



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/economy

Florida Storm Panels, Inc.
14475 N.W. 26th 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 and accepted by Miami-Dade County RER- Product Control Section 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 Section (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. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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. AD12-051, titled "Omega Accordion Shutter / Hi-Rise ", sheets 1 through 8 of 8, prepared by MCY Engineering, Inc., dated June 08, 2012, revision #1 dated June 13, 2012 signed and sealed by Yiping Wang, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, the following statement: "Miami-Dade County Product Control Approved", and NOA number, per TAS-201, TAS-202, and TAS-203, 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 NOA # 08-0917.11 and consists of this page 1, evidence submitted pages E-1, E-2, E-3, E-4 & E-5 as well as approval document mentioned above.

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



Helmy A. Makar
11/01/2012

NOA No. 12-0716.01
Expiration Date: 03/18/2014
Approval Date: 11/01/2012
Page 1

Florida Storm Panels, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 08-0917.11

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.*

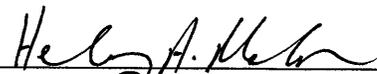
E. MATERIAL CERTIFICATIONS

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).*

Association File # 08-1488 is closed, all supporting documents moved to this file as shown next.



**Henry A. Makar, P.E., M.S.
Product Control Unit Supervisor
NOA No. 12-0716.01
Expiration Date: 03/18/2014
Approval Date: 11/01/2012**

Florida Storm Panels, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #97-0513.02

A. DRAWINGS

1. *Drawing No. 96-159, "The Jeff Robinson Shutter Co.", Sheets 1 through 8 of 8, dated 05/29/96, latest revision No. 1, dated 08/28/97, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E.*

B. TESTS

1. *Test report on: 1.) Large Missile Impact Test, per PA 201-94
2.) Cyclic Wind Pressure Test, per PA 203-94
3.) Uniform Static Air Pressure Test Loading, per PA 202-94
of extruded aluminum accordion shutter (96", 108", 120", 144" & 192" spans),
prepared by Miami Testing Laboratory, Report No. MTL 16908, dated February 14,
1997, signed and sealed by John M. Bridenstine, P.E.*
2. *Test report on: 1.) Large Missile Impact Test, per PA 201-94
2.) Cyclic Wind Pressure Test, per PA 203-94
3.) Uniform Static Air Pressure Test Loading, per PA 202-94
of extruded aluminum accordion shutter (96", 108", 120", 144" & 192" spans),
prepared by Miami Testing Laboratory, Report No. MTL 16910, dated February 18,
1997, signed and sealed by John M. Bridenstine, P.E.*

C. CALCULATIONS

1. *Comparative Analysis and Anchor Analysis dated 03/09/97, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E.*

D. MATERIAL CERTIFICATIONS

1. *Mill Certified Test Report issued by Caradon Indalex, with chemical composition for aluminum 6005-T5 Alloy and aluminum 6063-T6 alloy dated 01/03/97.*
2. *Mill Certified Test Report issued by Caradon Indalex, with chemical composition for aluminum 6005-T5 Alloy dated 01/10/97.*
3. *Tensile Test Report No. CAE 97010, prepared by Center For Applied Engineering, Inc., dated January 20, 1997, signed and sealed by John M. Bridenstine, P.E.*
4. *Tensile Test Report No. CAE 97019, prepared by Center For Applied Engineering, Inc., dated January 20, 1997, signed and sealed by John M. Bridenstine, P.E.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #00-0719.02

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*



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Product Control Unit Supervisor
NOA No. 12-0716.01
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS

1. *None.*

D. MATERIAL CERTIFICATIONS

1. *None.*

E. STATEMENTS

1. *Letter by The Jeff Robinson Shutter Company, Inc., dated July 5, 2000, signed by Jeffry T. Robinson, indicating that the approval has not changed.*
2. *Letter by Tilteco Inc., signed and sealed by Walter A. Tillit, Jr., P.E., dated May 4, 2000, certifying that Tilteco, Inc. is still the engineer of record and he continues to be in the engineering business.*

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #03-0722.01

A. DRAWINGS:

1. *Drawing No. 03-154, titled "Omega Accordion Shutter / Hi-Rise", sheets 1 through 8 of 8, prepared by Tilteco, Inc., dated July 08, 2003, last revision #1 dated July 08, 2003, signed and sealed by Walter A. Tillit Jr., P.E.*

B. TESTS:

1. *None.*

C. CALCULATIONS:

1. *None.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATION:

1. *None.*

F. OTHERS

1. *Letter from Tilteco, Inc., dated July 7, 2003, signed and sealed by Walter A. tillit Jr., P.E., certifying that drawing #03-154 prepared for Hurricane Manufacturing Corporation is engineering wise identical to the Jeff Robinson Shutter Co. drawing #96-159, except one wall mount header. The new extrusion has the same thickness and the anchor location has not changed.*
2. *Letter from Mr. Jeff Robinson requesting to change his company name from The Jeff Robinson Shutter Company to Hurricane Manufacturing Corporation.*



Henry A. Makar, P.E., M.S.
Product Control Unit Supervisor
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Florida Storm Panels, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 05-0927.05

A. DRAWINGS

1. *Drawing No. 05-283, titled " Omega Accordion Shutter / Hi-Rise ", sheets 1 through 8 of 8, prepared by Tilteco, Inc., dated September 13, 2005, last revision #1 dated September 13, 2005, signed and sealed by Walter A. Tillit Jr., P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *Anchor Analysis dated 09/23/2005, sheets 1 through 42, 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.*

5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 08-1488

A. DRAWINGS

1. *Drawing No. 08-222, 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. *None.*

C. CALCULATIONS

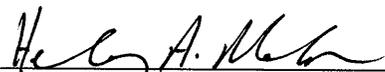
1. *Anchor Analysis, PART #I, dated 09/05/2008, sheets 1 through 42, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E.*
2. *Anchor Analysis, PART #II, dated 09/05/2008, sheets 1 through 19, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*



Henry A. Makar, P.E., M.S.
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Florida Storm Panels, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

6. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. AD12-051, titled " Omega Accordion Shutter / Hi-Rise ", sheets 1 through 8 of 8, prepared by MCY Engineering, Inc., dated June 08, 2012, revision #1 dated June 13, 2012 signed and sealed by Yiping Wang, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

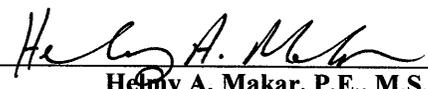
1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

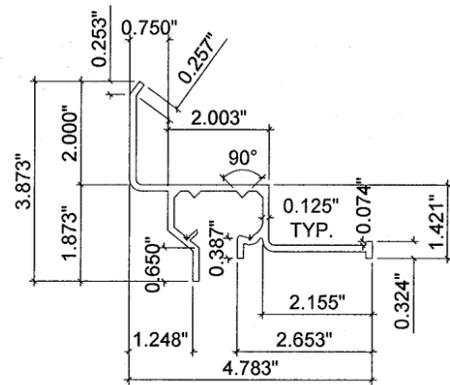
1. *None.*

F. OTHERS

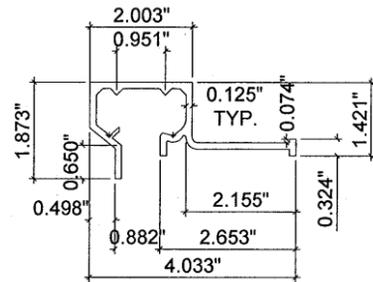
1. *Letter from MCY Engineering, Inc., October 27, 2012, signed and sealed by Yiping Wang, P.E., certifying that drawing # AD 12-051 prepared for Florida Storm Panels, Inc. is engineering wise identical to the previous NOA drawing of NOA # 08-0917.11.*
2. *Letter from Mr. Henry Revilla of Florida Storm Panels, Inc., dated October 26, 2012, requesting to close the Hurricane Protection Manufacturing Association file 08-1488 and move all documents to file # 12-0716.01.*



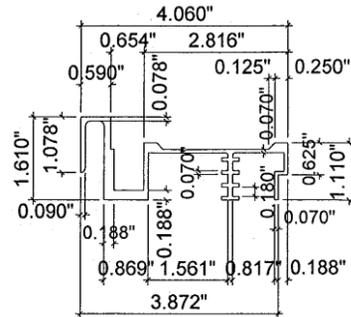
Henry A. Makar, P.E., M.S.
Product Control Unit Supervisor
NOA No. 12-0716.01
Expiration Date: 03/18/2014
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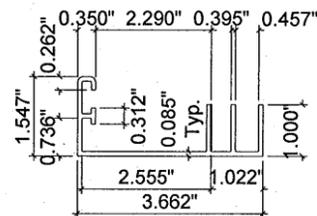
(A) WALL HEADER (& INVERTED)



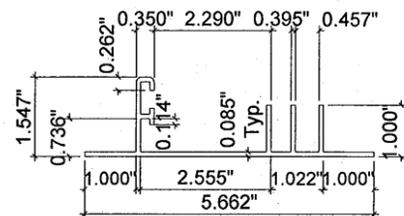
(B) CEILING HEADER



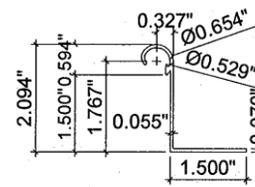
(C) SILL



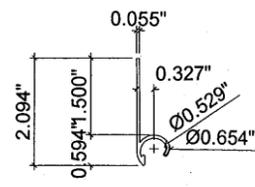
(D) ADJUSTABLE SILL ADAPTOR



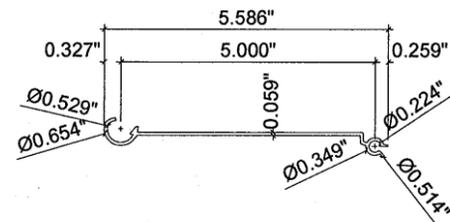
(D1) ADJUSTABLE SILL ADAPTOR



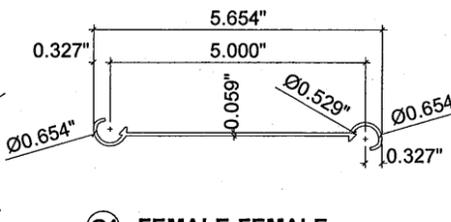
(E) 90° STARER



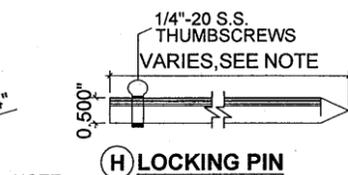
(F) 180° STARER



(G) 5" LOUVER BLADE
6005-T5 ALLOY

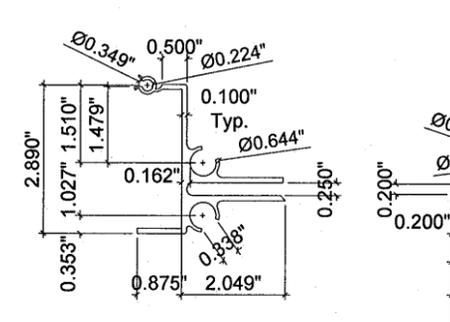


(G1) FEMALE-FEMALE 5" LOUVER BLADE
6005-T5 ALLOY

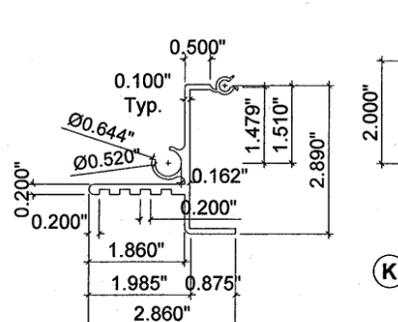


(H) LOCKING PIN

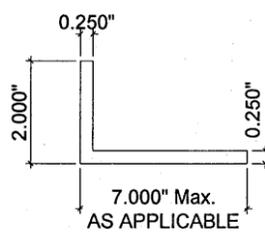
NOTE: TOTAL LENGTH OF TOP & BOTTOM PINS SHALL ADD A MINIMUM 2/3 SHUTTER'S BLADE LENGTH W/MINIMUM INDIVIDUAL PINS LENGTH OF 12" FOR UP TO 9'-0" BLADE LENGTH & 24" FOR BLADE LENGTH GREATER THAN 9'-0".



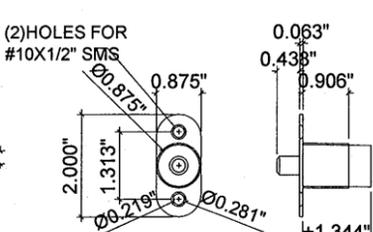
(I) OMEGA FEMALE CENTERMATE



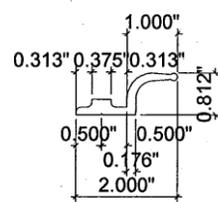
(J) OMEGA MALE CENTERMATE



(K) ALUMINUM ANGLE



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



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

COMPONENTS

SCALE: 3/8" = 1"

GENERAL NOTES:

1. ACCORDION SHUTTER SHOWN ON THIS PRODUCT APPROVAL DOCUMENT HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2010 EDITION OF THE FLORIDA BUILDING CODE, INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ). 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 SPACING. 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-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 XYLAN 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 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" Ø TAPCON ANCHORS, MANUFACTURED BY ITW / BUILDEX, INC. (MIN. f'c=3198 psi)
 - OR ELCO TEXTRON, INC. (MIN. f'c= 3500 psi)
 - 1/4" Ø ZAMAC NAILIN ANCHORS, MANUFACTURED BY POWERS FASTENERS, INC. (MIN. f'c=3000 psi)
 - 1/4" Ø x 7/8" CALK-IN ANCHORS MANUFACTURED BY POWERS FASTENERS, INC. (MIN. f'c=2000 psi)
 - 5/16" Ø XL TAPCON ANCHORS MANUFACTURED BY ITW/BUILDEX, INC. (MIN. f'c=2899 psi)
 - OR ELCO TEXTRON, INC. (MIN. f'c=3500 psi)
 - (B) TO EXISTING CONCRETE BLOCK WALL: ASTM C-90
 - 1/4" Ø TAPCON ANCHORS, MANUFACTURED BY I.T.W. BUILDEX OR ELCO TEXTRON, INC.
 - 1/4" Ø ZAMAC NAILIN ANCHORS, MANUFACTURED BY POWERS FASTENERS, INC.
 - 1/4" Ø x 7/8" CALK-IN ANCHORS MANUFACTURED BY POWERS FASTENERS, INC.
 - 5/16" Ø XL TAPCON ANCHORS MANUFACTURED BY ITW / BUILDEX OR ELCO TEXTRON, INC.

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" Ø - 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.

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" Ø - 20 SCREWS USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST AND 1" MINIMUM FOR WALLS WITH NO STUCCO.
- B.3) IN CASE THAT PRECAST STONE OR PRECAST CONCRETE PANELS BE FOUND ON THE EXISTING WALL, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS. ANCHORAGE SHALL BE 1 1/4" MINIMUM FOR ANCHORS MENTIONED IN B.1), & 7/8" FOR ANCHORS MENTIONED IN B.2).

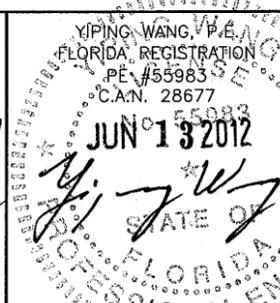
(C) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.

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.

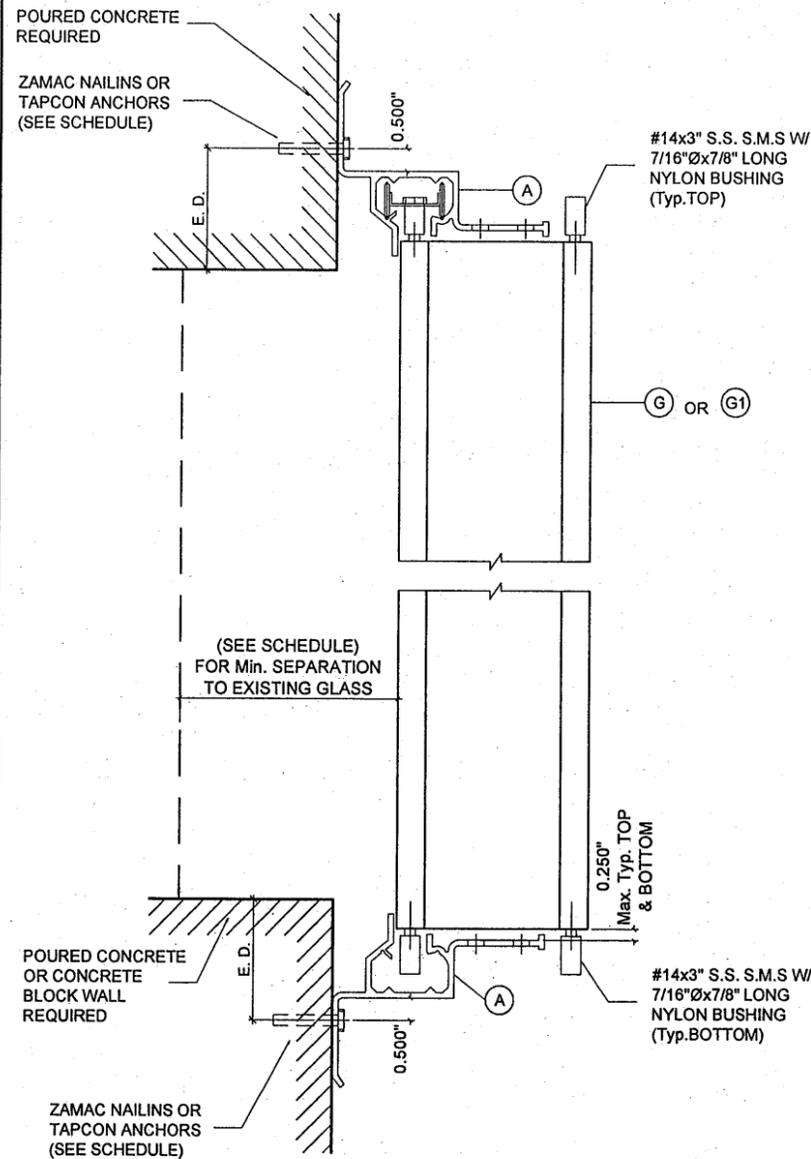
PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No 12-0716.01
 Expiration Date 03/18/2014
 By *Helga A. M...*
 Miami Dade Product Control



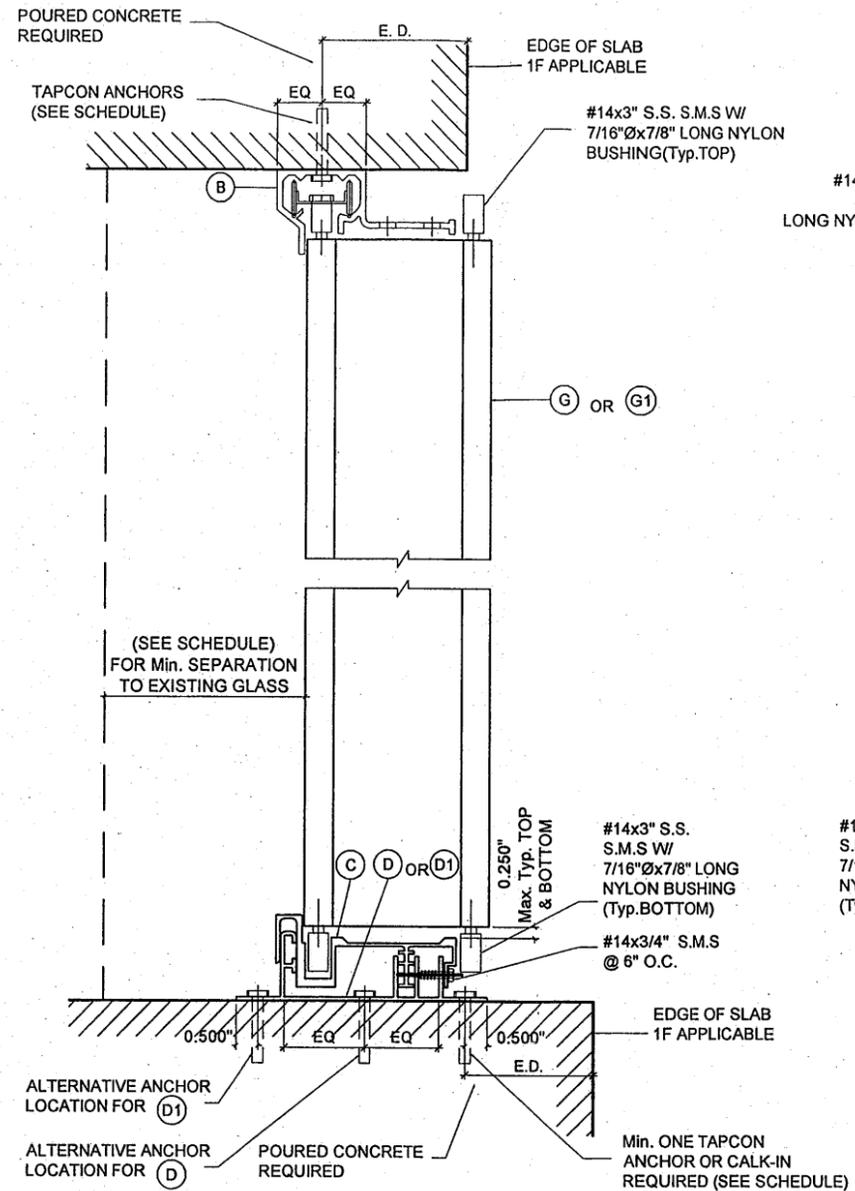
DATE	06-08-12
SCALE	AS NOTED
DRAWN	S.L.
PROJECT	MCY 12-117
DRAWING NO.	AD12-051

MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 8501 SW 124 Ave. STE. 205A P: 305.271.0117
 MIAMI, FL 33183 F: 786.573.5063
 www.MCYEngineering.com MCY.Engineering@Att.net

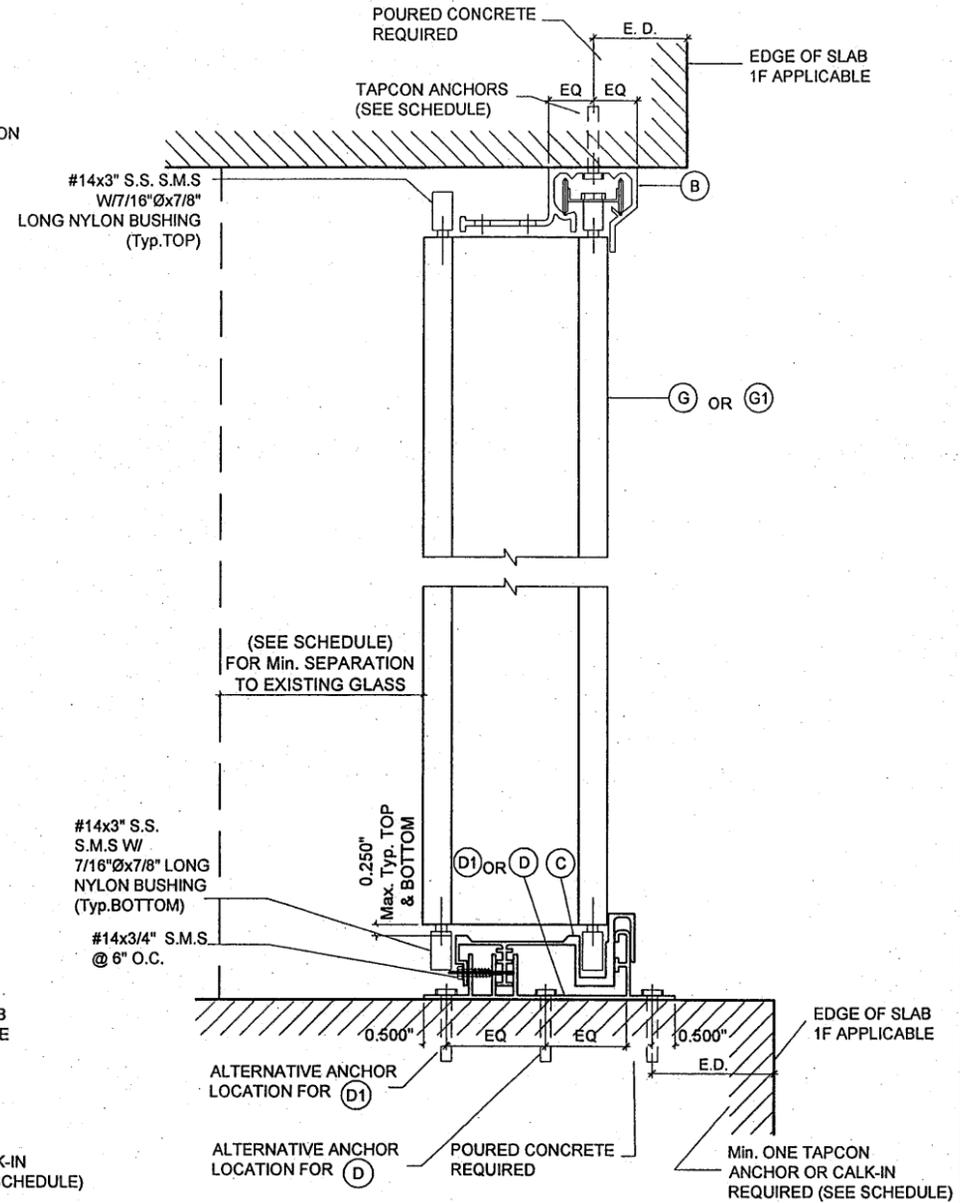
OMEGA ACCORDION SHUTTER / HI - RISE FLORIDA STORM PANELS, INC.
 14475 N.W. 26TH AVE.
 OPA LOCKA, FL. 33054
 P: (305) 685 - 9000 F: (305) 685 - 7511



WALL MOUNT 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"

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 12-0716.01
 Expiration Date 03/18/2014
 By *Healy*
 Miami Dade Product Control
 MIAMI DADE COUNTY

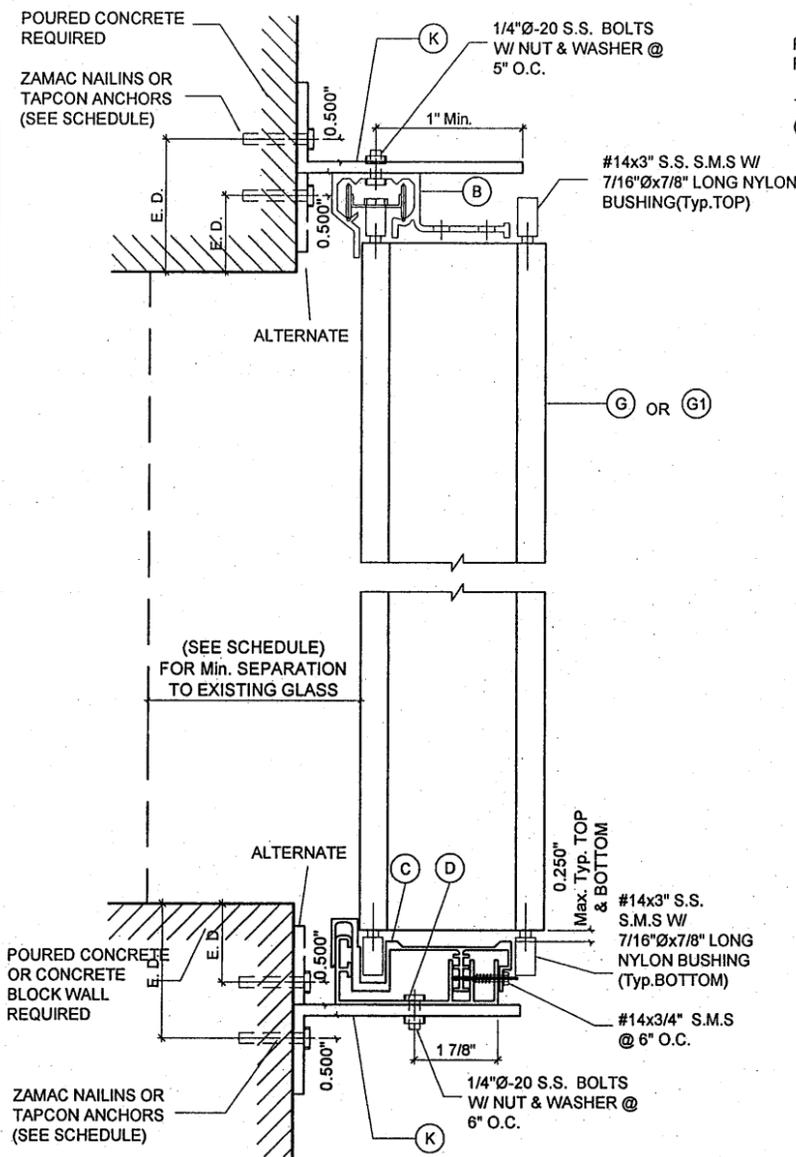
JUN 13 2012
 YIPING WANG, P.E.
 FLORIDA REGISTRATION
 PE # 55983
 C.A.N. 28677
 No 55983
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

NO	DATE	DESCRIPTION	UPDATE TO
1	5/13/12		2010FBC

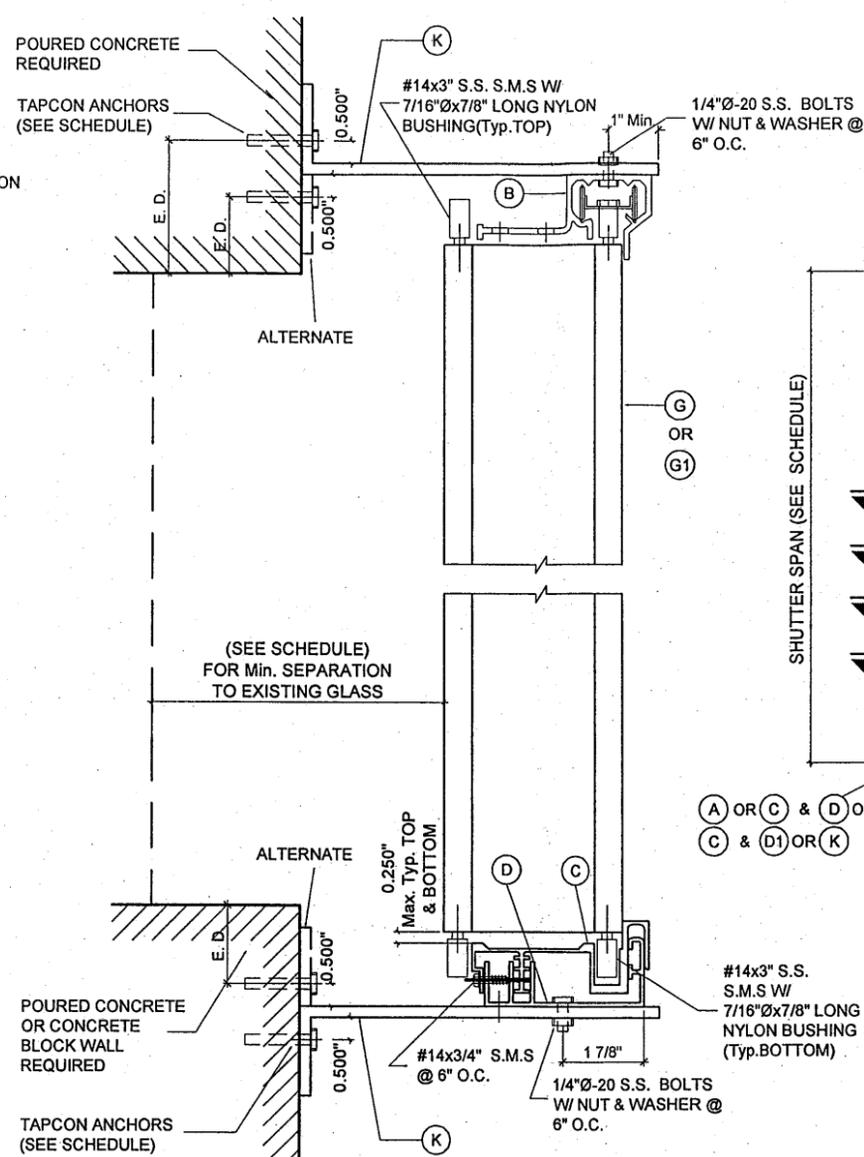
MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 6501 SW 124 Ave. STE. 205A P: 305.271.0117
 MIAMI, FL 33183 F: 786.573.5063
 www.MCYEngineering.com MCY.Engineering@Att.net

OMEGA ACCORDION SHUTTER / HI - RISE
FLORIDA STORM PANELS, INC.
 14475 N.W. 26TH AVE.
 OPA LOCKA, FL 33054
 P: (305) 665 - 9000 F: (305) 665 - 7511

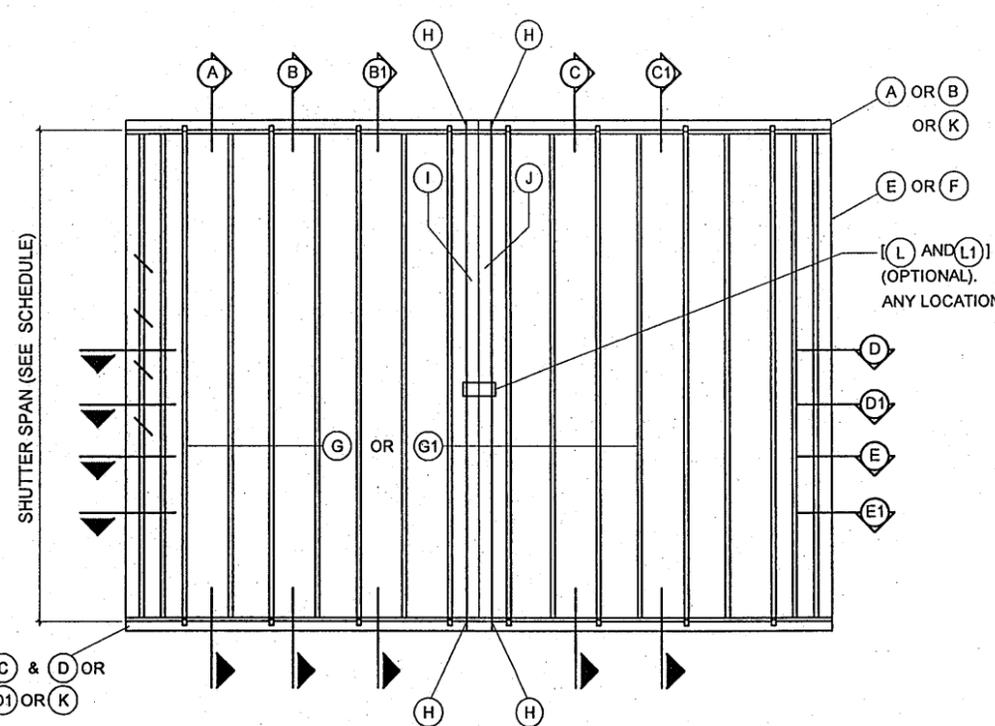
DATE	06-08-12
SCALE	AS NOTED
DRAWN	S.L.
PROJECT	MCY 12-117
DRAWING NO.	AD12-051
2 OF 8	



WALL MOUNT 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.

NO	DATE	DESCRIPTION
1	8/13/12	UPDATE TO 2010PEC

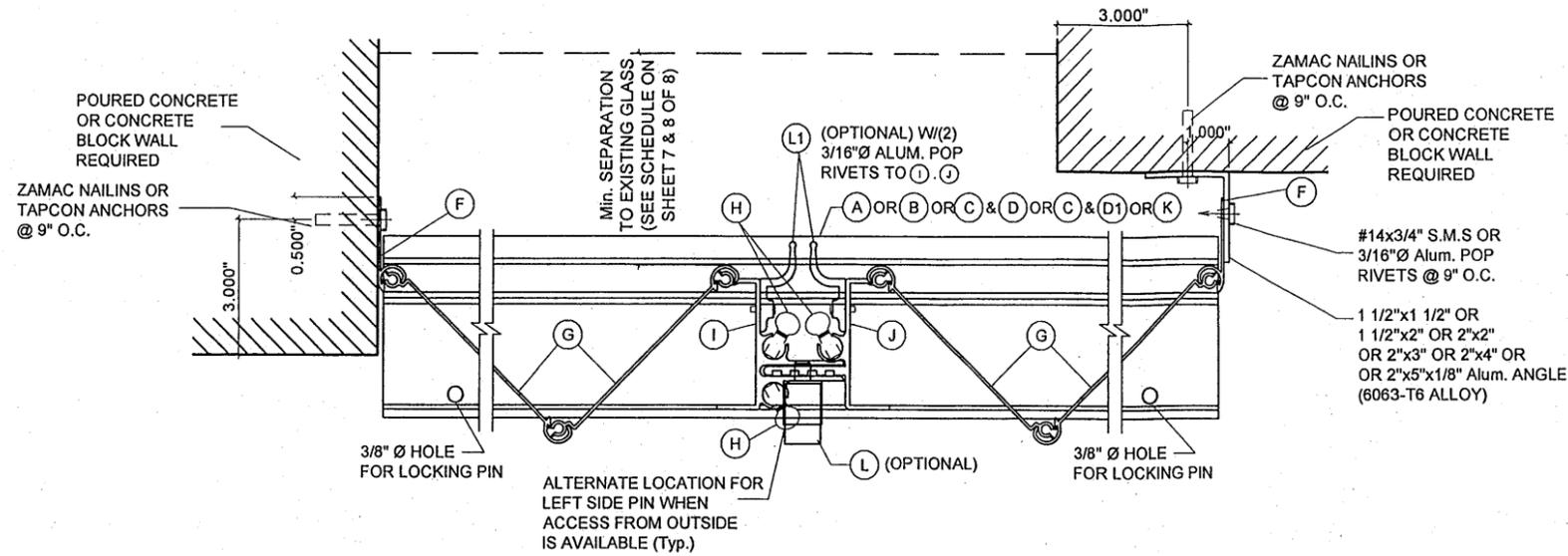
MCY ENGINEERING, INC.
 GLAZING CONSULTANTS
 8501 SW 124 Ave. STE. 205A
 MIAMI, FL 33183
 P: 305.271.0117
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OMEGA ACCORDION SHUTTER / HI - RISE
FLORIDA STORM PANELS, INC.
 14475 N.W. 26TH AVE.
 OPA LOCKA, FL 33054
 P: (305) 685 - 9000 F: (305) 685 - 7511

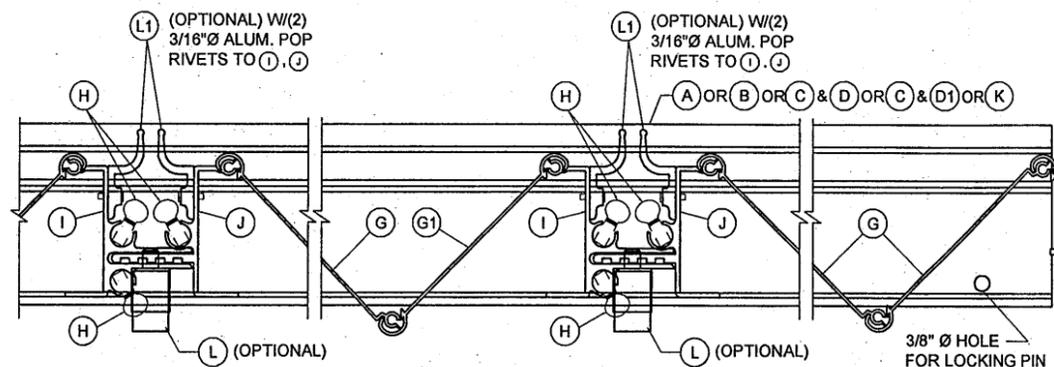
PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 12-0716.09
 Expiration Date 03/18/2014
 By *[Signature]*
 Miami Dade Product Control
 MIAMI DADE COUNTY

YIPING WANG, R.E.
 FLORIDA REGISTRATION
 PE #55983
 G.A. No. 28677
 No 55983
 JUN 13 2012
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

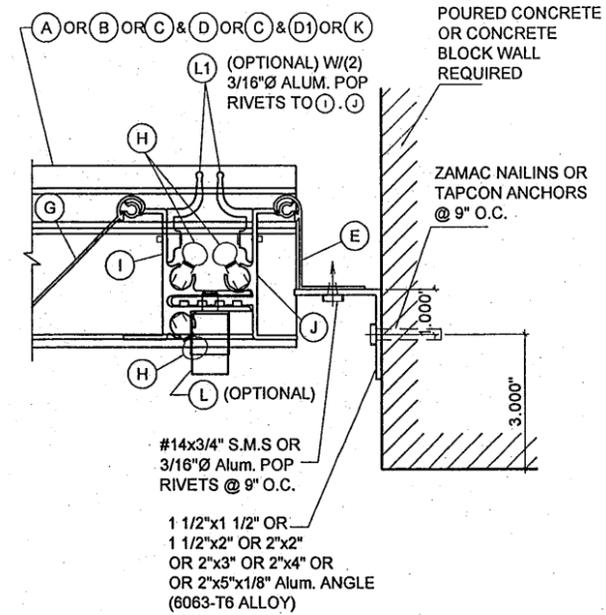
DATE	06-08-12
SCALE	AS NOTED
DRAWN	S.L.
PROJECT	MCY 12-117
DRAWING NO.	AD12-051
3 OF 8	



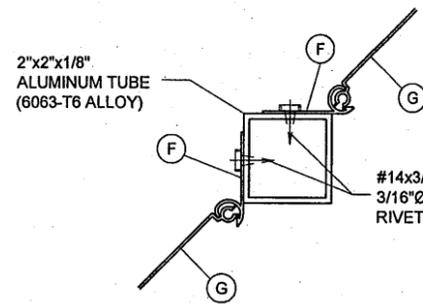
SECTION D
SCALE: 3/8" = 1"



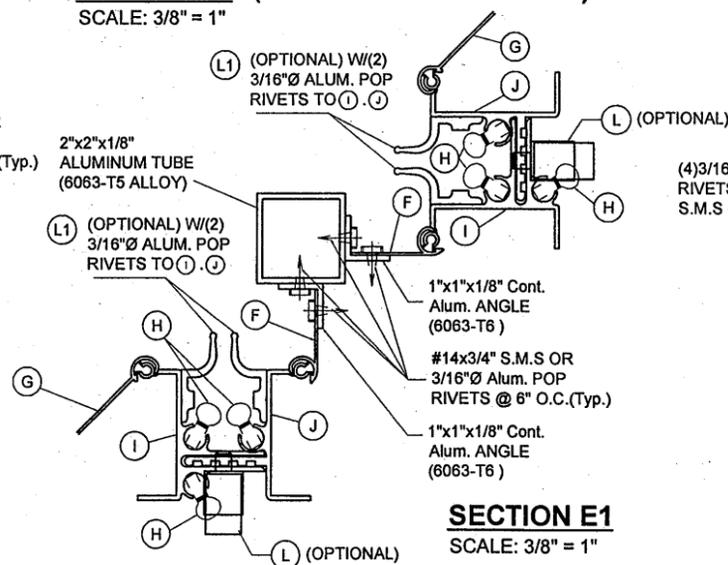
SECTION D1 (& MULTIPLE SHUTTERS)
SCALE: 3/8" = 1"



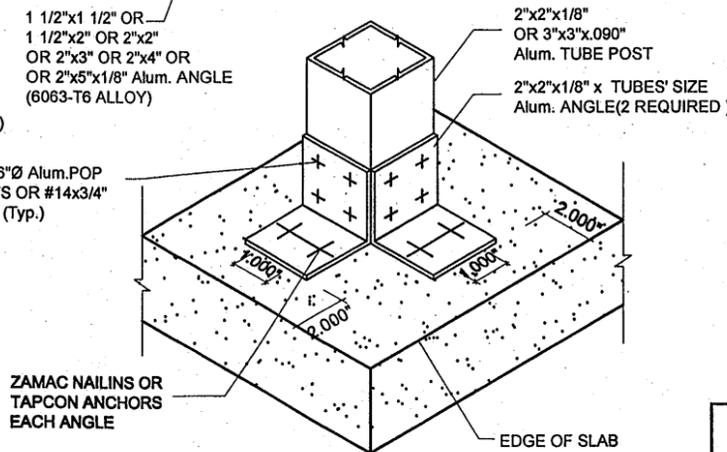
ONE SIDED SECTION: END CONNECTION DETAIL
SCALE: 3/8" = 1"



SECTION E
SCALE: 3/8" = 1"



SECTION E1
SCALE: 3/8" = 1"



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

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

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0716-07
Expiration Date 05/18/2014

By *Yiping Wang*
Miami Dade Product Control

MIAMI DADE COUNTY

YIPING WANG, P.E.
FLORIDA REGISTRATION
PE # 55983
C.A.N. 28677
No 55983

DATE 06-08-12
SCALE AS NOTED
DRAWN S.L.
PROJECT MCY 12-117
DRAWING NO. AD12-051

NO	DATE	DESCRIPTION	UPDATE TO
1.	6/13/12		2010FBC

MCY ENGINEERING, INC.
GLAZING CONSULTANTS

8501 SW 124 Ave. STE. 205A P: 305.271.0117
MIAMI, FL 33183 F: 786.573.5063

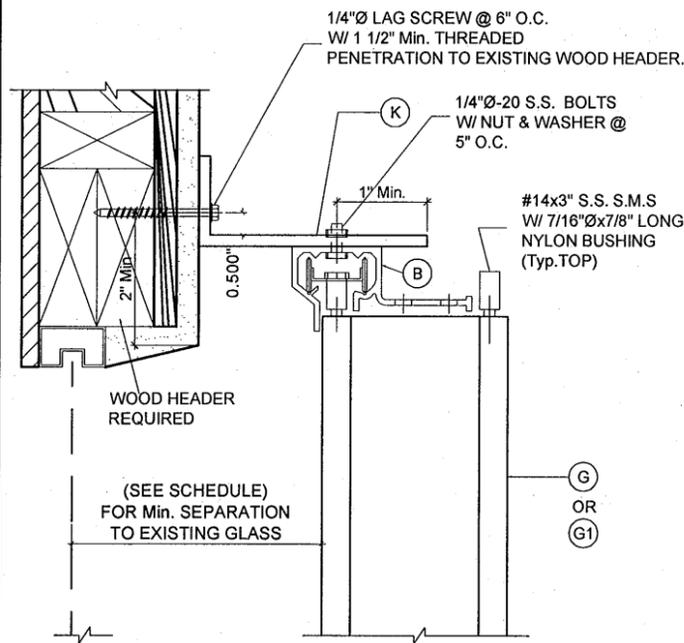
www.MCYEngineering.com MCY.Engineering@Att.net

OMEGA ACCORDION SHUTTER / HI - RISE
FLORIDA STORM PANELS, INC.

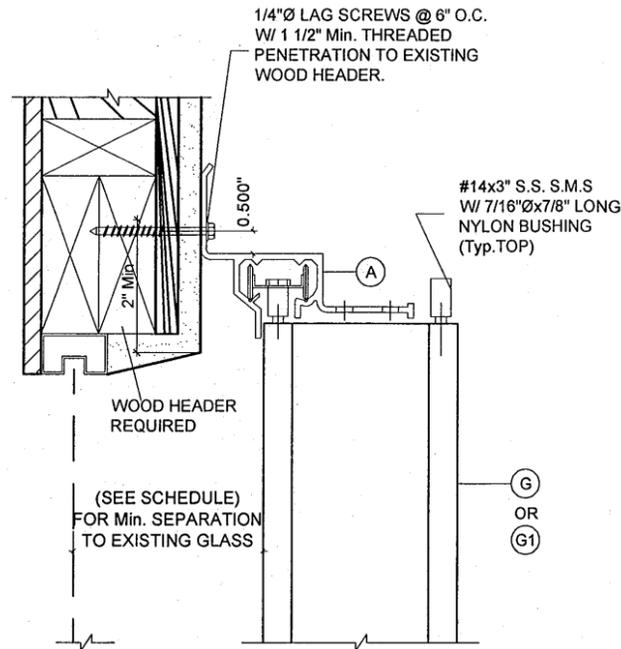
14475 N.W. 26TH AVE.
OPA LOCKA, FL 33064
P: (305) 685 - 9000 F: (305) 685 - 7511

JUN 13 2012

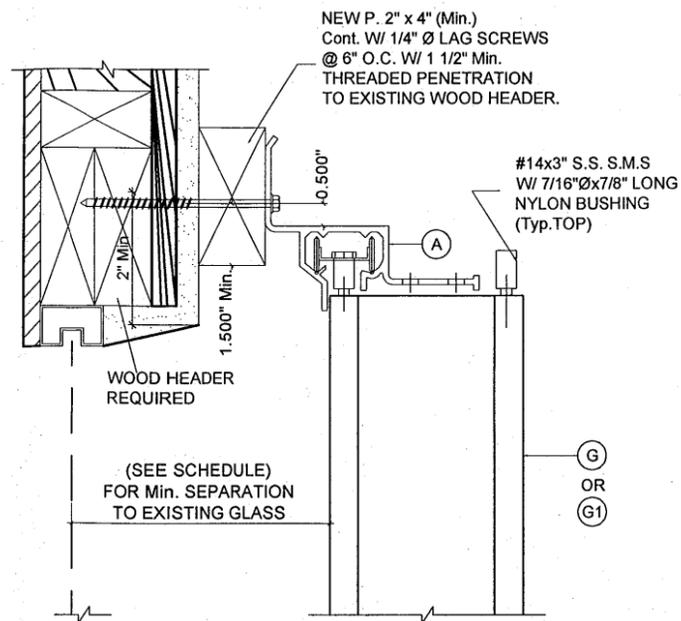
4 OF 8



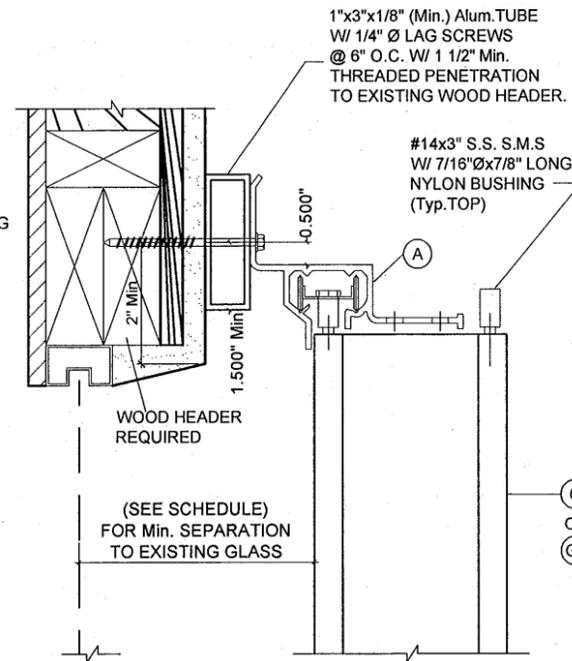
ALTERNATIVE 1



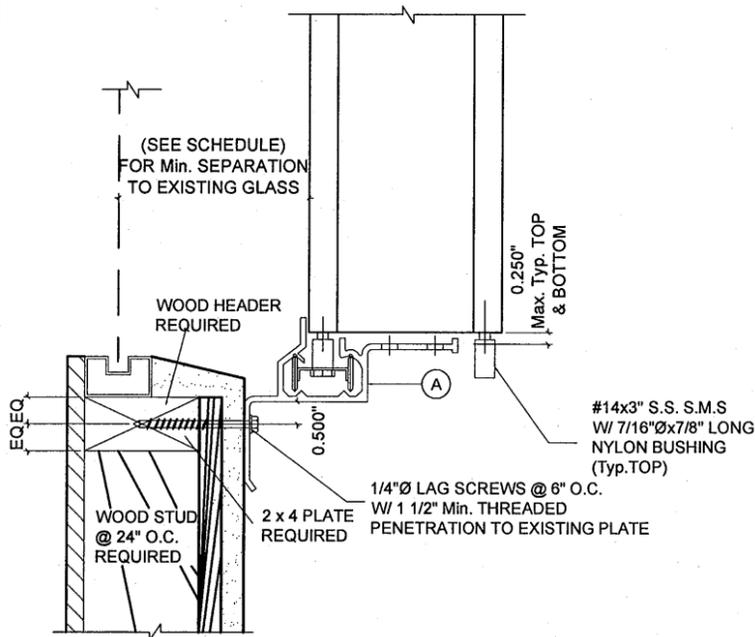
ALTERNATIVE 3



ALTERNATIVE 4



ALTERNATIVE 5



ALTERNATIVE 2

WALL MOUNTING INSTALLATION - SECTIONS A

SCALE: 1/4" = 1"

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

NOTES:
1. INSTALLATIONS ARE ONLY VALID FOR BUILDING WITH 75 p.s.f. Max DESIGN LOADS AND 9'-0" Max. SHUTTER SPAN.
2. 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.
3. FOR NEW WOOD FRAME CONSTRUCTION; WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

INSTALLATION DETAIL ON EXISTING WOOD FRAME BUILDINGS

PRODUCT REVISED as complying with the Florida Building Code
Acceptance No 12-0716-01
Expiration Date 03/18/2014
By *[Signature]*
Miami Dade Product Control
MIAMI DADE COUNTY

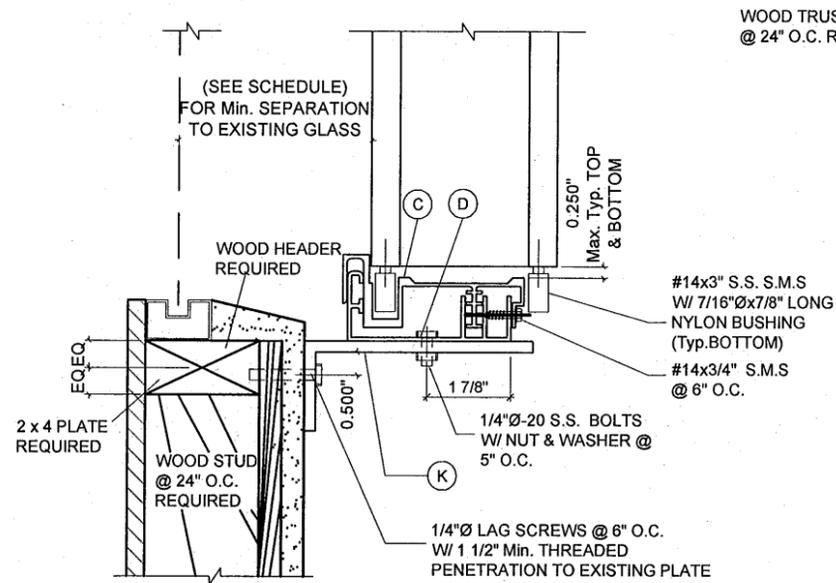
JUN 13 2012
WANG, WANG, P.E.
FLORIDA REGISTRATION
RE #55983
L.A.N. 28677
No 55983
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DATE	06-08-12
SCALE	AS NOTED
DRAWN	S.L.
PROJECT	MCY 12-117
DRAWING NO.	AD12-051
5 OF 8	

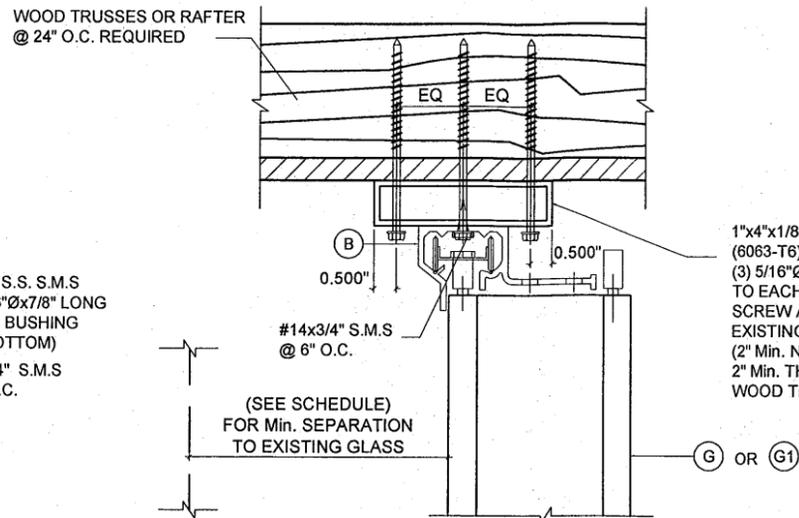
MCY ENGINEERING, INC.
GLAZING CONSULTANTS
8501 SW 124 Ave. STE. 205A. P: 305.271.0117
MIAMI, FL 33183 F: 786.573.5063
www.MCYEngineering.com MCY.Engineering@Att.net

NO	DATE	DESCRIPTION	UPDATE TO
1.	6/13/12		2010FEC

OMEGA ACCORDION SHUTTER / HI - RISE FLORIDA STORM PANELS, INC.
14475 N.W. 26TH AVE.
OPA LOCKA, FL 33054
P: (305) 685 - 9000 F: (305) 685 - 7511

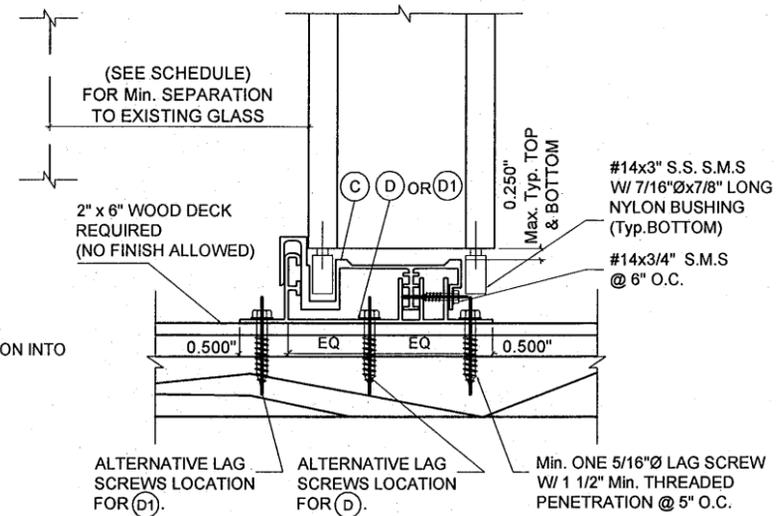


ALTERNATIVE 6



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

NO	DATE	DESCRIPTION	UPDATE TO
1.	6/13/12		2010FBC

MCY ENGINEERING, INC.
GLAZING CONSULTANTS

MCY

8501 SW 124 Ave. STE. 205A P: 305.271.0117
MIAMI, FL 33183 F: 786.573.5063

www.MCYEngineering.com MCY.Engineering@Att.net

OMEGA ACCORDION SHUTTER / HI - RISE FLORIDA STORM PANELS, INC.

14475 N.W. 26TH AVE.
OPA LOCKA, FL 33054
P: (305) 685 - 9000 F: (305) 685 - 7511

DATE	06-08-12
SCALE	AS NOTED
DRAWN	S.L
PROJECT	MCY 12-117
DRAWING NO.	AD12-051
	6 OF 8

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 12-0716.01
Expiration Date 03/18/2014

By *Yiping Wang*
Miami Dade Product Control

MIAMI DADE COUNTY

JUN 13 2012

YIPING WANG, P.E.
FLORIDA REGISTRATION
No. 55983
E.A.N. 28677

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'-4"	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"
	6"	6"	6"	6"	6"	3"	6"	6"	3 1/2"	6"	6"	6"	6"	6"	4"
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"
	6"	6"	6"	6"	5 1/2"	5"	6"	5"	3 1/2"	6"	6"	6"	6"	5 1/2"	3 1/2"
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"
	6"	6"	6"	6"	4"	5"	6"	4"	3 1/2"	6"	6"	6"	6"	4 1/2"	3 1/2"
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"
	6"	6"	4 1/2"	6"	N/A	N/A	5 1/2"	3"	2 1/2"	6"	6"	6"	6"	3 1/2"	3"
FROM 120.1 TO 168.1	6"	N/A	N/A	6"	N/A	N/A	4"	4 1/2"	N/A	6"	5"	5"	6"	4"	4"
	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
	5 1/2"	3 1/2"	N/A	N/A	N/A	N/A	3"	2 1/2"	N/A	6"	6"	N/A	3 1/2"	5"	N/A

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

MAXIMUM ANCHOR SPACING LEGEND (EXCEPT AS INDICATED ON +, ++ NOTES BELOW)	
WALL MOUNTING	FLOOR/CEILING MOUNTING
1/4" Ø ZAMAC NAILIN	1/4" Ø TAPCON (TOP & BOTTOM)
1/4" Ø TAPCON	1/4" Ø CALK-IN (BOTTOM)

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

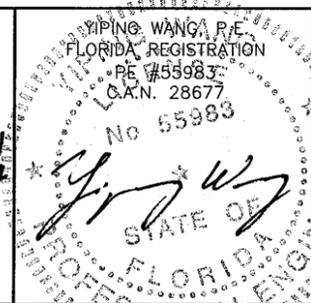
NOTES ON "p.s.f." VS SPAN SCHEDULE

* 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"

PRODUCT REVISED as complying with the Florida Building Code
Acceptance No 12-0716-01
Expiration Date 03/18/2014
By *[Signature]*
Miami Dade Product Control



MIAMI DADE COUNTY

NO	DATE	DESCRIPTION	UPDATE TO
1.	6/13/12		2010FBC

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OMEGA ACCORDION SHUTTER / HI - RISE FLORIDA STORM PANELS, INC.
14475 N.W. 26TH AVE.
OPA LOCKA, FL. 33054
P: (305) 685 - 9000 F: (305) 685 - 7511

DATE	06-08-12
SCALE	AS NOTED
DRAWN	S.L
PROJECT	MCY 12-117
DRAWING NO.	AD12-051
7 OF 8	

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	15'-7"	3 1/16"	3"
45.0	15'-2"	3 1/16"	3"
47.8	14'-11"	3 1/16"	3"
49.0	14'-0"	3 1/16"	3"
50.5	14'-9"	3 1/16"	3"
52.0	14'-7"	3 1/16"	3"
52.4	14'-7"	3 1/16"	3"
55.0	14'-5"	3 1/16"	3"
55.2	14'-5"	3 1/16"	3"
55.6	14'-5"	3 1/16"	3"
57.2	14'-3"	3 1/16"	3"
58.6	14'-2"	3 1/16"	3"
58.8	14'-2"	3 1/16"	3"
59.5	14'-2"	3 1/16"	3"
59.7	14'-2"	3 1/16"	3"
61.5	14'-0"	3 1/16"	3"
61.8	14'-0"	3 1/16"	3"
61.9	14'-0"	3 1/16"	3"
63.7	13'-11"	3 1/16"	3"
66.9	13'-9"	3 1/16"	3"
67.0	13'-9"	3 1/16"	3"

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

MAXIMUM DESIGN LOAD "W" (p.s.f.)	MAXIMUM PANEL SPAN "L" (ft.)	MINIMUM SEPARATION TO GLASS (in.)	
		*	**
91.4	12'-8"	3 1/16"	3"
92.7	12'-7"	3 1/16"	3"
93.8	12'-6"	3 1/16"	3"
94.8	12'-5"	3 1/16"	3"
96.6	12'-3"	3 1/16"	3"
96.8	12'-3"	3 1/16"	3"
97.7	12'-3"	3 1/16"	3"
100.5	12'-1"	3 1/16"	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"

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)			WALL MOUNTING INSTALLATION AT TOP & 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"Ø TAPCON	1/4"Ø TAPCON (TOP & BOTTOM) & CALK-IN (BOTTOM)

MIN. ANCHORS SPACING SCHEDULE

1/4"Ø 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"Ø 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"Ø TAPCONS AND USE 2 1/2" SPACING FOR CALK-INS

+ THIS SPACING IS ONLY VALID WHEN INSTALLATION IS PERFORMED USING A 5/16"Ø 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"Øx7/8" CALK-IN W/ 7/8" Min. EMBEDMENT INTO CONCRETE, AS MANUFACTURED BY POWERS FASTENERS, INC. AND ANCHOR IS ONLY INSTALLED ON TRACK (DOR) AT MIDWIDTH OF TRACK.

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"

REVISIONS

NO.	DATE	DESCRIPTION
1.	6/13/12	UPDATE TO 2010FBC

MCY ENGINEERING, INC.
GLAZING CONSULTANTS

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PRODUCT REVISED as complying with the Florida Building Code
Acceptance No 12-0716-01
Expiration Date 03/18/2014

By *Helena A. Miller*
Miami Dade Product Control

MIAMI DADE COUNTY

JUN 13 2012

YIPING WANG, P.E.
FLORIDA REGISTRATION NO. 55983
C.A.N. 28677

DATE 08-08-12
SCALE AS NOTED
DRAWN S.L.
PROJECT MCY 12-117
DRAWING NO. AD12-051

8 OF 8