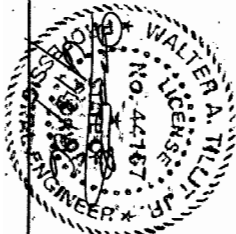


GENERAL NOTES:

1. STORM PANEL SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2004 EDITION OF THE FLORIDA BUILDING CODE WITH THE 2005 SUPPLEMENT.
STORM PANEL SHALL NOT BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES (MIAMI-DADE / BROWARD). DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1609 OF THE ABOVE MENTIONED CODE. FOR A BASIC WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE STORM PANEL WILL BE INSTALLED, AND FOR A DIRECTIONALITY FACTOR K_d=0.85, IN ACCORDANCE WITH ASCE 7-02 STANDARD.
STORM PANEL'S ADEQUACY FOR IMPACT AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1609.1.4 OF THE ABOVE MENTIONED CODE AS PER AIL REPORT # 0130-01-01, SSTD 12-99 STANDARD.
2. CLEAR BERTHA STORM PANEL SHALL BE EXTRUDED USING ANY OF THE FOLLOWING POLYCARBONATE SOURCES WITH THEIR CORRESPONDING MODEL NUMBER:
SOURCE: POLYCARBONATE RESIN MODEL #
GENERAL ELECTRIC PLASTOS LEXAN 103
DOW CHEMICAL CALIBRE 302 V-6
BAYER MATERIAL/SCIENCE LLC MAKROLON #1804
MINIMUM PROPERTIES FOR ALL OF THE ABOVE POLYCARBONATES ARE AS FOLLOWS:
PROPERTY APPLICABLE STANDARD REFERENCE RESULT
PHYSICAL:
SPECIFIC GRAVITY ASTM D792 1.200 G/CC
MECHANICAL:
TENSILE YIELD STRENGTH ASTM D638 8,700 P.S.I.
FLEXURAL STRENGTH AT YIELD ASTM D790 12,500 P.S.I.
FLEXURAL MODULUS ASTM D790 340,000 P.S.I.
IMPACT:
NOTCHED IZOD ASTM D256 17 FT-LB/IN
EIRE BURNING CHARACTERISTICS:
SMOKE DENSITY ASTM D2843 75 (MAX)
RATE OF BURNING ASTM D635 C-1 CLASS (MAX)
SELF IGNITION ASTM D1929 650 °F
3. ALL ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ASSOCIATION 6063-T6 ALLOY & TEMPER
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.
5. BOLTS TO BE A.S.T.M. A 307, GALVANIZED OR AISI 304 SERIES STAINLESS STEEL, WITH 3/8 IN. YIELD STRENGTH.
6. ANCHORS TO WALL SHALL BE AS FOLLOWS:
(A) TO EXISTING POURED CONCRETE:
- 1/4" # TARPON ANCHORS MANUFACTURED BY I.T.W. BUILDER
- 1/4" # x 7/8" CALK-IN ANCHORS OR ELCO mole & female "PANELMATE" MANUFACTURED BY POWERS FASTENERS, INC AND ELCO TEXTRON, RESPECTIVELY.
NOTES:
A.1) MINIMUM EMBEDMENT INTO POURED CONCRETE OF TARPON ANCHORS IS 1 3/4" AND FOR ELCO PANELMATES IS 1 3/4".
A.2) 7/8" CALK-IN ANCHORS SHALL BE ENTIRELY EMBEDDED INTO THE POURED CONCRETE. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED.
1/4" #-20 SCREWS USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST.
AND 1" MINIMUM FOR WALLS WITH NO STUCCO.
A.3) IN CASE THAT PRECAST STONE, PRECAST CONCRETE PANELS, OR PAPERS 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" # TARPON ANCHORS MANUFACTURED BY I.T.W. BUILDER
- 1/4" # x 7/8" CALK-IN ANCHORS OR ELCO mole & female "PANELMATE" MANUFACTURED BY POWERS FASTENERS, INC AND ELCO TEXTRON, RESPECTIVELY.

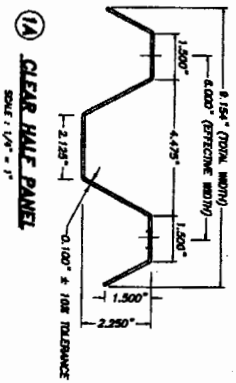
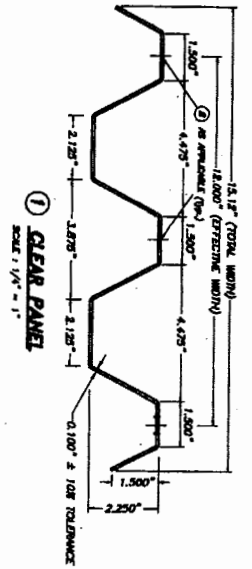
NOTES:

- B.1) MINIMUM EMBEDMENT OF TARPON ANCHORS AND ELCO PANELMATES INTO THE CONCRETE BLOCK UNIT SHALL BE 1 1/4"
- 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" #-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 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) & B.2) ABOVE.
- (C) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.
7. PANEL MAY ALSO BE INSTALLED HORIZONTALLY FOLLOWING INSTALLATION DETAILS SHOWN ON SECTIONS 1 THRU 5, SHEET 2 OF 4.
8. STORM PANEL SHALL BE REMOVED AFTER THE HURRICANE AND SHALL BE STORED AND PROPERLY MAINTAINED.
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.
10. SHUTTER'S MANUFACTURER LABEL SHALL BE PLACED ON A READY AND VISIBLE LOCATION AT PANEL. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABEL SHALL READ AS FOLLOWS:
EASTERN METAL SUPPLY, INC.
WEST PALM BEACH, FL
FLORIDA STATEWIDE PRODUCT APPROVAL.
11. THE INSTALLATION CONTRACTOR IS TO SEAL/CALK ALL SHUTTER COMPONENT EDGES WHICH REMAIN IN CONTINUOUS CONTACT WITH THE BUILDING TO PREVENT WIND/RAIN INTRUSION. CALK AND SEAL SHUTTER TRACKS ALL AROUND FULL LENGTH.
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. (G) 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.

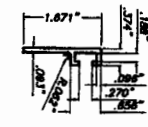
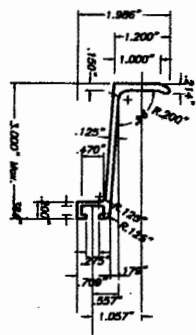


		CLEAR BERTHA STORM PANEL		DATE	8/7/05
		EASTERN METAL SUPPLY, INC		DRAWN BY	M.L.V./S.M.
TITELCO TESTING & ENGINEERING COMPANY 4500 WEST PALM BEACH DRIVE WEST PALM BEACH, FL 33407 FLORIDA LIC. # 44187		EASTERN METAL SUPPLY, INC 4500 WEST PALM BEACH DRIVE WEST PALM BEACH, FL 33407		DESIGNED BY	05-276
				DATE	8/7/05
				SCALE	AS SHOWN
				SHEET	1 OF 4

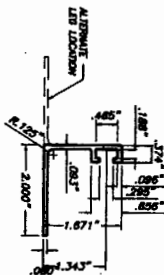
F.A.C. (Non High Velocity Hurricane Zone)



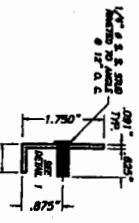
② 3" ANGLE BUILD OUT BRACKET
SCALE: 1/4" = 1"



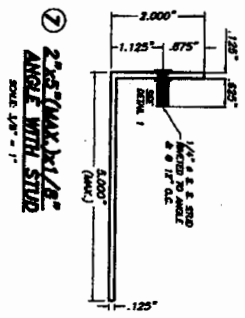
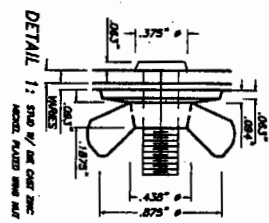
③ 3/8" B. O. T-TRACK
SCALE: 1/8" = 1"



④ T-TRACK ANGLE
SCALE: 1/4" = 1"

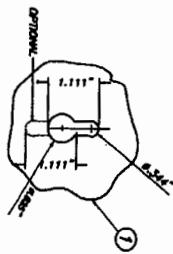


⑤ ANGLE WITH STUD
SCALE: 1/8" = 1"

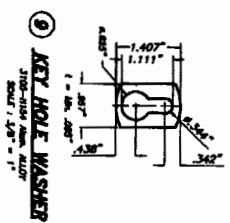


⑥ REVERSED T-ANGLE TRACK
SCALE: 1/4" = 1"

⑦ 2\"/>



⑧ KEY HOLE AT PANEL
SCALE: 1/4" = 1"



⑨ KEY HOLE WASHER
SCALE: 1/4" = 1"

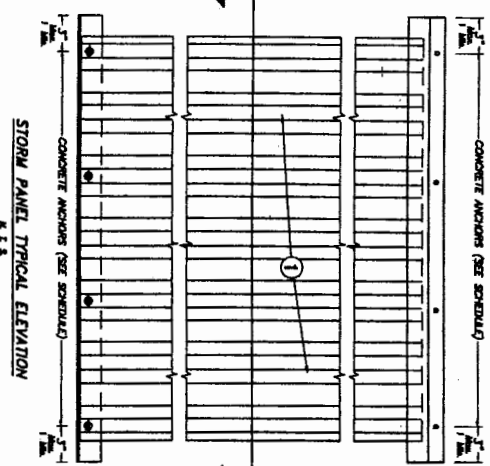
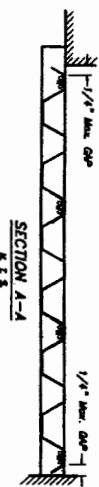
COMPONENTS

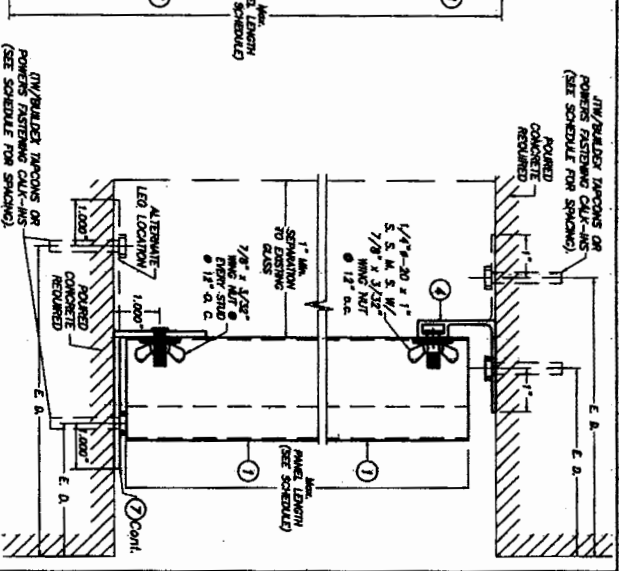
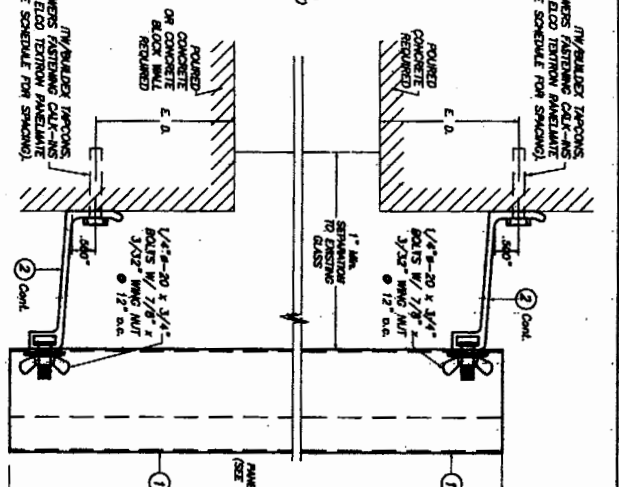
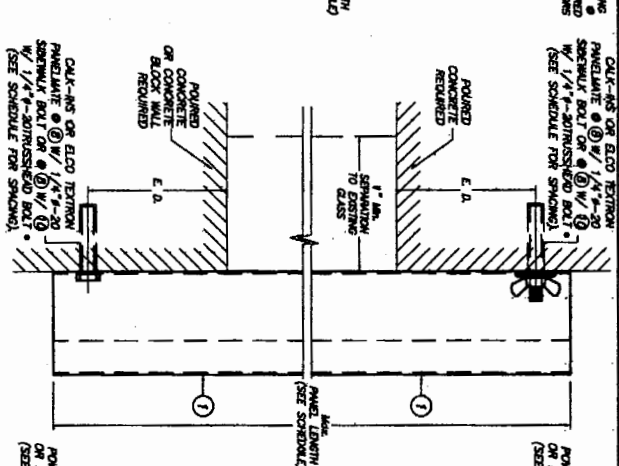
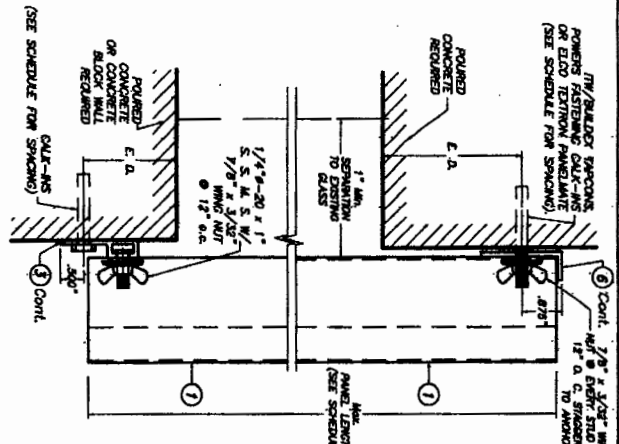


TILECO INC.
TILT TESTING & ENGINEERING COMPANY
1300-1500 W. PALM BLVD.
WEST PALM BEACH, FL 33411
WALTER A. TILLET, P. E.
FLORIDA LIC. # 54187

CLEAR BERTHA STORM PANEL		DATE	9/7/05
EASTERN METAL SUPPLY, INC		DRAWN BY	M.C.V./S.M.
4500 WEST PALM BLVD.		CHECKED BY	
WEST PALM BEACH, FL 33407		DATE	05-276
DRAWING NO.		SCALE	1/4" = 1'
SHEET 14 OF 4			

F.B.C.(Non High Velocity Hurricane Zone)



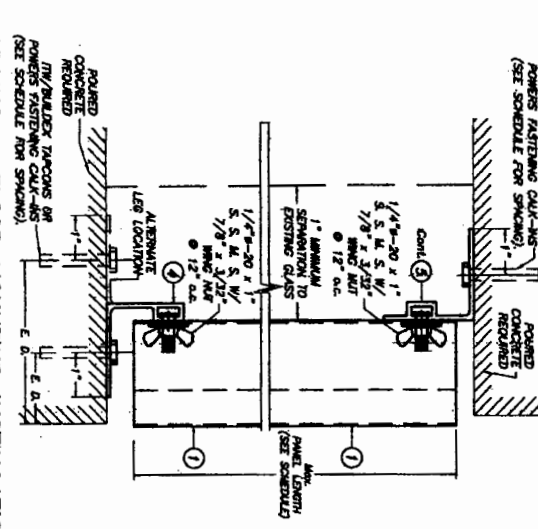


WALL MOUNTING INSTALLATION SECTION 1
SCALE: 3/8" = 1"

WALL MOUNTING INSTALLATION (D.M.) SECTION 2
SCALE: 3/8" = 1"

BUILD OUT INSTALLATION SECTION 3
SCALE: 3/8" = 1"

CEILING & FLOOR MOUNTING INSTALLATION SECTION 4
SCALE: 3/8" = 1"



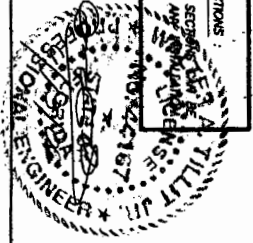
CEILING & FLOOR MOUNTING INSTALLATION SECTION 5
SCALE: 3/8" = 1"

SEE WALL BRITS ARE 3/4" DIA. / 2" THICK AND WING NUTS ARE 1/2" DIA. / 1" THICK AS PER NOTES A1 & B1 (SHEET 1)

TRUSS HEAD BOLTS ARE 1/2" DIA. / 8" THICK AS PER NOTES A2 & B2 (SHEET 1)

E. D. = EDGE DISTANCE (SEE SCHEDULE ON SHEET 3 OF 4)

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



TILECO INC.
TILT TESTING & ENGINEERING COMPANY
1000 WEST PALM BEACH DRIVE
WEST PALM BEACH, FL 33407
TEL: (407) 833-1111
FAX: (407) 833-1112
WWW.TILECO.COM

CLEAR BERTHA STORM PANEL		F.B.C. (Non High Velocity Hurricane Zone)	
EASTERN METAL SUPPLY, INC		DRAWING BY	
9/7/05		DATE	
05-276		DRAWING NO.	
SHEET 2 OF 4			

MAXIMUM DESIGN PRESSURE RATING 7/2" (G.A.F.) WITH CORRESPONDING MAXIMUM PANEL LENGTH 7' (E.L.) AND CORRESPONDING ANCHOR SPACING 3" (M.) SCHEDULE FOR INSTALLATIONS IN CONCRETE, CONCRETE BLOCK AND WOOD FRAME STRUCTURES *

MAXIMUM DESIGN PRESSURE RATING W (G.A.F.)	MAX. PANEL LENGTH (E.L.) - CLEAR LEAD FROM STORM PANEL	ANCHOR SPACING 3" (M.)			
		SECTION 4 (BOTTOM)	SECTIONS 2, 3 & 5 (TOP/BOTTOM) & SECTION 4 (TOP)	SECTION 1 (TOP)	SECTION 1 (TOP)
+28.0, -28.0	10'-0"	7"	12"	12"	12"
+28.0, -30.0	9'-8"	7"	12"	12"	12"
+30.0, -35.0	8'-11"	7"	12"	12"	12"
+35.0, -40.0	8'-4"	7"	12"	12"	12"
+40.0, -45.0	7'-11"	7"	12"	12"	12"
+45.0, -50.0	7'-8"	7"	12"	12"	12"
+50.0, -55.0	7'-2"	7"	12"	12"	12"
+55.0, -60.0	6'-10"	7"	12"	12"	12"
+60.0, -65.0	6'-7"	7"	12"	12"	12"
+65.0, -70.0	6'-3"	7"	12"	12"	12"
+70.0, -75.0	5'-10"	7"	12"	12"	12"
+75.0, -80.0	5'-6"	7"	12"	12"	12"
+80.0, -85.0	5'-2"	7"	12"	12"	12"
+85.0, -90.0	4'-11"	7"	12"	12"	12"
+90.0, -95.0	4'-8"	7"	12"	12"	12"
+95.0, -100.0	4'-5"	7"	12"	12"	12"
+100.0, -105.0	4'-2"	7"	12"	12"	12"
+105.0, -110.0	4'-0"	7"	12"	12"	12"

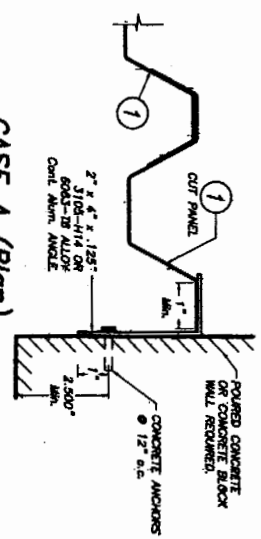
* MIN. PANEL LENGTH IS 3'-0"

** MAXIMUM ANCHOR SPACINGS ARE VALID FOR 3 1/2" EDGE DISTANCE FOR E. D. LESS THAN 3 1/2". REDUCE ANCHOR SPACING BY ALTERING SPACING SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS: (NOTE: MIN. E. D. FOR CALC-IN ANCHORS IS 2 1/2"). FOR THIS OPERATION TO BE PERFORMED, REDUCED ANCHOR SPACING MUST BE PROVIDED BE LESS THAN MAXIMUM SPACING INDICATED FOR EACH ANCHOR TYPE AT ANCHORS LEGEND.

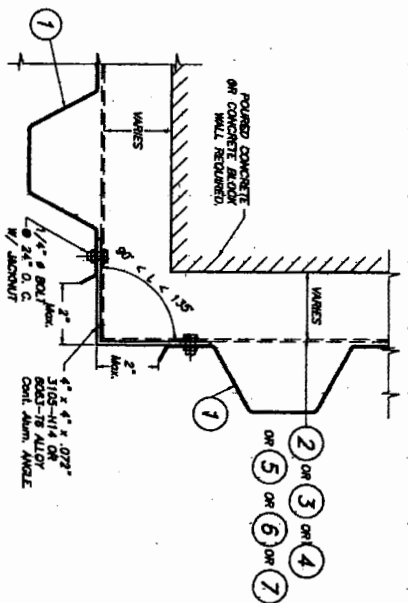
ACTUAL E. D.	FACTOR	
	THROU/PANELS	CALC-IN
3"	.86	.75
2 1/2"	.71	.50
2"	.50	-

ANCHORS LEGEND

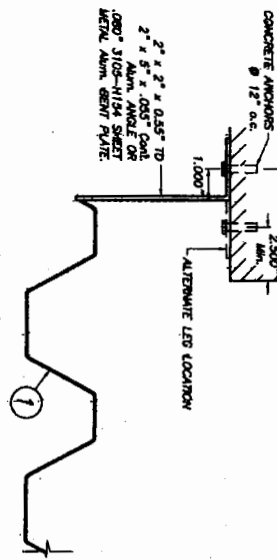
ANCHOR TYPE	MIN. ANCHOR SPACING
THROU/PANELS	3.0"
CALC-IN	2.5"



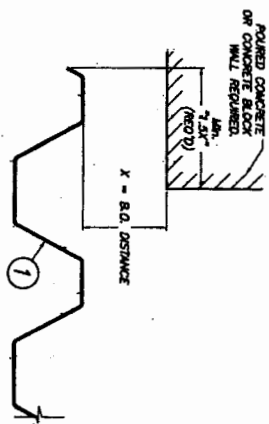
CASE A (Plan)
SCALE: 1/4" = 1'



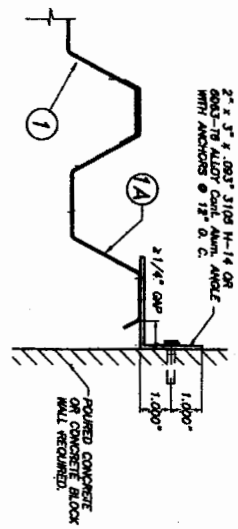
CASE B (Plan)
SCALE: 1/4" = 1'



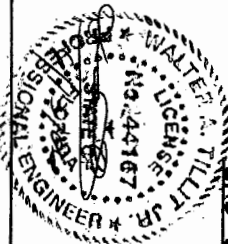
CASE C (Plan)
SCALE: 1/4" = 1'



CASE D (Plan)
SCALE: 1/4" = 1'



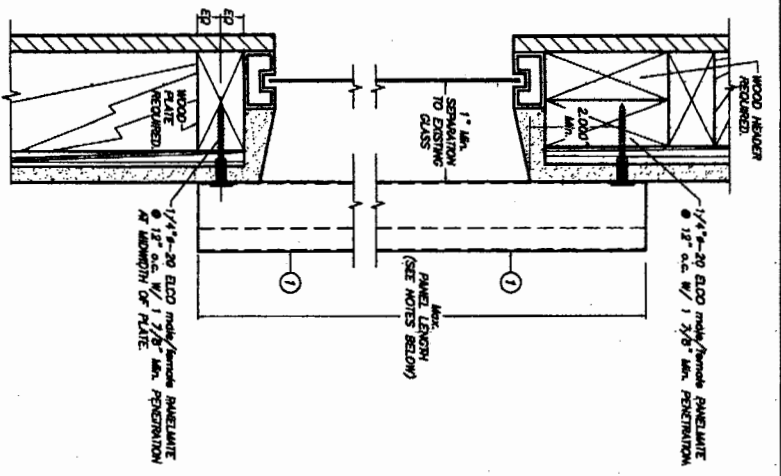
CASE E (Plan)
SCALE: 1/4" = 1'



TILECO INC.
TILE TESTING & ENGINEERING COMPANY
1000 W. PALM BEACH BLVD., SUITE 100
WEST PALM BEACH, FL 33407
TEL: 561-832-7770
FAX: 561-832-7771
WALTER A. TILT, P.E.
FLORIDA LICENSE # 24167

EASTERN METAL SUPPLY, INC.
4800 WEST HOUSS DRIVE
WEST PALM BEACH, FL 33407
DRAWING No. 05-276
DATE 9/27/05
SHEET 3 OF 4

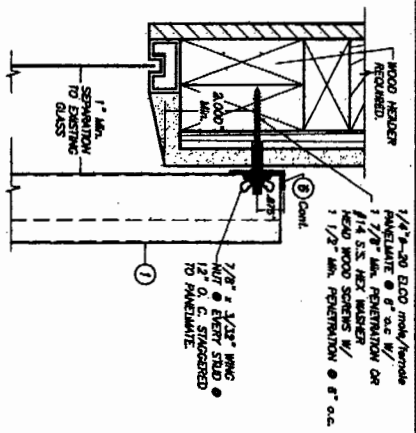
E.B.C. (Non High Velocity Hurricane Zone)
CLEAR BERTHA STORM PANEL



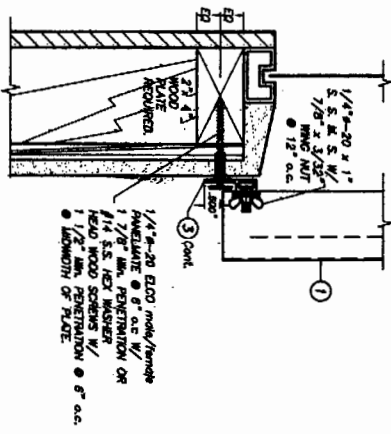
**WALL MOUNTING (D.M.)
ALTERNATIVE 1**

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

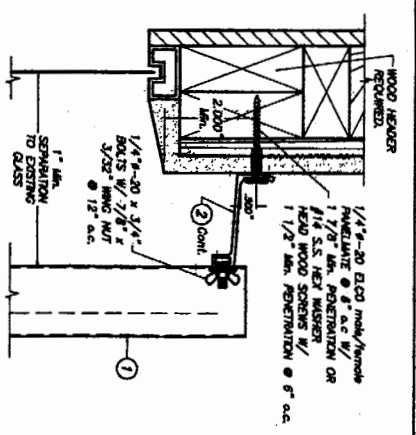
- NOTES:**
1. INSTALLATION ARE ONLY VALID FOR WIND LOADS AND PANEL'S LENGTHS AS PER SCHEDULE SHOWN ON SHEETS 3 OF 4.
 2. FOR WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.



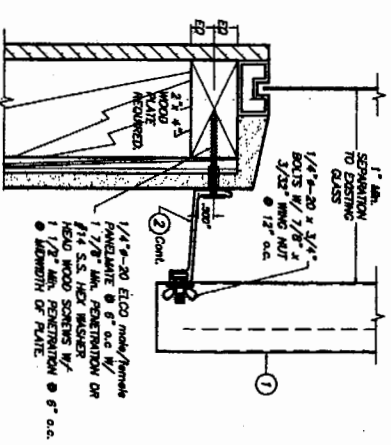
**WALL MOUNTING INSTALLATION
ALTERNATIVE 2**



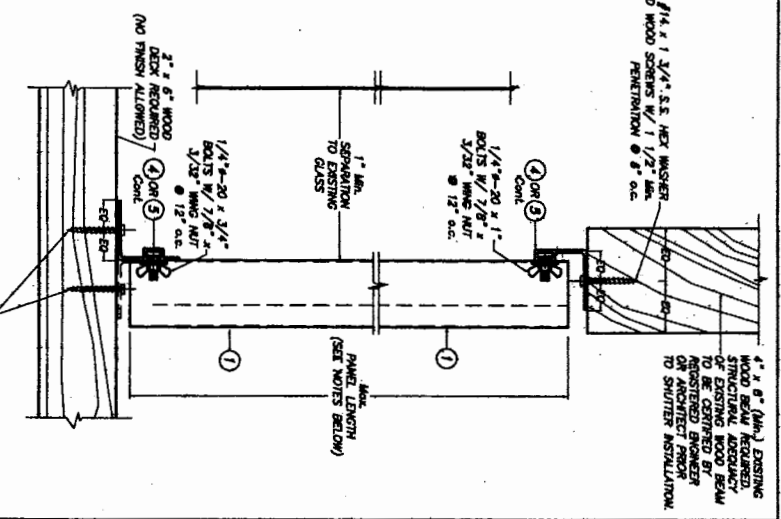
**WALL MOUNTING INSTALLATION
ALTERNATIVE 3**



**BUILD OUT INSTALLATION
ALTERNATIVE 4**



**BUILD OUT INSTALLATION
ALTERNATIVE 5**



**CEILING & FLOOR MOUNTING INSTALLATION
ALTERNATIVE 6**

INSTALLATION DETAILS ON EXISTING WOOD BUILDINGS



TITECO INC.
MULTI TESTING & ENGINEERING COMPANY
1000 WEST PALM BEACH BLVD., SUITE 100
WEST PALM BEACH, FL 33411
TEL: 561-833-1177
FAX: 561-833-1178
WWW.TITECO.COM

CLEAR BERTHA STORM PANEL		DRAWN BY: M.C.V.	
EASTERN METAL SUPPLY, INC.		DATE: 8/7/05	
4500 WEST PALM DRIVE WEST PALM BEACH, FL 33407		DRAWING NO: 05-276	
REV. NO.	DESCRIPTION	DATE	BY
1	REVISED	8/7/05	M.C.V.
2	REVISED	8/7/05	M.C.V.
3	REVISED	8/7/05	M.C.V.
4	REVISED	8/7/05	M.C.V.
SHEET 4 OF 4			

F.B.C.(Non High Velocity Hurricane Zone)