



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

www.miamidade.gov

NOTICE OF ACCEPTANCE (NOA)

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, 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, 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 # 02-0612.01 and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

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



Helmy A. Makar
 08/16/2007

NOA No. 07-0423.07
Expiration Date: 02/22, 2008
Approval Date: 08/16/2007

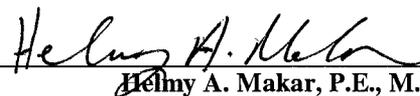
Rolladen, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

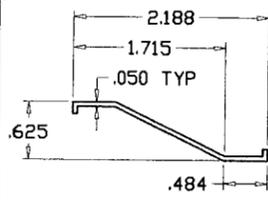
1. **EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 99-0208.06**
 - A. **DRAWINGS**
 1. *Drawing No. 95-37, titled "Aluminum Hinged Colonial Shutter", prepared by Al-Farooq Corporation, dated 07/24/95, with latest revision on 03/23/99, sheets 1 through 3 of 3, signed and sealed by H. Farooq, PE. on 03/29/99.*
 - 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**

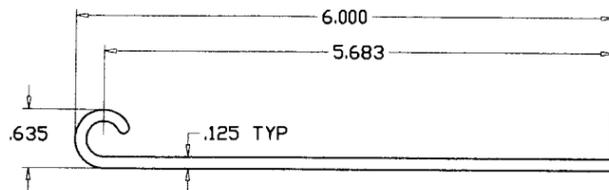
See NOA 99-0208.06



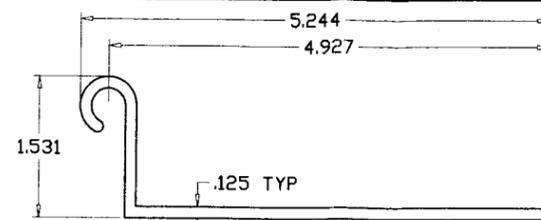
Helmy A. Makar, P.E., M.S.
Product Control Examiner
NOA No. 07-0423.07
Expiration Date: 02/22, 2008
Approval Date: 08/16/2007



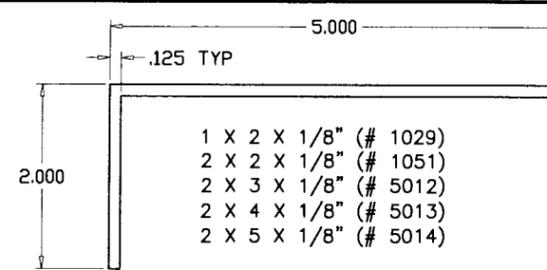
LOUVER BLADE
6063-T6
8535



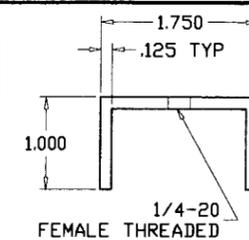
FLAT HINGE (1-7/8" LONG)
6063-T6
8545



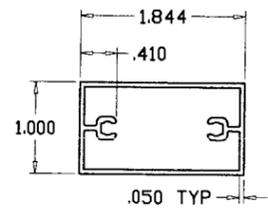
SIDE HINGE (1-7/8" LONG)
6063-T6
8546



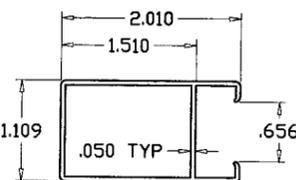
BUILD-OUT ANGLES
6063-T6



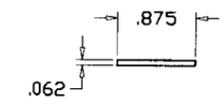
STORM BAR INSERT
6063-T6
1058



HORIZONTAL RAIL
6063-T6
8531



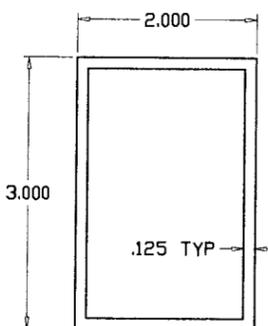
SIDE RAIL
6063-T6
8532



LOUVER PLATE
6063-T6
8536

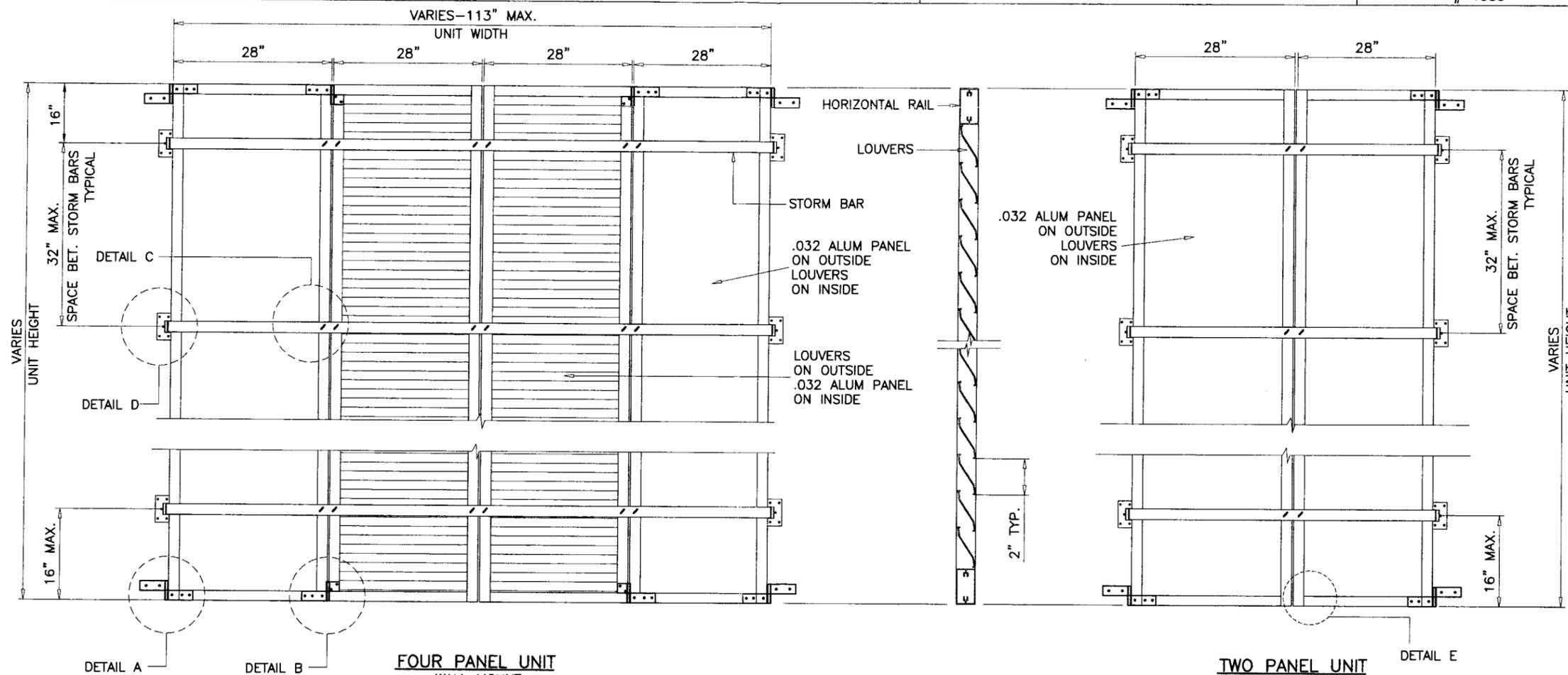


HINGE PIN (4" LONG)
6063-T6
8547



- 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)

STORM BARS
6063-T6



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 $f_c'=3000$ PSI CONC.
2-1/2" MIN. EDGE DISTANCE
- ANCHOR (B) = 1/4" DIA. TAPCONS (BY ELCO)
1-1/4" EMBED INTO $f_c'=1500$ PSI MASONRY BLOCK
2-1/2" MIN. EDGE DISTANCE
- ANCHOR (C) = 5/16" DIA. CARBON STEEL SLEEVE ANCHOR HILT
TOTAL ANCHOR BODY INTO $f_c'=1500$ PSI MASONRY BLOCK
2-1/2" MIN. EDGE DISTANCE
- ANCHOR (D) = 1/4" DIA. TAPCONS
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.

DESIGN PRESSURE RATING = + 50.0 PSF
- 67.0 PSF

MAX. UNIT WIDTH	
STORM BAR TYPE	MAX. WIDTH INCHES
1 X 2 X 1/8" (# 1019)	50.3
2 X 2 X 1/8" (# 1022)	66.7
2 X 3 X 1/8" (# 1024)	88
2 X 4 X 1/8" (# 1023)	108.1

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

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 67-0423.07
Expiration Date 02/22/2008
By Helmy A. Helmy
Miami Dade Product Control
Division

DEC 09 2006

afC
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-N

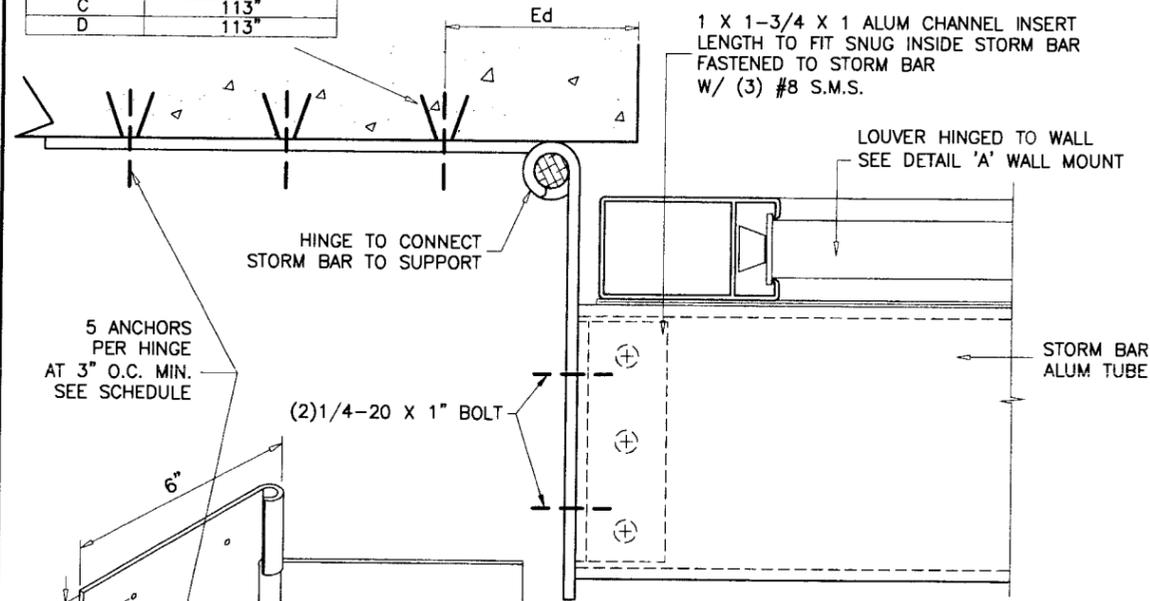
ALUMINUM HINGED COLONIAL SHUTTER
ROLLADEN INC.
550 ANSIN BOULEVARD
HALLANDALE, FL. 33009
TEL. (305) 757-8591 FAX. (305) 454-1577

revisions:

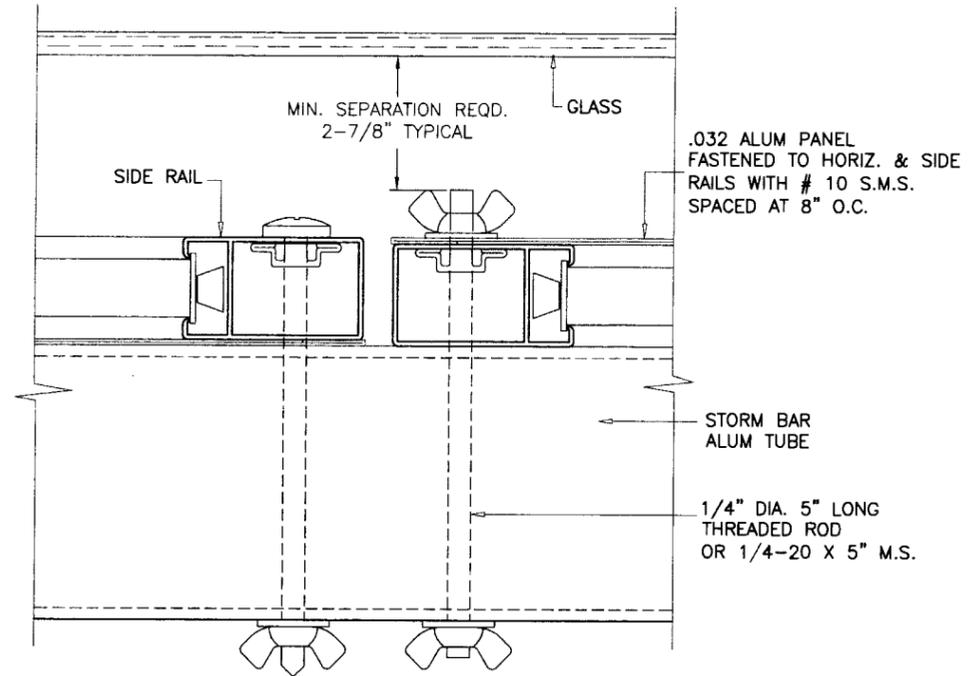
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A	10.13.95	T.H. VARIES			
B	01.03.96	T.H. LENGTHS ADDED			
C	04.11.96	T.H. Ed ADDED			
D	03.23.99	H. GENERAL REVISION			
E	07.27.06	H. UPDATED FOR 2004 FBC			

date: 07-24-95
scale: 1/2" = 1"
dr. by: HAMID
chk. by:
drawing no. 95-37
sheet 1 of 3

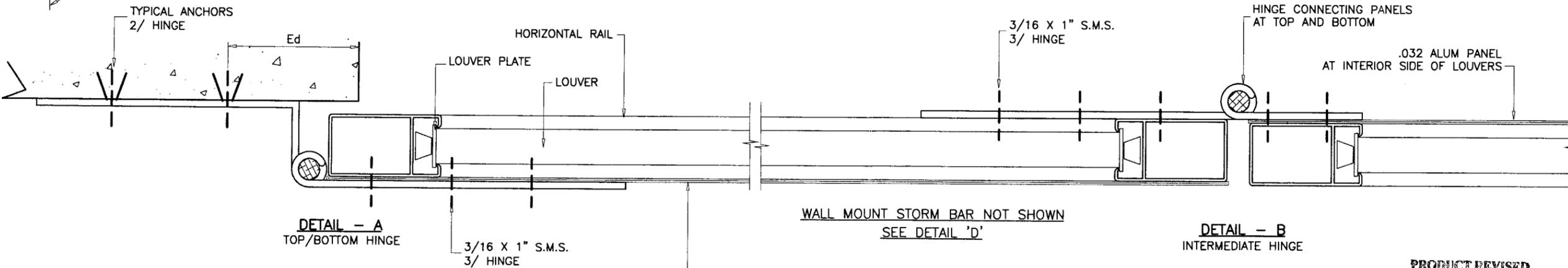
ANCHOR TYPE	MAX. SHUTTER WIDTH
A	113"
B	69"
C	113"
D	113"



DETAIL - D
WALL MOUNT STORM BAR



DETAIL - C

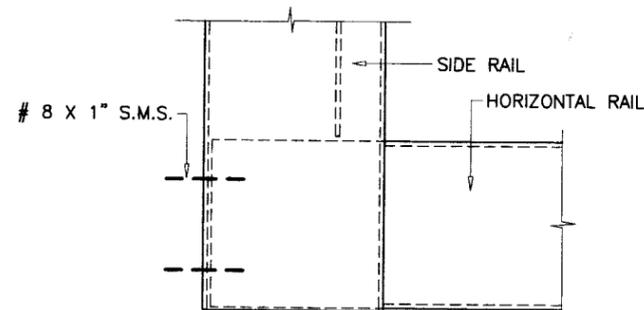


DETAIL - A
TOP/BOTTOM HINGE

DETAIL - B
INTERMEDIATE HINGE

WALL MOUNT STORM BAR NOT SHOWN
SEE DETAIL 'D'

.032 ALUM PANEL
AT EXTERIOR SIDE OF LOUVERS
FASTENED TO HORIZ. & SIDE
RAILS WITH # 10 S.M.S.
SPACED AT 8" O.C.



DETAIL - E
CORNER CONSTRUCTION

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 07-0423.07
Expiration Date 02/25/2008
Helmy A. Matar
Miami Design Product Control
Inc.

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

DEC 09 2006

afC

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ALUMINUM HINGED COLONIAL SHUTTER

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

no	date	description

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

drawing no.
95-37

sheet 2 of 3

HINGED 95-37RNI-N

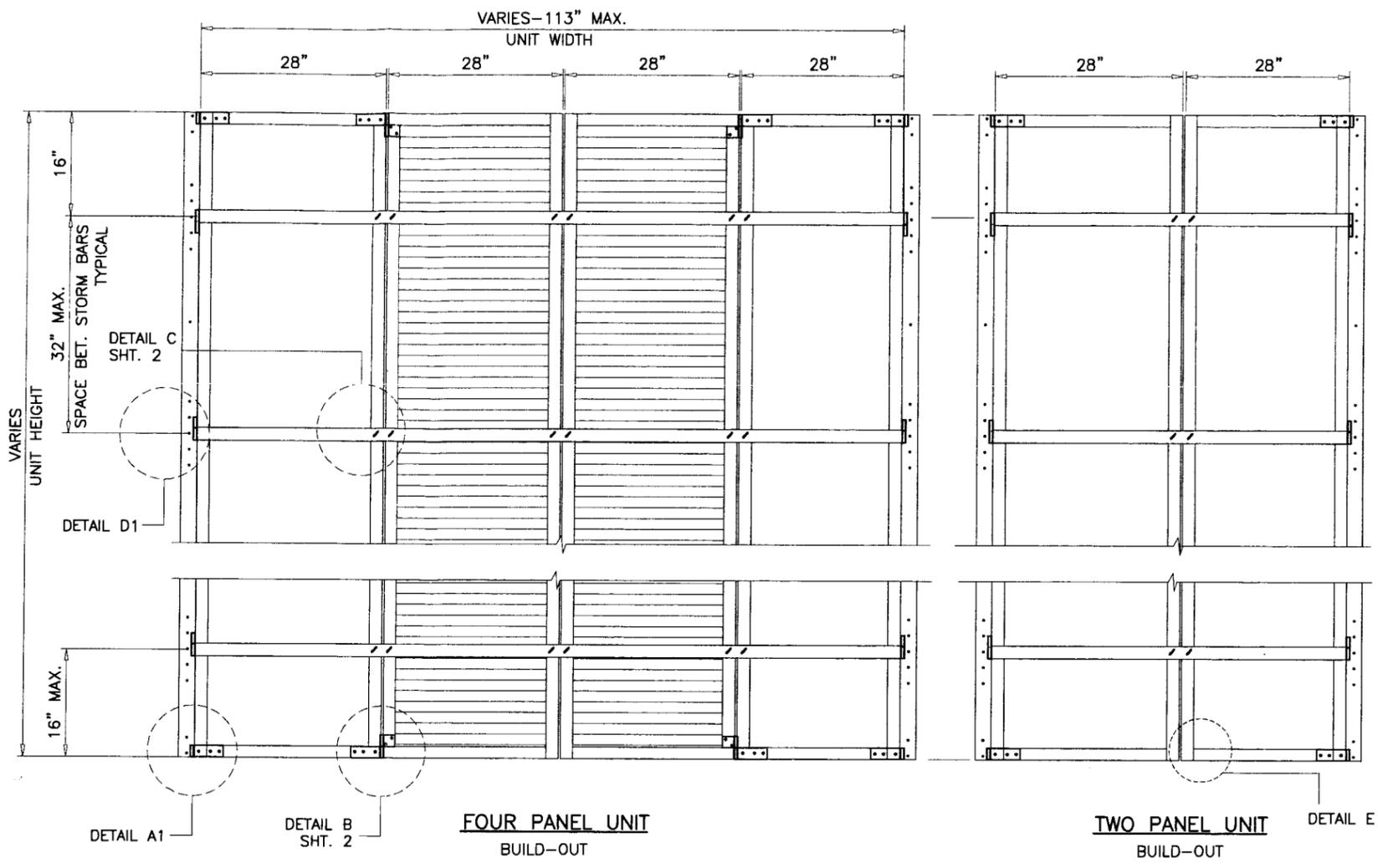
E 107.27.06 H UPDATED FOR 2004 FBC

no	date	by	description
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date: 07-24-95	scale: 1/2" = 1"	dr. by: HAMID	chk. by:
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PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 07-0423.07
 Expiration Date 02/22/2008
 By Helmy A. Helmy
 Miami Dade Product Control
 Division

Engr. DR. HUMAYOUN FAROOQ
 STRUCTURES
 FLA. PE # 16557
 C.A.N. 3538
 DEC 9 2006



TYPICAL ANCHORS
 (5) @ EACH S.BAR 2-1/2" O.C.
 (1) IN BETWEEN S.BARS
 SEE SCHEDULE

ANCHOR TYPE	MAX. SHUTTER WIDTH
A	108"
B	59"
C	101"
D	113"

