

GENERAL NOTES:

1. 24 GAGE BERTHA GALVANIZED STEEL STORM PANEL (2" DEEP) SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2023 (8th EDITION) OF THE FLORIDA BUILDING CODE. THIS 24 GAGE BERTHA GALVANIZED STEEL STORM PANEL (2" DEEP) SHALL NOT BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES (MIAMI-DADE/BROWARD COUNTIES).

DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1609 OF THE ABOVE MENTIONED CODE, FOR A WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE THESE SHUTTERS WILL BE INSTALLED AND FOR A DIRECTIONALITY FACTOR Kd= 0.85. USING ASCE 7-22 SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON SHEETS 2 , 6 THRU 10.

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 SHEETS 2, 6 THRU 10.

24 GAGE BERTHA GALVANIZED STEEL STORM PANEL (2" DEEP) ADEQUACY FOR IMPACT AND CYCLIC RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1609.1.2 OF THE ABOVE MENTIONED CODE, AS PER AMERICAN TESTING LAB OF SOUTH FLORIDA; REPORT # 0304.01-08, AS PER ASTM E 1886, ASTM E 1996 AND ASTM E 330 STANDARDS; AS WELL AS REPORT # 1220.01-05 AS PER ASTM E 1886, ASTM E 1996 AND ASTM E 330 STANDARDS AND REPORT # 0926.01-03 AS PER ASTM E 1886, E 1996 AND ASTM E 330 STANDARDS, QUALIFIED FOR WIND ZONES 1, 2 AND 3, MISSILE TIPE D (BASIC PROTECTION ONLY) AND FOR INSTALLATIONS AT NON ESSENTIAL FACILITIES AS DEFINED BY ASTM E 1996.

2. ALL STEEL SHEET METAL PANELS SHALL HAVE STRUCTURAL QUALITY ASTM A-653, GRADE 80 WITH MIN Fy =106.0 ksi, WITH G-90 GALVANIZED STEEL DESIGNATION.
3. ALL ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ASSOCIATION 6063-T6 ALLOY & TEMPER UNLESS OTHERWISE NOTED. THE THICKNESS OF ALL EXTRUSIONS SHALL BE AS SHOWN ON THIS DRAWING. STORM PANEL COMPONENTS (10) STUDDED SNAP TRACK AND (11) FEMALE COVER CAP ARE PATENT PENDING. ALL ALUMINUM EXTRUSIONS IN CONTACT WITH DISSIMILAR MATERIALS SHALL COMPLY WITH SECTION III-6 OF THE 2020 ALUMINUM DESIGN MANUAL.
4. ALL SCREWS TO BE STAINLESS STEEL 304 OR 316 AISI SERIES OR CORROSION RESISTANT COATED CARBON STEEL AS PER DIN 50018 W/ 50 ksi YIELD STRENGTH AND 90 ksi TENSILE STRENGTH & SHALL COMPLY W/ FLORIDA BUILDING CODE SECTION 2411.3.3.4.
5. BOLTS TO BE ASTM A-307 GALVANIZED STEEL OR AISI 304 SERIES STAINLESS STEEL, WITH 35 ksi MINIMUM YIELD STRENGTH.
6. ANCHORS TO WALL SHALL BE AS FOLLOWS (UNLESS OTHERWISE NOTED):

- (A) TO EXISTING POURED CONCRETE, f'c = 3192 psi. MIN.
- 1/4" Ø TAPCON ANCHORS AS MANUFACTURED BY I.T.W. BUILDEX.
  - 1/4" Ø S.G. TAPCONS AS MANUFACTURED BY I.T.W. BUILDEX.
  - 1/4" Ø x 3/4" ALL POINTS SOLID-SET ANCHORS AS DISTRIBUTED BY ALL POINTS SCREW, BOLT & SPECIALTY COMPANY.

- NOTES:
- A.1) MINIMUM EMBEDMENT INTO POURED CONCRETE OF TAPCON ANCHORS IS 1 3/4".
- A.2) MINIMUM EMBEDMENT OF 1/4"Ø x 3/4" ALL POINTS SOLID-SET ANCHORS SHALL BE 7/8" INTO THE POURED CONCRETE. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. 1/4" Ø-20 S.S. MACHINE SCREW (SIDEWALK BOLT OR TRUSS HEAD) USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST, AND 1" MINIMUM FOR WALLS WITH NO STUCCO.
- A.3) IN CASE THAT PRECAST STONE, PRECAST CONCRETE PANELS, OR PAVERS BE FOUND ON THE EXISTING WALL OR FLOOR, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS, ANCHORAGE SHALL BE AS INDICATED ON NOTES A.1) & A.2) ABOVE.

- (B) TO EXISTING CONCRETE BLOCK WALL, ASTM C-90 UNITS:
- 1/4" Ø TAPCON ANCHORS AS MANUFACTURED BY I.T.W. BUILDEX.
  - 1/4" Ø S.G. TAPCONS AS MANUFACTURED BY I.T.W. BUILDEX W/ f'm = 1500 psi. MIN.
  - 1/4" Ø x 3/4" ALL POINTS SOLID-SET ANCHORS AS DISTRIBUTED BY ALL POINTS SCREW, BOLT & SPECIALTY COMPANY W/ f'm = 1800 psi. MIN.

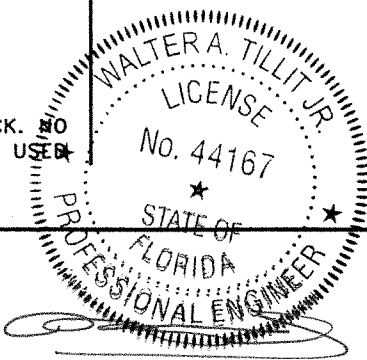
- NOTES:
- B.1) MINIMUM EMBEDMENT OF TAPCON INTO CONCRETE BLOCK UNIT SHALL BE 1 1/4".
- B.2) MINIMUM EMBEDMENT OF 1/4"Ø x 3/4" ALL POINTS SOLID-SET ANCHORS SHALL BE 7/8" INTO THE CONCRETE BLOCK. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. 1/4" Ø-20 S.S. MACHINE SCREW (SIDEWALK BOLT OR TRUSS HEAD) USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST, AND 1" MINIMUM FOR WALLS WITH NO STUCCO.
- B.3) IN CASE THAT PRECAST STONE OR PRECAST CONCRETE PANELS BE FOUND ON THE EXISTING WALL, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS. ANCHORAGE SHALL BE AS INDICATED ON NOTES B.1) AND B.2) ABOVE.

- (C) TO EXISTING WOOD FRAME BUILDINGS, WITH SPECIFIC GRAVITY G = 0.55
- 1/4" Ø TAPCON ANCHORS AS MANUFACTURED BY I.T.W. BUILDEX.
  - 1/4" Ø S.G. TAPCONS AS MANUFACTURED BY I.T.W. BUILDEX.
  - 1/4" Ø SAMMYS SCREW ANCHORS (SSC) AS MANUFACTURED BY ITW BUILDEX.

- NOTES:
- C.1) MINIMUM THREADED PENETRATION OF TAPCONS, S.G OR SAMMYS SCREW ANCHORS (SSC) INTO WOOD UNIT SHALL BE 1 1/2".
- C.2) ANCHORAGE SHALL BE PERFORMED BEYOND ANY FINISH MATERIAL AT WALL LIKE BRICK VENEER, STUCCO OR ANY OTHER FINISH. ANCHORAGE SHALL BE AS INDICATED ON NOTE C.1) ABOVE.

- (D) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.
7. PANELS MAY ALSO BE INSTALLED HORIZONTALLY FOLLOWING INSTALLATION DETAILS SHOWN ON SECTIONS 1 THRU 5 (SHEETS 4 & 5 FOR CONCRETE/BLOCK SUBSTRATES) AND ALTERNATIVES 1 THRU 6 (SHEETS 8 & 9 FOR WOOD SUBSTRATES) EXCEPT THAT HEADERS 2, 2A, 3 & 4 SHALL NOT BE USED.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE PANEL IS TO BE ATTACHED TO INSURE PROPER ANCHORAGE. THIS PANEL SHALL ONLY BE ATTACHED TO POURED CONCRETE, CONCRETE BLOCK OR WOOD FRAME BUILDINGS.
9. THE INSTALLATION CONTRACTOR IS TO SEAL/CAULK ALL PANEL COMPONENT EDGES WHICH REMAIN IN CONTINUOUS CONTACT WITH THE BUILDING TO PREVENT WIND/RAIN INTRUSION. CAULK AND SEAL SHUTTER TRACKS ALL AROUND FULL LENGTH.
10. 24 GAGE BERTHA GALVANIZED STEEL STORM PANEL (2" DEEP) SHALL COMPLY WITH SPECIFICATIONS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.
11. SHUTTER MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT PANEL IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABELING TO COMPLY WITH SECTION 1709.9.2 OF THE FLORIDA BUILDING CODE.
12. (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 INCLUDING LIFE SAFETY 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 ALTERED BY ANY MEANS.
- (d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A PROFESSIONAL ENGINEER OR REGISTERED 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) THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

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



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE ( Non High Velocity Hurricane Zone)

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**TILTECO INC.**

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e-mail: tilteco@aol.com  
CA-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

**24 GAGE GALVANIZED BERTHA STEEL STORM PANEL (2" DEEP)**

**EASTERN METAL SUPPLY, INC**

4268 WEST ROADS DRIVE  
WEST PALM BEACH, FL 33407  
PH: (561) 533-6061  
FAX: (561) 588-4780

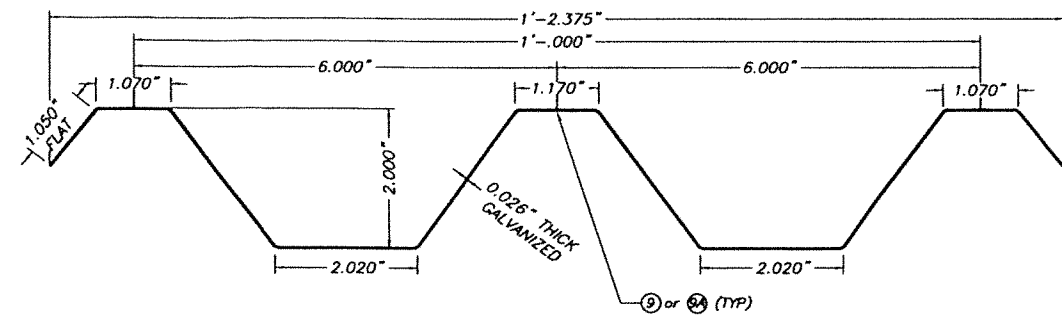
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| 1       | OLD 20-178  | 7/28/23 | 3       |             |      |
| 2       |             |         | 4       |             |      |

DRAWN BY:  
Y.M.

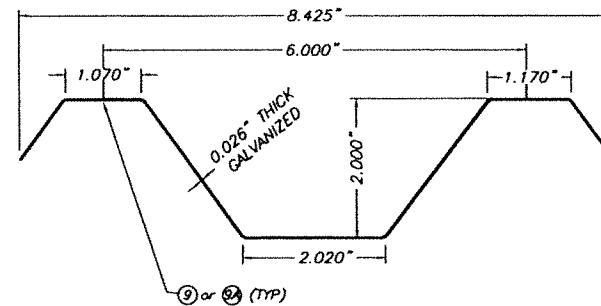
7/28/2023  
DATE

**23-142**  
DRAWING No

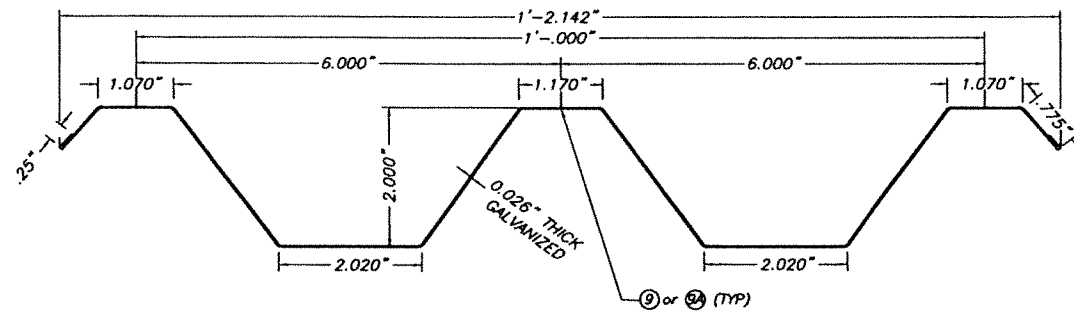
SHEET 1 OF 10



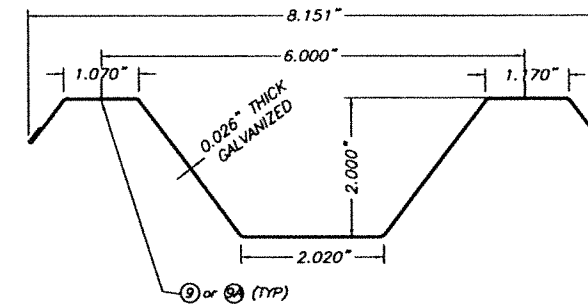
FULL PANEL W/O HEMMED EDGES



HALF PANEL W/O HEMMED EDGES

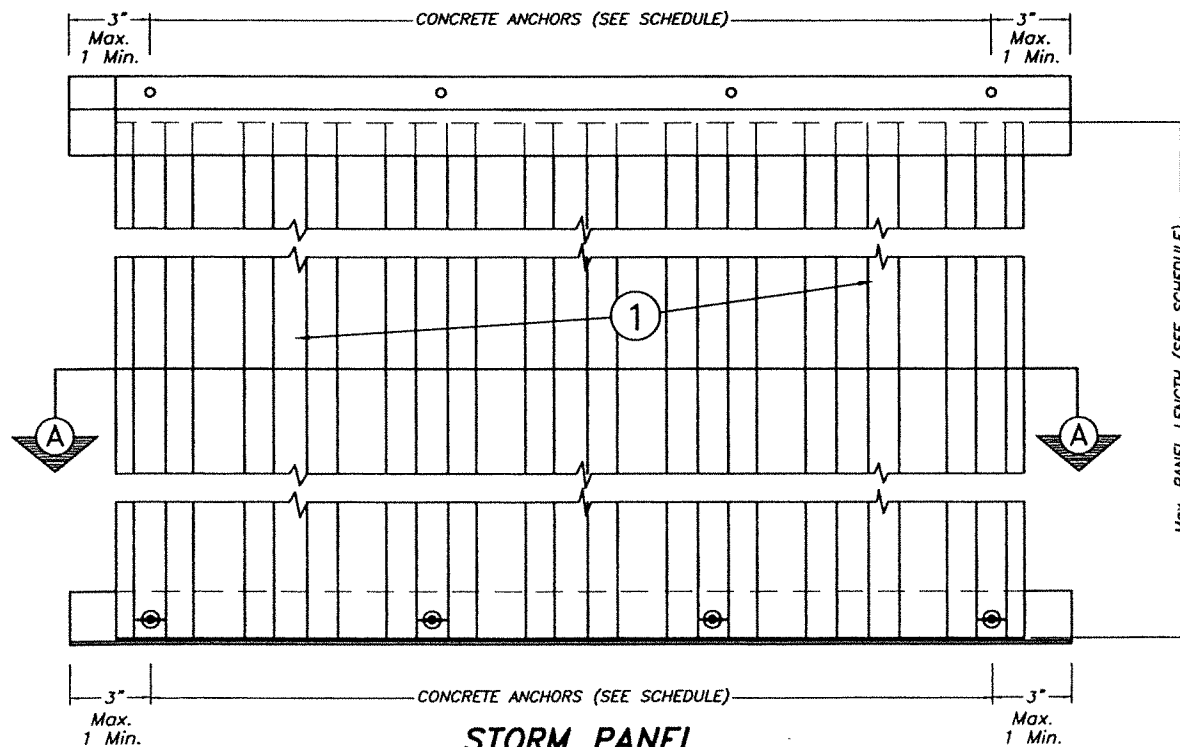


FULL PANEL W/ HEMMED EDGES



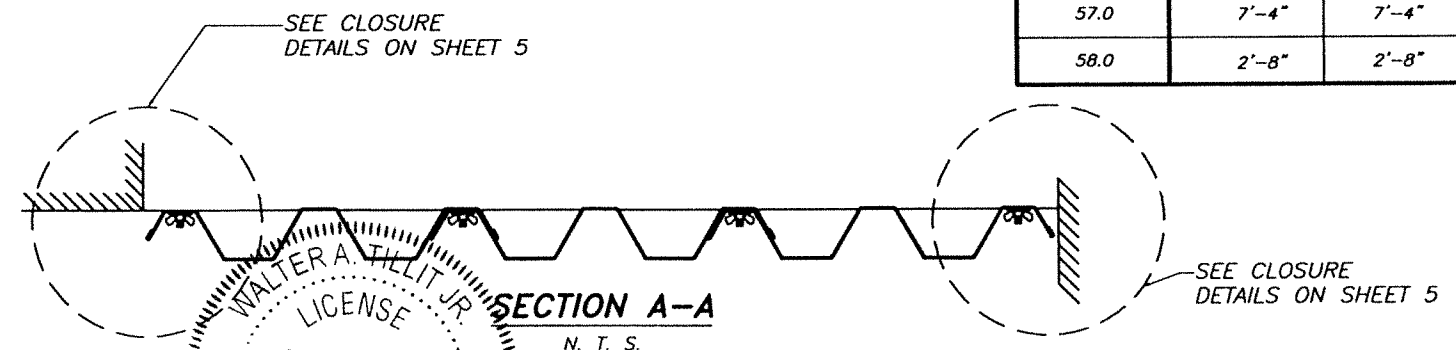
HALF PANEL W/ HEMMED EDGES

① **STORM PANEL**  
SCALE 3/8" = 1"



**STORM PANEL**  
**TYPICAL ELEVATION**

N. T. S.



# **MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.) AND CORRESPONDING MAXIMUM PANEL LENGTH "L"**

- 0 NOTES:**
- (1) L+: MAXIMUM ALLOWABLE PANEL LENGTH FOR A GIVEN POSITIVE A.S.D. DESIGN LOAD.  
L-: MAX. ALLOWABLE PANEL LENGTH FOR A GIVEN NEGATIVE A.S.D. DESIGN LOAD.
  - (2) PROCEDURE TO DETERMINE MAXIMUM PANEL LENGTH FOR WALL MOUNTINGS OR FLOOR/CEILING:  
GIVEN A POSITIVE A.S.D. DESIGN LOAD, DETERMINE MAXIMUM PANEL LENGTH "L+" FROM SCHEDULE.  
GIVEN A NEGATIVE A.S.D. DESIGN LOAD, DETERMINE MAXIMUM PANEL LENGTH "L-" FROM SCHEDULE.  
FINAL MAXIMUM ALLOWABLE PANEL LENGTH IS EQUAL TO THE MINIMUM DETERMINED PANEL LENGTH BETWEEN "L+" AND "L-".
  - (3) MINIMUM PANEL LENGTH TO BE 48"

## **SCHEDULE # 1**

**VALID FOR POURED CONCRETE, CONCRETE BLOCK AND  
WOOD SUBSTRATE INSTALLATIONS\***

| MAXIMUM PANEL LENGTH<br>"L+" OR "L-" (ft.) 0                        |                                                  |                               |
|---------------------------------------------------------------------|--------------------------------------------------|-------------------------------|
| MAXIMUM<br>A.S.D. DESIGN<br>PRESSURE RATING<br>(p.s.f.)<br>(+ or -) | CONCRETE, CONCRETE BLOCK &<br>WOOD INSTALLATIONS |                               |
|                                                                     | Max. PANEL LENGTH<br>L+ (ft.)                    | Max. PANEL LENGTH<br>L- (ft.) |
| 32.6                                                                | 9'-10"                                           | 9'-10"                        |
| 34.0                                                                | 9'-7"                                            | 9'-10"                        |
| 36.0                                                                | 9'-4"                                            | 9'-10"                        |
| 38.0                                                                | 9'-1"                                            | 9'-10"                        |
| 40.0                                                                | 8'-10"                                           | 9'-10"                        |
| 42.0                                                                | 8'-7"                                            | 9'-10"                        |
| 44.0                                                                | 8'-5"                                            | 9'-6"                         |
| 46.0                                                                | 8'-3"                                            | 9'-1"                         |
| 48.0                                                                | 8'-1"                                            | 8'-8"                         |
| 50.0                                                                | 7'-11"                                           | 8'-4"                         |
| 52.0                                                                | 7'-9"                                            | 8'-0"                         |
| 54.0                                                                | 7'-7"                                            | 7'-8"                         |
| 56.0                                                                | 7'-5"                                            | 7'-5"                         |
| 57.0                                                                | 7'-4"                                            | 7'-4"                         |
| 58.0                                                                | 2'-8"                                            | 2'-8"                         |

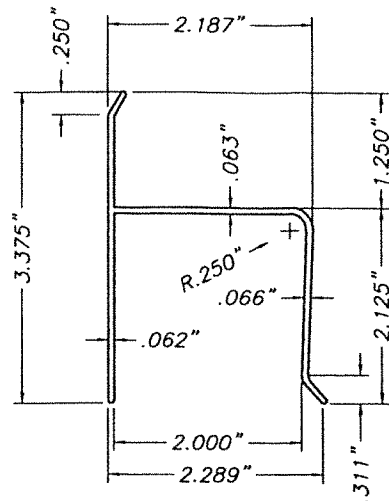
**FLORIDA BUILDING CODE ( Non High Velocity Hurricane Zone)**

WALTER A. TILLIT JR.  
LICENSE  
No. 44167  
STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER  
7/28/2023  
P.E. SEAL/SIGNATURE/DATE

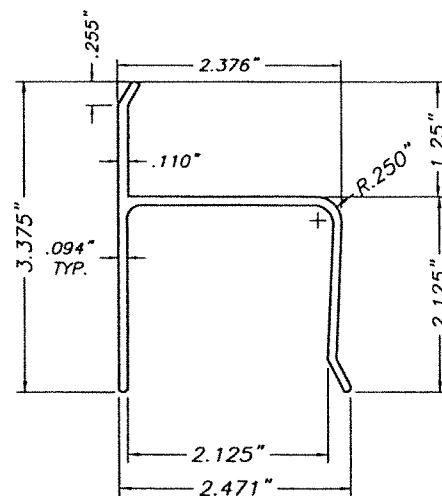
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TILLIT TESTING & ENGINEERING COMPANY  
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CA-0006719  
WALTER A. TILLIT Jr. P.E.  
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| 24 GAGE GALVANIZED BERTHA STEEL STORM PANEL<br>(2" DEEP)                                        |             |         |         |             |      |
|-------------------------------------------------------------------------------------------------|-------------|---------|---------|-------------|------|
| EASTERN METAL SUPPLY, INC                                                                       |             |         |         |             |      |
| 4268 WEST ROADS DRIVE<br>WEST PALM BEACH, FL 33407<br>PH: (561) 533-6061<br>FAX: (561) 588-4780 |             |         |         |             |      |
| REV. No                                                                                         | DESCRIPTION | DATE    | REV. No | DESCRIPTION | DATE |
| 1                                                                                               | OLD 20-178  | 7/28/23 | 3       |             |      |
| 2                                                                                               |             |         | 4       |             |      |

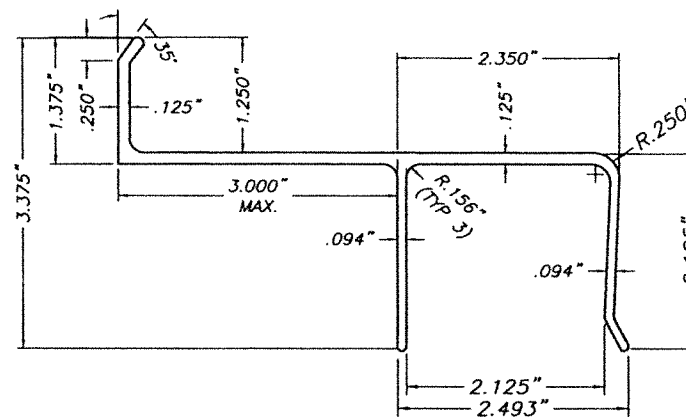
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Y.M.  
7/28/2023  
DATE  
**23-142**  
DRAWING No  
SHEET 2 OF 10



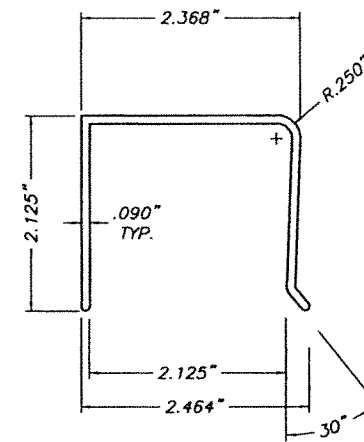
② "h" HEADER



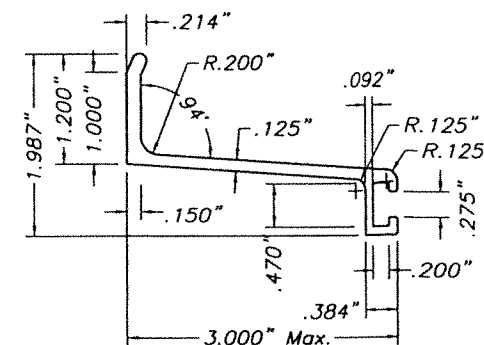
②A "h" HEADER (OPTIONAL)



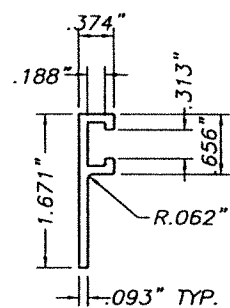
③ BUILD OUT "h" HEADER (3" MAX.)



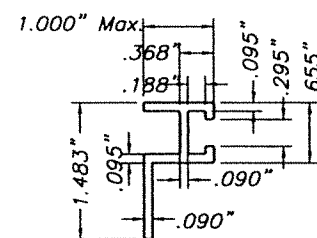
④ "U" HEADER



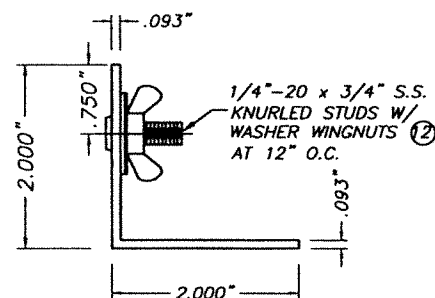
⑤ 3" ANGLE BUILD OUT BRACKET



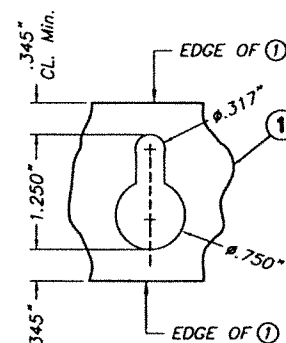
⑥ "F" TRACK



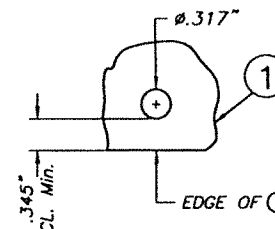
⑦ 1" STUCCO TRACK



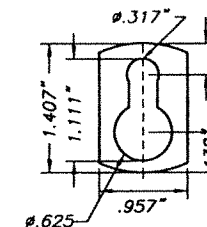
⑧ STUDDED ANGLE



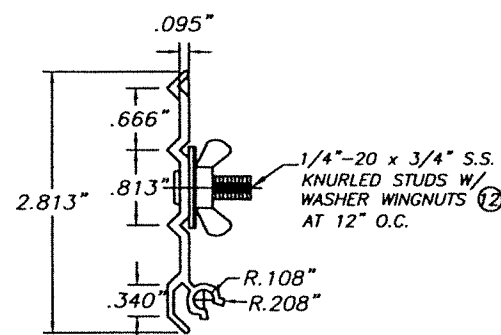
⑨ LARGE KEY HOLE



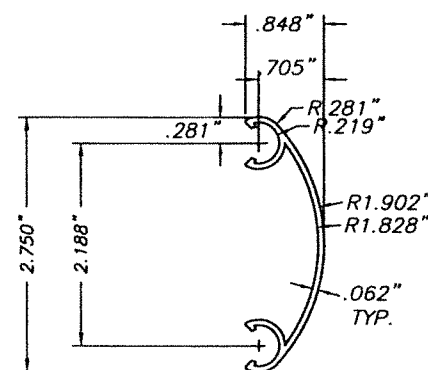
⑨A ROUND HOLE AT PANEL



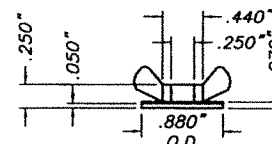
⑨B KEY HOLE WASHER  
3105-H154 ALUM. ALLOY



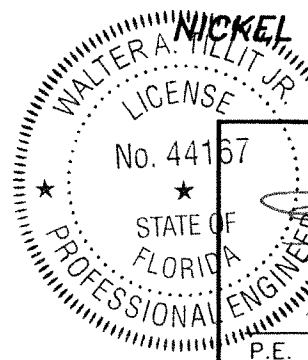
⑩ STUDDED SNAP TRACK



⑪ FEMALE COVER CAP



⑫ WASHERED WING NUT  
DIE CAST (ZINC # 7)  
NICKEL PLATED



# COMPONENTS

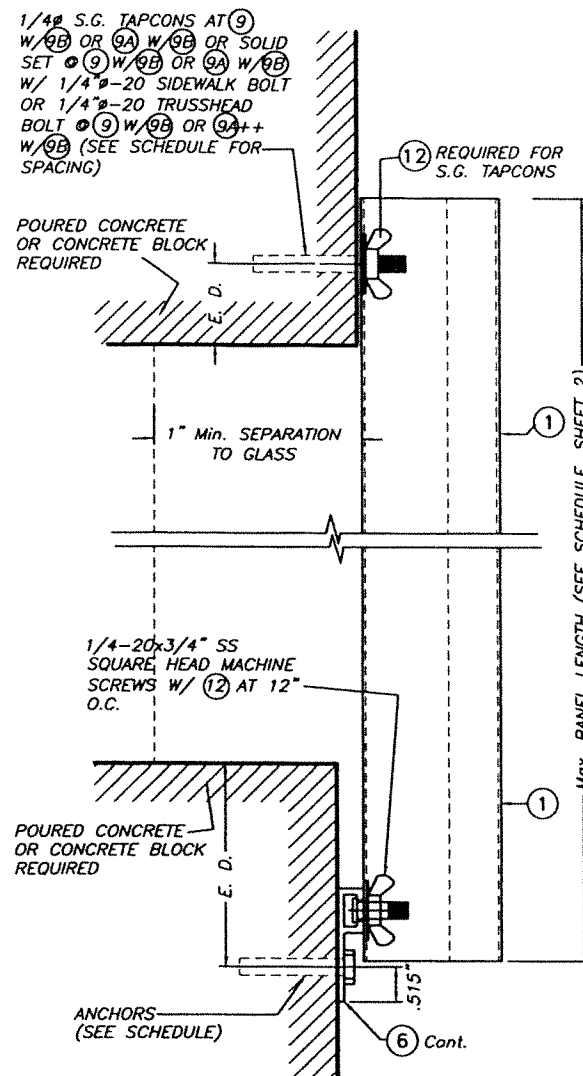
SCALE : 1/2" = 1"

FLORIDA BUILDING CODE ( Non High Velocity Hurricane Zone)

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|-------------------------------------------------------------------------------------------------|-------------|---------|---------|-------------|------|
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| REV. No                                                                                         | DESCRIPTION | DATE    | REV. No | DESCRIPTION | DATE |
| 1                                                                                               | OLD 20-178  | 7/28/23 | 3       |             |      |
| 2                                                                                               |             |         | 4       |             |      |

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Y.M.  
7/28/2023  
DATE  
**23-142**  
DRAWING No  
SHEET 3 OF 10



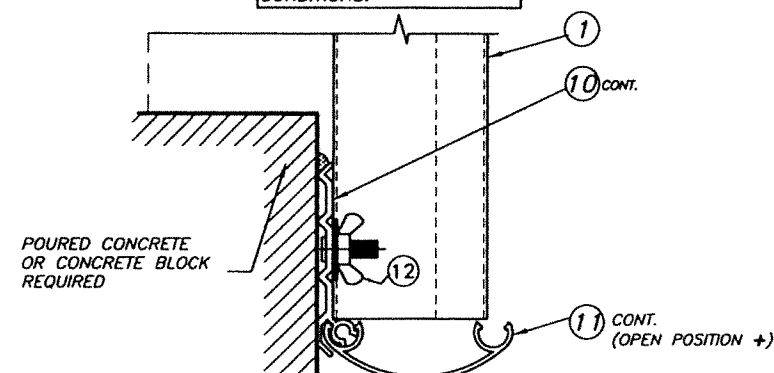
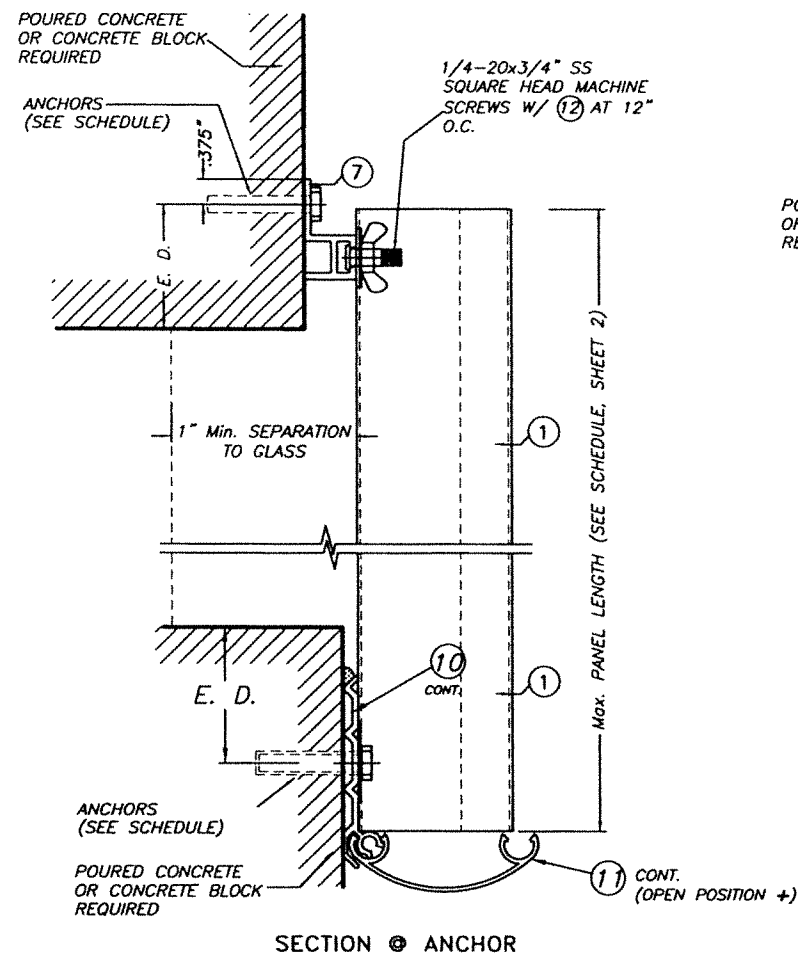
++  
SIDE WALK BOLTS ARE 3/4"x3/32" THICK HEAD  
MACHINE SCREW W/LENGTH AS PER NOTES A.2 &  
B.2 (SHEET 1)  
++  
TRUSS HEAD BOLTS ARE 1/2"x1/8" THICK HEAD  
MACHINE SCREW W/LENGTH AS PER NOTES A.2 &  
B.2 (SHEET 1)

### SECTION 1

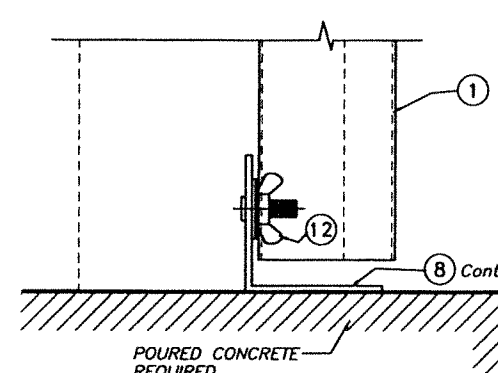
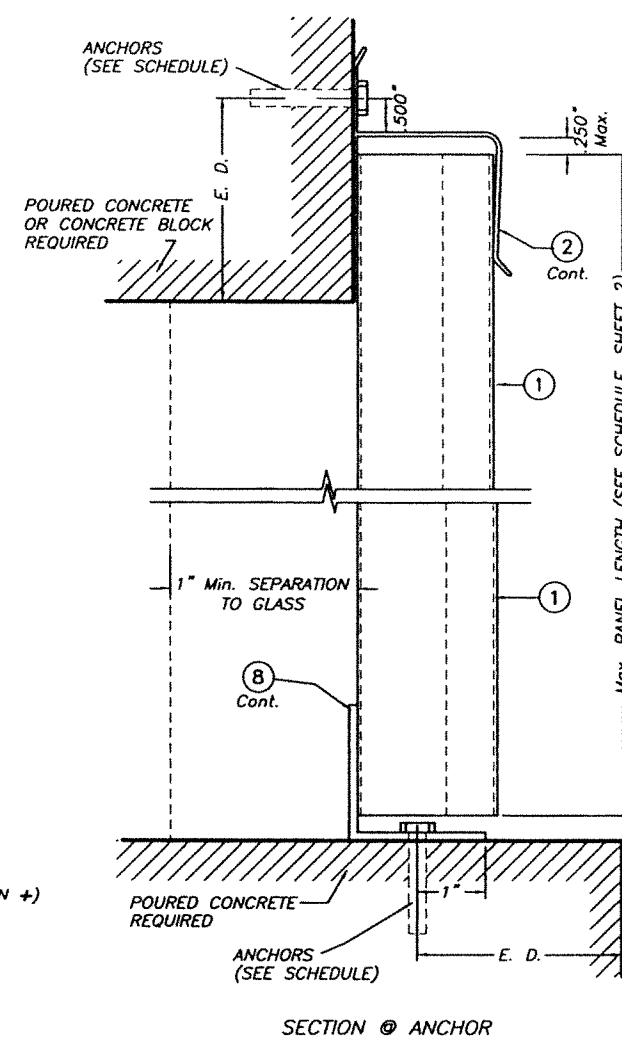
## WALL MOUNTING INSTALLATION

NOTE FOR COMBINATION OF SECTIONS :  
WALL/FLOOR MOUNTING SECTIONS CAN BE  
COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

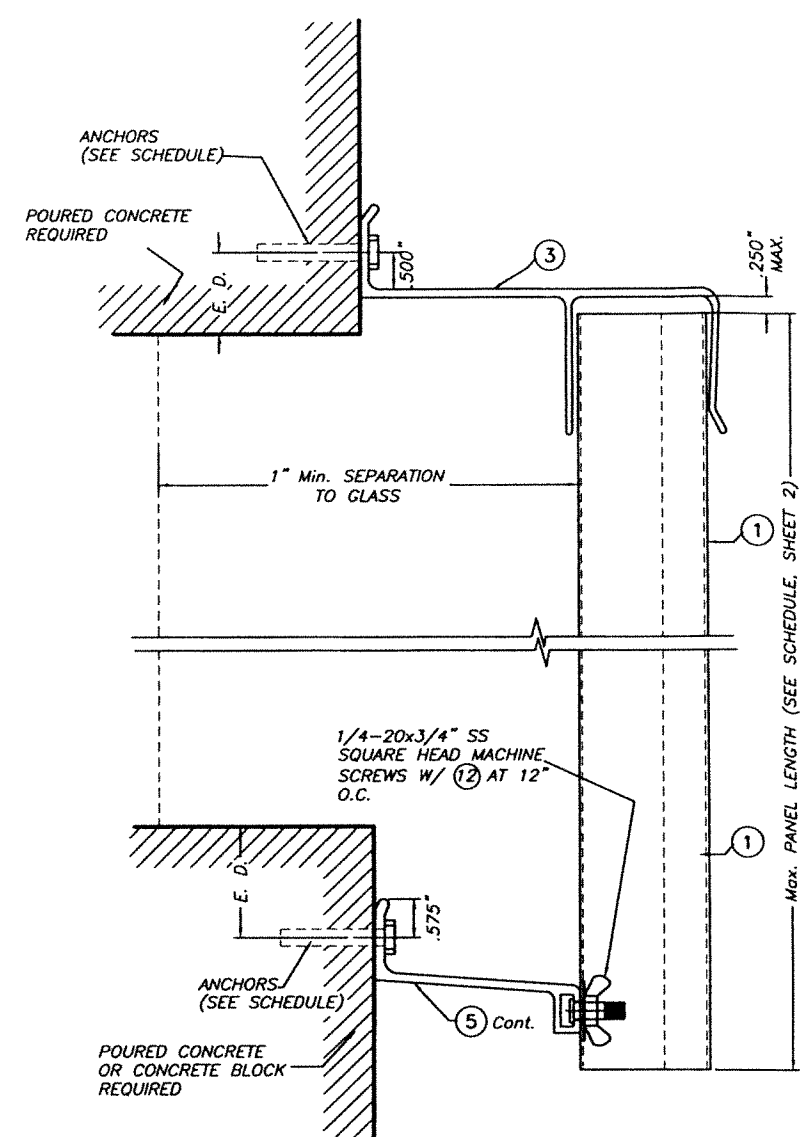
E. D. = EDGE DISTANCE  
(SEE SCHEDULE ON  
SHEET 7)



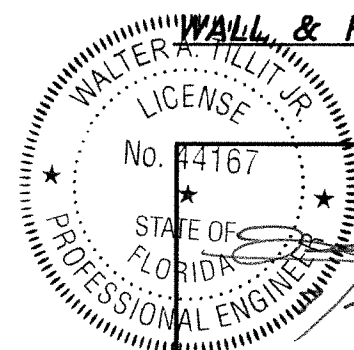
### SECTION 2



### SECTION 3



### BUILD OUT INSTALLATION SECTION 4



## WALL & FLOOR MOUNTING INSTALLATION SECTION 3

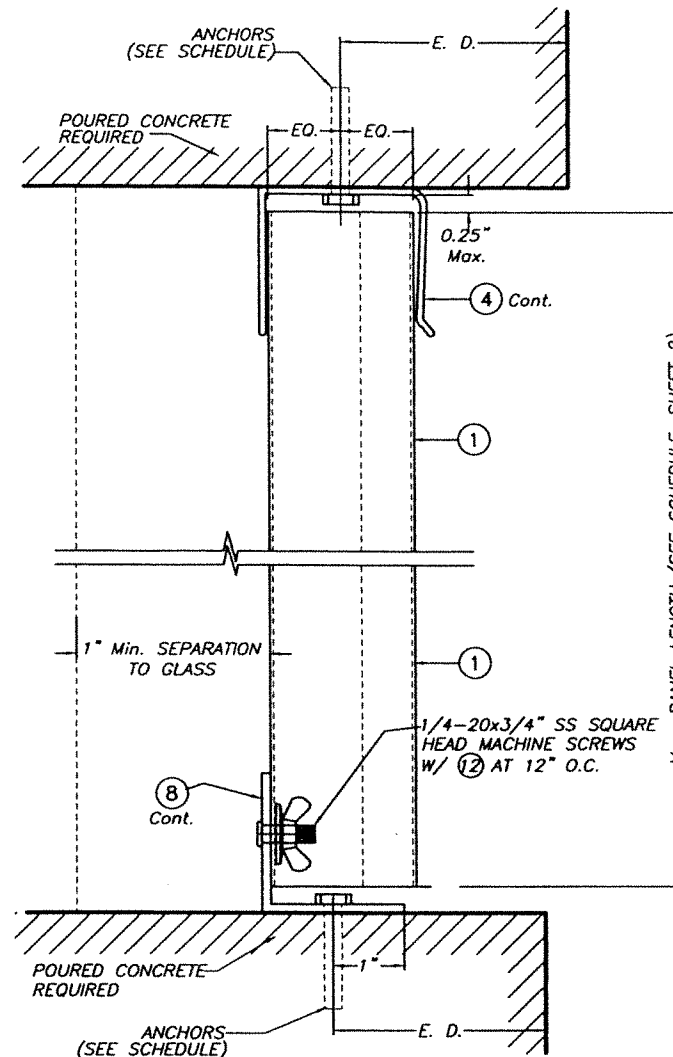
FLORIDA BUILDING CODE ( Non High Velocity Hurricane Zone)

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**TILTECO INC.**

TILLIT TESTING & ENGINEERING COMPANY  
8355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166  
Phone : (305) 871-1530 Fax : (305) 871-1531  
e-mail: tilteco@aol.com  
CA-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

| 24 GAGE GALVANIZED BERTHA STEEL STORM PANEL<br>(2" DEEP)                                        |             |         |         |             |      | DRAWN BY:<br>Y.M.    |  |
|-------------------------------------------------------------------------------------------------|-------------|---------|---------|-------------|------|----------------------|--|
| EASTERN METAL SUPPLY, INC                                                                       |             |         |         |             |      | 7/28/2023<br>DATE    |  |
| 4268 WEST ROADS DRIVE<br>WEST PALM BEACH, FL 33407<br>PH: (561) 533-6061<br>FAX: (561) 588-4780 |             |         |         |             |      | 23-142<br>DRAWING No |  |
| REV. No                                                                                         | DESCRIPTION | DATE    | REV. No | DESCRIPTION | DATE | SHEET 4 OF 10        |  |
| 1                                                                                               | OLD 20-178  | 7/28/23 | 3       |             |      |                      |  |
| 2                                                                                               |             |         | 4       |             |      |                      |  |

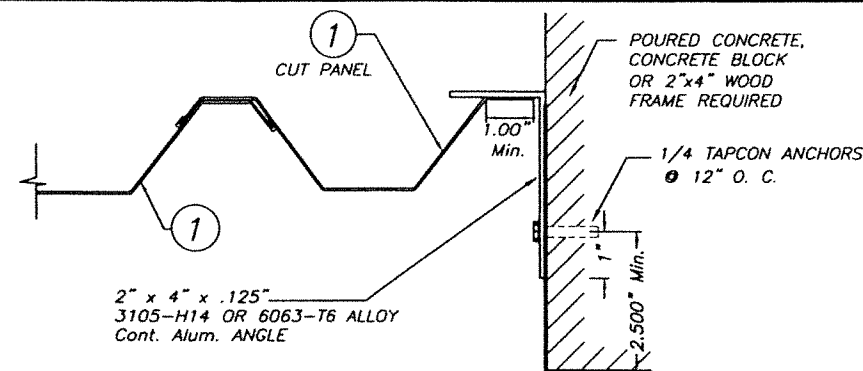


### CEILING & FLOOR MOUNTING INSTALLATION – SECTION 5

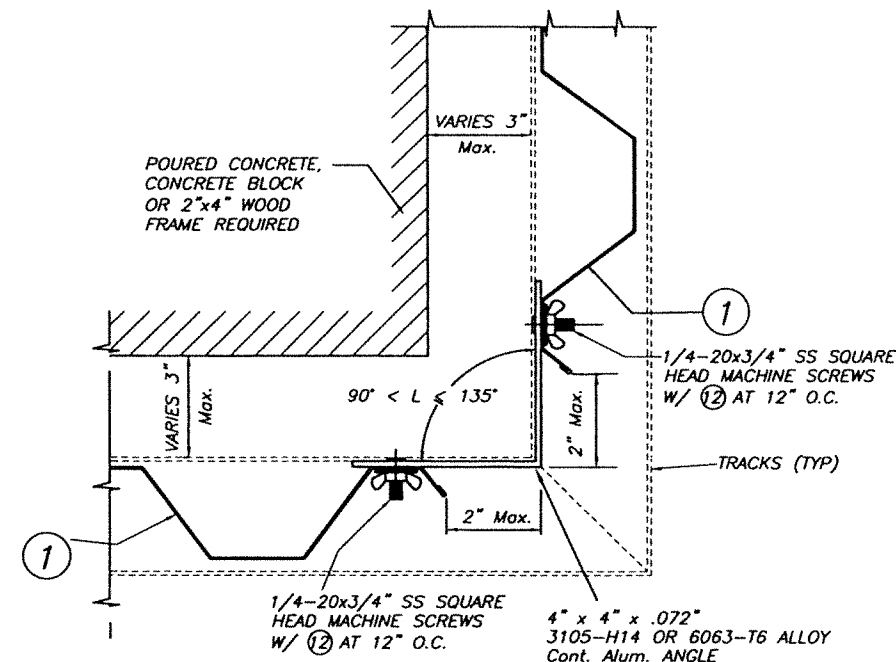
SCALE : 3/8" = 1"

E. D. = EDGE DISTANCE  
(SEE SCHEDULE ON  
SHEET 6)

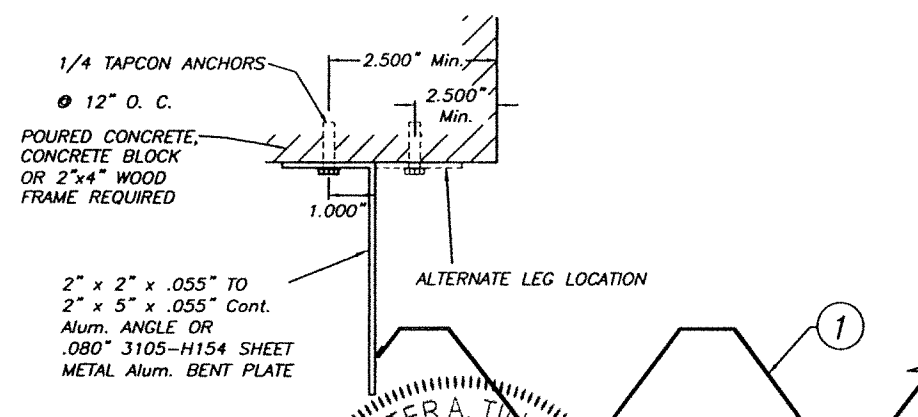
NOTE FOR COMBINATION OF SECTIONS :  
WALL/FLOOR/CEILING MOUNTING SECTIONS CAN BE  
COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.



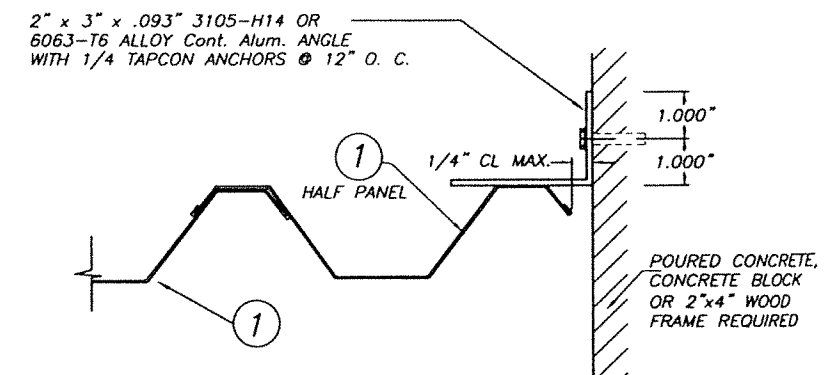
CASE A (Plan)



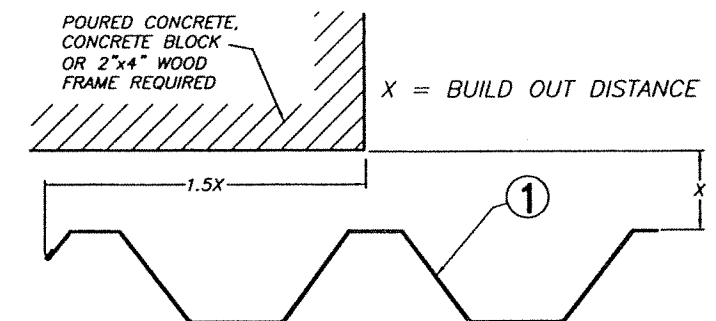
CASE B (Plan)



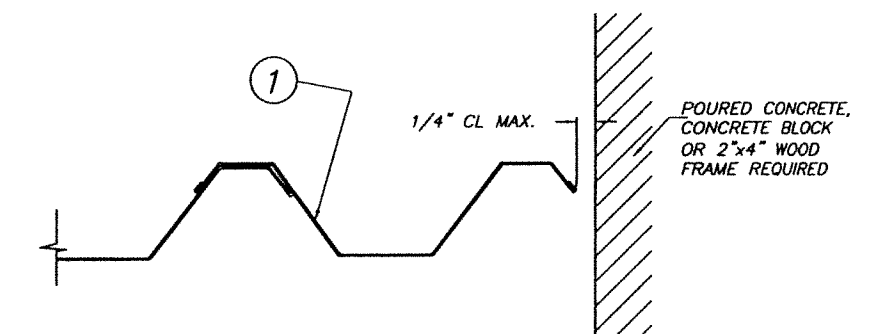
CASE C (Plan)



CASE D (Plan)



CASE E (Plan)

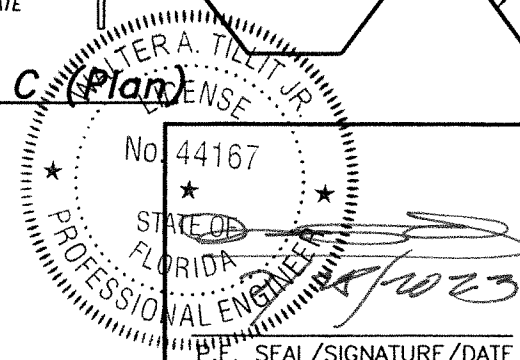


CASE F (Plan)

### END CLOSURES DETAILS

SCALE: 1/4" = 1"

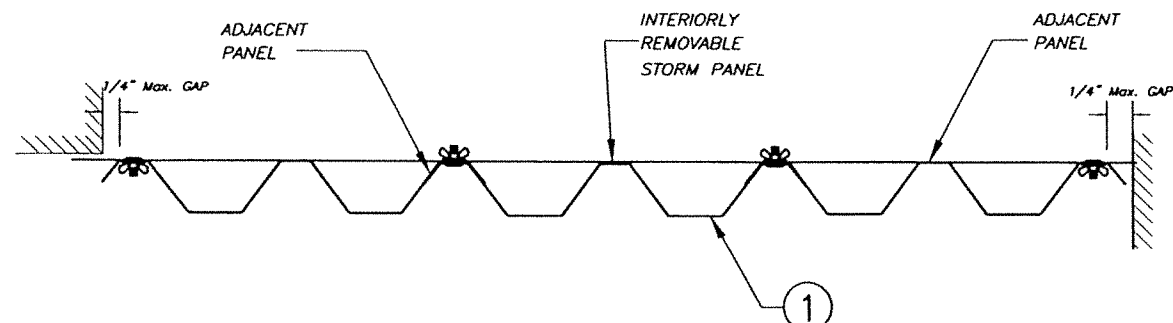
FLORIDA BUILDING CODE ( Non High Velocity Hurricane Zone)



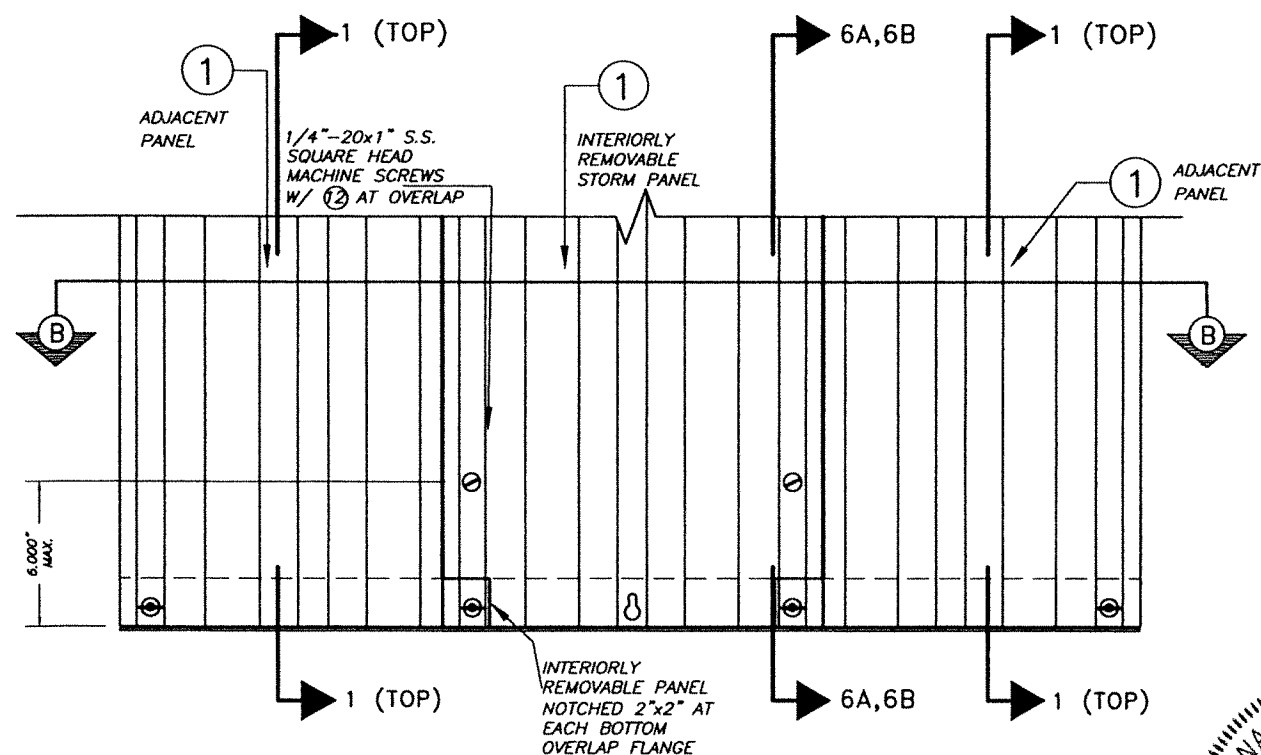
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**TILTECO INC.**  
TILLIT TESTING & ENGINEERING COMPANY  
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| 24 GAGE GALVANIZED BERTHA STEEL STORM PANEL<br>(2" DEEP)                                        |             |         |         |             |      |
|-------------------------------------------------------------------------------------------------|-------------|---------|---------|-------------|------|
| EASTERN METAL SUPPLY, INC                                                                       |             |         |         |             |      |
| 4268 WEST ROADS DRIVE<br>WEST PALM BEACH, FL 33407<br>PH: (561) 533-6061<br>FAX: (561) 588-4780 |             |         |         |             |      |
| REV. No                                                                                         | DESCRIPTION | DATE    | REV. No | DESCRIPTION | DATE |
| 1                                                                                               | OLD 20-178  | 7/28/23 | 3       |             |      |
| 2                                                                                               |             |         | 4       |             |      |

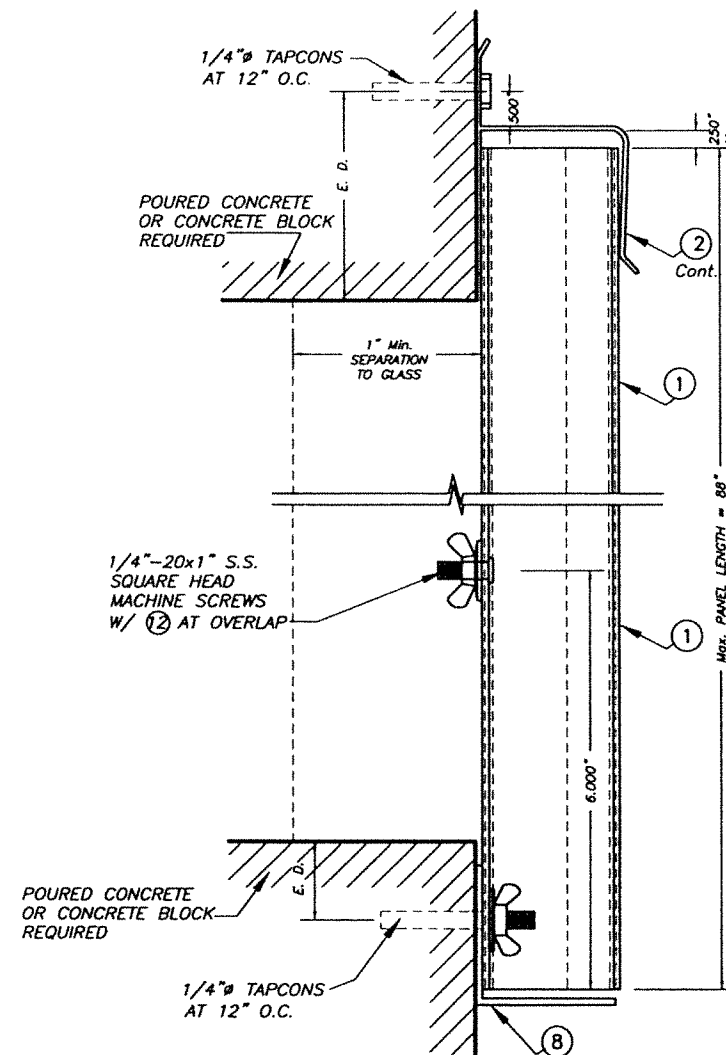
DRAWN BY:  
Y.M.  
7/28/2023  
DATE  
**23-142**  
DRAWING No  
SHEET 5 OF 10



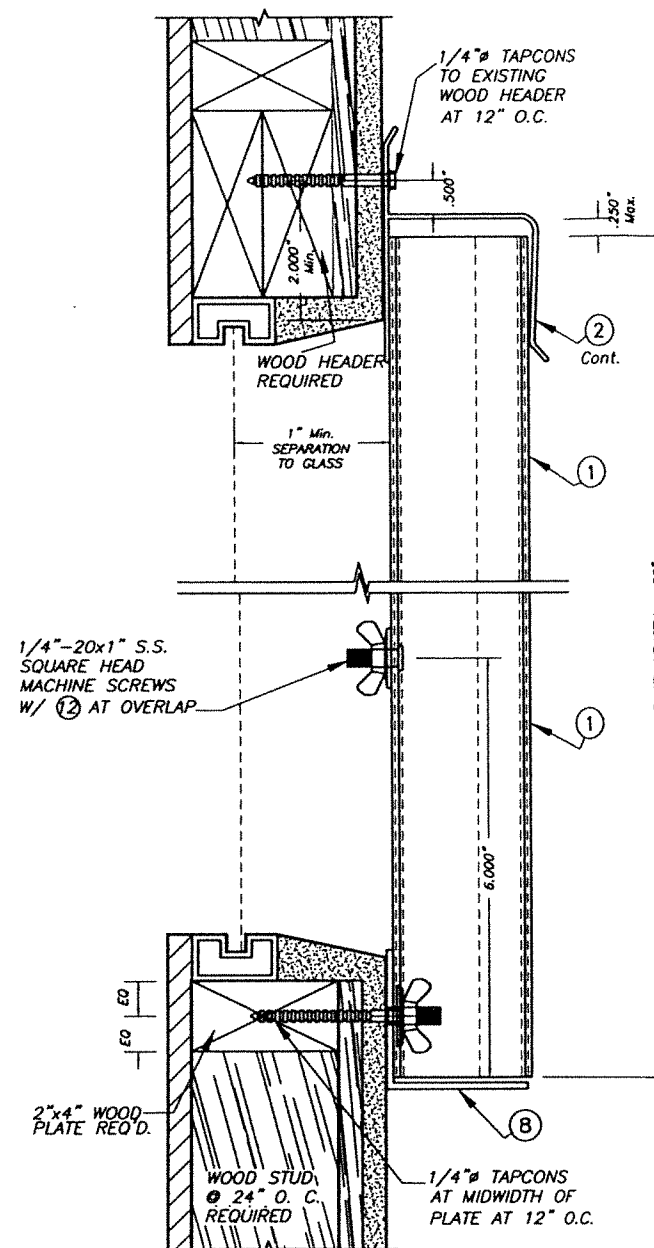
**SECTION B-B**  
SCALE : N.T.S.



**INTERIORLY REMOVABLE STORM PANEL  
PARTIAL ELEVATION**  
SCALE : N.T.S.



**WALL MOUNTING INSTALLATION  
SECTION 6A**  
SCALE : 3/8" = 1"



**WALL MOUNTING INSTALLATION  
SECTION 6B**  
SCALE : 3/8" = 1"

**INTERIORLY REMOVABLE STORM PANEL SECTIONS**

**MAX. A.S.D. DESIGN PRESSURE RATING = +57.0, -57.0 p.s.f.**

++  
SIDE WALK BOLTS ARE 3/4"x3/32" THICK HEAD  
MACHINE SCREW W/LENGTH AS PER NOTES A.2 &  
B.2 (SHEET 1)  
++  
TRANS. HEAD BOLTS ARE 1/2"x1/8" THICK HEAD  
MACHINE SCREW W/LENGTH AS PER NOTES A.2 &  
B.2 (SHEET 1)

WALTER A. TILIT JR.  
LICENSED PROFESSIONAL ENGINEER  
No. 44167  
STATE OF FLORIDA  
7/28/2023  
P.E. SEAL/SIGNATURE/DATE

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| 24 GAGE GALVANIZED BERTHA STEEL STORM PANEL<br>(2" DEEP)                                        |             |         |         |             |      | DRAWN BY:<br>Y.M.    |  |
|-------------------------------------------------------------------------------------------------|-------------|---------|---------|-------------|------|----------------------|--|
| EASTERN METAL SUPPLY, INC                                                                       |             |         |         |             |      | 7/28/2023<br>DATE    |  |
| 4268 WEST ROADS DRIVE<br>WEST PALM BEACH, FL 33407<br>PH: (561) 533-6061<br>FAX: (561) 588-4780 |             |         |         |             |      | 23-142<br>DRAWING No |  |
| REV. No                                                                                         | DESCRIPTION | DATE    | REV. No | DESCRIPTION | DATE | SHEET 6 OF 10        |  |
| 1                                                                                               | OLD 20-178  | 7/28/23 | 3       |             |      |                      |  |
| 2                                                                                               |             |         | 4       |             |      |                      |  |

**FLORIDA BUILDING CODE ( Non High Velocity Hurricane Zone)**

**MAXIMUM A.S.D DESIGN PRESSURE RATING (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR  
SPACING SCHEDULE FOR INSTALLATIONS IN CONCRETE AND CONCRETE BLOCK STRUCTURES (MASONRY)**

| MAXIMUM<br>A.S.D. DESIGN<br>PRESSURE<br>RATING (p.s.f.) | MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" ** |            |             |            |             |            | APPLICABLE TO<br>SECTIONS # &<br>ANY COMBINATION<br>OF THEM | MAXIMUM PANEL<br>LENGTH "L" (ft.) |
|---------------------------------------------------------|-----------------------------------------------|------------|-------------|------------|-------------|------------|-------------------------------------------------------------|-----------------------------------|
|                                                         | REGULAR TAPCONS                               |            | SOLID SET   |            | S.G.TAPCON  |            |                                                             |                                   |
|                                                         | TO CONCRETE                                   | TO MASONRY | TO CONCRETE | TO MASONRY | TO CONCRETE | TO MASONRY |                                                             |                                   |
| +40.0, -40.0<br>OR<br>LESS                              | N/A                                           | N/A        | 12"         | 12"        | 12"         | 12"        | 1 (TOP)                                                     | 6'-0"<br>OR<br>LESS               |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 1 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 2 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 2 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 3 (TOP)                                                     |                                   |
|                                                         | 12"                                           | N/A        | 12"         | N/A        | 12"         | N/A        | 3 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | N/A        | 12"         | N/A        | 12"         | N/A        | 4 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 4 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 5 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 5 (BOTTOM)                                                  |                                   |

| MAXIMUM<br>A.S.D. DESIGN<br>PRESSURE<br>RATING (p.s.f.) | MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" ** |            |             |            |             |            | APPLICABLE TO<br>SECTIONS # &<br>ANY COMBINATION<br>OF THEM | MAXIMUM PANEL<br>LENGTH "L" (ft.) |
|---------------------------------------------------------|-----------------------------------------------|------------|-------------|------------|-------------|------------|-------------------------------------------------------------|-----------------------------------|
|                                                         | REGULAR TAPCONS                               |            | SOLID SET   |            | S.G.TAPCON  |            |                                                             |                                   |
|                                                         | TO CONCRETE                                   | TO MASONRY | TO CONCRETE | TO MASONRY | TO CONCRETE | TO MASONRY |                                                             |                                   |
| +40.0, -40.0<br>UP TO<br>+57.0, -57.0                   | N/A                                           | N/A        | 12"         | 12"        | 12"         | 12"        | 1 (TOP)                                                     | > 6'-0"<br>UP TO<br>7'-4"         |
|                                                         | 12"                                           | 11"        | 12"         | 12"        | 12"         | 12"        | 1 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 11"        | 12"         | 12"        | 12"         | 12"        | 2 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 2 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 11"        | 12"         | 12"        | 12"         | 12"        | 3 (TOP)                                                     |                                   |
|                                                         | 12"                                           | N/A        | 12"         | N/A        | 12"         | N/A        | 3 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | N/A        | 12"         | N/A        | 12"         | N/A        | 4 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 11"        | 12"         | 12"        | 12"         | 12"        | 4 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 5 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 5 (BOTTOM)                                                  |                                   |

| MAXIMUM<br>A.S.D. DESIGN<br>PRESSURE<br>RATING (p.s.f.) | MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" ** |            |             |            |             |            | APPLICABLE TO<br>SECTIONS # &<br>ANY COMBINATION<br>OF THEM | MAXIMUM PANEL<br>LENGTH "L" (ft.) |
|---------------------------------------------------------|-----------------------------------------------|------------|-------------|------------|-------------|------------|-------------------------------------------------------------|-----------------------------------|
|                                                         | REGULAR TAPCONS                               |            | SOLID SET   |            | S.G.TAPCON  |            |                                                             |                                   |
|                                                         | TO CONCRETE                                   | TO MASONRY | TO CONCRETE | TO MASONRY | TO CONCRETE | TO MASONRY |                                                             |                                   |
| +40.0, -40.0<br>OR<br>LESS                              | N/A                                           | N/A        | 12"         | 12"        | 12"         | 12"        | 1 (TOP)                                                     | > 6'-0"<br>UP TO<br>9'-10"        |
|                                                         | 12"                                           | 11"        | 12"         | 12"        | 12"         | 12"        | 1 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 11"        | 12"         | 12"        | 12"         | 12"        | 2 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 2 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 11"        | 12"         | 12"        | 12"         | 12"        | 3 (TOP)                                                     |                                   |
|                                                         | 12"                                           | N/A        | 12"         | N/A        | 12"         | N/A        | 3 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | N/A        | 12"         | N/A        | 12"         | N/A        | 4 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 11"        | 12"         | 12"        | 12"         | 12"        | 4 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 5 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 5 (BOTTOM)                                                  |                                   |

| MAXIMUM<br>A.S.D. DESIGN<br>PRESSURE<br>RATING (p.s.f.) | MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" ** |            |             |            |             |            | APPLICABLE TO<br>SECTIONS # &<br>ANY COMBINATION<br>OF THEM | MAXIMUM PANEL<br>LENGTH "L" (ft.) |
|---------------------------------------------------------|-----------------------------------------------|------------|-------------|------------|-------------|------------|-------------------------------------------------------------|-----------------------------------|
|                                                         | REGULAR TAPCONS                               |            | SOLID SET   |            | S.G.TAPCON  |            |                                                             |                                   |
|                                                         | TO CONCRETE                                   | TO MASONRY | TO CONCRETE | TO MASONRY | TO CONCRETE | TO MASONRY |                                                             |                                   |
| +58.0, -58.0<br>OR<br>LESS                              | N/A                                           | N/A        | 12"         | 12"        | 12"         | 12"        | 1 (TOP)                                                     | 2'-8"<br>OR LESS                  |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 1 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 2 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 2 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 3 (TOP)                                                     |                                   |
|                                                         | 12"                                           | N/A        | 12"         | N/A        | 12"         | N/A        | 3 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | N/A        | 12"         | N/A        | 12"         | N/A        | 4 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 4 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 5 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 5 (BOTTOM)                                                  |                                   |

| MAXIMUM<br>A.S.D. DESIGN<br>PRESSURE<br>RATING (p.s.f.) | MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" ** |            |             |            |             |            | APPLICABLE TO<br>SECTIONS # &<br>ANY COMBINATION<br>OF THEM | MAXIMUM PANEL<br>LENGTH "L" (ft.) |
|---------------------------------------------------------|-----------------------------------------------|------------|-------------|------------|-------------|------------|-------------------------------------------------------------|-----------------------------------|
|                                                         | REGULAR TAPCONS                               |            | SOLID SET   |            | S.G.TAPCON  |            |                                                             |                                   |
|                                                         | TO CONCRETE                                   | TO MASONRY | TO CONCRETE | TO MASONRY | TO CONCRETE | TO MASONRY |                                                             |                                   |
| +40.0, -40.0<br>UP TO<br>+50.0, -50.0                   | N/A                                           | N/A        | 12"         | 12"        | 12"         | 12"        | 1 (TOP)                                                     | 6'-0"<br>OR LESS                  |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 1 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 2 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 2 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 3 (TOP)                                                     |                                   |
|                                                         | 12"                                           | N/A        | 12"         | N/A        | 12"         | N/A        | 3 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | N/A        | 12"         | N/A        | 12"         | N/A        | 4 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 4 (BOTTOM)                                                  |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 5 (TOP)                                                     |                                   |
|                                                         | 12"                                           | 12"        | 12"         | 12"        | 12"         | 12"        | 5 (BOTTOM)                                                  |                                   |

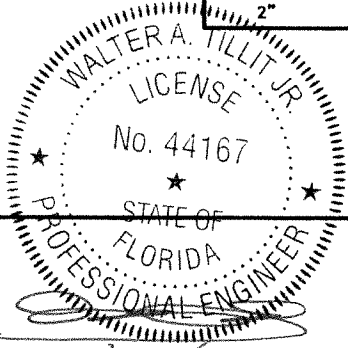
\*\* MAXIMUM ANCHOR SPACINGS ARE VALID FOR 3" EDGE DISTANCE. FOR E. D. LESS THAN 3", REDUCE ANCHOR SPACING BY MULTIPLYING SPACING SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. (NOTE: Min. E. D. FOR SOLIDSET ANCHORS IS 3") FOR THIS OPERATION TO BE POSSIBLE, REDUCED SPACING OBTAINED USING FACTOR SHALL NOT BE LESS THAN MINIMUM SPACING INDICATED FOR EACH ANCHOR TYPE AT ANCHORS LEGEND.

| ACTUAL E. D. | FACTOR                   |           |
|--------------|--------------------------|-----------|
|              | TAPCON (REGULAR OR S.G.) | SOLID SET |
| 3"           | .86                      | .75       |
| 2 1/2"       | .71                      | .50       |
| 2"           | .50                      | -         |

**ANCHORS LEGEND**

| ANCHOR TYPE              | Min. ANCHOR SPACING |
|--------------------------|---------------------|
| TAPCON (REGULAR OR S.G.) | 3.0"                |
| SOLID SET                | 2.5"                |

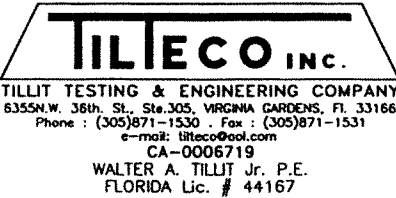
E. D. = EDGE DISTANCE



P.E. SEAL/SIGNATURE/DATE

FLORIDA BUILDING CODE ( Non High Velocity Hurricane Zone)

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(2" DEEP)  
**EASTERN METAL SUPPLY, INC**  
4268 WEST ROADS DRIVE  
WEST PALM BEACH, FL 33407  
PH: (561) 533-6061  
FAX: (561) 588-4780

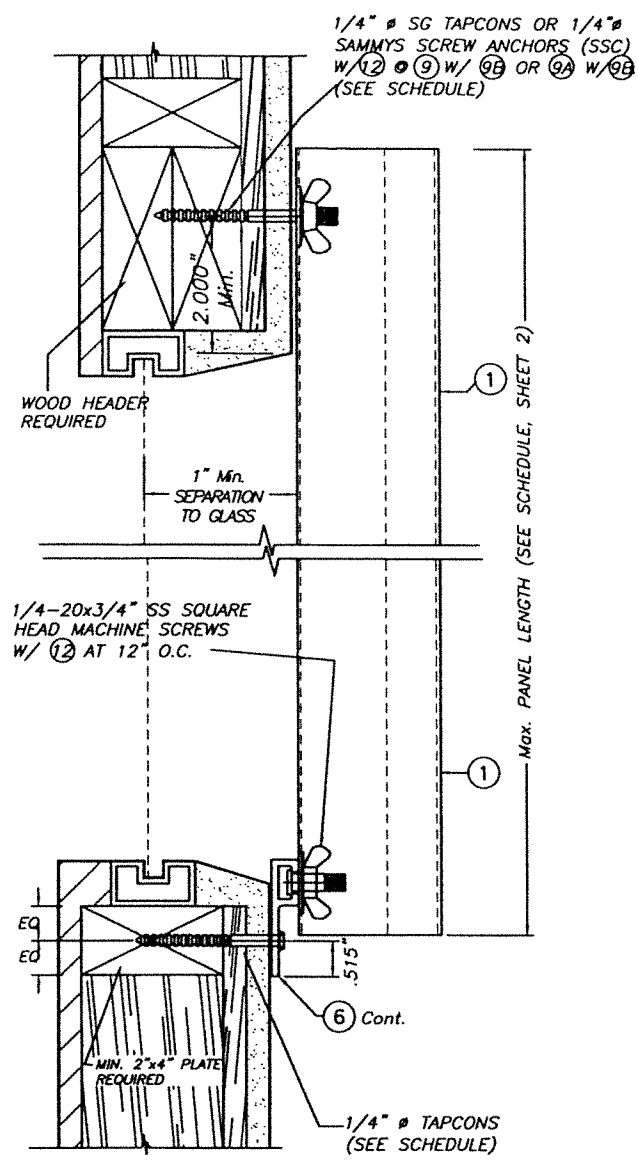
DRAWN BY:  
Y.M.

7/28/2023  
DATE

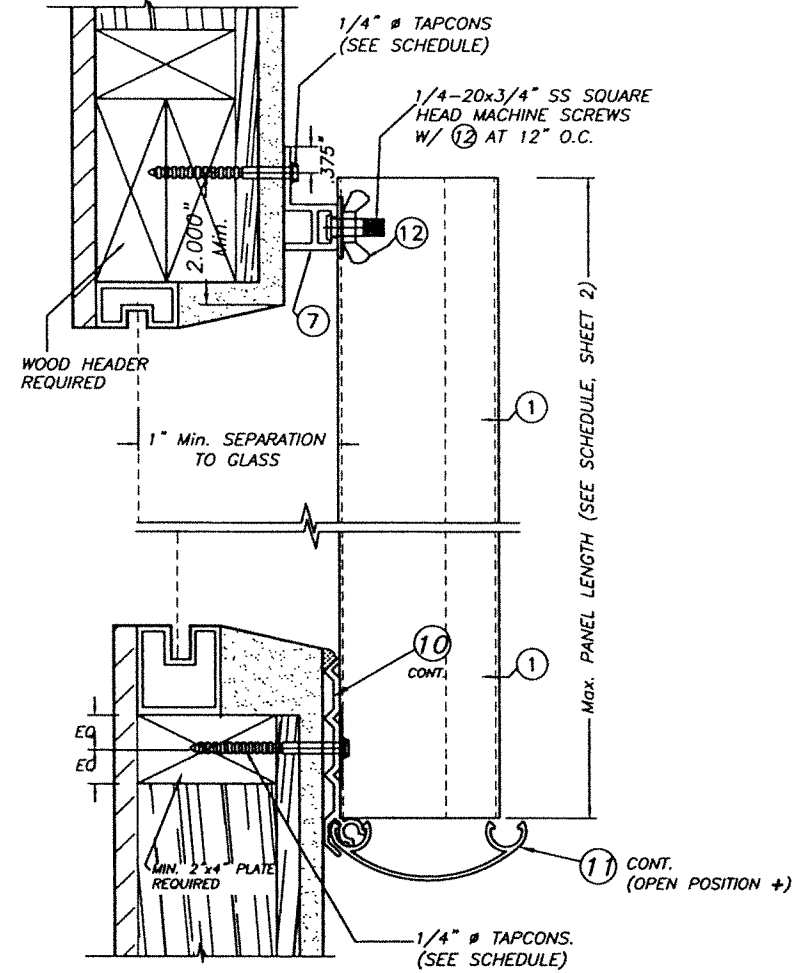
**23-142**  
DRAWING No

SHEET 7 OF 10

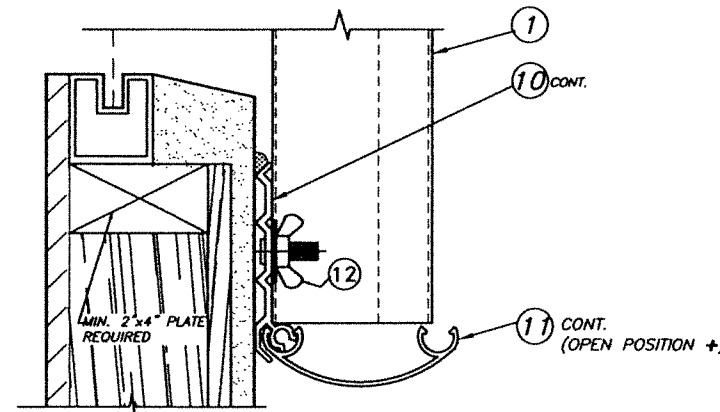
| REV. No | DESCRIPTION | DATE    | REV. No | DESCRIPTION | DATE |
|---------|-------------|---------|---------|-------------|------|
| 1       | OLD 20-178  | 7/28/23 | 3       |             |      |
| 2       |             |         | 4       |             |      |



**ALTERNATIVE 1**



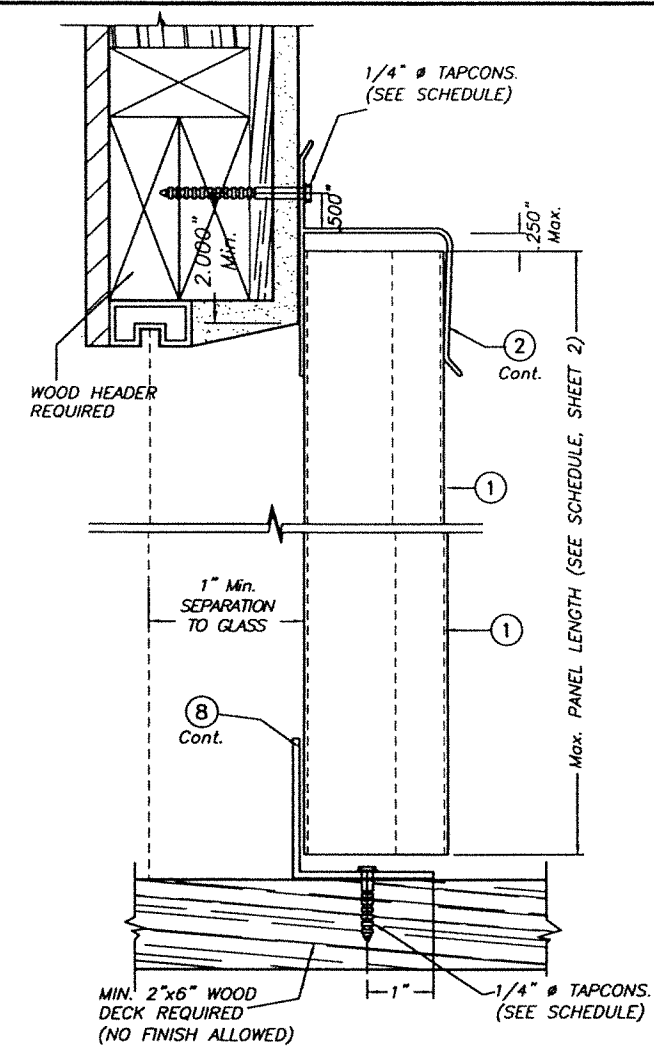
**SECTION @ ANCHOR**



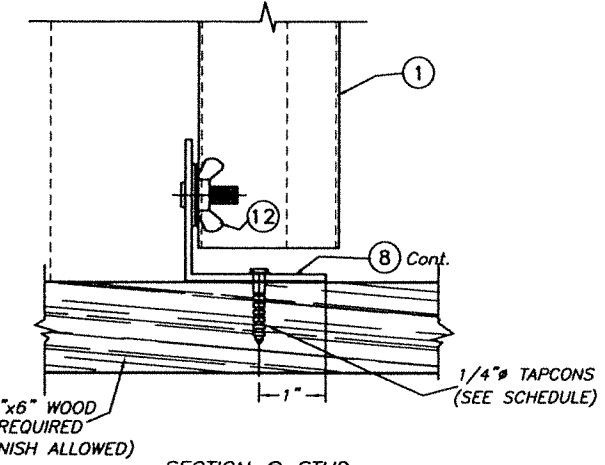
**SECTION @ STUD**

**ALTERNATIVE 2**

+ NOTE: FEMALE COVER CAP (1) TO REMAIN CLOSED AT NON HURRICANE CONDITIONS.

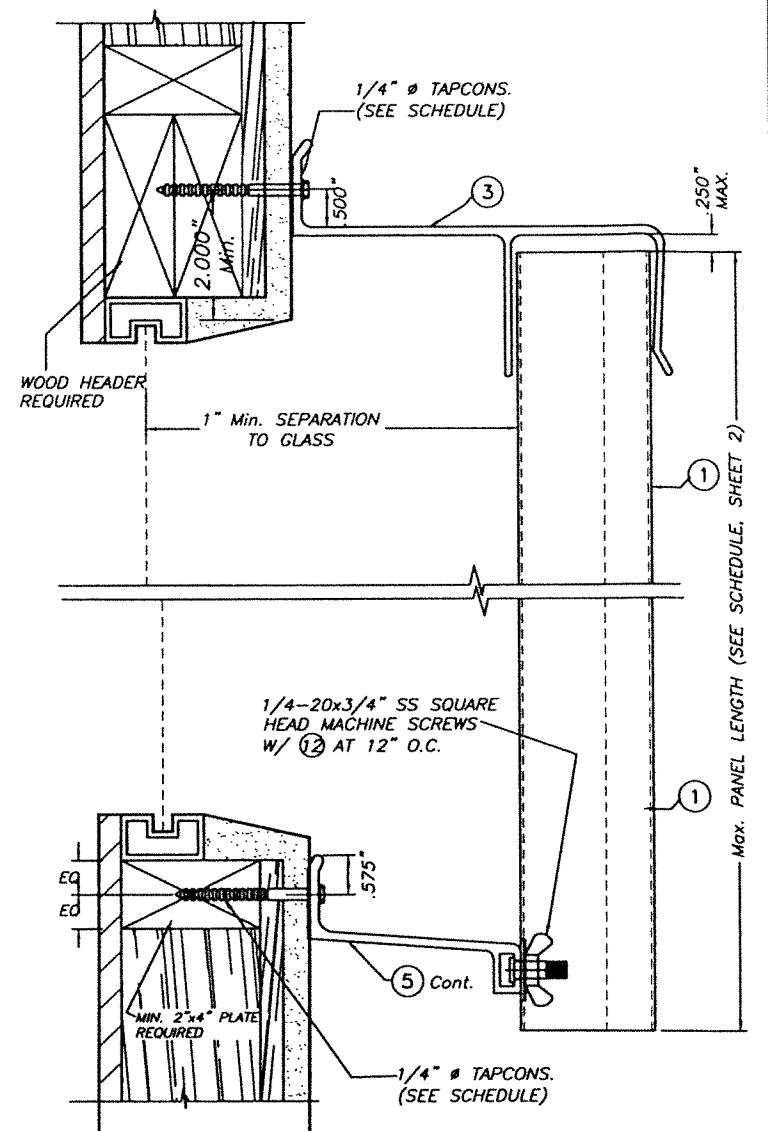


**SECTION @ ANCHOR**



**SECTION @ STUD**

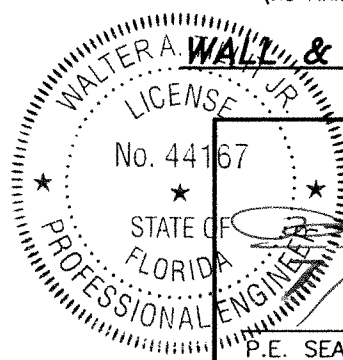
**WALL & FLOOR MOUNTING INSTALLATION ALTERNATIVE 3**



**BUILD OUT INSTALLATION ALTERNATIVE 4**

NOTE FOR COMBINATION OF SECTIONS :  
WALL/FLOOR MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

- NOTES:**
1. INSTALLATIONS ARE ONLY VALID FOR MAX. A.S.D. DESIGN PRESSURE RATING AND PANEL'S LENGTHS AS PER SCHEDULES ON SHEET 2 (EXCEPT AS NOTED)
  2. SEE ANCHOR SCHEDULE ON SHEET 10.
  3. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY (G) OF 0.55 OR EQUAL.



P.E. SEAL/SIGNATURE/DATE

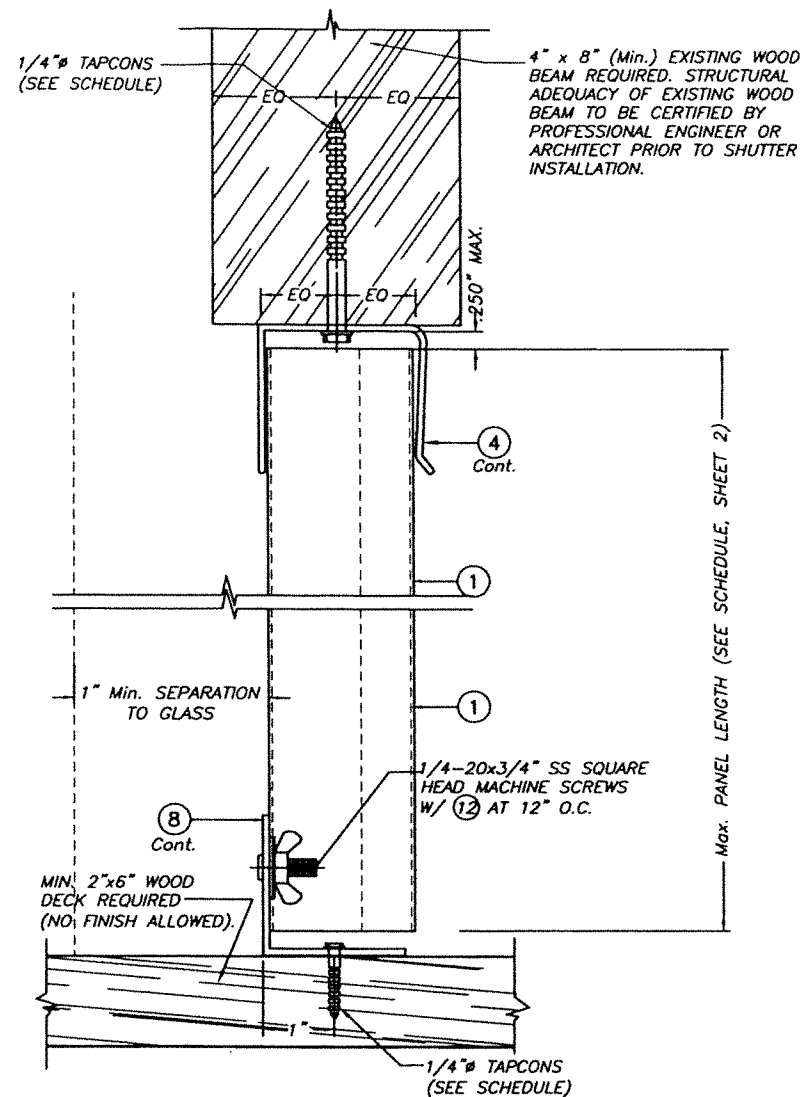
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**TILTECO INC.**

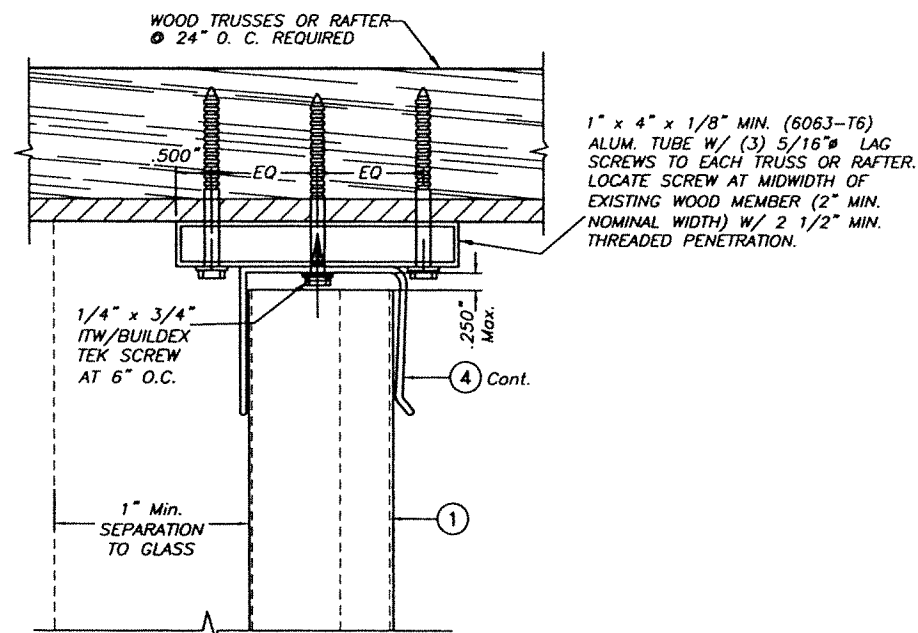
TILLIT TESTING & ENGINEERING COMPANY  
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166  
Phone : (305) 871-1530 . Fax : (305) 871-1531  
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CA-0006719  
WALTER A. TILLIT JR. P.E.  
FLORIDA Lic. # 44167

| 24 GAGE GALVANIZED BERTHA STEEL STORM PANEL (2" DEEP)                                           |             |         |         |             |      | DRAWN BY: Y.M.    |  |
|-------------------------------------------------------------------------------------------------|-------------|---------|---------|-------------|------|-------------------|--|
| EASTERN METAL SUPPLY, INC                                                                       |             |         |         |             |      | 7/28/2023 DATE    |  |
| 4268 WEST ROADS DRIVE<br>WEST PALM BEACH, FL 33407<br>PH: (561) 533-6061<br>FAX: (561) 588-4780 |             |         |         |             |      | 23-142 DRAWING No |  |
| REV. No                                                                                         | DESCRIPTION | DATE    | REV. No | DESCRIPTION | DATE | SHEET 8 OF 10     |  |
| 1                                                                                               | OLD 20-178  | 7/28/23 | 3       |             |      |                   |  |
| 2                                                                                               |             |         | 4       |             |      |                   |  |

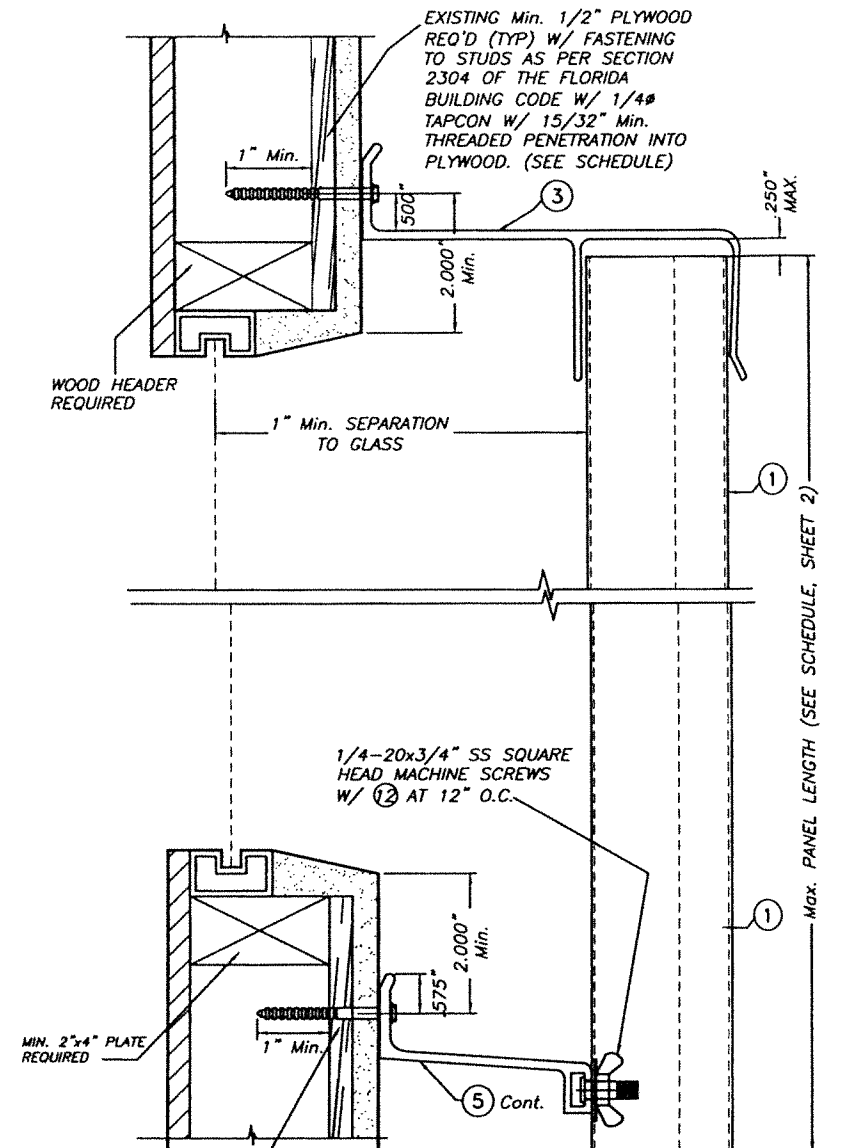
FLORIDA BUILDING CODE ( Non High Velocity Hurricane Zone)



**CEILING & FLOOR MOUNTING INSTALLATION  
ALTERNATIVE 5**



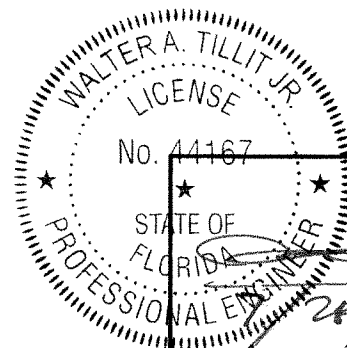
**OPTION TO  
ALTERNATIVE 5  
(TOP)**



**BUILD OUT INSTALLATION  
ALTERNATIVE 6**

**NOTE FOR COMBINATION OF SECTIONS :**  
WALL/FLOOR/CEILING MOUNTING SECTIONS CAN BE  
COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

- NOTES:**
1. INSTALLATIONS ARE ONLY VALID FOR MAX. A.S.D. DESIGN PRESSURE RATING AND PANEL'S LENGTHS AS PER SCHEDULES ON SHEET 2 (EXCEPT AS NOTED)
  2. SEE ANCHOR SCHEDULE ON SHEET 10.
  3. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY (G) OF 0.55 OR EQUAL.



P.E. SEAL/SIGNATURE/DATE

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**TILTECO INC.**

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**FLORIDA BUILDING CODE ( Non High Velocity Hurricane Zone)**

**24 GAGE GALVANIZED BERTHA STEEL STORM PANEL  
(2\"/>**

| REV. No | DESCRIPTION | DATE    | REV. No | DESCRIPTION | DATE |
|---------|-------------|---------|---------|-------------|------|
| 1       | OLD 20-178  | 7/28/23 | 3       |             |      |
| 2       |             |         | 4       |             |      |

DRAWN BY:  
Y.M.

7/28/2023  
DATE

**23-142**  
DRAWING No

SHEET 9 OF 10

MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR  
SPACING SCHEDULE FOR INSTALLATIONS INTO WOOD FRAME BUILDINGS

| MAXIMUM<br>A.S.D. DESIGN<br>PRESSURE<br>RATING (p.s.f.) | WOOD FASTENERS  |            |            | APPLICABLE TO<br>ALTERNATIVES # &<br>ANY COMBINATION<br>OF THEM | MAXIMUM PANEL<br>LENGTH "L" (ft.) |
|---------------------------------------------------------|-----------------|------------|------------|-----------------------------------------------------------------|-----------------------------------|
|                                                         | REGULAR TAPCONS | S.G.TAPCON | SAMMYS SSC |                                                                 |                                   |
| +40.0, -40.0<br>OR<br>LESS                              | N/A             | 12"        | 12"        | 1 (TOP)                                                         | 6'-0"<br>OR<br>LESS               |
|                                                         | 12"             | 12"        | N/A        | 1 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 2 (TOP)                                                         |                                   |
|                                                         | 12"             | N/A        | N/A        | 2 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 3 (TOP)                                                         |                                   |
|                                                         | 12"             | 12"        | N/A        | 3 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 4 (TOP)                                                         |                                   |
|                                                         | 12"             | 12"        | N/A        | 4 (BOTTOM)                                                      |                                   |
|                                                         | 11"             | 11"        | N/A        | 5 (TOP)                                                         |                                   |
|                                                         | 12"             | 12"        | N/A        | 5 (BOTTOM)                                                      |                                   |
|                                                         | 6"              | N/A        | N/A        | 6 (TOP)                                                         |                                   |
|                                                         | 6"              | N/A        | N/A        | 6 (BOTTOM)                                                      |                                   |

| MAXIMUM<br>A.S.D. DESIGN<br>PRESSURE<br>RATING (p.s.f.) | WOOD FASTENERS  |            |            | APPLICABLE TO<br>ALTERNATIVES # &<br>ANY COMBINATION<br>OF THEM | MAXIMUM PANEL<br>LENGTH "L" (ft.) |
|---------------------------------------------------------|-----------------|------------|------------|-----------------------------------------------------------------|-----------------------------------|
|                                                         | REGULAR TAPCONS | S.G.TAPCON | SAMMYS SSC |                                                                 |                                   |
| +40.0, -40.0<br>UP TO<br>+57.0, -57.0                   | N/A             | 12"        | 12"        | 1 (TOP)                                                         | > 6'-0"<br>UP TO<br>7'-4"         |
|                                                         | 12"             | 12"        | N/A        | 1 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 2 (TOP)                                                         |                                   |
|                                                         | 12"             | N/A        | N/A        | 2 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 3 (TOP)                                                         |                                   |
|                                                         | 7"              | 7"         | N/A        | 3 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 4 (TOP)                                                         |                                   |
|                                                         | 12"             | 12"        | N/A        | 4 (BOTTOM)                                                      |                                   |
|                                                         | 6.5"            | 6.5"       | N/A        | 5 (TOP)                                                         |                                   |
|                                                         | 7"              | 7"         | N/A        | 5 (BOTTOM)                                                      |                                   |
|                                                         | 6"              | N/A        | N/A        | 6 (TOP)                                                         |                                   |
|                                                         | 6"              | N/A        | N/A        | 6 (BOTTOM)                                                      |                                   |

| MAXIMUM<br>A.S.D. DESIGN<br>PRESSURE<br>RATING (p.s.f.) | WOOD FASTENERS  |            |            | APPLICABLE TO<br>ALTERNATIVES # &<br>ANY COMBINATION<br>OF THEM | MAXIMUM PANEL<br>LENGTH "L" (ft.) |
|---------------------------------------------------------|-----------------|------------|------------|-----------------------------------------------------------------|-----------------------------------|
|                                                         | REGULAR TAPCONS | S.G.TAPCON | SAMMYS SSC |                                                                 |                                   |
| +40.0, -40.0<br>OR<br>LESS                              | N/A             | 12"        | 12"        | 1 (TOP)                                                         | > 6'-0"<br>UP TO<br>9'-10"        |
|                                                         | 12"             | 12"        | N/A        | 1 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 2 (TOP)                                                         |                                   |
|                                                         | 12"             | N/A        | N/A        | 2 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 3 (TOP)                                                         |                                   |
|                                                         | 7.5"            | 7.5"       | N/A        | 3 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 4 (TOP)                                                         |                                   |
|                                                         | 12"             | 12"        | N/A        | 4 (BOTTOM)                                                      |                                   |
|                                                         | 7               | 7"         | N/A        | 5 (TOP)                                                         |                                   |
|                                                         | 7.5"            | 7.5"       | N/A        | 5 (BOTTOM)                                                      |                                   |
|                                                         | 6"              | N/A        | N/A        | 6 (TOP)                                                         |                                   |
|                                                         | 6"              | N/A        | N/A        | 6 (BOTTOM)                                                      |                                   |

| MAXIMUM<br>A.S.D. DESIGN<br>PRESSURE<br>RATING (p.s.f.) | WOOD FASTENERS  |            |            | APPLICABLE TO<br>ALTERNATIVES # &<br>ANY COMBINATION<br>OF THEM | MAXIMUM PANEL<br>LENGTH "L" (ft.) |
|---------------------------------------------------------|-----------------|------------|------------|-----------------------------------------------------------------|-----------------------------------|
|                                                         | REGULAR TAPCONS | S.G.TAPCON | SAMMYS SSC |                                                                 |                                   |
| +58.0, -58.0<br>OR<br>LESS                              | N/A             | 12"        | 12"        | 1 (TOP)                                                         | 2'-8"<br>OR LESS                  |
|                                                         | 12"             | 12"        | N/A        | 1 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 2 (TOP)                                                         |                                   |
|                                                         | 12"             | N/A        | N/A        | 2 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 3 (TOP)                                                         |                                   |
|                                                         | 12"             | 12"        | N/A        | 3 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 4 (TOP)                                                         |                                   |
|                                                         | 12"             | 12"        | N/A        | 4 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 5 (TOP)                                                         |                                   |
|                                                         | 12"             | 12"        | N/A        | 5 (BOTTOM)                                                      |                                   |
|                                                         | 6"              | N/A        | N/A        | 6 (TOP)                                                         |                                   |
|                                                         | 6"              | N/A        | N/A        | 6 (BOTTOM)                                                      |                                   |

| MAXIMUM<br>A.S.D. DESIGN<br>PRESSURE<br>RATING (p.s.f.) | WOOD FASTENERS  |            |            | APPLICABLE TO<br>ALTERNATIVES # &<br>ANY COMBINATION<br>OF THEM | MAXIMUM PANEL<br>LENGTH "L" (ft.) |
|---------------------------------------------------------|-----------------|------------|------------|-----------------------------------------------------------------|-----------------------------------|
|                                                         | REGULAR TAPCONS | S.G.TAPCON | SAMMYS SSC |                                                                 |                                   |
| +40.0, -40.0<br>UP TO<br>+50.0, -50.0                   | N/A             | 12"        | 12"        | 1 (TOP)                                                         | 6'-0"<br>OR LESS                  |
|                                                         | 12"             | 12"        | N/A        | 1 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 2 (TOP)                                                         |                                   |
|                                                         | 12"             | N/A        | N/A        | 2 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 3 (TOP)                                                         |                                   |
|                                                         | 10"             | 10"        | N/A        | 3 (BOTTOM)                                                      |                                   |
|                                                         | 12"             | 12"        | N/A        | 4 (TOP)                                                         |                                   |
|                                                         | 12"             | 12"        | N/A        | 4 (BOTTOM)                                                      |                                   |
|                                                         | 9"              | 9"         | N/A        | 5 (TOP)                                                         |                                   |
|                                                         | 10"             | 10"        | N/A        | 5 (BOTTOM)                                                      |                                   |
|                                                         | 6"              | N/A        | N/A        | 6 (TOP)                                                         |                                   |
|                                                         | 6"              | N/A        | N/A        | 6 (BOTTOM)                                                      |                                   |

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

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DRAWN BY:  
Y.M.  
7/28/2023  
DATE  
**23-142**  
DRAWING No  
REV. No DESCRIPTION DATE REV. No DESCRIPTION DATE  
1 OLD 20-178 7/28/23 3  
2 SHEET 10 OF 10