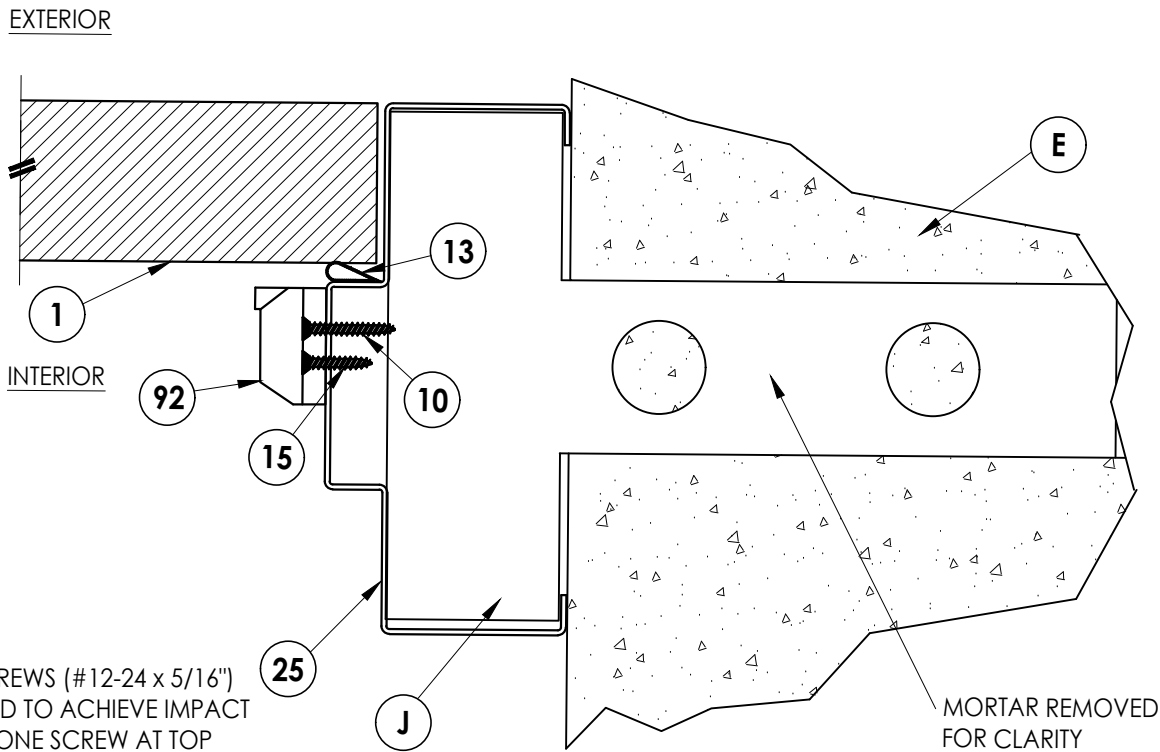
| NO. | DATE    | UPDATE TO | 8TH ED. (2023) | FBC     | LFS     | BY      |
|-----|---------|-----------|----------------|---------|---------|---------|
| 1   | 7/01/23 | 7/01/23   | 7/01/23        | 7/01/23 | 7/01/23 | 7/01/23 |

DATE: 3/21/22  
SCALE: N.T.S.  
DWG. BY: LFS  
CHK. BY: RW  
DRAWING NO.: FL-41130.3  
SHEET 2 OF 8

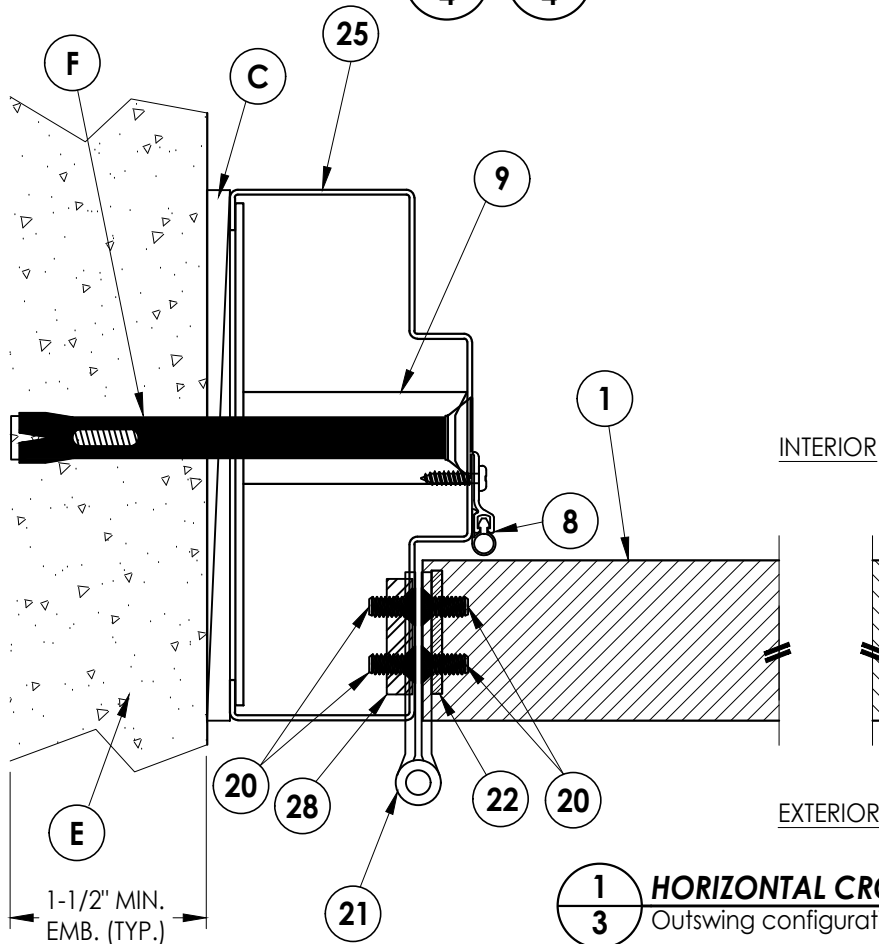
Z:\2023 FBC Drawings\DKS Steel Door & Frames Systems\FL-41130 R1\FL-41130.3-6.dwg



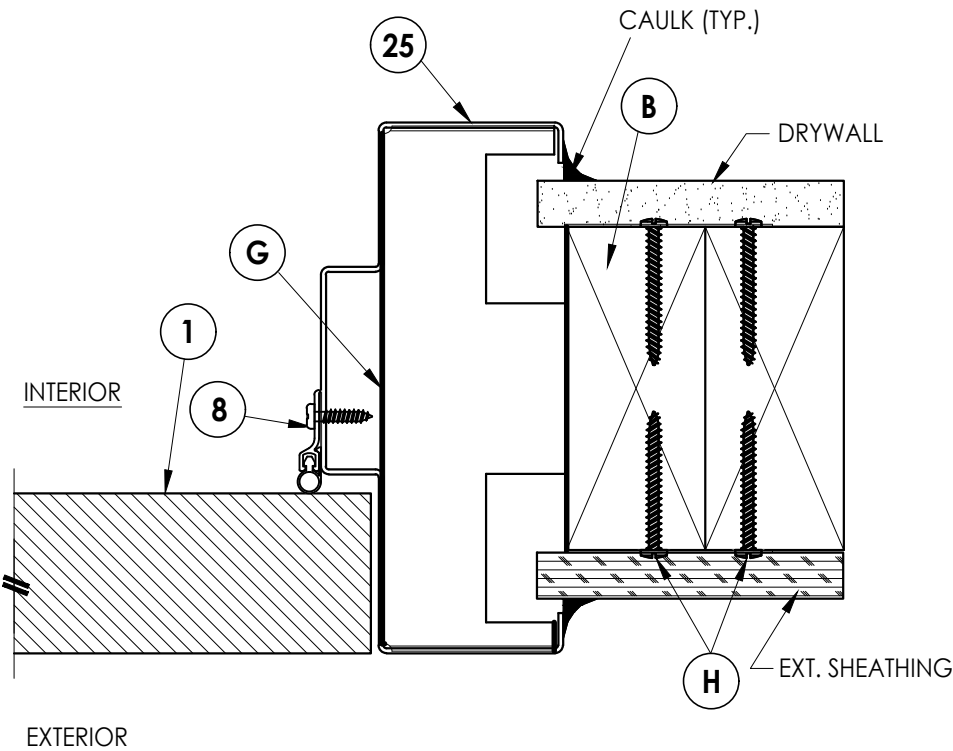
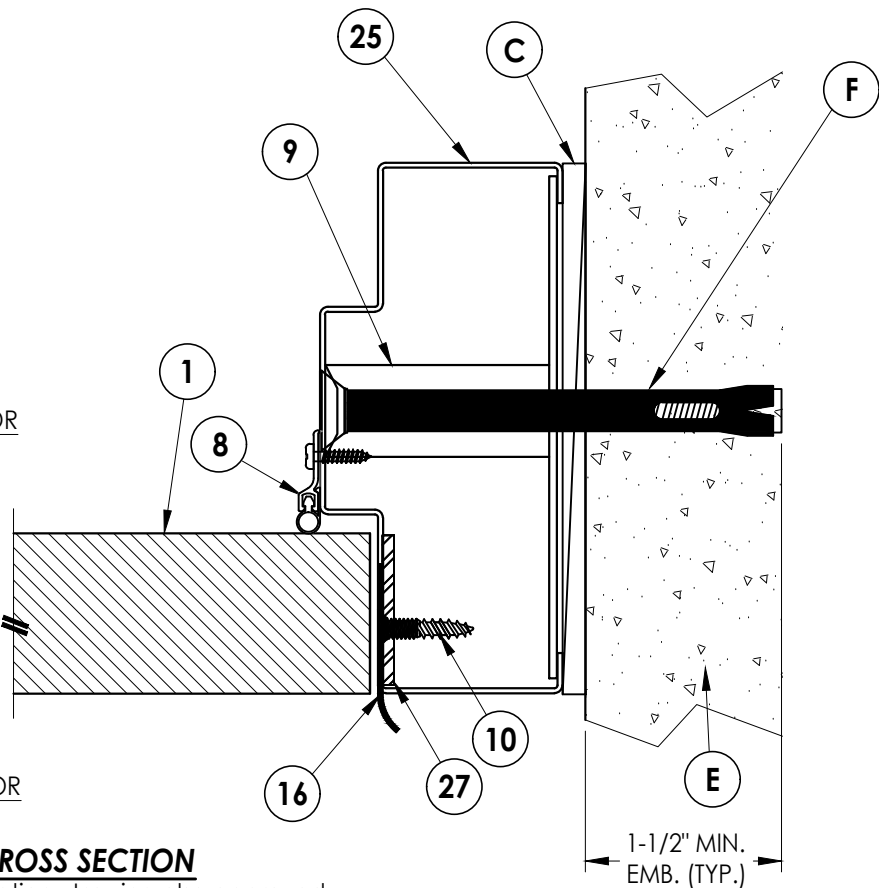
NOTE:  
1. PANIC BAR SET SCREWS (#12-24 x 5/16")  
MUST BE ACTIVATED TO ACHIEVE IMPACT  
RATING. LOCATE ONE SCREW AT TOP  
AND BOTTOM AT CENTER OF PUSH RAIL  
OR LOCATE ONE SCREW AT EACH END OF BAR.



**3 HORIZONTAL CROSS SECTION**  
Masonry Construction  
Masonry "Tee" Anchor



**1 HORIZONTAL CROSS SECTION**  
Outswing configuration - Inswing also approved



**2 HORIZONTAL CROSS SECTION**  
2X Stud Construction  
Wood Stud Anchor

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

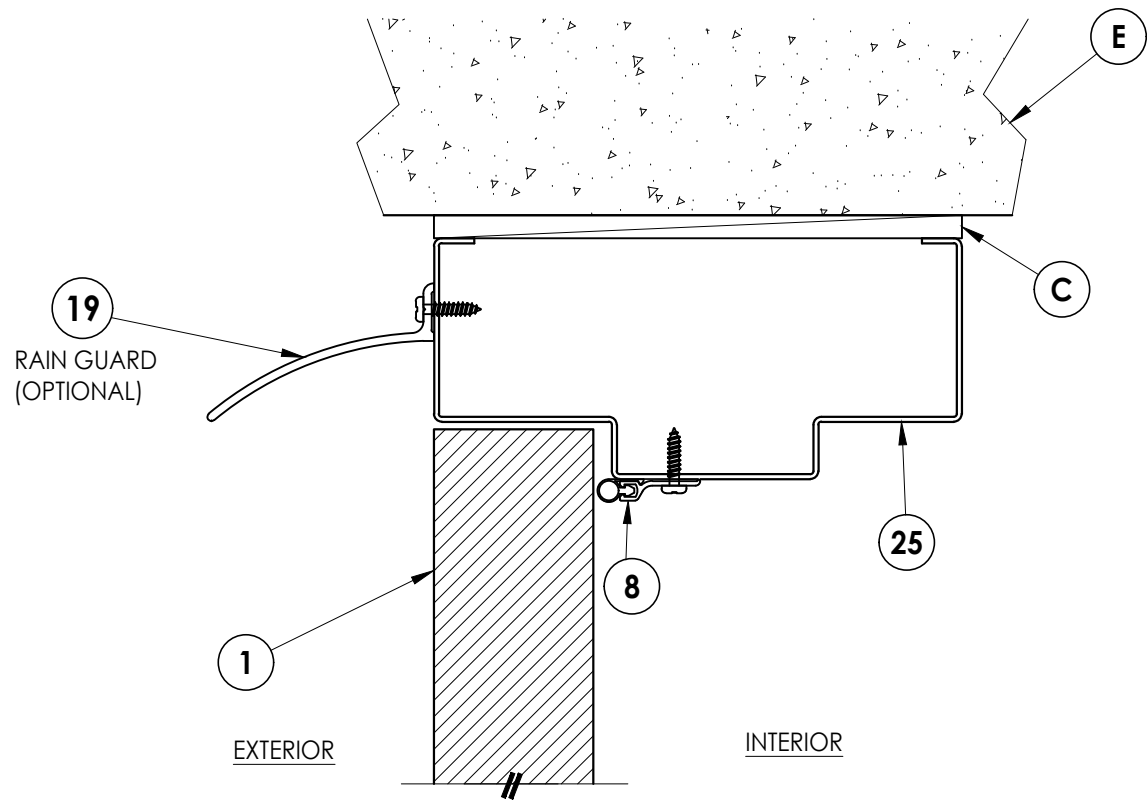
**BUILDING CONSULTANTS, INC.**  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813

PRODUCT:  
DKS  
STEEL COMMERCIAL DOOR

PART OR ASSEMBLY:  
HORIZONTAL CROSS SECTIONS

| NO. | DATE    | BY                |
|-----|---------|-------------------|
| 1   | 7/01/23 | FBC               |
| 2   | 7/01/23 | UPDATE TO 8TH ED. |
| 3   | 7/01/23 | 7/01/23           |

DATE: 3/21/22  
SCALE: N.T.S.  
DWG. BY: LFS  
CHK. BY: RW  
DRAWING NO.: FL-41130.3  
SHEET 3 OF 8



**1** **VERTICAL CROSS SECTION**  
**4** Outswing configuration - Inswing also approved

**2** **VERTICAL CROSS SECTION**  
**4** Outswing configuration - Inswing also approved

### 3 VERTICAL CROSS SECTION

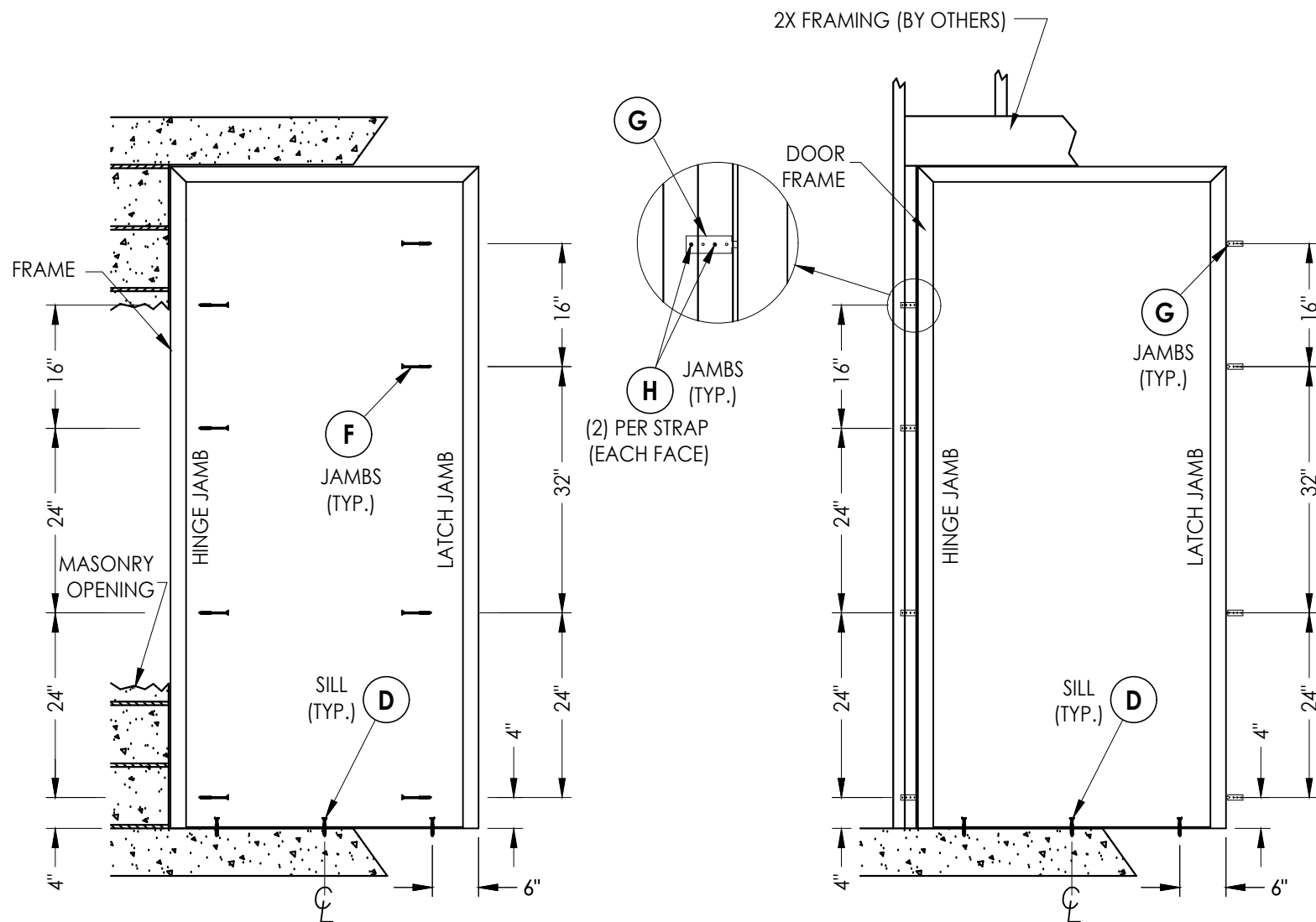
#### 4 Inswing configuration

**4 VERTICAL CROSS SECTION**  
 4 Outswing configuration

[illegible]

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

***R<sup>qW</sup>*** BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33595  
Phone No.: 813.659.9197  
FBPE Registry No. 9813



## FRAME ANCHORING

CONCRETE ANCHOR NOTES:

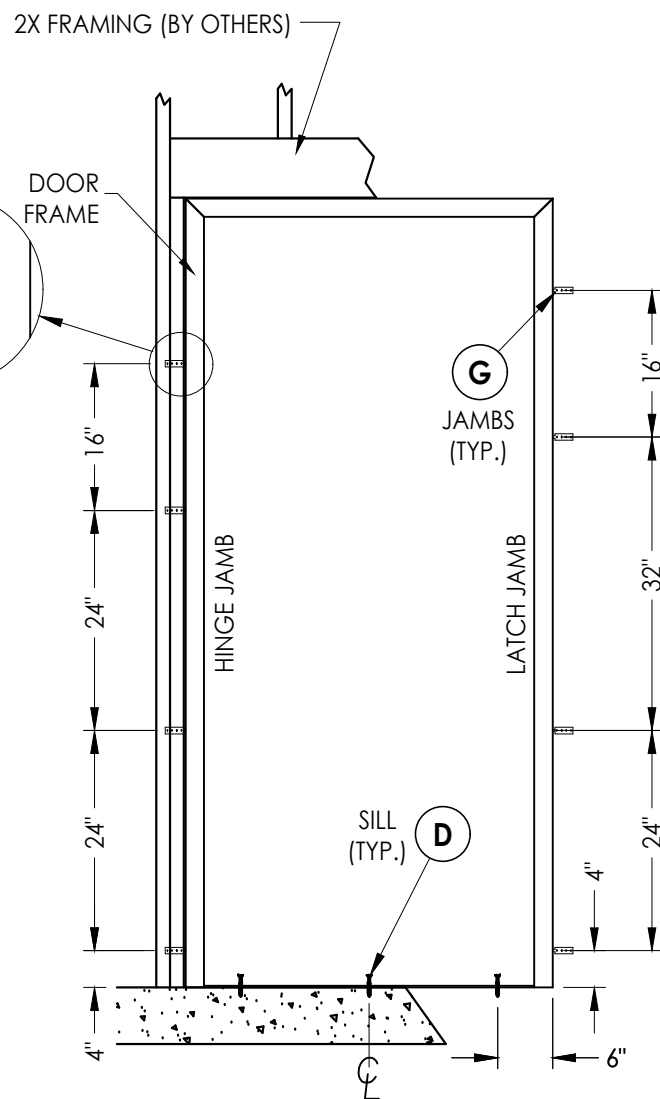
1. Substitution of equal concrete screws from a different supplier may have different edge distance and center distance requirements.
2. Concrete screw locations at the corners may be adjusted to maintain the minimum edge distance to mortar joints. If concrete screw locations noted as "MAX. ON CENTER" must be adjusted to maintain the minimum edge distance to mortar joints, additional concrete screws may be required to ensure the maximum on center dimension is 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"        | 1-3/4"         | 2-1/2"                         | 4"                                |
| DeWALT ULTRACON®       | 1/4"        | 1-3/4"         | 1"                             | 4"                                |
| DYNABOLT SLEEVE ANCHOR | 3/8"        | 1-1/2"         | 2-1/4"                         | 4-1/2"                            |

4. Embedment may be through 1-1/4" face shell of hollow block.

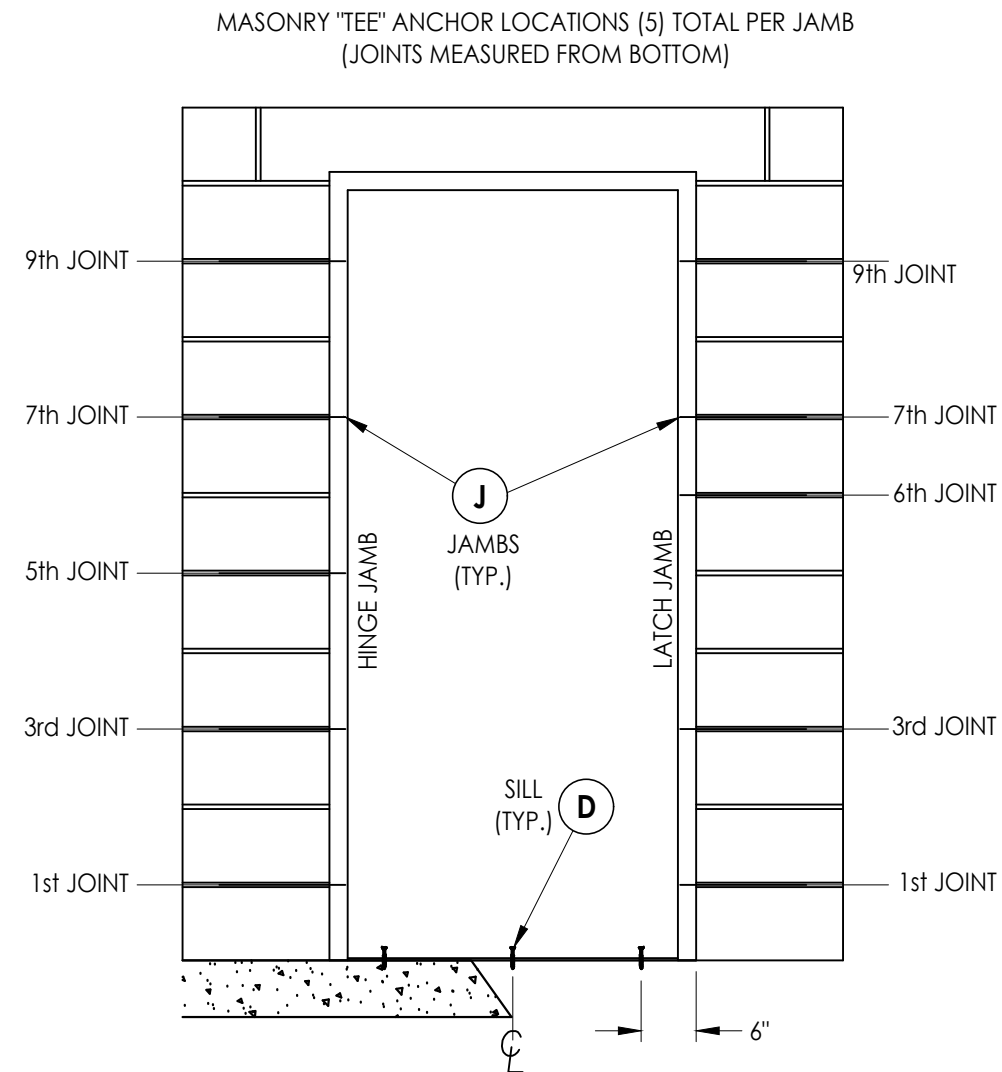
WOOD SCREW INSTALLATION NOTES:

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



### FRAME ANCHORING

2X Stud Construction  
Strap Anchors



## FRAME ANCHORING

---

Masonry Construction  
Masonry "Tee" Anchors

[illegible]

DATE: 3/21/22

SCALE: N.T.S.

DWG. BY: *LFS*

CHK. BY: RW

DRAWING NO.:

FL-41130.3

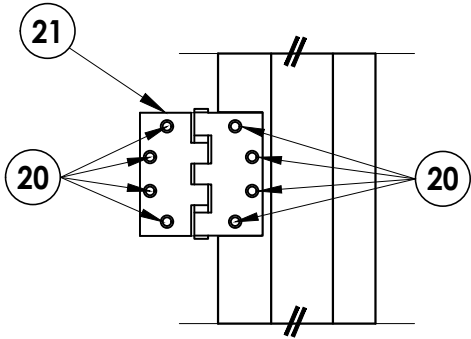
SHEET 5 OF 8

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

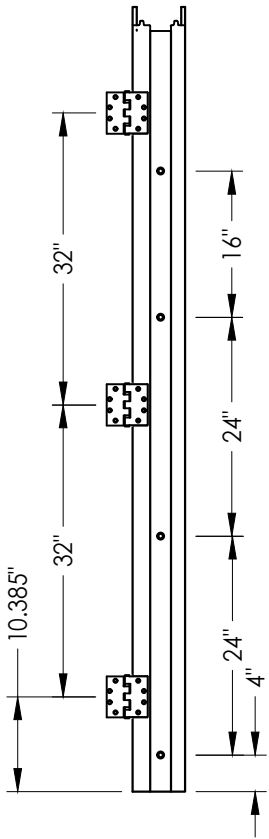
*RW* BUILDING CONSULTANTS, INC.  
P.O. Box 230, Valrico, FL 33486  
Phone No.: 813.659.9197

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

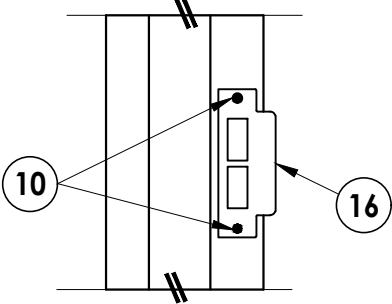
Z:\2023 FBC Drawings\DKS Steel Door & Frames Systems\FL-41130 R1\FL-41130.3-6.dwg



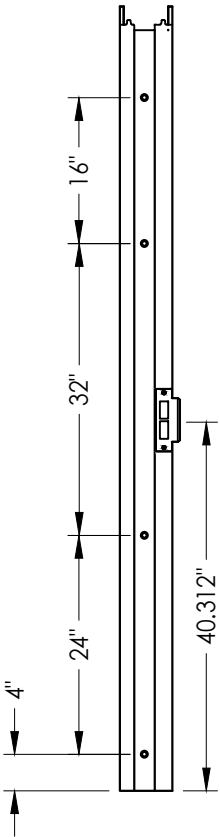
HINGE DETAIL



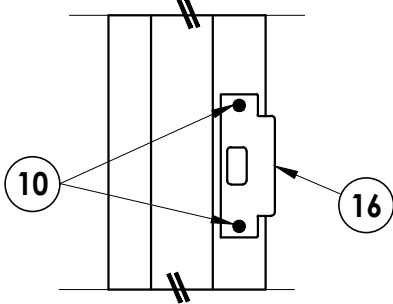
HINGE JAMB



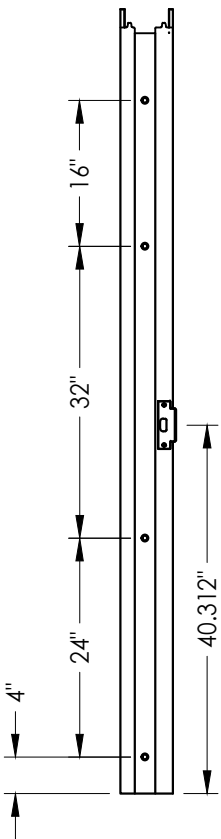
LATCH DETAIL  
Mortise Lock



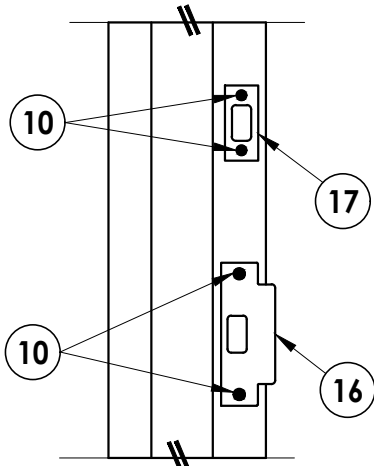
STRIKE JAMB  
Mortise Lock



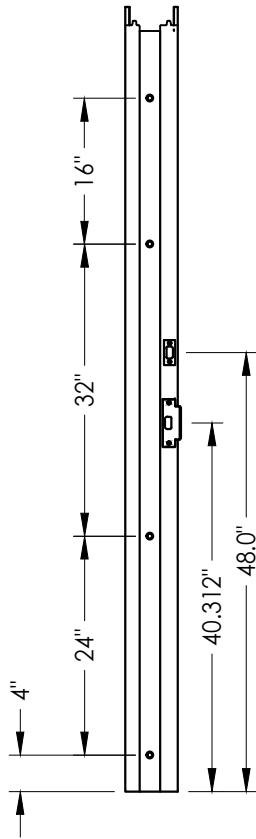
LATCH DETAIL  
161 Latch



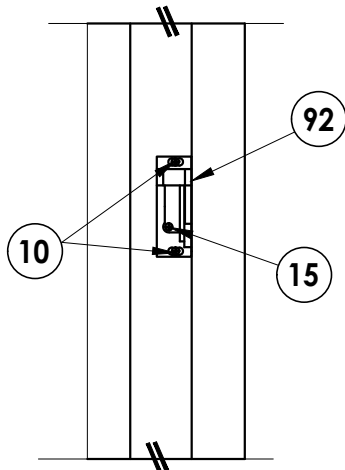
STRIKE JAMB  
161 Latch



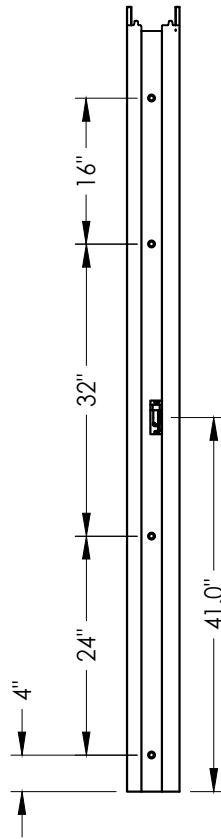
LATCH & DEADBOLT DETAIL  
161 Latch & Deadbolt



STRIKE JAMB  
161 Latch & Deadbolt



LATCH DETAIL  
Panic Bar



STRIKE JAMB  
Panic Bar

|              |            |
|--------------|------------|
| DATE:        | 3/21/22    |
| SCALE:       | N.T.S.     |
| DWG. BY:     | LFS        |
| CHK. BY:     | RW         |
| DRAWING NO.: | FL-41130.3 |
| SHEET        | 6 OF 8     |

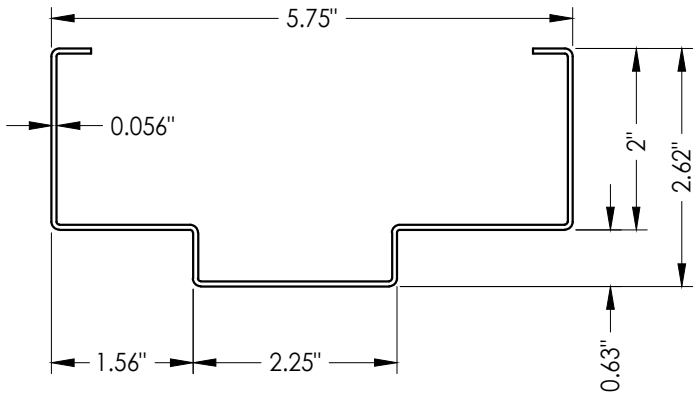
| NO. | DATE    | REVISIONS                    |
|-----|---------|------------------------------|
| 1   | 7/01/23 | UPDATE TO 8TH ED. (2023) FBC |
|     |         | LFS                          |
|     |         | BY                           |

|                   |                              |
|-------------------|------------------------------|
| PRODUCT:          | DKS<br>STEEL COMMERCIAL DOOR |
| PART OR ASSEMBLY: | FRAME ANCHORING<br>DETAILS   |

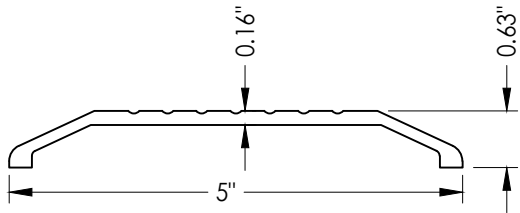
Documents Prepared By:  
Lyndon F. Schmidt  
P.E. No. 43409

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

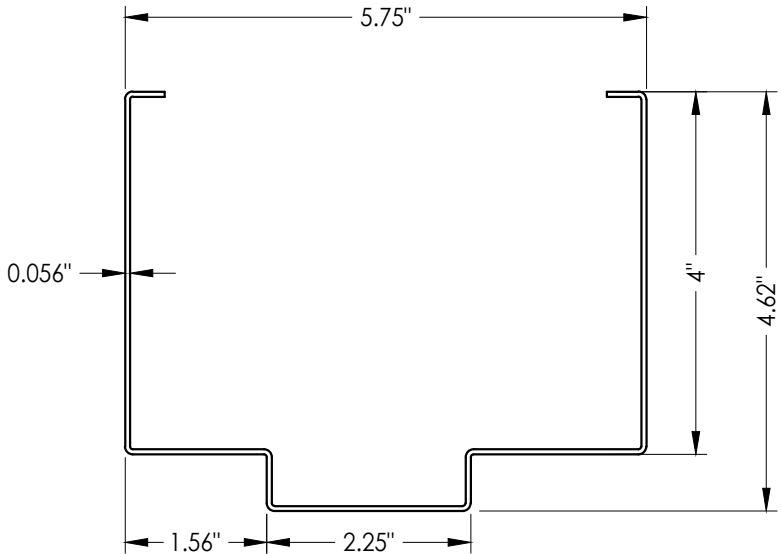
Z:\2023 FBC Drawings\DKS Steel Door & Frames Systems\FL-41130 R1\FL-41130.3-6.dwg



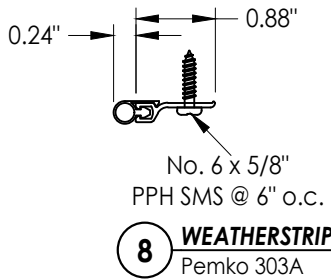
26 HOLLOW METAL FRAME  
2" HEAD



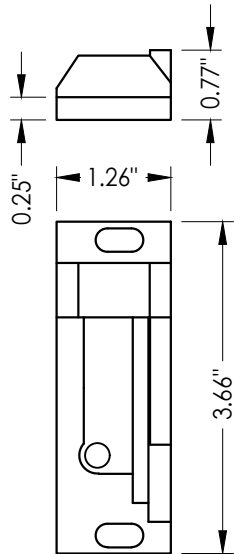
40 THRESHOLD  
Pemko 156



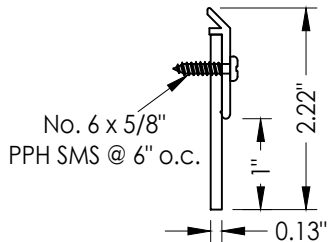
26 HOLLOW METAL FRAME  
4" HEAD



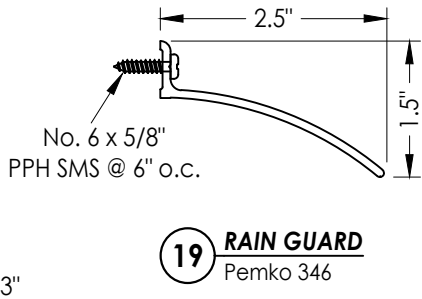
8 WEATHERSTRIP  
Pemko 303A



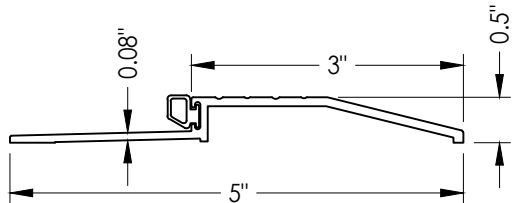
92 PANIC BAR LATCH STRIKE PLATE  
@ Jamb



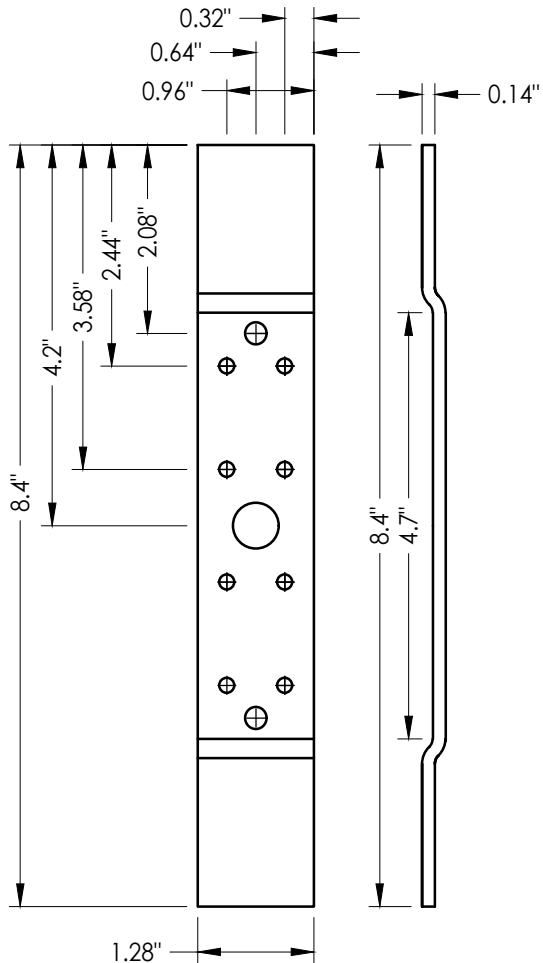
11 DOOR SWEEP  
Pemko 3151



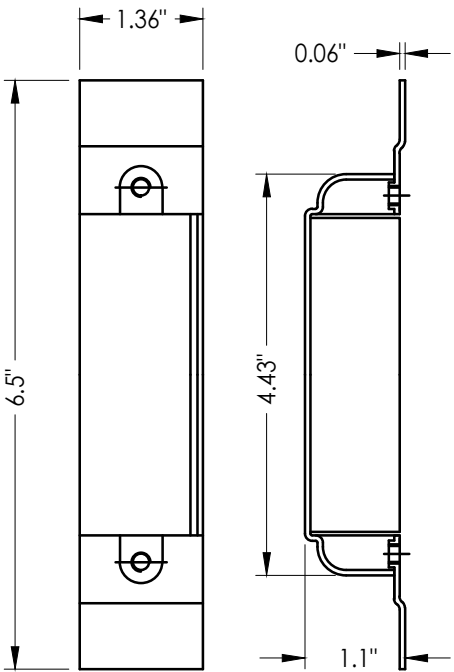
19 RAIN GUARD  
Pemko 346



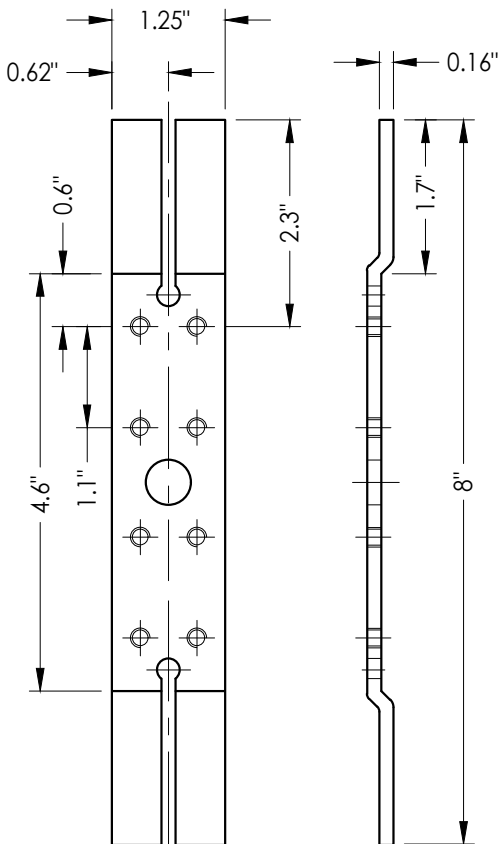
42 THRESHOLD  
Pemko 2001P



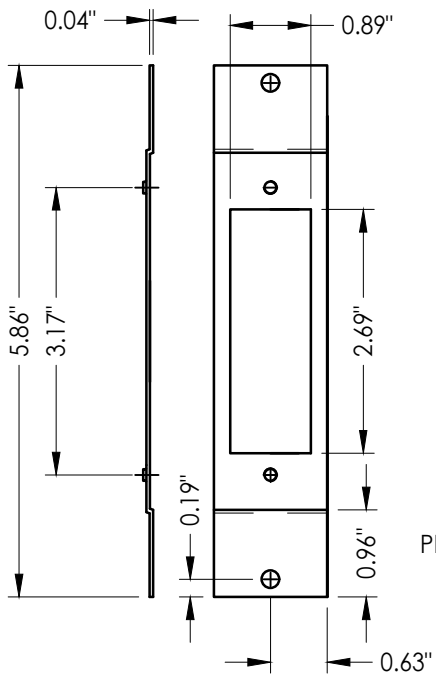
28 FRAME HINGE REINFORCEMENT



30 DOOR LATCH REINFORCEMENT  
Mortise Lock only



22 DOOR HINGE REINFORCEMENT



27 FRAME LATCH STRIKE REINFORCEMENT

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:  
DKS  
STEEL COMMERCIAL DOOR

PART OR ASSEMBLY:  
COMPONENTS

| NO. | DATE    | DESCRIPTION                  | BY  |
|-----|---------|------------------------------|-----|
| 1   | 7/01/23 | UPDATE TO 8TH ED. (2023) FBC | LFS |

DATE: 3/21/22

SCALE: N.T.S.

DWG. BY: LFS

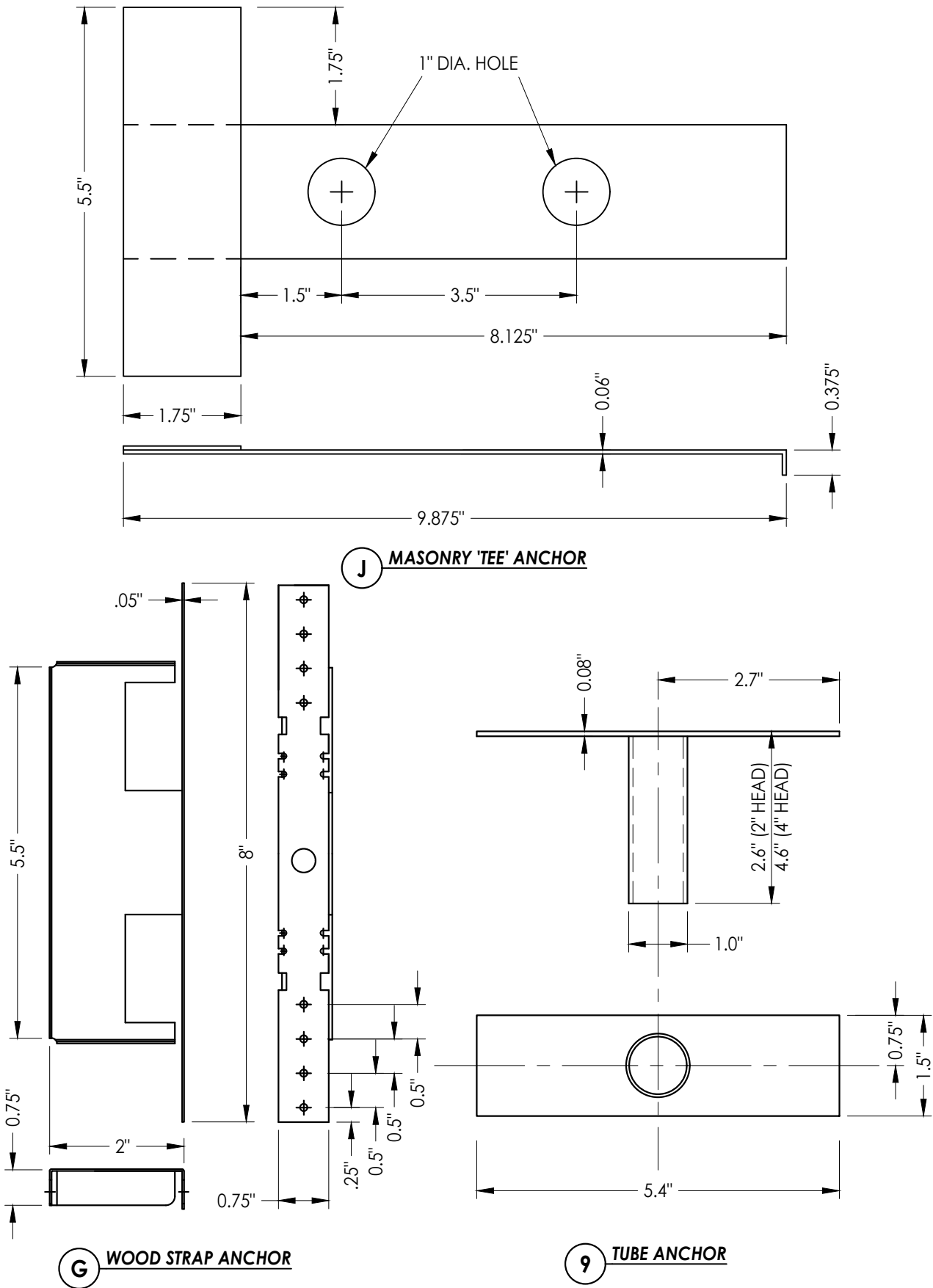
CHK. BY: RW

DRAWING NO.: FL-41130.3

SHEET 7 OF 8

Z:\2023 FBC Drawings\DKS Steel Door & Frames Systems\FL-41130 R1\FL-41130.3-6.dwg

| BILL OF MATERIALS |                                                                                                |          |
|-------------------|------------------------------------------------------------------------------------------------|----------|
| ITEM #            | DESCRIPTION                                                                                    | MATERIAL |
| B                 | 2 X 4 FRAMING (SG >= 0.55)                                                                     | WOOD     |
| C                 | 1/4" MAX. SHIM SPACE                                                                           | -        |
| D                 | 1/4" X 2-3/4" PFH DeWALT 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                 | 3/8" PFH ITW DYNABOLT SLEEVE ANCHOR                                                            | STEEL    |
| G                 | WOOD STRAP ANCHOR                                                                              | STEEL    |
| H                 | #8 X 1-1/2" PH WOOD SCREW (1-3/8" MIN. EMBEDMENT)                                              | STEEL    |
| J                 | MASONRY "TEE" ANCHOR                                                                           | STEEL    |
| 1                 | DKS DOOR PANEL                                                                                 | -        |
| 4                 | DOOR TOP CHANNEL                                                                               | STEEL    |
| 5                 | LOCK BOX REINFORCEMENT                                                                         | STEEL    |
| 6                 | CLOSER REINFORCEMENT (11 GA.)                                                                  | STEEL    |
| 7                 | DOOR BOTTOM CHANNEL                                                                            | STEEL    |
| 8                 | WEATHERSTRIP - PEMKO 303A                                                                      | NEOPRENE |
| 9                 | TUBE ANCHOR                                                                                    | STEEL    |
| 10                | #12-24 X 1" COMBINATION MACHINE / WOOD SCREW                                                   | STEEL    |
| 11                | DOOR SWEEP- PEMKO 3151                                                                         | PVC      |
| 13                | WEATHERSTRIP - COMPRESSION BULB 1/4" X 1/2" (PEMKO S88)                                        | NEOPRENE |
| 15                | #8-24 X 3/4" COMBINATION MACHINE / WOOD SCREW                                                  | STEEL    |
| 16                | ANSI LATCH STRIKE                                                                              | STEEL    |
| 17                | DEAD BOLT STRIKE                                                                               | STEEL    |
| 19                | RAIN GUARD (PEMKO 346)                                                                         | ALUM.    |
| 20                | #12-24 X 1/2" PFH MACHINE SCREW                                                                | STEEL    |
| 21                | 4-1/2" X 4-1/2" X 0.125" TEMPLATE HINGE                                                        | STEEL    |
| 22                | DOOR HINGE REINFORCEMENT                                                                       | STEEL    |
| 25                | HOLLOW FRAME 2"                                                                                | STEEL    |
| 26                | HOLLOW FRAME 4" HEAD                                                                           | STEEL    |
| 27                | FRAME LATCH STRIKE REINFORCEMENT                                                               | STEEL    |
| 28                | FRAME HINGE REINFORCEMENT                                                                      | STEEL    |
| 30                | FRAME LATCH STRIKE REINFORCEMENT (MORTISE LOCK)                                                | STEEL    |
| 40                | INSWING THRESHOLD - PEMKO 156                                                                  | ALUM     |
| 42                | OUTSWING THRESHOLD - PEMKO 2001P                                                               | ALUM     |
| 70                | CAL-ROYAL M SERIES MORTISE LOCK                                                                | -        |
| 71                | CAL-ROYAL T300 SERIES DEADBOLT                                                                 | -        |
| 72                | CAL-ROYAL PIONEER SL/CSL SERIES CYLINDRICAL LOCK                                               | -        |
| 73                | CAL-ROYAL GENESYS SERIES CYLINDRICAL LOCK                                                      | -        |
| 74                | CAL-ROYAL F7700/7700 SERIES RIM TYPE PANIC BAR                                                 | -        |
| 75                | CAL-ROYAL F5000/5000 SERIES RIM TYPE PANIC BAR                                                 | -        |
| 92                | PANIC BAR LATCH STRIKE PLATE                                                                   | STEEL    |



|                                                               |  |  |  |                                                                                                                    |  |     |  |
|---------------------------------------------------------------|--|--|--|--------------------------------------------------------------------------------------------------------------------|--|-----|--|
| Documents Prepared By:<br>Lyndon F. Schmidt<br>P.E. No. 43409 |  |  |  | BUILDING CONSULTANTS, INC.<br>P.O. Box 230, Valrico, FL 33595<br>Phone No.: 813.659.9197<br>FBPE Registry No. 9813 |  |     |  |
| PRODUCT:<br><br>DKS<br>STEEL COMMERCIAL DOOR                  |  |  |  | PART OR ASSEMBLY:<br><br>BILL OF MATERIALS AND<br>COMPONENTS                                                       |  |     |  |
|                                                               |  |  |  |                                                                                                                    |  | LFS |  |
|                                                               |  |  |  |                                                                                                                    |  | BY  |  |
|                                                               |  |  |  |                                                                                                                    |  |     |  |
|                                                               |  |  |  |                                                                                                                    |  |     |  |
|                                                               |  |  |  |                                                                                                                    |  |     |  |
|                                                               |  |  |  |                                                                                                                    |  |     |  |
| DATE: 3/21/22                                                 |  |  |  | UPDATE TO 8TH ED. (2023) FBC                                                                                       |  |     |  |
| SCALE: N.T.S.                                                 |  |  |  | NO. DATE                                                                                                           |  |     |  |
| DWG. BY: LFS                                                  |  |  |  |                                                                                                                    |  |     |  |
| CHK. BY: RW                                                   |  |  |  |                                                                                                                    |  |     |  |
| DRAWING NO.: FL-41130.3                                       |  |  |  |                                                                                                                    |  |     |  |
| SHEET 8 OF 8                                                  |  |  |  | REVISIONS                                                                                                          |  |     |  |