



**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)**

---

**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.02-045R2, titled "The Islander Bahama Louver" dated 12/30/02 with last revision on 01/29/03, prepared by EngCo Incorporated signed and sealed by Pedro De Figueiredo P.E., bearing the Miami-Dade County Product Control Approval stamp with the NOA number and approval 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 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** consists of this page 1 as well as approval document mentioned above.  
The submitted documentation was reviewed by **Candido F. Font PE.**



**NOA No: 02-0621.08  
Expiration Date: March 27, 2008  
Approval Date: March 27, 2003  
Page 1**

Willard Shutter Company, Inc.

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**  
(For File ONLY. Not part of NOA)

**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.

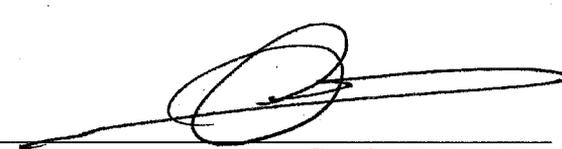
**C. CALCULATION**

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.

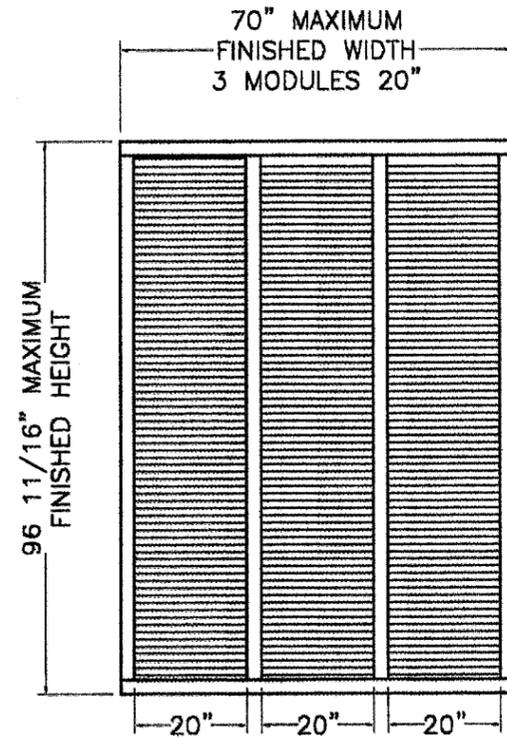
**E. MATERIAL CERTIFICATION**  
N/A



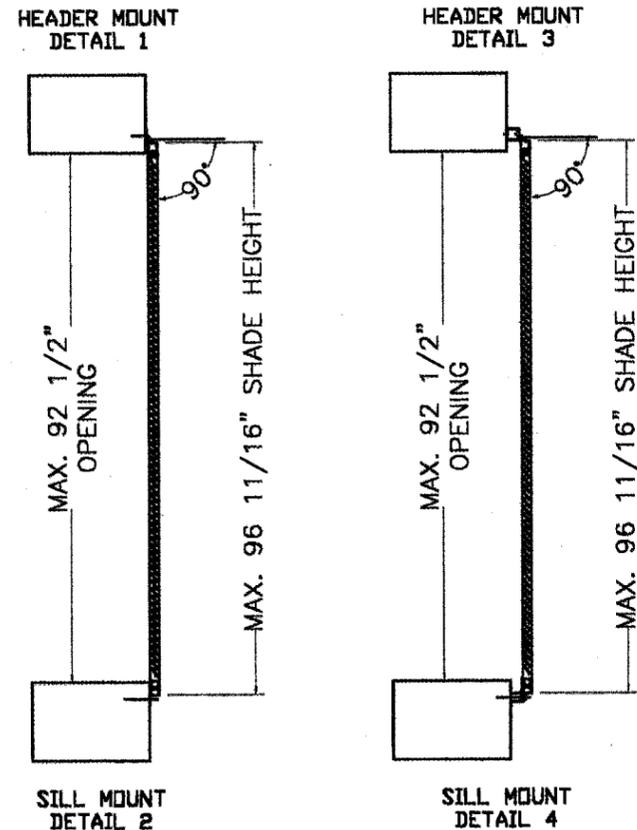
---

**Candido F. Font PE.**  
**Sr. Product Control Examiner**  
**NOA No 02-0621.08**  
**Expiration Date: March 27, 2008**  
**Approval: Date: March 27, 2003**

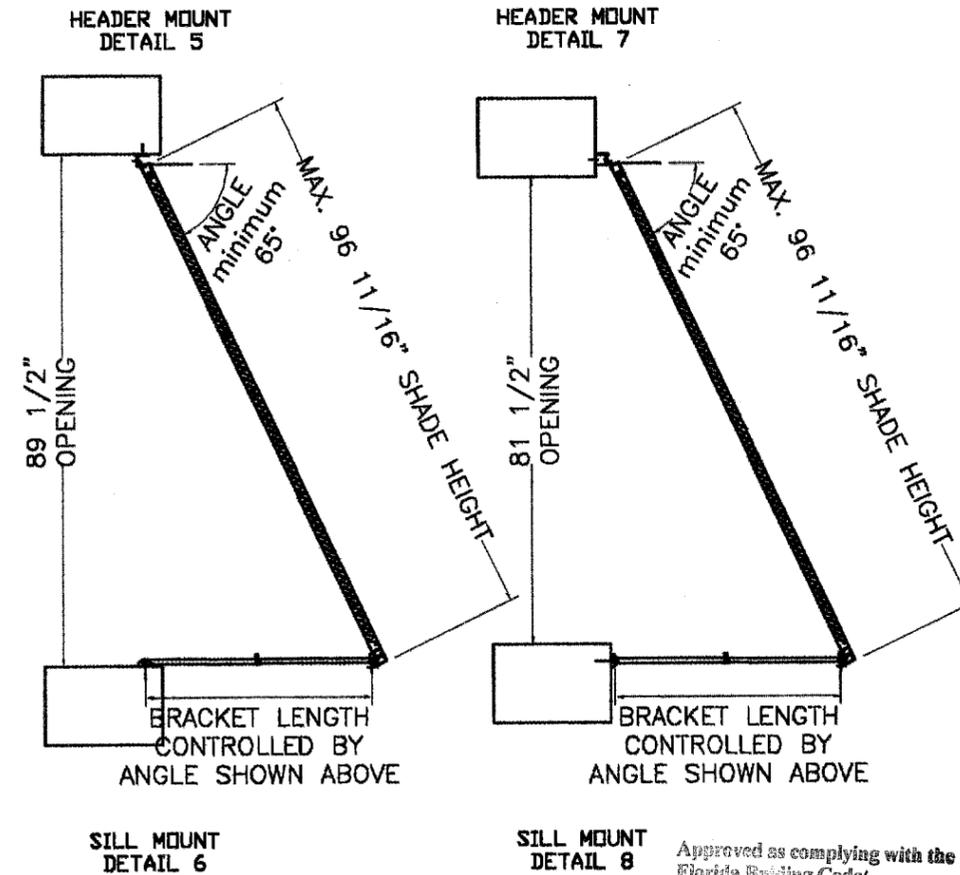
SHADE ELEVATION



SIDE SECTION W/OUT BRACKETS  
ALLOWABLE DESIGNED PRESSURES



SIDE SECTION W/ BRACKETS  
ALLOWABLE DESIGNED PRESSURES



Approved as complying with the  
Florida Building Code  
Date 03/27/03  
NOA# 01-0621.08  
Miami Dade Product Control  
Division  
By [Signature]

Manufacturer:  
**Willard  
Shutter  
Company**  
4420 NW 35TH COURT  
MIAMI - FLORIDA  
Tel.: (305) 633-0162

Product:  
**The Islander  
Bahama Louver**

Engineering:  
**EngCo Inc.**  
CA 8116  
6971 W. Sunrise Blvd. 104  
Plantation, Fl. 33313  
Tel.: (954) 585-0304

[Signature]

JAN 29 2003  
Engineer Seal  
Pedro De Figueiredo  
PE 52609

Date: 12/30/02  
Scale: NA  
Design by: PPMF

Revision:  
#2 - 1/29/03

Drawing Number  
02-045R2

Sheet  
1 of 4

**GENERAL NOTES:**

- 1- DEFINITION: THIS PRODUCT IS A BAHAMA LOUVER, TESTED & 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 DESIGNED UNDER THE FLORIDA BUILDING CODE 2001 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- LOADS: DESIGN PRESSURE CALCULATIONS SHALL BE PERFORMED IN ACCORDANCE WITH ASCE 7-98.
- 5- MATERIAL: ALL ALUMINUM STRUCTURES AND COMPONENTS SHALL BE DESIGN AS PER CHAPTER 20 OF THE FBC. ALUMINUM LOUVER EXTRUDED SHAPES SHALL BE 6063-T5 OR AS NOTED.
- 6- FASTENERS: ASSEMBLY SCREWS AND ANCHORS SHALL BE AS SPECIFIED BY THE CURRENT SET OF DRAWINGS. INSTALLATION AND LOADS AS PER THIS APPROVAL.

**ALLOWABLE PRESSURES:**

LOUVER HEIGHT	W/BRACKET		W/OUT BRACKET	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
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**

4420 NW 35TH COURT  
 MIAMI - FLORIDA  
 Tel.: (305) 633-0162

Product:  
**The Islander  
 Bahama  
 Louver**

Engineering:  
**EngCo Inc.**

CA 8116  
 6971 W. Sunrise Blvd. 104  
 Plantation, Fl. 33313  
 Tel.: (954) 585-0304

*[Signature]*  
 JAN 29 2003

Engineer Seal  
 Pedro De Figueiredo  
 PE 52609

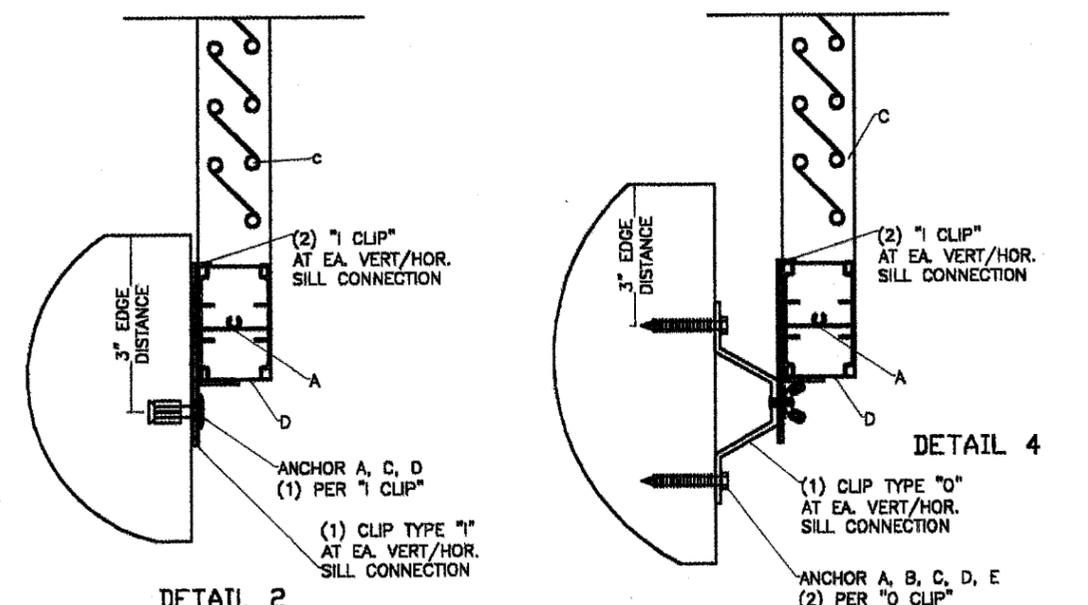
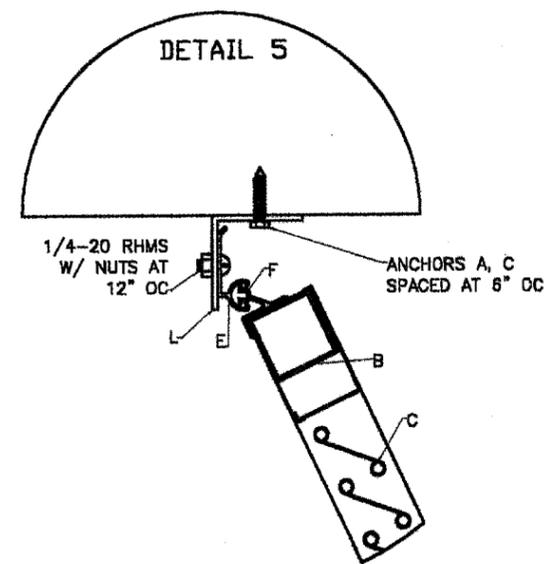
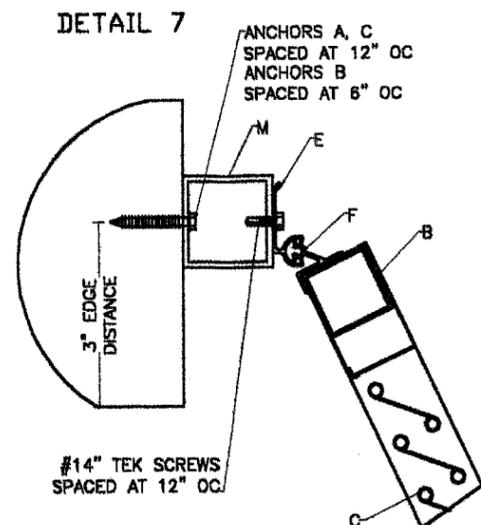
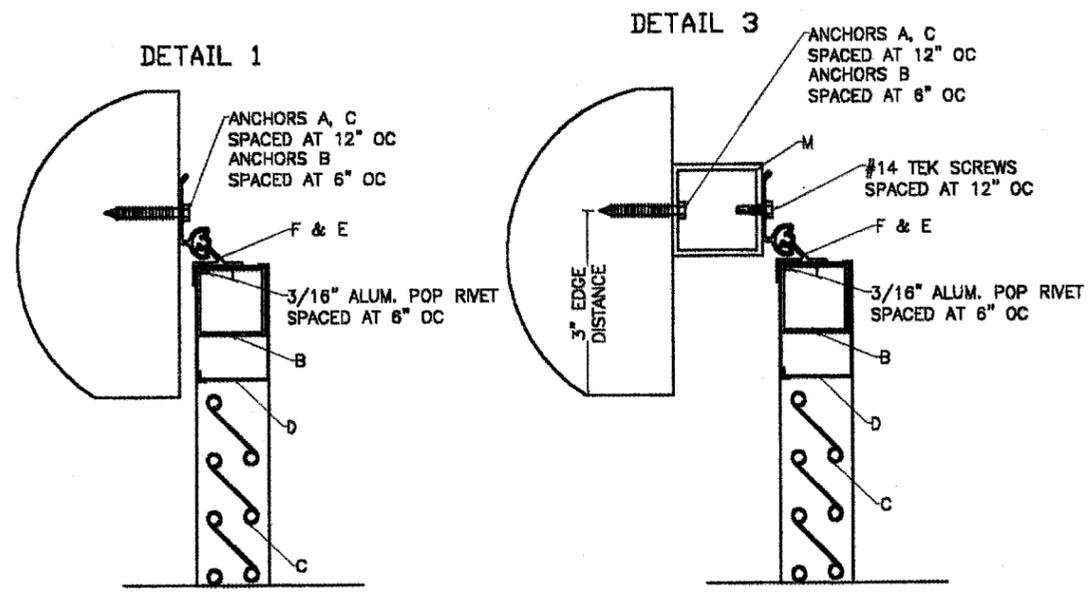
Date: 12/30/02  
 Scale: NA  
 Design by: PPMF

Revision:  
 #2 - 1/29/03

Drawing Number  
 02-045R2

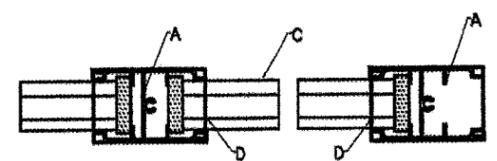
Sheet  
 2 of 4

# DETAILS

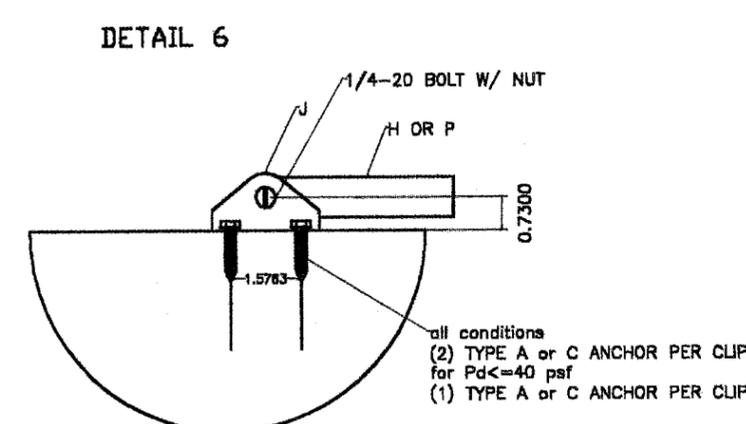
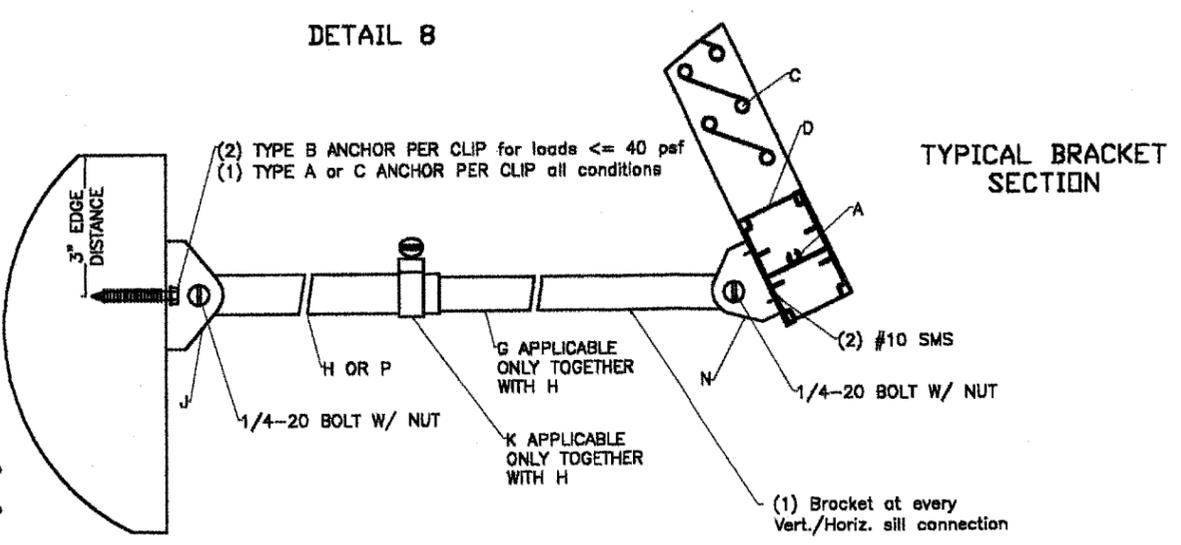


## ANCHOR SCHEDULE

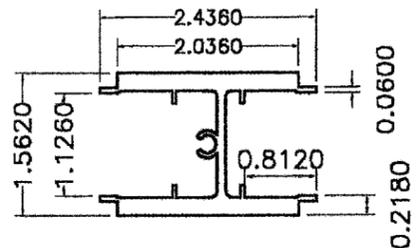
TYPE	DESCRIPTION	EMBED.	SUBSTRACT	MANUFACTURER
A	1/4" TAPCON	1 3/4"	Concrete 3000 psi	ELCO
B	1/4" TAPCON	1 1/4"	Hollow Block	ELCO
C	#14 SS PHSMS	1 1/2"	Wood (SG=.55)	GENERIC
D	1/4-20 RAWL CALK-IN	7/8"	Concrete 3000 psi	RAWL
E	1/4-20 RAWL CALK-IN	7/8"	Hollow Block	RAWL



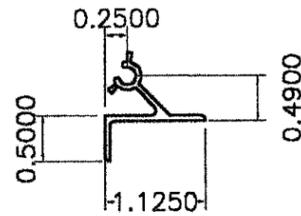
TYPICAL HORIZONTAL SECTION



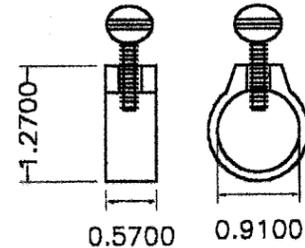
Approved as complying with the  
 Florida Building Code  
 Date 03/27/03  
 NOAH 02-0621.08  
 Miami Dade Product Control  
 Division



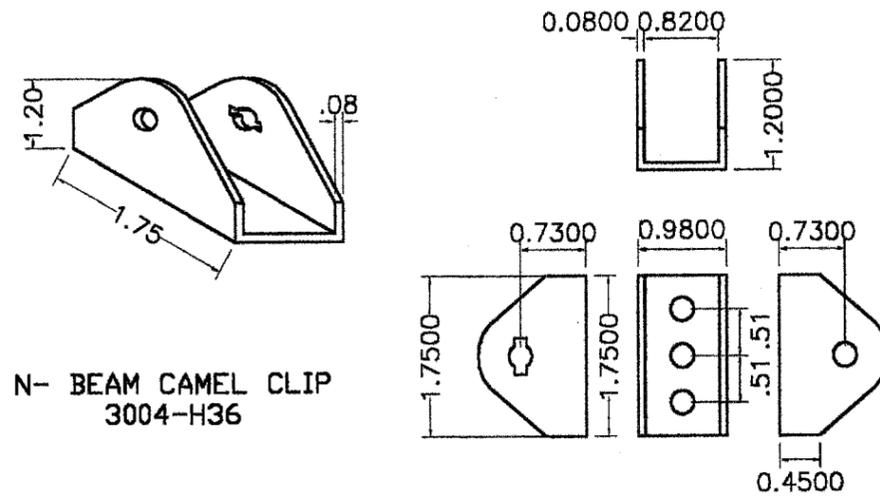
A- STIFFENER / HANGER  
6063-T6



F- MALE HINGE  
6063-T5



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



N- BEAM CAMEL CLIP  
3004-H36

Manufacturer:  
**Willard  
Shutter  
Company**  
4420 NW 35TH COURT  
MIAMI - FLORIDA  
Tel.: (305) 633-0162

Product:  
**The Islander  
Bahama Louver**

Engineering:  
**EngCo Inc.**  
CA 8116  
6971 W. Sunrise Blvd. 104  
Plantation, Fl. 33313  
Tel.: (954) 585-0304

  
**JAN 29 2003**  
Engineer Seal  
Pedro De Figueiredo  
PE 52609

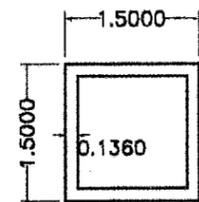
Date: 12/30/02  
Scale: NA  
Design by: PPMF

Revision:  
#2 - 1/29/03

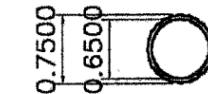
Drawing Number  
**02-045R2**

Sheet  
**3 of 4**

Approved as complying with the  
Florida Building Code  
Date 03/27/03  
NOA# 02-062108  
Miami Dade Product Control  
Division  
By 



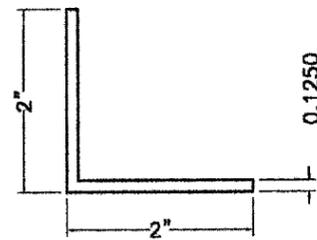
B- STIFFENER  
6063-T6



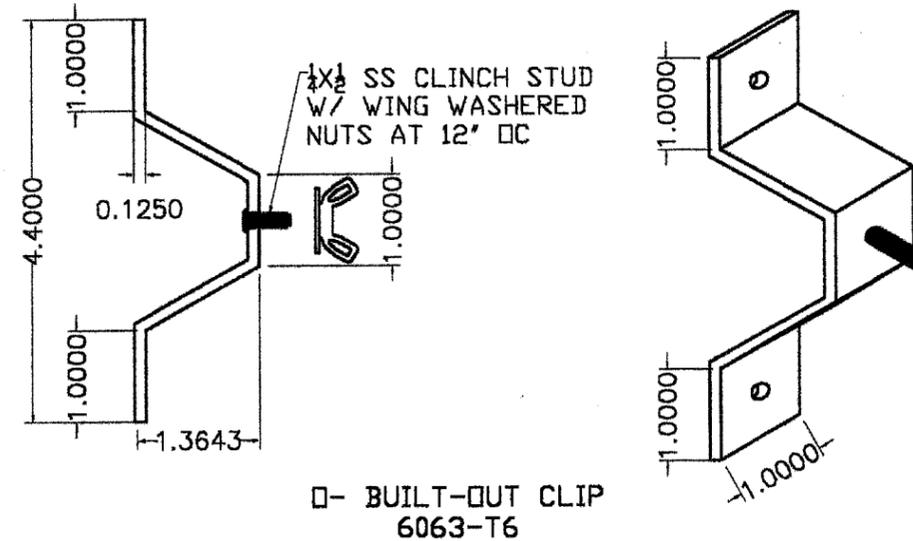
G- 3/4\"/>



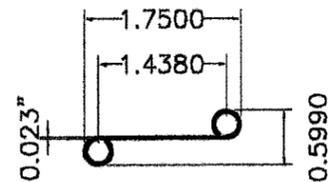
H- 7/8\"/>



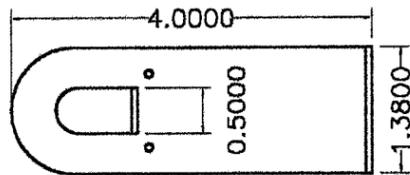
L- 1/8-2x2  
ALUMINUM ANGLE  
6063-T6



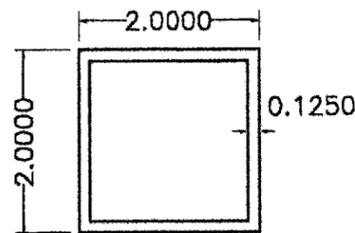
O- BUILT-OUT CLIP  
6063-T6



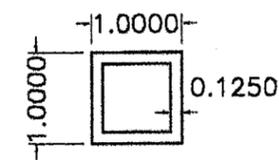
C- SLAT  
3004-H36



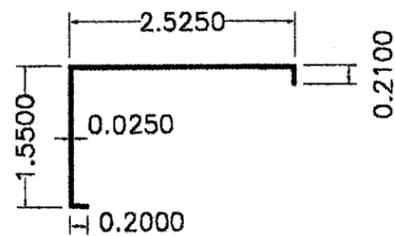
I- CLIP  
3004-H36  
NOTE: USED TWO CLIPS NESTED  
AT EA CONNECTION



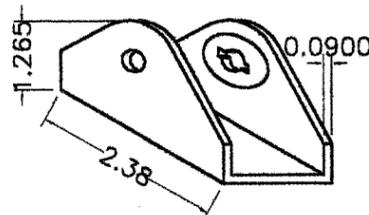
M- 1/8-2x2  
ALUMINUM TUBE  
6063-T6



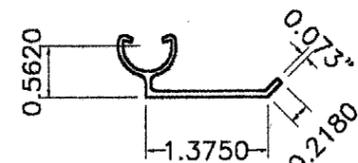
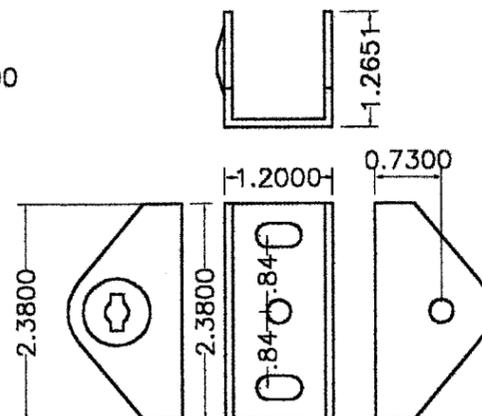
P- 1/8-1x1  
ALUMINUM TUBE 6063-T6  
ALTERNATE BRACKET



D- ALUMINUM CLAD  
3004-H36

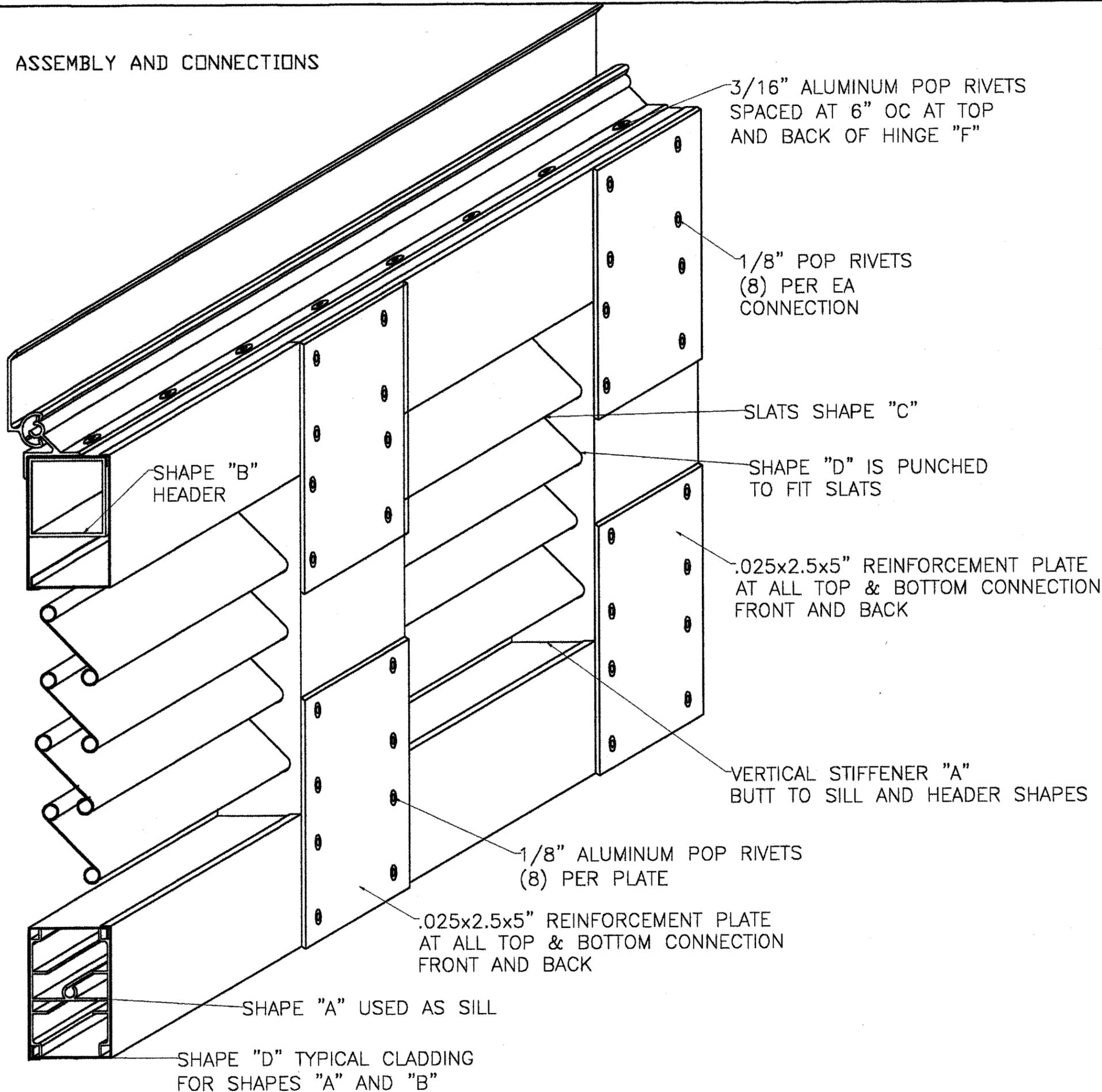


J- WALL CAMEL CLIP  
3004-H36



E- FEMALE HINGE  
6063-T5

ASSEMBLY AND CONNECTIONS



3/16" ALUMINUM POP RIVETS  
SPACED AT 6" OC AT TOP  
AND BACK OF HINGE "F"

1/8" POP RIVETS  
(8) PER EA  
CONNECTION

SLATS SHAPE "C"

SHAPE "D" IS PUNCHED  
TO FIT SLATS

.025x2.5x5" REINFORCEMENT PLATE  
AT ALL TOP & BOTTOM CONNECTION  
FRONT AND BACK

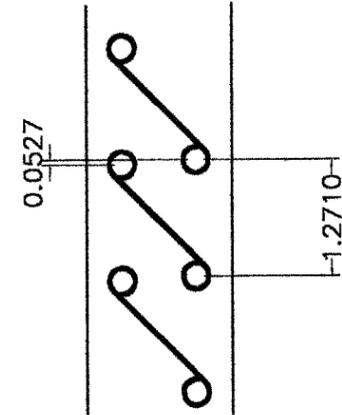
VERTICAL STIFFENER "A"  
BUTT TO SILL AND HEADER SHAPES

1/8" ALUMINUM POP RIVETS  
(8) PER PLATE

.025x2.5x5" REINFORCEMENT PLATE  
AT ALL TOP & BOTTOM CONNECTION  
FRONT AND BACK

SHAPE "A" USED AS SILL

SHAPE "D" TYPICAL CLADDING  
FOR SHAPES "A" AND "B"



Manufacturer:  
**Willard  
Shutter  
Company**

4420 NW 35TH COURT  
MIAMI - FLORIDA  
Tel.: (305) 633-0162

Product:  
**The Islander  
Bahama Louver**

Engineering:  
**EngCo Inc.**

CA 8116  
6971 W. Sunrise Blvd. 104  
Plantation, Fl. 33313  
Tel.: (954) 585-0304

JAN 29 2003

Engineer Seal  
Pedro De Figueiredo  
PE 52609

Date: 12/30/02  
Scale: NA  
Design by: PPMF

Revision:  
#2 - 1/29/03

Drawing Number  
02-045R2

Sheet  
4 of 4

Approved as complying with the  
Florida Building Code  
Date: 03/27/03  
NOA#: 02/0621.08  
Miami Dade Product Control  
Division  
By: