

GENERAL NOTES:

1. STORM PANEL SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2007 EDITION OF THE FLORIDA BUILDING CODE.
THIS STORM PANEL SHALL **NOT** BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES (MIAMI-DADE / BROWARD COUNTIES). DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1609 OF THE ABOVE MENTIONED CODE, FOR A 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 7-05 STANDARD. 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 AMERICAN TEST LAB REPORTS # 0321.01-05, # 0812.01-05 AND # 0119.01-06, PER ASTM E 1886-02, E 1996-02 AND ASTM E-330 STANDARDS, QUALIFIED FOR WIND ZONES 1, 2 AND 3; MISSILE TYPE D (BASIC PROTECTION ONLY) AND FOR INSTALLATION AT NON ESSENTIAL FACILITIES AS DEFINED BY SECTIONS 6.2.1.1 AND 6.2.1.2 OF ASTM E 1996-02.

- 2. ALL ALUMINUM SHEET METAL PANELS SHALL HAVE 5052-H32 OR 3004-H34 ALLOY.
- 3. ALL ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ASSOCIATION 6063-T6 ALLOY & TEMPER UNLESS OTHERWISE NOTED. STORM PANEL COMPONENTS (4) STUCCO PLATE AND (5) 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.
- 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)

- 1/4"Ø TAPCON ANCHORS AS MANUFACTURED BY I.T.W./BUILDEX.
- 1/4"Ø S.G. TAPCONS AS MANUFACTURED BY ITW/ BUILDEX.
- 1/4"Ø PANEL MATES ANCHORS MALE OR TVAS AS MANUFACTURED BY ELCO FASTENING SYSTEMS LLC.
- 1/4"Ø X 3/4" SOLID SET ANCHORS, AS DISTRIBUTED BY ALL POINTS SCREW, BOLT & SPECIALTY COMPANY.

NOTES:

- A.1) MINIMUM EMBEDMENT INTO POURED CONCRETE OF TAPCON ANCHORS AND S.G. TAPCONS IS 1 3/4"; FOR ELCO PANELMATE AND ELCO TVAS IS 2".
- A.2) 3/4"Ø SOLID SET 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) 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./BUILDEX.
- 1/4"Ø S.G. TAPCONS AS MANUFACTURED BY ITW/ BUILDEX.
- 1/4"Ø PANEL MATES ANCHORS MALE OR TVAS AS MANUFACTURED BY ELCO FASTENING SYSTEMS LLC.
- 1/4"Ø x 3/4" SOLID SET ANCHORS, AS DISTRIBUTED BY ALL POINTS SCREW, BOLT & SPECIALTY COMPANY.

NOTES:

- B.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS, S.G. TAPCONS, ELCO PANELMATE, ELCO TVAS. INTO THE CONCRETE BLOCK UNIT SHALL BE 1 1/4".
- B.2) -3/4"Ø SOLID SET 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) 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.

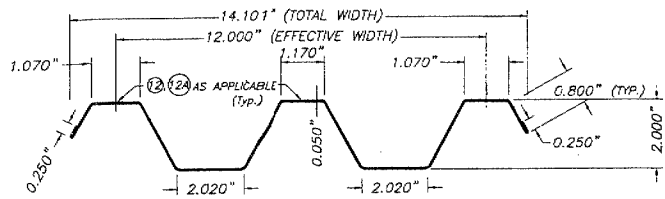
(C) TO EXISTING WOOD FRAME BUILDINGS, SEE SPECIFICATIONS ON SHEETS 12, 13, 14 & 15. ANCHORAGE SHALL BE PERFORMED BEYOND ANY FINISH MATERIAL AT WALL LIKE BRICK VENEER, STUCCO OR ANY OTHER FINISH.

(D) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.

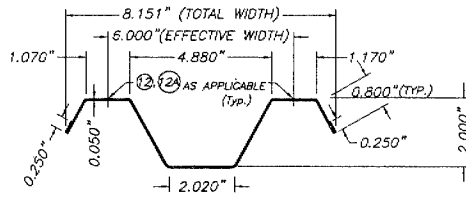
- 7. PANELS MAY ALSO BE INSTALLED HORIZONTALLY FOLLOWING INSTALLATION DETAILS SHOWN ON SECTIONS 1 THRU 13 (SHEET 4 THRU 8) EXCEPT THAT HEADERS 2, 3, 3A & 4 SHALL NOT BE USED.
- 8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE SHUTTER IS TO BE ATTACHED 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. (a) THIS P.E.D. PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.
(b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT, BASED ON THIS P.E.D. PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.
(c) THIS P.E.D. WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.
(d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A 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 1714.8.3 OF FLORIDA BUILDING CODE. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABELING TO COMPLY WITH SECTION 1714.8.2 OF THE FLORIDA BUILDING CODE.



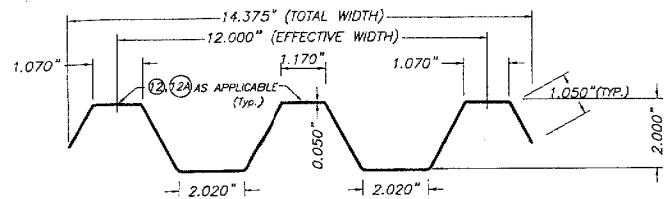
© 2008 TILTECO, INC.		F.B.C. (Non High Velocity Hurricane Zone)			
<p>TILLIT TESTING & ENGINEERING COMPANY 4268 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone: (561)971-1530, Fax: (561)971-1531 EB-0006719 WALTER A. TILLIT JR., P.E. FLORIDA Lic. 44167</p>		0.050" BERTHA ALUMINUM STORM PANEL (2.00" DEEP)	M.C.V./P.E. DRAWN BY: 05/12/08 DATE:		
		EASTERN METAL SUPPLY, INC 4268 WEST ROADS DRIVE WEST PALM BEACH, FL 33407 PHONE: (561)208-8263, FAX: (561)941-1716	08-146 DRAWING No.		
REV. NO	DESCRIPTION	DATE	REV. NO	DESCRIPTION	DATE
1	OLD 08-146	05/12/08	2		
2			4		
SHEET 1 OF 17					



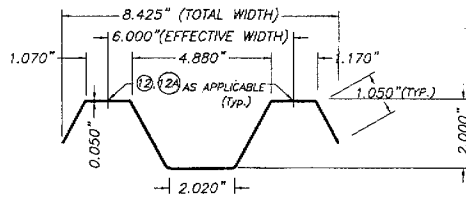
FULL PANEL W/ HEMMED EDGES



HALF PANEL W/ HEMMED EDGES

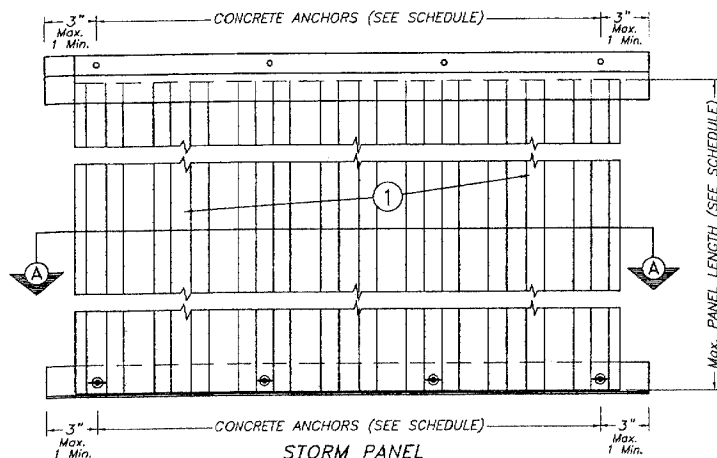


OPTIONAL FULL PANEL W/O HEMMED EDGES



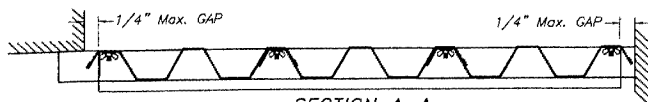
OPTIONAL HALF PANEL W/O HEMMED EDGES

① STORM PANEL
SCALE: 1/4" = 1'



STORM PANEL
TYPICAL ELEVATION

N. T. S.



SECTION A-A

N. T. S.

**MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND
CORRESPONDING MAXIMUM PANEL LENGTH "L" SCHEDULE**

**PANELS RETAINED AT BOTH
ENDS WITH TRACKS**

⑤⑥⑦⑧⑨⑩⑪⑬

OR DIRECT MOUNTED *

MAXIMUM DESIGN PRESSURE RATING W (p.s.f.)	Max. PANEL LENGTH L (ft.)
+30.0, -30.0	13'-0"
+35.0, -35.0	12'-8"
+40.0, -40.0	12'-4"
+45.0, -45.0	12'-0"
+50.0, -50.0	11'-0"
+55.0, -55.0	10'-0"
+60.0, -60.0	9'-4"
+70.0, -70.0	8'-0"
+80.0, -80.0	7'-0"
+90.0, -90.0	6'-3"
+90.0, -100.0	5'-7"
+90.0, -110.0	5'-1"
+90.0, -120.0	4'-8"
+90.0, -130.0	4'-0"

**PANELS RETAINED AT LEAST
IN ONE OF THEIR ENDS**

WITH TRACKS

②③④ OR ④*

MAXIMUM DESIGN PRESSURE RATING W (p.s.f.)	Max. PANEL LENGTH L (ft.)
+30.0, -30.0	13'-0"
+35.0, -35.0	12'-0"
+40.0, -40.0	11'-3"
+45.0, -45.0	10'-0"
+50.0, -50.0	9'-0"
+55.0, -55.0	8'-2"
+60.0, -60.0	7'-6"
+70.0, -70.0	6'-5"
+80.0, -80.0	5'-8"
+90.0, -90.0	5'-0"
+90.0, -100.0	5'-0"
+90.0, -110.0	5'-0"
+90.0, -120.0	4'-9"
+90.0, -130.0	4'-4 1/2"

*** NOTE:**

MAX. DESIGN LOAD & MAXIMUM PANEL LENGTH FOR INTERNALLY REMOVABLE PANELS AS PER MOUNTING INSTALLATIONS ON SHEET 7 OF 17 IS + 50.0, - 50.0 p.s.f. W/ 88" MAX. PANEL LENGTH.

MAX. DESIGN LOAD & MAXIMUM PANEL LENGTH FOR MOUNTING AS PER ALTERNATIVE #11 AND 14 ON SHEET 14A AND 15 OF 17, RESPECTIVELY, ARE +50.0, -60.0 p.s.f. FOR 78" MAX. PANEL LENGTH AND +50.0, -50.0 p.s.f. FOR UP TO 108" PANEL LENGTH.

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

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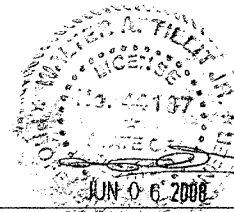
TILIT TESTING & ENGINEERING COMPANY
6355 N.W. 36th St., Ste. 305, VINCENNA GARDENS, FL 33156
Phone: (305)871-1530 Fax: (305)871-1531
EB-0005719
WALTER A. TILIT Jr., P.E.
FLORIDA Lic. 44167

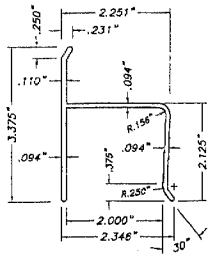
0.050" BERTHA ALUMINUM STORM PANEL
(2.00" DEEP)

EASTERN METAL SUPPLY, INC
4268 WEST ROADS DRIVE
WEST PALM BEACH, FL 33407
PHONE: (561)209-8283, FAX: (561)841-1716

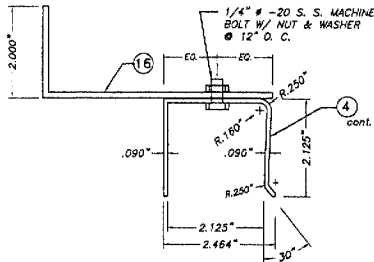
REV. NO	DESCRIPTION	DATE	REV. NO	DESCRIPTION	DATE
1	OLD 08-14P	05/12/08	2		

M.G.V./P/E.R.
DRAWN BY:
05/12/08
DATE:
08-146
DRAWING NO
SHEET 2 OF 17

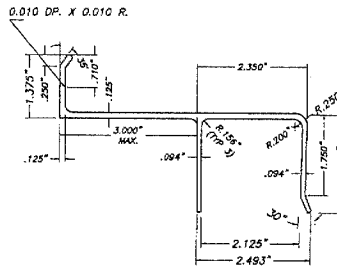




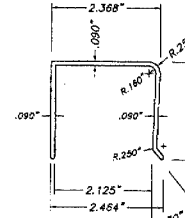
② "h" HEADER
SCALE: 3/8" = 1"



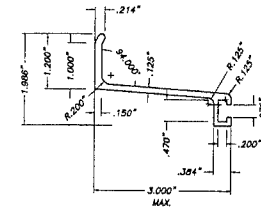
③ 3" Max. "U" BUILD OUT
SCALE: 3/8" = 1"



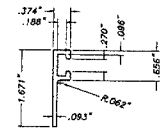
③A OPTIONAL 3" Max. "U" BUILD OUT HEADER
SCALE: 3/8" = 1"



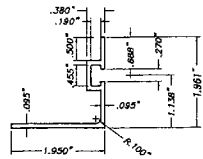
④ "U" HEADER
SCALE: 3/8" = 1"



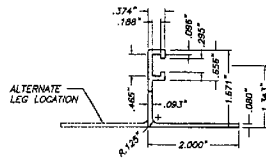
⑤ 3" MAX. ANGLE BUILD OUT BRACKET
SCALE: 3/8" = 1"



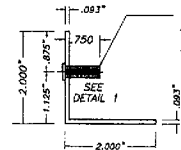
⑥ "F" TRACK
SCALE: 3/8" = 1"



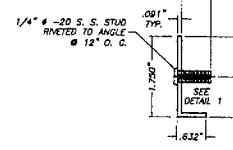
⑦ REVERSED "F" ANGLE TRACK
SCALE: 3/8" = 1"



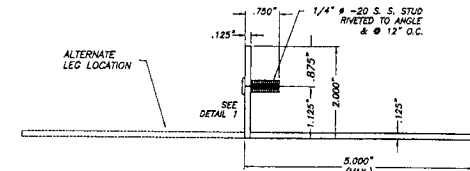
⑧ "F" TRACK ANGLE
SCALE: 3/8" = 1"



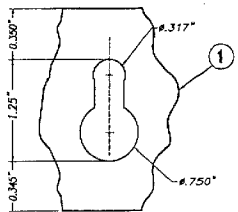
⑨ STUDDED ANGLE
6063-T5 ALUM. ALLOY
SCALE: 3/8" = 1"



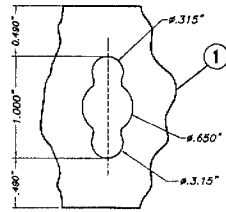
⑩ MINI WALL 1.75"x0.632" ANGLE WITH STUD
SCALE: 1/2" = 1"



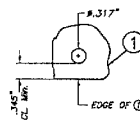
⑪ 2"x5" (MAX.)x1/8" ANGLE WITH STUD
SCALE: 3/8" = 1"



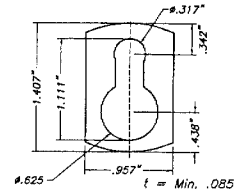
LARGE KEY HOLE (OPTION 1)
SCALE: 3/8" = 1"



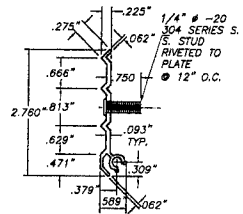
SMALL KEY HOLE (OPTION 2)
SCALE: 3/8" = 1"



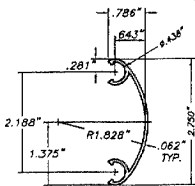
⑫A ROUND HOLE AT PANEL



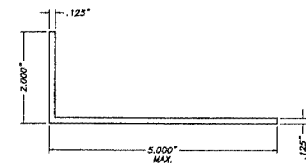
⑬ KEY HOLE WASHER
3105-H194 ALUM. ALLOY
SCALE: 3/4" = 1"



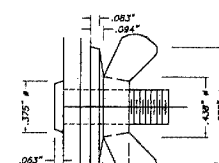
⑭ STUDDED PLATE
6063-T8 ALLOY
SCALE: 3/8" = 1"



⑮ SNAP CAP
6063-T8 ALLOY
SCALE: 3/8" = 1"

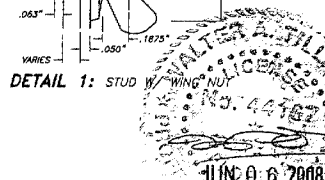


⑯ B.O. ANGLE
SCALE: 3/4" = 1"



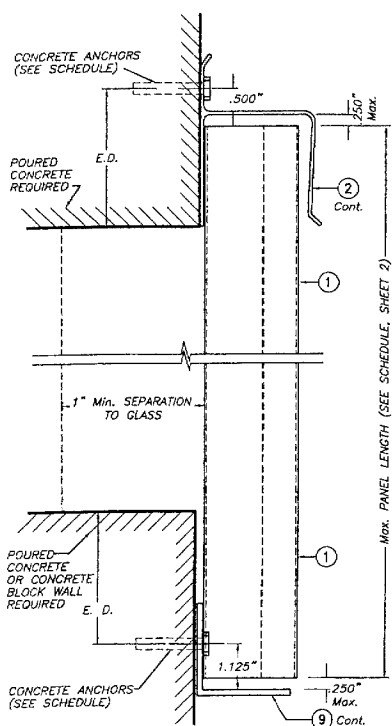
DETAIL 1: STUD W/ WING NUT

COMPONENTS

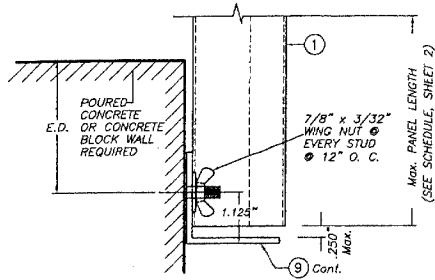


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 WALTER A. TILIT, JR., P.E.
 FLORIDA Lic. 44167

0.050" BERTHA ALUMINUM STORM PANEL (2.00" DEEP)		M.C.V./R.E. DRAWN BY:
EASTERN METAL SUPPLY, INC 4288 WEST ROADS DRIVE WEST PALM BEACH, FL 33407 PHONE: (561)209-8283, FAX: (561)841-1716		05/12/08 DATE:
REV. NO. DESCRIPTION DATE REV. No. DESCRIPTION DATE		08-146 DRAWING No.
1	OLD 06-169 03/12/08	3
2		



SECTION @ ANCHOR

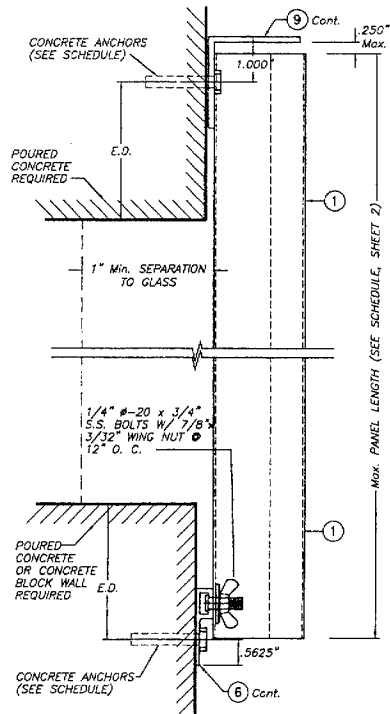


SECTION @ STUD

WALL MOUNTING INSTALLATION
SECTION 1

SCALE: 1/2" = 1"

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



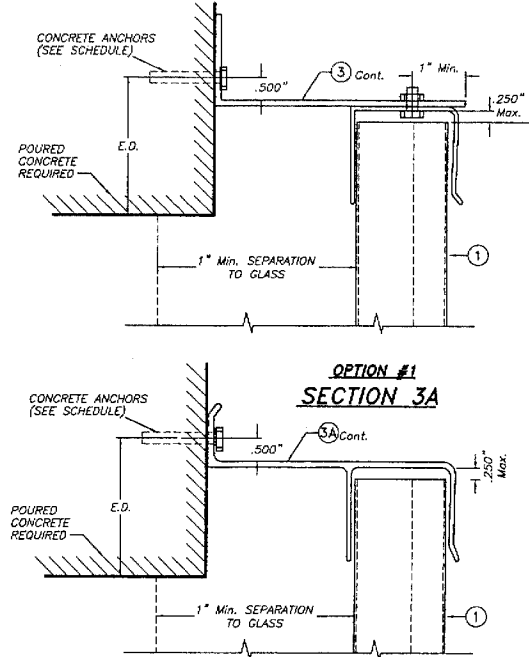
WALL MOUNTING INSTALLATION
SECTION 2

SCALE: 1/2" = 1"

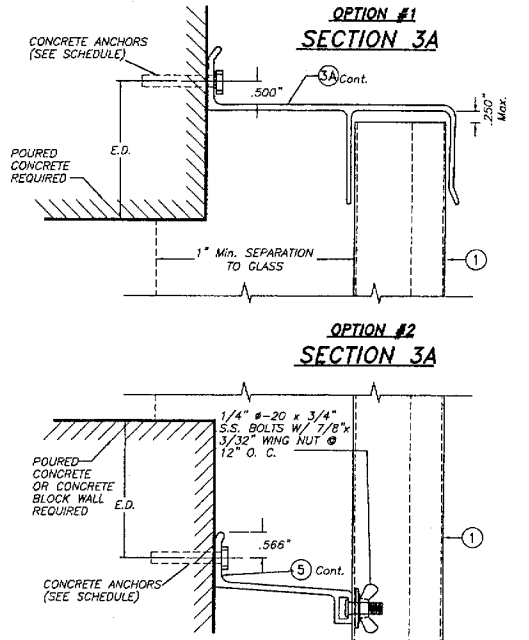
1/4" #20 x 3/4" S.S. BOLTS W/ 7/8" 3/32" WING NUT @ 12" O. C.

E. D. = EDGE DISTANCE (SEE SCHEDULE ON SHEETS 9 & 10 & 11)

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



OPTION #1
SECTION 3A

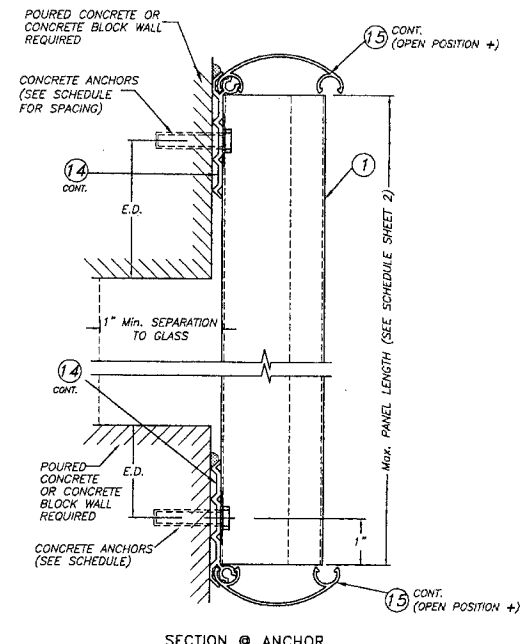


OPTION #2
SECTION 3A

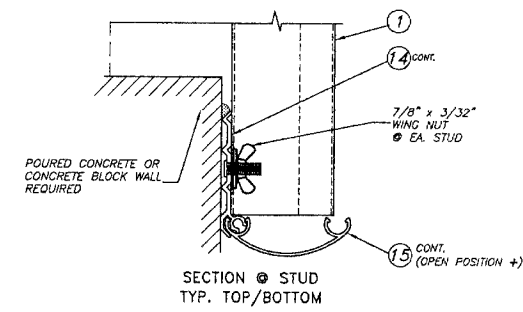
BUILD OUT INSTALLATION
SECTION 3

SCALE: 1/2" = 1"

+ NOTE: SNAP CAP (15) TO REMAIN CLOSED AT NON HURRICANE CONDITIONS.



SECTION @ ANCHOR



SECTION @ STUD TYP. TOP/BOTTOM

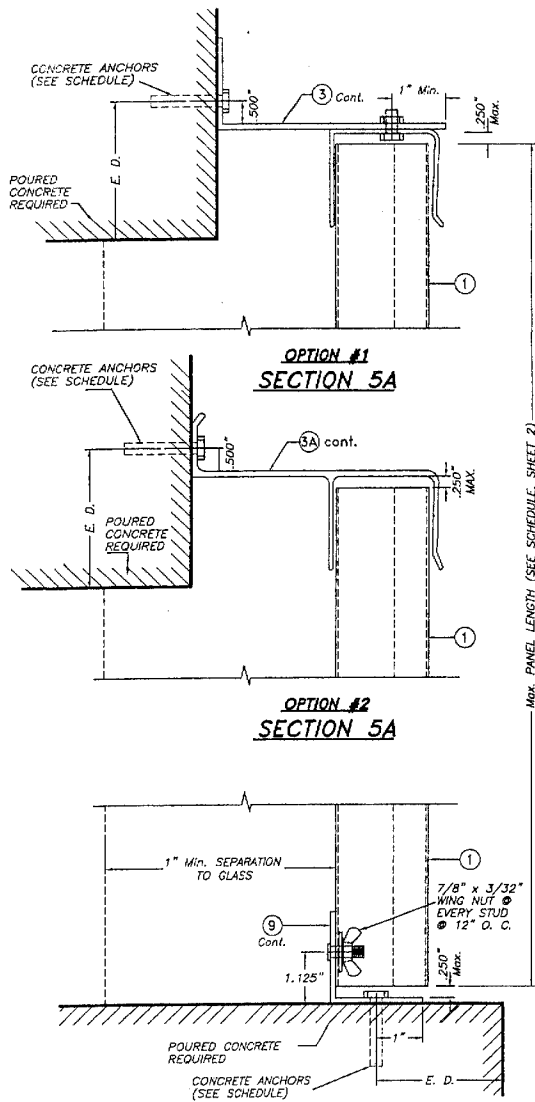
WALL MOUNTING INSTALLATION
SECTION 4

SCALE: 1/2" = 1"



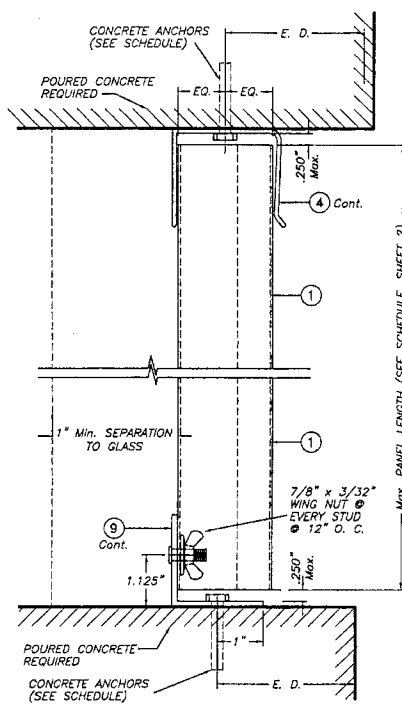
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Phone: (305) 971-1230, Fax: (305) 971-1131
EB-0006719
WALTER A. TILLIT JR., P.E.
FLORIDA Lic. 44167

F.B.C. (Non High Velocity Hurricane Zone)		M.C.V./R.E.	
0.050" BERTHA ALUMINUM STORM PANEL (2.00" DEEP)		DRAWN BY:	
EASTERN METAL SUPPLY, INC		05/12/08	
426B WEST ROADS DRIVE		DATE:	
WEST PALM BEACH, FL 33407		08-146	
PHONE: (561) 209-8253, FAX: (561) 841-1716		DRAWING No	
REV. NO	DESCRIPTION	DATE	REV. No
1	OLD 08-169	05/12/08	2
2			2



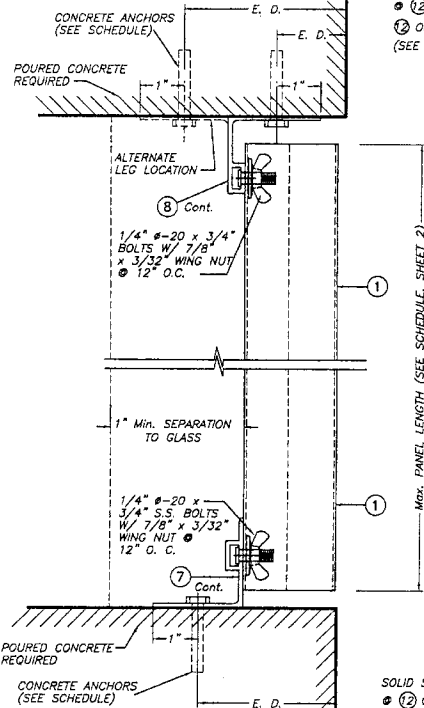
**BUILD-OUT & FLOOR MOUNTING
INSTALLATION - SECTION 5**

SCALE : 1/2" = 1"



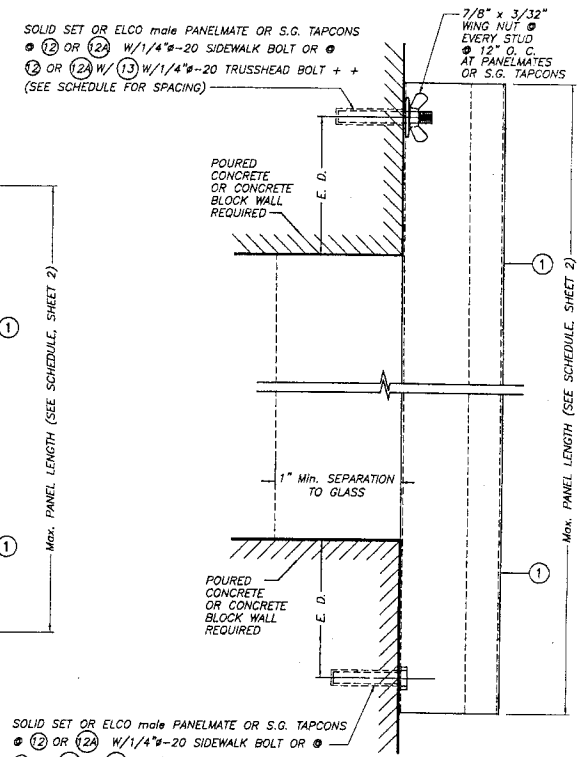
**CEILING & FLOOR MOUNTING
INSTALLATION - SECTION 6**

SCALE : 1/2" = 1"



**CEILING & FLOOR MOUNTING
INSTALLATION - SECTION 7**

SCALE : 1/2" = 1"



**DIRECT WALL MOUNTING INSTALLATION (D. M.)
- SECTION 8**

SCALE : 1/2" = 1"

E. D. = EDGE DISTANCE
(SEE SCHEDULE ON
SHEETS 9 & 10 & 11)

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

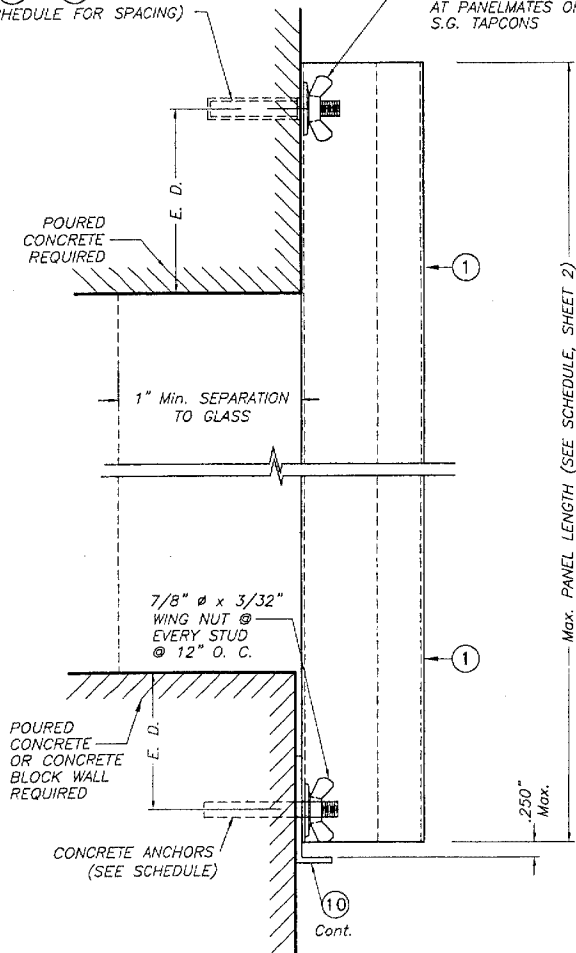


©2008 TILTECO, INC.		0.050" BERTHA ALUMINUM STORM PANEL (2.00" DEEP)		M.C.V./R.E. DRAWN BY:	
		EASTERN METAL SUPPLY, INC		05/12/08 DATE:	
		4268 WEST ROADS DRIVE WEST PALM BEACH, FL 33407 PHONE: (561)209-0263, FAX: (561)841-1716		08-146 DRAWING No	
REV. NO	DESCRIPTION	DATE	REV. NO	DESCRIPTION	DATE
1	OLD 05-169	05/12/08	2		
2			4		

SOLID SET OR ELCO male PANELMATE OR S.G. TAPCONS

⊙ (12) OR (12A) W/1/4"Ø-20 SIDEWALK BOLT OR ⊙
 (12) OR (12A)W/(13) W/1/4"Ø-20 TRUSSHEAD BOLT + +
 (SEE SCHEDULE FOR SPACING)

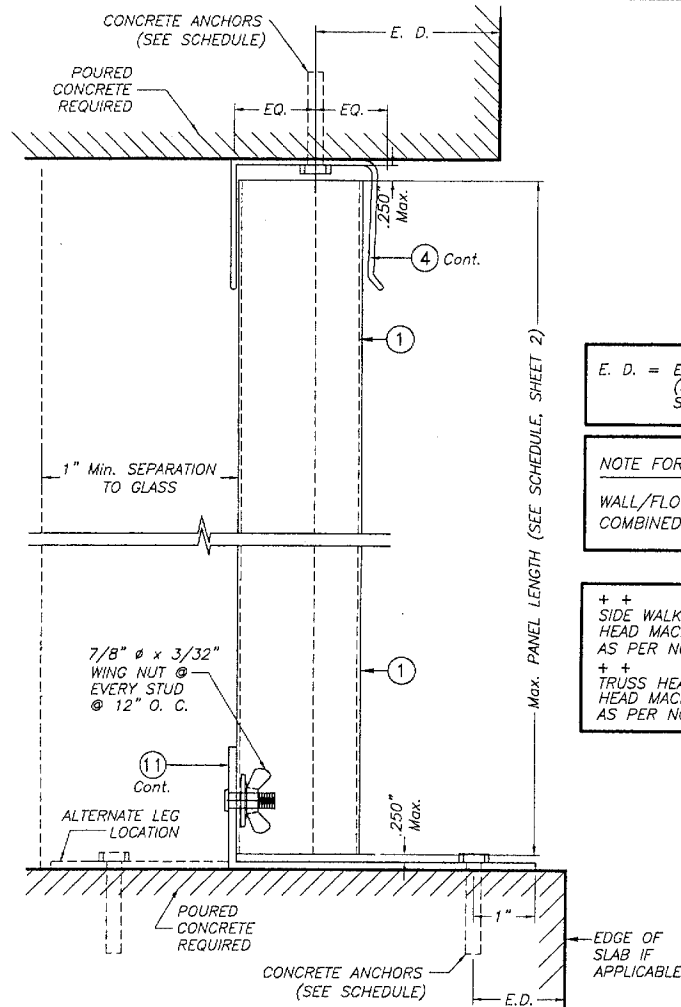
7/8"Ø x 3/32"
 WING NUTS @ 12" O.C.
 AT PANELMATES OR
 S.G. TAPCONS



WALL MOUNTING INSTALLATION

SECTION 9

SCALE : 1/2" = 1"



CEILING & FLOOR MOUNTING INSTALLATION

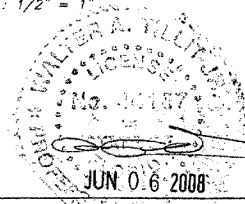
SECTION 10

SCALE : 1/2" = 1"

E. D. = EDGE DISTANCE
 (SEE SCHEDULE ON
 SHEETS 9 & 10 & 11)

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

+ +
 SIDE WALK BOLTS ARE 3/4"Øx3/32"THICK
 HEAD MACHINE SCREW W/LENGTH
 AS PER NOTES A.2 & B.2 (SHEET 1)
 + +
 TRUSS HEAD BOLTS ARE 1/2"Øx1/8"THICK
 HEAD MACHINE SCREW W/LENGTH
 AS PER NOTES A.2 & B.2 (SHEET 1)

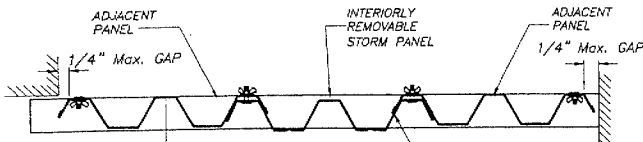


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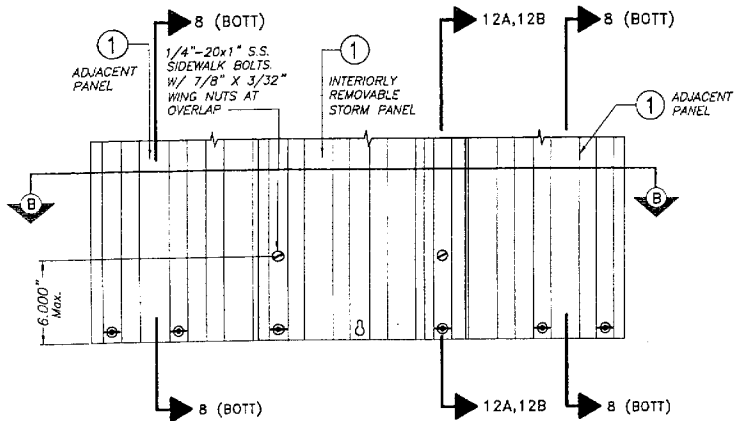
TILLIT TESTING & ENGINEERING COMPANY
 3255 S.W. 36th St., Ste 305, VINCENNA GARDENS, FL 33516
 Phone: (305)871-1530 Fax: (305)871-1531
 EB-0006719
 WALTER A. TILLIT JR., P.E.
 FLORIDA Lic. 44187

0.050" BERTHA ALUMINUM STORM PANEL (2.00" DEEP)		M.C.V./P.E. DRAWN BY:
EASTERN METAL SUPPLY, INC		05/12/08 DATE:
2268 WEST ROADS DRIVE WEST PALM BEACH, FL 33407 PHONE: (561)209-8263, FAX: (561)841-1716		08-146 DRAWING No
REV. NO	DESCRIPTION	DATE
1	OLD 08-169	05/12/08
2		



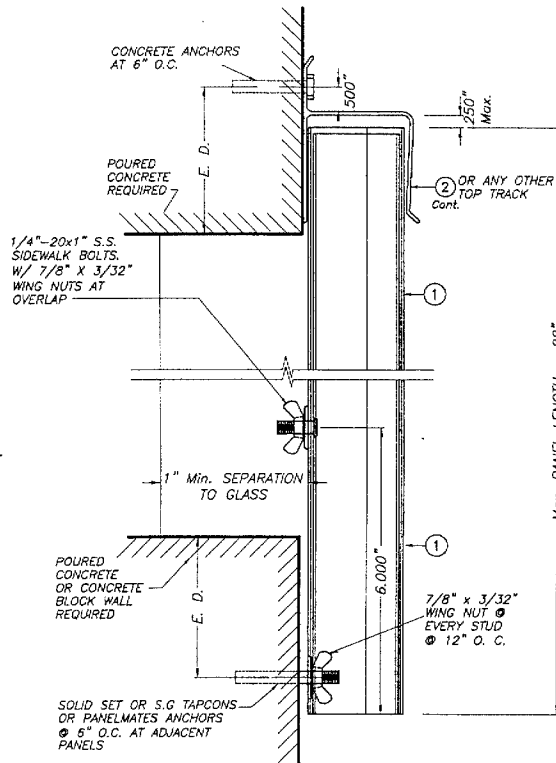
SECTION B-B

SCALE : 1 1/2" = 1"



**INTERIORLY REMOVABLE STORM PANEL
PARTIAL ELEVATION**

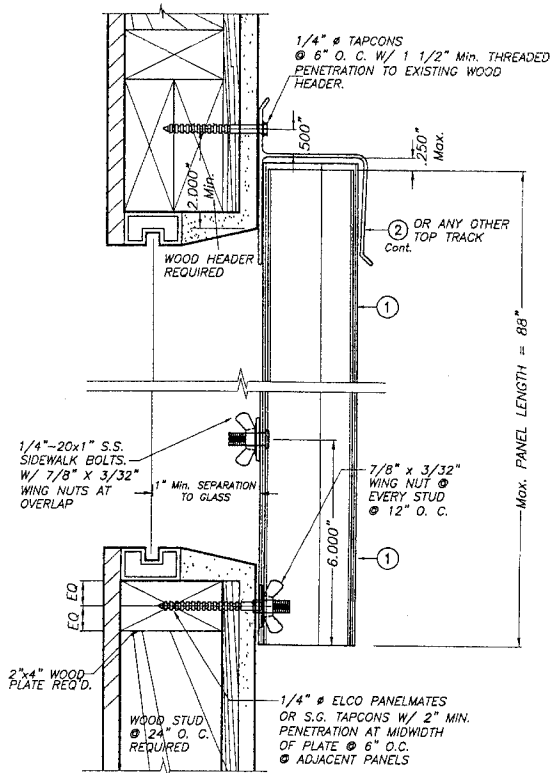
SCALE : 1 1/2" = 1"



WALL MOUNTING INSTALLATION

SECTION 12A

SCALE : 1/2" = 1"



WALL MOUNTING INSTALLATION

SECTION 12B

SCALE : 1/2" = 1"



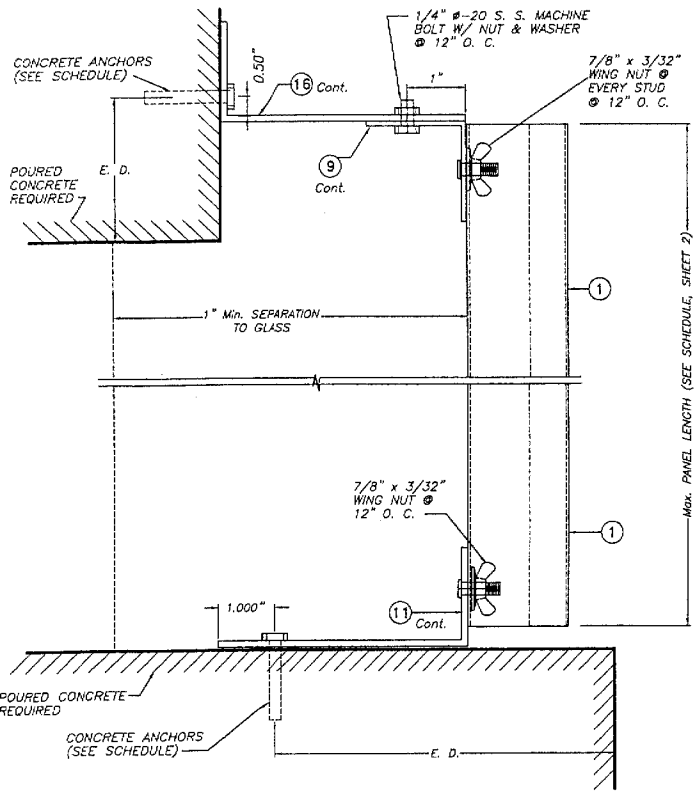
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TILTECO INC.

TILIT TESTING & ENGINEERING COMPANY
 4268 WEST ROADS DRIVE
 WEST PALM BEACH, FL 33407
 PHONE: (561)209-8263, FAX: (561)841-1716
 EB-0006719
 WALTER A. TILIT JR., P.E.
 FLORIDA Lic. 44167

0.050" BERTHA ALUMINUM STORM PANEL (2.00" DEEP)		M.C.V./R.E. DRAWN BY:
EASTERN METAL SUPPLY, INC		05/12/08 DATE:
4268 WEST ROADS DRIVE WEST PALM BEACH, FL 33407 PHONE: (561)209-8263, FAX: (561)841-1716		08-146 DRAWING No
REV. NO	DESCRIPTION	DATE
1	OLD OR-119	05/12/08
2		

MAX. DESIGN LOAD = +50.0, -50.0 p.s.f.

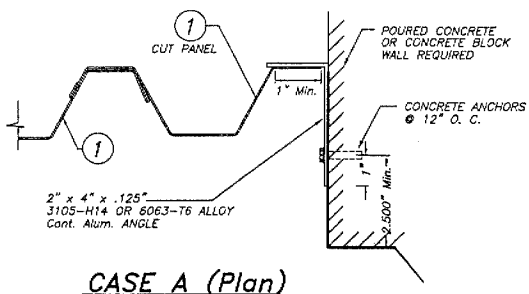


**CEILING & FLOOR MOUNTING
INSTALLATION - SECTION 13**

SCALE: 1/2" = 1"

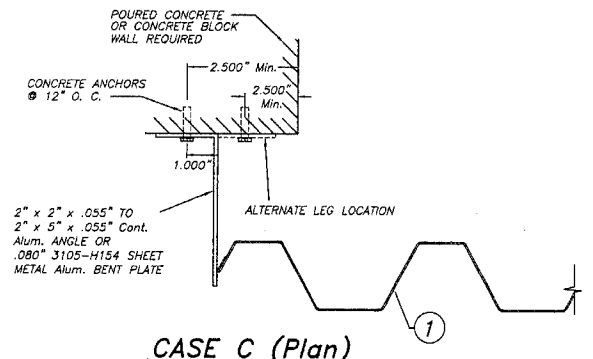
E. D. = EDGE DISTANCE
(SEE SCHEDULE ON
SHEETS 9, 10 & 11)

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



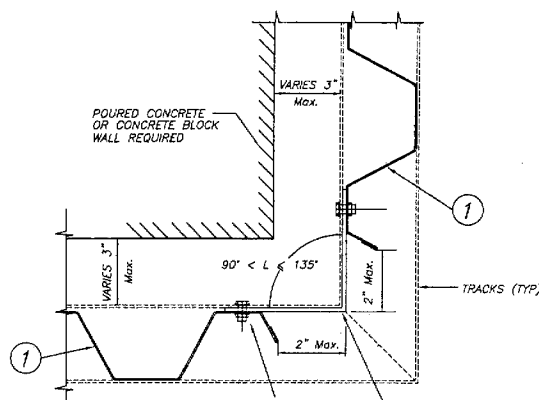
CASE A (Plan)

SCALE: 1/4" = 1"



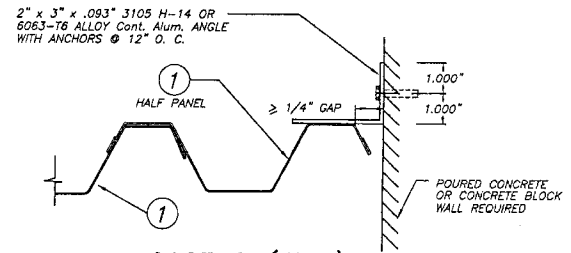
CASE C (Plan)

SCALE: 1/4" = 1"



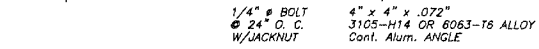
CASE B (Plan)

SCALE: 1/4" = 1"



CASE D (Plan)

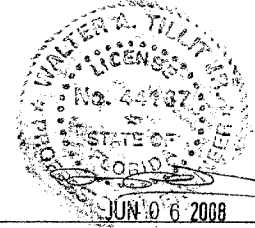
SCALE: 1/4" = 1"



CASE E (Plan)

SCALE: 1/4" = 1"

END CLOSURES DETAILS



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TILTECO INC.

TILLET TESTING & ENGINEERING COMPANY
6355 N.W. 36th St. Ste. 305, VIRGINIA GARDENS, FL 33166
Phone: (305)871-1530 Fax: (305)871-1531
EB-0006/19
WALTER A. TILLY JR., P.E.
FLORIDA Lic. 44167

0.050" BERTHA ALUMINUM STORM PANEL (2.00" DEEP)		M.C.V./R.E. DRAWN BY:
EASTERN METAL SUPPLY, INC		05/12/08 DATE:
4268 WEST ROADS DRIVE WEST PALM BEACH, FL 33407 PHONE: (561)209-8283, FAX: (561)841-1716		08-146 DRAWING No
REV. NO	DESCRIPTION	DATE
1	OLD 08-168	05/12/08
2		

MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING SCHEDULE FOR INSTALLATIONS IN CONCRETE AND CONCRETE BLOCK STRUCTURES

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHOR SPACING FOR E. D. = 3 1/2" **										APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH 1' (PL)	
	REGULAR TAPCONS		SOLID SET		S.G. TAPCON		PANELMATES		PANELMATE TVAS				
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY			
+40.0, -40.0 OR LESS	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	1	(TOP)	8'-0" OR LESS
	12"	11"	12"	12"	12"	12"	12"	12"	12"	12"	1	(BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	2	(TOP)	
	9"	9"	9"	9"	9"	9"	9"	9"	9"	9"	2	(BOTTOM)	
	9"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	3A	(TOP)	
	9"	9"	9"	9"	9"	9"	9"	9"	9"	9"	3	(BOTTOM)	
	12"	11"	12"	12"	12"	12"	12"	12"	12"	12"	4	(TOP)	
	12"	11"	12"	12"	12"	12"	12"	12"	12"	12"	4	(BOTTOM)	
	9"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	5A	(TOP)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	5	(BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	6	(TOP)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	6	(BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	7	(TOP)	
12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	7	(BOTTOM)		
N/A	N/A	12"	12"	12"	12"	12"	12"	12"	12"	8	(TOP)		
N/A	N/A	12"	12"	12"	12"	12"	12"	12"	12"	8	(BOTTOM)		
N/A	N/A	12"	12"	12"	12"	12"	12"	12"	12"	9	(TOP)		
12"	11"	12"	12"	12"	12"	12"	12"	12"	12"	9	(BOTTOM)		
12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	10	(TOP)		
6"	N/A	6"	N/A	6"	N/A	6"	N/A	6"	N/A	10	(BOTTOM)		
9"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	11A	(TOP)		
9"	9"	9"	9"	9"	9"	9"	9"	9"	9"	11	(BOTTOM)		
6"	N/A	6"	N/A	6"	N/A	6"	N/A	6"	N/A	13	(TOP)		
6"	N/A	6"	N/A	6"	N/A	6"	N/A	6"	N/A	13	(BOTTOM)		

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHOR SPACING FOR E. D. = 3 1/2" **										APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH 1' (PL)	
	REGULAR TAPCONS		SOLID SET		S.G. TAPCON		PANELMATES		PANELMATE TVAS				
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY			
+40.0, -40.0 OR LESS	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	1	(TOP)	> 8'-0" UP TO 13'-0"
	12"	7"	12"	12"	12"	12"	12"	12"	12"	12"	1	(BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	2	(TOP)	
	9"	9"	9"	9"	9"	9"	9"	9"	9"	9"	2	(BOTTOM)	
	9"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	3A	(TOP)	
	9"	9"	9"	9"	9"	9"	9"	9"	9"	9"	3	(BOTTOM)	
	12"	7"	12"	12"	12"	12"	12"	12"	12"	12"	4	(TOP)	
	12"	7"	12"	12"	12"	12"	12"	12"	12"	12"	4	(BOTTOM)	
	9"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	5A	(TOP)	
	9"	N/A	11"	N/A	12"	N/A	12"	N/A	12"	N/A	5	(BOTTOM)	
	9"	N/A	11 1/2"	N/A	12"	N/A	12"	N/A	12"	N/A	6	(TOP)	
	9"	N/A	11"	N/A	12"	N/A	12"	N/A	12"	N/A	6	(BOTTOM)	
	9"	N/A	11"	N/A	12"	N/A	12"	N/A	12"	N/A	7	(TOP)	
9"	N/A	11"	N/A	12"	N/A	12"	N/A	12"	N/A	7	(BOTTOM)		
N/A	N/A	12"	12"	12"	12"	12"	12"	12"	12"	8	(TOP)*		
N/A	N/A	12"	12"	12"	12"	12"	12"	12"	12"	8	(BOTTOM)*		
N/A	N/A	12"	12"	12"	12"	12"	12"	12"	12"	9	(TOP)*		
12"	7"	12"	12"	12"	12"	12"	12"	12"	12"	9	(BOTTOM)		
9"	N/A	11 1/2"	N/A	12"	N/A	12"	N/A	12"	N/A	10	(TOP)		
6"	N/A	6"	N/A	6"	N/A	6"	N/A	6"	N/A	10	(BOTTOM)		
9"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	11A	(TOP)		
9"	9"	9"	9"	9"	9"	9"	9"	9"	9"	11	(BOTTOM)		
6"	N/A	6"	N/A	6"	N/A	6"	N/A	6"	N/A	13	(TOP)		
6"	N/A	6"	N/A	6"	N/A	6"	N/A	6"	N/A	13	(BOTTOM)		

* USE 6" OC FOR PANEL LENGTHS LARGER THAN 10' - 0" AND USE 12" OC AS SHOWN ON SCHEDULE FOR PANELS LENGTHS EQUAL OR SHORTER THAN 10' - 0"

**MAXIMUM ANCHOR SPACINGS ARE VALID FOR 3 1/2" EDGE DISTANCE, FOR E. D. LESS THAN 3 1/2". REDUCE ANCHOR SPACING BY MULTIPLYING SPACING SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. (NOTE: MIN. E. D. FOR SOLIDSET ANCHORS IS 3") FOR THIS OPERATION TO BE POSSIBLE, REDUCED SPACING OBTAINED USING FACTOR SHALL NOT BE LESS THAN MINIMUM SPACING INDICATED FOR EACH ANCHOR TYPE AT ANCHORS LEGEND.

ACTUAL E. D.	FACTOR		
	TAPCON (REGULAR)	S.G. TAPCON, PANELMATE OR PANELMATE TVAS	SOLID SET
3"	-	.86	.75
2 1/2"	-	.71	.50
2"	-	.50	-
1 1/2"	.35	-	-

ANCHORS LEGEND

ANCHOR TYPE	Min. ANCHOR SPACING
TAPCON (REGULAR OR S.G.) PANELMATE OR PANELMATE TVAS	3"
SOLID SET	3"

E. D. = EDGE DISTANCE

REV. NO.	DESCRIPTION	DATE	REV. NO.	DESCRIPTION	DATE
1	GLD 06-168	05/12/08	3		
2			4		



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TILECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 36TH ST., SUITE 305, VIRGINIA GARDENS, FL 33146
Phone: (305)871-1530, Fax: (305)871-1531
EB-0008719
WALTER A. TILLIT JR., P.E.
Florida Lic. 44187

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

0.050" BERTHA ALUMINUM STORM PANEL
(2.00" DEEP)

M.C.V./R.E.
DRAWN BY:
05/12/08
DATE:
08-146
DRAWING No
SHEET 9 OF 17

EASTERN METAL SUPPLY, INC

4268 WEST ROADS DRIVE
WEST PALM BEACH, FL 33407
PHONE: (561)208-8263, FAX: (561)841-1716

MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING SCHEDULE FOR INSTALLATIONS IN CONCRETE AND CONCRETE BLOCK STRUCTURES

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2"*										APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	REGULAR TAPCONS		SOLID SET		S.G. TAPCON		PANELMATES		PANELMATE TYS			
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY		
+40.0, -40.0 UP TO +60.0, -60.0	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	1 (TOP)	8'-0" OR LESS
	12"	7"	12"	12"	12"	12"	12"	12"	12"	12"	1 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	2 (TOP)	
	9"	7"	9"	9"	9"	9"	9"	9"	9"	9"	2 (BOTTOM)	
	9"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	3A (TOP)	
	9"	7"	9"	9"	9"	9"	9"	9"	9"	9"	3 (BOTTOM)	
	12"	7"	12"	12"	12"	12"	12"	12"	12"	12"	4 (TOP)	
	12"	7"	12"	12"	12"	12"	12"	12"	12"	12"	4 (BOTTOM)	
	9"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	5A (TOP)	
	10"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	5 (BOTTOM)	
	10"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	6 (TOP)	
	10"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	6 (BOTTOM)	
	10"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	7 (TOP)	
	10"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	7 (BOTTOM)	
	N/A	N/A	12"	12"	12"	12"	12"	12"	12"	12"	8 (TOP)	
	N/A	N/A	12"	12"	12"	12"	12"	12"	12"	12"	8 (BOTTOM)	
	N/A	N/A	12"	12"	12"	12"	12"	12"	12"	12"	9 (TOP)	
	12"	7"	12"	12"	12"	12"	12"	12"	12"	12"	9 (BOTTOM)	
	10"	N/A	12"	N/A	12"	N/A	12"	N/A	N/A	N/A	10 (TOP)	
	6"	N/A	6"	N/A	6"	N/A	6"	N/A	N/A	N/A	10 (BOTTOM)	
9"	7"	N/A	N/A	N/A	N/A	9"	7"	9"	7"	11A (TOP)		
9"	7"	N/A	N/A	N/A	N/A	9"	7"	9"	7"	11 (BOTTOM)		
6"	N/A	6"	N/A	6"	N/A	6"	N/A	N/A	N/A	13 (TOP)		
6"	N/A	6"	N/A	6"	N/A	6"	N/A	N/A	N/A	13 (BOTTOM)		

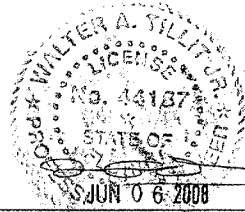
MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2"*										APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	REGULAR TAPCONS		SOLID SET		S.G. TAPCON		PANELMATES		PANELMATE TYS			
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY		
+60.0, -60.0 UP TO +80.0, -80.0	11"	N/A	11"	N/A	11"	N/A	11"	N/A	11"	N/A	1 (TOP)	9'-0" OR LESS
	11"	4"	11"	11"	11"	11"	11"	7"	11"	7"	1 (BOTTOM)	
	11"	N/A	11"	N/A	11"	N/A	11"	N/A	11"	N/A	2 (TOP)	
	8"	4"	9"	9"	9"	9"	9"	7"	9"	7"	2 (BOTTOM)	
	9"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	3A (TOP)	
	8"	4"	9"	9"	9"	9"	9"	7"	9"	7"	3 (BOTTOM)	
	11"	4"	11"	11"	11"	11"	11"	7"	11"	7"	4 (TOP)	
	11"	4"	11"	11"	11"	11"	11"	7"	11"	7"	4 (BOTTOM)	
	9"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	5A (TOP)	
	5"	8"	7"	N/A	9"	N/A	8"	N/A	N/A	N/A	5 (BOTTOM)	
	9"	N/A	10"	N/A	12"	N/A	11"	N/A	N/A	N/A	6 (TOP)	
	8"	N/A	7"	N/A	9"	N/A	8"	N/A	N/A	N/A	6 (BOTTOM)	
	5"	N/A	7"	N/A	9"	N/A	8"	N/A	N/A	N/A	7 (TOP)	
	5"	N/A	7"	N/A	9"	N/A	8"	N/A	N/A	N/A	7 (BOTTOM)	
	N/A	N/A	12"	12"	12"	12"	12"	6"	12"	6"	8 (TOP)	
	N/A	N/A	12"	12"	12"	12"	12"	6"	12"	6"	8 (BOTTOM)	
	N/A	N/A	12"	12"	12"	12"	12"	6"	12"	6"	9 (TOP)	
	11"	4"	11"	11"	11"	11"	11"	7"	11"	7"	9 (BOTTOM)	
	9"	N/A	10"	N/A	12"	N/A	11"	N/A	N/A	N/A	10 (TOP)	
	6"	N/A	6"	N/A	6"	N/A	6"	N/A	N/A	N/A	10 (BOTTOM)	
8"	4"	N/A	N/A	N/A	N/A	9"	7"	9"	7"	11A (TOP)		
8"	4"	N/A	N/A	N/A	N/A	9"	7"	9"	7"	11 (BOTTOM)		
6"	N/A	6"	N/A	6"	N/A	6"	N/A	N/A	N/A	13 (TOP)		
6"	N/A	12"	N/A	6"	N/A	6"	N/A	N/A	N/A	13 (BOTTOM)		

ANCHORS LEGEND

**MAXIMUM ANCHOR SPACINGS ARE VALID FOR 3 1/2" EDGE DISTANCE. FOR E.D. LESS THAN 3 1/2", REDUCE ANCHOR SPACING BY MULTIPLYING SPACING SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. (NOTE: MIN. E.D. FOR SOLIDSET ANCHORS IS 3")
FOR THIS OPERATION TO BE POSSIBLE, REDUCED SPACING OBTAINED USING FACTOR SHALL NOT BE LESS THAN MINIMUM SPACING INDICATED FOR EACH ANCHOR TYPE AT ANCHORS LEGEND.

ACTUAL E. D.	FACTOR		
	TAPCON (REGULAR)	S.G. TAPCON, PANELMATE OR PANELMATE TYS	SOLID SET
3"	-	.86	.75
2 1/2"	-	.71	.50
2"	-	.50	-
1 1/2"	.35	-	-

ANCHOR TYPE	MIN. ANCHOR SPACING
TAPCON (REGULAR OR S.G.) PANELMATE OR PANELMATE TYS	3"
SOLID SET	3"



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EB-0006719
WALTER A. TILIT, JR., P.E.
FLORIDA Lic. 44187

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

0.050" BERTHA ALUMINUM STORM PANEL
(2.00" DEEP)

M.C.V./R.E.
DRAWN BY:
05/12/08
DATE:
08-146
DRAWING NO

REV. NO	DESCRIPTION	DATE	REV. NO	DESCRIPTION	DATE
1	OLD 08-169	05/12/08	3		
2			4		

SHEET 10 OF 17

MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING SCHEDULE FOR INSTALLATIONS IN CONCRETE AND CONCRETE BLOCK STRUCTURES

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **										APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	REGULAR TAPCONS		SOLID SET		S.G. TAPCON		PANELMATES		PANELMATE TYS			
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY		
+40.0, -40.0 UP TO +60.0, -60.0	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	1 (TOP)	>8'-0" UP TO 12'-6"
	12"	4 1/2"	12"	12"	12"	12"	12"	8 1/2"	12"	8 1/2"	1 (BOTTOM)	
	12"	N/A	12"	N/A	12"	N/A	12"	N/A	12"	N/A	2 (TOP)	
	9"	4 1/2"	9"	9"	9"	9"	9"	8 1/2"	9"	8 1/2"	2 (BOTTOM)	
	9"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	3A (TOP)	
	9"	4 1/2"	9"	9"	9"	9"	9"	8 1/2"	9"	8 1/2"	3 (BOTTOM)	
	12"	4 1/2"	12"	12"	12"	12"	12"	8 1/2"	12"	8 1/2"	4 (TOP)	
	12"	4 1/2"	12"	12"	12"	12"	12"	8 1/2"	12"	8 1/2"	4 (BOTTOM)	
	9"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	5A (TOP)	
	6 1/2"	N/A	7 1/2"	N/A	8"	N/A	7 1/2"	N/A	N/A	N/A	5 (BOTTOM)	
	9"	N/A	9 1/2"	N/A	10"	N/A	9 1/2"	N/A	N/A	N/A	6 (TOP)	
	6 1/2"	N/A	7 1/2"	N/A	8"	N/A	7 1/2"	N/A	N/A	N/A	6 (BOTTOM)	
	6"	N/A	6 1/2"	N/A	7"	N/A	6 1/2"	N/A	N/A	N/A	7 (TOP)	
	6"	N/A	6 1/2"	N/A	7"	N/A	6 1/2"	N/A	N/A	N/A	7 (BOTTOM)	
	N/A	N/A	12" *	12" *	12" *	12" *	12" *	6" *	12" *	6" *	8 (TOP) *	
	N/A	N/A	12" *	12" *	12" *	12" *	12" *	6" *	12" *	6" *	8 (BOTTOM) *	
	N/A	N/A	12" *	12" *	12" *	12" *	12" *	6" *	12" *	6" *	9 (TOP) *	
	12"	4 1/2"	12"	12"	12"	12"	12"	8 1/2"	12"	8 1/2"	9 (BOTTOM)	
	9"	N/A	9 1/2"	N/A	10"	N/A	9 1/2"	N/A	N/A	N/A	10 (TOP)	
	6"	N/A	6"	N/A	6"	N/A	6"	N/A	N/A	N/A	10 (BOTTOM)	
9"	4 1/2"	N/A	N/A	N/A	N/A	9"	4 1/2"	9"	4 1/2"	11A (TOP)		
9"	4 1/2"	N/A	N/A	N/A	N/A	9"	4 1/2"	9"	4 1/2"	11 (BOTTOM)		
6"	N/A	6"	N/A	6"	N/A	6"	N/A	N/A	N/A	13 (TOP)		
6"	N/A	6"	N/A	6"	N/A	6"	N/A	N/A	N/A	13 (BOTTOM)		

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **										APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	REGULAR TAPCONS		SOLID SET		S.G. TAPCON		PANELMATES		PANELMATE TYS			
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY		
+80.0, -80.0 UP TO +100.0, -130.0	8 1/2"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	1 (TOP)	7'-0" OR LESS
	9"	7"	9"	9"	9"	9"	9"	7"	9"	7"	1 (BOTTOM)	
	9"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	2 (TOP)	
	9"	4"	9"	9"	9"	9"	9"	7"	9"	9"	2 (BOTTOM)	
	8"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	3A (TOP)	
	9"	4"	9"	9"	9"	9"	9"	7"	9"	9"	3 (BOTTOM)	
	9"	7"	9"	9"	9"	9"	9"	7"	9"	7"	4 (TOP)	
	9"	7"	9"	9"	9"	9"	9"	7"	9"	7"	4 (BOTTOM)	
	8"	N/A	9"	N/A	9"	N/A	9"	N/A	9"	N/A	5A (TOP)	
	5"	N/A	6"	N/A	7"	N/A	7"	N/A	N/A	N/A	5 (BOTTOM)	
	7"	N/A	8"	N/A	10"	N/A	8"	N/A	N/A	N/A	6 (TOP)	
	5"	N/A	6"	N/A	7"	N/A	7"	N/A	N/A	N/A	6 (BOTTOM)	
	5"	N/A	6"	N/A	7"	N/A	7"	N/A	N/A	N/A	7 (TOP)	
	5"	N/A	6"	N/A	7"	N/A	7"	N/A	N/A	N/A	7 (BOTTOM)	
	N/A	N/A	12"	6"	12"	6"	12"	6"	12"	6"	8 (TOP)	
	N/A	N/A	12"	6"	12"	6"	12"	6"	12"	6"	8 (BOTTOM)	
	N/A	N/A	12"	6"	12"	6"	12"	6"	12"	6"	9 (TOP)	
	9"	7"	9"	9"	9"	9"	9"	7"	9"	7"	9 (BOTTOM)	
	7"	N/A	8"	N/A	10"	N/A	8"	N/A	N/A	N/A	10 (TOP)	
	5"	N/A	6"	N/A	6"	N/A	6"	N/A	N/A	N/A	10 (BOTTOM)	
5"	4"	N/A	N/A	N/A	N/A	7"	7"	7"	7"	11A (TOP)		
5"	4"	N/A	N/A	N/A	N/A	7"	7"	7"	7"	11 (BOTTOM)		
6"	N/A	6"	N/A	6"	N/A	6"	N/A	N/A	N/A	13 (TOP)		
5"	N/A	6"	N/A	6"	N/A	6"	N/A	N/A	N/A	13 (BOTTOM)		

* USE 6" OC FOR PANEL LENGTHS LARGER THAN 10'-0" AND USE 12" AS SHOWN ON SCHEDULE FOR PANELS LENGTHS EQUAL OR SHORTER THAN 10'-0"

ANCHORS LEGEND

** MAXIMUM ANCHOR SPACINGS ARE VALID FOR 3 1/2" EDGE DISTANCE. FOR E.D. LESS THAN 3 1/2", REDUCE ANCHOR SPACING BY MULTIPLYING SPACING SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. (NOTE: MIN. E.D. FOR SOLIDSET ANCHORS IS 3") FOR THIS OPERATION TO BE POSSIBLE, REDUCED SPACING OBTAINED USING FACTOR SHALL NOT BE LESS THAN MINIMUM SPACING INDICATED FOR EACH ANCHOR TYPE AT ANCHORS LEGEND.

ACTUAL E. D.	FACTOR		
	TAPCON (REGULAR)	S.G. TAPCON, PANELMATE OR PANELMATE TYS	SOLID SET
3"	-	.86	.75
2 1/2"	-	.71	.50
2"	-	.50	-
1 1/2"	.35	-	-

ANCHOR TYPE	MIN. ANCHOR SPACING
TAPCON (REGULAR OR S.G.) PANELMATE OR PANELMATE TYS	3"
SOLID SET	3"

E. D. = EDGE DISTANCE



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TILLIT TESTING & ENGINEERING COMPANY
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 Phone: (305) 971-1530 Fax: (305) 971-1531
 EB-0066719
 WALTER A. TILLIT, P.E.
 FLORIDA Lic. 44187

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

0.050" BERTHA ALUMINUM STORM PANEL
(2.00" DEEP)

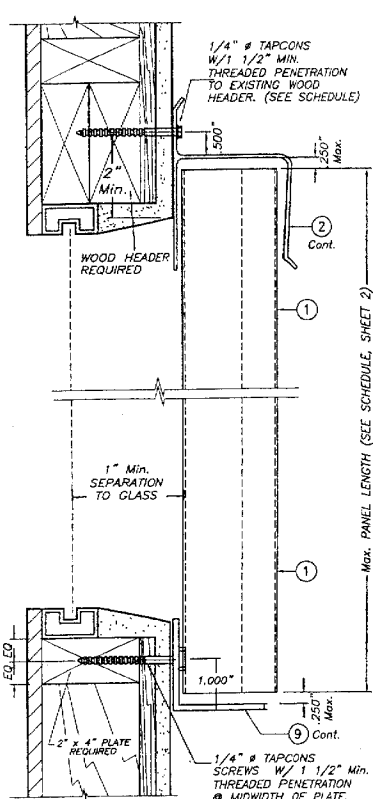
EASTERN METAL SUPPLY, INC

4268 WEST ROADS DRIVE
 WEST PALM BEACH, FL. 33407
 PHONE: (561) 209-6263, FAX: (561) 841-1716

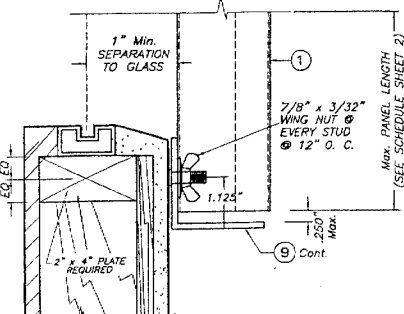
REV. NO	DESCRIPTION	DATE	REV. NO	DESCRIPTION	DATE
1	OLD 08-169	05/12/08	3		
2			4		

M.C.V./R.E.
 DRAWN BY:
 05/12/08
 DATE:
08-146
 DRAWING No

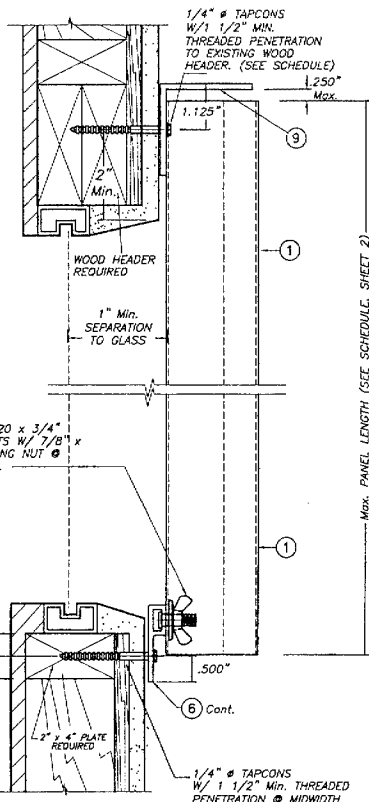
SHEET 11 OF 17



SECTION @ ANCHOR



SECTION @ STUD
ALTERNATIVE 1
SCALE: 1/2" = 1"

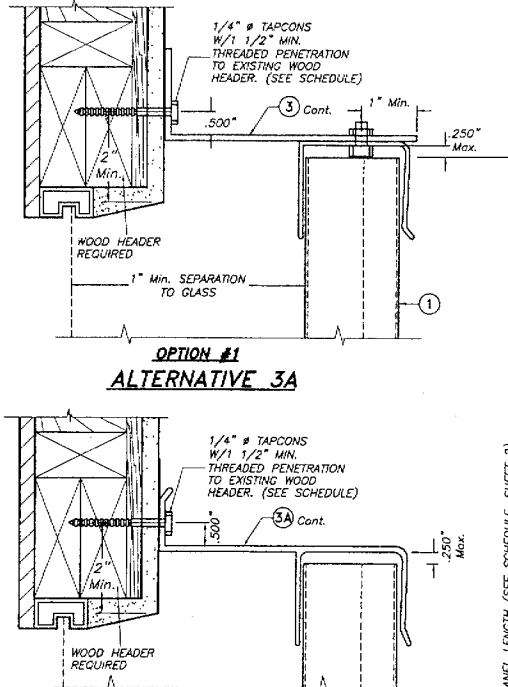


ALTERNATIVE 2
SCALE: 1/2" = 1"

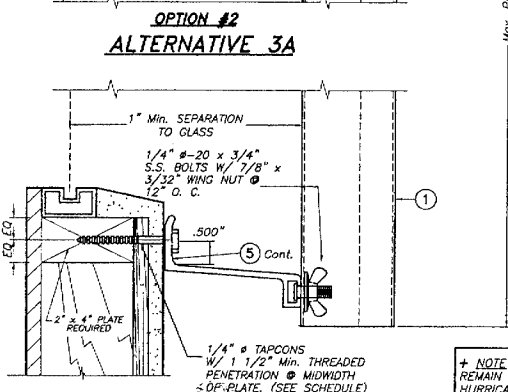
NOTE FOR COMBINATION OF SECTIONS :
WALL MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

NOTES:

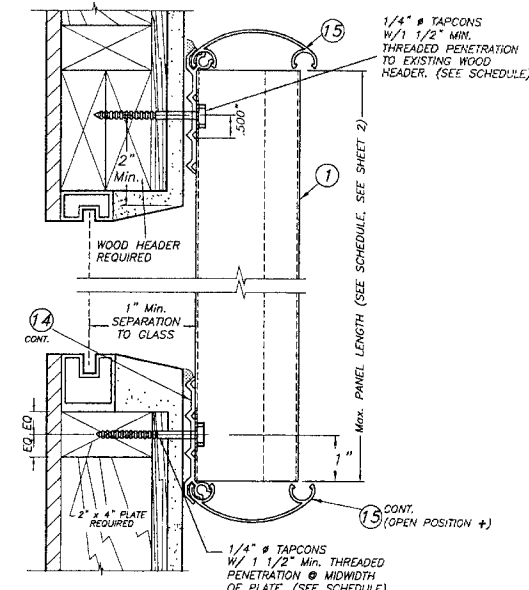
1. INSTALLATIONS ARE ONLY VALID FOR DESIGN WIND LOADS AND PANEL LENGTHS AS PER SCHEDULES ON SHEET 2
2. SEE ANCHOR SCHEDULE ON SHEETS 16 & 17.
3. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.



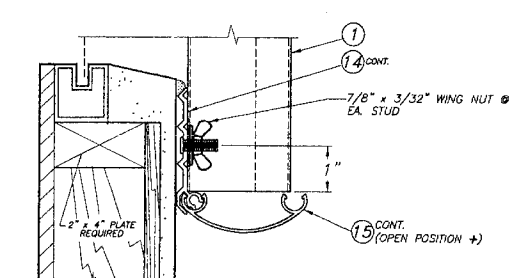
OPTION #1
ALTERNATIVE 3A



OPTION #2
ALTERNATIVE 3A



SECTION @ ANCHOR



SECTION @ STUD
ALTERNATIVE 4
SCALE: 1/2" = 1"

+ NOTE: SNAP CAP (15) TO REMAIN CLOSED AT NON HURRICANE CONDITIONS.

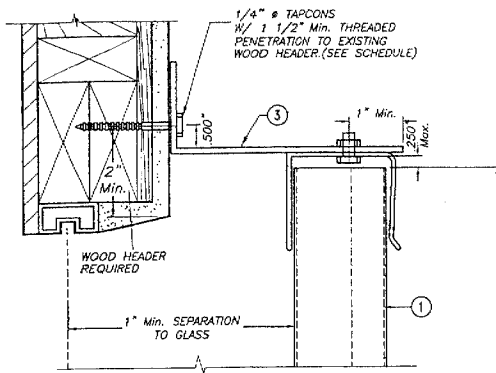
ALTERNATIVE 3

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EB-0608719
WALTER A. TILLIT JR., P.E.
FLORIDA LIC. 44187

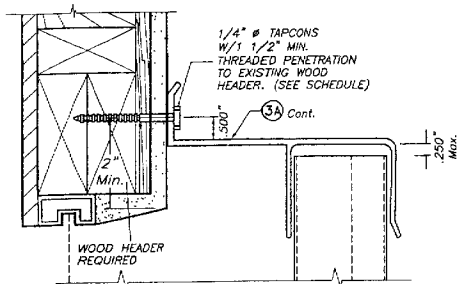
F.B.C. (Non High Velocity Hurricane Zone)
0.050" BERTHA ALUMINUM STORM PANEL (2.00" DEEP)
EASTERN METAL SUPPLY, INC
4268 WEST ROADS DRIVE
WEST PALM BEACH, FL 33407
PHONE: (561)208-8283, FAX: (561)841-1716
M.C.V./R.E. DRAWN BY: 05/12/08 DATE: 08-146 DRAWING No: SHEET 12 OF 17

REV. NO	DESCRIPTION	DATE	REV. NO	DESCRIPTION	DATE
1	OLD 06-16P	02/12/08	1		
2			2		

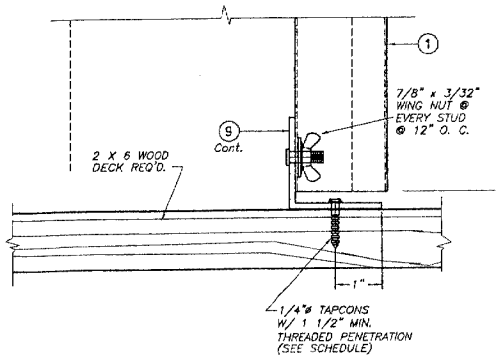
JUN 06 2008



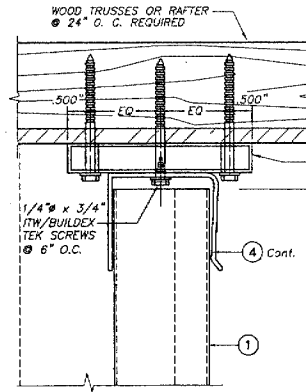
OPTION #1
ALTERNATIVE 5A



OPTION #2
ALTERNATIVE 5A

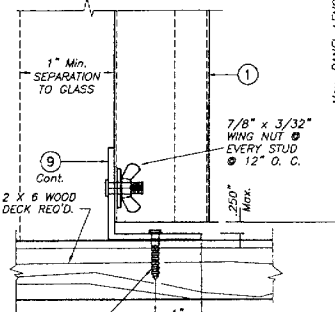


ALTERNATIVE 5
SCALE: 1/2" = 1"



ALTERNATIVE 6A

SCALE: 1/2" = 1"
(LIMITED TO +60.0, -66.0 p.s.f. DESIGN LOAD
AND UP TO 9'-0" Max. PANEL LENGTH)

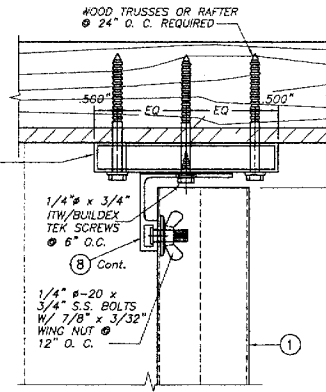


ALTERNATIVE 6

SCALE: 1/2" = 1"

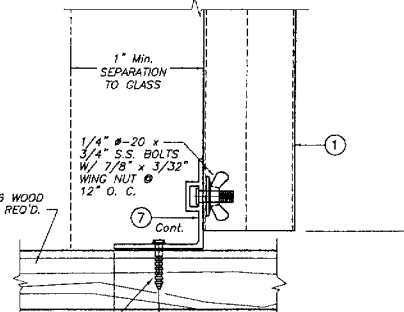
NOTES:

1. INSTALLATIONS ARE ONLY VALID FOR DESIGN WIND LOADS AND PANEL'S LENGTHS AS PER SCHEDULES ON SHEET 2 (EXCEPT AS NOTED)
2. SEE ANCHOR SCHEDULE ON SHEET 16 & 17.
3. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.



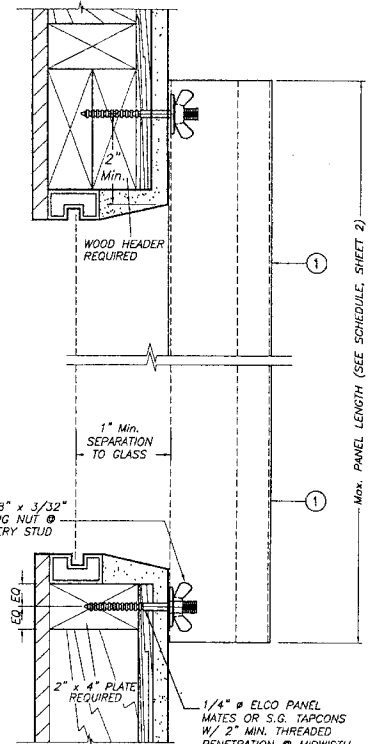
ALTERNATIVE 7A

SCALE: 1/2" = 1"
(LIMITED TO +60.0, -66.0 p.s.f. DESIGN LOAD
AND UP TO 9'-0" Max. PANEL LENGTH)



ALTERNATIVE 7

SCALE: 1/2" = 1"



ALTERNATIVE 8

SCALE: 1/2" = 1"

NOTE FOR COMBINATION OF SECTIONS :

WALL/FLOOR/CEILING MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

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

0.050" BERTHA ALUMINUM STORM PANEL
(2.00" DEEP)

EASTERN METAL SUPPLY, INC

4288 WEST ROADS DRIVE
WEST PALM BEACH, FL. 33407
PHONE: (561)208-8283, FAX: (561)841-1716

M.C.V./R.E.
DRAWN BY:

05/12/08
DATE:

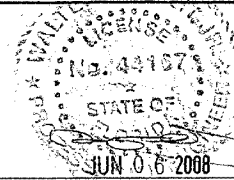
08-146

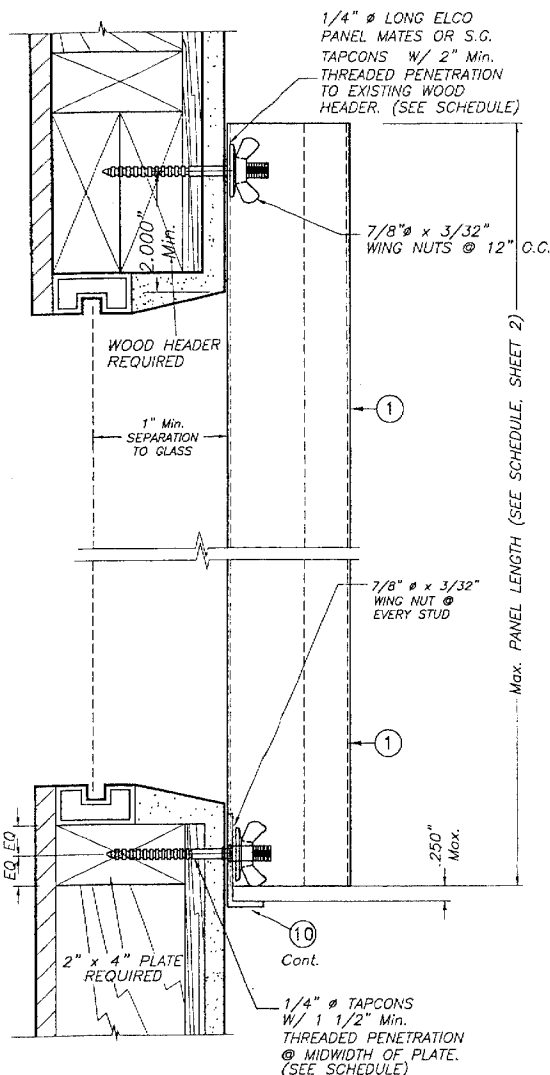
DRAWING NO

SHEET 13 OF 17

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EB-0006719
WALTER A. TILIT, JR., P.E.
FLORIDA LIC. 44167

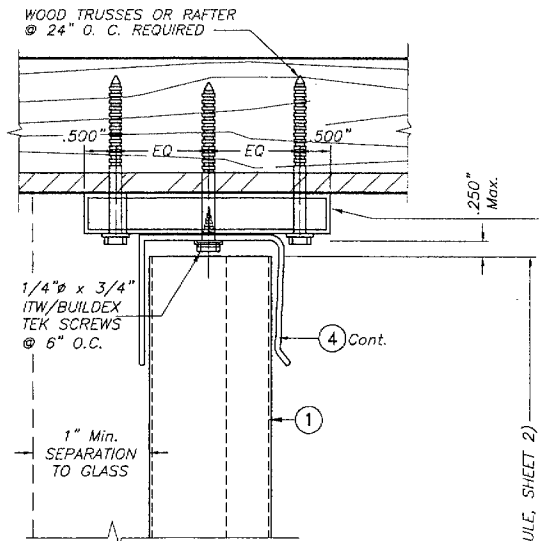




ALTERNATIVE 9

SCALE : 1/2" = 1"

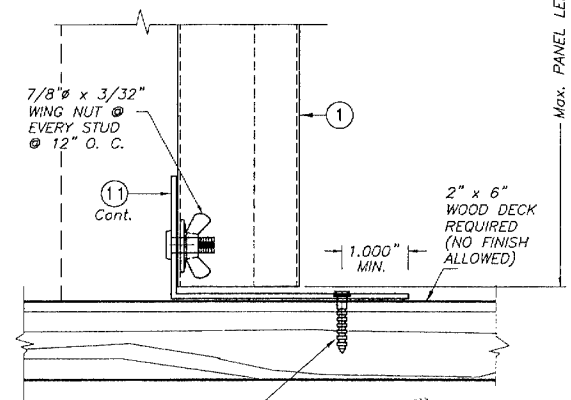
INSTALLATION DETAILS ON EXISTING WOOD BUILDINGS



ALTERNATIVE 10A

SCALE : 1/2" = 1"

(LIMITED TO +60.0, -66.0 p.s.f. DESIGN LOAD AND UP TO 9'-0" Max. PANEL LENGTH)



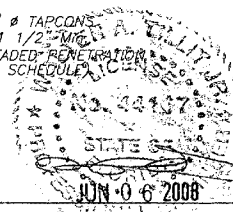
ALTERNATIVE 10

SCALE : 1/2" = 1"

- NOTES:**
1. INSTALLATIONS ARE ONLY VALID FOR DESIGN WIND LOADS AND PANEL'S LENGTHS AS PER SCHEDULES ON SHEET 2 (EXCEPT AS NOTED)
 2. SEE ANCHOR SCHEDULE ON SHEET 16 & 17.
 3. 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 :

WALL/FLOOR/CEILING MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.



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TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6255 N.W. 39th St., Ste. 205, VIRGINIA GARDENS, FL 33168
Phone : (904)871-1530 Fax : (904)871-1531
EB-0006719
WALTER A. TILLIT JR., P.E.
FLORIDA Lic. 44167

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

0.050" BERTHA ALUMINUM STORM PANEL (2.00" DEEP)

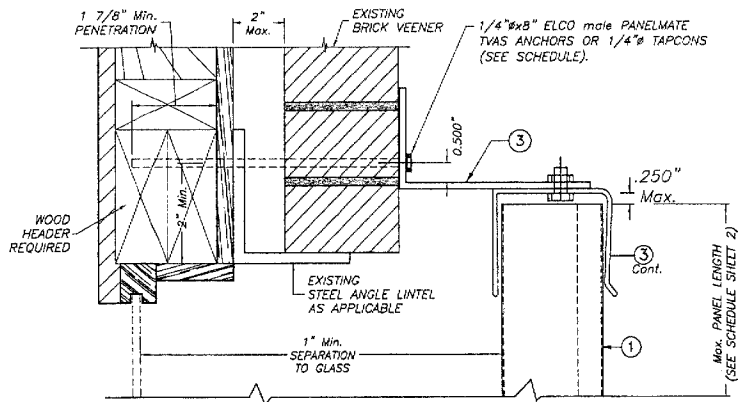
EASTERN METAL SUPPLY, INC

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

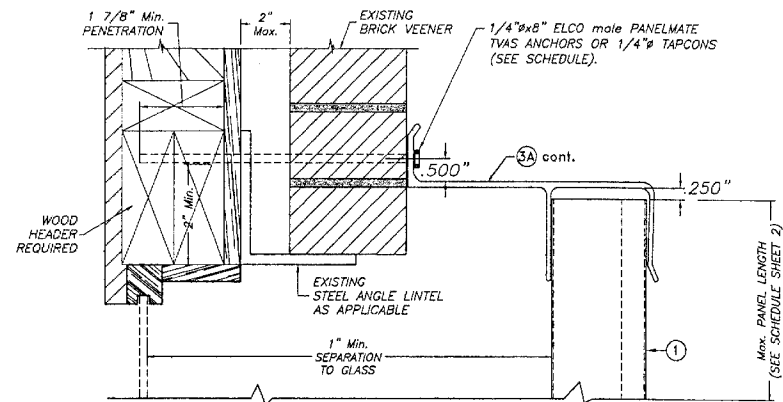
M.C.V./R.E. DRAWN BY: 05/12/08 DATE: 08-146 DRAWING NO

REV. NO	DESCRIPTION	DATE	REV. NO	DESCRIPTION	DATE
1	OLD 08-108	05/12/08	3		
2			4		

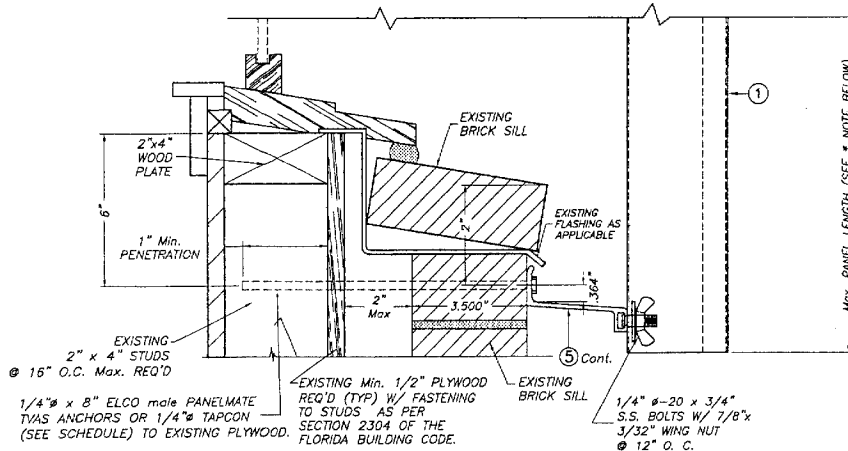
SHEET 14 OF 17



OPTION #1
ALTERNATIVE 11A



OPTION #2
ALTERNATIVE 11A



ALTERNATIVE 11
BUILD-OUT INSTALLATION
SCALE: 1/2" = 1"

* VALID FOR Max. +50.0, -60.0 p.s.f. DESIGN LOAD, FOR UP TO 78" PANELS LENGTHS, AND FOR +50.0, -50.0 p.s.f., FOR PANEL LENGTHS GREATER THAN 78" UP TO 108"

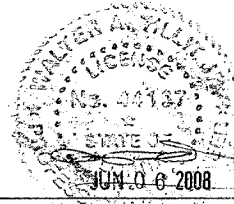
NOTES:

1. INSTALLATIONS ARE ONLY VALID FOR DESIGN WIND LOADS AND PANEL'S LENGTHS AS PER SCHEDULES ON SHEET 2 (EXCEPT AS NOTED)
2. SEE ANCHOR SCHEDULE ON SHEET 16 & 17.
3. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

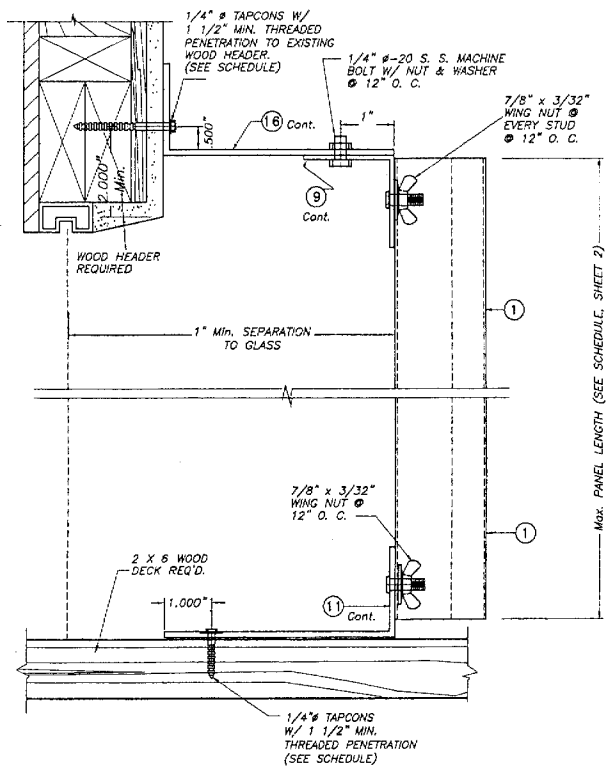
NOTE FOR COMBINATION OF SECTIONS :

WALL/FLOOR/CEILING MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

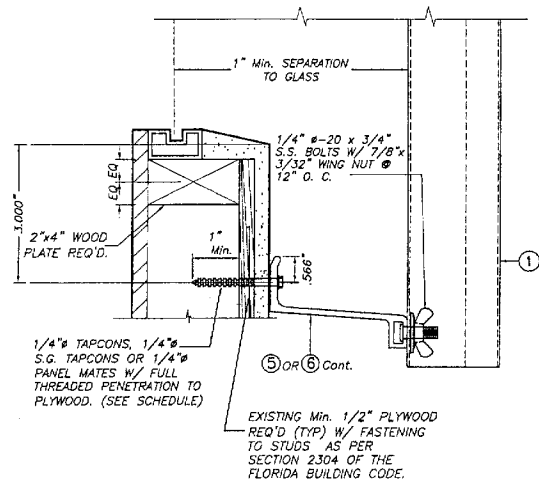
INSTALLATION DETAILS ON EXISTING WOOD BUILDINGS



© 2008 TILTECO, INC.		F.B.C. (Non High Velocity Hurricane Zone)	
 TILLIT TESTING & ENGINEERING COMPANY 4268 WEST ROADS DRIVE WEST PALM BEACH, FL 33407 6355 N.W. 36th St., Ste. 305, VIRGINA GARDENS, FL 33186 Phone: (561)971-1330 Fax: (561)971-1331 EB-0006719 WALTER A. TILLIT JR., P.E. FLORIDA Lic. 44167		0.050" BERTHA ALUMINUM STORM PANEL (2.00" DEEP)	M.C.V./R.E. DRAWN BY: 05/12/08 DATE:
		EASTERN METAL SUPPLY, INC	
REV. NO	DESCRIPTION	DATE	REV. NO
1	OLD 08-189	05/12/08	3
2			4



ALTERNATIVE 13
SCALE : 1/2" = 1"

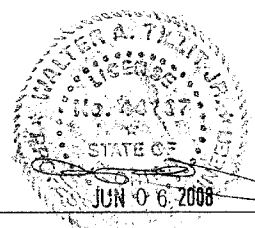


ALTERNATIVE 14
SCALE : 1/2" = 1"

- NOTES:**
1. INSTALLATIONS ARE ONLY VALID FOR DESIGN WIND LOADS AND PANEL'S LENGTHS AS PER SCHEDULES ON SHEET 2
 2. SEE ANCHOR SCHEDULE ON SHEET 16 & 17.
 3. 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 :
WALL MOUNTING SECTIONS CAN BE
COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

* VALID FOR Max. +50.0, -60.0 p.s.f. DESIGN LOAD, FOR UP TO 78" PANELS LENGTHS, AND FOR +50.0, -50.0 p.s.f., FOR PANEL LENGTHS GREATER THAN 78" UP TO 108"



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TILTECO INC. TILLIT TESTING & ENGINEERING COMPANY 6335 N.W. 38th St., Ste. 325, VIRGINIA GARDENS, FL 33166 Phone: (305)871-1530, Fax: (305)871-1531 EB-0006719		0.050" BERTHA ALUMINUM STORM PANEL (2.00" DEEP)	
WALTER A. TILLIT JR., P.E. FLORIDA Lic. 44167		EASTERN METAL SUPPLY, INC. 4208 WEST ROADS DRIVE WEST PALM BEACH, FL 33407 PHONE: (561)208-8263, FAX: (561)641-1716	
REV. NO	DESCRIPTION	DATE	REV. NO
1	OLD 08-189	05/12/08	3
2			4
M.C.V./P.E. DRAWN BY:		05/12/08 DATE:	
		08-146 DRAWING No	
		SHEET 15 OF 17	

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

MAXIMUM DESIGN LOAD W (p.s.f.)	WOOD FASTENERS			APPLICABLE TO ALTERNATIVES # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	REGULAR TAPCONS	S.G.TAPCON	PANELMATES OR PANELMATE TWAS		
+40.0, -40.0 OR LESS	12"	N/A	N/A	1 (TOP)	8'-0" OR LESS
	12"	N/A	N/A	1 (BOTTOM)	
	12"	N/A	N/A	2 (TOP)	
	9"	N/A	N/A	2 (BOTTOM)	
	9"	N/A	N/A	3A (TOP)	
	9"	N/A	N/A	3 (BOTTOM)	
	12"	N/A	N/A	4 (TOP)	
	12"	N/A	N/A	4 (BOTTOM)	
	9"	N/A	N/A	5A (TOP)	
	9"	N/A	N/A	5 (BOTTOM)	
	9"	N/A	N/A	6 (BOTTOM)	
	8 1/2"	N/A	N/A	7 (BOTTOM)	
	N/A	12"	12"	8 (TOP)	
	N/A	12"	12"	8 (BOTTOM)	
N/A	12"	12"	9 (TOP)		
12"	N/A	N/A	9 (BOTTOM)		
6"	N/A	N/A	10 (BOTTOM)		
9"	N/A	9"	11A (TOP)		
4"	N/A	4"	11 (BOTTOM)		
6"	N/A	N/A	13 (TOP)		
6"	N/A	N/A	13 (BOTTOM)		
4"	4"	4"	14 (BOTTOM)		

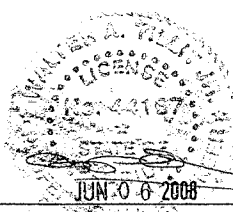
MAXIMUM DESIGN LOAD W (p.s.f.)	WOOD FASTENERS			APPLICABLE TO ALTERNATIVES # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	REGULAR TAPCONS	S.G.TAPCON	PANELMATES OR PANELMATE TWAS		
+40.0, -40.0 OR LESS	12"	N/A	N/A	1 (TOP)	>8'-0" UP TO 13'-0" *
	12"	N/A	N/A	1 (BOTTOM)	
	12"	N/A	N/A	2 (TOP)	
	9"	N/A	N/A	2 (BOTTOM)	
	9"	N/A	N/A	3A (TOP)	
	9"	N/A	N/A	3 (BOTTOM)	
	12"	N/A	N/A	4 (TOP)	
	12"	N/A	N/A	4 (BOTTOM)	
	9"	N/A	N/A	5A (TOP)	
	5 1/2"	N/A	N/A	5 (BOTTOM)	
	5 1/2"	N/A	N/A	6 (BOTTOM)	
	5 "	N/A	N/A	7 (BOTTOM)	
	N/A	12"	12"	8 (TOP) *	
	N/A	12" *	12" *	8 (BOTTOM) *	
N/A	12" *	12" *	9 (TOP)		
12"	N/A	N/A	9 (BOTTOM)		
5 1/2"	N/A	N/A	10 (BOTTOM)		
9"	N/A	9"	11A (TOP)		
4" **	N/A	4" **	11 (BOTTOM) **		
6"	N/A	N/A	13 (TOP)		
5 1/2"	N/A	N/A	13 (BOTTOM)		
4" **	4" **	4" **	14 (BOTTOM)**		

MAXIMUM DESIGN LOAD W (p.s.f.)	WOOD FASTENERS			APPLICABLE TO ALTERNATIVES # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	REGULAR TAPCONS	S.G.TAPCON	PANELMATES OR PANELMATE TWAS		
+40.0, -40.0 UP TO +60.0, -60.0	12"	N/A	N/A	1 (TOP)	8'-0" OR LESS
	12"	N/A	N/A	1 (BOTTOM)	
	12"	N/A	N/A	2 (TOP)	
	9"	N/A	N/A	2 (BOTTOM)	
	9"	N/A	N/A	3A (TOP)	
	9"	N/A	N/A	3 (BOTTOM)	
	12"	N/A	N/A	4 (TOP)	
	12"	N/A	N/A	4 (BOTTOM)	
	9"	N/A	N/A	5A (TOP)	
	8"	N/A	N/A	5 (BOTTOM)	
	8"	N/A	N/A	6 (BOTTOM)	
	5 1/2"	N/A	N/A	7 (BOTTOM)	
	N/A	12"	12"	8 (TOP)	
	N/A	12"	12"	8 (BOTTOM)	
N/A	12"	12"	9 (TOP)		
12"	N/A	N/A	9 (BOTTOM)		
6"	N/A	N/A	10 (BOTTOM)		
9"	N/A	9"	11A (TOP)		
4" *	N/A	4" *	11 (BOTTOM) *		
6"	N/A	N/A	13 (TOP)		
6"	N/A	N/A	13 (BOTTOM)		
4" *	4" *	4" *	14 (BOTTOM) *		

* USE 6" OC SPACING FOR PANEL LENGTHS LARGER THAN 10' - 0" AND USE 12" OC AS SHOWN ON SCHEDULE FOR PANELS LENGTHS EQUAL OR SHORTER THAN 10' - 0"

** VALID ONLY FOR UP TO 108" PANELS LENGTHS.

* VALID ONLY FOR UP TO +50.0, -60.0 p.s.f. DESIGN LOAD WITH 78" Max. PANEL LENGTHS OR FOR UP TO +50.0, -50.0 p.s.f. DESIGN LOAD WITH 96" Max. PANEL LENGTHS.



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TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
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 Phone: (305)871-1300, Fax: (305)871-1331
 EB-0006719
 WALTER A. TILLIT, JR., P.E.
 FLORIDA Lic. 44167

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

0.050" BERTHA ALUMINUM STORM PANEL (2.00" DEEP)

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 06-162	05/12/06	3		
2			4		

M.C.V./R.E.
 DRAWN BY:
 05/12/08
 DATE:
08-146
 DRAWING NO.
 SHEET 16 OF 17

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

MAXIMUM DESIGN LOAD W (p.s.f.)	WOOD FASTENERS			APPLICABLE TO ALTERNATIVES # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	REGULAR TAPCONS	S.G.TAPCON	PANELMATES OR PANELMATE TYS		
+60.0, -60.0 UP TO +80.0, -90.0	11"	N/A	N/A	1 (TOP)	9'-0" OR LESS
	11"	N/A	N/A	1 (BOTTOM)	
	11"	N/A	N/A	2 (TOP)	
	9"	N/A	N/A	2 (BOTTOM)	
	9"	N/A	N/A	3A (TOP)	
	9"	N/A	N/A	3 (BOTTOM)	
	11"	N/A	N/A	4 (TOP)	
	11"	N/A	N/A	4 (BOTTOM)	
	9"	N/A	N/A	5A (TOP)	
	3 1/2"	N/A	N/A	5 (BOTTOM)	
	3 1/2"	N/A	N/A	6 (BOTTOM)	
	3 1/2"	N/A	N/A	7 (BOTTOM)	
	N/A	12"	6"	8 (TOP)	
	N/A	12"	6"	8 (BOTTOM)	
N/A	12"	6"	9 (TOP)		
11"	N/A	N/A	9 (BOTTOM)		
3 1/2"	N/A	N/A	10 (BOTTOM)		
9"	N/A	9"	11A (TOP)		
N/A	N/A	N/A	11 (BOTTOM)		
6"	N/A	N/A	13 (TOP)		
3 1/2"	N/A	N/A	13 (BOTTOM)		
N/A	N/A	N/A	14 (BOTTOM)		

MAXIMUM DESIGN LOAD W (p.s.f.)	WOOD FASTENERS			APPLICABLE TO ALTERNATIVES # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	REGULAR TAPCONS	S.G.TAPCON	PANELMATES OR PANELMATE TYS		
+40.0, -40.0 UP TO +60.0, -60.0	12"	N/A	N/A	1 (TOP)	>8'-0" UP TO 12'-6"
	12"	N/A	N/A	1 (BOTTOM)	
	12"	N/A	N/A	2 (TOP)	
	12"	N/A	N/A	2 (BOTTOM)	
	12"	N/A	N/A	3A (TOP)	
	12"	N/A	N/A	3 (BOTTOM)	
	12"	N/A	N/A	4 (TOP)	
	12"	N/A	N/A	4 (BOTTOM)	
	12"	N/A	N/A	5A (TOP)	
	4"	N/A	N/A	5 (BOTTOM)	
	4"	N/A	N/A	6 (BOTTOM)	
	3 1/2"	N/A	N/A	7 (BOTTOM)	
	N/A	12"	6"	8 (TOP)	
	N/A	12"	6"	8 (BOTTOM)	
N/A	12"	6"	9 (TOP)		
12"	N/A	N/A	9 (BOTTOM)		
4"	N/A	N/A	10 (BOTTOM)		
12"	N/A	10 1/2"	11A (TOP)		
4"	N/A	N/A	11 (BOTTOM) **		
12"	N/A	N/A	13 (TOP)		
4"	N/A	N/A	13 (BOTTOM)		
4"	4"	4"	14 (BOTTOM) **		

MAXIMUM DESIGN LOAD W (p.s.f.)	WOOD FASTENERS			APPLICABLE TO ALTERNATIVES # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	REGULAR TAPCONS	S.G.TAPCON	PANELMATES OR PANELMATE TYS		
+90.0, -90.0 UP TO +100.0, -130.0	8 1/2"	N/A	N/A	1 (TOP)	7'-0" OR LESS
	9"	N/A	N/A	1 (BOTTOM)	
	9"	N/A	N/A	2 (TOP)	
	9"	N/A	N/A	2 (BOTTOM)	
	8"	N/A	N/A	3A (TOP)	
	9"	N/A	N/A	3 (BOTTOM)	
	9"	N/A	N/A	4 (TOP)	
	9"	N/A	N/A	4 (BOTTOM)	
	8"	N/A	N/A	5A (TOP)	
	3"	N/A	N/A	5 (BOTTOM)	
	3"	N/A	N/A	6 (BOTTOM)	
	3"	N/A	N/A	7 (BOTTOM)	
	N/A	12"	6"	8 (TOP)	
	N/A	12"	6"	8 (BOTTOM)	
N/A	12"	6"	9 (TOP)		
9"	N/A	N/A	9 (BOTTOM)		
3"	N/A	N/A	10 (BOTTOM)		
5"	N/A	6"	11A (TOP)		
N/A	N/A	N/A	11 (BOTTOM)		
6"	N/A	N/A	13 (TOP)		
3"	N/A	N/A	13 (BOTTOM)		
N/A	N/A	N/A	14 (BOTTOM)		

* USE 6" OC SPACING FOR PANEL LENGTHS LARGER THAN 10' - 0" AND USE 12" OC AS SHOWN ON SCHEDULE FOR PANELS LENGTHS EQUAL OR SHORTER THAN 10' - 0"

** VALID ONLY FOR UP TO +50.0, -50.0 p.s.f. DESIGN LOAD WITH 108" Max. PANEL LENGTHS.



© 2008 TILTECO, INC.	F.B.C. (Non High Velocity Hurricane Zone)	M.C.V./R.E. DRAWN BY:
 TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 38th St., Ste. 205, Virginia Gardens, FL 33166 Phone: (561)971-1530 Fax: (561)971-1531 EB-0006719	0.050" BERTHA ALUMINUM STORM PANEL (2.00" DEEP) EASTERN METAL SUPPLY, INC 4288 WEST ROADS DRIVE WEST PALM BEACH, FL 33407 PHONE: (561)208-0263, FAX: (561)841-1716	05/12/08 DATE: 08-146 DRAWING No
REV. NO. DESCRIPTION DATE REV. NO. DESCRIPTION DATE 1 OLD 08-15P 05/12/08 1 2		SHEET 17 OF 17