

**GENERAL NOTES:**

1- ROLL-UP DOOR SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR CODE COMPLIANCE IN ACCORDANCE WITH THE 2017 (6th EDITION) OF THE FLORIDA BUILDING CODE.  
 DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTIONS 1620 (HVHZ) AND 1609 (NHVHZ) OF THE ABOVE MENTIONED CODE, FOR A WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE THIS PRODUCT WILL BE INSTALLED AND FOR A DIRECTIONALITY FACTOR  $K_d=0.85$ , USING ASCE 7-10 AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON NOTE 1.  
 IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-10 SHALL BE FIRST REDUCED TO A.S.D. DESIGN WIND LOADS BY MULTIPLYING THEM BY 0.6 IN ORDER TO COMPARE THESE W/ MAX. (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON NOTE 1.  
 ROLL-UP DOOR'S ADEQUACY FOR IMPACT AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTIONS 1626 (HVHZ) AND 1609.1.2 (NHVHZ) OF THE ABOVE MENTIONED CODE AS PER BLACK WATER TESTING, INC. REPORT # BT-ROD-18-001, PER TAS-201, TAS-202 & TAS-203 PROTOCOLS.

**MAX. A.S.D. DESIGN PRESSURE RATING: +70.0, -70.0 PSF FOR SLAT ①**

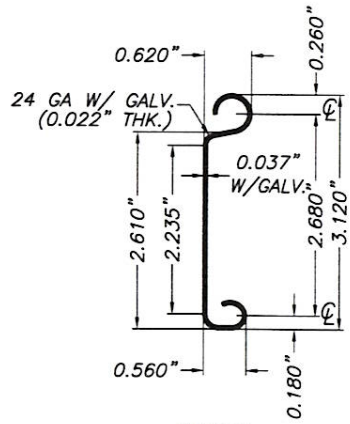
- 2-SLAT AND ROLLED FORMED GUIDE TO BE A.S.T.M. A-653 GR 40 STRUCTURAL QUALITY STEEL WITH MIN.  $F_y = 44.7$  ksi. AND G-90 GALVANIZING PER A.S.T.M. A-653, OR A.I.S.I. 304 SERIES STAINLESS STEEL MANUFACTURED WITH A MINIMUM YIELD STRENGTH OF  $F_y = 44.7$  ksi.
- 3- ALL STEEL ANGLES TO BE A.S.T.M. A-36 DESIGNATION, SHOP PRIMED AGAINST CORROSION PRIOR TO INSTALLATION. PAINT TO CONFORM TO FEDERAL SPECIFICATIONS CORRESPONDING TO RED OXIDE PAINT OR EQUAL.
- 4- WINDLOCKS TO BE "MALLEABLE IRON"  $F_y = 42$  ksi OR A.I.S.I. DESIGNATION STEEL W/  $F_y = 40$  ksi., CHROME OR NICKEL PLATED.
- 5- ALL ASSEMBLY BOLTS TO BE S.A.E. GRADE 2 CADMIUM PLATED OR GALVANIZED STEEL.
- 6- STEEL WINDBARS TO BE A.S.T.M. A-36 DESIGNATION, SHOP PRIMED PRIOR TO INSTALLATION. PAINT TO CONFORM TO FEDERAL SPECIFICATIONS CORRESPONDING TO RED OXIDE PAINT OR EQUAL.
- 7- HOOD TO BE 24 GA. A.S.T.M. A-653 DESIGNATION G-90 FINISH TYPE COATING.
- 8- ALL RIVETS TO BE A.I.S.I. C1006 SPHERODIZED ANNEALED ALUMINUM LOW CARBON COLD HEADING QUALITY STEEL, ZINC PLATED, W/ 55.0 ksi. MINIMUM TENSILE STRENGTH, AS MANUFACTURED BY UNIVERSAL RIVET, INC.
- 9- CONCRETE ANCHORS TO BE AS PER MANUFACTURERS INDICATED ON SHEET 6, AND SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER. STEEL FASTENERS TO BE AS MANUFACTURED BY ELCO CONSTRUCTION PRODUCTS AND SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.
- 10- ALL WELDING TO CONFORM TO AMERICAN WELDING SOCIETY'S AWS D1.1 REGULATIONS. USE A.W.S A5.1 OR A5.5 E60XX ELECTRODES MIN. 3/16" FILLET SIZE.
- 11- INSULATION MATERIAL SHALL BE EPS-EXPANDED POLYSTYRENE INSULATION, MANUFACTURED BY DYPLAST PRODUCTS LLC. W/ MIAMI DADE COUNTY APPROVAL.
- 12- THIS DOOR MAY BE INSTALLED WITH SLATS CONCAVE SIDE FACING OUTSIDE OR INSIDE OF BUILDING.
- 13- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE EXISTING STRUCTURE IS DESIGNED TO SUPPORT  $V_x$  AND  $V_y$  FORCES AT BOTH JAMBS. SEE SCHEDULE ON SHEET 6, FOR  $V_x$  &  $V_y$  VALUES.
- 14- ROLL-UP MECHANISM NOT PART OF THIS APPROVAL.
- 15- (A) THIS P.E.D. PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; I.E. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.  
 (B) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS P.E.D. PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.  
 (C) THIS P.E.D. WILL BE CONSIDERED INVALID IF MODIFIED.  
 (D) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER, SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.  
 (E) ORIGINAL P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.
- 16- DOOR MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT DOOR. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABELING TO COMPLY WITH SECTION 1709.5.2.1.1 OF THE FLORIDA BUILDING CODE.

THIS DRAWING SHALL ONLY BE USED TO OBTAIN PERMITS IN THE STATE OF FLORIDA

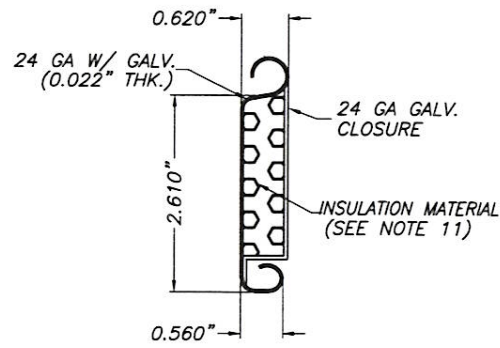
P.E. SEAL/SIGNATURE/DATE

| FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)   |             |      |  |             |                     |
|---|-------------|------|--|-------------|---------------------|
| ©2018 TILTECO, INC.   |             |      | <b>16'-0" WIDE, 24 GAGE SLAT ROLL-UP DOOR</b>  |             | F.R.L.<br>DRAWN BY: |
| TILLIT TESTING & ENGINEERING COMPANY<br>6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166<br>Phone : (305)871-1530 . Fax : (305)871-1531<br>EB-0006719<br>WALTER A. TILLIT Jr. P.E.<br>FLORIDA Lic. # 44167 |             |      | <b>XOEZ IMPORT &amp; EXPORT, INC.</b><br>dba.RollingDoors.com<br>7214 NW 78th TERRACE<br>MEDLEY, FL 33166<br>PHONE: (305)885-7590 EMAIL: info@rollingdoors.com |             | 04/30/18<br>DATE:   |
|   |             |      | 18-051<br>DRAWING No.  |             |                     |
| REV. NO   | DESCRIPTION | DATE | REV. No  | DESCRIPTION | DATE                |
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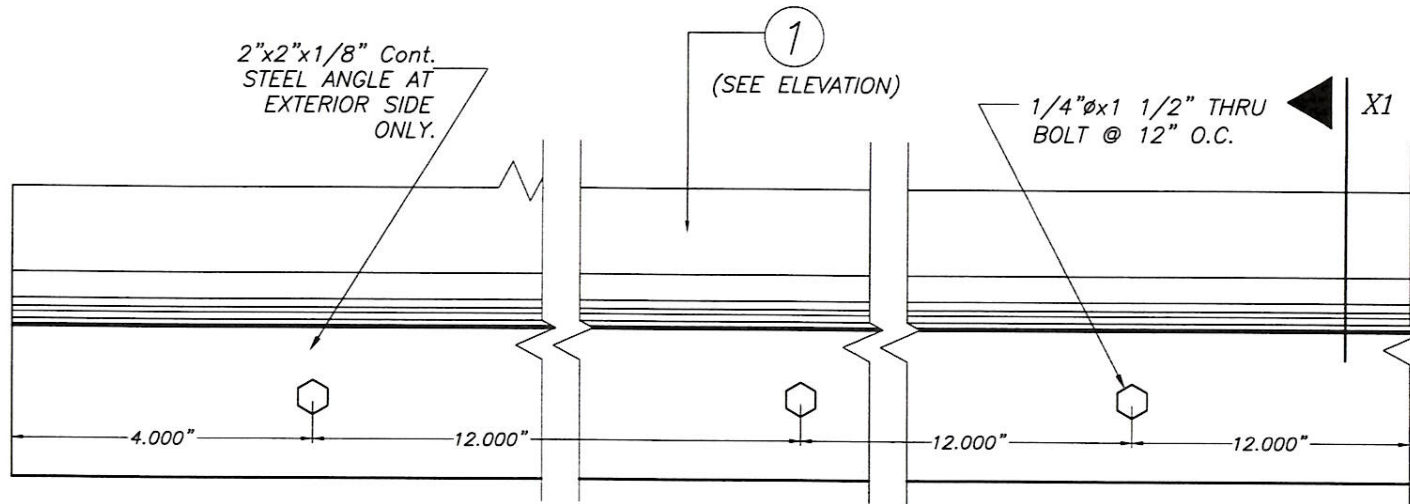
**PLAIN**



**INSULATED**

**1 FLAT SOLID SLAT**

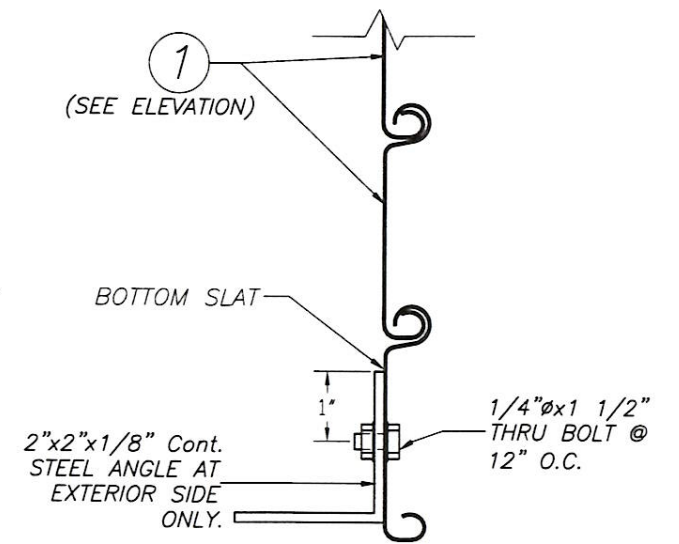
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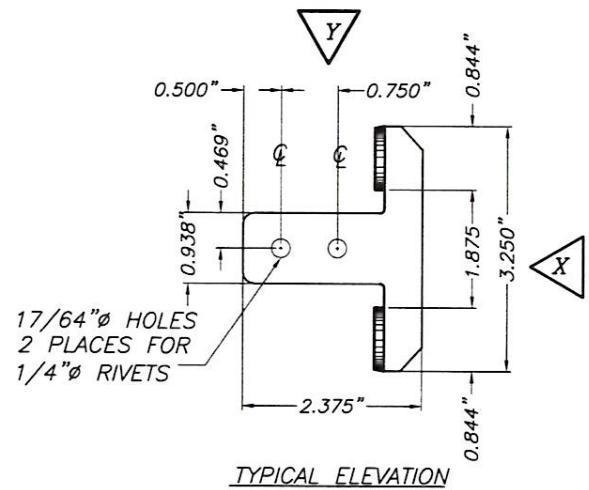
**ELEVATION**

**2 BOTTOM BAR**

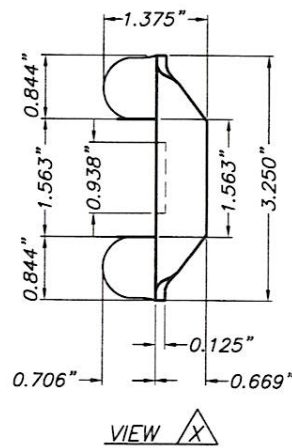
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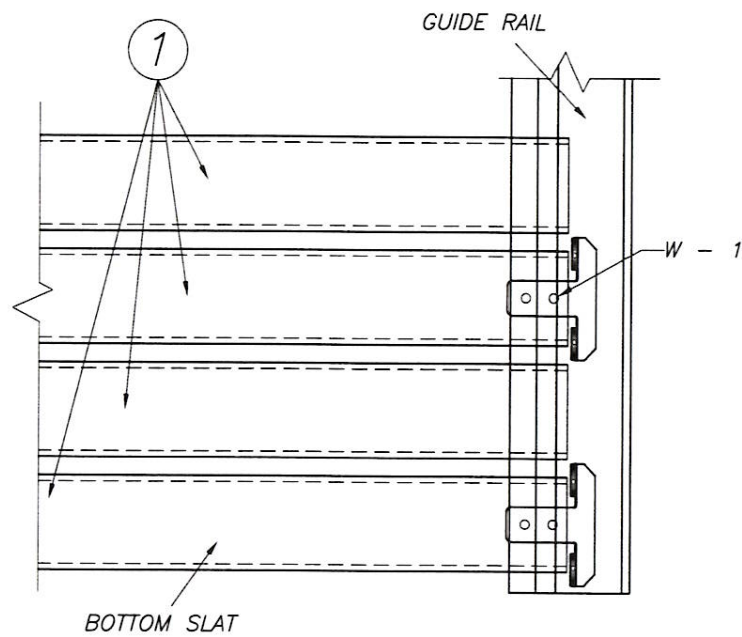
**SECTION XI**



**TYPICAL ELEVATION**



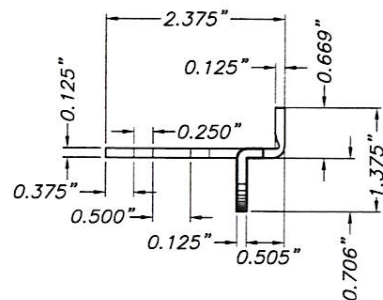
**VIEW X**



**BOTTOM SLAT**

**DETAIL 1 (elevation)**

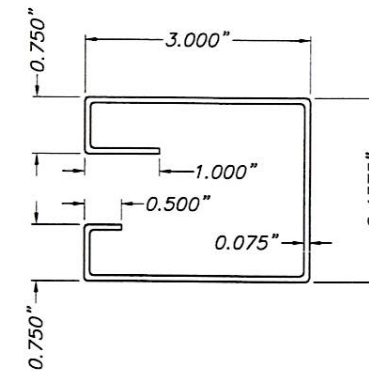
SCALE : N.T.S



**VIEW Y**

**3 TYPICAL WINDLOCK W - 1 DETAIL**

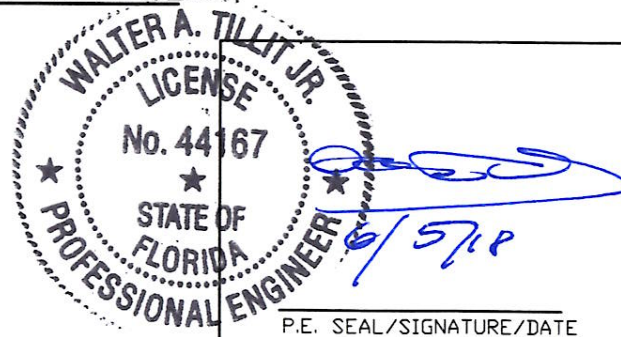
SCALE : N.T.S



**4 ROLLFORMED GUIDE**

SCALE : N.T.S

**COMPONENTS**



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EB-0006719  
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16'-0" WIDE, 24 GAGE SLAT ROLL-UP DOOR

XOEZ IMPORT & EXPORT, INC.

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MEDLEY, FL 33166

PHONE: (305)885-7590 EMAIL: info@rollingdoors.com

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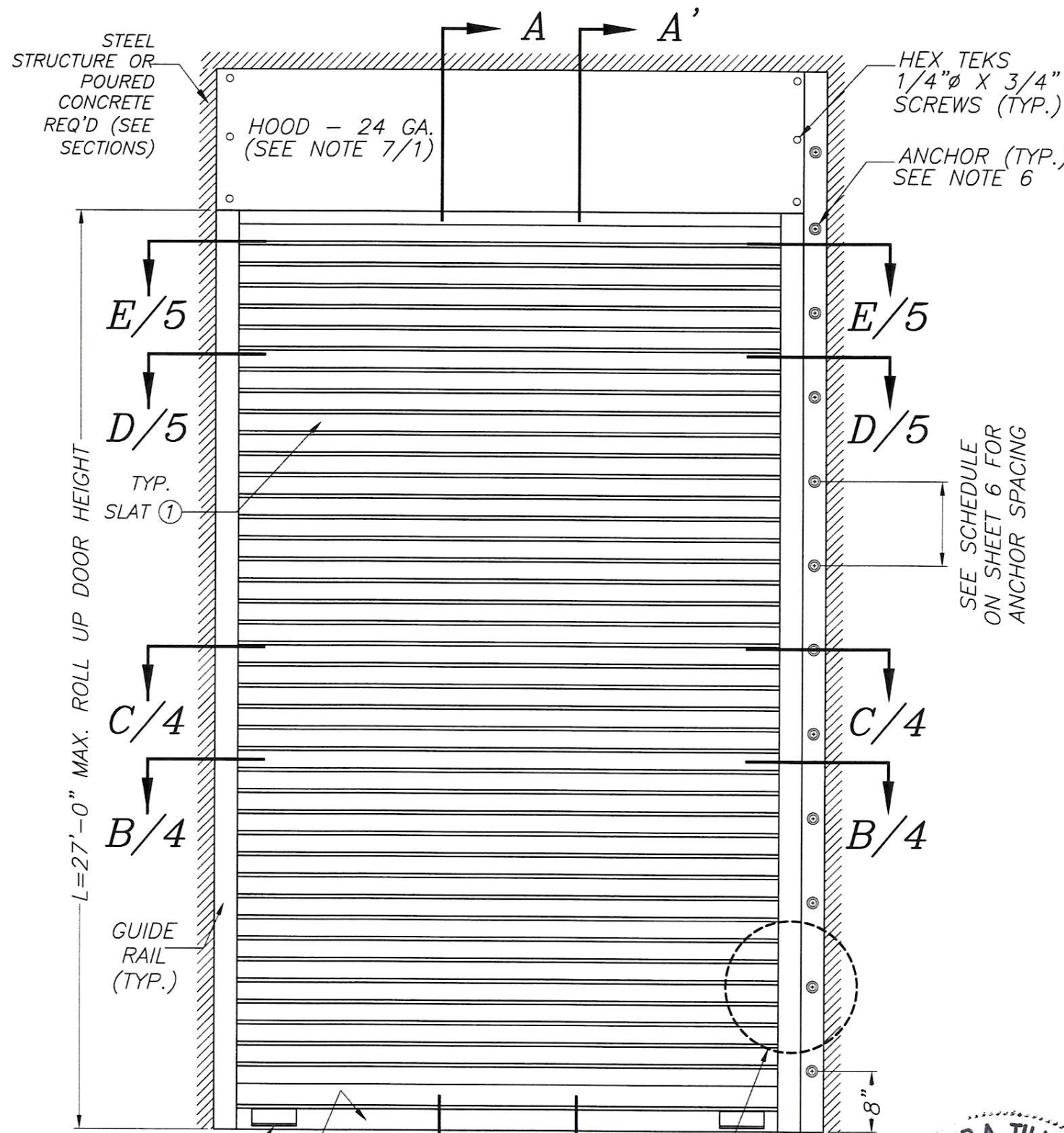
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SHEET 2 OF 6





**TYPICAL DOOR ELEVATION**

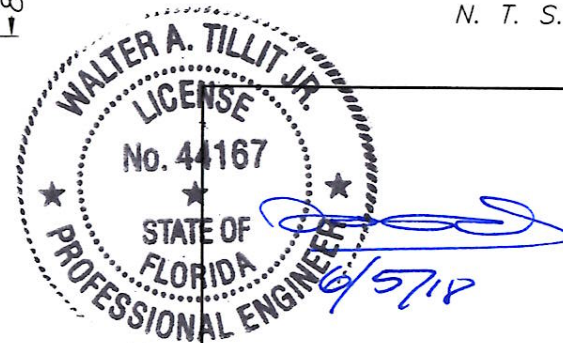
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**SECTION A-A**

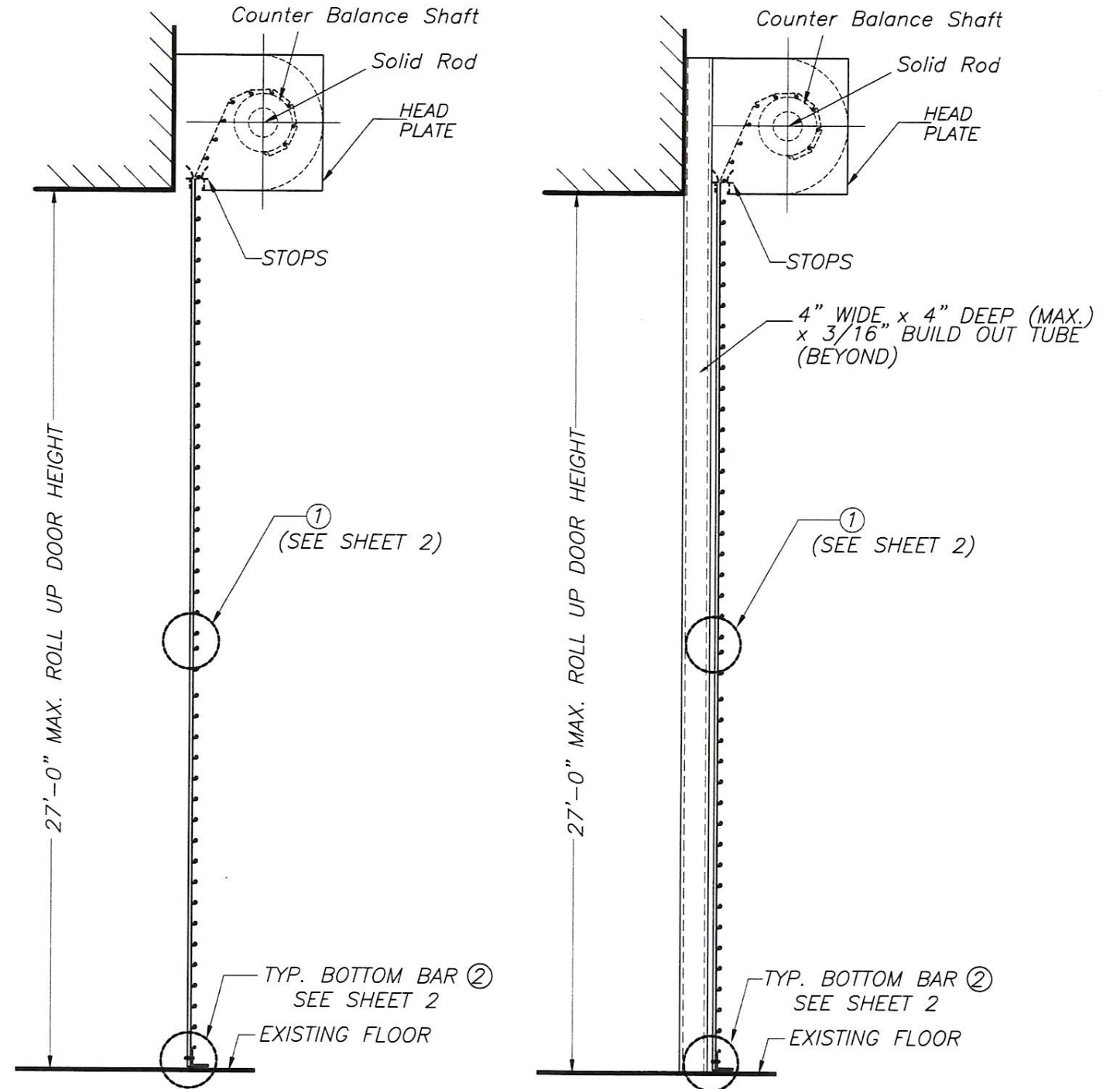
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**SECTION A'-A'**

N. T. S.



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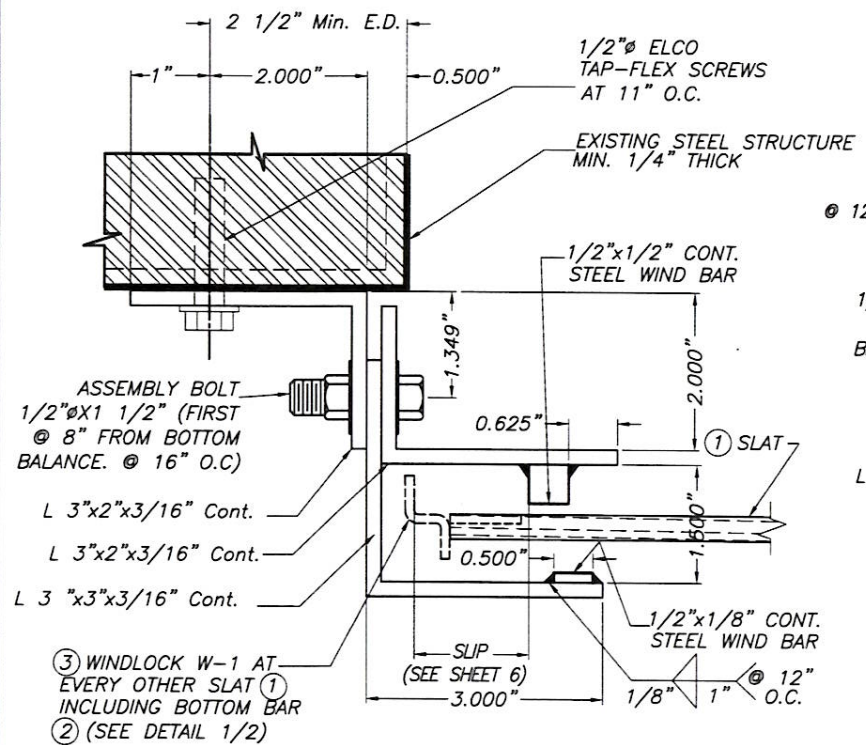
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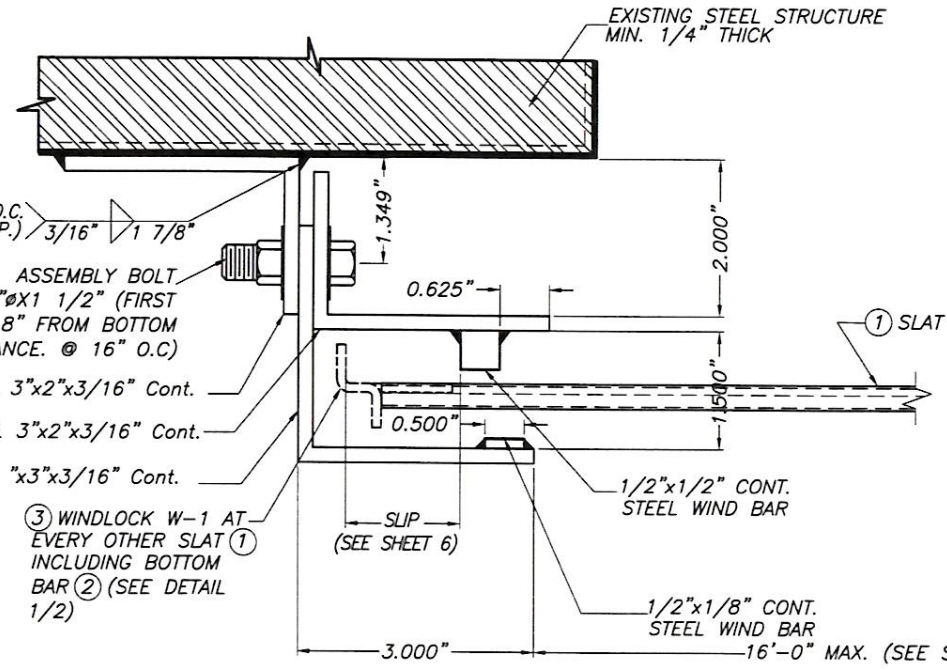
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SHEET 3 OF 6

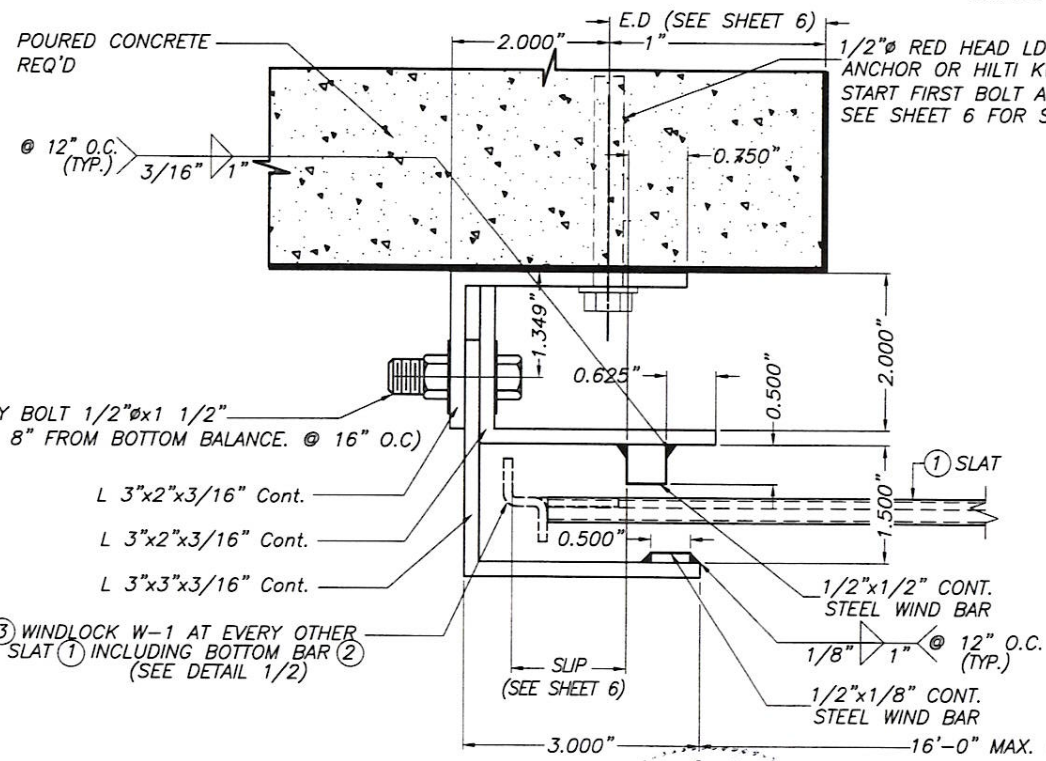
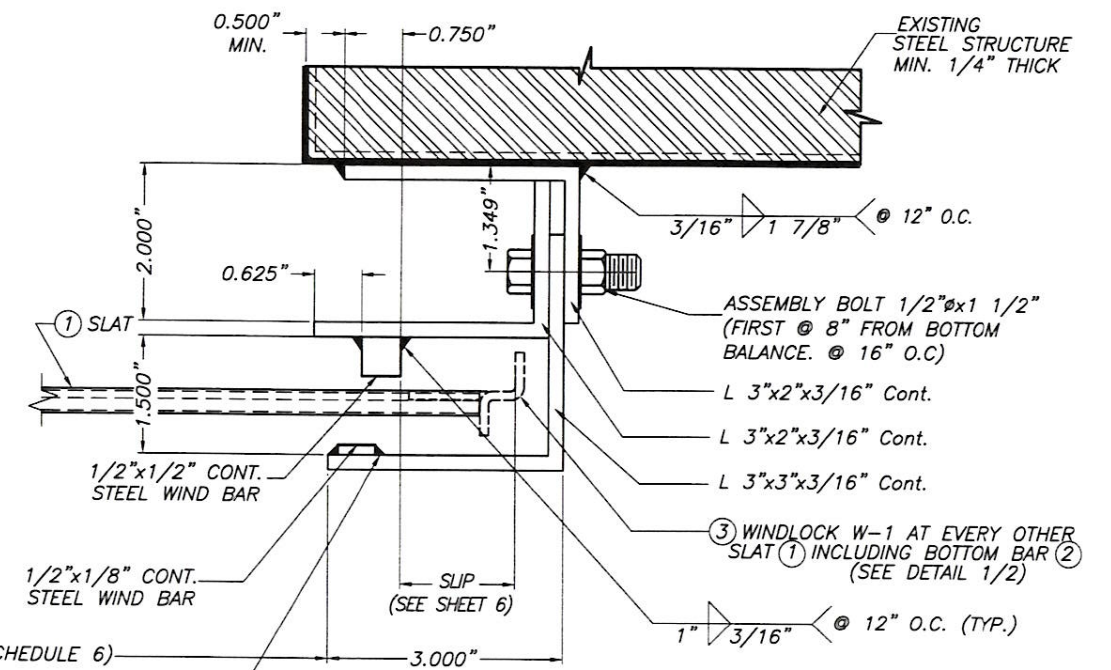




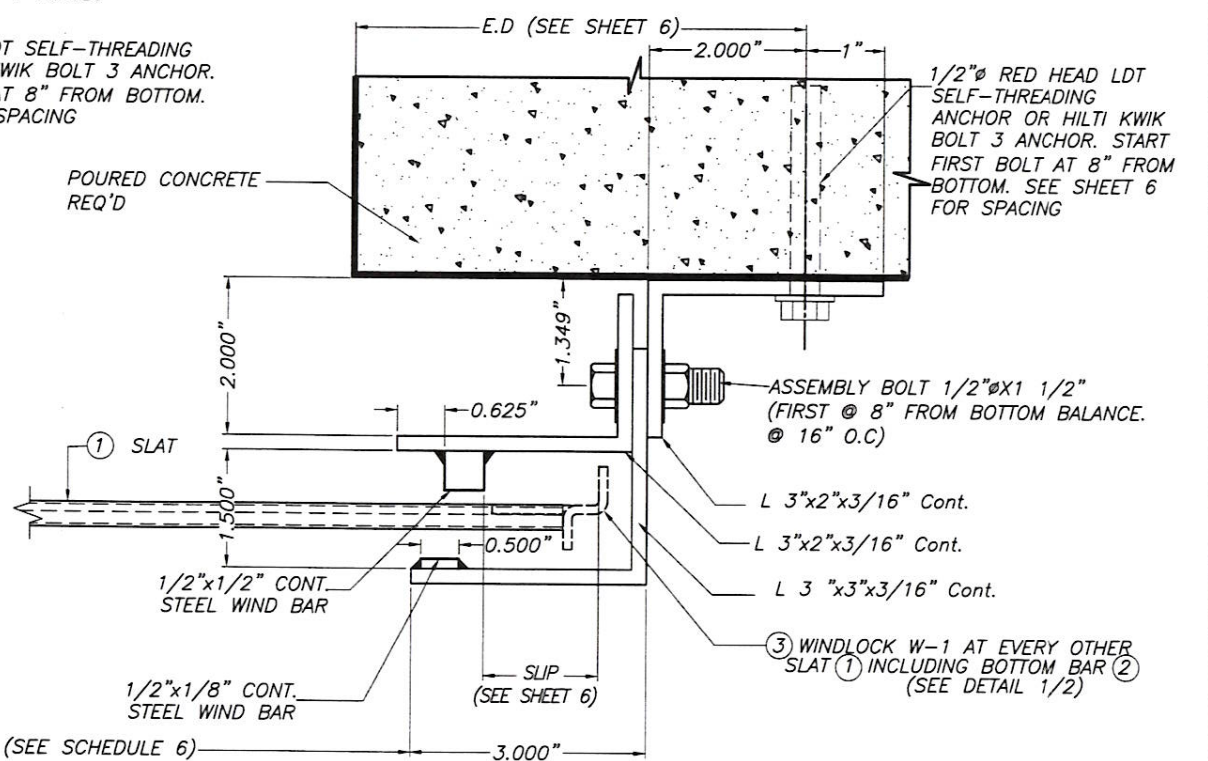
**VARIANCE W/ TAP-FLEX ANCHORAGE**  
SCALE : N.T.S.



**SECTION B-B\***  
SCALE : N.T.S.



**SECTION C-C\***  
SCALE : N.T.S.



\* GUIDES AT EACH JAMB MAY BE COMBINED AS NEEDED TO SUIT ANY INSTALLATION

WALTER A. TILLIT JR.  
LICENSE  
No. 44167  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
5/18  
P.E. SEAL/SIGNATURE/DATE

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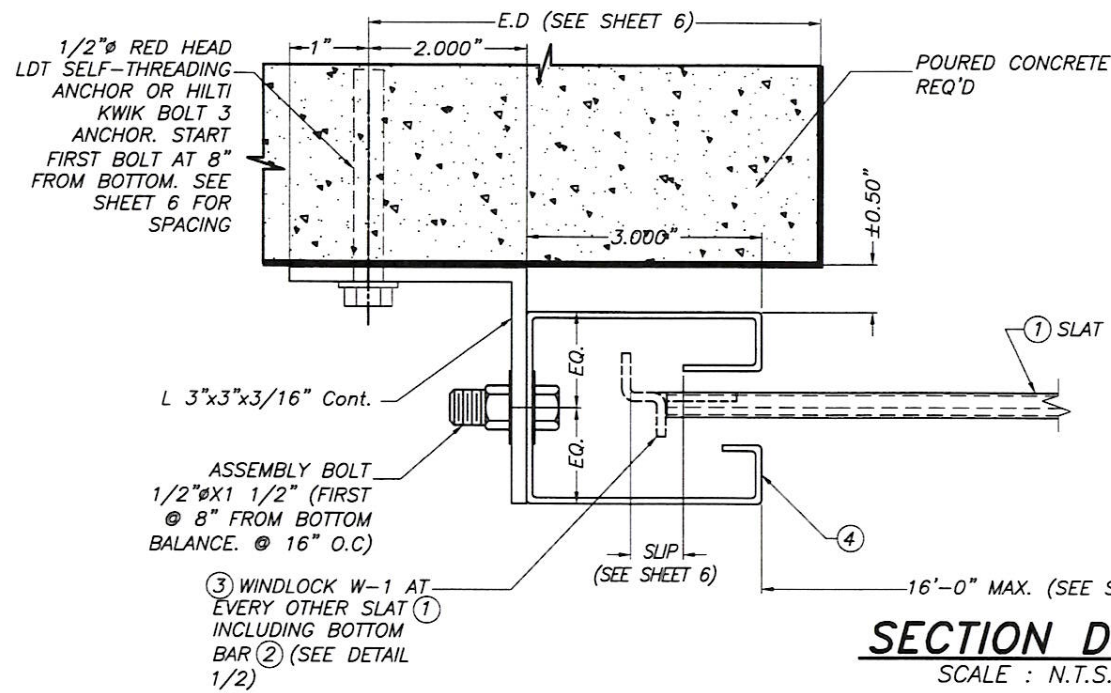
**16'-0" WIDE, 24 GAGE SLAT ROLL-UP DOOR**

F.R.L.  
DRAWN BY:  
04/30/18  
DATE:  
18-051  
DRAWING No.

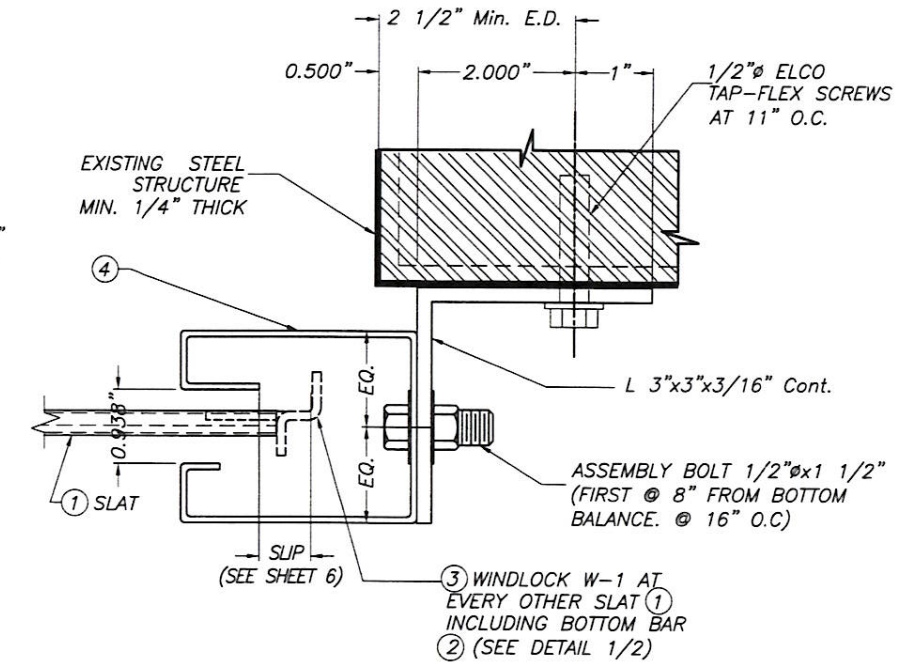
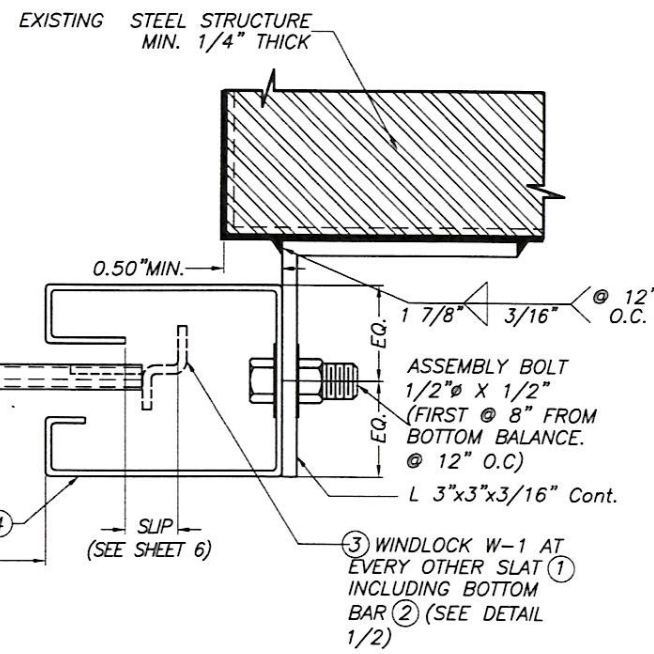
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SHEET 4 OF 6

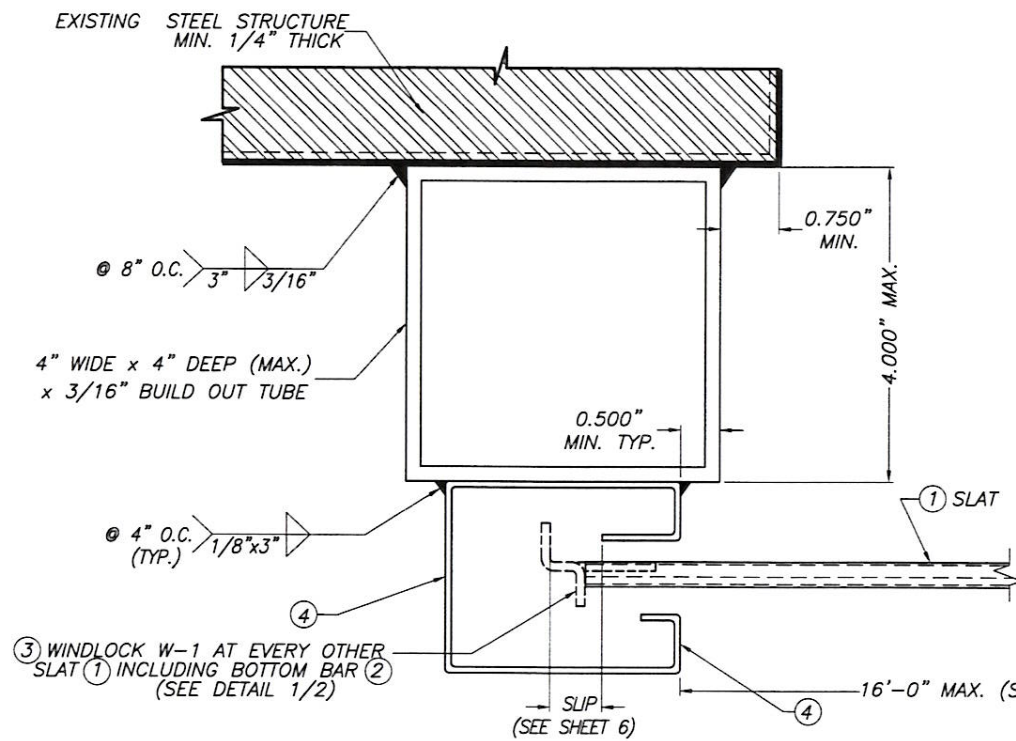




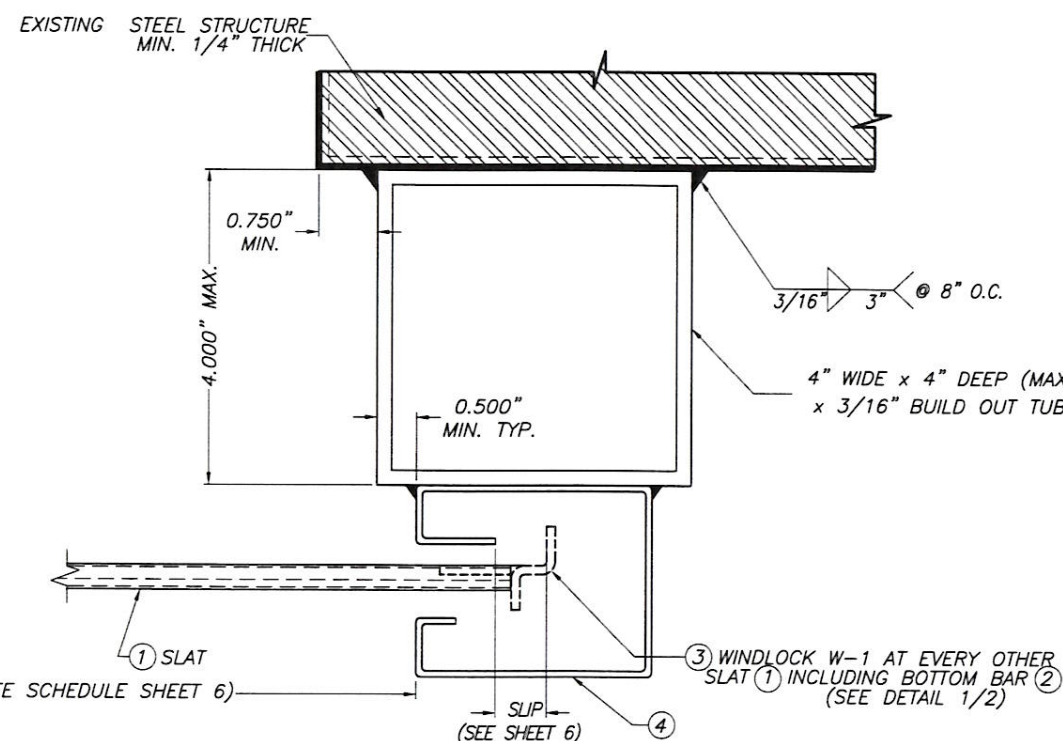
**SECTION D-D\***  
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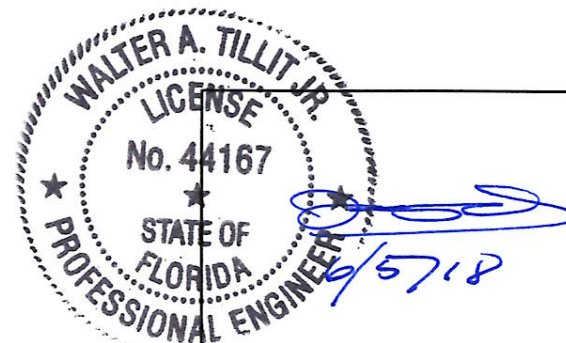
**VARIANCE W/ TAP-FLEX ANCHORAGE**  
SCALE : N.T.S.



**SECTION E-E\***  
SCALE : N.T.S.



\* GUIDES AT EACH JAMB MAY BE COMBINED AS NEEDED TO SUIT ANY INSTALLATION



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SHEET 5 OF 6



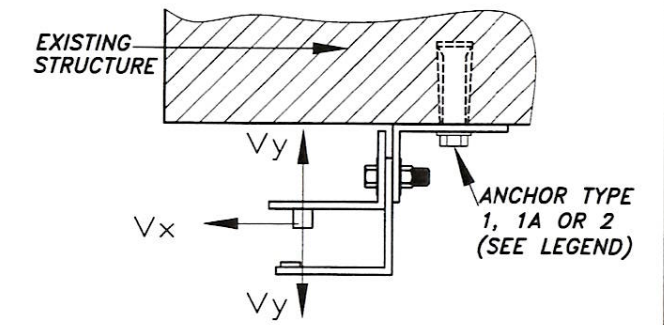
**MAX. PRESSURE RATINGS, V<sub>x</sub> & V<sub>y</sub> REACTIONS  
& ANCHOR SPACING SCHEDULE**

| MAXIMUM A.S.D. DESIGN PRESSURE RATING (PSF) | DOOR WIDTH (Ft.) | SLIP (In) | V <sub>x</sub> (Lb/Ft) | V <sub>y</sub> (Lb/Ft) | MAX. ANCHOR SPACING |          |          |          |          |            |
|---|------------------|-----------|------------------------|------------------------|---------------------|----------|----------|----------|----------|------------|
|   |                  |           |                        |                        | ANCHOR TYPE         |          |          |          |          | 1/4" STEEL |
|   |                  |           |                        |                        | TYPE 1              |          | TYPE 1A  |          |          |            |
|   |                  |           |                        |                        | f'c=3Ksi            | f'c=4Ksi | f'c=3Ksi | f'c=4Ksi | f'c=6Ksi |            |
| +47.0, -47.0                                | 10'-0"           | 1/4"      | 776                    | 250                    | 10 1/2"             | 11"      | 11"      | 11"      | 11"      | 11"        |
|   | 12'-0"           | 3/8"      | 994                    | 300                    | 8 1/2"              | 9"       | 11"      | 11"      | 11"      | 11"        |
|   | 14'-0"           | 1/2"      | 1187                   | 350                    | -                   | 8"       | 10"      | 11"      | 11"      | 11"        |
|   | 16'-0"           | 5/8"      | 1364                   | 400                    | -                   | -        | 8"       | 10"      | 11"      | 9 1/2"     |
| +55.0, -55.0                                | 10'-0"           | 1/4"      | 966                    | 275                    | 8 1/2"              | 9 1/2"   | 11"      | 11"      | 11"      | 11"        |
|   | 12'-0"           | 3/8"      | 1198                   | 330                    | -                   | 8"       | 10"      | 11"      | 11"      | 11"        |
|   | 14'-0"           | 1/2"      | 1409                   | 385                    | -                   | -        | 8"       | 9 1/2"   | 11"      | 9 1/2"     |
|   | 16'-0"           | 5/8"      | 1605                   | 440                    | -                   | -        | 6 1/2"   | 8"       | 10"      | 8"         |
| +60.0, -60.0                                | 10'-0"           | 1/4"      | 1084                   | 300                    | 8"                  | 8 1/2"   | 11"      | 11"      | 11"      | 11"        |
|   | 12'-0"           | 3/8"      | 1324                   | 360                    | -                   | -        | 9"       | 10"      | 11"      | 10"        |
|   | 14'-0"           | 1/2"      | 1546                   | 420                    | -                   | -        | 7"       | 8 1/2"   | 10 1/2"  | 8 1/2"     |
|   | 16'-0"           | 5/8"      | 1754                   | 480                    | -                   | -        | 6"       | 7"       | 9 1/2"   | 7 1/2"     |
| +70.0, -70.0                                | 10'-0"           | 1/4"      | 1314                   | 350                    | -                   | -        | 9"       | 10"      | 11"      | 10"        |
|   | 12'-0"           | 3/8"      | 1572                   | 420                    | -                   | -        | 7"       | 8"       | 10 1/2"  | 8 1/2"     |
|   | 14'-0"           | 1/2"      | 1816                   | 490                    | -                   | -        | 5 1/2"   | 7"       | 9"       | 7 1/2"     |
|   | 16'-0"           | 5/8"      | 2049                   | 560                    | -                   | -        | 4 1/2"   | 5 1/2"   | 8"       | 6 1/2"     |

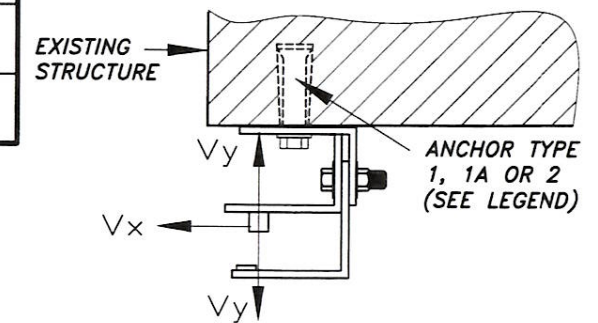
**ANCHOR LEGEND**

| CHARACTERISTICS            | ANCHOR TYPE   |                       |                                      |
|----------------------------|---|-----------------------|--------------------------------------|
|                            | TYPE 1  | TYPE 1A               | TYPE 2                               |
|                            | LDT SELF THREADING  | KWIK BOLT 3 EXPANSION | TAP-FLEX FULL THREAD SCREW           |
| DIAMETER $\phi$            | 1/2"  | 1/2"                  | 1/2"                                 |
| MIN. EMBEDMENT IN CONCRETE | 3 1/2" *  | 3 1/2" *              | FULL ENGAGEMENT IN 1/4" STRUCTURE    |
| MATERIAL                   | ZINC PLATED GRADE 5<br>F <sub>y</sub> =92 Ksi<br>F <sub>u</sub> =120Ksi | AISI 304 SERIES S.S   | GRADE 5, SILVER STALGARD SUB COATING |
| MANUFACTURER               | RED HEAD  | HILTI INC.            | ELCO CONSTRUCTION PRODUCTS           |
| MIN. E.D                   | 5" *  | 6" *                  | 2" *                                 |
| MIN. SPACING               | AS PER SCHEDULE   | AS PER SCHEDULE       | AS PER SCHEDULE                      |

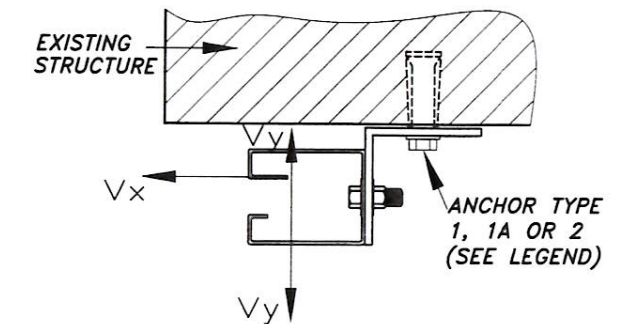
\* BEYOND ANY WALL FINISH



**LOAD DIAGRAM: "Z" GUIDE**



**LOAD DIAGRAM: "E" GUIDE**



**LOAD DIAGRAM: "ROLLED FORMED GUIDE"**

WALTER A. TILLIT JR.  
 LICENSE No. 44167  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER  
 DATE: 6/5/18  
 P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE (HIGH & NON HIGH VELOCITY HURRICANE ZONE)

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 PHONE: (305)885-7590 EMAIL: info@rollingdoors.com

| REV. NO | DESCRIPTION | DATE | REV. No | DESCRIPTION | DATE |
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| 1       | -           | -    | 3       | -           | -    |
| 2       | -           | -    | 4       | -           | -    |

F.R.L.  
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