GENERAL NOTES:

(VALID FOR 20 GAGE GALVANIZED STEEL STORM PANELS)

1. STORM PANEL SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2010 EDITION OF THE FLORIDA BUILDING CODE.

DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1620 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 7-10 FOR INSTALLATIONS UNDER 2010 FBC AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON SHEETS 7 THRU 12, 14, 15, 16, 19 & 20. 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

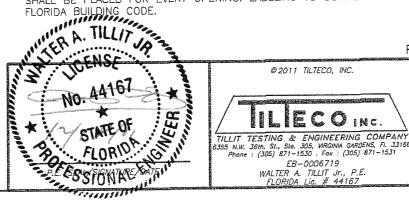
TO COMPARE THESE W/ MAX. (A.S.D) DESIGN PRESSURE RATINGS INDICATED ON SHEETS 7 THRU 12, 14, 15, 16, 19 & 20.

IN ORDER TO VERIFY THAT 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. FASTENERS SPACING TO WOOD HAS BEEN DETERMINED IN ACCORDANCE WITH N.D.S. 2005.

STORM PANEL'S ADEQUACY FOR IMPACT AND WIND RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1626 OF THE ABOVE MENTIONED CODE AS PER HURRICANE ENGINEERING & TESTING INC. REPORTS 96-569, 96-570 & 96-T30 AND FENESTRATION TESTING LAB. INC., REPORTS #2032 & #2126, AS PROTOCOLS TAS-201, TAS-202 AND TAS-203. AS WELL AS AMERICAN TEST LAB OF SOUTH FLORIDA REPORT #0219.01-09, AS PER TAS 201-94, TAS 202-94 AND TAS 203-94 STANDARDS.

- 2. ALL ALUMINUM EXTRUSIONS TO BE 6063-T6 ALLOY AND TEMPER. (UNLESS OTHERWISE NOTED). SEE SHEET 2.
- 3. ALL ALUMINUM SHEET METAL USED AT CLOSURES SHALL HAVE 3105-H14 ALLOY.
- 4. ALL STEEL SHEET METAL PANELS SHALL HAVE STRUCTURAL QUALITY STEEL, ASTM A-653 GRADE 50 MINIMUM, G-60 GALVANIZED STEEL DESIGNATION W/FY= 58.5 ksi (AFTER ROLLED).
- 5. 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.
- 6. BOLTS TO BE ASTM A-307 GALVANIZED STEEL, OR AISI 304 SERIES STAINLESS STEEL, WITH 36 ksi MINIMUM YIELD STRENGTH.
- 7. ANCHORS TO WALL SHALL BE AS FOLLOWS:
- (A) TO EXISTING POURED CONCRETE:
- 1/4" TAPCON ANCHORS AS MANUFACTURED BY I.T.W. BUILDEX, INC. (Min. f'c=3192 p.s.i.)
- 1/4" Ø x 7/8" CALK-IN ANCHORS, AS MANUFACTURED BY POWERS FASTENERS INC. (MIN. f'c=3000 p.s.i.)
- 1/4"ø x 3/4" SOLID-SET ANCHORS, AS DISTRIBUTED BY ALL POINT SCREW, BOLT & SPECIALTY CO. (Min. f'c=3000 p.s.i.)
- #14-10 PANELMATE FEMALE ID & PANELMATE PLUS ANCHORS, AS MANUFACTURED BY ELCO CONSTRUCTION PRODUCTS. (MIN. f'c=3350 p.s.i.)
- 1/4" CF TAP-GRIP ANCHORS, AS MANUFACTURED BY TRU-FAST CORPORATION (f'c=3600 p.s.i.)
- A.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS INTO POURED CONCRETE SHALL BE 1 3/4"; 2" FOR PANELMATE FEMALE ID AND PANEMALTE PLUS AND 1 1/4" FOR CF TAP-GRIP ANCHORS.
- A.2) CALK-IN & SOLID-SET ANCHORS SHALL BE EMBEDDED 7/8" 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, ND 1" MINIMUM FOR WALLS WITH NO STUCCO, AND MAY BE HEADED SCREWS OR ALL THREADED SCREWS W/O HEAD, BUT WITH WING NUTS.
- A.3) IN CASE THAT PRECAST STONE, PRECAST CONCRETE PANELS, PAVERS, STUCCO OR WOOD BOARDS 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 MENTIONED IN A.1) AND IN A.2).
- (B) TO EXISTING CONCRETE BLOCK WALL ASTM C-90:
 - 1/4" Ø TAPCON ANCHORS AS MANUFACTURED BY I. T. W. BUILDEX, INC.
 - 1/4" Ø x 7/8" CALK-IN ANCHORS, AS MANUFACTURED BY POWERS FASTENERS INC. (MIN. f'c=1500 p.s.i.)
- 1/4" X 3/4" SOLID-SET ANCHORS, AS DISTRIBUTED BY ALL POINT SCREW, BOLT & SPECIALTY CO. (MIN, f'c=1800 p.s.i.)
- #14-10 PANELMATE FEMALE ID AND PANELMATE PLUS ANCHORS, AS MANUFACTURED BY ELCO CONSTRUCTION PRODUCTS (MIN. f'c=2071 p.s.i.)
- 1/4" Ø CF TAP-GRIP ANCHORS, AS MANUFACTURED BY TRU-FAST CORPORATION
- B.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS, ELCO PANELMATES AND CF TAP-GRIP ANCHOR, INTO THE CONCRETE BLOCK UNIT SHALL BE 1 1/4".
- B.2) CALK-IN & SOLID-SET ANCHORS SHALL BE EMBEDDED 7/8" 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) IN CASE THAT PRECAST STONE, OR PRECAST CONCRETE PANELS, STUCCO OR WOOD BOARDS BE FOUND ON THE EXISTING WALL, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS. ANCHORAGE SHALL BE AS MENTIONED IN B.1) AND IN B.2).
- (C) TO EXISTING WOOD (MIN. SPECIFIC GRAVITY, G = 0.55 MIN.):
- 1/4"Ø TAPCON ANCHORS, AS MANUFACTURED BY I.T.W. BUILDEX, INC.
- #14-10 PANELMATE FEMALE ID AND PANELMATE PLUS ANCHORS, AS MANUFACTURED BY ELCO CONSTRUCTION PRODUCTS.
- 1/4"ø LAG SCREWS PER N.D.S.
- 7/16" x 5/8" WOOD BUSHING, AS DISTRIBUTED BY ALL POINT SCREW, BOLT & SPECIALTY CO.
- C.1) MINIMUM THREADED PENETRATION INTO WOOD OF TAPCON ANCHORS SHALL BE 1 1/2" AND 2" FOR ELCO PANELMATE PLUS AND PANELMALE FEMALE ID.
- C.2) MINIMUM THREADED PENETRATION OF LAG SCREW, INTO THE WOOD FRAME UNIT SHALL BE 1 1/2". NO THREADED PENETRATION INTO STUCCO SHALL BE CONSIDERED AS PART OF THE REQUIRED THREADED PENETRATION.
- C.3) MINIMUM EDGE DISTANCE OF LAG SCREWS, INTO WOOD SHALL BE AS INDICATED IN THIS DRAWING
- C.4) MINIMUM PENETRATION OF WOOD BUSHING SHALL BE 5/8". 1/4" Ø-20 SCREWS USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST, AND 1" MINIMUM FOR WALLS WITH NO STUCCO.
- C.5) IN CASE THAT PRECAST STONE, OR PRECAST CONCRETE PANELS, STUCCO OR WOOD BOARDS BE FOUND ON THE EXISTING WALL, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS. ANCHORAGE SHALL BE AS MENTIONED IN C.1), C.2) & C.4)
- (D) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.
- 8. PANELS MAY ALSO BE INSTALLED HORIZONTALLY FOLLOWING INSTALLATION DETAILS SHOWN ON SECTION 3 THROUGH 10 (SHEETS 4 THROUGH 6) EXCEPT THAT HEADERS (2 & (3) SHALL NOT BE USED.
- 9. 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.
- 10. EACH REGULAR STORM PANEL WITH LENGTHS OVER 8'-8 THROUGH 12'-4", AS PER SECTIONS 6, 8, 9 & 10 AND ALTERNATIVES 8W, 9W & 10W ON SHEETS 5, 6 & 12 RESPECTIVELY; SHALL HAVE A LEGIBLE AND READILY VISIBLE MARKING INSTRUCTING OWNER OR TENANT TO SECURE PANELS WITH APPLICABLE REINFORCEMENT DURING PERIODS OF HURRICANE WARNING.
- 11. THE INSTALLATION CONTRACTOR IS TO SEAL/CAULK ALL SHUTTER COMPONENT EDGES WHICH REMAIN IN CONTINUOUS CONTACT WITH THE BUILDING TO PREVENT WIND/RAIN INTRUSION.
- 12. STORM PANEL INSTALLATION SHALL COMPLY WITH SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.
- 13. (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 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 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 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.
- 14. SHUTTER MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT STORM PANEL SHUTTER IN ACCORDANCE WITH SECTION 1715.8.3 OF FLORIDA BUILDING CODE. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABELING TO COMPLY WITH SECTION 1715.8.2 OF THE

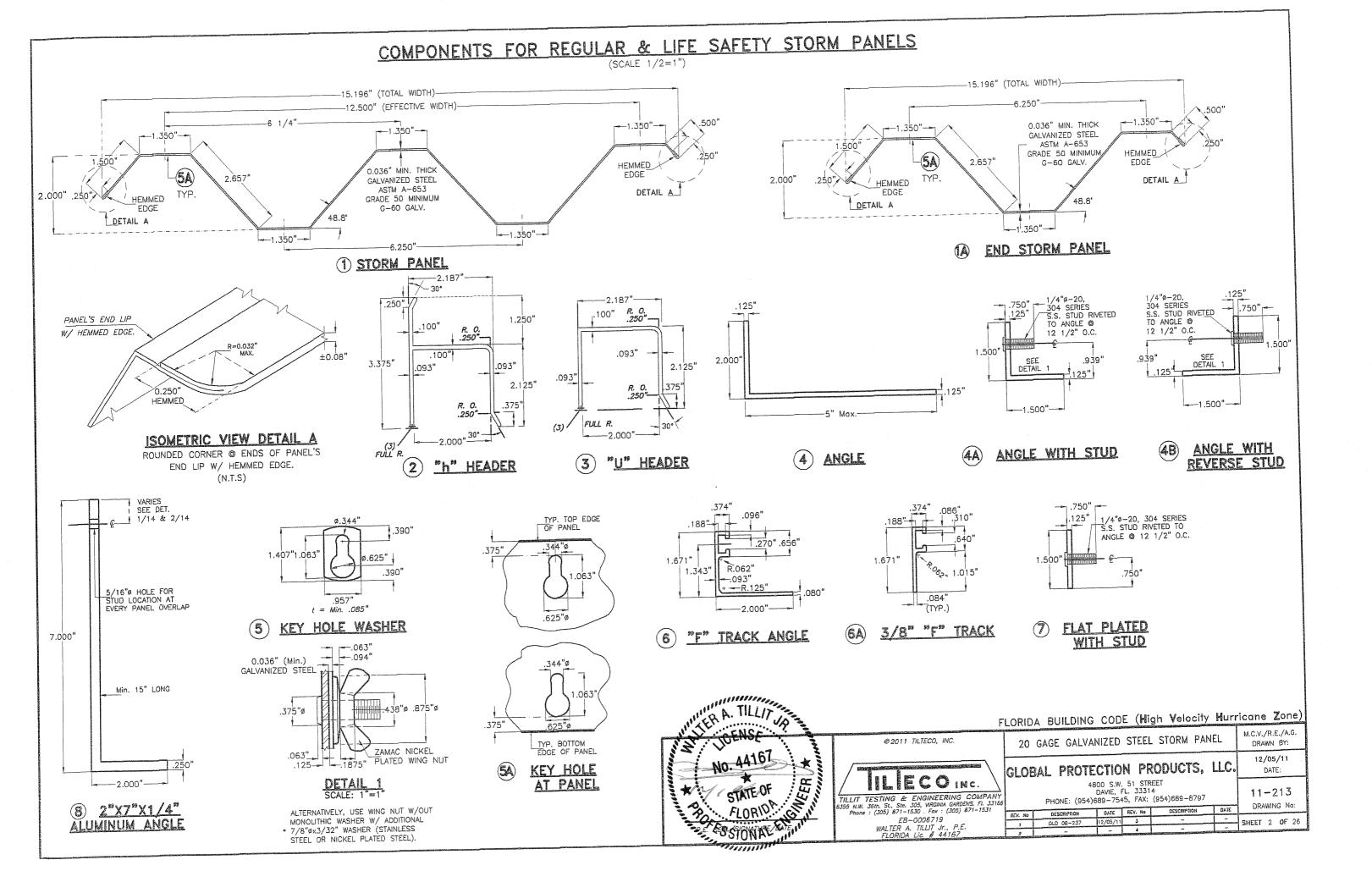


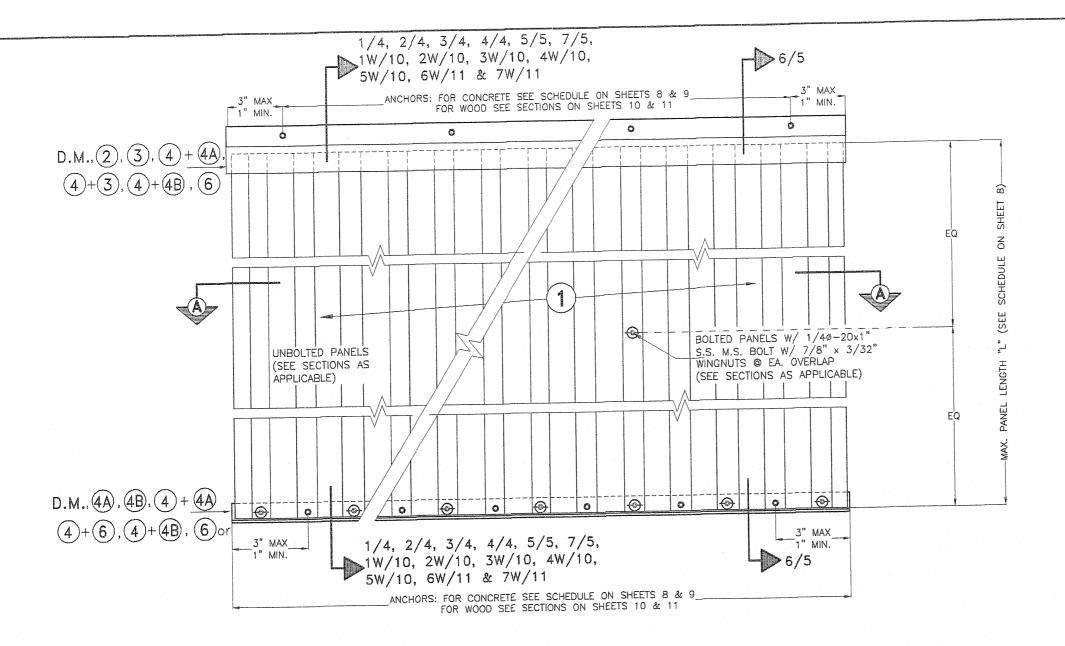
FLORIDA BUILDING CODE (High Velocity Hurricane Zone)

M.C.V./R.E./A.G. 20 GAGE GALVANIZED STEEL STORM PANEL DRAWN BY: 12/05/11 GLOBAL PROTECTION PRODUCTS, LLC. DATE: 4800 S.W. 51 STREET DAVIE, FL. 33314 11 - 213PHONE: (954)689-7545, FAX: (954)689-8797

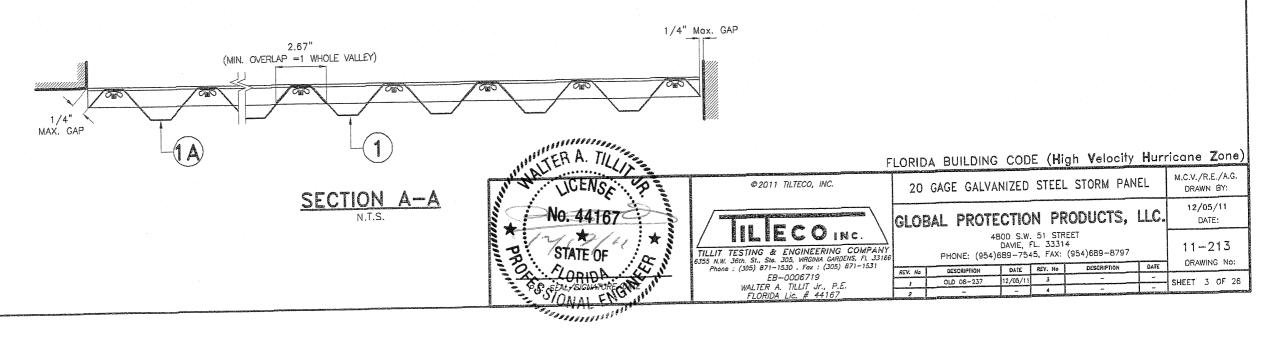
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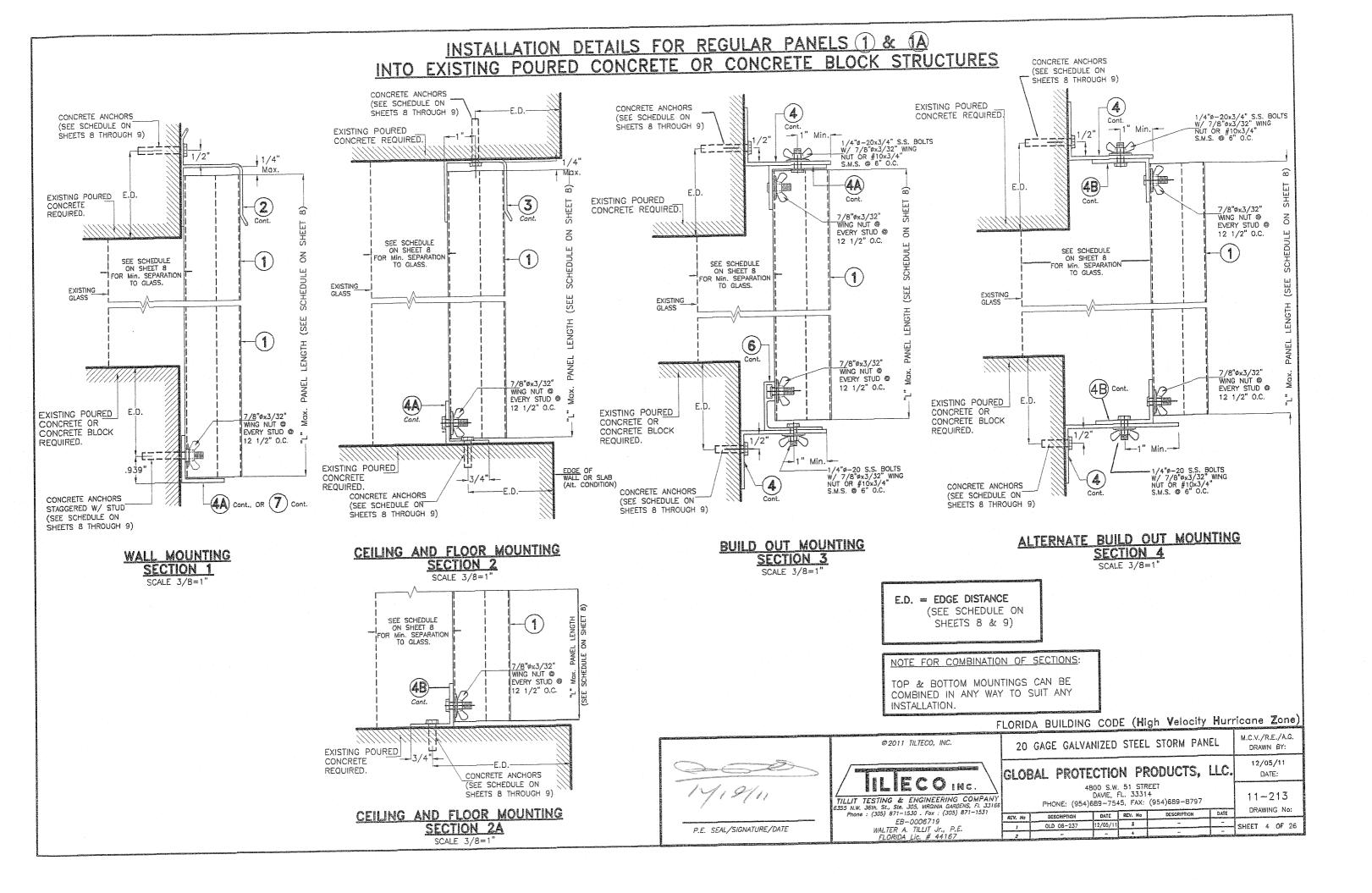
SHEET 1 OF 26

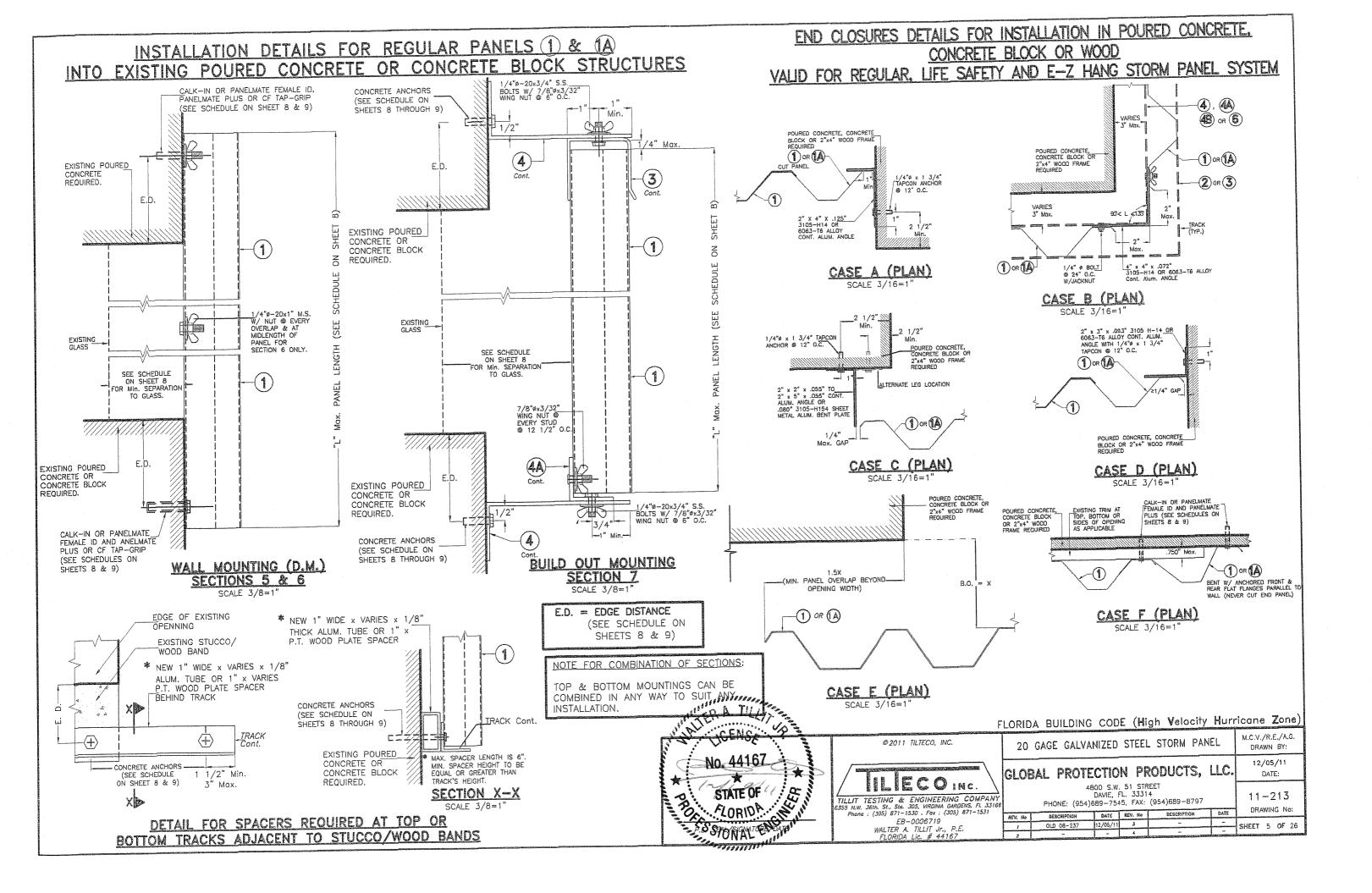


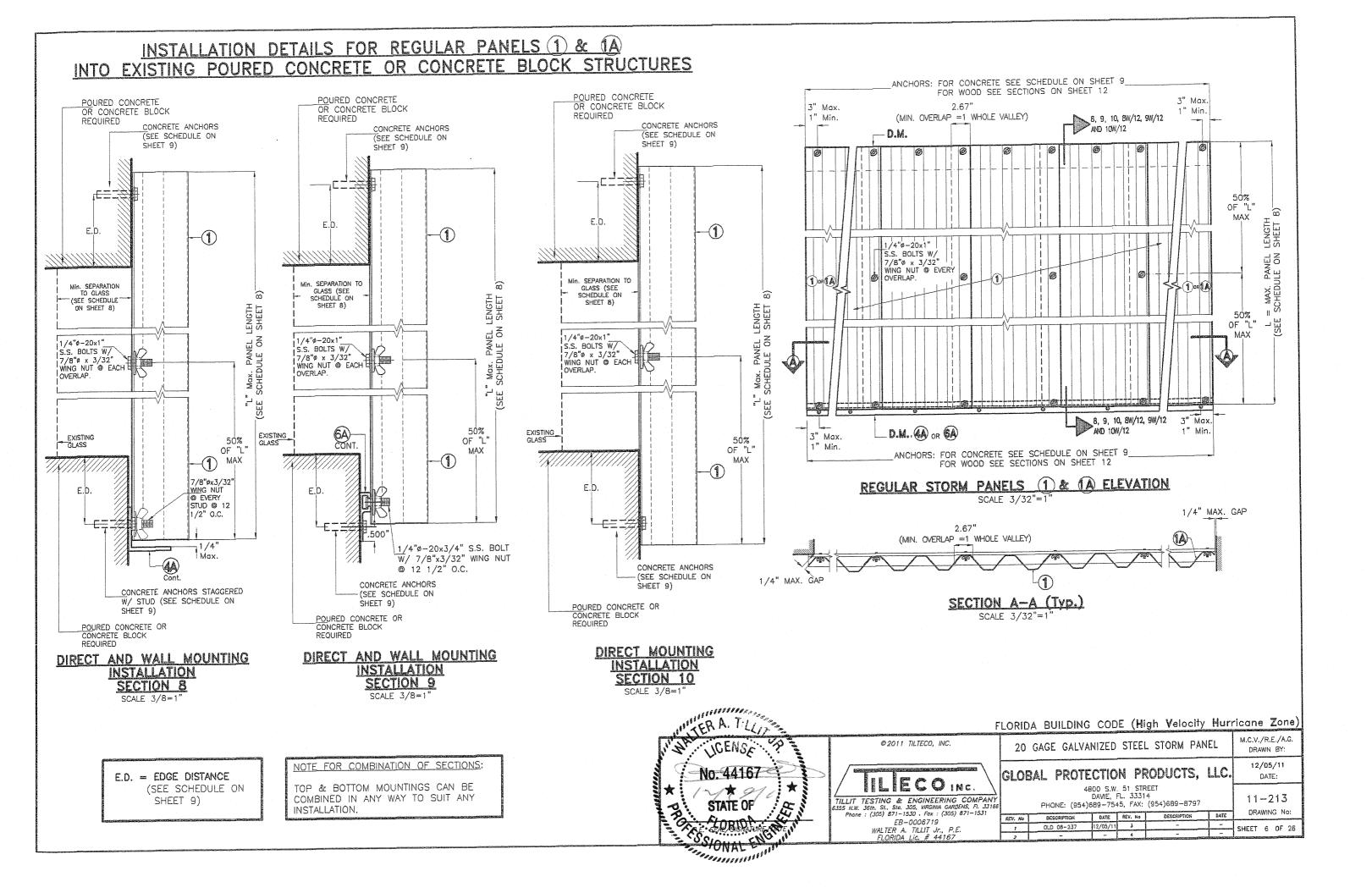


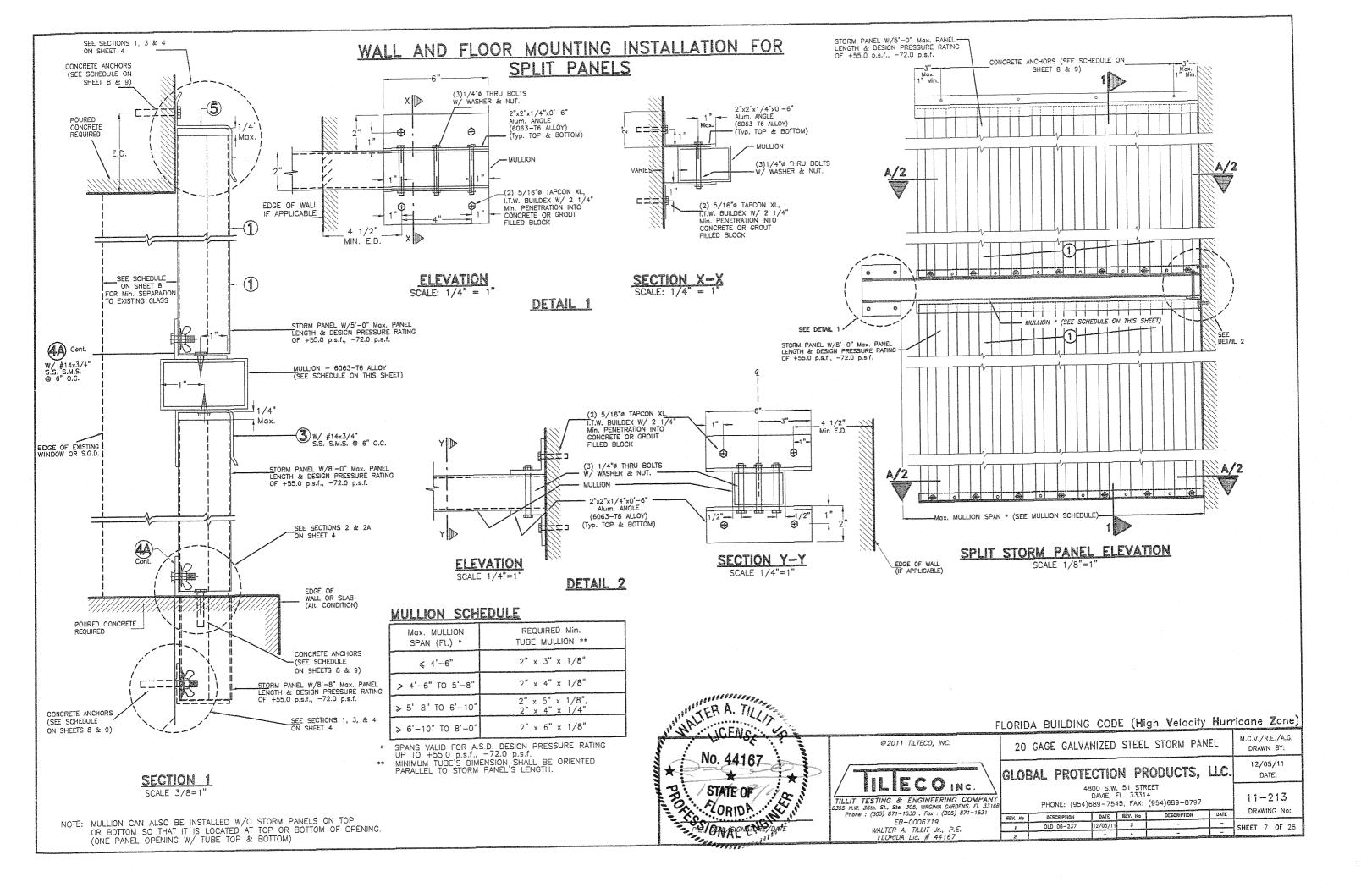
REGULAR STORM PANELS 1 & 1A ELEVATION N.T.S.











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

(VALID ONLY FOR PANELS 1) & 1) INSTALLATIONS AS PER SECTIONS 1 THRU 10, ON SHEETS 4, 5 & 6)

ALID ONLY FOR PA	NELS(1) & (1A) INSTALLA	TIONS AS	PER SECTION	S I IHRU IU, UN SIL	
MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.)	Max. PANEL LENGTH L (ft.) (SEE SECTIONS)	MINIMUM	SEPARATION GLASS	PANEL CONDITION	# AND ANY COMBINATION OF THEM
+55.5, -72.0	7'-5" OR LESS	2	1/4"	UNBOLTED	1 THRU 5 & 7
+55.5, -72.0	>7'-5" TO 8'-8" Max.	2	3/4"	UNBOLTED	1 THRU 5 & 7
	>8'-8" TO 11'-2" Max.	2	1/2"	* BOLTED AT MIDLENGTH AT OVERLAPS	6
+43.8, -48.0	12'-4" OR LESS	3	1/2"	* BOLTED AT MIDLENGTH AT OVERLAPS	8, 9 & 10

^{*} BOLTED W/ 1/4"Ø-20x1" S.S. M.S. & WINGNUT AT OVERLAP & MIDLENGTH OF PANEL.

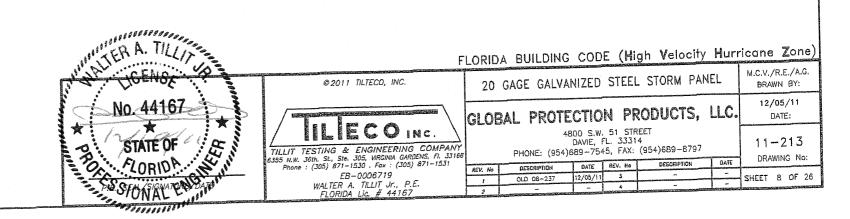
MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING SCHEDULE FOR REGULAR STORM PANELS 1 & 1 INSTALLATIONS INTO EXISTING CONCRETE & CONCRETE BLOCK STRUCTURES

(VALID ONLY FOR PANELS 1 & 1A) INSTALLATIONS AS PER SECTIONS 1 THRU 7, ON SHEETS 4 & 5)

				MA	XIMUM ANCHORS	SPACING FOR					APPLICABLE TO	MAXIMUM PANEL
AXIMUM A.S.D.		- AN	CF TAP	-GRIP	CALK	(-IN	PANELMATE		PANELMATE PLUS		SECTIONS # & ANY COMBINATION	LENGTH "L" (ft.)
DESIGN PRESSURE	TAPO TO CONCRETE	TO CONCRETE	TO CONCRETE	TO CONCRETE BLOCK	TO CONCRETE	TO CONCRETE BLOCK	TO CONCRETE	TO CONCRETE BLOCK	TO CONCRETE	TO CONCRETE BLOCK	OF THEM	
RATING (p.s.f.)		BLOCK	N/A	N/A	6"	N/A	6"	N/A	6"	N/A	1 (TOP)	
	6"	N/A		N/A	6"	6"	6"	6"	6"	6"	1 (BOTTOM)	
	6"	6"	N/A	N/A	6"	N/A	6"	N/A	6"	N/A	2 (TOP)	
	6"	N/A	N/A		6"	N/A	5"	N/A	5"	N/A	2 (BOTTOM)	
	6"	N/A	N/A	N/A	6"	N/A	6"	N/A	6"	N/A	3 & 4 (TOP)	7'-5" OR LESS
+55.5, -72.0	6"	N/A	N/A	N/A			6"	6"	6"	6"	3 (BOTTOM)	
OR LESS	6"	6"	N/A	N/A	6"	6"	6"	N/A	6"	N/A	7 (TOP)	
	6"	N/A	N/A	N/A	6"	N/A			6"	6"	4 & 7 (BOTTOM)	
	6"	6"	N/A	N/A	6"	6"	6"	6"				
	N/A	N/A	12 1/2"	6 1/4"	12 1/2"	6 1/4"	6 1/4"	6 1/4"	6 1/4"	6 1/4"	5 (TOP/BOTTOM)	

SEE SHEETS 10 & 11 FOR ANCHORS TYPE & SPACING FOR INSTALLATIONS INTO WOOD FRAME BUILDING.
MINIMUM ANCHOR SPACINGS AND MINIMUM EDGE DISTANCE ARE INDICATED ON THIS SCHEDULE, FOR E.D. LESS
THAN INDICATED ON SCHEDULE REDUCE ANCHOR SPACING BY MULTIPLYING SPACING SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. 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.

	1/4"ø	1/4"ø	1/4"ø	1/4"ø	1/4"ø	1/4"ø
ANCHOR TYPE		CF TAP-GRIP	PANELMATE FEMALE ID	PANELMATE PLUS	CALK-IN	SOLID-SET
SPACING (in.)	3	3	3	3	2 1/2	3
	3	3	3	3	3	3 1/2
	3	3	3 1/2	3 1/2	4	3 1/2
			FAC	TOR		
	.35	.35	-	<u> </u>	-	
		 -	-	-	.50	0.63
	1.00	1.00	-	1.00	.63	_
		+	1.00	-	1.00	1.00
	SPACING (in.) Concrete (in.) Concrete Black (in.) DEE DISTANCE 1/2" 1/2"	TAPCON SPACING (in.) 3 Concrete (in.) 3 Concrete Black (in.) 3 DGE DISTANCE) 1/2" .35 1/2" - 1.00	TAPE TAPCON CF TAP-GRIP SPACING (in.) 3 3 Concrete (in.) 3 3 Concrete Black (in.) 3 3 DGE DISTANCE) 1/2" .35 .35 1/2" 1/2" 1.00 1.00	TAPE TAPCON CF TAP-GRIP PANELMATE FEMALE ID SPACING (in.) 3 3 3 Concrete (in.) 3 3 3 3 Concrete Black (in.) 3 3 3 1/2 DGE DISTANCE) FACTOR	TAPEON CF TAP-GRIP PANELMATE PLUS SPACING (in.) 3 3 3 3 3 Concrete (in.) 3 3 3 3 1/2 3 1/2 Concrete Black (in.) 3 3 3 1/2 3 1/2 DOE DISTANCE) FACTOR 1/2"	TYPE



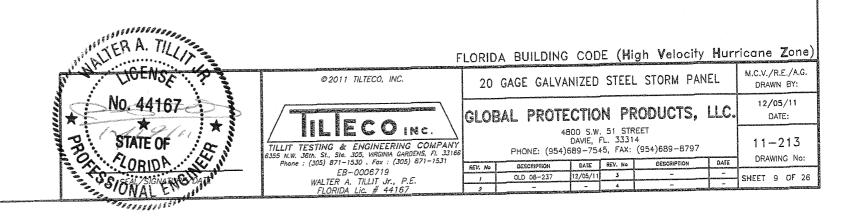
MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING SCHEDULE FOR REGULAR STORM PANELS 1 & 1A INSTALLATIONS INTO EXISTING CONCRETE & CONCRETE BLOCK STRUCTURES

(VALID ONLY FOR PANELS 1) & (A) INSTALLATIONS AS PER SECTIONS 1 THRU 10, ON SHEETS 4, 5 & 6)

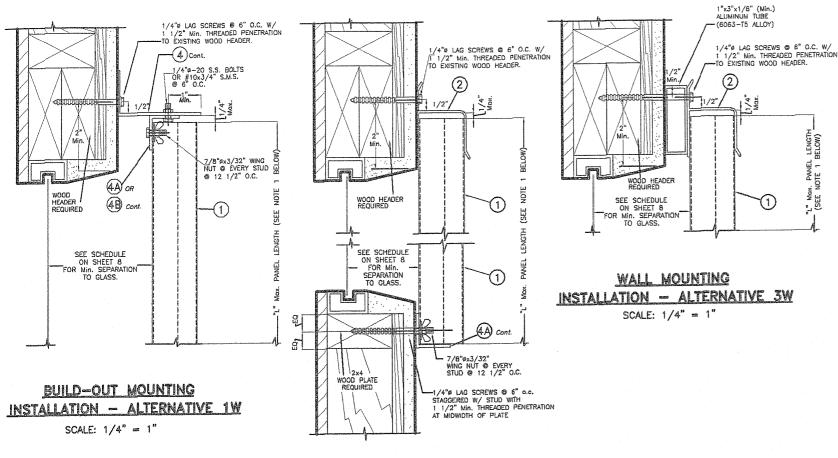
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		the state of the s			MAXIMUM	ANCHORS SPA	CING FOR E.D.				T 00115	CCT	APPLICABLE TO	
MAXIMUM A.S.D. DESIGN	TAPO	CON	CF TAP	-GRIP	CAL	(-IN	PANELMATE	FEMALE ID	PANELMA		SOLID		SECTIONS # & ANY COMBINATION	MAXIMUM PANEL LENGTH "L" (ft.)
PRESSURE RATING (p.s.f.)	TO CONCRETE	TO CONCRETE BLOCK	TO CONCRETE	TO CONCRETE BLOCK	TO CONCRETE	TO CONCRETE BLOCK	TO CONCRETE	TO CONCRETE BLOCK	TO CONCRETE	TO CONCRETE BLOCK	TO CONCRETE	TO CONCRETE BLOCK	OF THEM	
(4,,)	6"	N/A	N/A	N/A	6"	N/A	6"	N/A	6"	N/A	N/A	N/A	1 (TOP)	
	6"	6"	N/A	N/A	6"	6"	6"	6"	6"	6"	N/A	N/A	1 (BOTTOM)	
	6"	N/A	N/A	N/A	6"	N/A	6"	N/A	6"	N/A	N/A	N/A	2 (TOP)	·
-	6"	N/A	N/A	N/A	6"	N/A	5"	N/A	5"	N/A	N/A	N/A	2 (BOTTOM)	
			N/A	N/A	6"	N/A	6"	N/A	6"	N/A	N/A	N/A	3 & 4 (TOP)	>7'-5" TO 8'-8
-55.5, -72.0 OR LESS		N/A		N/A	6"	6"	6"	6"	6"	6"	N/A	N/A	3 (BOTTOM)	A THE PROPERTY OF THE PROPERTY
	6"	6"	N/A		6"	N/A	6"	N/A	6"	N/A	N/A	N/A	7 (TOP)	
	6"	N/A	N/A	N/A	6"	6"	6"	6"	6"	6"	N/A	N/A	4 & 7 (BOTTOM)	
-	6"	6"	N/A	N/A		6 1/4"	6 1/4"	6 1/4"	6 1/4"	6 1/4"	N/A	N/A	5 (TOP/BOTTOM)	
	N/A	N/A	12 1/2"	6 1/4"	12 1/2"		6 1/4"	6 1/4"	6 1/4"	6 1/4"	N/A	N/A	6 (TOP/BOTTOM)	>8'-8" TO 11'-
+50.0, -53.3	N/A	N/A	12 1/2"	6 1/4"	12 1/2"	6 1/4"	OF THE PARTY OF TH		6 1/4"	6 1/4"	N/A	N/A	6 (TOP/BOTTOM)	
+55.0, -72.0	N/A	N/A	6 1/4"	N/A	6 1/4"	N/A	6 1/4"	6 1/4"				6 1/4"		
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6 1/4"	6 1/4"	6 1/4"	-	8, 9, 10 (TOP)	MEDICAN MISSE BEST
+43.8, -48.0	6"	6"	N/A	N/A	N/A	N/A	N/A	N/A	6"	6"	6 1/4"	6 1/4"	8 (BOTTOM)	12'-4" OR LES
OR LESS	6"	6"	N/A	N/A	N/A	N/A	N/A	N/A	6"	6"	6 1/4"	6 1/4"	9 (BOTTOM)	STEER CONTRACTOR
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6 1/4"	6 1/4"	6 1/4"	6 1/4"	10 (BOTTOM)	

SEE SHEETS 10, 11 AND 12 FOR ANCHORS TYPE & SPACING FOR INSTALLATIONS INTO WOOD FRAME BUILDING. MINIMUM ANCHOR SPACINGS AND MINIMUM EDGE DISTANCE ARE INDICATED ON THIS SCHEDULE, FOR E.D. LESS THAN INDICATED ON SCHEDULE REDUCE ANCHOR SPACING BY MULTIPLYING SPACING SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. 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.

TEGG			The second secon	THE RESERVE OF THE PARTY OF THE	The second secon	The same of the sa
	1/4"ø	1/4"ø	1/4"ø	1/4"ø	1/4"ø	1/4"ø
ANCHOR TYPE		CF TAP-GRIP	PANELMATE FEMALE ID	PANELMATE PLUS	CALK-IN	SOUD-SET
SPACING (in.)	3	3	3	3	2 1/2	3
	3	3	3	3	3	3 1/2
	3	3	3 1/2	3 1/2	4	3 1/2
DOSE DISTANCE)	CONTROL OF THE PARTY OF THE PAR		FAC	TOR		Çunu din di
1/2"	.35	.35	-		-	-
		-	-	-	.50	0.63
-	1.00	1.00	-	1.00	.63	-
	-	 	1.00	-	1.00	1.00
		1/4"6 TAPCON TAPCON 3 Concrete (in.) 3 Concrete Block (in.) 4 Concrete Block (in.)	TYPE	TYPE	TYPE	TAPE TAPCON CF TAP-GRIP FEMALE ID PANELMATE PLUS SPACING (in.) 3 3 3 3 2 1/2 Concrete (in.) 3 3 3 3 3 3 2 1/2 Concrete Block (in.) 3 3 3 3 1/2 3 1/2 4 DEE DISTANCE) FACTOR 1/2"50 3" 1.00 1.00 - 1.00 .63



INSTALLATION DETAILS FOR REGULAR PANELS 1 & 1A INTO EXISTING WOOD STRUCTURES



WALL MOUNTING INSTALLATION - ALTERNATIVE 2W

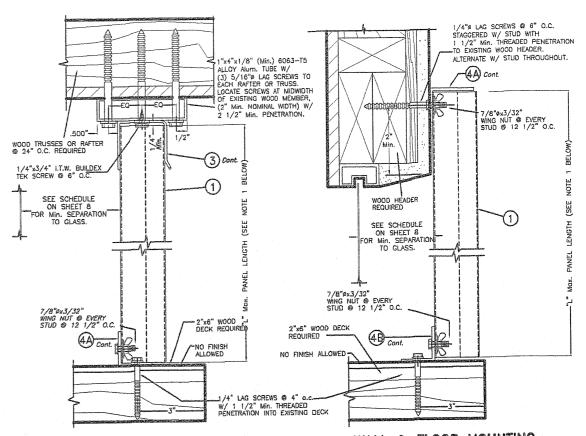
SCALE: 1/4" = 1"

NOTES:

- 1. INSTALLATIONS ARE ONLY VALID FOR BUILDINGS WITH A.S.D. DESIGN LOADS UP TO +55.5, -72.0 p.s.f. AND PANEL'S LENGTH UP TO 8'-8".
- 2. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE NO. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

NOTE FOR COMBINATION OF SECTIONS:

TOP & BOTTOM MOUNTINGS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.



CEILING & FLOOR MOUNTING INSTALLATION - ALTERNATIVE 4W

WALL & FLOOR MOUNTING INSTALLATIONS - ALTERNATIVE 5W SCALE: 1/4" = 1"

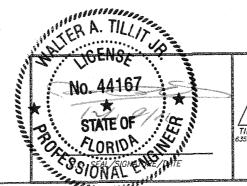
(SECTION AT TOP IS LIMITED TO +55.5-67.0 MAX. A.S.D. DESIGN PRESSURE RATING)

SCALE: 1/4" = 1"WING NUT @ EVERY STUD @ 12 1/2" O.C. 6 Cont. 2"v6" WOOD DECK NO FINISH ALLOWED

> 1/4" LAG SCREWS @ 4" o.c. W/ 2" Min. THREADED
> PENETRATION INTO EXISTING DECK

FLOOR MOUNTING INSTALLATION - SECTION 4AW

SCALE: 1/4" = 1"



FLORIDA BUILDING CODE (High Velocity Hurricane Zone) M.C.V./R.E./A.G. @ 2011 TILTECO, INC. 20 GAGE GALVANIZED STEEL STORM PANEL DRAWN BY:

GLOBAL PROTECTION PRODUCTS, LLC.

4800 S.W. 51 STREET DAVIE, FL. 33314 PHONE: (954)689-7545, FAX: (954)689-8797

11-213 DRAWING No: DESCRIPTION DATE REV. No DATE 12/05/11 3 OLD 08-237 SHEET 10 OF 26

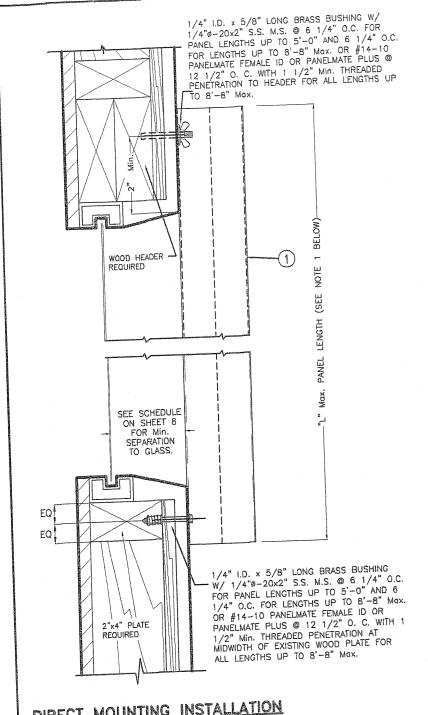
12/05/11

DATE:

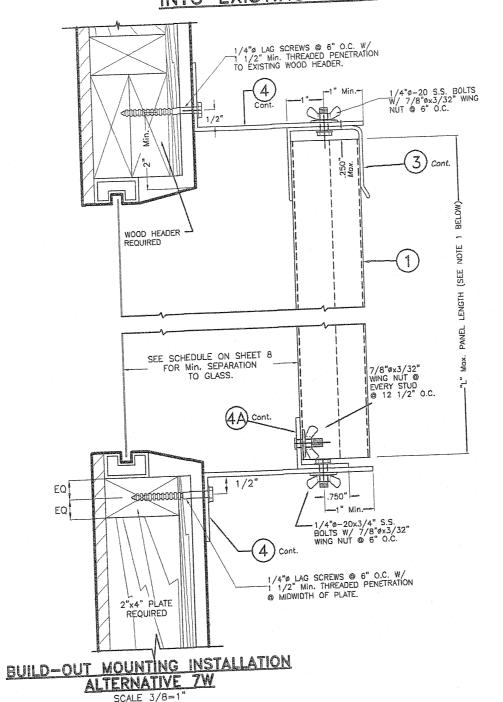
ILLECO INC.

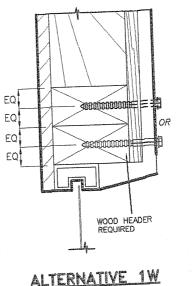
TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th. St., Ste. 305, VARGINIA GARDENS, Fl. 33166 Phone: (305) 871-1530 . Fox: (305) 871-1531 EB-0006719 WALTER A. TILLIT Jr., P.E. FLORIDA Lic. # 44167

7/8"@x3/32"

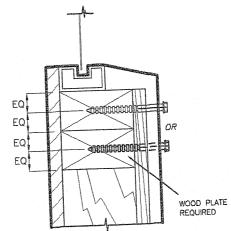


INSTALLATION DETAILS FOR REGULAR PANELS (1) & (A) INTO EXISTING WOOD STRUCTURES



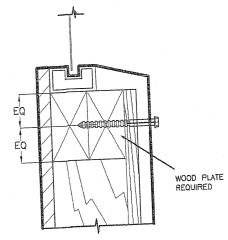








EQ



WOOD HEADER

ALTERNATIVE 3W

ALTERNATIVE 4W SCALE 3/8=1

ALTERNATIVE WOOD FRAME

CONDITIONS & ANCHOR LOCATIONS NOTE : SHUTTER TRACKS NOT SHOWN FOR CLARITY

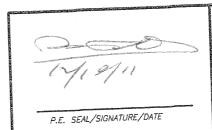
DIRECT MOUNTING INSTALLATION ALTERNATIVE 6W SCALE 3/8=1

NOTES:

- 1. INSTALLATIONS ARE ONLY VALID FOR BUILDINGS WITH A.S.D. DESIGN LOADS UP TO +55.5, -72.0 PSF AND PANEL'S LENGTH UP TO 8'-8".
- 2. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE NO. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

NOTE FOR COMBINATION OF SECTIONS:

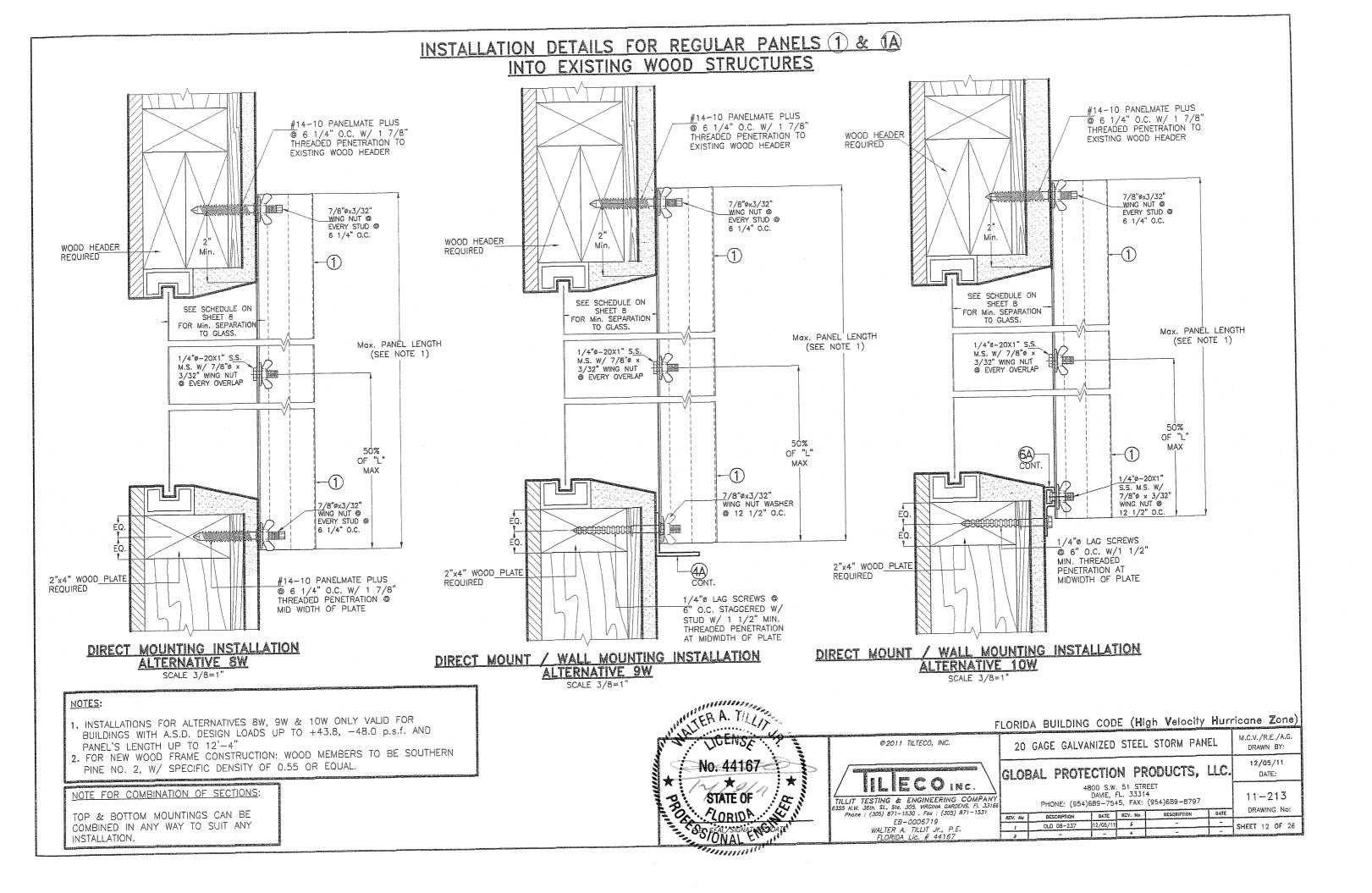
TOP & BOTTOM MOUNTINGS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

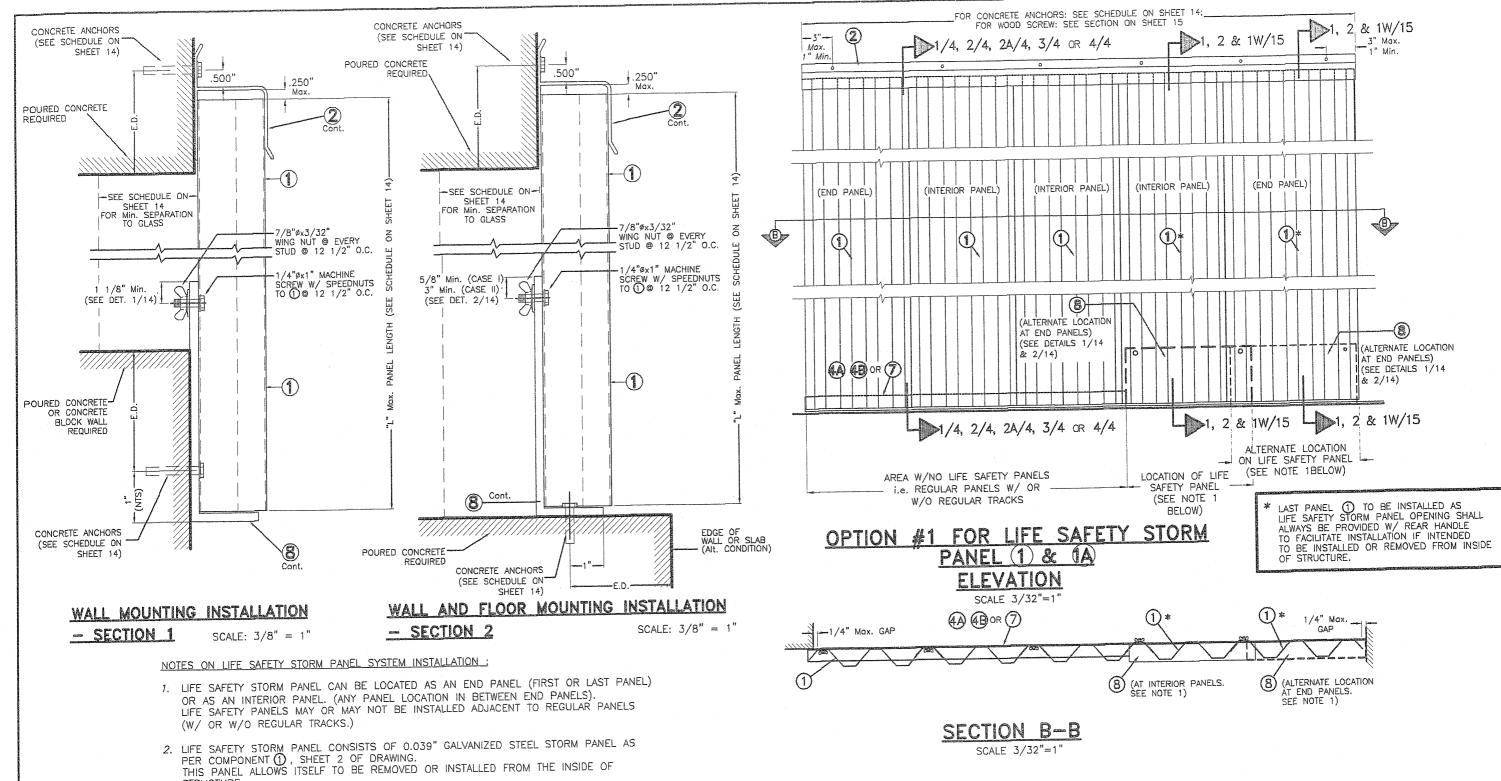


@2011 TILTECO, INC. ECOINC.

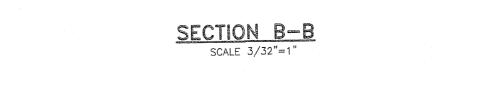
TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FL. 33166 Phone: (305) 871-1530 . Fox: (305) 871-1531 EB-0006719 WALTER A. TILLIT Jr., P.E. FLORIDA Lic. # 44167

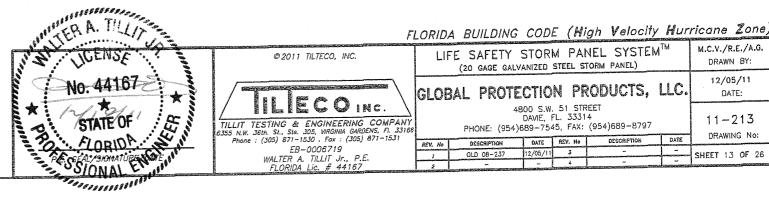
FI	ORID	A BUILDING	COD	E (Hig	gh V elocity	Hurr	icane Zone)
		GAGE GALVAN					M.C.V./R.E./A.G. DRAWN BY:
		AL PROTE		-			12/05/11 DATE:
INY J166	GLOE	48	00 S.W.	51 518	4 (954)689-8797		11-213 DRAWING No:
1	REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	-5-00
	i i	OLD 08-237	12/05/11	3		_	SHEET 11 OF 26
	2	-	_	-	The state of the s	(D.44-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	

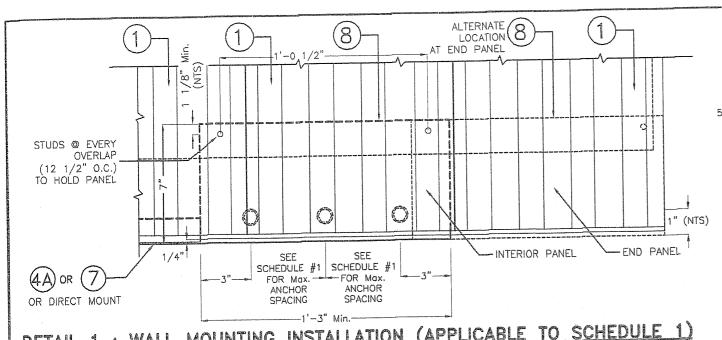




- STRUCTURE.
- 3. LIFE SAFETY PANEL REQUIRES TOP TRACK TO BE COMPONENT 2 & BOTTOM TRACK TO BE COMPONENT (8) AS PER SHEET 2 OF THIS DRAWING. COMPONENT (8) MAY BE INSTALLED WALL OR FLOOR MOUNTED FOLLOWING SECTIONS 1 & 2 ON THIS SHEET, AS WELL AS DETAILS 1 & 2 ON SHEET 14.
- 4. Min. LENGTH FOR COMPONENT (8) IS 15" Max. ANCHOR SPACING FOR COMPONENT (8) ANCHORAGE AT BOTTOM IS GIVEN ON SCHEDULES 1 & 2, SHEET 14. COMPONENT (8) MAY BE PERMANENT OR REMOVABLE.
- 5. SEE DETAILS FOR INSTALLATION INTO WOOD FRAME BUILDINGS ON SHEET 15.
- 6. SEE SHEET 4 FOR DETAIL APPLICABLE TO THE NECESSITY FOR THE INSTALLATION OF SPACERS AT TRACKS INSTALLED ADJACENT AND BEYOND TO STUCCO/WOOD BANDS.







: WALL MOUNTING INSTALLATION (APPLICABLE TO SCHEDULE 1) SCALE: 3/16" = 1"

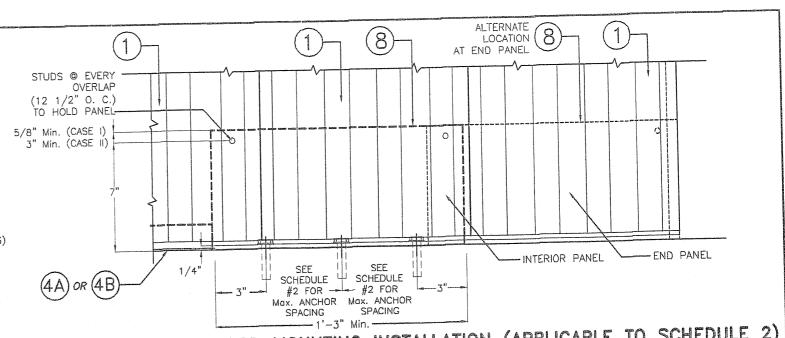
MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING SCHEDULE AT (8) FOR INSTALLATIONS INTO CONCRETE & CONCRETE BLOCK STRUCTURES

SCHEDULE # 1 : (8) W/ WALL MOUNT CONDITIONS TOP & BOTTOM W/ E.D. = 3 1/2" *

MAXIMUM A.S.D.	TAPO	ON	CF TAP	-GRIP	CALK	-IN	PANELMATE	FEMALE ID	PANELMA		APPLICABLE TO SECTIONS # &	MAXIMUM PANEL
DESIGN PRESSURE	TO CONCRETE	TO CONCRETE BLOCK	ANY COMBINATION OF THEM	LENGTH "L" (ft.)								
RATING (p.s.f.)	6"	N/A	N/A	N/A	6"	N/A	6"	N/A	6"	N/A	1 & 2 (TOP)	-1 -1 -2 -500
+55.0, -72.0		9"	9"	9"	9"	9"	9"	9"	9"	9" .	1 (BOTTOM)	5'-0" OR LESS
	6"	N/A	N/A	N/A	6"	N/A	6"	N/A	6"	N/A	1 & 2 (TOP)	>5'-0" TO 7'-6
+55.0 -72.0	9"	6"	9"	6"	9"	7 1/2"	9"	9"	9"	9"	1 (BOTTOM)	33 -0 10 7 -0
	6"	N/A	N/A	N/A	6"	N/A	6"	N/A	6"	N/A	1 & 2 (TOP)	>7'-6" TO 8'-8
+55.0 -72.0	9"	6"	q"	6"	9"	6"	6"	6"	6"	6"	1 (BOTTOM)	

SCHEDULE # 2 : 8 W/ FLOOR MOUNT CONDITIONS AT BOTTOM W/ E.D. = 3 1/2" *

SUPEDULL # 2	, W/ TEOOK					
MAXIMUM A.S.D.	CASE I (STUD @ 5/8" Mi	n. FROM TOP OF ANGLE)	CASE II (STUD @ 3" Mir	. FROM TOP OF ANGLE)	APPLICABLE TO SECTIONS # &	MAXIMUM PANEL
DESIGN	TAPCON	CALK-IN	TAPCON	CALK-IN	ANY COMBINATION	LENGTH "L" (ft.)
PRESSURE RATING (p.s.f.)	TO CONCRETE	TO CONCRETE	TO CONCRETE	CONCRETE	OF THEM	
+49.2 -61.5	711	711	4 1/2"	4 1/2"	2 (BOTTOM)	7'-6" OR LESS
+52.8 -66.0	711	3"	4"	4"	2 (BOTTOM)	7'-6" OR LESS
	2 1/2"	2 1/2"	4."	3 1/2"	2 (BOTTOM)	7'-6" OR LESS
+55.0 -72.0			N/A	N/A	2 (BOTTOM)	>7'-6" TO 8'-0"
+55.0 -72.0	2 1/2"	2 1/2"	N/A	11/7		>7'-6" TO 8'-8"
+55.0 -72.0	N/A	N/A	3"	3"	2 (BOTTOM)	2/-0 10 0 -0



DETAIL 2 : FLOOR MOUNTING INSTALLATION (APPLICABLE TO SCHEDULE 2) SCALE: 3/16" = 1"

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

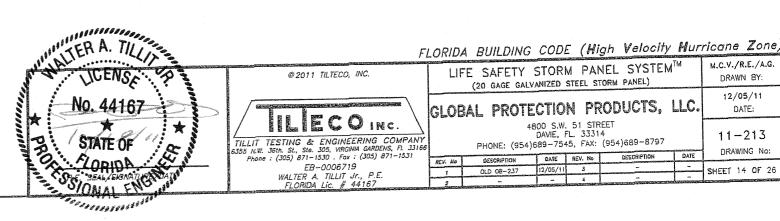
(APPLICABLE ONLY TO SECTIONS 1 & 2 INDICATED FOR LIFE SAFETY STORM PANEL

SYSTEM ON SHEET 13).

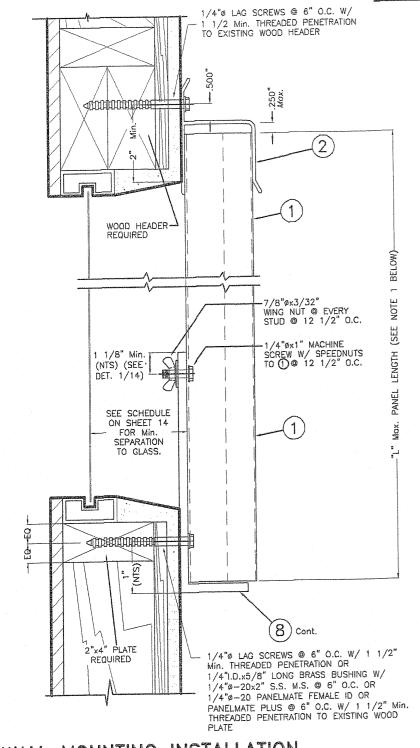
EM ON SHEET 13).			
MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.)	Max. PANEL LENGTH "L" (ft.) (SEE SECTIONS)	MINIMUM SEPARATION TO GLASS	PANEL CONDITION
+55.0, -72.0	8'-8"	2 3/4"	UNBOLTED

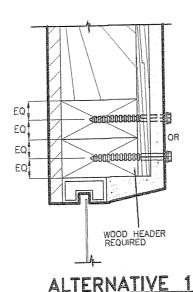
SEE SHEET 15 FOR ANCHORS TYPE & SPACING FOR INSTALLATIONS INTO WOOD FRAME BUILDING. MINIMUM ANCHOR SPACINGS AND MINIMUM EDGE DISTANCE ARE INDICATED ON THIS SCHEDULE. FOR E.D. LESS THAN INDICATED ON SCHEDULE REDUCE ANCHOR SPACING BY MULTIPLYING SPACING SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. FOR THIS OPERATION TO BE POSSIBLE, REDUCED SPACING OBTAINED USING FACTOR SHALL NOT BE LESS THAN MINIMUM SPACING INDICATED FOR EACH ANCHOR TYPE AT ANCHORS LEGEND.

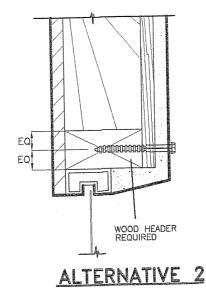
		1/4"0	1/4"ø	1/4"ø	1/4"0	1/4"ø
ANCHOR	ANCHOR TYPE		CF TAP-GRIP	PANELMATE FEMALE ID	PANELMATE PLUS	CALK-IN
Nin ANCHOR	SPACING (in.)	3	3	3	3	2 1/2
*EDGE DISTANCE		3	3	3	3	3
	Concrete Block (in.)	3	3	3 1/2	3 1/2	4
ACTUAL E.D. (E	DGE DISTANCE)			FACTOR		
NAME OF TAXABLE PARTY OF TAXABLE PARTY.	1/2"	.35	.35	-		- :
		_		-	-	.50
	1/2"	1.00	1.00	-	1.00	.63
	1/2"		 -	1.00	_	1.00

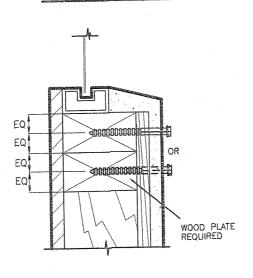


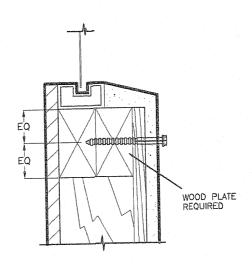
INSTALLATION DETAILS FOR OPTION # 1 FOR LIFE SAFETY STORM PANEL SYSTEM INTO EXISTING WOOD STRUCTURES











ALTERNATIVE 3

ALTERNATIVE 4

ALTERNATIVE WOOD FRAME CONDITIONS & ANCHOR LOCATIONS

SCALE: 3/8" = 1"

NOTE : SHUTTER TRACKS NOT SHOWN FOR CLARITY

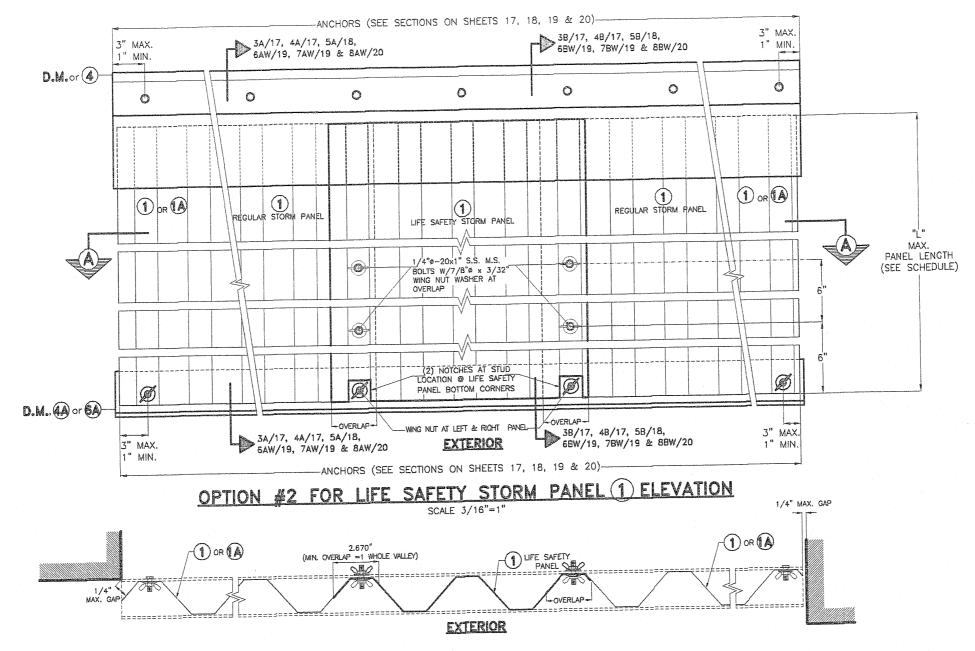
WALL MOUNTING INSTALLATION ALTERNATIVE 1W

SCALE: 3/8" = 1"

NOTES:

- 1. INSTALLATIONS ARE ONLY VALID FOR BUILDINGS WITH A.S.D. DESIGN LOADS UP TO $+55.5,\;-72.0$ psf and Panel's length up to 8'-8''.
- 2. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

HILL A THE ER A. TILLY FLORIDA BUILDING CODE (High Velocity Hurricane Zone, M.C.V./R.E./A.G. LIFE SAFETY STORM PANEL SYSTEMTM @ 2011 TILTECO, INC. DRAWN BY: (20 GAGE GALVANIZED STEEL STORM PANEL) 12/05/11 No. 44161 GLOBAL PROTECTION PRODUCTS, LLC. DATE: IL ECO INC. 4800 S.W. 51 STREET DAVIE, FL. 33314 PHONE: (954)689-7545, FAX: (954)689-8797 11-213 TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, Fl. 33166 Phone: (305) 871-1530 . Fox: (305) 871-1531 DRAWING No: DESCRIPTION BATE REV. No SENTANON AL SENTAN REV. No EB-0006719 12/05/11 3 SHEET 15 OF 26 OLD 08-237 WALTER A. TILLIT Jr., P.E. FLORIDA Lic. # 44167

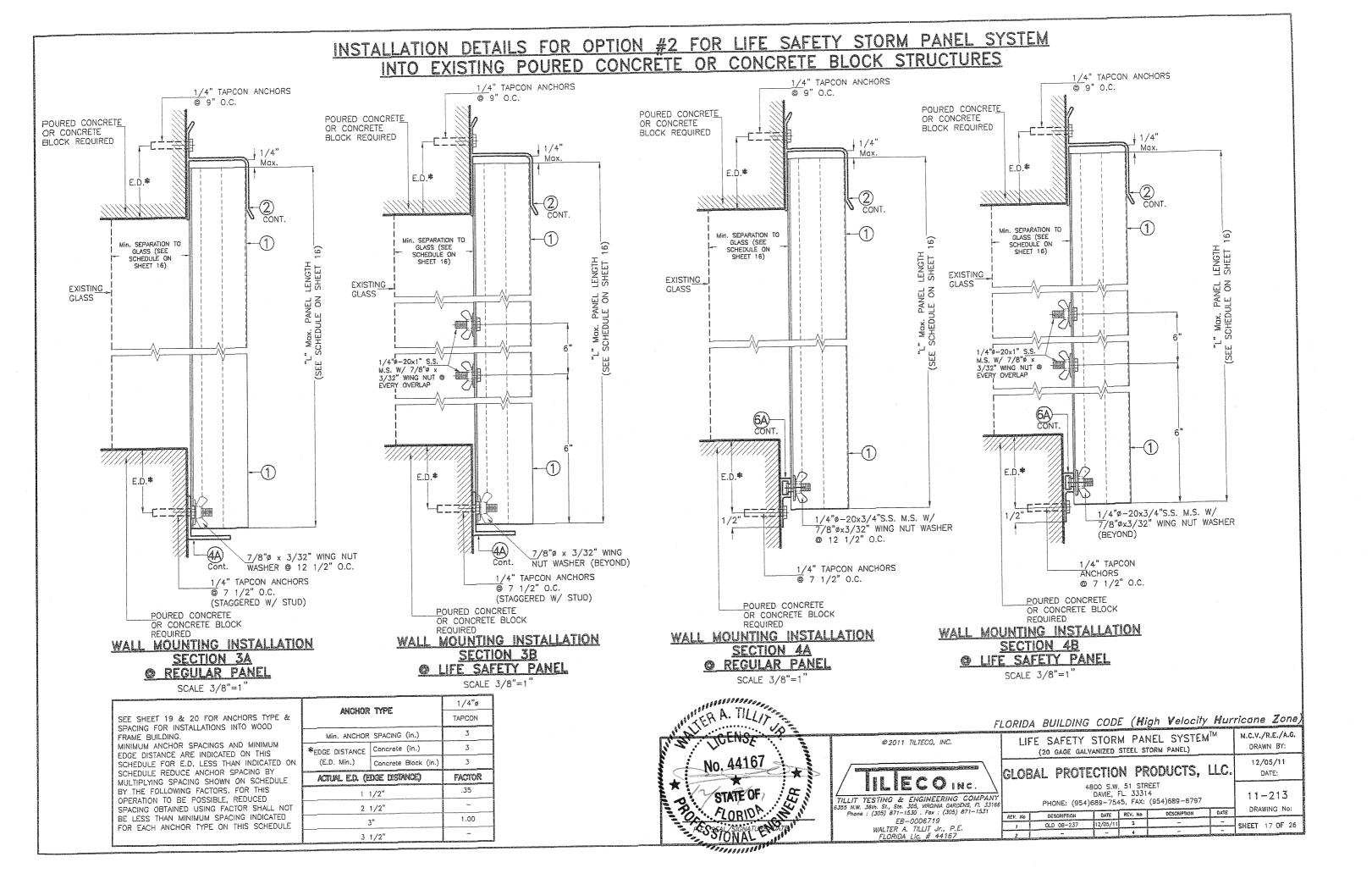


SECTION A-A SCALE 3/16"=1"

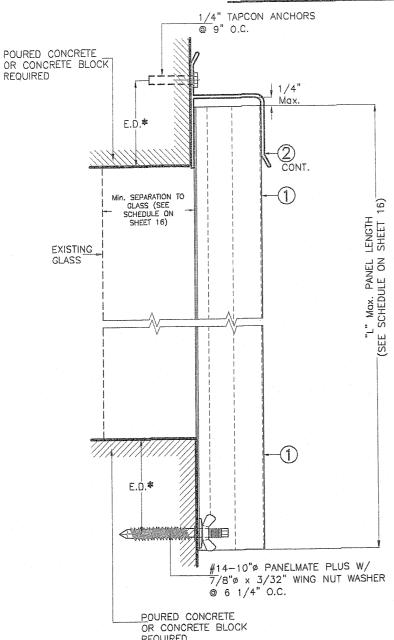
MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.) AND CORRESPONDING MAXIMUM PANEL LENGTH "L" SCHEDULE

MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.)	Max. PANEL LENGTH L (ft.) (SEE SECTIONS)	MINIMUM SEPARATION TO GLASS	PANEL CONDITION
+55.0, -72.0	8'-8"	2 3/4"	UNBOLTED

ANTER A. TILLY	FI	ORIDA BUILDING CODE (High Velocity Hurricane Zone)
THENSK : SE	© 2011 TiLTECO, INC.	LIFE SAFETY STORM PANEL SYSTEM TM M.C.V./R.E./A.G. (20 GAGE GALVANIZED STEEL STORM PANEL) M.C.V./R.E./A.G. DRAWN BY:
No. 44167	TILLIT TESTING & ENGINEERING COMPANY E355 N.W. Jöln. St., Ste. 305, VIRGINIA CARDENS, R. 33166 Phone : (305) 871-1530 . Fax : (305) 871-1531	GLOBAL PROTECTION PRODUCTS, LLC. 12/05/11 DATE: 4800 S.W. 51 STREET DAVIE, FL. 33314 PHONE: (954)689-7545, FAX: (954)689-8797 PARWING No:
PO GEALTSIONATURE GAVE	Phone: (309) 871-1303 EB-0008719 WALTER A. TILLIT Jr., P.E. FLORIDA Lic. # 44187	REV. No DESCRIPTION DATE REV. No DESCRIPTION UALL
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INSTALLATION DETAILS FOR OPTION #2 FOR LIFE SAFETY STORM PANEL SYSTEM INTO EXISTING POURED CONCRETE OR CONCRETE BLOCK STRUCTURES



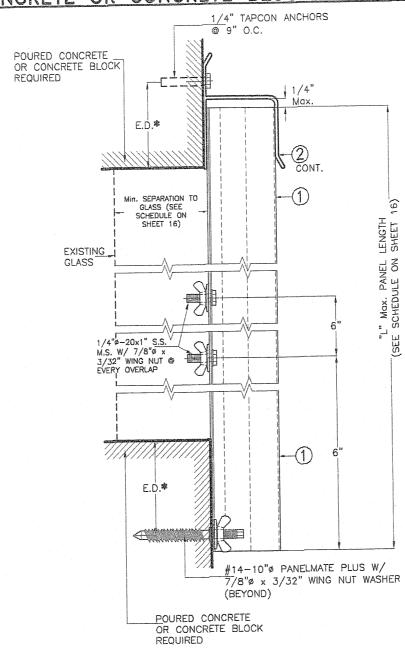
WALL MOUNTING INSTALLATION SECTION 5A REGULAR PANEL

SCALE 3/8"=1"

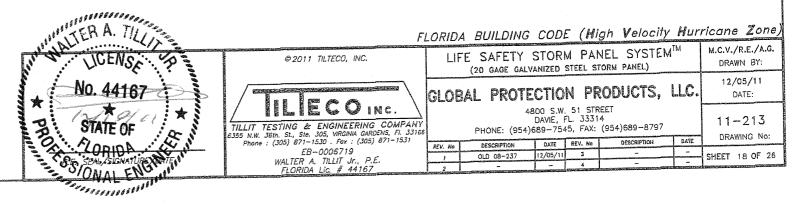
SEE SHEET 19 & 20 FOR ANCHORS TYPE & SPACING FOR INSTALLATIONS INTO WOOD FRAME BUILDING.

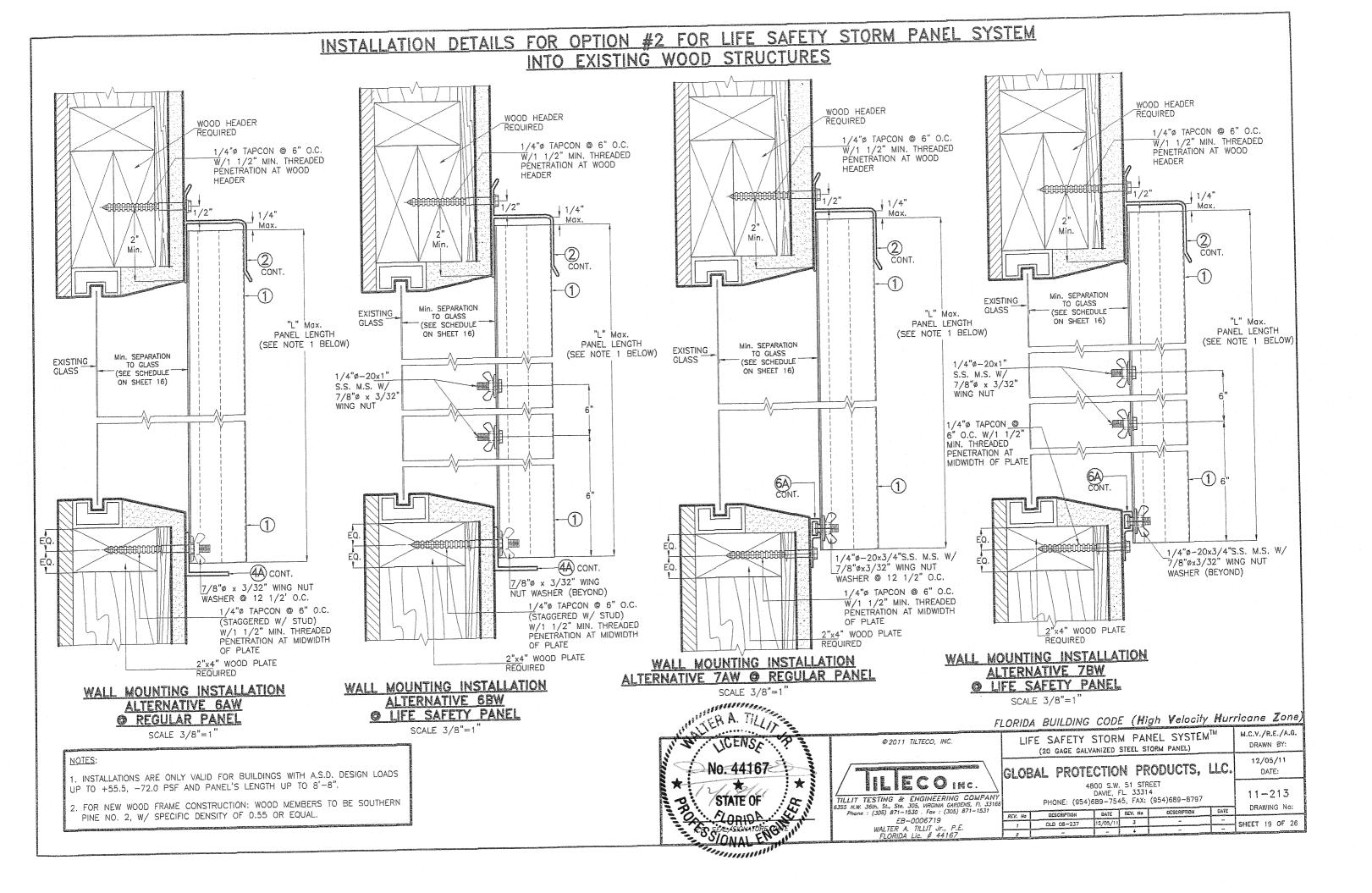
MINIMUM ANCHOR SPACINGS AND MINIMUM EDGE DISTANCE ARE INDICATED ON THIS SCHEDULE FOR E.D., LESS THAN INDICATED ON SCHEDULE REDUCE ANCHOR SPACING BY MULTIPLYING SPACING SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. FOR THIS OPERATION TO BE POSSIBLE, REDUCED SPACING OBTAINED USING FACTOR SHALL NOT BE LESS THAN MINIMUM SPACING INDICATED FOR EACH ANCHOR TYPE ON THIS SCHEDULE

		1/4"ø	1/4"ø	
ANCHOR	TYPE	TAPCON	PANELMATE PLUS	
Min. ANCHOR	SPACING (in.)	3	3	
*EDGE DISTANCE (E.D. Min.)	Concrete (in.)	3	3	
	Concrete Block (in.)	3	3 1/2	
ACTUAL E.D. (E	DGE DISTANCE)	FACTOR		
1	1/2"	.35	-	
2	1/2"	-	-	
	3"	1.00	1.00	
3	1/2"		-	
	and the second s	A CONTRACTOR OF THE PARTY OF TH		

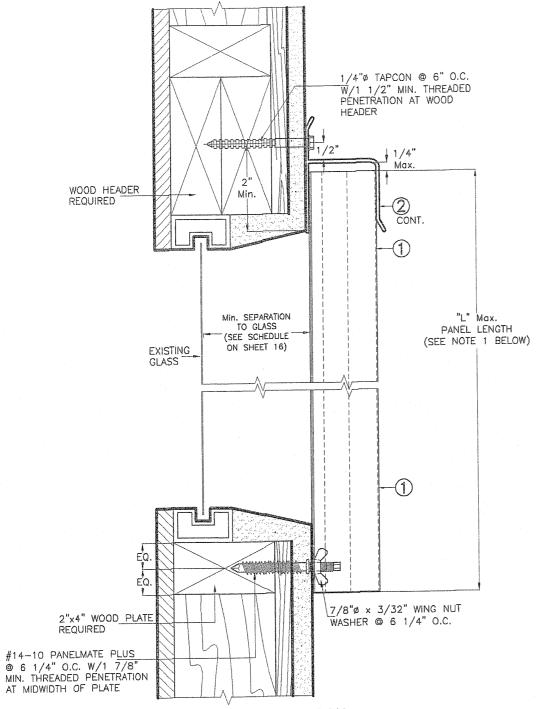


WALL MOUNTING INSTALLATION SECTION 5B O LIFE SAFETY PANEL SCALE 3/8"=1"





INSTALLATION DETAILS FOR OPTION #2 FOR LIFE SAFETY STORM PANEL SYSTEM INTO EXISTING WOOD STRUCTURES

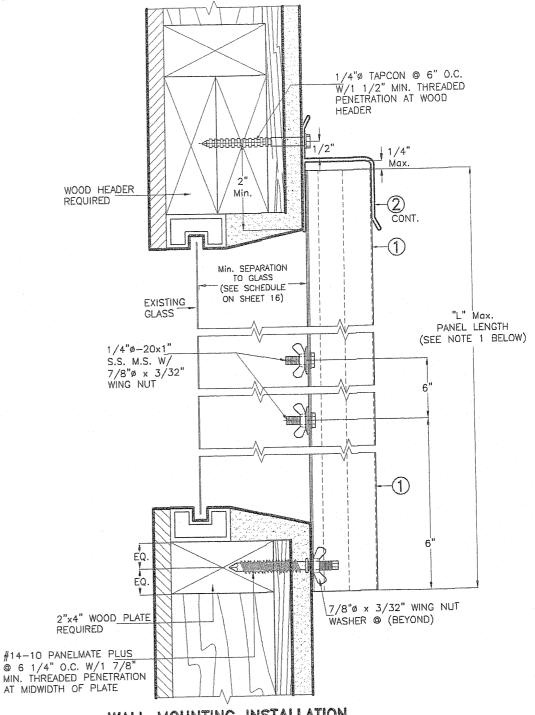


WALL MOUNTING INSTALLATION ALTERNATIVE 8AW @ REGULAR PANEL

SCALE 3/8"=1"

1. INSTALLATIONS ARE ONLY VALID FOR BUILDINGS WITH A.S.D. DESIGN LOADS UP TO +55.5, -72.0 PSF AND PANEL'S LENGTH UP TO 8'-8".

2. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE NO. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL



WALL MOUNTING INSTALLATION ALTERNATIVE 8BW @ LIFE SAFETY PANEL

MERA. TILLIFE TER A. TILLI SCALE 3/8"=1 @ 2011 TILTECO, INC. No. 44167 ILLECO INC. STATE OF SIONAL VICTORIAN

FLORIDA BUILDING CODE (High Velocity Hurricane Zone) LIFE SAFETY STORM PANEL SYSTEMTM M.C.V./R.E./A.G. DRAWN BY: (20 GAGE GALVANIZED STEEL STORM PANEL)

12/05/11 GLOBAL PROTECTION PRODUCTS, LLC DATE: 4800 S.W. 51 STREET

DAVIE, FL. 33314 PHONE: (954)689-7545, FAX: (954)689-8797 11-213 DRAWING No: DESCRIPTION DATE REV. No. 12/05/11 3 SHEET 20 OF 26 OLD 08-237

TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th. St., Ste. 305, VIRGINIA CARDENS, Pl. 33166 Phane: (305) 871-1530 . Fax: (305) 871-1531 EB-0006719 WALTER A. TILLIT Jr., P.E. FLORIDA Lic. # 44167

GENERAL NOTES: VALID E-Z HANG STORM PANEL SYSTEM

1. E-Z HANG STORM PANEL SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2010 EDITION OF THE FLORIDA BUILDING CODE.

DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1620 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 7-10 FOR INSTALLATIONS UNDER 2010 FBC AND SHALL NOT EXCEED THE MAXIMUM (A.S.D.) DESIGN PRESSURE RATINGS INDICATED ON SHEETS 25 & 26.

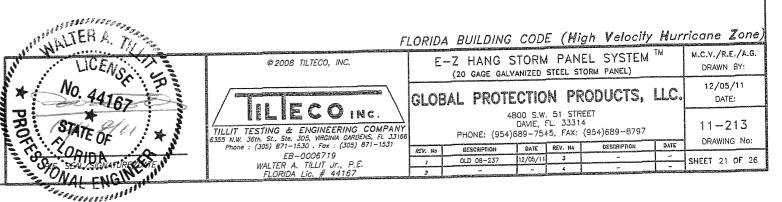
IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-10 SHALL BE FIRST REDUCED TO A.S.D. DESIGN WIND LOADS BY MULTIPLYING THEM BY O.6 IN ORDER TO TO COMPARE THESE W/ MAX. (A.S.D) DESIGN PRESSURE RATINGS INDICATED ON SHEETS 25 & 26.

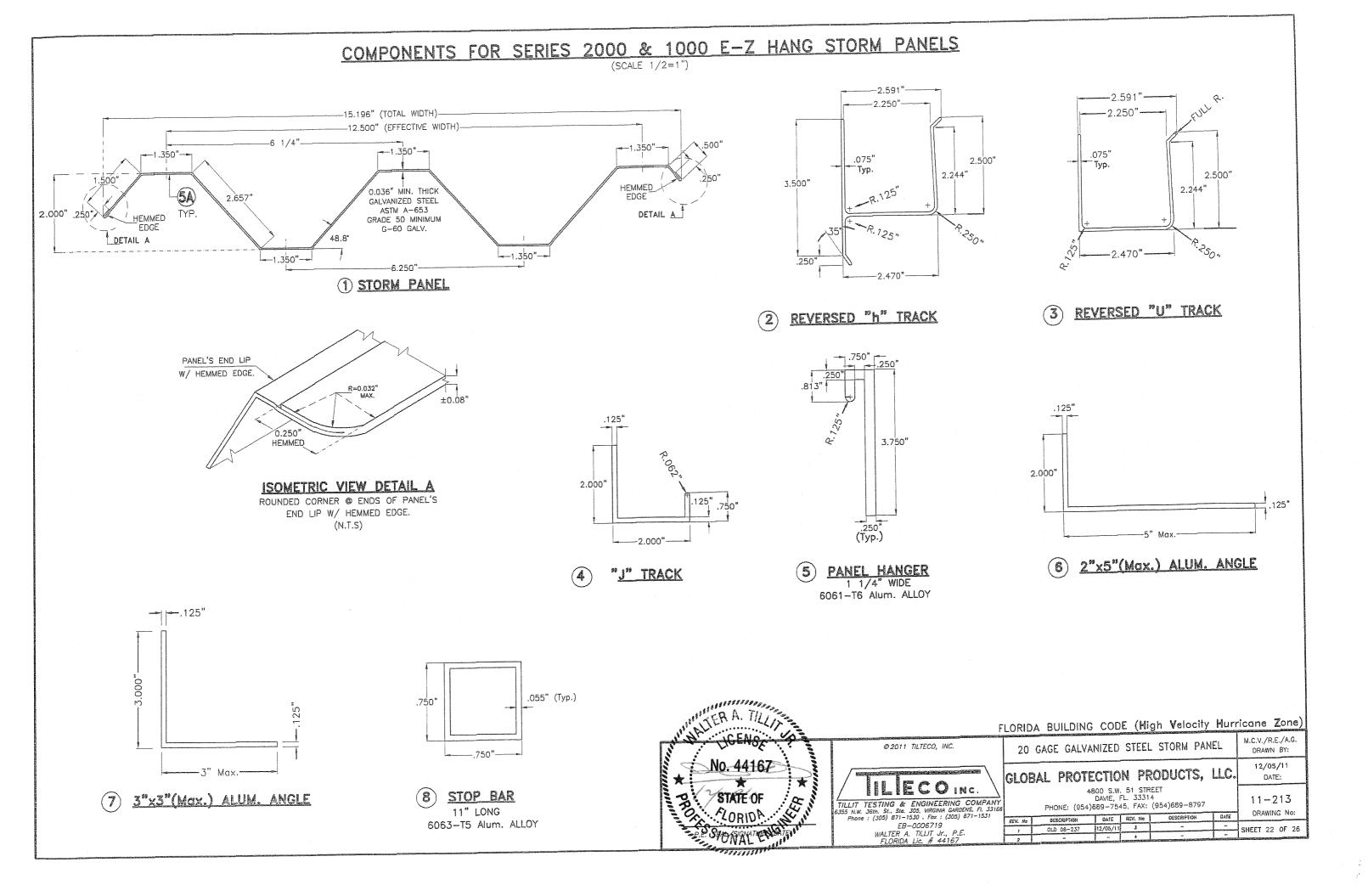
IN ORDER TO VERIFY THAT COMPONENTS AND ANCHORS ON THIS P.E.D. AS TESTED WERE NOT OVER STRESSED, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS WAS NOT USED IN THEIR ANALYSIS. FASTENERS SPACING TO WOOD HAS BEEN DETERMINED IN ACCORDANCE WITH N.D.S. 2005.

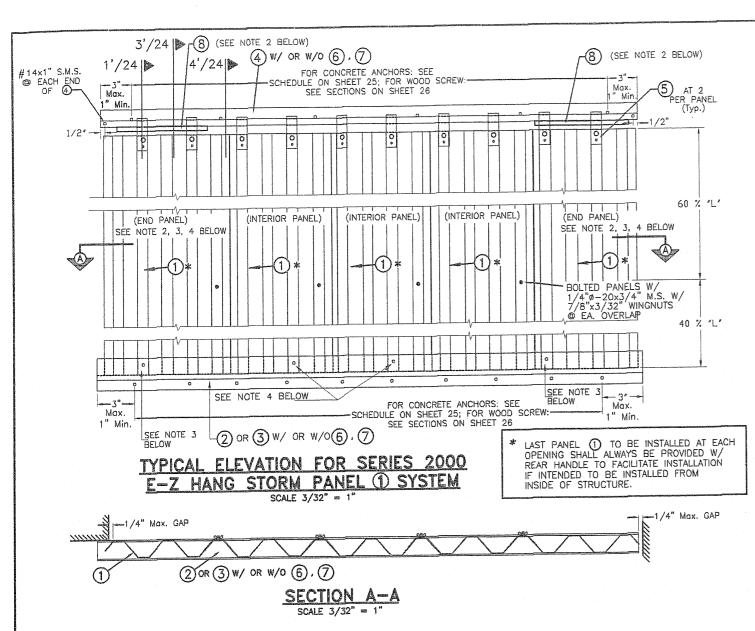
STORM PANEL'S ADEQUACY FOR IMPACT AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1626 OF THE ABOVE MENTIONED CODE AS PER FENESTRATION TESTING LABORATORY, INC. REPORT # 2032, AS PROTOCOLS TAS-201, TAS-202 AND TAS-203.

- 2. THIS SYSTEM HAS BEEN DESIGNED TO BE INSTALLED ON THE OUTSIDE OF THE OPENING ACCESSING THE OPENING FROM THE INSIDE W/O THE USE OF A LADDER OR LIFT. THIS APPLICATION IS VALID WHEN INSTALLATION IS INTENDED TO BE PERFORMED FROM THE INSIDE OF STRUCTURE.
- 3. SERIES 1000 INSTALLATION IS APPLICABLE TO SINGLE AND DOUBLE HUNG STYLE WINDOWS WHEN INSTALLATION IS REQUIRED TO BE PERFORMED FROM THE INSIDE OF STRUCTURE.
- 4. SERIES 2000 INSTALLATION IS APPLICABLE TO SINGLE AND DOUBLE HUNG AND HORIZONTAL SLIDERS STYLE WINDOWS WHEN INSTALLATION IS REQUIRED TO BE PERFORMED FROM THE INSIDE OF STRUCTURE.
- 5. ALL ALUMINUM EXTRUSIONS TO BE 6063-T6 ALLOY AND TEMPER. (UNLESS OTHERWISE NOTED)
- 6. ALL ALUMINUM SHEET METAL USED AT CLOSURES SHALL HAVE 3105-H14 ALLOY.
- 7. ALL STEEL SHEET METAL PANELS SHALL HAVE STRUCTURAL QUALITY STEEL, ASTM A-653 GRADE 50 Min., GALVANIZED STEEL DESIGNATION W/Fy= 58.5 ksi (AFTER ROLLED).
- 8. 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.
- 9. BOLTS TO BE ASTM A-307 GALVANIZED STEEL, OR AISI 304 SERIES STAINLESS STEEL, WITH 36 ksi MINIMUM YIELD STRENGTH.
- 10. ANCHORS TO WALL SHALL BE AS FOLLOWS:
 - (A) TO EXISTING POURED CONCRETE:
 - 1/4" TAPCON ANCHORS AS MANUFACTURED BY I.T.W. BUILDEX, INC. (MIN. f'c=3192 p.s.i.)
 - 1/4" Ø X 7/8" CALK-IN ANCHORS, AS MANUFACTURED BY POWERS FASTENERS INC. (MIN. f'c=3000 p.s.i.)
 - #14-10 PANELMATE FEMALE ID & PANELMATE PLUS ANCHORS, AS MANUFACTURED BY ELCO CONSTRUCTION PRODUCTS. (f'c=3350 p.s.i.)
 - A.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS INTO POURED CONCRETE SHALL BE 1 3/4" AND 2" FOR PANELMATE FEMALE ID & PANELMATE PLUS.
 - A2) MINIMUM EMBEDMENT OF 1/4" X 7/8" CALK-IN ANCHORS SHALL BE IS 7/8" INTO CONCRETE. NO EMBEDMENT INTO ANY FINISH MATERIAL SHALL BE PERMITTED. 1/4" Ø-20 SS SIDEWALK BOLTS USED SHALL BE LONG ENOUGH(SHOULD ANY FINISH MATERIAL EXIST) TO ENGAGE 3/4" INTO ANCHORS.
 - 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 MENTINED IN A.1) AND IN A.2).
 - (B) TO EXISTING CONCRETE BLOCK WALL:
 - 1/4" Ø TAPCON ANCHORS AS MANUFACTURED BY I.T.W. BUILDEX, INC.
 - 1/4" Ø X 7/8" CALK-IN ANCHORS, AS MANUFACTURED BY POWERS FASTENERS INC. (f'm=1500 p.s.i.)
 - #14-10 PANELMATE FEMALE ID AND PANELMATE PLUS ANCHORS, AS MANUFACTURED BY ELCO CONSTRUCTION PRODUCTS (f'm=2071 p.s.i.)

- B.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS AND PANELMATE FEMALE ID & PANELMATE PLUS INTO CONCRETE BLOCK SHALL BE 1 1/4".
- B.2) MINIMUM EMBEDMENT OF 1/4"Ø X 7/8" CALK-IN ANCHORS SHALL BE IS 7/8" INTO CONCRETE. NO EMBEDMENT INTO ANY FINISH MATERIAL SHALL BE PERMITTED. 1/4" Ø-20 SS SIDEWALK BOLTS USED SHALL BE LONG ENOUGH(SHOULD ANY FINISH MATERIAL EXIST) TO ENGAGE 3/4" INTO ANCHORS.
- 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 MENTIONED IN B.1) AND IN B.2).
- (C) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.
- 11. 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.
- 12. 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
- 13. STORM PANEL INSTALLATION SHALL COMPLY WITH SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.
- 14. ATRIUM WINDOWS AND DOORS, INC. E Z HANG STORM PANEL SYSTEM™ IS PATENT PENDING.
- 15. (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 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 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 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.
- 16. STORM PANEL MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT STORM PANEL IN ACCORDANCE WITH SECTION 1715.8.3 OF FLORIDA BUILDING CODE, ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABELING TO COMPLY WITH SECTION 1715.8.2 OF THE FLORIDA BUILDING CODE.

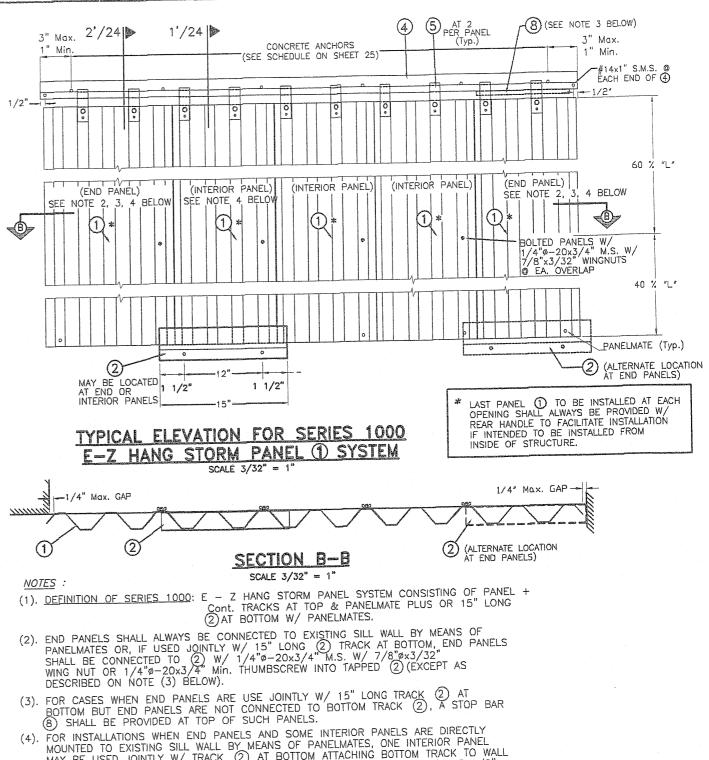




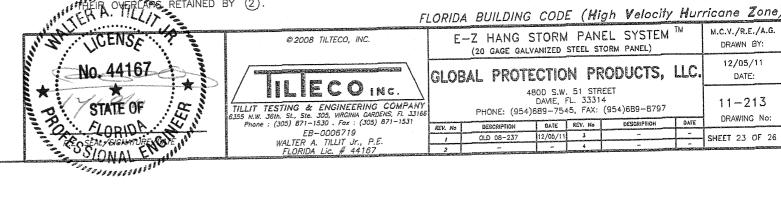


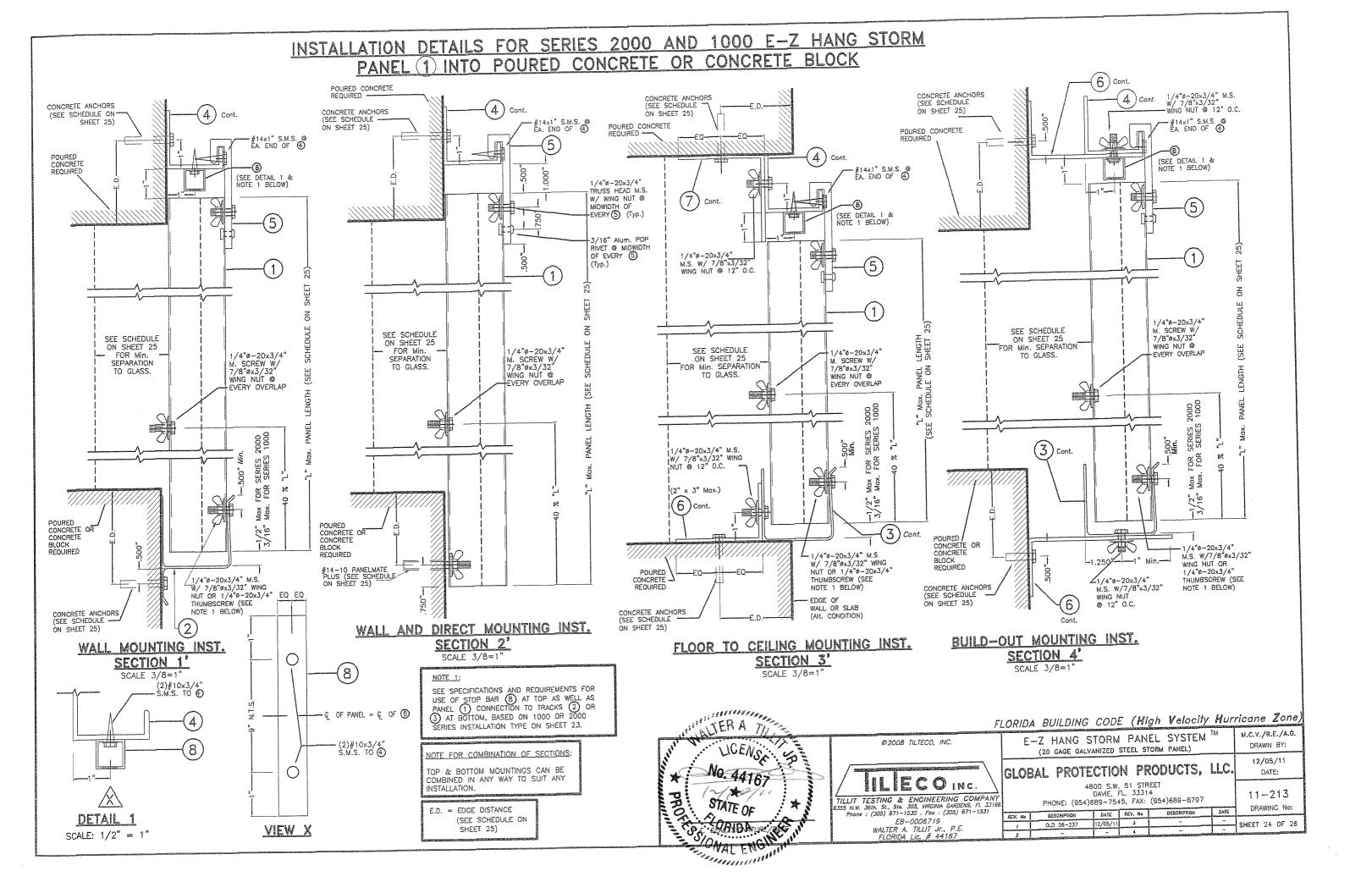
NOTES :

- (1). <u>DEFINITION OF SERIES 2000</u>: E Z HANG STORM PANEL SYSTEM CONSISTING OF PANEL + Cont. TRACKS TOP & BOTTOM.
- (2). END PANELS SHALL ALWAYS BE CONNECTED TO BOTTOM TRACK OTHERWISE A STOP BAR 8 SHALL BE PROVIDED AT TOP OF SUCH PANELS.
- (3). IF END PANELS ARE CONNECTED TO BOTTOM TRACK, CONNECTION SHALL CONSIST OF 1/4"@-20x3/4" M.S. W/ 7/8"@x3/32" WING NUT OR 1/4"@x3/4" Min. THUMBSCREW INTO TAPPED BOTTOM TRACK. LOCATION OF FASTENERS MAY BE AT EITHER OF TWO EXTERIOR FLAT FLANGES OF END PANEL.
- (4). IN CASE THAT END PANELS ARE NOT CONNECTED TO BOTTOM TRACK (i.e. A STOP BAR IS ONLY USED AT TOP) AT LEAST TWO PANELS SHALL BE CONNECTED TO BOTTOM TRACK USING SPECS INDICATED ON NOTE (3) ABOVE. IN SUCH CASE, CONNECTION OF PANELS TO BOTTOM TRACK MAY OCCUR AT ANY PANEL LOCATION.
- (5). SEE SECTION 1', 3' & 4' ON SHEET 24. SEE ANCHOR SCHEDULE ON SHEET 25.



(4). FOR INSTALLATIONS WHEN END PANELS AND SOME INTERIOR PANELS ARE DIRECTLY MOUNTED TO EXISTING SILL WALL BY MEANS OF PANELMATES, ONE INTERIOR PANEL MAY BE USED JOINTLY W/ TRACK (2) AT BOTTOM ATTACHING BOTTOM TRACK TO WALL W/ TWO PANELMATES FOLLOWING SPACING SHOWN ON ELEVATION AND W/ A 3 1/2" Min. EDGE DISTANCE. FOR THIS CASE, INTERIOR PANEL USED JOINTLY W/ (2) DOES NOT NEED TO BE CONNECTED TO (2) BY ANY MEANS. TRACK (2) SHALL BE INSTALLED SUCH THAT ADJACENT PANELS (TO THE LEFT & RIGHT SIDE OF INTERIOR PANEL) HAVE THEIR OVERLAPS RETAINED BY (2).





MAXIMUM A.S.D. DESIGN PRESSURE RATING (p.s.f.) AND CORRESPONDING MAXIMUM PANEL LENGTH "L" SCHEDULE FOR SERIES 1000/2000 E-Z HANG STORM PANEL (1) SYSTEM

(VALID ONLY FOR PANEL INSTALLATIONS AS PER SECTIONS 1' THRU 4', SHEET 24).

ON THE PERSON NAMED IN COLUMN	MAXIMUM A.S.D. DESING PRESSURE RATING (p.s.f.)	Max. PANEL LENGTH "L" (in.) (SEE SECTIONS)	MINIMUM SEPARATION TO GLASS	PANEL CONDITION	APPLICABLE TO SECTIONS				
	+66.0, -75.3	70" OR LESS	2 9/16"	BOLTED *	1', 2', 3', 1"W, 2"W & 3"W				
	+66.0, -75.3	70" OR LESS	2 7/8"	BOLTED *	4' & 4"W				
1			TOTAL PROPERTY AND DESCRIPTION OF THE PARTY						

^{*} BOLTED W/ 1/4"ø-20x3/4" S.S. M.S. & WINGNUT AT OVERLAP & 40% OF PANEL LENGTH MEASURED FROM BOTTOM OF PANEL.

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

E. D. = EDGE DISTANCE

(VALID ONLY FOR PANEL INSTALLATIONS AS PER SECTIONS 1' THRU 4', SHEET 24).

MAXIMUM	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **							APPLICABLE TO SECTIONS # &	MAXIMUM PANEL	
A.S.D. DESIGN PRESSURE	TAPCONS		CALK-IN		PANELMATE FEMALE ID		PANELMATE PLUS		ANY COMBINATION	LENGTH "L" (in.)
		TO CONCOUTE	TO CONCRETE	TO CONCRETE BLOCK	TO CONCRETE	TO CONCRETE BLOCK	TO CONCRETE	TO CONCRETE BLOCK	OF THEM	
(μ.σ.ι.)	12"	N/A	12"	N/A	12"	N/A	12"	N/A	1' & 2' (TOP)	70" OR LESS
+66.0, -75.3	11"	3 1/2"	10"	3"	5"	5"	5"	5"	1' (BOTTOM) SERIES 2000 +	
	12"	5 1/2"	12"	5"	8"	7 1/2"	8"	7 1/2"	1' (BOTTOM) SERIES 1000 ++	
	N/A	N/A	N/A	N/A	N/A	N/A	12 1/2"	12 1/2"	2' (BOTTOM)	
	7"	N/A	6 1/2"	N/A	4 1/2"	N/A	4 1/2"	N/A	3' (TOP)	
	12"	N/A	12"	N/A	9 1/2"	N/A	9 1/2"	N/A	3' (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	4' (TOP)	
	12"	8"	12"	9 1/2"	12"	12"	12"	12"	4' (BOTTOM)	

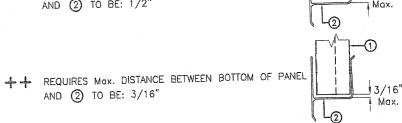
EB-0006719 WALTER A. TILLIT Jr., P.E. FLORIDA Lic. # 44167

A SEE SHEET 26 FOR ANCHORS TYPE & SPACING FOR INSTALLATIONS INTO WOOD FRAME BUILDING.

MINIMUM ANCHOR SPACINGS AND MINIMUM EDGE DISTANCE ARE INDICATED ON THIS SCHEDULE, FOR E.D. LESS THAN INDICATED ON SCHEDULE REDUCE ANCHOR SPACING BY MULTIPLYING SPACING SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. 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.

ANCHORS LEGE	ND.					
Antinona Leo-		1/4"ø	1/4"ø	1/4"ø	1/4"ø	
anchor Type		TAPCON	PANELMATE FEMALE ID	PANELMATE PLUS	CALK-IN	
Min. ANCHOR	SPACING (in.)	3	3	3	2 1/2	
	Concrete (in.)	3	3	3	3	
	Concrete Block (in.)	3	3 1/2	3 1/2	4	
ACTUAL E.D. (E	DCE DISTANCE)					
THE RESERVE OF THE PARTY OF THE	1/2"	.35	-	-		
2 1/2" 3" 3 1/2"		_	-	-	.50	
		1.00	-	1,00	.63	
		_	1.00	-	1.00	
g 3	1/2	1	COLUMN TO SERVICE STATE OF THE	in the second second	A THE REAL PROPERTY.	

REQUIRES Max. DISTANCE BETWEEN BOTTOM OF PANEL AND (2) TO BE: 1/2"



MILER A. TILLIA No. 44167 STONAL Y

FLORIDA BUILDING CODE (High Velocity Hurricane Zone) E-Z HANG STORM PANEL SYSTEM ™ @ 2008 TILTECO, INC. (20 GAGE GALVANIZED STEEL STORM PANEL) GLOBAL PROTECTION PRODUCTS, LLC.

ELECO INC. 4800 S.W. 51 STREET DAVIE, FL. 33314 TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, FI. 33166 Phone: (305) 871-1530 . Fax: (305) 871-1531 PHONE: (954)689-7545, FAX: (954)689-8797

11-213 DRAWING No: DESCRIPTION DATE REV. No DESCRIPTION DATE REV. No OLD 08-237 12/05/11 3 SHEET 25 OF 26

M.C.V./R.E./A.G.

DRAWN BY:

12/05/11

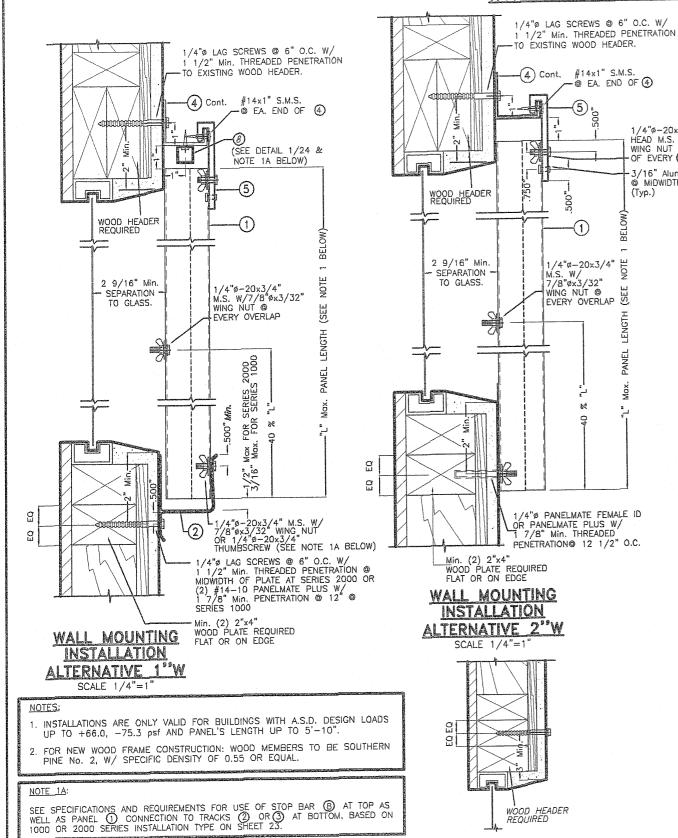
DATE:

INSTALLATION DETAILS FOR SERIES 2000 & 1000 E-Z HANG STORM PANEL 1 INTO EXISTING WOOD STRUCTURES

OF EVERY (5) (Typ.)

3/16" Alum. POP RIVET

MIDWIDTH OF EVERY (5)



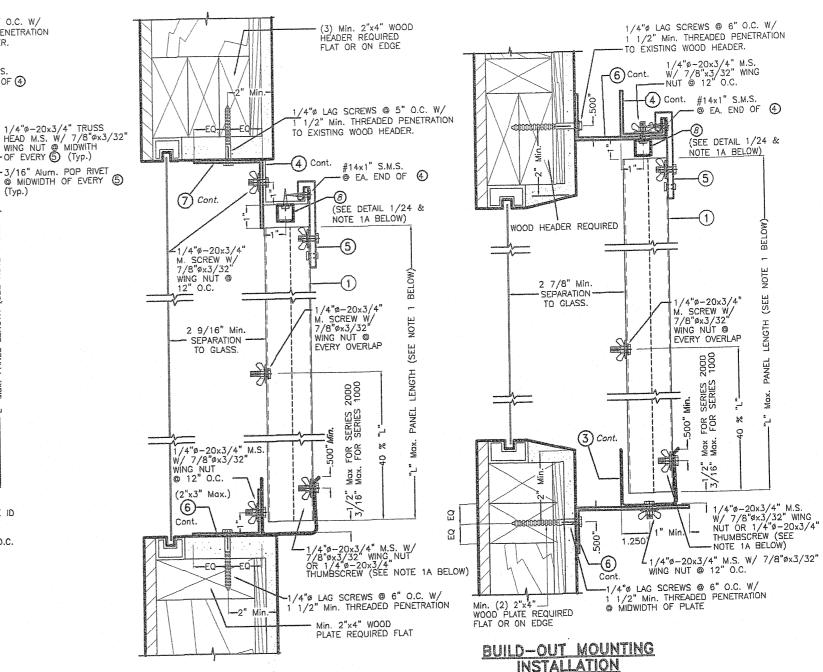
NOTE FOR COMBINATION OF SECTIONS:

TOP & BOTTOM MOUNTINGS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

ALTERNATIVE TOP HEADER WOOD FRAME CONDITION & ANCHOR LOCATION

SCALE: 1/4" = 1"

NOTE : SHUTTER TRACKS NOT SHOWN FOR CLARITY



FLOOR TO CEILING MOUNTING INSTALLATION

MITER A. TILISE TER A. TILI @2008 TILTECO, INC. CENSE No. 44167 ILIECO INC. ~/***~?/ TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th. St., Ste. 305, VIRGINIA GARDENS, R. 33166 Phone : (305) 871-1530 . Fox : (305) 871-1531 STATE OF EB-0006719 WALTER A. TILLIT Jr., P.E. FLORIDA Lic. # 44167

FLORIDA BUILDING CODE (High Velocity Hurricane Zone M.C.V./R.E./A.G. E-Z HANG STORM PANEL SYSTEM DRAWN BY:

(20 GAGE GALVANIZED STEEL STORM PANEL) 12/05/11 GLOBAL PROTECTION PRODUCTS, LLC DATE: 4800 S.W. 51 STREET 11 - 213

DAVIE, FL. 33314 PHONE: (954)689-7545, FAX: (954)689-8797

ALTERNATIVE 4"W

SCALE 1/4"=1

DATE DESCRIPTION DATE REV. No OLD 08-237 12/05/11 3 SHEET 26 OF 26

DRAWING No:

ALTERNATIVE 3"W

SCALE 1/4"=1

WALL !!