



**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

[www.buildingcodeonline.com](http://www.buildingcodeonline.com)

**NOTICE OF ACCEPTANCE (NOA)**

**Florida Storm Panels and Accordions, Inc.**  
14475 N.W. 26<sup>th</sup> Avenue  
Opa-Locka, Florida 33054

**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: "Omega / Hi-Rise" Aluminum Accordion Shutter**

**APPROVAL DOCUMENT:** Drawing No. 08-224, titled "Omega Accordion Shutter / Hi-Rise", sheets 1 through 8 of 8, prepared by Tilteco, Inc., dated August 30, 2008, signed and sealed by Walter A. Tillit Jr., P.E., on September 04, 2008 bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and the approval date by the Miami-Dade County Product Control Division.

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

**LABELING:** Each unit 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 consists of this page 1, evidence submitted page E-1 as well as approval document mentioned above. The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**



*Helmy A. Makar*  
03/18/2009

NOA No. 08-0917.11  
Expiration Date: 03/18/2014  
Approval Date: 03/18/2009  
Page 1

**Florida Storm Panels and Accordions, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. *Drawing No. 08-224, titled " Omega Accordion Shutter / Hi-Rise ", sheets 1 through 8 of 8, prepared by Tilteco, Inc., dated August 30, 2008, signed and sealed by Walter A. Tillit Jr., P.E., on September 04, 2008.*

**B. TESTS**

1. *See Association's generic approval under 08-1488.*

**C. CALCULATIONS**

1. *See Association's generic approval under 08-1488.*

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

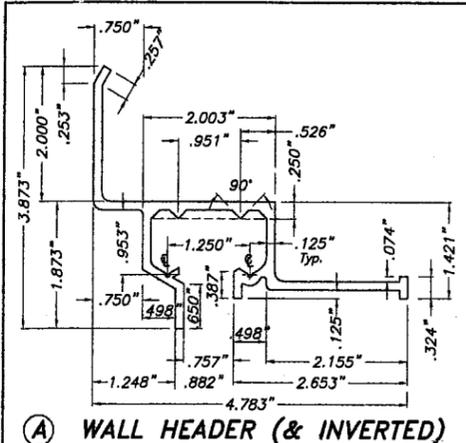
1. *See Association's generic approval under 08-1488.*

**F. STATEMENTS**

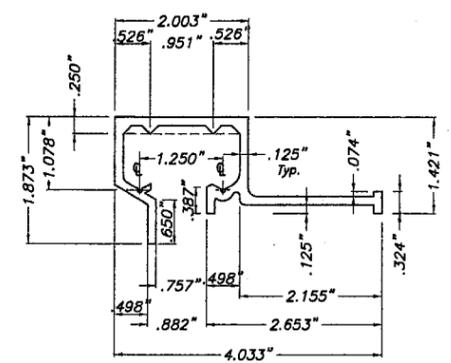
1. *Release letter issued by the Hurricane Protection Manufacturers Association, dated September 12, 2008, certifying this product to meet the criteria of product tested and approved, and allowing Florida Storm Panels & Accordions, Inc. to use the test results approved under Miami Dade County Approval No. 08-1488, signed by Mr. Henry Revilla.*
2. *Acknowledgment letter by Florida Storm Panels & Accordions, Inc. dated September 12, 2008, signed by Mr. Henry Revilla.*
3. *Letter by Tilteco Inc., dated September 04, 2008, signed and sealed by Mr. Walter A. Tillit, Jr., P.E., certifying that the drawing (No. 08-224) prepared for Florida Storm Panels & Accordions, Inc. is engineering wise identical to HPMA's generic drawing (No. 08-222).*



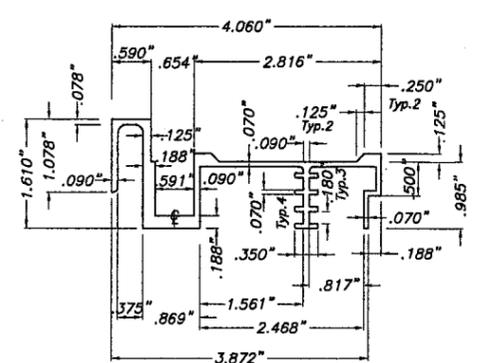
Helmy A. Makar, P.E., M.S.  
Product Control Examiner  
NOA No. 08-0917.11  
Expiration Date: 03/18/2014  
Approval Date: 03/18/2009



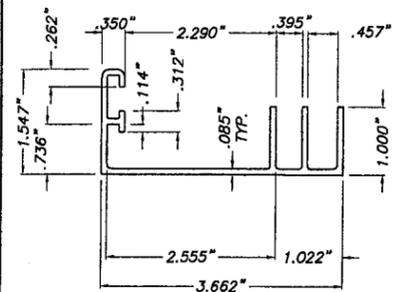
**A WALL HEADER (& INVERTED)**



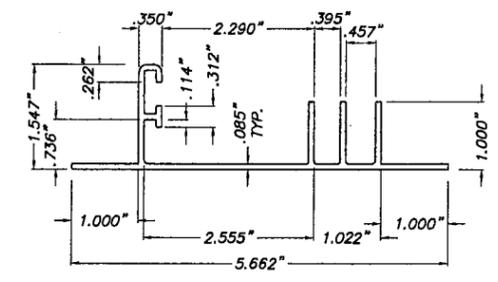
**B CEILING HEADER**



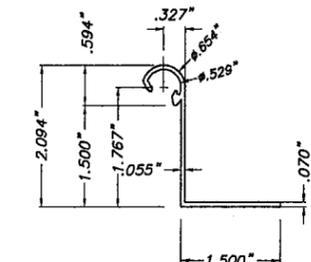
**C SILL**



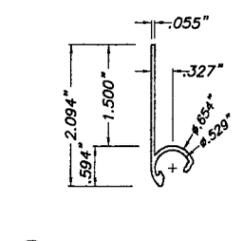
**D ADJUSTABLE SILL ADAPTOR**



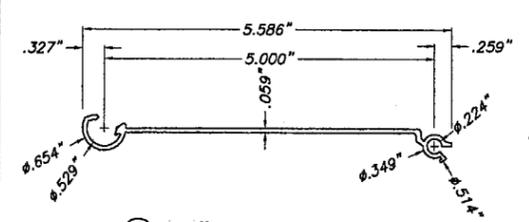
**D1 ADJUSTABLE SILL ADAPTOR**



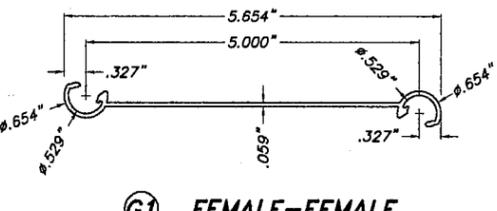
**E 90° STARTER**



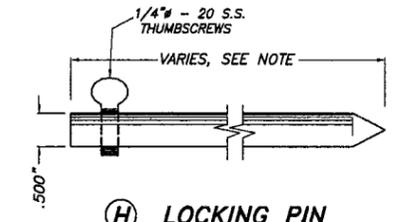
**F 180° STARTER**



**G 5" LOUVER BLADE**  
6005-T5 ALLOY

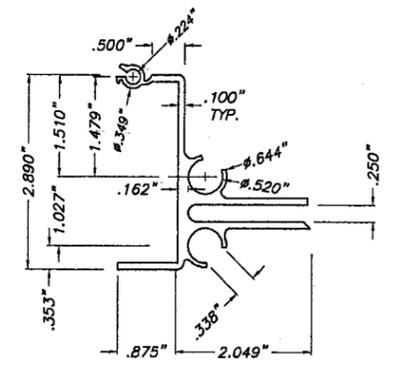


**G1 FEMALE-FEMALE 5" LOUVER BLADE**  
6005-T5 ALLOY

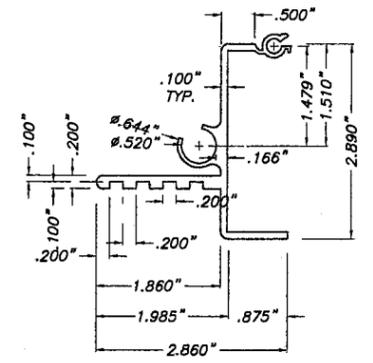


**H LOCKING PIN**

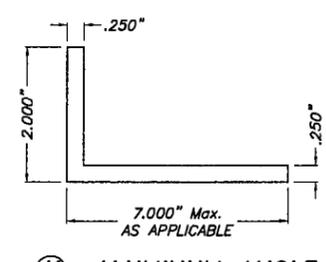
NOTE:  
TOTAL LENGTH OF TOP & BOTTOM PINS SHALL BE A MINIMUM 2/3 OF SHUTTER'S BLADE LENGTH W/ MINIMUM INDIVIDUAL PINS LENGTH OF 12" FOR UP TO 9'-0" BLADE LENGTH & 24" FOR BLADE LENGTH GREATER THAN 9'-0".



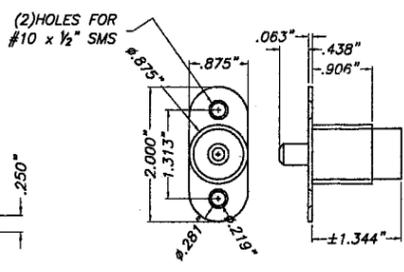
**I OMEGA FEMALE CENTERMATE**



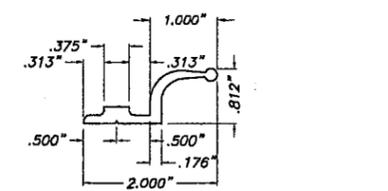
**J OMEGA MALE CENTERMATE**



**K ALUMINUM ANGLE**



**L BRASS NICKEL PLATED PUSH BUTTON LOCK (OPTIONAL)**



**L1 INSIDE HANDLE (OPTIONAL)**  
1 3/4" LONG

**GENERAL NOTES:**

1. ACCORDION SHUTTER SHOWN ON THIS PRODUCT APPROVAL DOCUMENT HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2004 EDITION OF THE FLORIDA BUILDING CODE, W/ 2005, 2006 AND 2007 SUPPLEMENTS. DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1620 OF THE ABOVE MENTIONED CODE. IN ORDER TO VERIFY THAT ANCHORS ON THIS P.A.D., AS TESTED, WERE NOT OVERSTRESSED, A 33% INCREASE IN ALLOWABLE LOADS FOR WIND LOADS WAS NOT USED IN THEIR ANALYSIS. HOWEVER, FOR LAG SCREWS INTO WOOD, A 1.60 WIND LOAD DURATION FACTOR WAS USED TO CALCULATE SCREWS SPACINGS. ACCORDION SHUTTER'S ADEQUACY FOR IMPACT AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1626 OF THE ABOVE MENTIONED CODE AS PER TAS-201, TAS-202 AND TAS-203 PROTOCOLS.

2. STAINLESS STEEL SHEET METAL SCREWS USED AT LOUVER BLADE SHALL BE # 14 x 3", 410-HT MINIMUM SERIES W/ 135.0 ksi YIELD STRENGTH & 180 ksi TENSILE STRENGTH. SCREWS SHALL BE COATED WITH XLAN 5000 SERIES FLUOROPOLYMER COATINGS AS MANUFACTURED BY WHITFORD Co, BOX 507, WEST CHESTER PA. 19381.

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. ALL ALUMINUM POP RIVETS TO BE 5052 ALUMINUM ALLOY WITH ALUMINUM MANDREL.

6. BOLTS TO BE ASTM A-307 GALVANIZED STEEL OR AISI 304 SERIES STAINLESS STEEL, WITH 35 ksi MINIMUM YIELD STRENGTH.

7. ANCHORS TO WALL SHALL BE AS FOLLOWS: (UNLESS OTHERWISE NOTED)

- (A) TO EXISTING POURED CONCRETE:
  - 1/4" # TAPCON ANCHORS, MANUFACTURED BY ITW/BUILDEX, INC. (MIN. f'c=3192 psi.) OR ELCO TEXTRON, INC. (MIN. f'c=2700 psi.)
  - 1/4" # ZAMAC NAILIN ANCHORS, MANUFACTURED BY POWERS FASTENERS, INC. (MIN. f'c=3000 psi.)
  - 1/4" # x 7/8" CALK-IN ANCHORS MANUFACTURED BY POWERS FASTENERS, INC. (MIN. f'c=2000 psi.)
  - 5/16" # XL TAPCON ANCHORS MANUFACTURED BY ITW/BUILDEX, INC. (MIN. f'c=2899 psi.) OR ELCO TEXTRON, INC. (MIN. f'c=3500 psi.)

**NOTES:**

A.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS INTO CONCRETE IS 1 3/4". MINIMUM EMBEDMENT OF ZAMAC NAILIN IS 1 1/2"  
A.2) 7/8" CALK-IN ANCHORS SHALL BE ENTIRELY EMBEDDED INTO THE POURED CONCRETE. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. 1/4" #-20 SCREWS USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST.

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" # TAPCON ANCHORS MANUFACTURED BY I.T.W. BUILDEX OR ELCO TEXTRON, INC.
- 1/4" # ZAMAC NAILIN ANCHORS MANUFACTURED BY POWERS FASTENERS, INC.
- 1/4" # x 7/8" CALK-IN ANCHORS MANUFACTURED BY POWERS FASTENERS, INC.
- 5/16" # XL TAPCON ANCHORS MANUFACTURED BY ITW/BUILDEX OR ELCO TEXTRON, INC.

**NOTES:**

B.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS, AND ZAMAC NAILIN ANCHORS INTO THE CONCRETE BLOCK UNIT SHALL BE 1 1/4".

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

B.3) IN CASE THAT PRECAST STONE OR PRECAST CONCRETE PANELS BE FOUND ON THE EXISTING WALL, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS. ANCHORAGE SHALL BE 1 1/4" MINIMUM FOR ANCHORS MENTIONED IN B.1.), & 7/8" FOR ANCHORS MENTIONED IN B.2.).

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

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) THE 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 PRODUCT APPROVAL 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 PROFESSIONAL OF RECORD (P.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.A.D. PROFESSIONAL OF RECORD, ACTING AS 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 THAT PREPARED IT.

11. SHUTTER'S MANUFACTURER LABEL SHALL BE PLACED ON THE EXPOSED SURFACE OF THE FEMALE LOCK SLAT (COMPONENT I).

ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABEL SHALL READ AS FOLLOWS:  
FLORIDA STORM PANELS AND ACCORDIONS, INC.  
OPA-LOCKA, FL 33054  
MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED.

Approved as complying with the Florida Building Code  
Date 03/18/2009  
NOA# 08-0917-11  
Miami Dade Product Control  
Division  
By Helmy A. Alkhatib

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

**COMPONENTS**

SCALE: 3/8" = 1"

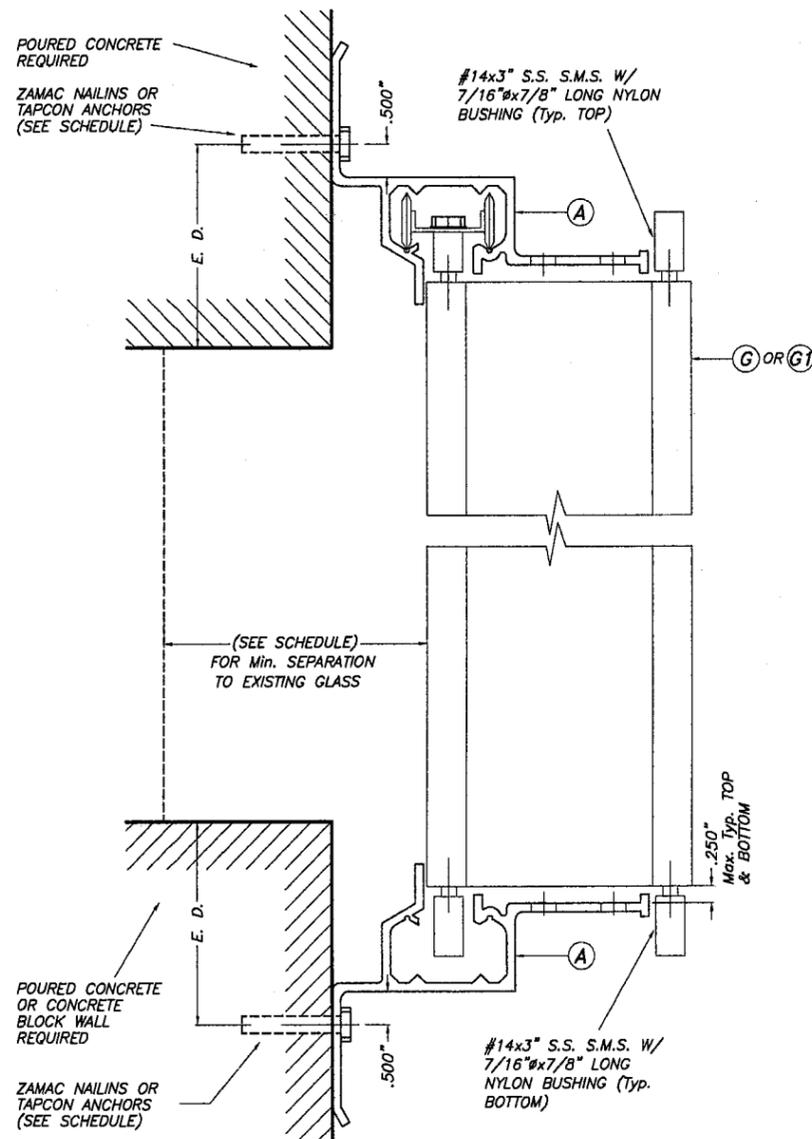
© 2008 HURRICANE PROTECTION MANUFACTURERS ASSOCIATION

**TILECO INC.**

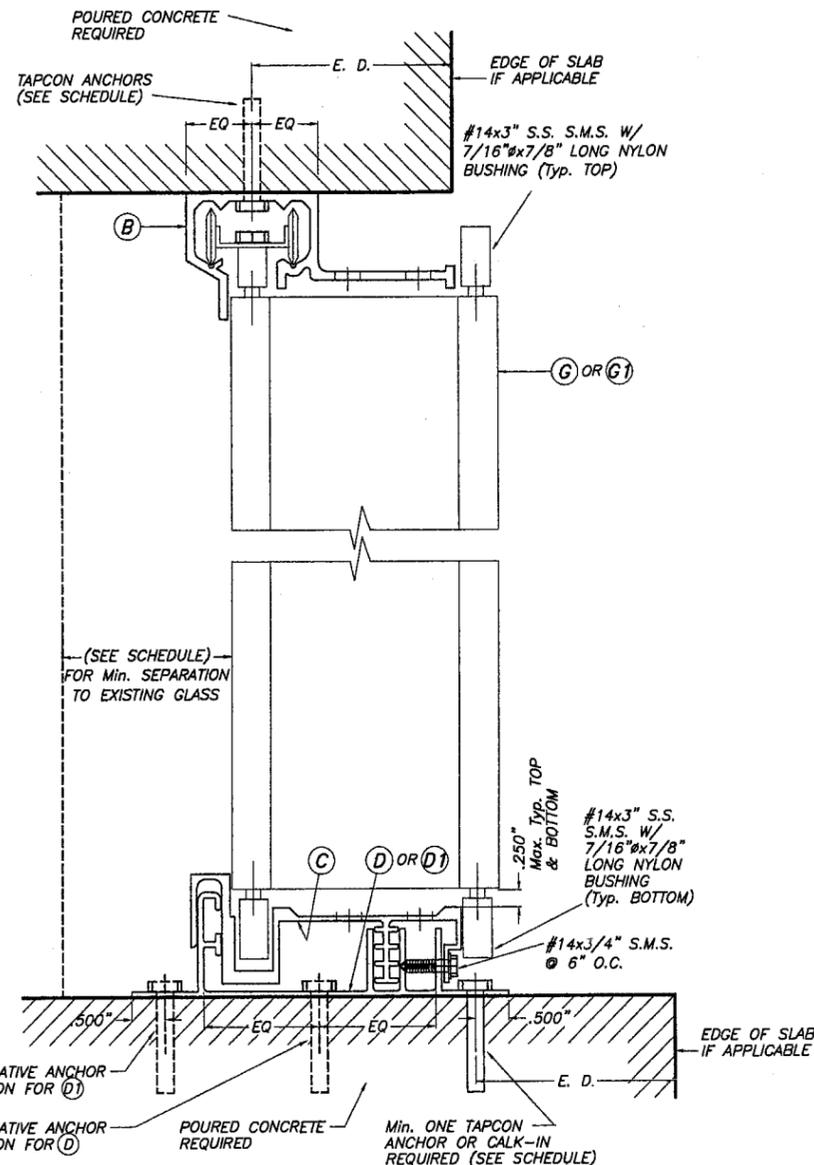
TILLIT TESTING & ENGINEERING COMPANY  
6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166  
Phone: (305)871-1330 Fax: (305)871-1331  
EB-0006719  
WALTER A. TILLIT Jr. P. E.  
FLORIDA Lic. # 44167

OMEGA ACCORDION SHUTTER / HI-RISE			DRAWN BY: J.J.V./I.A./F.P.		
FLORIDA STORM PANELS AND ACCORDIONS, INC. (H.P.M.A. # 2) 14475 N.W. 26 AVENUE OPA-LOCKA, FLORIDA 33054 PH: (305) 685-9000 FAX: (305) 685-7511			08/30/08 DATE		
			08-224 DRAWING No		
			SHEET 1 OF 8		
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	-	-	3	-	-
2	-	-	4	-	-

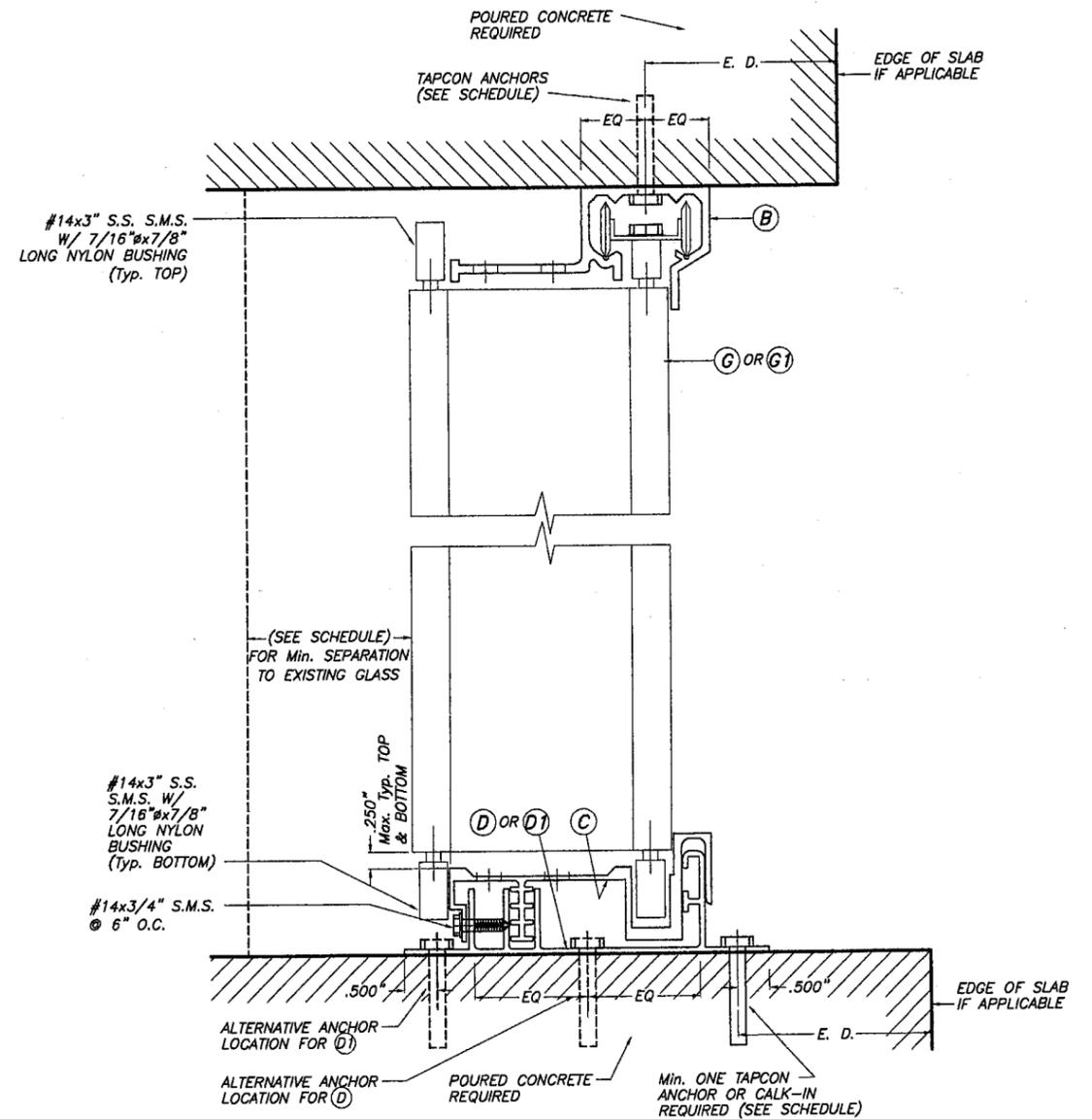
SEP 04 2008



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



**CEILING & FLOOR MOUNT. INSTALLATION**  
**- SECTION B, W/ REGULARLY ORIENTED**  
**TRACKS TOP & BOTTOM** SCALE : 3/8" = 1"



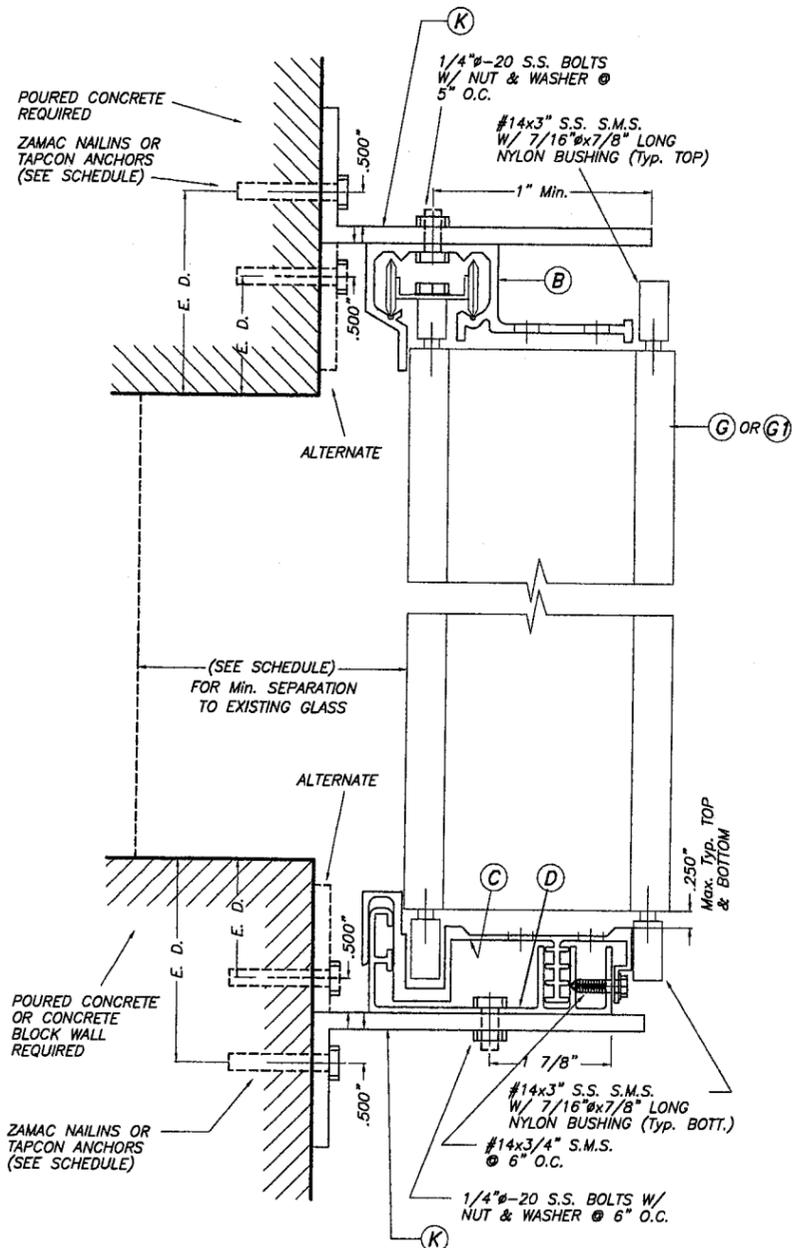
**CEILING & FLOOR MOUNT. INSTALLATION**  
**- SECTION B1, W/ REVERSED TRACKS**  
**TOP & BOTTOM** SCALE : 3/8" = 1"

Approved as complying with the  
 Florida Building Code  
 Date 03/18/2009  
 NOA# 08-0917-11  
 Miami Dade Product Control  
 Division  
 By Helmut A. H. H.

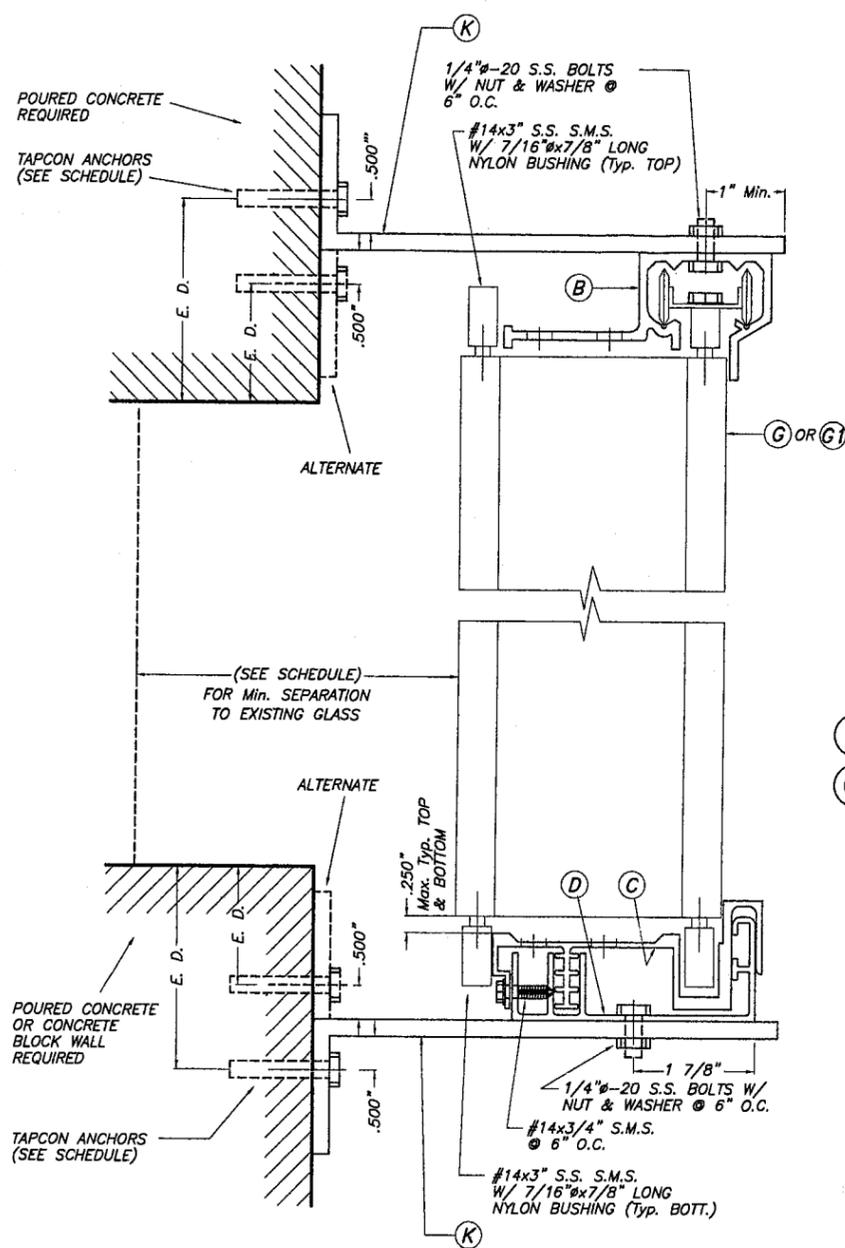
F.B.C. (High Velocity Hurricane Zone)

© 2008 HURRICANE PROTECTION MANUFACTURERS ASSOCIATION		OMEGA ACCORDION SHUTTER / HI-RISE		DRAWN BY: J.J.V./I.A./F.P.	
<b>TILECO Inc.</b> TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33166 Phone : (305)871-1539 . Fax : (305)871-1531 EB-006719 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167		<b>FLORIDA STORM PANELS AND ACCORDIONS, INC.</b> (H.P.M.A. # 2) 14475 N.W. 26 AVENUE OPA-LOCKA, FLORIDA 33054 PH: (305) 685-9000 FAX: (305) 685-7511		08/30/08 DATE	
		08-224 DRAWING No		SHEET 2 OF 8	
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
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2	-	-	4	-	-

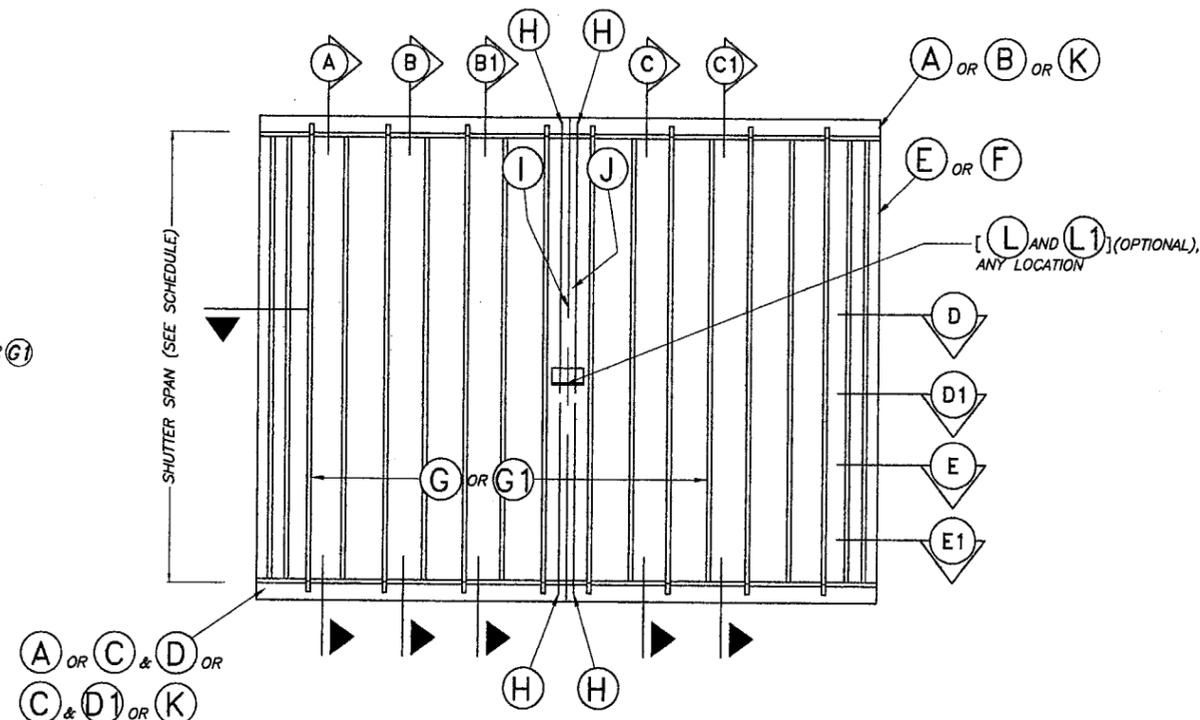
SEP 04 2009



**WALL MOUNTING INSTALLATION (OFFSET)**  
**- SECTION C, W/ REGULARLY ORIENTED**  
**TRACKS TOP & BOTTOM** SCALE : 3/8" = 1"



**WALL MOUNTING INSTALLATION (OFFSET)**  
**- SECTION C1, W/ REVERSED TRACKS**  
**TOP & BOTTOM** SCALE : 3/8" = 1"



**TYPICAL ELEVATION** N. T. S.

Approved as complying with the  
 Florida Building Code  
 Date 03/18/2009  
 NOA# 08-0917-11  
 Miami Dade Product Control  
 Heung A. Mak

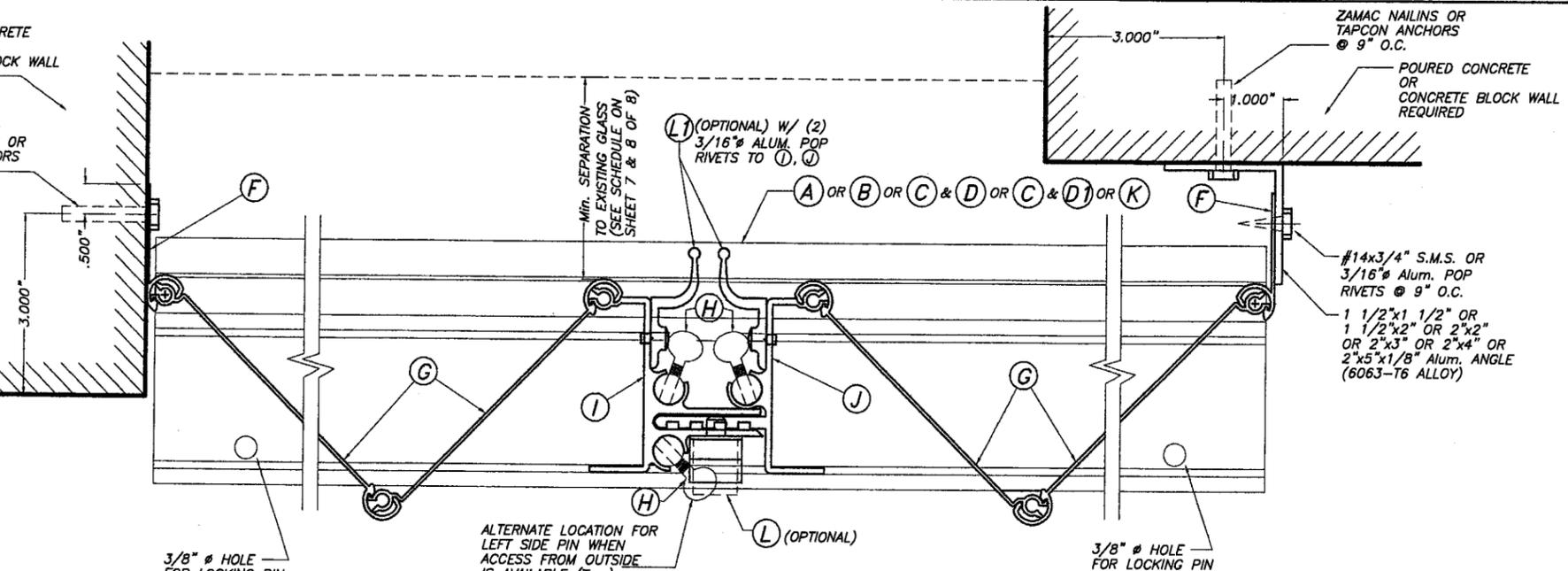
F.B.C. (High Velocity Hurricane Zone)

© 2008 HURRICANE PROTECTION MANUFACTURERS ASSOCIATION		OMEGA ACCORDION SHUTTER / HI-RISE		DRAWN BY: J.J.V./I.A./F.P.	
 <b>TILTECO INC.</b> TILLIT TESTING & ENGINEERING COMPANY 8355 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		<b>FLORIDA STORM PANELS AND ACCORDIONS, INC.</b> (H.P.M.A. # 2) 14475 N.W. 26 AVENUE OPA-LOCKA, FLORIDA 33054 PH: (305) 685-9000 FAX: (305) 685-7511		08/30/08 DATE	
		REV. NO. DESCRIPTION DATE REV. No. DESCRIPTION DATE 1 - - - 3 - - - 2 - - - 4 - - -		08-224 DRAWING No	
				SHEET 3 OF 8	

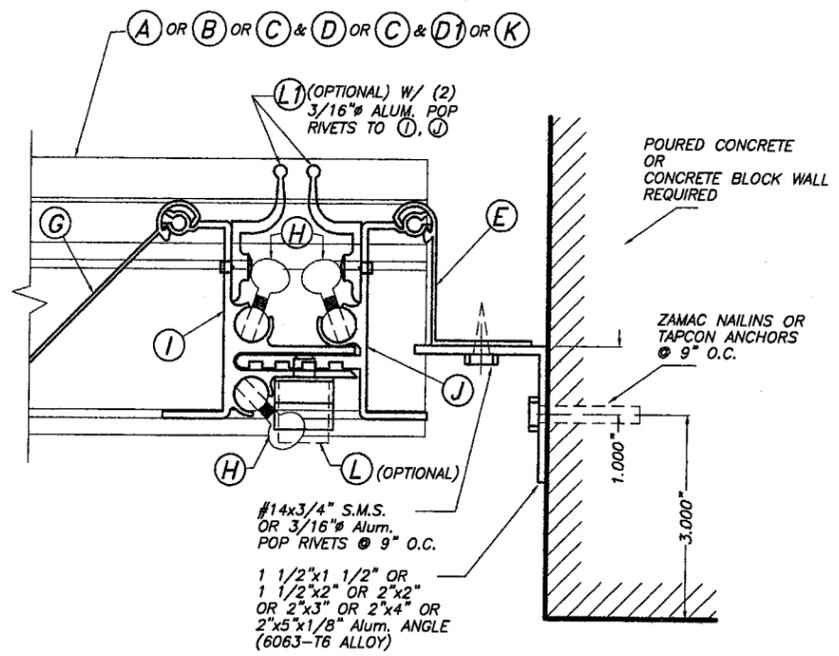
SEP 04 2008

POURED CONCRETE OR CONCRETE BLOCK WALL REQUIRED

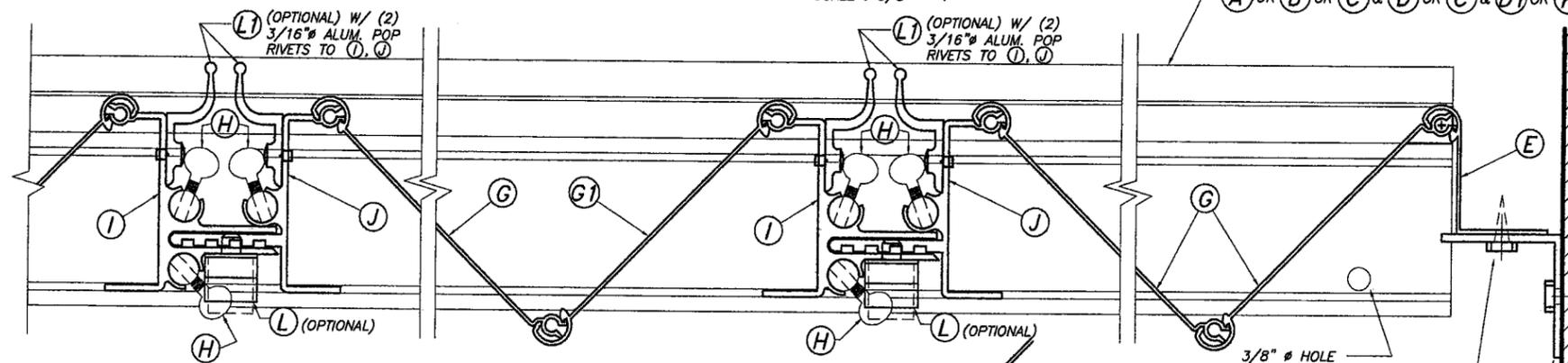
ZAMAC NAILS OR TAPCON ANCHORS @ 9" O.C.



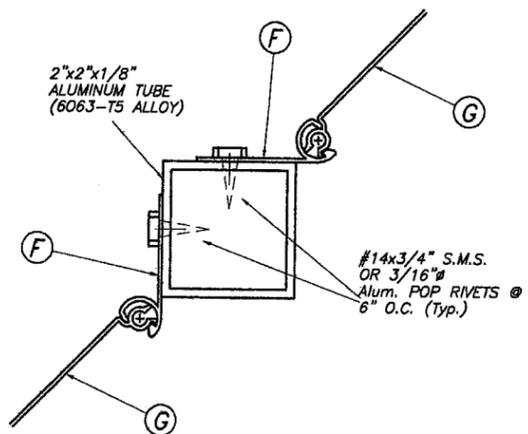
**SECTION D**  
SCALE: 3/8" = 1"



**ONE SIDED SECTION: END CONNECTION DETAIL**  
SCALE: 3/8" = 1"

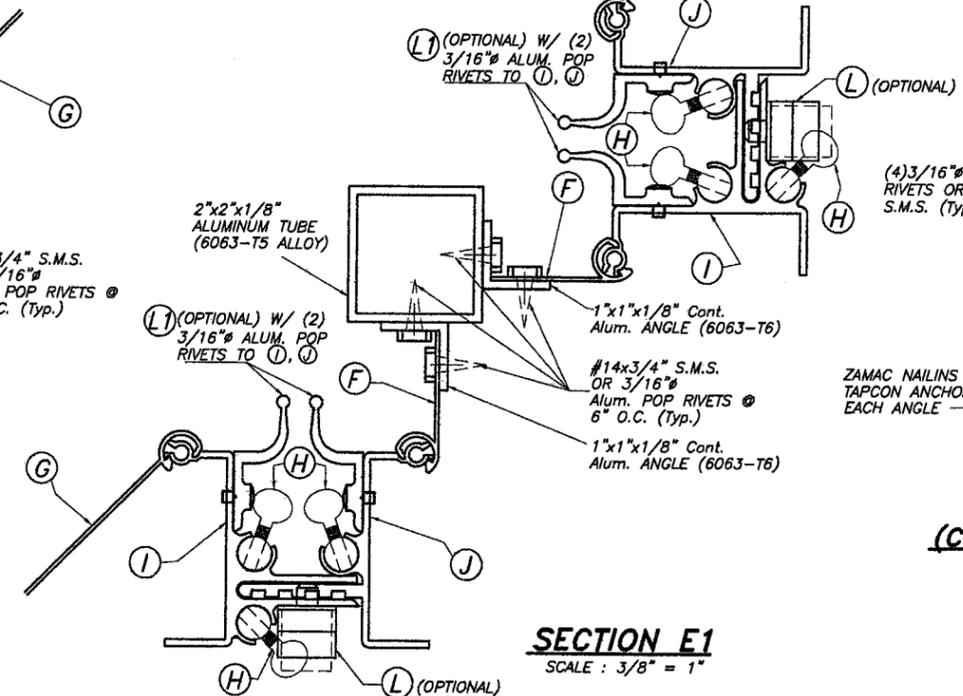


**SECTION D1 (& MULTIPLE SHUTTERS)**  
SCALE: 3/8" = 1"

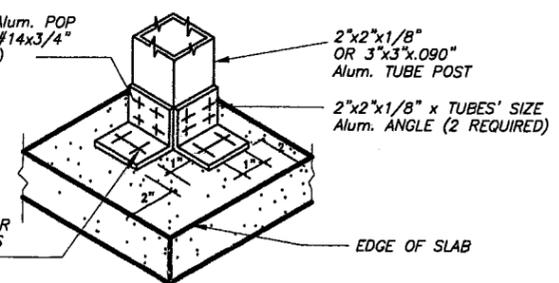


**SECTION E**  
SCALE: 3/8" = 1"

**NOTE:**  
SECTIONS E & E1 CAN BE COMBINED TO SUIT ANY INSTALLATION.



**SECTION E1**  
SCALE: 3/8" = 1"



**ISOMETRIC (CORNER POST)** (Typ. AT TOP & BOTTOM SLABS)

Approved as complying with the Florida Building Code  
Date 03/18/2009  
NOAH 08-0917-11  
Miami Dade Product Control Division  
By Helene A. Miller

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

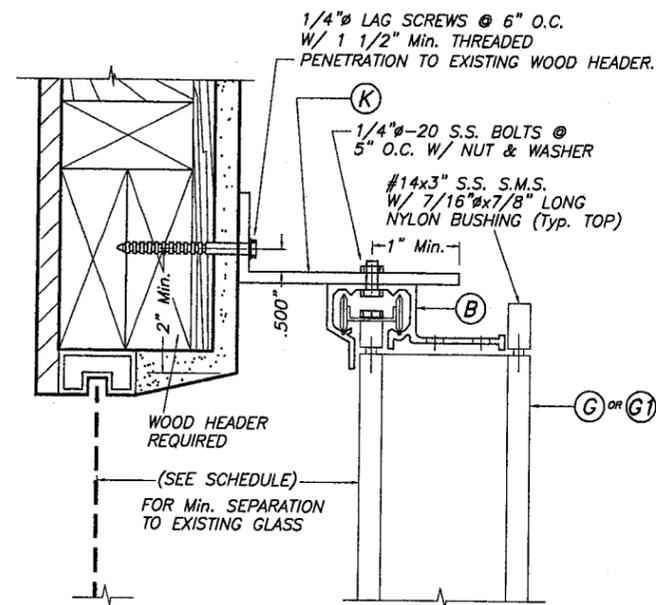
© 2008 HURRICANE PROTECTION MANUFACTURERS ASSOCIATION

**TILECO INC.**

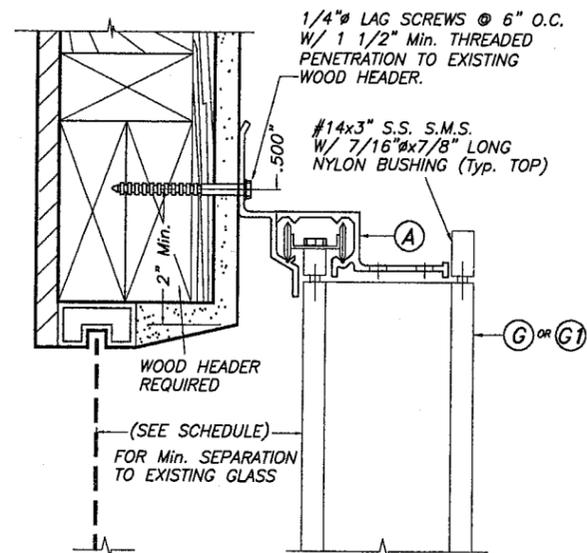
TILLIT TESTING & ENGINEERING COMPANY  
8355 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33168  
Phone: (305)871-1530 Fax: (305)871-1531  
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WALTER A. TILLIT Jr. P. E.  
FLORIDA Lic. # 44167

OMEGA ACCORDION SHUTTER / HI-RISE		DRAWN BY: J.J.V./L.A./F.P.	
FLORIDA STORM PANELS AND ACCORDIONS, INC. (H.P.M.A. # 2) 14475 N.W. 26 AVENUE OPA-LOCKA, FLORIDA 33054 PH: (305) 685-9000 FAX: (305) 685-7511		DATE 08/30/08	
REV. NO		DRAWING No	
1	DESCRIPTION	DATE	DATE
2			
		SHEET 4 OF 8	

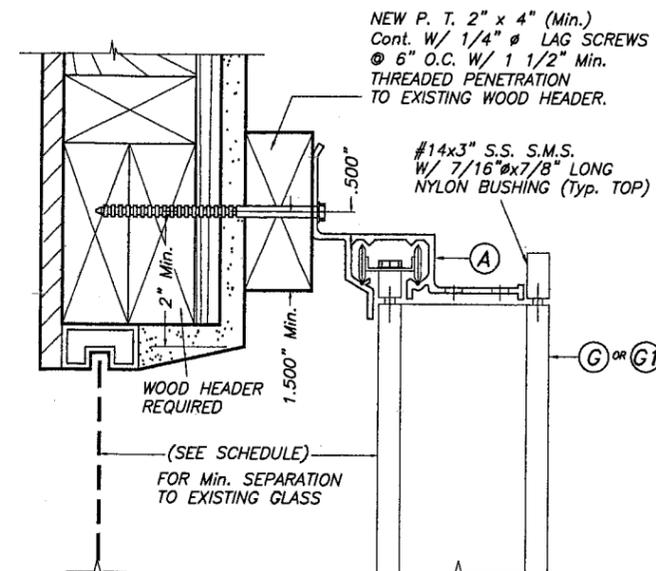
SEP 01 2009



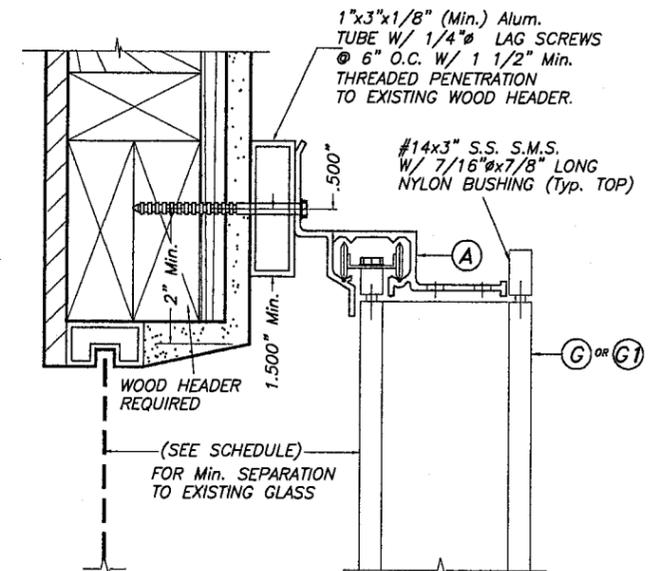
**ALTERNATIVE 1**



**ALTERNATIVE 3**



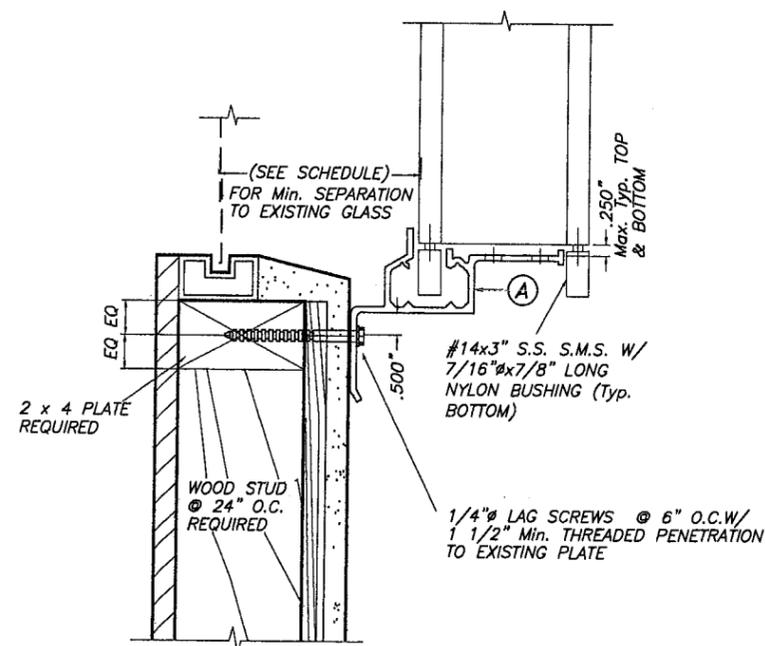
**ALTERNATIVE 4**



**ALTERNATIVE 5**

**WALL MOUNTING INSTALLATION - SECTIONS A**

SCALE : 1/4" = 1"



**ALTERNATIVE 2**

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

- NOTES:**
- INSTALLATIONS ARE ONLY VALID FOR BUILDINGS WITH 75 p.s.f. Max DESIGN LOADS AND 9'-0" Max. SHUTTER SPAN.
  - NEW 2" x 6" P. T. TO BE SOUTHERN PINE No. 2, SURFACED DRY WITH 19 % M. M. C. W/ SPECIFIC DENSITY OF 0.55.
  - FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

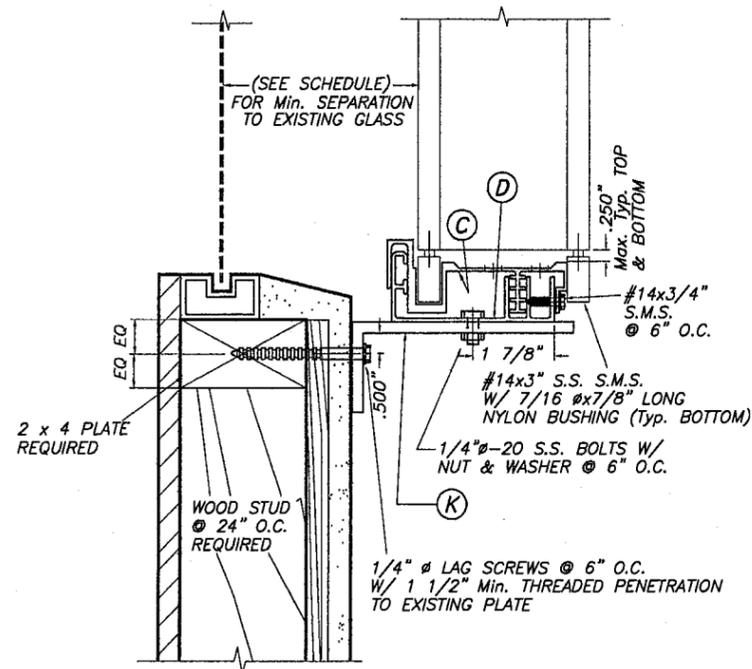
**INSTALLATION DETAILS ON EXISTING  
WOOD FRAME BUILDINGS**

Approved as complying with the  
Florida Building Code  
Date 03/18/2009  
NOA# 08-0917-11  
Miami Dade Product Control  
Division  
By Helen A. Miller

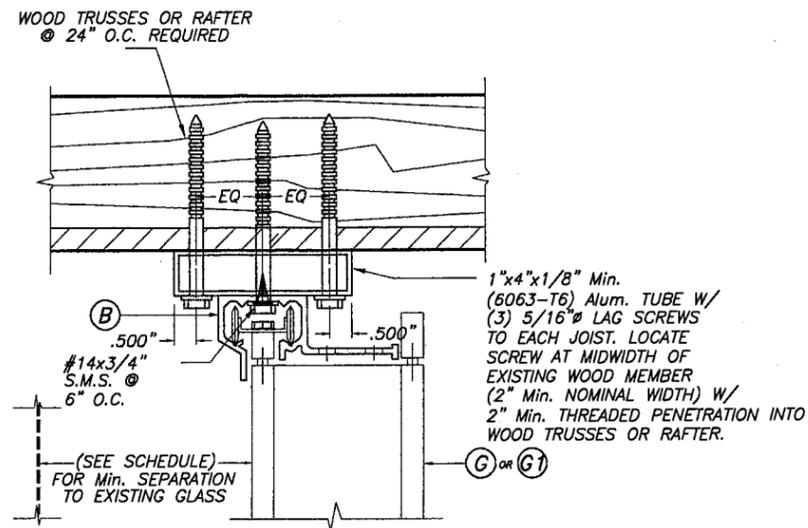
F.B.C. (High Velocity Hurricane Zone)

© 2008 HURRICANE PROTECTION MANUFACTURERS ASSOCIATION		OMEGA ACCORDION SHUTTER / HI-RISE		DRAWN BY: J.J.V./I.A./F.P.	
<p>TILLIT TESTING &amp; 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</p>		FLORIDA STORM PANELS AND ACCORDIONS, INC.		08/30/08 DATE	
		<p>(H.P.M.A. # 2) 14475 N.W. 26 AVENUE OPA-LOCKA, FLORIDA 33054 PH: (305) 685-9000 FAX: (305) 685-7511</p>		08-224 DRAWING No	
REV. NO	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	-	-	3	-	-
2	-	-	4	-	-
					SHEET 5 OF 8

SEP 04 2009

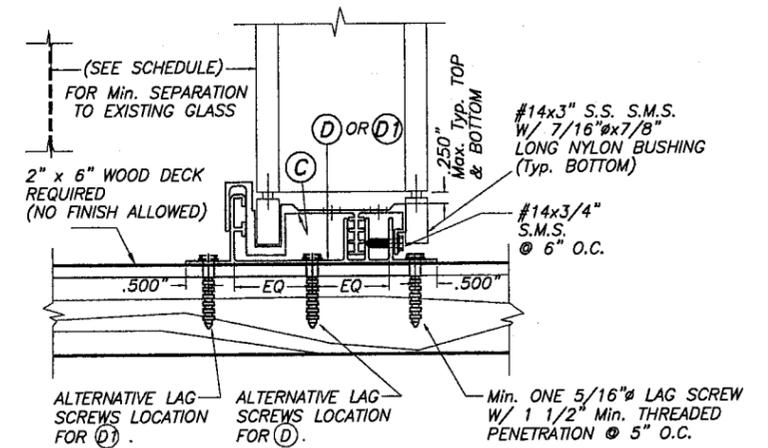


**ALTERNATIVE 6**



**ALTERNATIVE 1**

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



**ALTERNATIVE 2**

**WALL MOUNTING INSTALLATION- SECTIONS A**

SCALE : 1/4" = 1"

**CEILING & REMOVABLE FLOOR MOUNTING INSTALLATION - SECTIONS B**

SCALE : 1/4" = 1"

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

- NOTES:**
- INSTALLATIONS ARE ONLY VALID FOR BUILDINGS WITH 75 p.s.f. Max. DESIGN LOADS AND 9'-0" Max. SHUTTER SPAN (EXCEPT AS NOTED)
  - 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 FRAME BUILDINGS**

Approved as complying with the Florida Building Code  
Date 03/18/2009  
NOA# 08-0917-11  
Miami Date Product Control  
Division  
By Helmut A. Kuhn

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

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 <b>TILTECO 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		<b>FLORIDA STORM PANELS AND ACCORDIONS, INC.</b> (H.P.M.A. # 2) 14475 N.W. 26 AVENUE OPA-LOCKA, FLORIDA 33054 PH: (305) 685-9000 FAX: (305) 685-7511		08/30/08 DATE	
		08-224 DRAWING No		SHEET 6 OF 8	
REV. NO	DESCRIPTION	DATE	REV. NO	DESCRIPTION	DATE
1	-	-	3	-	-
2	-	-	4	-	-

SEP 04 2008

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

(VALID FOR SECTIONS A, B & C ON SHEET 2 & 3 OF 8).

NOTE: DESIGN PRESSURE RATING CORRESPONDS ONLY TO NEGATIVE PRESSURE (SUCTION) LOADS, IN ACCORDANCE WITH ASCE 7-02 CRITERIA FOR A GIVEN OPENING. IF NEGATIVE PRESSURE VALUES COMPLY WITH THE REQUIRED PRESSURE FOR THE OPENING, THE POSITIVE PRESSURE WILL AUTOMATICALLY QUALIFY AND NEED NOT TO BE CHECKED.

MAXIMUM DESIGN LOAD "W" (p.s.f.)	MAXIMUM PANEL SPAN "L" (ft.)	MINIMUM SEPARATION TO GLASS (in.)	
		*	**
35.0	16'-0"	3 1/16"	3"
40.0	16'-0"	3 1/16"	3"
45.0	15'-7"	3 1/16"	3"
47.8	15'-4"	3 1/16"	3"
49.0	15'-3"	3 1/16"	3"
50.5	15'-1"	3 1/16"	3"
52.0	15'-0"	3 1/16"	3"
52.4	15'-0"	3 1/16"	3"
55.0	14'-10"	3 1/16"	3"
55.2	14'-9"	3 1/16"	3"
55.6	14'-9"	3 1/16"	3"
57.2	14'-7"	3 1/16"	3"
58.6	14'-5"	3 1/16"	3"
58.8	14'-5"	3 1/16"	3"
59.5	14'-3"	3 1/16"	3"
59.7	14'-3"	3 1/16"	3"
61.5	14'-1"	3 1/16"	3"
61.8	14'-0"	3 1/16"	3"
61.9	14'-0"	3 1/16"	3"
63.7	13'-10"	3 1/16"	3"
66.9	13'-6"	3 1/16"	3"
67.0	13'-6"	3 1/16"	3"

MAXIMUM DESIGN LOAD "W" (p.s.f.)	MAXIMUM PANEL SPAN "L" (ft.)	MINIMUM SEPARATION TO GLASS (in.)	
		*	**
67.5	13'-5"	3 1/16"	3"
70.1	13'-2"	3 1/16"	3"
71.1	13'-1"	3 1/16"	3"
71.4	13'-1"	3 1/16"	3"
71.5	13'-0"	3 1/16"	3"
72.9	12'-11"	3 1/16"	3"
75.1	12'-9"	3 1/16"	3"
75.2	12'-9"	3 1/16"	3"
75.3	12'-8"	3 1/16"	3"
77.0	12'-7"	3 1/16"	3"
77.5	12'-6"	3 1/16"	3"
78.8	12'-5"	3 1/16"	3"
80.7	12'-3"	3 1/16"	3"
81.5	12'-3"	3 1/16"	3"
82.5	12'-2"	3 1/16"	3"
83.4	12'-1"	3 1/16"	3"
86.2	11'-10"	3 1/16"	3"
86.7	11'-10"	3 1/16"	3"
86.8	11'-10"	3 1/16"	3"
88.5	11'-9"	3 1/16"	3"
90.3	11'-7"	3 1/16"	3"
90.8	11'-7"	3 1/16"	3"

MAXIMUM DESIGN LOAD "W" (p.s.f.)	MAXIMUM PANEL SPAN "L" (ft.)	MINIMUM SEPARATION TO GLASS (in.)	
		*	**
91.4	10'-6"	3 1/16"	3"
92.7	11'-5"	3 1/16"	3"
93.8	11'-5"	3 1/16"	3"
94.8	11'-4"	3 1/16"	3"
96.6	11'-3"	3 1/16"	3"
96.8	11'-2"	3 1/16"	3"
97.7	11'-2"	3 1/16"	3"
100.5	11'-0"	3 1/16"	3"
101.5	10'-11"	3 1/16"	3"
103.7	10'-10"	3 1/16"	3"
106.5	10'-8"	3 1/16"	3"
108.8	10'-7"	3 1/16"	3"
110.6	10'-6"	3 1/16"	3"
111.0	10'-6"	3 1/16"	3"
114.1	10'-4"	3 1/16"	3"
116.5	10'-3"	3 1/16"	3"
116.9	10'-2"	3 1/16"	3"
117.6	10'-2"	3 1/16"	3"
119.7	10'-1"	3 1/16"	3"
120.0	10'-1"	3 1/16"	3"
121.2	10'-0"	2 7/16"	1 15/16"
122.5	10'-0"	2 7/16"	1 15/16"

MAXIMUM DESIGN LOAD "W" (p.s.f.)	MAXIMUM PANEL SPAN "L" (ft.)	MINIMUM SEPARATION TO GLASS (in.)	
		*	**
125.3	9'-10"	2 7/16"	1 15/16"
125.8	9'-10"	2 7/16"	1 15/16"
126.7	9'-10"	2 7/16"	1 15/16"
129.6	9'-8"	2 7/16"	1 15/16"
130.9	9'-8"	2 7/16"	1 15/16"
131.6	9'-7"	2 7/16"	1 15/16"
134.3	9'-6"	2 7/16"	1 15/16"
136.2	9'-5"	2 7/16"	1 15/16"
137.9	9'-5"	2 7/16"	1 15/16"
140.7	9'-4"	2 7/16"	1 15/16"
142.8	9'-3"	2 7/16"	1 15/16"
143.5	9'-2"	2 7/16"	1 15/16"
147.0	9'-1"	2 7/16"	1 15/16"
148.4	9'-1"	2 7/16"	1 15/16"
152.6	8'-10"	2 7/16"	1 3/4"
153.1	8'-10"	2 7/16"	1 3/4"
156.8	8'-7"	2 7/16"	1 3/4"
157.5	8'-7"	2 7/16"	1 3/4"
157.8	8'-7"	2 7/16"	1 3/4"
160.8	8'-5"	2 7/16"	1 3/4"
161.7	8'-4"	2 7/16"	1 3/4"
164.4	8'-3"	2 7/16"	1 3/4"

MAXIMUM DESIGN LOAD "W" (p.s.f.)	MAXIMUM PANEL SPAN "L" (ft.)	MINIMUM SEPARATION TO GLASS (in.)	
		*	**
165.2	8'-2"	2 7/16"	1 3/4"
168.1	8'-0"	2 7/16"	1 3/4"
168.7	8'-0"	2 7/16"	1 3/4"
170.0	7'-11"	2 7/16"	1 3/4"
175.6	7'-8"	2 7/16"	1 3/4"
176.6	7'-8"	2 7/16"	1 3/4"
180.3	7'-6"	2 7/16"	1 3/4"
188.0	7'-2"	2 7/16"	1 3/4"
195.0	6'-11"	2 7/16"	1 3/4"

**MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING (in.) SCHEDULE. +**  
(VALID FOR SECTIONS A, B & C ON SHEET 2 & 3 OF 8).

MAXIMUM DESIGN LOAD "W" (p.s.f.)	SECTION A ONLY			SECTION B			SECTION C								
	WALL MOUNTING INSTALLATION AT TOP & BOTTOM (TO CONCRETE)			WALL MOUNTING INSTALLATION AT BOTTOM (TO MASONRY)			FLOOR/CEILING MOUNTING INSTALLATION TOP & BOTTOM (TO CONCRETE)			WALL MOUNTING INSTALLATION AT TOP & BOTTOM (TO CONCRETE)			WALL MOUNTING INSTALLATION AT BOTTOM (TO MASONRY)		
	NOTE 1	NOTE 2	NOTE 3	NOTE 1	NOTE 2	NOTE 3	NOTE 1	NOTE 2	NOTE 3	NOTE 1	NOTE 2	NOTE 3	NOTE 1	NOTE 2	NOTE 3
FROM 35.0 TO 61.8	6"	6"	6"	6"	6"	5 1/2"	6"	6"	4"	6"	6"	6"	6"	6"	6"
FROM 61.9 TO 75.3	6"	6"	5"	6"	6"	3 1/2"	6"	5 1/2"	3 1/2"	6"	6"	6"	6"	6"	6"
FROM 75.4 TO 91.4	6"	6"	5"	6"	6"	3 1/2"	6"	4 1/2"	3 1/2"	6"	6"	6"	6"	6"	6"
FROM 91.5 TO 120.0	6"	4"	N/A	6"	3"	N/A	5 1/2"	3 1/2"	5"	6"	6"	5 1/2"	6"	5 1/2"	4 1/2"
FROM 120.1 TO 168.1	6"	3 1/2"	3 1/2"	3 1/2"	N/A	N/A	4"	2 1/2"	2 1/2"	6"	6"	6"	4"	3"	3"
FROM 168.2 TO 195.0	3"	N/A	N/A	4"	N/A	N/A	3 1/2"	4 1/2"	N/A	6"	5"	N/A	5"	4"	N/A

**MAXIMUM ANCHOR SPACING LEGEND**  
(EXCEPT AS INDICATED ON +, ++ NOTES BELOW)

WALL MOUNTING	FLOOR/CEILING MOUNTING
1/4" ZAMAC NAILIN	1/4" TAPCON (TOP & BOTTOM)
1/4" TAPCON	1/4" CALK-IN (BOTTOM)

MIN. ANCHORS SPACING SCHEDULE	
1/4" ANCHORS TYPE	MIN. SPACING
TAPCONS	3.0"
CALK-IN	2.5"
ZAMAC NAILIN	2.5"

+ MAXIMUM ANCHOR SPACINGS ARE VALID FOR 3 1/2" EDGE DISTANCE. FOR E. D. LESS THAN 3 1/2", REDUCE ANCHOR SPACING (THIS OPERATION IS NOT ALLOWED FOR 5/16" TAPCONS PER +, ++ NOTES) 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 MIN. ANCHORS SPACING SCHEDULE.

ACTUAL E. D. = EDGE DISTANCE	FACTOR	
	TAPCON/ZAMAC NAILIN	CALK-IN
3"	.86	.75
2 1/2"	.71	.50
2"	.50	-

+ SEE SHEETS 5 & 6 OF 8 FOR ANCHORS TYPE SPACING FOR INSTALLATIONS INTO WOOD FRAME BLDGS. SEE ANCHORS LEGEND FOR ANCHORS TYPE FOR A GIVEN SPACING, LOAD & SHUTTER SPAN.

**NOTES ON "p.s.f." VS SPAN SCHEDULE**

\* MINIMUM SEPARATION BETWEEN GLASS & SHUTTER FOR SHUTTERS INSTALLED WITHIN THE FIRST 30'-0" ELEVATION OF BUILDING MEASURED AT BOTTOM OF SHUTTER. SEE TABLE 1 FOR MINIMUM SEPARATION TO GLASS FOR SPANS SHORTER THAN THE MAXIMUM ALLOWED SHOWN ON SCHEDULE.  
\*\* FOR SHUTTERS INSTALLED ABOVE 30'-0" ELEVATION OF BUILDING, MEASURED AT BOTTOM OF SHUTTER. SEPARATION TO BE MEASURED AS INDICATED ON SECTION D, SHEET 4 OF 8.

**TABLE 1:**

SHUTTER SPAN "L" (ft.)	MINIMUM SEPARATION (in.)
LESS OR EQUAL THAN 10'-0"	2 7/16"
> 10'-0" TO 16'-0"	3 1/16"

Approved as complying with the Florida Building Code  
Date 03/18/2009  
NOA# 08-0917-11  
Miami Date Product Control  
Division  
By Healy A. Miller

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

**ANCHOR SPACING LEGEND**  
(1) Max. ANCHOR SPCG. VALID FOR SPANS OF 5'-0" OR LESS.  
(2) Max. ANCHOR SPCG. VALID FOR SPANS GREATER THAN 5'-0" TO 8'-6".  
(3) Max. ANCHOR SPCG. VALID FOR SPANS GREATER THAN 8'-6" TO Max. ALLOWED.

+ THIS SPACING IS ONLY VALID WHEN INSTALLATION IS PERFORMED USING A 5/16" TAPCON W/ 1 1/4" Min. EMBEDMENT AS MANUFACTURED BY ELCO TEXTRON, INC.  
++ THIS SPACING IS ONLY VALID WHEN INSTALLATION IS PERFORMED USING A 5/16" XL TAPCON W/ 2 1/4" Min. EMBEDMENT AS MANUFACTURED BY ITW/BUILDDEX, INC.

SEP 0 4 2009

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**TILECO INC.**

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

OMEGA ACCORDION SHUTTER / HI-RISE

**FLORIDA STORM PANELS AND ACCORDIONS, INC.**  
(H.P.M.A. # 2)  
14475 N.W. 26 AVENUE  
OPA-LOCKA, FLORIDA 33054  
PH: (305) 685-9000 FAX: (305) 685-7511

DRAWN BY:  
J.J.V./I.A./F.P.  
DATE  
08/30/08  
08-224  
DRAWING No  
SHEET 7 OF 8

REV. NO	DESCRIPTION	DATE	REV. NO	DESCRIPTION	DATE
1	-	-	3	-	-
2	-	-	4	-	-

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

(VALID FOR SECTIONS B1 & C1 ON SHEET 2 & 3 OF 8).

NOTE: DESIGN PRESSURE RATING CORRESPONDS ONLY TO NEGATIVE PRESSURE (SUCTION) LOADS, IN ACCORDANCE WITH ASCE 7-02 CRITERIA FOR A GIVEN OPENING. IF NEGATIVE PRESSURE VALUES COMPLY WITH THE REQUIRED PRESSURE FOR THE OPENING, THE POSITIVE PRESSURE WILL AUTOMATICALLY QUALIFY AND NEED NOT TO BE CHECKED.

MAXIMUM DESIGN LOAD "W" (p.s.f.)	MAXIMUM PANEL SPAN "L" (ft.)	MINIMUM SEPARATION TO GLASS (in.)	
		*	**
35.0	16'-0"	3 3/16"	3"
40.0	15'-7"	3 3/16"	3"
45.0	15'-2"	3 3/16"	3"
47.8	14'-11"	3 3/16"	3"
49.0	14'-0"	3 3/16"	3"
50.5	14'-9"	3 3/16"	3"
52.0	14'-7"	3 3/16"	3"
52.4	14'-7"	3 3/16"	3"
55.0	14'-5"	3 3/16"	3"
55.2	14'-5"	3 3/16"	3"
55.6	14'-5"	3 3/16"	3"
57.2	14'-3"	3 3/16"	3"
58.6	14'-2"	3 3/16"	3"
58.8	14'-2"	3 3/16"	3"
59.5	14'-2"	3 3/16"	3"
59.7	14'-2"	3 3/16"	3"
61.5	14'-0"	3 3/16"	3"
61.8	14'-0"	3 3/16"	3"
61.9	14'-0"	3 3/16"	3"
63.7	13'-11"	3 3/16"	3"
66.9	13'-9"	3 3/16"	3"
67.0	13'-9"	3 3/16"	3"

MAXIMUM DESIGN LOAD "W" (p.s.f.)	MAXIMUM PANEL SPAN "L" (ft.)	MINIMUM SEPARATION TO GLASS (in.)	
		*	**
67.5	13'-8"	3 3/16"	3"
70.1	13'-7"	3 3/16"	3"
71.1	13'-6"	3 3/16"	3"
71.4	13'-6"	3 3/16"	3"
71.5	13'-6"	3 3/16"	3"
72.9	13'-5"	3 3/16"	3"
75.1	13'-4"	3 3/16"	3"
75.2	13'-4"	3 3/16"	3"
75.3	13'-4"	3 3/16"	3"
77.0	13'-3"	3 3/16"	3"
77.5	13'-3"	3 3/16"	3"
78.8	13'-2"	3 3/16"	3"
80.7	13'-1"	3 3/16"	3"
81.5	13'-1"	3 3/16"	3"
82.5	13'-0"	3 3/16"	3"
83.4	13'-0"	3 3/16"	3"
86.2	12'-11"	3 3/16"	3"
86.7	12'-10"	3 3/16"	3"
86.8	12'-10"	3 3/16"	3"
88.5	12'-10"	3 3/16"	3"
90.3	12'-8"	3 3/16"	3"
90.8	12'-8"	3 3/16"	3"

MAXIMUM DESIGN LOAD "W" (p.s.f.)	MAXIMUM PANEL SPAN "L" (ft.)	MINIMUM SEPARATION TO GLASS (in.)	
		*	**
91.4	12'-8"	3 3/16"	3"
92.7	12'-7"	3 3/16"	3"
93.8	12'-6"	3 3/16"	3"
94.8	12'-5"	3 3/16"	3"
96.6	12'-3"	3 3/16"	3"
96.8	12'-3"	3 3/16"	3"
97.7	12'-3"	3 3/16"	3"
100.5	12'-1"	3 3/16"	3"
101.5	12'-0"	2 13/16"	2 13/16"
103.7	11'-10"	2 13/16"	2 13/16"
106.5	11'-8"	2 13/16"	2 13/16"
108.8	11'-7"	2 13/16"	2 13/16"
110.6	11'-6"	2 13/16"	2 13/16"
111.0	11'-6"	2 13/16"	2 13/16"
114.1	11'-4"	2 13/16"	2 13/16"
116.5	11'-2"	2 13/16"	2 13/16"
116.9	11'-2"	2 13/16"	2 13/16"
117.6	11'-2"	2 13/16"	2 13/16"
119.7	11'-0"	2 13/16"	2 13/16"
120.0	11'-0"	2 13/16"	2 13/16"
121.2	11'-0"	2 13/16"	2 13/16"
122.5	10'-11"	2 13/16"	2 13/16"

MAXIMUM DESIGN LOAD "W" (p.s.f.)	MAXIMUM PANEL SPAN "L" (ft.)	MINIMUM SEPARATION TO GLASS (in.)	
		*	**
125.3	10'-9"	2 13/16"	2 13/16"
125.8	10'-9"	2 13/16"	2 13/16"
126.7	10'-9"	2 13/16"	2 13/16"
129.6	10'-7"	2 13/16"	2 13/16"
130.9	10'-7"	2 13/16"	2 13/16"
131.6	10'-6"	2 13/16"	2 13/16"
134.3	10'-5"	2 13/16"	2 13/16"
136.2	10'-4"	2 13/16"	2 13/16"
137.9	10'-3"	2 13/16"	2 13/16"
140.7	10'-2"	2 13/16"	2 13/16"
142.8	10'-1"	2 13/16"	2 13/16"
143.5	10'-1"	2 13/16"	2 13/16"
147.0	10'-0"	2 3/4"	2 1/4"
148.4	9'-11"	2 3/4"	2 1/4"
152.6	9'-9"	2 3/4"	2 1/4"
153.1	9'-9"	2 3/4"	2 1/4"
156.8	9'-8"	2 3/4"	2 1/4"
157.5	9'-7"	2 3/4"	2 1/4"
157.8	9'-7"	2 3/4"	2 1/4"
160.8	9'-6"	2 3/4"	2 1/4"
161.7	9'-6"	2 3/4"	2 1/4"
164.4	9'-5"	2 3/4"	2 1/4"

MAXIMUM DESIGN LOAD "W" (p.s.f.)	MAXIMUM PANEL SPAN "L" (ft.)	MINIMUM SEPARATION TO GLASS (in.)	
		*	**
165.2	9'-5"	2 3/4"	2 1/4"
168.1	9'-4"	2 3/4"	2 1/4"
168.7	9'-4"	2 3/4"	2 1/4"
170.0	9'-3"	2 3/4"	2 1/4"
175.6	9'-1"	2 3/4"	2 1/4"
176.6	9'-1"	2 3/4"	2 1/4"
180.3	9'-0"	2 3/4"	2"
188.0	8'-7"	2 3/4"	2"
195.0	8'-4"	2 3/4"	2"

**NOTES ON "p.s.f." VS SPAN SCHEDULE**

\* MINIMUM SEPARATION BETWEEN GLASS & SHUTTER FOR SHUTTERS INSTALLED WITHIN THE FIRST 30'-0" ELEVATION OF BUILDING MEASURED AT BOTTOM OF SHUTTER.  
SEE TABLE 1 FOR MINIMUM SEPARATION TO GLASS FOR SPANS SHORTER THAN THE MAXIMUM ALLOWED SHOWN ON SCHEDULE.  
\*\* FOR SHUTTERS INSTALLED ABOVE 30'-0" ELEVATION OF BUILDING, MEASURED AT BOTTOM OF SHUTTER.  
SEPARATION "S" TO BE MEASURED AS INDICATED ON SECTION D, SHEET 4 OF 8.

**TABLE 1:**

SHUTTER SPAN "L" (ft.)	MINIMUM SEPARATION "S" (in.)
LESS OR EQUAL THAN 10'-0"	2 3/4"
> 10'-0" TO 12'-0"	2 13/16"
> 12'-0" TO 16'-0"	3 3/16"

**MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING (in.) SCHEDULE. +**  
(VALID FOR SECTIONS B1 & C1 ON SHEET 2 & 3 OF 8).

MAXIMUM DESIGN LOAD "W" (p.s.f.)	SECTION C1						SECTION B1			SECTION B1		
	WALL MOUNTING INSTALLATION AT TOP & BOTTOM (TO CONCRETE)			WALL MOUNTING INSTALLATION AT BOTTOM (TO MASONRY)			FLOOR/CEILING MOUNTING INSTALLATION TOP & BOTTOM (TO CONCRETE)			FLOOR/CEILING MOUNTING INSTALLATION BOTTOM (TO CONCRETE) ++		
	NOTE 1	NOTE 2	NOTE 3	NOTE 1	NOTE 2	NOTE 3	NOTE 1	NOTE 2	NOTE 3	NOTE 1	NOTE 2	NOTE 3
FROM 35.0 TO 61.8	6"	6"	6"	3"	3"	3"	6"	6"	3 1/2"	6"	6"	3 1/2"
FROM 61.9 TO 75.3	6"	6"	6"	3"	3"	3"	6"	5"	3"	6"	5"	3"
FROM 75.4 TO 91.4	6"	6"	6"	3"	3"	3"	6"	4"	3" *	6"	4"	2 1/2"
FROM 91.5 TO 120.0	6"	6"	6"	3"	3"	3"	5 1/2"	3"	3" *	5 1/2"	3"	2 1/2"
FROM 120.1 TO 168.1	3"	3"	3"	3"	2 1/2"	N/A	4"	4" +	3 3/4" +	4"	3"	3"
FROM 168.2 TO 195.0	3"	3"	3"	3"	N/A	N/A	3"	3 3/4" +	3 3/4" +	3"	3"	3"

**ANCHOR SPACING LEGEND**

- (1) Max. ANCHOR SPCG. VALID FOR SPANS OF 5'-0" OR LESS.
- (2) Max. ANCHOR SPCG. VALID FOR SPANS GREATER THAN 5'-0" TO 8'-6".
- (3) Max. ANCHOR SPCG. VALID FOR SPANS GREATER THAN 8'-6" TO Max. ALLOWED.

**MAXIMUM ANCHOR SPACING LEGEND (EXCEPT AS INDICATED ON +, ++ NOTES BELOW)**

WALL MOUNTING	FLOOR/CEILING MOUNTING
1/4" TAPCON	1/4" TAPCON (TOP & BOTTOM) & CALK-IN (BOTTOM)

**MIN. ANCHORS SPACING SCHEDULE**

1/4" ANCHORS TYPE	MIN. SPACING
TAPCONS	3.0"
CALK-IN	2.5"

+ MAXIMUM ANCHOR SPACINGS ARE VALID FOR 3 1/2" EDGE DISTANCE. FOR E. D. LESS THAN 3 1/2", REDUCE ANCHOR SPACING (THIS OPERATION IS NOT ALLOWED FOR 5/16" TAPCONS PER +, ++ NOTES) 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 MIN. ANCHORS SPACING SCHEDULE.

ACTUAL E. D. = EDGE DISTANCE	FACTOR	
	TAPCON/ZAMAC NAILIN	CALK-IN
3"	.86	.75
2 1/2"	.71	.50
2"	.50"	.50

+ SEE SHEETS 5 & 6 OF 8 FOR ANCHORS TYPE SPACING FOR INSTALLATIONS INTO WOOD FRAME BLDGS. SEE ANCHORS LEGEND FOR ANCHORS TYPE FOR A GIVEN SPACING, LOAD & SHUTTER SPAN.

\* USE 3" SPACING FOR 1/4" TAPCONS AND USE 2 1/2" SPACING FOR CALK-INS

+ THIS SPACING IS ONLY VALID WHEN INSTALLATION IS PERFORMED USING A 1/4"x7/8" XL TAPCON W/ 2 1/4" Min. EMBEDMENT AS MANUFACTURED BY ITW/BUILDEX, INC.

++ THESE SPACINGS ARE ONLY VALID WHEN INSTALLATION IS PERFORMED USING A 1/4"x7/8" CALK-IN W/ 7/8" Min. EMBEDMENT INTO CONCRETE, AS MANUFACTURED BY POWERS FASTENERS, INC. AND ANCHOR IS ONLY INSTALLED ON TRACK (C) OR (D) AT MIDWIDTH OF TRACKS

SEP 04 2009

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

Approved as complying with the Florida Building Code  
Date 03/18/2009  
NOA# 08-0917-11  
Miami Dade Product Control  
Division  
By *Helmy A. Alkhatib*

 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		OMEGA ACCORDION SHUTTER / HI-RISE DRAWN BY: J.J.V./I.A./F.P. DATE: 08/30/08 08-224 DRAWING No
FLORIDA STORM PANELS AND ACCORDIONS, INC. (H.P.M.A. # 2) 14475 N.W. 26 AVENUE OPA-LOCKA, FLORIDA 33054 PH: (305) 685-9000 FAX: (305) 685-7511	REV. NO. DESCRIPTION DATE 1 - - - 2 - - -	REV. NO. DESCRIPTION DATE 3 - - - 4 - - -