



**BUILDING CODE COMPLIANCE OFFICE (BCCO)  
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA  
METRO-DADE FLAGLER BUILDING**

**140 WEST FLAGLER STREET, SUITE 1603  
MIAMI, FLORIDA 33130-1563  
(305) 375-2901 FAX (305) 375-2908**

**NOTICE OF ACCEPTANCE (NOA)**

[www.miamidade.gov](http://www.miamidade.gov)

**R. C. Aluminum Shutters, Inc.  
2970 N.W. 75<sup>th</sup> Avenue  
Miami, Florida 33122**

**SCOPE:**

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

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

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

**DESCRIPTION: "AS-500 Advanced" Aluminum Accordion Shutter**

**APPROVAL DOCUMENT:** Drawing No. 06-02, titled "AS-500 Advanced Alum Accordion Shutter", sheets 1 through 7 of 7, prepared by Al-Farooq Corporation, dated March 06, 2006, last revision #C dated June 27, 2007, 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**

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA # 06-0407.09 and consists of this page 1, evidence submitted pages E-1, E-2, & E-3 and approval document mentioned above.

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

*Helmy A. Makar*  
09/27/2007

**NOA No. 07-0306.12  
Expiration Date: 06/29/2011  
Approval Date: 09/27/2007**



**R. C. Aluminum Shutters, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

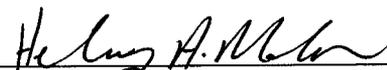
**1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 06-0407.09**

**A. DRAWINGS**

1. *Drawing No. 06-02, titled "AS-500 Advanced Alum Accordion Shutter", sheets 1 through 7 of 7, prepared by Al-Farooq Corporation, dated March 06, 2006, last revision #A dated May 24, 2006, signed and sealed by Humayoun Farooq, P.E.*

**B. TESTS**

1. *Test report on Large Missile Impact Test and Uniform Static Air Pressure Test "Aluminum Accordion Shutter", prepared by Hurricane Engineering & Testing, Inc., Report # HETI-05-1489, dated January 13, 2006, signed and sealed by Ivonne Ghia, P.E.*
2. *Test report on Large Missile Impact Test and Uniform Static Air Pressure Test "Aluminum Accordion Shutter", prepared by Hurricane Engineering & Testing, Inc., Report # HETI-05-1491, dated January 13, 2006, signed and sealed by Ivonne Ghia, P.E.*
3. *Test report on Uniform Static Air Pressure Test "Aluminum Accordion Shutter", prepared by Hurricane Engineering & Testing, Inc., Report # HETI-05-1487, dated January 13, 2006, signed and sealed by Ivonne Ghia, P.E.*
4. *Test report on Uniform Static Air Pressure Test "Aluminum Accordion Shutter", prepared by Hurricane Engineering & Testing, Inc., Report # HETI-05-1492, dated January 13, 2006, signed and sealed by Ivonne Ghia, P.E.*
5. *Test report on Large Missile Impact Test and Cyclic Wind Pressure Test "Aluminum Accordion Shutter", prepared by Hurricane Engineering & Testing, Inc., Report # HETI-05-1487A, dated January 13, 2006, signed and sealed by Ivonne Ghia, P.E.*
6. *Test report on Large Missile Impact Test and Cyclic Wind Pressure Test "Aluminum Accordion Shutter", prepared by Hurricane Engineering & Testing, Inc., Report # HETI-05-1490, dated January 13, 2006, signed and sealed by Ivonne Ghia, P.E.*
7. *Test report on Large Missile Impact Test and Cyclic Wind Pressure Test "Aluminum Accordion Shutter", prepared by Hurricane Engineering & Testing, Inc., Report # HETI-06-2064, dated January 13, 2006, signed and sealed by Ivonne Ghia, P.E.*
8. *Test report on Large Missile Impact Test and Cyclic Wind Pressure Test "Aluminum Accordion Shutter", prepared by Hurricane Engineering & Testing, Inc., Report # HETI-06-2080, dated January 13, 2006, signed and sealed by Ivonne Ghia, P.E.*



**Helmy A. Makar, P.E., M.S.**  
**Product Control Examiner**  
**NOA No. 07-0306.12**  
**Expiration Date: 06/29/2011**  
**Approval Date: 09/27/2007**

**R. C. Aluminum Shutters, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**C. CALCULATIONS**

1. *Comparative analysis and anchor calculations dated March 31, 2006, 86 pages, prepared by Al-Farooq Corporation, signed and sealed by Humayoun Farooq, P.E.*
2. *Anchor calculations dated May 31, 2006, 8 pages, prepared by Al-Farooq Corporation, signed and sealed by Humayoun Farooq, P.E.*

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. *Tensile Test Report prepared by Hurricane Engineering & Testing, Inc., Report # HETI-06-T518, dated January 13, 2006, signed and sealed by Ivonne Ghia, P.E.*

**2. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. *Drawing No. 06-02, titled "AS-500 Advanced Alum Accordion Shutter", sheets 1 through 7 of 7, prepared by Al-Farooq Corporation, dated March 06, 2006, last revision #C dated June 27, 2007, signed and sealed by Humayoun Farooq, P.E.*

**B. TESTS**

1. *See Association's generic approval under 07-3252.*

**C. CALCULATIONS**

1. *See Association's generic approval under 07-3252.*

**D. QUALITY ASSURANCE**

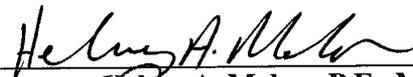
1. *By Miami-Dade County Building Code Compliance Office.*

**E. MATERIAL CERTIFICATIONS**

1. *See Association's generic approval under 07-3252.*

**F. STATEMENTS**

1. *Release letter issued by the RC Advanced Shutter Systems Association, Inc. dated March 06, 2007, certifying this product to meet the criteria of product tested and approved, and allowing RC Aluminum Shutters, Inc. to use the test results approved under Miami Dade County Approval No. 07-3252, signed by Mr. Richard Gallo.*

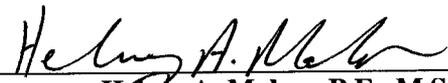


**Helmy A. Makar, P.E., M.S.**  
**Product Control Examiner**  
**NOA No. 07-0306.12**  
**Expiration Date: 06/29/2011**  
**Approval Date: 09/27/2007**

**R. C. Aluminum Shutters, Inc.**

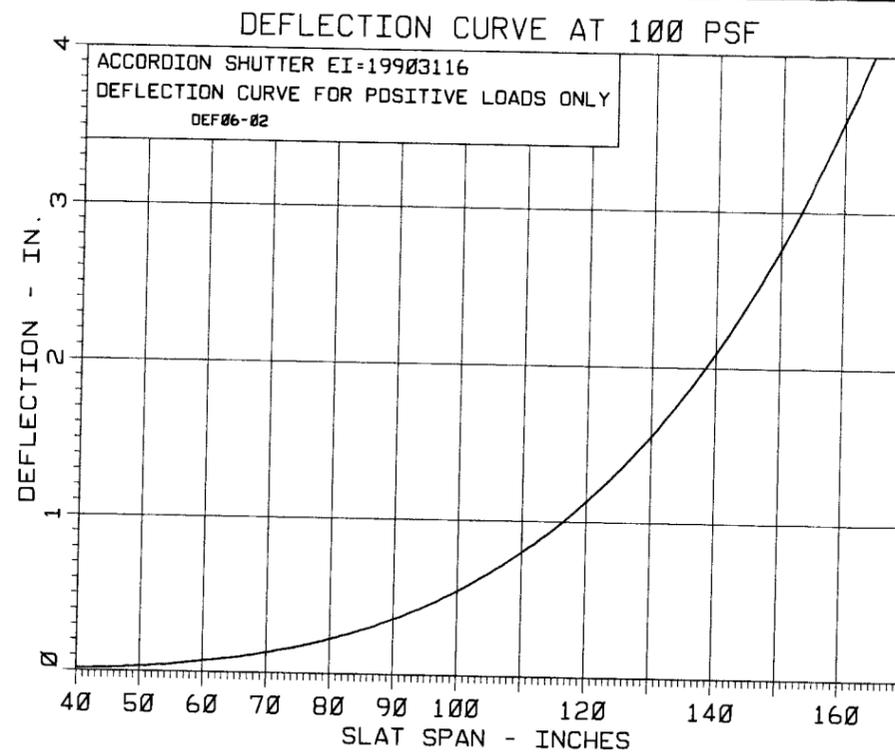
**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

2. *Acknowledgment letter by RC Aluminum Shutters, Inc., dated April 10, 2007, signed by Mr. Richard Gallo.*
3. *Letter by Al-Farooq Corporation, dated June 12, 2007, signed and sealed by Mr. Humayoun Farooq, P.E., certifying that the drawing (No. 06-02) prepared for RC Aluminum Shutters, Inc. is engineering wise identical to RC Advanced Shutter Systems Association, Inc. generic drawing (No. 06-02A).*

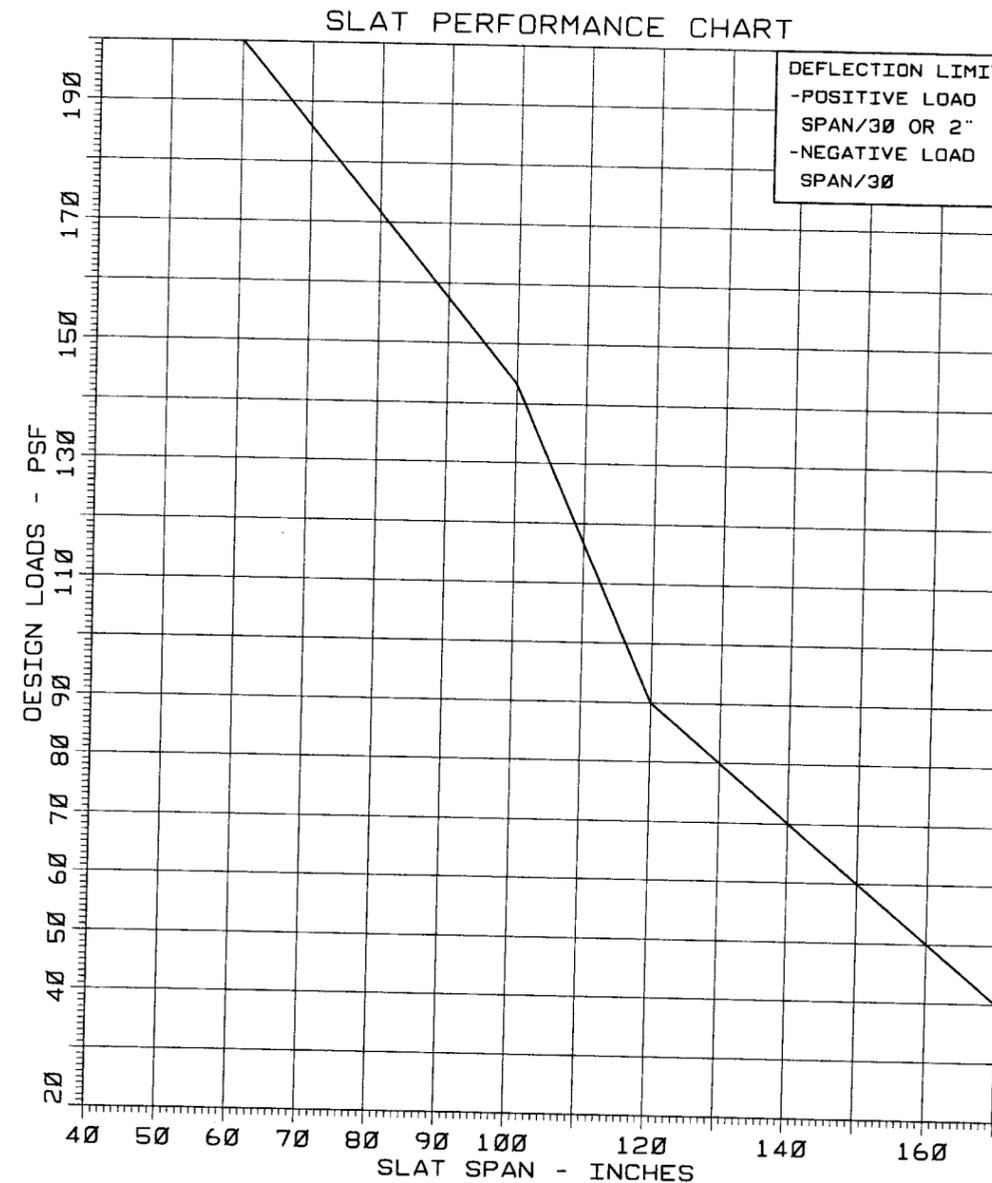


---

**Henry A. Makar, P.E., M.S.**  
**Product Control Examiner**  
**NOA No. 07-0306.12**  
**Expiration Date: 06/29/2011**  
**Approval Date: 09/27/2007**



MINIMUM SEPARATION FROM GLASS			
SEPARATION REQD. DUE TO WIND LOAD		SEPARATION REQD. DUE TO LARGE MISSILE IMPACT	
SHUTTER SPAN = H =	IN.	FOR SLAT SPANS UPTO	SEPARATION
DESIGN LOAD = Pd =	PSF	96"	2-1/2"
FACTOR = K = Pd/100 =	IN.	120"	3"
READING FROM SPAN D. CURVE = D =	IN.	170"	3-5/8"
DEFLECTION AT Pd = K*D =	IN.		
MIN. SEPARATION REQD. = K*D+1" =	IN.		
FOR INSTALLATIONS UPTO 30' OF GRADE USE MAXIMUM OF WIND LOAD OR IMPACT LOAD REQUIREMENTS SHOWN ABOVE			
FOR INSTALLATIONS ABOVE 30' OF GRADE IGNORE LARGE MISSILE IMPACT REQUIREMENT.			
NOTE: NO PART OF SHUTTER SHALL BE UNDER 30' ABOVE GRADE TO WAIVE LARGE MISSILE IMPACT REQUIREMENT.			



USE SLAT PERFORMANCE CHART TO VERIFY SLAT CAPACITY FOR THE REQUIRED DESIGN LOAD FOR THE PARTICULAR LOCATION.

DESIGN LOADS SHALL BE CALCULATED AS PER REQUIREMENTS OF ASCE 7-02.

**GENERAL NOTES**

- THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2004 EDITION INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).
- DESIGN CRITERIA FOR ALUMINUM, MINIMUM MECHANICAL PROPERTIES, AND SAFETY FACTORS ARE IN ACCORDANCE WITH THE "ALUMINUM CONSTRUCTION MANUAL" LATEST EDITION.
- ALUMINUM ALLOYS: ALL EXTRUSIONS SHALL BE ALLOY AS SHOWN
- STEEL SURFACES TO BE PLACED IN CONTACT WITH ALUMINUM SHALL BE GIVEN ONE COAT OF ZINC CHROMATE PRIMER IN ACCORDANCE WITH FEDERAL SPEC. NO. TTP-645, OR BE GALVANIZED.
- ANCHORS SHALL BE AS SHOWN ON DETAILS. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
- ALL BOLTS SHALL BE STAINLESS STEEL, ALUMINUM ALLOY 2024-T4 OR 7075-T6, OR PLATED STEEL. WING NUTS TO BE OF ZINC ALLOY.
- DESIGN CRITERIA FOR SLATS: MAX DEFLECTION  $\leq$  THE LESSER OF L/30 OR 2".
- ANCHORING OR LOADING CONDITIONS OTHER THAN THOSE 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.

**PRODUCT MARKING**

A LABEL SHALL BE AFFIXED ON LOCKING MEMBER OF UNIT ABOVE LOCK WITH THE FOLLOWING STATEMENT.

R.C. ALUMINUM SHUTTERS INC., MIAMI, FL.  
'MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED'

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

JUN 27 2007

**afc**

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

AS-500 ADVANCED ALUM ACCORDION SHUTTER

**R.C. ALUMINUM SHUTTERS, INC.**  
2805 N.W. 75 TH AVE.  
MIAMI, FL. 33122  
TEL. (305) 592-1515 FAX. (305) 592-2184

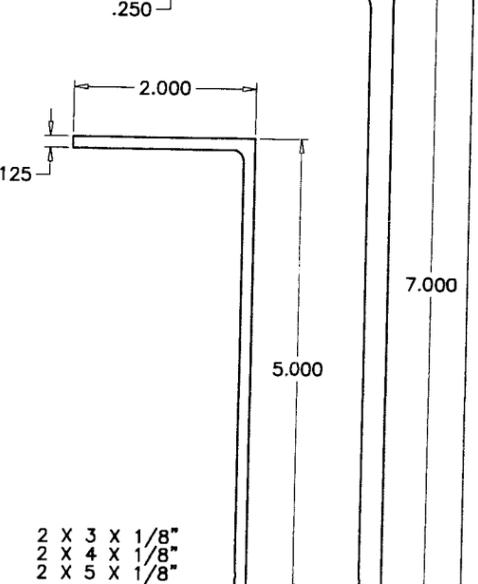
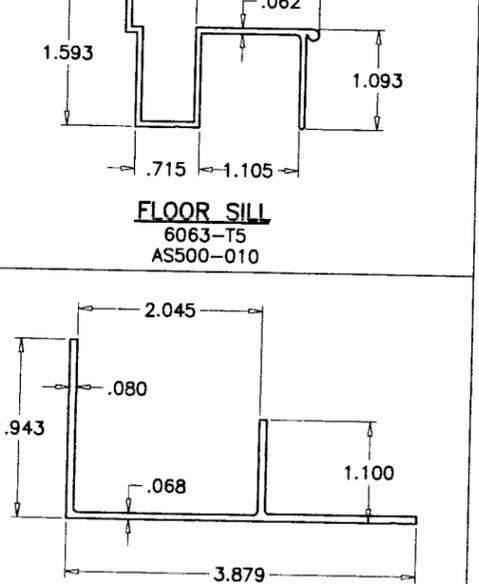
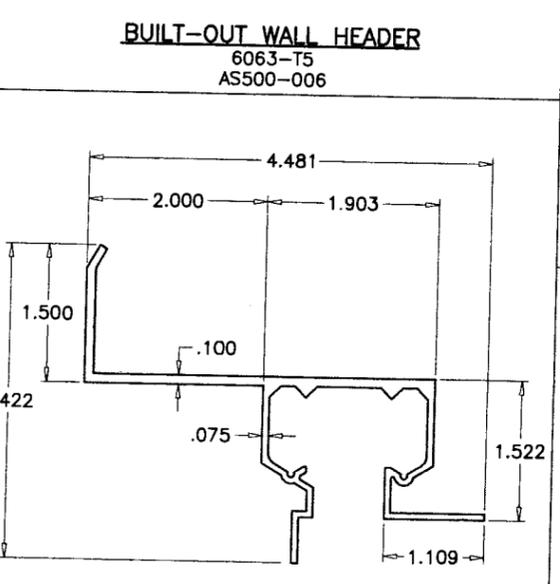
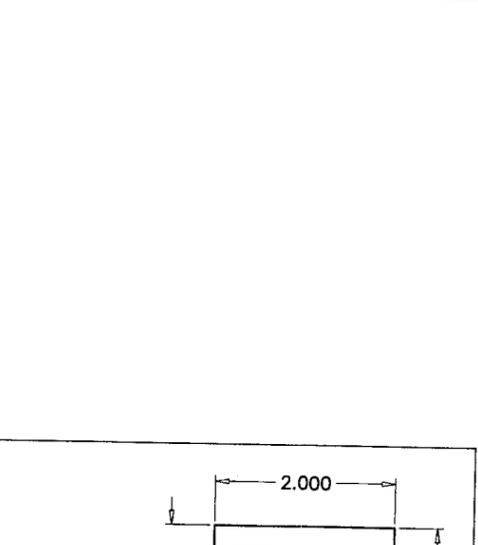
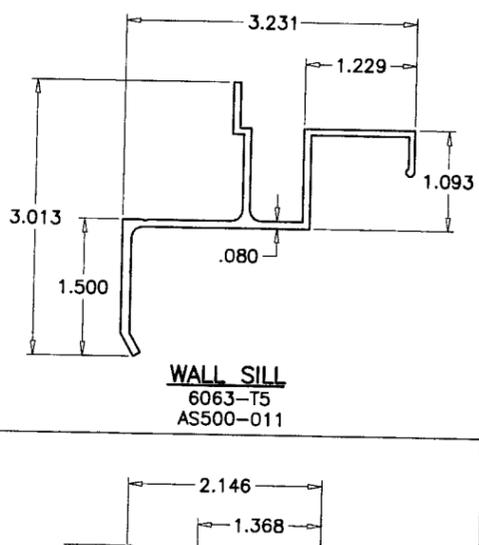
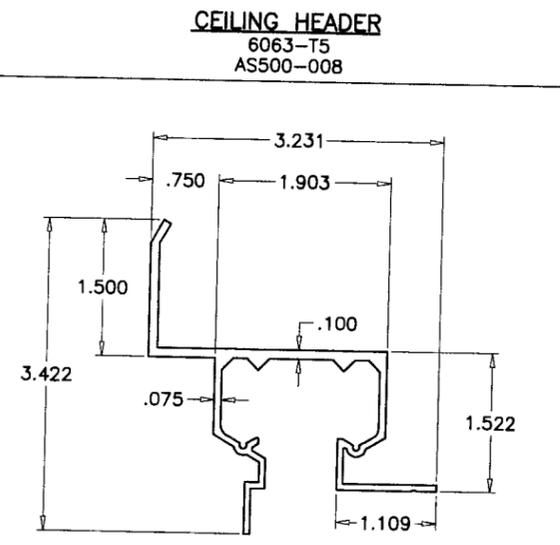
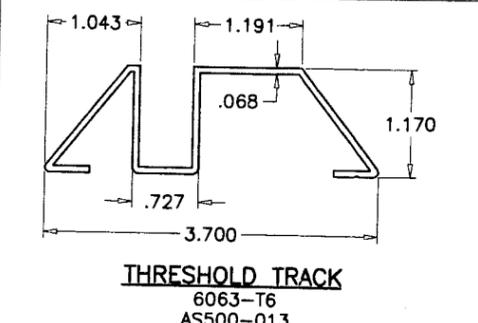
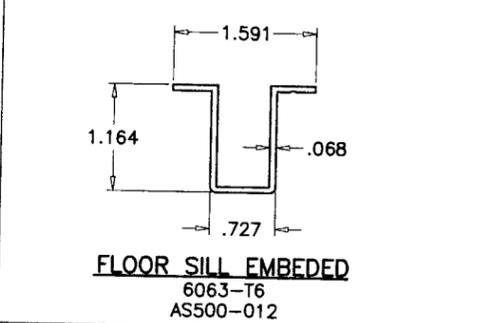
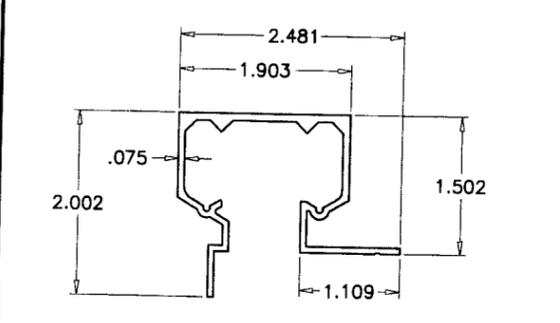
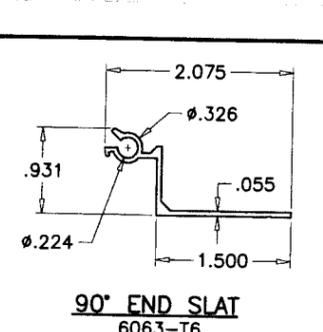
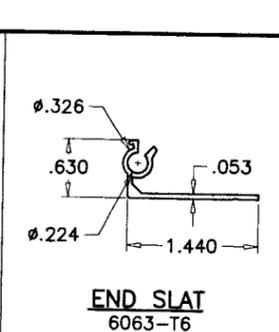
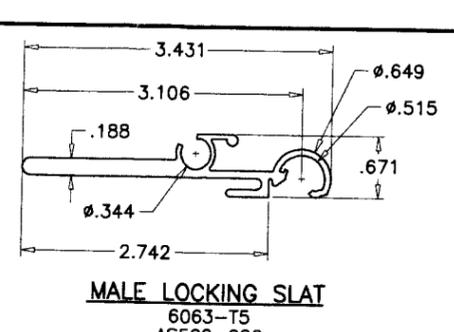
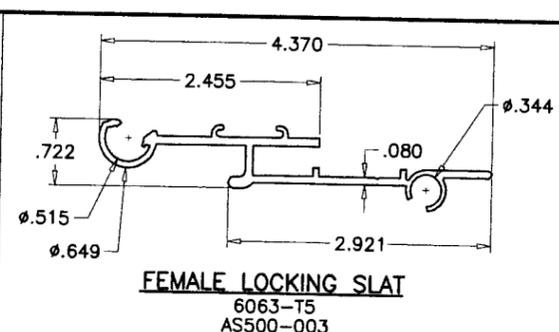
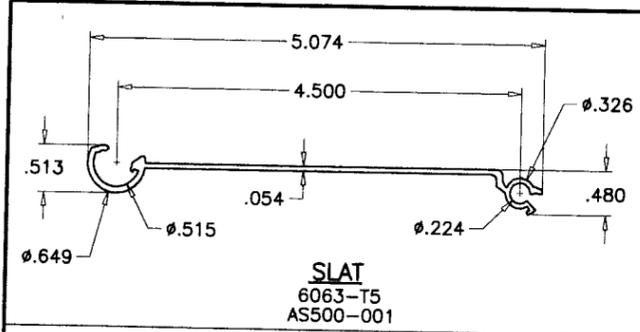
no	date	description	REV. PER BCCO COMMENTS	NO CHANGE THIS SHEET
A	05.24.06			
B	01.30.07		SLAT CHART REV.	
C	06.27.07			

date: 03-06-06	scale: 1/2" = 1"	dr. by: HAMID	chk. by:
----------------	------------------	---------------	----------

drawing no.  
**06-02**

sheet 1 of 7

ACCORDION/06-02RC



Engr: DR. HUMAYOUN FAROOQ  
 STRUCTURES  
 FLA. PE # 16557  
 C.A.N. 3538  
 JUN 27 2007

PRODUCT REVISED  
 as complying with the Florida  
 Building Code  
 Acceptance No. 07-0306.12  
 Expiration Date 06/29/2011  
 By: *Helmy A. Helmy*  
 Miami Design Product Control  
 Division

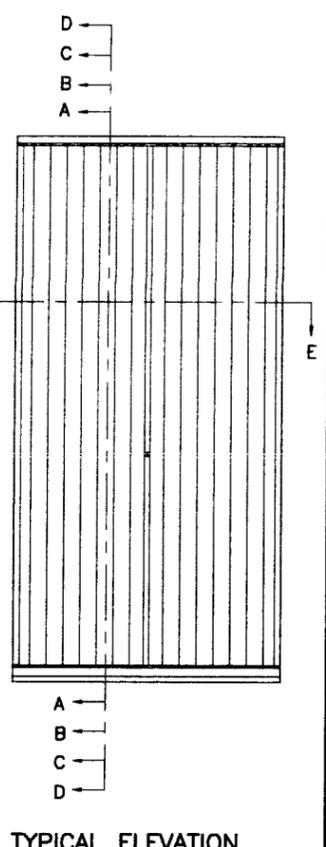
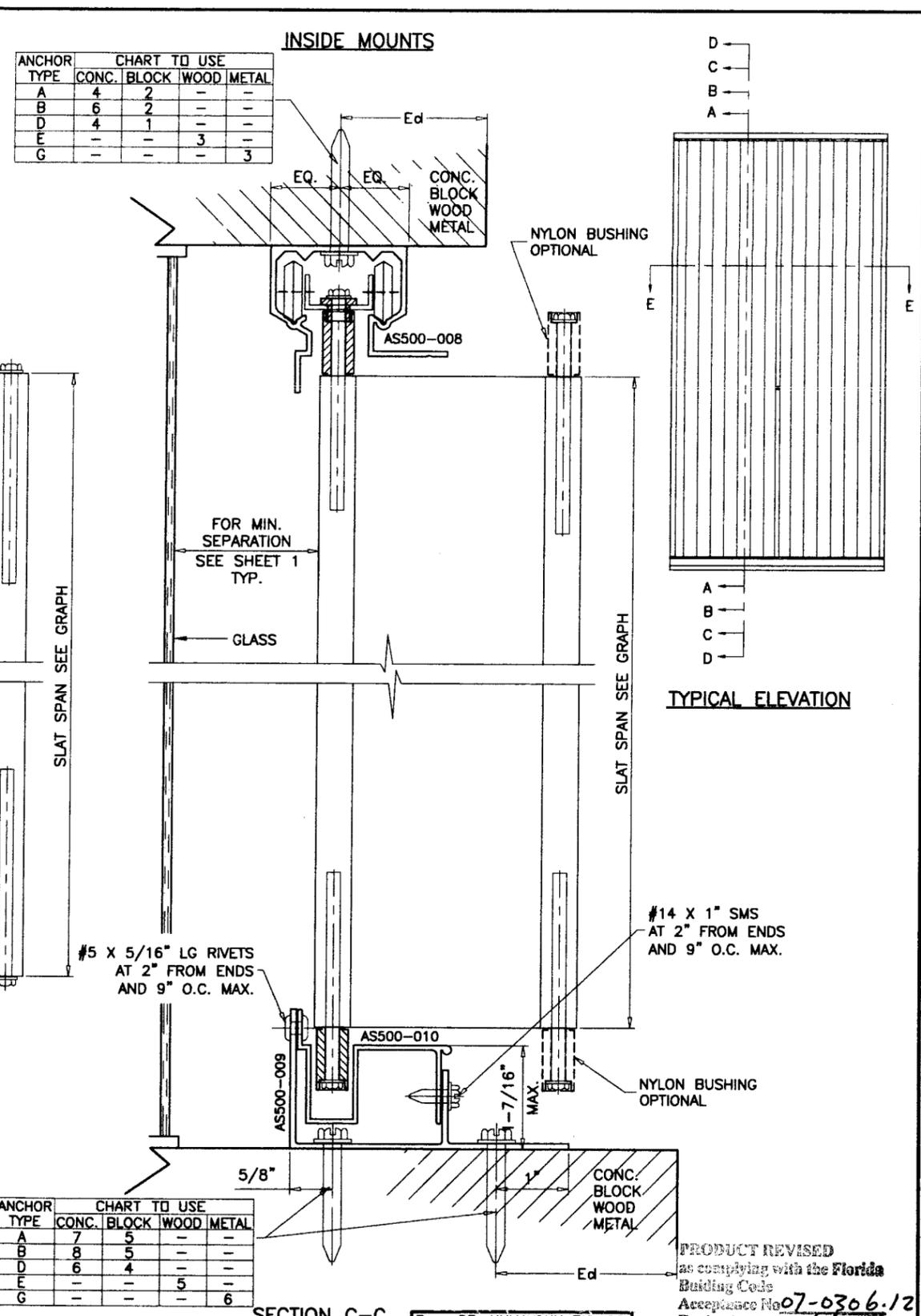
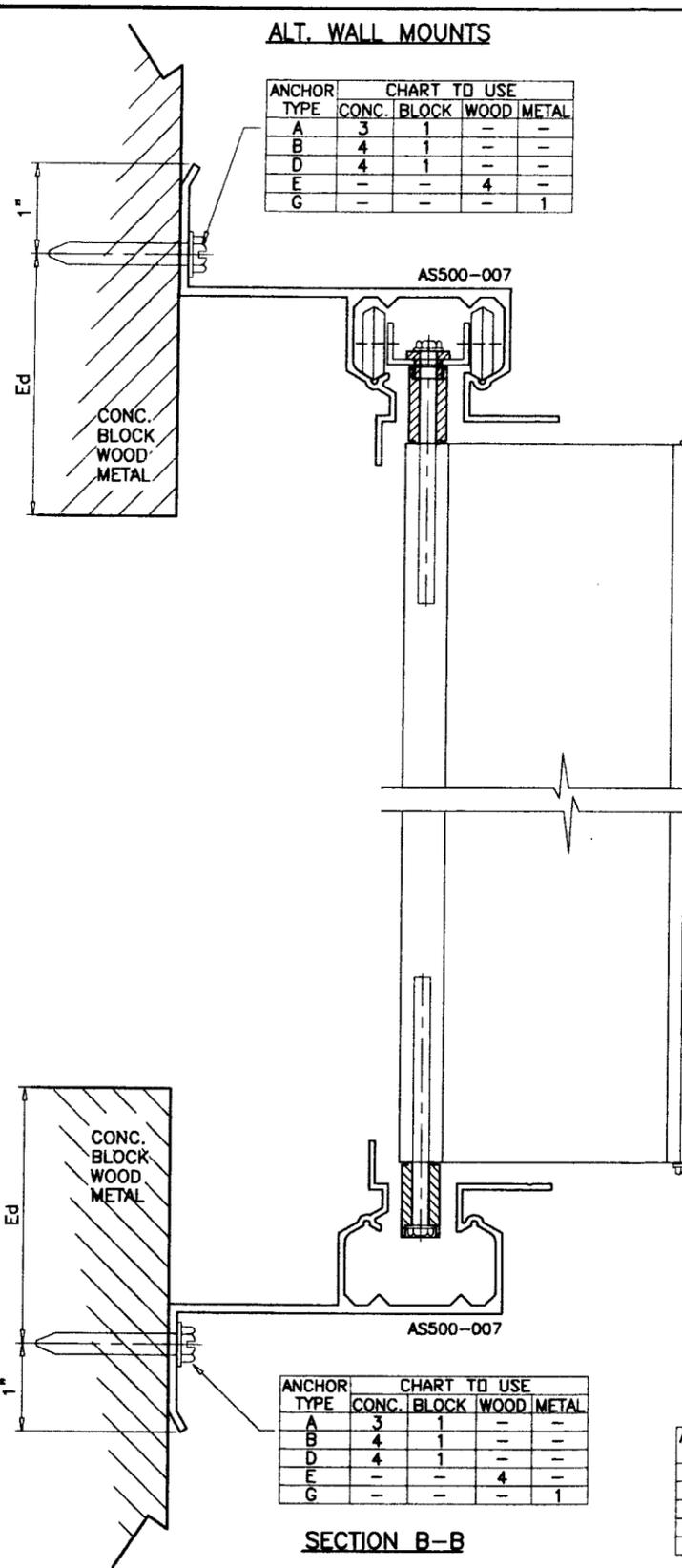
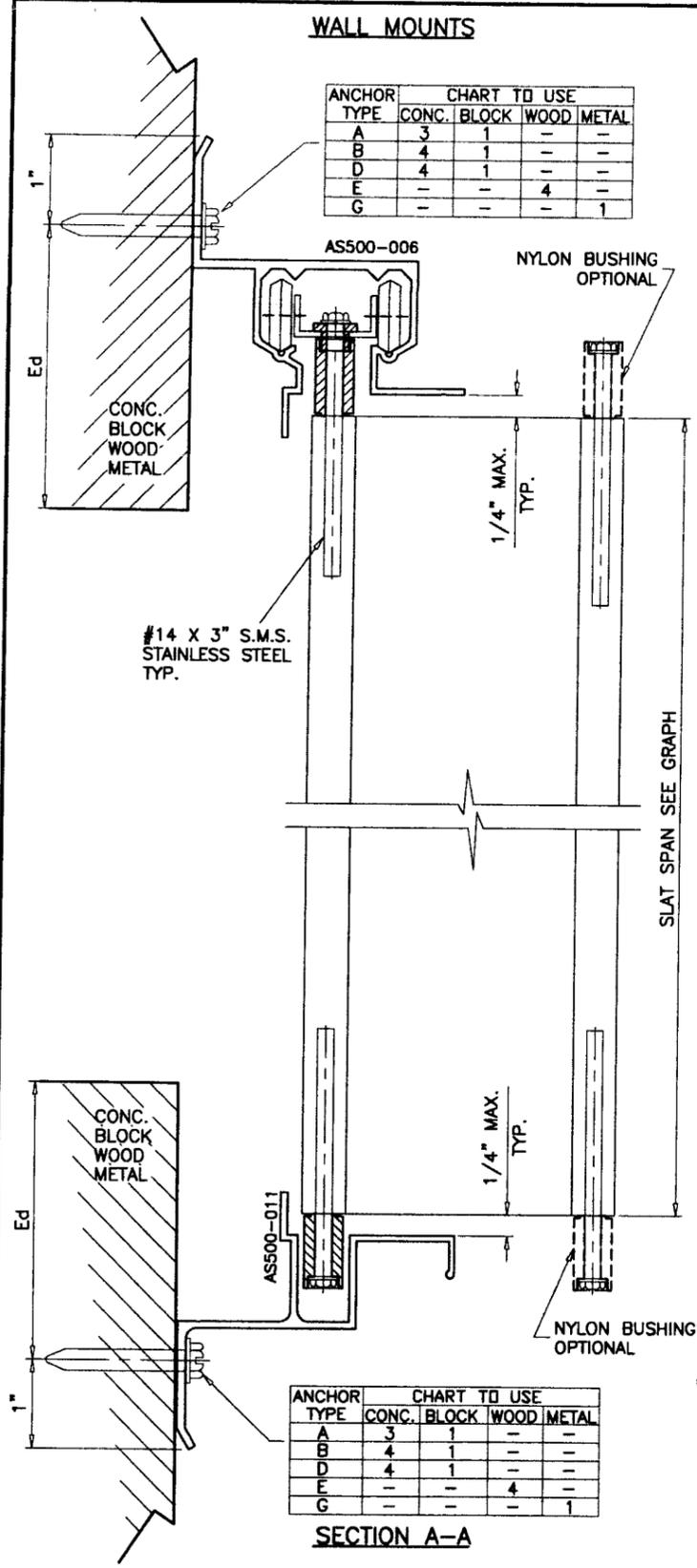
**af c**  
**AL-FAROOQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 1236 S.W. 87 AVE  
 MIAMI, FLORIDA 33174  
 TEL. (305) 264-8100 FAX. (305) 262-6978  
 ACCORDION/06-02RC

AS-500 ADVANCED ALUM ACCORDION SHUTTER  
**R.C. ALUMINUM SHUTTERS, INC.**  
 2805 N.W. 75 TH AVE.  
 MIAMI, FL. 33122  
 TEL. (305) 592-1515 FAX. (305) 592-2184

no	date	description	by
A	05.24.06	REV. PER BCCO COMMENTS	
B	01.30.07	NO CHANGE THIS SHEET	
C	06.27.07	ALUM ALLOY REV.	

date: 03-06-06  
 scale: 1/2" = 1"  
 dr. by: HAMID  
 chk. by:

drawing no.  
**06-02**  
 sheet 2 of 7



ANCHOR TYPE	CHART TO USE			
	CONC.	BLOCK	WOOD	METAL
A	3	1	-	-
B	4	1	-	-
D	4	1	-	-
E	-	-	4	-
F	-	-	-	1

SECTION A-A

ANCHOR TYPE	CHART TO USE			
	CONC.	BLOCK	WOOD	METAL
A	3	1	-	-
B	4	1	-	-
D	4	1	-	-
E	-	-	4	-
F	-	-	-	1

SECTION B-B

ANCHOR TYPE	CHART TO USE			
	CONC.	BLOCK	WOOD	METAL
A	7	5	-	-
B	8	5	-	-
D	6	4	-	-
E	-	-	5	-
F	-	-	-	6

SECTION C-C

ANCHORS: EMBEDMENT & EDGE DISTANCES SHOWN ARE BEYOND THE WALL & FLOOR COVERING (STUCCO, TILES, ETC.)

Ed = TYPICAL EDGE DISTANCE  
 CONC. & BLOCK = 12d (12 ANCHOR DIAMETERS)  
 WOOD = 5d  
 FOR LESSER EDGE DISTANCES SEE SHEET 6 OF 6.

HEADER AND SILL DETAILS CAN BE USED IN ANY COMBINATIONS.

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

JUN 27 2007

PRODUCT REVISED as complying with the Florida Building Code  
 Acceptance No. 07-0306.12  
 Expiration Date 06/29/2011  
 By: *Helmy A. Helmy*  
 Miami Data Product Control Division

FOR GENERAL NOTES AND EXTRUSION DETAILS SEE SHEET 1 OF 6.  
 FOR WOOD INSTALLATIONS SEE SHEET 5 OF 6.  
 FOR ANCHOR CHARTS SEE SHEET 6 OF 6.

**afC**

**AL-FAROOQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 1235 S.W. 87 AVE  
 MIAMI, FLORIDA 33174  
 TEL. (305) 264-8100 FAX. (305) 262-6978  
 ACCORDION/06-02RC

AS-500 ADVANCED ALUM ACCORDION SHUTTER

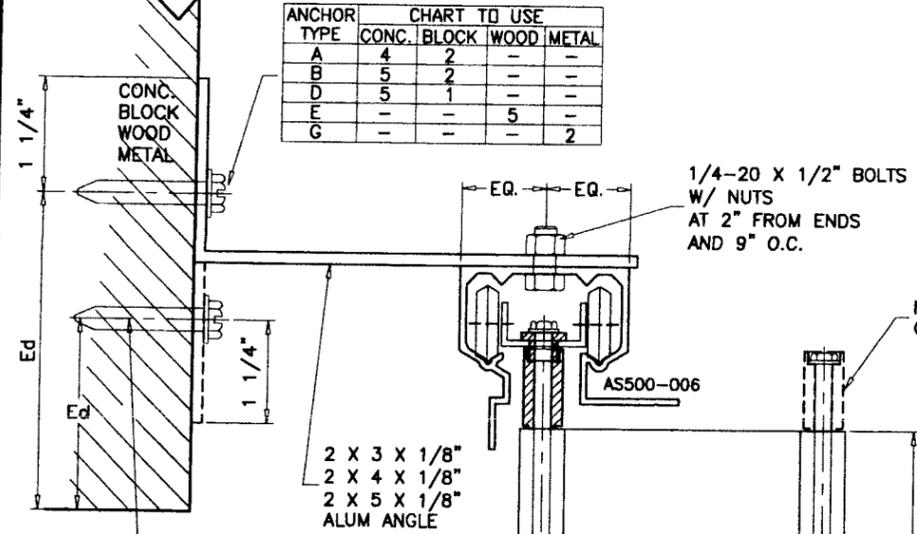
**R.C. ALUMINUM SHUTTERS, INC.**  
 2805 N.W. 75 TH AVE.  
 MIAMI, FL. 33122  
 TEL. (305) 592-1515 FAX. (305) 592-2184

NO.	DATE	DESCRIPTION
A	05.24.06	REV. PER BCCO COMMENTS
B	01.30.07	NYLON BUSHING REV.
C	06.27.07	NO CHANGE THIS SHEET

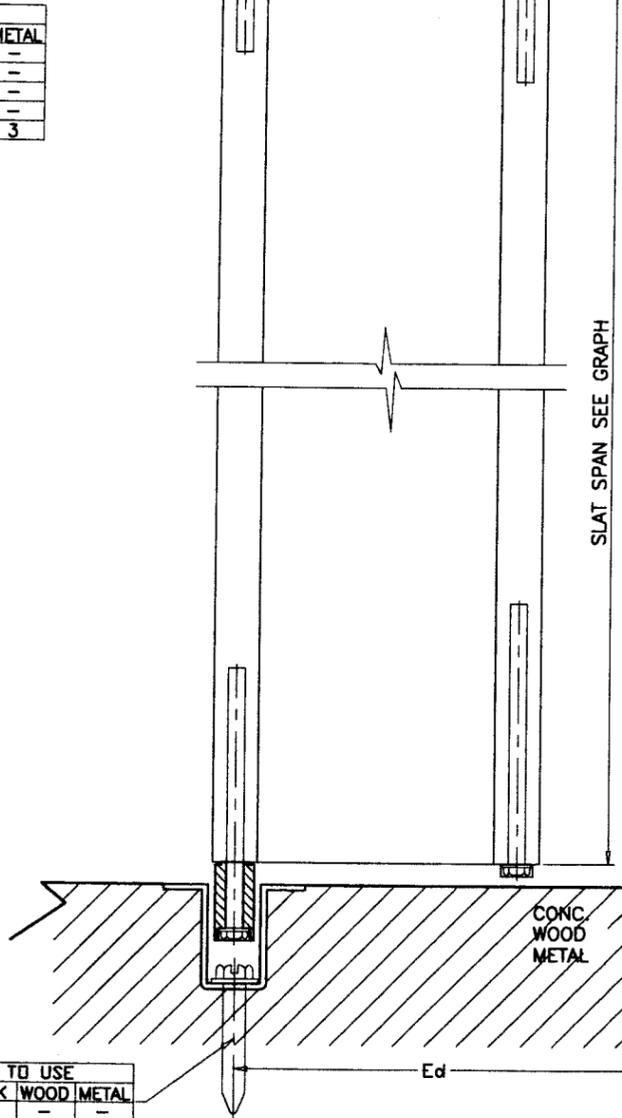
date: 03-06-06  
 scale: 1/2" = 1"  
 dr. by: HAMID  
 chk. by:

drawing no. **06-02**  
 sheet 3 of 7

**BUILT-OUT CONDITION**



ANCHOR TYPE	CHART TO USE			
	CONC.	BLOCK	WOOD	METAL
A	6	3	-	-
B	7	3	-	-
D	7	2	-	-
F	-	-	6	-
G	-	-	-	3



ANCHOR TYPE	CHART TO USE			
	CONC.	BLOCK	WOOD	METAL
A	5	2	-	-
B	6	2	-	-
D	6	2	-	-
E	-	-	6	-
G	-	-	-	3

ANCHOR TYPE	CHART TO USE			
	CONC.	BLOCK	WOOD	METAL
A	6	4	-	-
B	7	3	-	-
D	5	3	-	-
E	-	-	4	-
G	-	-	-	4

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

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 07-0306.12  
Expiration Date 06/29/2011

By *Helmy A. Helmy*  
Miami Dade Product Control  
Division

JUN 27 2007

**af c**

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

AS-500 ADVANCED ALUM ACCORDION SHUTTER

**R.C. ALUMINUM SHUTTERS, INC.**  
2805 N.W. 75 TH AVE.  
MIAMI, FL. 33122  
TEL. (305) 592-1515 FAX. (305) 592-2184

NO	DATE	DESCRIPTION
A	05.24.06	REV. PER BCCO COMMENTS
B	01.30.07	NYLON BUSHING REV.
C	06.27.07	NO CHANGE THIS SHEET

date: 03-06-06	scale: 1/2" = 1"	dr. by: HAMID	chk. by:
----------------	------------------	---------------	----------

drawing no.  
**06-02**  
sheet 4 of 7

**afc**

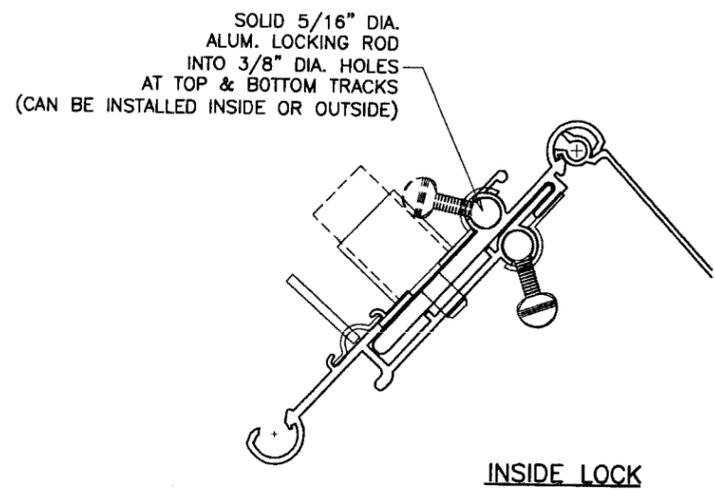
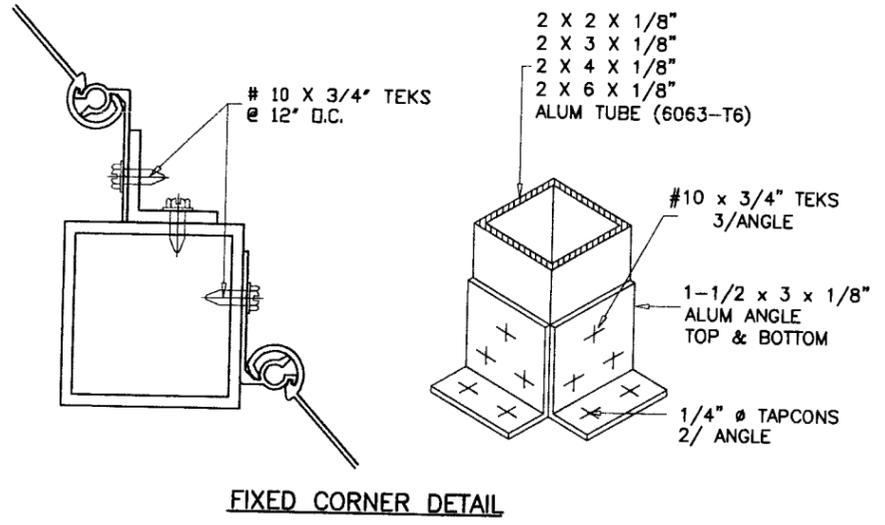
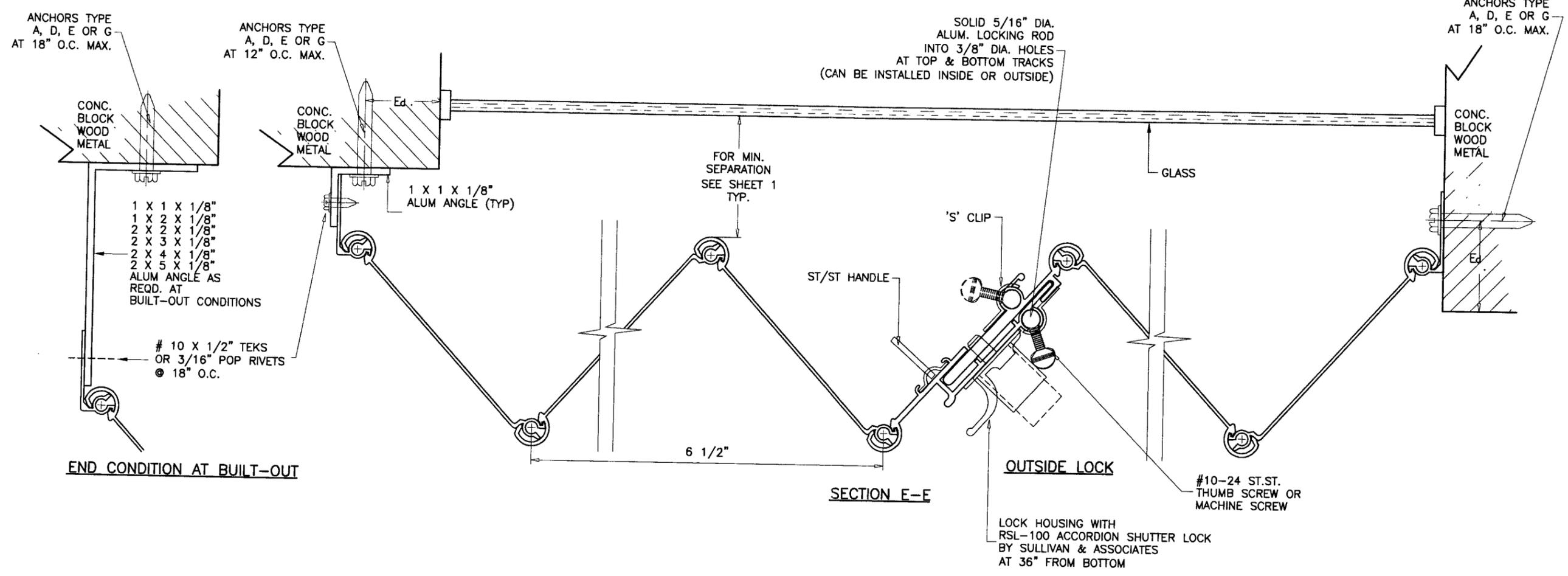
**AL-FAROOQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 1235 S.W. 87 AVE  
 MIAMI, FLORIDA 33174  
 TEL. (305) 264-8100 FAX. (305) 262-6978

AS-500 ADVANCED ALUM ACCORDION SHUTTER  
**R.C. ALUMINUM SHUTTERS, INC.**  
 2805 N.W. 75 TH AVE.  
 MIAMI, FL. 33122  
 TEL. (305) 592-1515 FAX. (305) 592-2184

no	date	description	by
A	05.24.06	REV. PER BCCD COMMENTS	
B	01.30.07	LOCK REV.	
C	08.27.07	NO CHANGE THIS SHEET	

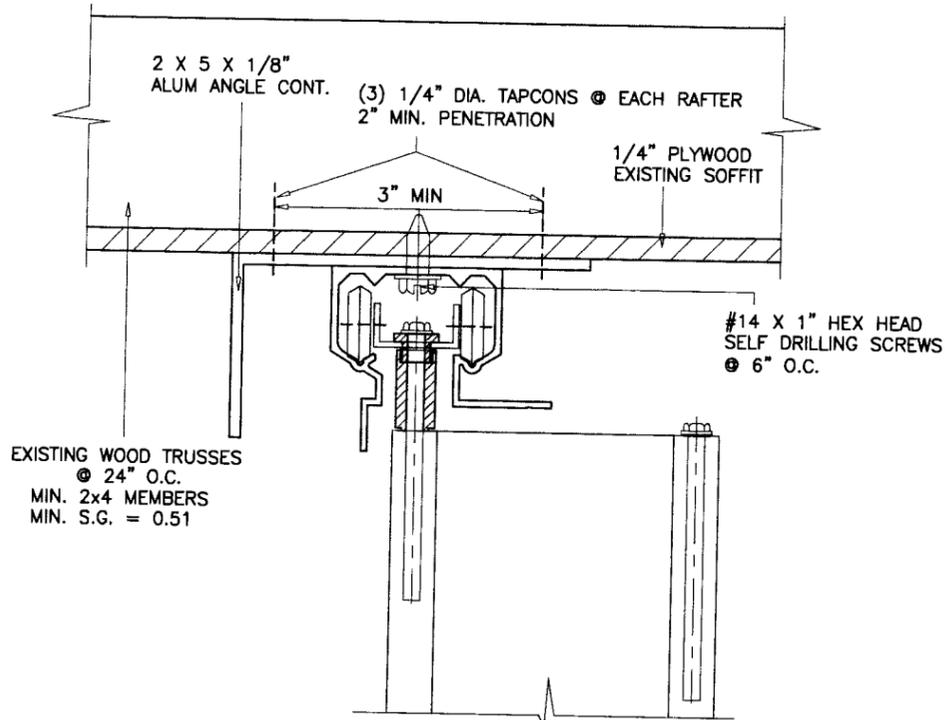
date: 03-06-06  
 scale: 1/2" = 1"  
 dr. by: HAMID  
 chk. by:

drawing no.  
**06-02**  
 sheet 5 of 7



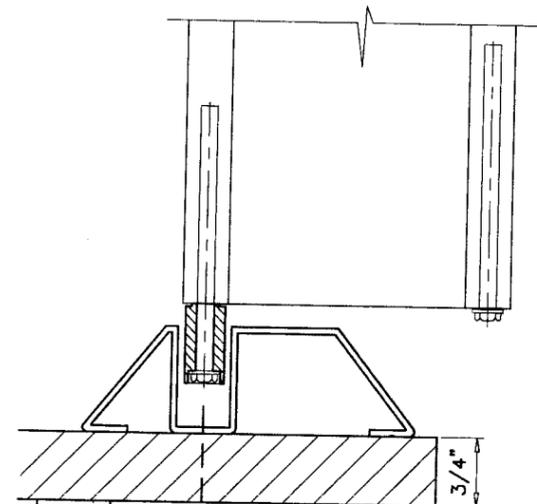
**PRODUCT REVISED**  
 as complying with the Florida  
 Building Code  
 Acceptance No. 07-0306.12  
 Expiration Date 06/29/2011  
 By *Helmy A. M...*  
 Miami Dade Product Control  
 Division

Engr: DR. HUMAYOUN FAROOQ  
 STRUCTURES  
 FLA. PE # 16557  
 C.A.N. 3538  
 JUN 27 2007



**HEADER CONNECTION TO WOOD TRUSSES**

FOR SHUTTER HEIGHT OF 84" MAX. DESIGN LOAD = 92 PSF  
 FOR SHUTTER HEIGHT OF 96" MAX. DESIGN LOAD = 80 PSF  
 FOR SHUTTER HEIGHT OF 108" MAX. DESIGN LOAD = 71 PSF



**COUNTER TOP CONDITION**  
 (PASS THRU WINDOW)  
 MAX SHUTTER HEIGHT = 6 FT.

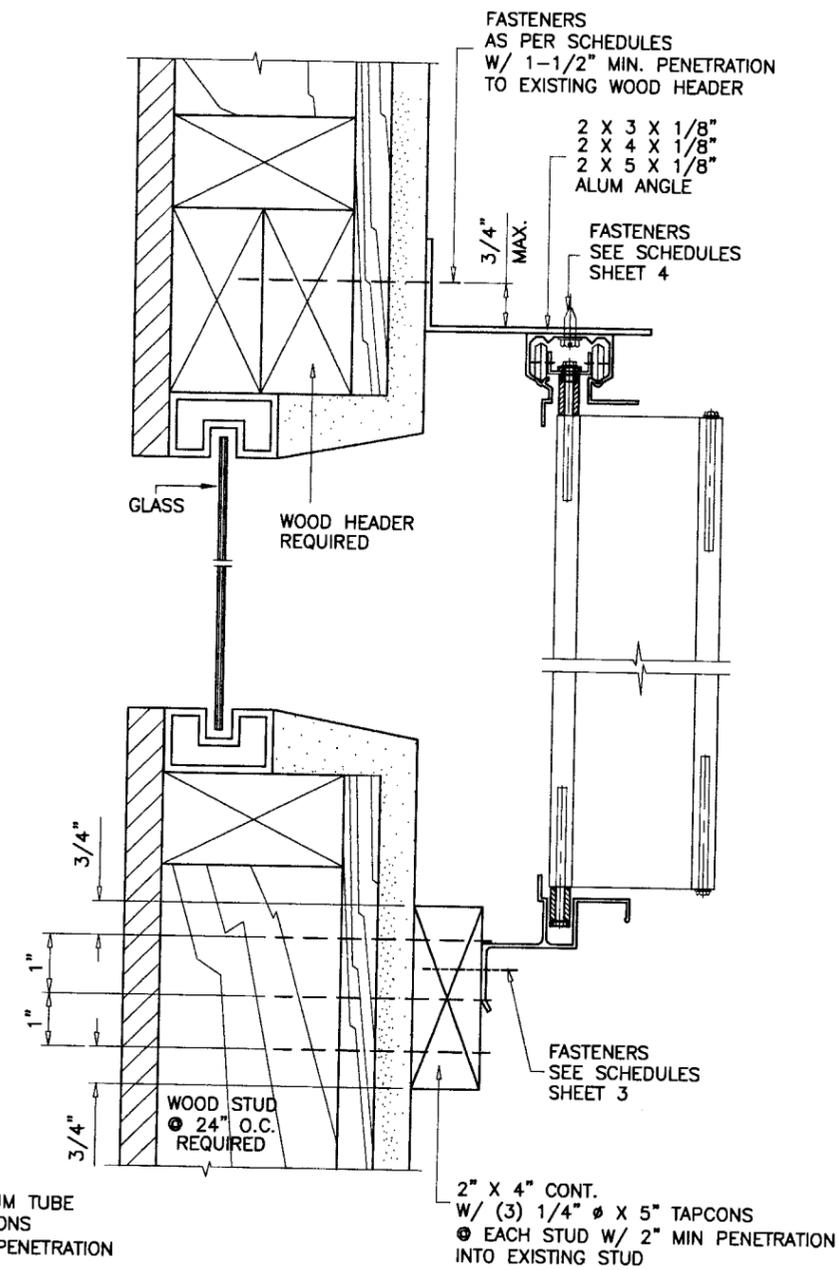
ANCHOR TYPE	ANCHOR SPACING INCHES							
	UPTO 52 PSF		UPTO 60 PSF		UPTO 75 PSF		UPTO 97 PSF	
	CONC	BLK	WOOD	METAL	CONC	BLK	WOOD	METAL
A	6.0	3.0	-	-	5.2	-	-	-
B	7.2	-	-	-	6.2	-	-	5.0
D	-	-	-	-	-	-	-	3.2
E	-	-	9.0	-	-	-	9.0	-
G	-	-	6.6	-	-	5.7	-	4.6
								3.5

FOR SHUTTER HEIGHT OF 84" MAX. DESIGN LOAD = 100 PSF  
 FOR SHUTTER HEIGHT OF 96" MAX. DESIGN LOAD = 87 PSF  
 FOR SHUTTER HEIGHT OF 108" MAX. DESIGN LOAD = 77 PSF  
 FOR SHUTTER HEIGHT OF 120" MAX. DESIGN LOAD = 70 PSF

**INSTALLATION DETAIL ON EXISTING WOOD BUCKS** SCALE: 1/4"=1"

ABOVE DETAILS SHOWS CONNECTION OF 2X4 BUCK & 1X4 ALUM TUBE TO WOOD STUDS TO PROVIDE A CONTINUOUS SURFACE FOR SHUTTER INSTALLATION.

FOR INSTALLATION DETAILS OF HEADER/SILL TO CONTINUOUS WOOD MEMBERS SEE SHEETS 3 THRU 4-PRODUCT REVISED



FOR SHUTTER HEIGHT OF 84" MAX. DESIGN LOAD = 98 PSF  
 FOR SHUTTER HEIGHT OF 96" MAX. DESIGN LOAD = 86 PSF  
 FOR SHUTTER HEIGHT OF 108" MAX. DESIGN LOAD = 76 PSF  
 FOR SHUTTER HEIGHT OF 120" MAX. DESIGN LOAD = 69 PSF

Engr: DR. HUMAYOUN FAROOQ  
 STRUCTURES  
 FLA. PE # 16557  
 C.A.N. 3538  
 JUN 27 2007

as complying with the Florida Building Code  
 Acceptance No. 07-0306.12  
 Expiration Date 06/29/2011  
 By: *Hamid*  
 Miami Data Product Control Division

**af c**  
**AL-FAROOQ CORPORATION**  
 ENGINEERS & PRODUCT DEVELOPMENT  
 1235 S.W. 87 AVE  
 MIAMI, FLORIDA 33174  
 TEL. (305) 264-8100 FAX. (305) 262-6978  
 ACCORDION/06-02RC

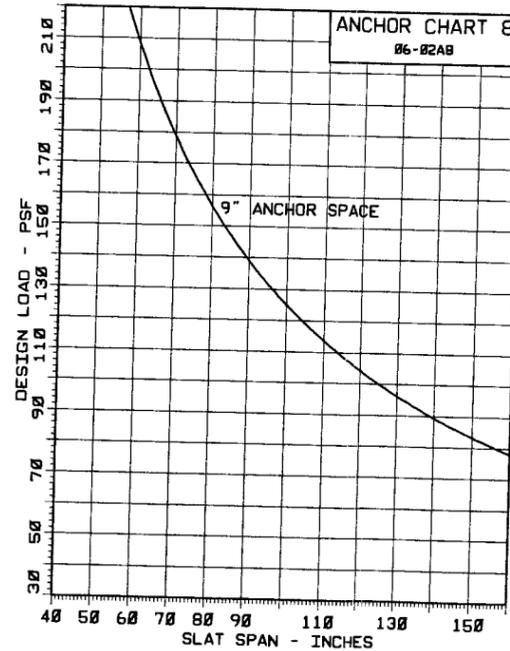
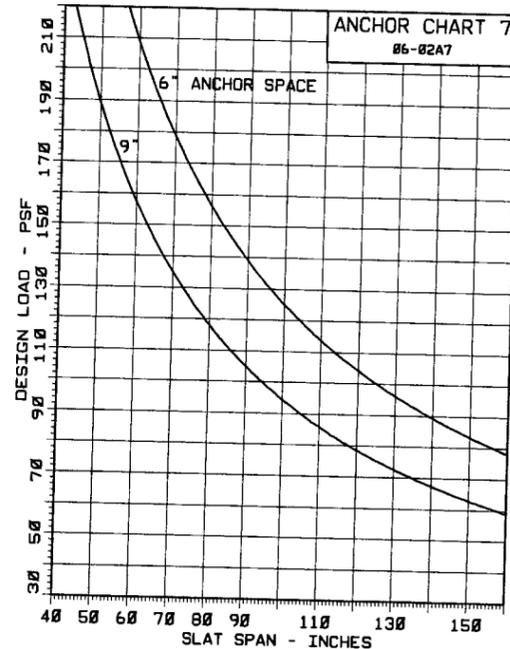
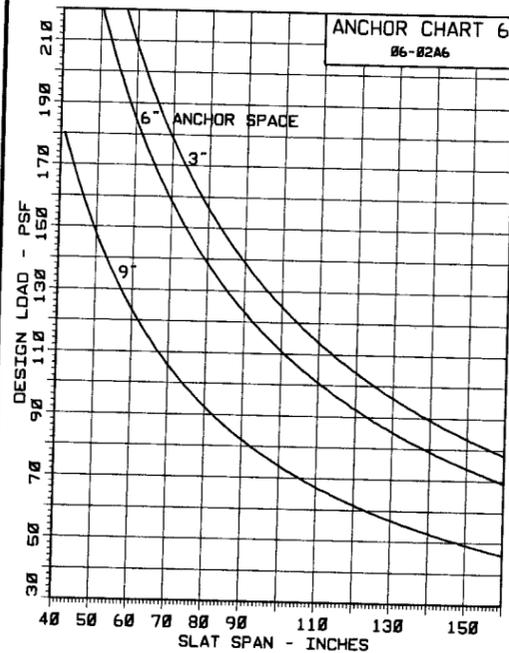
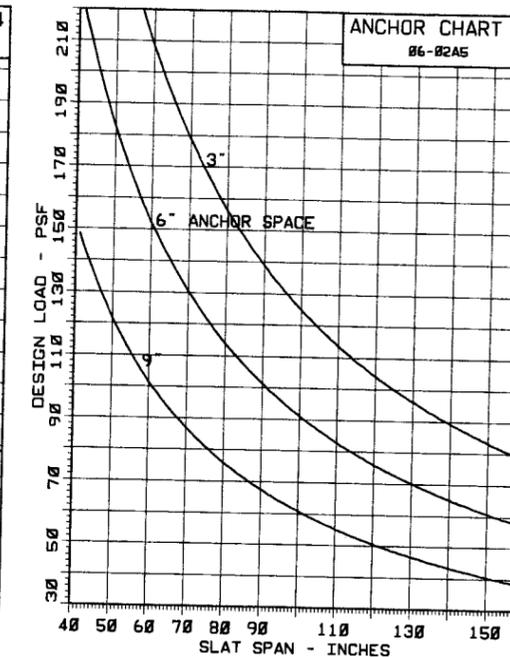
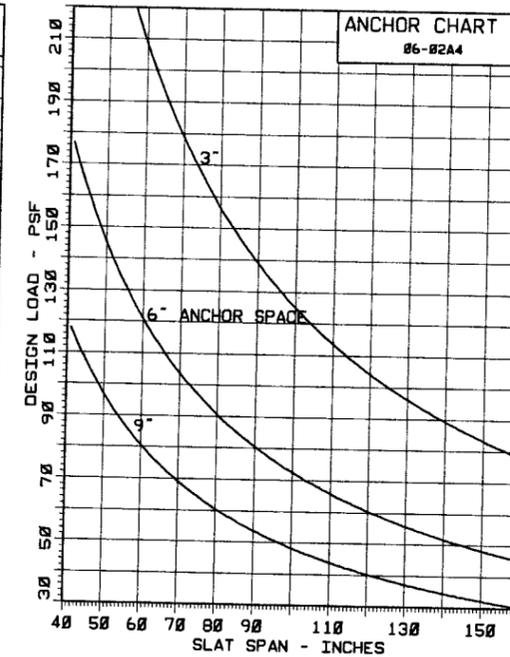
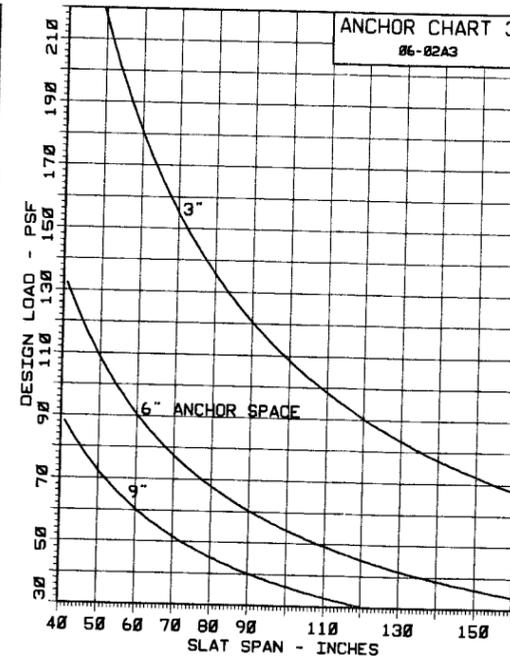
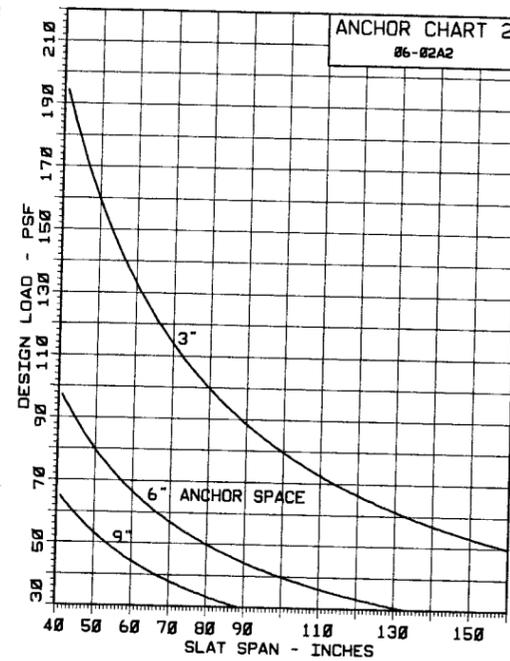
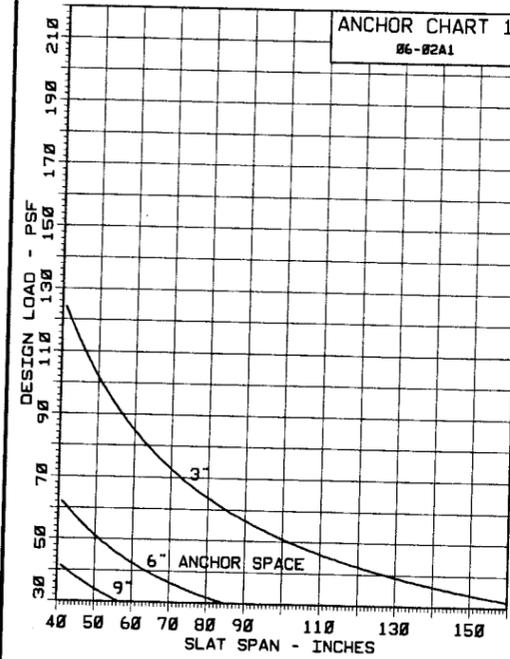
AS-500 ADVANCED ALUM ACCORDION SHUTTER  
**R.C. ALUMINUM SHUTTERS, INC.**  
 2805 N.W. 75 TH AVE.  
 MIAMI, FL. 33122  
 TEL. (305) 592-1515 FAX. (305) 592-2184

no	date	by	description
A	05.24.06	REV. PER BCCO COMMENTS	
B	01.30.07	NO CHANGE THIS SHEET	
C	06.27.07	NO CHANGE THIS SHEET	

revisions:

date: 03-06-06  
 scale: 1/2" = 1"  
 dr. by: HAMID  
 chk. by:

drawing no.  
**06-02**  
 sheet 6 of 7



**TYPICAL ANCHORS:**

- ANCHOR (A) = 1/4" DIA. TAPCONS (BY ELCO)  
1-3/4" EMBEDMENT INTO 3000 PSI CONC.  
1-1/4" EMBEDMENT INTO C-90 BLOCK
- ANCHOR (B) = 1/4" DIA. KWIKCON II (BY HILTI)  
1-3/4" EMBEDMENT INTO 3000 PSI CONC.  
1-1/4" EMBEDMENT INTO C-90 BLOCK
- ANCHOR (D) = 1/4" RAWL CALK-IN  
TOTAL ANCHOR BODY INTO 3000 PSI CONC.  
OR C-90 BLOCK
- ANCHOR (E) = 1/4" DIA. TAPCONS  
1-1/2" MIN PENETRATION INTO WOOD(S.G.=0.55)
- ANCHOR (G) = 1/4" DIA. KWIK-FLEX SELF DRILLING SCREWS  
INTO METAL STRUCTURES  
(STEEL OR ALUMINUM 1/8" MIN. THICK.)

NOTE: ANCHORS EMBEDMENT SHOWN IS BEYOND WALL & FLOOR COVERINGS (STUCCO, TILES, ETC.)

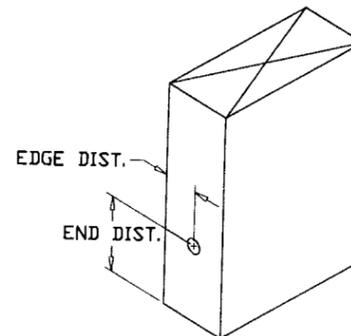
**FASTENER SPACING IN MASONRY/CONCRETE**

CHARTS ARE BASED ON TYPICAL EDGE DISTANCE = 12d.  
FOR LESSER EDGE DISTANCE DECREASE SPACING BY MULTIPLYING WITH THE FACTOR BELOW

EDGE DIST.	12d=3"	10d=2-1/2"	8d=2"	6d=1-1/2"	5d=1-1/4"
FACTOR	1.00	0.86	0.71	0.57	0.50

EXAMPLE: FOR 3" EDGE DIST. SPACING = 9" O.C. (FROM CHART)  
FOR 2" EDGE DIST. SPACING = 9 X .71 = 6.4 O.C.

TYPICAL EDGE DISTANCE IN WOOD = 3/4"  
TYPICAL END DISTANCE IN WOOD = 1"  
NO REDUCTION FACTOR IS REQUIRED



USE CHARTS 1 THRU 8 TO VERIFY ANCHOR REQUIREMENTS AND STRESS LIMITATIONS OF LOAD/SPAN COMBINATIONS FOR HEADER AND SILL.

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

*[Signature]*  
JUN 27 2007

PRODUCT REVISED as complying with the Florida Building Code  
Acceptance No. 07-0306.12  
Expiration Date 06/29/2011  
By *[Signature]*  
Miami Dade Product Control Division

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

---

AS-500 ADVANCED ALUM ACCORDION SHUTTER  
**R.C. ALUMINUM SHUTTERS, INC.**  
2805 N.W. 75 TH AVE.  
MIAMI, FL. 33122  
TEL. (305) 592-1515 FAX. (305) 592-2184

no.	date	description
A	05.24.06	REV. PER BCCO COMMENTS
B	01.30.07	NO CHANGE THIS SHEET
C	06.27.07	NO CHANGE THIS SHEET

date: 03-06-06  
scale: 1/2" = 1"  
dr. by: HAMID  
chk. by:

drawing no. **06-02**  
sheet 7 of 7