



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

Willard Shutter Company, Inc.
4420 NW 35th 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.05-267, titled "The Islander Bahama Louver" sheets 1 through 4 of 4, prepared by EngCo, Inc., dated 08/17/05, with no revisions, signed and sealed by Pedro De Figueiredo P.E., bearing the Miami-Dade County Product Control Renewal 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 renews NOA # 05-0822.07 and consists of this page 1, evidence submitted pages E-1 and 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
04/03/2008

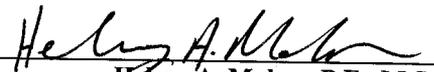
NOA No. 07-1219.08
Expiration Date: 03/27/2013
Approval Date: 04/03/2008

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.
Product Control Examiner
NOA No. 07-1219.08
Expiration Date: 03/27/2013
Approval Date: 04/03/2008

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. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

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

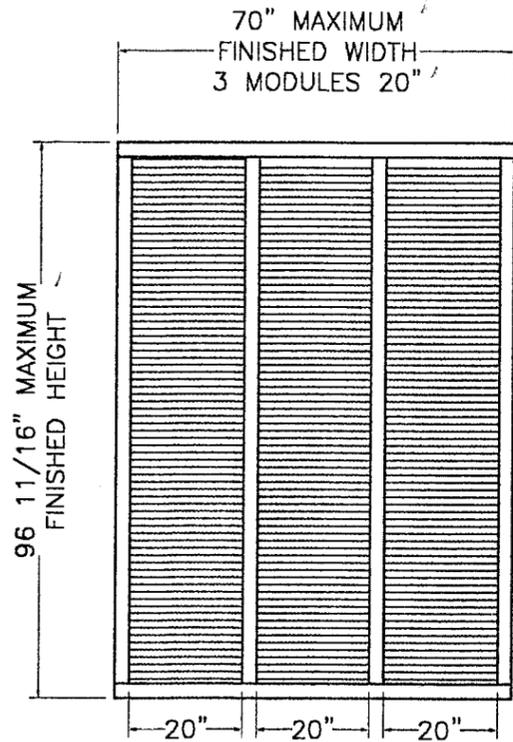
E. MATERIAL CERTIFICATIONS

1. *None.*

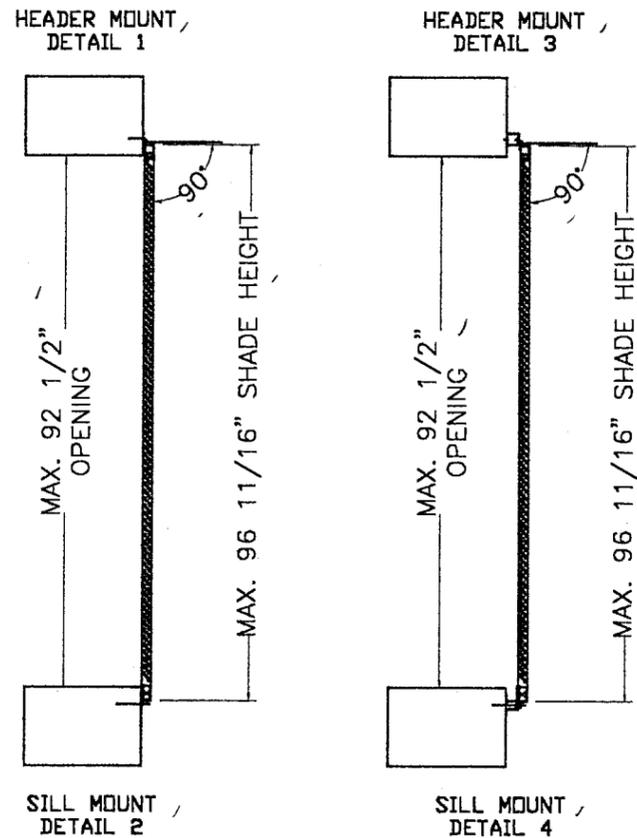


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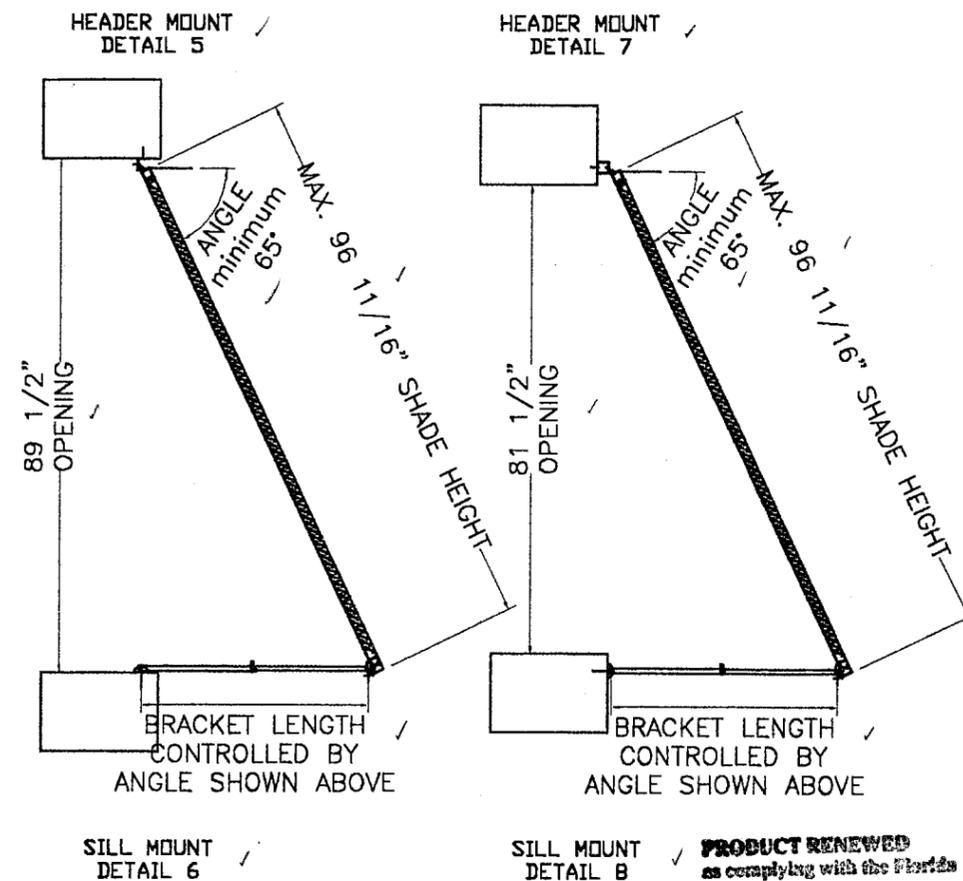
SHADE ELEVATION



SIDE SECTION W/OUT BRACKETS
ALLOWABLE DESIGNED PRESSURES



SIDE SECTION W/ BRACKETS
ALLOWABLE DESIGNED PRESSURES



PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No. 07-1219.08
Expiration Date 03/27/2013
By *Helmy A. Helmy*
Miami Dade Product Control
Division

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

AUG 17 2005

Engineer Seal
Pedro De Figueiredo
PE 52609

Date: 08/17/05
Scale: NA
Design by: PPMF

PRODUCT CONTROL DIVISION:

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No. 05-082207
Expiration Date 03/27/08
By *Helmy A. Helmy*
Miami Dade Product Control
Division

Drawing Number
05-267

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 2004 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:
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MIAMI - FLORIDA
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Bahama
Louver**

Engineering:
EngCo Inc.

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



AUG 17 2005
Engineer Seal
Pedro De Figueiredo
PE 52609

Date: 08/17/05
Scale: NA
Design by: PPMF

PRODUCT CONTROL DIVISION:

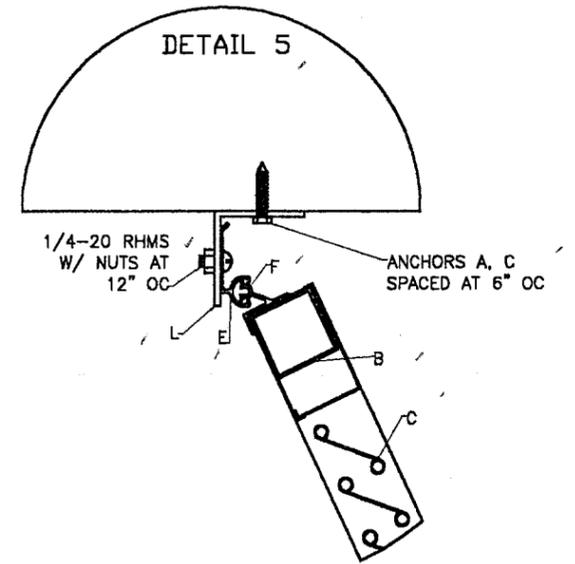
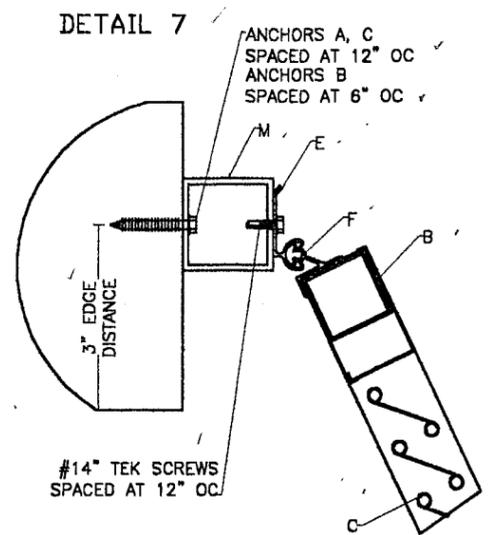
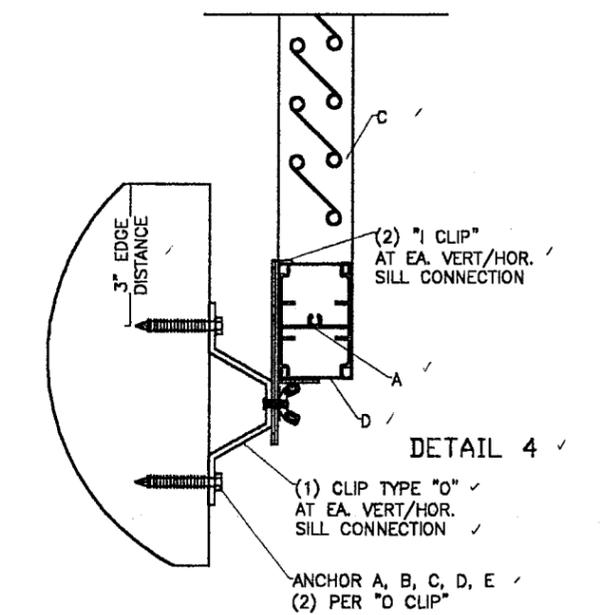
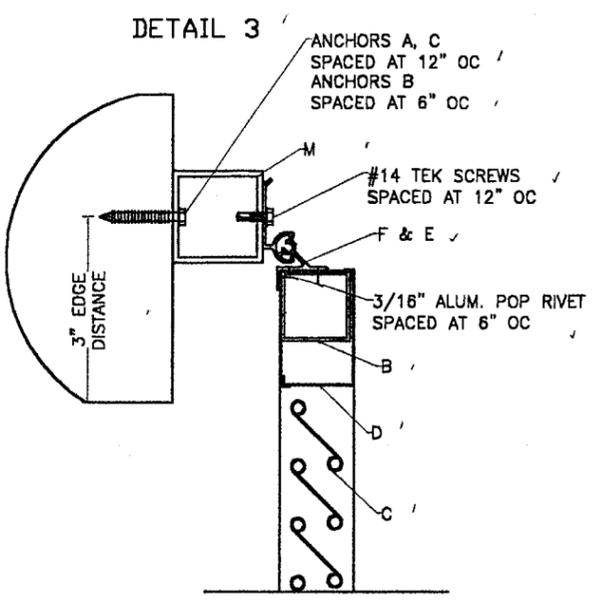
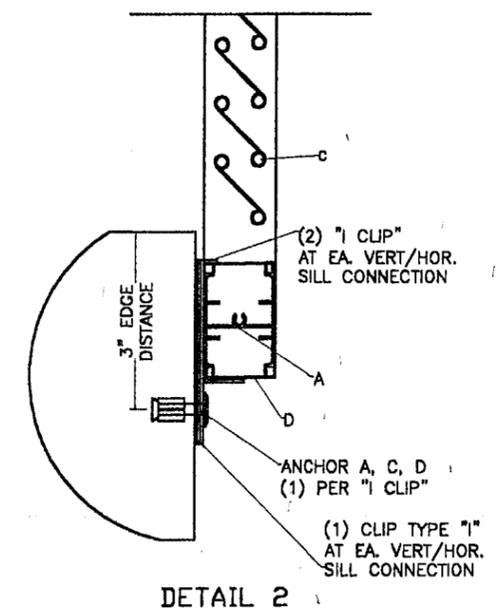
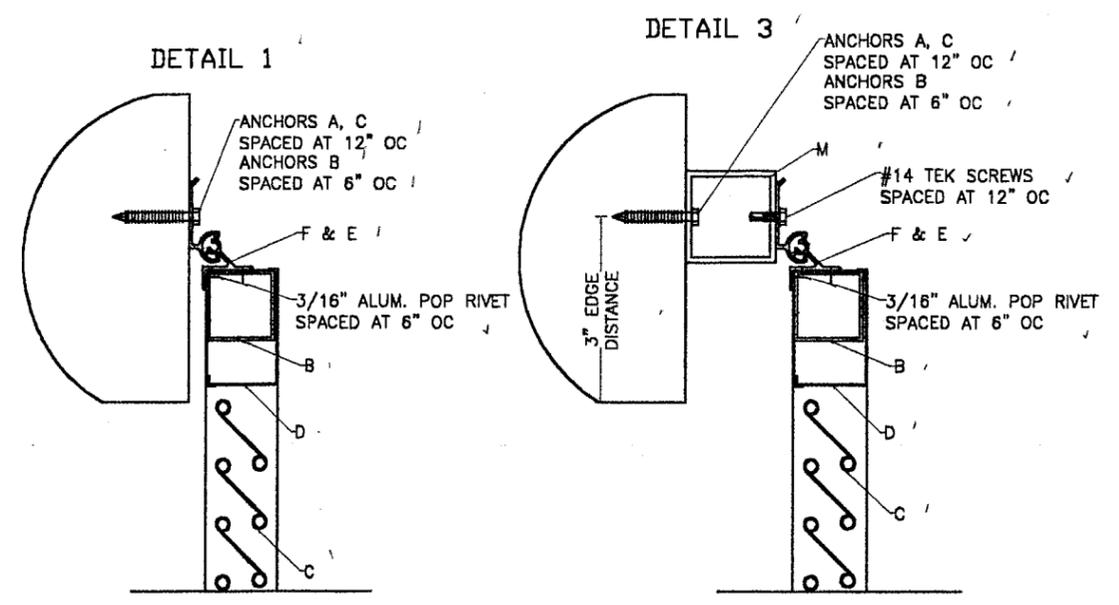
PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No. 07-1219-08
Expiration Date 03/27/2013
By *Helmy A. Matar*
Miami Trade Product Control
Division

PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No. 05-0822-07
Expiration Date 03/27/08
By *[Signature]*
Miami Trade Product Control
Division

Drawing Number
05-267

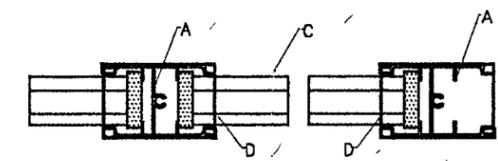
Sheet
2 of 4

DETAILS



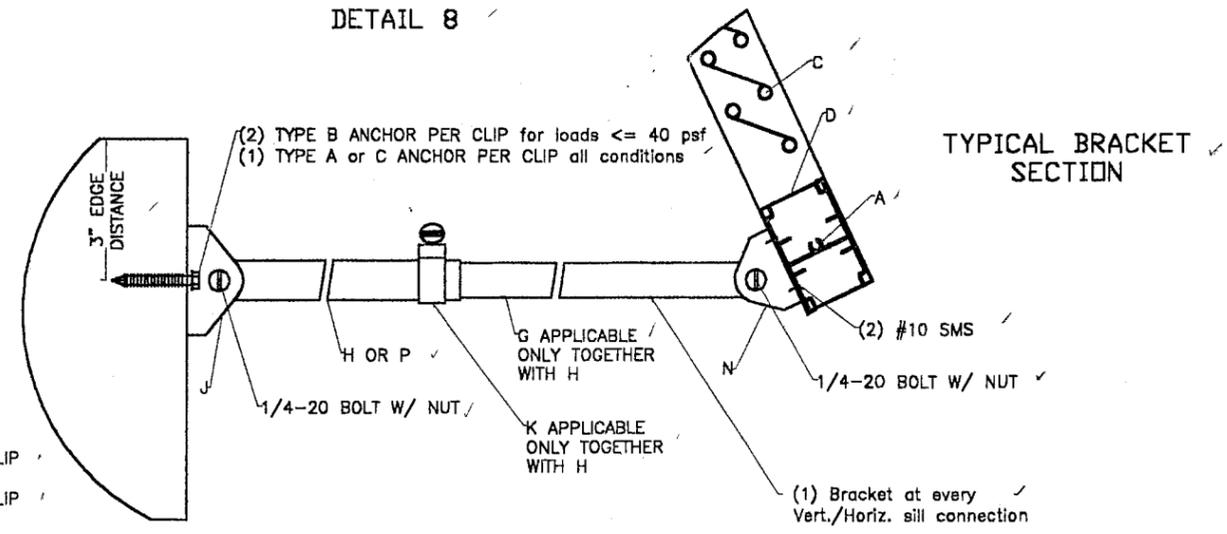
ANCHOR SCHEDULE

TYPE	DESCRIPTION	EMBED.	SUBSTRACT	MANUFACTURER
A	1/4" TAPCON	1 3/4"	Concrete 3320 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



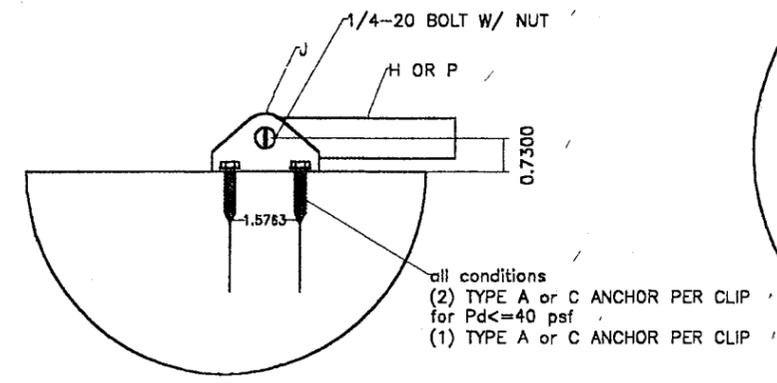
TYPICAL HORIZONTAL SECTION

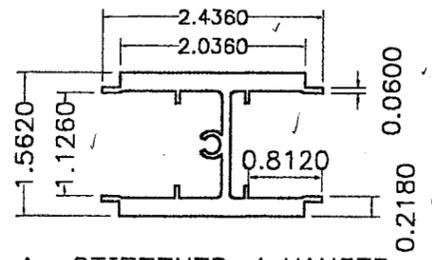
DETAIL 8



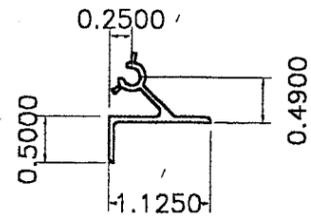
TYPICAL BRACKET SECTION

DETAIL 6

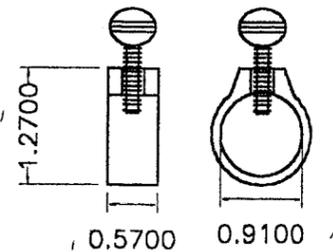




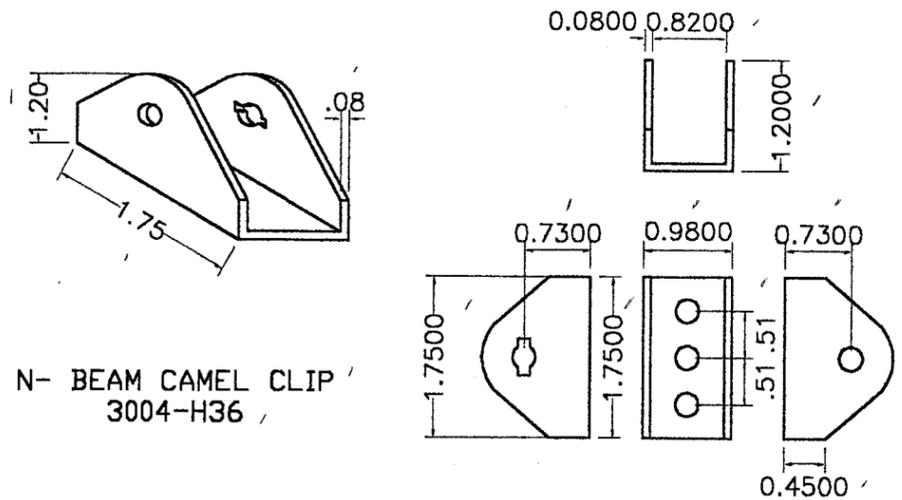
A- STIFFENER / HANGER
6063-T6



F- MALE HINGE
6063-T5



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



N- BEAM CAMEL CLIP
3004-H36

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



AUG 17 2005

Engineer Seal
Pedro De Figueiredo
PE 52609

Date: 08/17/05
Scale: NA
Design by: PPMF

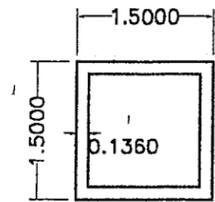
PRODUCT CONTROL DIVISION:

PRODUCT REVIEWED
as complying with the Florida
Building Code
Acceptance No. 07-1219-08
Expiration Date 03/27/2013
By: *Helmy A. Maher*
Miami Design Product Control
Division

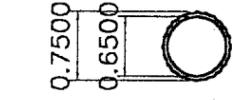
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By: *[Signature]*
Miami Design Product Control
Division

Drawing Number
05-267

Sheet
3 of 4



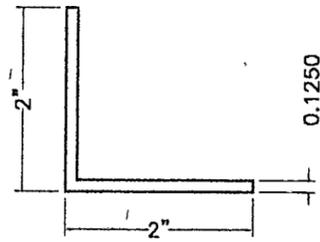
B- STIFFENER
6063-T6



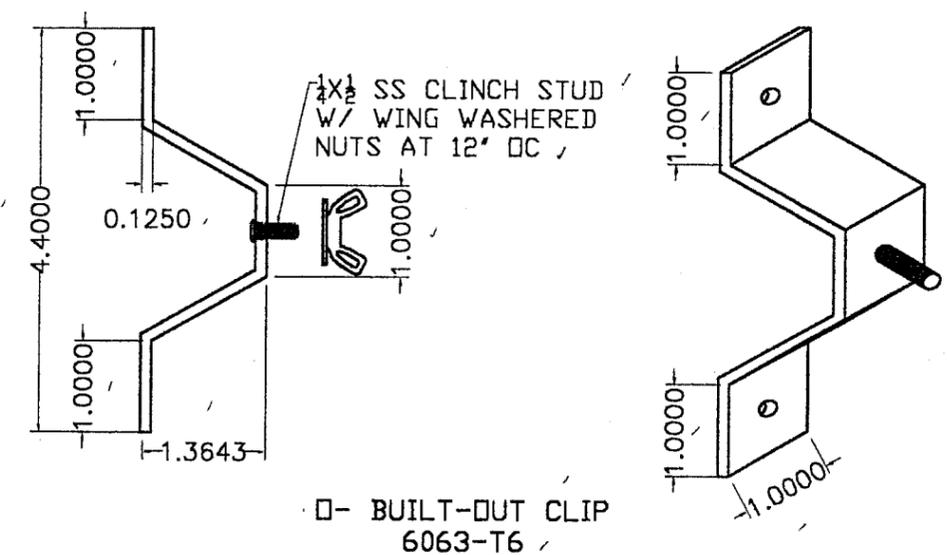
G- 3/4" SERRATED TUBE
6063-T6



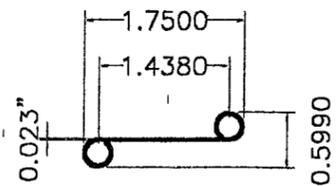
H- 7/8" SERRATED TUBE
6063-T6



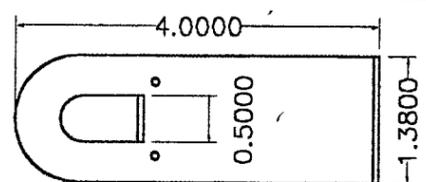
L- 1/8-2x2
ALUMINUM ANGLE
6063-T6



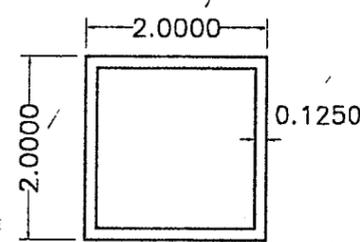
Q- BUILT-OUT CLIP
6063-T6



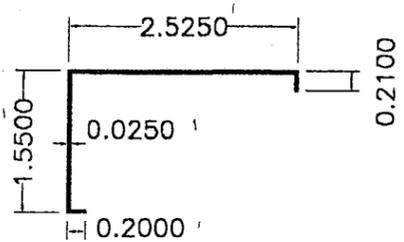
C- SLAT
3004-H36



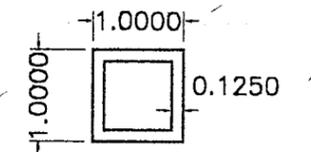
I- CLIP
3004-H36
*NOTE: USED TWO CLIPS NESTED
AT EA CONNECTION



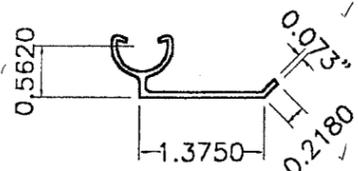
M- 1/8-2x2
ALUMINUM TUBE
6063-T6



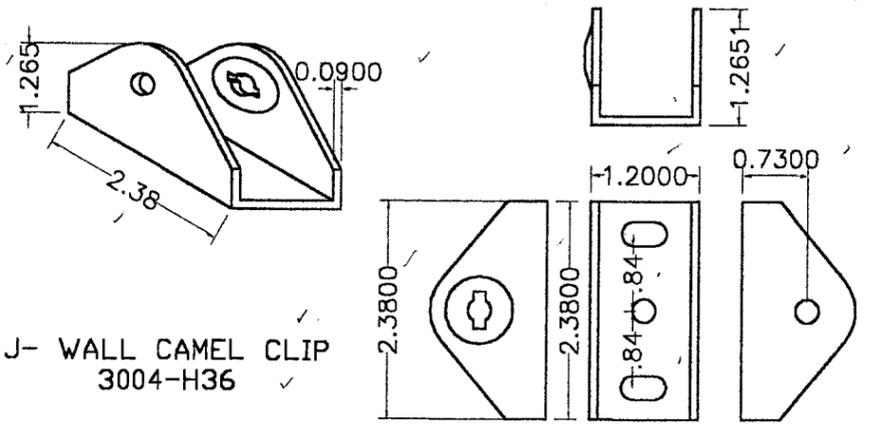
D- ALUMINUM CLAD
3004-H36



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

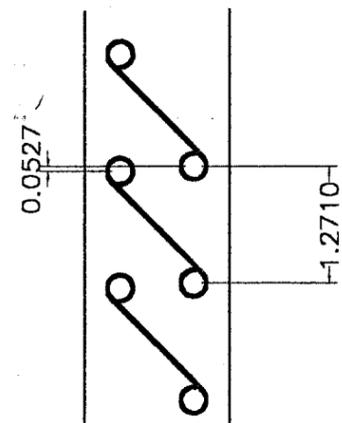
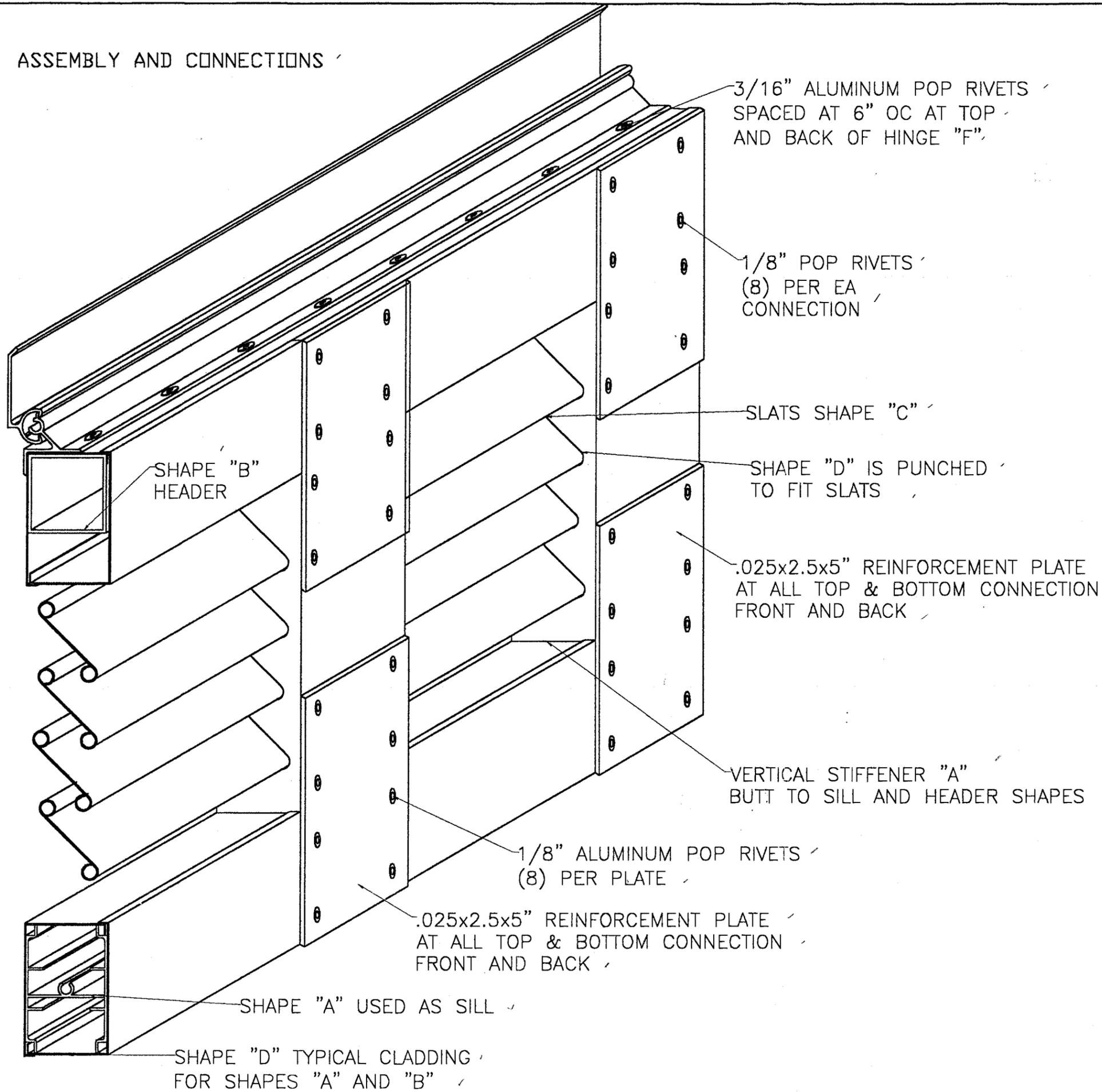


E- FEMALE HINGE
6063-T5



J- WALL CAMEL CLIP
3004-H36

ASSEMBLY AND CONNECTIONS



Manufacturer:
**Willard
Shutter
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Date: 08/17/05
Scale: NA
Design by: PPMF

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By Healy A. Healy
Miami Dept Product Control
Division

PRODUCT REVISOR
as complying with the Florida
Building Code
Acceptance No 05-0822.07
Expiration Date 03/27/08
By [Signature]
Miami Dept Product Control
Division

Drawing Number
05-267

Sheet
4 of 4