

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 2023 (8th EDITION) OF THE FLORIDA BUILDING CODE. DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTIONS 1620 (H.V.H.Z.) AND 1609 (N.H.V.H.Z.) OF THE ABOVE MENTIONED CODE, FOR A WIND SPEED AS REQUIRED BY JURISDICTION WHERE THIS PRODUCT WILL BE INSTALLED AND FOR A DIRECTIONALITY FACTOR $K_d=0.85$, USING ASCE 7-22 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 7-22 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 AND 1609.1.2 OF THE ABOVE MENTIONED CODE AS PER BLACKWATER TECHNICAL SERVICES INC. REPORT # BT-MTD-20-001 PER TAS-201, TAS 202 & TAS-203 PROTOCOLS.

MAX. A.S.D. DESIGN PRESSURE RATING: +70.0, -70.0 PSF

2. SLAT TO BE A.S.T.M. A-653 GR 45 STRUCTURAL QUALITY STEEL WITH MIN $F_y= 45.0$ ksi AND G-60 GALVANIZED PER A.S.T.M. A-653.
3. ALL STEEL ANGELS TO BE A.S.T.M. A-36 DESIGNATION, SHOP PRIMED AGAINST CORROSION PRIOR TO INSTALLATION. PAINT TO CONFORM TO FEDERAL SPECIFICATIONS CORRESPONDING TO GRAY PAINT OR EQUAL.
4. WINDLOCKS TO BE A.S.T.M. A-1011 GRADE 60 W/ A.S.T.M. A-123 G-60 GALVANIZED STEEL. ($F_y= 60$ ksi, $F_u= 80$ ksi).
5. ALL ASSEMBLY BOLTS TO BE S.A.E. GRADE 5 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.
- 7.1 HOOD TO BE 24 GAGE A.S.T.M. A-653 DESIGNATION, GRADE 33, G-90 GALVANIZED STEEL OR 22 GAGE A.S.T.M. A-653 DESIGNATION, GRADE 33, G-60 GALVANIZED STEEL.
- 7.2 BACKER SLAT TO BE 24 GAGE A.S.T.M. A-653 DESIGNATION, GRADE 33, G-90 GALVANIZED STEEL OR 22 OR 20 GAGE A.S.T.M. A-653 DESIGNATION, GRADE 33, G-60 GALVANIZED STEEL.
8. ALL RIVETS TO BE A.I.S.I. $\frac{1}{4}$ " $\varnothing$ W/ $\frac{1}{2}$ " FLANGE $\varnothing$ STAINLESS STEEL MODEL # STS84D DOMED HD, W/ 1460 Lb SHEAR STRENGTH & 1800 TENSILE STRENGTH.
9. CONCRETE ANCHORS TO BE AS MANUFACTURED BY RED HEAD AND SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER. ANCHOR FOR STEEL SHALL BE AS MANUFACTURED BY ELCO CONSTRUCTION PRODUCTS.
10. ALL WELDING TO CONFORM TO AMERICAN WELDING SOCIETY'S AWS D1.1 REGULATIONS. USE A.W.S. AS.1 OR A5.5 E60XX ELECTRODES MIN. $\frac{3}{16}$ " FILLET SIZE.
11. INSULATION MATERIAL SHALL BE RMAX FOIL FACED RIGID POLYISOCYANURATE FOAM SHEATHING INSULATION, MANUFACTURED BY Rmax Operating, LLC W/ MIAMI DADE COUNTY APPROVAL.
12. 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 7 OF 7, FOR V_x & V_y VALUES.
13. ROLL-UP MECHANISM NOT PART OF THIS APPROVAL.
14. (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.
15. ROLL-UP 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.

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

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

WALTER A. TILLIT JR.
LICENSE
No. 44167
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
7/14/2023
P.E. SEAL/SIGNATURE/DATE

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TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL 33166
Phone : (305)871-1530 . Fax : (305)871-1531
CA-0006719
WALTER A. TILLIT Jr. P.E.
FLORIDA Lic. # 44167

18'-1" MAXIMUM WIDE, 20 GAGE SLAT
ROLL-UP DOOR

METRO DOOR LLC.
821 INDUSTRIAL DRIVE
LEWISBURG, TN 37091

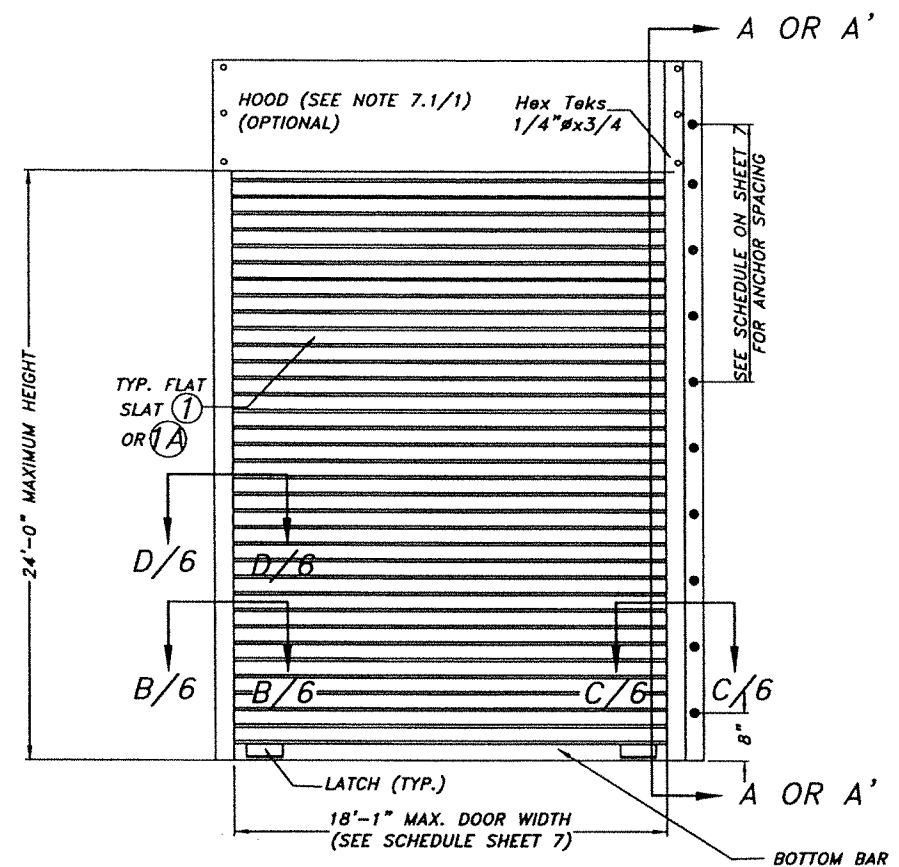
Y.M.
DRAWN BY:

7/14/2023
DATE

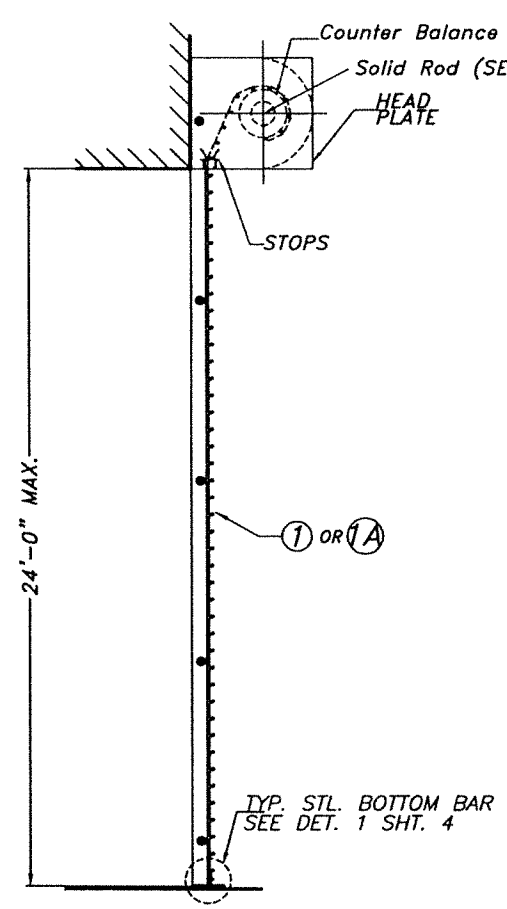
23-109
DRAWING No

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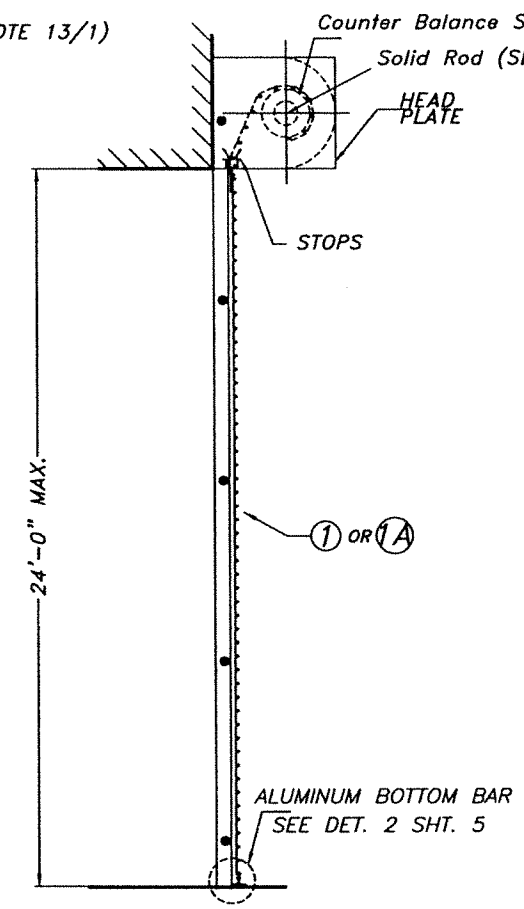
SHEET 1 OF 7



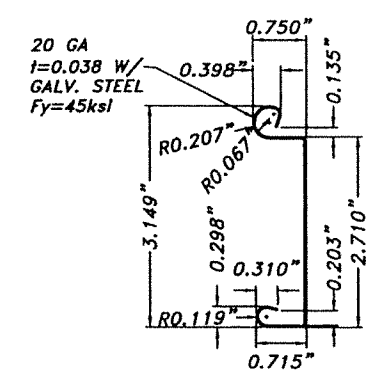
TYPICAL DOOR ELEVATION
N. T. S.



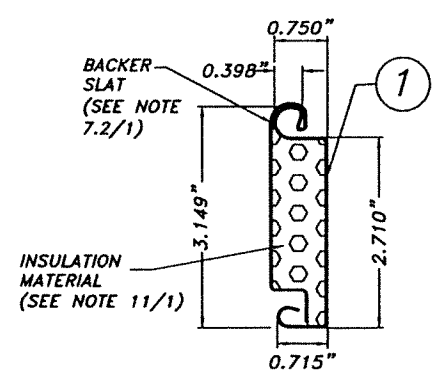
SECTION A-A
N. T. S.



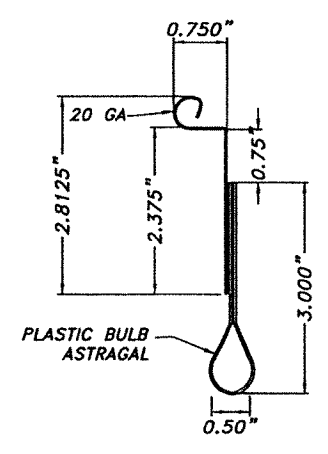
SECTION A'-A'
N. T. S.



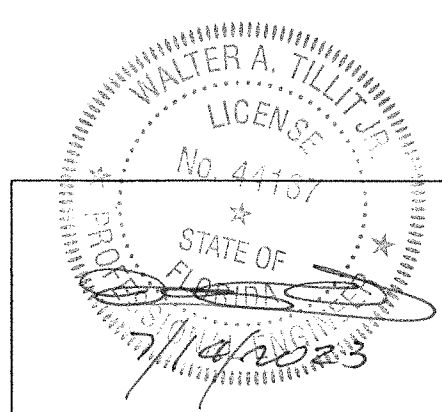
1 FLAT SLAT
Fy=45ksi
ASTM A-653 GRADE 45
G-60 GALV. STL



1A SLAT
Fy=45ksi
ASTM A-653 GRADE 45
G-60 GALV. STL



2 STL BOTTOM SLAT FOR SECTION A-A
Fy=45ksi
ASTM A-653 GRADE 45
G-60 GALV. STL



P.E. SEAL/SIGNATURE/DATE

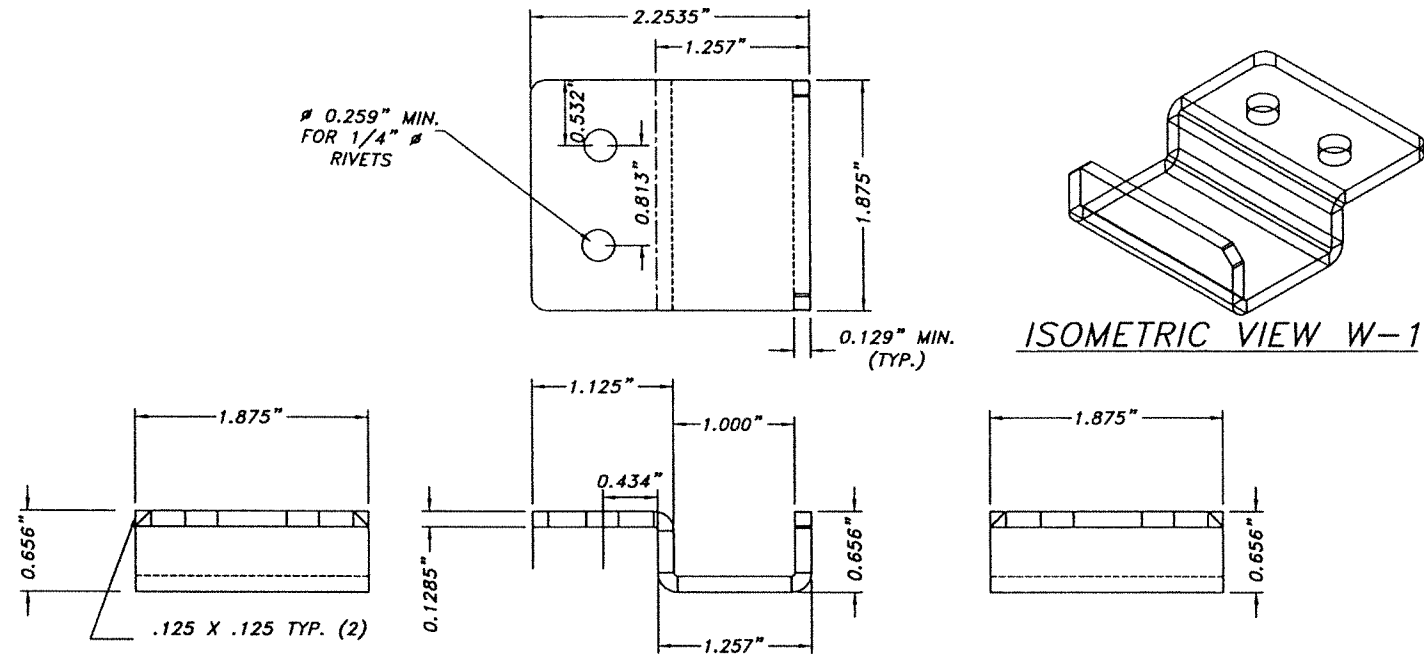
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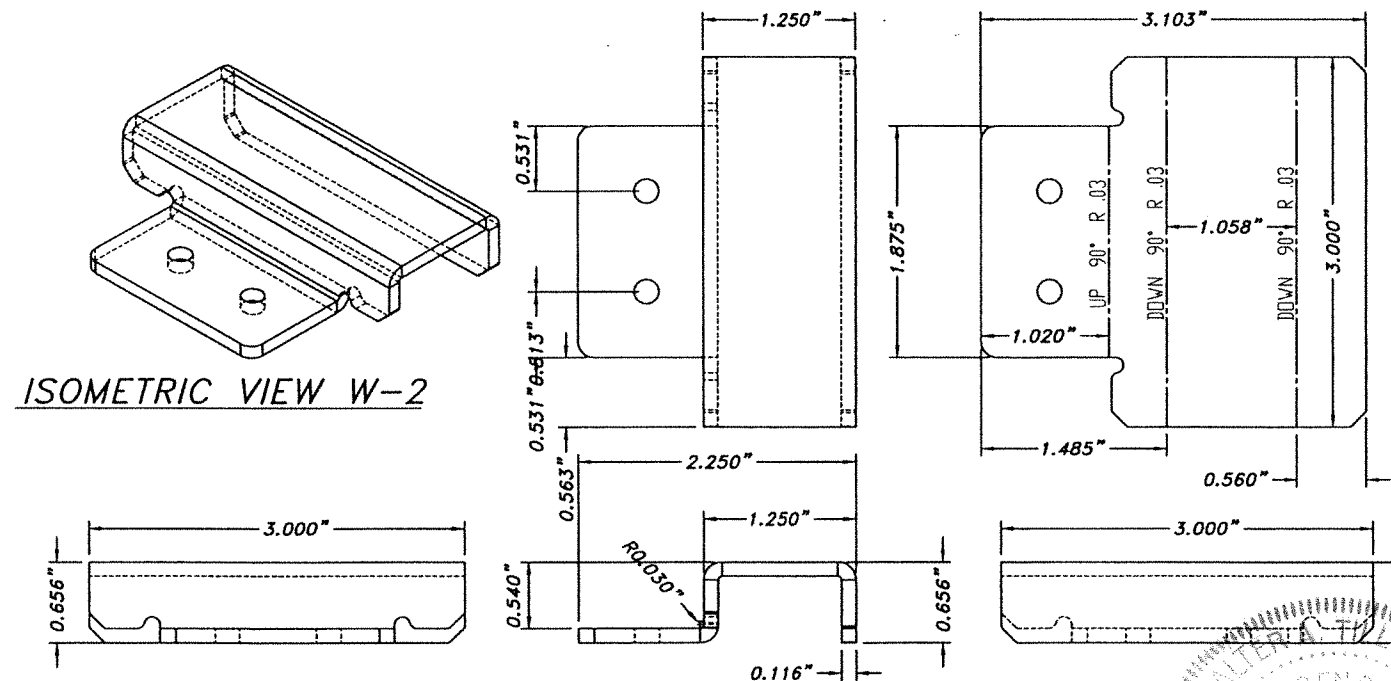
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FLORIDA Lic. # 44167

18'-1" MAXIMUM WIDE, 20 GAGE SLAT ROLL-UP DOOR						Y.M. DRAWN BY:
METRO DOOR LLC. 821 INDUSTRIAL DRIVE LEWISBURG, TN 37091						7/14/2023 DATE
						23-109 DRAWING No
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	
1	OLD 20-246	7/14/23	3	-	-	
2	-	-	4	-	-	



WIND LOCK W-1

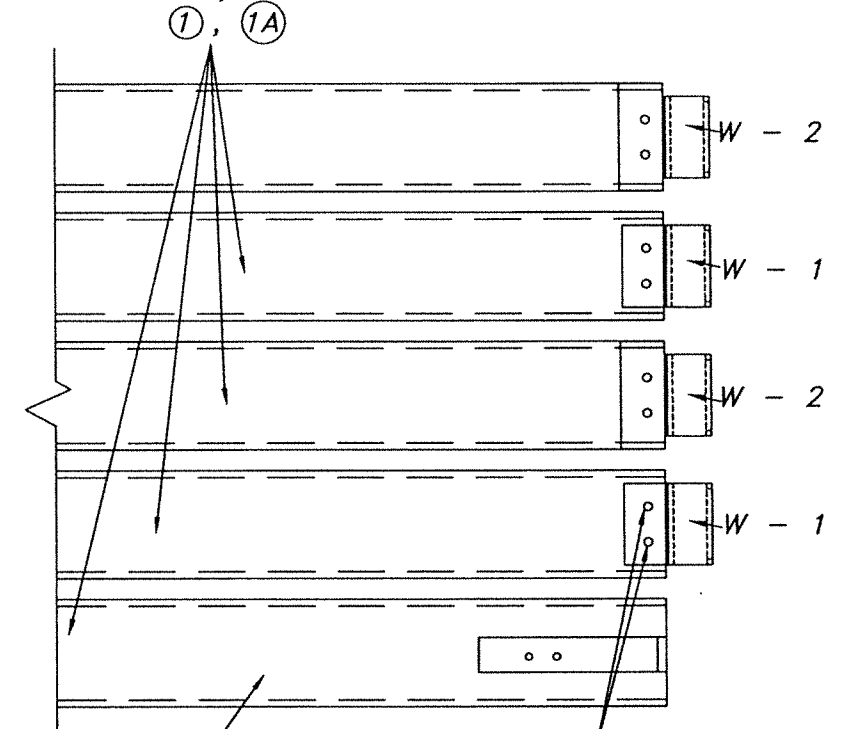
Fy= 60ksi
Fu= 80ksi
ASTM A-1011 GRADE 60 W/ ASTM A-123
G-60 GALVANIZED STEEL



WIND LOCK W-2

Fy= 60ksi
Fu= 80ksi
ASTM A-1011 GRADE 60 W/ ASTM A-123
G-60 GALVANIZED STEEL

FLAT SLAT , INSULATED SLAT



BOTTOM SLAT W/LATCH
(SEE SHEETS 4 & 5)

S.S. RIVETS Ø 1/4" (STS84D)
(2) EA. W-1 OR EA. W-2

ELEVATION DETAIL FOR SLAT W/ W-1 & W-2
N.T.S.

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

Professional Engineer Seal/Signature/Date
No. 44167
7/14/2023
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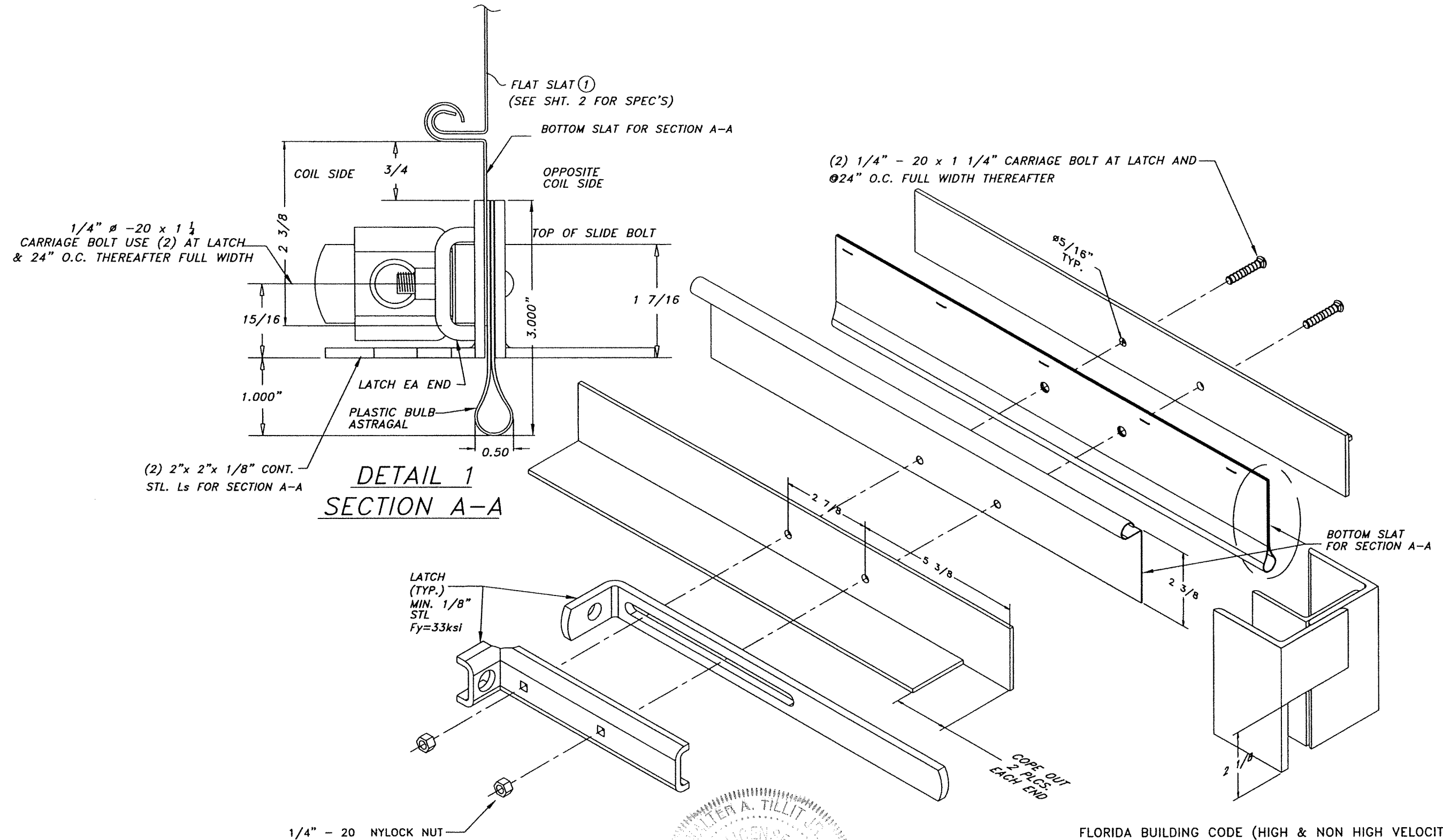
METRO DOOR LLC.
821 INDUSTRIAL DRIVE
LEWISBURG, TN 37091

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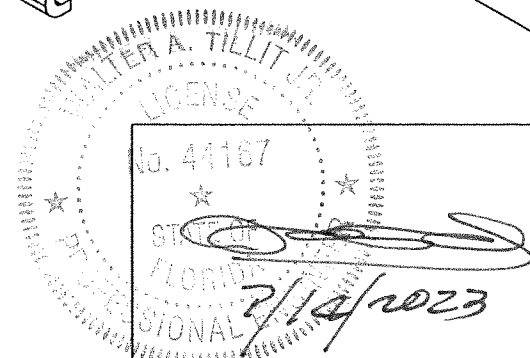
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SHEET 3 OF 7



ASSEMBLY DETAIL OF BOTTOM SLAT
W/ STEEL ANGLES & W/ LATCH AT
SECTION A-A

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



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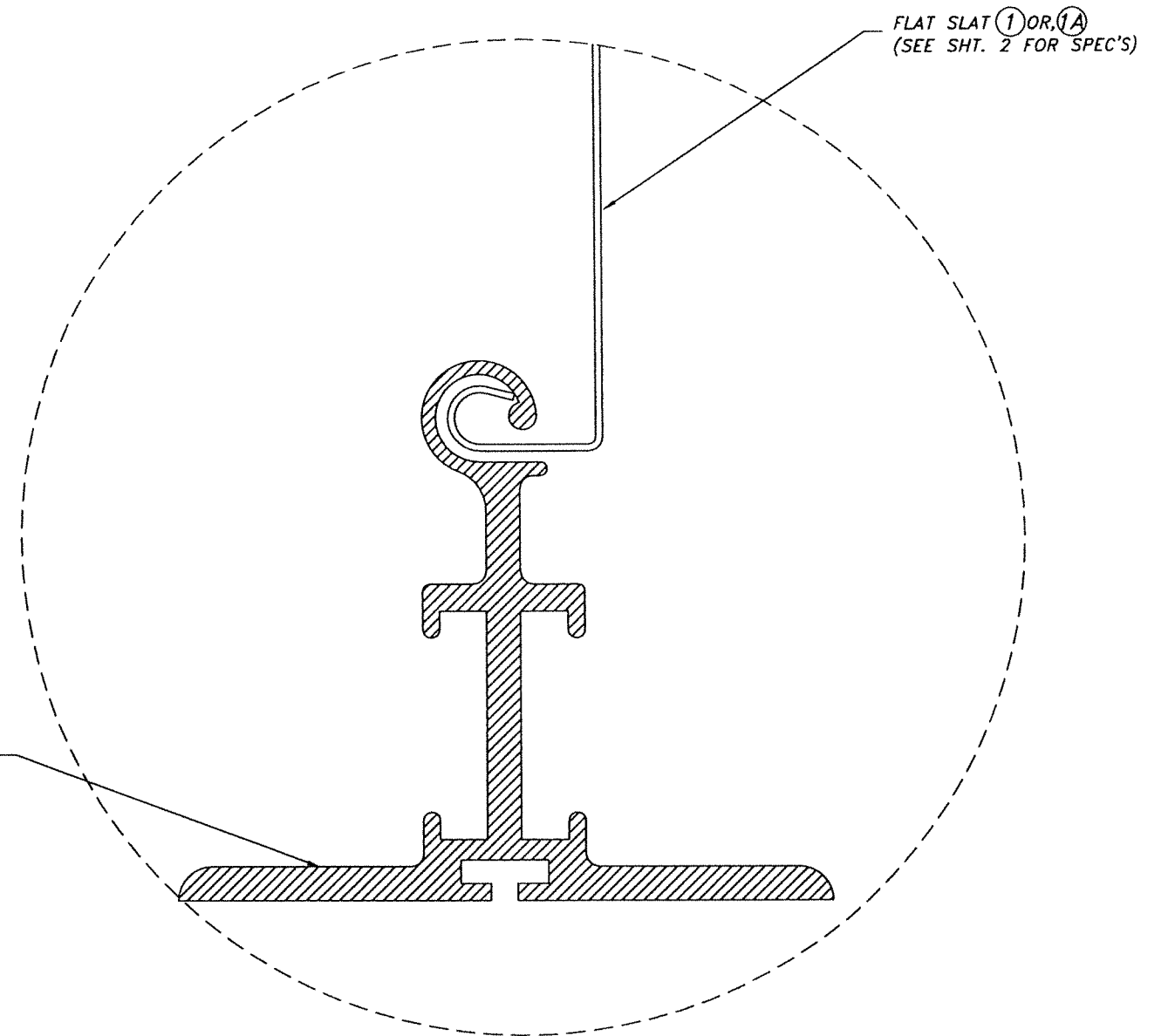
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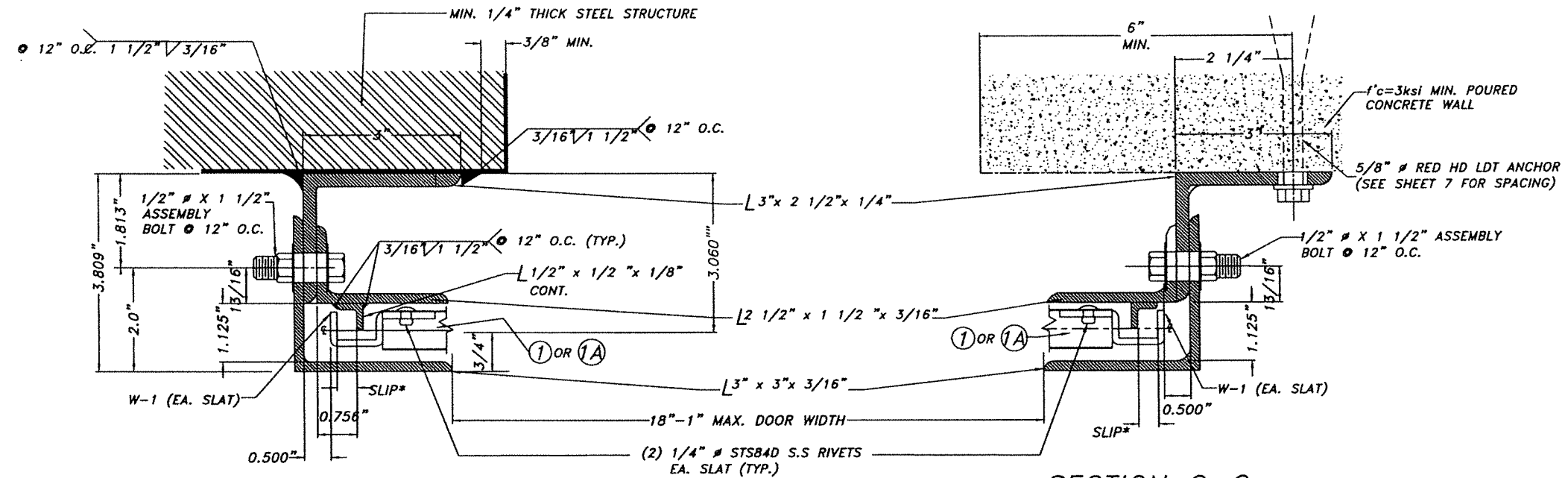
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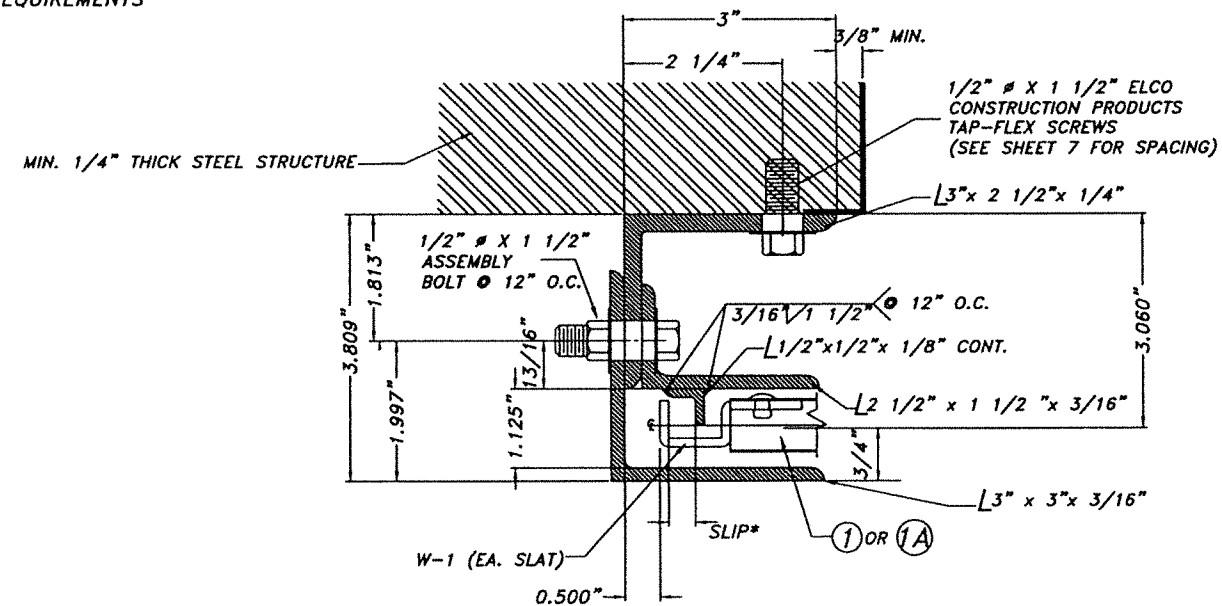
SHEET 4 OF 7





* SEE SHEET 7 FOR REQUIREMENTS

* SEE SHEET 7 FOR REQUIREMENTS



* SEE SHEET 7 FOR REQUIREMENTS

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

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SHEET 6 OF 7

Vx & Vy REACTIONS & ANCHOR SPACING SCHEDULE

MAXIMUM DESIGN LOAD (psf)	DOOR WIDTH (ft-in)	SLIP (in)	Vx (lb/ft)	Vy (lb/ft)	MAXIMUM ANCHOR SPACING		
					ANCHOR TYPE 1 *		ANCHOR TYPE 2 *
					f'c= 3ksi Min.	f'c= 4ksi Min.	$\frac{1}{4}$ Min. f'y=36ksi STEEL
+50.0 , -50.0	14'-0"	3/8"	1427	350	10"	10"	10"
	16'-0"	1/2 "	1595	400	10"	10"	10"
	18'-1"	0.634"	1765	453	10"	10"	10"
+55.0 , -55.0	14'-0"	3/8"	1585	385	10"	10"	10"
	16'-0"	1/2 "	1762	440	10"	10"	10"
	18'-1"	0.634"	1944	498	9 1/2"	10"	10"
+60.0 , -60.0	14'-0"	3/8"	1741	420	10"	10"	10"
	16'-0"	1/2 "	1928	480	9 3/4"	10"	10"
	18'-1"	0.634"	2122	543	8 3/4"	10"	10"
+70.0 , -70.0	14'-0"	3/8"	2048	490	9"	10"	10"
	16'-0"	1/2 "	2255	560	8 1/4"	10"	10"
	18'-1"	0.634"	2472	634	7 1/2"	9"	9 1/4"

ANCHOR TYPE 1: $\frac{5}{8}$ " $\varnothing$ RED HEAD LDT SELF THREADING W/ 4 $\frac{1}{2}$ " MIN. EMBEDMENT & 6" MIN. EDGE DISTANCE INTO f'c= 3ksi MIN. POURED CONCRETE.

ANCHOR TYPE 2: 1/2" $\varnothing$ x 1 $\frac{1}{2}$ " MIN. ELCO CONSTRUCTION PRODUCT TAP-FLEX THREADING SCREW INTO $\frac{1}{4}$ " MIN. ASTM A-36 STEEL STRUCTURE.

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