



**MIAMI-DADE COUNTY**  
**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)

**Rolladen, Inc.**  
**550 Ansin Boulevard**  
**Hallandale, FL 33009**

**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: Aluminum Hinged Colonial Shutter**

**APPROVAL DOCUMENT:** Drawing No. 95-37, titled "Aluminum Hinged Colonial Shutter", sheets 1 through 3 of 3, prepared by Al-Farooq Corp., dated July 24, 1995, last revision #F dated February 29, 2008, signed and sealed by Humayoun Farooq, P.E., on March 03, 2008, 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 & renews** NOA # **07-0423.07** and consists of this page 1, evidence submitted pages E-1, E-2 & E-3 as well as approval document mentioned above.

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



*Helmy A. Makar*  
 04/10/2008

NOA No. 07-1120.12  
 Expiration Date: 02/22, 2013  
 Approval Date: 04/10/2008  
 Page 1

**Rolladen, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 99-0208.06**

**A. DRAWINGS**

1. *Drawing No. 95-37, titled "Aluminum Hinged Colonial Shutter", prepared by Al-Farooq Corporation, dated 07/24/95, with latest revision on 03/23/99, sheets 1 through 3 of 3, signed and sealed by H. Farooq, PE. on 03/29/99.*

**B. TESTS**

1. *Test report on Large Missile Impact Test, Cyclic Wind Pressure Test of "Colonial Shutters", prepared by Hurricane Engineering & Testing, Inc., report No HETI 95-460, dated 06/21/95, signed and sealed by H. M. Medina, PE.*
2. *Test report on Uniform Static Air Pressure Test of "Colonial Shutters" prepared by Hurricane Engineering & Testing, Inc., report No. HETI 95-459, dated 06/19/95, signed and sealed by H. M. Medina, PE.*

**C. CALCULATIONS**

1. *Storm Bars and Anchors Calculations prepared by Al-Farooq Corporation on 08/29/95, sheets 1 through 6 of 6, signed and sealed by H. Farooq, PE.*

**D. MATERIAL CERTIFICATIONS**

1. *Test report on Tensile Test of Aluminum Colonial Shutters, prepared by Hurricane Engineering & Testing, Inc. report No. HETI 95-T91, dated 08/03/95, signed and sealed by H. M. Medina, PE.*
2. *Certificate of compliance with 6063 T6 aluminum alloy by W. L. Bonnell Co., Inc. with no date, signed by C. Combs.*

**E. STATEMENTS**

1. *No change letter issued by Rolladen, Inc. on 02/05/99, signed by T. D. Low and notarized by D. Sosa.*
2. *Professional Practice letter issued by Al-Farooq Corporation on 07/07/98, signed and sealed by H. Farooq, PE.*

**2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 02-0612.01**

**A. DRAWINGS**

*See NOA 99-0208.06*

**B. TESTS**

*See NOA 99-0208.06*

  
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**Helmy A. Makar, P.E., M.S.**  
**Product Control Examiner**  
**NOA No. 07-1120.12**  
**Expiration Date: 02/22, 2013**  
**Approval Date: 04/10/2008**

**Rolladen, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**C. CALCULATIONS**

*See NOA 99-0208.06*

**D. MATERIAL CERTIFICATIONS**

*See NOA 99-0208.06*

**E. STATEMENTS**

*See NOA 99-0208.06*

**F. OTHER**

*NOA 99-0208.06.*

**3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 07-0423.07**

**A. DRAWINGS**

1. *Drawing No. 95-37, titled "Aluminum Hinged Colonial Shutter", sheets 1 through 3, prepared by Al-Farooq Corporation, dated July 24, 1995, last revision #E dated July 27, 2006, signed and sealed by Humayoun Farooq, P.E., on December 09, 2006.*

**B. TESTS**

1. *None.*

**C. CALCULATIONS**

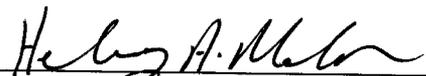
1. *Revised calculation for Anchors prepared by Al-Farooq Corporation, dated December 09, 2006, sheets 1 through 15 of 15, signed and sealed by H. Farooq, PE.*

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. *None.*



**Helmy A. Makar, P.E., M.S.**

**Product Control Examiner**

**NOA No. 07-1120.12**

**Expiration Date: 02/22, 2013**

**Approval Date: 04/10/2008**

**Rolladen, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**4. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. *Drawing No. 95-37, titled "Aluminum Hinged Colonial Shutter", sheets 1 through 3 of 3, prepared by Al-Farooq Corp., dated July 24, 1995, last revision #F dated February 29, 2008, signed and sealed by Humayoun Farooq, P.E., on March 03, 2008.*

**B. TESTS**

1. *Test report on Uniform Static Air Pressure Test of "Colonial Shutters", prepared by Hurricane Engineering & Testing, Inc., report No. HETI-07-4268, dated 08/08/07, signed and sealed by Candido F. Font, P.E.*
2. *Test report on Large Missile Impact Test, Cyclic Wind Pressure Test of "Colonial Shutters", prepared by Hurricane Engineering & Testing, Inc., report No. HETI 07-4269, dated 08/08/07, signed and sealed by Candido F. Font, P.E.*

**C. CALCULATIONS**

1. *Revised calculation for Anchors prepared by Al-Farooq Corporation, dated November 15, 2007, sheets 1 through 15 of 15, signed and sealed by H. Farooq, PE.*
2. *Revised calculation for Anchors prepared by Al-Farooq Corporation, dated March 03, 2008, sheets 1 & 2, signed and sealed by H. Farooq, PE.*

**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 No. HETI 07-T744, dated 08/08/07, signed and sealed by Candido F. Font, P.E.*
2. *Tensile Test report, prepared by Hurricane Engineering & Testing, Inc., report No. HETI 07-T745, dated 08/08/07, signed and sealed by Candido F. Font, P.E.*

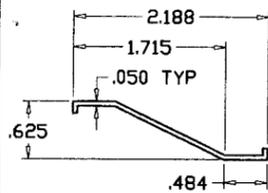
  
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**Helmy A. Makar, P.E., M.S.  
Product Control Examiner**

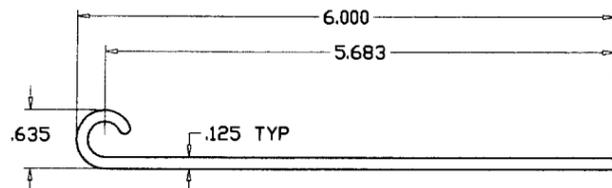
**NOA No. 07-1120.12**

**Expiration Date: 02/22, 2013**

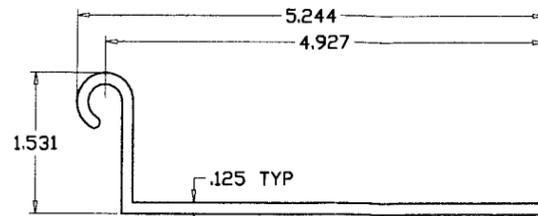
**Approval Date: 04/10/2008**



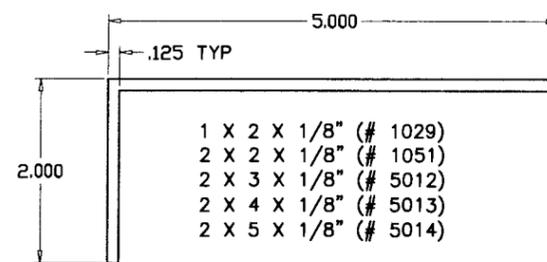
**LOUVER BLADE**  
6063-T6  
# 8535



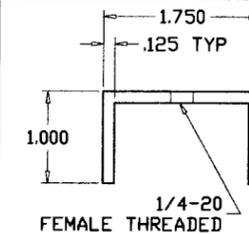
**FLAT HINGE** (1-7/8" LONG)  
6063-T6  
# 8545



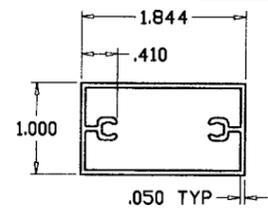
**SIDE HINGE** (1-7/8" LONG)  
6063-T6  
# 8546



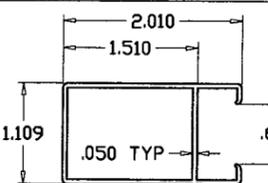
**BUILD-OUT ANGLES**  
6063-T6  
1 X 2 X 1/8" (# 1029)  
2 X 2 X 1/8" (# 1051)  
2 X 3 X 1/8" (# 5012)  
2 X 4 X 1/8" (# 5013)  
2 X 5 X 1/8" (# 5014)



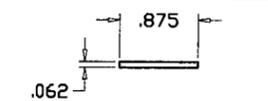
**STORM BAR INSERT**  
6063-T6  
# 1058



**HORIZONTAL RAIL**  
6063-T6  
# 8531



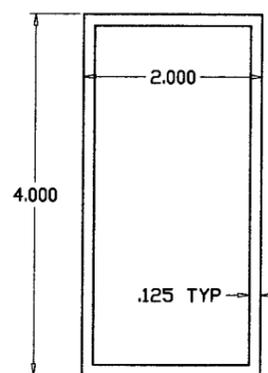
**SIDE RAIL**  
6063-T6  
# 8532



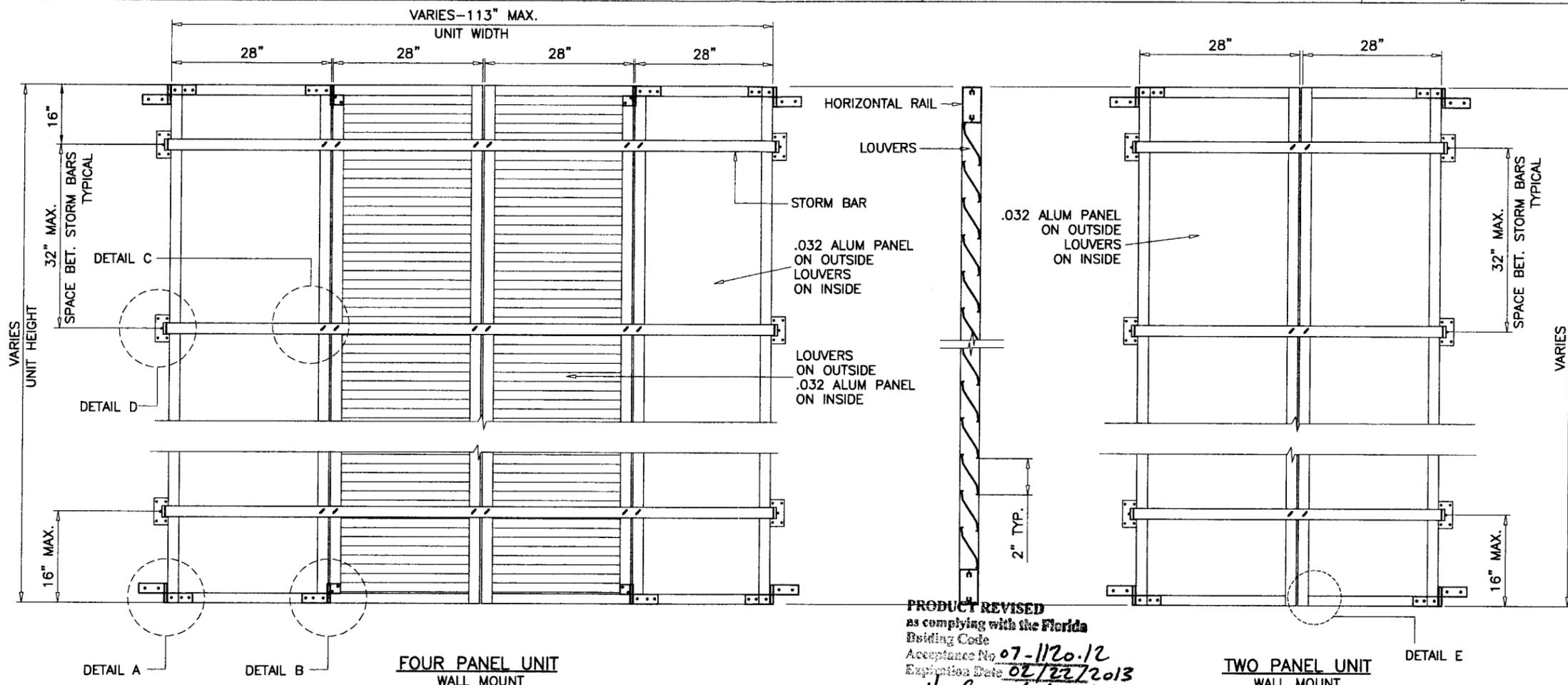
**LOUVER PLATE**  
6063-T6  
# 8536



**HINGE PIN** (4" LONG)  
6063-T6  
# 8547



**STORM BARS**  
6063-T6  
1 X 2 X 1/8" (# 1019)  
2 X 2 X 1/8" (# 1022)  
2 X 3 X 1/8" (# 1024)  
2 X 4 X 1/8" (# 1023)  
2 X 6 X 1/8"



**FOUR PANEL UNIT**  
WALL MOUNT

**TWO PANEL UNIT**  
WALL MOUNT

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. 07-1120-12  
Expiration Date 02/22/2013  
By *Helmy A. Helmy*  
Miami Dade Product Control  
Division

**GENERAL NOTES**

1. 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).
2. DESIGN CRITERIA FOR ALUMINUM, MINIMUM MECHANICAL PROPERTIES, AND SAFETY FACTORS ARE IN ACCORDANCE WITH THE "ALUMINUM CONSTRUCTION MANUAL" LATEST EDITION.
3. ALUMINUM ALLOYS: ALL EXTRUSIONS SHALL BE ALLOY AS SHOWN.
4. 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.
5. ANCHORS SHALL BE AS SHOWN ON DETAILS. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
6. ALL BOLTS SHALL BE STAINLESS STEEL, ALUMINUM ALLOY 2024-T4 OR 7075-T6, OR PLATED STEEL. WING NUTS TO BE OF ZINC ALLOY.
7. DESIGN CRITERIA FOR SLATS: MAX DEFLECTION  $\leq L/30$  OR 2".
8. ANCHORING OR LOADING CONDITIONS OTHER THAN THOSE SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
9. A LOAD DURATION INCREASE IN ALLOWABLE STRESS IS USED IN DESIGN OF WOOD ANCHORS ONLY.
10. EACH SHUTTER SHALL HAVE A LEGIBLE AND READILY VISIBLE MARKING INSTRUCTING OWNER OR TENANT TO FASTEN SHUTTER TO WALL BY USING STORM BARS AS SHOWN ON SHEET 2, DURING PERIODS OF HURRICANE WARNING.

**TYPICAL ANCHORS:**

- ANCHOR (A) = 1/4" DIA. TAPCONS (BY ELCO)  
1-3/4" EMBED INTO fc'=3000 PSI CONC.  
2-1/2" MIN. EDGE DISTANCE
- ANCHOR (B) = 1/4" DIA. TAPCONS (BY ELCO)  
1-1/4" EMBED INTO fc'=1500 PSI MASONRY BLOCK  
2-1/2" MIN. EDGE DISTANCE
- ANCHOR (C) = 5/16" DIA. CARBON STEEL SLEEVE ANCHOR HILT  
TOTAL ANCHOR BODY INTO fc'=1500 PSI MASONRY BLOCK  
2-1/2" MIN. EDGE DISTANCE
- ANCHOR (D) = 1/4" DIA. LAG SCREWS  
1-1/2" MIN PENETRATION INTO WOOD (S.G.=0.55)  
1" MIN. EDGE DISTANCE

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

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

MAX. UNIT WIDTHS FOR VARIOUS DESIGN LOADS				
STORM BAR TYPE	70 PSF	60 PSF	50 PSF	40 PSF
1 X 2 X 1/8" (# 1019)	49"	53"	57"	64"
2 X 2 X 1/8" (# 1022)	65"	70"	77"	86"
2 X 3 X 1/8" (# 1024)	85"	92"	100"	110"
2 X 4 X 1/8" (# 1023)	104"	110"	112-5/8"	-
2 X 6 X 1/8"	112-5/8"	-	-	-

SHUTTER'S WIDTH IS THE SMALLER WIDTH BASED ON STORM BAR AND ANCHOR TABLES.

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

MAR 03 2008

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

**ROLLADEN INC.**  
550 ANSIN BOULEVARD  
HALLANDALE, FL. 33009  
TEL. (305) 757-8591 FAX. (305) 454-1577

ALUMINUM HINGED COLONIAL SHUTTER

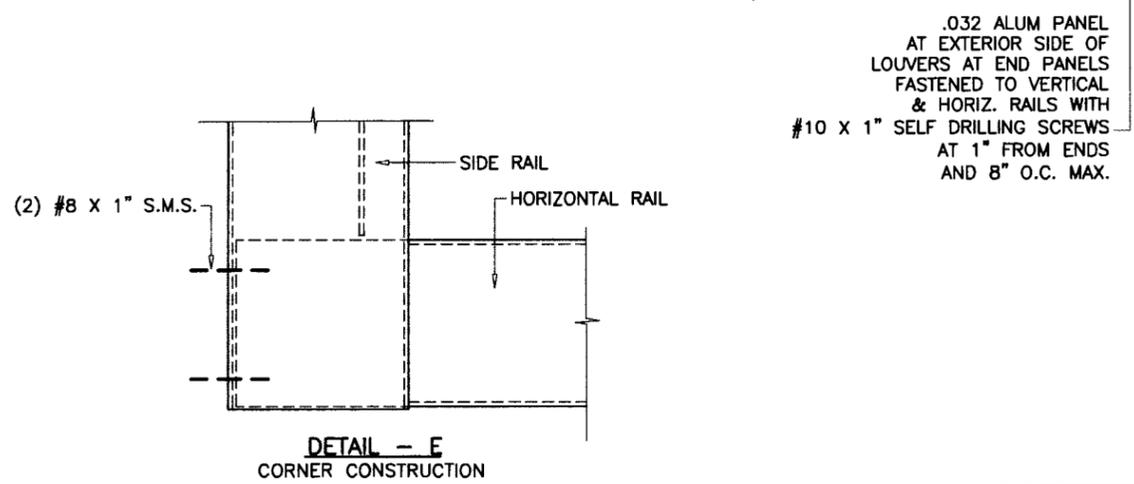
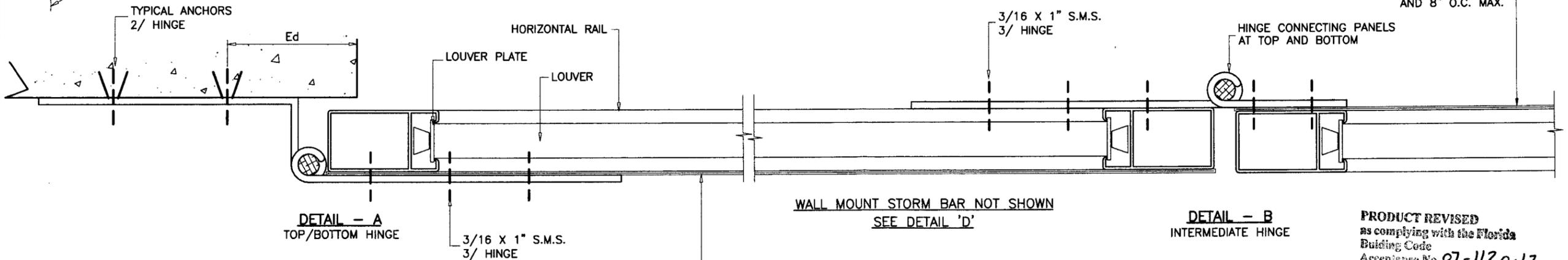
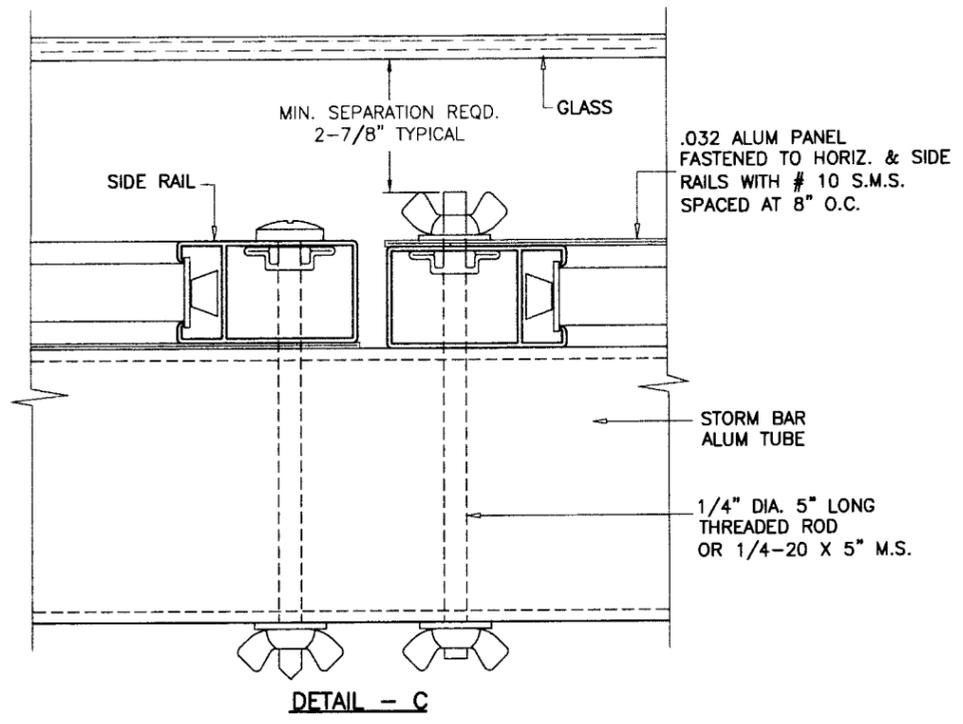
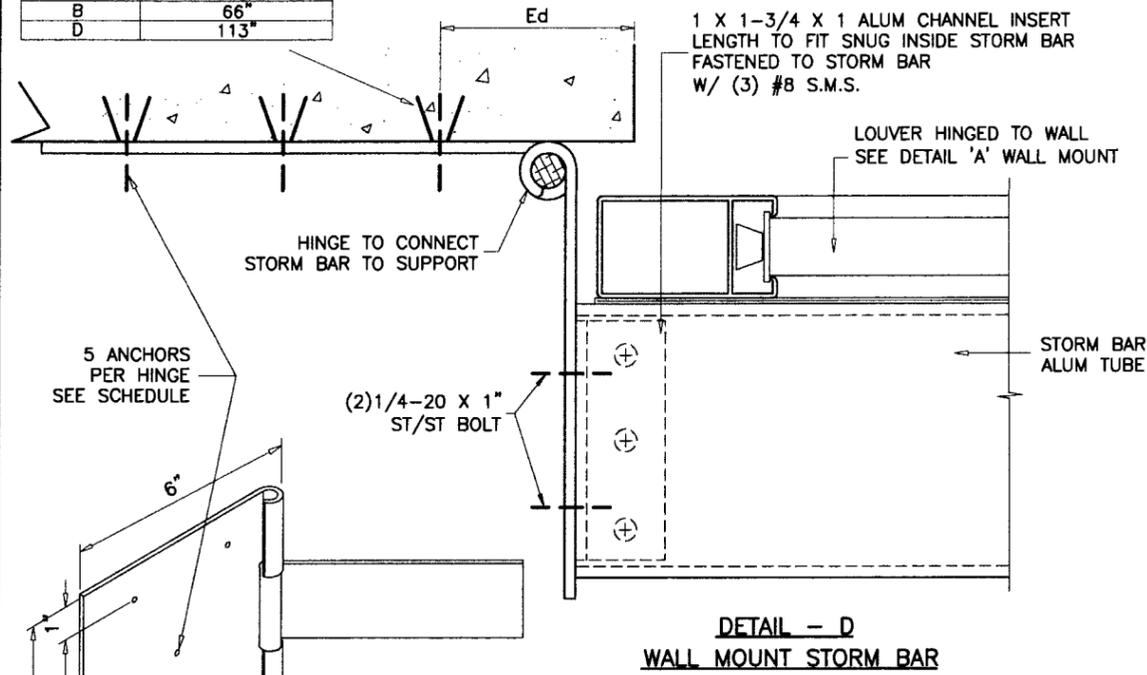
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C	04.11.96	T.H.	Ed ADDED
D	03.23.99	H	GENERAL REVISION
E	07.27.06	H	UPDATED FOR 2004 FBC
F	02.29.08	H	REV. PER BCCO COMMENTS

date: 07-24-95  
scale: 1/2" = 1"  
dr. by: HAMID  
chk. by:

drawing no.  
**95-37**  
sheet 1 of 3

HINGED 95-37RNI

ANCHOR TYPE	MAX. SHUTTER WIDTH
A	113"
B	66"
D	113"



.032 ALUM PANEL  
AT INTERIOR SIDE OF  
LOUVERS AT CENTER PANELS  
FASTENED TO VERTICAL  
& HORIZ. RAILS WITH  
#10 X 1" SELF DRILLING SCREWS  
AT 1" FROM ENDS  
AND 8" O.C. MAX.

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. 07-1120.12  
Expiration Date 02/22/2013  
By *Helmy A. Meher*  
Miami Dade Product Control  
Division

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

MAR 03 2008

**af c**

**AL-FAROOQ CORPORATION**  
ENGINEERS & PRODUCT DEVELOPMENT  
1235 S.W. 87 AVE  
MIAMI, FLORIDA 33174  
TEL. (305) 264-8100 FAX. (305) 262-6978  
HINGED 95-37RNI

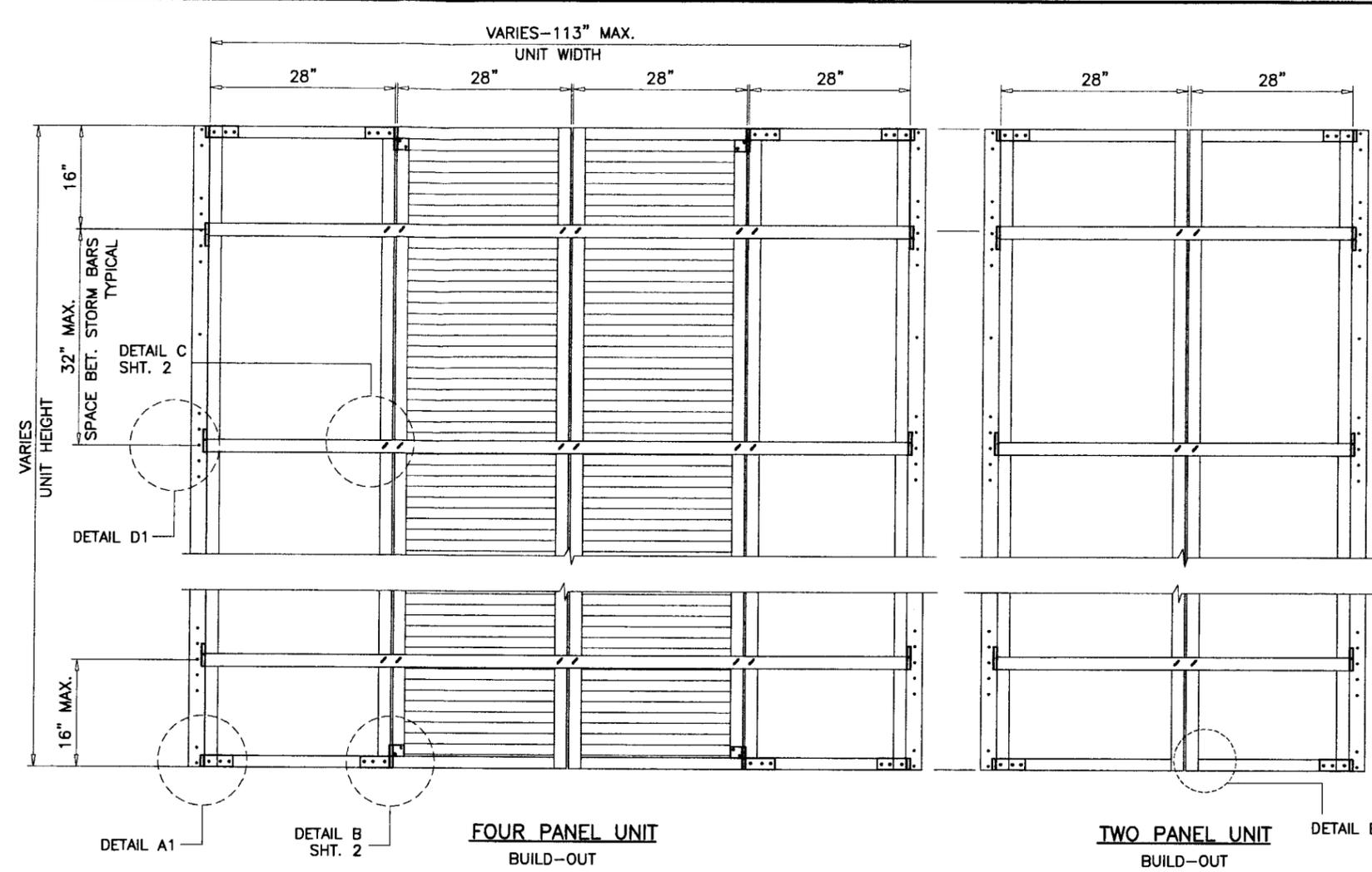
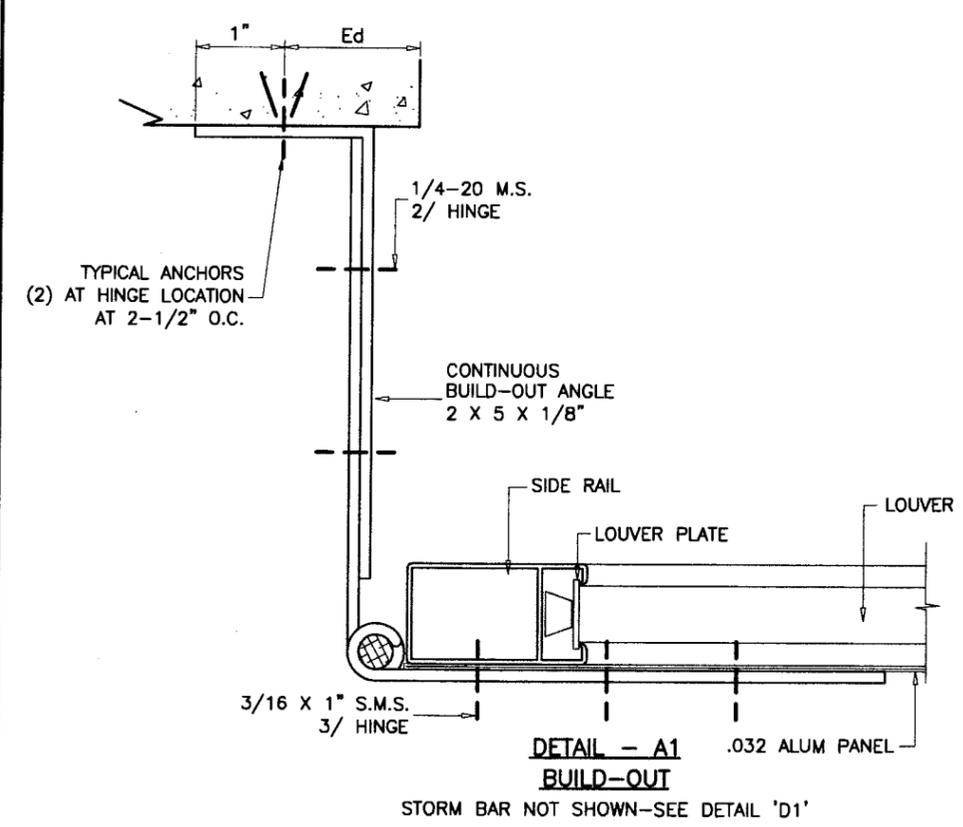
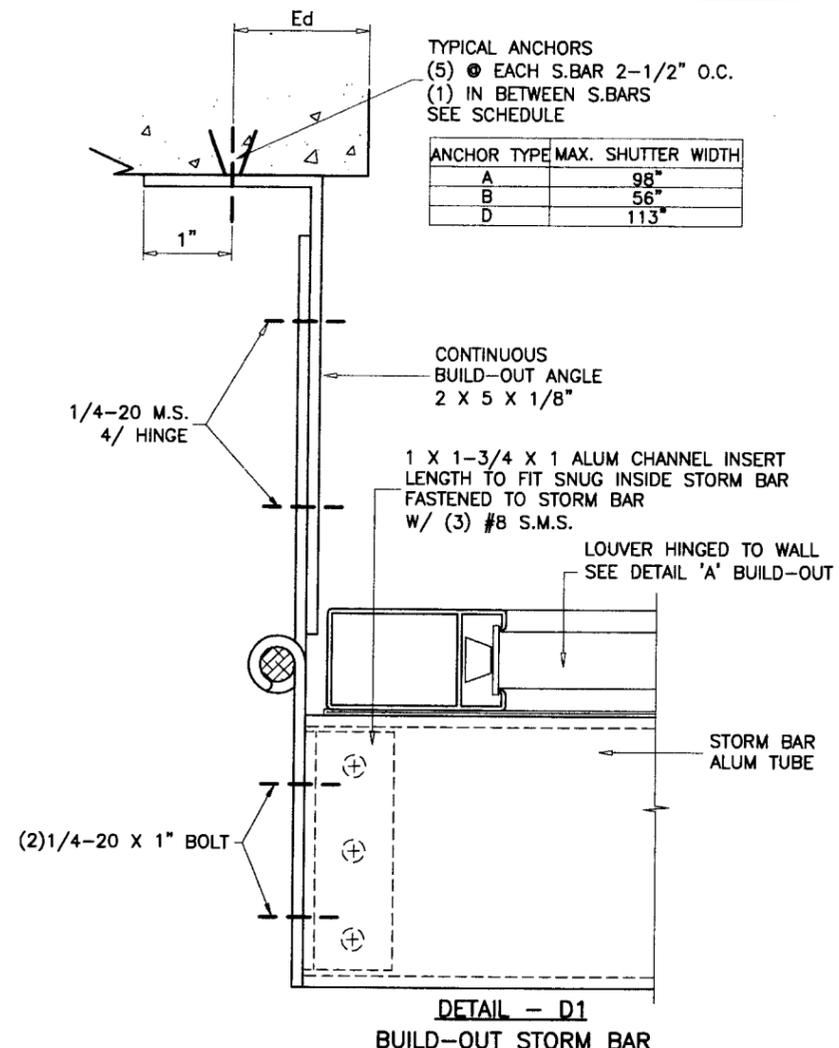
**ALUMINUM HINGED COLONIAL SHUTTER**

**ROLLADEN INC.**  
550 ANSIN BOULEVARD  
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TEL. (305) 757-8591 FAX. (305) 454-1577

revisions:	no	date	by	description
	E	07.27.06	H	UPDATED FOR 2004 FBC
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date: 07-24-95  
scale: 1/2" = 1"  
dr. by: HAMID  
chk. by:

drawing no.  
**95-37**  
sheet 2 of 3



**PRODUCT REVISED**  
as complying with the Florida Building Code  
Acceptance No 07-1120.12  
Expiration Date 02/22/2013  
By *Helmy A. M. M.*  
Miami Dade Product Control Division

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

MAR 03 2008

**af c**

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ALUMINUM HINGED COLONIAL SHUTTER

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	E	07.27.06	H	UPDATED FOR 2004 FBC
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date: 07-24-95  
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drawing no.  
**95-37**

sheet 3 of 3