



BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 372-6339

NOTICE OF ACCEPTANCE (NOA)

www.maimidade.gov/buildingcode

ES Windows LLC
10653 NE Quaybridge Ct.
Miami, FL 33138

SCOPE:

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

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

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

DESCRIPTION: Series 1500 Aluminum Fixed Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. **W03-57**, titled "Series-1500 Aluminum Fixed Window (L.M.I.)", sheets 1 through 7 of 7, prepared by Al-Farooq Corporations, dated 07/31/03 with revision D dated 03/26/08, signed and sealed by Humayoun Farooq, 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 Division.

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 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 # **06-1201.05** 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.**



NOA No. 08-0417.06
Expiration Date: November 6, 2013
Approval Date: June 5, 2008
Page 1

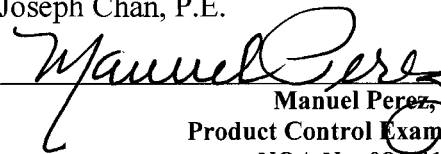
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **W03-57**, titled "Series-1500 Aluminum Fixed Window (L.M.I.)", sheets 1 thru 7 of 7, prepared by Al-Farooq Corporations, dated 07/31/03 with revision D dated 03/26/08, signed and sealed by Humayoun Farooq, 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) Large Missile Impact Test per FBC, TAS 201-94
4) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of a series 1500 aluminum fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-5339**, dated 02/11/08, signed and sealed by Michael R. Wenzel, P.E.
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 arch, round top & cathedral shapes aluminum fixed windows, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-5054**, dated 10/03/06, signed and sealed by Edmundo Largaespada, P.E. (*Submitted under previous NOA#06-0308.05*)
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) 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 fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-3810**, dated 05/16/03, signed & sealed by Joseph Chan, P.E. (*Submitted under previous NOA#03-0910.01*)
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 a alum. fixed windows mulled together, prepared by Fenestration Testing Laboratory, Inc. Test Report No. **FTL-3819**, dated 06/09/03, signed & sealed by Joseph Chan, P.E. (*Submitted under previous NOA#03-0910.01*)


Manuel Perez, P.E.
Product Control Examiner
NOA No. 08-0417.06

Expiration Date: November 6, 2013

Approval Date: June 5, 2008

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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 fixed window, prepared by Fenestration Testing Laboratory, Inc., Test Report No. **FTL-3808**, dated 05/14/03, signed & sealed by Joseph Chan, P.E.
(Submitted under previous NOA#03-0910.01)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC-2004, prepared by Al-Farooq Corporation, dated 4/7/08, signed and sealed by Humayoun Farooq, P.E.
Complies with ASTM E1300-02

D. QUALITY ASSURANCE

1. Miami Dade Building Code Compliance Office (BCCO).

E. MATERIAL CERTIFICATIONS

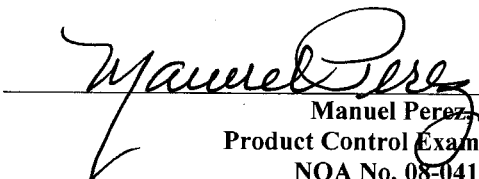
1. Notice of Acceptance No. **07-1116.04** issued to E.I. DuPont DeNemours & Co., Inc. for their "**DuPont SentryGlas ® Plus**" dated 01/03/08, expiring on 01/14/12.
2. Notice of Acceptance No. **05-1208.02** issued to E.I. DuPont DeNemours & Co., Inc. for their "**DuPont Butacite PVB Interlayer**" dated 01/05/06, expiring on 12/11/10.

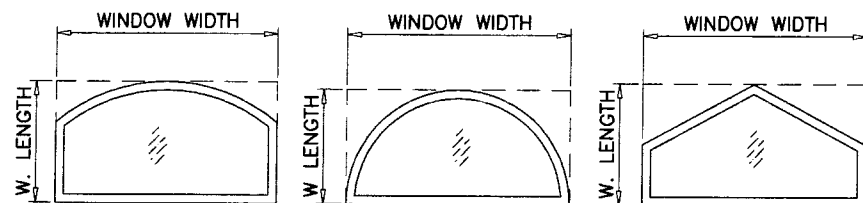
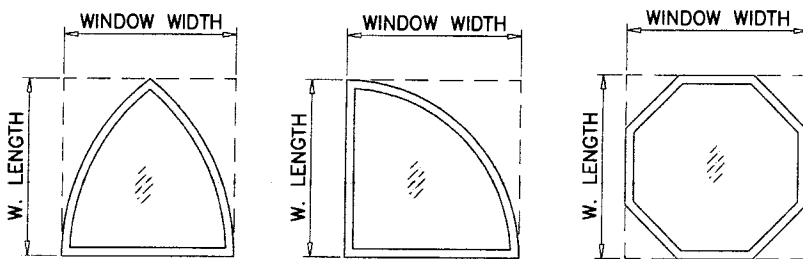
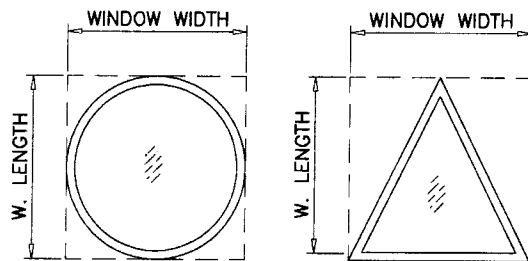
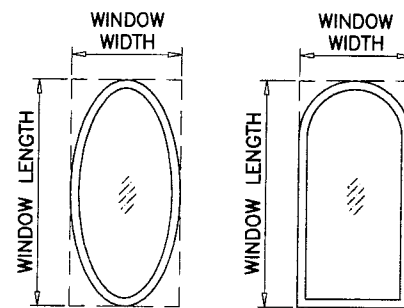
F. STATEMENTS

1. Statement letter of conformance, dated March 26, 2008, signed and sealed by Humayoun Farooq, P.E.
2. Statement letter of no financial interest, dated March 26, 2008, signed and sealed by Humayoun Farooq, P.E.
3. Laboratory compliance letter for Test Report no. **FTL-5339**, issued by Fenestration Testing Laboratory, Inc., dated February 7, 2008, signed and sealed by Michael R. Wenzel, P.E.

G. OTHER

1. Notice of Acceptance No. **06-1201.05**, issued to ES Windows, Inc., for their Series 1500 Aluminum Fixed Window – L.M.I., approved on 02/01/07 and expiring on 11/06/08.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 08-0417.06
Expiration Date: November 6, 2013
Approval Date: June 5, 2008



ALLOWABLE LOADS FOR ALTERNATE SHAPES AS SHOWN ABOVE OR SIMILAR CAN BE VERIFIED BY INSCRIBING PICTURE WINDOW SHAPE WITHIN SQUARE OR RECTANGLE AS SHOWN IN DOTTED LINES AND OBTAINING ALLOWABLE LOADS FROM THOSE SHAPES.

SERIES-1500 ALUMINUM FIXED WINDOW

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF FIXED/FIXED OR FIXED WITH OTHER MIAMI-DADE COUNTY APPR'D WINDOWS USING MIAMI-DADE COUNTY APPROVED MULLIONS IN BETWEEN. LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL WILL APPLY TO ENTIRE SYSTEM.

DESIGN LOAD RATING FOR THESE WINDOWS TO BE AS PER CHARTS ON SHEETS 2 & 3.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2004/2007 EDITION INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

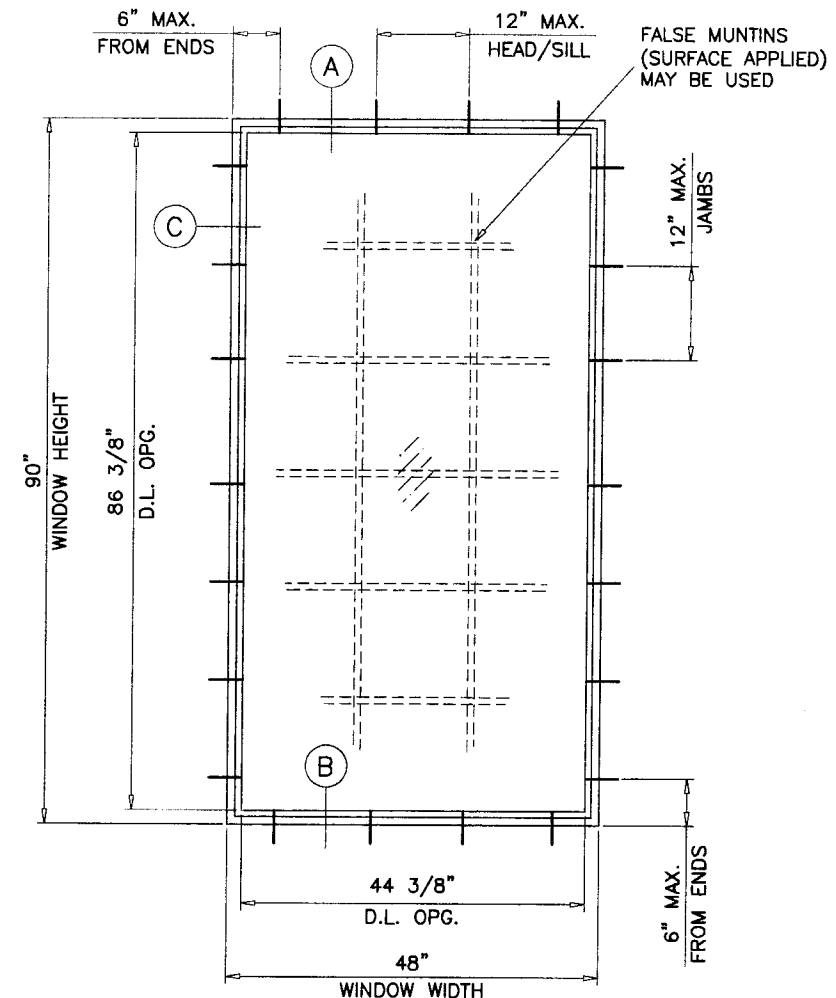
WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

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 IN ALLOWABLE STRESS IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2004 FLORIDA BLDG. CODE SECTION 2003.8.4.



TYPICAL ELEVATION

THESE WINDOWS ARE RATED FOR LARGE MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.

Engr. DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 08-0417.06
Expiration Date NOV. 6, 2013
By *Manuel Dine*
Miami Dade Product Control
Division

APR 09 2008

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL\W03-57ESW

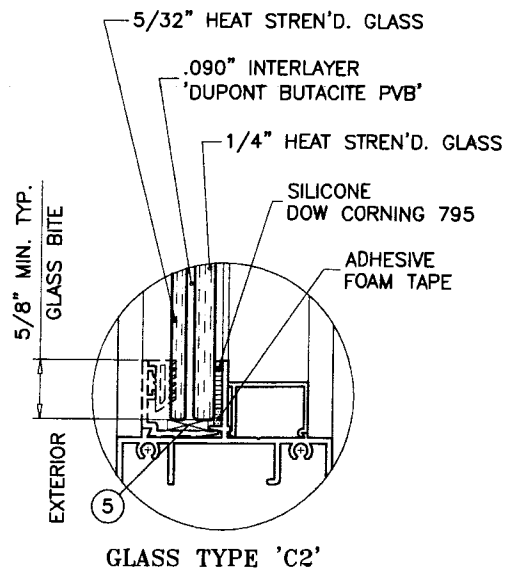
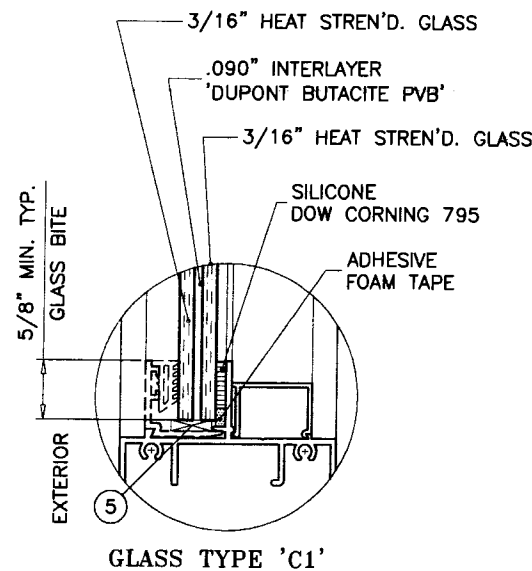
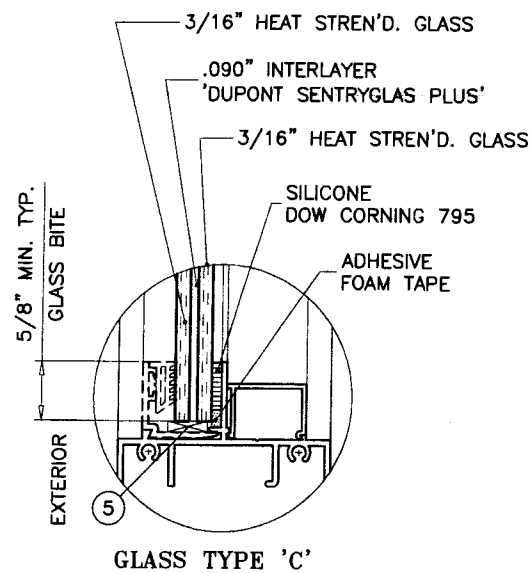
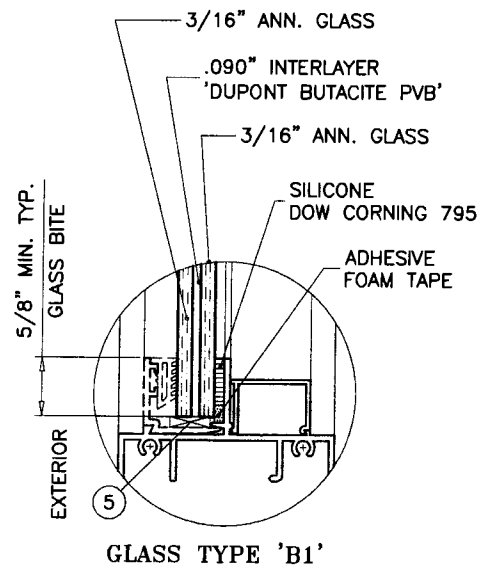
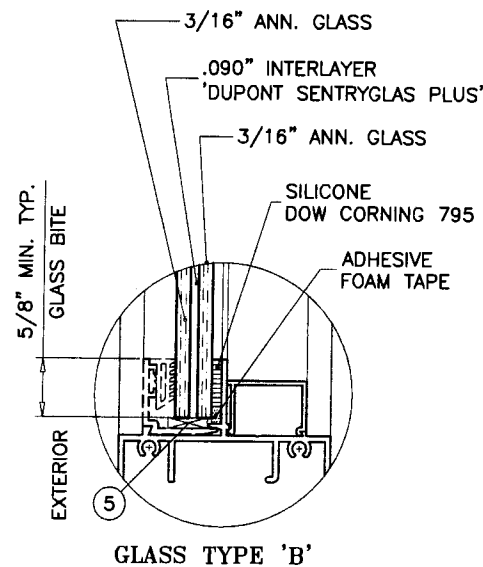
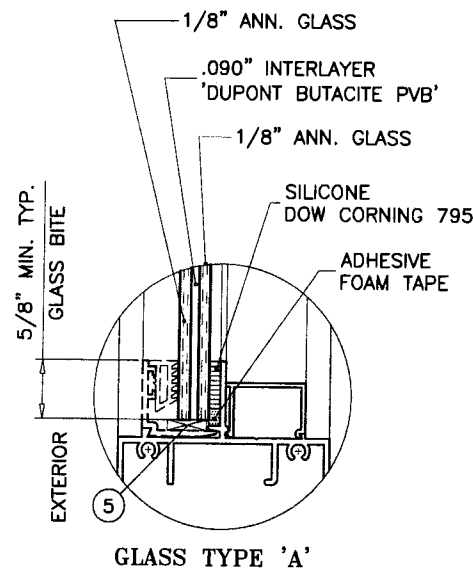
SERIES-1500 ALUMINUM FIXED WINDOW (L.M.I.)
E.S. WINDOWS
5220 N.W. 72 AVE. BAY #4
MIAMI, FL. 33166
TEL. (305) 640-9857 FAX. (305) 593-2074

revisions:	no	date	by	description
	A	09.25.03		NO CHANGE THIS SHEET
	B	09.05.05		UPDATED FOR 2004 FBC
	C	11.11.06		SHAPES ADDED
	D	03.26.08		NOTE REV.

date: 07-31-03
scale: 1/2" = 1'-0"
dr. by: HAMID
chk. by:

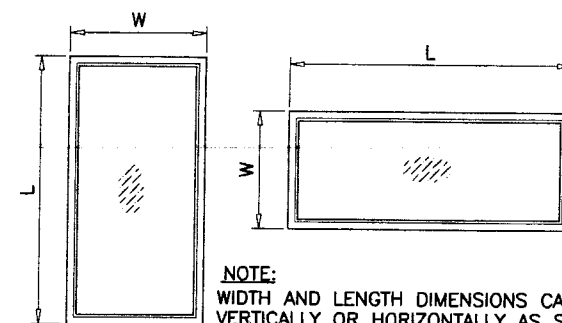
drawing no.
W03-57

sheet 1 of 7



WINDOW DIMS.		DESIGN LOAD CAPACITY - PSF											
		ANCHOR TYPES 'A' & 'C'						ANCHOR TYPES 'B' & 'C'					
		GLASS TYPE 'A'		GLASS TYPES 'B' & 'B1'		GLASS TYPES 'C', 'C1' & 'C2'		GLASS TYPE 'A'		GLASS TYPES 'B' & 'B1'		GLASS TYPES 'C', 'C1' & 'C2'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
19-1/8"	26"	70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
26-1/2"		70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
37"		66.5	66.5	66.5	66.5	66.5	66.5	70.0	70.0	70.0	90.0	70.0	80.0
48"		66.5	66.5	66.5	66.5	66.5	66.5	70.0	70.0	70.0	90.0	70.0	80.0
53-1/8"		66.5	66.5	66.5	66.5	66.5	66.5	70.0	70.0	70.0	90.0	70.0	80.0
19-1/8"	38-3/8"	70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
26-1/2"		65.2	65.2	65.2	65.2	65.2	65.2	70.0	70.0	70.0	90.0	70.0	80.0
37"		46.7	46.7	46.7	46.7	46.7	46.7	68.1	68.1	70.0	90.0	70.0	80.0
48"		45.0	45.0	45.0	45.0	45.0	45.0	65.7	65.7	70.0	90.0	70.0	80.0
53-1/8"		45.0	45.0	45.0	45.0	45.0	45.0	65.7	65.7	70.0	90.0	70.0	80.0
19-1/8"	50-5/8"	70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
26-1/2"		65.2	65.2	65.2	65.2	65.2	65.2	70.0	70.0	70.0	90.0	70.0	80.0
37"		46.7	46.7	46.7	46.7	46.7	46.7	68.1	68.1	70.0	90.0	70.0	80.0
48"		-	-	36.0	36.0	36.0	36.0	-	-	70.0	90.0	70.0	80.0
53-1/8"		-	-	34.1	34.1	34.1	34.1	-	-	66.4	85.3	66.4	75.9
19-1/8"	58"	70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
26-1/2"		65.2	65.2	65.2	65.2	65.2	65.2	70.0	70.0	70.0	90.0	70.0	80.0
37"		46.7	46.7	46.7	46.7	46.7	46.7	68.1	68.1	70.0	90.0	70.0	80.0
48"		-	-	36.0	36.0	36.0	36.0	-	-	70.0	90.0	70.0	80.0
53-1/8"		-	-	-	-	32.5	32.5	-	-	-	-	63.2	72.3
19-1/8"	63"	70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
26-1/2"		65.2	65.2	65.2	65.2	65.2	65.2	70.0	70.0	70.0	90.0	70.0	80.0
37"		-	-	46.7	46.7	46.7	46.7	-	-	70.0	90.0	70.0	80.0
48"		-	-	-	-	36.0	36.0	-	-	-	-	70.0	80.0
53-1/8"		-	-	-	-	32.5	32.5	-	-	-	-	63.2	72.3
19-1/8"	74-1/4"	70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
26-1/2"		65.2	65.2	65.2	65.2	65.2	65.2	70.0	70.0	70.0	90.0	70.0	80.0
37"		-	-	46.7	46.7	46.7	46.7	-	-	70.0	90.0	70.0	80.0
48"		-	-	-	-	36.0	36.0	-	-	-	-	70.0	80.0
53-1/8"		-	-	-	-	32.5	32.5	-	-	-	-	63.2	72.3

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-02/04 (3 SEC. GUSTS).



Engr. DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. DB-0417.06
Expiration Date NOV. 6, 2013

By *Manuel Pires*
Miami Dade Product Control
Division

APR 09 2008

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

SERIES-1500 ALUMINUM FIXED WINDOW (L.M.I.)
E.S. WINDOWS
5220 N.W. 72 AVE. BAY #4
MIAMI, FL. 33166
TEL. (305) 640-9857 FAX. (305) 593-2074

no	date	by	description
A	09.25.03	REV. PER BCCO	COMMENTS
B	09.05.05	CHARTS REV.	
C	11.11.06	SHAPES ADDED	
D	03.26.08	GLASS TYPE C2 ADDED	

date: 07-31-03
scale: 1/2"=1'-0"
dr. by: HAMID
chk. by:

drawing no.
W03-57

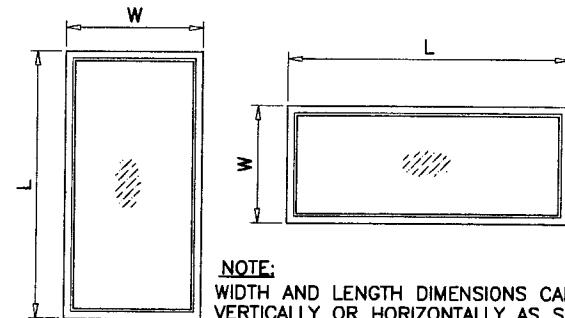
sheet 2 of 7

COMP-ANL\W03-57ESW

DESIGN LOAD CAPACITY - PSF													
WINDOW DIMS.		ANCHOR TYPES 'A' & 'C'						ANCHOR TYPES 'B' & 'C'					
		GLASS TYPE 'A'		GLASS TYPES 'B' & 'B1'		GLASS TYPES 'C', 'C1' & 'C2'		GLASS TYPE 'A'		GLASS TYPES 'B' & 'B1'		GLASS TYPES 'C', 'C1' & 'C2'	
		EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
18"	36"	70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
24"		70.0	70.0	70.0	72.0	70.0	72.0	70.0	70.0	70.0	90.0	70.0	80.0
30"		57.6	57.6	57.6	57.6	57.6	57.6	70.0	70.0	70.0	90.0	70.0	80.0
36"		48.0	48.0	48.0	48.0	48.0	48.0	70.0	70.0	70.0	90.0	70.0	80.0
42"		48.0	48.0	48.0	48.0	48.0	48.0	70.0	70.0	70.0	90.0	70.0	80.0
48"		48.0	48.0	48.0	48.0	48.0	48.0	70.0	70.0	70.0	90.0	70.0	80.0
54"		48.0	48.0	48.0	48.0	48.0	48.0	70.0	70.0	70.0	90.0	70.0	80.0
60"		48.0	48.0	48.0	48.0	48.0	48.0	67.3	67.3	70.0	90.0	70.0	80.0
18"	48"	70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
24"		70.0	70.0	70.0	72.0	70.0	72.0	70.0	70.0	70.0	90.0	70.0	80.0
30"		57.6	57.6	57.6	57.6	57.6	57.6	70.0	70.0	70.0	90.0	70.0	80.0
36"		48.0	48.0	48.0	48.0	48.0	48.0	70.0	70.0	70.0	90.0	70.0	80.0
42"		41.1	41.1	41.1	41.1	41.1	41.1	60.0	60.0	70.0	90.0	70.0	80.0
48"		-	-	36.0	36.0	36.0	36.0	-	-	70.0	90.0	70.0	80.0
54"		-	-	36.0	36.0	36.0	36.0	-	-	70.0	90.0	70.0	80.0
60"		-	-	36.0	36.0	36.0	36.0	-	-	70.0	90.0	70.0	80.0
18"	60"	70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
24"		70.0	70.0	70.0	72.0	70.0	72.0	70.0	70.0	70.0	90.0	70.0	80.0
30"		57.6	57.6	57.6	57.6	57.6	57.6	70.0	70.0	70.0	90.0	70.0	80.0
36"		48.0	48.0	48.0	48.0	48.0	48.0	67.3	67.3	70.0	90.0	70.0	80.0
42"		-	-	41.1	41.1	41.1	41.1	-	-	70.0	90.0	70.0	80.0
48"		-	-	36.0	36.0	36.0	36.0	-	-	70.0	90.0	70.0	80.0
54"		-	-	-	-	32.0	32.0	-	-	-	-	62.2	71.1
60"		-	-	-	-	28.8	28.8	-	-	-	-	56.0	64.0
18"	72"	70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
24"		70.0	70.0	70.0	72.0	70.0	72.0	70.0	70.0	70.0	90.0	70.0	80.0
30"		57.6	57.6	57.6	57.6	57.6	57.6	64.2	64.2	70.0	90.0	70.0	80.0
36"		-	-	48.0	48.0	48.0	48.0	-	-	70.0	90.0	70.0	80.0
42"		-	-	-	-	41.1	41.1	-	-	-	-	70.0	80.0
48"		-	-	-	-	36.0	36.0	-	-	-	-	70.0	80.0
54"		-	-	-	-	32.0	32.0	-	-	-	-	62.2	71.1
60"		-	-	-	-	28.8	28.8	-	-	-	-	56.0	64.0
18"	84"	70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
24"		70.0	70.0	70.0	72.0	70.0	72.0	70.0	70.0	70.0	90.0	70.0	80.0
30"		-	-	57.6	57.6	57.6	57.6	-	-	70.0	90.0	70.0	80.0
36"		-	-	-	-	48.0	48.0	-	-	-	-	70.0	80.0
42"		-	-	-	-	41.1	41.1	-	-	-	-	70.0	80.0
48"		-	-	-	-	36.0	36.0	-	-	-	-	70.0	80.0
18"	90"	70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
24"		70.0	70.0	70.0	72.0	70.0	72.0	70.0	70.0	70.0	90.0	70.0	80.0
30"		-	-	57.6	57.6	57.6	57.6	-	-	70.0	90.0	70.0	80.0
36"		-	-	-	-	48.0	48.0	-	-	-	-	70.0	80.0
42"		-	-	-	-	41.1	41.1	-	-	-	-	70.0	80.0
48"		-	-	-	-	36.0	36.0	-	-	-	-	70.0	80.0
18"	96"	70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
24"		-	-	70.0	72.0	70.0	72.0	-	-	70.0	90.0	70.0	80.0
30"		-	-	57.6	57.6	57.6	57.6	-	-	70.0	90.0	70.0	80.0
36"		-	-	-	-	48.0	48.0	-	-	-	-	70.0	80.0
42"		-	-	-	-	41.1	41.1	-	-	-	-	70.0	80.0

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-02/04 (3 SEC. GUSTS).

DESIGN LOAD CAPACITY - PSF													
WINDOW DIMS.		ANCHOR TYPES 'A' & 'C'						ANCHOR TYPES 'B' & 'C'					
		GLASS TYPE 'A'		GLASS TYPES 'B' & 'B1'		GLASS TYPES 'C', 'C1' & 'C2'		GLASS TYPE 'A'		GLASS TYPES 'B' & 'B1'		GLASS TYPES 'C', 'C1' & 'C2'	
		EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
18"	108"	70.0	70.0	70.0	90.0	70.0	80.0	70.0	70.0	70.0	90.0	70.0	80.0
24"		-	-	70.0	72.0	70.0	72.0	-	-	70.0	90.0	70.0	80.0
30"		-	-	-	-	57.6	57.6	-	-	-	-	70.0	80.0
36"		-	-	-	-	48.0	48.0	-	-	-	-	70.0	80.0
18"	120"	56.2	56.2	70.0	90.0	70.0	80.0	56.2	56.2	70.0	90.0	70.0	80.0
24"		-	-	70.0	72.0	70.0	72.0	-	-	70.0	90.0	70.0	80.0
30"		-	-	-	-	57.6	57.6	-	-	-	-	70.0	80.0
36"		-	-	-	-	48.0	48.0	-	-	-	-	70.0	80.0



Engr. DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538
APR 09 2008

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 08-0417-06
Expiration Date NOV. 6, 2013
By *Maunel Perez*
Miami Dade Product Control
Division

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
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TEL. (305) 262-6978 FAX. (305) 262-6978

SERIES-1500 ALUMINUM FIXED WINDOW (L.M.I.)

E.S. WINDOWS
5220 N.W. 72 AVE. BAY #4
MIAMI, FL. 33166
TEL. (305) 640-9857 FAX. (305) 593-2074

no	date	by	description
A	09.25.03	REV. PER BCCO	COMMENTS
B	09.05.05	CHARTS REV.	
C	11.11.06	SHAPES ADDED	
D	03.26.08	GLASS TYPE C2 ADDED	

date: 07-31-03

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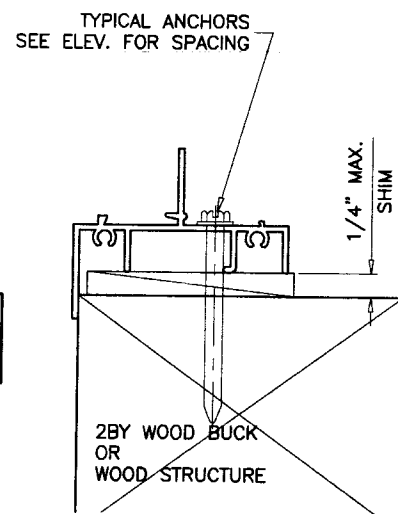
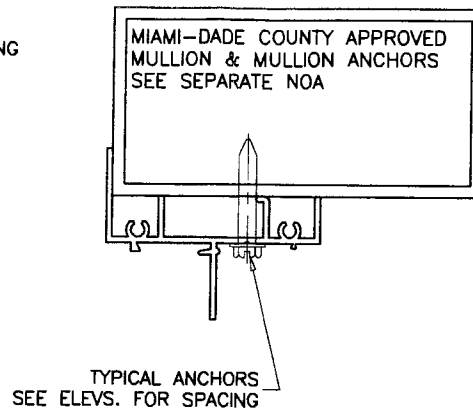
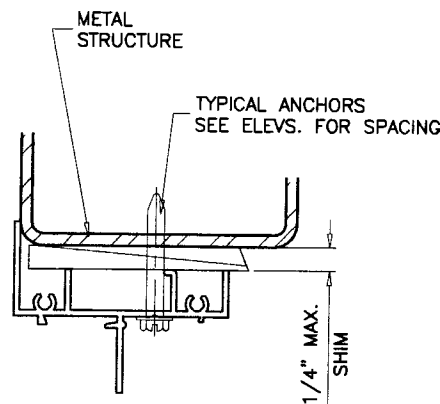
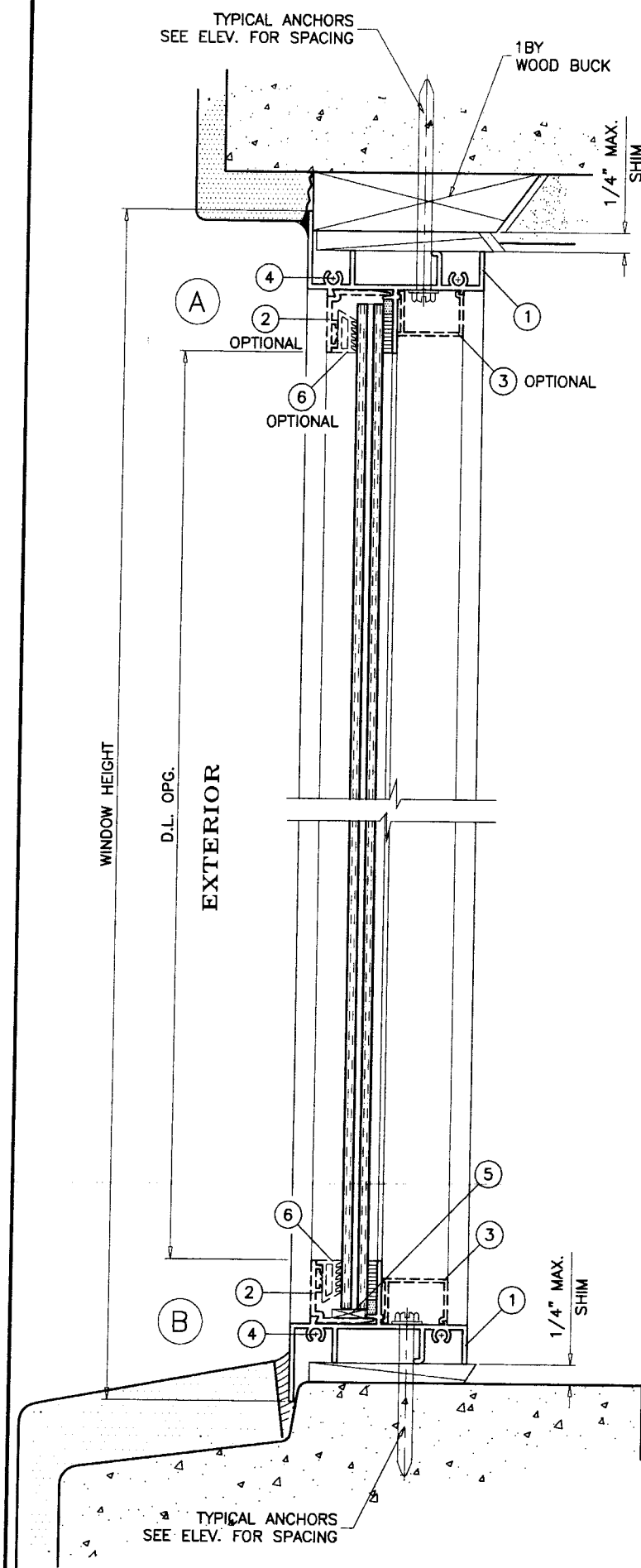
dr. by: HAMID

chk. by:

drawing no.
W03-57

sheet 3 of 7

COMP-ANL\W03-57ESW



WOOD BUCKS AND METAL STRUCTURE NOT BY E.S. WINDOWS, MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A' - 3/16\"

INTO 2BY WOOD BUCKS OR WOOD STRUCTURE
1-3/8\"

THRU 1BY BUCKS INTO CONC. OR MASONRY
1-1/4\"

DIRECTLY INTO CONC. OR MASONRY
1-1/4\"

3/16\"

INTO METAL STRUCTURES

STEEL : 12 GA. MIN. (Fy = 36 KSI MIN.)

ALUMINUM : 1/8\"

(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPE 'B' - 1/4\"

INTO 2BY WOOD BUCKS OR WOOD STRUCTURE
1-3/8\"

THRU 1BY BUCKS INTO CONC. OR MASONRY
1-1/4\"

DIRECTLY INTO CONC. OR MASONRY
1-1/4\"

#14 SMS OR SELF DRILLING SCREWS

INTO METAL STRUCTURES

STEEL : 12 GA. MIN. (Fy = 36 KSI MIN.)

ALUMINUM : 1/8\"

(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPE 'C' - #10 SMS OR SELF DRILLING SCREWS

INTO DADE COUNTY APPROVED MULLIONS
(NO SHIM SPACE)

ANCHOR EDGE DISTANCES:

INTO CONCRETE AND MASONRY = 1-3/8\"

INTO WOOD STRUCTURE = 1\"

INTO METAL STRUCTURE = 1/2\"

SEALANT:

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH WHITE/ALUM COLOR SILICONE.

Engr. DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
C.A.N. 3538

As Complied with Florida Building Code
Acceptance No. **DB-0417-06**
Expiration Date **NOV. 6, 2013**
By **Manuel Perez**
Miami-Dade Product Control Division

APR 09 2008

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COMP-ANL\W03-57ESW

E.S. WINDOWS
5220 N.W. 72 AVE. BAY #4
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TEL. (305) 640-9857 FAX. (305) 593-2074

revisions:		by description		REV. PER BCCO COMMENTS	
no	date				
A	09.25.03				
B	09.05.05				
C	11.11.06				
D	03.26.08				

date: 07-31-03

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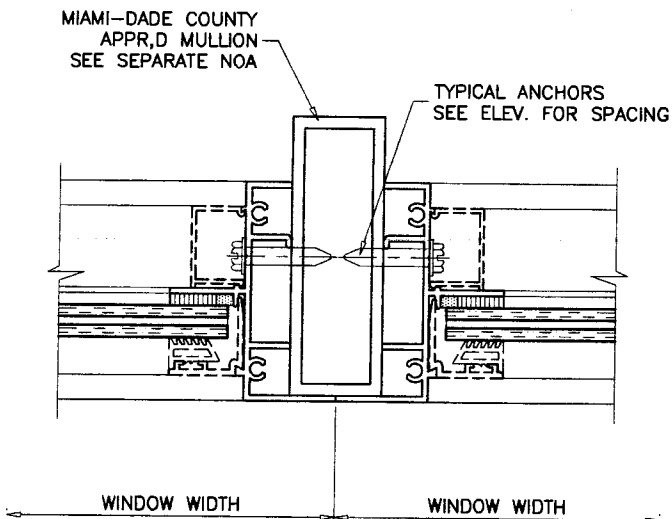
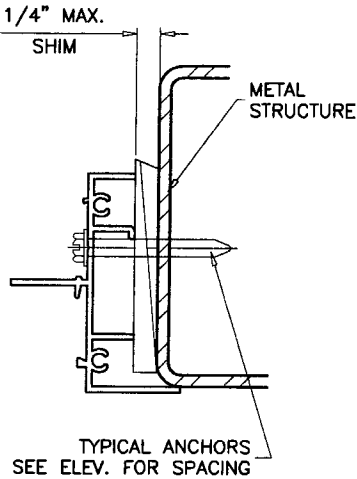
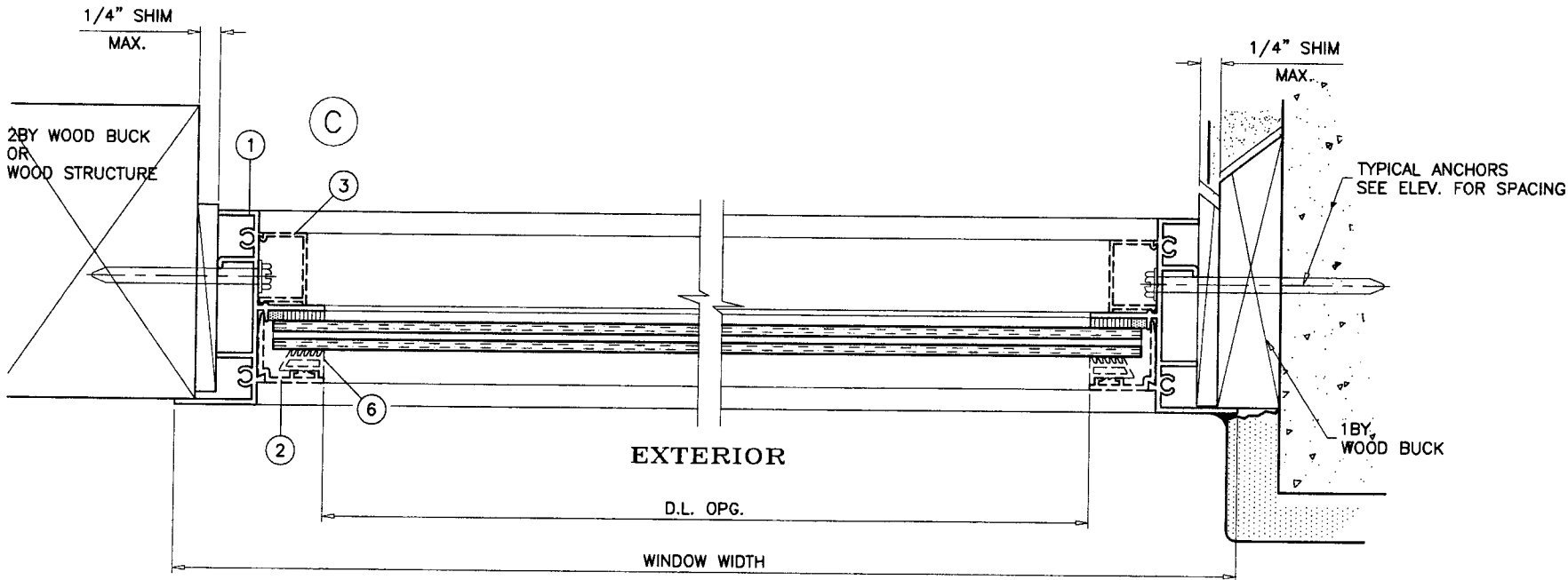
dr. by: HAMID

chk. by:

drawing no.
W03-57

sheet 4 of 7

ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	ES5001	4	WINDOW FRAME	6063-T5	-
2	ES2000-8	OPTIONAL	GLAZING STOP	6063-T6	-
3	ES5002	4	FRAME COVER (OPTIONAL)	6063-T5	-
4	#8 X 1"	AS REQD.	ASSEMBLY SCREWS	CRS	PH SMS
5	-	2/ LITE	SETTING BLOCK	NEOPRENE	7/16" X 3/16" X 3-1/2" LONG
6	ES2000-10	OPTIONAL	GLAZING GASKET	SOFT PVC	-
7	ES1505	-	FLUSH FRAME ADAPTER	6063-T5	OPTIONAL



Engr: DR. HUMAYOUN FAROOQ
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COMP - ANL\W03-57ESW

SERIES-1500 ALUMINUM FIXED WINDOW (L.M.I.)

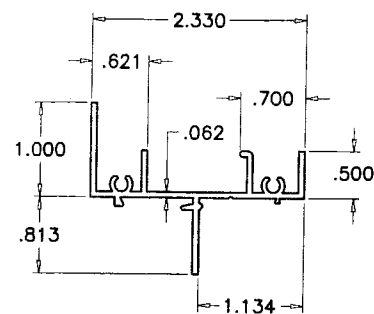
E.S. WINDOWS
5220 N.W. 72 AVE. BAY #4
MIAMI, FL. 33166
TEL. (305) 640-9857 FAX. (305) 593-2074

revisions:	no	date	by	description
	A	08.25.03	REV. PER BCCO	COMMENTS
	B	09.05.05	ANCHORS REV.	
	C	11.11.06	SHAPES ADDED	
	D	03.26.08	NO CHANGE THIS SHEET	

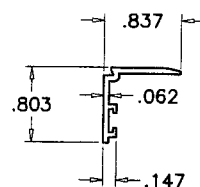
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dr. by:	HAMID
chk. by:	

drawing no.
W03-57

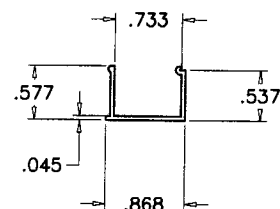
sheet 5 of 7



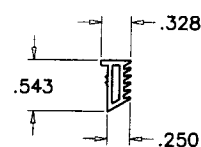
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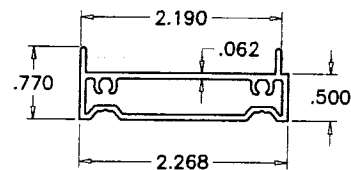
GLAZING STOP (OPTIONAL)



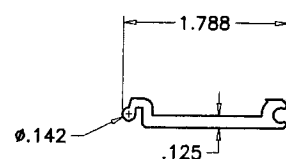
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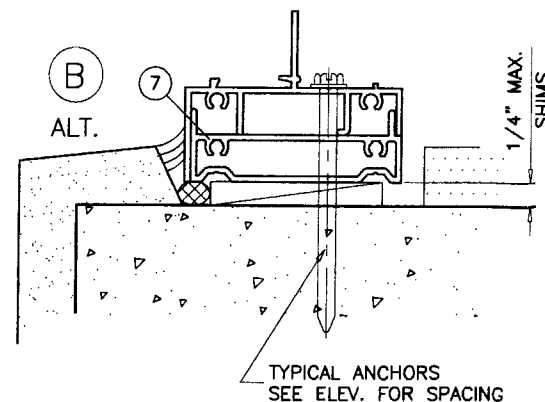
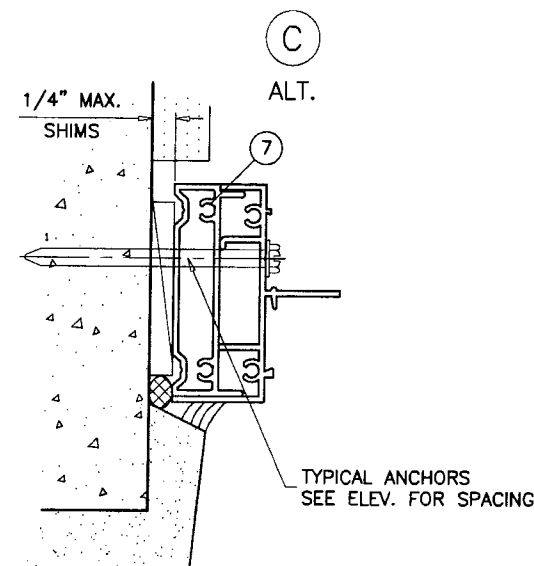
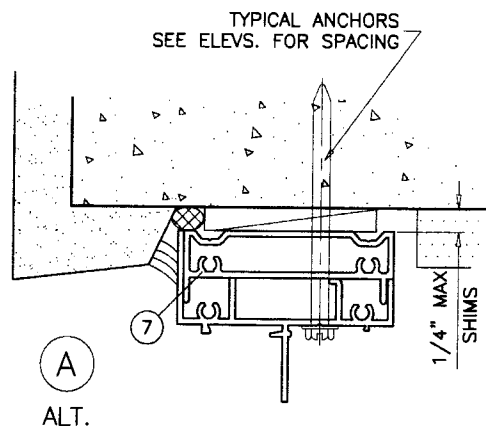
BULB VINYL (OPTIONAL)



FLUSH FRAME ADAPTER



ALUM CORNER LOCK
(6063-T5)



Engr: DR. HUMAYOUN FAROOQ
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Expiration Date Nov. 6, 2013
By: *[Signature]*
Miami Trade Product Control
Division

APR 09 2008

af c
AL-FAROOQ CORPORATION
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1235 S.W. 87 AVE
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COMP-ANL\W03-57ESW

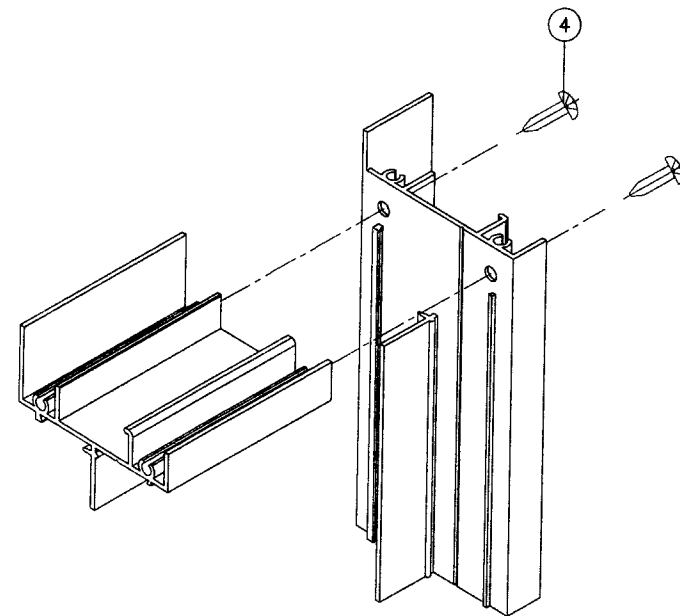
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revisions:	no	date	by	description
	A	09.25.03		NO CHANGE THIS SHEET
	B	09.05.05		FRAME ADAPTER ADDED
	C	11.11.06		SHAPES ADDED
	D	03.26.08		NO CHANGE THIS SHEET

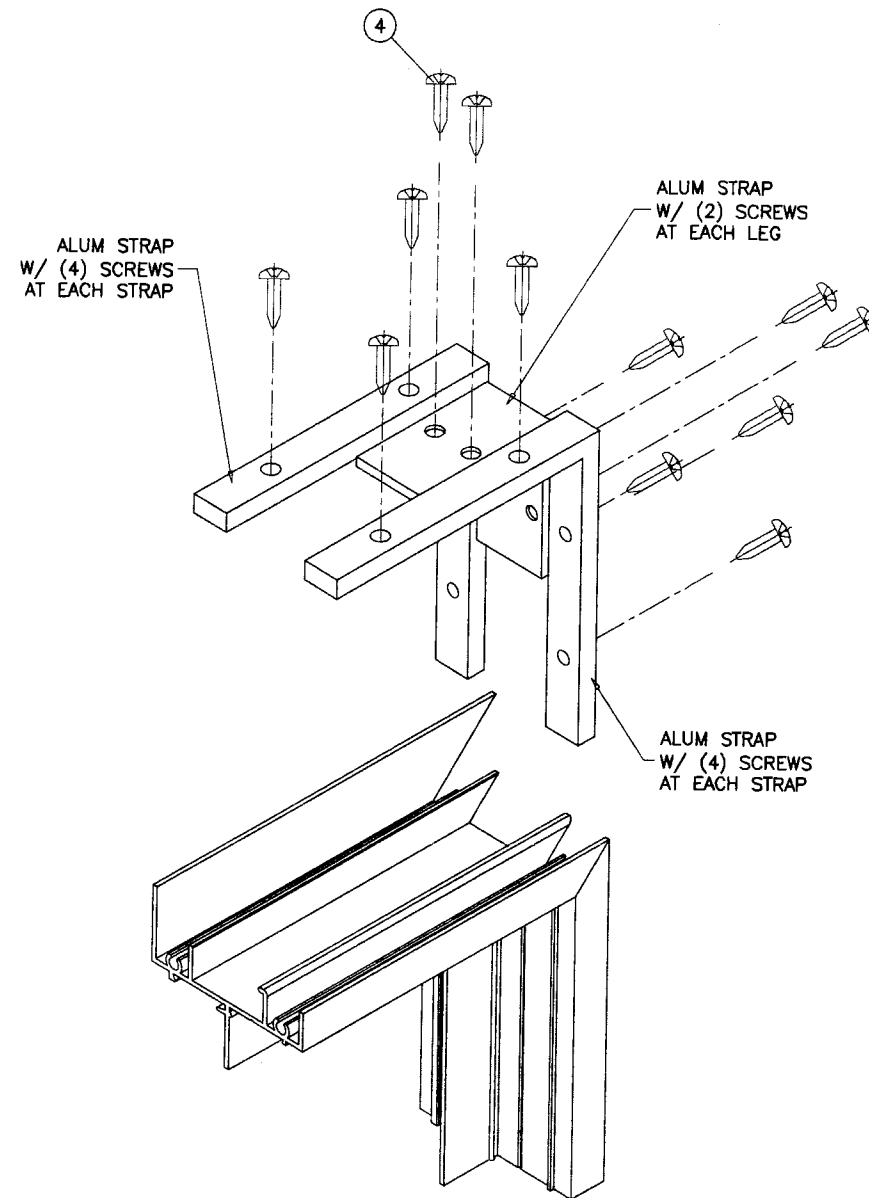
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scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
W03-57

sheet 6 of 7

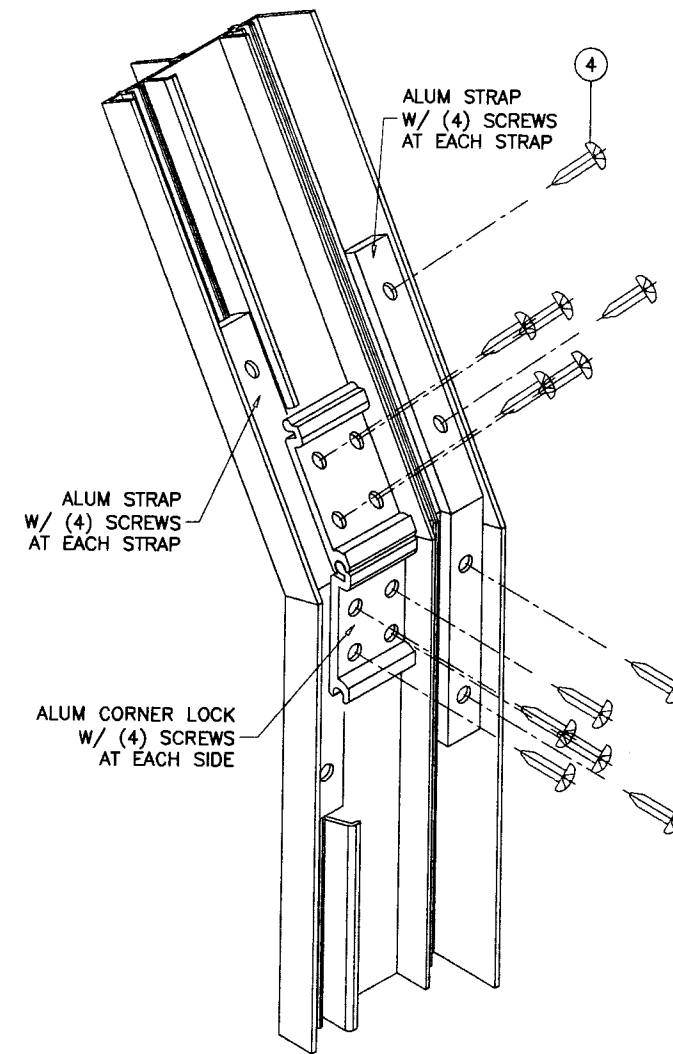


RECT. OR SQUARE WINDOWS



RECT. OR SQUARE WINDOWS

TYPICAL CORNER DETAILS



CIRCULAR WINDOWS

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
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	D	03.26.08		NO CHANGE THIS SHEET

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scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
W03-57
sheet 7 of 7