



BUILDING CODE COMPLIANCE OFFICE
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT DIVISION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Poma Corporation
9040 Belvedere Road
West Palm Beach ,FL 33411

Your application for Notice of Acceptance (NOA) of:

Aluminum Bahama Shutter

under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

Raul Rodriguez
Chief Product Control Division

ACCEPTANCE NO.: 00-0822.09
EXPIRES: 12/14/2003

**THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL
CONDITIONS
BUILDING CODE & PRODUCT REVIEW COMMITTEE**

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

APPROVED: 12/14/2000

Poma Corporation

ACCEPTANCE No. : 00-0822.09

APPROVED : 12/14/2000

EXPIRES : 12/14/2003

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

This approves an extruded aluminum bahama type shutter, as described in Section 2 of this Notice of Acceptance, designed to comply with the South Florida Building Code, 1994 Edition for Miami-Dade County, for the locations where the pressure requirements, as determined by SFBC Chapter 23, do not exceed the Design Pressure Rating values indicated in the approved drawings.

2. PRODUCT DESCRIPTION

This extruded aluminum bahama type shutter and its components shall be constructed in strict compliance with the following documents: Drawing No. 99-262, titled "Bahama Shutter", prepared by Knezevich & Associates, Inc., dated July 24, 2000, last revision #1 dated November 6, 2000, sheets 1 through 3 of 3, bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division. These documents shall hereinafter be referred to as the approved drawings.

3. LIMITATIONS

All permanent set components, included but not limited to embedded anchor bolts, threaded cones, metal shields, headers and sills, must be protected against corrosion, contamination and damage at all times.

4. INSTALLATION

This extruded aluminum bahama type shutter and its components shall be installed in strict compliance with the approved drawings.

5. 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".

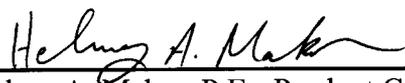
6. BUILDING PERMIT REQUIREMENTS

6.1 Application for building permit shall be accompanied by copies of the following:

6.1.1 This Notice of Acceptance.

6.1.2 Duplicate copies of the approved drawings, as identified in Section 2 of this Notice of Acceptance, clearly marked to show the components selected for the proposed installation.

6.1.3 Any other documents required by the Building Official or the South Florida Building Code (SFBC) in order to properly evaluate the installation of this system.



Helmy A. Makar, P.E.- Product Control Examiner
Product Control Division

Poma Corporation

ACCEPTANCE No. : 00-0822.09

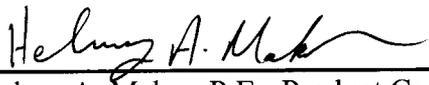
APPROVED : 12/14/2000

EXPIRES : 12/14/2003

NOTICE OF ACCEPTANCE: STANDARD CONDITIONS

1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documents, including test-supporting data, engineering documents, are no older than eight (8) years.
2. Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.
3. Renewals of Acceptance will not be considered if:
 - a. There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes.
 - b. The product is no longer the same product (identical) as the one originally approved.
 - c. If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product.
 - d. The engineer, who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.
4. Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.
5. Any of the following shall also be grounds for removal of this Acceptance:
 - a. Unsatisfactory performance of this product or process.
 - b. Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.
6. The Notice of Acceptance 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 Notice of Acceptance is displayed, then it shall be done in its entirety.
7. A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all time. The engineer needs not reseal the copies.
8. Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.
9. This Notice of Acceptance consists of pages 1, 2 and this last page 3.

END OF THIS ACCEPTANCE



Helmy A. Makar, P.E.- Product Control Examiner
Product Control Division

GENERAL NOTES:

- THIS BAHAMA SHUTTER IS DESIGNED IN ACCORDANCE WITH THE SOUTH FLORIDA BUILDING CODE, 1994 EDITION FOR MIAMI-DADE COUNTY AS A LARGE MISSILE IMPACT RESISTANT HURRICANE SHUTTER.
- POSITIVE AND NEGATIVE DESIGN PRESSURE CALCULATIONS FOR BUILDINGS SHALL BE PERFORMED IN ACCORDANCE WITH ASCE 7-88 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES". DESIGN PRESSURE OF PROTECTED OPENING SHALL BE LESS THAN OR EQUAL TO THE RATED DESIGN PRESSURES.

- THE DETAILS AND SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED FOR IMPACT, CYCLIC AND UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH MIAMI-DADE COUNTY PROTOCOLS PA201, 202, AND 203 WITH DESIGN LOADS AS FOLLOWS:

OPEN POSITION INSTALLATIONS BASIC WIND VELOCITY = 75 M.P.H.
 - NON-HURRICANE, SHADE CONDITION
 - POSITIVE DESIGN LOAD: 45.1 P.S.F.
 - NEGATIVE DESIGN LOAD: 45.1 P.S.F.

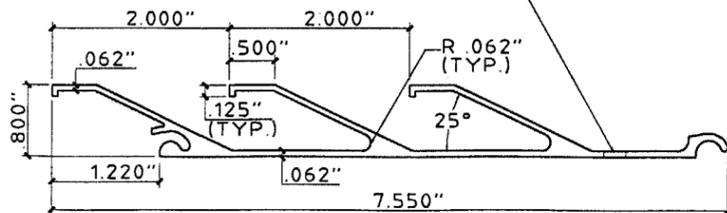
CLOSED POSITION INSTALLATIONS BASIC WIND VELOCITY = 110 M.P.H.
 - HURRICANE SHUTTER CONDITION
 - POSITIVE DESIGN LOAD: 97.0 P.S.F.
 - NEGATIVE DESIGN LOAD: 97.0 P.S.F.
 - MIN. SEPARATION FROM GLASS: 3-9/16"

- DESIGN OF SHUTTER IS BASED ON C.T.C. TEST REPORT NO. 00-026
- EACH SHUTTER ASSEMBLY SHALL BE PERMANENTLY LABELED AS FOLLOWS:

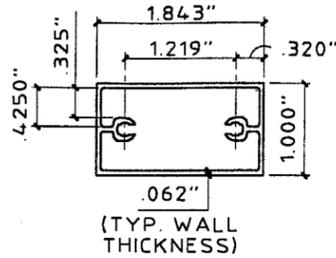
POMA CORPORATION
WEST PALM BEACH, FLORIDA
MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED

- EXTRUSIONS SHOWN SHALL BE 6063-T6 ALUMINUM ALLOY, U.O.N.
- ALL SCREWS, BOLTS AND WASHERS TO BE 2024-T4 ALUMINUM ALLOY OR 300 SERIES STAINLESS STEEL WITH A 60 K.S.I. MINIMUM TENSILE STRENGTH. ALL POP RIVETS SHALL BE 3/16" DIAMETER 5052 ALUMINUM ALLOY.
- THE PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO SUSTAIN THE NEW SUPERIMPOSED LOADS AND TO VERIFY ALL DIMENSIONS AT THE JOB SITE BEFORE COMMENCING WITH THE WORK.
- 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 AS ARE DESIGNATED BY THE U.S. WEATHER BUREAU AS BEING A HURRICANE WARNING OR ALERT.

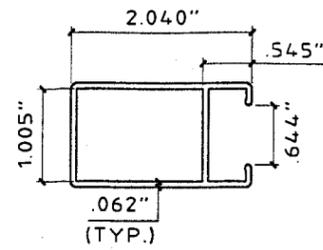
SEVEN 1/4" x 7/8" ELONGATED PERFORATIONS @ 1-3/8" O.C. AT CENTER OF LOUVER BLADE (OPTIONAL)



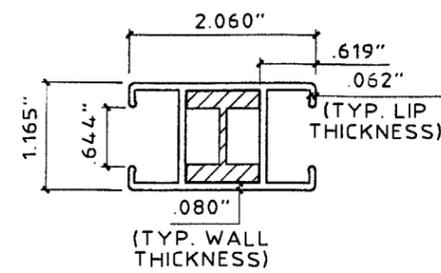
10 STANDARD 3 LOUVER BLADE
 SCALE: HALF SCALE



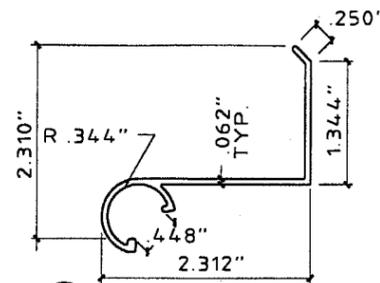
1 H TUBE
 SCALE: HALF SCALE



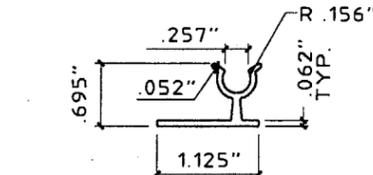
2 JAMB
 SCALE: HALF SCALE



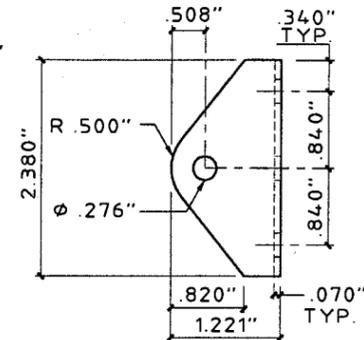
3 DOUBLE JAMB W/ INSERT
 SCALE: HALF SCALE



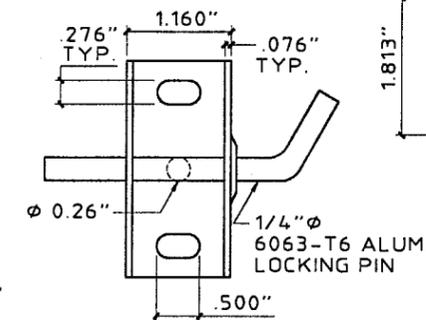
4 FEMALE HINGE
 SCALE: HALF SCALE



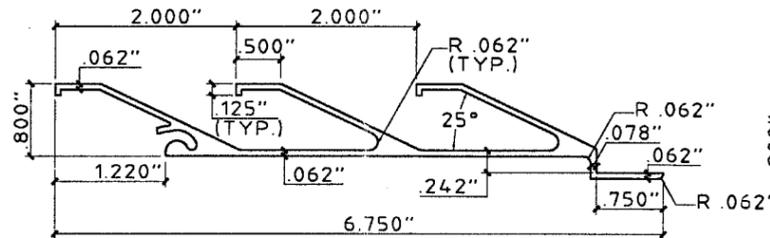
5 MALE HINGE
 SCALE: HALF SCALE



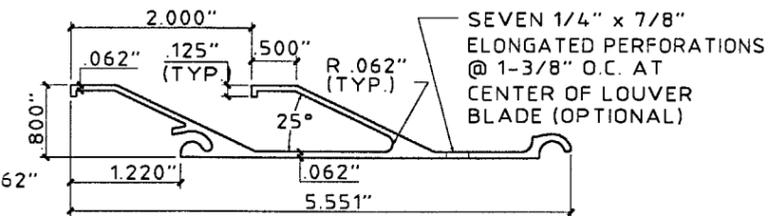
6 CAMEL BACK HINGE
 SCALE: HALF SCALE



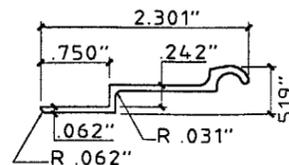
7a Z BAR (4-1/2" LONG)
7b Z BAR (7" LONG)
 SCALE: HALF SCALE



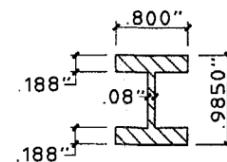
8 STARTER BLADE
 SCALE: HALF SCALE



9 STANDARD 2 LOUVER BLADE
 SCALE: HALF SCALE



11 CLOSURE STRIP
 SCALE: HALF SCALE



12 INSERT
 SCALE: HALF SCALE

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE 12/14/2000
 BY *Helmut A. Meier*
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 00-0822.09

KNEZEVICH & ASSOCIATES, INC.
 CONSULTING ENGINEERS • PRODUCT TESTING
 1280 N. UNIVERSITY DRIVE, SUITE 180 • FORT LAUDERDALE, FL 33322
 TEL: (954) 382-2800 • FAX: (954) 382-2888 • FLORIDA COA #3205
 WEBSITE: WWW.KNEZEVICH.COM • E-MAIL: KA@KNEZEVICH.COM
 COPYRIGHT © 2000 KNEZEVICH & ASSOCIATES, INC.

BAHAMA SHUTTER
 9040 Belvedere Road
 West Palm Beach, FL 33411
 (561) 790-5799
poma CORPORATION

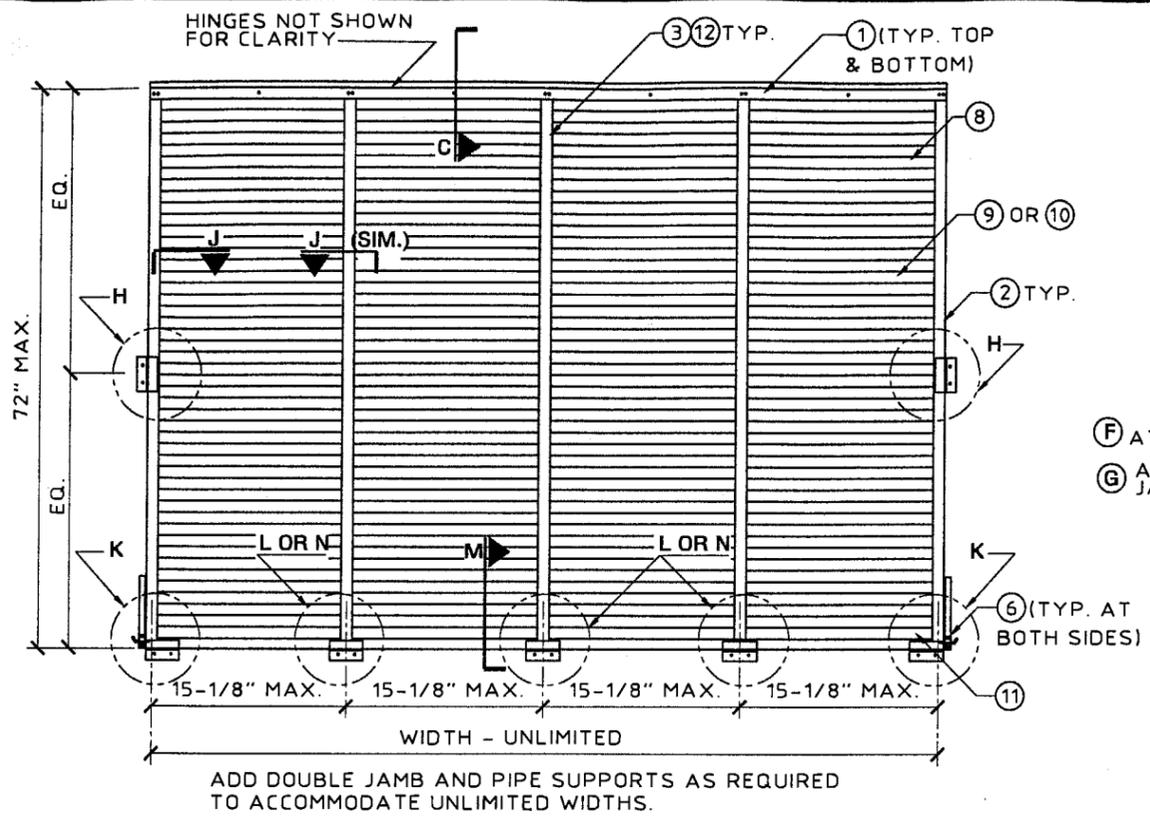
no.	date	by	description
1	11/06/00	ZS	COUNTY COMMENTS

V.J. KNEZEVICH
 PROFESSIONAL ENGINEER
 FL License No:
 PE 0010983

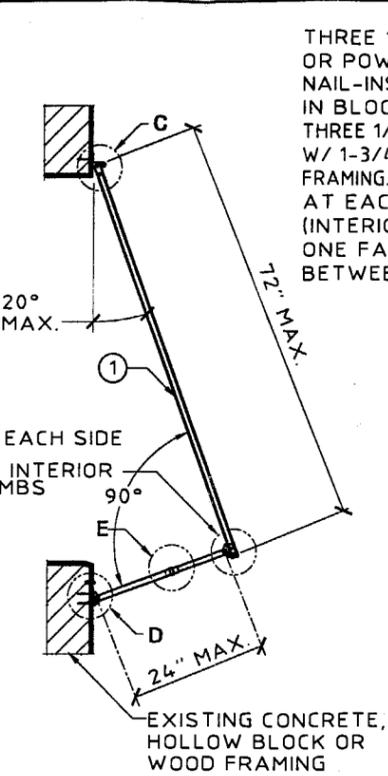
NOV 20 2000
 Date: 07/24/00

scale AS NOTED drawn by AV
 design by ZS checked by VJK

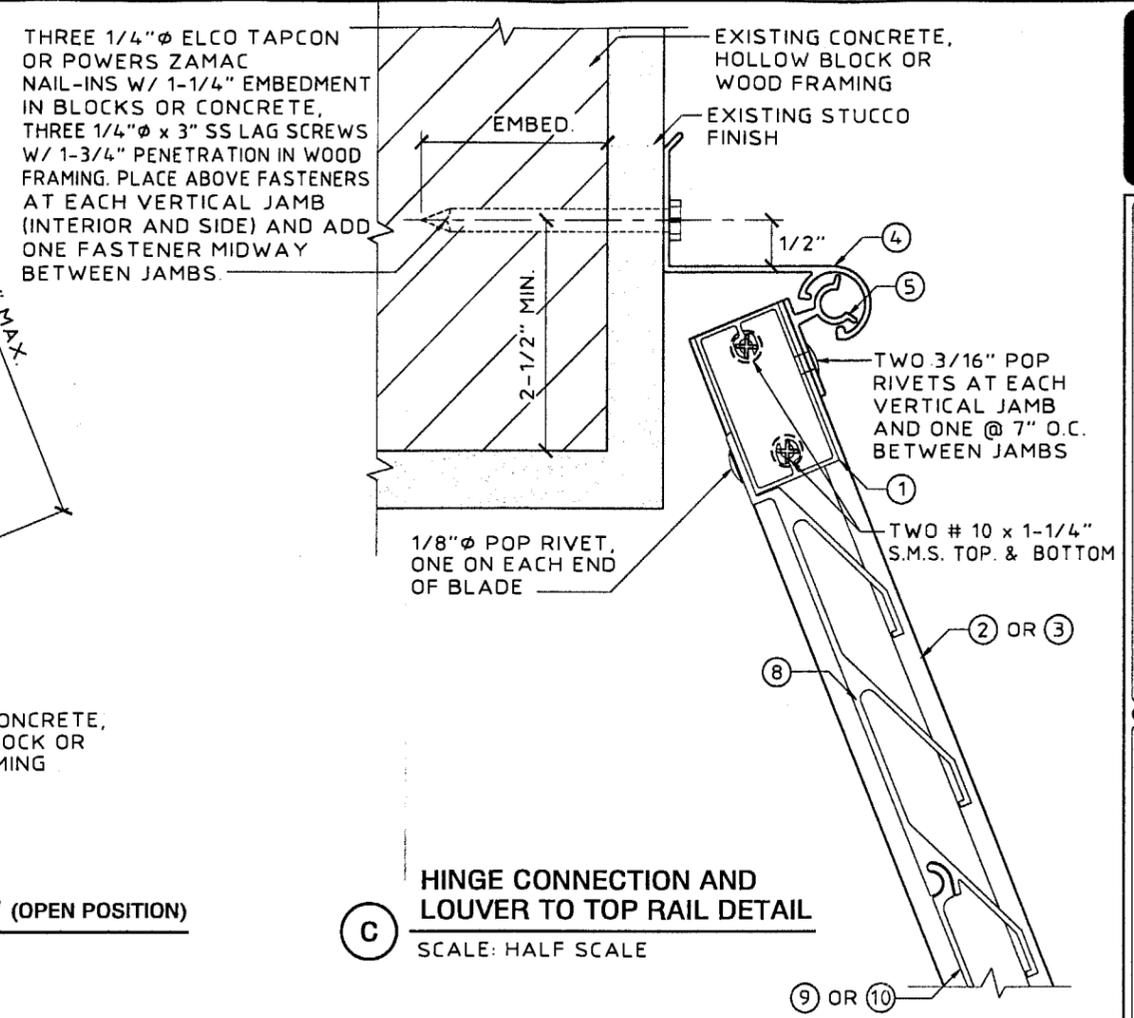
drawing no.
99-262
 sheet 1 of 3



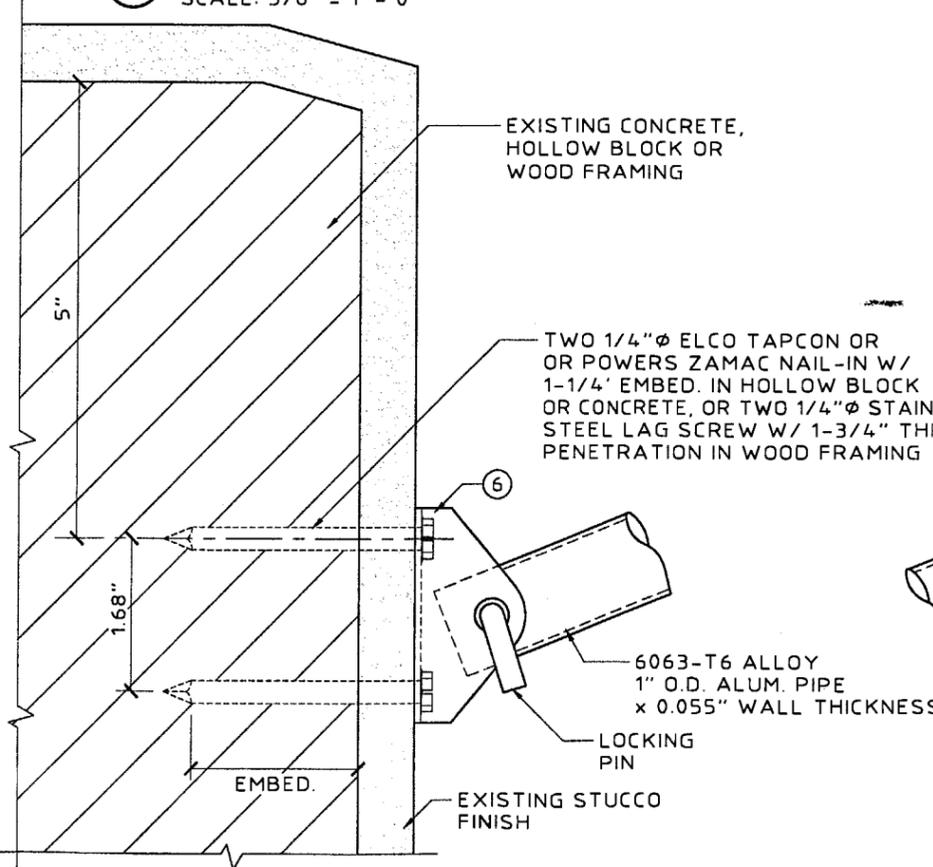
A TYPICAL ELEVATION (CLOSED POSITION)
SCALE: 3/8" = 1' - 0"



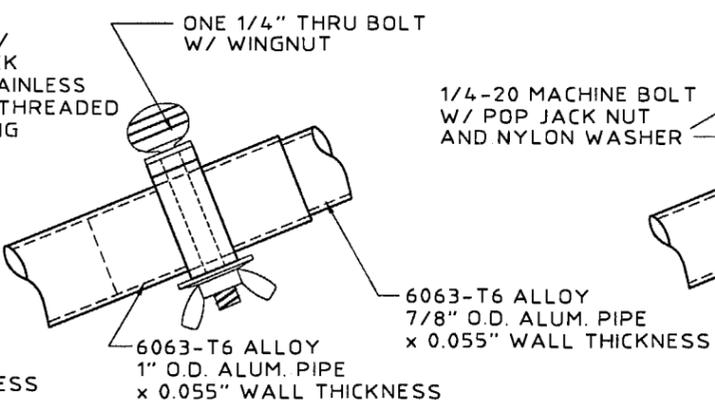
B TYPICAL SIDE VIEW (OPEN POSITION)
SCALE: 3/8" = 1' - 0"



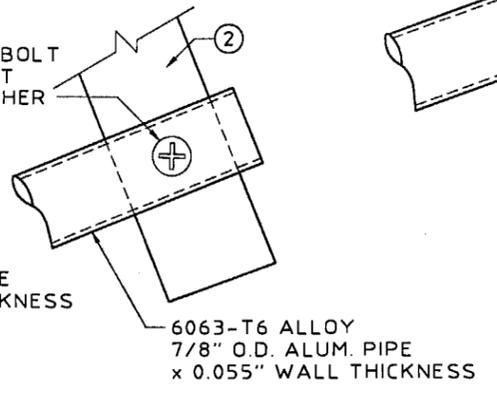
C HINGE CONNECTION AND LOUVER TO TOP RAIL DETAIL
SCALE: HALF SCALE



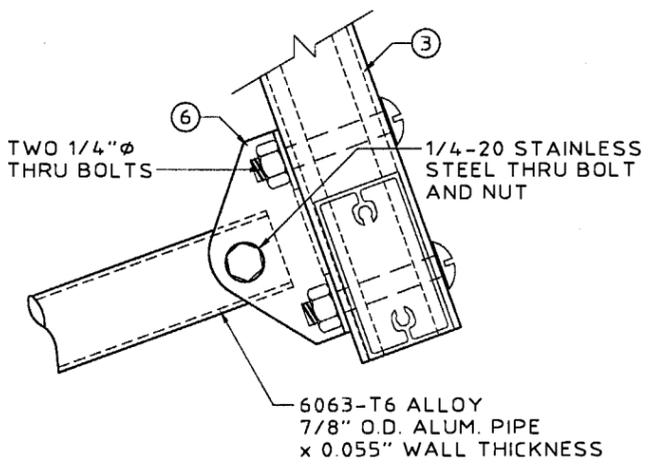
D SUPPORT PIPE AT CAMEL BACK HINGE TO WALL
SCALE: HALF SCALE



E SUPPORT PIPE OVER LAP
SCALE: HALF SCALE



F SUPPORT PIPE AT JAMB
SCALE: HALF SCALE



G SUPPORT PIPE AT DOUBLE JAMB
SCALE: HALF SCALE

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE 12/14/2000
BY *Helmut H. Knezevich*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 00-0822.09



KNEZEVICH & ASSOCIATES, INC.
CONSULTING ENGINEERS • PRODUCT TESTING
1280 N. UNIVERSITY DRIVE, SUITE 180 • FORT LAUDERDALE, FL 33322
TEL: (954) 382-2800 • FAX: (954) 382-2989 • FLORIDA COA #3205
WEBSITE: WWW.KNEZEVICH.COM • E-MAIL: KA@KNEZEVICH.COM
COPYRIGHT © 2000 KNEZEVICH & ASSOCIATES, INC.

BAHAMA SHUTTER CORPORATION
9040 Belvedere Road
West Palm Beach, FL 33411
(561) 790-5799

NO.	DATE	BY	DESCRIPTION	COUNTY COMMENTS
1	11/26/00	ZS		

V.J. KNEZEVICH
PROFESSIONAL ENGINEER
FL License No:
PE 0010983

NOV 20 2000
date 07/24/00
scale AS NOTED drawn by AV
design by ZS checked by VJK
drawing no. 99-262
sheet 2 of 3



KNEZEVICH & ASSOCIATES, INC.
 CONSULTING ENGINEERS • PRODUCT TESTING
 1280 N. UNIVERSITY DRIVE, SUITE 180 • FORT LAUDERDALE, FL 33322
 TEL: (954) 382-2800 • FAX: (954) 382-2888 • FLORIDA COA #3305
 WEBSITE: WWW.KNEZEVICH.COM • E-MAIL: KA@KNEZEVICH.COM
 COPYRIGHT © 2000 KNEZEVICH & ASSOCIATES, INC.

BAHAMA SHUTTER CORPORATION
 9040 Belvedere Road
 West Palm Beach, FL 33411
 (561) 790-5799

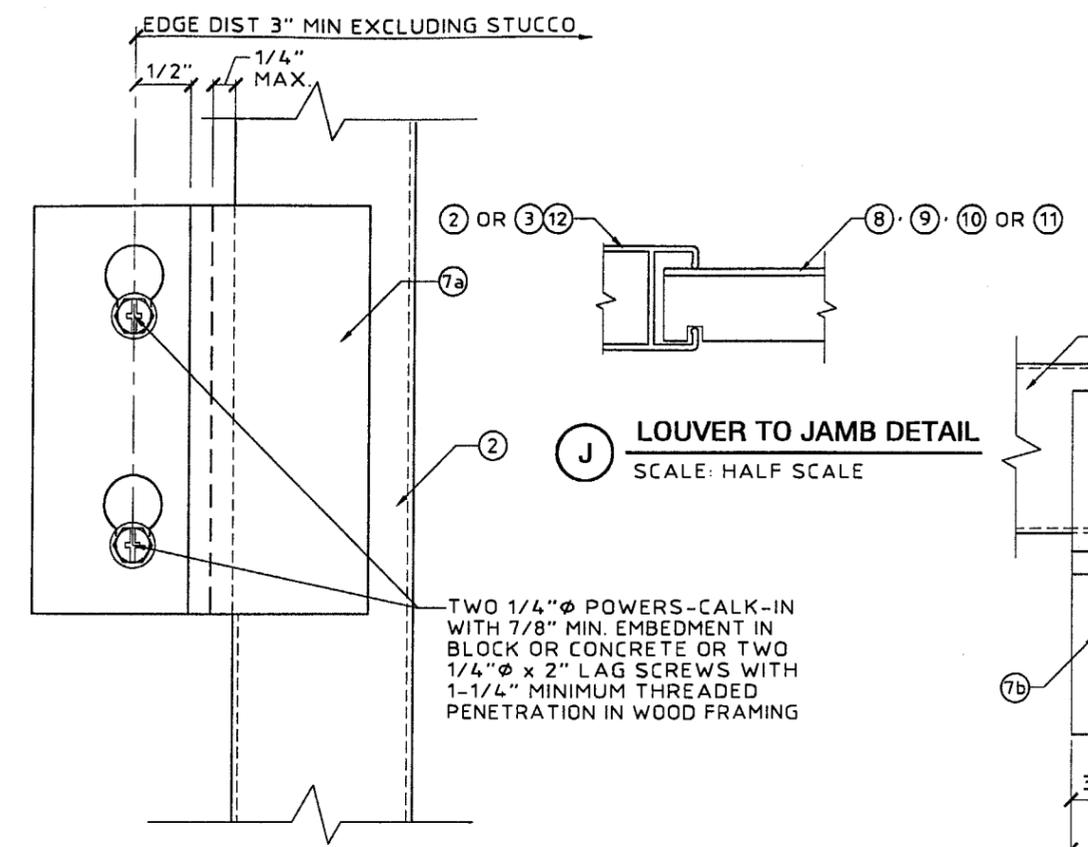
NO.	DATE	BY	DESCRIPTION
1	11/06/00	ZS	COUNTY COMMENTS

V.J. KNEZEVICH
 PROFESSIONAL ENGINEER
 FL License No:
 PE 0010983

NOV 20 2000

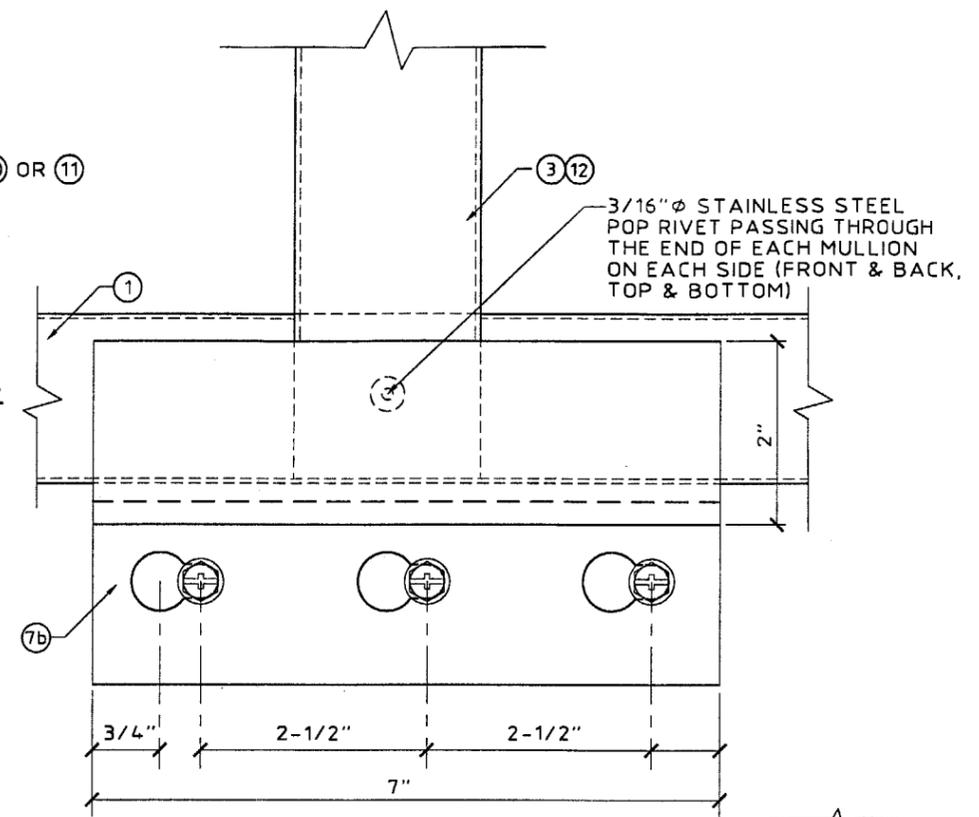
date 07/24/00
 scale AS NOTED
 drawn by AV
 design by ZS
 checked by VJK

drawing no.
99-262
 sheet 3 of 3



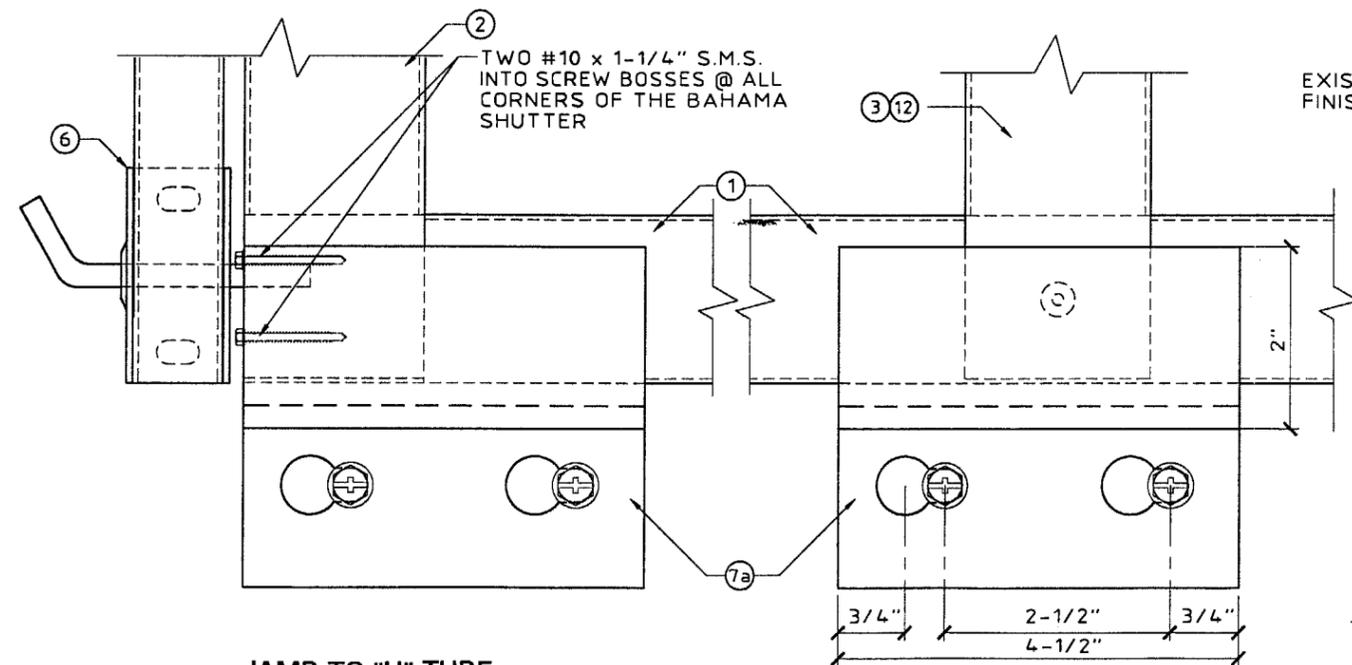
J LOUVER TO JAMB DETAIL
 SCALE: HALF SCALE

TWO 1/4" Ø POWERS-CALK-IN WITH 7/8" MIN. EMBEDMENT IN BLOCK OR CONCRETE OR TWO 1/4" Ø x 2" LAG SCREWS WITH 1-1/4" MINIMUM THREADED PENETRATION IN WOOD FRAMING

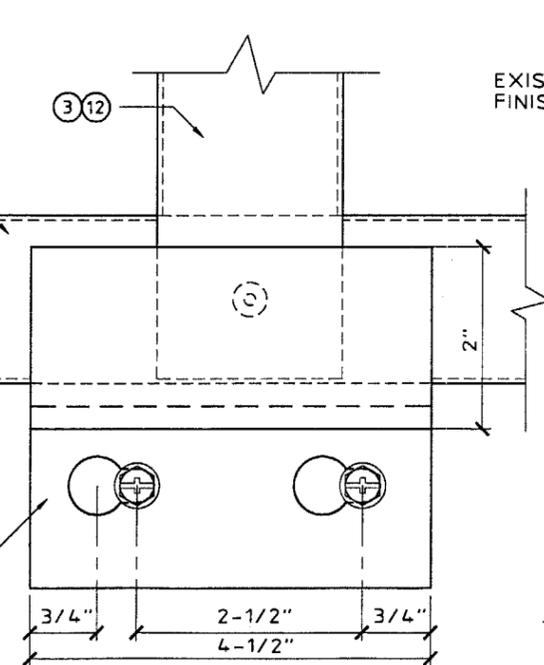


N DOUBLE JAMB TO \"H\" TUBE DETAIL (CLOSED POSITION)
 SCALE: HALF SCALE

H SIDE JAMB \"Z\" BAR DETAIL
 SCALE: HALF SCALE

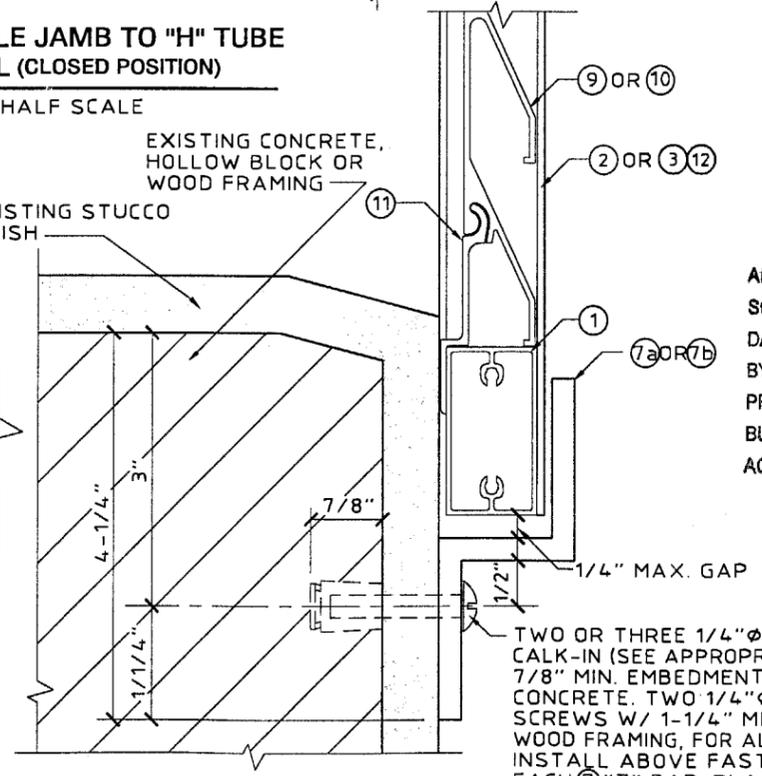


K JAMB TO \"H\" TUBE BOTTOM DETAIL (CLOSED POSITION)
 SCALE: HALF SCALE



L DOUBLE JAMB TO \"H\" TUBE BOTTOM DETAIL (CLOSED POSITION)
 SCALE: HALF SCALE

MAX DESIGN LOAD FOR DETAIL L IS 62 P.S.F.
 FOR LOADS ABOVE 62 P.S.F. UP TO 97 P.S.F. SEE DETAIL N



M TYPICAL \"Z\" BAR WALL MOUNT DETAIL (CLOSED POSITION)
 SCALE: HALF SCALE

TWO OR THREE 1/4" Ø POWERS CALK-IN (SEE APPROPRIATE DETAIL) W/ 7/8" MIN. EMBEDMENT IN BLOCKS OR CONCRETE. TWO 1/4" Ø x 2" LAG SCREWS W/ 1-1/4" MIN. PENTR. IN WOOD FRAMING, FOR ALL WIND LOADS. INSTALL ABOVE FASTENERS AT EACH Z BAR. PLACE \"Z\" BARS AT EVERY JAMB (INTERIOR OR SIDE)

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE 12/14/2000
 BY *Heung A. Makin*
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 00-0822.09