



**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)

**Hurst Awning Co., Inc.
6865 NW 36th Avenue
Miami, FL 33147**

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 Bahama Shutter

APPROVAL DOCUMENT: Drawing No. 05-344, titled "Bahama Shutter", sheets 1 through 3 of 3, prepared by Thornton-Tomasetti Group, dated June 28, 2005, last revision #2 dated June 28, 2006, signed and sealed by V.J. Knezevich, P.E., 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 # 05-0718.04 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
04/05/2007

**NOA No 06-0711.08
Expiration Date: 02/27/2011
Approval Date: 04/05/2007
Page 1**

Hurst Awning Co., Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 95-0113.02

A. DRAWINGS

1. *Drawing No. 94-187, "Bahama Shutter", Sheets 1 and 2 of 2, prepared by Knezevich and Associates, Inc., dated 11/29/94, rev. #2 dated 01/23/95, signed and sealed by V.J. Knezevich, P.E.*
2. *Die Drawing No. GAS-42150 of extruded louver blade.*

B. TESTS

1. *Test report on Large Missile Impact Test and Cyclic Wind Pressure Test of bahama shutters, prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-94-377, dated Nov. 17, 1994, signed and sealed by Hector M. Medina, P.E.*
2. *Test report on Uniform Static Air Pressure Test of bahama shutters, prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-94-373, dated Nov. 15, 1994, signed and sealed by Hector M. Medina, P.E.*

C. CALCULATIONS

1. *Anchor analysis and calculations dated 01/06/95, Pages 1 thru 4 of 4, prepared by Knezevich and Associates, Inc., signed and sealed by V.J. Knezevich, P.E.*

D. MATERIAL CERTIFICATIONS

1. *Mill Certified Inspection Report issued by INDALEX dated Dec. 13, 1994 with chemical composition and physical properties of alum. alloy 6063-T6 for louver blade Part No. GAS-42150.*
2. *Certified Tensile Test Report No. HETI 94-T45, for colonial and bahama shutter specimen, prepared by Hurricane Engineering & Testing, Inc., dated 11/29/94, per ASTM E8-93, signed and sealed by Hector M. Medina, P.E.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 98-0213.06

A. DRAWINGS

1. *Drawing No. 94-187, "Bahama Shutter", Sheets 1 and 2 of 2, prepared by Knezevich and Associates, Inc., dated 11/29/94, rev. #4 dated 02/20/98, signed and sealed by V.J. Knezevich, P.E.*

B. CALCULATIONS

1. *Anchor analysis and calculations dated 02/10/98, Pages 1 thru 4 of 4, prepared by Knezevich and Associates, Inc., signed and sealed by V.J. Knezevich, P.E.*



Helmy A. Makar, P.E., M.S.
Product Control Examiner
NOA No 06-0711.08
Expiration Date: 02/27/2011
Approval Date: 04/05/2007

Hurst Awning Co., Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 01-0301.01

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. MATERIAL CERTIFICATIONS

1. *None.*

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 01-0312.06

A. DRAWINGS

1. *Drawing No. 00-351, titled "Bahama Shutter", prepared by Knezevich & Associates, Inc., dated January 19, 2001, last revision #1 dated November 20, 2001, sheets 1 through 3 of 3, signed and sealed by V.J. Knezevich, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. MATERIAL CERTIFICATIONS

1. *None.*

5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 02-0315.01

A. DRAWINGS

See NOA 02-0315.01 (General Notes)

B. TESTS

See NOA 01-0312.06

C. CALCULATIONS

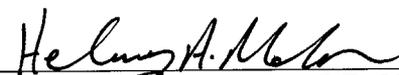
See NOA 01-0312.06

D. MATERIAL CERTIFICATIONS

See NOA 01-0312.06

E. STATEMENTS

See NOA 01-0312.06



Helmy A. Makar, P.E., M.S.
Product Control Examiner
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. OTHER

See NOA 01-0312.06

6. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 05-0718.04

A. DRAWINGS

1. *Drawing No. 05-344, titled "Bahama Shutter", sheets 1 through 3 of 3, prepared by Thornton-Tomasetti Group, dated June 28, 2005, last revision #1 dated April 04, 2006, signed and sealed by V.J. Knezevich, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *Anchor analysis and calculations, dated June 17, 2005, 10 Pages, prepared by Thornton-Tomasetti Group, signed and sealed by V.J. Knezevich, P.E.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*

7. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 05-344, titled "Bahama Shutter", sheets 1 through 3 of 3, prepared by Thornton-Tomasetti Group, dated June 28, 2005, last revision #2 dated June 28, 2006, signed and sealed by V.J. Knezevich, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

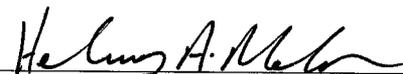
1. *None.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*



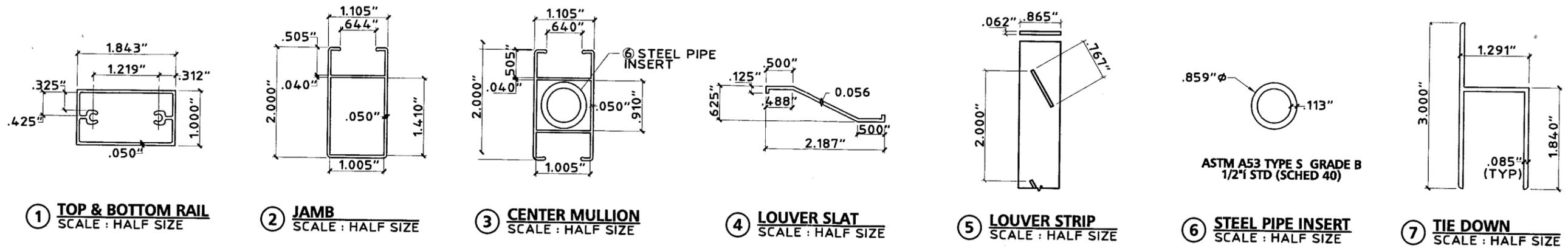
Helmy A. Makar, P.E., M.S.

Product Control Examiner

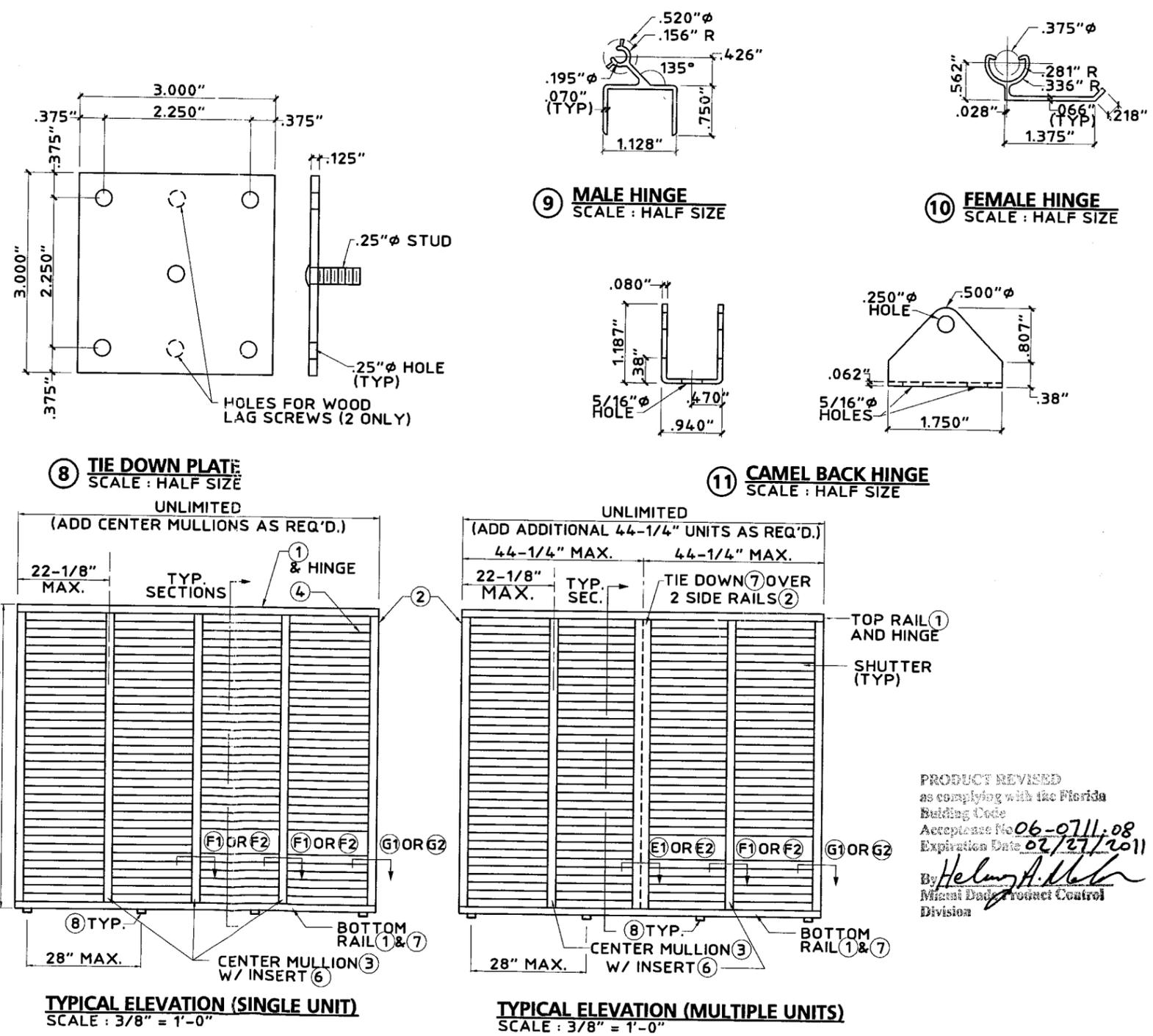
NOA No 06-0711.08

Expiration Date: 02/27/2011

Approval Date: 04/05/2007



- GENERAL NOTES:**
- THESE APPROVAL DOCUMENTS REPRESENT A SHUTTER SYSTEM ANALYZED WITH THE PROVISION SET FOR THE ISSUANCE OF A NOTICE OF ACCEPTANCE (NOA) BY MIAMI-DADE COUNTY PRODUCT CONTROL DIVISION FOR THE HIGH VELOCITY HURRICANE ZONE (HVHZ) OF THE FLORIDA BUILDING CODE 2004, WITH 2005 SUPPLEMENTS.
 - NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT. WIND LOAD DURATION FACTOR $C_d = 1.6$ WAS USED FOR WOOD LAG SCREW DESIGN.
 - DETERMINE THE POSITIVE AND NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH ASCE 7-02, A DIRECTIONALITY FACTOR OF $K_d = 0.85$ SHALL BE USED.
 - THESE APPROVAL DOCUMENTS ARE GENERIC AND DO NOT INCLUDE INFORMATION FOR SITE-SPECIFIC APPLICATION OF THIS SHUTTER SYSTEM.
 - USE OF THESE APPROVAL DOCUMENTS SHALL COMPLY WITH CHAPTER 61G15-23 OF THE FLORIDA ADMINISTRATIVE CODE.
 - THESE APPROVAL DOCUMENTS ARE SUITABLE TO BE APPLIED BY THE CONTRACTOR PROVIDED THE CONTRACTOR DOES NOT DEVIATE FROM THE CONDITIONS DETAILED HEREIN AND THE CONTRACTOR VERIFIES THAT THE EXISTING STRUCTURE DOES NOT DEVIATE IN EITHER FORM OR MATERIAL FROM THE STRUCTURAL SUBSTRATES DETAILED HEREIN.
 - ANY MODIFICATIONS OR ADDITIONS TO THESE APPROVAL DOCUMENTS WILL VOID THE APPROVAL DOCUMENTS.
 - WHEN THE SITE CONDITIONS DEVIATE FROM THESE APPROVAL DOCUMENTS, THE BUILDING OFFICIAL MAY ELECT ONE OF THE FOLLOWING OPTIONS:
 - REQUIRE THAT SITE SPECIFIC DOCUMENTS BE PREPARED, SIGNED, DATED AND SEALED BY A LICENSED ENGINEER OR REGISTERED ARCHITECT, WHICH DETAIL AND JUSTIFY THE DEVIATION.
 - REQUIRE THAT A ONE-TIME SITE SPECIFIC APPROVAL BE APPLIED FOR AND SECURED FROM THE MIAMI-DADE COUNTY PRODUCT CONTROL DIVISION
 WHEN THE SITE CONDITION DEVIATIONS OCCUR WITHIN THE HIGH VELOCITY HURRICANE ZONE AREAS ONLY OPTION "B" SHALL BE ACCEPTED BY THE BUILDING OFFICIAL.
 - THIS SHUTTER SYSTEM HAS A MAXIMUM PERFORMANCE RATING OF:
 CLOSED POSITION:
 POSITIVE DESIGN LOAD +68.0 PSF
 NEGATIVE DESIGN LOAD -92.0 PSF
 - PRODUCT MARKINGS SHALL BE A MIN. OF ONE PER SHUTTER AND SHALL BE LABELED AS FOLLOWS:
 HURST AWNING CO., INC.
 MIAMI, FLORIDA
 MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED
 - ALL EXTRUSIONS SHALL BE 6063-T6 ALUMINUM ALLOY, U.O.N
 - ALL SCREWS, BOLTS AND WASHERS TO BE 2024-T4 ALUMINUM ALLOY, STAINLESS STEEL OR GALVANIZED STEEL WITH A 33 KSI MINIMUM YIELD STRENGTH. ALL POP RIVETS SHALL BE 3/16" DIAMETER 5052-T6 ALUMINUM ALLOY.
 - THIS SHUTTER SHALL BE PROVIDED WITH A PERMANENT LABEL INSTRUCTING THE OWNER OR TENANT TO CLOSE AND FASTEN THE SHUTTER TO THE WALL DURING PERIODS OF TIME THAT ARE DESIGNATED BY THE US WEATHER BUREAU AS BEING A HURRICANE WARNING OR ALERT.



Thornton-Tomasetti Group
 330 N. Andrews Ave., Suite 450 • Ft. Lauderdale, FL 33301
 Tel. (954) 522-3690 • Fax (954) 522-3691 • COA # 7519
 Website: www.TheTTGroup.com
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BAHAMA SHUTTER
 Manufacturers of Hurricane & Security Protection Products
 6865 N.W. 36th Avenue
 Miami, Florida 33147
 Phone: (305) 635-0900
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 Fax: (305) 634-9078

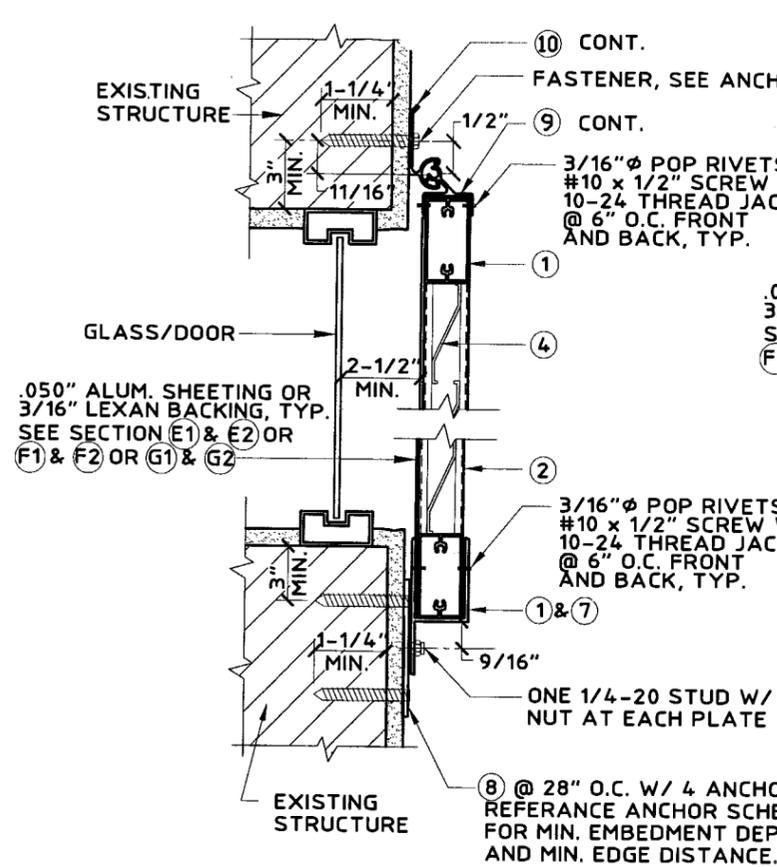
HURST AWNING COMPANY, INC.
 QUALITY SERVICE SINCE 1987

V.J. Knezevich
 Professional Engineer
 FL License No. PE 0010983
 JUN 28 2006

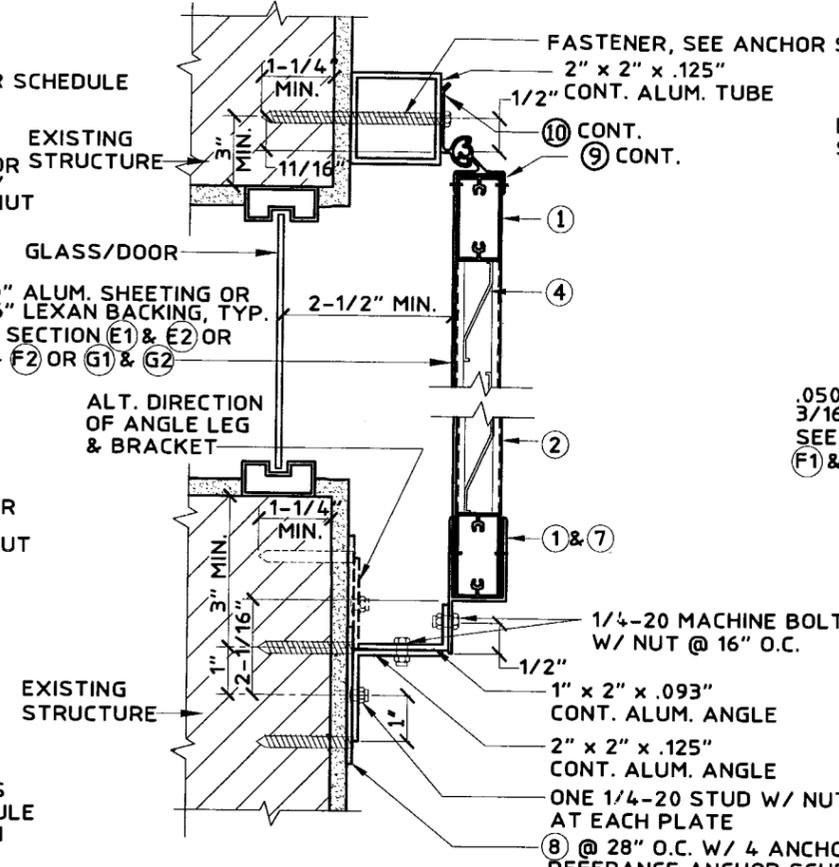
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| 1 | 04/04/2006 | BCCO COMMENTS (ANCHOR SCHEDULE) |
| 2 | 06/28/2006 | STUD SPECIFICATION |

PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No. 06-0711-08
 Expiration Date 02/27/2011
 By: *Helmut A. M...*
 Miami Dade Product Control Division

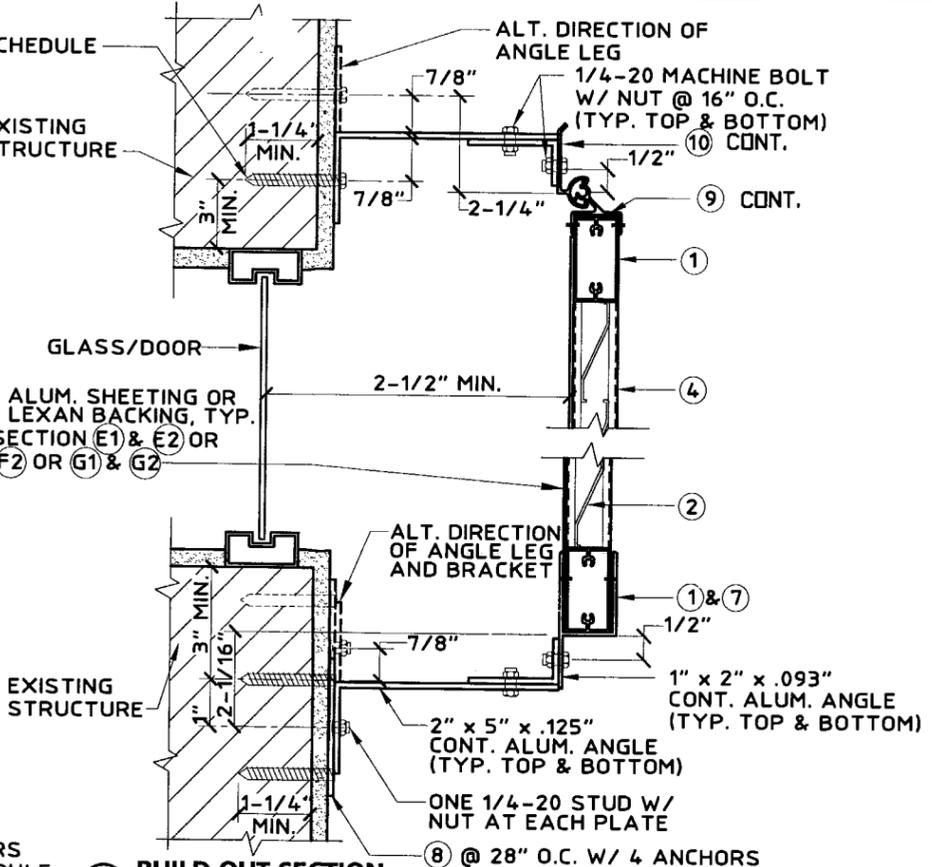
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 scale: AS NOTED
 design by: VJK
 checked by: VJK
 drawing no. 05-344
 sheet 1 of 3



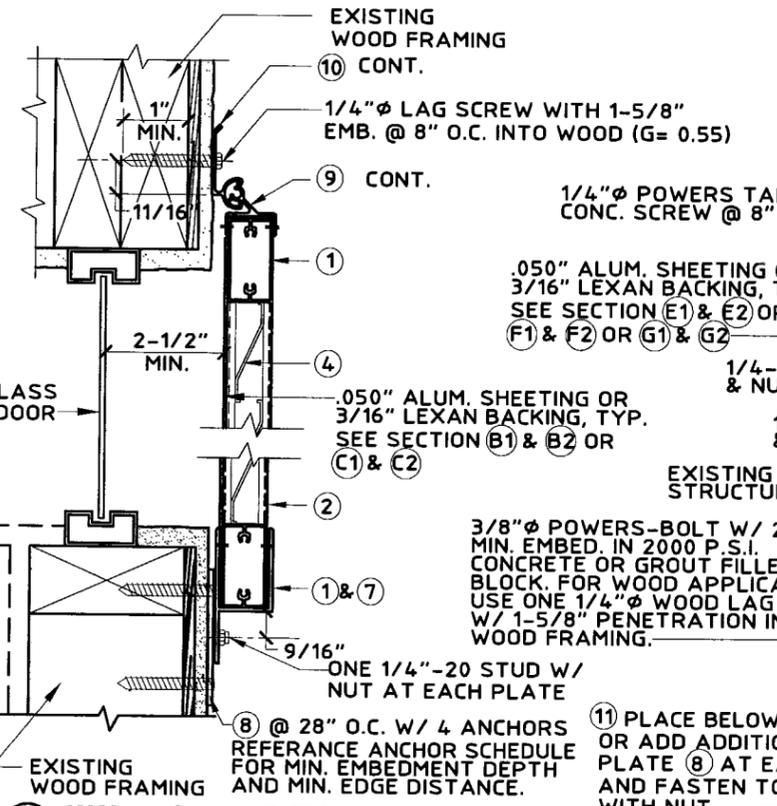
A WALL MOUNT SECTION
 SCALE : 3" = 1'-0"



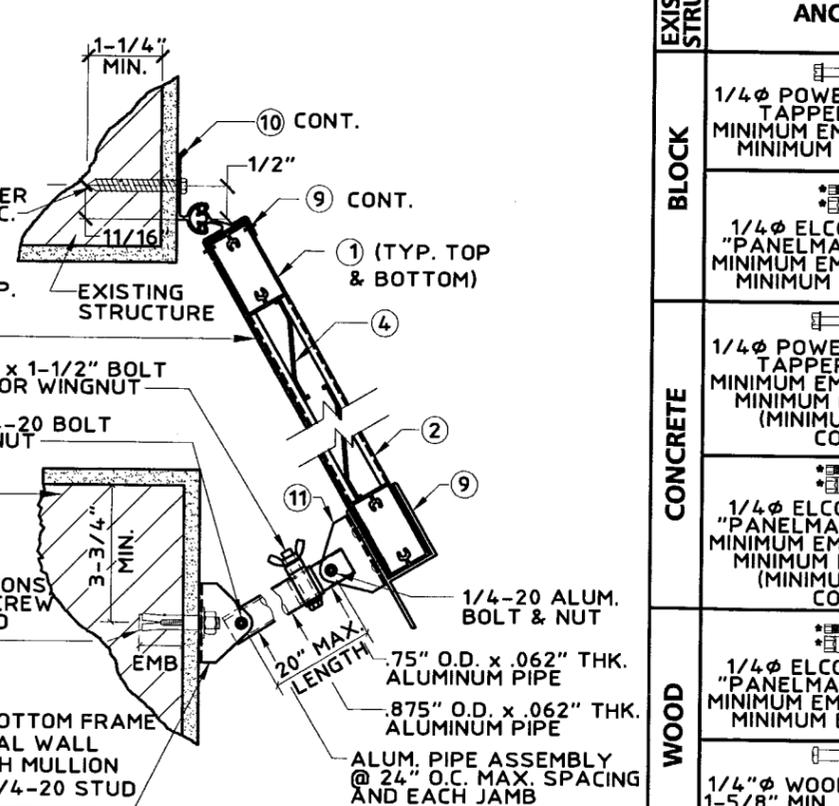
B BUILD OUT SECTION
 SCALE : 3" = 1'-0"



C BUILD OUT SECTION
 SCALE : 3" = 1'-0"



D WALL MOUNT SECTION
 SCALE : 3" = 1'-0"
 * SEE NOTE 9



E TYPICAL OPEN POSITION
 SCALE : 3" = 1'-0"
 * SEE NOTE 9

| ANCHOR SCHEDULE | | | | |
|-----------------|--|--------------------|-------|--------------------|
| EXIST. STRUC. | ANCHOR TYPE | FASTENER SPANS FOR | | NO. OF FASTENER AT |
| | | A B D E | C TOP | |
| BLOCK | 1/4" PHOSPHOR BRONZE PERMA STEEL TAPPER WITH 1-1/4" MINIMUM EMBEDMENT AND 3" MINIMUM EDGE DISTANCE | 8" | 8" | 4 |
| | 1/4" ELCO MALE/FEMALE "PANELMATE" WITH 1-1/4" MINIMUM EMBEDMENT AND 3" MINIMUM EDGE DISTANCE | 8" | 8" | 4 |
| CONCRETE | 1/4" PHOSPHOR BRONZE PERMA STEEL TAPPER WITH 1-1/4" MINIMUM EMBEDMENT AND 3" MINIMUM EDGE DISTANCE (MINIMUM 2,000 P.S.I. CONCRETE) | 8" | 8" | 4 |
| | 1/4" ELCO MALE/FEMALE "PANELMATE" WITH 1-3/4" MINIMUM EMBEDMENT AND 3" MINIMUM EDGE DISTANCE (MINIMUM 3,350 P.S.I. CONCRETE) | 8" | 8" | 4 |
| WOOD | 1/4" ELCO MALE/FEMALE "PANELMATE" WITH 1-1/4" MINIMUM EMBEDMENT AND 3" MINIMUM EDGE DISTANCE | 8" | 8" | 4 |
| | 1/4" WOOD LAG SCREW W/ 1-5/8" MIN. EMB. AND 3/4" MIN. EDGE DISTANCE | 8" | 8" | 4 |

PRODUCED REVISED
 as complying with the Florida
 Building Code
 Approved By: 06-0711-08
 Expired Date: 02/27/2011
 By: Helmut A. Helmer
 Miami Dade District Council
 Division

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THURSTAL
 ANVINO COMPANY, INC.
 "QUALITY SERVICE SINCE 1957"

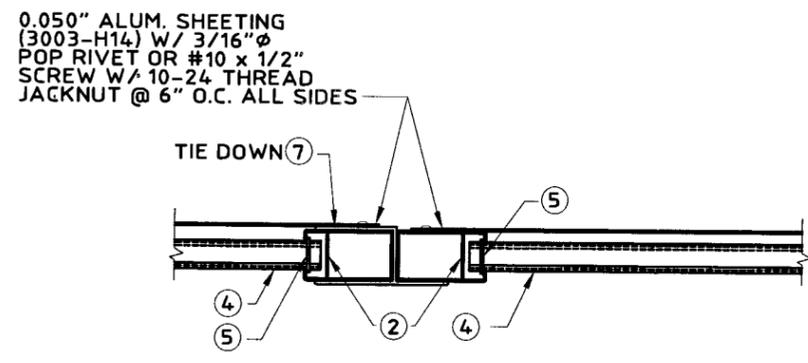
V.J. Knezevich
 Professional Engineer
 FL License No.: PE-0010983

JUN 28 2006

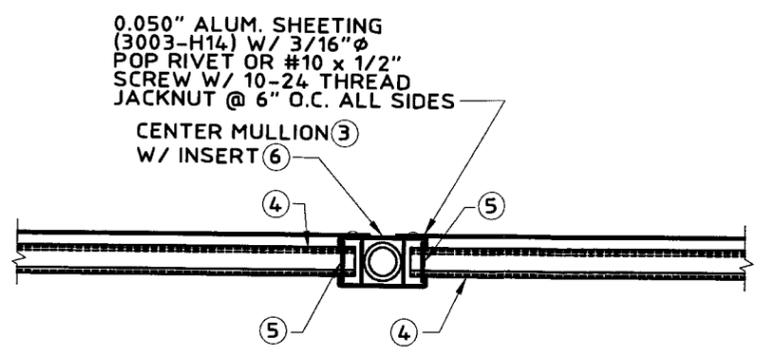
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| 1 | 04/04/2006 | NW | RECC COMMENTS (ANCHOR SCHEDULE) |
| 2 | 06/28/2006 | NW | STUD SPECIFICATION |

date: 06/28/2005
 scale: AS NOTED
 design by: VJK
 checked by: VJK
 drawing no.: 05-344
 sheet 2 of 3

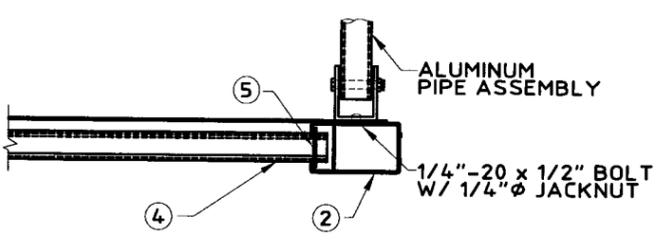
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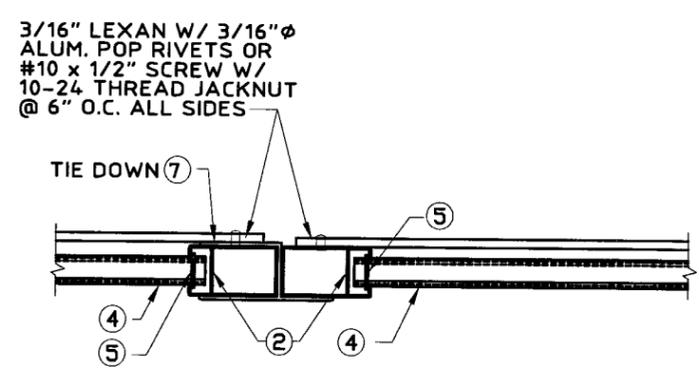
E1 ALUMINUM BACKING
TYPICAL SECTION
SCALE: 3" = 1'-0"



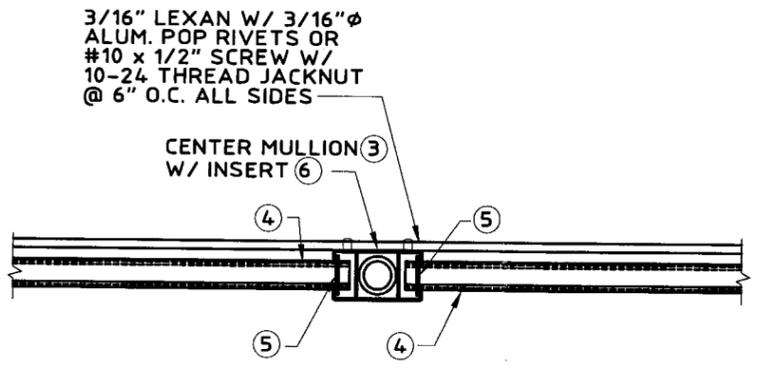
F1 ALUMINUM BACKING
TYPICAL SECTION
SCALE: 3" = 1'-0"



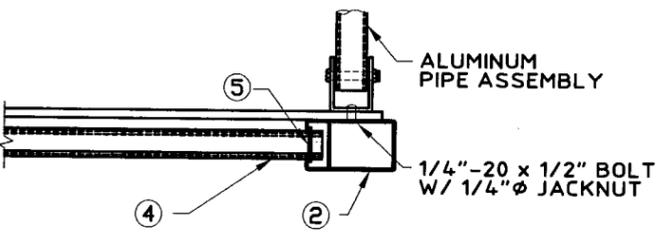
G1 ALUMINUM BACKING
TYPICAL SECTION
SCALE: 3" = 1'-0"



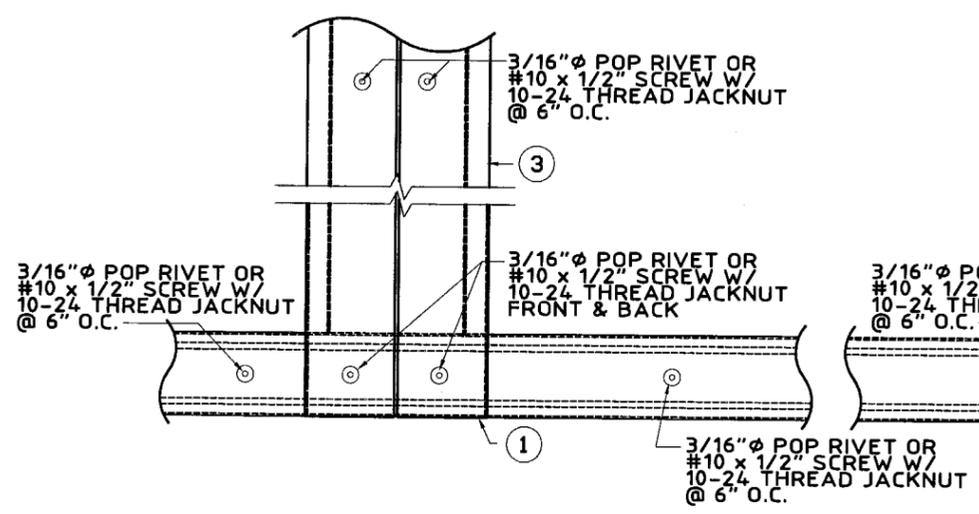
E2 LEXAN BACKING
TYPICAL SECTION
SCALE: 3" = 1'-0"



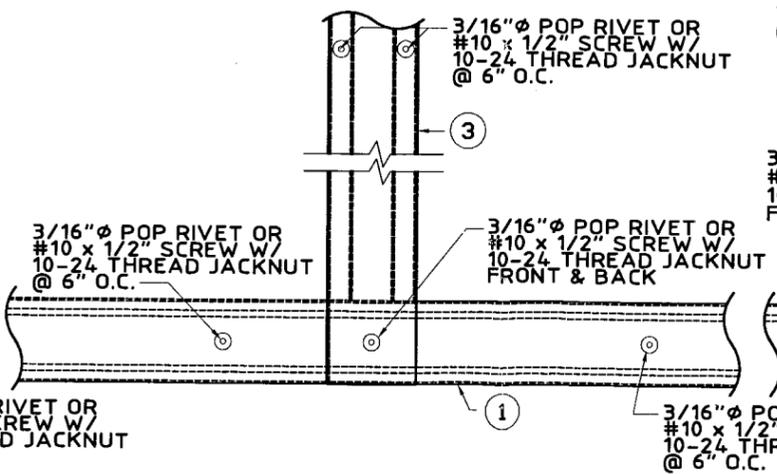
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TYPICAL SECTION
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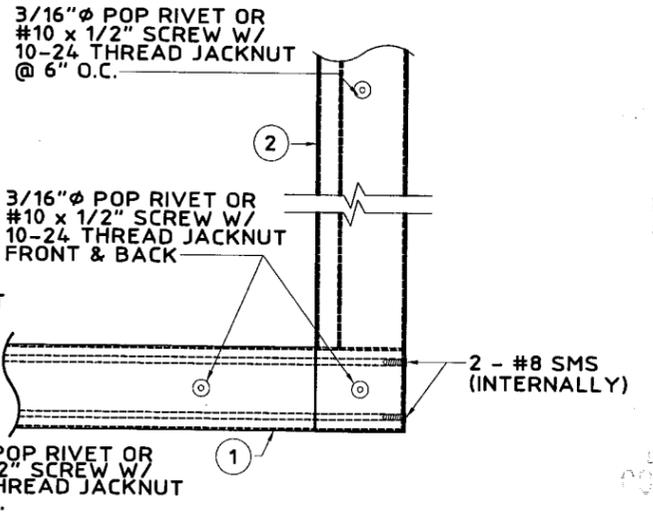
G2 LEXAN BACKING
TYPICAL SECTION
SCALE: 3" = 1'-0"



H TYPICAL TWO JAMB TO
TOP & BOTTOM RAIL CONNECTION
SCALE: 3" = 1'-0"



J TYPICAL CENTER MULLION TO
TOP & BOTTOM RAIL CONNECTION
SCALE: 3" = 1'-0"



K TYPICAL JAMB TO TOP
& BOTTOM RAIL CONNECTION
SCALE: 3" = 1'-0"

PRODUCT REVISED
 as complying with the Florida
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 By *Helmut A. Mader*
 Miami Building Department
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V.J. Knezevich

Professional Engineer
 FL License No.: PE 0010983

JUN 28 2006

| no | date | by | description |
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date 06/28/2005
 scale AS NOTED
 design by VJK
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 sheet 3 of 3