

GENERAL NOTES:

1. TITAN II FOLDING IMPACT PROTECTIVE SYSTEM 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 FOLDING IMPACT PROTECTIVE SYSTEM MAY BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES (HVHZ) AND OUT OF THEM (NHVHZ).

DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTIONS 1620 (HVHZ) & 1609 (NHVHZ) OF THE ABOVE MENTIONED CODE, FOR A BASIC WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE THIS PRODUCT TO BE INSTALLED FOR A DIRECTIONALITY FACTOR Kd=0.85, USING ASCE 7-22 AND SHALL NOT EXCEED THE MAXIMUM A.S.D. DESIGN PRESSURE RATING INDICATED ON SHEET 13.

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 SHEET 13.

IN ORDER TO VERIFY THAT COMPONENTS & ANCHORS ON THIS P.E.D., AS TESTED, WERE NOT OVERSTRESSED, A 33 % INCREASE IN ALLOWABLE STRESS FOR WIND LOADS WAS NOT USED IN THEIR ANALYSIS. A DURATION FACTOR CD = 1.60 WAS USED FOR VERIFICATION OF FASTENERS IN WOOD,PER N.D.S. 2018.

FOLDING IMPACT PROTECTIVE SYSTEM ADEQUACY FOR IMPACT AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTIONS 1626 & 1609.1.2 OF THE ABOVE MENTIONED CODE AS PER TESTING PERFORMED AT HURRICANE ENGINEERING TESTING, INC. (H.E.T.I.), HURRICANE TESTING LABORATORY (H.T.L.) & AMERICAN TESTING LAB OF SOUTH FLORIDA AS PER PROTOCOLS TAS-201, TAS-202 AND TAS-203, AND AS PER SUBMITTED STRUCTURAL CALCULATIONS, PERFORMED AS PER SECTION 1616 & 1604 OF THE FLORIDA BUILDING CODE.

2. STAINLESS STEEL SHEET METAL SCREWS USED AT SLATS ① & ② SHALL BE # 10 x 3", 410-HT MINIMUM SERIES W/ 173.6 ksi YIELD STRENGTH & 187.4 ksi TENSILE STRENGTH. SCREWS SHALL BE COATED WITH XYLAN 5000 SERIES FLUOROPOLYMER COATING, AS MANUFACTURED BY WHITFORD Co, BOX 507. WEST CHESTER PA. 19381.

3. ALL ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ASSOCIATION ALLOY AND TEMPER AS INDICATED ON SHEET 2. MINIMUM YIELD STRENGTH FOR 6063-T6 ALLOY AT SLATS SHALL BE Fy=25.9 ksi. ALL ALUMINUM EXTRUSIONS IN CONTACT WITH DISSIMILAR MATERIALS SHALL COMPLY WITH SECTION III-6 OF THE 2015 ALUMINUM DESIGN MANUAL.

4. ALL SCREWS TO BE STAINLESS STEEL 304 OR 316 SERIES W/ 50 ksi YIELD STRENGTH AND 90 ksi TENSILE STRENGTH OR CORROSION RESISTANT COATED CARBON STEEL ITW/BUILDEX TEK SCREWS AND SHALL COMPLY W/ FLORIDA BUILDING CODE SECTION 2411.3.3.4. ALL ALUMINUM POP RIVETS TO BE 5052 ALUMINUM ALLOY WITH ALUMINUM MANDREL.

5. BOLTS TO BE ASTM A-307 GALVANIZED STEEL, OR AISI 304 OR 316 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:

- 1/4" Ø TAPCON W/ ADVANCED THREADFORM TECHNOLOGY, AS MANUFACTURED BY I.T.W. BUILDEX, INC. TO MIN. f'c=3192 psi.
- 1/4" Ø x 3/4" SOLID SET, AS DISTRIBUTED BY ALL POINT SOLID SET ANCHORS TO MIN. f'c=3000 psi.
- 1/4" Ø CRETE-FLEX, AS MANUFACTURED BY ELCO CONSTRUCTION PRODUCTS TO MIN. f'c=3350 psi.

NOTES:

- A.1) MINIMUM EMBEDMENT OF 1/4" Ø TAPCON ANCHORS OR 1/4" Ø CRETE-FLEX INTO CONCRETE IS 1 3/4". MINIMUM EDGE DISTANCE (E.D.) SHALL BE AS PER SHEET 13.
- A.2) 3/4" SOLID SET ANCHORS SHALL BE ENTIRELY EMBEDDED (7/8") INTO THE POURED CONCRETE. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. 1/4" Ø-20 S.S SCREWS USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST.
- A.3) IN CASE THAT PRECAST STONE, PRECAST CONCRETE PANELS, OR PAVERS BE FOUND ON THE EXISTING WALL 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.

- 1/4" Ø TAPCON W/ ADVANCED THREADFORM TECHNOLOGY AS MANUFACTURED BY I.T.W. BUILDEX, INC.
- 1/4" Ø x 3/4" SOLID SET, AS DISTRIBUTED BY ALL POINT SOLID SET ANCHORS.
- 1/4" Ø CRETE-FLEX, AS MANUFACTURED BY ELCO CONSTRUCTION PRODUCTS.

NOTES:

- B.1) MINIMUM EMBEDMENT OF 1/4"Ø TAPCON ANCHORS OR 1/4" Ø CRETE-FLEX INTO CONCRETE BLOCK UNIT IS 1 1/4" MINIMUM EDGE DISTANCE (E.D.) SHALL BE AS PER SHEET 13.
- B.2) 3/4" SOLID SET ANCHORS SHALL BE ENTIRELY EMBEDDED (7/8") INTO THE CONCRETE BLOCK UNIT. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. 1/4" Ø-20 S.S SCREWS 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 & B.2 ABOVE.

(C) TO EXISTING WOOD FRAME BUILDING: G=0.46 MIN.

- 1/4" Ø TAPCON W/ ADVANCED THREADFORM TECHNOLOGY, OR 1/4" Ø CRETE-FLEX, AS MANUFACTURED BY ITW/BUILDEX, INC & ELCO CONSTRUCTION PRODUCTS, RESPECTIVELY, OR # 14 NDS WOOD SCREWS OR 1/4" Ø NDS LAG SCREWS.

NOTES:

- C.1) MINIMUM THREADED PENETRATION OF 1/4" Ø TAPCON OR 1/4" Ø CRETE-FLEX OR #14 NDS WOOD SCREWS OR 1/4" Ø NDS LAG SCREWS INTO THE WOOD FRAME UNIT SHALL BE 1 1/2" FOR C1 THRU C4 AND C6 THRU C8 CONNECTION TYPE, AND 2" FOR C5, OR AS INDICATED ON WOOD SECTIONS ON SHEETS 10 THRU 12. NO THREADED PENETRATION INTO WALL FINISH SHALL BE CONSIDERED AS PART OF THE REQUIRED THREADED PENETRATION.
- C.2) MINIMUM EDGE DISTANCE OF 1/4" Ø TAPCON OR 1/4" Ø CRETE-FLEX OR #14 NDS WOOD SCREWS OR 1/4"Ø NDS LAG SCREWS INTO WOOD SHALL BE AS SHOWN ON SHEETS 10 THRU 12.
- C.3) IN CASE THAT PRECAST STONE, PRECAST CONCRETE OR BRICK PANELS, VENEER OR PAVERS BE FOUND ON THE EXISTING WALL, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN SUBSTRATE BEHIND SUCH PANELS. MINIMUM THREADED PENETRATION SHALL BE AS INDICATED ON NOTE C.1 ABOVE.

(D) TO EXISTING STEEL STRUCTURE: MIN. 12 GAGE, Fy=33 KSI (MIN.) MATERIAL.

- 1/4" Ø ITW BUILDEX TEK SCREWS, W/ FULL THREAD PENETRATION.

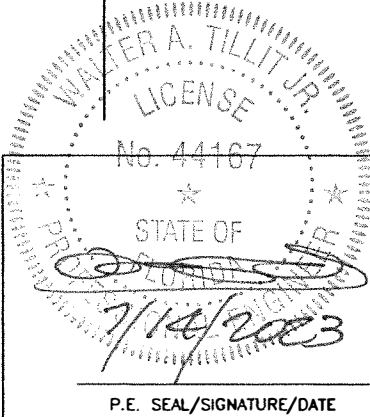
NOTES:

D.1) MINIMUM EDGE DISTANCE OF ITW BUILDEX TEK SCREW 1".

7. ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR MANUFACTURER.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE PRODUCT IS TO BE ATTACHED TO INSURE PROPER ANCHORAGE. THIS SHUTTER SHALL ONLY BE ATTACHED TO CONCRETE, BLOCK OR WOOD FRAME BUILDINGS.
9. EACH UNIT MUST BEAR PERMANENT LABEL IN A VISIBLE PLACE WITH WARNING NOTE: DURING PERIODS OF HURRICANE WARNINGS HOME OWNER, TENANT, OR OTHERS, MUST PROPERLY CLOSE ALL CENTERPIECES AND ENGAGE OR LOCK ALL LOCKS.
10. PRODUCT MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT PRODUCT IN ACCORDANCE WITH SECTION 1709.9.3 OF THE FLORIDA BUILDING CODE. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABELING TO COMPLY WITH SECTION 1709.9.2 OF THE FLORIDA BUILDING CODE.
11. FOLDING IMPACT PROTECTIVE SYSTEM'S INSTALLATION SHALL COMPLY WITH SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.
12. (A) THIS PRODUCT EVALUATION DOCUMENT (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 PRODUCT EVALUATION DOCUMENT PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.
- (C) THIS PRODUCT EVALUATION DOCUMENT 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 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 THAT PREPARED IT.

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

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



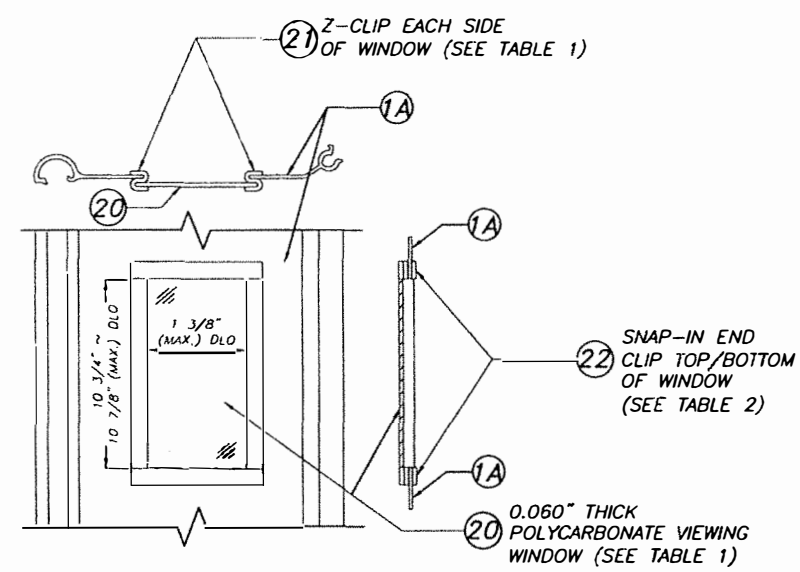
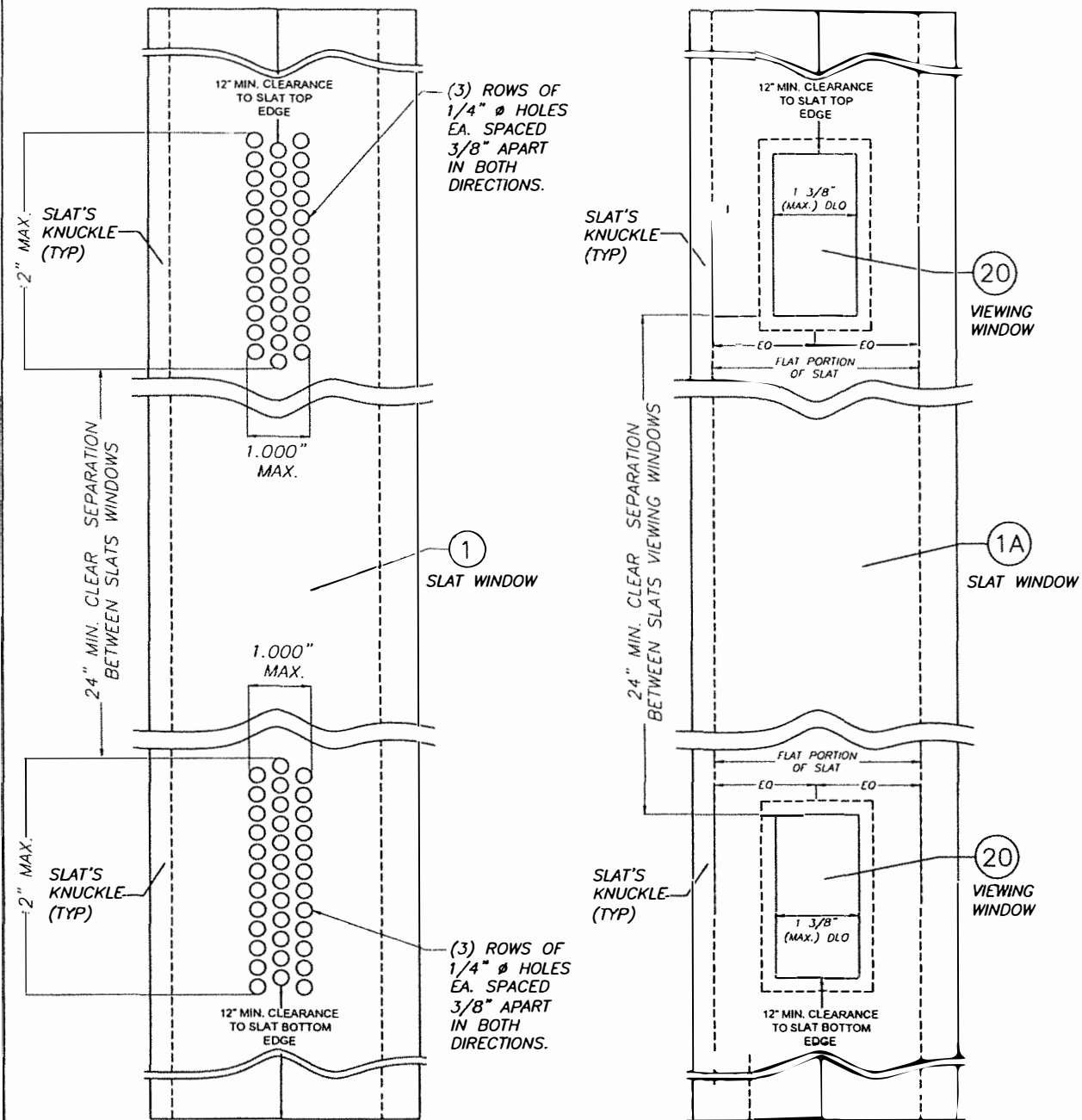
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**TILTECO** INC.

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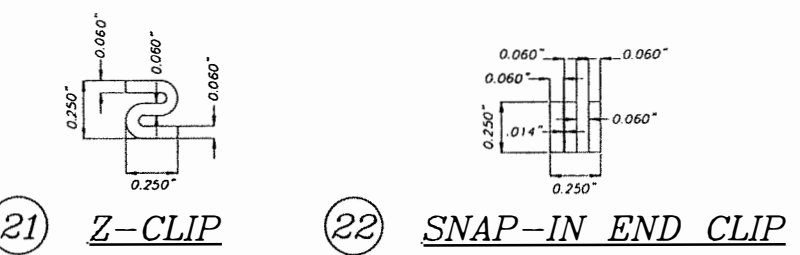
| TITAN II FOLDING IMPACT PROTECTIVE SYSTEM                                                                                                     |             |           |         |             |      | DRAWN BY:            |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------|---------|-------------|------|----------------------|
| <b>FOLDING SHUTTER CORP.</b><br>1862 MARTIN LUTHER KING JR. BLVD<br>WEST PALM BEACH, FL 33404<br>PH: 1800-643-6371<br>www.foldingshutters.com |             |           |         |             |      | Y.M.                 |
|                                                                                                                                               |             |           |         |             |      | 7/14/2023<br>DATE    |
|                                                                                                                                               |             |           |         |             |      | 23-106<br>DRAWING No |
| REV. No                                                                                                                                       | DESCRIPTION | DATE      | REV. No | DESCRIPTION | DATE | SHEET 1 OF 13        |
| 1                                                                                                                                             | OLD 20-190  | 7/14/2023 | 3       | -           | -    |                      |
| 2                                                                                                                                             | -           | -         | 4       | -           | -    |                      |





NOTES:  
- MAX. (2) WINDOWS MAY BE IN ONE SLAT SPACED A MINIMUM OF 24" APART, WITH 12" MIN. FROM ENDS OF SLAT TOP & BOTTOM.  
- (1A) SLAT MUST NEVER BE INSTALLED ADJACENT TO CENTERPIECES (4) OR (5), NOR AT CORNERS OF PRODUCT.

(1A) SLAT WINDOW DETAIL (ELEVATION)



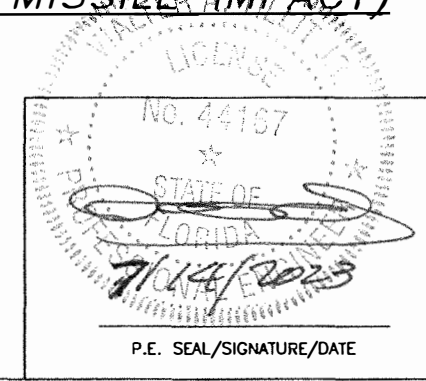
| TABLE 1: SOURCES FOR (20) & (21)  |                    |                                            |                                          |
|-----------------------------------|--------------------|--------------------------------------------|------------------------------------------|
| TYPICAL PROPERTIES                | STANDARD REFERENCE | OPTIONS                                    |                                          |
|                                   |                    | BAYER MATERIAL / SCIENCE LLC.MAKROLON 3103 | SABIC INNOVATIVE PLASTIC LEXAN 103 RESIN |
| PHYSICAL:                         |                    |                                            |                                          |
| SPECIFIC GRAVITY                  | ASTM D792          | 0.043 lb/in <sup>3</sup>                   | 0.043 lb/in <sup>3</sup>                 |
| MECHANICAL:                       |                    |                                            |                                          |
| TENSILE YIELD STRENGTH            | ASTM D638          | 9,400 p.s.i.                               | 9,500 p.s.i.                             |
| FLEXURAL STRENGTH AT YIELD        | ASTM D790          | 12,500 p.s.i.                              | 13,400 p.s.i.                            |
| FLEXURAL MODULUS                  | ASTM D790          | 340,000 p.s.i.                             | 345,000 p.s.i.                           |
| IMPACT:                           |                    |                                            |                                          |
| NOTCHED IZOD                      | ASTM D256          | 18 FT-lb/in                                | 17 FT-lb/in                              |
| FIRE-BURNING CHARACTERISTICS:     |                    |                                            |                                          |
| SMOKE DENSITY                     | ASTM D2843         | 47.2 %                                     | 64.5 % MAX                               |
| RATE OF BURNING                   | ASTM D635          | C-1 CLASS                                  | C-1 CLASS                                |
| SELF IGNITION                     | ASTM D1929         | 1040 °F                                    | 980 °F                                   |
| WEATHERING:                       |                    |                                            |                                          |
| TENSILE STRENGTH AFTER WEATHERING | ASTM G155          |                                            |                                          |
| TENSILE STRESS BEFORE WEATHERING  | ASTM D638          | 9302 p.s.i.                                | 8840 p.s.i.                              |
|                                   | ASTM D638          | 8461 p.s.i.                                | 8880 p.s.i.                              |

| TABLE 2: SOURCES FOR (22)        |                    |                                                 |
|----------------------------------|--------------------|-------------------------------------------------|
| TYPICAL PROPERTIES               | STANDARD REFERENCE | MASTER TOOL COMPANY BLACK NYLON PART # 20519A/B |
| PHYSICAL:                        |                    |                                                 |
| SPECIFIC GRAVITY                 | ASTM D792          | 0.042 lb/in <sup>3</sup>                        |
| MECHANICAL:                      |                    |                                                 |
| TENSILE YIELD STRENGTH           | ASTM D638          | 11,500 p.s.i.                                   |
| FLEXURAL STRENGTH AT YIELD       | ASTM D790          | 15,000 p.s.i.                                   |
| FLEXURAL MODULUS                 | ASTM D790          | 450,000 p.s.i.                                  |
| IMPACT:                          |                    |                                                 |
| NOTCHED IZOD                     | ASTM D256          | 0.6 FT-lb/in                                    |
| THERMAL PROPERTIES:              |                    |                                                 |
| COEFFICIENT OF THERMAL EXPANSION | ASTM D696          | 5.5 x 10 <sup>-5</sup> in/in-°F                 |
| FLAMMABILITY                     | UL 94              | V-2                                             |
| MELTING TEMPERATURE              | ASTM D3418         | 500 °F                                          |

NOTES:  
- TO BE USED AS AN OPTION FOR ALL INSTALLATIONS UNDER LARGE MISSILE. MAY INCLUDE PERFORATIONS AS PER THIS DETAIL.  
- MAX. (2) WINDOWS MAY BE IN ONE SLAT SPACED MIN. 24" APART (MAX. EVERY 10 SLATS).

TYPICAL ALTERNATE PERFORATED  
(1) SLAT WINDOW ELEVATION  
(LARGE MISSILE IMPACT)

TYPICAL (1A) SLAT WINDOW DETAILS  
W/ (20) VIEWING WINDOW & (21), (22) CLIPS  
(SMALL MISSILE IMPACT)



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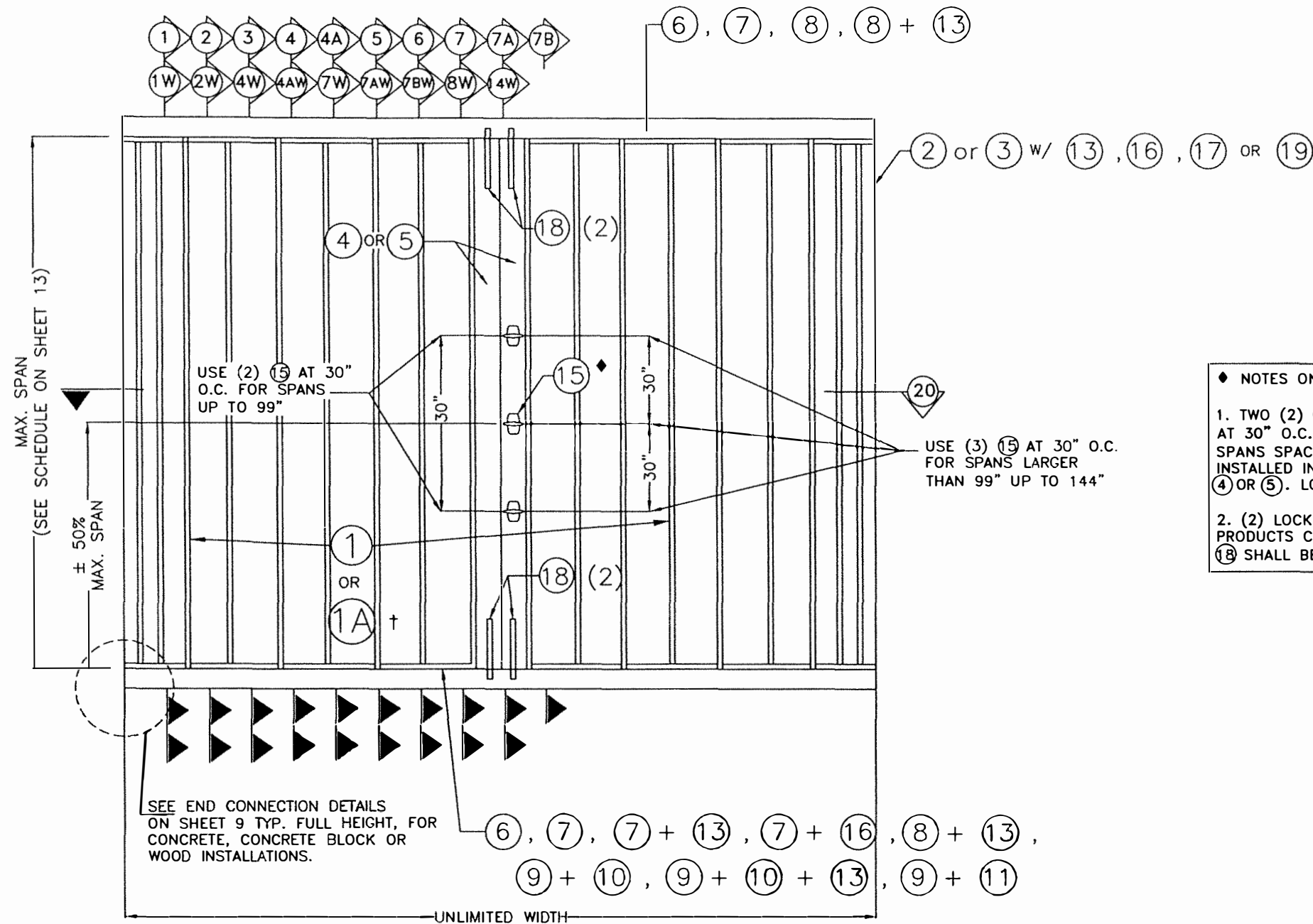
FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)

TITAN II FOLDING IMPACT PROTECTIVE SYSTEM

FOLDING SHUTTER CORP.  
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WEST PALM BEACH, FL 33404  
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DRAWN BY: Y.M.  
7/14/2023 DATE  
23-106 DRAWING No  
SHEET 3 OF 13

| REV. No | DESCRIPTION | DATE      | REV. No | DESCRIPTION | DATE |
|---------|-------------|-----------|---------|-------------|------|
| 1       | OLD 20-190  | 7/14/2023 | 3       | -           | -    |
| 2       | -           | -         | 4       | -           | -    |



- ◆ NOTES ON 15 & LOCKING TUBES 18 AT 4 & 5.
1. TWO (2) 15 SHALL ALWAYS BE USED AT PRODUCT'S MIDSPAN SPACED AT 30" O.C. FOR SPANS UP TO 99". USE THREE (3) 15 FOR LARGER SPANS SPACED AT 30" O.C. AT MIDSPAN. COMPONENT 15 MAY BE INSTALLED INTERIOR OR EXTERIOR SCREWED TO TAPPED CENTERPIECES 4 OR 5. LOCATION OF 15 SHALL BE AS SHOWN ON TYPICAL ELEVATION.
  2. (2) LOCKING TUBES 18 SHALL ALWAYS BE USED TOP & BOTTOM AT PRODUCTS CENTERPIECES 4 OR 5 AT ALL INSTALLATIONS. LOCKING TUBES 18 SHALL BE SECURED W/ LEVERS AS SHOWN ON SHEET 9.

† SEE LIMITATIONS FOR 1A ON SHEET 2

SEE END CONNECTION DETAILS  
ON SHEET 9 TYP. FULL HEIGHT, FOR  
CONCRETE, CONCRETE BLOCK OR  
WOOD INSTALLATIONS.

TYPICAL ELEVATION ♣  
N. T. S.

♣ NOTE:  
SEE SECTIONS 1 THRU 3 ON SHEET 5.  
SEE SECTIONS 4 THRU 6 ON SHEET 6.  
SEE SECTIONS 7, 7A & 7B ON SHEET 7.  
SEE SECTIONS 1W & 2W ON SHEET 10.  
SEE SECTIONS 4W, 4AW & 7W ON SHEET 11.  
SEE SECTIONS 7AW, 7BW, 8W & 14W ON SHEET 12.

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

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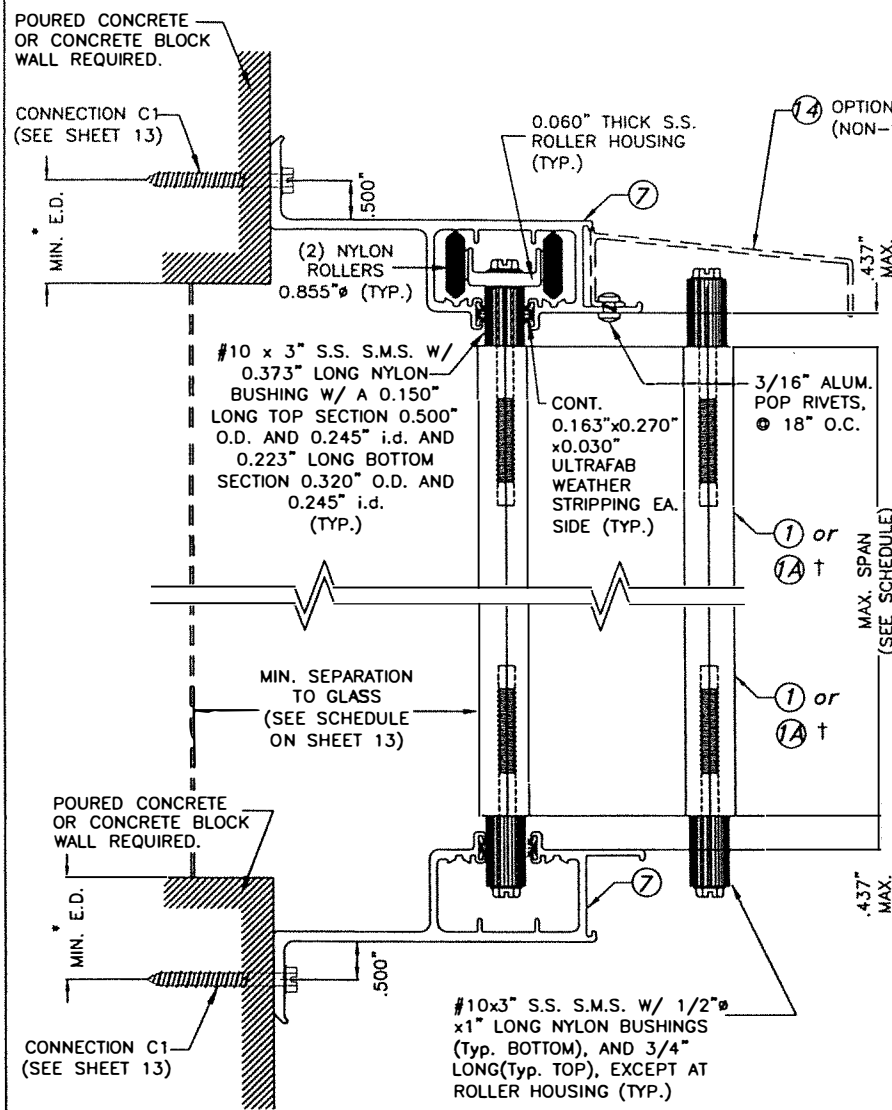
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| 2       | -           | -         | 4       | -           | -    |

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Y.M.

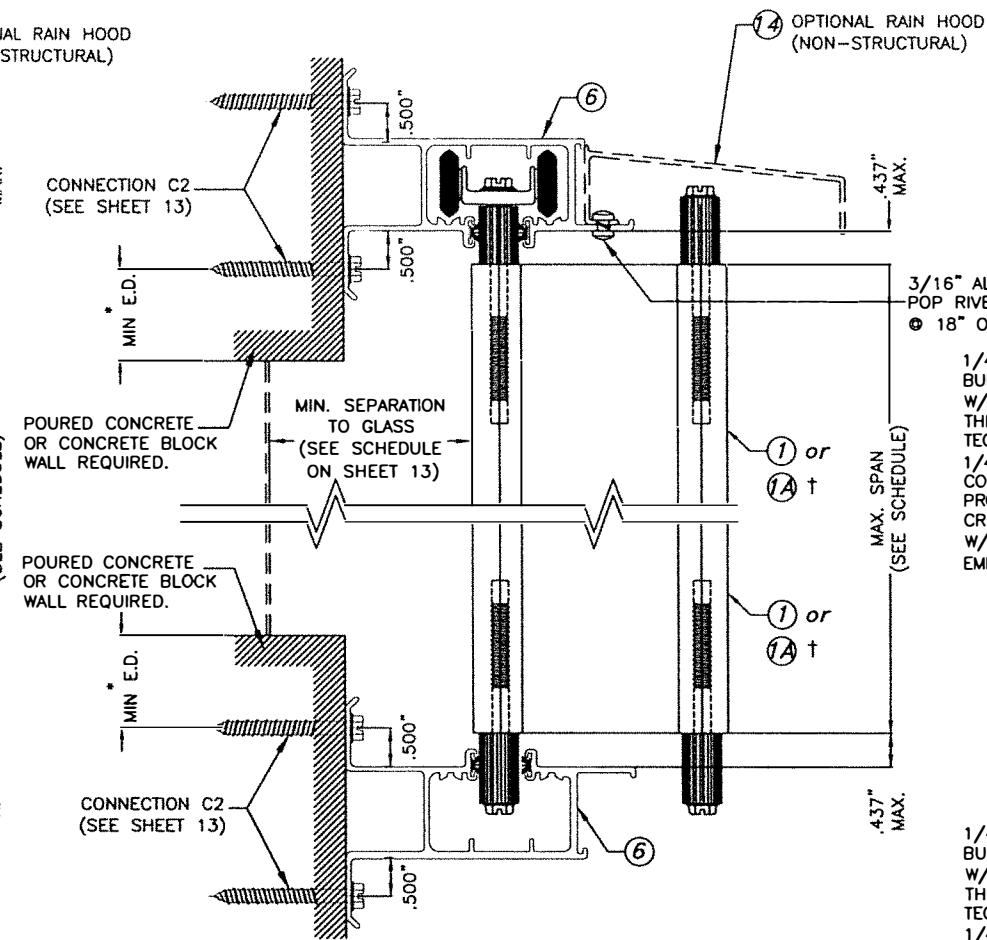
7/14/2023  
DATE

23-106  
DRAWING No

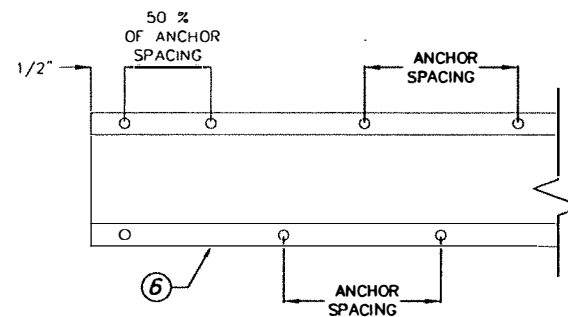
SHEET 4 OF 13



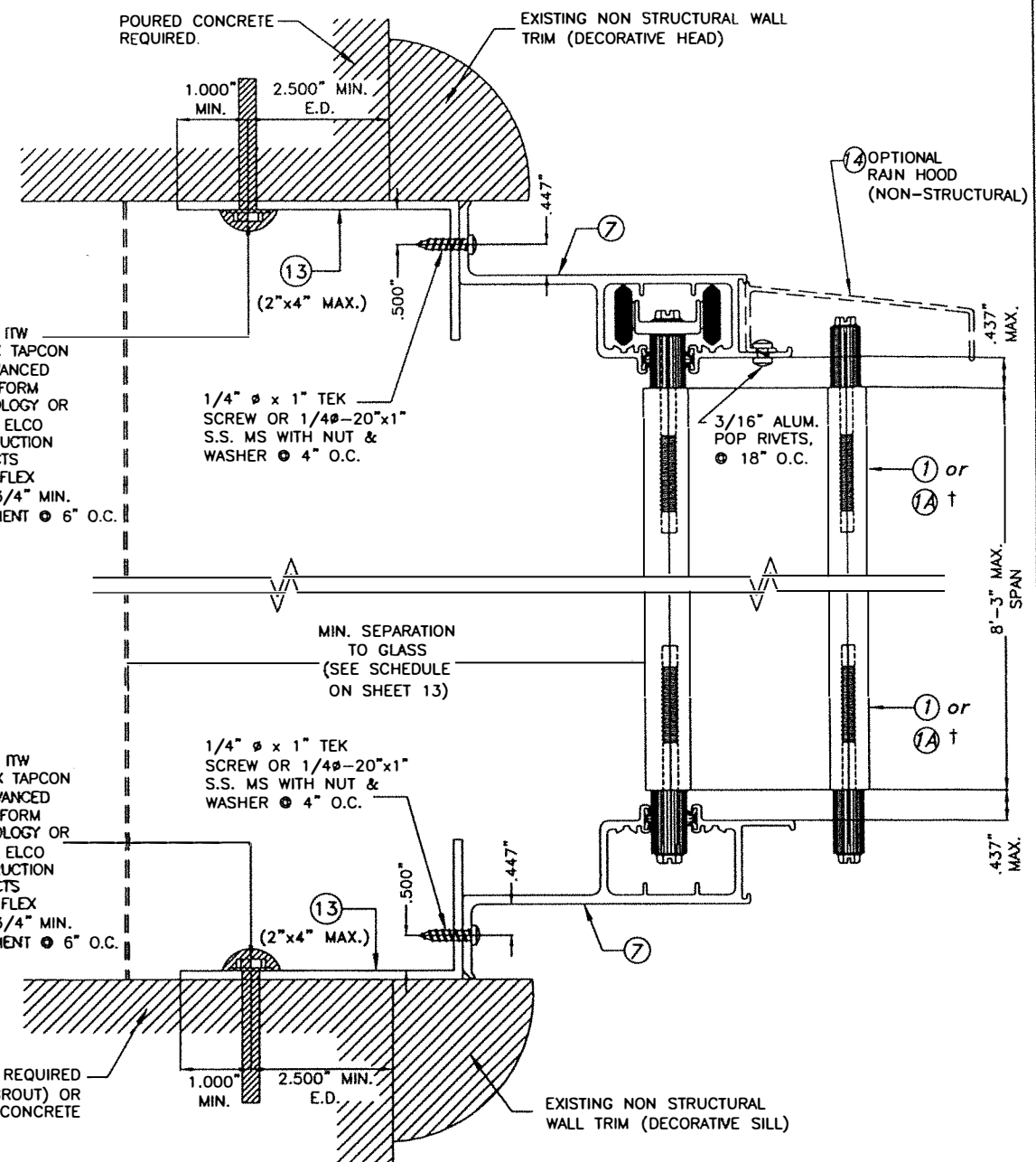
WALL FACE MOUNTING INSTALLATION  
SECTION 1



WALL FACE MOUNTING INSTALLATION  
SECTION 2



STAGGERED ANCHOR SPACING  
DETAIL FOR (6)



DECORATIVE WALL TRIM TRAPPED  
MOUNTING INSTALLATION  
SECTION 3

MAX. A.S.D. DESIGN PRESSURE RATING = +65.0, -90.0 PSF

## INSTALLATIONS DETAILS INTO CONCRETE & CONCRETE BLOCK

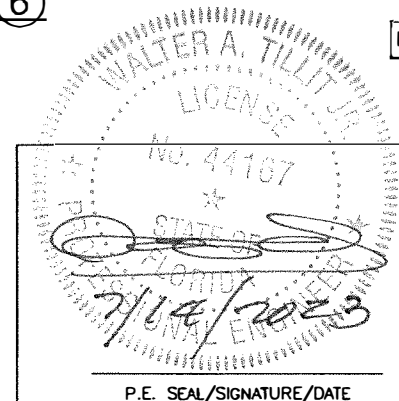
SCALE: N.T.S.

### NOTE FOR COMBINATION OF SECTIONS:

1- MOUNTING SECTIONS CAN BE COMBINED  
IN ANY WAY TO SUIT ANY INSTALLATION.

\* E.D. = EDGE DISTANCE  
(SEE SPECIFICATIONS ON SHEET 13)

† SEE LIMITATIONS FOR (1A) ON SHEET 2



P.E. SEAL/SIGNATURE/DATE

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

TITAN II FOLDING IMPACT PROTECTIVE SYSTEM

DRAWN BY:  
Y.M.

FOLDING SHUTTER CORP.

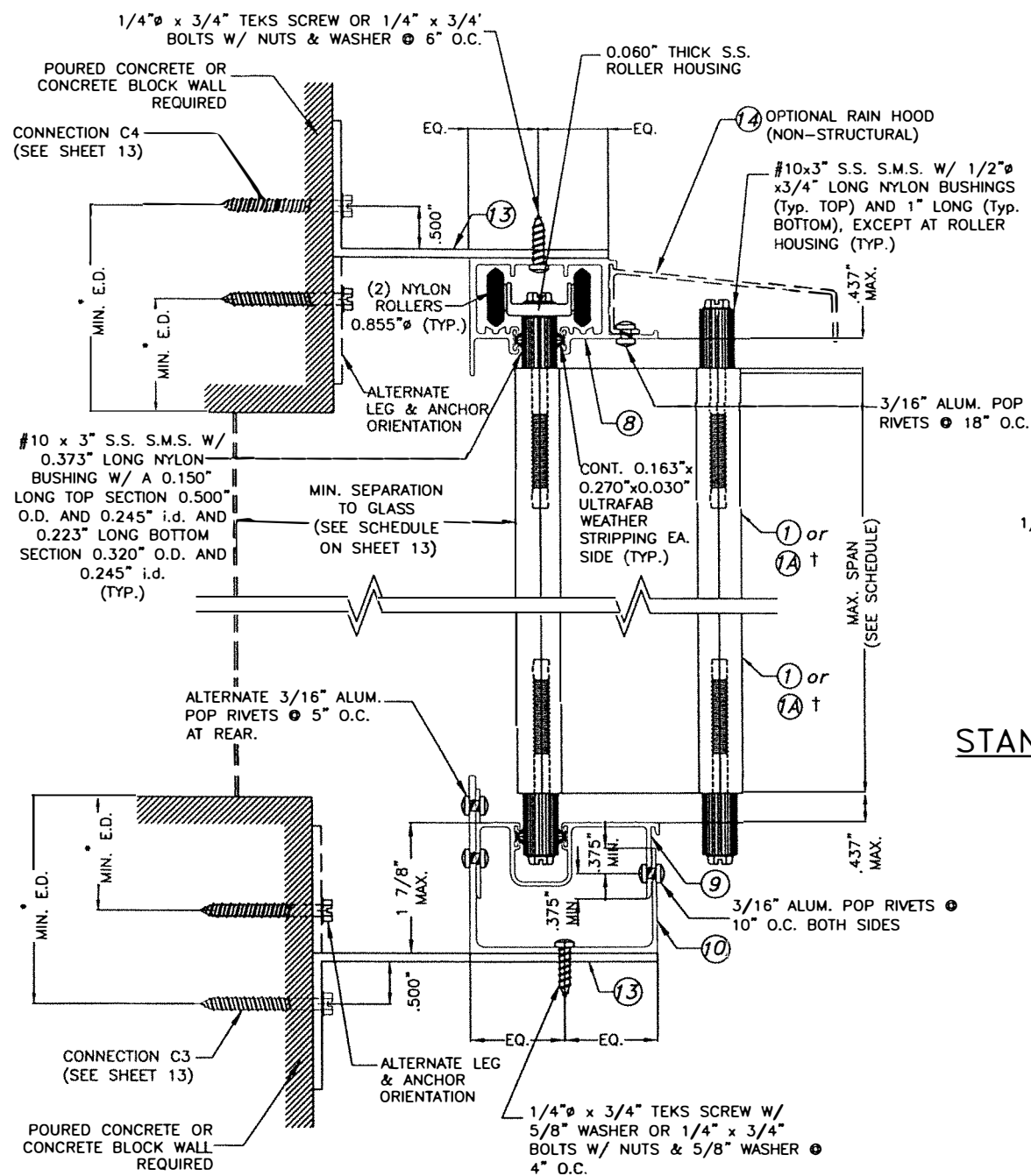
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7/14/2023  
DATE

23-106  
DRAWING No

| REV. No | DESCRIPTION | DATE      | REV. No | DESCRIPTION | DATE |
|---------|-------------|-----------|---------|-------------|------|
| 1       | OLD 20-190  | 7/14/2023 | 3       | -           | -    |
| 2       | -           | -         | 4       | -           | -    |

SHEET 5 OF 13



**BUILD-OUT FACE MOUNTING INSTALLATION**  
**SECTION 4**

## INSTALLATIONS DETAILS INTO CONCRETE & CONCRETE BLOCK

SCALE : N.T.S.

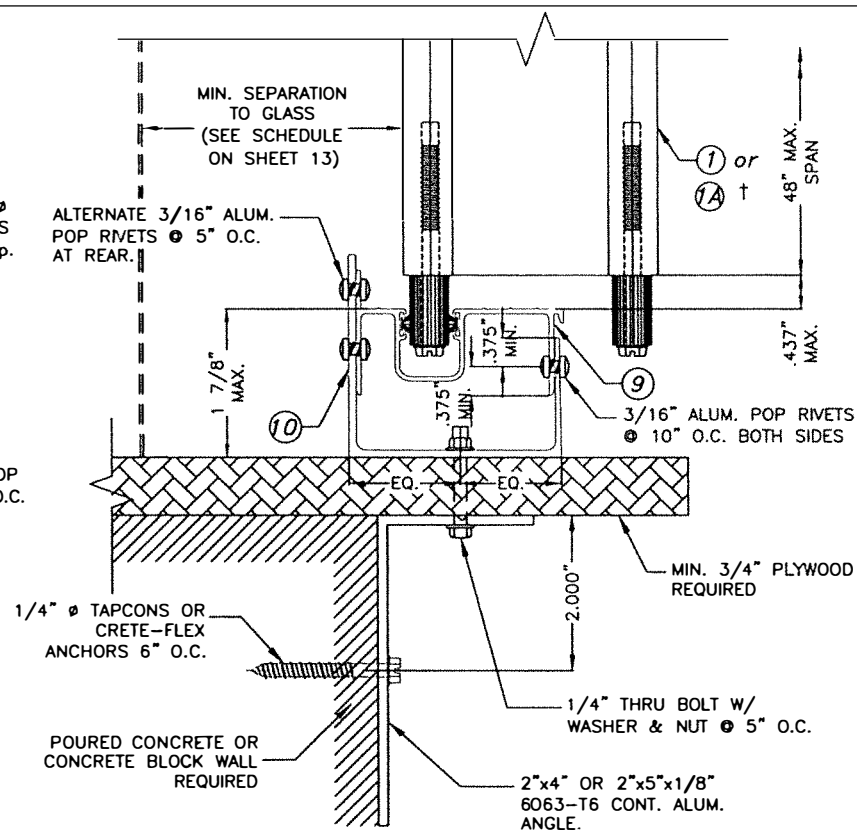
### NOTE FOR COMBINATION OF SECTIONS:

1- MOUNTING SECTIONS CAN BE COMBINED  
IN ANY WAY TO SUIT ANY INSTALLATION.

† SEE LIMITATIONS FOR (A) ON SHEET 2

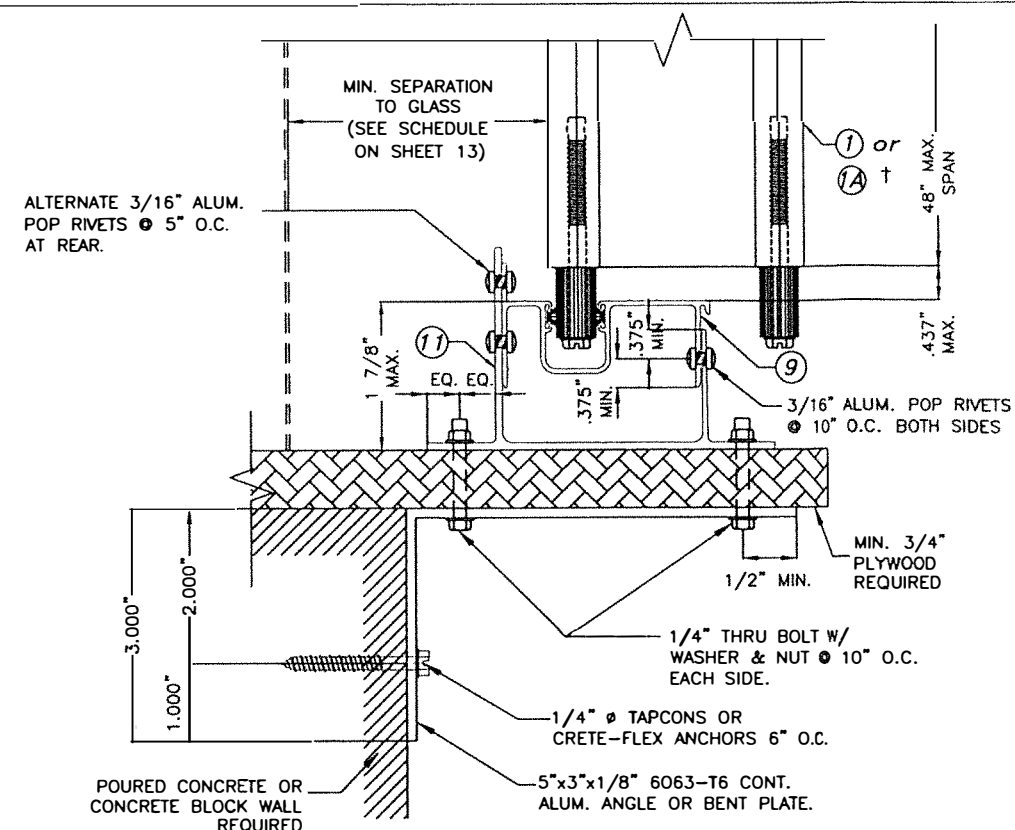
\* E.D. = EDGE DISTANCE

(SEE SPECIFICATIONS ON SHEET 13)



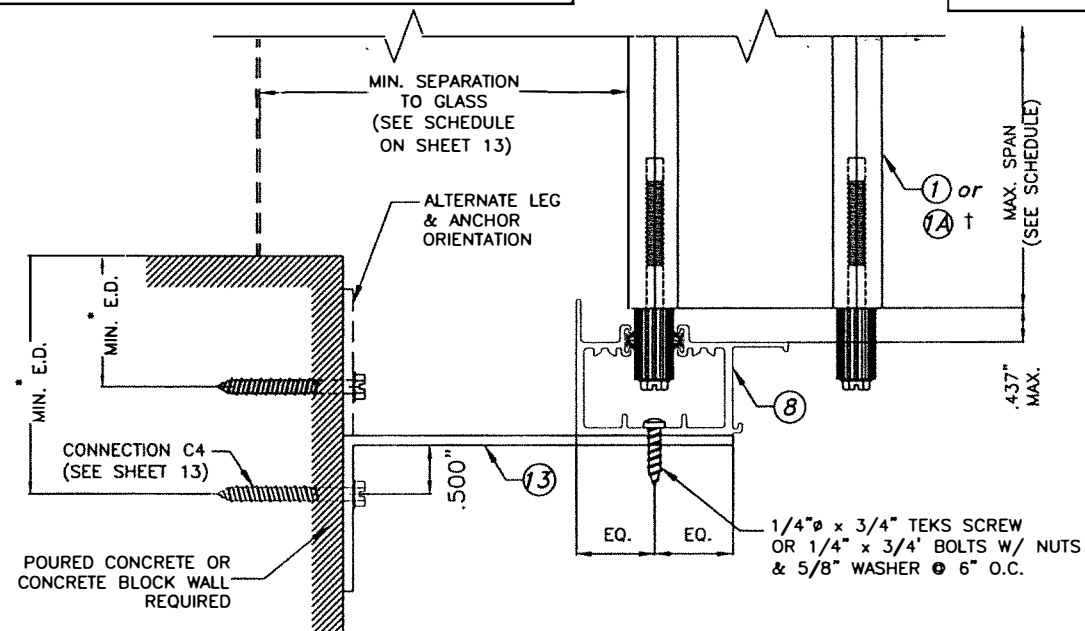
**STANDARD COUNTER-TOP MOUNTING INSTALLATION**  
**SECTION 5**

MAX. A.S.D. DESIGN PRESSURE RATING= +66.0, -66.0 PSF



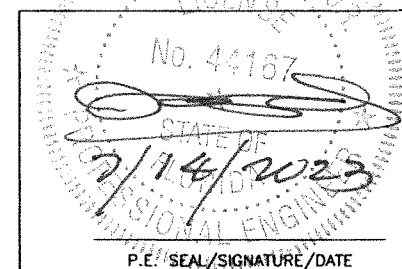
**ALTERNATE COUNTER-TOP MOUNTING**  
**INSTALLATION SECTION 6**

MAX. A.S.D. DESIGN PRESSURE RATING= +66.0, -66.0 PSF



**BUILD-OUT FACE MOUNTING INSTALLATION**  
**SECTION 4A (BOTTOM)**

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



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

TITAN II FOLDING IMPACT PROTECTIVE SYSTEM

DRAWN BY:  
Y.M.

**FOLDING SHUTTER CORP.**

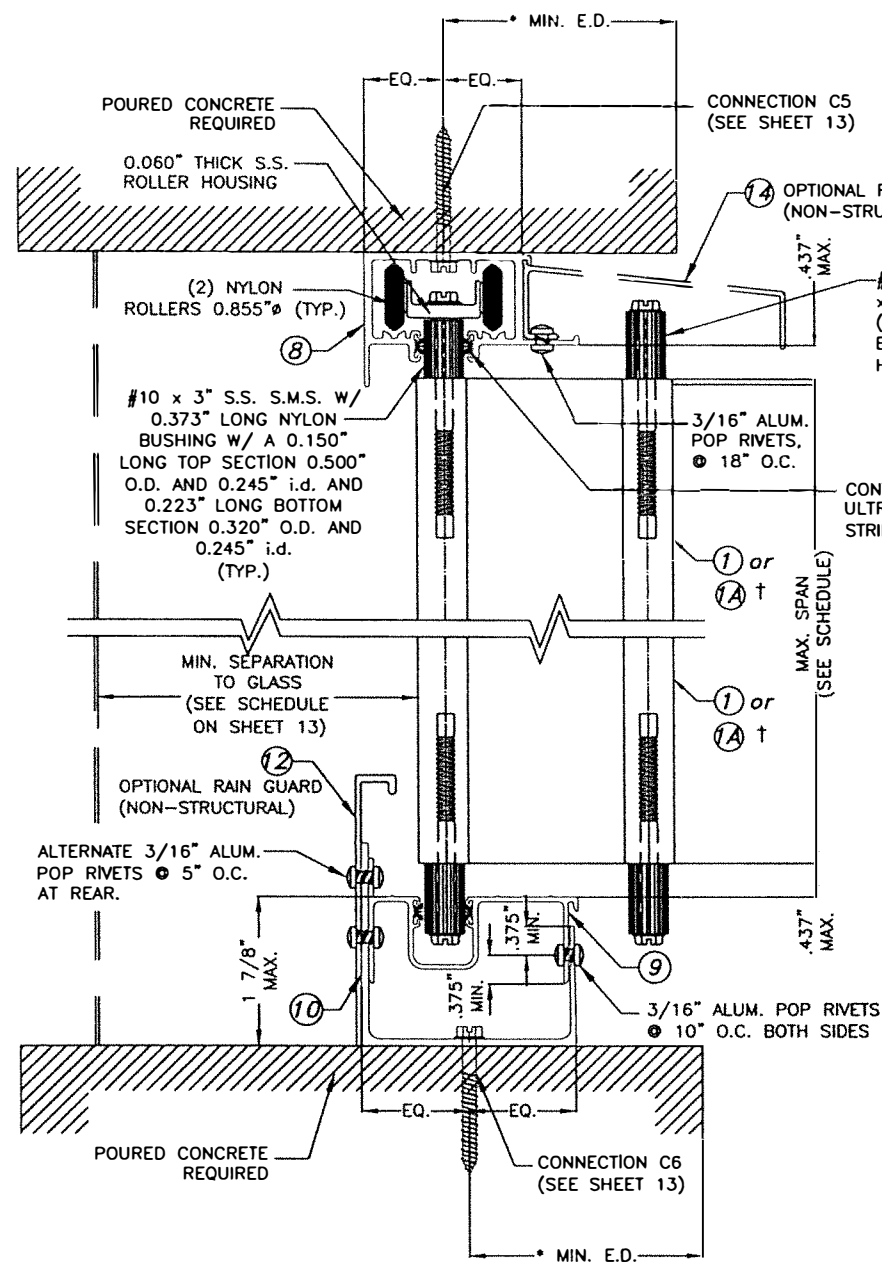
1862 MARTIN LUTHER KING JR. BLVD  
WEST PALM BEACH, FL 33404  
PH: 1800-643-6371  
www.foldingshutters.com

7/14/2023  
DATE

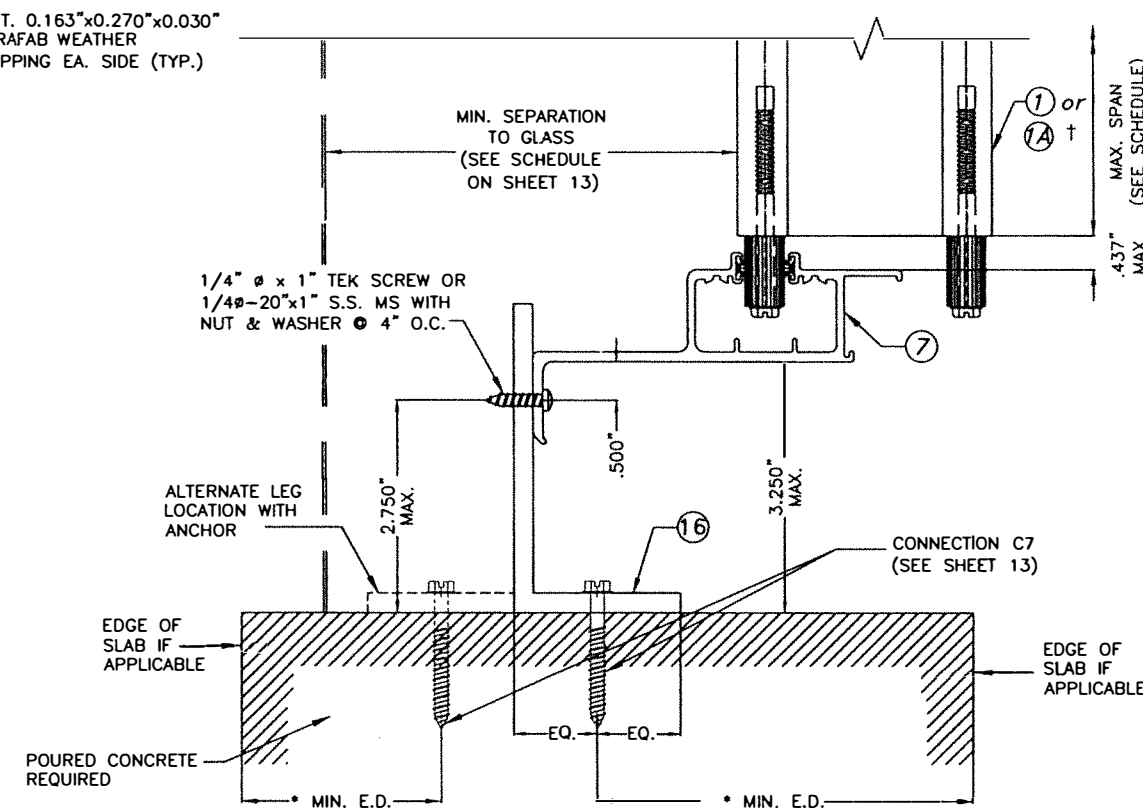
23-106  
DRAWING No

| REV. No | DESCRIPTION | DATE      | REV. No | DESCRIPTION | DATE |
|---------|-------------|-----------|---------|-------------|------|
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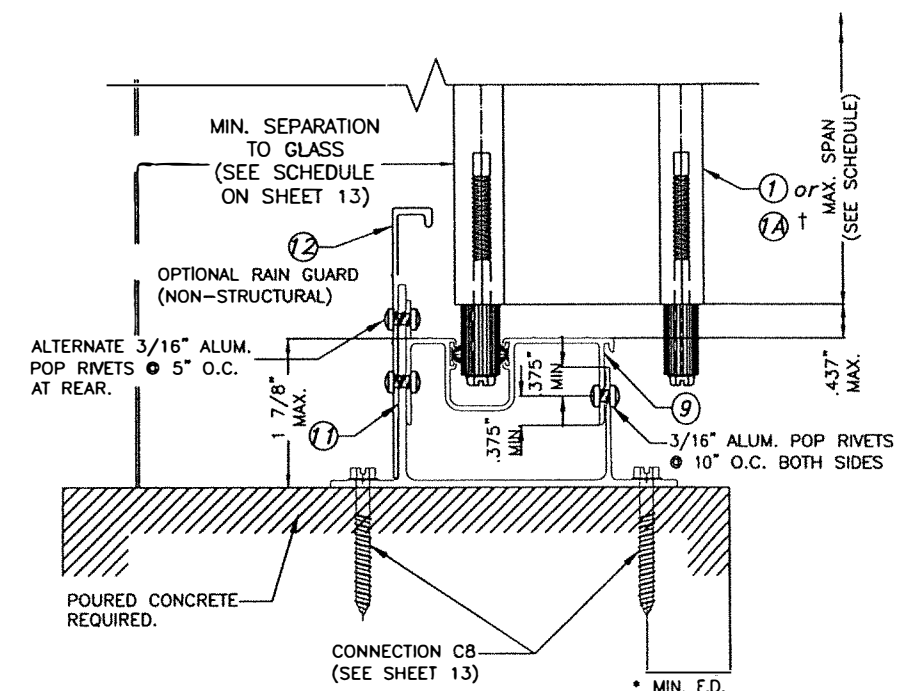
SHEET 6 OF 13



TRAPPED MOUNTING INSTALLATION  
SECTION 7



ALTERNATE TRAPPED MOUNTING  
INSTALLATION AT BOTTOM  
SECTION 7A



ALTERNATE TRAPPED MOUNTING  
INSTALLATION AT BOTTOM  
SECTION 7B

## INSTALLATIONS DETAILS INTO CONCRETE & CONCRETE BLOCK

SCALE: N.T.S.

### NOTE FOR COMBINATION OF SECTIONS:

1- MOUNTING SECTIONS CAN BE COMBINED  
IN ANY WAY TO SUIT ANY INSTALLATION.

† SEE LIMITATIONS FOR 1A ON SHEET 2

\* E.D. = EDGE DISTANCE  
(SEE SPECIFICATIONS ON SHEET 13)

WALTER A. TILLIT  
No. 44107  
7/14/2023  
P.E. SEAL/SIGNATURE/DATE

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

TITAN II FOLDING IMPACT PROTECTIVE SYSTEM

**FOLDING SHUTTER CORP.**

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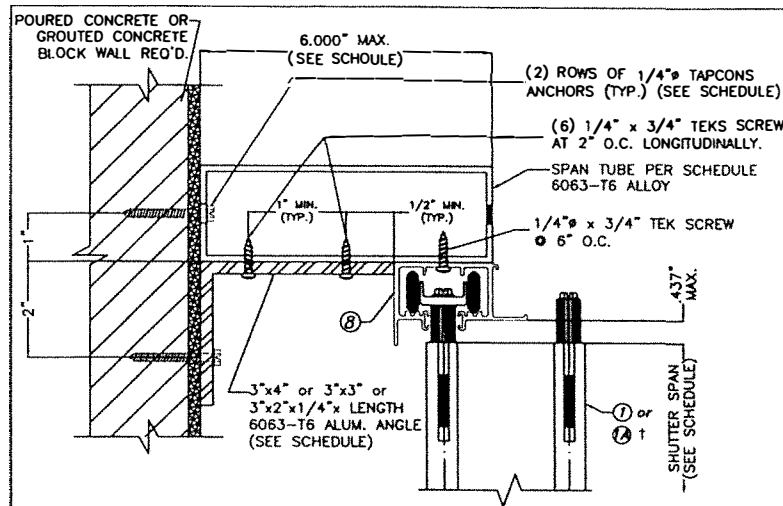
DRAWN BY:  
Y.M.

7/14/2023  
DATE

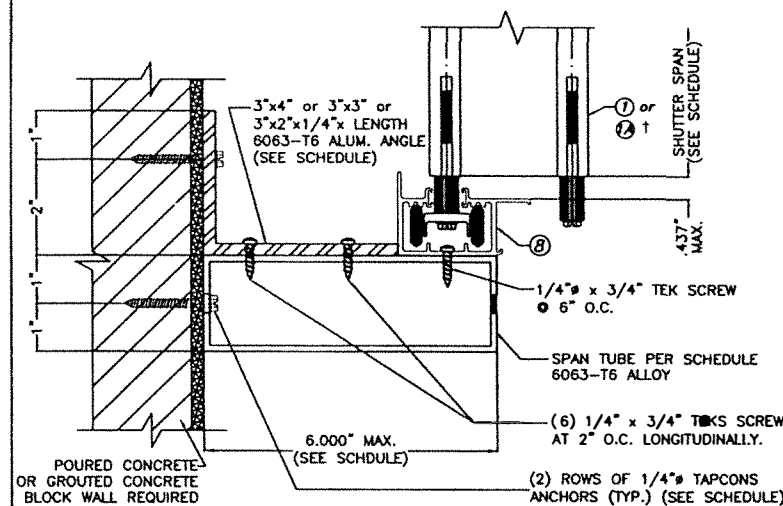
23-106  
DRAWING No

| REV. No | DESCRIPTION | DATE      | REV. No | DESCRIPTION | DATE |
|---------|-------------|-----------|---------|-------------|------|
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| 2       | -           | -         | 4       | -           | -    |

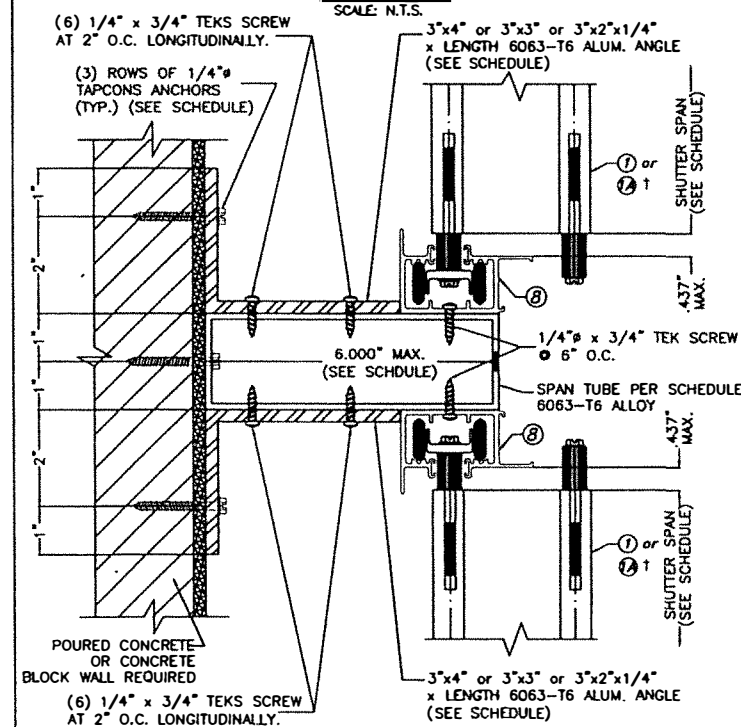
SHEET 7 OF 13



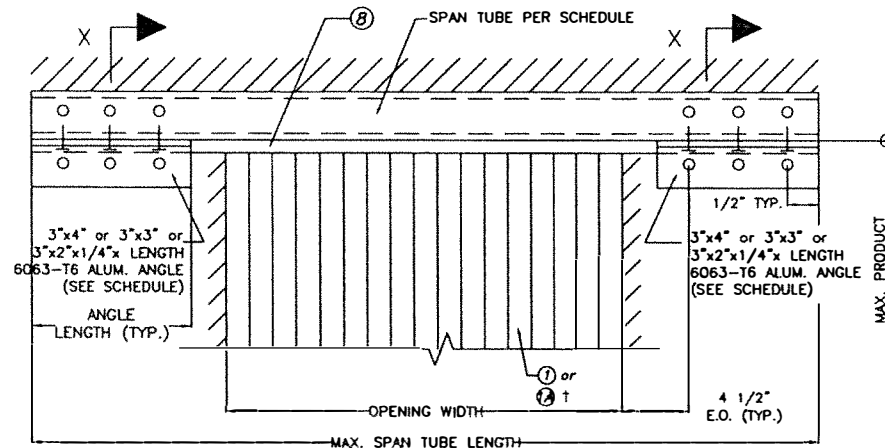
SPAN TUBE MOUNTING INSTALLATION  
SECTION X  
SCALE: N.T.S.



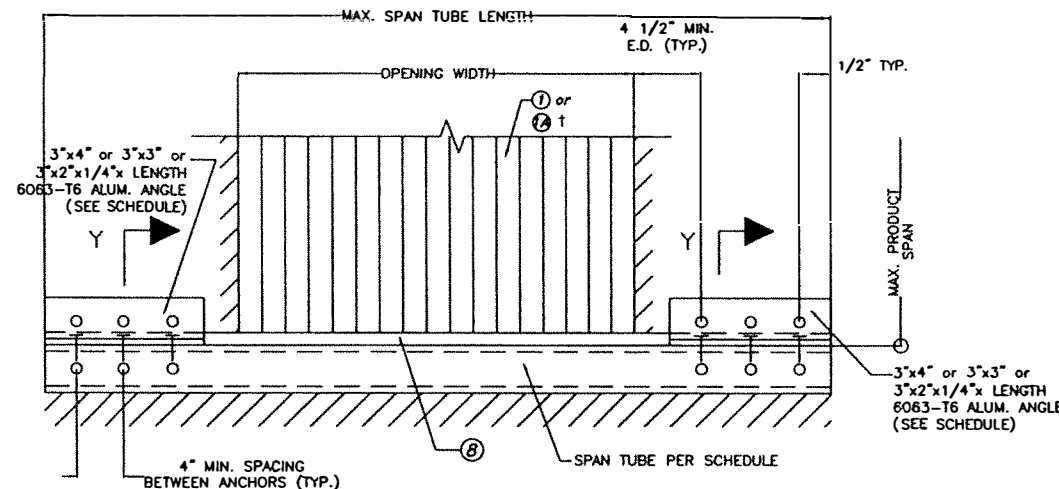
SPAN TUBE MOUNTING INSTALLATION  
SECTION Y  
SCALE: N.T.S.



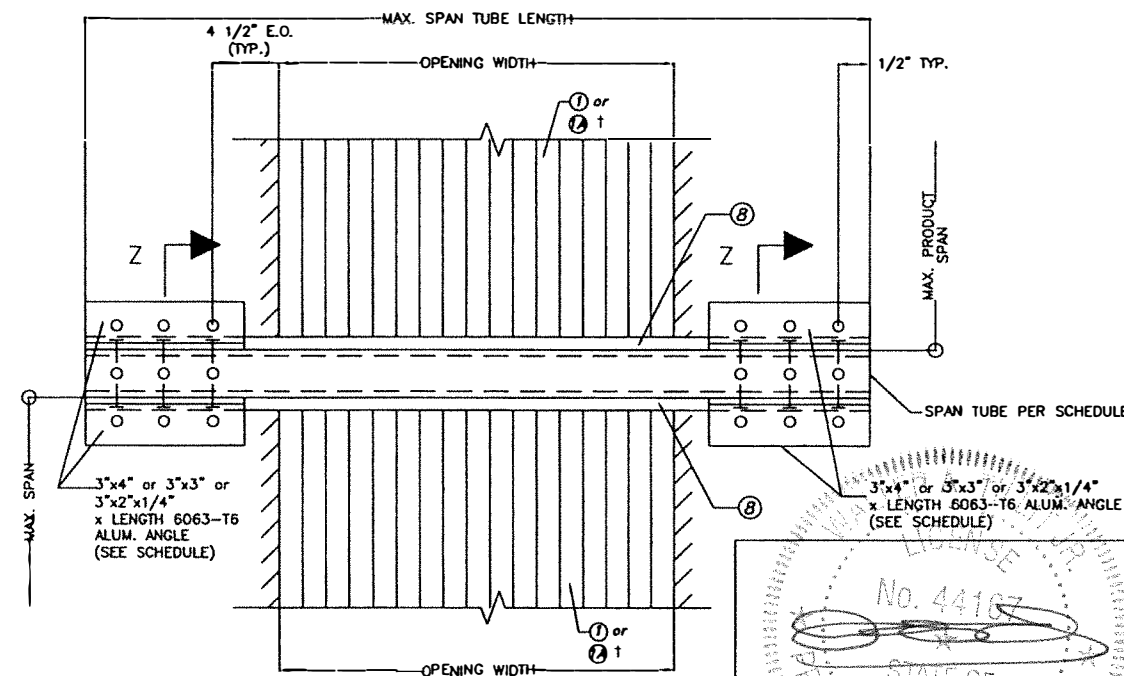
SPAN TUBE MOUNTING INSTALLATION  
SECTION Z  
SCALE: N.T.S.



TYPICAL ELEVATION (TUBE AT TOP)  
SCALE: N.T.S.



TYPICAL ELEVATION (TUBE AT BOTTOM)  
SCALE: N.T.S.



TYPICAL ELEVATION (TUBE AT MIDHEIGHT)  
SCALE: N.T.S.

† SEE LIMITATIONS FOR (A) ON SHEET 2

| TUBE SIZE  | MAXIMUM PRODUCT SPAN | ALLOWABLE TUBE SPAN | REQ'D ANGLE LENGTH EA. END | NUMBER OF ANCHORS PER END OF TUBE |
|------------|----------------------|---------------------|----------------------------|-----------------------------------|
|            |                      | TOP OR BOTTOM TUBE  | TOP OR BOTTOM TUBE         | TOP OR BOTTOM TUBE                |
| 2"x4"x1/8" | 60"                  | 106.0"              | 13                         | 8                                 |
|            | 96"                  | 85.0"               | 17                         | 10                                |
|            | 144"                 | 69.0"               | 13                         | 8                                 |
| 2"x4"x1/4" | 80"                  | 117.0"              | 17                         | 10                                |
|            | 96"                  | 110.0"              | 21                         | 12                                |
|            | 144"                 | 91.0"               | 21                         | 12                                |
| 2"x5"x1/8" | 80"                  | 109.0"              | 17                         | 10                                |
|            | 96"                  | 100.0"              | 21                         | 12                                |
|            | 144"                 | 81.0"               | 17                         | 10                                |
| 2"x6"x1/8" | 80"                  | 124.0"              | 21                         | 12                                |
|            | 96"                  | 114.0"              | 21                         | 12                                |
|            | 144"                 | 93.0"               | 21                         | 12                                |

\* VALID ALSO FOR MIDHEIGHT TUBE INSTALLATION ONLY WHEN THE SUMATION OF THE SHUTTERS HEIGHT ABOVE & BELOW DOES NOT EXCEED THE MAX. PRODUCT SPAN SHOWN ON TABLE 1.

| TUBE SIZE  | MAXIMUM PRODUCT SPAN | ALLOWABLE TUBE SPAN | REQ'D ANGLE LENGTH EA. END | NUMBER OF ANCHORS PER END OF TUBE |
|------------|----------------------|---------------------|----------------------------|-----------------------------------|
| 2"x4"x1/8" | 60"                  | 76.0"               | 13                         | 12                                |
|            | 96"                  | 60.0"               | 17                         | 15                                |
|            | 144"                 | 48.0"               | 13                         | 12                                |
| 2"x4"x1/4" | 80"                  | 87.0"               | 21                         | 18                                |
|            | 96"                  | 79.0"               | 21                         | 18                                |
|            | 144"                 | 65.0"               | 21                         | 18                                |
| 2"x5"x1/8" | 80"                  | 77.0"               | 17                         | 15                                |
|            | 96"                  | 70.0"               | 21                         | 18                                |
|            | 144"                 | 57.0"               | 17                         | 15                                |
| 2"x6"x1/8" | 80"                  | 88.0"               | 21                         | 18                                |
|            | 96"                  | 81.0"               | 21                         | 18                                |
|            | 144"                 | 66.0"               | 21                         | 18                                |

## INSTALLATIONS DETAILS W/ SPAN TUBE INTO POURED CONCRETE OR GROUTED CONCRETE BLOCK WALL

SCALE: N.T.S.

MAX. A.S.D. DESIGN PRESSURE RATING =  $\pm 72.0$  PSF

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

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

TITAN II FOLDING IMPACT PROTECTIVE SYSTEM

**FOLDING SHUTTER CORP.**

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WEST PALM BEACH, FL 33404  
PH: 1800-643-6371  
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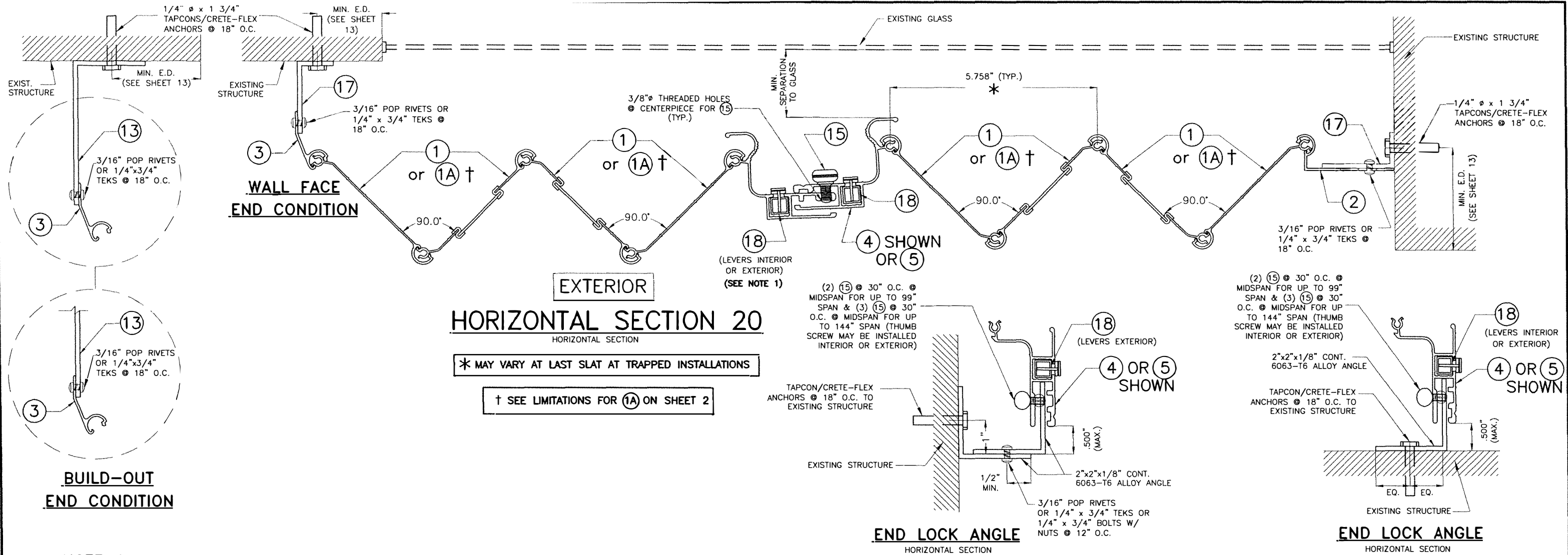
DRAWN BY:  
Y.M.

7/14/2023  
DATE

23-106  
DRAWING No

| REV. No | DESCRIPTION | DATE      | REV. No | DESCRIPTION | DATE |
|---------|-------------|-----------|---------|-------------|------|
| 1       | OLD 20-100  | 7/14/2023 | 3       | -           | -    |
| 2       | -           | -         | 4       | -           | -    |

SHEET 8 OF 13



**END INSTALLATION DETAILS INTO CONCRETE,  
CONCRETE BLOCK & WOOD (AS APPLICABLE)**

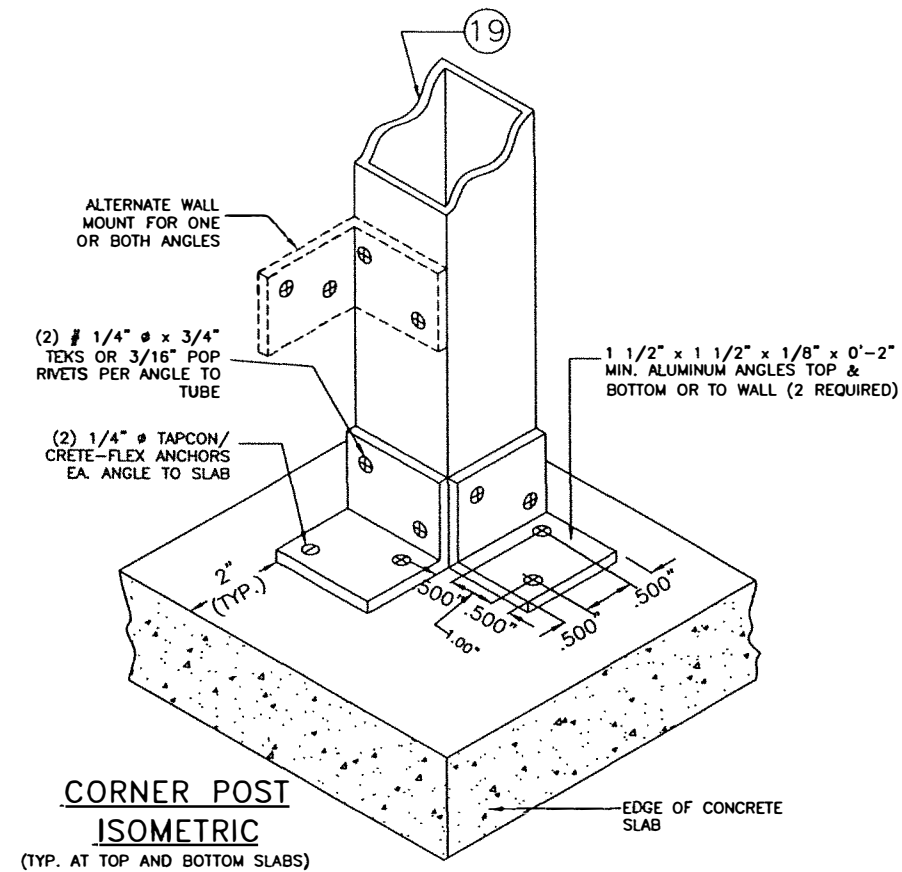
WALTER A. TILLIT JR.  
LICENSE  
No. 44167  
STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER  
7/14/2023  
P.E. SEAL/SIGNATURE/DATE

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WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

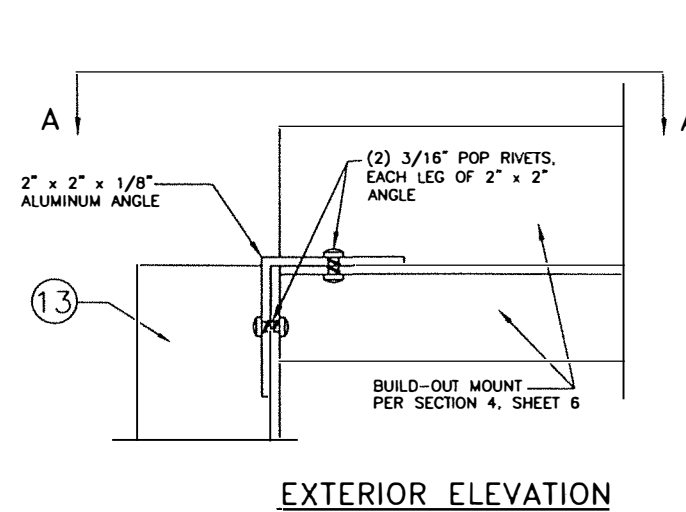
**FLORIDA BUILDING CODE (High & Non High Velocity Hurricane Zone)**

| TITAN II FOLDING IMPACT PROTECTIVE SYSTEM                                                                     |             |           |         | DRAWN BY:<br>Y.M.    |      |
|---------------------------------------------------------------------------------------------------------------|-------------|-----------|---------|----------------------|------|
| FOLDING SHUTTER CORP.                                                                                         |             |           |         | 7/14/2023<br>DATE    |      |
| 1862 MARTIN LUTHER KING JR. BLVD<br>WEST PALM BEACH, FL 33404<br>PH: 1800-643-6371<br>www.foldingshutters.com |             |           |         | 23-106<br>DRAWING No |      |
| REV. No                                                                                                       | DESCRIPTION | DATE      | REV. No | DESCRIPTION          | DATE |
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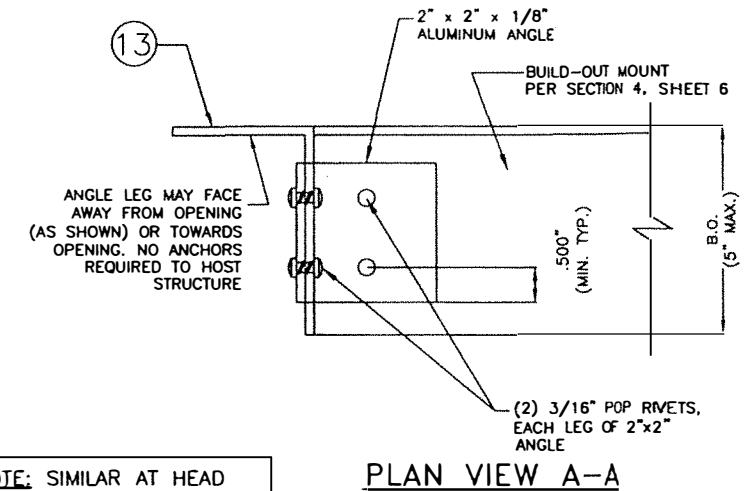
SHEET 9 OF 13



**CORNER POST  
ISOMETRIC**  
(TYP. AT TOP AND BOTTOM SLABS)



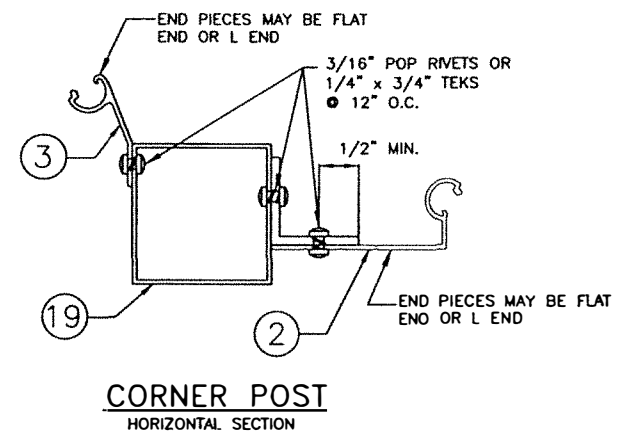
**EXTERIOR ELEVATION**



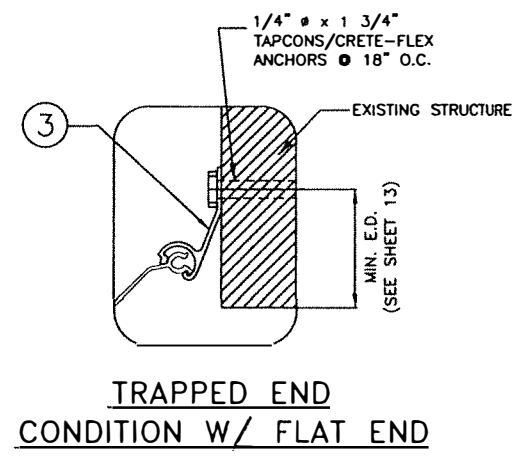
**PLAN VIEW A-A**

**NOTE:** SIMILAR AT HEAD  
AND SILL AND BOTH SIDES  
OF PRODUCT

**OPTIONAL SIDE ANGLE**  
(FOR SECTION 4, SHEET 6)



**CORNER POST  
HORIZONTAL SECTION**



**TRAPPED END  
CONDITION W/ FLAT END**

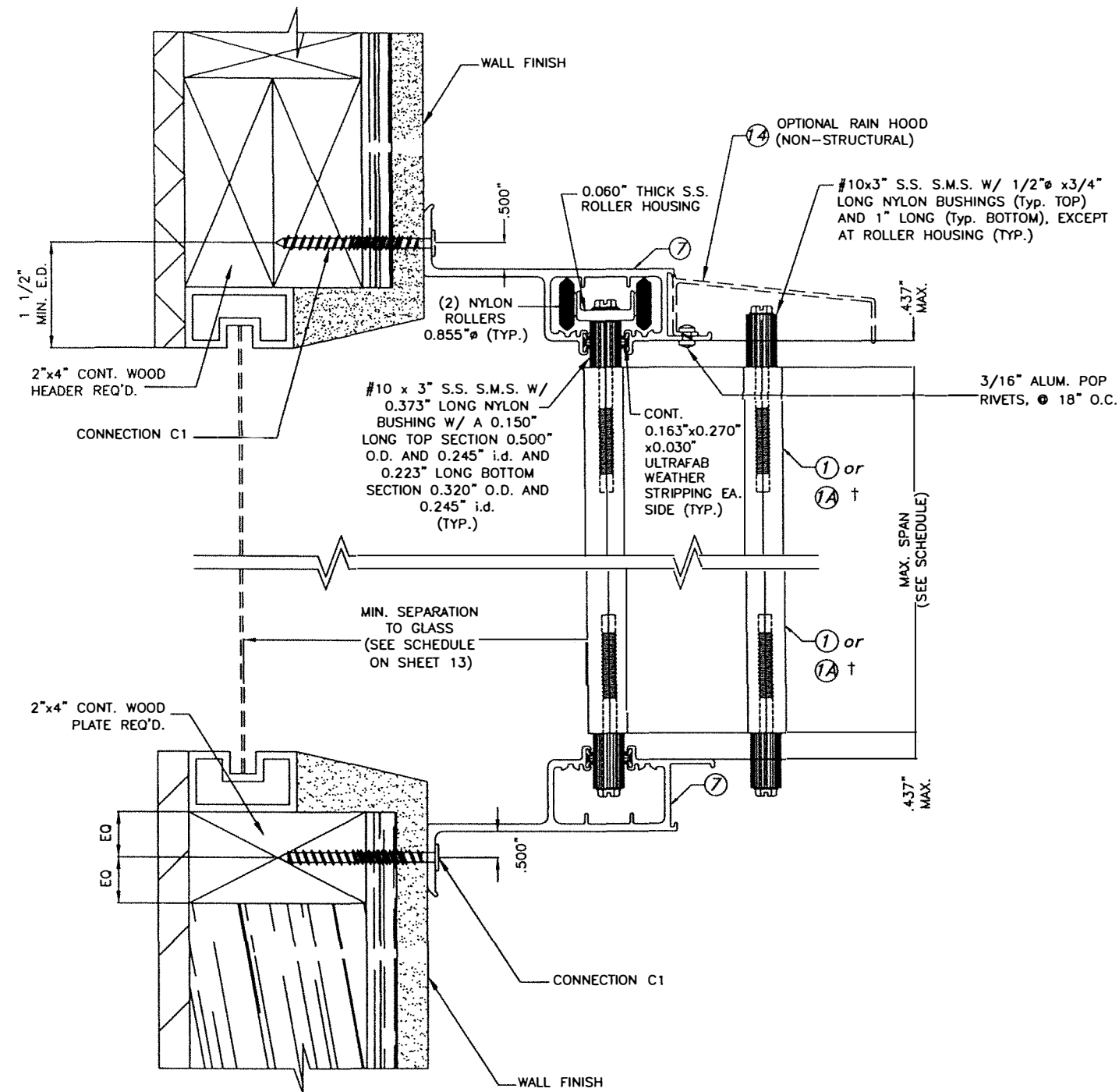
**END INSTALLATION DETAILS INTO CONCRETE,  
CONCRETE BLOCK & WOOD (AS APPLICABLE)**

WALTER A. TILLIT JR.  
P.E.  
NO. 44167  
7/14/2023  
P.E. SEAL/SIGNATURE/DATE

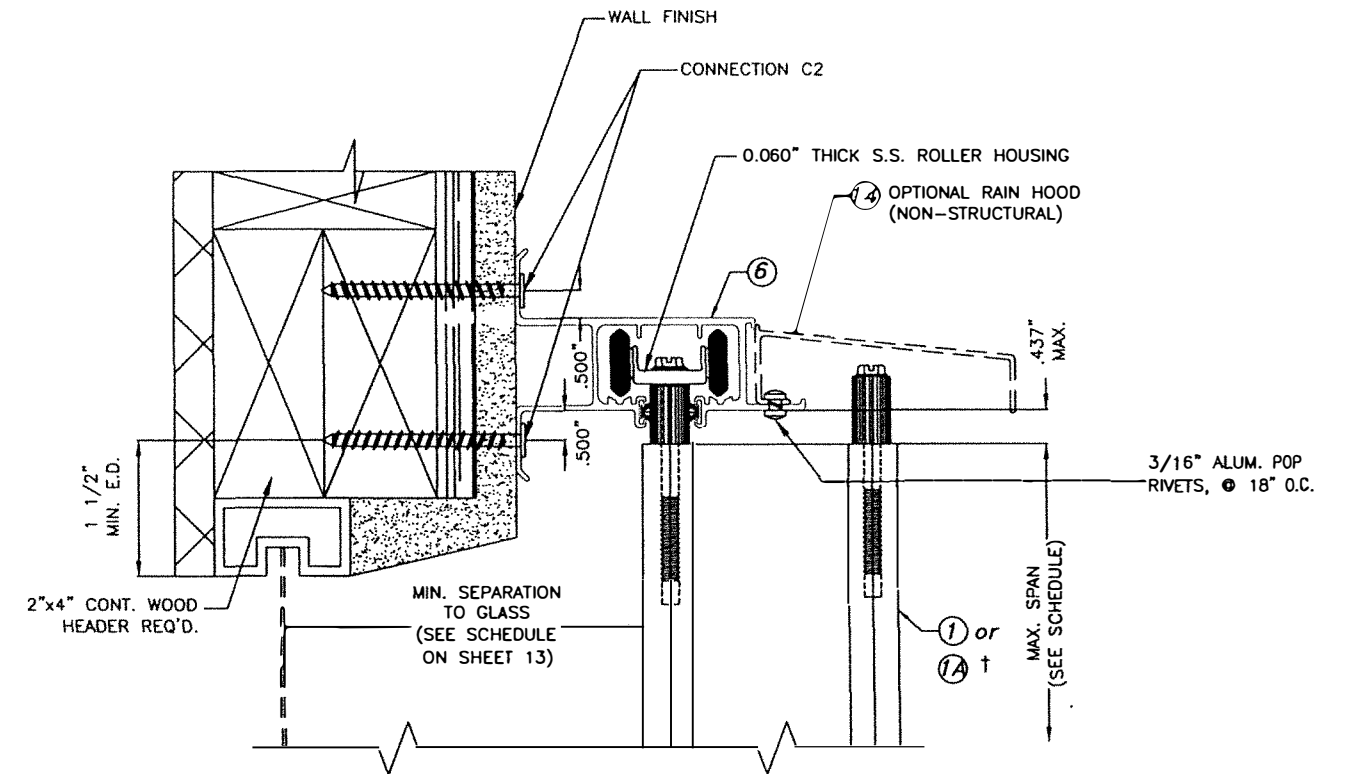
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CA-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

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

| TITAN II FOLDING IMPACT PROTECTIVE SYSTEM                                                                     |             |           |         |             |      | DRAWN BY:<br>Y.M.    |  |
|---------------------------------------------------------------------------------------------------------------|-------------|-----------|---------|-------------|------|----------------------|--|
| FOLDING SHUTTER CORP.                                                                                         |             |           |         |             |      | 7/14/2023<br>DATE    |  |
| 1862 MARTIN LUTHER KING JR. BLVD<br>WEST PALM BEACH, FL 33404<br>PH: 1800-643-6371<br>www.foldingshutters.com |             |           |         |             |      | 23-106<br>DRAWING No |  |
| REV. No                                                                                                       | DESCRIPTION | DATE      | REV. No | DESCRIPTION | DATE | SHEET 9A OF 13       |  |
| 1                                                                                                             | OLD 20-190  | 7/14/2023 | 3       | -           | -    |                      |  |
| 2                                                                                                             | -           | -         | 4       | -           | -    |                      |  |



WALL FACE MOUNTING INSTALLATION  
SECTION 1W



WALL FACE MOUNTING INSTALLATION  
SECTION 2W (TOP)

## INSTALLATIONS DETAILS INTO WOOD

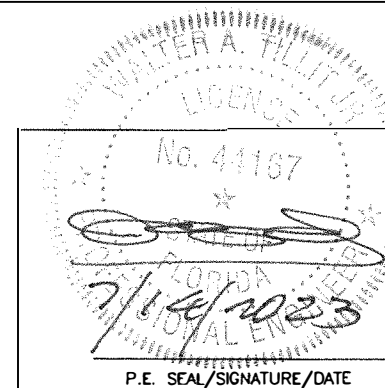
### NOTES:

1- FOR WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE HAVE A MIN. SPECIFIC DENSITY OF 0.46 OR EQUAL

† SEE LIMITATIONS FOR 1A ON SHEET 2

### NOTE FOR COMBINATION OF SECTIONS:

1- MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.



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

TITAN II FOLDING IMPACT PROTECTIVE SYSTEM

DRAWN BY:  
Y.M.

FOLDING SHUTTER CORP.

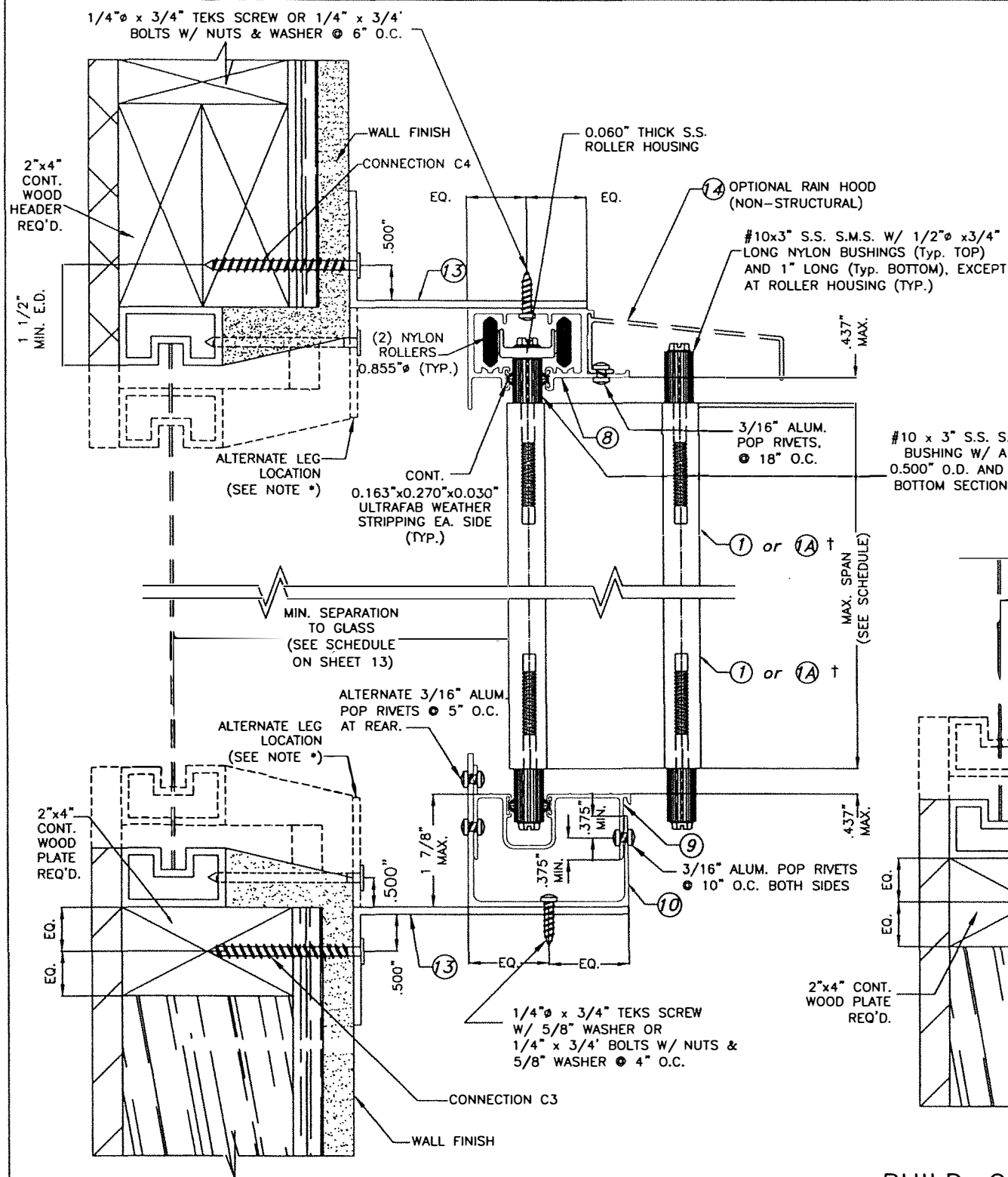
7/14/2023  
DATE

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23-106  
DRAWING No

| REV. No | DESCRIPTION | DATE      | REV. No | DESCRIPTION | DATE |
|---------|-------------|-----------|---------|-------------|------|
| 1       | OLD 20-190  | 7/14/2023 | 3       | -           | -    |
| 2       | -           | -         | 4       | -           | -    |

SHEET 10 OF 13



**BUILD-OUT FACE MOUNTING INSTALLATION  
SECTION 4W**

NOTE \*: ALTERNATE LEG LOCATION AND ANCHORAGE TO WALL SHOWN DOTTED

## INSTALLATIONS DETAILS INTO WOOD

SCALE : N.T.S.

† SEE LIMITATIONS FOR 1A ON SHEET 2

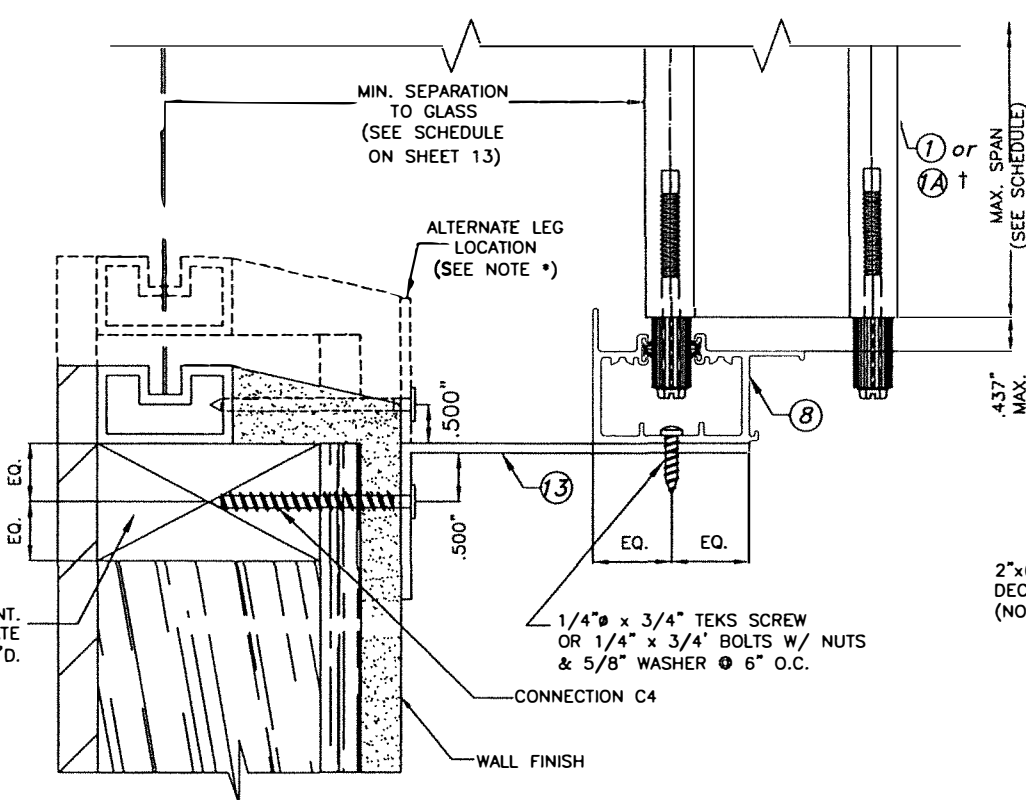
### NOTE FOR COMBINATION OF SECTIONS:

1- MOUNTING SECTIONS CAN BE COMBINED  
IN ANY WAY TO SUIT ANY INSTALLATION.

### NOTES:

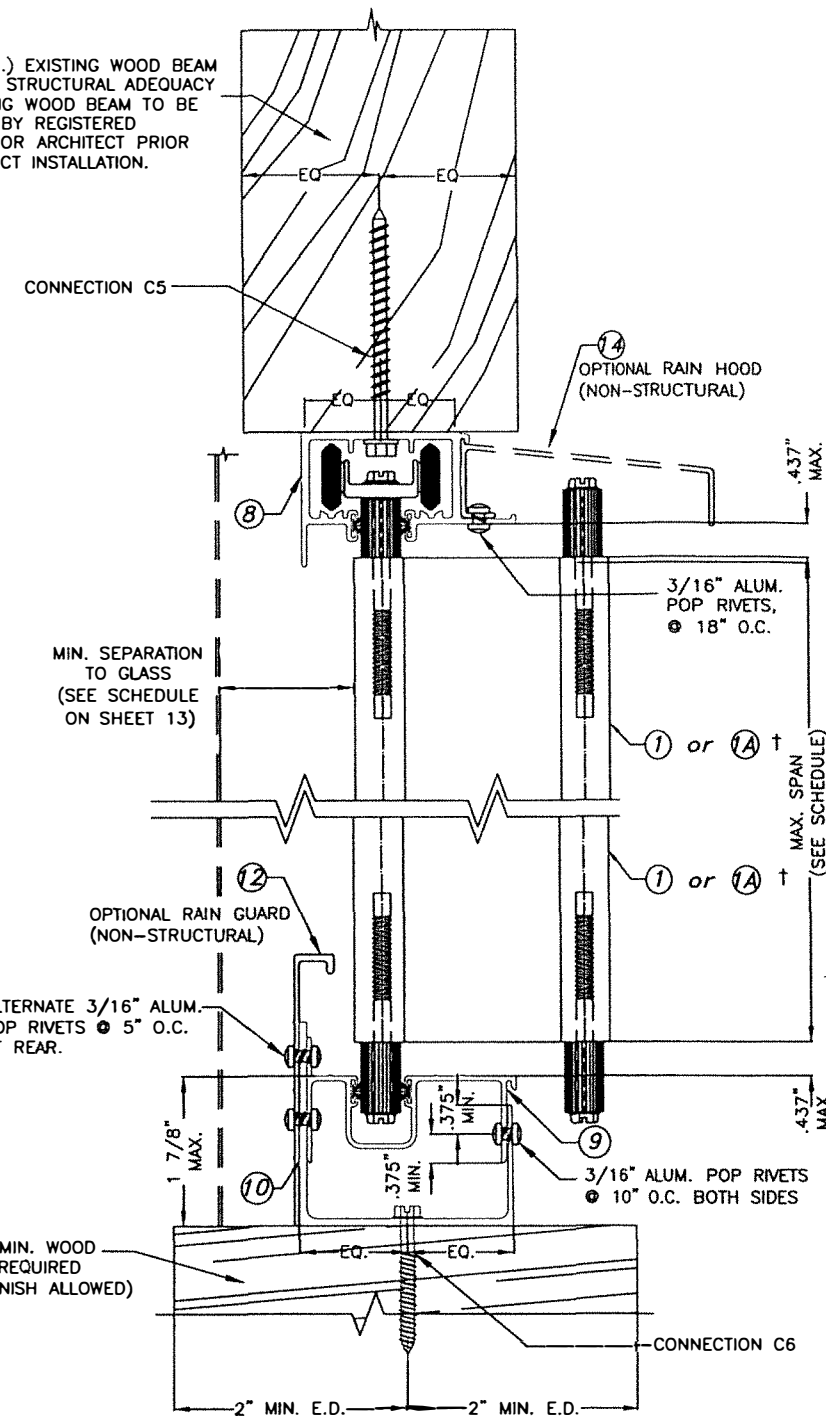
1- FOR WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO  
BE HAVE A MIN. SPECIFIC DENSITY OF 0.46 OR EQUAL

#10 x 3" S.S. S.M.S. W/ 0.373" LONG NYLON  
BUSHING W/ A 0.150" LONG TOP SECTION  
0.500" O.D. AND 0.245" i.d. AND 0.223" LONG  
BOTTOM SECTION 0.320" O.D. AND 0.245" i.d.  
(TYP.)



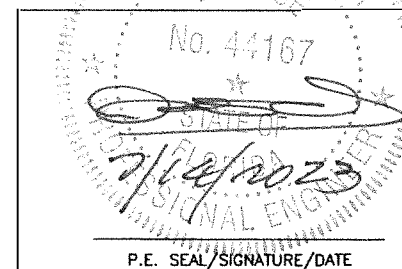
**BUILD-OUT FACE MOUNTING INSTALLATION  
SECTION 4AW (BOTTOM)**

4"x8" (Min.) EXISTING WOOD BEAM  
REQUIRED. STRUCTURAL ADEQUACY  
OF EXISTING WOOD BEAM TO BE  
CERTIFIED BY REGISTERED  
ENGINEER OR ARCHITECT PRIOR  
TO PRODUCT INSTALLATION.



**TRAPPED MOUNTING INSTALLATION  
SECTION 7W**

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



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CA-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

TITAN II FOLDING IMPACT PROTECTIVE SYSTEM

DRAWN BY:  
Y.M.

**FOLDING SHUTTER CORP.**

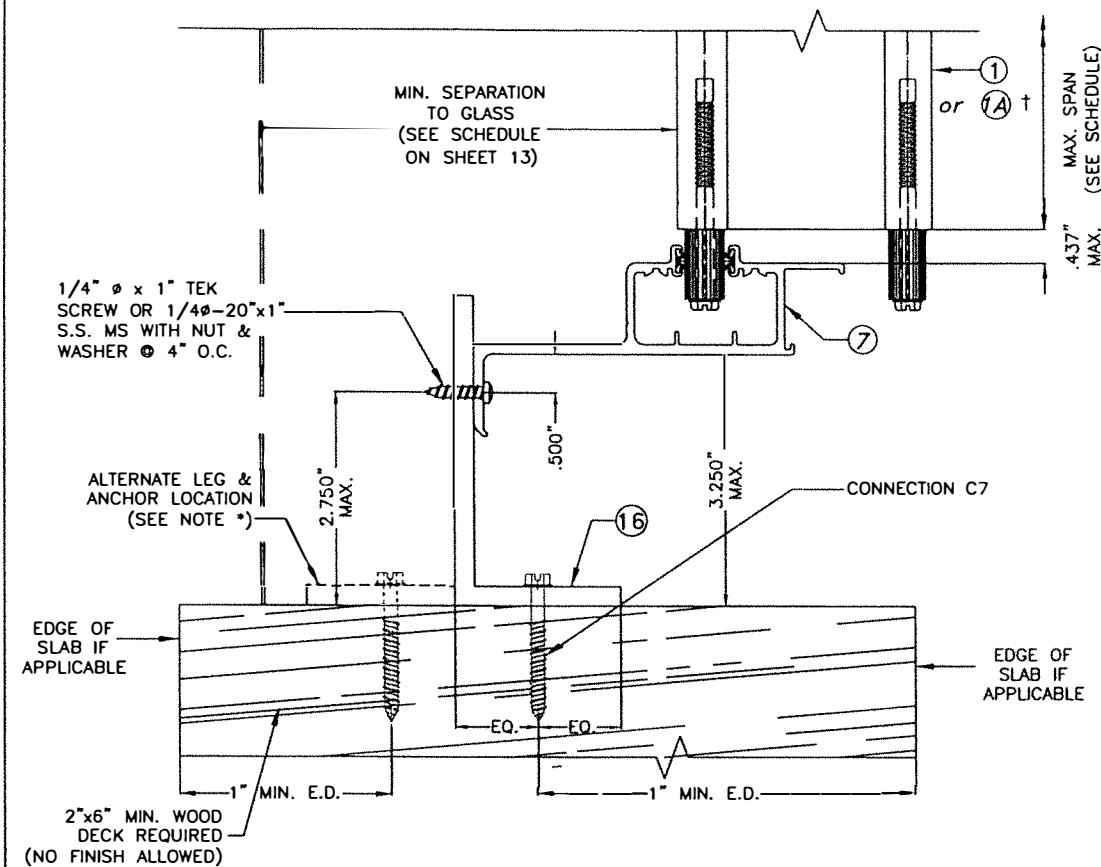
1862 MARTIN LUTHER KING JR. BLVD  
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7/14/2023  
DATE

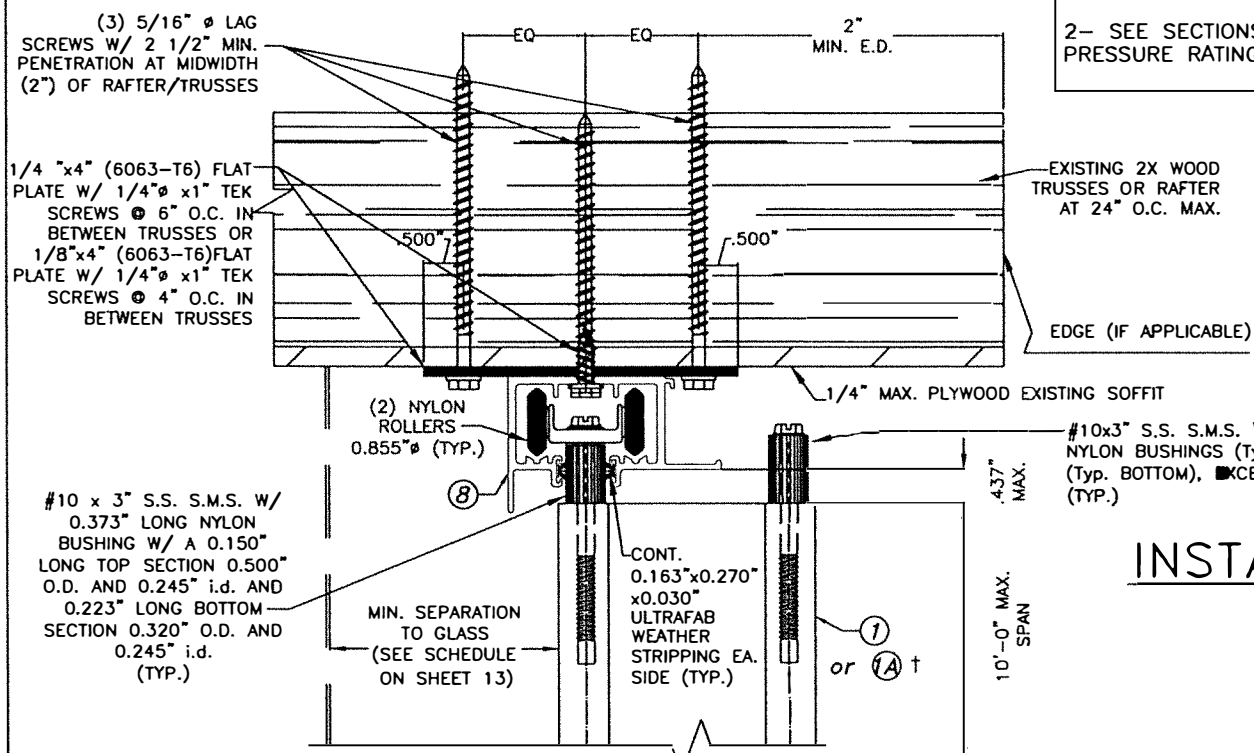
23-106  
DRAWING No

| REV. No | DESCRIPTION | DATE      | REV. No | DESCRIPTION | DATE |
|---------|-------------|-----------|---------|-------------|------|
| 1       | OLD 20-190  | 7/14/2023 | 3       | -           | -    |
| 2       | -           | -         | 4       | -           | -    |

SHEET 11 OF 13



FLOOR MOUNTING INSTALLATION  
SECTION 7AW (BOTTOM)



HEADER TO TRUSS MOUNTING INSTALLATION  
SECTION 8W (TOP)

MAX. A.S.D. DESIGN PRESSURE RATING +60.0, -60.0 PSF

† SEE LIMITATIONS FOR 1A ON SHEET 2

NOTE FOR COMBINATION OF SECTIONS:

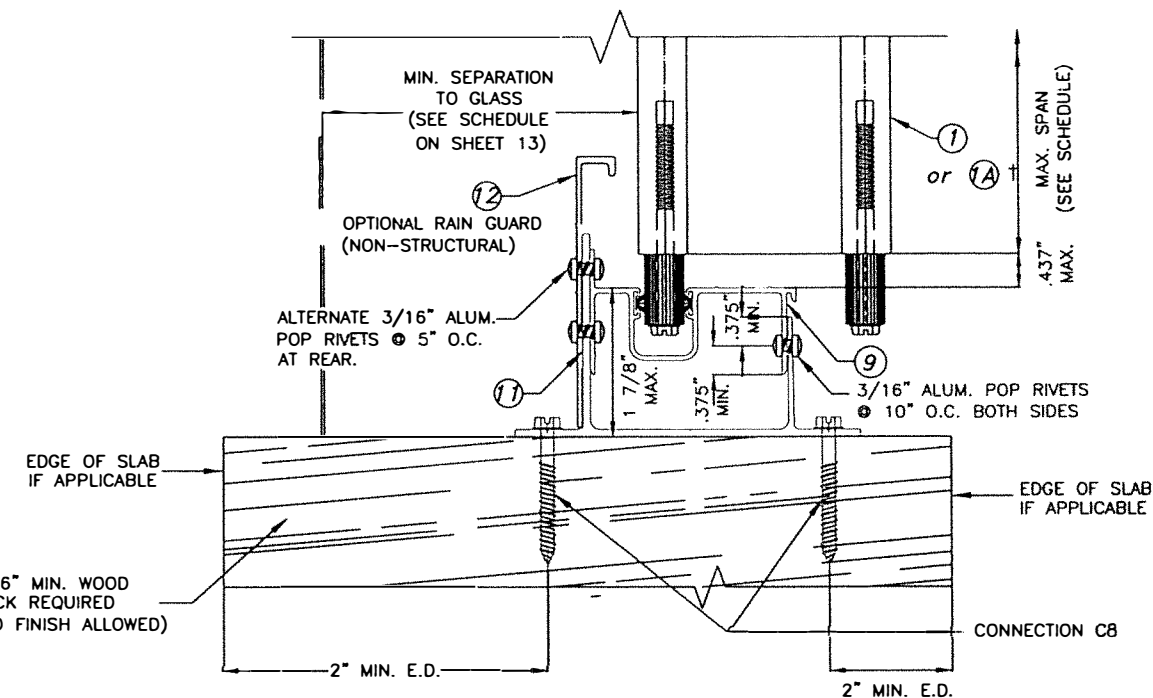
1- MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

NOTES:

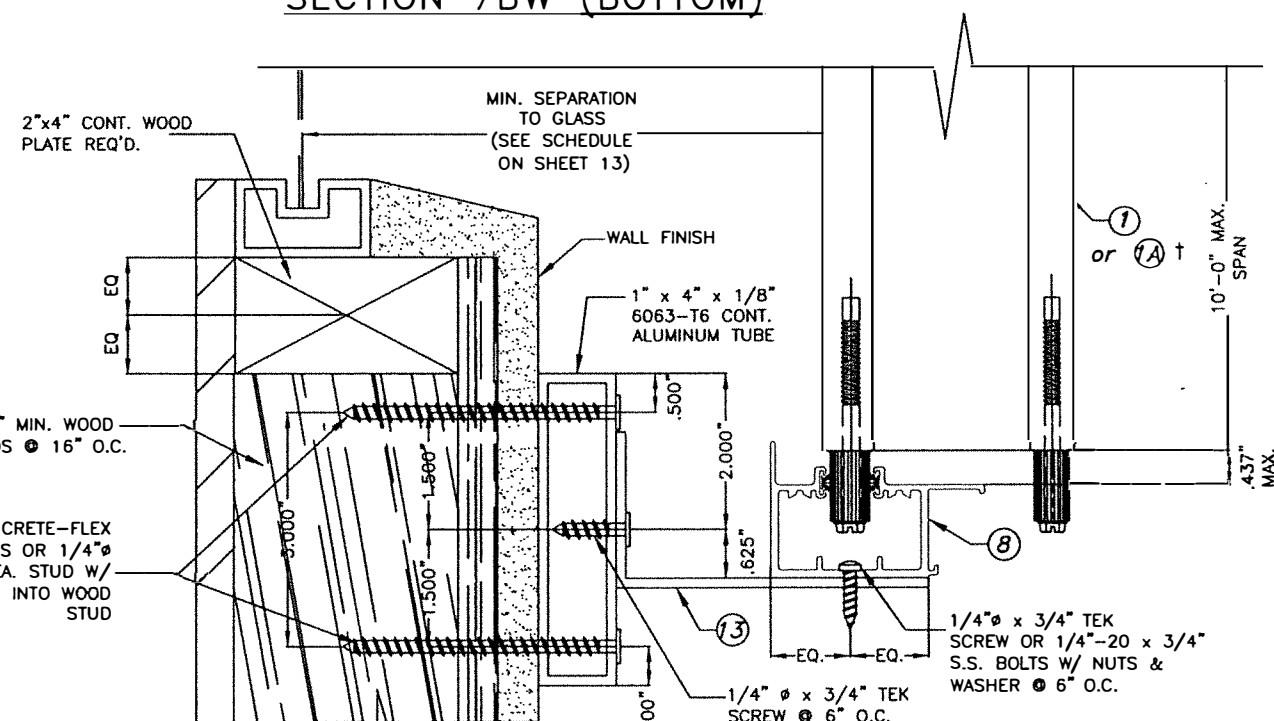
- FOR WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE HAVE A MIN. SPECIFIC DENSITY OF 0.46 OR EQUAL
- SEE SECTIONS 8W & 14W FOR MAX. A.S.D. DESIGN PRESSURE RATING & SPANS

INSTALLATIONS DETAILS  
INTO WOOD

SCALE : N.T.S.



ALT TRACK ADAPTER MOUNTING INSTALLATION  
SECTION 7BW (BOTTOM)



MOUNT TO WOOD STUDS MOUNTING INSTALLATION  
SECTION 14W (BOTTOM)

MAX. A.S.D. DESIGN PRESSURE RATING= +60.0, -60.0 PSF

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

No. 44167

7/14/2023

STATE OF FLORIDA

PROFESSIONAL ENGINEER

P.E. SEAL/SIGNATURE/DATE

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CA-0006719  
WALTER A. TILLIT Jr. P.E.  
FLORIDA Lic. # 44167

| TITAN II FOLDING IMPACT PROTECTIVE SYSTEM                                                                     |             |           |         |             |      | DRAWN BY:<br>Y.M.    |  |
|---------------------------------------------------------------------------------------------------------------|-------------|-----------|---------|-------------|------|----------------------|--|
| FOLDING SHUTTER CORP.                                                                                         |             |           |         |             |      | 7/14/2023<br>DATE    |  |
| 1862 MARTIN LUTHER KING JR. BLVD<br>WEST PALM BEACH, FL 33404<br>PH: 1800-643-6371<br>www.foldingshutters.com |             |           |         |             |      | 23-106<br>DRAWING No |  |
| REV. No                                                                                                       | DESCRIPTION | DATE      | REV. No | DESCRIPTION | DATE | SHEET 12 OF 13       |  |
| 1                                                                                                             | OLD 20-190  | 7/14/2023 | 3       | -           | -    |                      |  |
| 2                                                                                                             | -           | -         | 4       | -           | -    |                      |  |

MAXIMUM WIND PRESSURE (p.s.f.)  
AND CORRESPONDING MAXIMUM  
SLATS SPANS SCHEDULE.

| WIND<br>PRESSURE<br>(+/-) | MAXIMUM SLATS SPANS Δ        |                              | MAX. ALLOWABLE<br>REACTION<br>AT TOP<br>& BOTTOM |
|---------------------------|------------------------------|------------------------------|--------------------------------------------------|
|                           | POSITIVE<br>PRESSURE<br>(L+) | NEGATIVE<br>PRESSURE<br>(L-) |                                                  |
| 30 psf                    | 144.0"                       | 144"                         | 180 lb/ft                                        |
| 35 psf                    | 60.0"                        | 60"                          | 88 lb/ft                                         |
|                           | 100.0"                       | 100"                         | 146 lb/ft                                        |
|                           | 144"                         | 144"                         | 210 lb/ft                                        |
| 40 psf                    | 60.0"                        | 60"                          | 100 lb/ft                                        |
|                           | 100.0"                       | 100"                         | 167 lb/ft                                        |
|                           | 144"                         | 144"                         | 240 lb/ft                                        |
| 46 psf                    | 60.0"                        | 60.0"                        | 115 lb/ft                                        |
|                           | 80.0"                        | 80.0"                        | 154 lb/ft                                        |
|                           | 97.0"                        | 97.0"                        | 187 lb/ft                                        |
|                           | 115.0"                       | 115.0"                       | 221 lb/ft                                        |
|                           | 144"                         | 144"                         | 276 lb/ft                                        |
| 50 psf                    | 60.0"                        | 60.0"                        | 125 lb/ft                                        |
|                           | 89.0"                        | 89.0"                        | 187 lb/ft                                        |
|                           | 100.0"                       | 100.0"                       | 208 lb/ft                                        |
|                           | 120.0"                       | 120.0"                       | 250 lb/ft                                        |
|                           | 144"                         | 140"                         | 300 lb/ft                                        |
| 55 psf                    | 60.0"                        | 60.0"                        | 138 lb/ft                                        |
|                           | 81.0"                        | 81.0"                        | 187 lb/ft                                        |
|                           | 100.0"                       | 100.0"                       | 229 lb/ft                                        |
|                           | 120.0"                       | 120.0"                       | 275 lb/ft                                        |
|                           | 137"                         | 134"                         | 330 lb/ft                                        |
| 60 psf                    | 60.0"                        | 60.0"                        | 150 lb/ft                                        |
|                           | 80.0"                        | 80.0"                        | 200 lb/ft                                        |
|                           | 100.0"                       | 100.0"                       | 250 lb/ft                                        |
|                           | 115.0"                       | 115.0"                       | 288 lb/ft                                        |
| 65 psf                    | 59.0"                        | 59.0"                        | 160 lb/ft                                        |
|                           | 92.0"                        | 92.0"                        | 249 lb/ft                                        |
|                           | 100.0"                       | 100.0"                       | 271 lb/ft                                        |
|                           | 126"                         | 123"                         | 360 lb/ft                                        |
| 70 psf                    | 60.0"                        | 60.0"                        | 175 lb/ft                                        |
|                           | 100.0"                       | 100.0"                       | 292 lb/ft                                        |
|                           | 121"                         | 118"                         | 374 lb/ft                                        |
| 75 psf                    | 59.0"                        | 59.0"                        | 187 lb/ft                                        |
|                           | 100.0"                       | 100.0"                       | 313 lb/ft                                        |
| 80 psf                    | 113"                         | 111"                         | 387 lb/ft                                        |
| 90 psf                    | 107"                         | 104"                         | 424 lb/ft                                        |
| 100 psf                   | 101"                         | 99"                          | 447 lb/ft                                        |
| 110 psf                   | 94"                          | 90"                          | 468 lb/ft                                        |
| 120 psf                   | 87"                          | 82"                          | 484 lb/ft                                        |
| 130 psf                   | 80"                          | 76"                          | 483 lb/ft                                        |
| 140 psf                   | 74"                          | 70"                          | 484 lb/ft                                        |
| 150 psf                   | 69"                          | 66"                          | 483 lb/ft                                        |
| 160 psf                   | 65"                          | 62"                          | 483 lb/ft                                        |

Δ NOTES:  
L+: MAXIMUM ALLOWABLE PRODUCT SPAN FOR A GIVEN POSITIVE A.S.D DESIGN PRESSURE RATING.  
L-: MAX. ALLOWABLE PRODUCT SPAN FOR A GIVEN NEGATIVE A.S.D. DESIGN PRESSURE RATING.  
FINAL MAXIMUM ALLOWABLE PRODUCT SPAN IS EQUAL TO THE MINIMUM DETERMINED PRODUCT SPAN BETWEEN "L+" AND "L-".

CONNECTION CAPACITY SCHEDULE  
(MAX. ALLOWABLE REACTION TOP & BOTTOM LB/FT)  
FOR MIN. EDGE DISTANCES SHOWN ON ANCHOR SCHEDULE

| CON.<br>TYPE | ANCHOR<br>SPACING | CONCRETE<br>ANCHOR TYPE |            |           | CONCRETE BLOCK<br>ANCHOR TYPE |           | STEEL<br>ANCHOR<br>TYPE | WOOD<br>ANCHOR<br>TYPE |
|--------------|-------------------|-------------------------|------------|-----------|-------------------------------|-----------|-------------------------|------------------------|
|              |                   | A                       | B          | C         | A                             | C         |                         |                        |
| C1           | 9                 | 425 LB/FT               | -          | 388 LB/FT | 157 LB/FT                     | 134 LB/FT | 256 LB/FT               | 397 LB/FT              |
|              | 6                 | 473 LB/FT               | -          | 418 LB/FT | 236 LB/FT                     | 202 LB/FT | 383 LB/FT               | 432 LB/FT              |
| C2           | 12                | 387 LB/FT               | -          | 334 LB/FT | 166 LB/FT                     | 142 LB/FT | 271 LB/FT               | 347 LB/FT              |
|              | 9                 | 456 LB/FT               | -          | 362 LB/FT | 250 LB/FT                     | 190 LB/FT | 318 LB/FT               | 380 LB/FT              |
|              | 6                 | 525 LB/FT               | -          | 419 LB/FT | 312 LB/FT                     | 285 LB/FT | 353 LB/FT               | 443 LB/FT              |
| C3           | 9                 | 390 LB/FT               | -          | 309 LB/FT | 157 LB/FT                     | 134 LB/FT | 257 LB/FT               | 329 LB/FT              |
|              | 6                 | 496 LB/FT               | -          | 375 LB/FT | 236 LB/FT                     | 202 LB/FT | 298 LB/FT               | 405 LB/FT              |
|              | 3                 | 813 LB/FT               | -          | 572 LB/FT | 326 LB/FT                     | 304 LB/FT | 418 LB/FT               | 631 LB/FT              |
| C4           | 9                 | 466 LB/FT               | -          | 370 LB/FT | 157 LB/FT                     | 134 LB/FT | 256 LB/FT               | 393 LB/FT              |
|              | 6                 | 592 LB/FT               | -          | 448 LB/FT | 236 LB/FT                     | 202 LB/FT | 357 LB/FT               | 483 LB/FT              |
| C5           | 3                 | 972 LB/FT               | -          | 682 LB/FT | 389 LB/FT                     | 364 LB/FT | 500 LB/FT               | 753 LB/FT              |
|              | 9                 | 281 LB/FT               | -          | 224 LB/FT | 81 LB/FT                      | 83 LB/FT  | 143 LB/FT               | 103 LB/FT              |
|              | 6                 | 421 LB/FT               | -          | 334 LB/FT | 122 LB/FT                     | 125 LB/FT | 214 LB/FT               | 155 LB/FT              |
| C6           | 3                 | 843 LB/FT               | -          | 670 LB/FT | 243 LB/FT                     | 250 LB/FT | 432 LB/FT               | 311 LB/FT              |
|              | 9                 | 273 LB/FT               | 325 LB/FT  | 215 LB/FT | -                             | -         | 138 LB/FT               | 102 LB/FT              |
|              | 6                 | 410 LB/FT               | 487 LB/FT  | 323 LB/FT | -                             | -         | 207 LB/FT               | 153 LB/FT              |
| C7           | 3                 | 822 LB/FT               | 975 LB/FT  | 648 LB/FT | -                             | -         | 414 LB/FT               | 307 LB/FT              |
|              | 4                 | 269 LB/FT               | 301 LB/FT  | 183 LB/FT | -                             | -         | 114 LB/FT               | 153 LB/FT              |
|              | 3                 | 358 LB/FT               | 402 LB/FT  | 244 LB/FT | -                             | -         | 152 LB/FT               | 204 LB/FT              |
| C8           | 2                 | -                       | -          | -         | -                             | -         | -                       | 305 LB/FT              |
|              | 12                | 491 LB/FT               | 596 LB/FT  | 409 LB/FT | -                             | -         | 265 LB/FT               | 168 LB/FT              |
|              | 8                 | 736 LB/FT               | 894 LB/FT  | 614 LB/FT | -                             | -         | 397 LB/FT               | 252 LB/FT              |
|              | 6                 | 982 LB/FT               | 1194 LB/FT | 819 LB/FT | -                             | -         | 530 LB/FT               | 336 LB/FT              |

MIN. SEPARATION TO GLASS SCHEDULE

| SLAT<br>SPAN        | HIGH VELOCITY<br>HURRICANE ZONE | NON HIGH VELOCITY<br>HURRICANE ZONE Δ |          |
|---------------------|---------------------------------|---------------------------------------|----------|
|                     |                                 | ZONE 1,2,3                            | ZONE 4   |
| 5'-10"<br>AS LESS   | 2 1/2"                          | 1"                                    | 2 5/8"   |
| >5'-10"<br>TO 8'-3" | 2 5/8" +                        | 1"                                    | 2 3/4" + |
| >8'-3"<br>TO 12'-0" | 3 1/2"                          | 1"                                    | 3 5/8"   |

Δ AS DEFINED BY ASTM E-1996 STANDARD.  
+ EXCEPT THAT 3 5/8" SHALL BE USED  
FOR MOUNTINGS AS PER SECTIONS 3,  
4, 4A & 7A.

CONNECTION CAPACITY SCHEDULE  
(MAX. ALLOWABLE REACTION TOP & BOTTOM LB/FT)  
FOR CONCRETE & CONCRETE BLOCK  
FOR SHORTER E.D. (2" FOR A, 2 1/2" FOR B & 2 1/4" FOR C ANCHORS)  
THAN MIN. E.D. SHOWN ON ANCHOR SCHEDULE

| CONNECTION<br>TYPE | ANCHOR<br>SPACING | CONCRETE<br>ANCHOR TYPE |           |           | CONCRETE BLOCK<br>ANCHOR TYPE |           |
|--------------------|-------------------|-------------------------|-----------|-----------|-------------------------------|-----------|
|                    |                   | A                       | B         | C         | A                             | C         |
| C1                 | 9                 | 417 LB/FT               | -         | 388 LB/FT | -                             | 134 LB/FT |
|                    | 6                 | 461 LB/FT               | -         | 418 LB/FT | -                             | 202 LB/FT |
| C2                 | 12                | 375 LB/FT               | -         | 334 LB/FT | -                             | 142 LB/FT |
|                    | 9                 | 417 LB/FT               | -         | 362 LB/FT | -                             | 190 LB/FT |
|                    | 6                 | 502 LB/FT               | -         | 419 LB/FT | -                             | 285 LB/FT |
| C3                 | 9                 | 372 LB/FT               | -         | 309 LB/FT | -                             | 134 LB/FT |
|                    | 6                 | 469 LB/FT               | -         | 375 LB/FT | -                             | 202 LB/FT |
|                    | 3                 | 760 LB/FT               | -         | 572 LB/FT | -                             | 304 LB/FT |
| C4                 | 9                 | 445 LB/FT               | -         | 370 LB/FT | -                             | 134 LB/FT |
|                    | 6                 | 561 LB/FT               | -         | 448 LB/FT | -                             | 202 LB/FT |
|                    | 3                 | 912 LB/FT               | -         | 682 LB/FT | -                             | 364 LB/FT |
| C5                 | 9                 | 226 LB/FT               | -         | 224 LB/FT | -                             | 83 LB/FT  |
|                    | 6                 | 339 LB/FT               | -         | 334 LB/FT | -                             | 125 LB/FT |
|                    | 3                 | 681 LB/FT               | -         | 670 LB/FT | -                             | 250 LB/FT |
| C6                 | 9                 | 221 LB/FT               | 251 LB/FT | 215 LB/FT | -                             | -         |
|                    | 6                 | 332 LB/FT               | 378 LB/FT | 323 LB/FT | -                             | -         |
|                    | 3                 | 663 LB/FT               | 756 LB/FT | 646 LB/FT | -                             | -         |
| C7                 | 4                 | 232 LB/FT               | 236 LB/FT | 183 LB/FT | -                             | -         |
|                    | 3                 | 310 LB/FT               | 315 LB/FT | 244 LB/FT | -                             | -         |
| C8                 | 12                | 388 LB/FT               | 460 LB/FT | 409 LB/FT | -                             | -         |
|                    | 8                 | 582 LB/FT               | 691 LB/FT | 614 LB/FT | -                             | -         |
|                    | 6                 | 777 LB/FT               | 921 LB/FT | 819 LB/FT | -                             | -         |

ANCHORS SCHEDULE SEE GENERAL NOTE C.2 ON SHEET 1

| ANCHORS<br>TYPE | ANCHORS<br>DESCRIPTION                            | MIN. E.D. |         |      |       | MIN. SPACING |         |       |       |
|-----------------|---------------------------------------------------|-----------|---------|------|-------|--------------|---------|-------|-------|
|                 |                                                   | CONC.     | C.BLOCK | WOOD | STEEL | CONC.        | C.BLOCK | WOOD  | STEEL |
| A               | 1/4"Ø TAPCON W/ ADVANCED<br>THREADFORM TECHNOLOGY | 3.50"     | 2.50"   | Ø    | N/A   | 4.00"        | 4.00"   | N/A   | N/A   |
| B               | 1/4" Ø x 3/4" SOLID SET                           | 3.50"     | 3.50"   | N/A  | N/A   | 3.00"        | 3.00"   | N/A   | N/A   |
| C               | 1/4" Ø CRETE-FLEX                                 | 3.00"     | 3.00"   | Ø    | N/A   | 3.00"        | 3.00"   | N/A   | N/A   |
| E               | 1/4" Ø ITW-BUILDEX<br>TEK SCREWS                  | N/A       | N/A     | N/A  | 1.00" | N/A          | N/A     | N/A   | 2.00" |
|                 | #14 NDS WOOD SCREWS OR<br>1/4" NDS LAG SCREWS     | N/A       | N/A     | Ø    | N/A   | N/A          | N/A     | 2.00" | N/A   |

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

No. 44167

7/14/2023

P.E. SEAL/SIGNATURE/DATE

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|---------|-------------|-----------|---------|-------------|------|
| 1       | OLD 20-190  | 7/14/2023 | 3       | -           | -    |
| 2       | -           | -         | 4       | -           | -    |

SHEET 13 OF 13

DRAWN BY:  
Y.M.

7/14/2023  
DATE

23-106  
DRAWING No