MIAMI-DADE COUNTY
DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Aldora Aluminum & Glass Products, Inc.
11500 Miramar Parkway, Suite 300
Miramar, FL 33025

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 Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "TCW-250P Reinforced LMI" Aluminum Window Wall System – L.M.I.

APPROVAL DOCUMENT: Drawing No. **ACW-250P.LMI.R,** titled "TCW-250P LMI (W/Reinforcing)", sheets 1 through 9 of 9, dated 11/12/13, prepared by Bromley • Cook | Engineering, signed and sealed by William D. Cook, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and 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, model/series, and 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 NOA # 10-0728.07** and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**

MIAMI-DADE COUNTY APPROVED

5/9/14

NOA No. 13-1203.10
Expiration Date: August 25, 2015
Approval Date: May 15, 2014
Page 1

Aldora Aluminum & Glass Products, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **ACW-250P.LMI.R,** titled "TCW-250P LMI (W/Reinforcing)", sheets 1 through 9 of 9, dated 11/12/13, prepared by Bromley • Cook | Engineering, signed and sealed by William D. Cook, P.E.

B. TESTS

1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
   2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
   3) Water Resistance Test, per FBC, TAS 202-94
   4) Large Missile Impact Test per FBC, TAS 201-94
   5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

   along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Test Laboratory, LLC Test Report No. **HTL-0062-1020-03,** dated 10/24-27/03, signed and sealed by Vinu J. Abraham, P.E. ***(Submitted under NOA #05-0624.03)***
2. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
   2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
   3) Water Resistance Test, per FBC, TAS 202-94
   4) Large Missile Impact Test per FBC, TAS 201-94
   5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

   along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Test Laboratory, LLC Test Report No. **HTL-0062-0302-04,** dated 02/23-4/07/04, signed and sealed by Vinu J. Abraham, P.E. ***(Submitted under NOA #05-0624.03)***
3. Test reports on: 1) Large Missile Impact Test per FBC, TAS 201-94
   2) Cyclic Wind Pressure Loading per FBC, TAS 203-94

   along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Test Laboratory, LLC Test Report No. **HTL-0062-0406-04,** dated 02/23-04/07/04, signed and sealed by Vinu J. Abraham, P.E. ***(Submitted under previous NOA #05-0624.03)***
4. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
   2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
   3) Water Resistance Test, per FBC, TAS 202-94
   4) Large Missile Impact Test per FBC, TAS 201-94
   5) Cyclic Wind Pressure Loading per FBC, TAS 203-94

   along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Test Laboratory, LLC Test Report No. **HTL-0062-0916-03,** dated 09/23-24/03, signed and sealed by Vinu J. Abraham, P.E. ***(Submitted under NOA #05-0624.03)***

Manuel Perez

Manuel Perez, P.E.
Product Control Examiner
NOA No. 13-1203.10
Expiration Date: August 25, 2015
Approval Date: May 15, 2014

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS (CONTINUED)

5. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
   2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
   3) Water Resistance Test, per FBC, TAS 202-94
   4) Large Missile Impact Test per FBC, TAS 201-94
   5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
   along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Test Laboratory, LLC Test Report No. **HTL-0062-0916-03**, dated 11/10-12/05/03, signed and sealed by Vinu J. Abraham, P.E. ***(Submitted under NOA #05-0624.03)***
6. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
   2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
   3) Water Resistance Test, per FBC, TAS 202-94
   4) Large Missile Impact Test per FBC, TAS 201-94
   5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
   along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Test Laboratory, LLC Test Report No. **HTL-0062-1113-03,** dated 02/23-4/07/04, signed and sealed by Vinu J. Abraham, P.E. ***(Submitted under NOA #05-0624.03)***
7. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
   2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
   3) Water Resistance Test, per FBC, TAS 202-94
   4) Large Missile Impact Test per FBC, TAS 201-94
   5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
   along with marked-up drawings and installation diagram of an aluminum window wall system, prepared by Hurricane Test Laboratory, LLC Test Report No. **HTL-0062-0512-04,** dated 03/18-5/11/04, signed and sealed by Vinu J. Abraham, P.E. ***(Submitted under NOA #05-0624.03)***

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2010, dated 10/20/10, updated on 05/07/14 to comply with FBC-5th Edition (2014), prepared by Bromley • Cook | Engineering, signed and sealed by William D. Cook, P.E. ***(Submitted partly under previous NOA #10-0728.07)***
2. Complies with **ASTM E1300-04**

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

Manuel Perez, P.E.
Product Control Examiner
NOA No. 13-1203.10
Expiration Date: August 25, 2015
Approval Date: May 15, 2014

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **11-0624.02** issued to **E.I. DuPont DeNemours & Co.**, Inc. for their "**DuPont SentryGlas® Interlayer**" dated 08/25/11, expiring on 01/14/17.
2. Notice of Acceptance No. **12-1231.09** issued to **Eastman Chemical Company (MA)** for their "**Saflex HP Clear or Color Glass Interlayers**" dated 03/28/13, expiring on 04/14/18.
3. Notice of Acceptance No. **12-1231.08** issued to **Eastman Chemical Company (MA)** for their "**Saflex CP – Saflex and Saflex HP Composite Glass Interlayers with PET Core**" dated 03/28/13, expiring on 12/11/18.

F. STATEMENTS

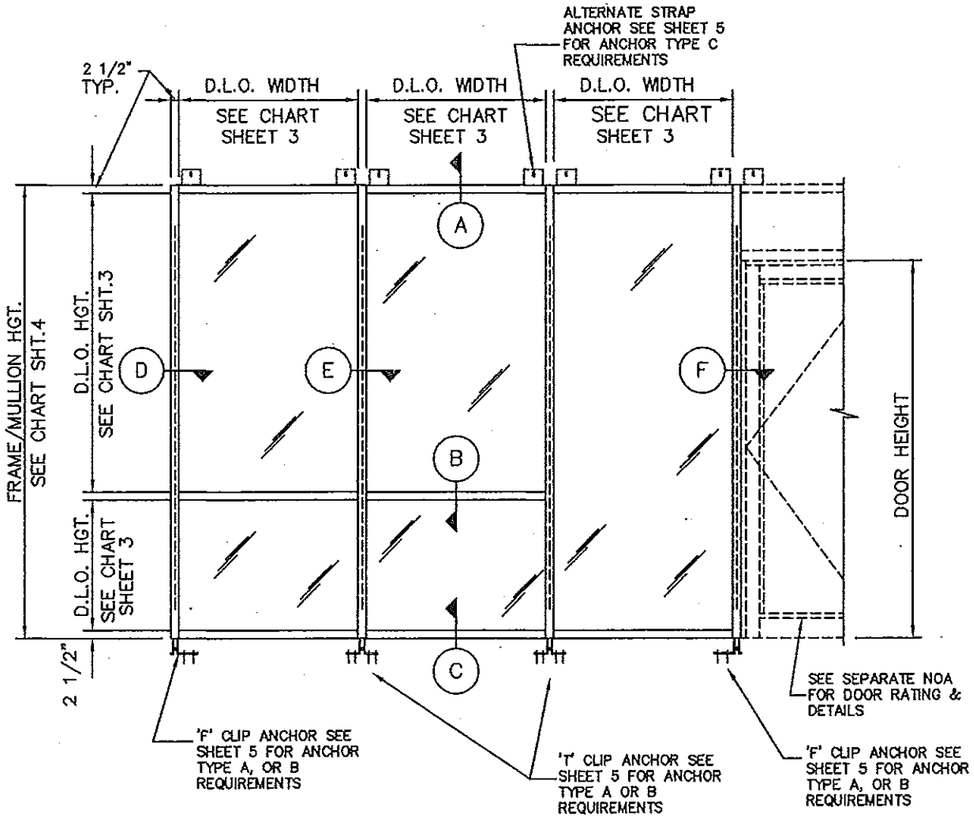
1. Statement letter of conformance, complying with **FBC-5th Edition (2014)**, dated May 7, 2014, issued by Bromley • Cook | Engineering, signed and sealed by William D. Cook, P.E.
2. Statement letter of no financial interest, dated May 7, 2014, signed and sealed by William D. Cook, P.E.
3. Laboratory compliance letter for Test Reports No. **HTL-0062-0916-03, HTL-0062-1020-03, HTL-0062-0105-04, HTL-0062-0302-04, HTL-0062-0406-04 and HTL-0062-0512-04**, issued by Hurricane Test Laboratory, LLC, dated September 16, 2004, signed and sealed by Vinu J. Abraham, P.E.
   (Submitted under NOA #05-0624.03)
4. Bill of Sales, asset purchase agreement dated April 19, 2013, signed by Mr. Edwin Trainor and Mr. Leon J. Silverstein.
5. Letter from owners of existing NOA stating that they have sold all assets to the applicant, that they no longer manufacture the product and relinquish their rights to the current NOA, dated April 15, 2013, signed by Mr. Ed Trainor.

G. OTHERS

1. Notice of Acceptance No. **10-0728.07**, issued to Trainor Glass Company for their Series "TCW-250P LMR" Aluminum Curtain Wall System W/Reinforced Mullion – L.M.I., approved on 12/30/10 and expiring on 08/25/15.

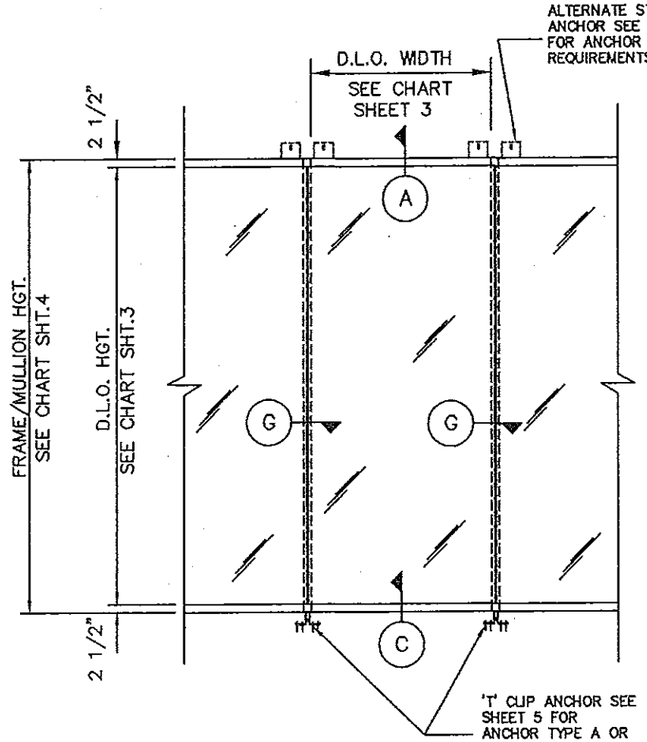
Manuel Perez

Manuel Perez, P.E.
Product Control Examiner
NOA No. 13-1203.10
Expiration Date: August 25, 2015
Approval Date: May 15, 2014



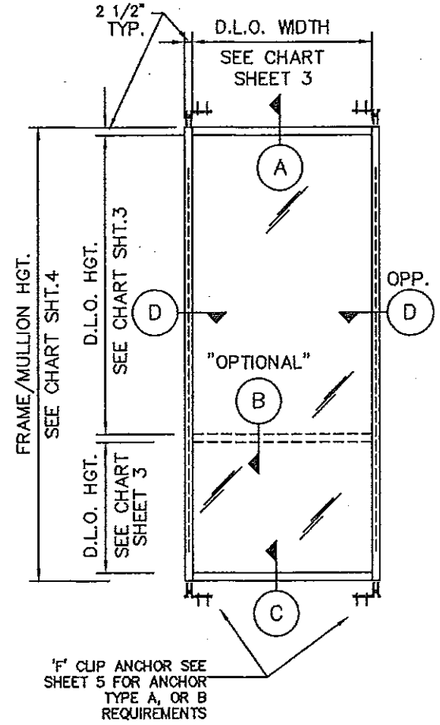
TYPICAL ELEVATION

MULTIPLE UNITS
W/ TGF-209 FACE COVER



TYPICAL ELEVATION

W/ VERTICAL BUTT JOINTS
(STRUCTURALLY GLAZED OPTION)



TYPICAL ELEVATION

SINGLE FIXED WINDOW
(PUNCHED OPENING)

NOTES:

1.) ALUMINUM WINDOW WALL SYSTEM IS RATED FOR LARGE MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

2.) THIS SYSTEM MAY BE USED IN CONJUNCTION WITH APPROVED ENTRANCE DOORS.

3.) CODE REQUIREMENTS FOR SAFEGUARDS MUST BE OBSERVED.

4.) THIS PRODUCT IS DESIGNED TO COMPLY WITH THE HIGH VELOCITY HURRICANE ZONE OF THE FLORIDA BUILDING CODE 5TH EDITION (2014).

5.) WOOD BUCKS BY OTHERS MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE. BUCKS SHALL BE DESIGNED BY PROFESSIONAL ENGINEER OF RECORD

6.) ANCHORS SHALL BE AS LISTED IN CHARTS AND SPACED AS DETAILED.

7.) ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

8.) ALL STEEL IN CONTACT WITH ALUMINUM SHALL BE SEPARATED.

INSTRUCTIONS:

STEP 1: DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE. USING APPLICABLE ASCE 7 STANDARDS.

STEP 2: SEE CHARTS ON SHEET 3 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE. MATCH GLASS SIZE AND DESIGN LOAD

STEP 3: CHECK MULLION CAPACITY FOR GIVEN SPACING AND HEIGHT USING CHARTS ON SHEET 4. THE CAPACITY SHOULD EQUAL OR EXCEED THE DESIGN LOAD.

STEP 4: USING CHARTS ON SHEET 5 SELECT ANCHOR OPTION WITH WITH DESIGN RATING EQUAL TO OR GREATER THAN DESIGN LOAD SPECIFIED IN STEP 1.

TCW-250P SERIES WINDOW WALL SYSTEM
W/ REINFORCED MULLIONS
APPROVED FOR VERTICAL FACE COVERS OR BUTT JOINTS
LARGE MISSILE IMPACT

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-1203.10
Expiration Date Aug. 25, 2015
By Miami Dade Product Control

PROJECT NAME: TCW-250P LMI (W/REINFORCING)			
DRAWING NUMBER: ACW-250P.LMI.R	DRAW BY: M.G.	EXTRUSION NO. AND LOCATION: N/A	
SHT. 1 OF 9	SCALE: 1/4" = 1'-0"	DATE: 11/12/13	

Aldora
Aluminum & Glass Products, Inc.
11500 MIRAMAR PKWY. SUITE 300 MIRAMAR, FL. 33025
PHONE: (954) 784-6900 FAX: (954) 784-6901

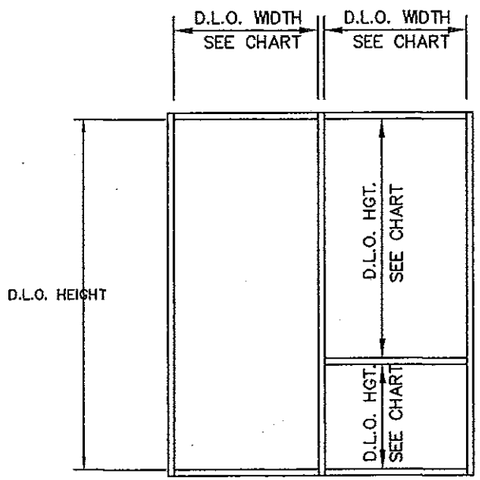
SEAL: WILLIAM D. COOK LICENSE No 43904 STATE OF FLORIDA PROFESSIONAL ENGINEER
MAY 07 2014
WILLIAM D. COOK P.E.
FLA. P.E. # 43904
FLA. C.A. # 2008

BROMLEY COOK ENGINEERING, INC.
STRUCTURAL ENGINEERING SERVICES
5440 N.W. 33RD AVENUE SUITE 100
FORT LAUDERDALE, FLORIDA 33309
TEL: (954) 772-4624 FAX: (954) 772-4634

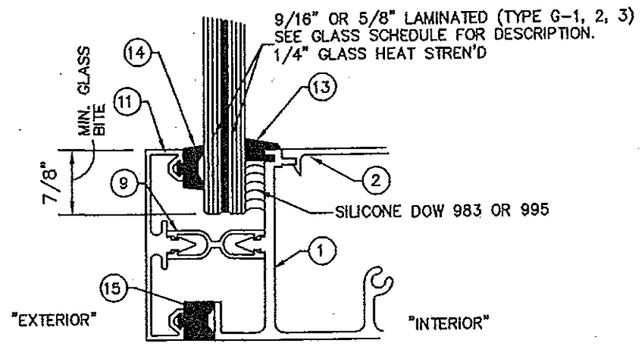
GLASS SCHEDULE

TYPE	NOMINAL THCKNSS	DESCRIPTION		MISSILE TYPE
G-1	9/16"	LAMINATED GLASS (VISION OR SPANDREL)	1/4" HS OUTBOARD. 0.100" SAFLEX HP PVB BY EASTMAN CHEMICAL COMPANY (INTERLAYER) 1/4" HS INBOARD	LARGE
G-2	9/16"	LAMINATED "VANCEVA STORM"	1/4" HS OUTBOARD 0.075" SAFLEX CP - SAFLEX COMPOSITE GLASS INTERLAYER WITH PET CORE BY EASTMAN CHEMICAL COMPANY (INTERLAYER) 1/4" HS INBOARD	LARGE
G-3	9/16"	LAMINATED "SENTRYGLAS"	1/4" HS OUTBOARD 0.090" SENTRYGLAS BY DUPONT (INTERLAYER) 1/4" HS INBOARD	LARGE
G-4	1 5/16"	INSULATED LAMINATED GLASS (VISION OR SPANDREL)	1/4" TEMP. OUTBOARD 1/2" AIRSPACE 1/4" HS/0.100" SAFLEX HP PVB BY EASTMAN CHEMICAL COMPANY (INTERLAYER) 1/4" HS INBOARD	LARGE

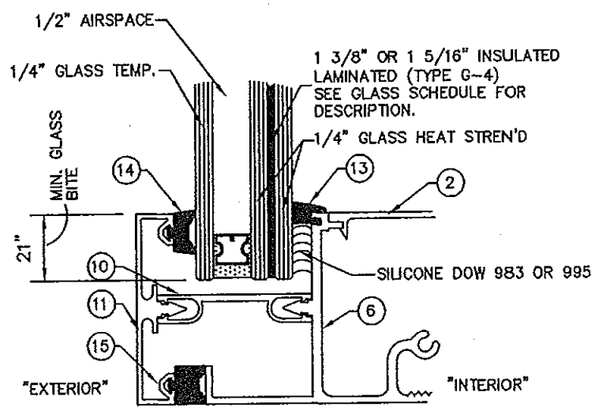
OPTIONAL: 6mm THK. COMPOSITE ALUMINUM PANEL IN LIEU OF GLAZING (COMPOSITION: .030" ALUM. SHEET - 3/16" PLYWOOD - .030" ALUM. SHEET)



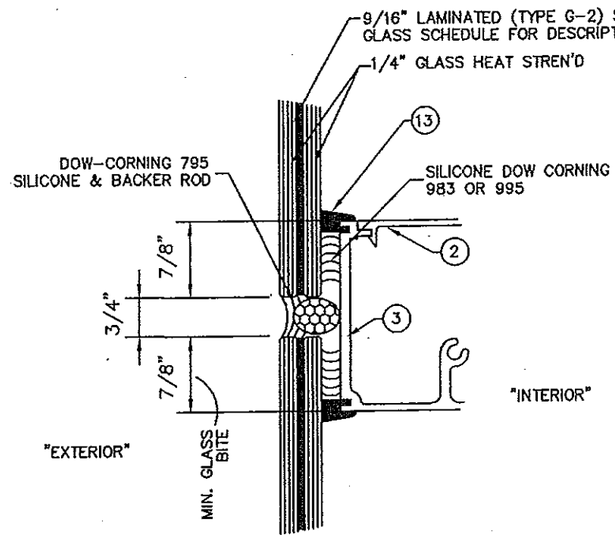
GLAZING DETAILS



LAMINATED



INSULATED/LAMINATED



STRUCTURAL GLAZED

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-1203.10
Expiration Date Aug. 25, 2015
By Manuel Perez
Miami Dade Product Control

PROJECT NAME: TCW-250P LMI (W/REINFORCING)		
DRAWING NUMBER: ACW-250P.LMI.R	DRAW BY: M.G.	EXTRUSION NO. AND LOCATION: N/A
SHT. 2 OF 9	SCALE: N.T.S.	DATE: 11/12/13

Aldora Aluminum & Glass Products, Inc.
11500 MIRAMAR PKWY. SUITE 300 MIRAMAR, FL. 33025
PHONE: (954) 784-6900 FAX: (954) 784-6901

SEAL: WILLIAM D. COOK LICENSE No 43904 STATE OF FLORIDA PROFESSIONAL ENGINEER
MAY 07 2014
WILLIAM D. COOK P.E.
FLA. P.E.S.# 43904
FLA. S.I.# 2008

BROMLEY COOK ENGINEERING, INC.
STRUCTURAL ENGINEERING SERVICES
5440 N.W. 33RD AVENUE SUITE 100
FORT LAUDERDALE, FLORIDA 33309
TEL: (954) 772-4624 FAX: (954) 772-4634

GLASS LOAD CAPACITY – P.S.F.

NOMINAL DIM'S.		LAMINATED GLASS GLASS TYPE: G1, G3		LAMINATED GLASS (STRUCTURALLY GLAZED) GLASS TYPE: G2		LAMINATED–INSULATED GLASS TYPE: G4	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+)	EXT. (–)	EXT. (+)	EXT. (–)	EXT. (+)	EXT. (–)
42"	81"	80	110	80	102	80	110
45"		80	110	80	102		
48"		80	110	80	102		
51"		80	110	80	102		
54"		80	110	80	102		
57"		80	110	80	102		
60"		80	110	80	100		
63"		80	109	80	98		
66"		80	107	80	95		
42"	84"	80	110	80	102		
45"		80	110	80	102		
48"		80	110	80	102		
51"		80	110	80	102		
54"		80	110	80	102		
57"		80	107	80	102		
60"		80	105	80	100		
64"		80	102	80	96		
42"	87"	80	110	80	102		
45"		80	110	80	102		
48"		80	110	80	102		
51"		80	110	80	102		
54"		80	105	80	102		
57"		80	102	80	102		
60"		80	99	80	100		
62"		80	98	80	98		
39"	90"	80	110	80	102		
42"		80	110	80	102		
45"		80	110	80	102		
48"		80	107	80	102		
51"		80	103	80	102		
54"		80	100	80	102		
57"		80	97	80	102		
60"		80	94	80	100		
36"	93"	80	110	80	102		
39"		80	110	80	102		
42"		80	110	80	102		
45"		80	107	80	102		
48"		80	102	80	102		
51"		80	98	80	102		
54"		80	95	80	102		
58"		80	91	80	102		

GLASS LOAD CAPACITY – P.S.F.

NOMINAL DIM'S.		LAMINATED GLASS GLASS TYPE: G1, G3		LAMINATED GLASS (STRUCTURALLY GLAZED) GLASS TYPE: G2		LAMINATED–INSULATED GLASS TYPE: G4	
D.L.O. WIDTH	D.L.O. HEIGHT	EXT. (+)	EXT. (–)	EXT. (+)	EXT. (–)	EXT. (+)	EXT. (–)
39"	95"	80	110	80	102	80	110
42"		80	109	80	102		
45"		80	104	80	102		
48"		80	99	80	102		
51"		80	96	80	102		
54"		80	92	80	102		
58"		80	90	80	102		
36"	99"	80	110	80	102		
39"		80	109	80	102		
42"		80	103	80	102		
45"		80	98	80	102		
48"		80	94	80	102		
51"		80	90	80	102		
54"		80	90	80	102		
36"	102"	80	110	80	102		
39"		80	105	80	102		
42"		80	100	80	102		
45"		80	95	80	102		
48"		80	90	80	102		
51"		80	90	80	102		
53"		80	90	80	102		
36"	105"	80	108	80	102		
39"		80	102	80	102		
42"		80	96	80	102		
45"		80	91	80	102		
48"		80	90	80	102		
51"		80	90	80	102		
36"	108"	80	105	80	102		
39"		80	98	80	102		
42"		80	93	80	102		
45"		80	90	80	102		
48"		80	90	80	102		
50"		80	90	80	102		
36"	111"	80	101	80	102		
39"		80	95	80	102		
42"		80	90	80	102		
45"		80	90	80	102		
48"		80	90	80	102		
36"	114"	80	98	80	102		
39"		80	92	80	102		
42"		80	90	80	102		
45"		80	90	80	102		
47"		80	90	80	102		

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 13-1203.10
Expiration Date Aug 25, 2015
By Manuel Cruz
Miami Dade Product Control

PROJECT NAME: TCW–250P LMI (W/REINFORCING)

DRAWING NUMBER: ACW–250P.LMI.R

SHT. 3 OF 9

DRAW BY: M.G.

SCALE: N.T.S.

EXTRUSION NO. AND LOCATION: N/A

DATE: 11/12/13

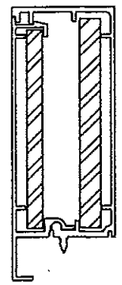
Aldora
Aluminum & Glass Products, Inc.
11500 MIRAMAR PKWY. SUITE 300 MIRAMAR, FL. 33025
PHONE: (954) 784–6900 FAX: (954) 784–6901

WILLIAM D. COOK LICENSE SEAL No 43904 STATE OF FLORIDA PROFESSIONAL ENGINEER
MAY 07 2014
WILLIAM D. COOK, P.E.
FLA. PE. #43904
FLA. C.A. #26004

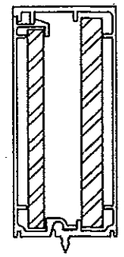
BROMLEY COOK ENGINEERING, INC.
STRUCTURAL ENGINEERING SERVICES
5440 N.W. 33RD AVENUE SUITE 100
FORT LAUDERDALE, FLORIDA 33309
TEL: (954) 772–4624 FAX: (954) 772–4634

JAMB & MULLION LOAD CAPACITY – P.S.F. (REINFORCED MULLIONS)			
NOMINAL DIM'S.		INTERMEDIATE MULLION JAMB/DOOR MULLION	
WIDTH (W)	MULLION HGT.	EXT. (+)	EXT. (–)
49"	108"	80	110
55"			
61"			
67"			
73"			
74"			
79"			
45"	114"		
51"			
57"			
63"			
69"			
75"			
35"	120"		
41"			
47"			
53"			
59"			
65"			
71"			
32"	126"		
38"			
44"			
50"			
56"			
62"			
68"		80	110

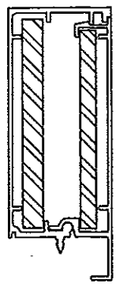
JAMB & MULLION LOAD CAPACITY – P.S.F. (REINFORCED MULLIONS)			
NOMINAL DIM'S.		INTERMEDIATE MULLION JAMB/DOOR MULLION	
WIDTH (W)	MULLION HGT.	EXT. (+)	EXT. (–)
35"	132"	80	110
41"			
47"			
53"			
59"			
65"			
32"	138"		
38"			
44"			
50"			
56"			
62"			
30"	143"		
36"			
42"			
48"			
54"			
60"		80	110



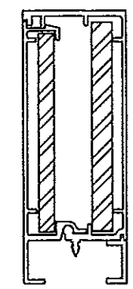
FRAME JAMB
TGF-201/110
REINFORCING: 1/2" X 5" & 3/8" X 4 3/4" STEEL BAR (A36)
ALUMINUM: Ixx = 9.33 in^4, Sxx = 3.39 in^3
STEEL: (NOT CONVERTED) Ixx = 8.55 in^4, Sxx = 3.49 in^3



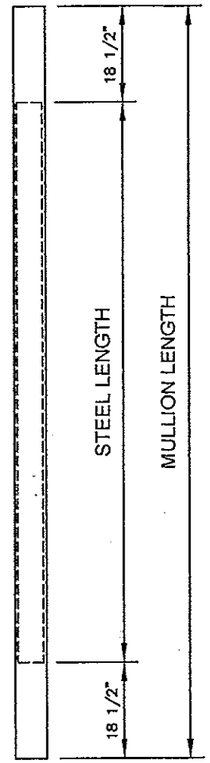
INTERMEDIATE MULLION
TGF-201/202
REINFORCING: 1/2" X 5" & 3/8" X 4 3/4" STEEL BAR (A36)
ALUMINUM: Ixx = 9.33 in^4, Sxx = 3.39 in^3
STEEL: (NOT CONVERTED) Ixx = 8.55 in^4, Sxx = 3.49 in^3



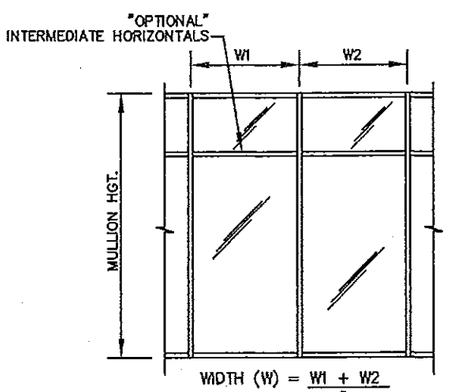
DOOR JAMB @ MULLION
TGF-201/110
REINFORCING: 1/2" X 5" & 3/8" X 4 3/4" STEEL BAR (A36)
ALUMINUM: Ixx = 9.33 in^4, Sxx = 3.39 in^3
STEEL: (NOT CONVERTED) Ixx = 8.55 in^4, Sxx = 3.49 in^3



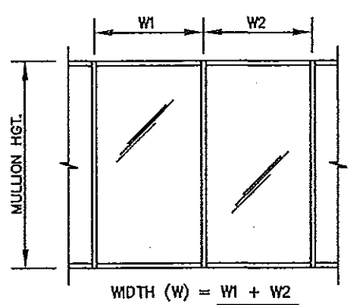
DOOR JAMB @ WALL
TGF-201/110
REINFORCING: 1/2" X 5" & 3/8" X 4 3/4" STEEL BAR (A36)
ALUMINUM: Ixx = 9.33 in^4, Sxx = 3.39 in^3
STEEL: (NOT CONVERTED) Ixx = 8.55 in^4, Sxx = 3.49 in^3



STEEL REINFORCING DIAGRAM
STEEL LENGTH = MULLION LENGTH –37"
CENTER REINFORCING IN SPAN



WIDTH (W) = $\frac{W1 + W2}{2}$



WIDTH (W) = $\frac{W1 + W2}{2}$

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-1203.10
Expiration Date Aug. 25, 2015
By Manuel Perez
Miami Dade Product Control

PROJECT NAME: TCW-250P LMI (W/REINFORCING)		
DRAWING NUMBER: ACW-250P.LMI.R	DRAW BY: M.G.	EXTRUSION NO. AND LOCATION: N/A
SHT. 4 OF 9	SCALE: N.T.S.	DATE: 11/12/13

Aldora
Aluminum & Glass Products, Inc.
11500 MIRAMAR PKWY. SUITE 300 MIRAMAR, FL. 33025
PHONE: (954) 784-6900 FAX: (954) 784-6901

WILLIAM D. COOK LICENSE No 43904 STATE OF FLORIDA PROFESSIONAL ENGINEER
WILLIAM D. COOK, P.E.
FLA. P.E. # 43904
FLA. S.I. # 2008

BROMLEY COOK ENGINEERING, INC.
STRUCTURAL ENGINEERING SERVICES
5440 N.W. 33RD AVENUE SUITE 100
FORT LAUDERDALE, FLORIDA 33309
TEL: (954) 772-4624 FAX: (954) 772-4634

FRAME ANCHOR LOAD CAPACITY – P.S.F. Pmax (+) & (–)				
NOMINAL DIM'S.		ANCHOR TYPES		
WIDTH (W)	MULLION HGT.	A6	B2	C2
49"	108"	110	110	110
55"		110	99	110
61"		110	90	103
67"		110	82	94
73"		105	75	86
79"		97	69	79
45"	114"	110	110	110
51"		110	102	110
57"		110	91	105
63"		110	82	94
69"		105	75	86
75"		96	69	79
35"	120"	110	110	110
41"		110	110	110
47"		110	105	110
53"		110	93	108
59"		110	83	96
65"		106	76	87
71"		97	88	79
32"	126"	110	110	110
38"		110	110	110
44"		110	107	110
50"		110	94	107
56"		110	84	96
62"		106	76	87
68"		96	69	79

FRAME ANCHOR LOAD CAPACITY – P.S.F. Pmax (+) & (–)				
NOMINAL DIM'S.		ANCHOR TYPES		
WIDTH (W)	MULLION HGT.	A6	B2	C2
35"	132"	110	110	110
41"		110	109	110
47"		110	95	110
53"		110	84	97
59"		106	76	87
65"		96	69	79
32"	138"	110	110	110
38"		110	110	110
44"		110	97	110
50"		110	86	98
56"		106	76	87
62"		96	69	79
30"	143"	110	110	110
36"		110	110	110
42"		110	98	110
48"		110	86	99
54"		106	77	88
60"		95	69	79

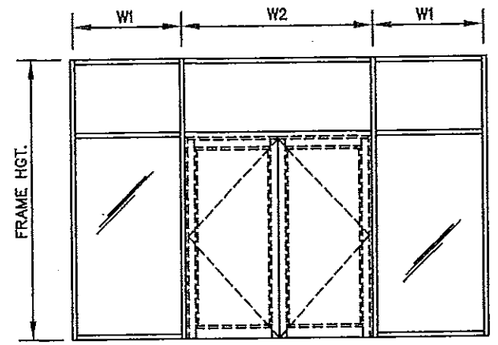
ANCHOR TYPE SCHEDULE	
SUBSTRATE	ANCHOR TYPES
METAL (1/8" THICK)	TYPE 'A' – #14 S.M.S. OR 1/4" SELF DRILLING SCREWS INTO METAL STRUCTURES (A36 STEEL OR 6061–T6)
CONCRETE (3000 PSI MIN) "SHEAR CLIP"	TYPE 'B' – 3/8" POWERS WEDGE BOLTS DIRECTLY INTO CONC. 3 1/2" MIN. EMBED MIN. EDGE DISTANCE: 3 1/2" MIN. C/C SPACING: 4 1/2" NOTE: FOR 'F' CLIP AT JAMB ONLY USE 2 1/2" C/C SPACING
CONCRETE (3000 PSI MIN) "STRAP ANCHOR"	TYPE 'C' – 3/8" POWERS WEDGE BOLTS DIRECTLY INTO CONC. 3" MIN. EMBED MIN. EDGE DISTANCE: 3" MIN. C/C SPACING: 4 1/2"

ANCHORAGE NOTES: SEE ABOVE FOR TYPES/DESCRIPTIONS

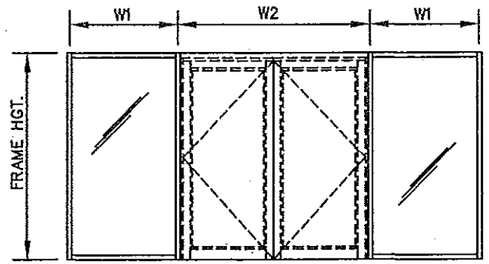
A6 = (6) ANCHORS TYPE 'A' AT EACH MULLION INTO TGF–14 "T" ANCHOR CLIP. (4) AT EA. JAMB INTO TGF–13 "F" ANCHOR CLIP

B2 = (2) ANCHORS TYPE 'B' AT EACH MULLION INTO TGF–14 "T" ANCHOR CLIP. (2) AT EA. JAMB INTO TGF–13 "F" ANCHOR CLIP

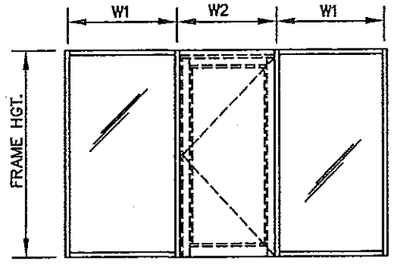
ALTERNATE ANCHORAGE:
C2 = (2) STRAP ANCHORS PER MULLION END (1. EA. SIDE OF MULLION) WITH (1) ANCHOR PER STRAP.
(1) STRAP ANCHOR PER JAMB END



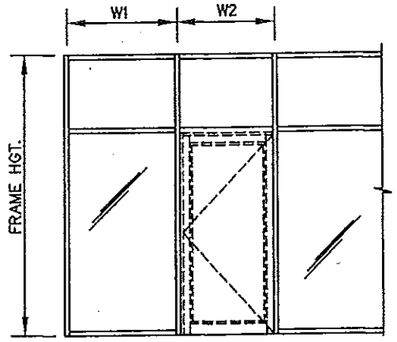
WIDTH (W) = $\frac{W1 + W2}{2}$ (MULLION)



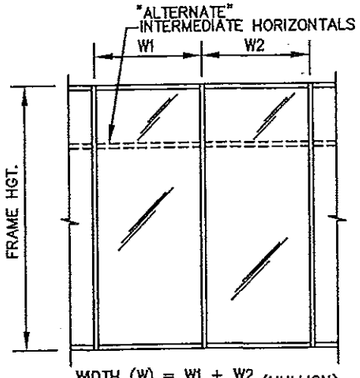
WIDTH (W) = $\frac{W1}{2} + \frac{W2}{4}$ (MULLION)



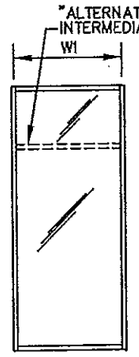
WIDTH (W) = $\frac{W1 + W2}{2}$ (MULLION)



WIDTH (W) = $\frac{W1 + W2}{2}$ (MULLION)



WIDTH (W) = $\frac{W1 + W2}{2}$ (MULLION)



WIDTH (W) = W1 @ JAMB

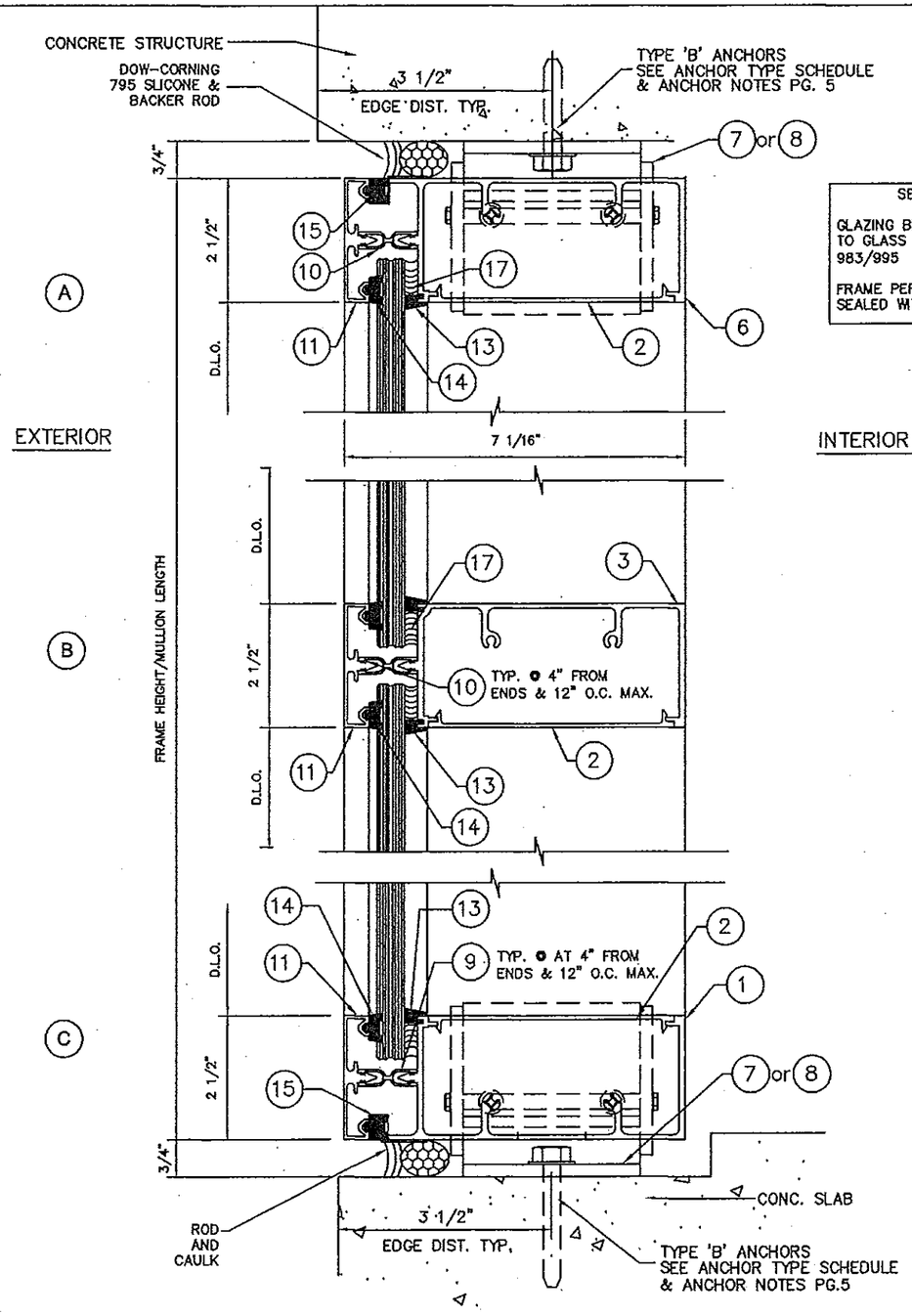
PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-1203.10
Expiration Date Aug. 25, 2015
By Manuel Perez
Miami Dade Product Control

PROJECT NAME: TCW–250P LMI (W/REINFORCING)		
DRAWING NUMBER: ACW–250P.LMI.R	DRAW BY: M.G.	EXTRUSION NO. AND LOCATION: N/A
SHT. 5 OF 9	SCALE: N.T.S.	DATE: 11/12/13

Aldora
Aluminum & Glass Products, Inc.
11500 MIRAMAR PKWY. SUITE 300 MIRAMAR, FL. 33025
PHONE: (954) 784–6900 FAX: (954) 784–6901

WILLIAM D. COOK LICENSE SEAL No 43904 STATE OF FLORIDA
WILLIAM D. COOK P.E. FLA. P.E. # 43904
FLA. CA. # 2008
PROFESSIONAL ENGINEER
MAY 07 2014

BROMLEY COOK ENGINEERING, INC.
STRUCTURAL ENGINEERING SERVICES
5440 N.W. 33RD AVENUE SUITE 100
FORT LAUDERDALE, FLORIDA 33309
TEL: (954) 772–4624 FAX: (954) 772–4634

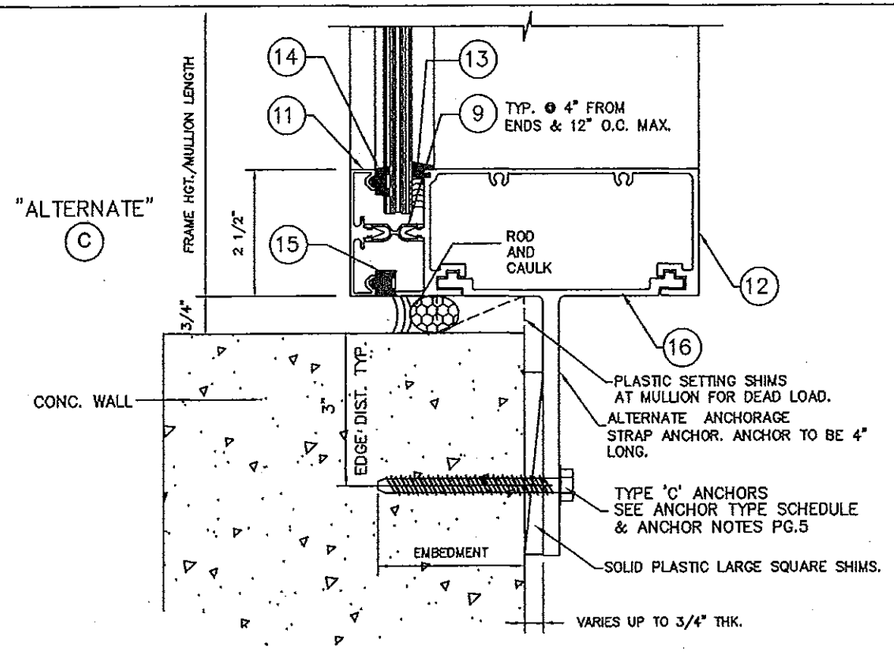


SEALANT NOTES:

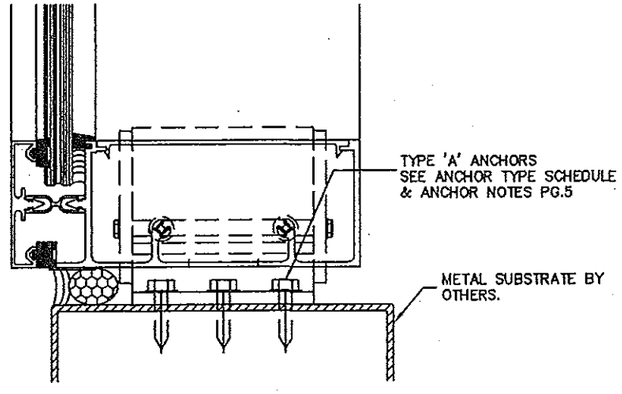
GLAZING BEAD AT FRAME SEALED TO GLASS WITH DOW CORNING 983/995

FRAME PERIMETER TO STRUCTURE SEALED WITH DOW CORNING 795

"ALTERNATE" C



STRAP ANCHOR CONDITION



METAL SUBSTRATE CONDITION

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-1203.10
Expiration Date Aug. 25, 2015
By Manuel Perez
Miami Dade Product Control

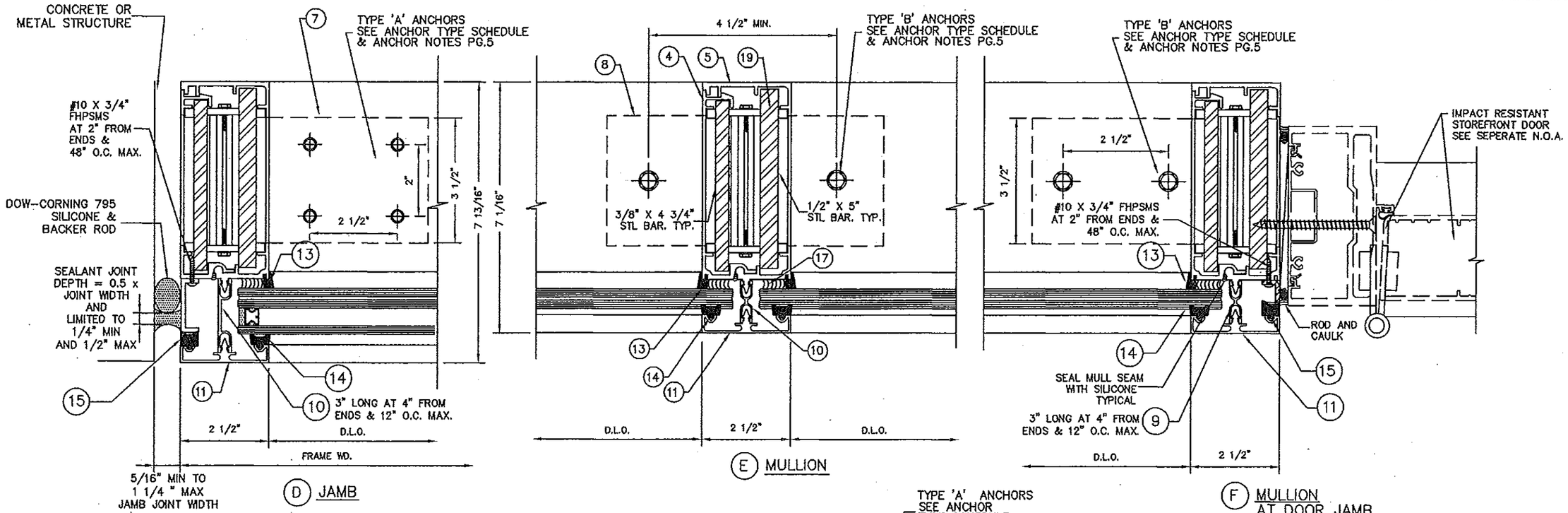
PROJECT NAME: TCW-250P LMI (W/REINFORCING)		
DRAWING NUMBER: ACW-250P.LMI.R	DRAW BY: M.G.	EXTRUSION NO. AND LOCATION: N/A
SHT. 6 OF 9	SCALE: N.T.S.	DATE: 11/12/13

Aldora
Aluminum & Glass Products, Inc.
11500 MIRAMAR PKWY. SUITE 300 MIRAMAR, FL. 33025
PHONE: (954) 784-6900 FAX: (954) 784-6901

WILLIAM D. COOK STATE OF FLORIDA LICENSE No 43904 MAY 07 2014 PROFESSIONAL ENGINEER

WILLIAM D. COOK P.E.
FLA P.E. # 43904
FLA. S.I. # 2008

BROMLEY COOK ENGINEERING, INC.
STRUCTURAL ENGINEERING SERVICES
5440 N.W. 33RD AVENUE SUITE 100
FORT LAUDERDALE, FLORIDA 33309
TEL: (954) 772-4624 FAX: (954) 772-4634



JAMB SEALANT NOTES:

PERIMETER SEALANT OPTIONS:
DOW-CORNING 795 SILICONE

ALTERNATE SEALANTS AND JAMB GAPS:
TO BE APPROVED BY DESIGN PROFESSIONAL OF RECORD AND SEALANT MANUFACTURER

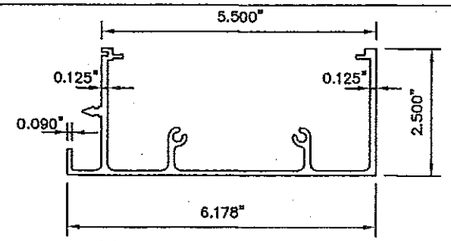
PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-1203.10
Expiration Date Aug. 25, 2015
By Manuel Perez
Miami-Dade Product Control

PROJECT NAME: TCW-250P LMI (W/REINFORCING)			
DRAWING NUMBER: ACW-250P.LMI.R	DRAW BY: M.G.	EXTRUSION NO. AND LOCATION: N/A	
SHT. 7 OF 9	SCALE: N.T.S.	DATE: 11/12/13	

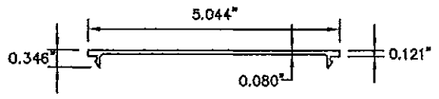
Aldora
Aluminum & Glass Products, Inc.
11500 MIRAMAR PKWY. SUITE 300 MIRAMAR, FL. 33025
PHONE: (954) 784-6900 FAX: (954) 784-6901

WILLIAM D. COOK LICENSE No 43904 STATE OF FLORIDA WILLIAM D. COOK P.E. LICENSE # 43904 MAY 07 2014

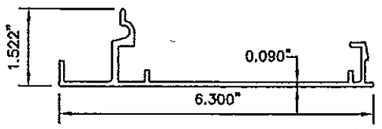
BROMLEY COOK ENGINEERING, INC.
STRUCTURAL ENGINEERING SERVICES
5440 N.W. 33RD AVENUE SUITE 100
FORT LAUDERDALE, FLORIDA 33309
TEL: (954) 772-4624 FAX: (954) 772-4634



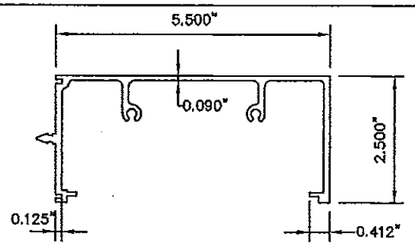
(1) FRAME – HEAD/SILL TGF–212



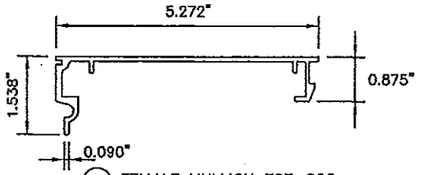
(2) FILLER TGF–17



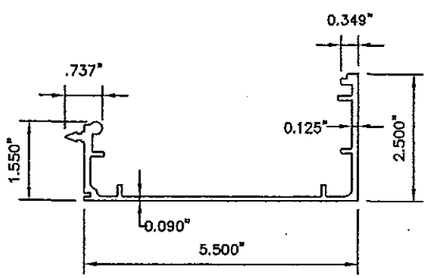
(22) JAMB TGF–110



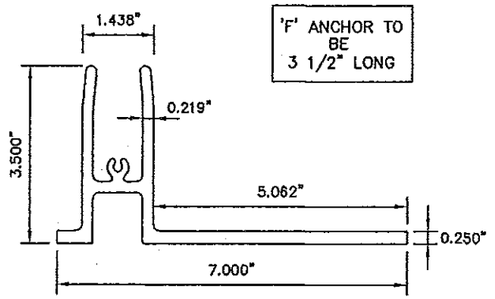
(3) INTERMEDIATE TGF–23



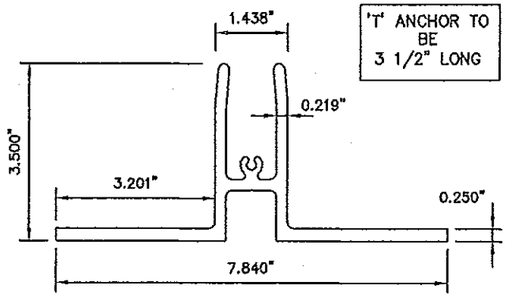
(4) FEMALE MULLION TGF–202



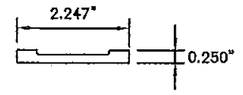
(5) MALE MULLION TGF–201



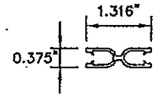
(7) ANCHOR "F" TGF–13



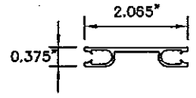
(8) ANCHOR "T" TGF–14



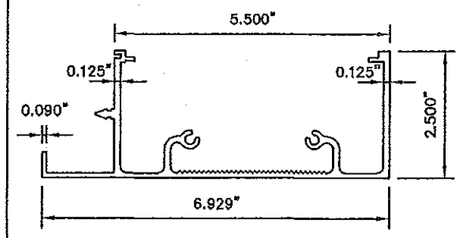
(19) END PLATE TGF–104



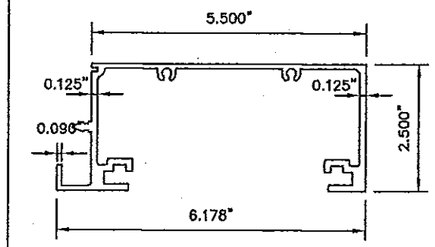
(9) COVER CLIP TGF–101



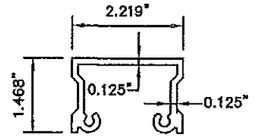
(10) COVER CLIP TGF–102



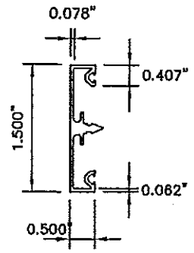
(6) FRAME – HEAD/SILL TGF–207



(12) FRAME HEAD/SILL TGF–86

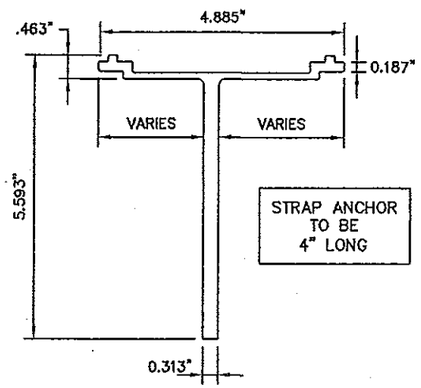


(21) SHEAR BLOCK TGF–15

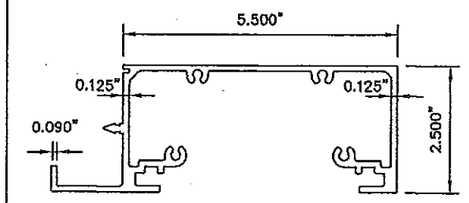


(11) COVER TGF–209

ITEM #	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	TGF-212	AS REQ'D	FRAME HEAD/SILL	ALUM. 6063-T5	TRAINOR GLASS CO.
2	TGF-17	AS REQ'D	FILLER	ALUM. 6063-T5	TRAINOR GLASS CO.
3	TGF-23	AS REQ'D	INTERMEDIATE HORT.	ALUM. 6063-T5	TRAINOR GLASS CO.
4	TGF-202	AS REQ'D	FEMALE MULLION	ALUM. 6063-T6	TRAINOR GLASS CO.
5	TGF-201	AS REQ'D	MALE MULLION	ALUM. 6063-T6	TRAINOR GLASS CO.
6	TGF-207	AS REQ'D	FRAME HEAD/SILL	ALUM. 6063-T5	TRAINOR GLASS CO.
7	TGF-13	1/JAMB	"F" ANCHOR AT JAMBS	ALUM. 6063-T5	TRAINOR GLASS CO.
8	TGF-14	1/MULLION	"T" ANCHOR AT MULLIONS	ALUM. 6063-T5	TRAINOR GLASS CO.
9	TGF-101	AS REQ'D	COVER CLIP	ALUM. 6063-T5	TRAINOR GLASS CO.
10	TGF-102	AS REQ'D	COVER CLIP	ALUM. 6063-T5	TRAINOR GLASS CO.
11	TGF-209	AS REQ'D	COVER	ALUM. 6063-T5	TRAINOR GLASS CO.
12	TGF-86	AS REQ'D	FRAME HEAD/SILL/JAMB	ALUM. 6063-T6	TRAINOR GLASS CO.
13	TR-5796	AS REQ'D	BLOW-OUT GASKET	VINYL	TREMCO- SILICONE COMPAT.
14	TR-6049	AS REQ'D	GLAZING GASKET	NEOPRENE	TREMCO
15	TR-6050	AS REQ'D	GLAZING GASKET	NEOPRENE	TREMCO
16	TGF-22,54,87,213,214	AS REQ'D	"STRAP" ANCHORS	ALUM. 6063-T5	TRAINOR GLASS CO.
17	983	AS REQ'D	GLAZING COMPOUND	SILICONE	DOW CORNING
18	TGF-203	AS REQ'D	FRAME HEAD/SILL/JAMB	ALUM. 6063-T6	TRAINOR GLASS CO.
19	TGF-104	2/"T" or "F"	END PLATE	ALUM. 6063-T5	TRAINOR GLASS CO.
20	-	AS REQ'D	CHANNEL 1/2" X 1 1/2"	ALUM. 6063-T5	TRAINOR GLASS CO. 1/8" THK.
21	TGF-15	AS REQ'D	SHEAR BLOCK	ALUM. 6063-T5	TRAINOR GLASS CO.
22	TGF-110	AS REQ'D	JAMB MEMBER	ALUM. 6063-T6	TRAINOR GLASS CO.



(16) "STRAP" ANCHOR TGF–22, 54, 87, 213, 214



(18) FRAME HEAD/SILL/JAMB TGF–203

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-1203.10
Expiration Date Aug. 25, 2015
By Manuel Perez
Miami Dade Product Control

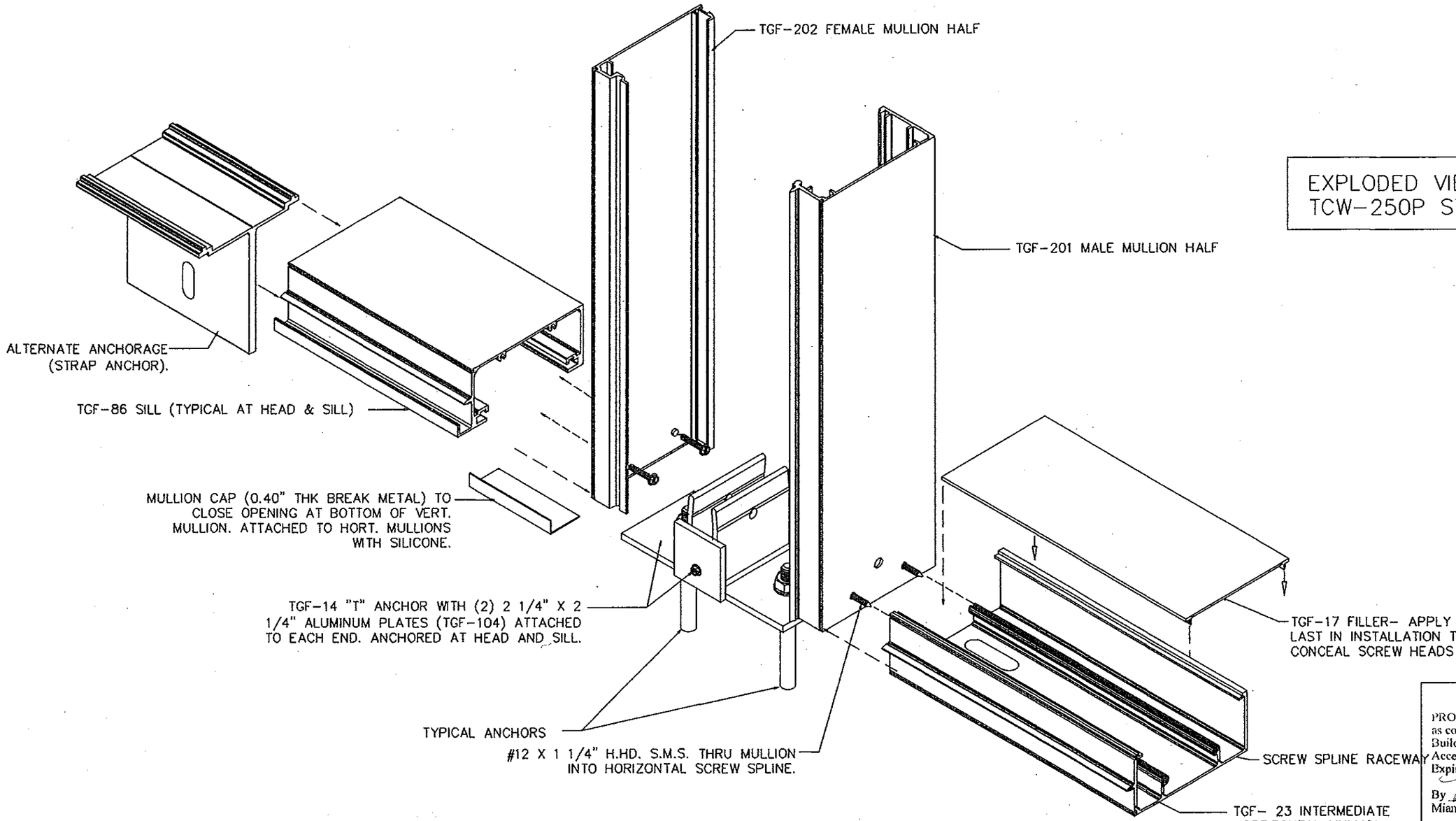
PROJECT NAME: TCW–250P LMI (W/REINFORCING)			
DRAWING NUMBER: ACW–250P.LMI.R	DRAW BY: M.G.	EXTRUSION NO. AND LOCATION: N/A	
SHT. 8 OF 9	SCALE: N.T.S.	DATE: 11/12/13	

Aldora
Aluminum & Glass Products, Inc.
11500 MIRAMAR PKWY. SUITE 300 MIRAMAR, FL. 33025
PHONE: (954) 784–6900 FAX: (954) 784–6901

WILLIAM D. COOK LICENSE No 43904 SEAL STATE OF FLORIDA PROFESSIONAL ENGINEER
WILLIAM D. COOK P.E.
FLA. P.E. # 43904
SIGNED: MAY 07 2014

BROMLEY COOK ENGINEERING, INC.
STRUCTURAL ENGINEERING SERVICES
5440 N.W. 33RD AVENUE SUITE 100
FORT LAUDERDALE, FLORIDA 33309
TEL: (954) 772–4624 FAX: (954) 772–4634

EXPLODED VIEW OF TCW-250P SYSTEM



PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 13-1203.10
Expiration Date Aug. 25, 2015
By Manuel Perez
Miami Dade Product Control

PROJECT NAME: TCW-250P LMI (W/REINFORCING)			
DRAWING NUMBER: ACW-250P.LMI.R	DRAW BY: M.G.	EXTRUSION NO. AND LOCATION: N/A	
SHT. 9 OF 9	SCALE: N.T.S.	DATE: 11/12/13	

Aldora
Aluminum & Glass Products, Inc.
11500 MIRAMAR PKWY. SUITE 300 MIRAMAR, FL. 33025
PHONE: (954) 784-6900 FAX: (954) 784-6901

WILLIAM D. COOK LICENSE
SEAL No 43904
STATE OF FLORIDA
WILLIAM D. COOK P.E.
FLA. P.E. # 43904
FLA. S.I. # 2008
PROFESSIONAL ENGINEER

BROMLEY COOK ENGINEERING, INC.
STRUCTURAL ENGINEERING SERVICES
5440 N.W. 33RD AVENUE SUITE 100
FORT LAUDERDALE, FLORIDA 33309
TEL: (954) 772-4624 FAX: (954) 772-4634