



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

Sansone Hurricane Shutters, Inc.

505 N.E. 27 Street

Pompano Beach FL 33064

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.: 00-0208.01

Expires: 03/06/2003

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



Sansone Hurricane Shutters, Inc.

ACCEPTANCE No. : 00-0208.01

APPROVED : MAR 24 2000

EXPIRES : 03/06/2003

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

This renews the Notice of Acceptance, No. 96-0521.01, which was issued on March 6, 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. 96-05, titled "Accordion Shutter Details", prepared by Al-Farooq Corporation, dated January 13, 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".

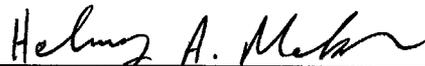
6. BUILDING PERMIT REQUIREMENTS

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

Sansone Hurricane Shutters, Inc.

ACCEPTANCE No. : 00-0208.01

APPROVED : MAR 24 2000

EXPIRES : 03/06/2003

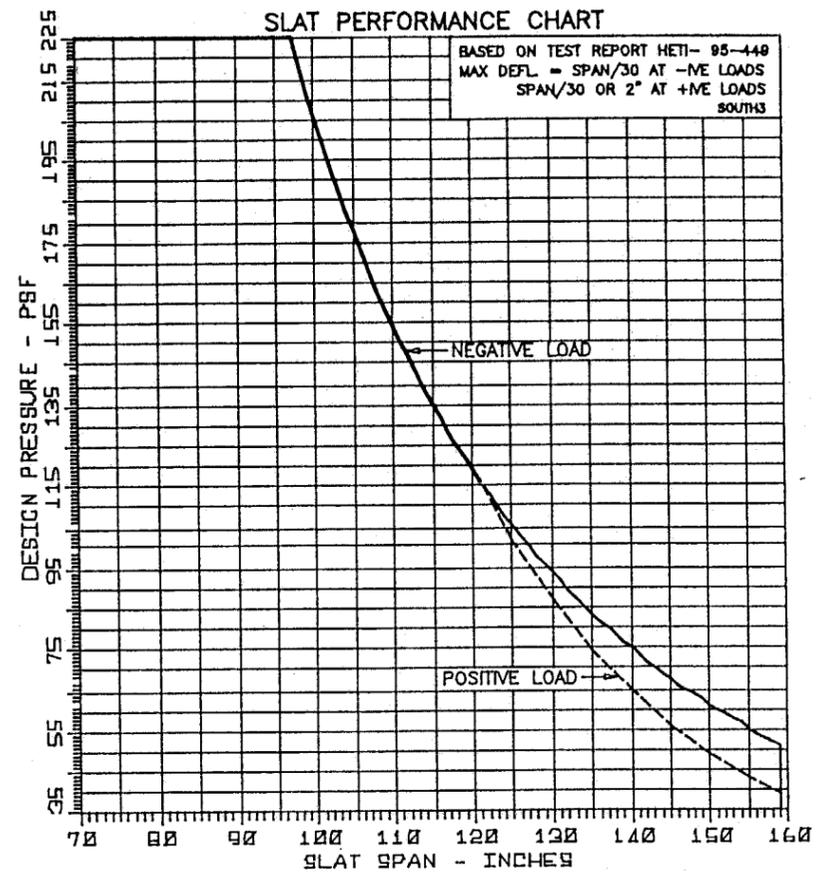
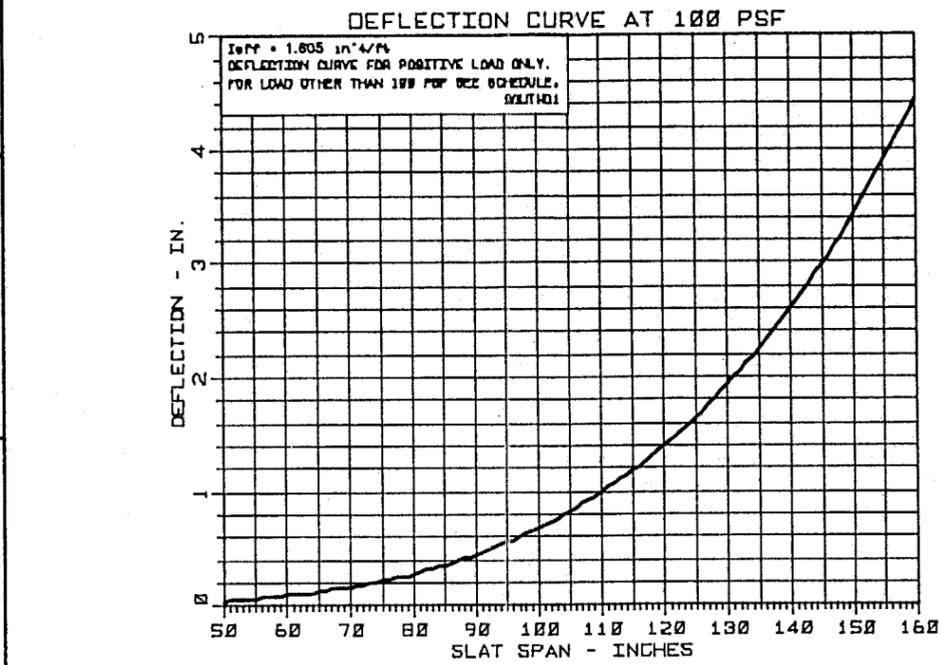
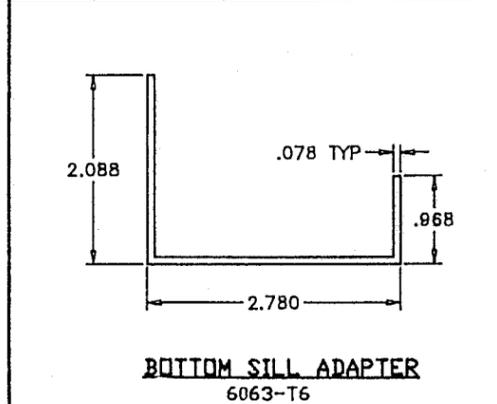
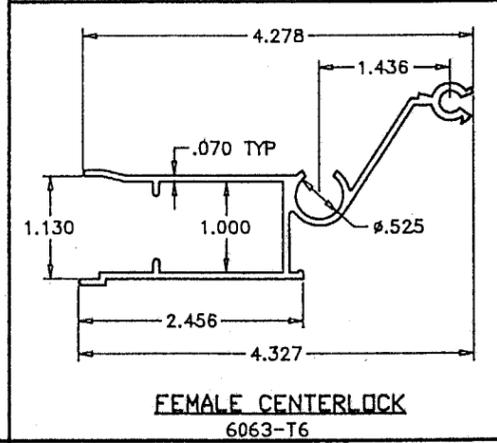
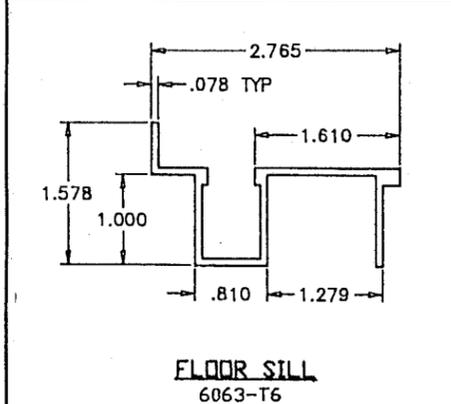
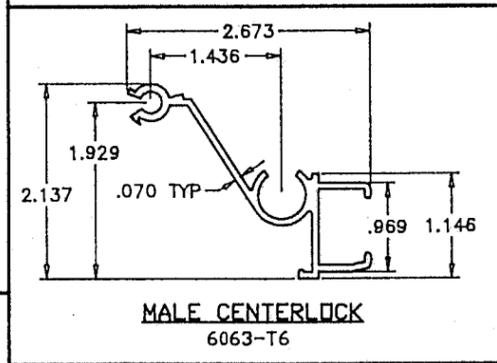
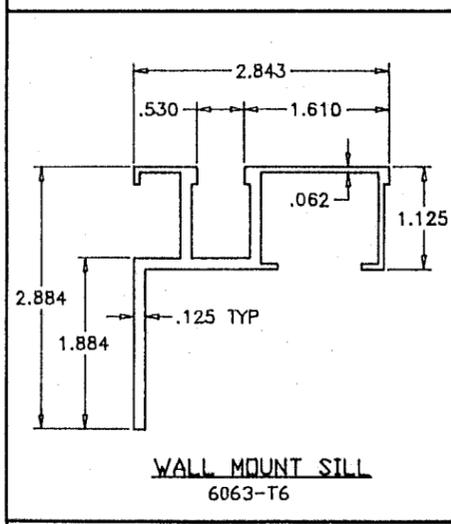
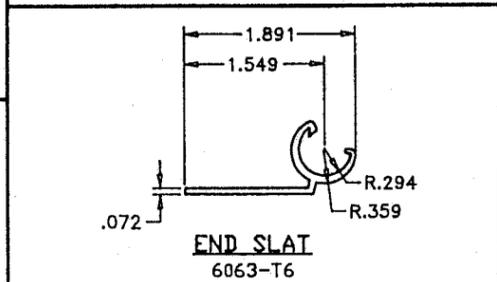
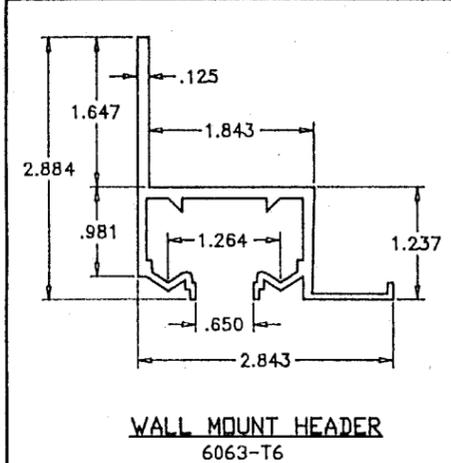
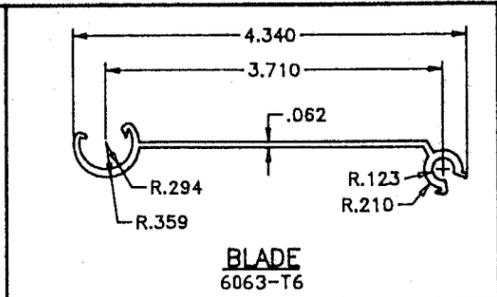
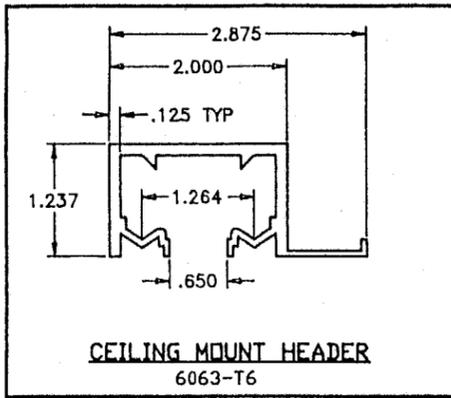
NOTICE OF ACCEPTANCE: STANDARD CONDITIONS

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

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-845, 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 $\leq L/30$ FOR NEGATIVE LOAD AND THE LESSER OF $L/30$ OR 2" FOR POSITIVE LOAD.
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 OF PAINTED INSTRUCTION TO OWNER OR TENANT INDICATING THE MANDATORY USE OF 1/4" DIA. THRU PIN AT CENTERMATES DURING PERIODS OF HURRICANE WARNING.

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

USE SLAT PERFORMANCE CHART TO VERIFY SLAT CAPACITY FOR THE REQUIRED DESIGN LOAD FOR THE PARTICULAR LOCATION. USE SPAN DEFLECTION CHART TO CALCULATE SEPARATION FROM GLASS.

MINIMUM SEPARATION FROM GLASS			
SEPARATION REQD. DUE TO WIND LOAD		SEPARATION FOR INSTALLATIONS UPTO 30 FT. OF GRADE DUE TO LARGE MISSILE IMPACT	
SHUTTER SPAN = H =	IN.	PANEL SPAN UPTO	SEPARATION
DESIGN LOAD = Pd =	PSF		
FACTOR = K = Pd/100 =	IN.		
READING FROM SPAN D. CURVE = D =	IN.	97"	2-5/8"
DEFLECTION AT Pd = K*D =	IN.		
MIN. SEPARATION REQD. = K*D+1" =	IN.	159"	3-1/2"

FOR INSTALLATIONS UPTO 30' OF GRADE USE MAXIMUM OF WIND LOAD OR IMPACT LOAD REQUIREMENTS SHOWN ABOVE
FOR INSTALLATIONS ABOVE 30' OF GRADE IGNORE LARGE MISSILE IMPACT REQUIREMENT.
NOTE: NO PART OF SHUTTER SHALL BE UNDER 30' ABOVE GRADE TO WAIVE LARGE MISSILE IMPACT REQUIREMENT.

PRODUCT MARKING

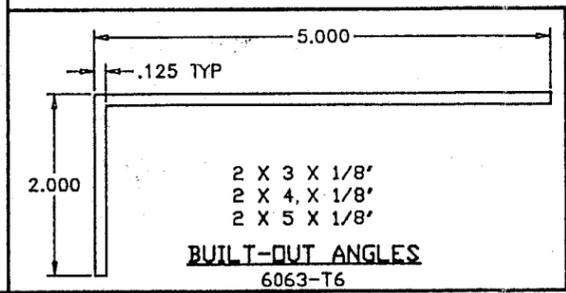
A LABEL SHALL BE AFFIXED ON LOCKING MEMBER ON UNIT ABOVE THE LOCK WITH THE FOLLOWING STATEMENT.
SANSONE HURRICANE SHUTTERS INC. POMPANO BEACH, FL
"DADE COUNTY PRODUCT CONTROL APPROVED"

PRODUCT RENEWED

ACCEPTANCE No. 00-0208.01
EXPIRATION DATE March 06, 2003
By Helmy A. Matar
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE

ENGINEER: HUMAYOON FAROOQ
PE # 16557

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE MARCH 06, 1997
BY Helmy A. Matar
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 96-0521.01



FOR INSTALLATION DETAILS SEE SHEET 2 THRU 4.

af c

AL-FAROOQ CORPORATION
ENGINEERS, PLANNERS & PRODUCT TESTING
1235 SW 87 AVE
MIAMI, FLORIDA 33174
(305) 264-8100
SH19605A

ACCORDION SHUTTER DETAILS
SANSONE HURRICANE SHUTTERS INC.
505 N.E. 27 TH ST.
POMPANO BEACH, FL. 33064
(305) 979 - 5256

NO	DATE	BY	DESCRIPTION
A	11.15.96	H	GENERAL REVISION
B	01.12.97	H	ANCHOR GRAPHIC REV.
C	01.30.97	H	ANCHOR CHARTS REV.

date: 01-13-99
scale: 1/2" = 1"
design by:
drawn by: HMMB
checked by:

drawing no. **96-05**
sheet 1 of 5

a f c

AL-FAROOQ CORPORATION
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 POMPANO BEACH, FL. 33064
 (305) 979 - 5256

no	date	description

date: 01-13-98	scale: 1/2" = 1"	design by:	drawn by: HAFD	checked by:
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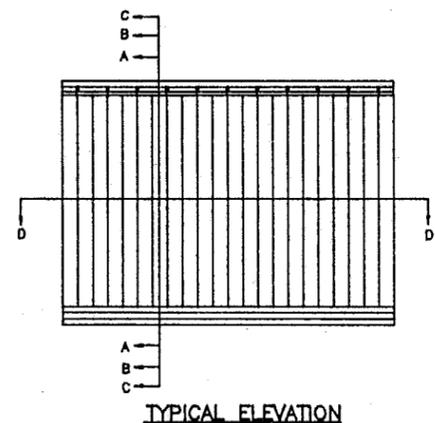
drawing no.
96-05
 sheet 2 of 5

BUILT-OUT CONDITION

2 X 3, 2 X 4 OR 2 X 5
 2-ALUM ANGLES 1/8" THICK.
 1-ALUM ANGLE 1/4" THICK.

1/4" X 3/4" BOLTS
 W/ NUTS @ 6" O.C.

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



2 X 3
 2 X 4
 2 X 5
 2-ALUM ANGLES 1/8" THICK.
 1-ALUM ANGLE 1/4" THICK.

1/4" X 3/4" BOLTS
 W/ NUTS @ 6" O.C.

SECTION C-C

INSIDE MOUNTS

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

14 X 3" M.S.
 STAINLESS STEEL

MAX. SPAN
 SEE GRAPH

SECTION B-B

ANCHORS
 SAME AS HEADER

ANCHORS
 SAME AS HEADER

WALL MOUNTS

ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	3	1	-
D	4	2	-
E	-	-	2

DIE CAST ZAMAK
 ROLLER HOUSING

.440 DIA.
 CELCON BUSHING

.400 MAX.(TYP)

MAX. SPAN
 SEE GRAPH

SECTION A-A

ANCHORS
 SAME AS HEADER

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

PRODUCT RENEWED

ACCEPTANCE No. 00-0208.01

EXPIRATION DATE March 06, 2003

By *Helmy A. Matar*
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE

ENGINEER: HUMAYOUN FAROOQ
 PE # 16557

APPROVED AS COMPLYING WITH THE
 SOUTH FLORIDA BUILDING CODE
 DATE MARCH 06 1997
 BY *Helmy A. Matar*
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 96-0521.01

HAF
JAN 31 1997

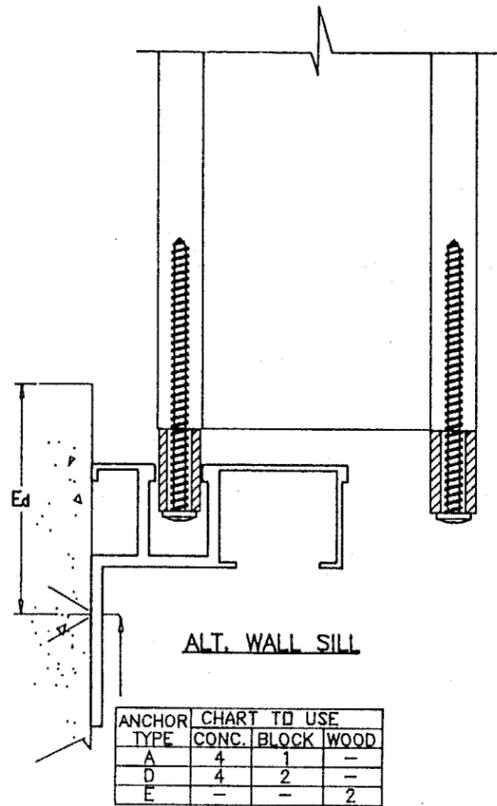
Ed = TYPICAL EDGE DISTANCE
 CONC. & BLOCK = 12d (12 ANCHOR DIAMETERS)
 WOOD = 5d
 FOR LESSER EDGE DISTANCES SEE SHEET 5 OF 5.

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

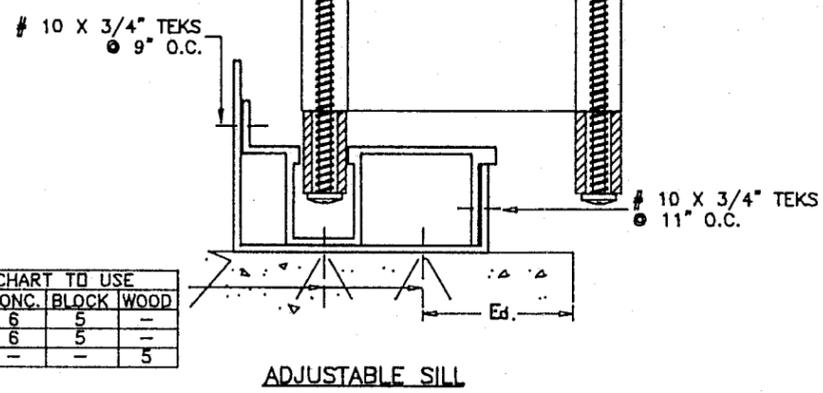
FOR GENERAL NOTES AND EXTRUSION DETAILS SEE SHEET 1 OF 5.
 FOR ANCHOR CHARTS SEE SHEET 5 OF 5.

a f c

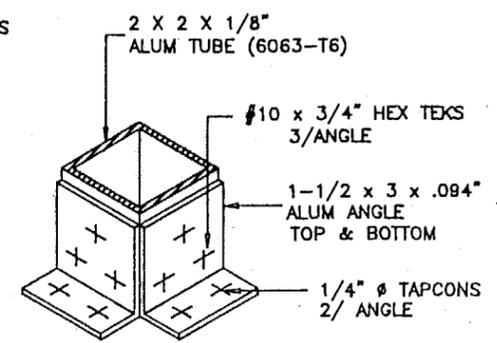
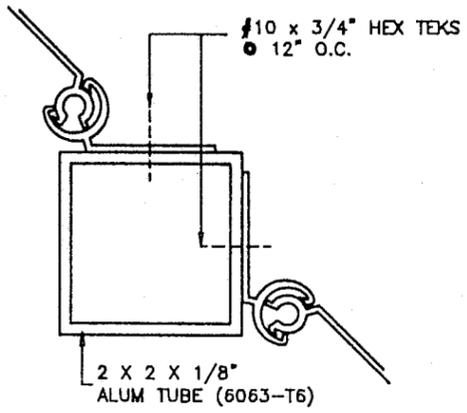
NOTE: HEADER AND SILL DETAIL CAN BE USED IN ALL COMBINATIONS.



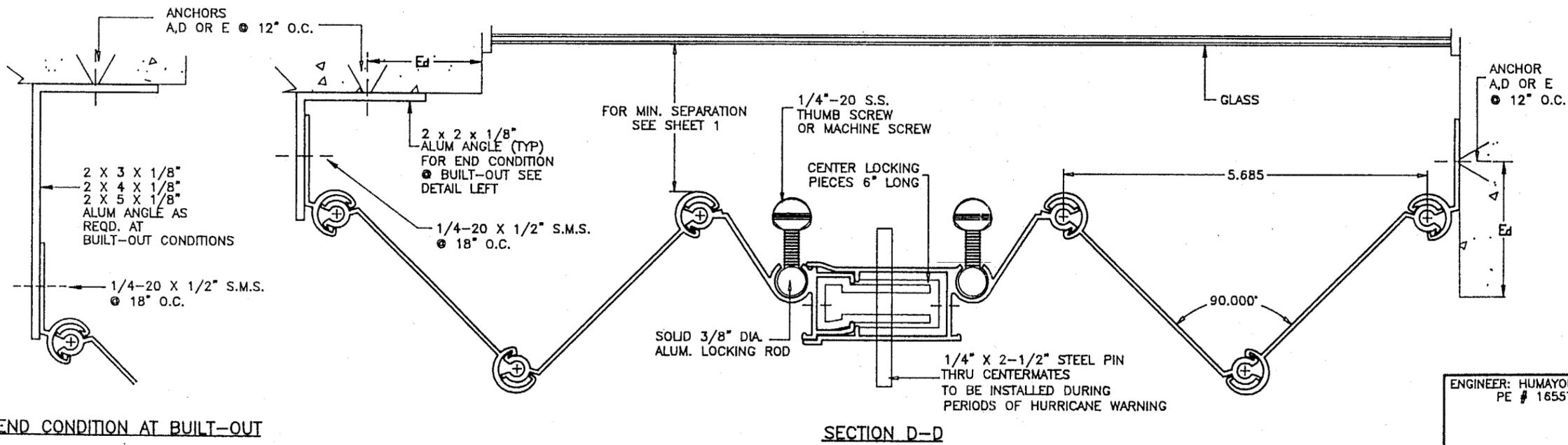
ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	4	1	-
D	4	2	-
E	-	-	2



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



TYPICAL CORNER DETAILS



END CONDITION AT BUILT-OUT

SECTION D-D

PRODUCT RENEWED
 ACCEPTANCE No. 00-0208.01
 EXPIRATION DATE June 06, 2003
 By Helmy A. Makher
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE

ENGINEER: HUMAYOUN FAROOQ
 PE # 18557
 APPROVED AS COMPLYING WITH THE
 SOUTH FLORIDA BUILDING CODE
 DATE MARCH 06 1997
 BY Helmy A. Makher
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 96-0521.01

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

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

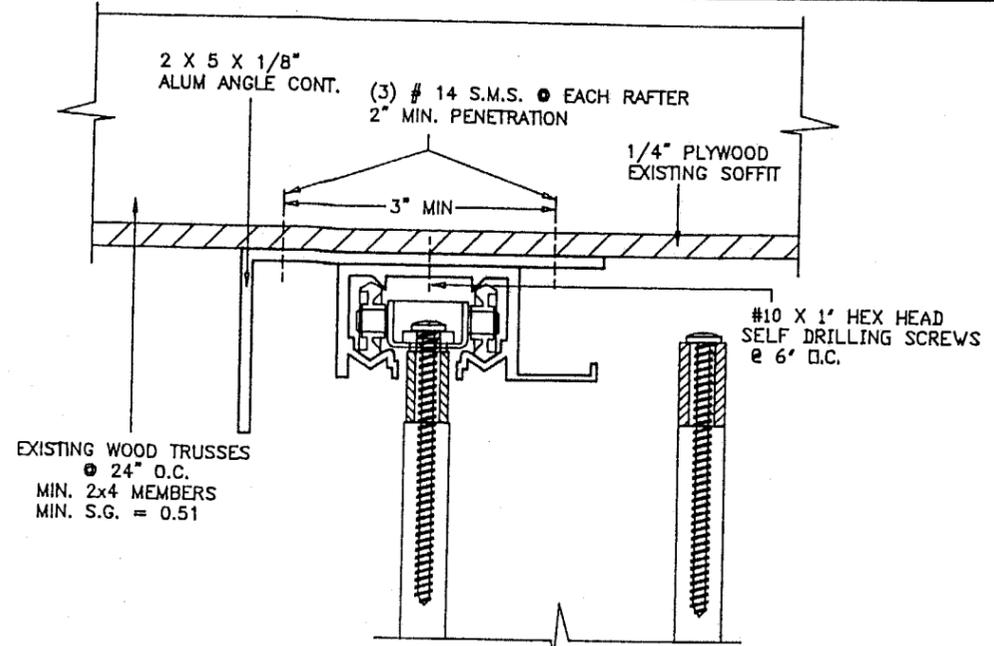
AL-FAROOQ CORPORATION
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ACCORDION SHUTTER DETAILS
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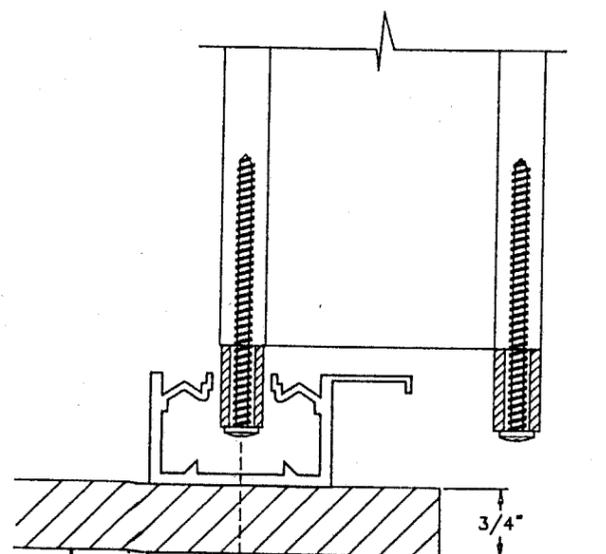
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 design by:
 drawn by: HAFD
 checked by:

drawing no.
96-05
 sheet 3 of 5

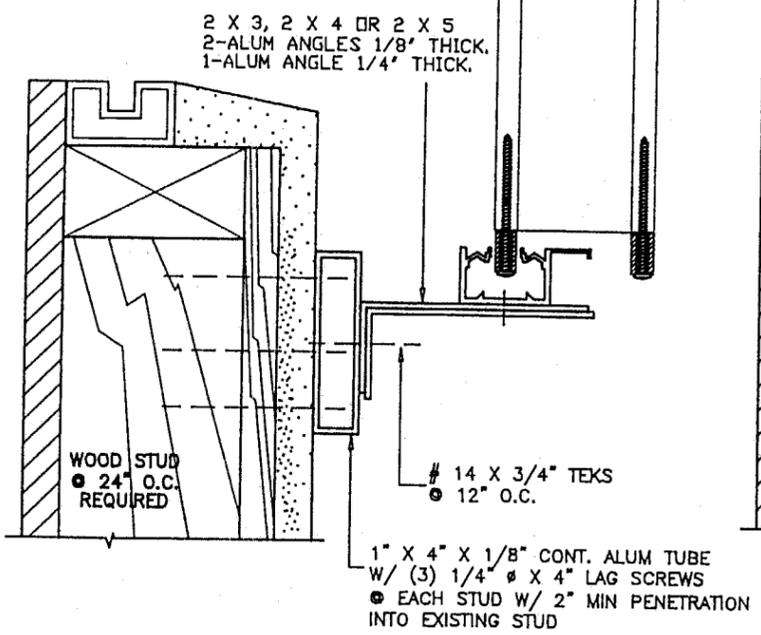


HEADER CONNECTION TO WOOD TRUSSES
 MAX SHUTTER HEIGHT = 108"
 MAX DESIGN LOAD = 72 PSF

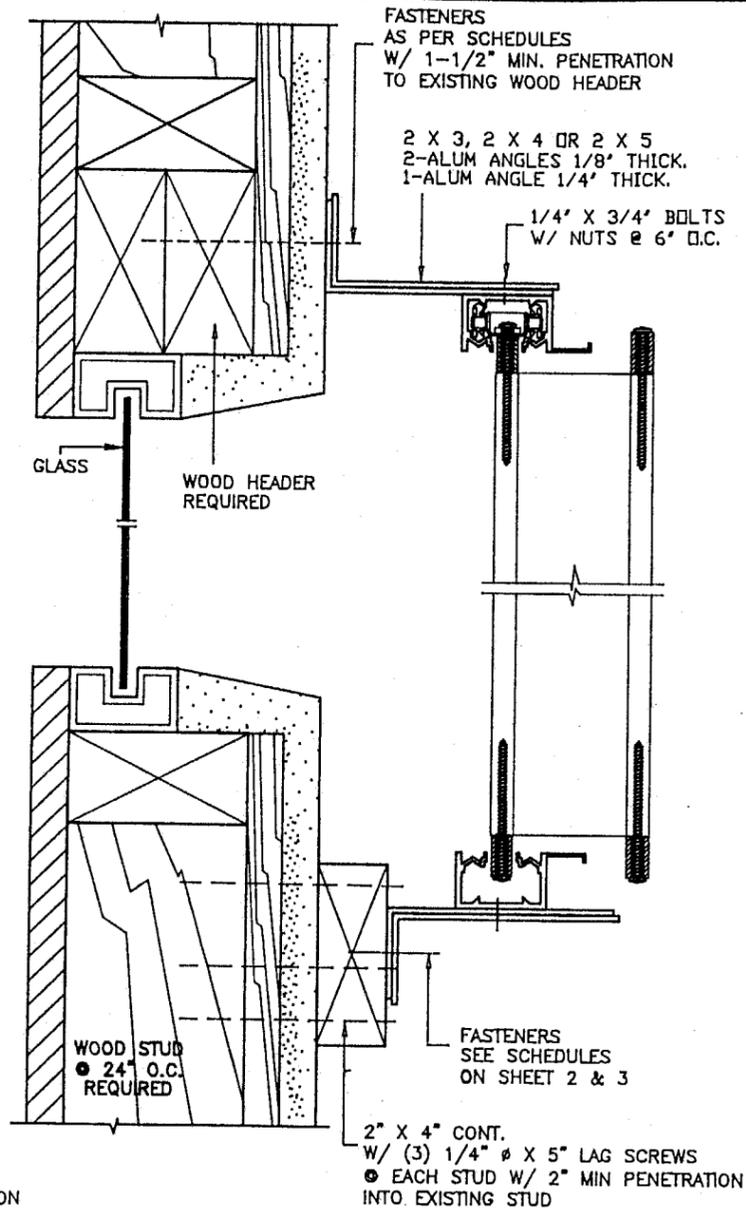


COUNTER TOP CONDITION (PASS THRU WINDOW)
 MAX SHUTTER HEIGHT = 6 FT.

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



INSTALLATION DETAIL ON EXISTING WOOD BUCKS SCALE: 1/4"=1"
 MAX. SHUTTER HEIGHT = 8"
 MAX. DESIGN LOAD = 53 PSF
 FOR HEADER/SILL DETAILS CONNECTED TO CONT. WOOD MEMBERS SEE SHEETS 2 & 3.



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NO	DATE	BY	DESCRIPTION

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drawing no. **96-05**
 sheet 4 of 5

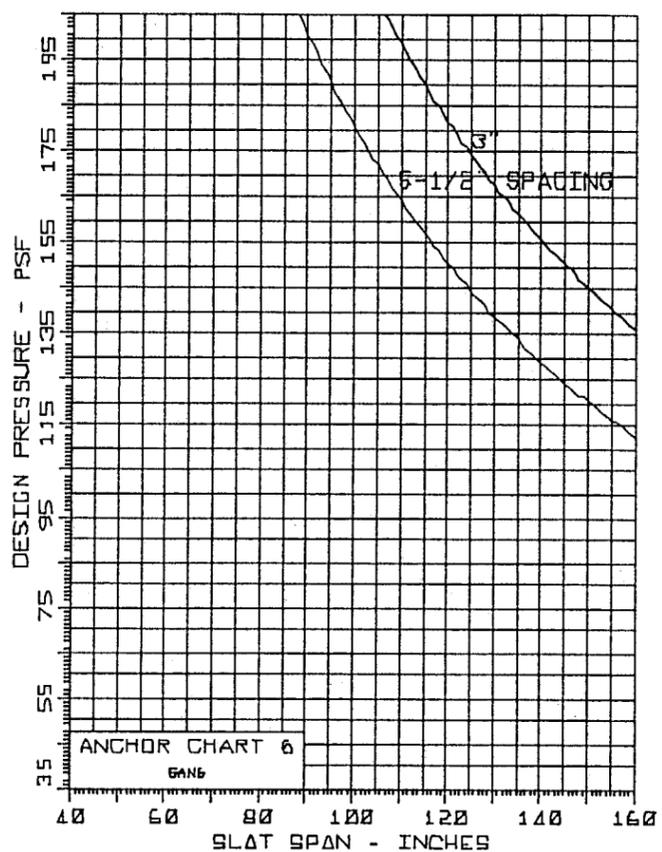
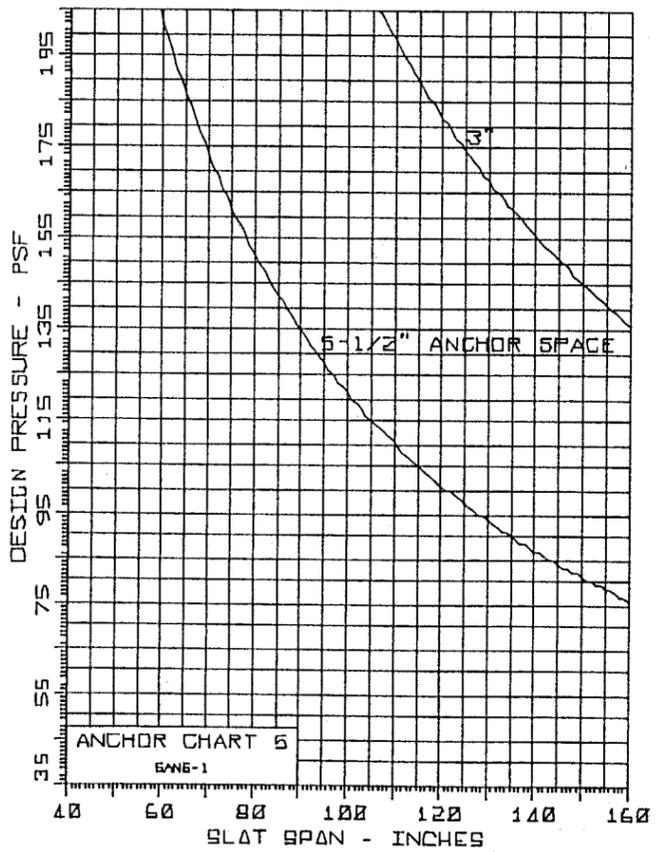
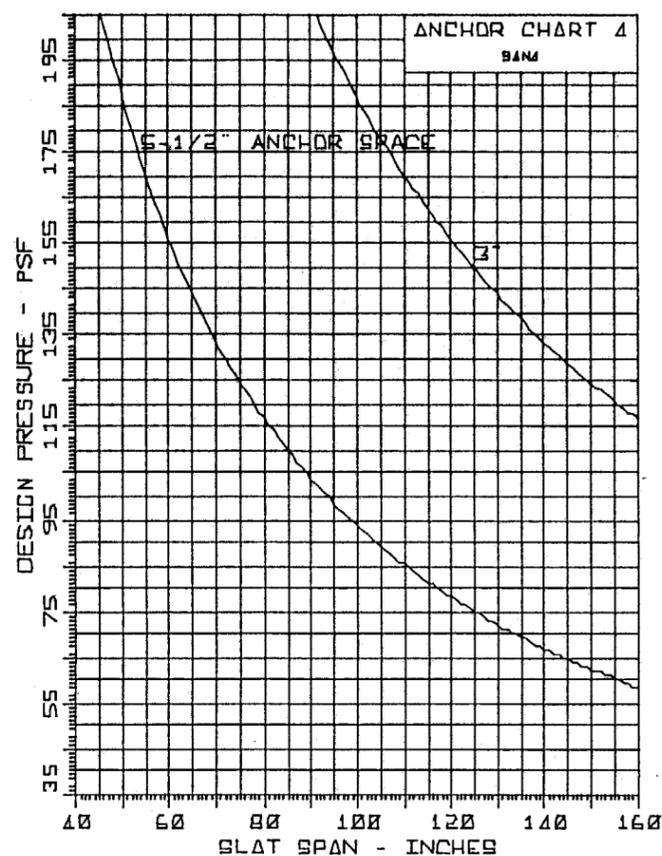
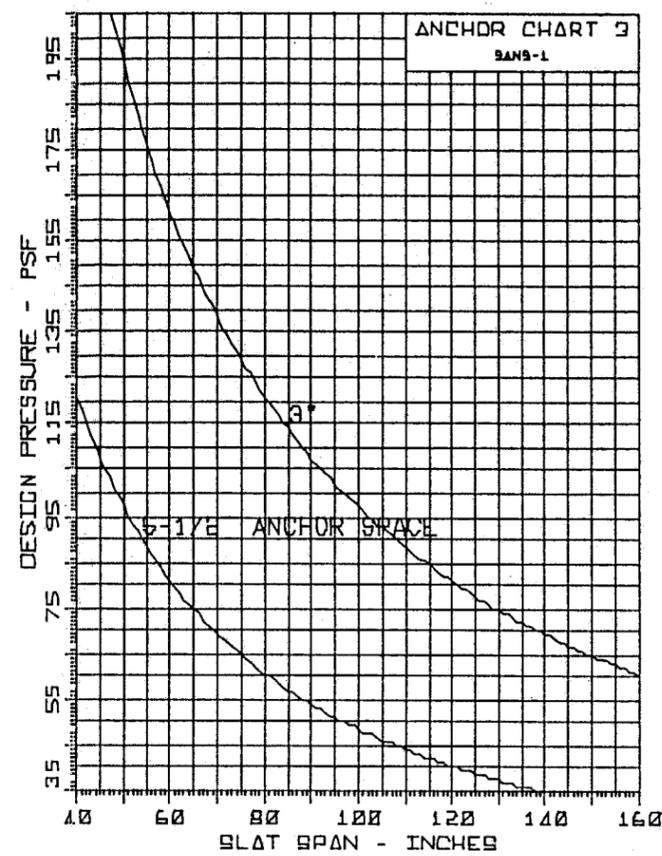
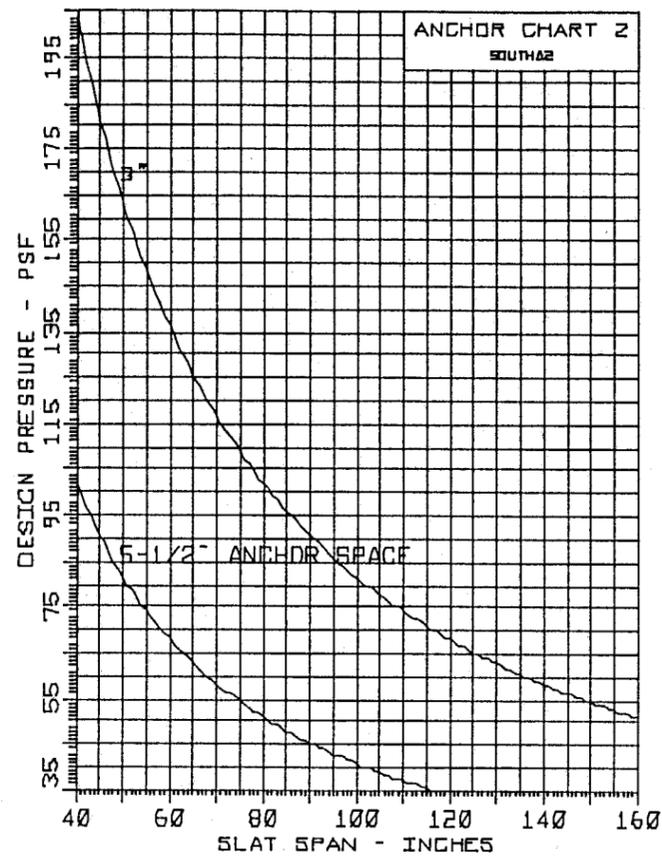
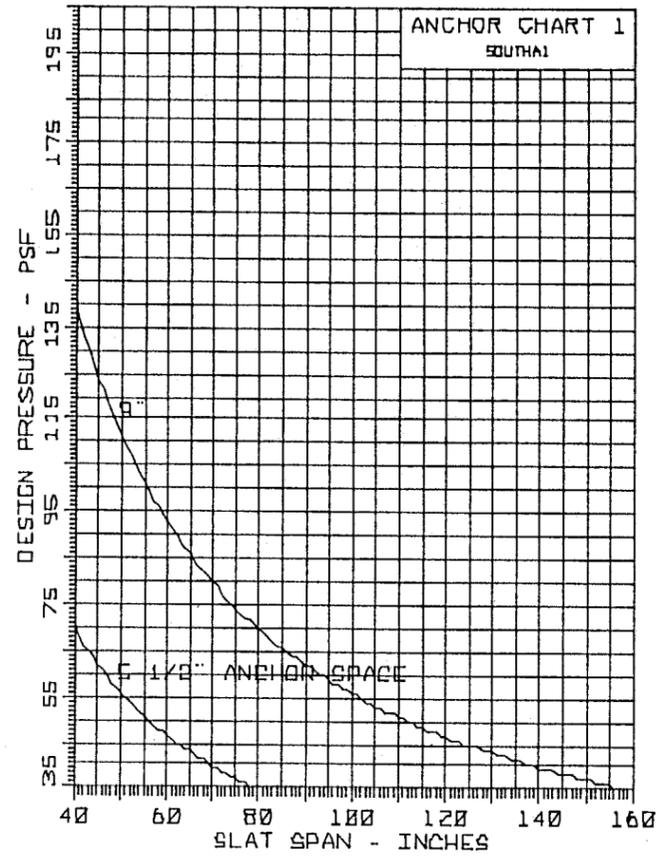
PRODUCT RENEWED

ACCEPTANCE No. 00-0208.01
 EXPIRATION DATE March 06, 2003
 By Helmy A. Matar
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE

ENGINEER: HUMAYOUN FAROOQ
 PE # 16557

APPROVED AS COMPLYING WITH THE
 SOUTH FLORIDA BUILDING CODE
 DATE MARCH 06, 1997
 BY Helmy A. Matar
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 96-0521.01

JAN 8 1 1997



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 = 6" O.C. (FROM CHART)
FOR 2" EDGE DIST. SPACING = 6 X .71 = 4.2 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 (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.)

PRODUCT RENEWED

ACCEPTANCE No. 00-0208.01
 EXPIRATION DATE March 06, 2003
 By Helmy A. Maki
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE

ENGINEER: HUMAYOUN FAROOQ
 PE # 16557

APPROVED AS COMPLYING WITH THE
 SOUTH FLORIDA BUILDING CODE
 DATE MARCH 06, 1997
 BY Helmy A. Maki
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE No. 96-0521.0

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AL-FAROOQ CORPORATION
 ENGINEERS, PLANNERS & PRODUCT TESTING
 1235 SW 87 AVE
 MIAMI, FLORIDA 33174
 (305) 264-8100
 SH19605A

ACCORDION SHUTTER DETAILS
SANSONE HURRICANE SHUTTERS INC
 505 N.E. 27 TH ST.
 POMPANO BEACH, FL. 33064
 (305) 979 - 5256

no	date	description

date: 01-15-96
 scale: 1/2" = 1"
 design by:
 drawn by: HMB
 checked by:

drawing no.
96-05
 sheet 5 of 5