



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

**NOTICE OF ACCEPTANCE (NOA)**

**Willard Shutter Company, Inc.**  
**4420 NW 35<sup>th</sup> Court.**  
**Miami, FL 33142**

**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: The Islander Bahama Louver.**

**APPROVAL DOCUMENT:** Drawing No. **09-044**, titled "The Islander Bahama Louver" sheets 1 through 5 of 5, prepared by EngCo, Inc., dated May 01, 2009, signed and sealed by Pedro De Figueiredo, P.E., on September 17, 2009 bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Division.

**MISSILE IMPACT RATING: None**

**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 # 07-1219.08** and consists of this page 1, evidence submitted pages E-1, E-2, and 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*  
 10/14/2009

**NOA No. 09-0528.02**  
**Expiration Date: 03/27/2013**  
**Approval Date: 10/14/2009**  
**Page 1**

**Willard Shutter Company, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 02-0621.08**

**A. DRAWINGS**

1. *Drawing No. 02-045R2, titled "The Islander Bahama Louver" dated 12/30/02 with last revision on 01/29/03, prepared by EngCo, Inc, signed and sealed by P. De Figueiredo PE.*

**B. TESTS**

1. *Test report on Air Pressure Test per PA 202 of "Willard: Louvered Bahama Architectural Fixture: FBC", prepared by Construction Testing Corporation, report No. 02-049, dated 12/21/02, signed and sealed by Y. G. Kuri PE.*
2. *Test report on Air Pressure Test per PA 202 of "Bahama Shades", prepared by Construction Testing Corporation, report No. 02-004, dated 03/12/02, signed and sealed by C. G. Tyson, PE.*

**C. CALCULATION**

1. *Product Evaluation and Anchor Verification of Sunshades (Louvers) prepared by EngCo, Inc. on 05/24/02, signed and sealed by P. De Figueiredo, PE.*

**D. STATEMENTS.**

1. *Letter of Code Compliance and No-Financial Interest issued by Engco, Inc., on 01/06/03, signed and sealed by P. De Figueiredo, PE.*
2. *Letter of Code Compliance and No-Financial Interest issued by William Shutter Company Inc., on 01/07/03, signed and sealed by W. E. Clark.*

**E. MATERIAL CERTIFICATION**

*N/A*

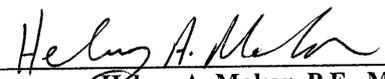
**2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 05-0822.07**

**A. DRAWINGS**

1. *Drawings prepared by EngCo, Inc. titled "The Islander Bahama Louver", Drawing No. 05-267, sheets 1 to 4 of 4, dated 08/17/05 with no revisions signed and sealed by P. De Figueiredo, P.E.*

**B. TESTS**

1. *Test report on Air Pressure Test per PA 202 of "Willard: Louvered Bahama Architectural Fixture: FBC", prepared by Construction Testing Corporation, report No. 02-049, dated 12/21/02, signed and sealed by Y. G. Kuri PE.*
2. *Test report on Air Pressure Test per PA 202 of "Bahama Shades", prepared by Construction Testing Corporation, report No. 02-004, dated 03/12/02, signed and sealed by C. G. Tyson, PE.*



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

**NOA No. 09-0528.02  
Expiration Date: 03/27/2013  
Approval Date: 10/14/2009**

**Willard Shutter Company, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**C. CALCULATION**

1. *Product Evaluation and Anchor Verification of Sunshades (Louvers) prepared by EngCo, Inc. on 05/24/02, signed and sealed by P. De Figueiredo, PE.*

**D. QUALITY ASSURANCE**

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

**E. STATEMENTS.**

1. *Letter of Code Compliance and No-Financial Interest issued by Engco, Inc., on 01/06/03, signed and sealed by P. De Figueiredo, P.E.*
2. *Letter of Code Compliance and No-Financial Interest issued by William Shutter Company Inc., on 01/07/03, signed and sealed by W. E. Clark.*
3. *Letter of Code Compliance issued by EngCo, Inc., on 08/17/05, signed and sealed by P. De Figueiredo, P.E.*

**3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 07-1219.08**

**A. DRAWINGS**

1. *None.*

**B. TESTS**

1. *None.*

**C. CALCULATIONS**

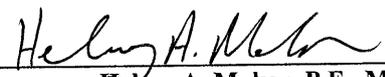
1. *None.*

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. *None.*



Helmy A. Makar, P.E., M.S.  
Senior Product Control Examiner  
NOA No. 09-0528.02  
Expiration Date: 03/27/2013  
Approval Date: 10/14/2009

**Willard Shutter Company, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**4. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. *Drawing No. 09-044, titled "The Islander Bahama Louver" sheets 1 through 5 of 5, prepared by EngCo, Inc., dated May 01, 2009, signed and sealed by Pedro De Figueiredo, P.E., on September 17, 2009.*

**B. TESTS**

1. *None.*

**C. CALCULATIONS**

1. *Product Evaluation and Anchor Verification of Sunshades (Louvers) prepared by EngCo, Inc. on 05/05/09, to comply with the FBC 2007, signed and sealed by P. De Figueiredo, PE.*

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. *None.*

**F. STATEMENTS.**

1. *Letter of Code Compliance with the FBC 2007 and No-Financial Interest issued by Engco, Inc., on 05/05/09, signed and sealed by P. De Figueiredo, P.E.*

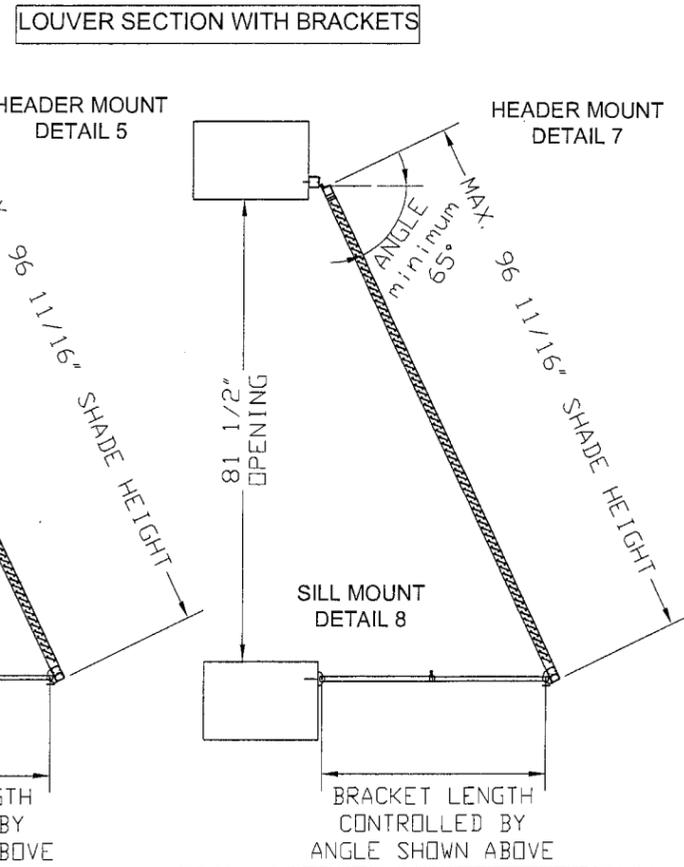
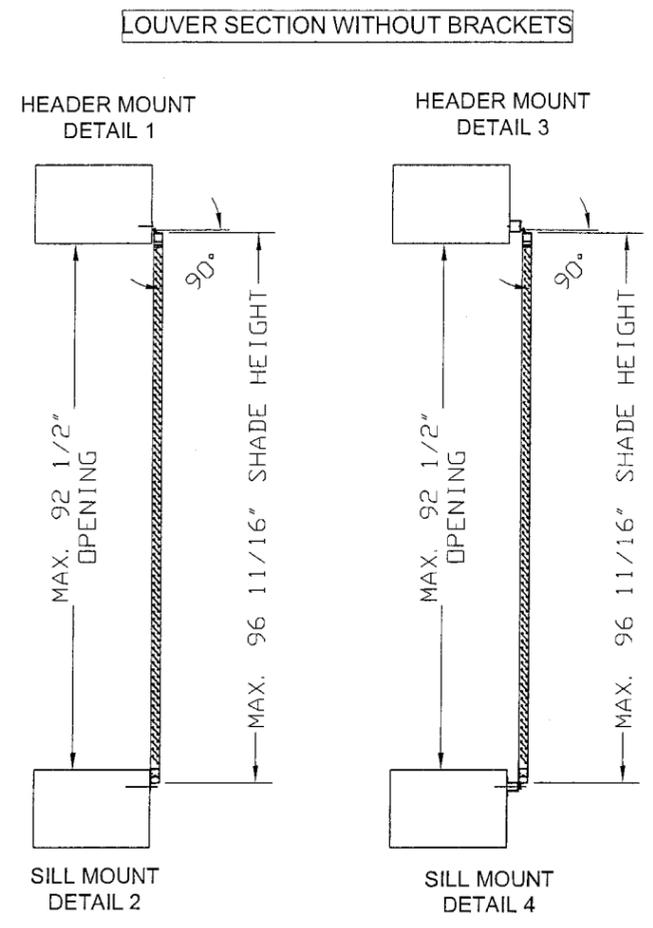
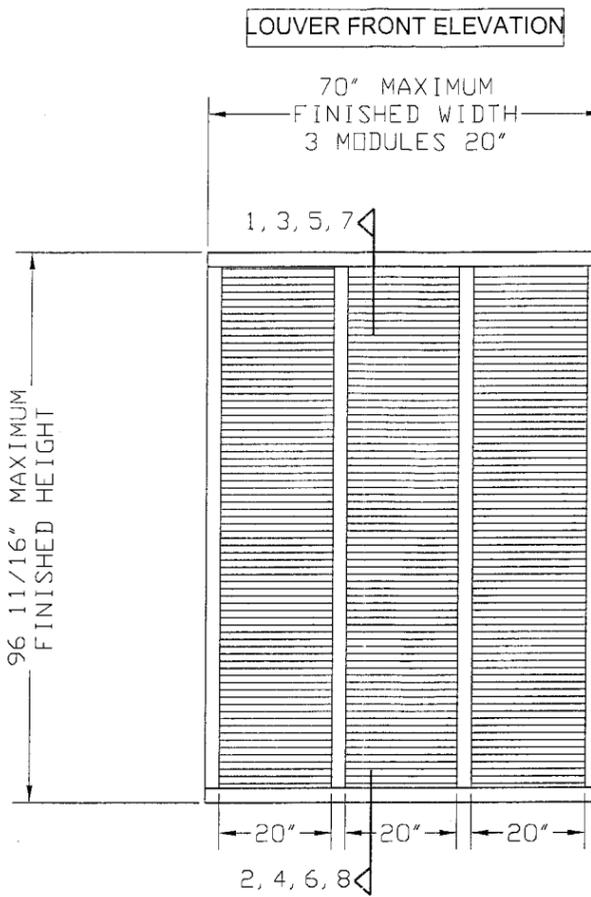


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**Helmy A. Makar, P.E., M.S.**  
**Senior Product Control Examiner**  
**NOA No. 09-0528.02**  
**Expiration Date: 03/27/2013**  
**Approval Date: 10/14/2009**

**GENERAL NOTES: - (FLORIDA BUILDING CODE 2007)**

- 1- DEFINITION: THIS PRODUCT IS A BAHAMAS LOUVER, TESTED UNDER TAS 202 & DESIGNED TO BE USED AS DECORATIVE CLADDING AND PROTECTIVE SUN SCREEN. THIS PRODUCT USE IS LIMITED TO THE ALLOWABLE DESIGNED PRESSURE STATED IN THIS APPROVAL AND MUST NOT BE USED AS AN APPROVED HURRICANE PROTECTION DEVICE.
- 2- CODE: THIS PRODUCT IS IN COMPLIANCE WITH THE FLORIDA BUILDING CODE 2007 EDITION.
- 3- POSTING: A PERMANENT LEGIBLE DECAL SHALL BE PLACED AT A READILY VISIBLE LOCATION STATING THE FOLLOWING:  
  
BAHAMA LOUVER - WILLARD SHUTTERS  
MIAMI - FLORIDA  
DADE COUNTY PRODUCT CONTROL APPROVED"
- 4- A LICENSED ENGINEER OR ARCHITECT SHALL PROVIDE A SITE SPECIFIC WIND LOAD FOR A PROJECT AS PER ASCE 7-05 OR LATEST. THE CONTRACTOR, ENGINEER OR ARCHITECT SHALL VERIFY THE ADEQUACY OF THIS PRODUCT WITH THE PROJECT WIND LOADS.
- 5- MATERIAL: ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T5 OR AS INDICATED IN THIS SET OF DRAWINGS
- 6- FASTENERS: ASSEMBLY SCREWS AND ANCHORS SHALL BE AS SPECIFIED BY THE CURRENT SET OF DRAWINGS. INSTALLATION AND LOADS AS PER THIS APPROVAL. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING.
- 7- THE CONTRACTOR MUST VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE IN SUSTAINING THE PRODUCT IMPOSED LOADS.
- 8- MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL/ METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2007 FBC SECTION 2003.8.4.



**TABLE OF CONTENTS:**

SHEET	DESCRIPTION
1	GENERAL NOTES & TYPICAL ELEVATIONS AND SECTIONS, ALLOWABLE PRESSURES
2	LOUVERS WITHOUT BRACKETS SECTIONS 1, 2, 3 AND 4
3	LOUVERS WITH BRACKETS SECTIONS 5, 6, 7 AND 8
4	LOUVER COMPONENTS
5	LOUVER ASSEMBLY

**ALLOWABLE PRESSURES:**

LOUVER HEIGHT	W/BRACKET		W/OUT BRACKET	
	POS(+)	NEG(-)	POS(+)	NEG(-)
96 11/16"	+40.0	-35.0	+40.0	-40.0
72 1/2"	+52.0	-52.0	+55.5	-55.5
48 3/8"	+76.3	-76.3	+83.2	-90.1

NOTES: 1- USE OF LINEAR INTERPOLATION BETWEEN ABOVE VALUES IS ACCEPTABLE.  
2- LOUVERS ARE TO BE INSTALLED IN LOCATION WHERE ROOM BEHIND THE LOUVER IS DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM AND THE ROOM WILL HOUSE WATER RESISTANT/ WATER PROOF EQUIPMENT COMPONENTS OR SUPPLIES.

MANUFACTURER:  
**WILLARD**  
SHUTTER COMPANY, INC.  
4420 NW 35TH COURT  
MIAMI, FL 33142  
Tel.: (305) 633-0162  
Fax.: (305) 638-8634

PRODUCT:  
**THE ISLANDER  
BAHAMA LOUVER**

Engineering:  
**EngCo Inc.**  
CA 8116  
6971 W. Sunrise Blvd. 104  
Plantation, FL 33313  
ENGCO@AOL.COM

SEP 17 2009  
Engineer Seal  
Pedro De Figueiredo  
PE 52609

DRAFTING:  
**PK DRAFTING & MORE**

MIAMI-DADE BCCO:

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No 09-0528.02  
Expiration Date 03/27/2013  
By *Helmy A. Helmy*  
Miami Dade Product Control  
Division

Date: 05/01/09  
Scale: NA  
Design by: PPMF

Drawing Number  
**09-044**

SHEET  
**1 of 5**

LOUVERS WITHOUT BRACKETS  
SECTION DETAILS 1, 2, 3 AND 4

MANUFACTURER:  
**WILLARD**  
SHUTTER COMPANY, INC.  
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*[Signature]*  
SEP 17 2009  
Engineer Seal  
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DRAFTING:  
**PK DRAFTING & MORE**

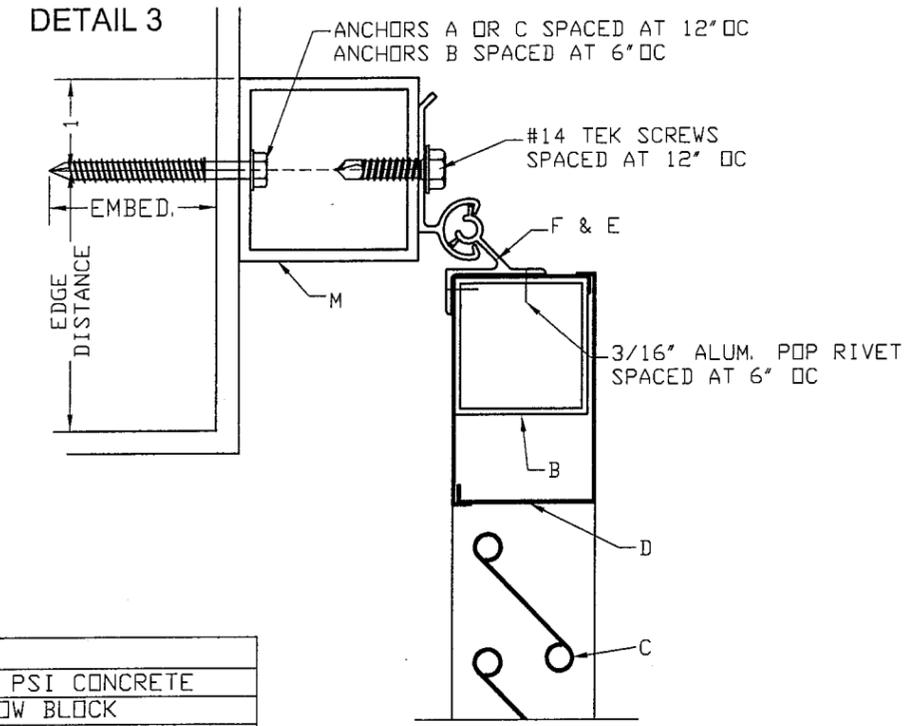
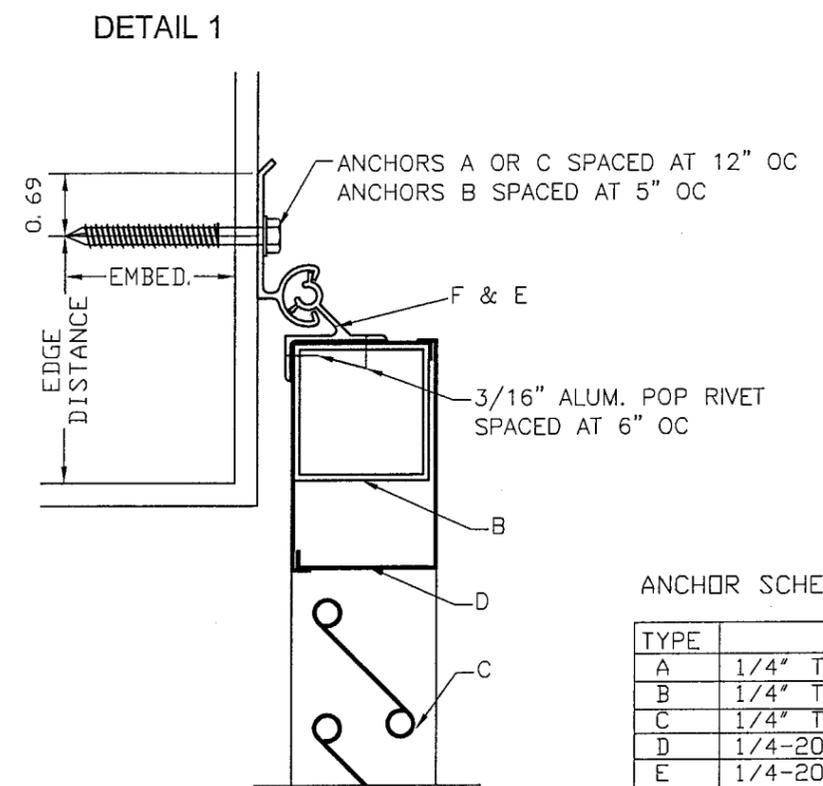
MIAMI-DADE BCCO:

PRODUCT REVISED  
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Building Code  
Acceptance No. 09-0528.02  
Expiration Date 03/27/2013  
By *[Signature]*  
Miami Dade Product Control  
Division

Date: 05/01/09  
Scale: NA  
Design by: PPMF

Drawing Number  
**09-044**

SHEET  
2 of 5

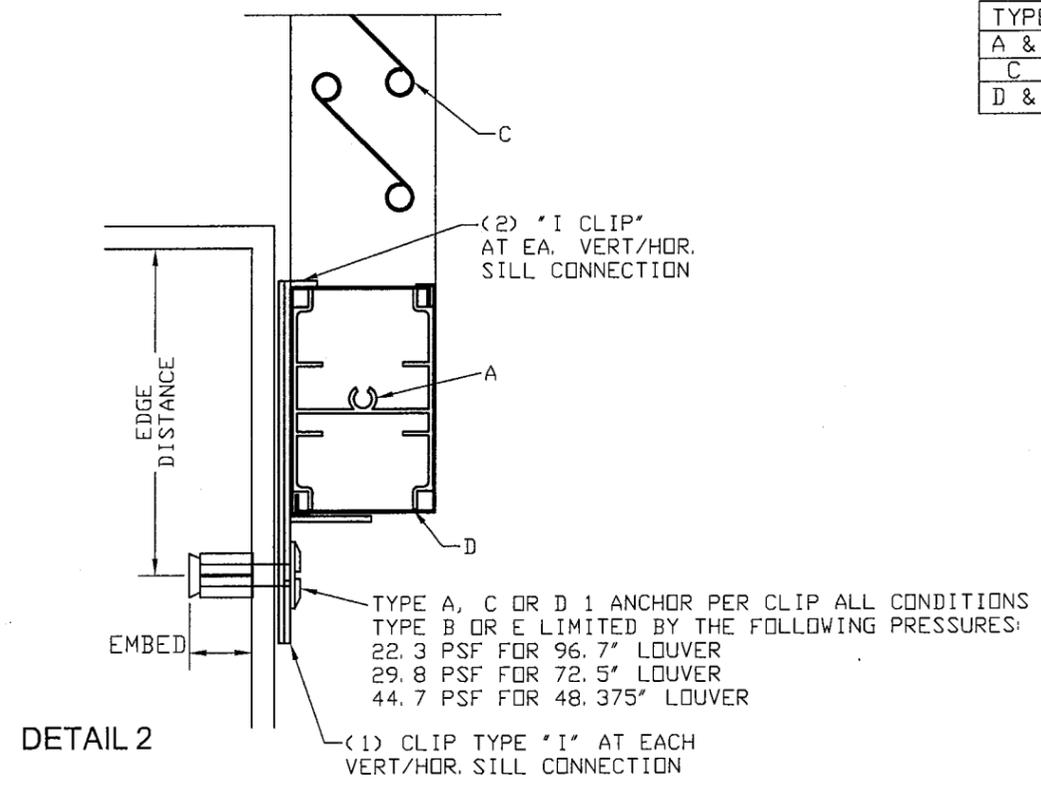


ANCHOR SCHEDULE

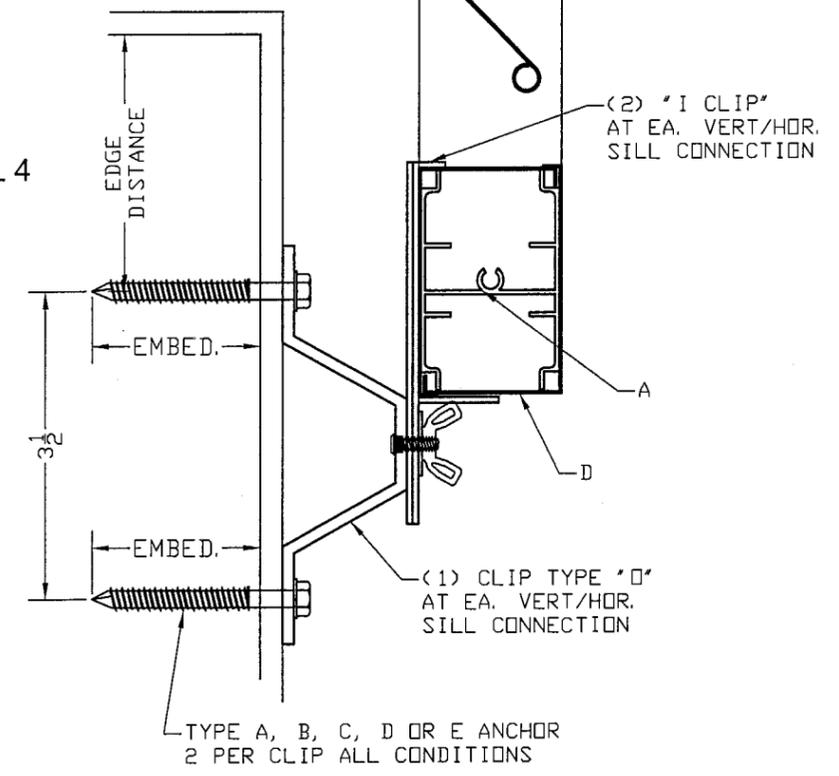
TYPE	DESCRIPTION
A	1/4" TAPCON/ ULTRACON, 1 3/4" EMBEDMENT INTO 3320 PSI CONCRETE
B	1/4" TAPCON/ ULTRACON, 1 1/4" EMBEDMENT INTO HOLLOW BLOCK
C	1/4" TAPCON/ ULTRACON, 1 1/2" EMBEDMENT INTO WOOD (<SG>=0.55)
D	1/4-20 CALK-IN/ SOLID SETS, 7/8" EMBEDMENT INTO 3000 PSI CONCRETE
E	1/4-20 CALK-IN/ SOLID SETS, 7/8" EMBEDMENT INTO HOLLOW BLOCK

EDGE DISTANCE

TYPE	E. D.
A & B	2-1/2"
C	3/4"
D & E	3"



DETAIL 4



MANUFACTURER:  
**WILLARD**  
 SHUTTER COMPANY, INC.  
 4420 NW 35TH COURT  
 MIAMI, FL 33142  
 Tel.: (305) 633-0162  
 Fax.: (305) 638-8634

PRODUCT:  
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 BAHAMA LOUVER**

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SEP 17 2001

Engineer Seal  
 Pedro De Figueiredo  
 PE 52609

DRAFTING:  
**PK DRAFTING & MORE**

MIAMI-DADE BCCO:

PRODUCT REVISED  
 as complying with the Florida  
 Building Code  
 Acceptance No 09-0528.02  
 Expiration Date 03/27/12.013  
 By *Helmut A. ...*  
 Miami Dade Product Control  
 Division

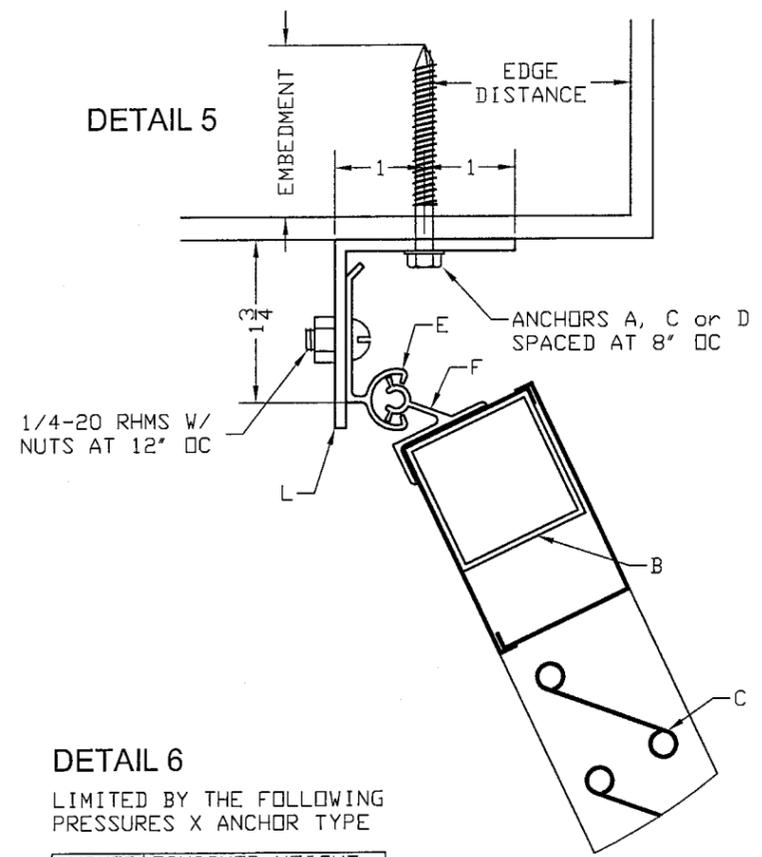
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Drawing Number  
**09-044**

SHEET  
**3 of 5**

LOUVERS WITH BRACKETS  
 SECTION DETAILS 5, 6, 7 AND 8

DETAIL 5

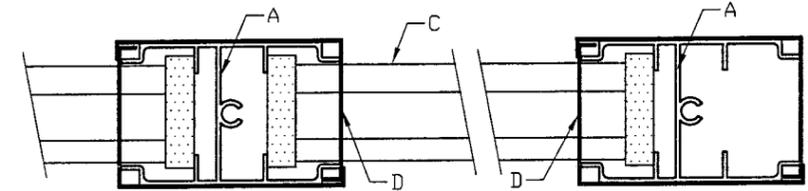


DETAIL 6

LIMITED BY THE FOLLOWING  
 PRESSURES X ANCHOR TYPE

ANCHOR TYPE	FINISHED HEIGHT		
	96.7	72.5	48.4
A	32.3	43.1	64.6
B	--	23.6	35.4
C*	40.0	52.0	76.3
D	31.8	42.3	63.5
E	--	22.9	34.3

TYPICAL HORIZONTAL SECTION



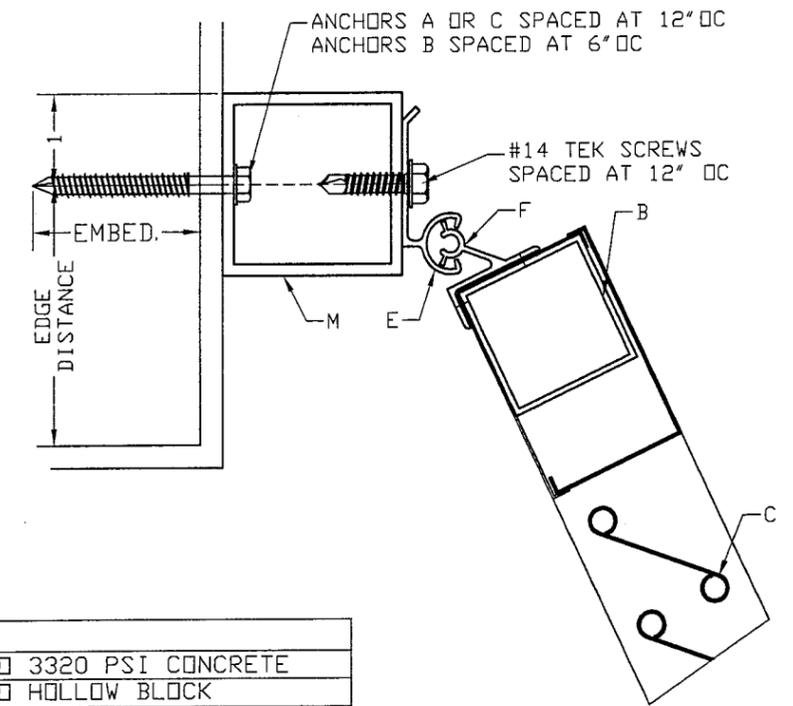
ANCHOR SCHEDULE

TYPE	DESCRIPTION
A	1/4" TAPCON/ ULTRACON, 1 3/4" EMBEDMENT INTO 3320 PSI CONCRETE
B	1/4" TAPCON/ ULTRACON, 1 1/4" EMBEDMENT INTO HOLLOW BLOCK
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EDGE DISTANCE

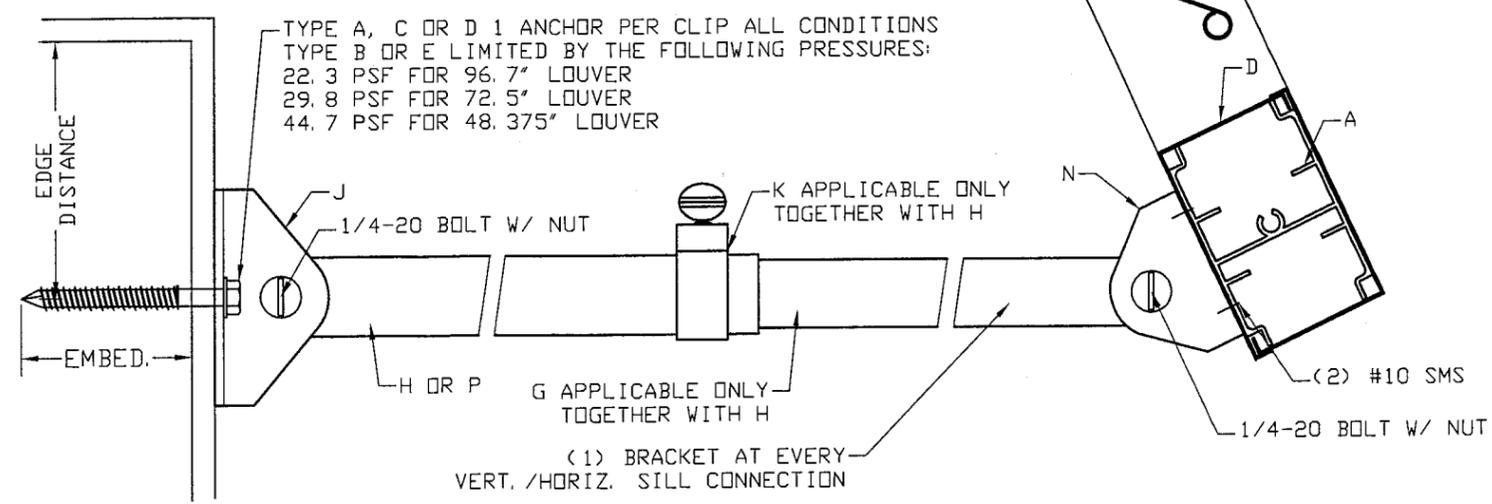
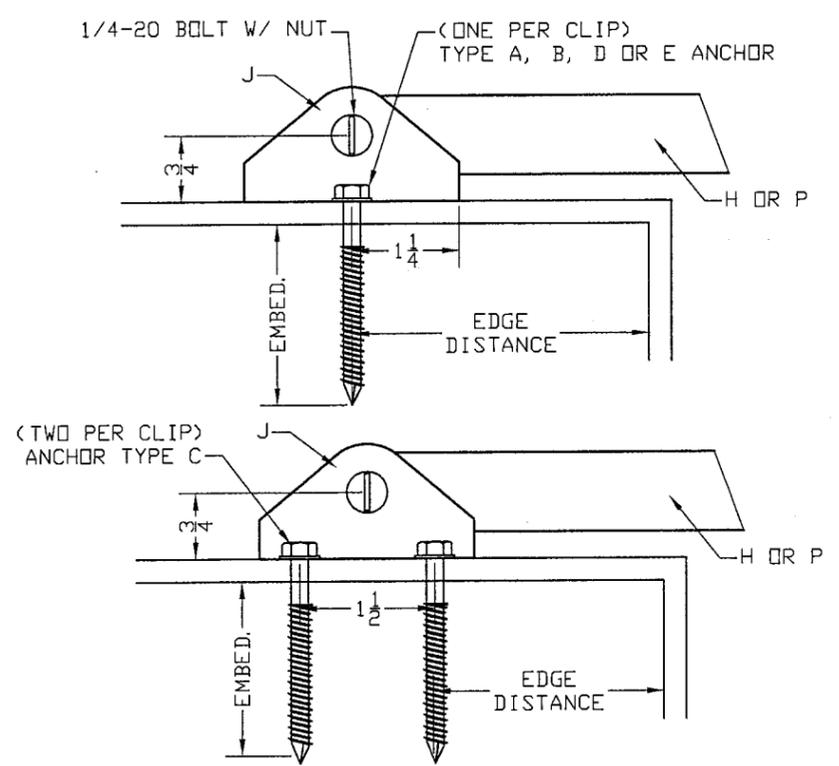
TYPE	E. D.
A & B	2-1/2"
C	3/4"
D & E	3"

DETAIL 7



DETAIL 8

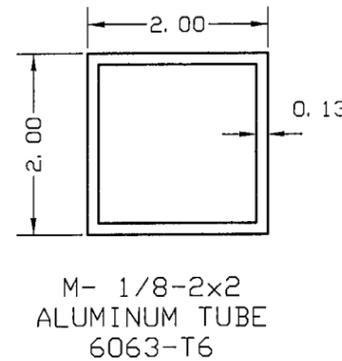
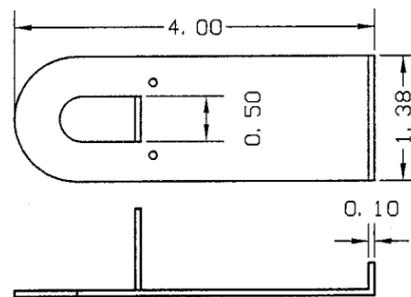
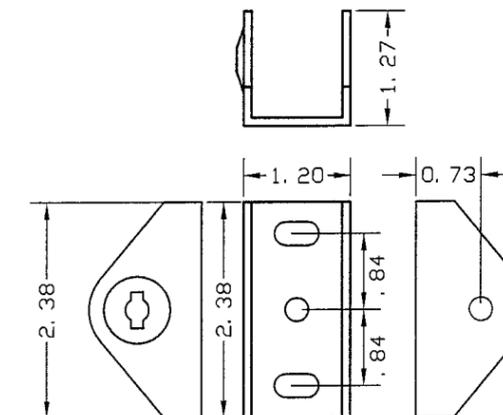
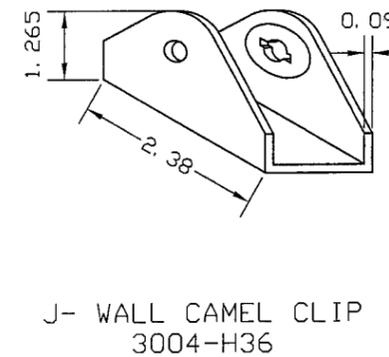
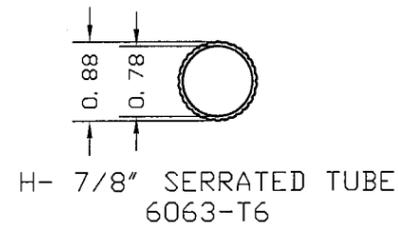
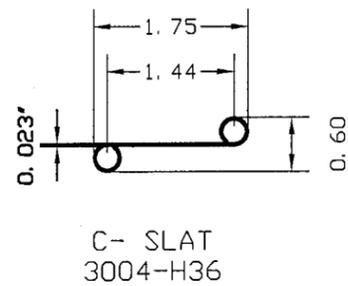
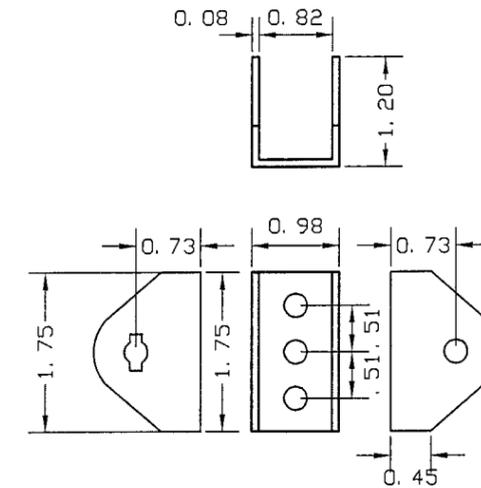
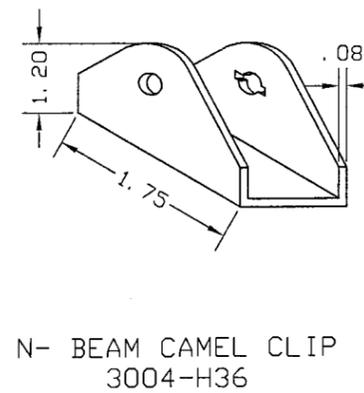
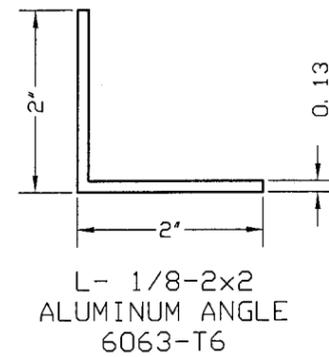
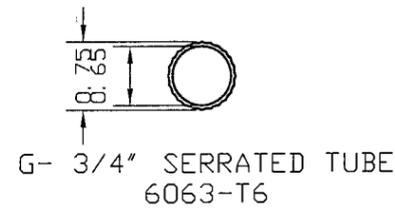
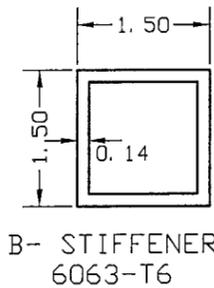
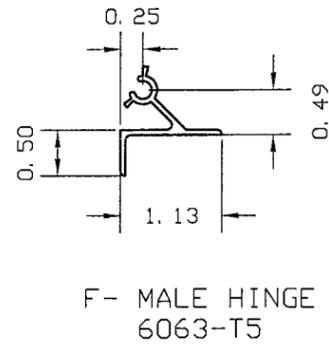
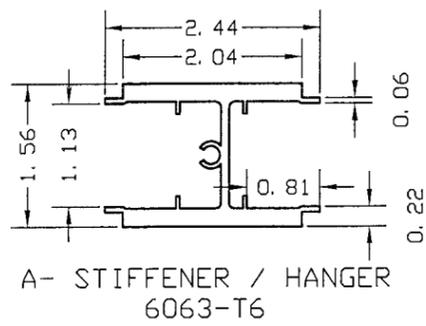
TYPICAL BRACKET SECTION



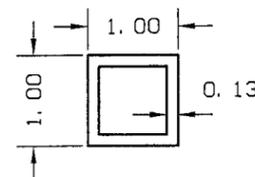
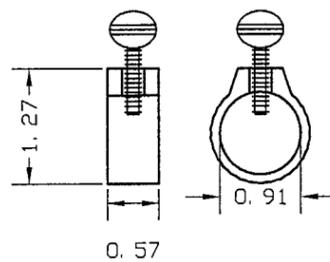
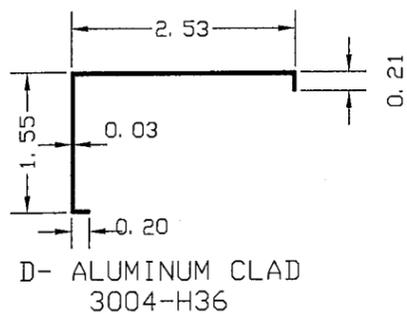
TYPE A, C OR D 1 ANCHOR PER CLIP ALL CONDITIONS  
 TYPE B OR E LIMITED BY THE FOLLOWING PRESSURES:  
 22.3 PSF FOR 96.7" LOUVER  
 29.8 PSF FOR 72.5" LOUVER  
 44.7 PSF FOR 48.375" LOUVER

(1) BRACKET AT EVERY  
 VERT./HORIZ. SILL CONNECTION

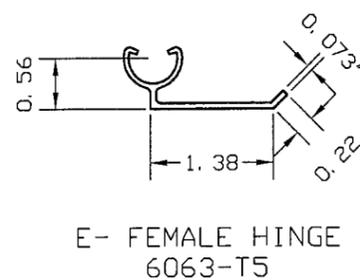
LOUVER COMPONENTS



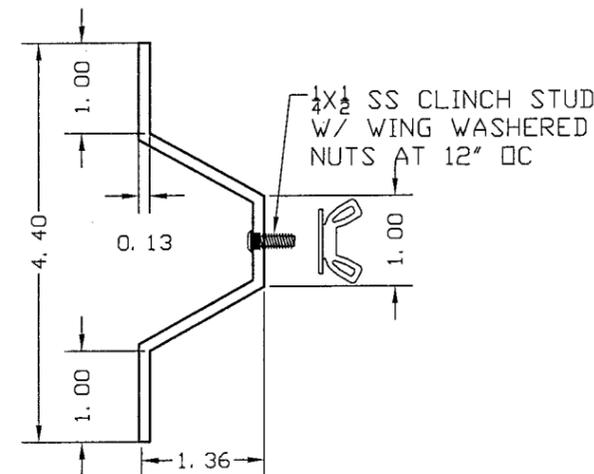
I- CLIP  
3004-H36  
\*NOTE: USED TWO CLIPS NESTED  
AT EA CONNECTION



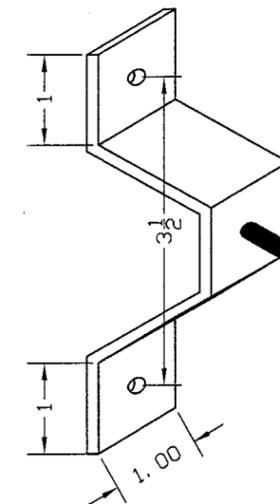
P- 1/8-1x1  
ALUMINUM TUBE 6063-T6  
ALTERNATE BRACKET



K- LOCK RING W/  
1/4-20 THUMB BOLT  
CAST ALUMINUM



Q- BUILT-OUT CLIP  
6063-T6



MANUFACTURER:  
**WILLARD**  
SHUTTER COMPANY, INC.  
4420 NW 35TH COURT  
MIAMI, FL 33142  
Tel.: (305) 633-0162  
Fax.: (305) 638-8634

PRODUCT:  
**THE ISLANDER  
BAHAMA LOUVER**

Engineering:  
**EngCo Inc.**  
CA 8116  
6971 W. Sunrise Blvd. 104  
Plantation, FL 33313  
ENGCO@AOL.COM

SEP 17 2009  
Engineer Seal  
Pedro De Figueiredo  
PE 52609

DRAFTING:  
**PK DRAFTING & MORE**

MIAMI-DADE BCCO:

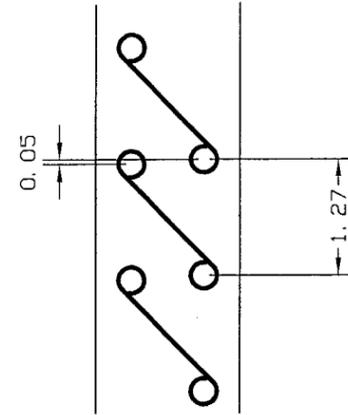
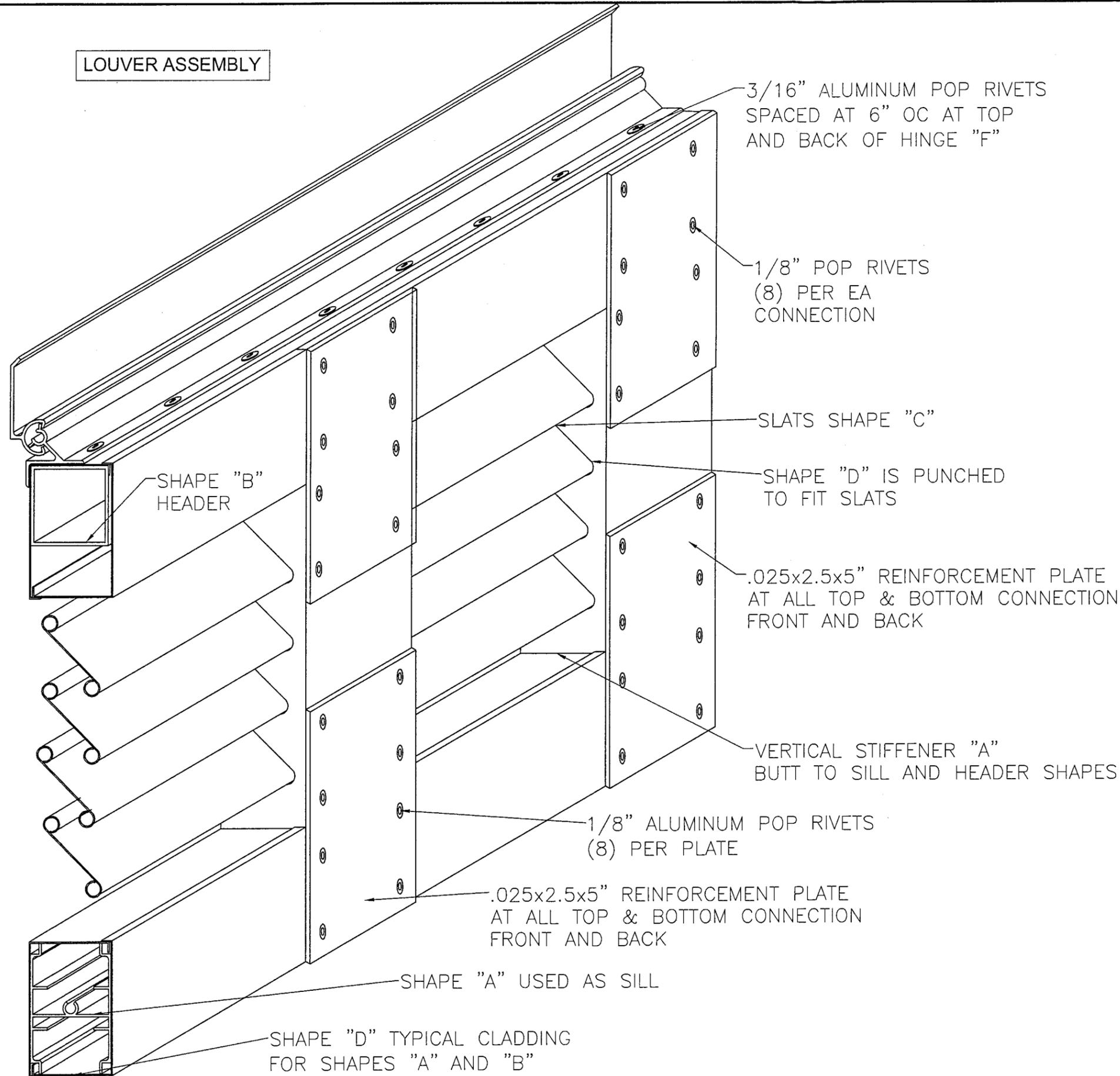
PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 09-0528.02  
Expiration Date 03/27/2013  
By *Helena A. Miller*  
Miami Dade Product Control  
Division

Date: 05/01/09  
Scale: NA  
Design by: PPMF

Drawing Number  
**09-044**

SHEET  
**4 of 5**

LOUVER ASSEMBLY



MANUFACTURER:  
**WILLARD**  
 SHUTTER COMPANY, INC.  
 4420 NW 35TH COURT  
 MIAMI, FL 33142  
 Tel.: (305) 633-0162  
 Fax.: (305) 638-8634

PRODUCT:  
**THE ISLANDER  
 BAHAMA LOUVER**

Engineering:  
**EngCo Inc.**  
 CA 8116  
 6971 W. Sunrise Blvd. 104  
 Plantation, Fl. 33313  
 ENGCO@AOL.COM

*[Signature]*  
 SEP 17 2009  
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MIAMI-DADE BCCO:

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SHEET  
**5 of 5**