



**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**

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

Your application for Notice of Acceptance (NOA) of:

**"A.C.C.A." 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 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.: 00-0609.06**  
**EXPIRES: 09/25/2003**

**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: 09/21/2000**



Rolladen, Inc.

ACCEPTANCE No. : 00-0609.06

APPROVED : SEP 21 2000

EXPIRES : 09/25/2003

**NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS**

**1. SCOPE**

This renews the Notice of Acceptance No. 97-0721.03, which was issued on September 25, 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. 94-83, titled "Accordion Shutter Details", prepared by Al-Farooq Corporation, dated October 25, 1994, last revision #A dated January 26, 1995, sheets 1 through 4 of 4, 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".

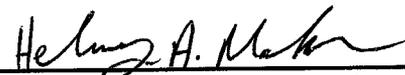
**6. BUILDING PERMIT REQUIREMENTS**

**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. :** 00-0609.06

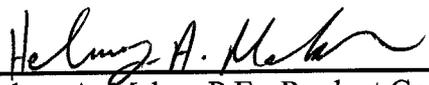
**APPROVED :** SEP 2 1 2000

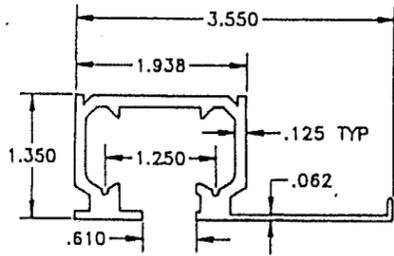
**EXPIRES :** 09/25/2003

**NOTICE OF ACCEPTANCE: STANDARD CONDITIONS**

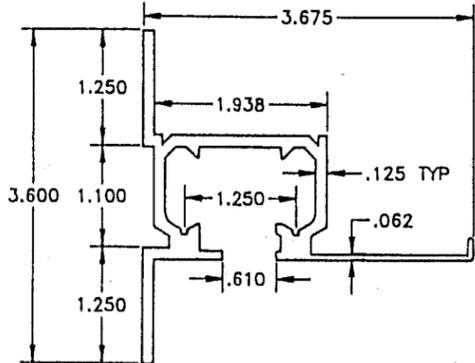
1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documents, including test-supporting data, engineering documents, are no older than eight (8) years.
2. Any and all approved products shall be permanently labeled with the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

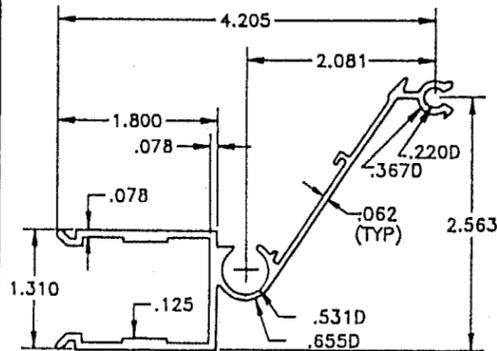
  
\_\_\_\_\_  
Helmy A. Makar, P.E.- Product Control Examiner  
Product Control Division



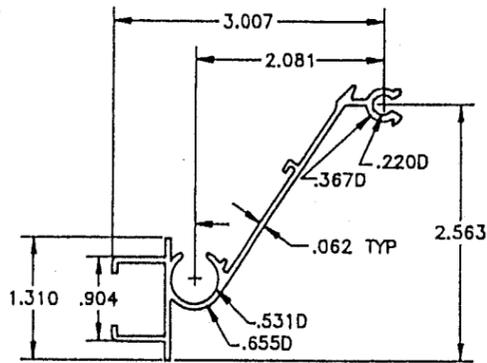
**INSIDE MOUNT HEADER & SILL**  
6063-T6  
RON-90



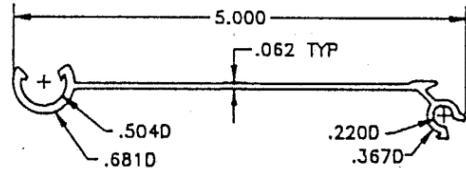
**WALL MOUNT HEADER & SILL**  
6063-T6  
RON-91



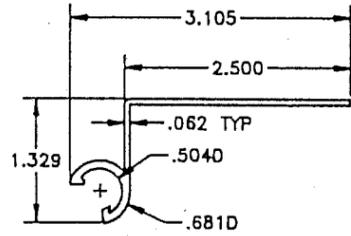
**FEMALE LOCKING SLAT**  
6063-T6  
RON-95



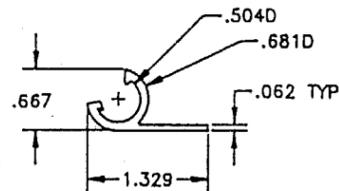
**MALE LOCKING SLAT**  
6063-T6  
RON-96



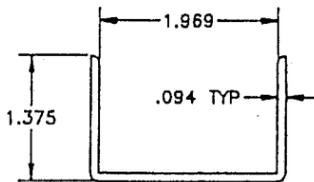
**BLADE**  
6063-T6



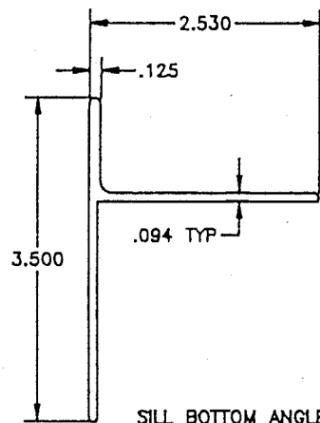
**90° END SLAT**  
6063-T6  
RON-93



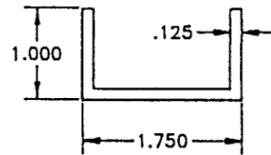
**FLAT END SLAT**  
6063-T6  
RON-94



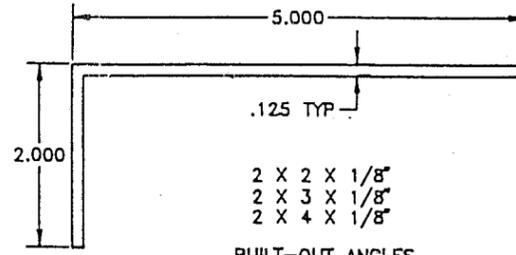
**BOTTOM TRACK ADAPTER**  
6063-T6  
RON-97



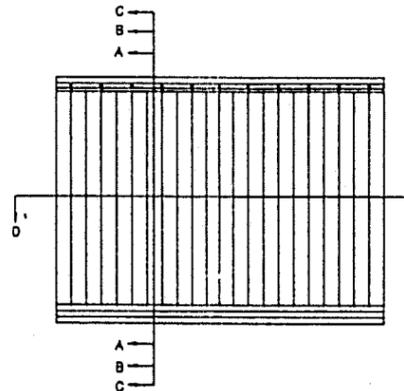
**SILL BOTTOM ANGLE**  
6063-T6  
RON-89



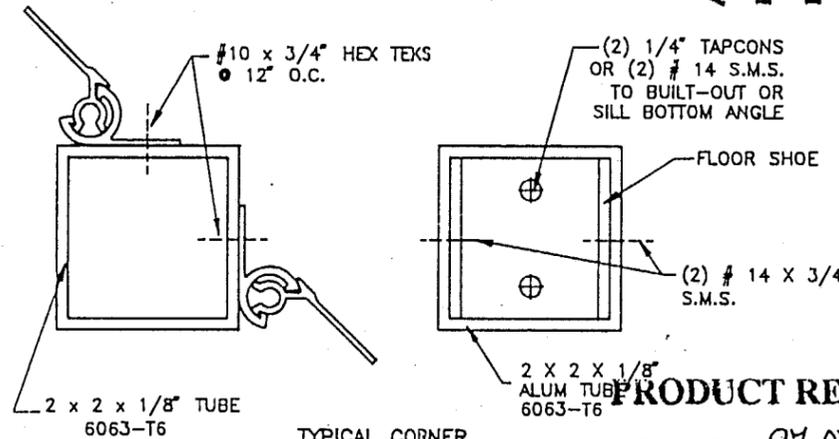
**FLOOR SHOE**  
6063-T6  
RON-1058



**BUILT-OUT ANGLES**  
6063-T6



**TYPICAL ELEVATION**



**TYPICAL CORNER DETAILS**

**PRODUCT MARKING**

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

ROLLADEN INC. HALLANDALE, FL  
A.C.C.A. ACCORDION SHUTTER  
"DADE COUNTY PRODUCT CONTROL APPROVED"

THIS PRODUCT PASSED LARGE MISSILE IMPACT TEST AND WAS CYCLED TO  
DESIGN PRESSURE RATING = + 112 PSF,  
- 217 PSF;

FOR INSTALLATION DETAILS SEE SHEET 2 & 3.

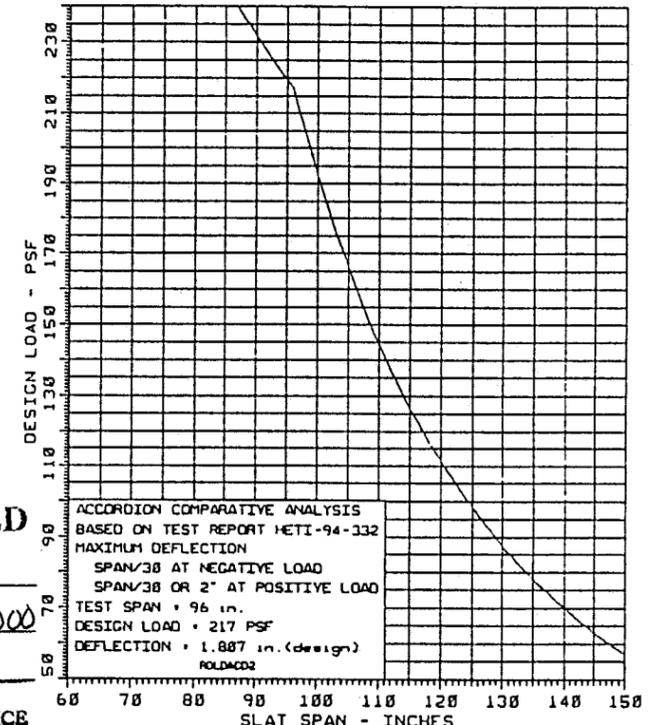
**PRODUCT RENEWED**  
ACCEPTANCE No. 00-0609.06  
EXPIRATION DATE 09/25/2003  
By *Heather A. Miller*  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE

**PRODUCT RENEWED**  
ACCEPTANCE No. 97-0721.03  
EXPIRATION DATE SEPT 25, 2000  
By *Manuel Serrano*  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE

- 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. ALUMINUM ALLOYS: ALL EXTRUSIONS SHALL BE ALLOY 6063-T6, OR AS NOTED.
  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, OR PLATED STEEL.
  7. THE DESIGN AT ANY GIVEN ELEVATION SHALL COMPLY WITH THE TABLES PERTAINING TO THE EXPOSURE/ZONE.
  8. DESIGN CRITERIA FOR PANELS: MAX DEFLECTION  $\leq L/30$  OR 2".
  9. ANCHORING OR LOADING CONDITIONS OTHER THAN THOSE SHOWN IN THESE DETAILS ARE TO BE ENGINEERED SEPARATELY.

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

**SLAT PERFORMANCE CHART**



ACCORDION COMPARATIVE ANALYSIS  
BASED ON TEST REPORT HETI-94-332  
MAXIMUM DEFLECTION  
SPAN/38 AT NEGATIVE LOAD  
SPAN/38 OR 2" AT POSITIVE LOAD  
TEST SPAN = 96 in.  
DESIGN LOAD = 217 PSF  
DEFLECTION = 1.887 in. (design)  
ROLLADEN

USE SLAT PERFORMANCE CHART TO VERIFY SLAT CAPACITY FOR THE REQUIRED DESIGN LOAD FOR THE PARTICULAR LOCATION.

ENGINEER: HUMAYOON FAROOQ  
PE # 16557

*Manuel Serrano*  
JAN 26 1995

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE  
DATE *February 23, 1995*  
BY *Manuel Serrano*  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. *97-1201.06*

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

**a f c**

**AL-FAROOQ CORPORATION**  
ENGINEERS, PLANNERS & PRODUCT TESTING  
1235 SW 87 AVE  
MIAMI, FLORIDA 33174  
(305) 264-8100  
RN19483A

**ACCORDION SHUTTER DETAILS**  
ROLLADEN INC.  
550 ANSIN BOULEVARD  
HALLANDALE, FL 33009

no.	date	description
1	1.26.95	T.H. SHEET 2 REVISED

date	scale	design	drawn	checked
10-25-94	1/2" = 1'			

drawing no.  
**94-83**

sheet 1 of 4

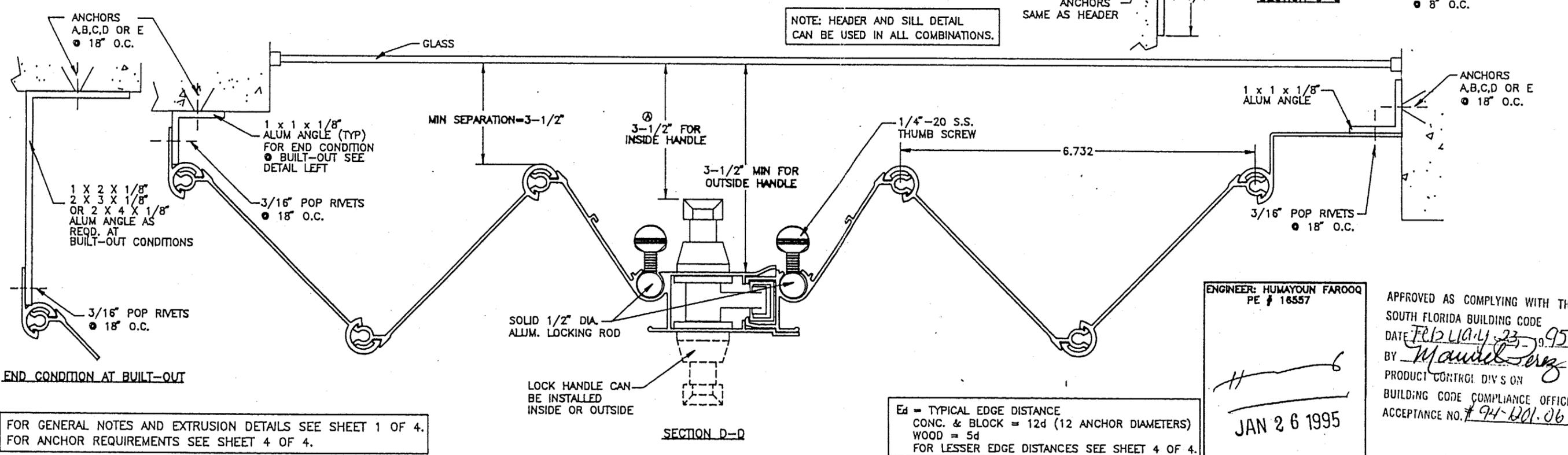
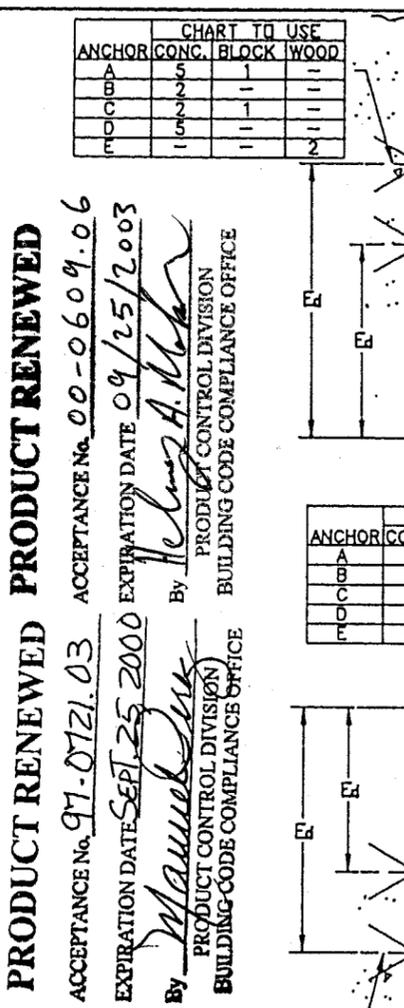
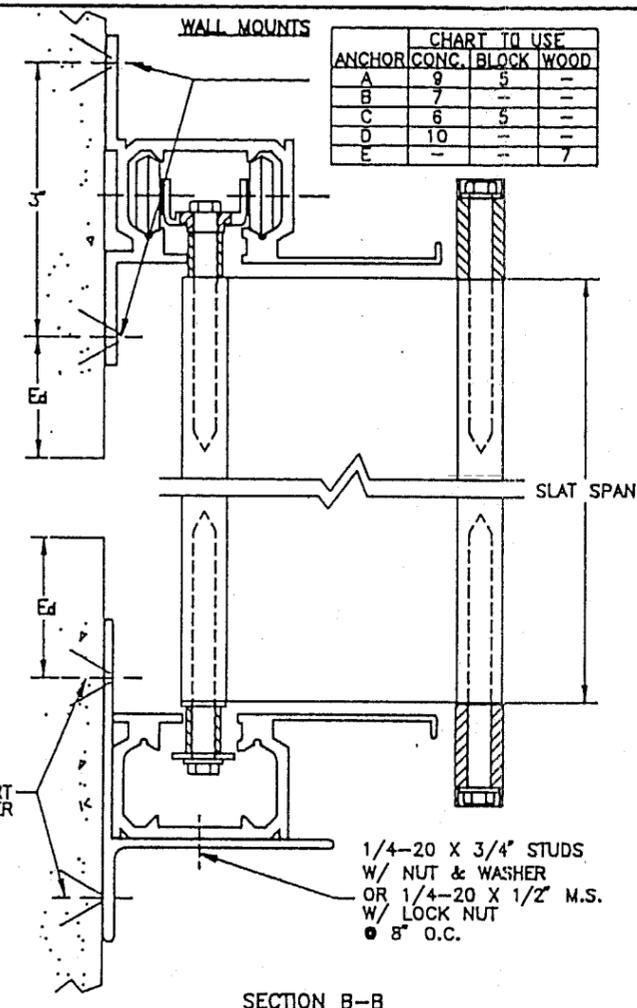
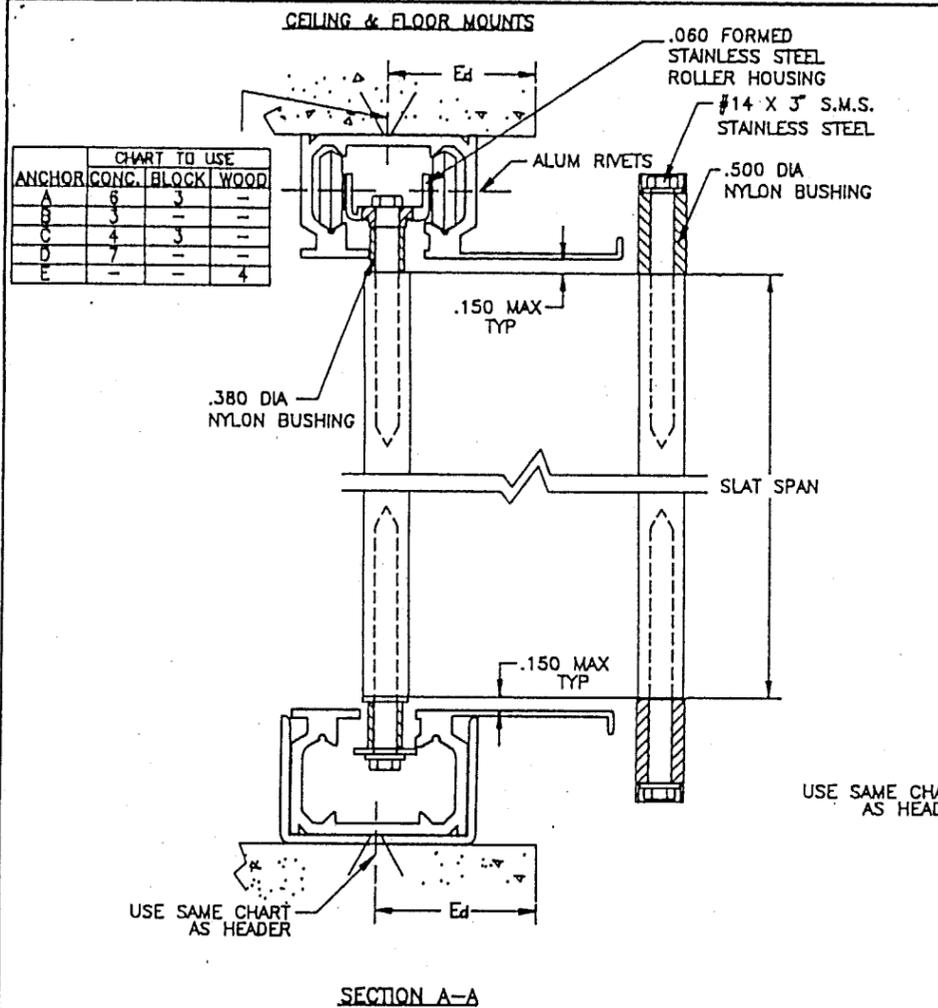


CHART TO USE			
ANCHOR	CONC.	BLOCK	WOOD
A	9	5	-
B	7	-	-
C	6	5	-
D	10	-	-
E	-	-	7

CHART TO USE			
ANCHOR	CONC.	BLOCK	WOOD
A	5	1	-
B	3	-	-
C	2	1	-
D	1	-	-
E	-	-	2

CHART TO USE			
ANCHOR	CONC.	BLOCK	WOOD
A	3	1	-
B	2	-	-
C	1	1	-
D	1	-	-
E	-	-	3

**PRODUCT RENEWED PRODUCT RENEWED**

ACCEPTANCE No. 91-0721.03 ACCEPTANCE No. 00-0609.06  
 EXPIRATION DATE SEPT 25 2000 EXPIRATION DATE 09/25/2003  
 By *Maulid Farooq*  
 PRODUCT CONTROL DIVISION BUILDING CODE COMPLIANCE OFFICE

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

FOR GENERAL NOTES AND EXTRUSION DETAILS SEE SHEET 1 OF 4.  
 FOR ANCHOR REQUIREMENTS SEE SHEET 4 OF 4.

Ed = TYPICAL EDGE DISTANCE  
 CONC. & BLOCK = 12d (12 ANCHOR DIAMETERS)  
 WOOD = 5d  
 FOR LESSER EDGE DISTANCES SEE SHEET 4 OF 4.

ENGINEER: HUMAYOON FAROOQ  
 PE # 16557

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE  
 DATE FEBRUARY 23 1995  
 BY *Maulid Farooq*  
 PRODUCT CONTROL DIVISION  
 BUILDING CODE COMPLIANCE OFFICE  
 ACCEPTANCE NO. 94-201.06

JAN 26 1995

a f c

**AL-FAROOQ CORPORATION**  
 ENGINEERS, PLANNERS & PRODUCT TESTING  
 1235 SW 87 AVE  
 MIAMI, FLORIDA 33174  
 (305) 264-8100  
 RN19483A

ACCORDION SHUTTER DETAILS  
 ROLLADEN INC.  
 550 ANSIN BOULEVARD  
 HALLANDALE, FL. 33009

revisions:	no	date	by	description
A	1	11.26.95	J.H.	SEPARATION REVISED

date	scale	1/2" = 1"	design by	drawn by	checked by
10-25-94	1/2" = 1"				

drawing no. 94-83  
 sheet 2 of 4

a f c

**AL-FAROOQ CORPORATION**  
 ENGINEERS, PLANNERS & PRODUCT TESTING  
 1235 SW 87 AVE  
 MIAMI, FLORIDA 33174  
 (305) 264-8100  
 RN19483A

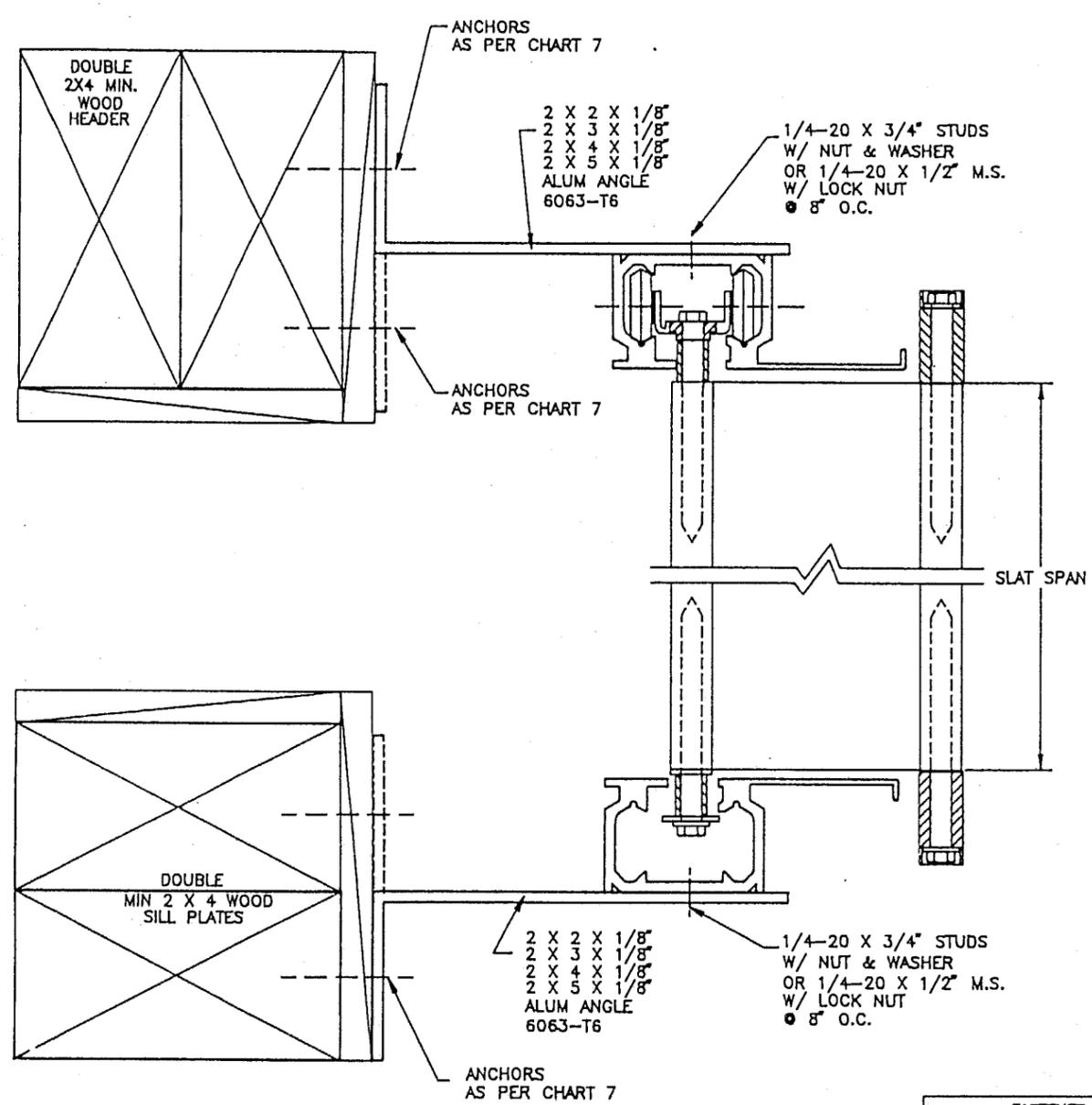
ACCORDION SHUTTER DETAILS  
 ROLLADEN INC.  
 550 ANSIN BOULEVARD  
 HALLANDALE, FL 33009

no.	date	description

date: 10-23-94  
 scale: 1/2" = 1'  
 design by: *M. Perez*  
 drawn by: *M. Perez*  
 checked by: *M. Perez*

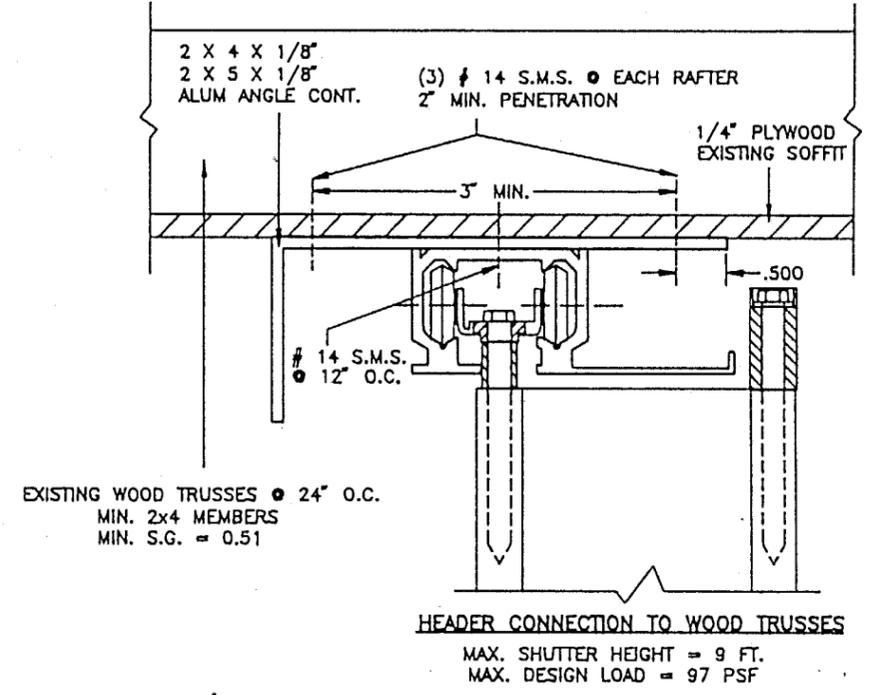
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**94-83**

sheet 3 of 4

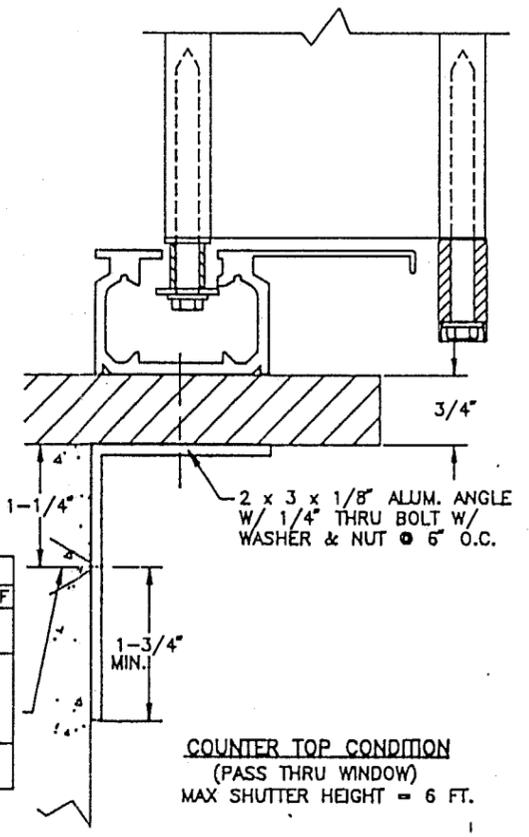


**WOOD INSTALLATION DETAIL**  
 OTHER CONDITIONS SIMILAR

BASE MAT.	ANCHOR	FASTENER SPACING IN.	
		40 PSF	70 PSF
CONCRETE	1/4" TAPCON 1-3/4" EMBED.	24	24
BLOCK	1/4" DRIVE PIN 1" EMBED. OR 1/4" TAPCONS 1-1/4" EMBED.	12	7
WOOD	#14 SMS 1-1/2" EMBED.	18	10



**HEADER CONNECTION TO WOOD TRUSSES**  
 MAX. SHUTTER HEIGHT = 9 FT.  
 MAX. DESIGN LOAD = 97 PSF

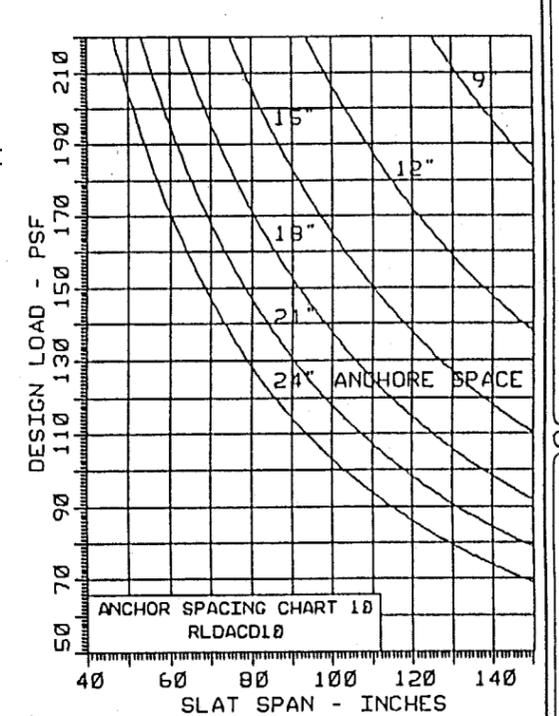
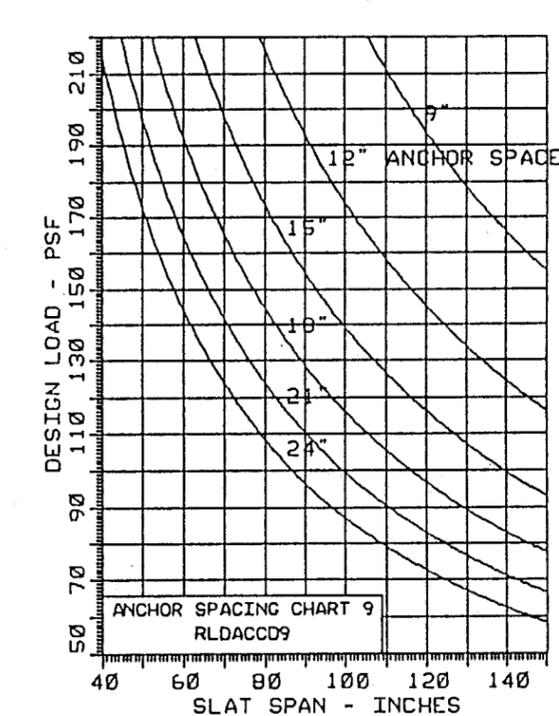
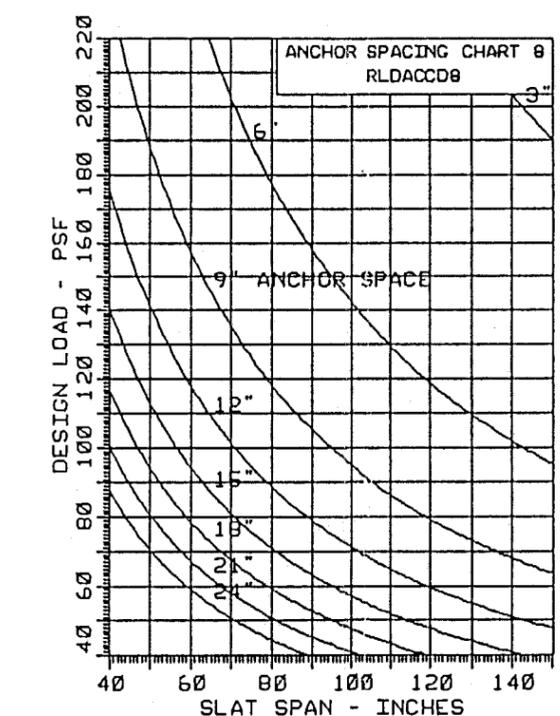
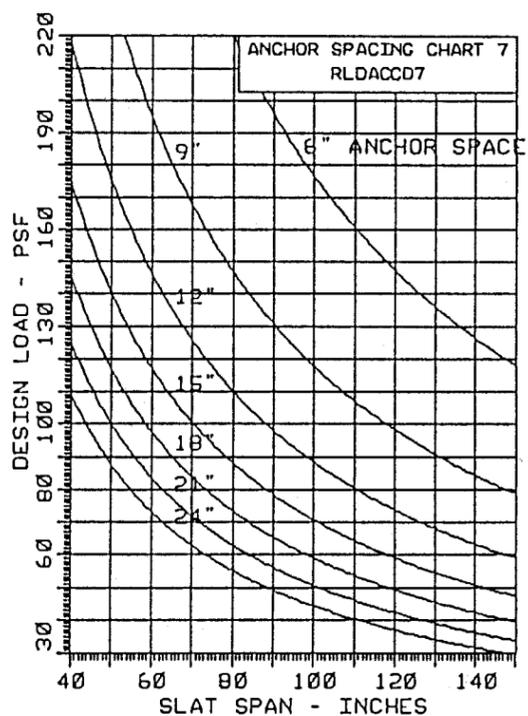
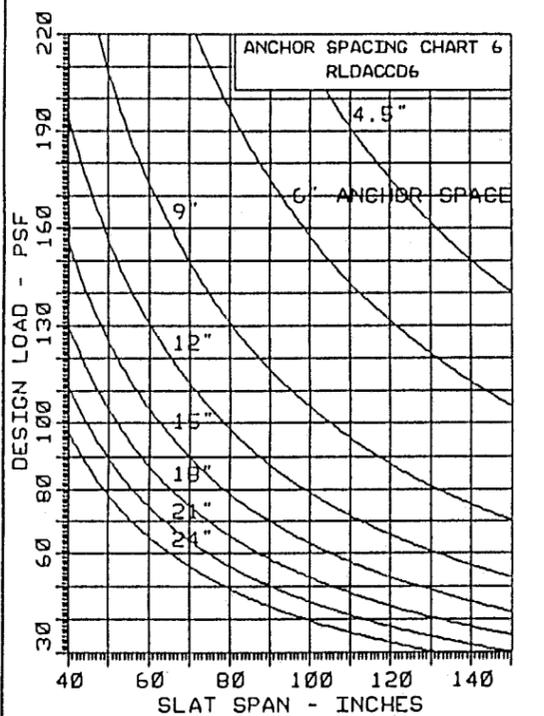
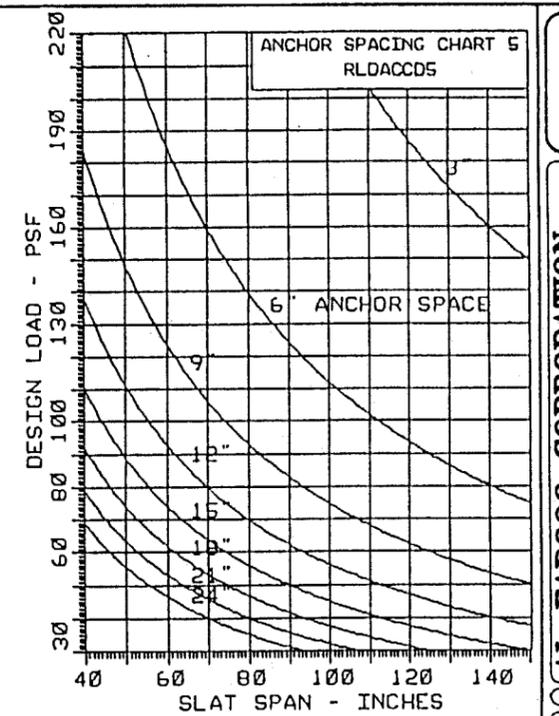
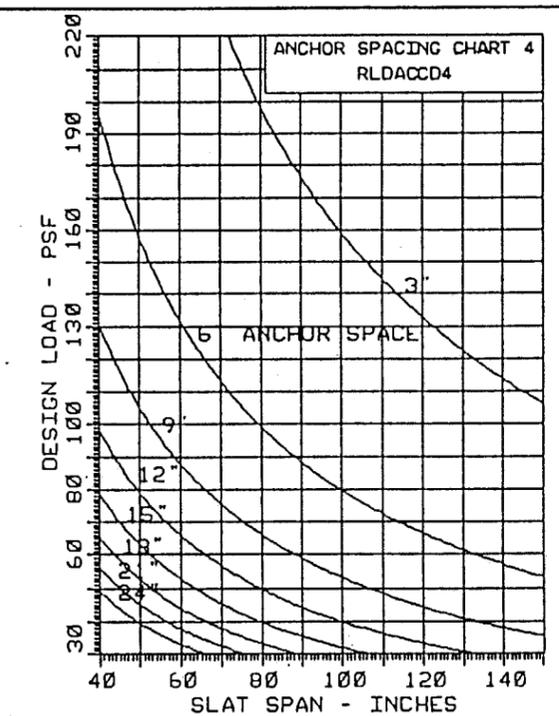
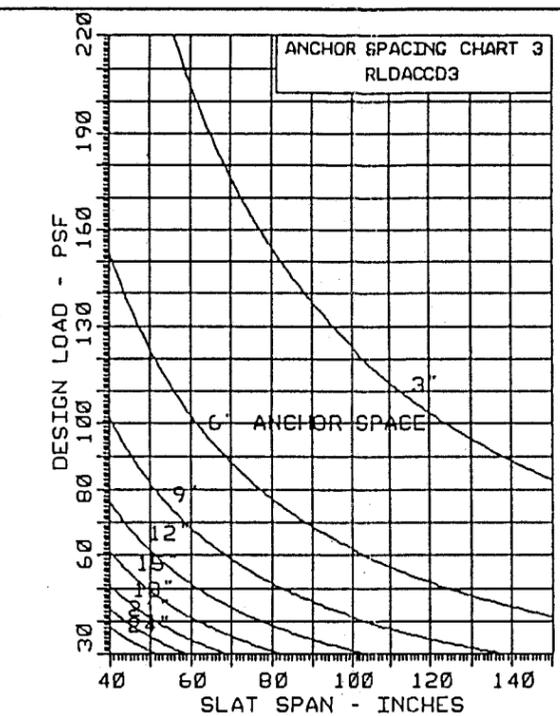
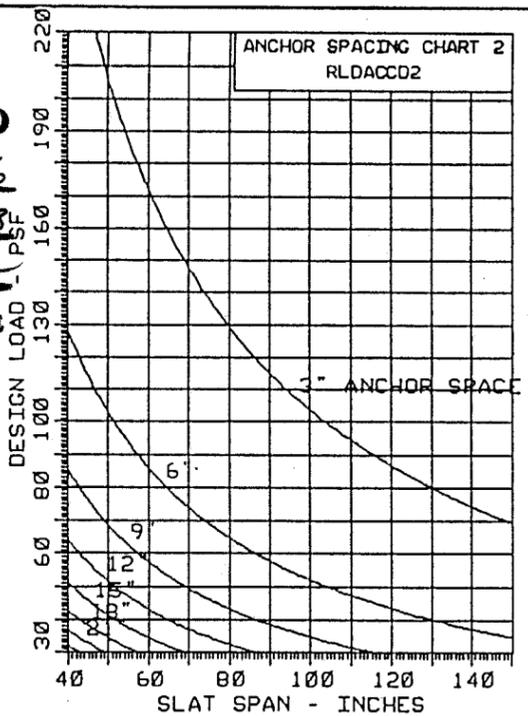
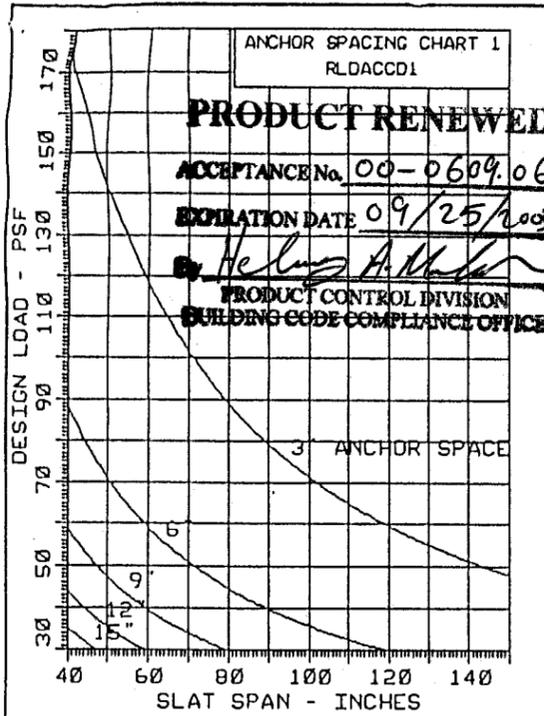


**COUNTER TOP CONDITION**  
 (PASS THRU WINDOW)  
 MAX SHUTTER HEIGHT = 6 FT.

ENGINEER: HUMAYOON FAROOQ  
 PE # 16557

*H. Farooq*  
 JAN 26 1995

APPROVED AS COMPLYING WITH THE  
 SOUTH FLORIDA BUILDING CODE  
 DATE February 23, 1995  
 BY *M. Perez*  
 PRODUCT CONTROL DIVISION  
 BUILDING CODE COMPLIANCE OFFICE  
 ACCEPTANCE NO. 94-1001.06



**TYPICAL ANCHORS**

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

**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

USE CHARTS 1 THRU 10 TO VERIFY ANCHOR REQUIREMENTS AND STRESS LIMITATIONS OF LOAD/SPAN COMBINATIONS FOR HEADER AND SILL

**PRODUCT RENEWED**  
ACCEPTANCE No. 97-0721.03  
EXPIRATION DATE SEPT 25, 2000  
By Maurice Perry  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE

ENGINEER: HUMAYOUN FAROOQ  
PE # 16557  
H  
JAN 26 1995

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE  
DATE February 25, 1995  
BY Maurice Perry  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. 1614-1201.06

**af c**

**AL-FAROOQ CORPORATION**  
ENGINEERS, PLANNERS & PRODUCT TESTING  
1235 SW 87 AVE  
MIAMI, FLORIDA 33174  
(305) 264-8100  
RN19483A

**ACCORDION SHUTTER DETAILS**  
ROLLADEN INC.  
550 ANSIN BOULEVARD  
HALLANDALE, FL 33009

revisions:	no	date	by	description

date: 10-25-94  
scale: 1/2" = 1'  
drawn by: HAWK  
checked by:

drawing no. **94-83**  
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