



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)

Glass Tech Engineering, Inc.
8321 N.W. 70th Street
Miami, FL 33166

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 "2046A" Aluminum Window Wall System – L.M.I.

APPROVAL DOCUMENT: Drawing No. W05-17, titled "Series-2046A Alum Window Wall System (L.M.I.)", sheets 1, 2, 2.1, 3, 3.1, 4, 5, 6 and 7 of 7, dated 04/08/05, with revision C dated 03/02/15, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E., bearing the Miami-Dade County Product Control Section 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 and renews NOA# 12-0514.18 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

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



MP
5/21/15

NOA No. 15-0302.03
Expiration Date: August 04, 2020
Approval Date: May 28, 2015
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under NOA No. 05-0620.01)
2. Drawing No. **W05-17**, titled "Series-2046A Alum Window Wall System (L.M.I.)", sheets 1, 2, 2.1, 3, 3.1, 4, 5, 6 and 7 of 7, dated 04/08/05 with revision C dated 03/02/15, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, 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) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94
5) Large Missile Impact Test per FBC, TAS 201-94
6) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of a series 2046A aluminum window wall system, prepared by Fenestration Testing Laboratory, Inc. Test Report No. **FTL-7963**, dated 10/23/14, signed and sealed by Idalmis Ortega, P.E.
2. 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 a series 2046A aluminum window wall system, prepared by Fenestration Testing Laboratory, Inc. Test Report No. **FTL-8243**, dated 02/17/15, signed and sealed by Idalmis Ortega, P.E.
3. 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) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94
5) Large Missile Impact Test per FBC, TAS 201-94
6) 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 Fenestration Testing Laboratory, Inc. Test Reports No. **FTL-4537** and **FTL-4535**, dated 03/23/05 and 03/21/05, both signed and sealed by Edmundo J. Largaespada, P.E.
(Submitted under NOA No.05-0620.01)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC-5th Edition (2014)**, dated 02/18/15, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
2. Glazing complies with **ASTM E1300-09**


Manuel Perez, P.E.
Product Control Examiner
NOA No. 15-0302.03
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Glass Tech Engineering, Inc.

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D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **13-1126.20** issued to **Allnex USA, Inc.** for their “**Uvekol S Laminated Glass Interlayer**”, dated 02/20/14, expiring on 02/08/19.
2. Notice of Acceptance No. **14-0423.15** issued to **Eastman Chemical Company (MA)** for their “**Saflex CP – Saflex and Saflex HP Composite Glass Interlayers with PET Core**” dated 06/19/14, expiring on 12/11/18.
3. Notice of Acceptance No. **14-0714.01** issued to **Kuraray America, Inc.** for their “**Trosifol XT Glass Interlayers**” dated 10/09/14, expiring on 07/08/19.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC-5th Edition (2014)**, and of no financial interest, dated February 15, 2015, issued by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
2. Laboratory compliance letter for Test Reports No. **FTL-4537** and **FTL-4535**, issued by Fenestration Testing Laboratory, Inc., dated 03/23/05, signed and sealed by Edmundo J. Largaespada, P.E.
(Submitted under NOA No.05-0620.01)

G. OTHERS

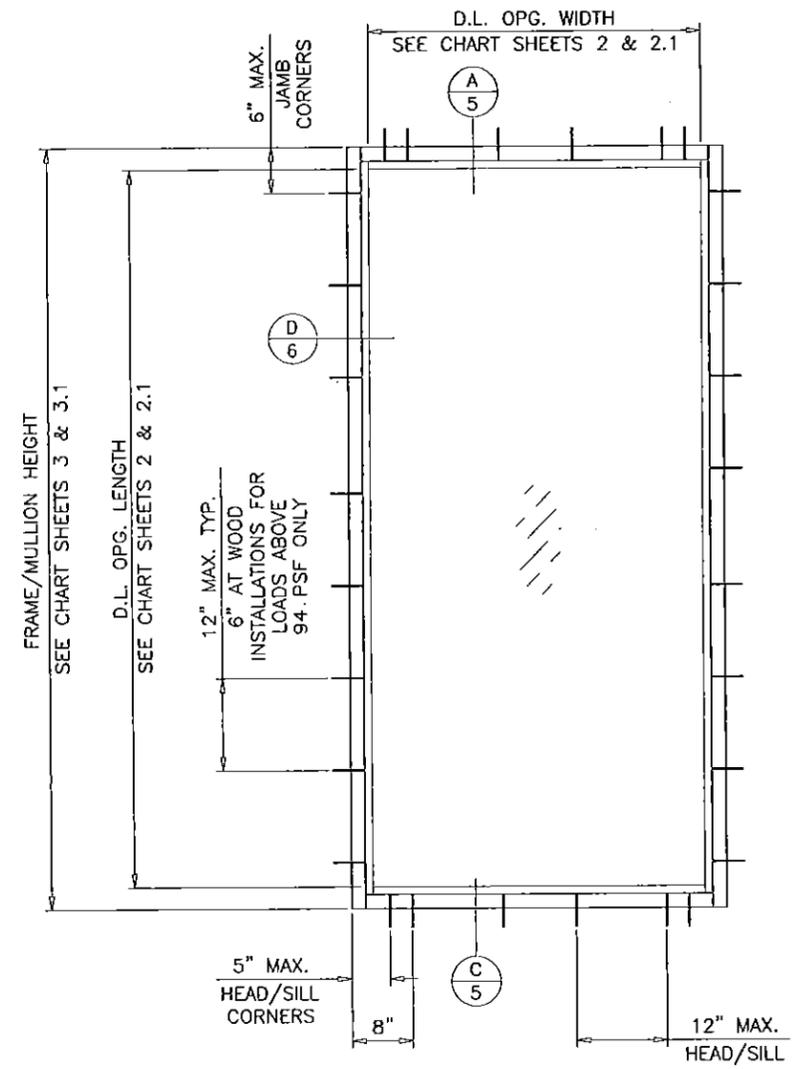
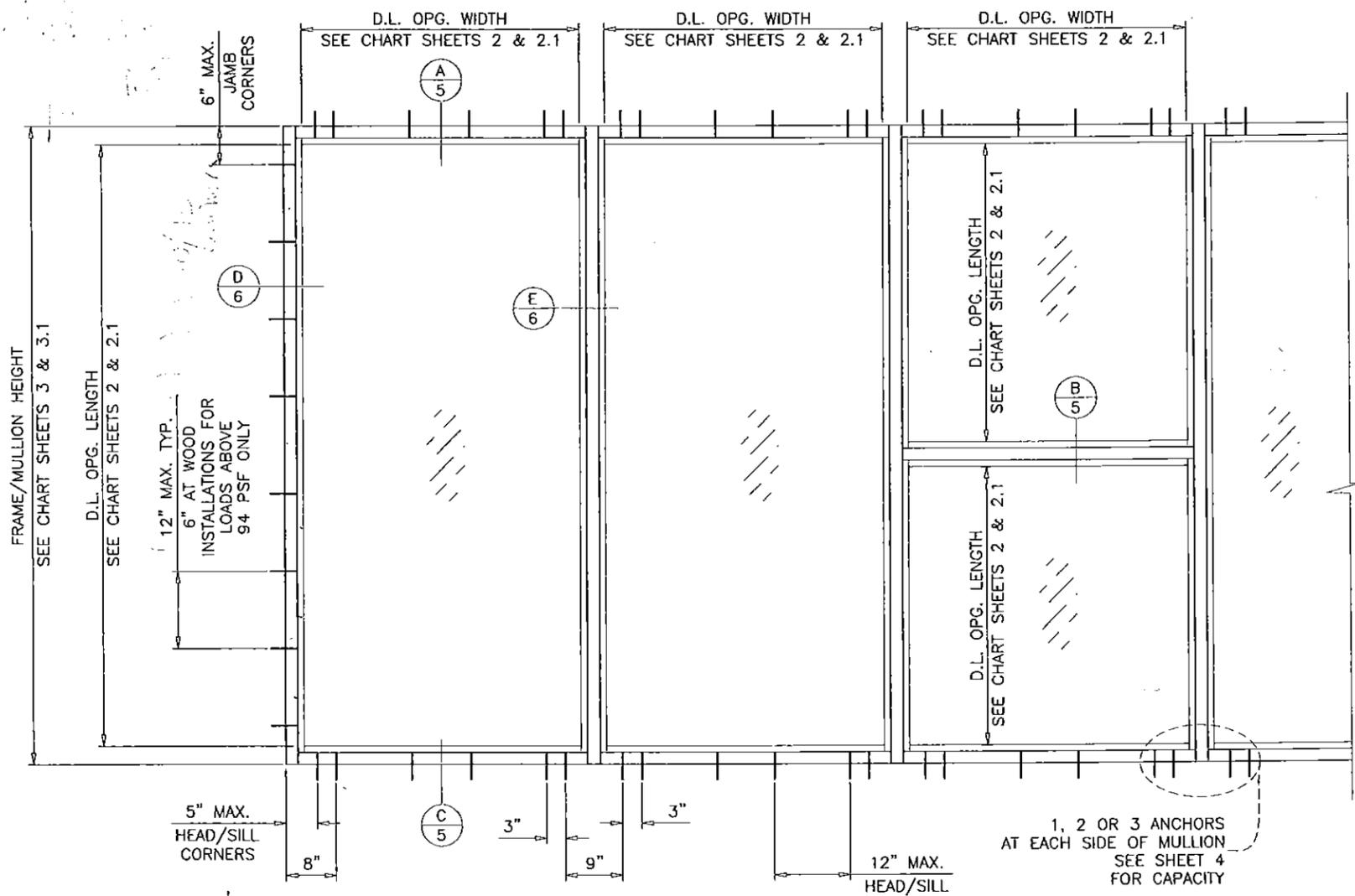
1. Notice of Acceptance No. **12-0514.18**, issued to Glass Tech Engineering, Inc. for their Series “**2046A**” Aluminum Window Wall System - L.M.I., approved on 07/19/12 and expiring on 08/04/15.



Manuel Perez, P.E.
Product Control Examiner
NOA No. 15-0302.03

Expiration Date: August 04, 2020

Approval Date: May 28, 2015



TYPICAL ELEVATIONS

SERIES-2046A IMPACT WINDOW WALL SYSTEM

THIS SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

CODE REQUIREMENTS FOR SAFEGUARDS MUST BE OBSERVED.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE.

INSTRUCTIONS:

USE CHARTS AS FOLLOWS.

- STEP 1** DETERMINE DESIGN WIND LOAD REQUIREMENT BASED ON WIND VELOCITY, BLDG. HEIGHT, WIND ZONE USING APPLICABLE ASCE 7 STANDARD.
- STEP 2** SEE CHART ON SHEETS 2 AND 2.1 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE.
- STEP 3** CHECK MULLION CAPACITY FOR A GIVEN SPACING AND HEIGHT USING CHARTS ON SHEETS 3 & 3.1 THE CAPACITY SHOULD EXCEED THE DESIGN LOAD.
- STEP 4** USING CHARTS ON SHEET 4 SELECT ANCHOR OPTION WITH DESIGN RATING MORE THAN DESIGN LOAD SPECIFIED IN STEP 1 ABOVE.
- STEP 5** THE LOWEST VALUE RESULTING FROM STEPS 2, 3 AND 4 SHALL APPLY TO ENTIRE SYSTEM.

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

MAR 06 2015

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 15-0302.03
Expiration Date Aug. 4, 2020
By *Manuel J. Jr.*
Miami Dade Product Control

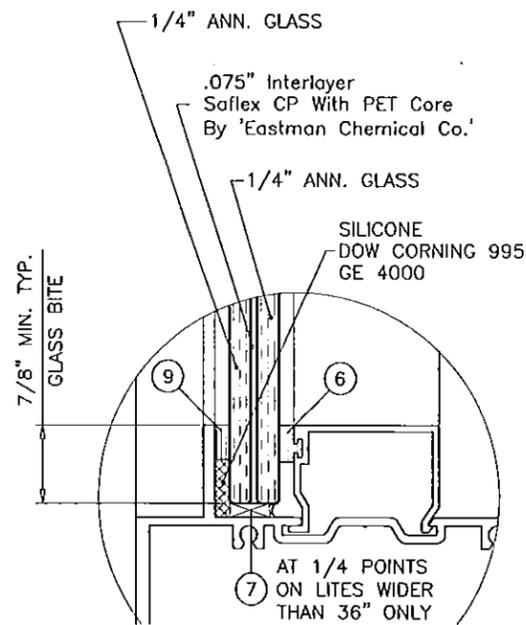
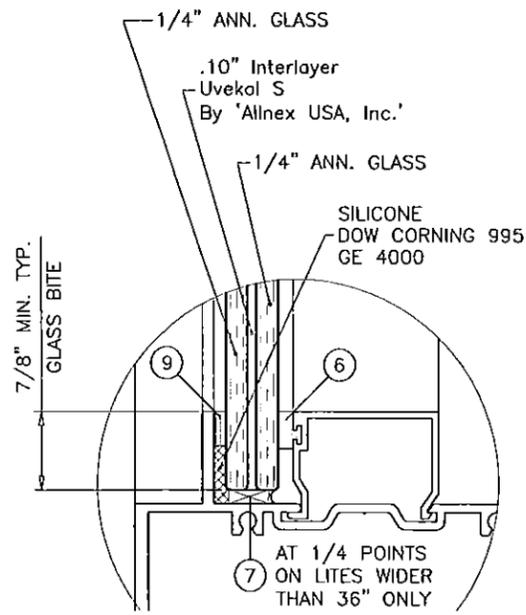
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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
STORE W05-17GTE

SERIES-2046A ALUM WINDOW WALL SYSTEM (L.M.I.)
GLASS TECH ENGINEERING INC.
8321 N.W. 70TH STREET
MIAMI, FL. 33166
TEL. (305) 594-4321 FAX. (305) 599-2730

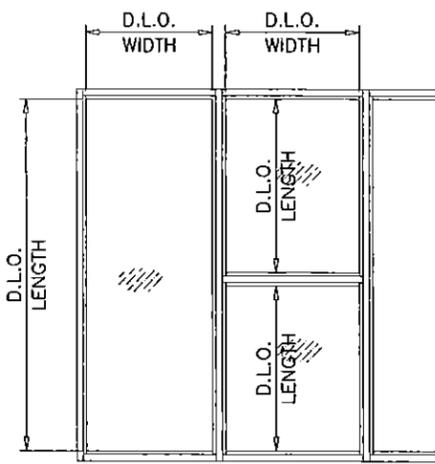
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	B	04.20.12		UPDATED TO 2010 FBC
	C	03.02.15		UPDATED TO 2014 FBC

date:	04-08-05	scale:	1/2"=1'-0"
dr. by:	HAMID	chk. by:	

drawing no.	W05-17
sheet	1 of 7



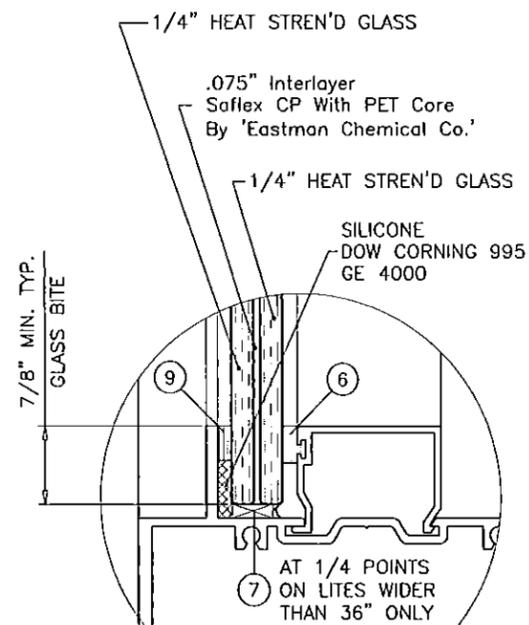
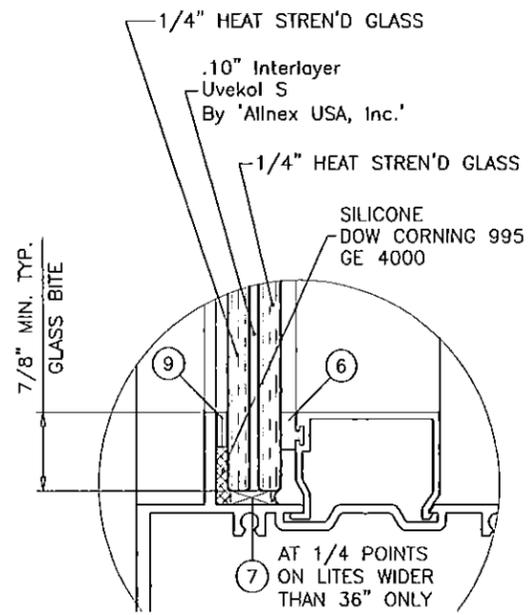
GLASS TYPE 'A'



GLASS DESIGN LOAD CAPACITY - PSF		
NOMINAL DIMS.		GLASS TYPE 'A'
D.L.O. WIDTH	D.L.O. LENGTH	EXT.(+) & INT.(-)
24"	66"	120.0
30"		120.0
36"		120.0
42"		100.0
48"		96.7
54"		89.0
60"	81.9	
24"	72"	120.0
30"		120.0
36"		100.0
42"		98.4
48"		88.7
54"		81.0
24"	78"	120.0
30"		120.0
36"		100.0
42"		91.2
48"		81.2
24"	84"	120.0
30"		100.0
36"		100.0
42"		85.2
24"	90"	120.0
30"		100.0
36"		96.8
42"		80.3
24"	96"	120.0
30"		100.0
36"		92.5
24"	102"	100.0
30"		100.0
36"		88.2
24"	108"	100.0
30"		100.0
36"		84.7
24"	114"	100.0
30"		100.0
24"	120"	100.0
30"		100.0
30"		100.0

VALUES SHOWN ABOVE ARE MAXIMUM DAYLITE OPENING DIMS. FOR GLASS. SEE MULLION CHARTS FOR MULLION CAPACITY.

GLASS DESIGN LOAD CAPACITY - PSF		
NOMINAL DIMS.		GLASS TYPE 'B'
D.L.O. WIDTH	D.L.O. LENGTH	EXT.(+) & INT.(-)
24"	78"	120.0
30"		120.0
36"		120.0
42"		120.0
48"		120.0
54"		120.0
60"	120.0	
24"	84"	120.0
30"		120.0
36"		120.0
42"		120.0
48"		120.0
54"		120.0
24"	90"	120.0
30"		120.0
36"		120.0
42"		120.0
48"		120.0
54"		120.0
24"	96"	120.0
30"		120.0
36"		120.0
42"		120.0
48"		120.0
24"	102"	120.0
30"		120.0
36"		120.0
42"		120.0
48"		120.0
24"	108"	120.0
30"		120.0
36"		120.0
42"		120.0
24"	114"	120.0
30"		120.0
36"		120.0
42"		120.0
24"	120"	120.0
30"		120.0
36"		120.0



GLASS TYPE 'B'

NOTE: GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-09 (3 SEC. GUSTS).

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

MAR 06 2015

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0302-03
Expiration Date Aug 4, 2020
By *Wahid Hussain*
Miami Trade Product Control

afC
AL-FAROOQ CORPORATION
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1235 S.W. 87 AVE
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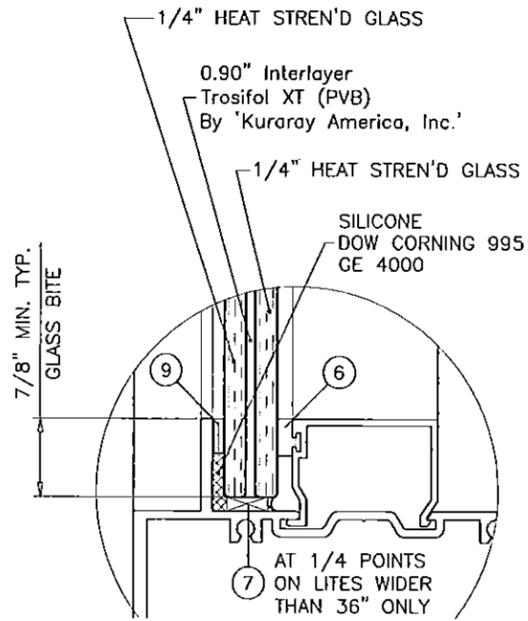
SERIES-2046A ALUM WINDOW WALL SYSTEM (L.M.I.)
GLASS TECH ENGINEERING INC.
8321 N.W. 70TH STREET
MIAMI, FL. 33166
TEL. (305) 594-4321 FAX. (305) 599-2730

no	date	by	description
A	10.21.09		UPDATED FOR 2007 FBC
B	04.20.12		UPDATED TO 2010 FBC
C	03.02.15		UPDATED TO 2014 FBC

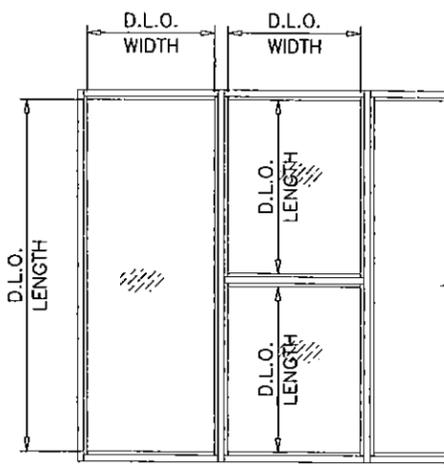
date: 04-08-05
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
W05-17
sheet 2 of 7

GLASS DESIGN LOAD CAPACITY - PSF		
NOMINAL DIMS.		GLASS TYPE 'C'
D.L.O. WIDTH	D.L.O. LENGTH	EXT.(+) & INT.(-)
24"	96"	80.0
30"		80.0
36"		80.0
42"		80.0
48"		80.0
54"		80.0
60"	80.0	
24"	102"	80.0
30"		80.0
36"		80.0
42"		80.0
48"		80.0
54"		80.0
24"	108"	80.0
30"		80.0
36"		80.0
42"		80.0
48"		80.0
54"		80.0
24"	114"	80.0
30"		80.0
36"		80.0
42"		80.0
48"		80.0
24"	120"	80.0
30"		80.0
36"		80.0
42"		80.0
48"		80.0
24"	126"	80.0
30"		80.0
36"		80.0
42"		80.0
48"		80.0



GLASS TYPE 'C'



VALUES SHOWN ABOVE ARE MAXIMUM DAYLITE OPENING DIMS. FOR GLASS. SEE MULLION CHARTS FOR MULLION CAPACITY.

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-09 (3 SEC. GUSTS).

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

MAR 06 2015

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 15-03.02.03
Expiration Date Aug. 4, 2020

By *Manuel Sosa*
Miami Dade Product Control

af c
AL-FAROOQ CORPORATION
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SERIES-2046A ALUM. WINDOW WALL SYSTEM (L.M.I.)
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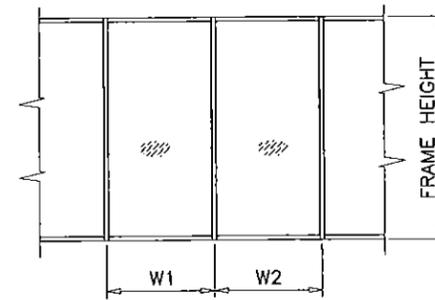
revisions:	no	date	by	description
	C	03.02.15		UPDATED TO 2014 FBC

date: 04-08-05
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drawing no.
W05-17
sheet 2.1 of 7

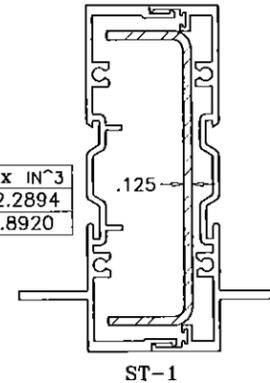
MULLION LOAD CAPACITY - PSF WITHOUT INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		WITHOUT REINFORCING	ST-1 REINFORCING	ST-2 REINFORCING	ST-3 REINFORCING
WIDTH (W)	FRAME HEIGHT	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
24"	72"	100.0	120.0	120.0	120.0
30"		100.0	120.0	120.0	120.0
36"		100.0	120.0	120.0	120.0
42"		100.0	120.0	120.0	120.0
48"		100.0	120.0	120.0	120.0
54"		100.0	120.0	120.0	120.0
60"	100.0	120.0	120.0	120.0	
24"	78"	100.0	120.0	120.0	120.0
30"		100.0	120.0	120.0	120.0
36"		100.0	120.0	120.0	120.0
42"		100.0	120.0	120.0	120.0
48"		100.0	120.0	120.0	120.0
54"		100.0	120.0	120.0	120.0
60"	-	120.0	120.0	120.0	
24"	84"	100.0	120.0	120.0	120.0
30"		100.0	120.0	120.0	120.0
36"		100.0	120.0	120.0	120.0
42"		100.0	120.0	120.0	120.0
48"		100.0	120.0	120.0	120.0
54"		100.0	120.0	120.0	120.0
60"	-	120.0	120.0	120.0	
24"	90"	100.0	120.0	120.0	120.0
30"		100.0	120.0	120.0	120.0
36"		100.0	120.0	120.0	120.0
42"		100.0	120.0	120.0	120.0
48"		95.9	120.0	120.0	120.0
54"		-	120.0	120.0	120.0
60"	-	113.9	120.0	120.0	
24"	96"	100.0	120.0	120.0	120.0
30"		100.0	120.0	120.0	120.0
36"		100.0	120.0	120.0	120.0
42"		93.2	120.0	120.0	120.0
48"		83.3	116.3	120.0	120.0
54"		-	105.9	120.0	120.0
60"	-	98.0	116.6	120.0	
24"	102"	-	120.0	120.0	120.0
30"		-	120.0	120.0	120.0
36"		-	120.0	120.0	120.0
42"		-	114.4	120.0	120.0
48"		-	101.9	120.0	120.0
54"		-	92.6	110.1	120.0
24"	108"	-	120.0	120.0	120.0
30"		-	120.0	120.0	120.0
36"		-	116.7	120.0	120.0
42"		-	101.4	120.0	120.0
48"		-	90.2	107.2	120.0
54"		-	-	-	-
24"	114"	-	120.0	120.0	120.0
30"		-	120.0	120.0	120.0
36"		-	104.4	120.0	120.0
42"		-	90.6	107.7	120.0
48"		-	80.4	95.6	108.4

MULLION LOAD CAPACITY - PSF WITHOUT INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		WITHOUT REINFORCING	ST-1 REINFORCING	ST-2 REINFORCING	ST-3 REINFORCING
WIDTH (W)	FRAME HEIGHT	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
24"	120"	-	120.0	120.0	120.0
30"		-	111.7	120.0	120.0
36"		-	93.9	111.7	120.0
42"		-	81.4	96.8	109.7
48"	-	-	72.1	85.8	97.2
24"	126"	-	-	80.0	80.0
30"		-	-	80.0	80.0
36"		-	-	80.0	80.0
42"		-	-	80.0	80.0
48"	-	-	77.4	80.0	

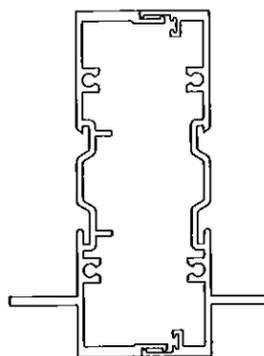
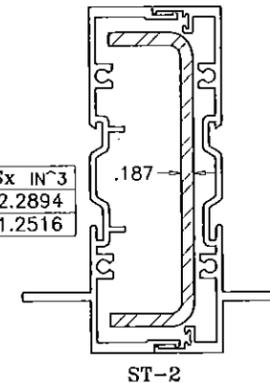


$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$

	Ix IN ⁴	Sx IN ³
ALUMINUM	6.2048	2.2894
STEEL	1.8955	.8920
TOTAL Ix ALUM + Ix STL X 2.9	11.7018	

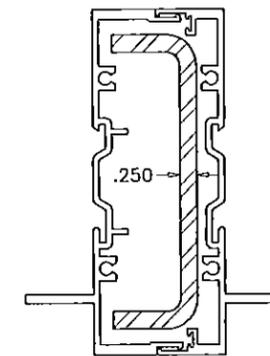


	Ix IN ⁴	Sx IN ³
ALUMINUM	6.2048	2.2894
STEEL	2.6597	1.2516
TOTAL Ix ALUM + Ix STL X 2.9	13.9179	



	Ix IN ⁴	Sx IN ³
ALUM	6.2048	2.2894

MULLION
W/O REINFORCING



	Ix IN ⁴	Sx IN ³
ALUMINUM	6.2048	2.2894
STEEL	3.3026	1.5542
TOTAL Ix ALUM + Ix STL X 2.9	15.7823	

MULLION
W/ REINFORCING

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0302.03
Expiration Date Aug 4, 2020
By *Manuel Perez*
Miami Trade Product Control

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
O.A.N. 3538

MAR 06 2015

af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
STORE W05-17GTE

SERIES-2046A ALUM WINDOW WALL SYSTEM (L.M.I.)
GLASS TECH ENGINEERING INC.
8321 N.W. 70TH STREET
MIAMI, FL. 33166
TEL. (305) 594-4321 FAX. (305) 599-2730

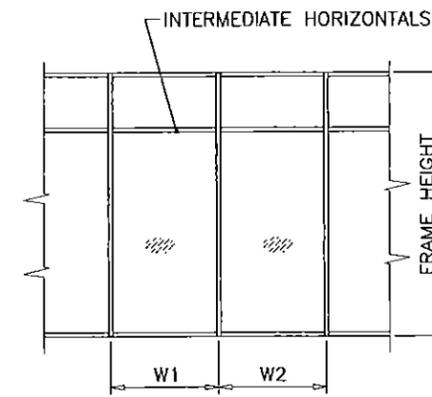
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B	04.20.12	NO CHANGE THIS SHEET
C	03.02.15	UPDATED TO 2014 FBC

date:	04-08-05
scale:	-
dr. by:	HAMID
chk. by:	

drawing no.
W05-17
sheet 3 of 7

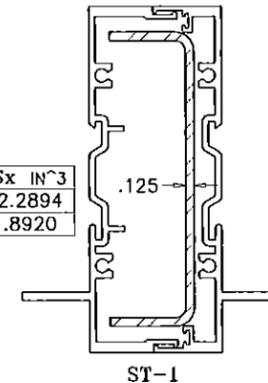
MULLION LOAD CAPACITY - PSF WITH INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		WITHOUT REINFORCING	ST-1 REINFORCING	ST-2 REINFORCING	ST-3 REINFORCING
WIDTH (W)	FRAME HEIGHT	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
24"	72"	100.0	120.0	120.0	120.0
30"		100.0	120.0	120.0	120.0
36"		100.0	120.0	120.0	120.0
42"		100.0	120.0	120.0	120.0
48"		100.0	120.0	120.0	120.0
54"		100.0	120.0	120.0	120.0
60"	100.0	120.0	120.0	120.0	
24"	78"	100.0	120.0	120.0	120.0
30"		100.0	120.0	120.0	120.0
36"		100.0	120.0	120.0	120.0
42"		100.0	120.0	120.0	120.0
48"		100.0	120.0	120.0	120.0
54"		100.0	120.0	120.0	120.0
60"	-	120.0	120.0	120.0	
24"	84"	100.0	120.0	120.0	120.0
30"		100.0	120.0	120.0	120.0
36"		100.0	120.0	120.0	120.0
42"		100.0	120.0	120.0	120.0
48"		100.0	120.0	120.0	120.0
54"		100.0	120.0	120.0	120.0
60"	-	111.6	120.0	120.0	
24"	90"	100.0	120.0	120.0	120.0
30"		100.0	120.0	120.0	120.0
36"		100.0	120.0	120.0	120.0
42"		100.0	120.0	120.0	120.0
48"		97.1	120.0	120.0	120.0
54"		-	108.0	120.0	120.0
60"	-	97.2	115.6	120.0	
24"	96"	100.0	120.0	120.0	120.0
30"		100.0	120.0	120.0	120.0
36"		100.0	120.0	120.0	120.0
42"		91.4	120.0	120.0	120.0
48"		80.0	106.8	120.0	120.0
54"		-	94.9	112.9	120.0
60"	-	85.4	101.6	115.2	
24"	102"	-	120.0	120.0	120.0
30"		-	120.0	120.0	120.0
36"		-	120.0	120.0	120.0
42"		-	108.1	120.0	120.0
48"		-	94.6	112.5	120.0
54"		-	84.1	100.0	113.4
24"	108"	-	120.0	120.0	120.0
30"		-	120.0	120.0	120.0
36"		-	112.5	120.0	120.0
42"		-	96.5	114.7	120.0
48"		-	84.4	100.4	113.8
54"		-	-	-	-
24"	114"	-	120.0	120.0	120.0
30"		-	120.0	120.0	120.0
36"		-	101.0	120.0	120.0
42"		-	86.6	103.0	116.8
48"		-	75.7	90.1	102.2

MULLION LOAD CAPACITY - PSF WITH INTERMEDIATE HORIZONTALS					
NOMINAL DIMS.		WITHOUT REINFORCING	ST-1 REINFORCING	ST-2 REINFORCING	ST-3 REINFORCING
WIDTH (W)	FRAME HEIGHT	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)	EXT.(+) INT.(-)
24"	120"	-	120.0	120.0	120.0
30"		-	109.4	120.0	120.0
36"		-	91.1	108.4	120.0
42"		-	78.1	92.9	105.4
48"	-	68.4	81.3	92.2	
24"	126"	-	-	80.0	80.0
30"		-	-	80.0	80.0
36"		-	-	80.0	80.0
42"		-	-	80.0	80.0
48"	-	-	73.7	80.0	

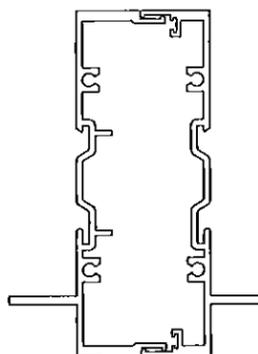
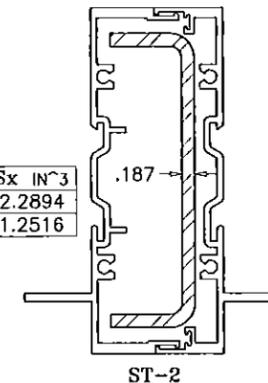


$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$

	Ix IN ⁴	Sx IN ³
ALUMINUM	6.2048	2.2894
STEEL	1.8955	.8920
TOTAL	8.1003	3.1814
Ix ALUM + Ix STL X 2.9	11.7018	

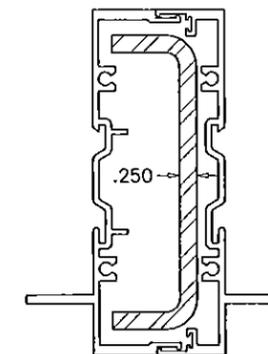


	Ix IN ⁴	Sx IN ³
ALUMINUM	6.2048	2.2894
STEEL	2.6597	1.2516
TOTAL	8.8645	3.5410
Ix ALUM + Ix STL X 2.9	13.9179	



	Ix IN ⁴	Sx IN ³
ALUM	6.2048	2.2894

MULLION
W/O REINFORCING



	Ix IN ⁴	Sx IN ³
ALUMINUM	6.2048	2.2894
STEEL	3.3026	1.5542
TOTAL	9.5074	3.8436
Ix ALUM + Ix STL X 2.9	15.7823	

MULLION
W/ REINFORCING

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0302.03
Expiration Date Aug 4, 2020
By *Manuel Sra*
Miami Dade Product Control

Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538

Manuel Sra
MAR 06 2015

af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
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MIAMI, FLORIDA 33174
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STORE W05-17GTE

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GLASS TECH ENGINEERING INC.
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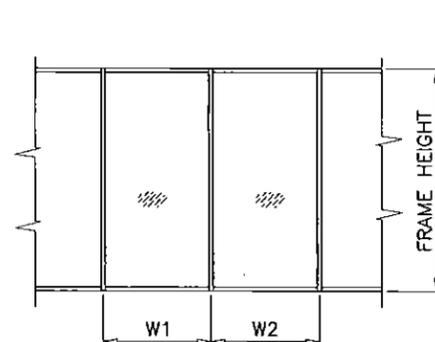
no	date	by	description
C	03.02.15		UPDATED TO 2014 FBC

date:	04-08-05
scale:	-
dr. by:	HAMID
chk. by:	

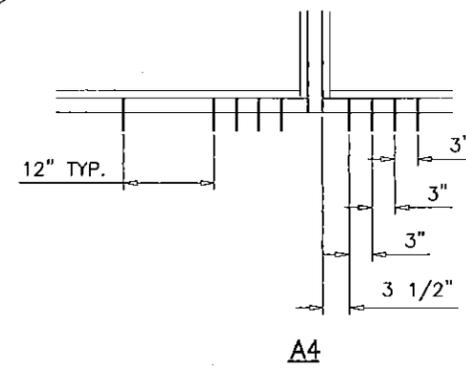
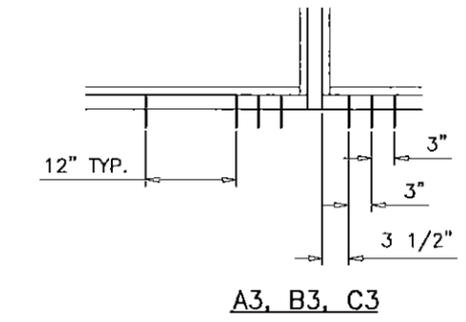
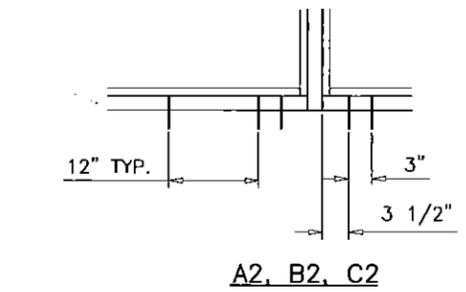
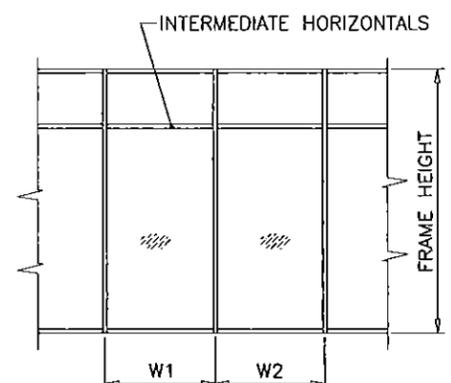
drawing no.	W05-17
sheet	3.1 of 7

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)						
NOMINAL DIMS.		ANCHORS TYPE 'A'			TYPE 'B' OR 'C'	
WIDTH (W)	FRAME HEIGHT	A2	A3	A4	B2/C2	B3/C3
24"	60"	120.0	120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0	120.0
36"		120.0	120.0	120.0	120.0	120.0
42"		120.0	120.0	120.0	120.0	120.0
48"		120.0	120.0	120.0	120.0	120.0
54"		120.0	120.0	120.0	120.0	120.0
60"	120.0	120.0	120.0	120.0	120.0	
24"	66"	120.0	120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0	120.0
36"		120.0	120.0	120.0	120.0	120.0
42"		120.0	120.0	120.0	120.0	120.0
48"		120.0	120.0	120.0	120.0	120.0
54"		120.0	120.0	120.0	120.0	120.0
60"	120.0	120.0	120.0	120.0	120.0	
24"	72"	120.0	120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0	120.0
36"		120.0	120.0	120.0	120.0	120.0
42"		120.0	120.0	120.0	120.0	120.0
48"		118.0	120.0	120.0	120.0	120.0
54"		111.9	120.0	120.0	120.0	120.0
60"	107.0	120.0	120.0	120.0	120.0	
24"	78"	120.0	120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0	120.0
36"		120.0	120.0	120.0	120.0	120.0
42"		113.6	120.0	120.0	120.0	120.0
48"		104.9	120.0	120.0	120.0	120.0
54"		98.7	120.0	120.0	120.0	120.0
60"	94.4	120.0	120.0	120.0	120.0	
24"	84"	120.0	120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0	120.0
36"		114.4	120.0	120.0	120.0	120.0
42"		102.7	120.0	120.0	120.0	120.0
48"		94.4	120.0	120.0	120.0	120.0
54"		88.3	120.0	120.0	120.0	120.0
60"	83.9	120.0	120.0	120.0	120.0	
24"	90"	120.0	120.0	120.0	120.0	120.0
30"		120.0	120.0	120.0	120.0	120.0
36"		104.9	120.0	120.0	120.0	120.0
42"		93.8	120.0	120.0	120.0	120.0
48"		85.8	120.0	120.0	120.0	120.0
54"		79.9	119.9	120.0	120.0	120.0
60"	75.5	113.3	120.0	120.0	120.0	
24"	96"	120.0	120.0	120.0	120.0	120.0
30"		111.9	120.0	120.0	120.0	120.0
36"		96.8	120.0	120.0	120.0	120.0
42"		86.3	120.0	120.0	120.0	120.0
48"		78.7	118.0	120.0	120.0	120.0
54"		73.0	109.4	120.0	120.0	120.0
60"	68.7	103.0	120.0	113.5	120.0	

ANCHOR LOAD CAPACITY - PSF EXT.(+) & INT.(-)						
NOMINAL DIMS.		ANCHORS TYPE 'A'			TYPE 'B' OR 'C'	
WIDTH (W)	FRAME HEIGHT	A2	A3	A4	B2/C2	B3/C3
24"	102"	120.0	120.0	120.0	120.0	120.0
30"		104.2	120.0	120.0	120.0	120.0
36"		89.9	120.0	120.0	120.0	120.0
42"		79.9	119.9	120.0	120.0	120.0
48"		72.6	108.9	120.0	120.0	120.0
54"		67.1	100.7	120.0	110.9	120.0
24"	108"	118.0	120.0	120.0	120.0	120.0
30"		97.4	120.0	120.0	120.0	120.0
36"		83.9	120.0	120.0	120.0	120.0
42"		74.4	111.6	120.0	120.0	120.0
48"		67.4	101.1	120.0	111.4	120.0
54"		62.2	93.2	120.0	102.7	120.0
24"	114"	111.1	120.0	120.0	120.0	120.0
30"		91.5	120.0	120.0	120.0	120.0
36"		78.7	118.0	120.0	120.0	120.0
42"		69.6	104.4	120.0	115.0	120.0
48"	62.9	94.4	120.0	104.0	120.0	
24"	120"	104.9	120.0	120.0	120.0	120.0
30"		86.3	120.0	120.0	120.0	120.0
36"		74.0	111.1	120.0	120.0	120.0
42"		65.4	98.1	120.0	108.1	120.0
48"		59.0	88.5	118.0	97.6	120.0
24"		126"	99.4	120.0	120.0	120.0
30"	81.6		120.0	120.0	120.0	120.0
36"	69.9		104.9	120.0	115.6	120.0
42"	61.6		92.5	120.0	101.9	120.0
48"	55.5		83.3	111.1	91.8	120.0



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



ANCHORS TYPES: SEE SHEET 5 FOR DESCRIPTION

A2 = (2) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION
A3 = (3) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION
A4 = (4) ANCHORS TYPE 'A' AT EACH SIDE OF MULLION

B2 = (2) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION
B3 = (3) ANCHORS TYPE 'B' AT EACH SIDE OF MULLION

C2 = (2) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION
C3 = (3) ANCHORS TYPE 'C' AT EACH SIDE OF MULLION

ALL OTHER ANCHORS TO BE SPACED AS PER ELEVATION.

Engr: JAVAD AHMAD
 CIVIL
 FLA. PE # 70592
 C.N. 3538

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By *Manuel Perez*
 Miami Dade Product Contr.

af c

AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 1235 S.W. 87 AVE
 MIAMI, FLORIDA 33174
 TEL. (305) 264-8100 FAX. (305) 262-6978
 STORE W05-17GTE

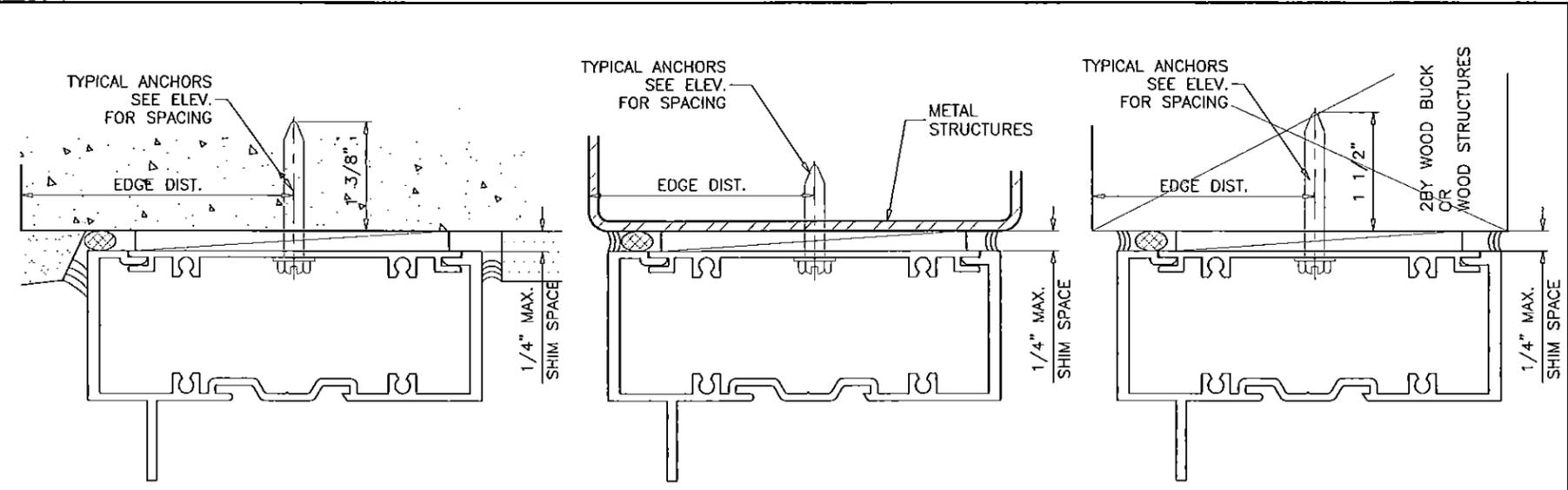
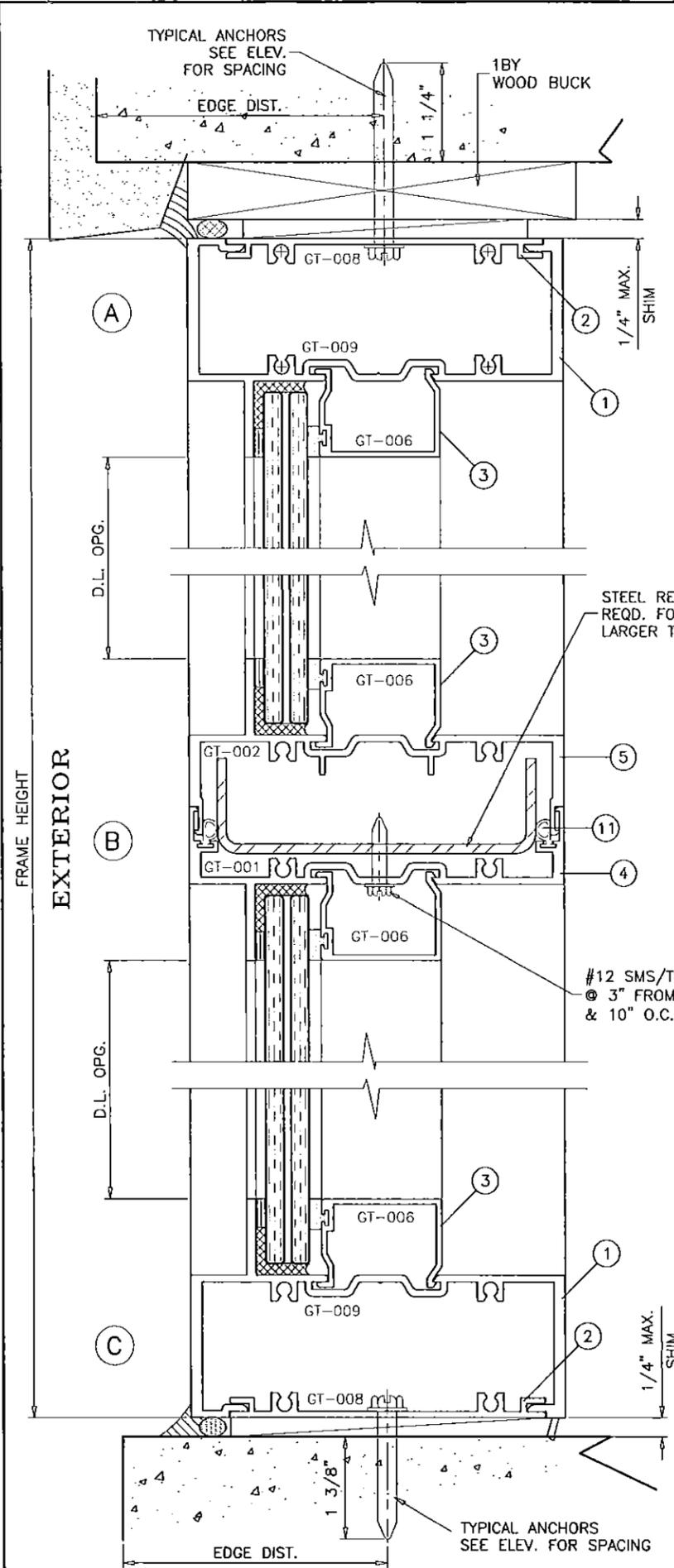
SERIES-2046A ALUM WINDOW WALL SYSTEM (L.M.I.)

GLASS TECH ENGINEERING INC.
 8321 N.W. 70TH STREET
 MIAMI, FL. 33166
 TEL. (305) 584-4321 FAX. (305) 599-2730

revisions:	no	date	by	description
	A	10.21.09		UPDATED FOR 2007 FBC
	B	04.20.12		NO CHANGE THIS SHEET
	C	03.02.15		UPDATED TO 2014 FBC

date: 04-08-05
 scale: -
 dr. by: HAMID
 chk. by:

drawing no.
W05-17
 sheet 4 of 7



WOOD BUCKS AND METAL STRUCTURES NOT BY GLASS TECH MUST SUPPORT LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A'- 1/4" DIA ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI) INTO 2BY WOOD BUCKS OR WOOD STRUCTURES WITH 1-1/2" MIN. PENETRATION INTO WOOD THRU 1BY WOOD BUCKS INTO CONCRETE OR MASONRY WITH 1-1/4" MIN. EMBED INTO CONCRETE OR MASONRY

ANCHOR EDGE DISTANCES

INTO CONCRETE OR MASONRY = 2-1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.

TYPE 'B'- 1/4" DIA ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI) DIRECTLY INTO CONCRETE OR MASONRY WITH 1-3/8" MIN. EMBED INTO CONCRETE WITH 1-1/4" MIN. EMBED INTO MASONRY

ANCHOR EDGE DISTANCES

INTO CONCRETE AND MASONRY = 2-1/2" MIN.

TYPE 'C'- 1/4" DIA. TEKS OR SELF DRILLING SCREWS ST/ST (GRADE 5 CRS) INTO MIAMI-DADE COUNTY APPROVED MULLIONS (1/8" THK. MIN.) INTO METAL STRUCTURES
STEEL : 1/8" THK. MIN. (Fy = 36 KSI MIN.)
ALUMINUM : 1/8" THK. MIN. (6063-T5 MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

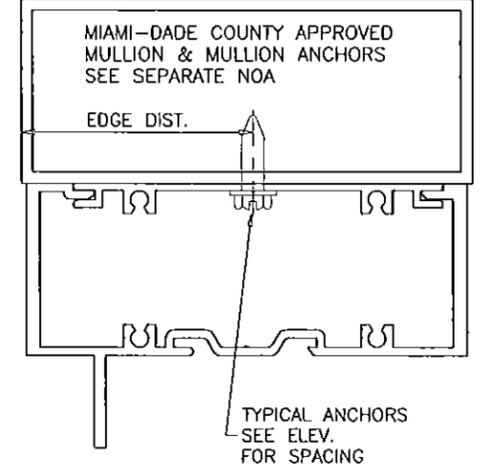
ANCHOR EDGE DISTANCES

INTO METAL STRUCTURE = 3/4" MIN.

WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.
CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.

SEALANTS:

ALL FRAME CORNERS SEALED WITH JOINT SEALANT.



Engr: JAVAD AHMAD
CIVIL
FLA. PE # 70592
C.A.N. 3538
(Signature)
MAR 06 2015

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Expiration Date Aug 4, 2020
By *(Signature)*
Miami Dade Product Control

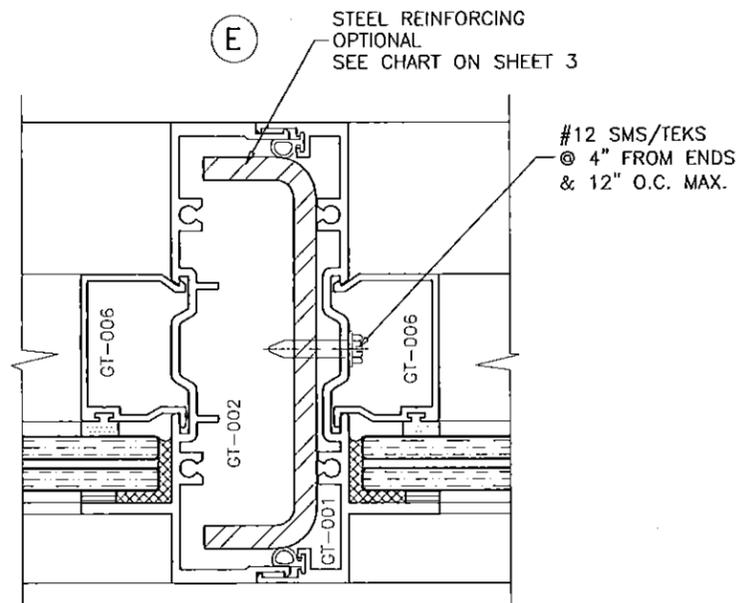
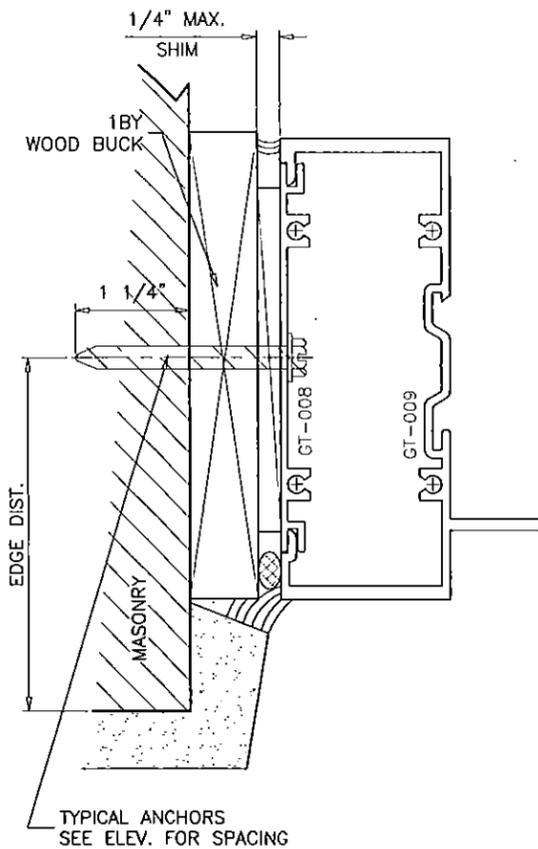
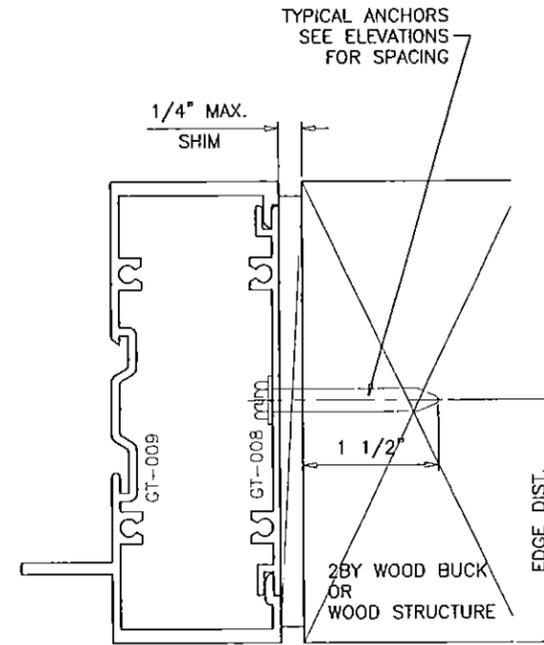
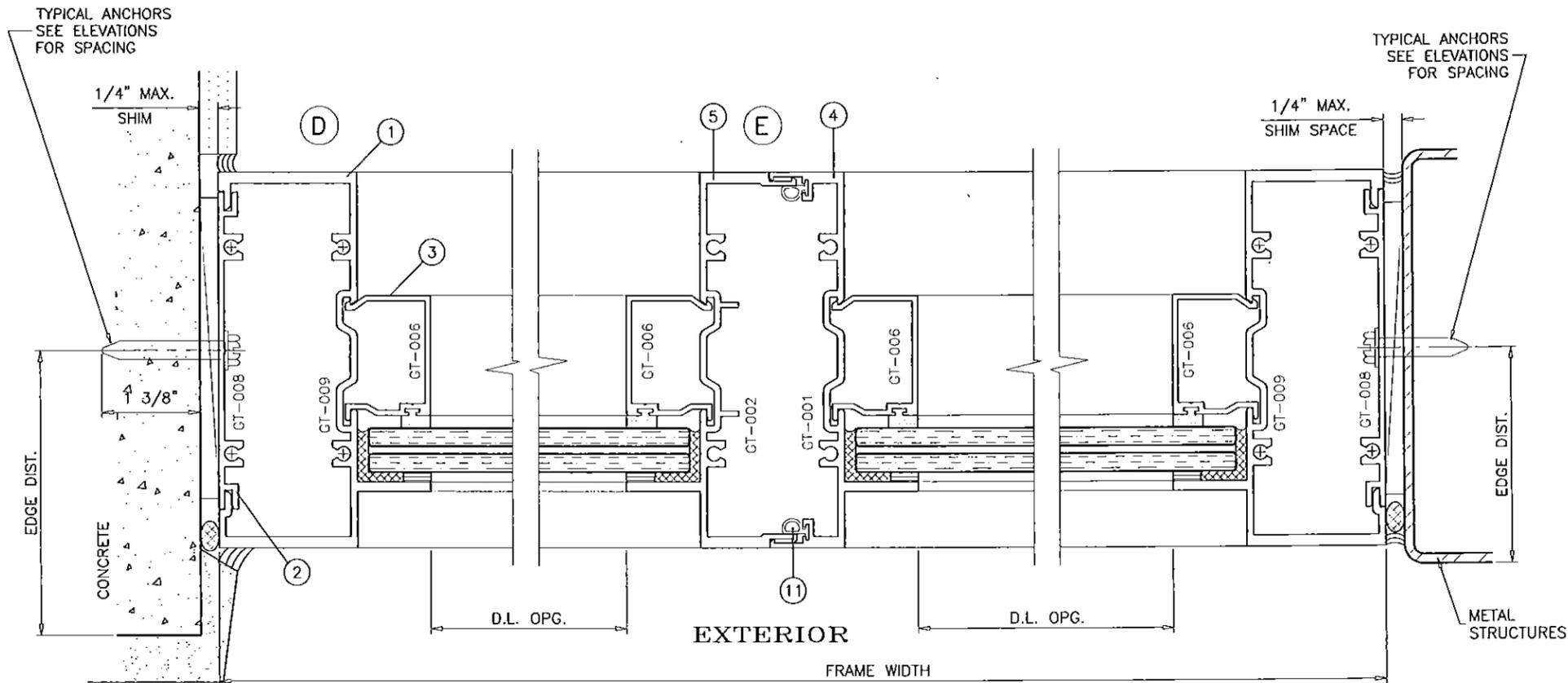
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no	date	by	description
A	10.21.09		UPDATED FOR 2007 FBC
B	04.20.12		UPDATED TO 2010 FBC
C	03.02.15		UPDATED TO 2014 FBC

date: 04-08-05
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
W05-17
sheet 5 of 7



Engr: JAVAD AHMAD
 CIVIL
 FLA. RE # 70592
 C.A.N. 3538

MAR 06 2015

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33y *Manuel*
 Miami Dade Product Control

af c

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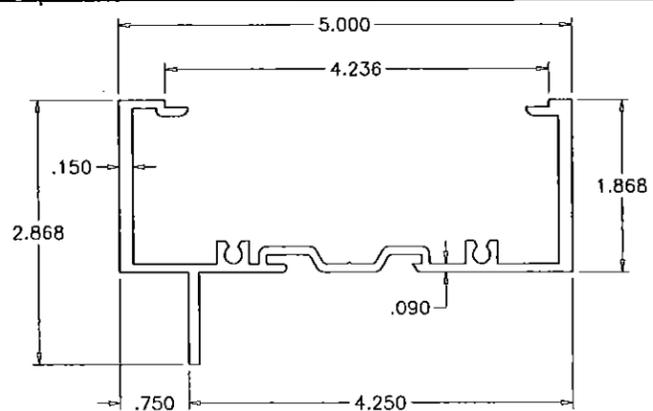
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B	04.20.12		NO CHANGE THIS SHEET
C	03.02.15		UPDATED TO 2014 FBC

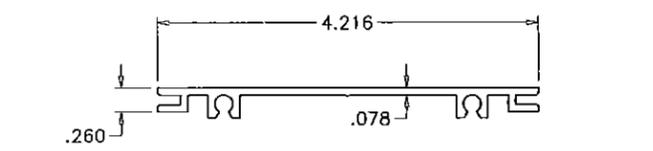
date: 04-08-05
 scale: 1/2" = 1"
 dr. by: HAMID
 chk. by:

drawing no. W05-17
 sheet 6 of 7

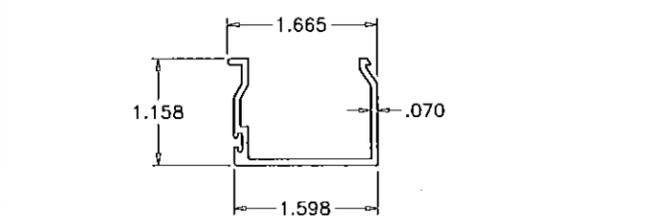
ITEM No.	PART NUMBER	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	GT-009	AS REQD.	HEAD, SILL AND JAMB FRAME	6063-T6	-
2	GT-008	AS REQD.	FLAT POCKET FILLER	6063-T6	-
3	GT-006	AS REQD.	GLAZING BEAD	6063-T5	-
4	GT-001	AS REQD.	FEMALE FRAME	6063-T6	-
5	GT-002	AS REQD.	MALE FRAME	6063-T6	-
6	TR-427N	AS REQD.	GLAZING GASKET	NEOPRENE	TREMCO
7	-	AS REQD.	SETTING BLOCKS	EPDM	DUROMETER 80±5 SHORE A
8	995/4000	AS REQD.	GLAZING COMPOUND	SILICONE	DOW CORNING/GE
9	V2204	AS REQD.	GLAZING TAPE (1/8" X 3/8")	-	NORTON
10	#12 X 1-1/2"	AS REQD.	FRAME ASSEMBLY SCREWS	-	SMS OR SELF DRILLING
11	-	AS REQD.	BULB VINYL	-	-



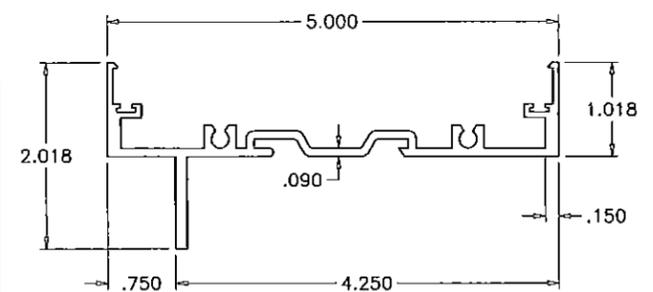
1 FRAME HEAD/SILL/JAMB



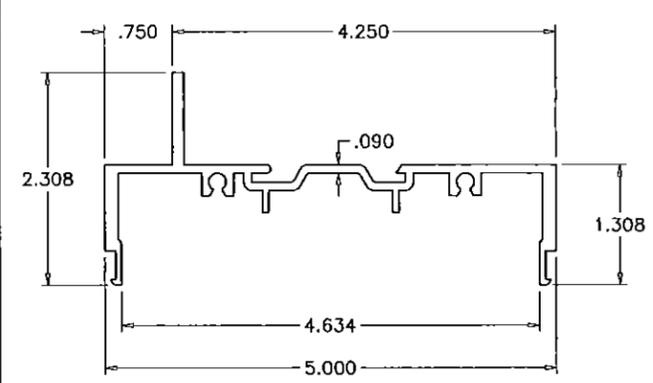
2 FLAT POCKET FILLER



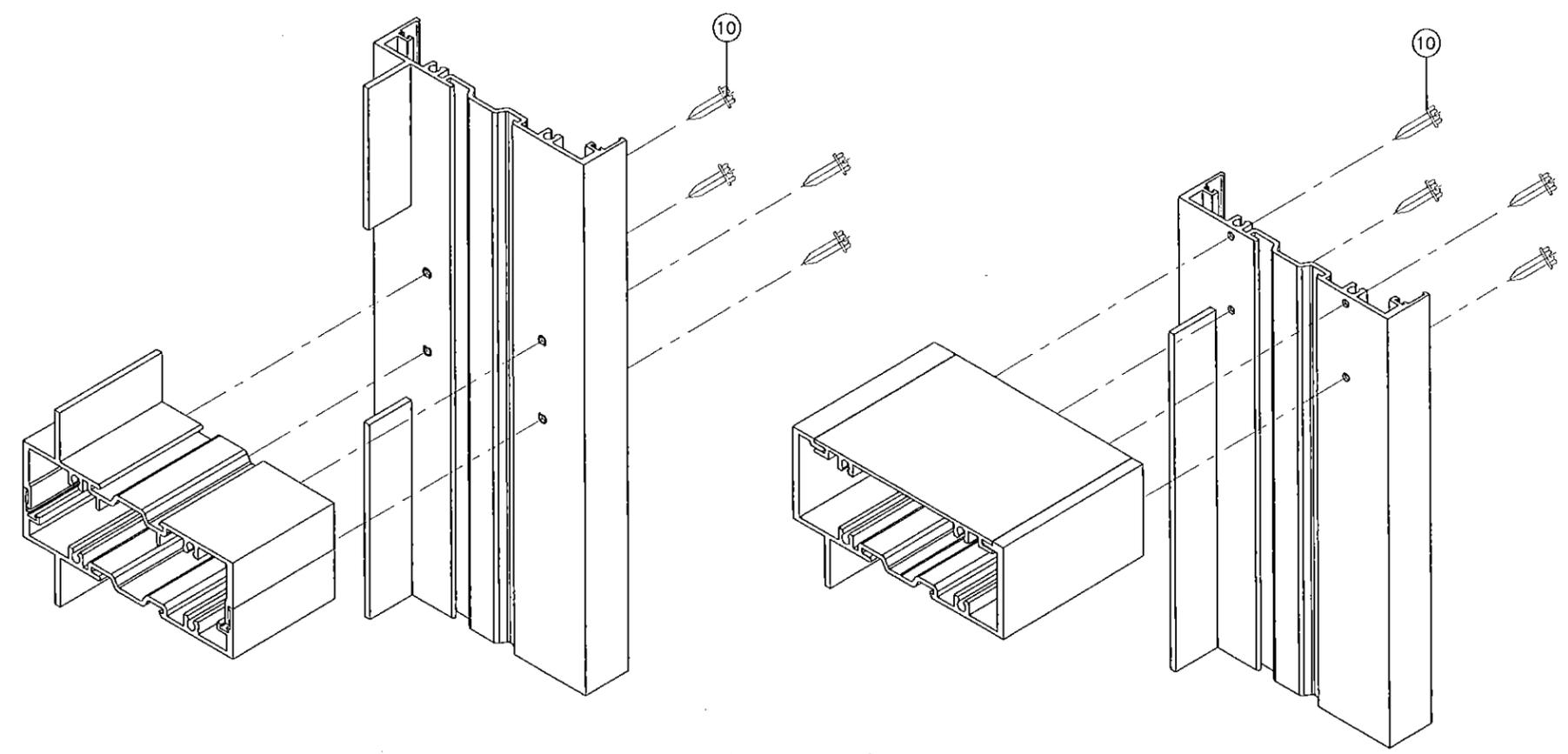
3 GLAZING STOP



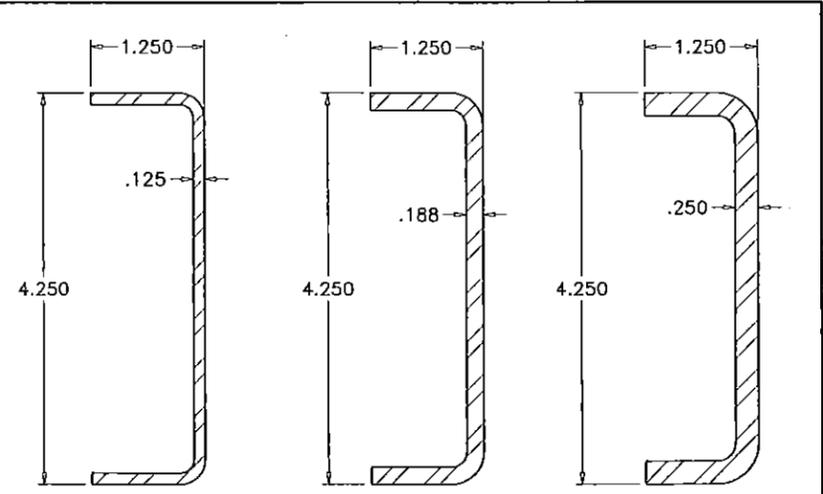
4 FEMALE FRAME



5 MALE FRAME



FRAME CORNERS



ST-1 ST-2 ST-3

11 STEEL REINFORCING 36 KSI MIN.

Engr: JAVAD AHMAD
 CIVIL
 FLA. PE # 70592
 C.A.N. 3538

MAR 06 2015

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 15-0302.03
 Expiration Date Aug. 4, 2020

By: *Manuel Suez*
 Miami Dade Product Control

afC
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 1235 S.W. 87 AVE
 MIAMI, FLORIDA 33174
 TEL. (305) 264-8100 FAX. (305) 262-6978
 STORE W05-17GTE

SERIES-2046A ALUM WINDOW WALL SYSTEM (L.M.I.)
GLASS TECH ENGINEERING INC.
 8321 N.W. 70TH STREET
 MIAMI, FL. 33166
 TEL. (305) 594-4321 FAX. (305) 599-2730

NO	DATE	BY	DESCRIPTION
A	10.21.09		UPDATED FOR 2007 FBC
B	04.20.12		NO CHANGE THIS SHEET
C	03.02.15		UPDATED TO 2014 FBC

date: 04-08-05
 scale: 1/2" = 1"
 dr. by: HAMID
 chk. by:

drawing no.
W05-17
 sheet 7 of 7