



**MIAMI-DADE COUNTY**  
**BUILDING CODE COMPLIANCE OFFICE (BCCO)**  
**PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA**  
**METRO-DADE FLAGLER BUILDING**

**140 WEST FLAGLER STREET, SUITE 1603**  
**MIAMI, FLORIDA 33130-1563**  
**(305) 375-2901 FAX (305) 375-2908**

**NOTICE OF ACCEPTANCE (NOA)**

[www.miamidade.gov](http://www.miamidade.gov)

**Eastern Metal Supply, Inc.**  
**4268 West Roads Drive**  
**West Palm Beach, Florida 33407**

**SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

**DESCRIPTION: 0.050" Perforated Bertha Aluminum Storm Panels Shutter**

**APPROVAL DOCUMENT:** Drawing No. 06-290, titled "0.050" Perforated Bertha Aluminum Storm Panel", sheets 1 through 15 of 15 and sheet 1A, prepared by Tilteco, Inc., dated 11/20/2006, last revision #2 dated August 03, 2007, signed and sealed by Walter A. Tillit Jr., P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by Miami-Dade County Product Control Division.

**MISSILE IMPACT RATING: Large and Small Missile Impact**

**LABELING:** Each panel shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises & renews** NOA # **01-1107.01** and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**



*Helmy A. Makar*  
 08/30/2007

**NOA No. 07-0111.02**  
**Expiration Date: 03/21/2012**  
**Approval Date: 08/30/2007**  
**Page 1**

**Eastern Metal Supply, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #01-1107.01**

**A. DRAWINGS**

1. *Drawing No. 01-251, titled "0.050" Perforated Bertha Aluminum Storm Panel", sheets 1 through 15 of 15, prepared by Tilteco, Inc., dated August 27, 2001, last revision #1 dated February 21, 2002, signed and sealed by Walter A. Tillit Jr., P.E.*

**B. TESTS**

1. *Test reports on 1) Uniform Static Air Pressure Test, per SFBC PA 202-94  
2) Large Missile Impact Test per SFBC, PA 201-94  
3) Cyclic Wind Pressure Loading per SFBC, PA 203-94  
along with marked-up drawings and installation diagram of 0.050" Perforated Aluminum Storm Panels Shutter, prepared by ATL of South Florida, Test Report No. 0221.01-01, dated 05/02/01, signed and sealed by Henry Hattem, P.E.*
2. *Addendum to ATL of South Florida, Test Report No. 0221.01-01, dated 10/12/01, signed and sealed by Henry Hattem, P.E.*
3. *Addendum to ATL of South Florida, Test Report No. 0221.01-01, dated 02/04/02, signed and sealed by Henry Hattem, P.E.*

**C. CALCULATIONS**

1. *Anchor Analysis, dated 09/10/01, pages 1 through 53, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E.*

**D. MATERIAL CERTIFICATIONS**

1. *Mill Certified Inspection Report of coils, dated 04/24/01, for Aluminum Alloy 3004 -H34 by NA Nichols Aluminum with chemical composition and physical properties.*
2. *Certified Tensile Test Report by QC Metallurgical, Inc., Report No. 1CM-384, dated 03/26/01, signed and sealed by Frank Grate, P.E.*

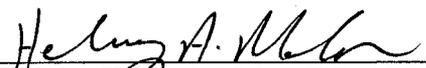
**2. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. *Drawing No. 06-290, titled "0.050" Perforated Bertha Aluminum Storm Panel", sheets 1 through 15 of 15 and sheet 1A, prepared by Tilteco, Inc., dated 11/20/2006, last revision #2 dated August 03, 2007, signed and sealed by Walter A. Tillit Jr., P.E.*

**B. TESTS**

1. *None.*



Helmy A. Makar, P.E., M.S.  
Product Control Examiner  
NOA No. 07-0111.02  
Expiration Date: 03/21/2012  
Approval Date: 08/30/2007

**Eastern Metal Supply, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**C. CALCULATIONS**

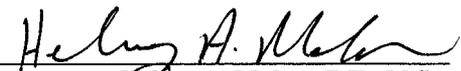
1. *Anchor Analysis, dated 12/08/2006, pages 1 through 120 OF 120, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E.*
2. *Revised anchor Analysis, dated 08/07/2007, 4 pages, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade County Building Code Compliance Office.*

**E. MATERIAL CERTIFICATIONS**

1. *None.*



**Jeffrey A. Makar, P.E., M.S.**  
**Product Control Examiner**  
**NOA No. 07-0111.02**  
**Expiration Date: 03/21/2012**  
**Approval Date: 08/30/2007**

**GENERAL NOTES:**

1. STORM PANEL SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2004 EDITION OF THE FLORIDA BUILDING CODE WITH THE 2005, 2006 & 2007 SUPPLEMENTS. DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1620 OF THE ABOVE MENTIONED CODE. IN ORDER TO VERIFY THAT COMPONENTS AND ANCHORS ON THIS P.A.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 1609.1.4 OF THE ABOVE MENTIONED CODE AS PER ATL REPORTS # 1022.01-96 AND # 0221.01-01, AS PROTOCOLS TAS-201, TAS-202 AND TAS-203.
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.
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)

(A) TO EXISTING POURED CONCRETE:

- 1/4"  $\phi$  TAPCON ANCHORS AS MANUFACTURED BY I.T.W. BUILDEX. (REGULAR OR 410 S.S.)  
USE MIN. f'c = 3192 psi
- 1/4"  $\phi$  CRETE-FLEX SS4 ANCHORS AS MANUFACTURED BY ELCO TEXTRON.  
USE MIN. f'c = 3350 psi.
- 1/4"  $\phi$  CF TAP-GRIP ANCHORS (BERTHA STUD-CON), AS MANUFACTURED BY TRU-FAST CORPORATION.  
USE MIN. f'c = 3600 psi.
- 1/4"  $\phi$  ZAMAC NAILIN ANCHORS AS MANUFACTURED BY POWER FASTENERS, INC.  
USE MIN. f'c = 2000 psi.
- 1/4"  $\phi$  x 7/8" CALK-IN ANCHORS OR ELCO male & female "PANELMATE" OR ELCO male & female "PANELMATE PLUS" AS MANUFACTURED BY POWER FASTENERS, INC. AND ELCO TEXTRON, RESPECTIVELY. USE MIN. f'c = 2000 psi. & 3350 psi RESPECTIVELY.

NOTES:

- A.1) MINIMUM EMBEDMENT INTO POURED CONCRETE OF TAPCON ANCHORS OR CRETE-FLEX SS4 IS 1 3/4"; FOR ZAMAC NAILIN ANCHORS IS 1 3/8"; FOR ELCO PANELMATE AND ELCO MALE "PANELMATE PLUS" ANCHORS IS 2", AND FOR CF TAP-GRIP ANCHORS IS 1 1/4".
- A.2) 7/8" CALK-IN ANCHORS SHALL BE ENTIRELY EMBEDDED INTO THE POURED CONCRETE. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. 1/4" $\phi$ -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: ASTM C-90.

- 1/4"  $\phi$  TAPCON ANCHORS AS MANUFACTURED BY I.T.W. BUILDEX. (REGULAR OR 410 S.S.)
- 1/4"  $\phi$  CRETE-FLEX SS4 ANCHORS AS MANUFACTURED BY ELCO TEXTRON.
- 1/4"  $\phi$  CF TAP-GRIP ANCHORS (BERTHA STUD-CON), AS MANUFACTURED BY TRU-FAST CORPORATION.
- 1/4"  $\phi$  ZAMAC NAILIN ANCHORS AS MANUFACTURED BY POWER FASTENERS, INC.
- 1/4"  $\phi$  x 7/8" CALK-IN ANCHORS OR ELCO male & female "PANELMATE" OR ELCO male & female "PANELMATE PLUS" AS MANUFACTURED BY POWER FASTENERS, INC. AND ELCO TEXTRON, RESPECTIVELY.

NOTES:

B.1) MINIMUM EMBEDMENT OF TAPCON, ELCO PANELMATE AND ELCO MALE "PANELMATE PLUS" CF TAP-GRIP AND CRETE-FLEX SS4 ANCHORS INTO CONCRETE BLOCK UNIT SHALL BE 1 1/4"; 1 3/8" FOR ZAMAC NAILIN ANCHORS.

B.2) 7/8" CALK-IN ANCHORS SHALL BE ENTIRELY EMBEDDED INTO THE CONCRETE BLOCK UNIT. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. 1/4" $\phi$ -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) AND B.2) ABOVE.

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

7. PANELS MAY ALSO BE INSTALLED HORIZONTALLY FOLLOWING INSTALLATION DETAILS SHOWN ON SECTIONS 1 THRU 15 (SHEET 3 & 7 OF 15) EXCEPT THAT HEADERS 2, 3 & 4 SHALL NOT BE USED.

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

9. THE INSTALLATION CONTRACTOR IS TO SEAL/CAULK ALL SHUTTER COMPONENT EDGES WHICH REMAIN IN CONTINUOUS CONTACT WITH THE BUILDING TO PREVENT WIND/RAIN INTRUSION.

10. 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.

11. (a) THIS PRODUCT APPROVAL DOCUMENT (P.A.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.A.D.

(b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT BASED ON THIS P.A.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 APPROVAL 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.A.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.A.D. ENGINEER, SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.

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

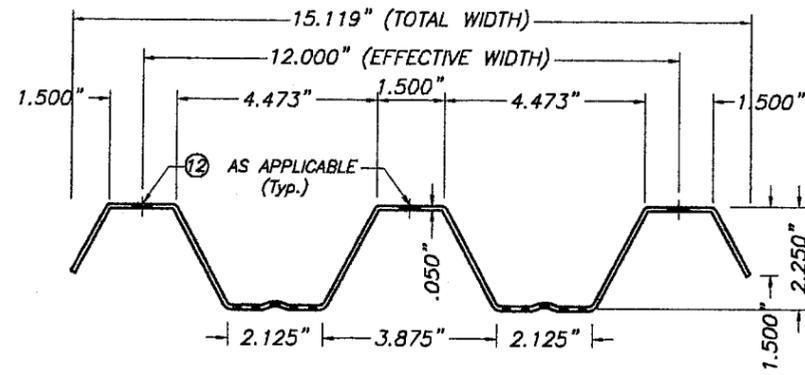
12. SHUTTER MANUFACTURER'S LABEL SHALL BE PLACED ON A READILY AND VISIBLE LOCATION AT PANEL. ONE LABEL SHALL BE PLACED FOR EVERY PANEL. LABEL SHALL READ AS FOLLOWS:  
EASTERN METAL SUPPLY, INC.  
WEST PALM BEACH, FL.  
MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED.

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 07-0111.02  
Expiration Date 03/21/2012  
By *Heather A. Miller*  
Miami Dade Product Control  
Division

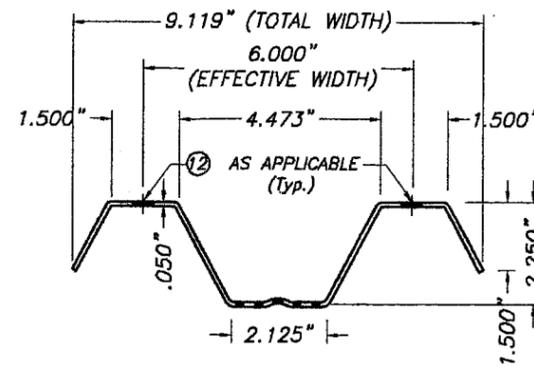
F.B.C.(H.V.H.Z.)/MIAMI-DADE COUNTY

*David*  
AUG 03 2007

 TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 38th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone: (305)871-1530 Fax: (305)871-1531 EB-0006719 WALTER A. TILLIT Jr., P. E. FLORIDA Lic. # 44167		0.050" PERFORATED BERTHA ALUMINUM STORM PANEL		DRAWN BY I.A.	
		EASTERN METAL SUPPLY, INC 4268 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-6061 FAX: (561)-588-4780		11/20/06 DATE	
		06-290		DRAWING No	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 03-143	11/20/06	3	-	-
2	GENERAL	08/03/07	4	-	-
				SHEET 1 OF 15	



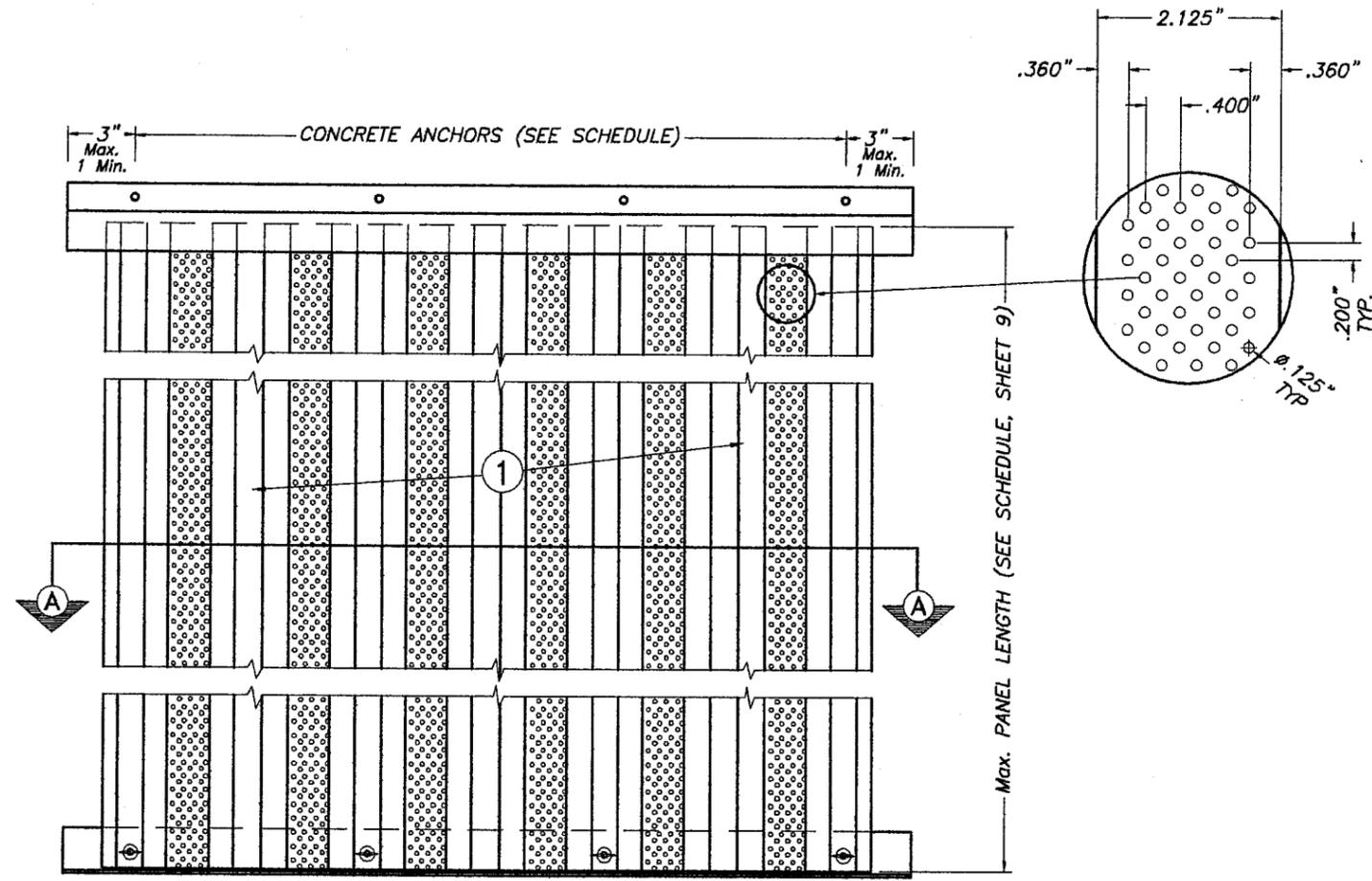
**FULL PANEL**



**HALF PANEL**

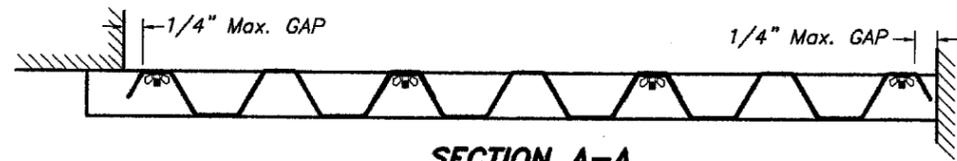
**1 PERFORATED STORM PANEL**

SCALE: 1/2" = 1"



**PERFORATED STORM PANEL  
TYPICAL ELEVATION**

N. T. S.



**SECTION A-A**

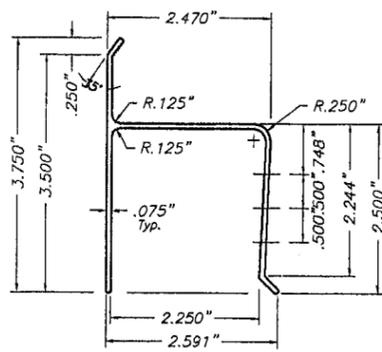
N. T. S.

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No 07-0111-02  
Expiration Date 03/21/2012  
By *Heather A. Miller*  
Miami Dade Product Control  
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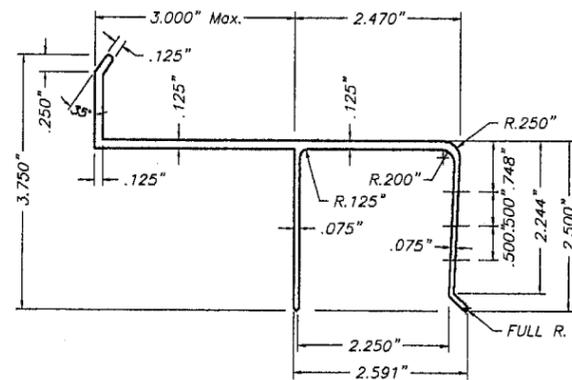
F.B.C.(H.V.H.Z.)/MIAMI-DADE COUNTY

<p><b>TILTECO INC.</b> TILLIT TESTING &amp; ENGINEERING COMPANY 6355 N.W. 38th St., Ste. 305, VIRGINIA GARDENS, FL 33188 Phone: (305)871-1530 Fax: (305)871-1531 EB-0006719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167</p>		0.050" PERFORATED BERTHA ALUMINUM STORM PANEL			DRAWN BY I.A.
		<p><b>EASTERN METAL SUPPLY, INC</b> 4268 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-6061 FAX: (561)-588-4780</p>			11/20/06 DATE
		<p>REV. No DESCRIPTION DATE REV. No DESCRIPTION DATE</p> <p>1 OLD 03-143 11/20/06 3 - -</p> <p>2 - - - 4 - -</p>			06-290 DRAWING No
					SHEET 1A OF 15

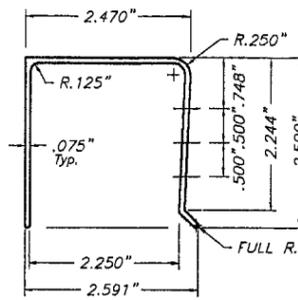
*[Signature]*  
AUG 8 2007



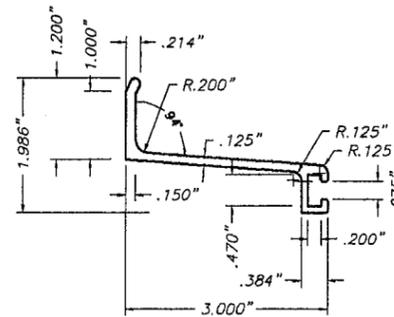
② **"h" HEADER**  
SCALE: 3/8" = 1"



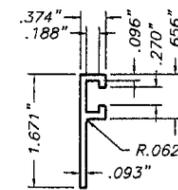
③ **3" Max. "U" BUILD OUT**  
SCALE: 3/8" = 1"



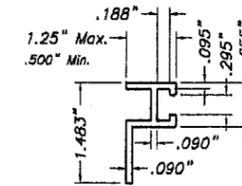
④ **"U" HEADER**  
SCALE: 3/8" = 1"



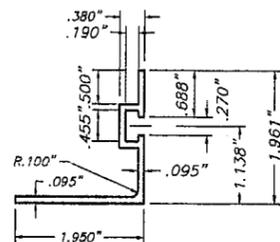
⑤ **3" ANGLE BUILD OUT BRACKET**  
SCALE: 3/8" = 1"



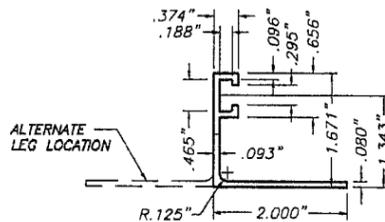
⑥ **"F" TRACK**  
SCALE: 3/8" = 1"



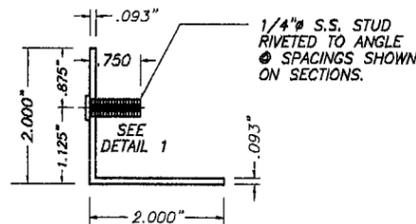
⑥A **1 1/4" MAX. B. O. "F" TRACK**  
SCALE: 3/8" = 1"



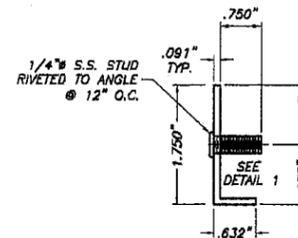
⑦ **REVERSED "F" ANGLE TRACK**  
SCALE: 3/8" = 1"



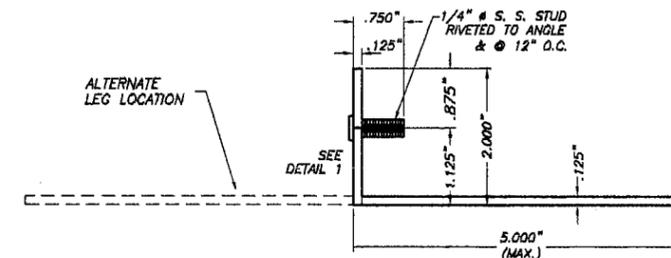
⑧ **"F" TRACK ANGLE**  
SCALE: 3/8" = 1"



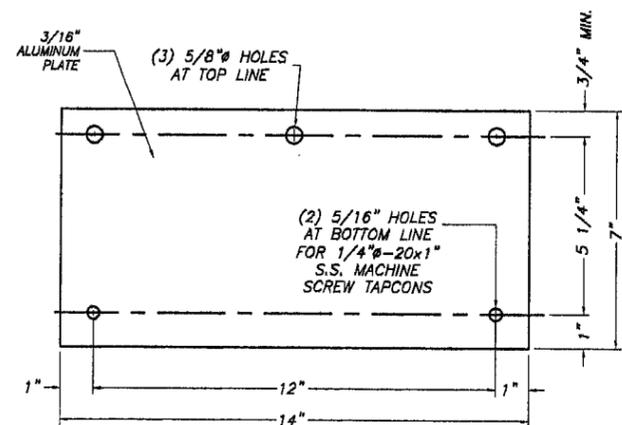
⑨ **STUDED ANGLE**  
6063-T5 Alum. ALLOY  
SCALE: 3/8" = 1"



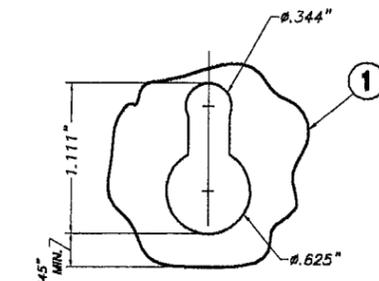
⑨A **MINI WALL 1.75"x0.632" ANGLE WITH STUD**  
SCALE: 1/2" = 1"



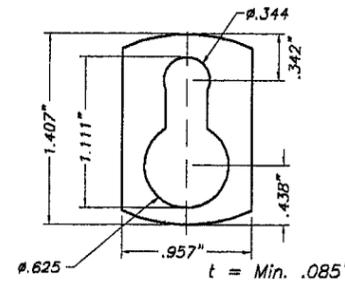
⑩ **2"x5" (MAX.) x 1/8" ANGLE WITH STUD**  
SCALE: 3/8" = 1"



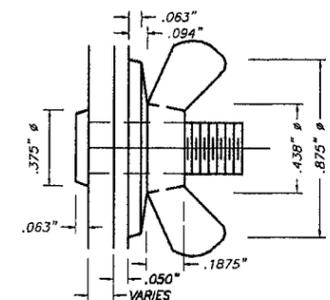
⑪ **3/16"x7"x14" LONG WALL PLATE**  
SCALE: 3/16" = 1"



⑫ **KEY HOLE AT PANEL**



⑬ **KEY HOLE WASHER**  
3105-H154 Alum. ALLOY  
SCALE: 3/4" = 1"



DETAIL 1: STUD W/ WING NUT

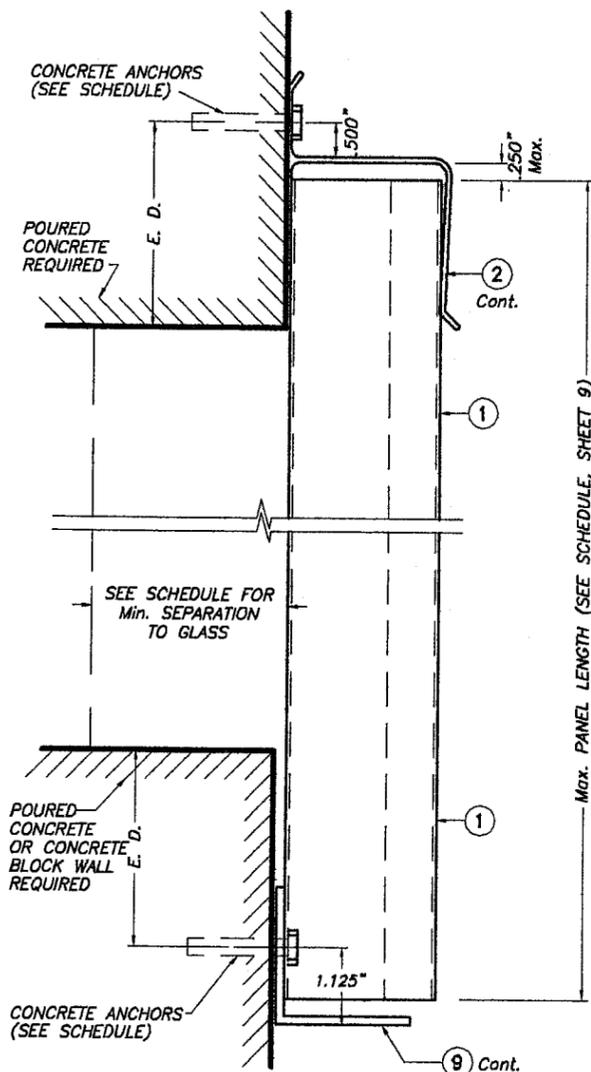
**COMPONENTS**

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 07-0111.02  
Expiration Date 03/21/2012  
By *Walter A. Tillit Jr.*  
Miami Date Product Control  
Division

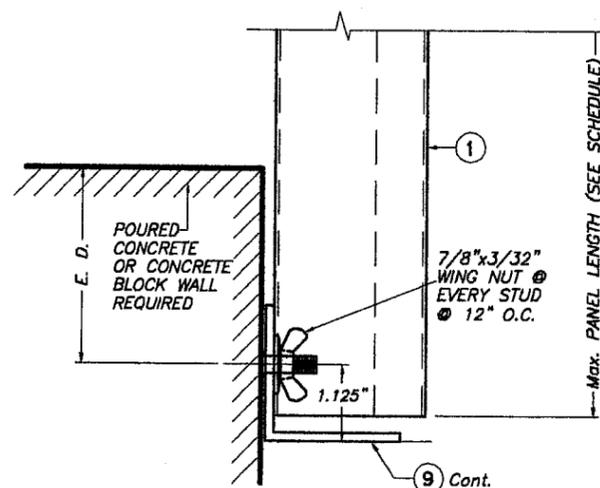
F.B.C.(H.V.H.Z.)/MIAMI-DADE COUNTY

<p>TILLIT TESTING &amp; ENGINEERING COMPANY 6355 N.W. 38th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone: (305)871-1530 Fax: (305)871-1531 EB-0008719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167</p>		0.050" PERFORATED BERTHA ALUMINUM STORM PANEL		DRAWN BY I.A.	
		<b>EASTERN METAL SUPPLY, INC</b> 4288 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-6061 FAX: (561)-588-4780		11/20/06 DATE	
		06-290 DRAWING No			
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 03-143	11/20/06	3		
2			4		

AUG 03 2007



SECTION @ ANCHOR

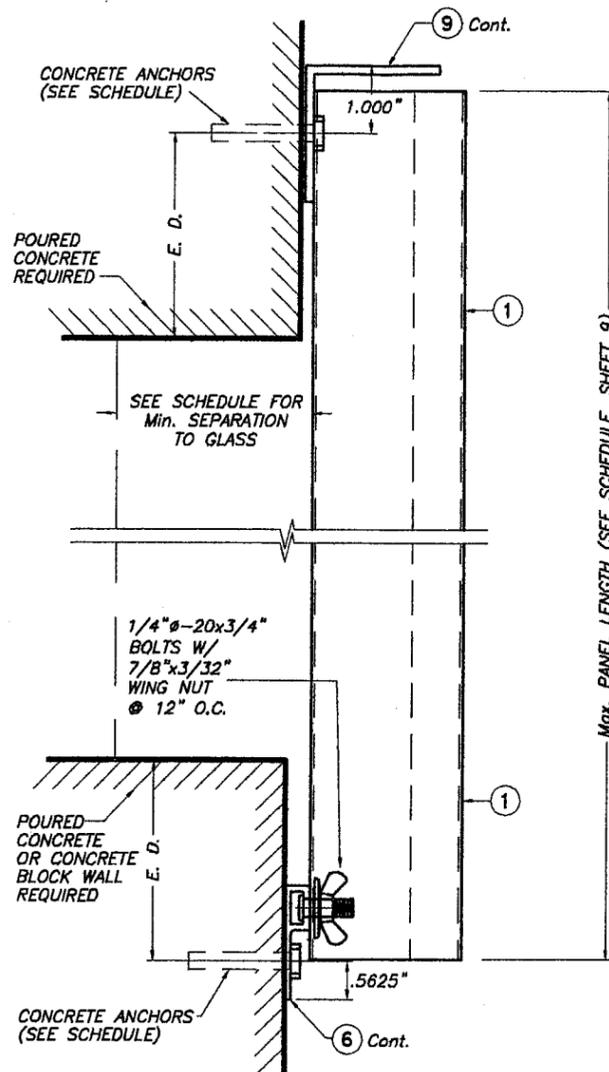


SECTION @ STUD

**WALL MOUNTING INSTALLATION SECTION 1**

SCALE : 3/8" = 1"

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



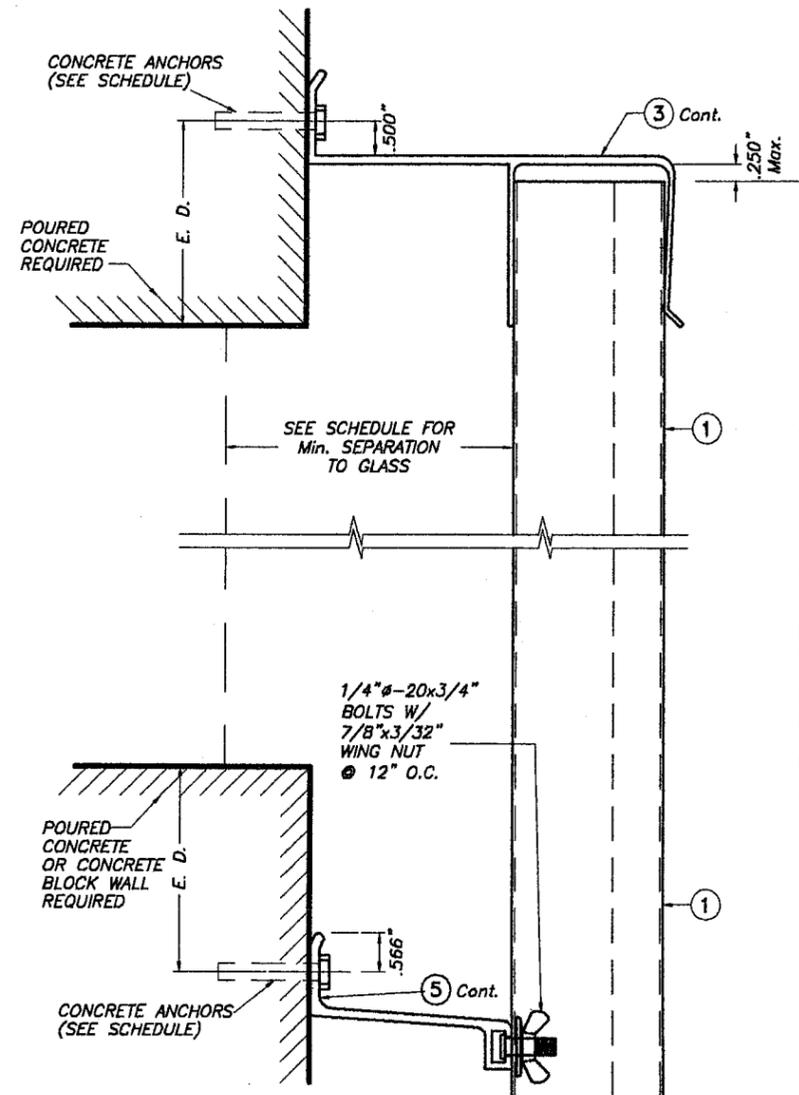
**WALL MOUNTING INSTALLATION SECTION 2**

SCALE : 3/8" = 1"

E. D. = EDGE DISTANCE (SEE SCHEDULE ON SHEETS 10 & 11 OF 15)

**NOTE FOR COMBINATION OF SECTIONS:**

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



**BUILD OUT INSTALLATION SECTION 3**

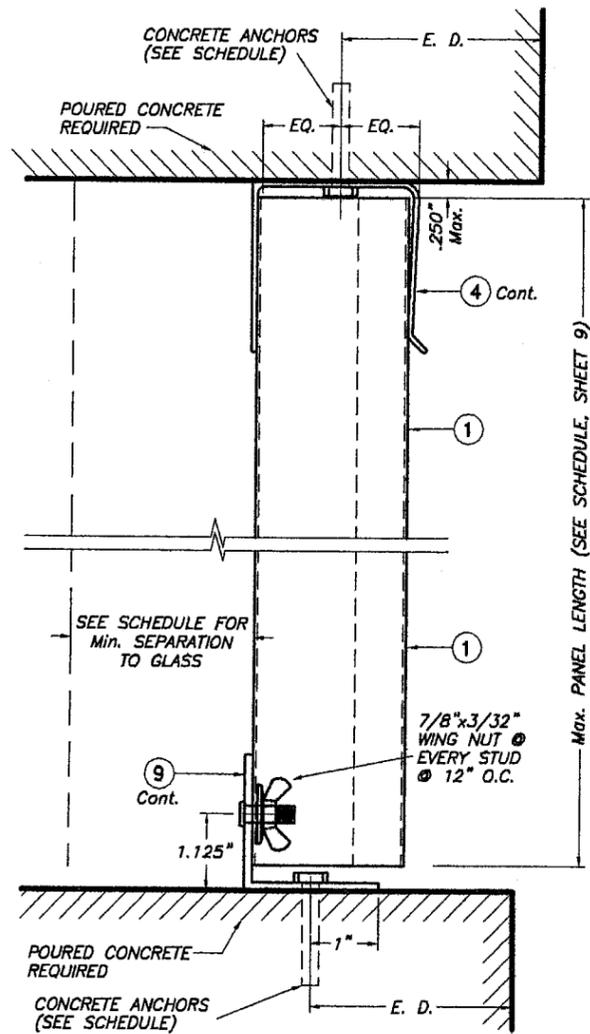
SCALE : 3/8" = 1"

PRODUCT REVISED as complying with the Florida Building Code  
 Acceptance No 07-0111.02  
 Expiration Date 03/21/2012  
 By *Helmy A. Helmy*  
 Miami Dade Product Control Division

F.B.C.(H.V.H.Z.)/MIAMI-DADE COUNTY

<p>TILLIT TESTING &amp; ENGINEERING COMPANY        6355 N.W. 38th St., Ste. 305, VIRGINIA GARDENS, FL 33166        Phone : (305)871-1530 . Fax : (305)871-1531        EB-0006719        WALTER A. TILLIT Jr, P. E.        FLORIDA Lic. # 44167</p>		0.050" PERFORATED BERTHA ALUMINUM STORM PANEL		DRAWN BY I.A.	
		<b>EASTERN METAL SUPPLY, INC</b> 4268 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-6061 FAX: (561)-588-4780		11/20/06 DATE	
		06-290 DRAWING No		SHEET 3 OF 15	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 03-143	11/20/06	3	-	-
2	-	-	4	-	-

AUG 03 2007

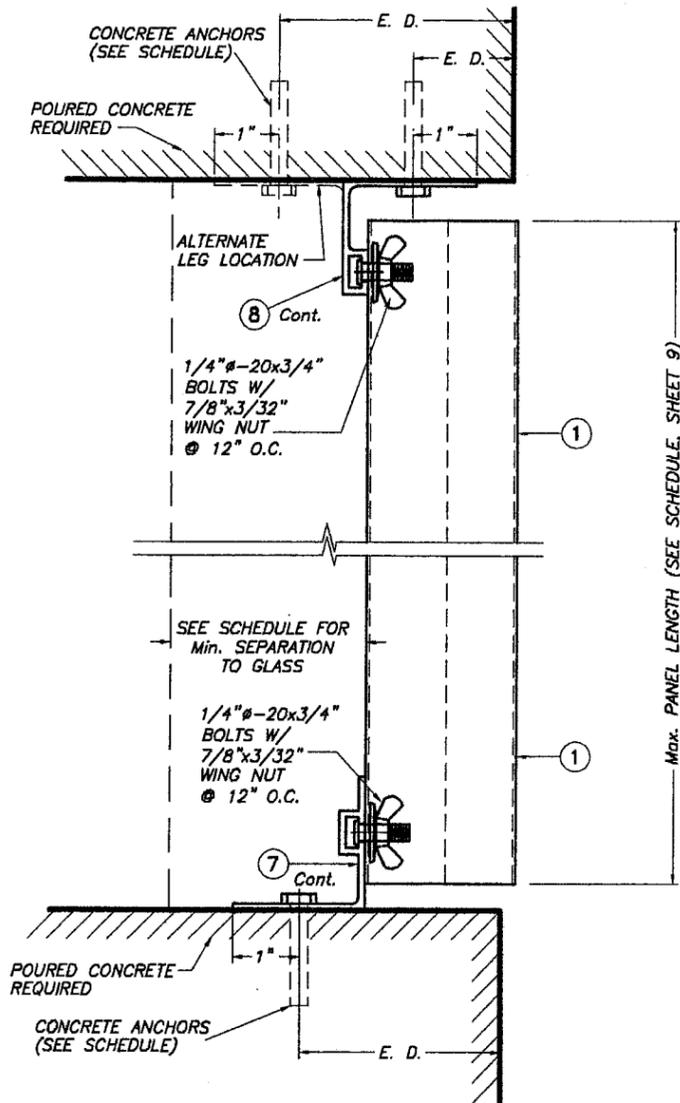


**CEILING & FLOOR MOUNTING  
INSTALLATION - SECTION 4**

SCALE : 3/8" = 1"

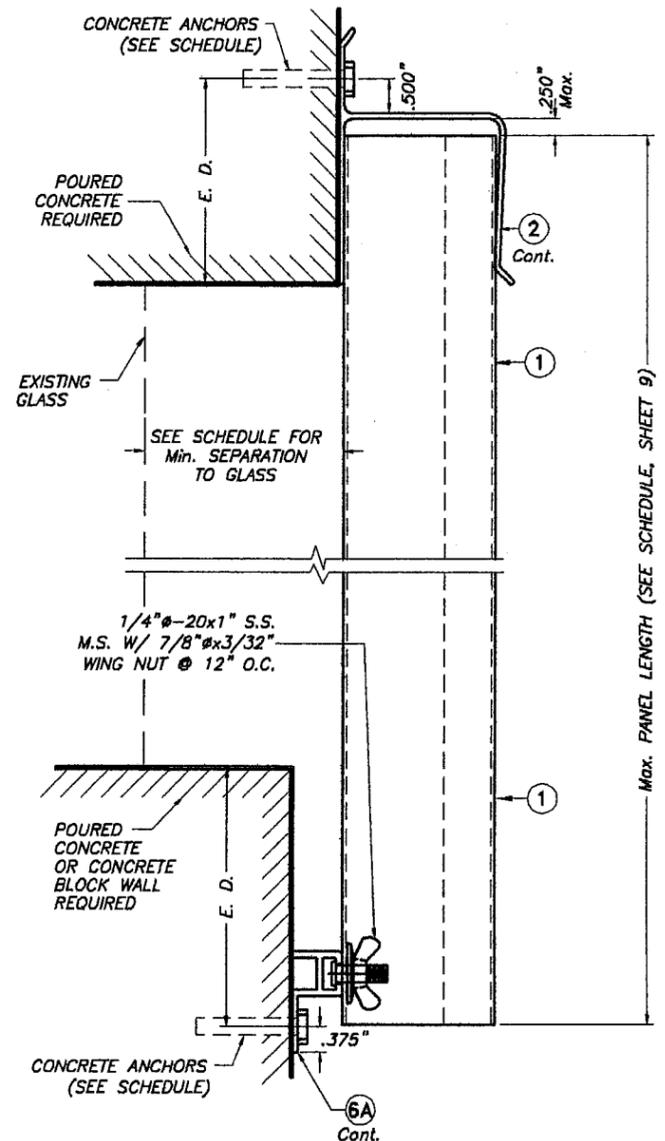
E. D. = EDGE DISTANCE  
(SEE SCHEDULE ON  
SHEETS 10 & 11 OF 15)

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



**CEILING & FLOOR MOUNTING  
INSTALLATION - SECTION 5**

SCALE : 3/8" = 1"



**WALL MOUNTING INSTALLATION  
SECTION 6**

SCALE : 3/8" = 1"

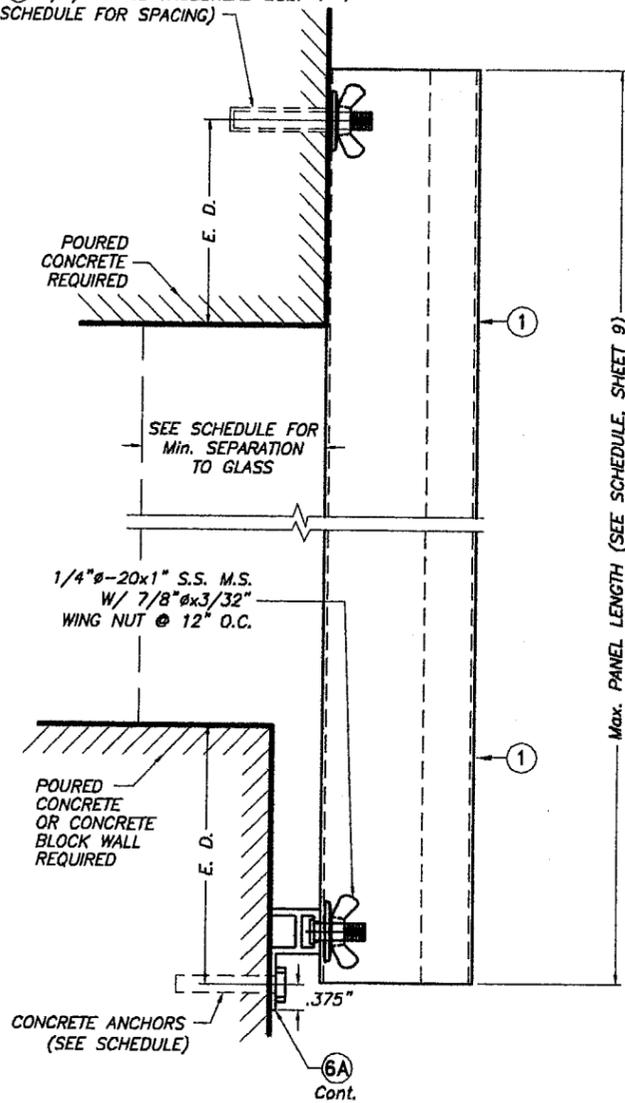
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. 07-0111.02  
Expiration Date 03/21/2012  
By *Helmut A. Klobner*  
Miami Dade Product Control  
Division

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 <b>TILTECO INC.</b> TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone : (305)871-1530 • Fax : (305)871-1531 EB-0006719 WALTER A. TILLIT Jr., P. E. FLORIDA Lic. # 44167		0.050" PERFORATED BERTHA ALUMINUM STORM PANEL		DRAWN BY I.A.	
		<b>EASTERN METAL SUPPLY, INC</b> 4288 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-6061 FAX: (561)-588-4780		11/20/06 DATE	
REV. No 1 DESCRIPTION OLD 03-143 DATE 11/20/06 REV. No 2 DESCRIPTION - DATE -		REV. No 3 DESCRIPTION - DATE -		06-290 DRAWING No	
				SHEET 4 OF 15	

CALK-IN OR ELCO male/female PANELMATE  
OR ELCO male/female PANELMATE PLUS  
① 2 W/1/4"Ø-20 SIDEWALK BOLT OR  
② W/1/4"Ø-20 TRUSSHEAD BOLT + +  
(SEE SCHEDULE FOR SPACING)

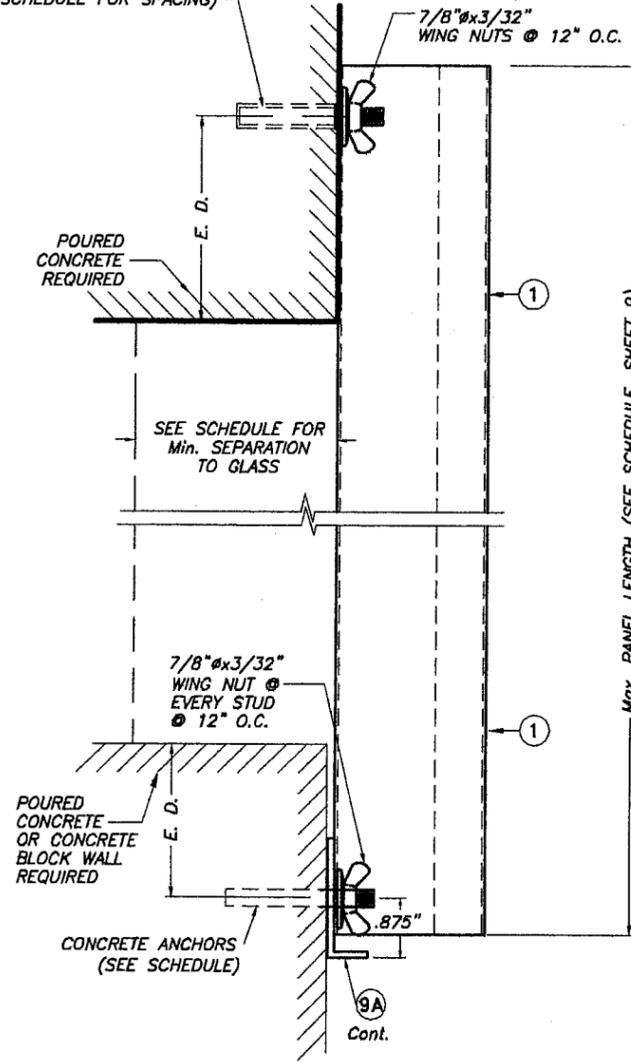


**WALL MOUNTING INSTALLATION**

**SECTION 7**

SCALE : 3/8" = 1"

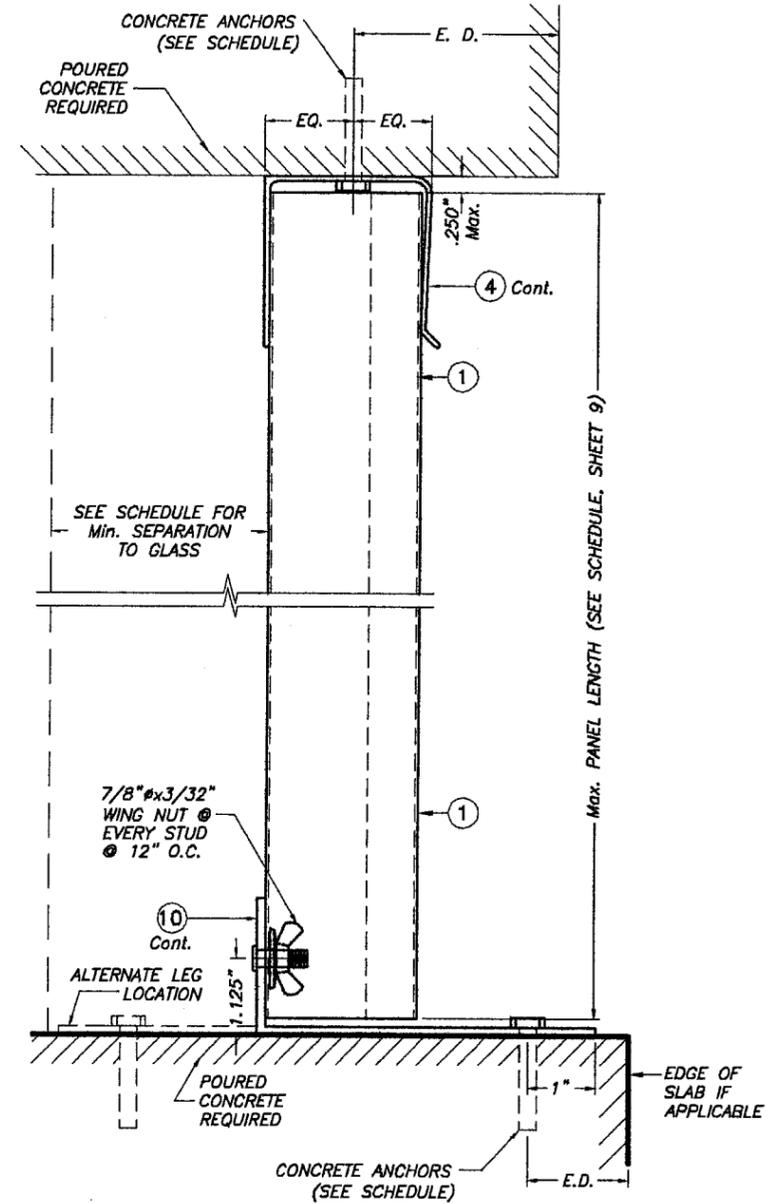
CALK-IN OR ELCO male/female PANELMATE  
OR ELCO male/female PANELMATE PLUS  
① 2 W/1/4"Ø-20 SIDEWALK BOLT OR  
② W/1/4"Ø-20 TRUSSHEAD BOLT + +  
(SEE SCHEDULE FOR SPACING)



**WALL MOUNTING INSTALLATION**

**SECTION 8**

SCALE : 3/8" = 1"



**CEILING & FLOOR MOUNTING**

**INSTALLATION SECTION 9**

SCALE : 3/8" = 1"

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 07-0111.02  
Expiration Date 03/21/2012  
By *Heber A. Nelson*  
Miami Dade Product Control  
Division

E. D. = EDGE DISTANCE  
(SEE SCHEDULE ON  
SHEETS 10 & 11 OF 15)

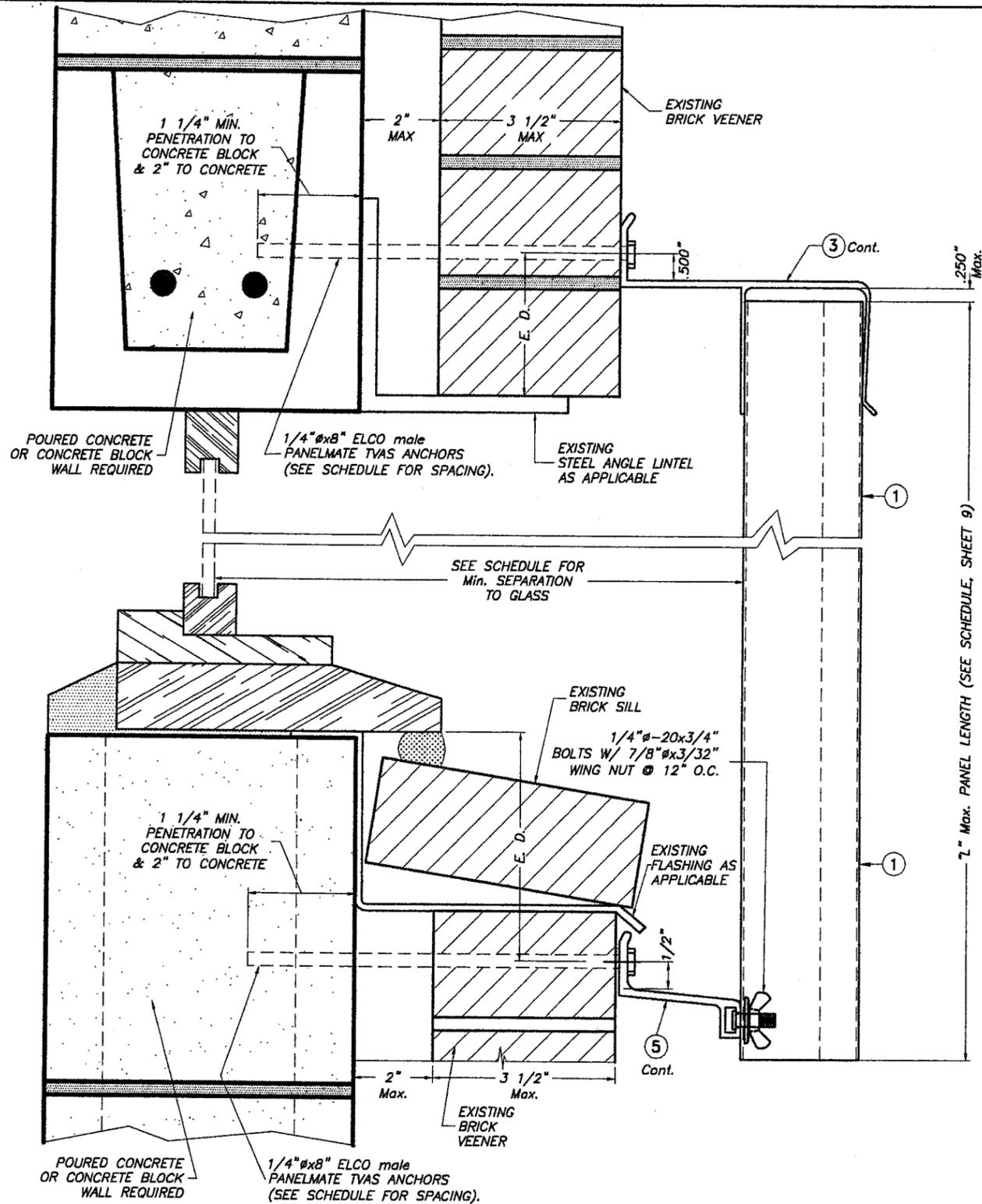
NOTE FOR COMBINATION OF SECTIONS:  
WALL/FLOOR/CEILING MOUNTING SECTIONS CAN BE  
COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

++  
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)

*[Signature]*  
AUG 03 2007

F.B.C.(H.V.H.Z.)/MIAMI-DADE COUNTY

 <b>TILECO Inc.</b> TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33186 Phone : (305)871-1530 . Fax : (305)871-1531 EB-0006719 WALTER A. TILLIT Jr., P. E. FLORIDA Lic. # 44167		0.050" PERFORATED BERTHA ALUMINUM STORM PANEL DRAWN BY I.A.	
		<b>EASTERN METAL SUPPLY, INC</b> 4288 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-6061 FAX: (561)-588-4780	
11/20/06 DATE		06-290 DRAWING No	
SHEET 5 OF 15			



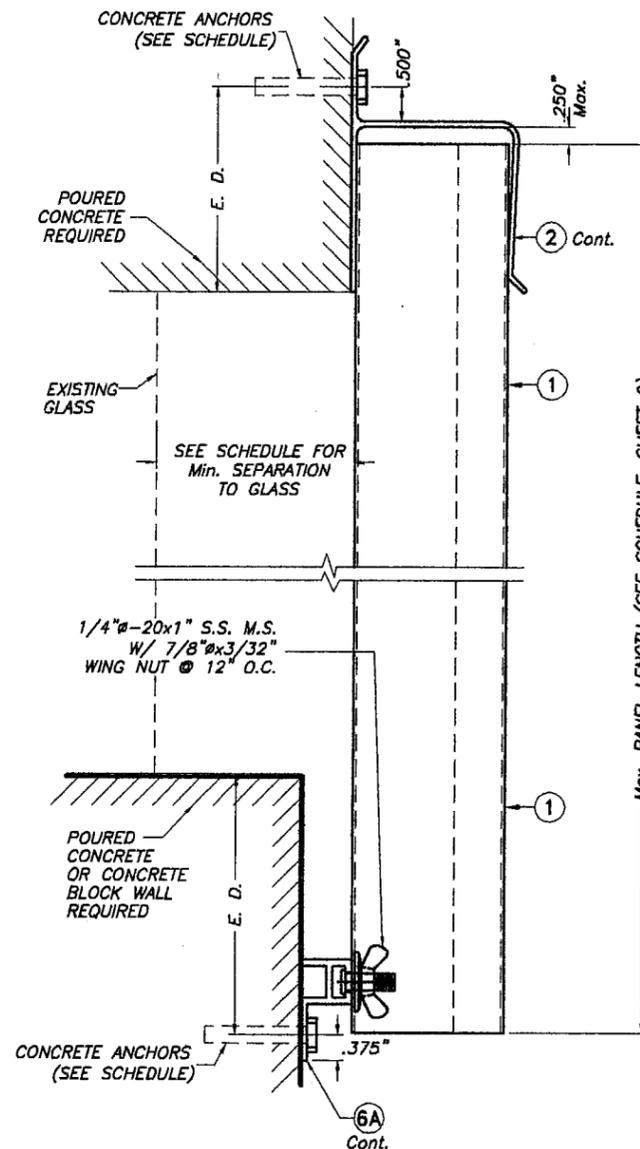
**BUILD OUT INSTALLATION**

**SECTION 10**

SCALE : 3/8" = 1"

E. D. = EDGE DISTANCE  
(SEE SCHEDULE ON  
SHEETS 10 & 11 OF 15)

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

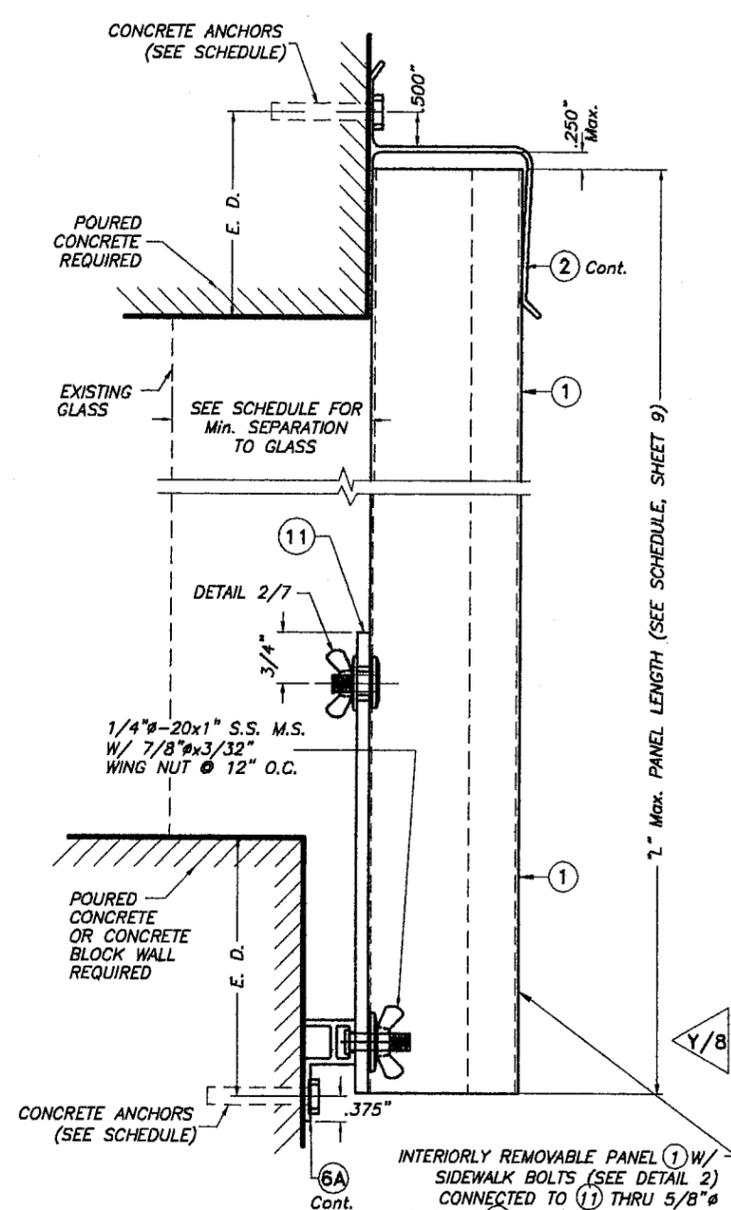


**SECTION 11A**

**WALL MOUNTING INSTALLATIONS**

**SECTIONS 11**

SCALE : 3/8" = 1"



**SECTION 11B**

INTERIORLY REMOVABLE PANEL (1) W/  
SIDEWALK BOLTS (SEE DETAIL 2)  
CONNECTED TO (1) THRU 5/8" Ø  
HOLES AT (1) @ 6" O.C. & FASTENED  
AT REAR W/ 7/8" Ø x 3/32" WING NUT  
@ EVERY SIDEWALK BOLT.

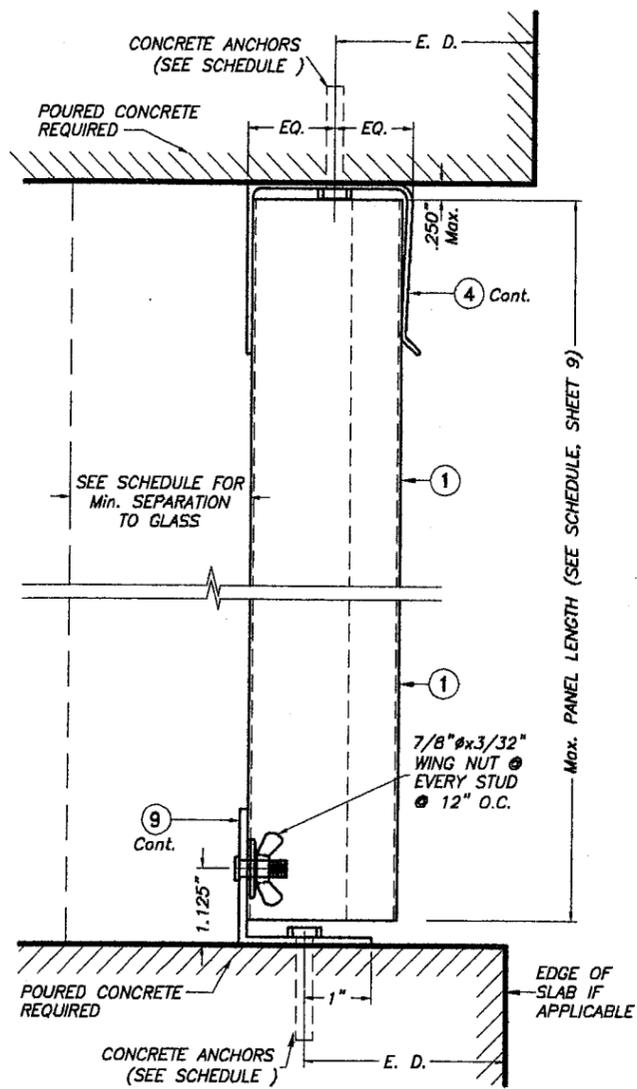
**INSTALLATIONS VALID FOR PANELS (1) USED JOINTLY  
WITH INTERIORLY REMOVABLE PANELS (1)**

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 07-0111.02  
Expiration Date 03/21/2012  
By *Helmut A. Miller*  
Miami Dade Product Control  
Division

F.B.C.(H.V.H.Z.)/MIAMI-DADE COUNTY

 TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33188 Phone : (305)871-1530 • Fax : (305)871-1531 EB-0006719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167		0.050" PERFORATED BERTHA ALUMINUM STORM PANEL		DRAWN BY I.A.
		<b>EASTERN METAL SUPPLY, INC</b> 4288 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-8061 FAX: (561)-588-4780		11/20/06 DATE
		06-290 DRAWING No		
		SHEET 6 OF 15		

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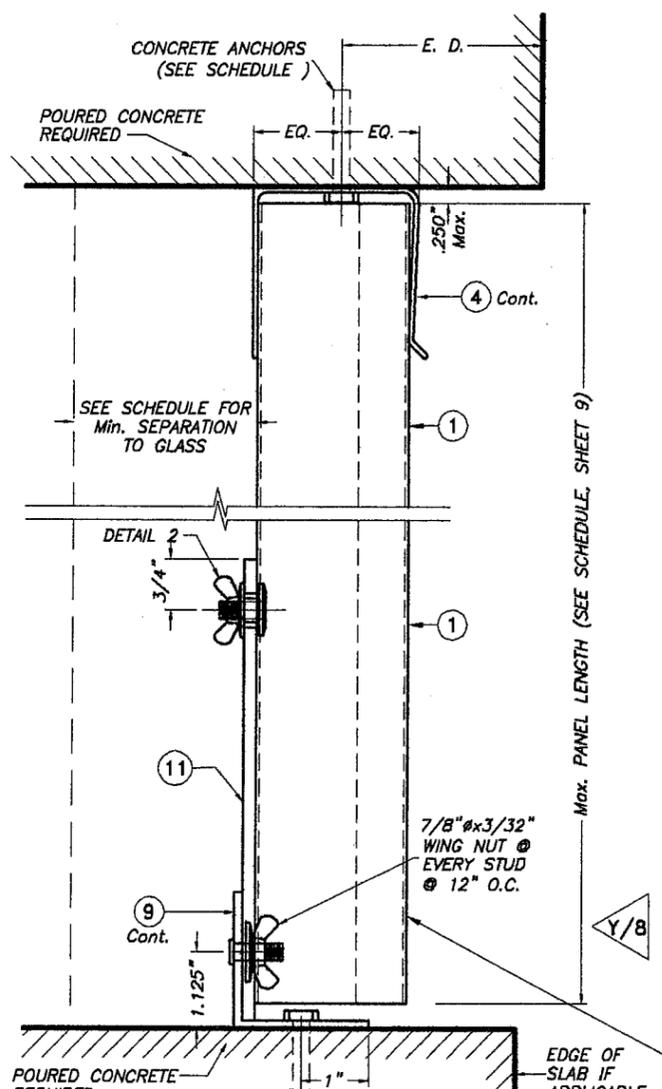


**SECTION 12A**

**CEILING & FLOOR MOUNTING INSTALLATIONS**

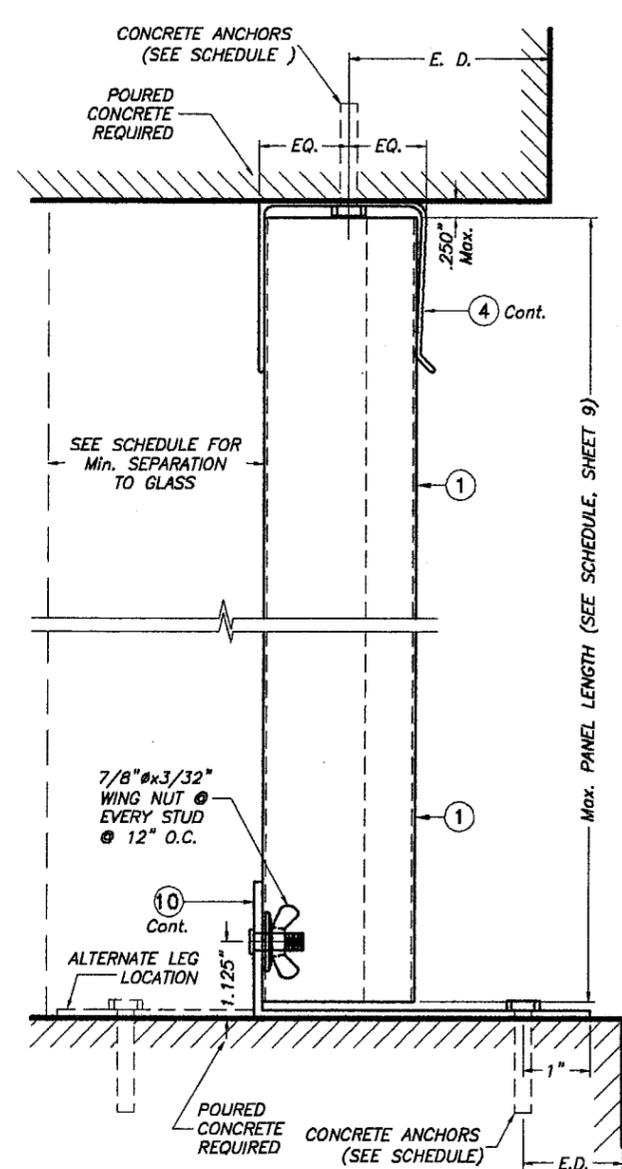
**SECTIONS 12**

SCALE : 3/8" = 1"



**SECTION 12B**

INTERIORLY REMOVABLE PANEL (1) W/ SIDEWALK BOLTS (SEE DETAIL 2) CONNECTED TO (1) THRU 5/8" Ø HOLES AT (1) @ 6" O.C. & FASTENED AT REAR W/ 7/8" Ø x 3/32" WING NUT @ EVERY SIDEWALK BOLT.

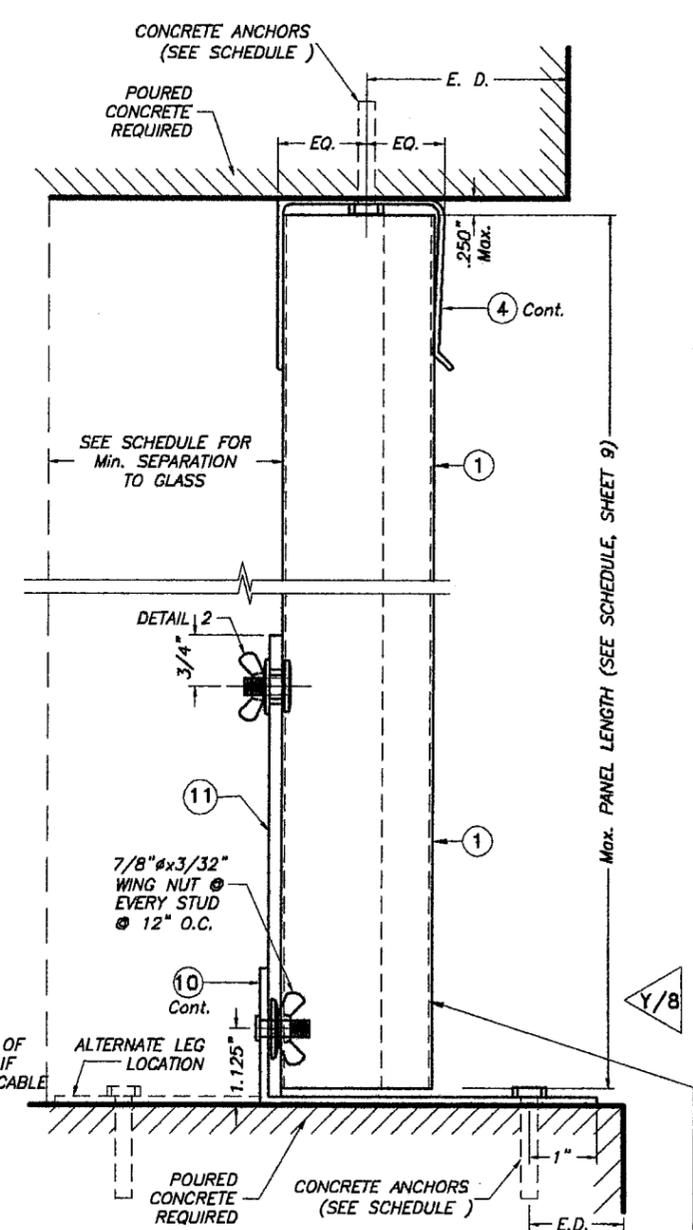


**SECTION 13A**

**CEILING & FLOOR MOUNTING INSTALLATIONS**

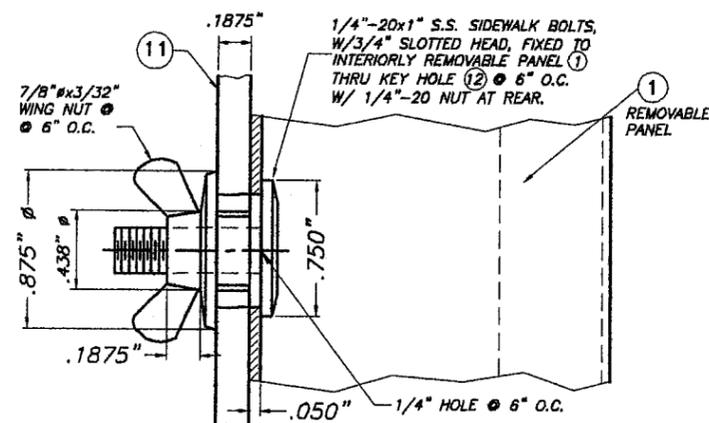
**SECTIONS 13**

SCALE : 3/8" = 1"



**SECTION 13B**

INTERIORLY REMOVABLE PANEL (1) W/ SIDEWALK BOLTS (SEE DETAIL 2) CONNECTED TO (1) THRU 5/8" Ø HOLES AT (1) @ 6" O.C. & FASTENED AT REAR W/ 7/8" Ø x 3/32" WING NUT @ EVERY SIDEWALK BOLT.



**DETAIL 2 - INSTALLATION OF 1/4" x 1" SIDEWALK BOLTS @ REMOVABLE PANEL**

SCALE: 1" = 1"

**INSTALLATIONS VALID FOR PANELS (1) USED JOINTLY WITH INTERIORLY REMOVABLE PANELS (1)**

E. D. = EDGE DISTANCE (SEE SCHEDULE ON SHEET 10 & 11 OF 15)

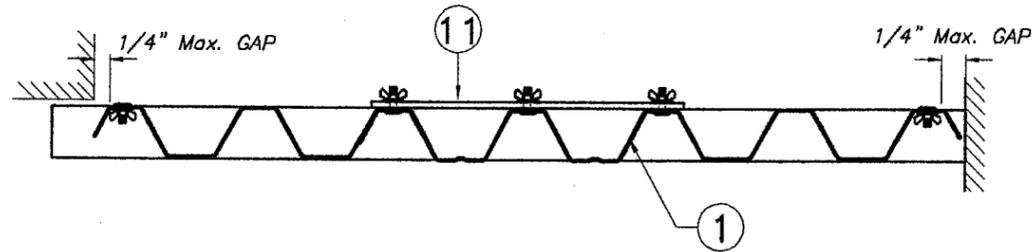
NOTE FOR COMBINATION OF SECTIONS:  
FLOOR/CEILING MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

PRODUCT REVISED as complying with the Florida Building Code  
Acceptance No. 07-0111.02  
Expiration Date 03/21/2012  
By *Walter A. Tillit Jr.*  
Miami Dade Product Control Division

F.B.C.(H.V.H.Z.)/MIAMI-DADE COUNTY

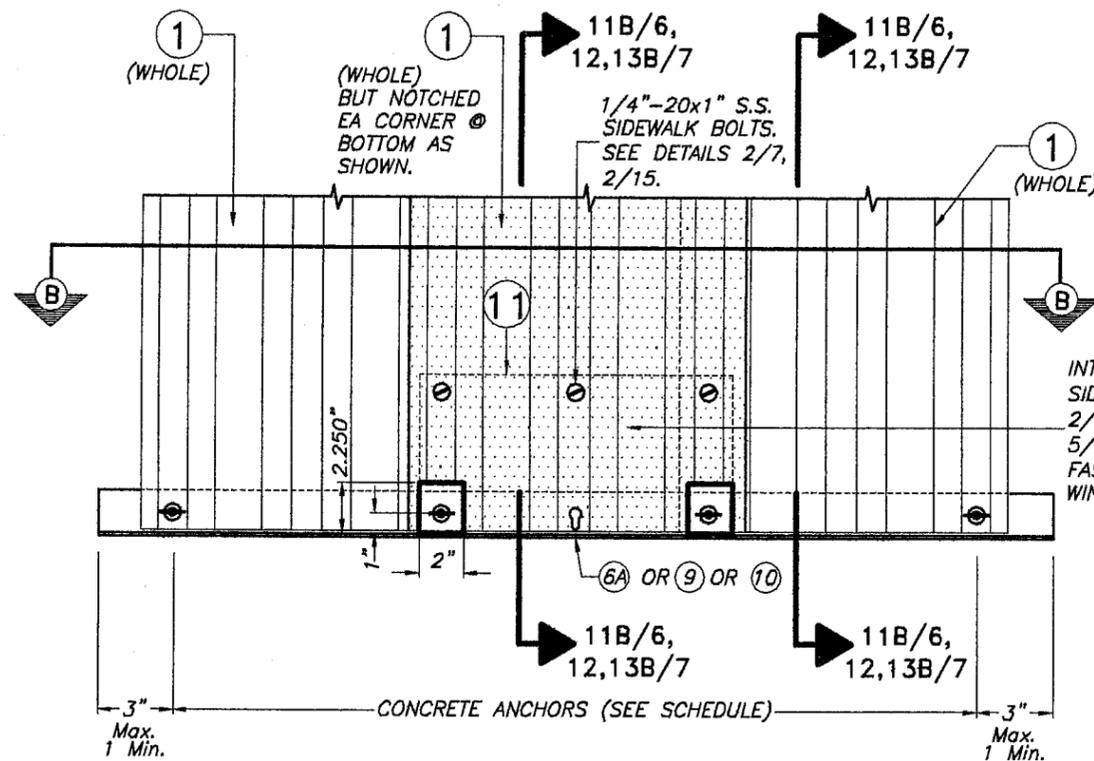
<p>TILLIT TESTING &amp; ENGINEERING COMPANY 8355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33148 Phone : (305)871-1530 • Fax : (305)871-1531 EB-0006719 WALTER A. TILLIT Jr., P. E. FLORIDA Lic. # 44167</p>		0.050" PERFORATED BERTHA ALUMINUM STORM PANEL		DRAWN BY I.A.	
		<p><b>EASTERN METAL SUPPLY, INC</b> 426B WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-6061 FAX: (561)-588-4780</p>		11/20/06 DATE	
<p>REV. No. 1 DESCRIPTION OLD 03-143 DATE 11/20/06</p>		<p>REV. No. 3 DESCRIPTION - DATE -</p>		06-290 DRAWING No	
<p>REV. No. 2 DESCRIPTION - DATE -</p>		<p>REV. No. 4 DESCRIPTION - DATE -</p>		SHEET 7 OF 15	

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**SECTION B-B**

SCALE : 1/8" = 1"



INTERIORLY REMOVABLE PANEL ① W/  
SIDEWALK BOLTS (SEE DETAILS  
2/7, 2/14) CONNECTED TO ① THRU  
5/8" Ø HOLES AT ① @ 6" O.C. &  
FASTENED AT REAR W/7/8" Ø x 3/32"  
WING NUT @ EVERY SIDEWALK BOLT.

**INTERIORLY REMOVABLE STORM PANEL  
PARTIAL ELEVATION Y**

SCALE : 1/8" = 1"

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 07-0111.02  
Expiration Date 03/21/2012  
By *Walter A. Tillit Jr.*  
Miami Dade Product Control  
Division

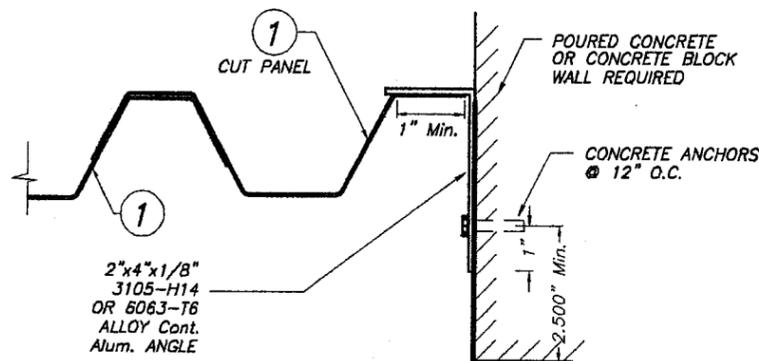
F.B.C.(H.V.H.Z.)/MIAMI-DADE COUNTY

<p><b>TILECO INC.</b> TILLIT TESTING &amp; ENGINEERING COMPANY 6355 N.W. 38th. St., Ste. 305, VIRGINIA GARDENS, FL 33168 Phone : (305)871-1530 . Fax : (305)871-1531 EB-0006719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167</p>		0.050" PERFORATED BERTHA ALUMINUM STORM PANEL		DRAWN BY I.A.	
		<p><b>EASTERN METAL SUPPLY, INC</b> 4268 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-6061 FAX: (561)-588-4780</p>		11/20/06 DATE	
		06-290 DRAWING No			
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 03-143	11/20/06	3	-	-
2	-	-	4	-	-

*[Signature]*  
AUG 03 2007

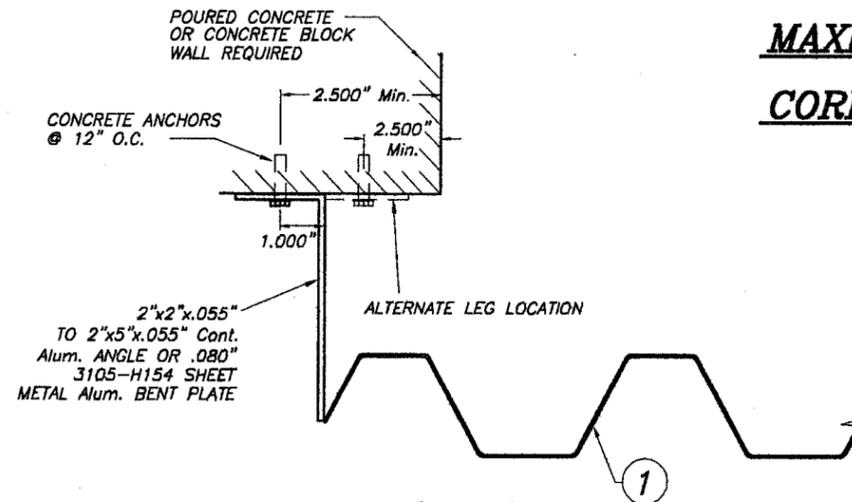
**MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND  
CORRESPONDING MAXIMUM PANEL LENGTH "L" SCHEDULE**

MAXIMUM DESIGN PRESSURE RATING W (p.s.f.)	Max. PANEL LENGTH L (ft.) (SEE SECTIONS)	MINIMUM SEPARATION TO GLASS	APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM
+65.0, -72.0	9'-0" OR LESS	3 1/2"	8
+63.5, -63.5	9'-0" OR LESS	3 1/8"	3
+65.0, -65.0	9'-0" OR LESS	3 3/4"	4
+65.0, -72.0	9'-0" OR LESS	3 1/4"	5
+63.5, -63.5	9'-0" OR LESS	3 1/2"	1, 2, 6, 7, 11
+65.0, -65.0	9'-0" OR LESS	3 1/2"	9, 12, 13
+63.5, -63.5	9'-0" OR LESS	3 3/4"	10



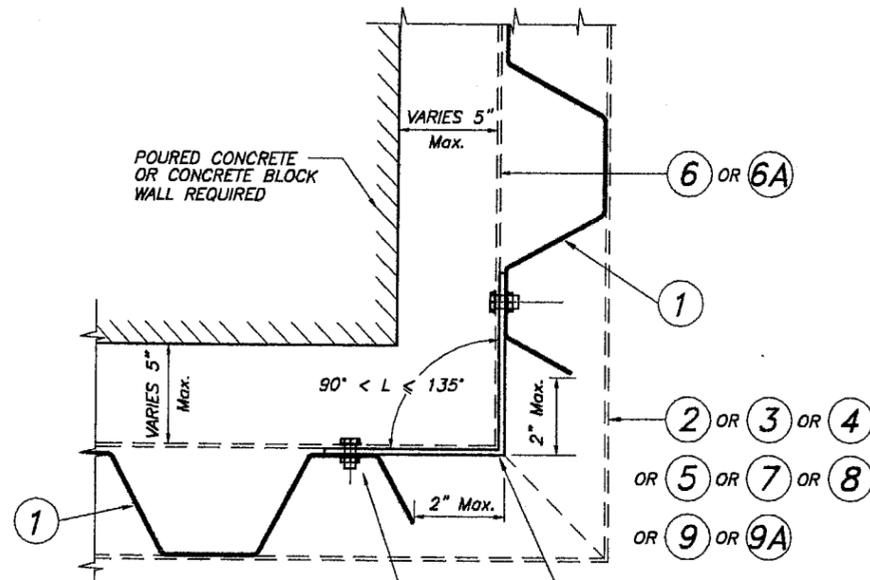
**CASE A (Plan)**

SCALE: 1/4" = 1"



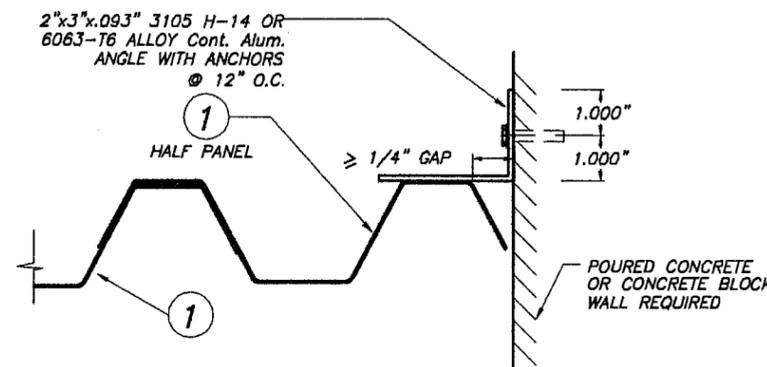
**CASE C (Plan)**

SCALE: 1/4" = 1"



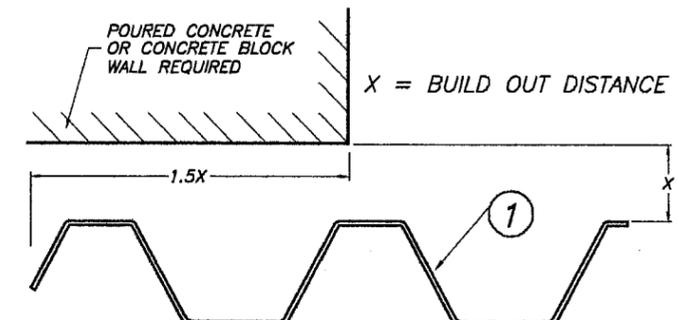
**CASE B (Plan)**

SCALE: 1/4" = 1"



**CASE D (Plan)**

SCALE: 1/4" = 1"



**CASE E (Plan)**

SCALE: 1/4" = 1"

**END CLOSURES DETAILS**

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 07-0111.02  
Expiration Date 03/21/2012  
By *Helmut A. Weber*  
Miami Dade Product Control  
Division

F.B.C.(H.V.H.Z.)/MIAMI-DADE COUNTY

 <b>TILTECO INC.</b> TILLIT TESTING & ENGINEERING COMPANY 8355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33188 Phone: (305)871-1530 Fax: (305)871-1531 EB-0006719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167	0.050" PERFORATED BERTHA ALUMINUM STORM PANEL	DRAWN BY I.A.
	<b>EASTERN METAL SUPPLY, INC</b> 4268 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-8061 FAX: (561)-588-4780	11/20/06 DATE
	06-290 DRAWING No	
		SHEET 9 OF 15

*[Signature]*  
AUG 03 2007

**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		CRETE-FLEX SS4		ZAMAC NAILIN		CALK-IN		CF TAP-GRIP		PANELMATES		PANELMATE PLUS		410 S.S. TAPCON			
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY		
+63.5, -63.5	8"	N/A	N/A	N/A	4"	N/A	8"	N/A	5"	N/A	3 1/2"	N/A	N/A	N/A	N/A	N/A	1 (TOP)	
	12"	8"	N/A	N/A	11"	10"	12"	9"	12"	8"	11"	11"	12"	7"	N/A	N/A	1 (BOTTOM)	
	12"	N/A	N/A	N/A	11"	N/A	12"	N/A	12"	N/A	11"	N/A	N/A	N/A	N/A	N/A	2 (TOP)	
	12"	8"	N/A	N/A	11"	10"	12"	9"	12"	8"	11"	11"	12"	7"	N/A	N/A	2 (BOTTOM)	
	12"	N/A	N/A	N/A	11"	N/A	12"	N/A	12"	N/A	11"	N/A	N/A	N/A	N/A	N/A	3 (TOP)	
	12"	8"	N/A	N/A	12"	10"	12"	9"	12"	8"	11"	11"	12"	7"	N/A	N/A	3 (BOTTOM)	
	9"	N/A	12"	N/A	5"	N/A	7"	N/A	8"	N/A	11"	N/A	11"	N/A	10"	N/A	4 (TOP/BOTTOM)	
	8"	N/A	11"	N/A	4"	N/A	7"	N/A	7"	N/A	10"	N/A	10"	N/A	9"	N/A	5 (TOP/BOTTOM)	
	12"	N/A	12"	N/A	N/A	N/A	12"	N/A	N/A	N/A	12"	N/A	12"	N/A	12"	N/A	6 (TOP)	
	12"	8"	12"	12"	N/A	N/A	12"	9"	N/A	N/A	12"	11"	12"	7"	12"	6"	6 (BOTTOM)	
	N/A	N/A	N/A	N/A	N/A	N/A	12"	N/A	N/A	N/A	12"	N/A	12"	N/A	N/A	N/A	7 (TOP)	
	12"	7 1/2"	12"	12"	N/A	N/A	12"	9"	N/A	N/A	12"	10"	12"	7"	12"	6"	7 (BOTTOM)	
	10"	N/A	12"	N/A	N/A	N/A	9"	N/A	N/A	N/A	11"	N/A	12"	N/A	11"	N/A	9 (TOP)	
	9"	N/A	12"	N/A	N/A	N/A	7"	N/A	N/A	N/A	11"	N/A	11"	N/A	10"	N/A	9 (BOTTOM)	
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12"	11"	N/A	N/A	N/A	N/A	10 (TOP)	
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12"	6"	N/A	N/A	N/A	N/A	10 (BOTTOM)	
	12"	N/A	12"	N/A	N/A	N/A	12"	N/A	N/A	N/A	12"	N/A	12"	N/A	12"	N/A	11 (TOP)	
	12"	8"	12"	12"	N/A	N/A	12"	9"	N/A	N/A	12"	11"	12"	7"	12"	6"	11A (BOTTOM)	
	12"	8"	12"	12"	N/A	N/A	12"	12"	N/A	N/A	12"	11"	12"	9"	12"	10"	11B (BOTTOM)	
	10"	N/A	12"	N/A	N/A	N/A	12"	N/A	N/A	N/A	12"	N/A	12"	N/A	11"	N/A	12 (TOP)	
9"	N/A	12"	N/A	N/A	N/A	4 1/2"	N/A	N/A	N/A	11"	N/A	11"	N/A	10"	N/A	12A (BOTTOM)		
3"	N/A	3 1/2"	N/A	N/A	N/A	2 1/2"	N/A	N/A	N/A	3"	N/A	3"	N/A	3"	N/A	12B (BOTTOM)		
10"	N/A	12"	N/A	N/A	N/A	9 1/2"	N/A	N/A	N/A	11"	N/A	12"	N/A	11"	N/A	13 (TOP)		
9"	N/A	12"	N/A	N/A	N/A	7 1/2"	N/A	N/A	N/A	11"	N/A	11"	N/A	10"	N/A	13A (BOTTOM)		
3"	N/A	3 1/2"	N/A	N/A	N/A	2 1/2"	N/A	N/A	N/A	3"	N/A	3"	N/A	3"	N/A	13B (BOTTOM)		

E. D. = EDGE DISTANCE

9'-0" OR LESS

\* 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 CALK-IN ANCHORS IS 2 1/2") 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		
	REGULAR TAPCON, 410 S.S. TAPCON, CRETE-FLEX SS4, ZAMAC NAILING, PANELMATE OR PANELMATE PLUS.	CALK-IN	CF TAP-GRIP
3"	.86	.75	1.00
2 1/2"	.71	.50	.80
2"	.50	-	-

**ANCHORS LEGEND**

ANCHOR TYPE	Min. ANCHOR SPACING
REGULAR TAPCON, 410 S.S. TAPCON	3.0"
CRETE-FLEX SS4, ZAMAC NAILING, CF TAP-GRIP, PANELMATE OR PANELMATE PLUS.	3.0"
CALK-IN	2.5"

**PRODUCT REVISED**  
 as complying with the Florida Building Code  
 Acceptance No 07-0111.02  
 Expiration Date 03/21/2012  
 By *Healy A. Albin*  
 Miami Dade Product Control Division

F.B.C.(H.V.H.Z.)/MIAMI-DADE COUNTY

AUG 03 2007

 TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 38th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone: (305)871-1530 Fax: (305)871-1531 EB-0008719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167	0.050" PERFORATED BERTHA ALUMINUM STORM PANEL	DRAWN BY I.A.
	<b>EASTERN METAL SUPPLY, INC</b> 4268 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-6061 FAX: (561)-588-4780	11/20/06 DATE
REV. No DESCRIPTION DATE REV. No DESCRIPTION DATE 1 OLD 03-143 1/20/06 3 - - 2 GENERAL 08/03/07 4 - -	06-290 DRAWING No	SHEET 10 OF 15

**MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING SCHEDULE FOR INSTALLATIONS INTO 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		CRETE-FLEX SS4		ZAMAC NAILIN		CALK-IN		CF TAP-GRIP		PANELMATES		PANELMATE PLUS		410 S.S. TAPCON				
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY			
+65.0, -65.0	9"	N/A	N/A	N/A	5"	N/A	7"	N/A	7"	N/A	5"	N/A	N/A	N/A	N/A	N/A	N/A	4 (TOP/BOTTOM)	9'-0" OR LESS
+65.0, -72.0	7"	N/A	10"	N/A	N/A	N/A	6"	N/A	N/A	N/A	9"	N/A	8"	N/A	8"	N/A	5 (TOP/BOTTOM)		
	N/A	N/A	N/A	N/A	N/A	N/A	12"	N/A	N/A	N/A	12"	N/A	12"	N/A	N/A	N/A	8 (TOP)		
	12"	7"	12"	11"	N/A	N/A	12"	8"	N/A	N/A	12"	9"	12"	6"	12"	5 1/2"	8 (BOTTOM)		

E. D. = EDGE DISTANCE

\* 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 CALK-IN ANCHORS IS 2 1/2") 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		
	REGULAR TAPCON, 410 S.S. TAPCON, CRETE-FLEX SS4, ZAMAC NAILING, PANELMATE OR PANELMATE PLUS.	CALK-IN	CF TAP-GRIP
3"	.86	.75	1.00
2 1/2"	.71	.50	.80
2"	.50	-	-

**ANCHORS LEGEND**

ANCHOR TYPE	Min. ANCHOR SPACING
REGULAR TAPCON, 410 S.S. TAPCON	3.0"
CRETE-FLEX SS4, ZAMAC NAILING, CF TAP-GRIP, PANELMATE OR PANELMATE PLUS.	3.0"
CALK-IN	2.5"

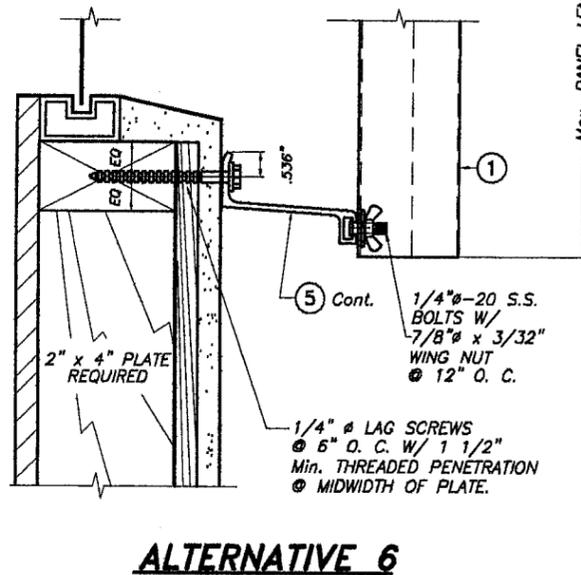
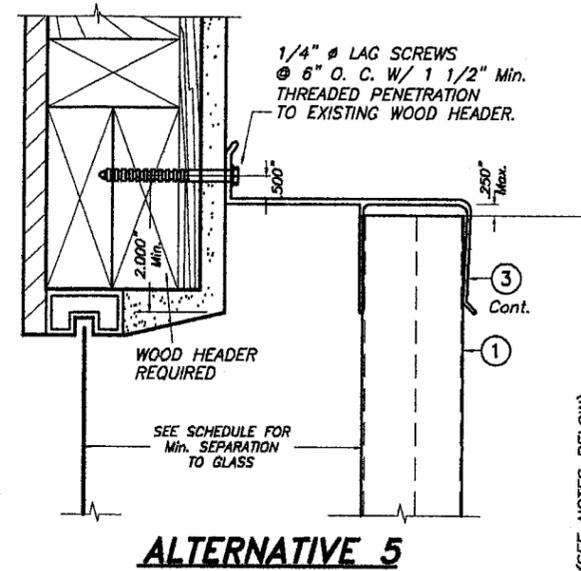
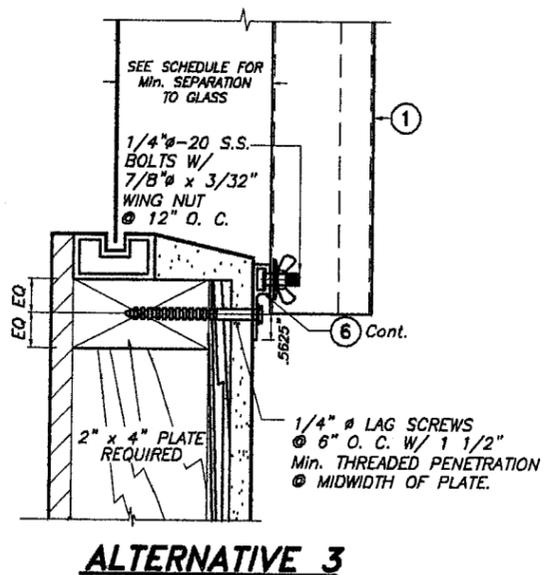
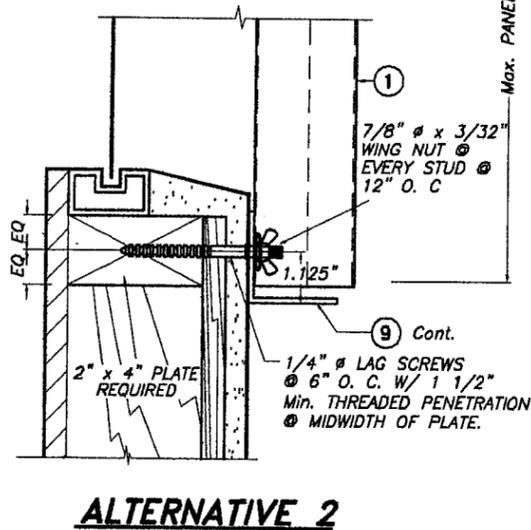
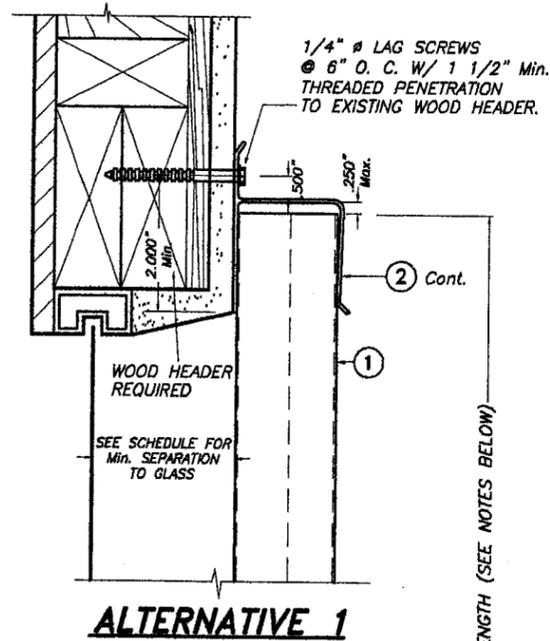
**PRODUCT REVISED**  
as complying with the Florida Building Code  
Acceptance No 07-0111-02  
Expiration Date 03/21/2012  
By *Helmy A. Miller*  
Miami Dade Product Control Division

F.B.C.(H.V.H.Z.)/MIAMI-DADE COUNTY

*[Signature]*  
AUG 03 2007

 <b>TILECO Inc.</b> TILLIT TESTING & ENGINEERING COMPANY 6335 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33186 Phone: (305)871-1530 Fax: (305)871-1531 EB-0006719 WALTER A. TILLIT Jr., P. E. FLORIDA Lic. # 44167	0.050" PERFORATED BERTHA ALUMINUM STORM PANEL	DRAWN BY I.A.
	<b>EASTERN METAL SUPPLY, INC</b> 4288 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-6061 FAX: (561)-588-4780	11/20/06 DATE
	REV. No DESCRIPTION DATE REV. No DESCRIPTION DATE 1 OLD 03-143 11/20/06 3 - - 2 - - 4 - -	06-290 DRAWING No

SHEET 11 OF 15



**WALL MOUNTING INSTALLATIONS**  
**SECTION A**

SCALE : 1/4" = 1"

**INSTALLATION DETAILS ON EXISTING WOOD BUILDINGS**

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

**NOTES:**

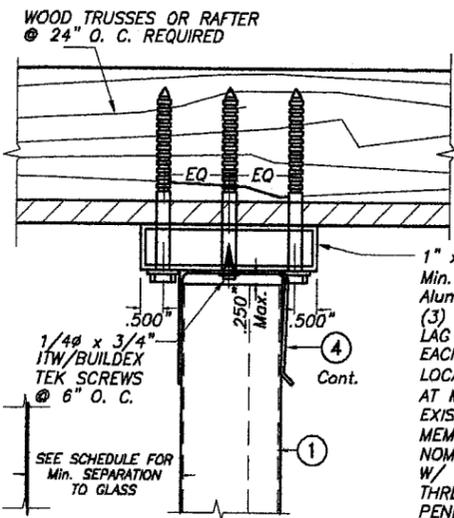
- INSTALLATIONS ARE ONLY VALID FOR DESIGN WIND LOADS UP TO +63.5, -63.5 psf AND PANEL'S LENGTHS UP TO 9'-0".
- FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 07-0111.02  
Expiration Date 03/21/2012  
By *Helmut A. Meier*  
Miami Dade Product Control  
Division

F.B.C.(H.V.H.Z.)/MIAMI-DADE COUNTY

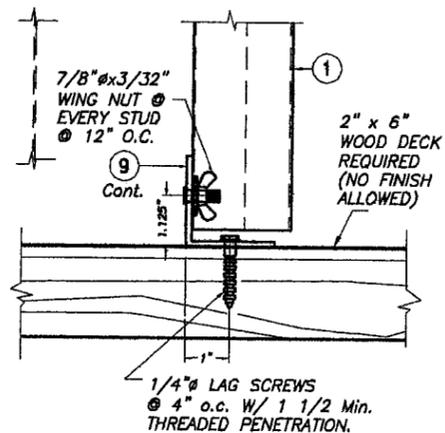
<p>TILLIT TESTING &amp; ENGINEERING COMPANY 6335 N.W. 38th St., Ste. 305, VIRGINIA GARDENS, FL 33188 Phone : (305)871-1530 • Fax : (305)871-1531 EB-0006719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167</p>		0.050" PERFORATED BERTHA ALUMINUM STORM PANEL		DRAWN BY I.A.	
		<p><b>EASTERN METAL SUPPLY, INC</b> 4268 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-6061 FAX: (561)-588-4780</p>		11/20/06 DATE	
		06-290 DRAWING No			
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 03-143	11/20/06	3	-	-
2	-	-	4	-	-

AUG 03 2007



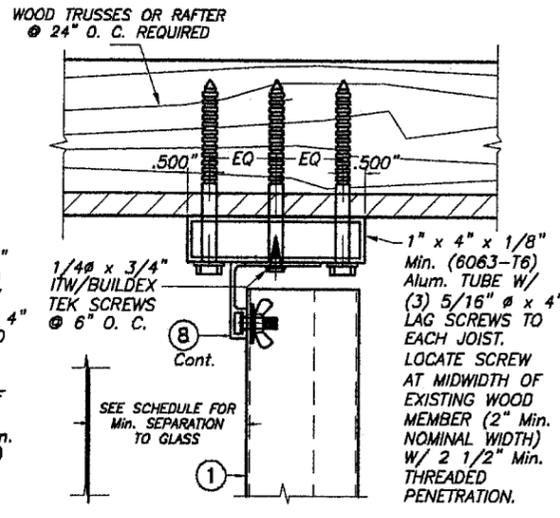
**ALTERNATIVE 7 \***

\* VALID FOR Max. +65.0, -65.0 psf.

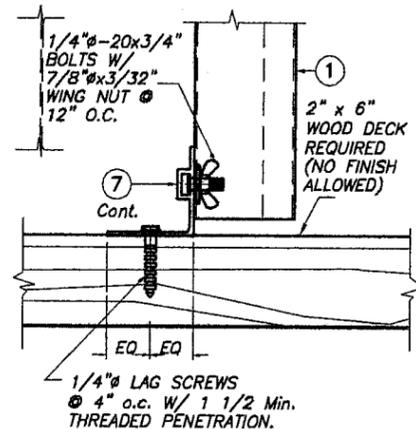


**ALTERNATIVE 8 \***

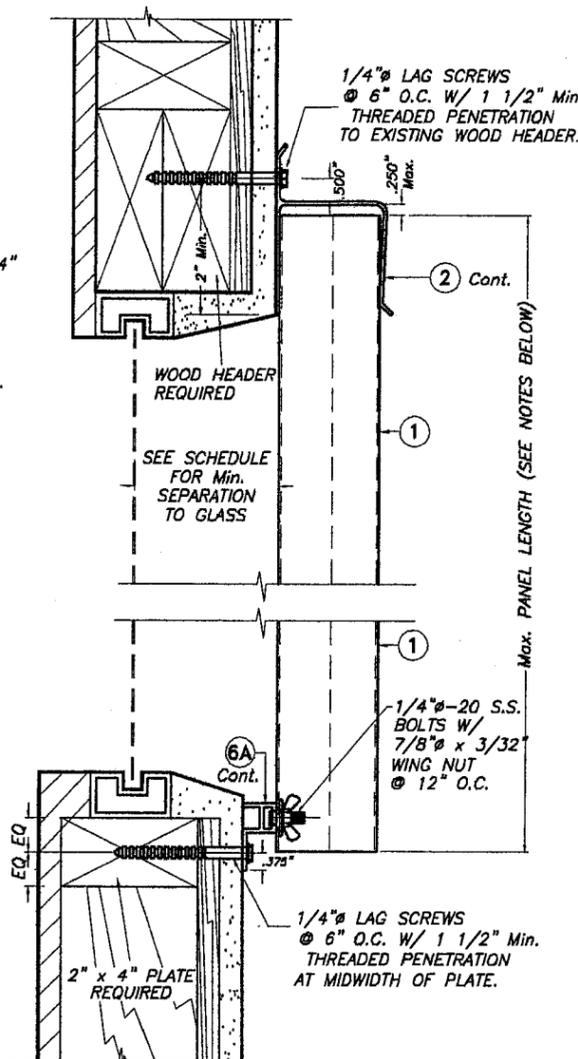
\* VALID FOR Max. +65.0, -65.0 psf.



**ALTERNATIVE 9**

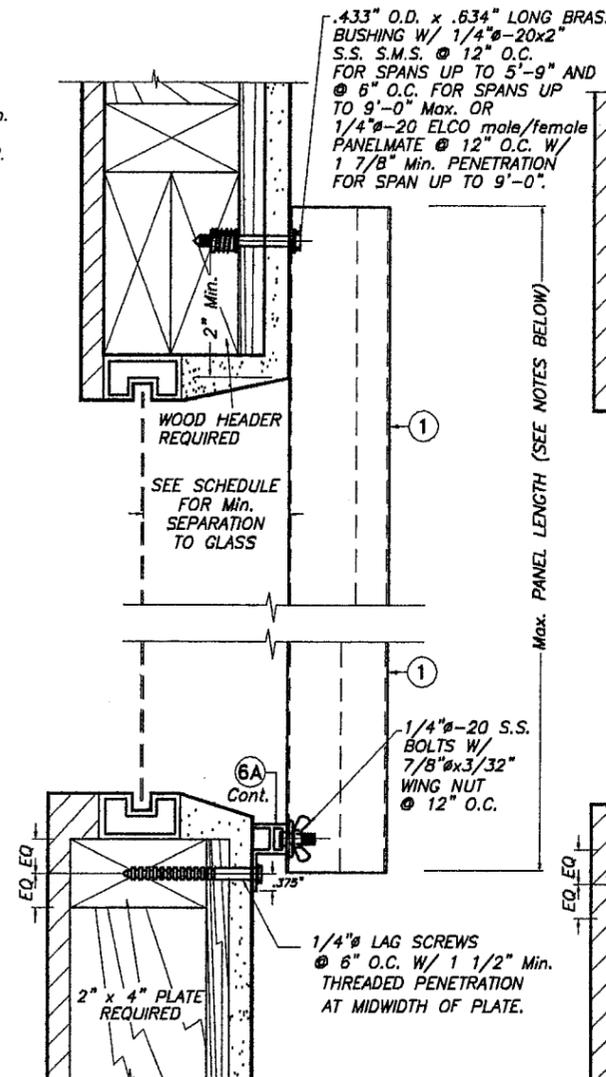


**ALTERNATIVE 10**



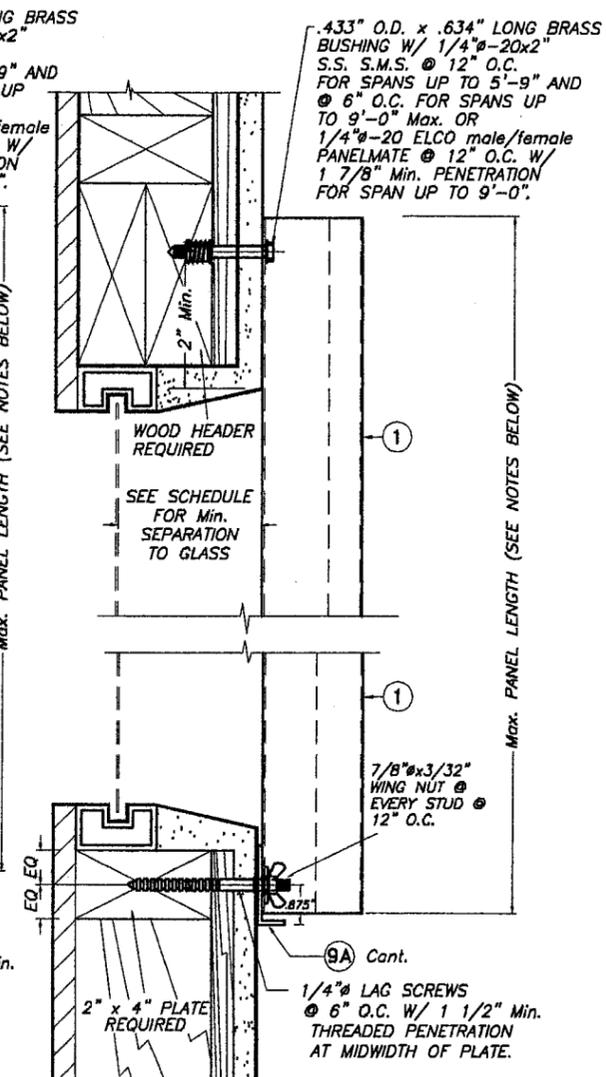
**ALTERNATIVE 11 \***

\* VALID FOR Max. +63.5, -63.5 psf.



**ALTERNATIVE 12 \***

\* VALID FOR Max. +63.5, -63.5 psf.



**ALTERNATIVE 13**

**CEILING & FLOOR MOUNTING INSTALLATIONS**

SCALE : 1/4" = 1"

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**

NOTES:

- INSTALLATIONS ARE ONLY VALID FOR DESIGN WIND LOADS UP TO +65.0, -72.0 psf AND PANEL'S LENGTHS UP TO 9'-0", EXCEPT AS NOTED.
- FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

**WALL MOUNTING INSTALLATION**

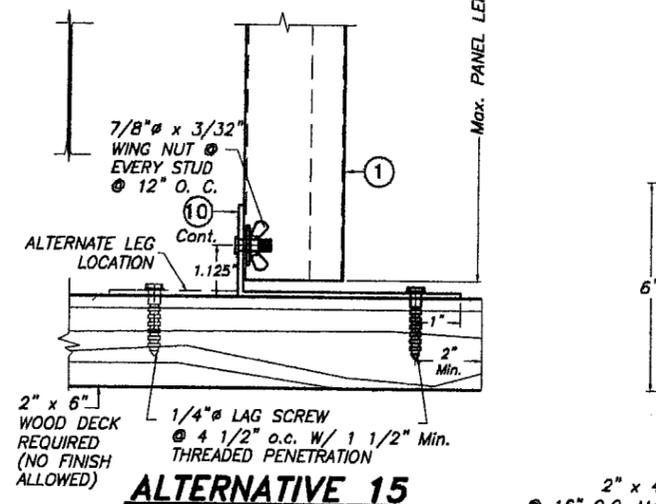
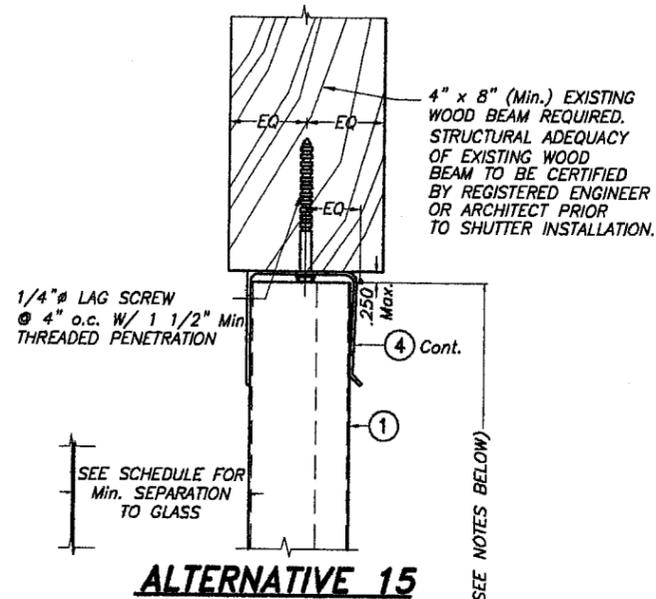
SCALE : 1/4" = 1"

PRODUCT REVISED as complying with the Florida Building Code  
 Acceptance No. 07-0111-02  
 Expiration Date 03/21/2012  
 By *Helmut A. Miller*  
 Miami Dade Product Control Division

F.B.C.(H.V.H.Z.)/MIAMI-DADE COUNTY

 TILLIT TESTING & ENGINEERING COMPANY 8355 N.W. 30th. St., Ste. 305, VIRGINIA GARDENS, FL 33188 Phone: (305)871-1530 Fax: (305)871-1531 EB-0006719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167		0.050" PERFORATED BERTHA ALUMINUM STORM PANEL		DRAWN BY I.A.	
		<b>EASTERN METAL SUPPLY, INC</b> 4288 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-6061 FAX: (561)-588-4780		11/20/06 DATE	
		06-290 DRAWING No			
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 03-143	11/20/06	3	-	-
2	-	-	4	-	-

AUG 03 2007



**CEILING & FLOOR MOUNTING INSTALLATIONS**

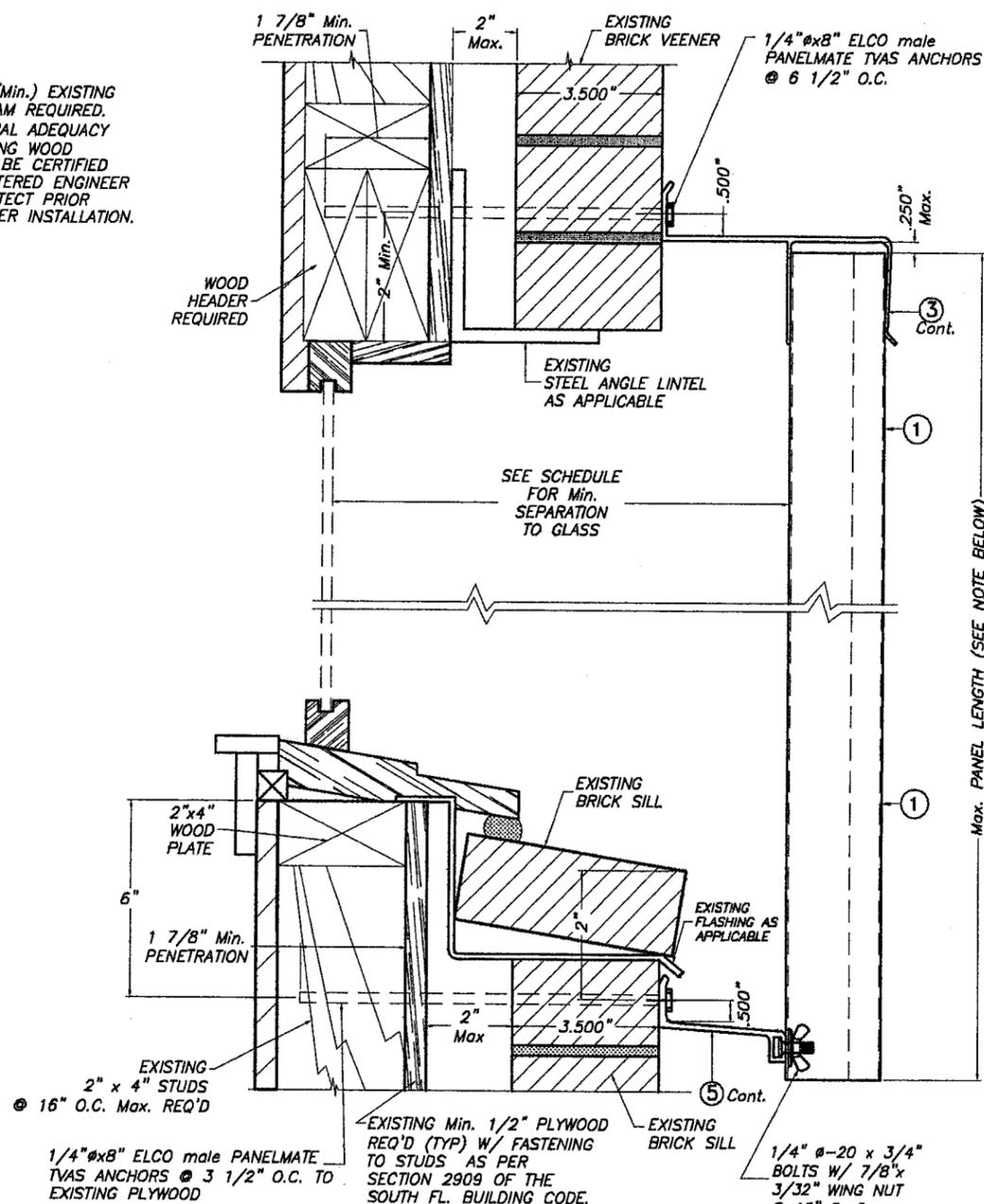
SCALE: 1/4" = 1"

**NOTE FOR COMBINATION OF SECTIONS:**

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

**NOTES:**

1. INSTALLATIONS ARE ONLY VALID FOR DESIGN WIND LOADS UP TO +65.0, -65.0 psf AND PANEL'S LENGTHS UP TO 9'-0", EXCEPT AS NOTED.
2. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

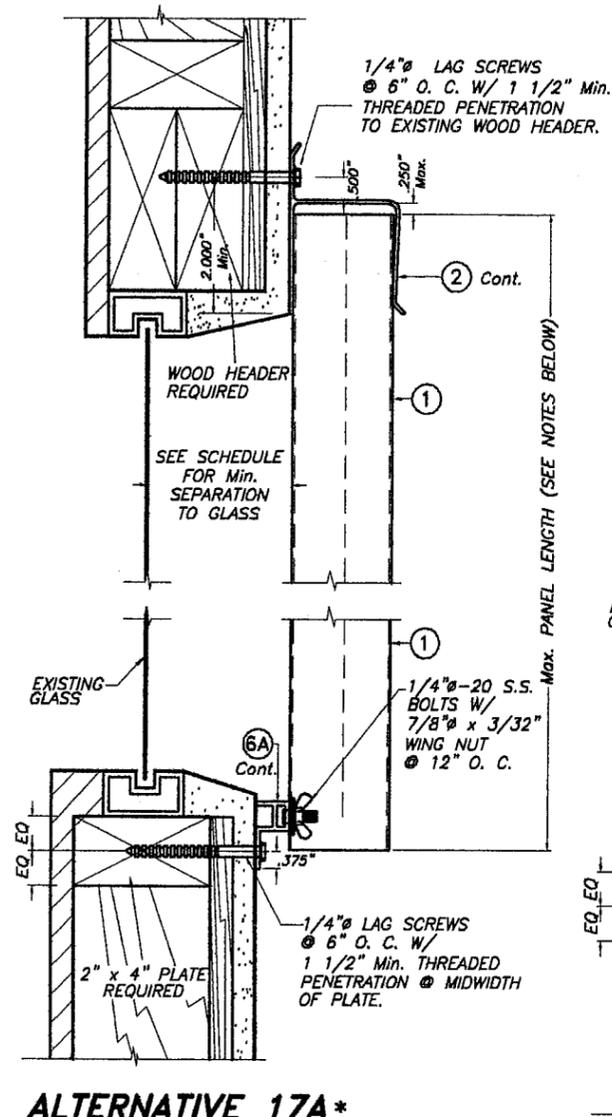


\* VALID FOR Max. +63.5, -63.5 psf.

**BUILD-OUT INSTALLATION**

SCALE: 1/4" = 1"

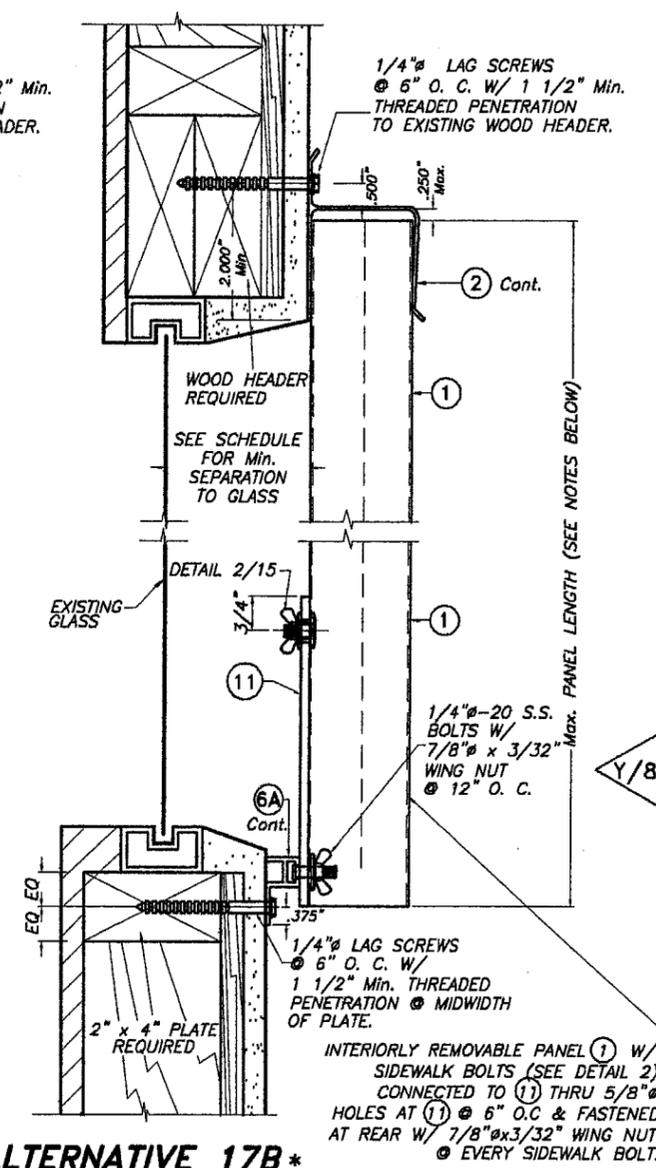
**INSTALLATION DETAILS ON EXISTING WOOD BUILDINGS**



**WALL MOUNTING INSTALLATIONS**

SECTIONS 17 \* VALID FOR Max. +63.5, -63.5 psf. SCALE: 1/4" = 1"

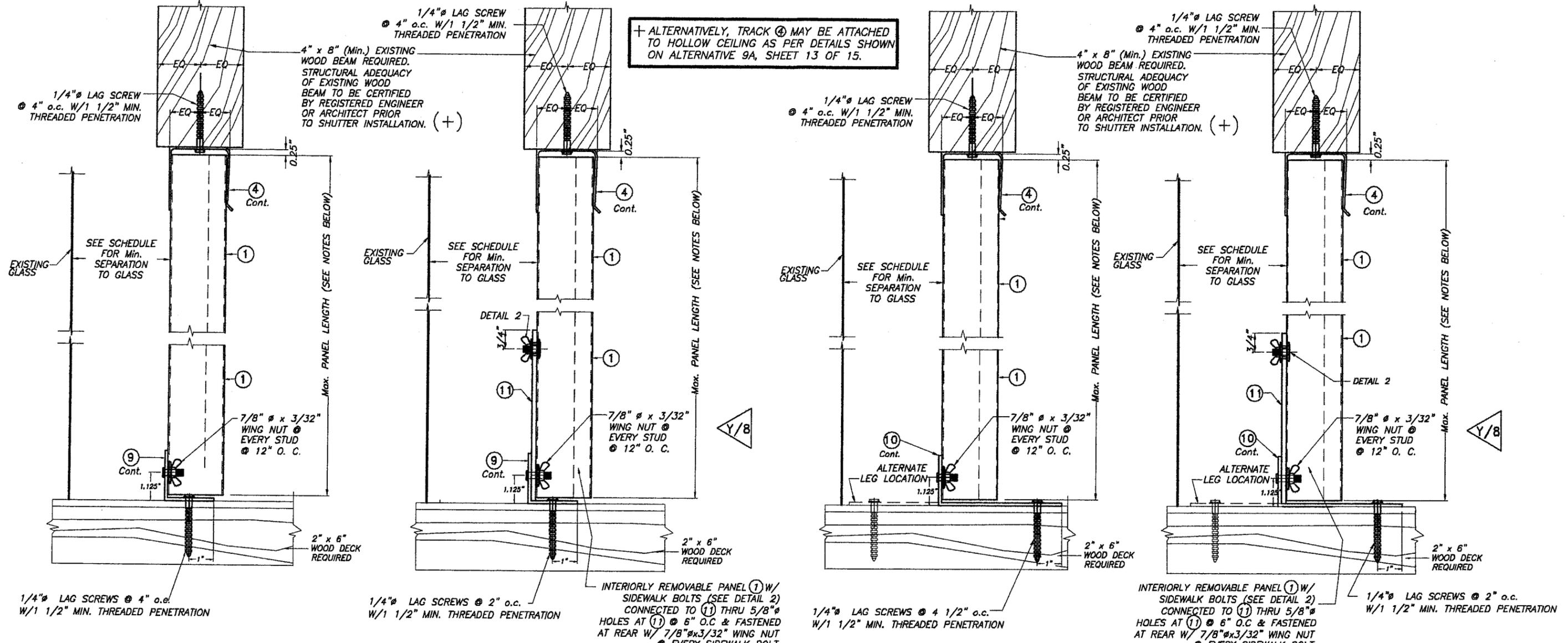
**INSTALLATIONS VALID FOR PANELS 1 USED JOINTLY WITH INTERIORLY REMOVABLE PANELS 1**



PRODUCT REVISED as complying with the Florida Building Code Acceptance No 07-0111.02 Expiration Date 03/21/2012 By Helmut A. Tillit Miami Dade Product Control F.B.C.(H.V.P.) MIAMI-DADE COUNTY

<p>TILLIT TESTING &amp; ENGINEERING COMPANY 8335 N.W. 38th St., Ste. 305, VIRGINIA GARDENS, FL 33167 Phone: (305)871-1530 - Fax: (305)871-1531 EB-0006719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167</p>		<p>0.050" PERFORATED BERTHA ALUMINUM STORM PANEL</p> <p><b>EASTERN METAL SUPPLY, INC</b> 4288 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-6061 FAX: (561)-588-4780</p>		<p>DRAWN BY I.A.</p> <p>11/20/06 DATE</p> <p>06-290 DRAWING No</p>	
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	OLD 03-143	11/20/06	3	-	-
2	-	-	4	-	-

AUG 03 2007



ALTERNATIVELY, TRACK 4 MAY BE ATTACHED TO HOLLOW CEILING AS PER DETAILS SHOWN ON ALTERNATIVE 9A, SHEET 13 OF 15.

**ALTERNATIVE 18A**

**CEILING & FLOOR MOUNTING INSTALLATIONS**

**SECTIONS 18**

SCALE: 1/4" = 1"

**ALTERNATIVE 18B**

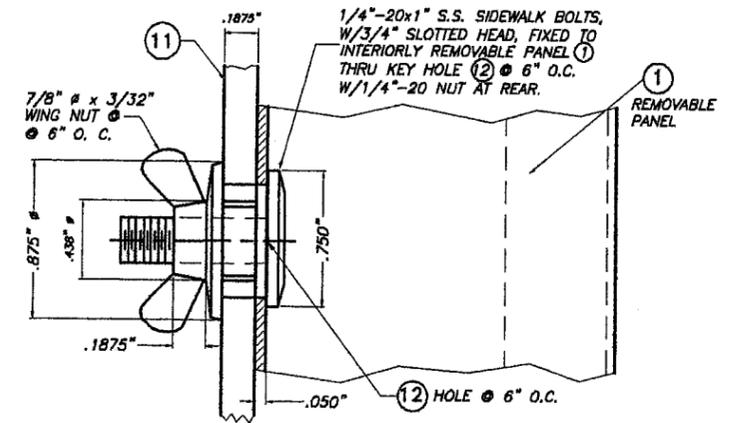
**ALTERNATIVE 19A**

**CEILING & FLOOR MOUNTING INSTALLATIONS**

**SECTIONS 19**

SCALE: 1/4" = 1"

**ALTERNATIVE 19B**



**DETAIL 2 - INSTALLATION OF 1/4"x1" SIDEWALK BOLTS @ REMOVABLE PANEL**

SCALE: 1" = 1"

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

**NOTES:**  
 1. INSTALLATIONS ARE ONLY VALID FOR DESIGN WIND LOADS UP TO +65.0, -65.0 psf AND PANEL'S LENGTHS UP TO 9'-0".  
 2. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

**INSTALLATION DETAILS ON EXISTING WOOD BUILDINGS**

**PRODUCT REVISED**  
 as complying with the Florida Building Code  
 Acceptance No 07-0111.02  
 Expiration Date 03/21/2012  
 By *Heather A. Miller*  
 Miami Dade Product Control Division

AUG 08 2007

F.B.C.(H.V.H.Z.)/MIAMI-DADE COUNTY

<b>TILECO INC.</b>		<b>EASTERN METAL SUPPLY, INC</b>		DRAWN BY I.A.
TILLIT TESTING & ENGINEERING COMPANY 8155 N.W. 38th St., Ste. 303, VIRGINIA GARDENS, FL 33188 Phone: (305)871-1530 Fax: (305)871-1531 EB-0006719		4268 WESTROADS DRIVE WEST PALM BEACH, FL 33407 PH: (561)-533-6061 FAX: (561)-588-4780		11/20/06 DATE
WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167				06-290 DRAWING No
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION
1	OLD 03-143	1/20/06	3	-
2	-	-	4	-

SHEET 15 OF 15