

GENERAL NOTES:

1. STORM PANEL SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2017 (6th EDITION) OF THE FLORIDA BUILDING CODE. THIS STORM PANEL SHALL **NOT** BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES (MIAM-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 $K_d=0.85$. USING ASCE 7-10 FOR INSTALLATIONS UNDER 2017 FBC AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON SHEETS 4 THRU 8.

IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-10 SHALL BE FIRST REDUCED TO A.S.D. DESIGN WIND LOADS BY MULTIPLYING THEM BY 0.6 IN ORDER TO TO COMPARE THESE W/ MAX. (A.S.D) DESIGN PRESSURE RATINGS INDICATED ON SHEETS 4 THRU 8.

IN ORDER TO VERIFY THAT COMPONENTS AND ANCHORS ON THIS P.E.D. AS TESTED WERE NOT OVER STRESSED, 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.

STORM PANEL'S ADEQUACY FOR IMPACT AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1609.1.2 OF THE ABOVE MENTIONED CODE AS PER ATL REPORTS # 0121.01-98R, # 0329.01-00, #0512.01-03 AND 0617.01-04 AS PER IMPACT TESTING EQUIVALENT TO ASTM E-1996 STANDARD & ASTM E 330-02 STANDARD. LIMITED TO INSTALLATIONS WITHIN WIND ZONES 1, 2 & 3 AS DEFINED BY ASTM E-1996 STANDARD.

2. ALL STEEL SHEET METAL PANELS SHALL HAVE STRUCTURAL QUALITY ASTM A-653, GRADE 40, WITH G-60 GALVANIZED STEEL DESIGNATION.

3. ALL ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ASSOCIATION 6063-T6 ALLOY & TEMPER UNLESS OTHERWISE NOTED. STORM PANEL COMPONENTS (12) STUDDER PLATE AND (13) SNAP CAP ARE PATENT PENDING.

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:

- 1/4" Ø TAPCON ANCHORS AS MANUFACTURED BY I.T.W. BUILDX.
- 1/4" Ø CF TAP-GRIP ANCHORS (BERTHA STUD-CON), AS MANUFACTURED BY TRU-FAST CORPORATION.
- 1/4" Ø ZAMAC NAILIN ANCHORS AS MANUFACTURED BY POWER FASTENERS, INC.
- 1/4" Ø x 7/8" CALK-IN ANCHORS OR ELCO male & female "PANELMATE" AS MANUFACTURED BY POWER FASTENERS, INC. AND ELCO CONSTRUCTION PRODUCTS, RESPECTIVELY.
- 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", FOR ZAMAC NAILIN ANCHORS IS 1 3/8"; FOR ELCO PANELMATE ANCHORS IS 1 3/4", AND FOR CF TAP-GRIP ANCHORS IS 1 1/4".

A.2) 7/8" CALK-IN ANCHORS SHALL BE ENTIRELY EMBEDDED INTO THE POURED CONCRETE. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. 1/4"Ø-20 SCREWS USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST, AND 1" MINIMUM FOR WALLS WITH NO STUCCO.

A.3) 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 USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST, AND 1" MINIMUM FOR WALLS WITH NO STUCCO.

A.4) 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:

- 1/4" Ø TAPCON ANCHORS AS MANUFACTURED BY I.T.W. BUILDX.
- 1/4" Ø CF TAP-GRIP ANCHORS (BERTHA STUD-CON), AS MANUFACTURED BY TRU-FAST CORPORATION.
- 1/4" Ø ZAMAC NAILIN ANCHORS AS MANUFACTURED BY POWER FASTENERS, INC.
- 1/4" Ø x 7/8" CALK-IN ANCHORS OR ELCO male & female "PANELMATE" AS MANUFACTURED BY POWER FASTENERS, INC. AND ELCO CONSTRUCTION PRODUCTS, RESPECTIVELY.
- 1/4" Ø x 3/4" ALL POINTS SOLID-SET ANCHORS AS DISTRIBUTED BY ALL POINTS SCREW, BOLT & SPECIALTY COMPANY.
- 1/4" Ø RED HEAD DYNABOLT SLEEVE ANCHORS AS MANUFACTURED BY I.T.W. BUILDX.

NOTES:

B.1) MINIMUM EMBEDMENT OF TAPCON, ELCO PANELMATE, AND CF TAP-GRIP ANCHORS INTO CONCRETE BLOCK UNIT SHALL BE 1 1/4"; 1 3/8" FOR ZAMAC NAILIN ANCHORS AND 1 1/8" FOR RED HEAD DYNABOLT SLEEVE ANCHORS

B.2) 7/8" CALK-IN ANCHORS SHALL BE ENTIRELY EMBEDDED INTO THE CONCRETE BLOCK UNIT. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. 1/4"Ø-20 SCREWS USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST, AND 1" MINIMUM FOR WALLS WITH NO STUCCO.

B.3) 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 USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST, AND 1" MINIMUM FOR WALLS WITH NO STUCCO.

B.4) 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 IN B.1) AND B.2) ABOVE.

(C) 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 8 (SHEET 2 & 3 OF 8) EXCEPT THAT HEADERS 2, 3 & 4 SHALL NOT BE USED.

8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE SHUTTER IS TO BE ATTACHED TO INSURE PROPER ANCHORAGE. THIS SHUTTER SHALL ONLY BE ATTACHED TO CONCRETE, BLOCK OR WOOD FRAME BUILDINGS.

9. THE INSTALLATION CONTRACTOR IS TO SEAL/CAULK ALL SHUTTER 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. (c) 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.

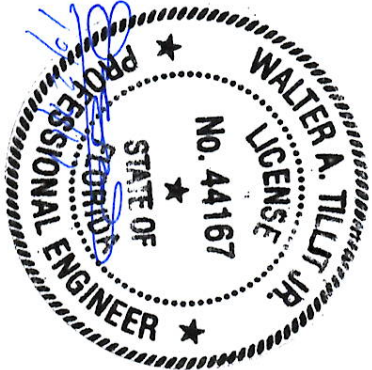
(b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT, BASED ON THIS P.E.D. PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.

(c) THIS P.E.D. WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

(d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER, SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.

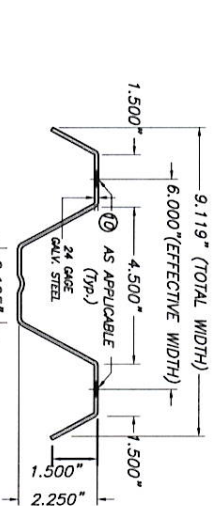
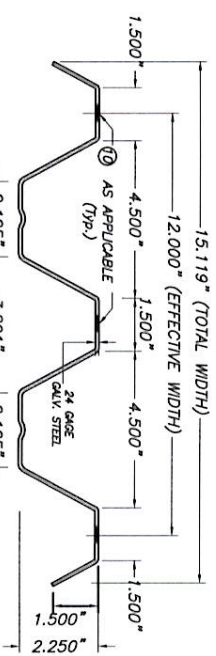
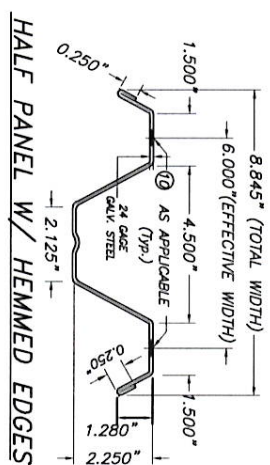
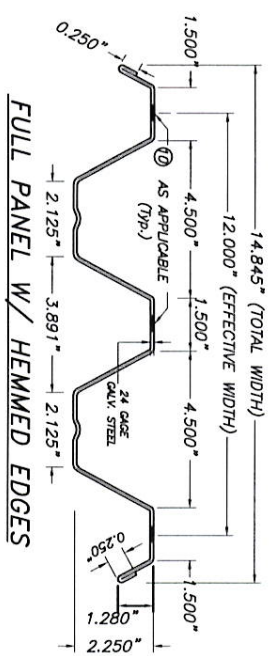
(e) THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

11. SHUTTER MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT STORM 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.



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

© 2017 TILTECO, INC.		24 GAGE GALVANIZED BERTHA STEEL STORM PANEL (2.25" DEEP)		L.C. DRAWN BY:	
TILTECO inc.		EASTERN METAL SUPPLY, INC		07/25/17 DATE:	
TILIT TESTING & ENGINEERING COMPANY 6335 N.W. 36th, St., Ste. 305, Virginia Gardens, FL 33166 Phone : (305)971-1530 , Fax : (305)971-1531 EB-0006719 WALTER A. TILIT Jr., P.E. FLORIDA Lic. # 44167		4268 WEST ROADS DRIVE WEST PALM BEACH, FL. 33407 PHONE: (561)209-8263 FAX: (561)841-1716		17-095 DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 15-043	07/26/17	3		
2	C.N. 1	10/26/17	4		
				SHEET 1 OF 8	

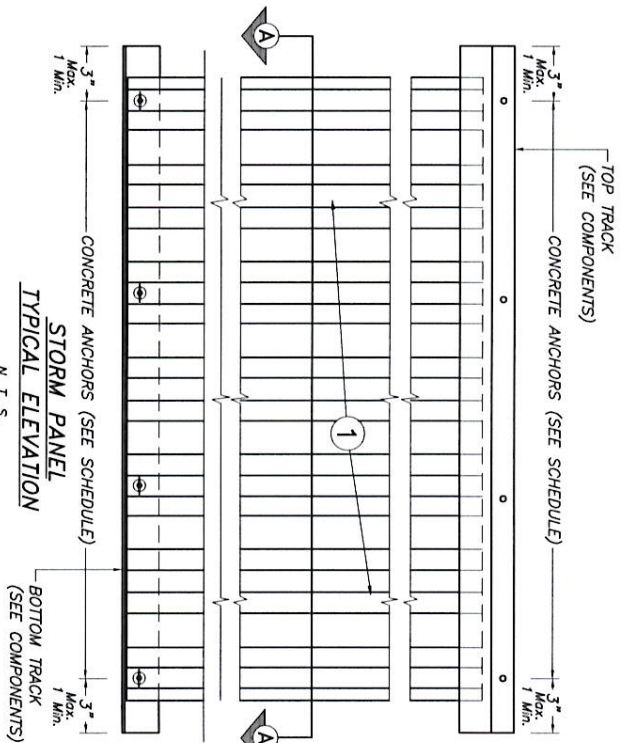


OPTIONAL FULL PANEL W/O HEMMED EDGES

OPTIONAL HALF PANEL W/O HEMMED EDGES

1 SOLID STORM PANEL

SCALE : 3/16" = 1"

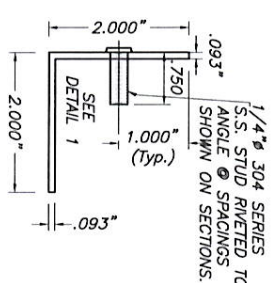


TYPICAL ELEVATION

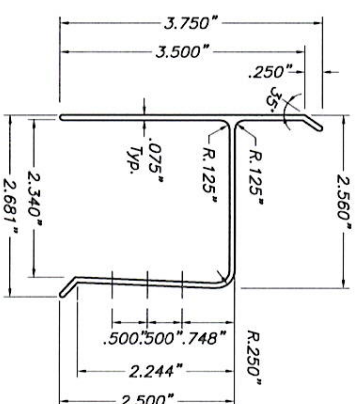
N. T. S.

9 STUDDED ANGLE

6063-T6 ALUM. ALLOY
SCALE : 3/8" = 1"

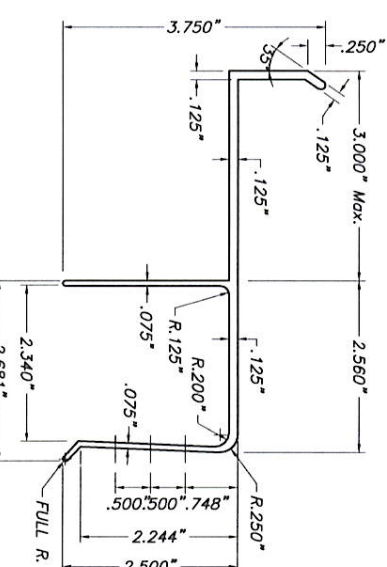


DETAIL 1: STUD W/ DIE CAST ZINC NICKEL PLATED WING NUT



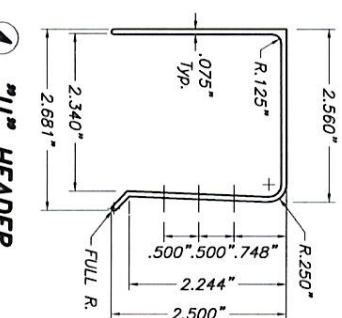
2 2" H" HEADER

SCALE : 3/8" = 1"



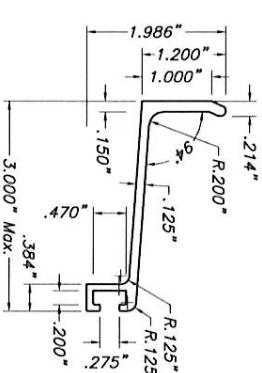
3 3" Max. "U" BUILD OUT

SCALE : 3/8" = 1"



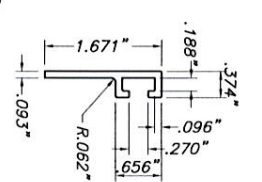
4 4" U" HEADER

SCALE : 3/8" = 1"



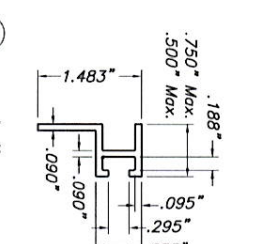
5 3" ANGLE BUILD OUT BRACKET

SCALE : 3/8" = 1"



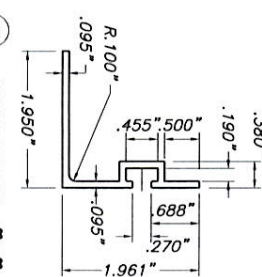
6 3/8" B. O. "F" TRACK

SCALE : 3/8" = 1"



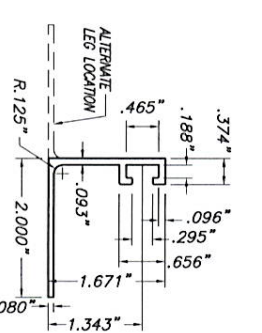
6A 3/4" B. O. "F" TRACK

SCALE : 3/8" = 1"



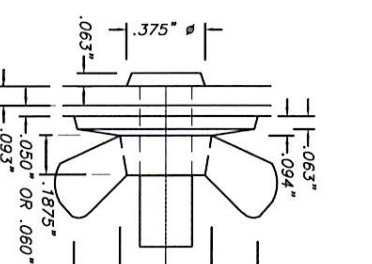
7 REVERSED "F" ANGLE TRACK

SCALE : 3/8" = 1"



8 8" F" TRACK ANGLE

SCALE : 3/8" = 1"

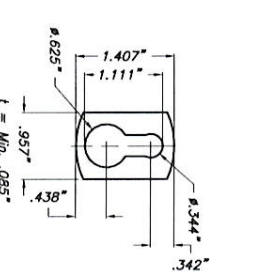


OPTION 1

OPTION 2

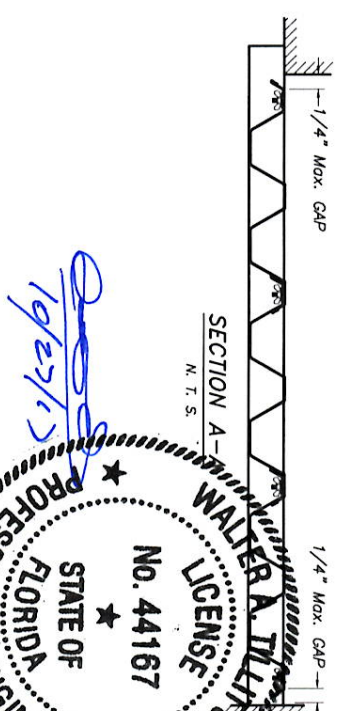
10A

ROUND HOLE AT PANEL (OPTION TO 10)



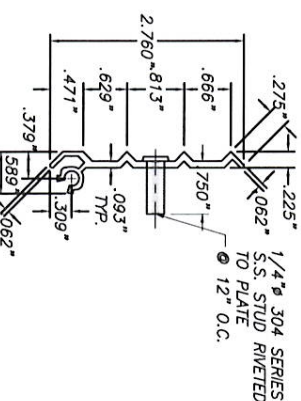
11 KEY HOLE WASHER

3105-H154 ALUM. ALLOY
SCALE : 3/8" = 1"



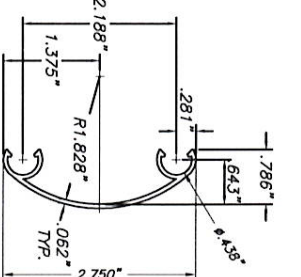
SECTION A-A

N. T. S.



12 STUDDED PLATE

6063-T6 ALLOY
SCALE : 3/8" = 1"



13 SNAP CAP

6063-T6 ALLOY
SCALE : 3/8" = 1"

© 2017 TILTECO, INC.

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

24 GAGE GALVANIZED BERTHA STEEL STORM PANEL (2.25" DEEP)

EASTERN METAL SUPPLY, INC.

L.C. DRAWN BY:
DATE: 07/25/17

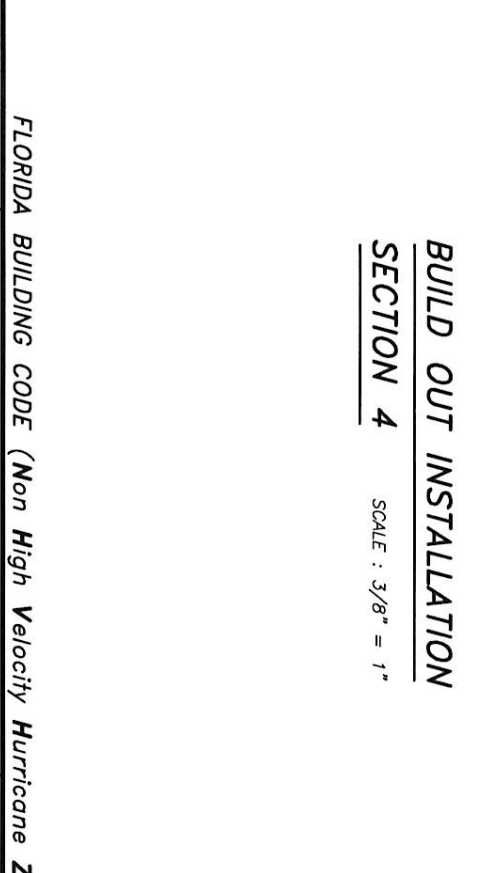
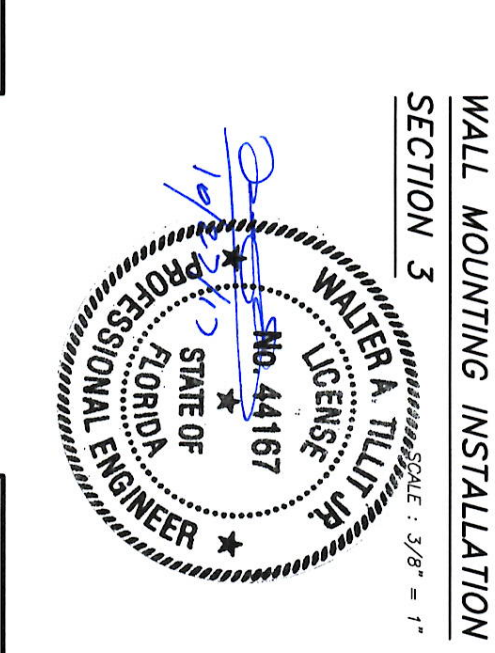
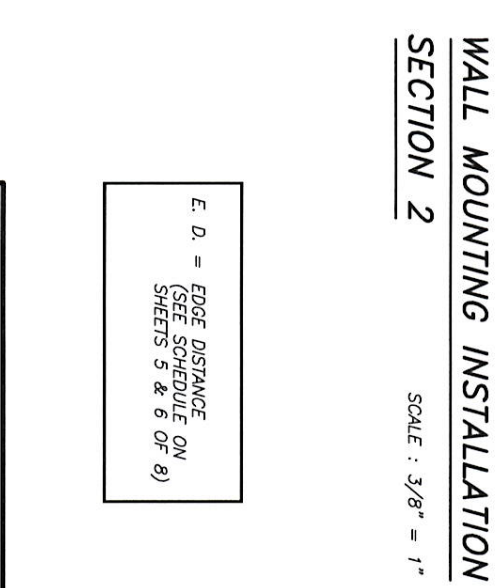
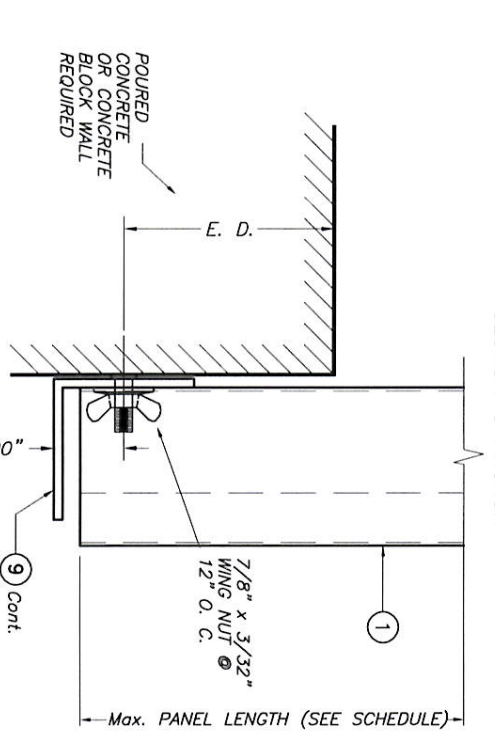
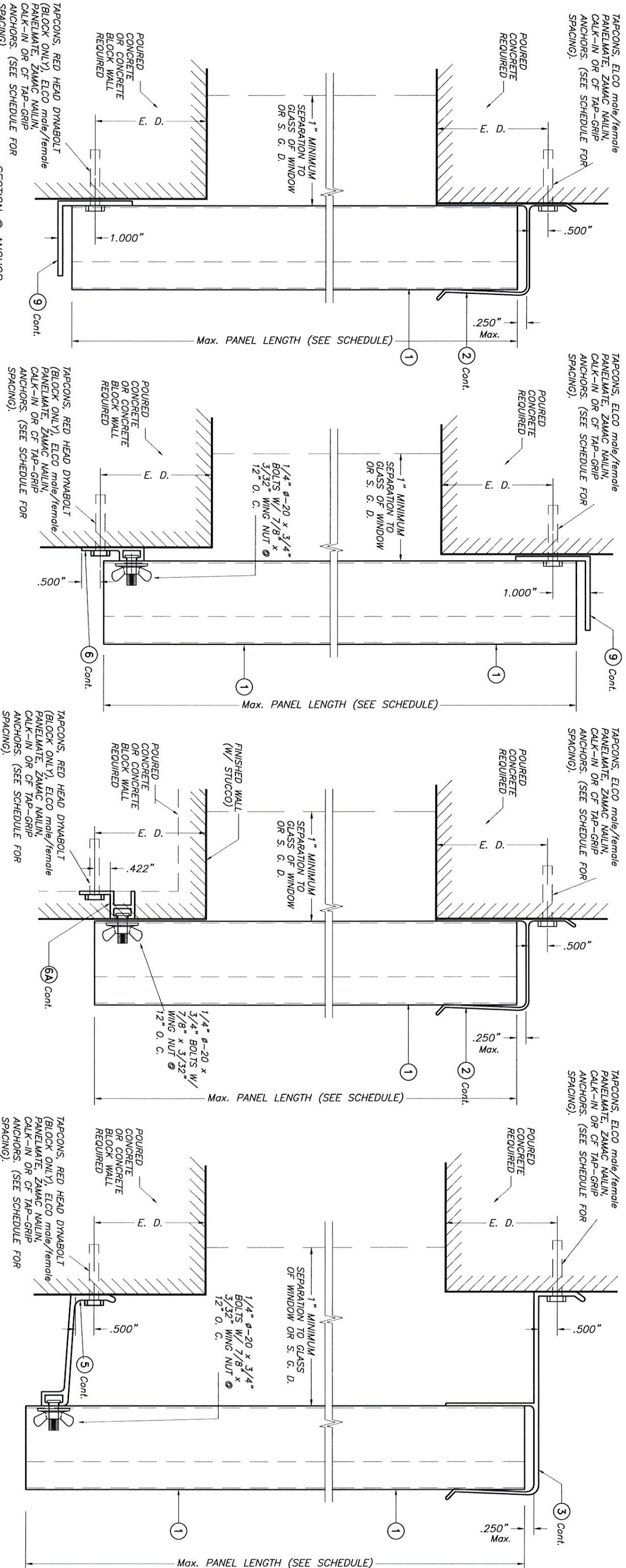
4268 WEST BROADS DRIVE
WEST PALM BEACH, FL. 33407
PHONE: (561)209-8263, FAX: (561)841-1716

17-095
DRAWING No

REV. NO.	DESCRIPTION	DATE	REV. NO.	DESCRIPTION	DATE
1	OLD 15-043	07/25/17	3		
2			4		

SHEET 1A OF 8

TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6335 N.W. 36th, ST. STE. 305, VIRGINIA GARDENS, FL. 33166
Phone : (305)871-1530, Fax : (305)871-1531
EB-0006719
WALTER A. TILLIT JR., P.E.
FLORIDA Lic. # 44167



WALL MOUNTING INSTALLATION

SECTION 1 SCALE : 3/8" = 1"

NOTE : DETAIL OF SECTION @ STUD VALID ALSO FOR WALL MOUNTING INSTALLATION - SECTION 2 (TOP)

WALL MOUNTING INSTALLATION

WALL MOUNTING INSTALLATION

BUILD OUT INSTALLATION

E. D. = EDGE DISTANCE (SEE SCHEDULE ON SHEETS 5 & 6 OF 8)

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



© 2017 TILTECO, INC.

TILTECO inc.

TILLIT TESTING & ENGINEERING COMPANY
6335 N.W. 36th St., Ste. 305, Virginia Gardens, FL 33166
Phone : (305)871-1530, Fax : (305)871-1531
EB-0006719
WALTER A. TILLIT Jr., P.E.
FLORIDA Lic. # 44167

24 GAGE GALVANIZED BERTHA STEEL STORM PANEL
(2.25" DEEP)

EASTERN METAL SUPPLY, INC

4268 WEST ROADS DRIVE
WEST PALM BEACH, FL 33407
PHONE: (561)209-8263, FAX: (561)841-1716

17-095
DRAWING No

07/25/17
DATE:

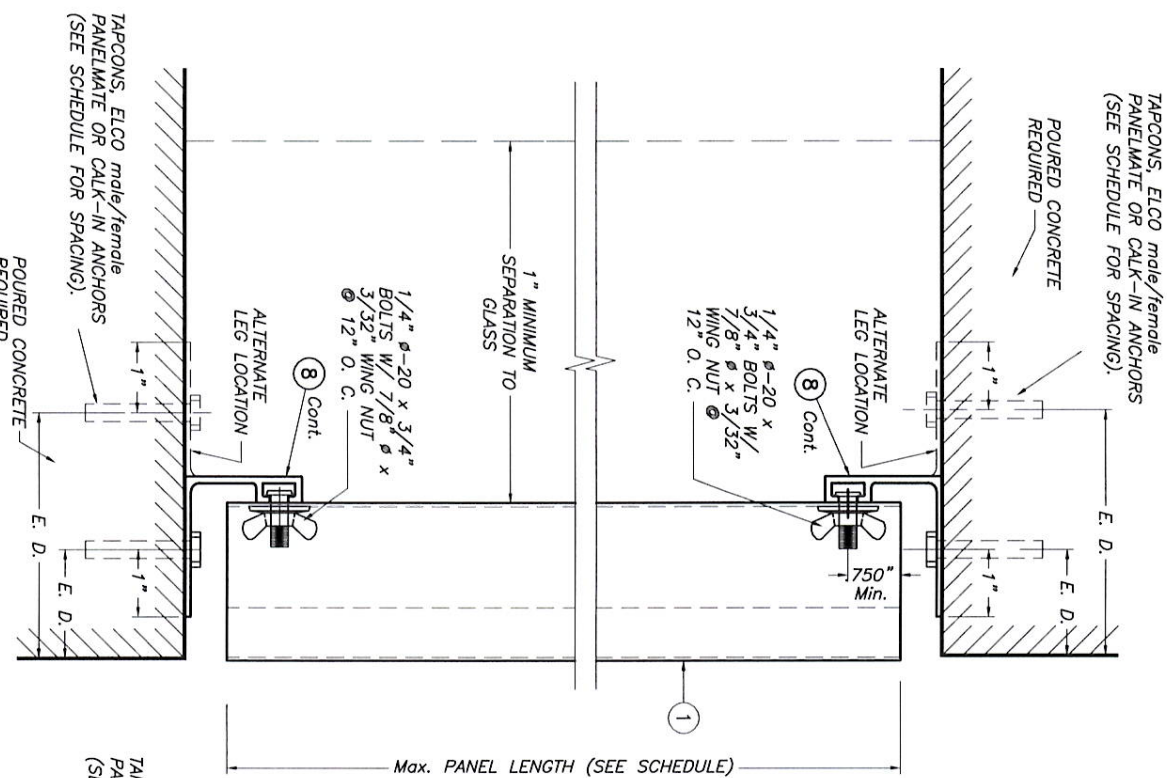
17-095
DRAWING No

07/25/17
DATE:

SHEET 2 OF 8

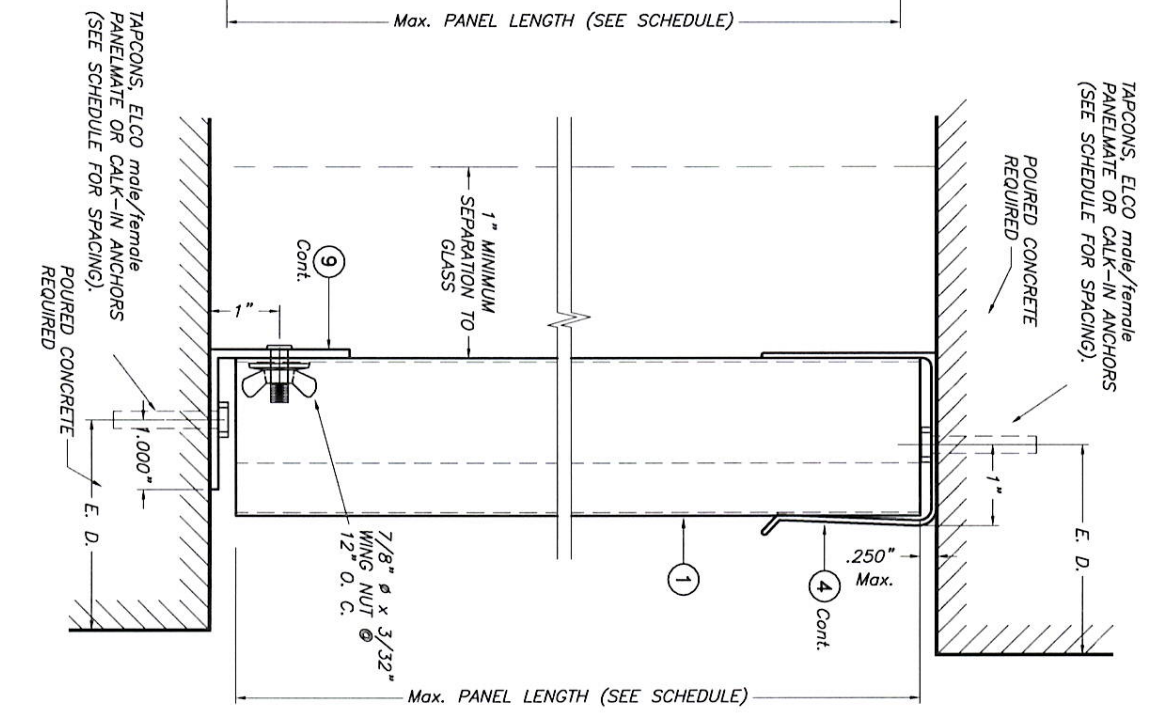
L.C.
DRAWN BY:

07/25/17
DATE:



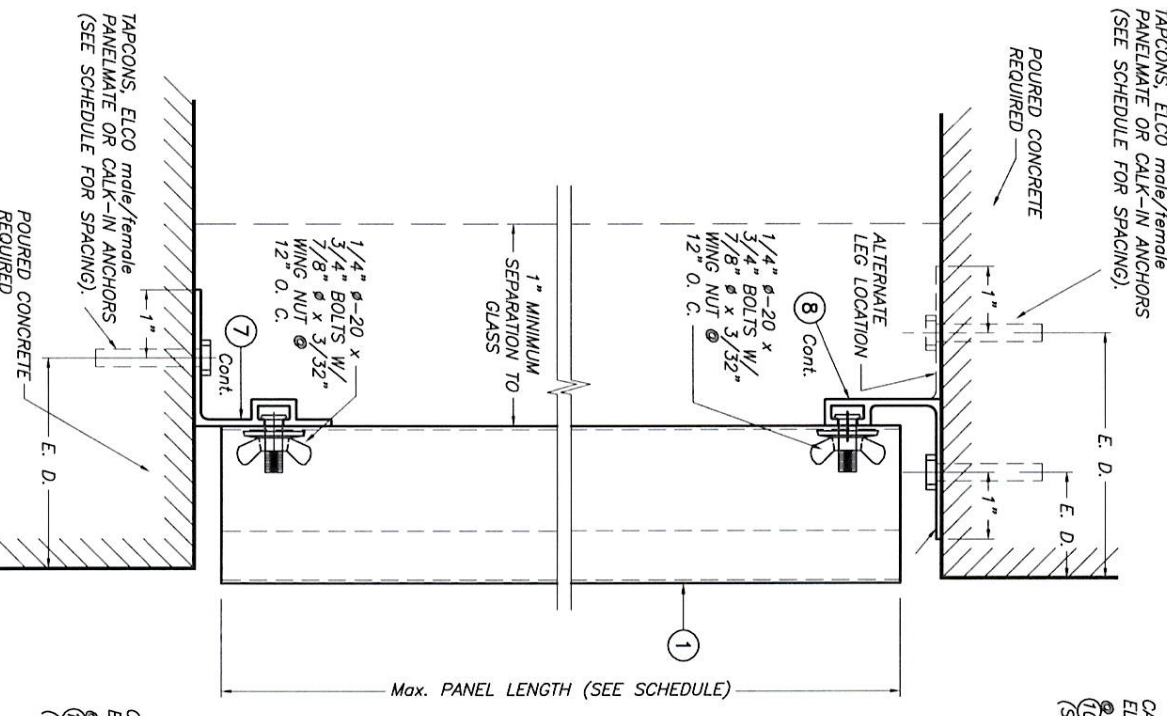
CEILING & FLOOR MOUNTING INSTALLATION – SECTION 5

SCALE : 3/8" = 1"



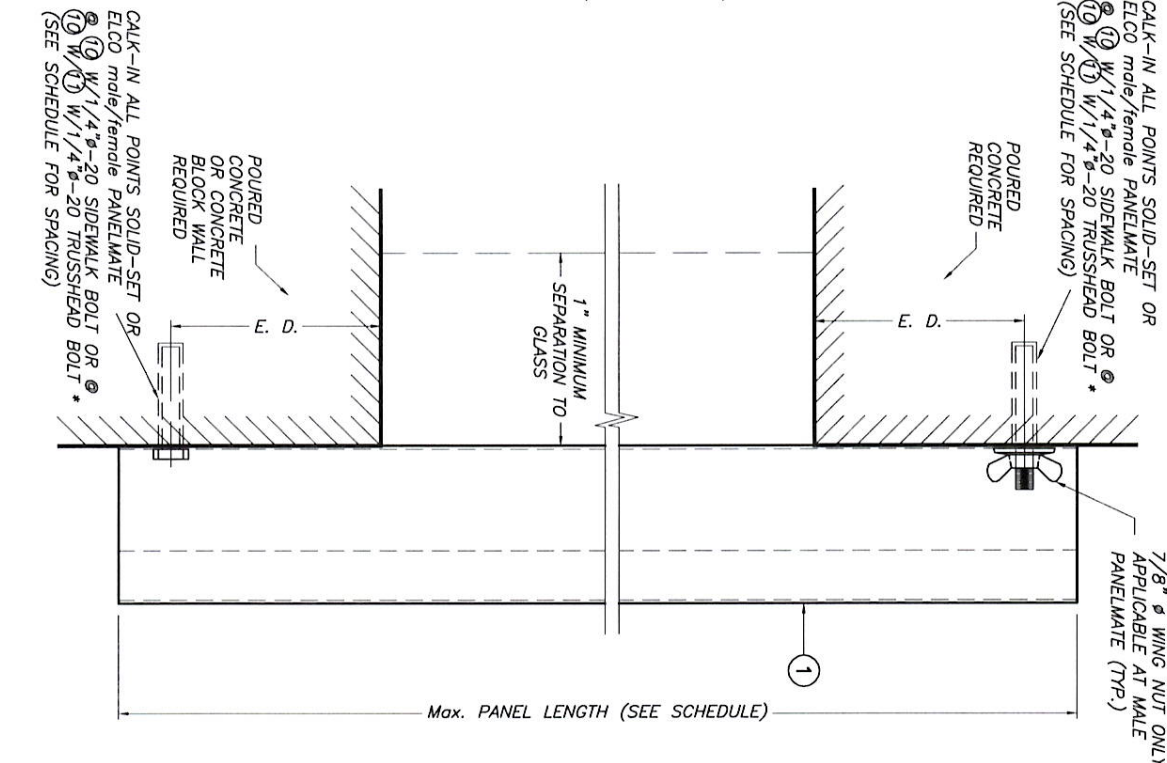
CEILING & FLOOR MOUNTING INSTALLATION – SECTION 6

SCALE : 3/8" = 1"



CEILING & FLOOR MOUNTING INSTALLATION – SECTION 7

SCALE : 3/8" = 1"

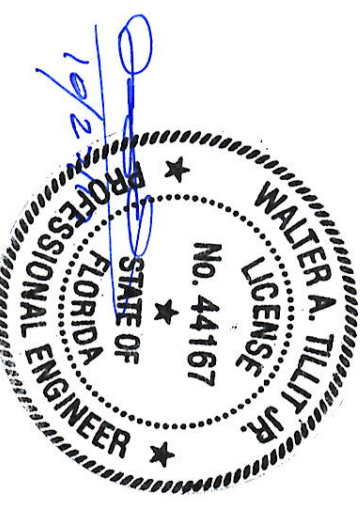


WALL MOUNTING INSTALLATION (D. M.) – SECTION 8

SCALE : 3/8" = 1"

E. D. = EDGE DISTANCE
(SEE SCHEDULE ON
SHEET 5 & 6 OF 8)

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



TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6335 N.W. 36th St., Ste. 305, Virginia Gardens, FL 33166
Phone: (305) 971-1530, Fax: (305) 971-1531
EB-0006719
WALTER A. TILLIT JR., P.E.
FLORIDA Lic. # 44167

EASTERN METAL SUPPLY, INC

4268 WEST ROADS DRIVE
WEST PALM BEACH, FL 33407
PHONE: (561) 209-8263, FAX: (561) 841-1716
REV. NO. DESCRIPTION DATE REV. NO. DESCRIPTION DATE
1 OLD 15-043 07/25/17 3
2
SHEET 3 OF 8

24 GAGE GALVANIZED BERTHA STEEL STORM PANEL
(2.25" DEEP)

L.C. DRAWN BY:
DATE: 07/25/17
17-095 DRAWING No

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

THIS SCHEDULE INDICATES REQUIRED ANCHOR SPACING FOR A GIVEN DESIGN LOAD AND PANEL LENGTH. HOWEVER MAXIMUM PANEL LENGTH FOR A GIVEN DESIGN LOAD MUST BE VERIFIED AS PER SCHEDULE ON SHEET 4 OF 8.

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

E. D. = EDGE DISTANCE

MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **													APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM			MAXIMUM PANEL LENGTH "L" (ft.)
MAXIMUM A.S.D. DESIGN PRESSURE RATING(p.s.f.)	TAPCONS		ZMAC NAILIN/ RED HD. DYABOLT		CAULK-IN		SOLID-SET		PANELMATES		CF TAP-GRIP		MAXIMUM PANEL LENGTH "L" (ft.)			
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY				
+40.0, -45.0 OR LESS	12"	-	12"++	-	12"	-	12"	-	12"	-	12"	-	1 & 3 (TOP)	8'-0" OR LESS		
	12"	9"	12"++	12"	7"	12"	12"	9 1/2"	1, 9 ⁺ (BOTTOM)	12"	9 1/2"	7"	1, 9 ⁺ (BOTTOM)			
	12"	-	12"++	-	12"	-	12"	-	2, 9 ⁺ (TOP)	12"	-	2, 9 ⁺ (TOP)				
	12"	9"	12"++	12"	7"	-	12"	-	2 (BOTTOM)	12"	-	2 (BOTTOM)				
	12"	9"	12"++	12"	7"	-	12"	-	3 (BOTTOM)	12"	-	3 (BOTTOM)				
	12"	-	12"++	-	12"	-	12"	-	4 (TOP)	12"	-	4 (TOP)				
	12"	9"	12"++	12"	7"	-	12"	-	4 (BOTTOM)	12"	-	4 (BOTTOM)				
	9"	-	-	-	10"	-	12"	-	5 (TOP/BOTTOM)	12"	-	5 (TOP/BOTTOM)				
	12"	-	-	-	12"	-	12"	-	6 (TOP)	12"	-	6 (TOP)				
	11"	-	-	-	11"	-	12"	-	6 (BOTTOM)	12"	-	6 (BOTTOM)				
+40.0, -45.0 OR LESS	10"	-	-	-	11"	-	12"	-	7 (BOTTOM)	12"	-	7 (BOTTOM)				
	-	-	-	-	12"	6"	12"	12"	8 (TOP/BOTTOM)	12"	12"	12"	8 (TOP/BOTTOM)			
	12"	-	12"++	-	12"	-	12"	-	1 & 3 (TOP)	12"	-	1 & 3 (TOP)				
	12"	6"	12"++	12"	5"	12"	12"	6 1/2"	1, 9 ⁺ (BOTTOM)	12"	12"	12"	1, 9 ⁺ (BOTTOM)			
	12"	-	12"++	-	12"	-	12"	-	2, 9 ⁺ (TOP)	12"	-	2, 9 ⁺ (TOP)				
	12"	6"	12"++	12"	5"	-	12"	-	2 (BOTTOM)	12"	-	2 (BOTTOM)				
	12"	6"	12"++	12"	5"	-	12"	-	3 (BOTTOM)	12"	-	3 (BOTTOM)				
	12"	-	12"	-	12"	-	12"	-	4 (TOP)	12"	-	4 (TOP)				
	12"	12"	12"	-	12"	-	12"	-	4 (BOTTOM)	12"	-	4 (BOTTOM)				
	7"	-	-	-	7"	-	10"	-	5 (TOP/BOTTOM)	12"	-	5 (TOP/BOTTOM)				
+40.0, -45.0 OR LESS	10"	-	-	-	10"	-	12"	-	6 (TOP)	12"	-	6 (TOP)				
	8"	-	-	-	8"	-	6"	-	6 (BOTTOM)	12"	-	6 (BOTTOM)				
	8"	-	-	-	8"	-	11 1/2"	-	7 (BOTTOM)	12"	-	7 (BOTTOM)				
	-	-	-	-	8"	-	11"	-	8 (TOP/BOTTOM)	12"	-	8 (TOP/BOTTOM)				
	-	-	-	-	12"	-	12"	-	9 (TOP/BOTTOM)	12"	-	9 (TOP/BOTTOM)				
	12"	-	12"++	-	12"	-	12"	-	1 & 3 (TOP)	12"	-	1 & 3 (TOP)				
	12"	6"	12"++	12"	5"	12"	12"	9 1/2"	1, 9 ⁺ (BOTTOM)	12"	-	1, 9 ⁺ (BOTTOM)				
	12"	-	12"++	-	12"	-	12"	-	2, 9 ⁺ (TOP)	12"	-	2, 9 ⁺ (TOP)				
	12"	6"	12"++	12"	5"	-	12"	-	2 (BOTTOM)	12"	-	2 (BOTTOM)				
	12"	6"	12"++	12"	5"	-	12"	-	3 (BOTTOM)	12"	-	3 (BOTTOM)				
+40.0, -45.0 OR LESS	12"	-	12"	-	12"	-	12"	-	4 (TOP)	12"	-	4 (TOP)				
	12"	12"	12"	-	12"	-	12"	-	4 (BOTTOM)	12"	-	4 (BOTTOM)				
	7"	-	-	-	7"	-	5"	-	5 (TOP/BOTTOM)	12"	-	5 (TOP/BOTTOM)				
	10"	-	-	-	10"	-	10 1/2"	-	6 (TOP)	12"	-	6 (TOP)				
	8"	-	-	-	8"	-	8 1/2"	-	6 (BOTTOM)	12"	-	6 (BOTTOM)				
	8"	-	-	-	8"	-	7 (BOTTOM)	-	7 (BOTTOM)	12"	-	7 (BOTTOM)				
	-	-	-	-	8"	-	8"	-	8 (TOP/BOTTOM)	12"	-	8 (TOP/BOTTOM)				
	-	-	-	-	12"	-	12"	-	9 (TOP/BOTTOM)	12"	-	9 (TOP/BOTTOM)				
	12"	-	12"++	-	12"	-	12"	-	1 & 3 (TOP)	12"	-	1 & 3 (TOP)				
	12"	6"	12"++	12"	5"	12"	12"	9 1/2"	1, 9 ⁺ (BOTTOM)	12"	-	1, 9 ⁺ (BOTTOM)				

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

E. D. = EDGE DISTANCE

MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **														MAXIMUM ANCHOR LENGTH "L" (ft)
MAXIMUM A.S.D. DESIGN PRESSURE RATING(p.s.f.)	TAPCONS		ZAMAC NAILING/ RED HD. DYWIDAG BOLT		CALK-IN		SOLID-SET		PANELMATES		CF TAP-GRIP		APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY		
>+50.0, -55.0	8"	-	7"	-	9"	-	-	-	12"	-	6"	-	1 & 3 (TOP)	
	12"	12"	1 1/2"	10"	12"	4"	12"	12"	12"	9 1/2"	9"	5"	1, 9 ⁺ (BOTTOM)	
	12"	-	1 1/2"	-	12"	-	12"	12"	12"	-	9"	-	2, 9 ⁺ (TOP)	
	12"	5"	1 1/2"	10"	12"	4"	-	-	12"	9 1/2"	9"	5"	2 (BOTTOM)	
	12"	5"	1 1/2"	10"	12"	4"	-	-	12"	9 1/2"	9"	5"	3 (BOTTOM)	
TO +70.0, -80.0	12"	-	1 1/2"	-	12"	-	-	-	12"	-	9"	-	4 (TOP)	
	12"	5"	1 1/2"	10"	12"	4"	-	-	12"	9 1/2"	9"	5"	4 (BOTTOM)	
	5"	-	-	-	5"	-	-	-	8"	-	-	-	5 (TOP/BOTTOM) 7 (TOP)	
	8"	-	-	-	8"	-	-	-	10 1/2"	-	-	-	6 (TOP)	
	6"	-	-	-	6"	-	-	-	9"	-	-	-	6 (BOTTOM)	
	6"	-	-	-	6"	-	-	-	8 1/2"	-	-	-	7 (BOTTOM)	
	-	-	-	-	12"	-	12"	12"	12"	6"	-	-	8 (TOP/BOTTOM)	

THIS SCHEDULE INDICATES REQUIRED ANCHOR SPACING FOR A GIVEN DESIGN LOAD AND PANEL LENGTH. HOWEVER MAXIMUM PANEL LENGTH FOR A GIVEN DESIGN LOAD MUST BE VERIFIED AS PER SCHEDULE ON SHEET 4 OF 8.

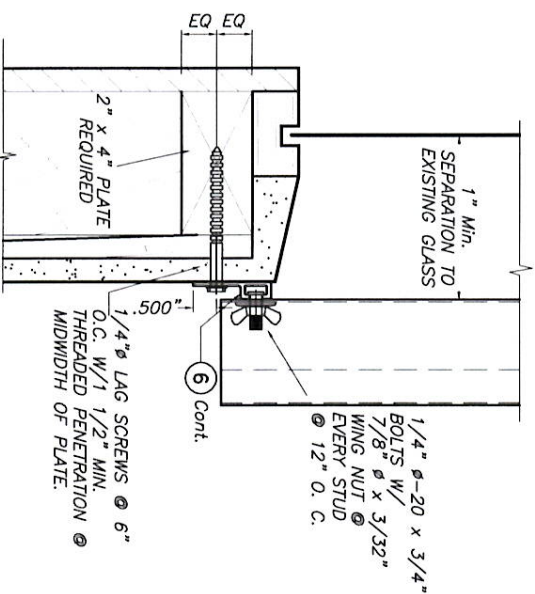
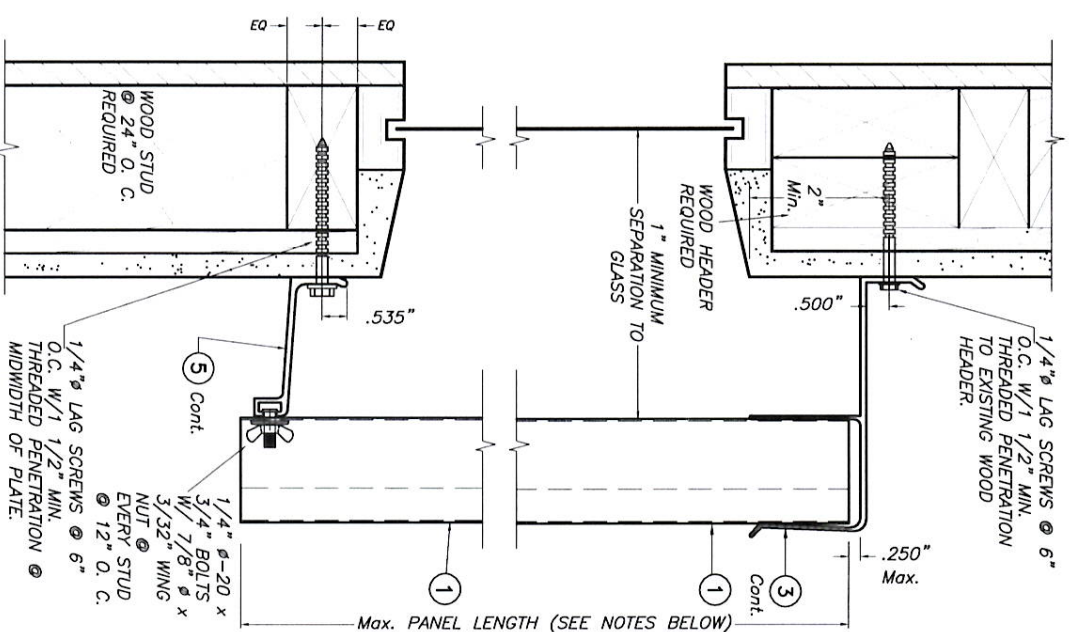
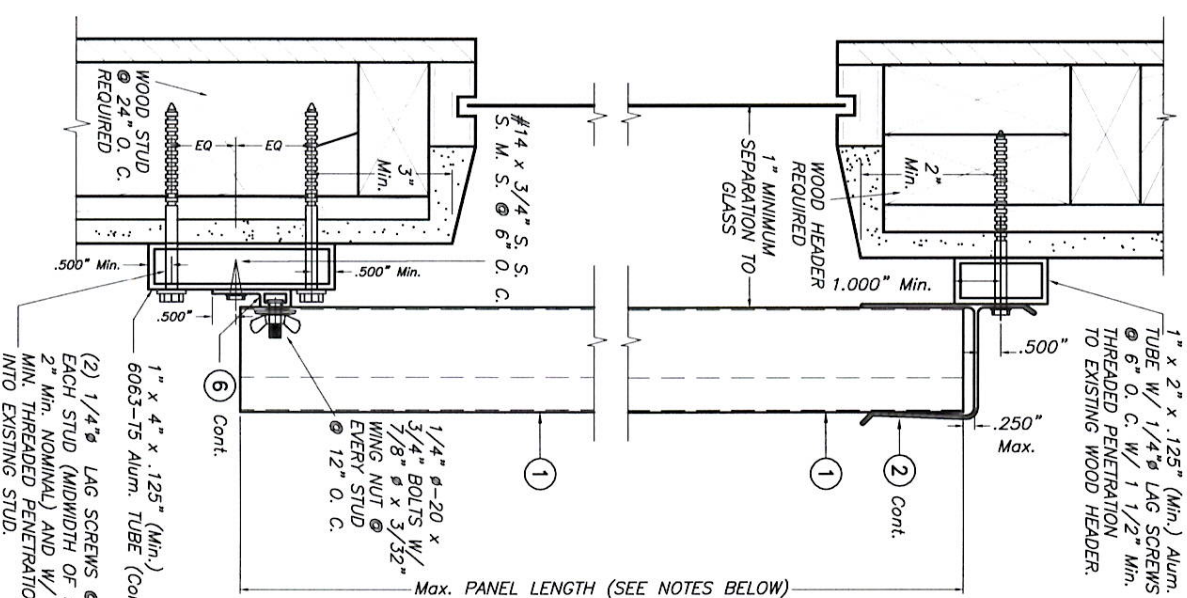
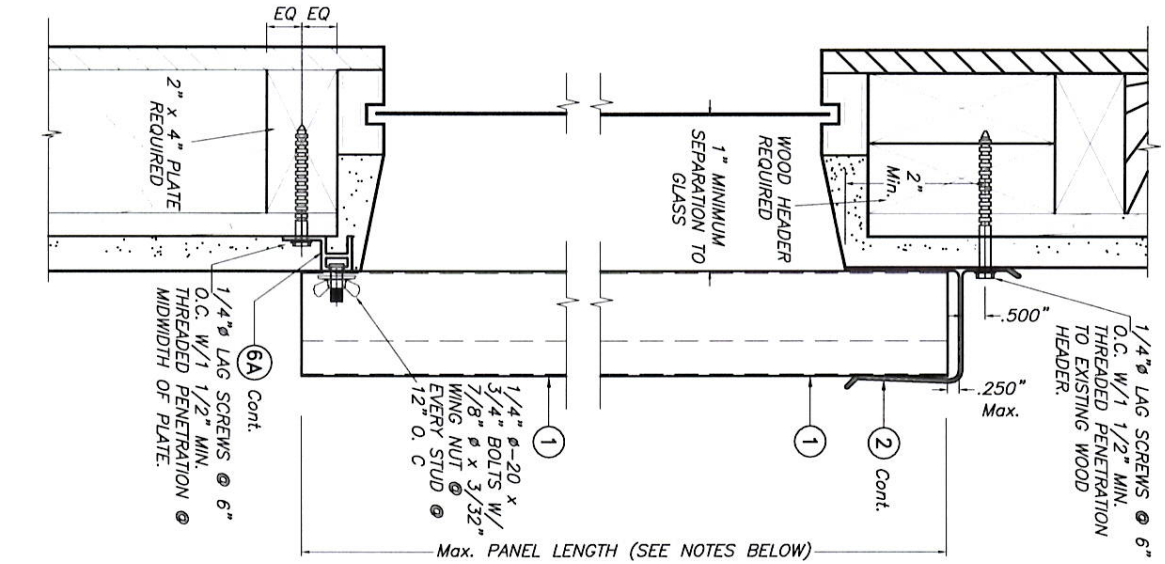
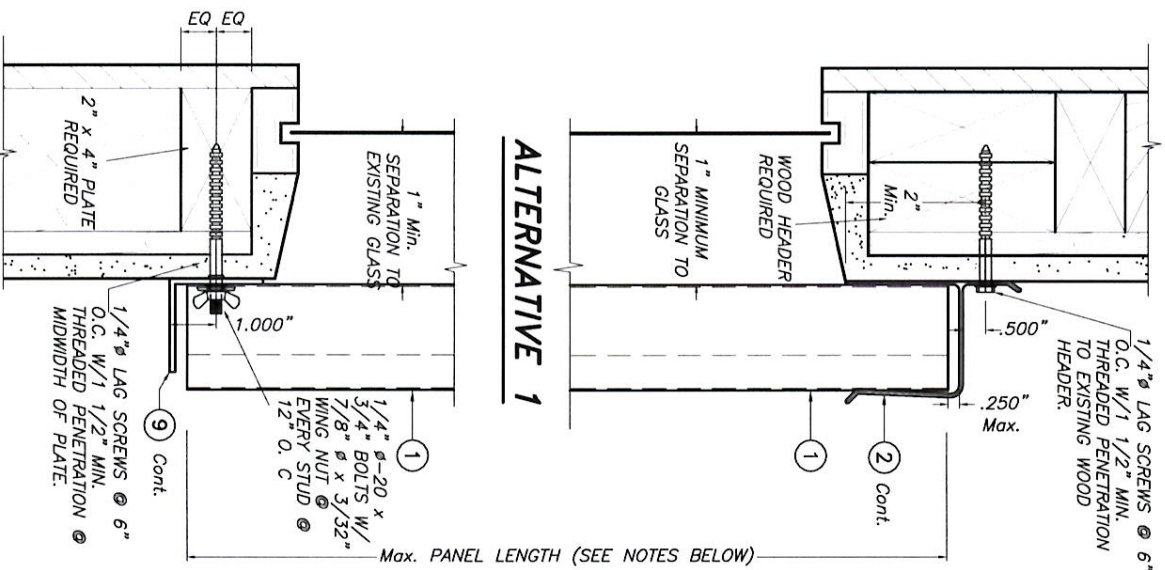
[illegible]

++ ONLY TAPCON ANCHORS OR ALL POINT SOLID-SET ALLOWED FOR MOUNTING SECTION 9

* SEE SHEET 7 & 8 OF 8 FOR ANCHORS TYPE & SPACING FOR INSTALLATIONS INTO WOOD FRAME BUILDINGS.

**** MAXIMUM ANCHOR SPACINGS ARE VALID FOR 3 1/2" EDGE DISTANCE. FOR E, D, LESS THAN 3 1/2", REDUCE ANCHOR SPACING BY MULTIPLYING SPACINGS SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. (MIN. E, D, FOR CALK-IN ANCHORS & ELCO PANELMATE IS 2 1/2", AND 3 1/2" FOR SOLID-SET ANCHORS). FOR THIS OPERATION TO BE MADE REDUCED SPACINGS RESULTING FROM APPLYING ABOVE FACTORS SHALL NOT RESULT ON SPACINGS LESS THAN 3" FOR ALL ANCHORS (EXCEPT +4.5 FOR RED HD. DYWIDOL ANCHORS).**

© 2017 TILTECO, INC.				L.C.	
24 GAGE GALVANIZED BERTHA STEEL STORM PANEL (2.25" DEEP)				DRAWN BY:	
TILTECO INC.				07/25/17	
TILTIT TESTING & ENGINEERING COMPANY 6350 N.W. 35th, Suite 150, Miramar, FL 33186 Phone: (305)971-1531 Fax: (305)971-1531				DATE:	
EASTERN METAL SUPPLY, INC				17-095	
4268 WEST ROADS DRIVE WEST PALM BEACH, FL. 33407 PHONE: (561)209-8263, FAX: (561)841-1716				DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 15-04-3	07/25/17	3		
2			4		
				SHEET 6 OF 8	



NOTE FOR COMBINATION OF SECTIONS:
WALL 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 UP TO +60.0, -65.0 psf AND PANEL'S LENGTHS UP TO 7'-8".
 2. FOR WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

WALL MOUNTING INSTALLATIONS

SECTIONS A

SCALE : 1/4" = 1"

INSTALLATION DETAILS ON EXISTING WOOD BUILDINGS

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)

24 GAGE GALVANIZED BERTHA STEEL STORM PANEL
(2.25" DEEP)

EASTERN METAL SUPPLY, INC

TILTECO INC.

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

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 15-043	07/25/17	3		
2			4		

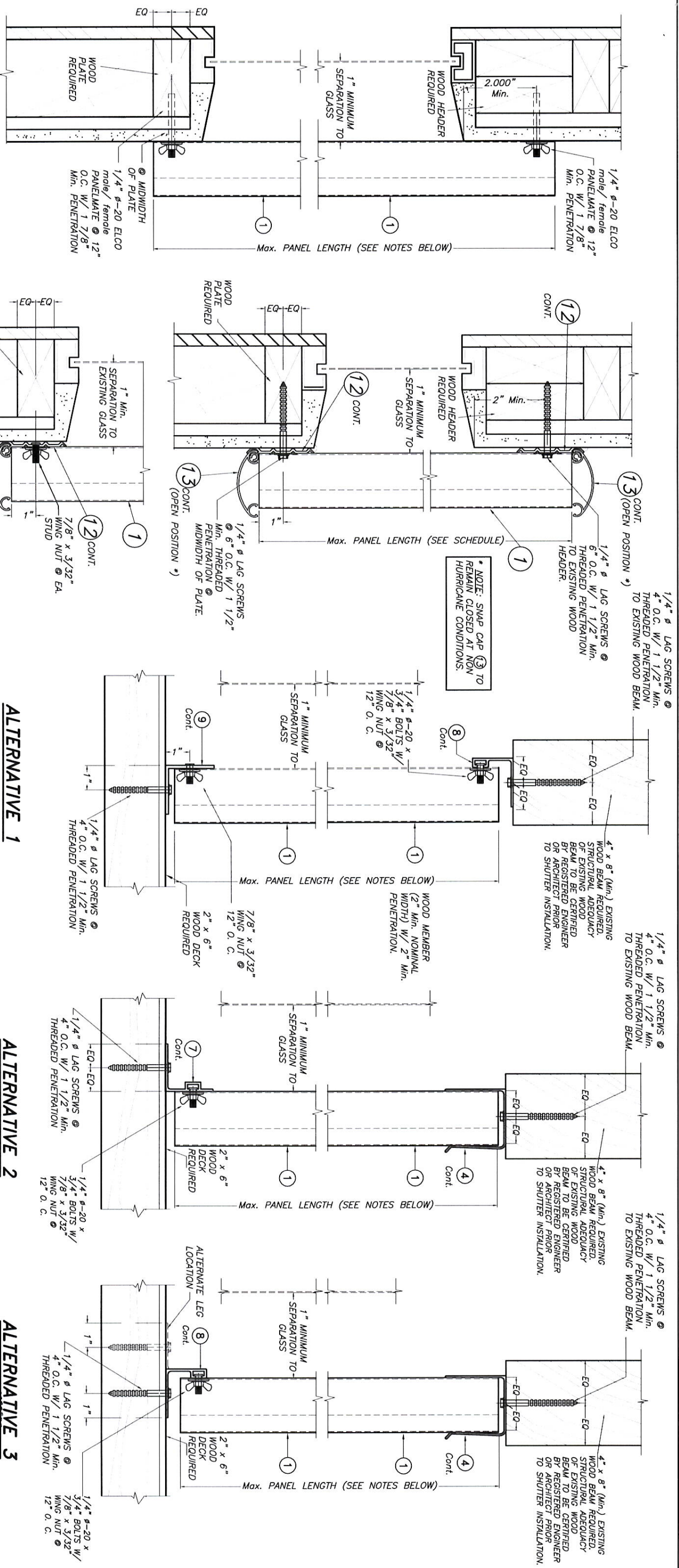
17-095
DRAWING No

DATE:
07/25/17

L.C.
DRAWN BY:

SHEET 7 OF 8





ALTERNATIVE 7

SECTION @ STUD TYP. TOP/BOTTOM
ALTERNATIVE 8

WALL MOUNTING INSTALLATION

SECTION A

SCALE : 1/4" = 1"

INSTALLATION DETAILS ON EXISTING WOOD BUILDINGS

NOTE FOR COMBINATION OF SECTIONS:

FLOOR/ WALL/ 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 UP TO +60.0, -65.0 psf AND PANEL'S LENGTHS UP TO 7'-8".
2. FOR WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE NO. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

© 2017 TILTECO, INC.

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
EB-0006719
WALTER A. TILLIT JR., P.E.
FLORIDA Lic. # 44167

EASTERN METAL SUPPLY, INC

4268 WEST ROADS DRIVE
WEST PALM BEACH, FL 33407
PHONE: (561)209-8263, FAX: (561)841-1716

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 15-043	07/29/17	3		
2			4		

FLORIDA BUILDING CODE (Non High Velocity Hurricane Zone)
24 GAGE GALVANIZED BERTHA STEEL STORM PANEL
(2.25" DEEP)

L.C.

DRAWN BY:

DATE:

17-095

DRAWING No

