



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:

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 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.: 00-0411.07

EXPIRES: 02/27/2003

**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: 09/28/2000

Rolladen, Inc.

ACCEPTANCE No. : 00-0411.07

APPROVED : 09/28/2000

EXPIRES : 02/27/2003

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

This revises the Notice of Acceptance, No. 00-0128.10, which was issued on March 24, 2000. 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 #E dated August 1, 2000, sheets 1 through 5 of 5, 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 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".

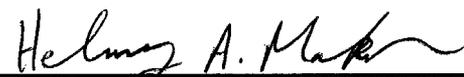
6. BUILDING PERMIT REQUIREMENTS

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. : 00-0411.07

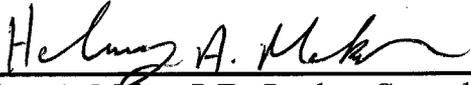
APPROVED : 09/28/2000

EXPIRES : 02/27/2003

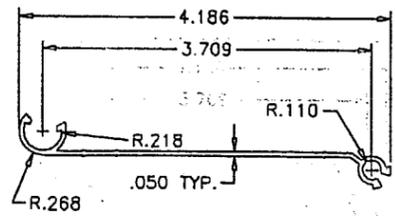
NOTICE OF ACCEPTANCE: STANDARD CONDITIONS

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.

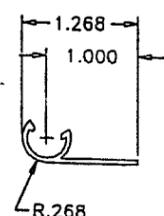
END OF THIS ACCEPTANCE



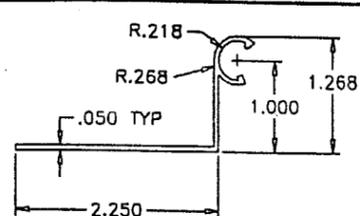
Helmy A. Makar, P.E.- Product Control Examiner
Product Control Division



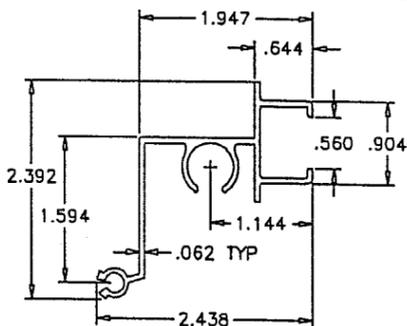
BLADE '5905'
6063-T6



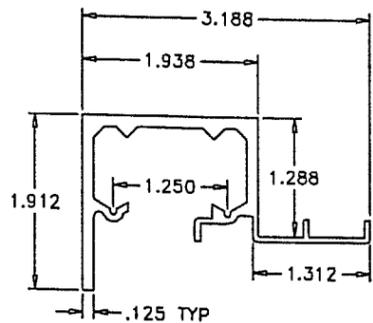
END SLAT
6063-T6



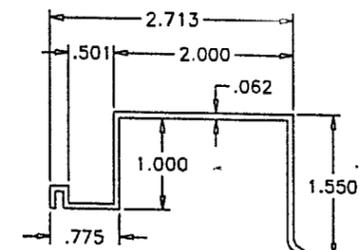
90° END SLAT
6063-T6



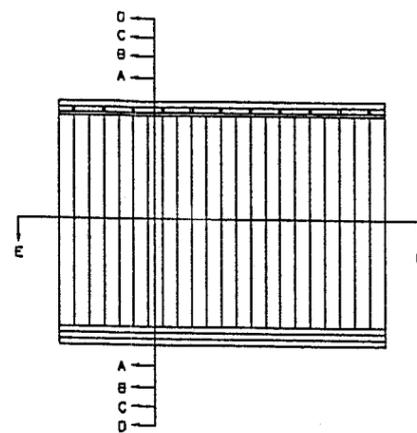
MALE LOCK SLAT '5904'
6063-T6



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.

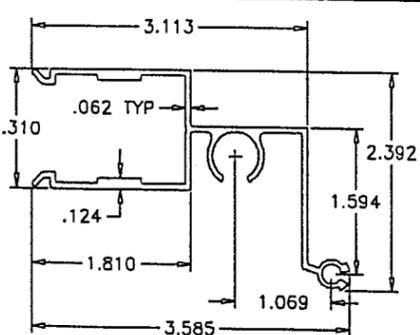
DESIGN PRESSURE RATING = + 74 PSF
- 105 PSF

PRODUCT MARKING

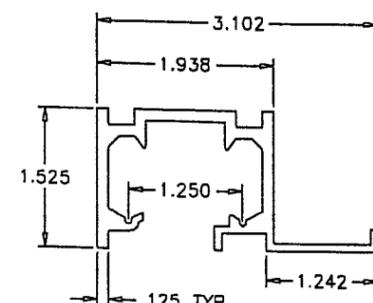
A LABEL SHALL BE AFFIXED ON LOCKING MEMBER ON UNIT ABOVE THE LOCK WITH THE FOLLOWING STATEMENT.

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

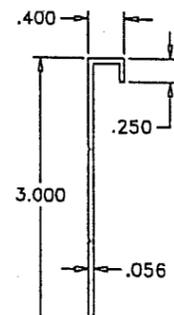
ANCHORS: EMBEDMENT & EDGE DISTANCES SHOWN ARE BEYOND THE WALL & FLOOR COVERING (STUCCO, TILES, ETC.)



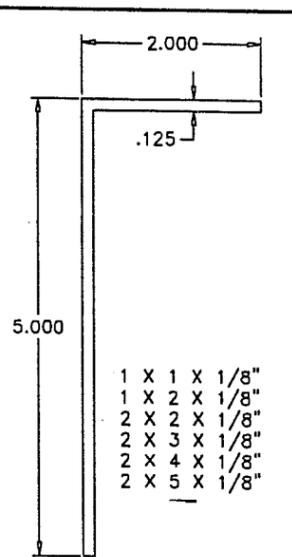
FEMALE LOCK SLAT '5903'
6063-T6



ALT. HEADER
6063-T6

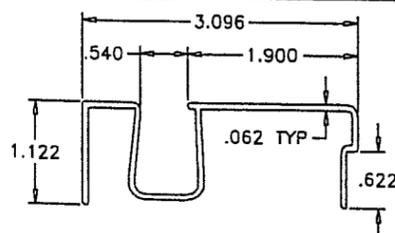


BOTTOM GUTTER
6063-T6

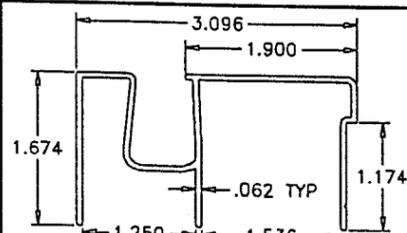


ALUMINUM ANGLES
6063-T6

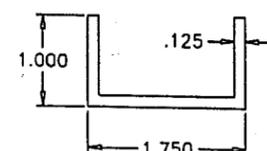
- 1 X 1 X 1/8"
- 1 X 2 X 1/8"
- 2 X 2 X 1/8"
- 2 X 3 X 1/8"
- 2 X 4 X 1/8"
- 2 X 5 X 1/8"



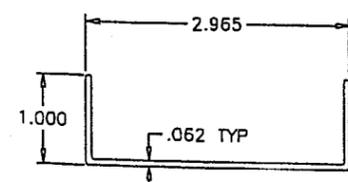
ALT. SILL
6063-T6



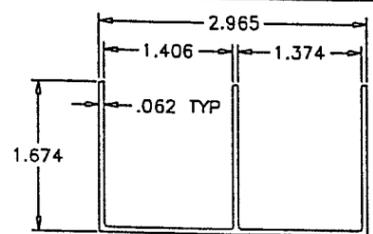
SILL
6063-T6



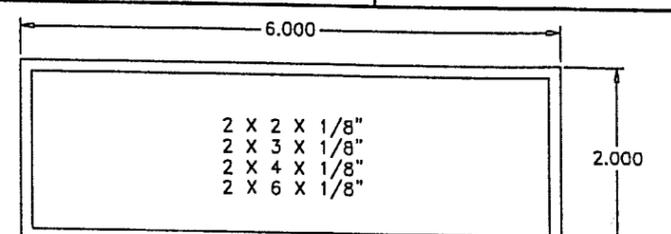
FLOOR SHOE
6063-T6



ALT. SILL ADAPTER
6063-T6

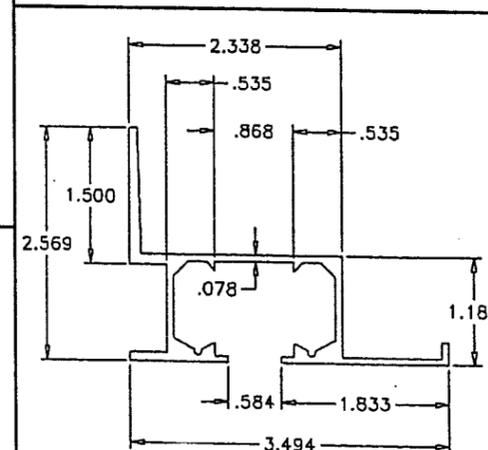


SILL ADAPTER
6063-T6



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"



WALL MOUNT TRACK
6063-T6

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

AUG 09 2000

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE 09/28/2000
BY *Helmut A. Mark*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 00-0411.07

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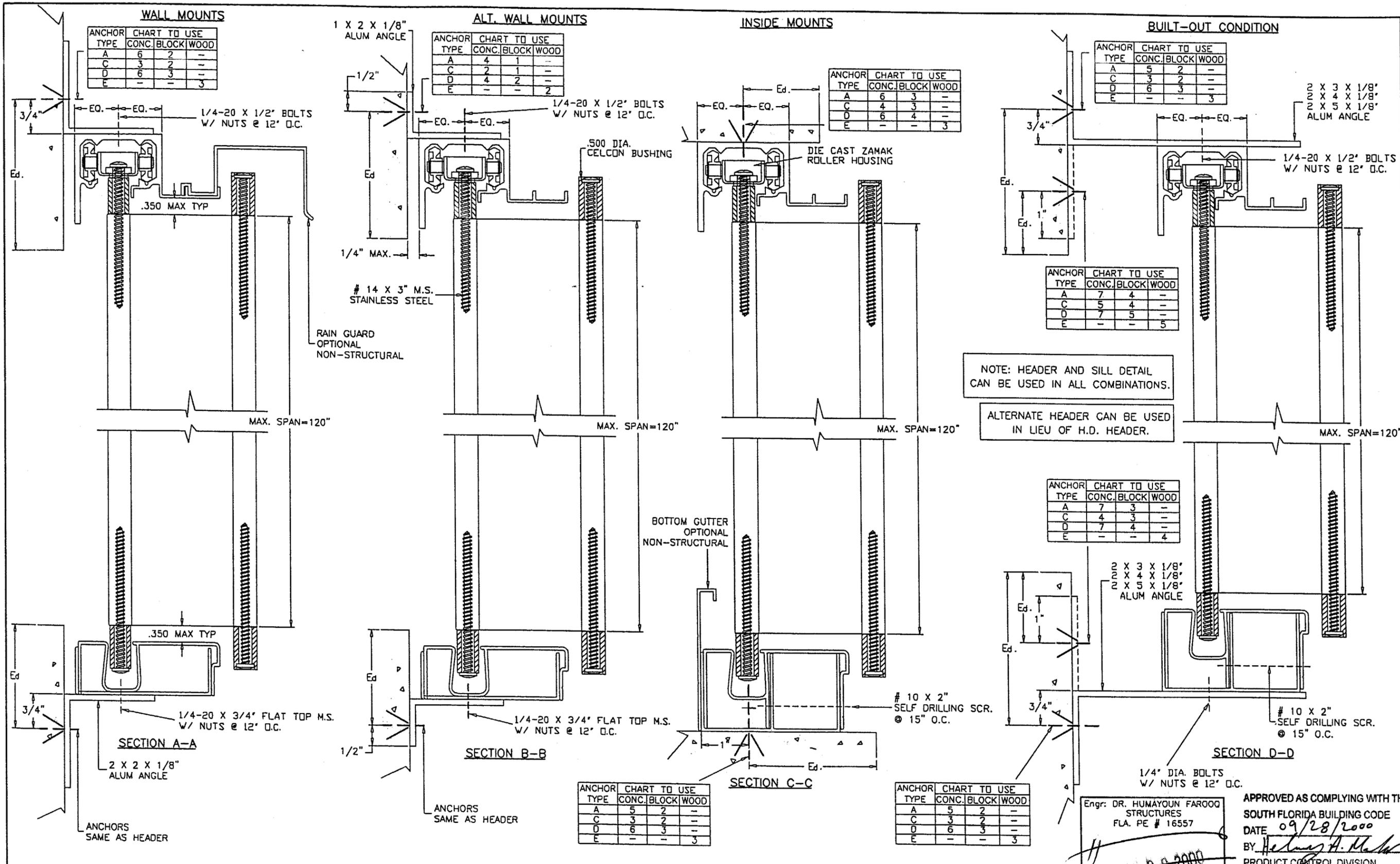
AL-FAROOQ CORPORATION
ENGINEERS, PLANNERS & PRODUCT TESTING
1235 SW 87 AVE
MIAMI, FLORIDA 33174
(305) 264-8100
ACCORDION/RN196-19

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.
D	01.14.00	H	WALL TRACK ADDED
E	08.01.00	H	REV. PER BCCO COMMENTS

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

drawing no.
96-19
sheet 1 of 5



WALL MOUNTS

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

ALT. WALL MOUNTS

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

INSIDE MOUNTS

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

BUILT-OUT CONDITION

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.

Engr: DR. HUMAYOON FAROOQ
 STRUCTURES
 FLA. PE # 16557
 APPROVED AS COMPLYING WITH THE
 SOUTH FLORIDA BUILDING CODE
 DATE 09/28/2000
 BY: *Helmy A. M...*
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 00-0411-07

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

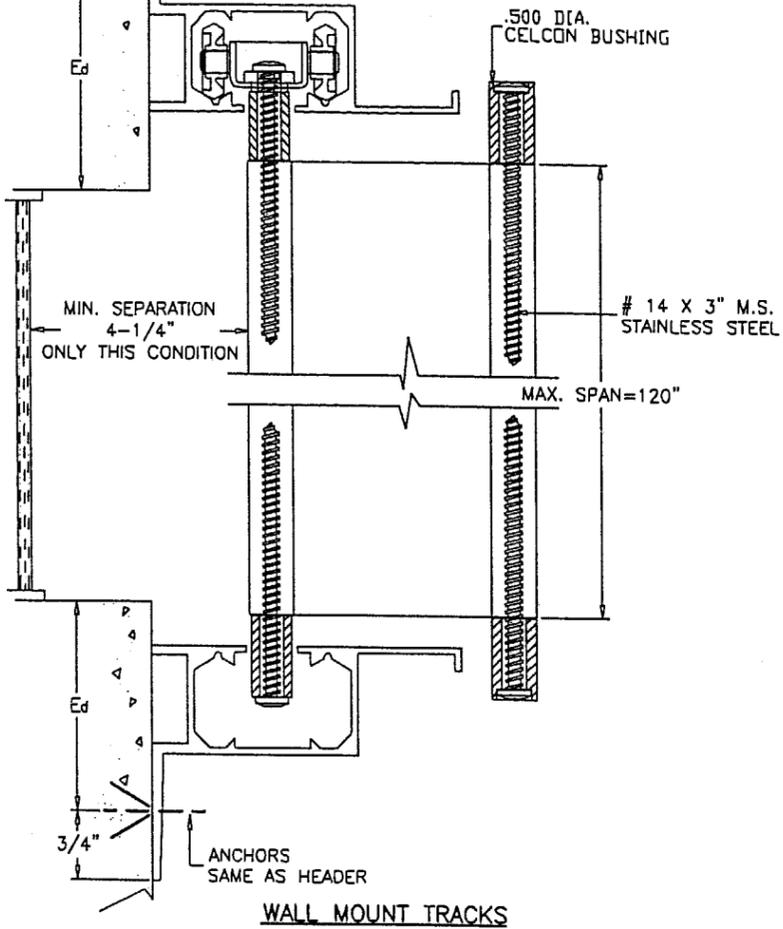
ACCORDION SHUTTER DETAILS
 ROLLADEN INC.
 550 ANSIN BOULEVARD
 HALLANDALE, FL. 33009
 (305) 757 - 8591

revisions:	no	date	description

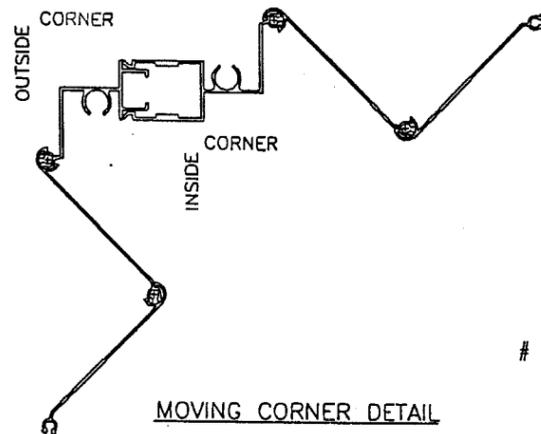
date: 04-25-96
 scale: 1/2" = 1"
 design by:
 drawn by: HMD
 checked by:

drawing no.
96-19
 sheet 2 of 5

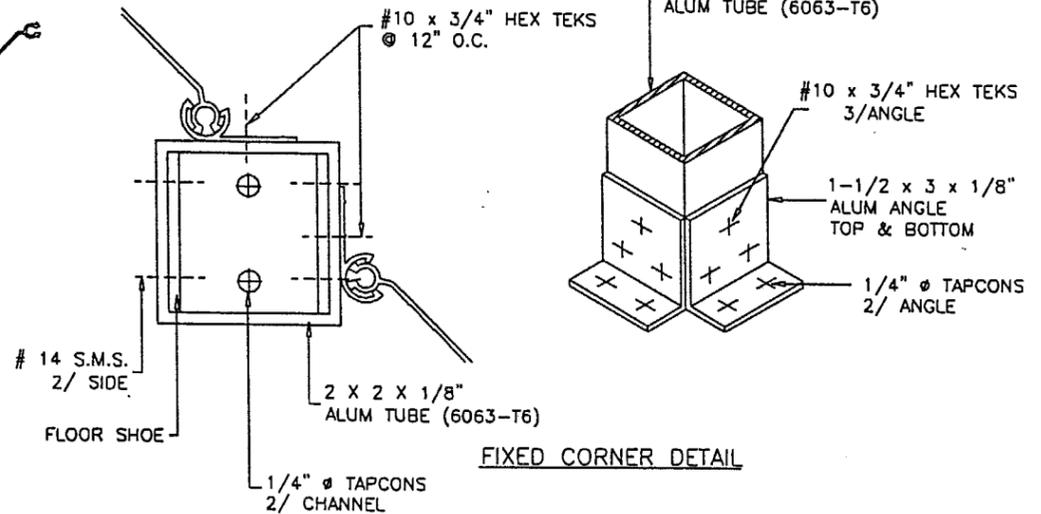
ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	4	2	-
C	2	2	-
D	4	2	-
E	-	-	2



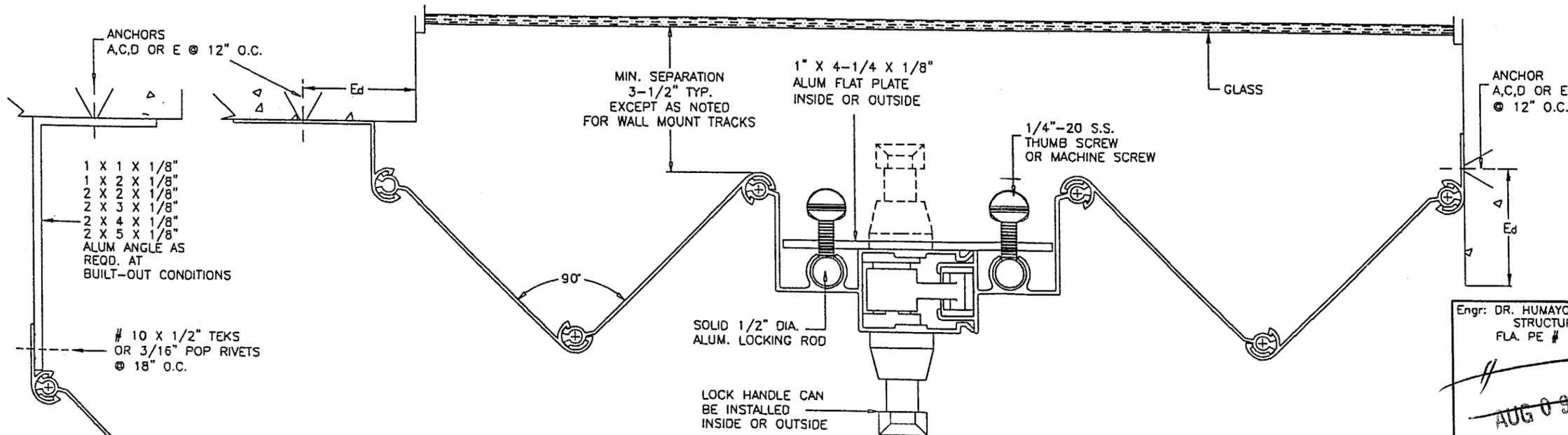
WALL MOUNT TRACKS



MOVING CORNER DETAIL



FIXED CORNER DETAIL



SECTION E-E

END CONDITION AT BUILT-OUT

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE 09/28/2000
 BY *Henry H. Miller*
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 00-0411.07

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

AUG 09 2000

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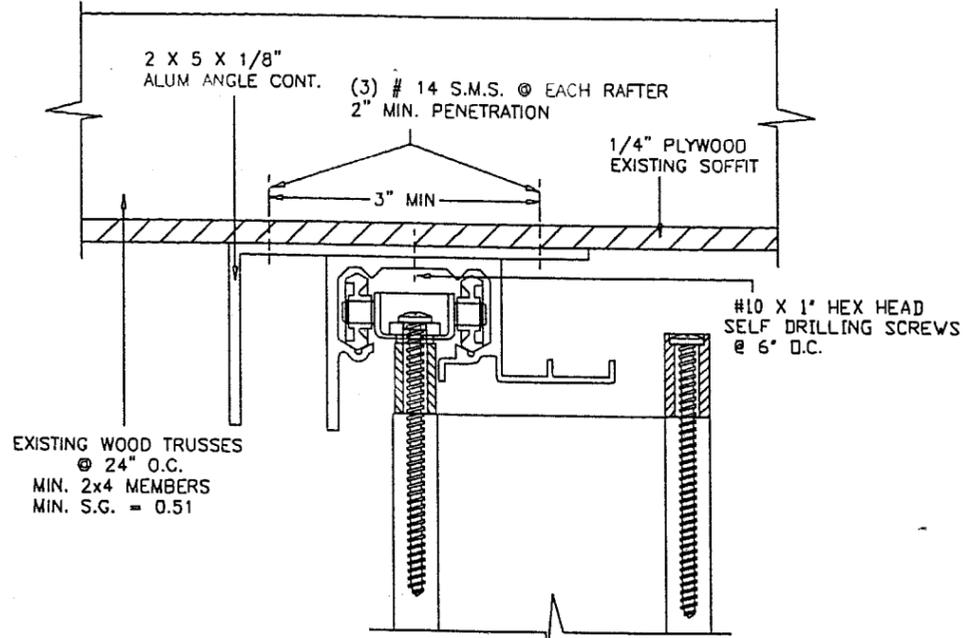
AL-FAROOQ CORPORATION
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ACCORDION SHUTTER DETAILS
 ROLLADEN INC.
 550 ANSIN BOULEVARD
 HALLANDALE, FL. 33009
 (305) 757 - 8591

revisions:	no	date	description

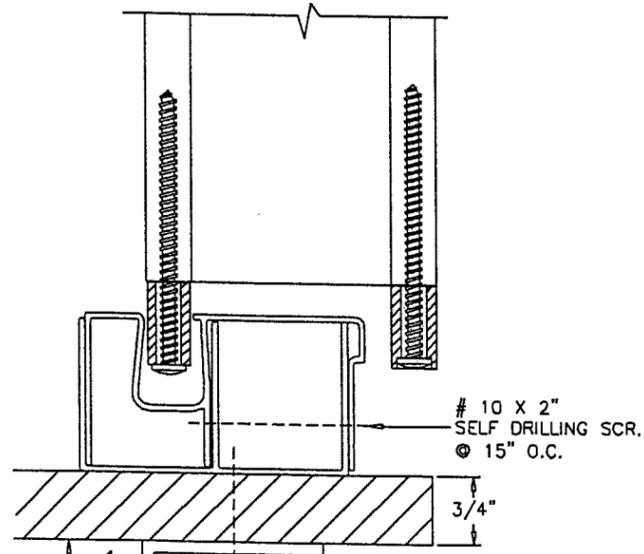
date: 04-25-96	scale: 1/2" = 1'	design by:	drawn by: HMD	checked by:
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drawing no.
96-19
 sheet 3 of 5



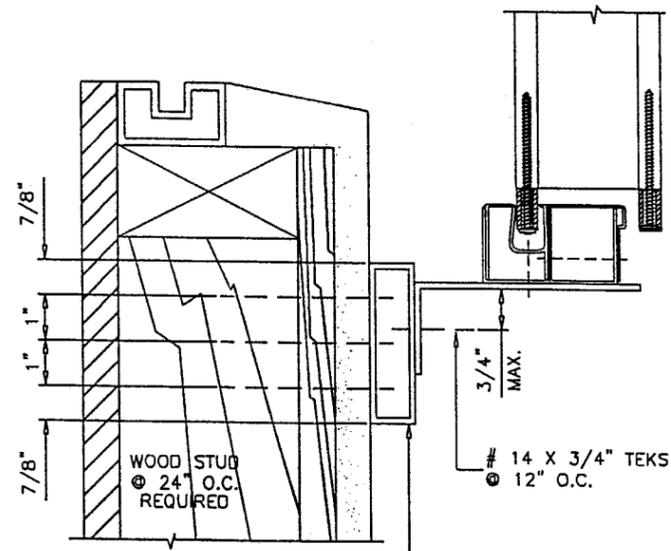
HEADER CONNECTION TO WOOD TRUSSES

MAX SHUTTER HEIGHT = 123"
MAX DESIGN LOAD = 62 PSF



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

ANCHOR TYPE	ANCHOR SPACING INCHES					
	UPTD 40 PSF		UPTD 70 PSF			
	CONC	BLOCK	WOOD	CONC	BLOCK	WOOD
A	23	8	-	13	4	-
C	11	7	-	6	4	-
D	16	7	-	9	4	-
E	-	-	14	-	-	8

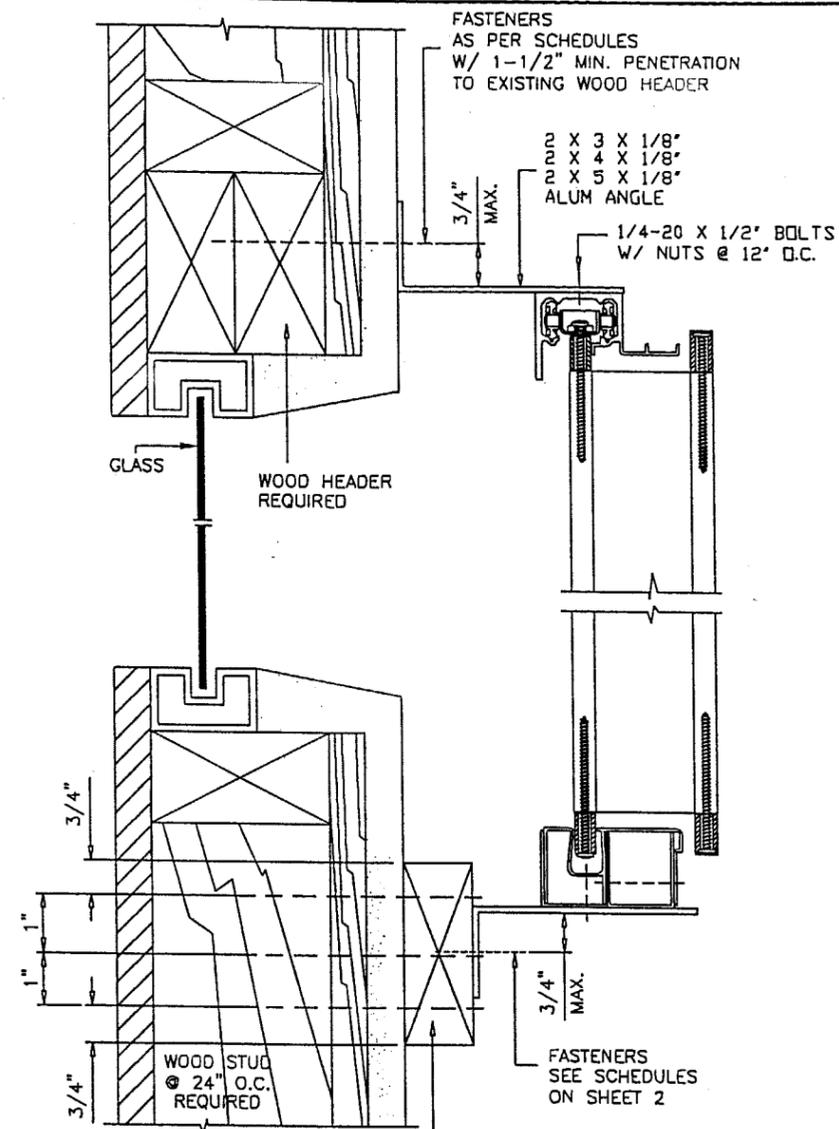


1" X 3-3/4" X 1/8" CONT. ALUM TUBE
W/ (3) 1/4" Ø X 4" LAG SCREWS
Ø EACH STUD W/ 2" MIN PENETRATION
INTO EXISTING STUD

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

2" X 4" CONT.
W/ (3) 1/4" Ø X 5" LAG SCREWS
Ø EACH STUD W/ 2" MIN PENETRATION
INTO EXISTING STUD



FASTENERS
AS PER SCHEDULES
W/ 1-1/2" MIN. PENETRATION
TO EXISTING WOOD HEADER

2 X 3 X 1/8"
2 X 4 X 1/8"
2 X 5 X 1/8"
ALUM ANGLE

1/4-20 X 1/2" BOLTS
W/ NUTS @ 12" O.C.

a f c

AL-FAROOQ CORPORATION
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ACCORDION SHUTTER DETAILS
ROLLADEN INC.
550 ANSIN BOULEVARD
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revisions:	no	date	by	description

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

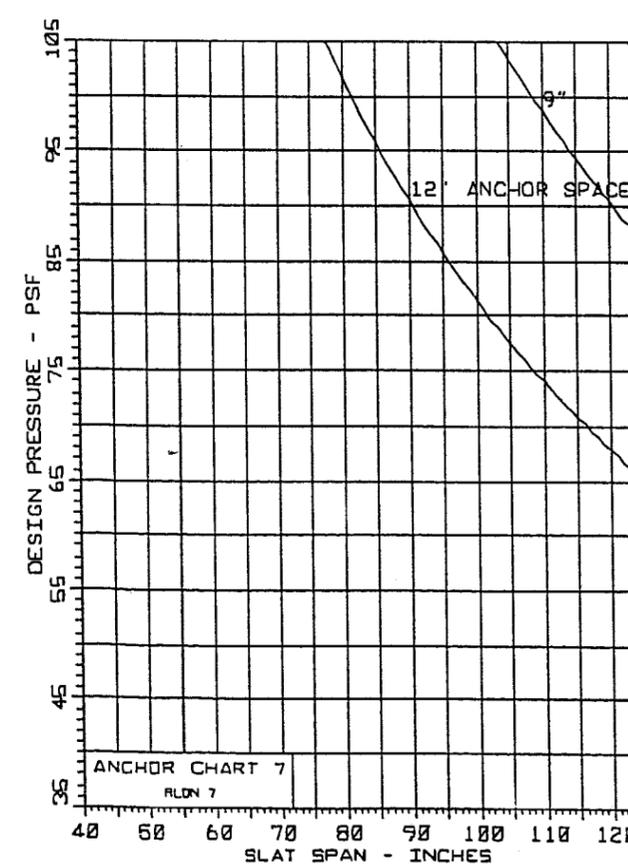
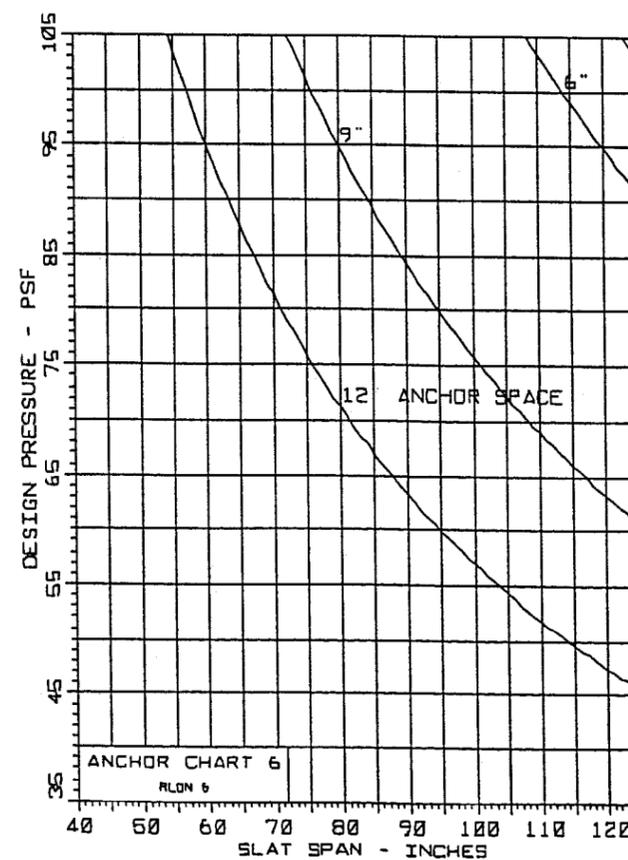
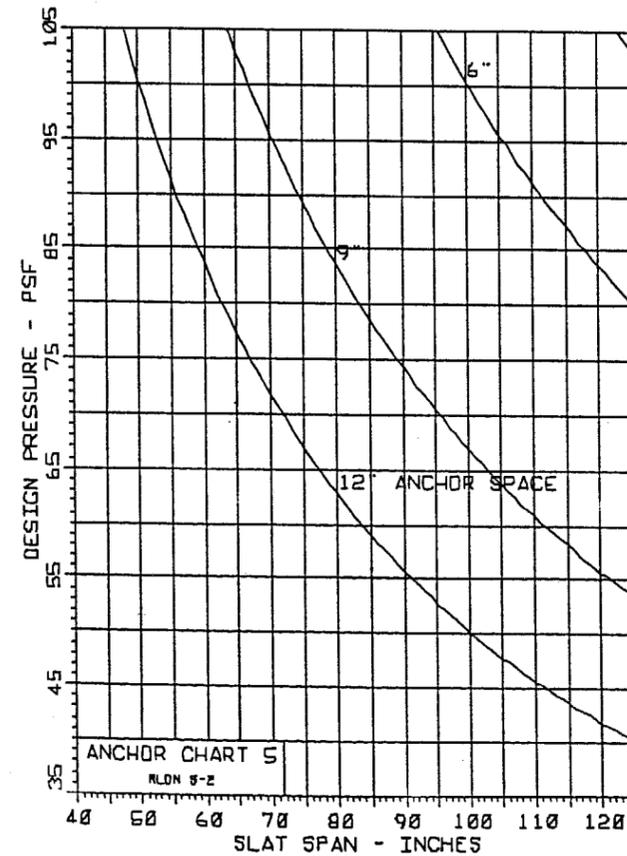
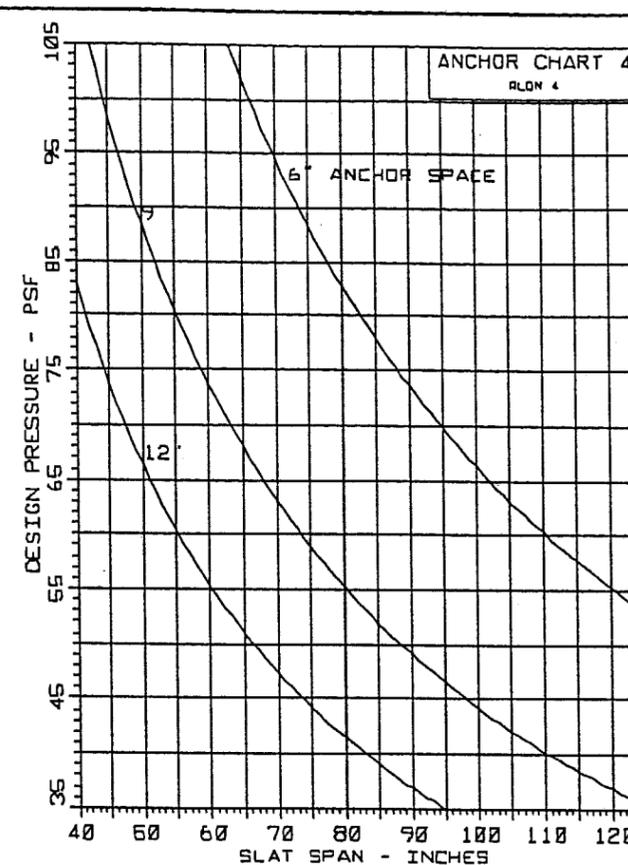
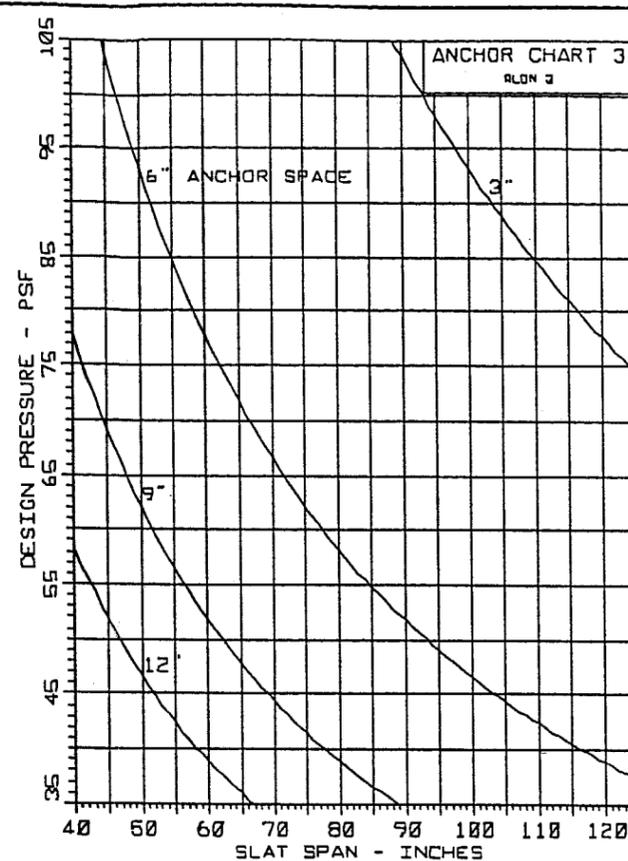
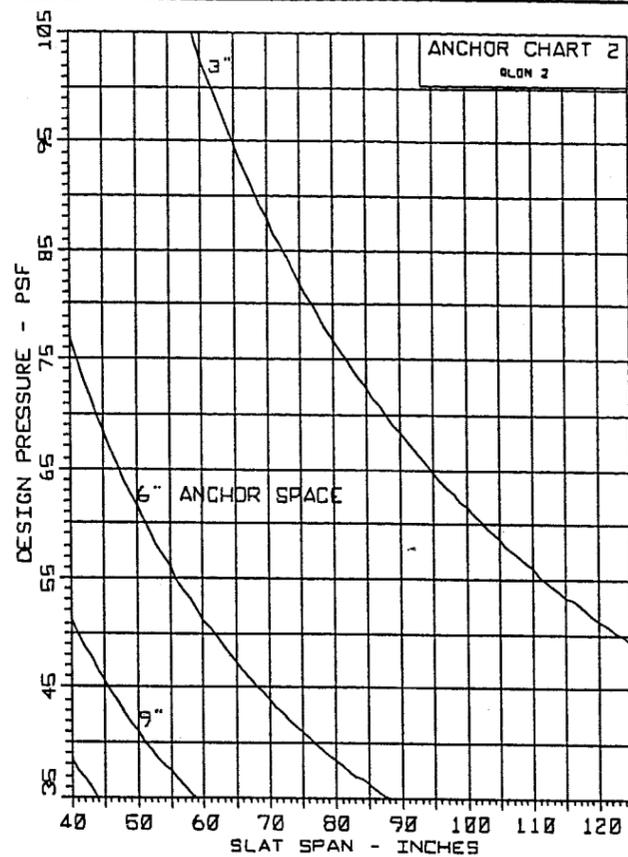
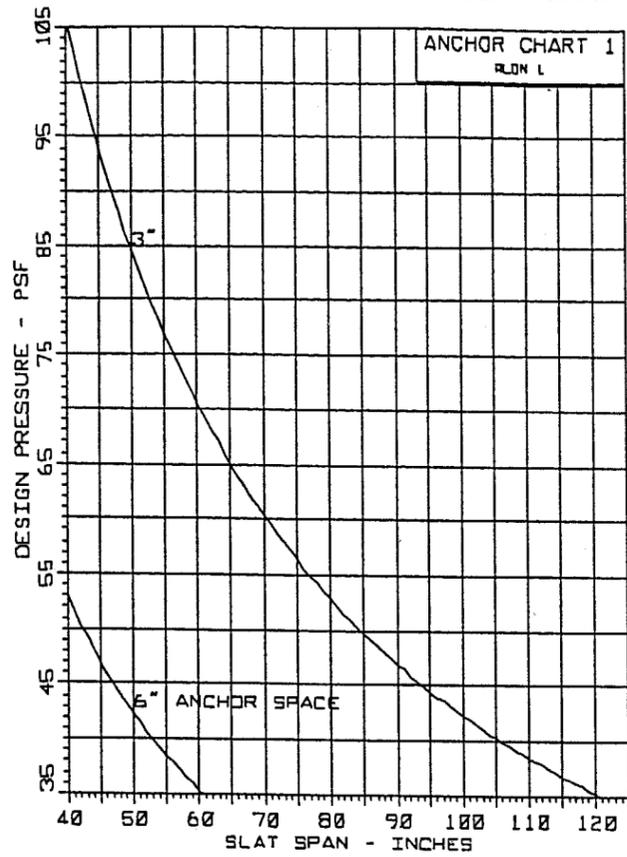
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 00-0411.07

AUG 09 2000

date: 01-25-96
scale: 1/2" = 1"
design by:
drawn by: HMM
checked by:

drawing no.
96-19

sheet 4 of 5



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 BY ELCO.
1-3/4" EMBEDMENT TO CONCRETE
1-1/4" EMBEDMENT TO BLOCK
- ANCHOR (C) = 1/4" X 1-1/4" HILTI METAL HIT ANCHORS
WITH ZAMAK BODY
OR RAWL ZAMAK NAILIN
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: 09/28/2000

BY: *Heidi A. Walker*

PRODUCT CONTROL DIVISION

BUILDING CODE COMPLIANCE OFFICE

ACCEPTANCE NO. 00-0411.07

AUG 09 2000

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	by	description

date: 04-25-06	scale: 1/2" = 1'
design by:	drawn by: HMB
checked by:	

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sheet 5 of 5