



MIAMI-DADE COUNTY, FLORIDA  
METRO-DADE FLAGLER BUILDING

**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

**PRODUCT CONTROL NOTICE OF ACCEPTANCE**

**Rolladen, Inc.**  
**550 Ansin Boulevard**  
**Hallandale FL 33009**

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

**CONTRACTOR ENFORCEMENT SECTION**  
(305) 375-2966 FAX (305) 375-2908

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

Your application for Product Approval of:

***Extruded Aluminum Accordion 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 approval shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at anytime 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 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.

**Acceptance No.: 00-0128.10**

**Expires: 02/27/2003**

Raul Rodriguez  
Chief Product Control Division

**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 Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.  
Director

Miami-Dade County  
Building Code Compliance Office

**Approved: 03/24/2000**

1 of 3



**Rolladen, Inc.**

ACCEPTANCE No. : 00-0128.10

APPROVED : MAR 24 2000

EXPIRES : 02/27/2003

**NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS**

**1. SCOPE**

This renews the Notice of Acceptance, No. 96-0621.01, which was issued on February 27, 1997. It approves an aluminum accordion 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 aluminum accordion type shutter and its components shall be constructed in strict compliance with the following documents: Drawing No. 96-19, titled "Accordion Shutter Details", prepared by Al-Farooq Corporation, dated April 25, 1996, last revision #C dated January 30, 1997, sheets 1 through 5 of 5, bearing the Miami-Dade County Product Control Approval and Renewal stamps with the Notice of Acceptance numbers and approval dates 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 aluminum accordion 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

**Rolladen, Inc.**

**ACCEPTANCE No. :** 00-0128.10

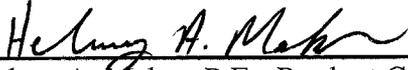
**APPROVED :** MAR 24 2000

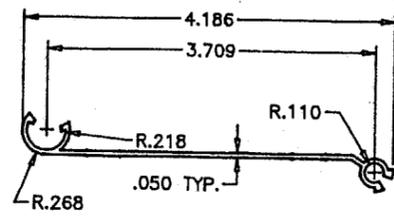
**EXPIRES :** 02/27/2003

**NOTICE OF ACCEPTANCE: STANDARD CONDITIONS**

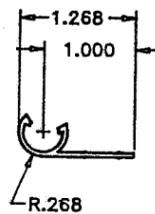
1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documents, including test-supporting data, engineering documents, are no older than eight (8) years.
2. Any and all approved products shall be permanently labeled with the 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**

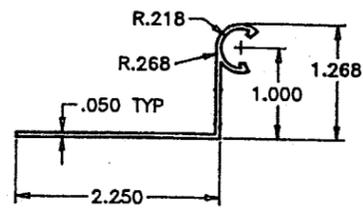
  
\_\_\_\_\_  
Helmy A. Makar, P.E.- Product Control Examiner  
Product Control Division



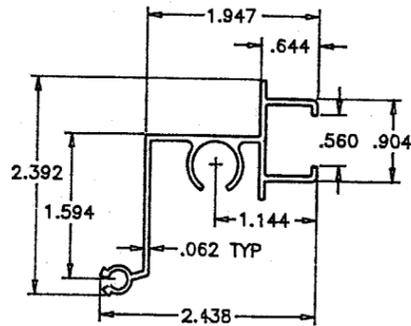
**BLADE '5905'**  
6063-T6



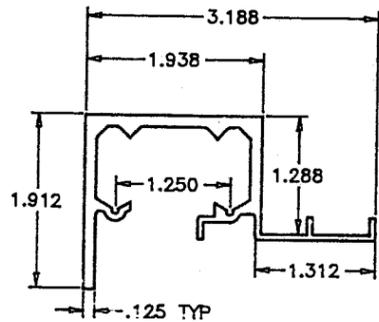
**END SLAT**  
6063-T6



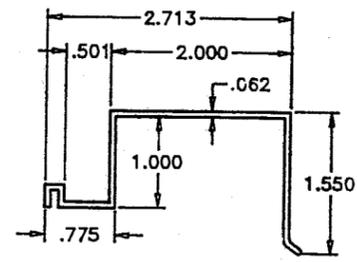
**90° END SLAT**  
6063-T6



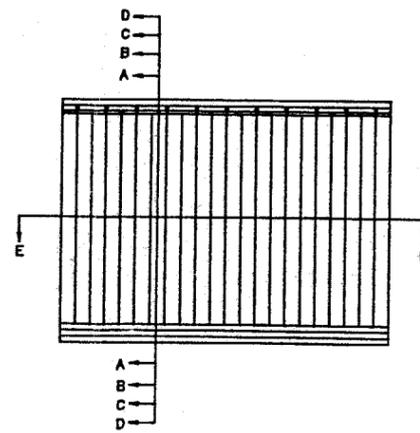
**MALE LOCK SLAT '5904'**  
6063-T6



**H.D. HEADER**  
6063-T6



**RAIN-GUARD**  
6063-T6



**TYPICAL ELEVATION**

- GENERAL NOTES**
1. THIS STRUCTURE IS DESIGNED AS PER THE SOUTH FLORIDA BUILDING CODE 1994 EDITION FOR DADE COUNTY. ALSO FOR WIND LOADS AS PER ASCE 7-88 USING CORRESPONDING LOADS.
  2. DESIGN CRITERIA FOR ALUMINUM, MINIMUM MECHANICAL PROPERTIES, AND SAFETY FACTORS ARE IN ACCORDANCE WITH THE "ALUMINUM CONSTRUCTION MANUAL" LATEST EDITION.
  3. ALL EXTRUSIONS SHALL BE ALLOYS AS SHOWN ON DETAILS.
  4. STEEL SURFACES TO BE PLACED IN CONTACT WITH ALUMINUM SHALL BE GIVEN ONE COAT OF ZINC CHROMATE PRIMER IN ACCORDANCE WITH FEDERAL SPEC. NO. TTP-645, OR BE GALVANIZED.
  5. ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
  6. ALL BOLTS, NUTS AND WASHERS SHALL BE STAINLESS STEEL OR ALUMINUM ALLOY 2024-T4 OR 7075-T6.
  7. DESIGN CRITERIA FOR PANELS: MAX DEFLECTION < L/30 FOR NEGATIVE PRESSURE AND THE LESSER OF L/30 OR 2" FOR POSITIVE PRESSURE.
  8. ANCHORING OR LOADING CONDITIONS OTHER THAN THOSE SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.
  9. EACH UNIT SHALL HAVE A READILY VISIBLE DECAL INSTRUCTING OWNER OR TENANT TO SECURE CENTERMATES BY USING ALUMINUM PLATE, DURING PERIODS OF HURRICANE WARNING.

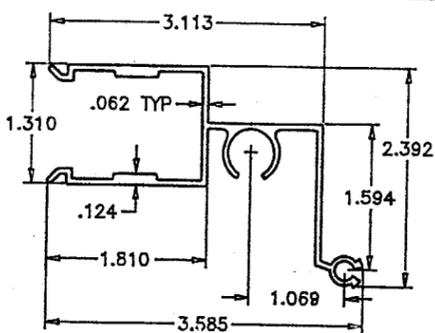
DESIGN LOADS SHALL BE CALCULATED AS PER REQUIREMENTS OF ASCE 7-88, BASED ON 110 MPH WIND VELOCITY.

DESIGN PRESSURE RATING = + 74 PSF  
- 105 PSF

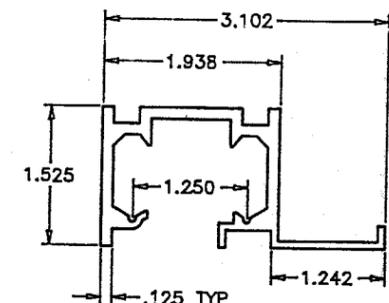
**PRODUCT MARKING**

A LABEL SHALL BE AFFIXED ON LOCKING MEMBER ON UNIT ABOVE THE LOCK WITH THE FOLLOWING STATEMENT.

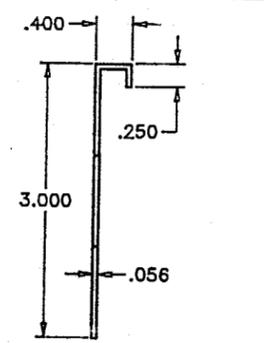
'ROLLADEN INC.' HALLANDALE, FL.  
"DADE COUNTY PRODUCT CONTROL APPROVED"



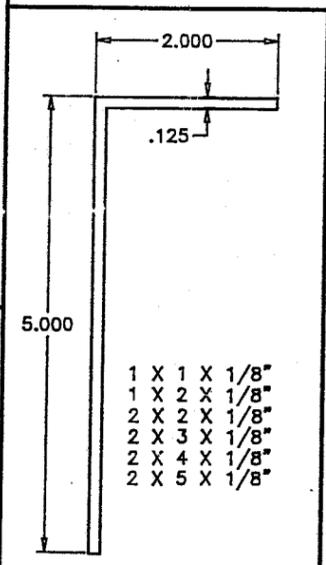
**FEMALE LOCK SLAT '5903'**  
6063-T6



**ALT. HEADER**  
6063-T6

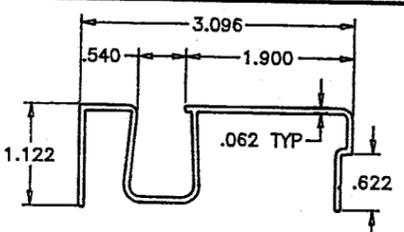


**BOTTOM GUTTER**  
6063-T6

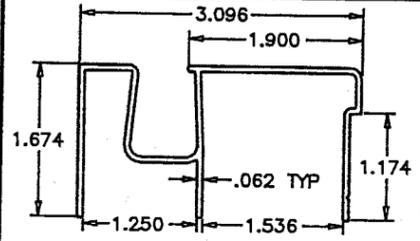


**ALUMINUM ANGLES**  
6063-T6

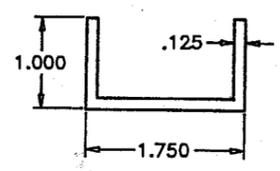
- 1 X 1 X 1/8"
- 1 X 2 X 1/8"
- 2 X 2 X 1/8"
- 2 X 3 X 1/8"
- 2 X 4 X 1/8"
- 2 X 5 X 1/8"



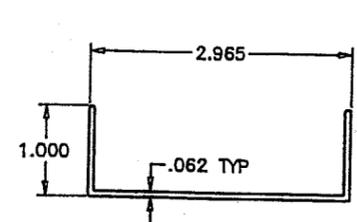
**ALT. SILL**  
6063-T6



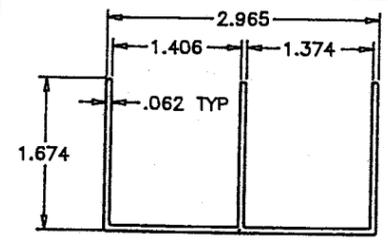
**SILL**  
6063-T6



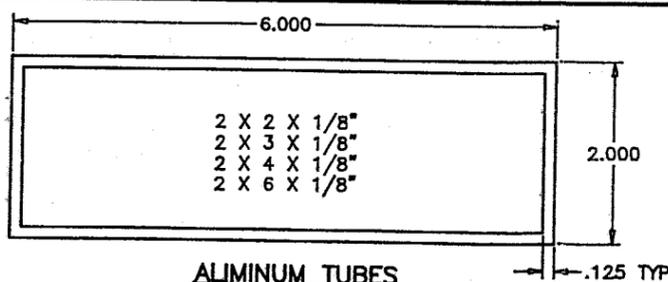
**FLOOR SHOE**  
6063-T6



**ALT. SILL ADAPTER**  
6063-T6



**SILL ADAPTER**  
6063-T6



**ALUMINUM TUBES**  
6063-T6

- 2 X 2 X 1/8"
- 2 X 3 X 1/8"
- 2 X 4 X 1/8"
- 2 X 6 X 1/8"

ANCHORS: EMBEDMENT & EDGE DISTANCES SHOWN ARE BEYOND THE WALL & FLOOR COVERING (STUCCO, TILES, ETC.)

Engr. DR. HUMAYOUN FAROOQ  
STRUCTURES  
FLA. PE # 16557

JAN 31 1997

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE  
DATE FEBRUARY 27, 1997  
BY Helmy A. Matar  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. 96-0621.01

a f c

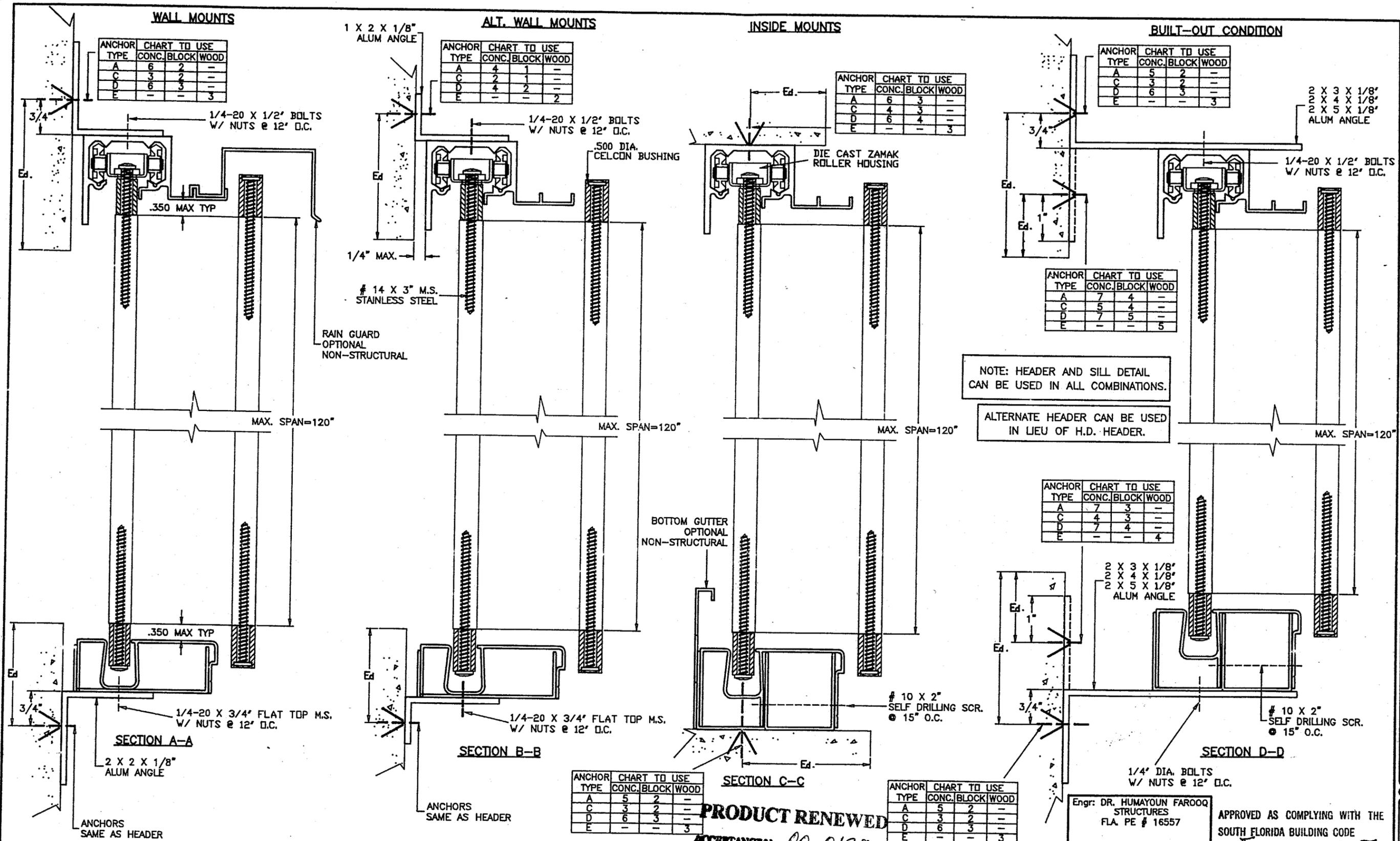
**AL-FAROOQ CORPORATION**  
ENGINEERS, PLANNERS & PRODUCT TESTING  
1235 SW 87 AVE  
MIAMI, FLORIDA 33174  
(305) 264-8100  
ACCORDION/RN196-19

ACCORDION SHUTTER DETAILS  
ROLLADEN INC.  
550 ANSIN BOULEVARD  
HALLANDALE, FL. 33009  
(305) 757 - 8591

no.	date	by	description
A	11.25.96	H	GENERAL REVISION
B	01.02.97	H	INS. MOUNT & CHART 5 REV.
C	01.30.97	H	ANCHOR CHARTS REV.

date	1/2" = 1'	design by	drawn by	checked by
04-25-98				

drawing no. **96-19**  
sheet 1 of 5



ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	6	2	-
C	3	4	-
D	6	3	-
E	-	-	3

ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	4	1	-
C	2	1	-
D	4	2	-
E	-	-	2

ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	6	3	-
C	4	3	-
D	6	4	-
E	-	-	3

ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	5	2	-
C	3	2	-
D	6	3	-
E	-	-	3

ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	7	4	-
C	5	4	-
D	7	5	-
E	-	-	5

ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	7	3	-
C	4	3	-
D	7	4	-
E	-	-	4

ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	5	2	-
C	3	2	-
D	6	3	-
E	-	-	3

ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	5	2	-
C	3	2	-
D	6	3	-
E	-	-	3

Ed = TYPICAL EDGE DISTANCE  
 CONC. & BLOCK = 12d (12 ANCHOR DIAMETERS)  
 WOOD = 5d  
 FOR LESSER EDGE DISTANCES SEE SHEET 5 OF 5.

FOR GENERAL NOTES AND EXTRUSION DETAILS SEE SHEET 1 OF 5.  
 FOR WOOD INSTALLATIONS SEE SHEET 4 OF 5.  
 FOR ANCHOR CHARTS SEE SHEET 5 OF 5.

NOTE: HEADER AND SILL DETAIL CAN BE USED IN ALL COMBINATIONS.

ALTERNATE HEADER CAN BE USED IN LIEU OF H.D. HEADER.

**PRODUCT RENEWED**  
 ACCEPTANCE No. 00-0128-10  
 EXPIRATION DATE February 27, 2003  
 By *Helmy A. Maki*  
 PRODUCT CONTROL DIVISION  
 BUILDING CODE COMPLIANCE OFFICE

Engr: DR. HUMAYOON FAROOQ  
 STRUCTURES  
 FLA PE # 16557

APPROVED AS COMPLYING WITH THE  
 SOUTH FLORIDA BUILDING CODE  
 DATE FEBRUARY 27, 1997  
 BY *Helmy A. Maki*  
 PRODUCT CONTROL DIVISION  
 BUILDING CODE COMPLIANCE OFFICE  
 ACCEPTANCE NO. 96-0621-01

a f c

**AL-FAROOQ CORPORATION**  
 ENGINEERS, PLANNERS & PRODUCT TESTING  
 1235 SW 87 AVE  
 MIAMI, FLORIDA 33174  
 (305) 264-8100  
 ACCORDION/RN196-19

ACCORDION SHUTTER DETAILS  
 ROLLADEN INC.  
 550 ANSIN BOULEVARD  
 HALLANDALE, FL 33009  
 (305) 757 - 8591

revisions:	no	date	description

date: 04-25-96  
 scale: 1/2" = 1"  
 design by:  
 drawn by: HMM  
 checked by:

drawing no.  
**96-19**  
 sheet 2 of 5



sheet 4 of 5  
 96-19  
 drawing no.  
 PRODUCT CONTROL DIVISION  
 BUILDING CODE COMPLIANCE OFFICE  
 ACCEPTANCE NO. 96-0621.01

date: 04-25-97  
 scale: 1/2" = 1'  
 design by:  
 drawn by: HMD  
 checked by:

Revisions:  
 no. date by description

ACCORDION SHUTTER DETAILS  
 ROLLADEN INC.  
 550 ANSIN BOULEVARD  
 HALLANDALE, FL. 33009  
 (305) 757 - 8591

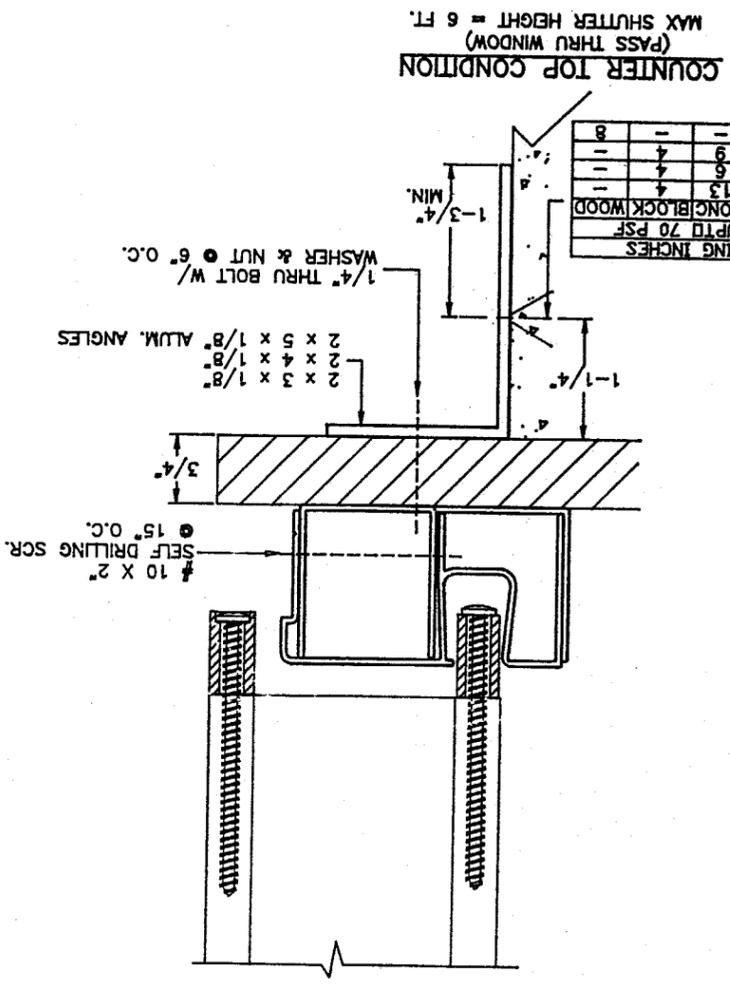
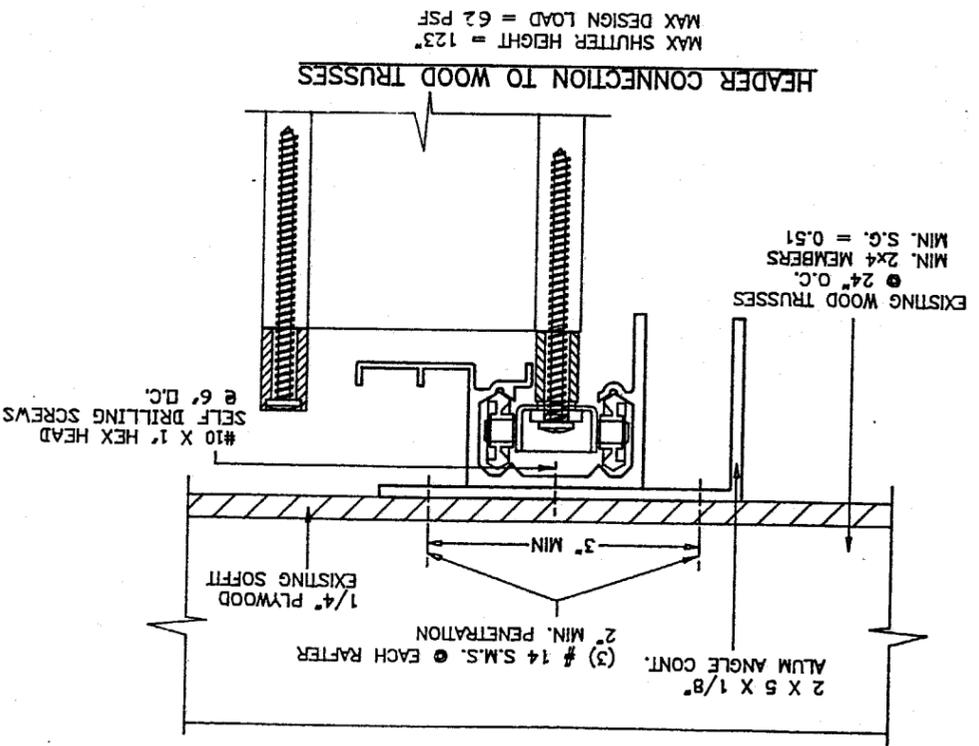
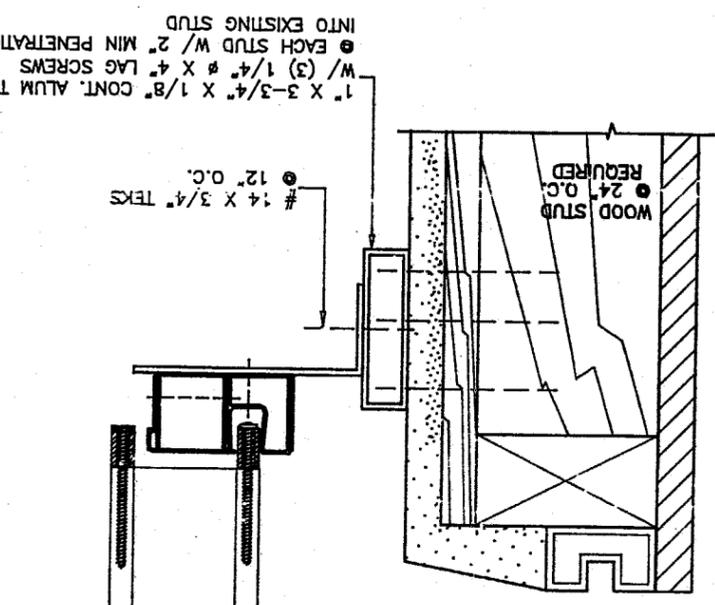
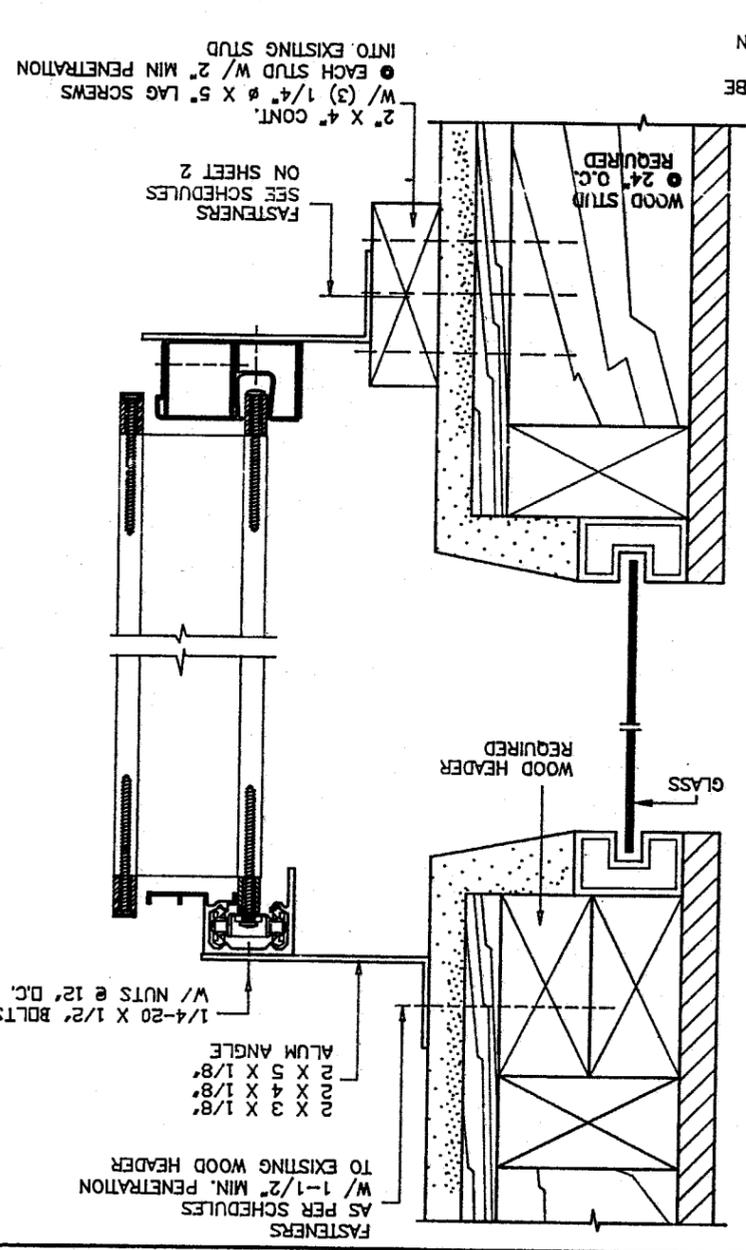
AL-FAROQ CORPORATION  
 ENGINEERS, PLANNERS & PRODUCT TESTING  
 1235 SW 87 AVE  
 MIAMI, FLORIDA 33174  
 (305) 264-8100  
 ACCORDION/RN196-19

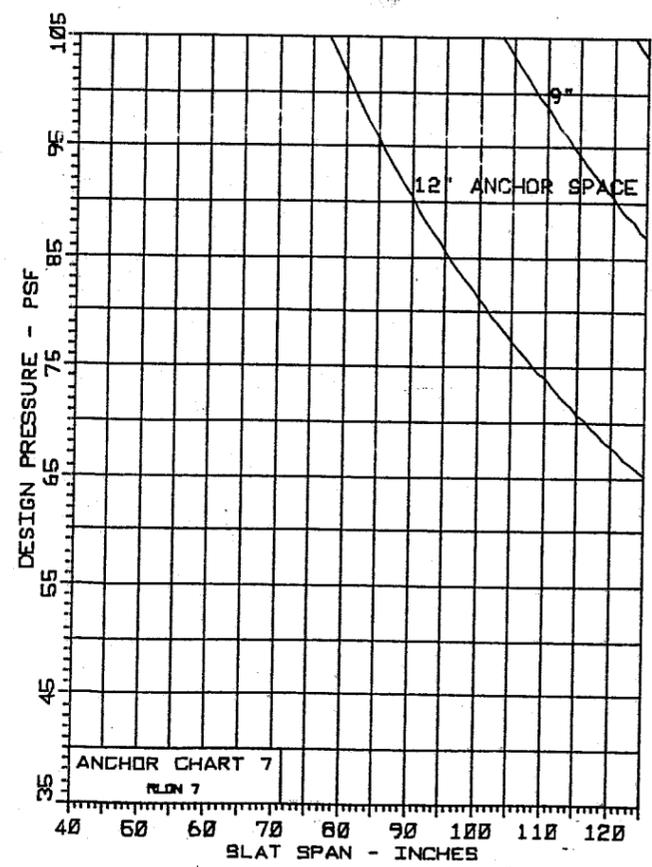
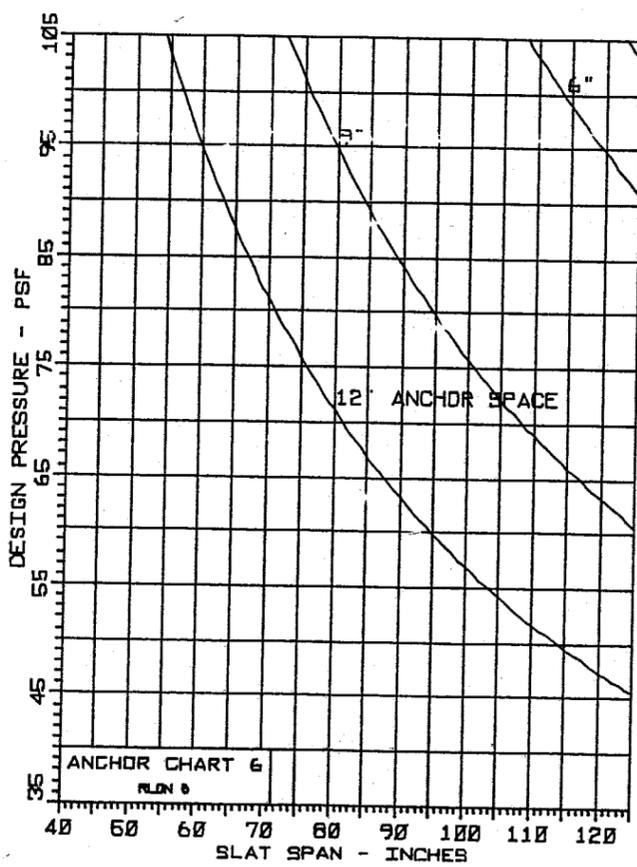
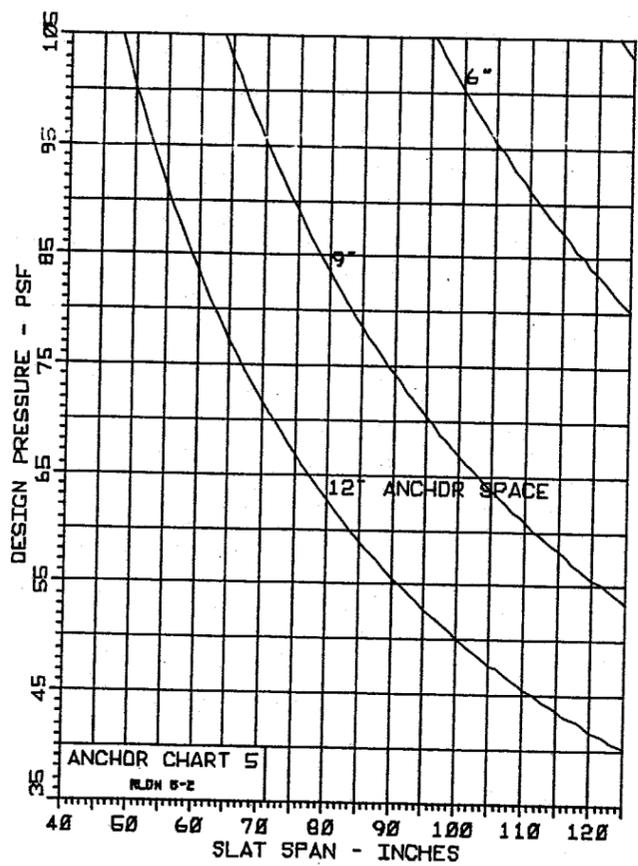
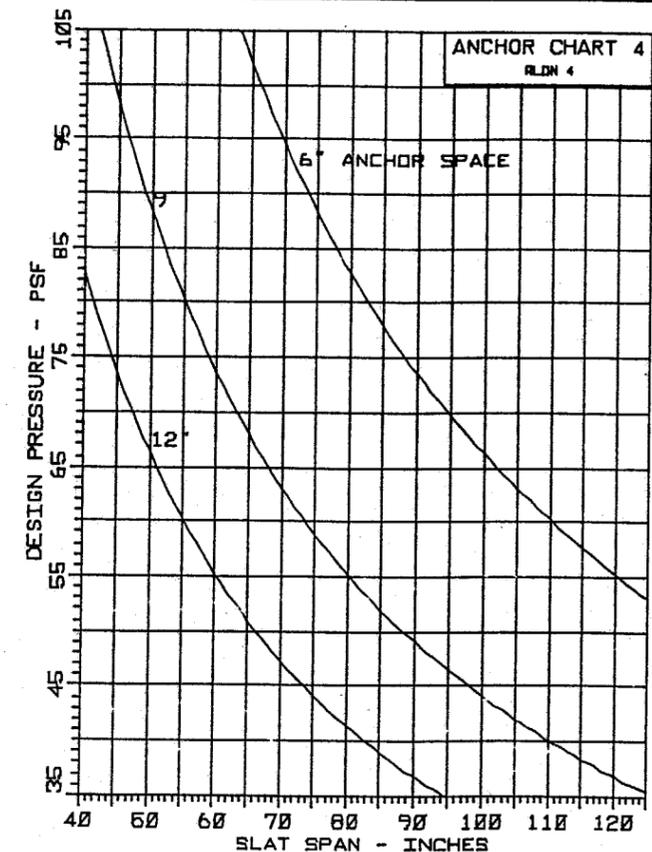
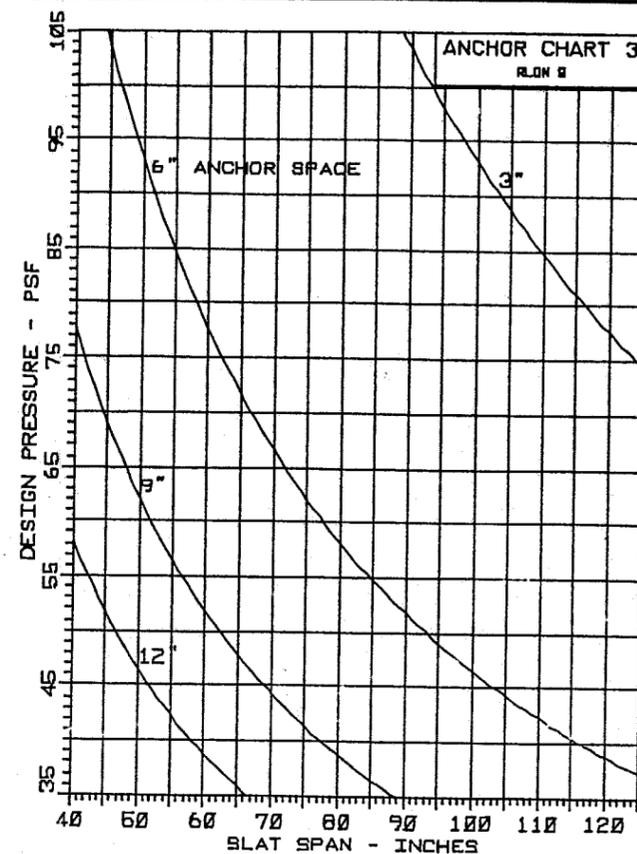
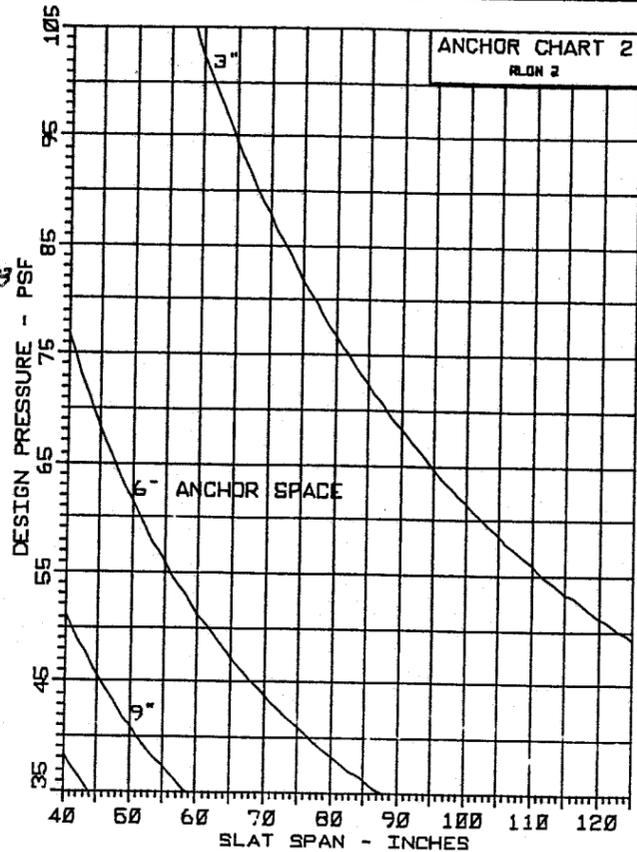
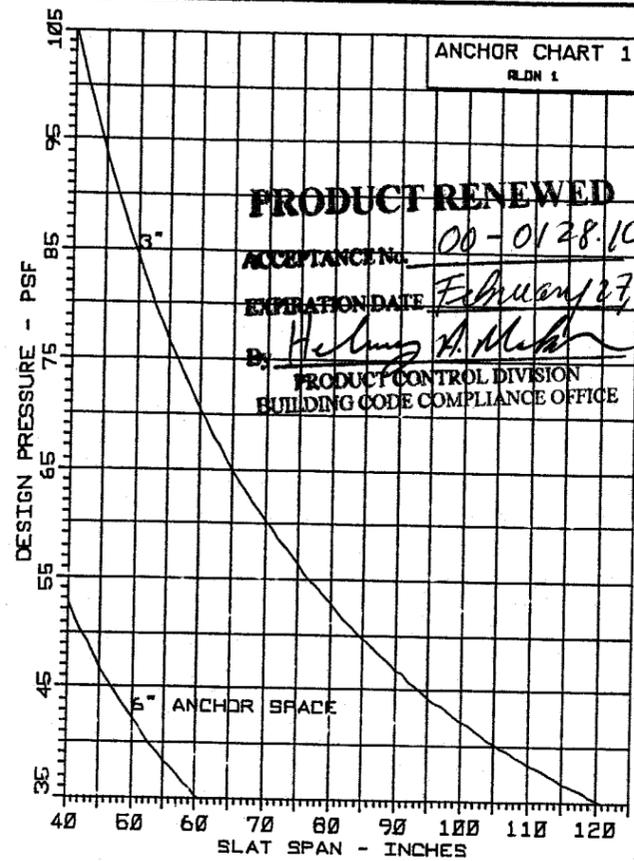
APPROVED AS COMPLYING WITH THE  
 SOUTH FLORIDA BUILDING CODE  
 DATE: FEBRUARY 27 1997  
 BY: Helmy A. M. M.  
 PRODUCT CONTROL DIVISION  
 BUILDING CODE COMPLIANCE OFFICE  
 ACCEPTANCE NO. 96-0621.01

Engr. DR. HUMAYOUN FAROOQ  
 STRUCTURES  
 F.L.A. PE # 16557  
 JAN 31 1997

PRODUCT RENEWED  
 ACCEPTANCE NO. 00-0128.10  
 EXPIRATION DATE February 27, 2003  
 BY: Helmy A. M. M.  
 PRODUCT CONTROL DIVISION  
 BUILDING CODE COMPLIANCE OFFICE

INSTALLATION DETAIL ON EXISTING WOOD BUCKS  
 SCALE: 1/4" = 1'  
 MAX. SHUTTER HEIGHT = 6 FT.  
 MAX. DESIGN LOAD = 65 PSF  
 OTHER CONDITIONS SIMILAR  
 FOR FASTENERS SEE SCHEDULES ON SHEET 2





**FASTENER SPACING IN MASONRY**

CHARTS ARE BASED ON TYPICAL EDGE DISTANCE = 12d.  
FOR LESSER EDGE DISTANCE DECREASE SPACING BY  
MULTIPLYING WITH THE FACTOR BELOW

EDGE DIST.	12d=3"	10d=2-1/2"	8d=2"	6d=1-1/2"	5d=1-1/4"
FACTOR	1.00	0.86	0.71	0.57	0.50

EXAMPLE: FOR 3" EDGE DIST. SPACING = 12" O.C. (FROM CHART)  
FOR 2" EDGE DIST. SPACING = 12 X .71 = 8.5 O.C.

TYPICAL EDGE DISTANCE IN WOOD = 1-1/4"  
NO REDUCTION FACTOR IS REQUIRED

- TYPICAL ANCHORS**
- ANCHOR (A) = 1/4" TAPCON 1-3/4" EMBEDMENT TO CONCRETE  
1-1/4" EMBEDMENT TO BLOCK
  - ANCHOR (C) = 1/4" X 1-1/4" METAL HIT ANCHORS (W/ ZAMAC BODY)  
1" EMBEDMENT TO CONC. OR BLOCK
  - ANCHOR (D) = 1/4" RAWL CALK-IN, STAR 'TAMPIN' OR EQUAL  
TOTAL ANCHOR BODY INTO CONC. OR BLOCK
  - ANCHOR (E) = #14 S.M.S./LAG SCREWS INTO WOOD. (S.G. = 0.47)  
1-1/2" MIN. PENETRATION.
- NOTE: ANCHORS, USE FULL EMBEDMENT IN CONCRETE BEYOND  
THE COVERING (STUCCO, TILES, ETC.)

Engr. DR. HUMAYOUN FAROOQ  
STRUCTURES  
FLA. PE # 16557

APPROVED AS COMPLYING WITH THE  
SOUTH FLORIDA BUILDING CODE  
DATE FEBRUARY 27, 1997  
BY *Helmy A. Matar*  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. 96-0621.01

JAN 31 1997

**af c**

**AL-FAROOQ CORPORATION**  
ENGINEERS, PLANNERS & PRODUCT TESTING  
1235 SW 87 AVE  
MIAMI, FLORIDA 33174  
(305) 264-8100  
ACCORDION RN196-19

ACCORDION SHUTTER DETAILS

ROLLADEN INC.  
550 ANSIN BOULEVARD  
HALLANDALE, FL. 33009  
(305) 757 - 8591

revisions:					
no.	date	by	description		

date: 04-28-96  
scale: 1/2" = 1"  
design by:  
drawn by: HMD  
checked by:

drawing no.  
**96-19**

sheet 5 of 5