



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 Storm Panels 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.

ACCEPTANCE NO.: 00-0609.07
EXPIRES: 09/16/2003

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 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. : 00-0609.07

APPROVED : SEP 21 2000

EXPIRES : 09/16/2003

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

This **renews** the Notice of Acceptance, No. 97-0721.02, which was issued on September 16, 1997. It approves a 0.068" aluminum storm panel 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 0.068" aluminum storm panel shutter and its components shall be constructed in strict compliance with the following documents: Drawing No. 94-51, titled "Storm Panel Details", prepared by Al-Farooq Corporation, dated July 7, 1994, last revision #B dated December 17, 1994 sheet 3 of 4 and #D dated April 4, 1995, sheets 1, 2, and 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 0.068" aluminum storm panel shutter and its components shall be installed in strict compliance with the approved drawings.

5. LABELING

Each panel 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. : 00-0609.07

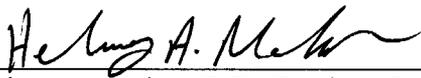
APPROVED : SEP 21 2000

EXPIRES : 09/16/2003

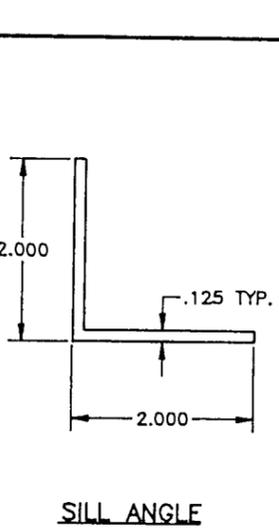
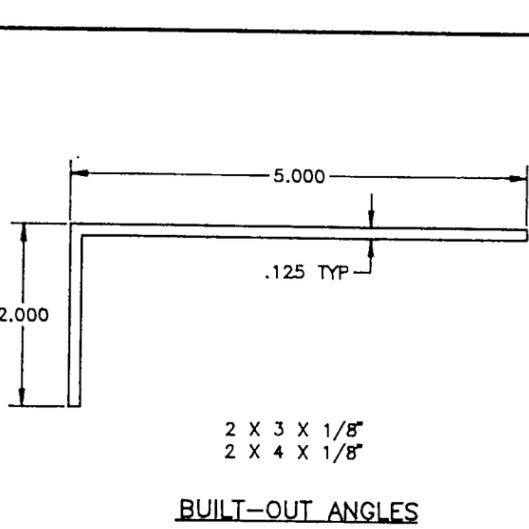
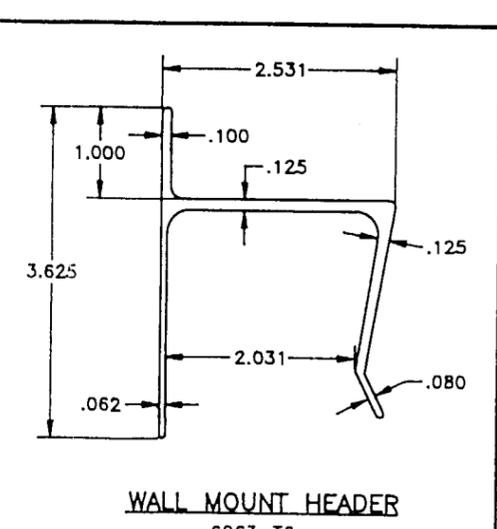
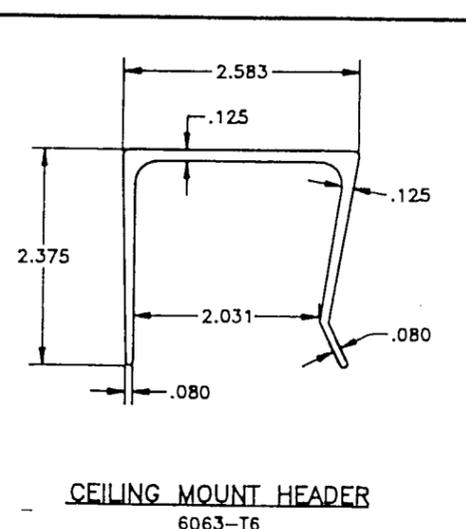
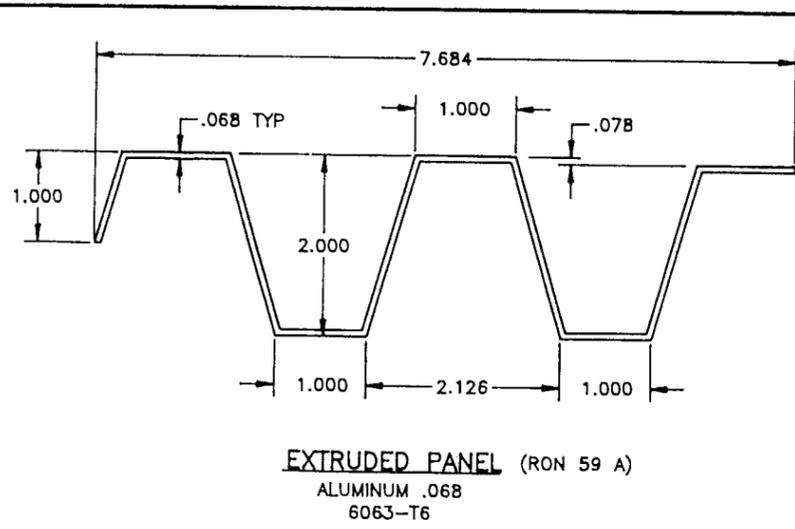
NOTICE OF ACCEPTANCE: STANDARD CONDITIONS

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 times. 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

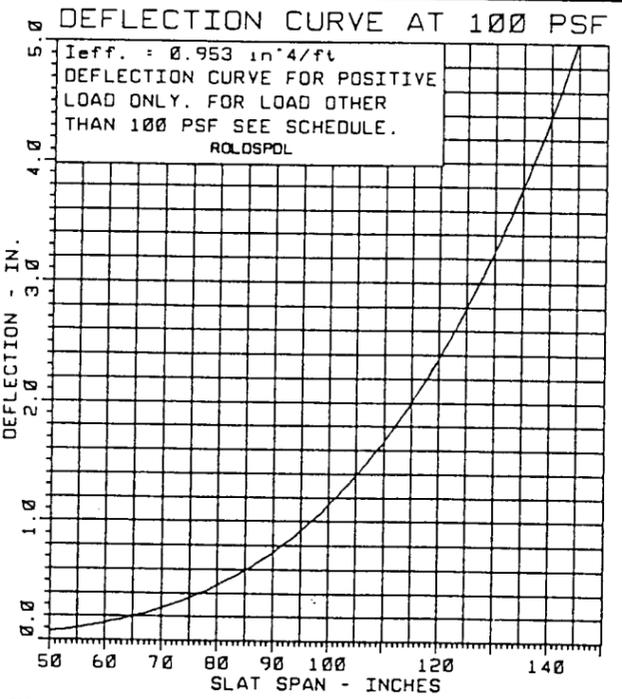
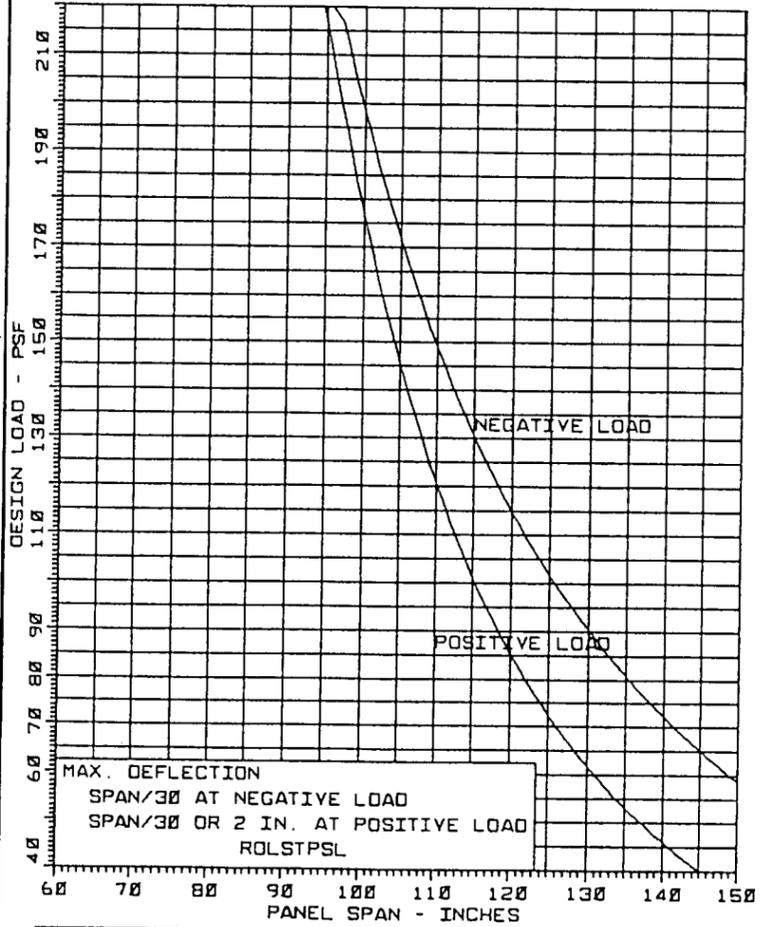


a f c

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

ROLDSPN2

PANEL PERFORMANCE CHART



PRODUCT RENEWED

ACCEPTANCE No. 00-0609.07

EXPIRATION DATE 09/16/2003

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

- GENERAL NOTES**
- 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.
 - DESIGN CRITERIA FOR ALUMINUM, MINIMUM MECHANICAL PROPERTIES, AND SAFETY FACTORS ARE IN ACCORDANCE WITH THE "ALUMINUM CONSTRUCTION MANUAL" LATEST EDITION.
 - ALUMINUM ALLOYS: ALL EXTRUSIONS SHALL BE ALLOY AS LISTED. PANELS SHALL BE ALLOY 6063-T6.
 - 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.
 - ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
 - ALL BOLTS SHALL BE STAINLESS STEEL, ALUMINUM ALLOY 2024-T4 OR 7075-T6, OR PLATED STEEL. WING NUTS SHALL BE OF ZINC ALLOY.
 - THE DESIGN AT ANY GIVEN ELEVATION SHALL COMPLY WITH THE TABLES PERTAINING TO THE EXPOSURE/ZONE.
 - DESIGN CRITERIA FOR PANELS: MAX DEFLECTION $\leq L/30$ OR 2".
 - ANCHORING OR LOADING CONDITIONS OTHER THAN THOSE SHOWN IN THESE DETAILS ARE TO BE ENGINEERED SEPARATELY.
 - EXISTING STRUCTURES MUST BE CAPABLE OF SUSTAINING LOADS IMPOSED BY SHUTTER.

DESIGN LOADS SHALL BE CALCULATED AS PER REQUIREMENTS OF ASCE 7-88, BASED ON 110 MPH WIND VELOCITY. SEE AFC 94-01.

MINIMUM SEPARATION FROM GLASS REQUIRED

INSTALLATIONS ABOVE 30' OF GRADE		SEPARATION FOR INSTALLATIONS UPTO 30 FT. OF GRADE DUE TO LARGE MISSILE IMPACT	
		PANEL SPAN UPTO	SEPARATION
SHUTTER SPAN = H =	IN.		
DESIGN LOAD = Pd =	PSF		
FACTOR = K = Pd/100 =			
READING FROM SPAN DEFLECTION CURVE = D =	IN.	96-1/2"	2-1/4"
DEFLECTION AT Pd = K*D =	IN.	131"	3-3/4"
MIN. SEPARATION REQD. = K*D+1" =	IN.	145"	5-1/2"

FOR INSTALLATIONS UPTO 30' OF GRADE USE MAX. OF ABOVE TWO.
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 AT BOTTOM OF ONE PANEL OF EACH OPENING WITH THE FOLLOWING STATEMENT.

ROLLADEN INC. HALLANDALE, FL.
ALUMINUM STORM PANEL
"DADE COUNTY PRODUCT CONTROL APPROVED"

PRODUCT RENEWED

ACCEPTANCE No. 97-0721.02

EXPIRATION DATE SEPTEMBER 16, 2000

By Manuel Perez
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE

ENGINEER: HUMAYOUN FAROQ
PE # 16557

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE

DATE JULY 06, 1995

BY Manuel Perez

PRODUCT CONTROL DIVISION

BUILDING CODE COMPLIANCE OFFICE

ACCEPTANCE No. 94-1230.03

FOR INSTALLATION DETAILS SEE SHEET 2 AND 3.

STORM PANEL DETAILS

ROLLADEN INC.
550 ANSIN BOULEVARD
HALLANDALE, FL. 33009

revisions:

no.	date	by	description
A	8-29-94	T.H.	COMPLETE REVISION
B	12-17-94	T.H.	GL. SEPARATION REVISED
C	03-17-95	T.H.	GL. SEPARATION REVISED
D	4-4-95	T.H.	ANCHOR GRAPHIS REVISED

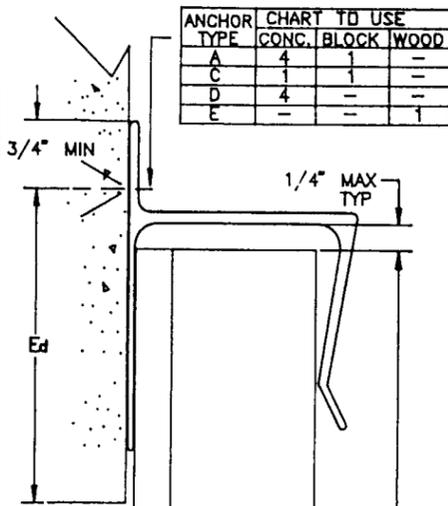
drawing no. **94-51**

sheet 1 of 4

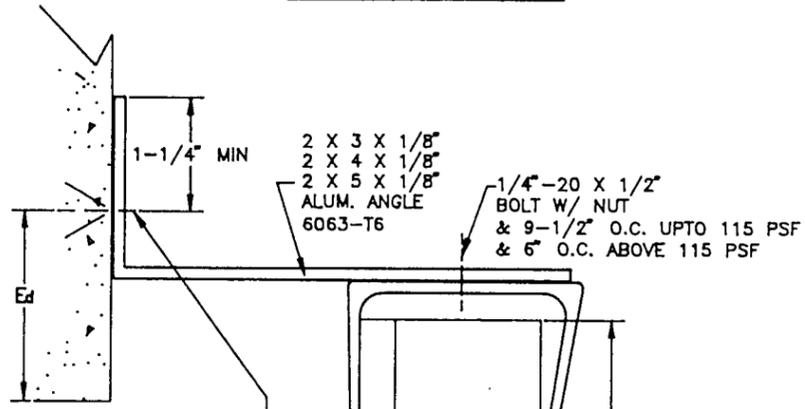
WALL MOUNTS

BUILT-OUT CONDITION

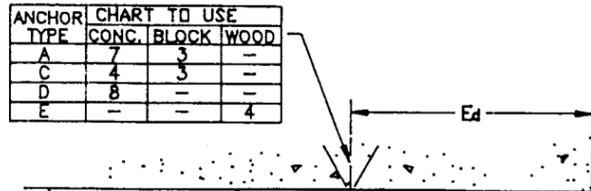
INSIDE MOUNTS



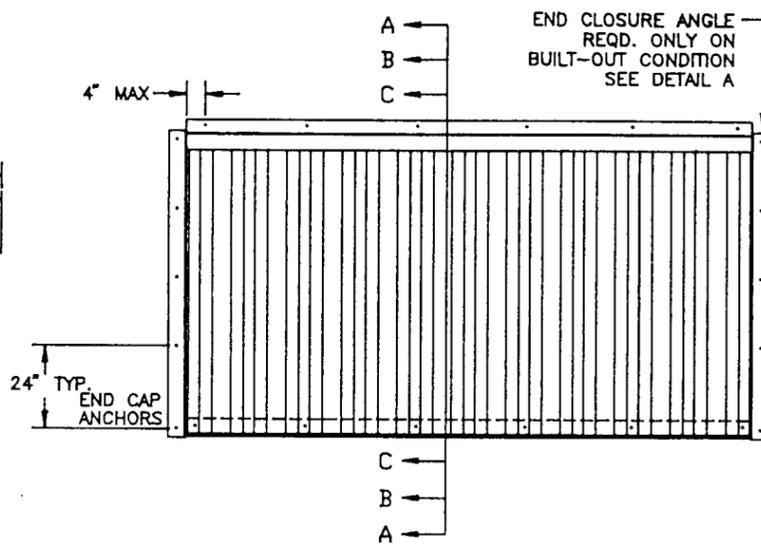
ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	4	1	-
C	1	-	-
D	4	-	-
E	-	-	1



ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	5	1	-
C	2	1	-
D	6	-	-
E	-	-	2

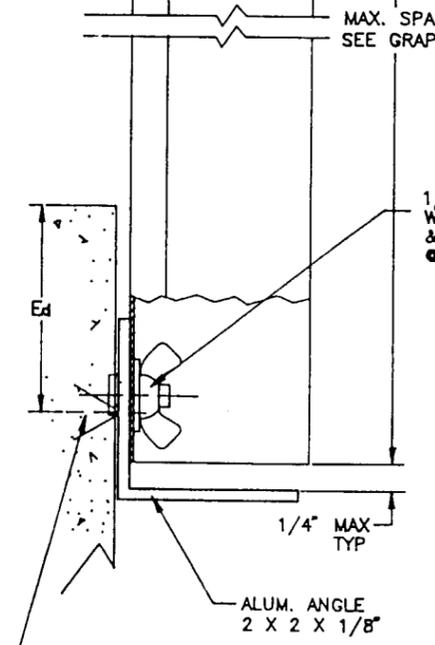


ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	7	3	-
C	4	3	-
D	8	-	-
E	-	-	4

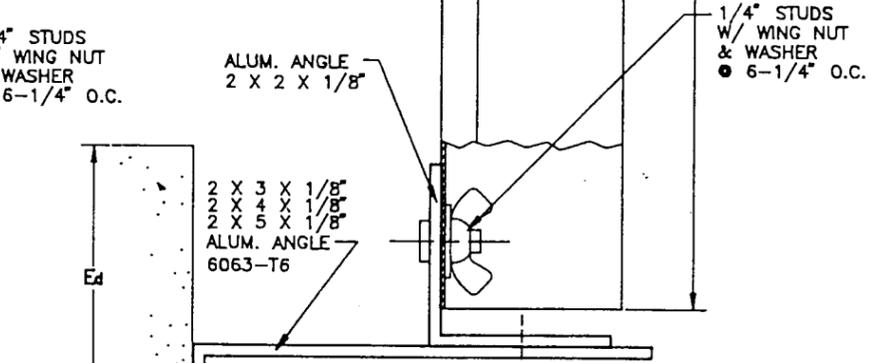


TYPICAL ELEVATION

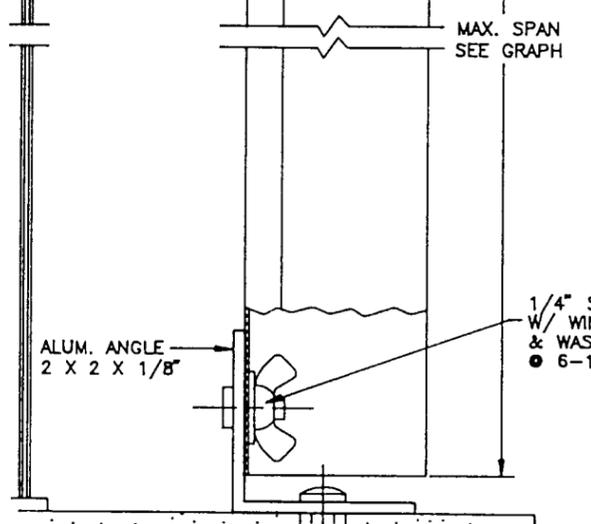
PRODUCT RENEWED
 ACCEPTANCE No. 00-0609.07
 EXPIRATION DATE 09/16/2003
 By Helmut A. Malar
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE



ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	9	3	-
C	5	3	-
D	10	-	-
E	-	-	5

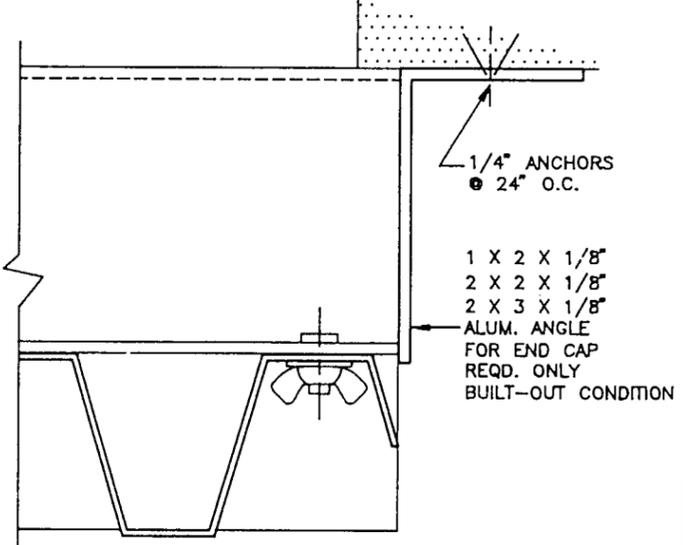


SECTION B-B



SECTION C-C

ANCHOR TYPE	CHART TO USE		
	CONC.	BLOCK	WOOD
A	7	3	-
C	5	3	-
D	8	-	-
E	-	-	4



**END CAP BUILT-OUT CONDITION
DETAIL A**

PRODUCT RENEWED
 ACCEPTANCE No. 97-0721.02
 EXPIRATION DATE SEPTEMBER 16, 2000
 By Manuel Sora
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE JULY 06, 1995
 BY Manuel Sora
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE No. 94-1230.03

FOR GENERAL NOTES AND EXTRUSION DETAILS SEE SHEET 1 OF 4.
 FOR WOOD INSTALLATIONS SEE SHEET 3 OF 3.

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

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

SEP 10 1997

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AL-FAROQ CORPORATION
 ENGINEERS, PLANNERS & PRODUCT TESTING
 1235 SW 87 AVE
 MIAMI, FLORIDA 33174
 (305) 264-8100
 ROLDSPN2

STORM PANEL DETAILS
 ROLLADEN INC.
 550 ANSIN BOULEVARD
 HALLANDALE, FL. 33009

NO.	DATE	BY	DESCRIPTION
A	8.28.94	T.H.	SHEET # 3 ADDED
B	12.17.94	T.H.	COMPLETE REVISION
C	03.17.95	T.H.	GL. SEPARATION REVISED
D	4.4.95	T.H.	ANCHOR GRAPHIS REVISED

date: 07-07-94
 scale: 1/2" = 1"
 design by:
 drawn by: HMBD
 checked by:

drawing no. **94-51**
 sheet 2 of 4

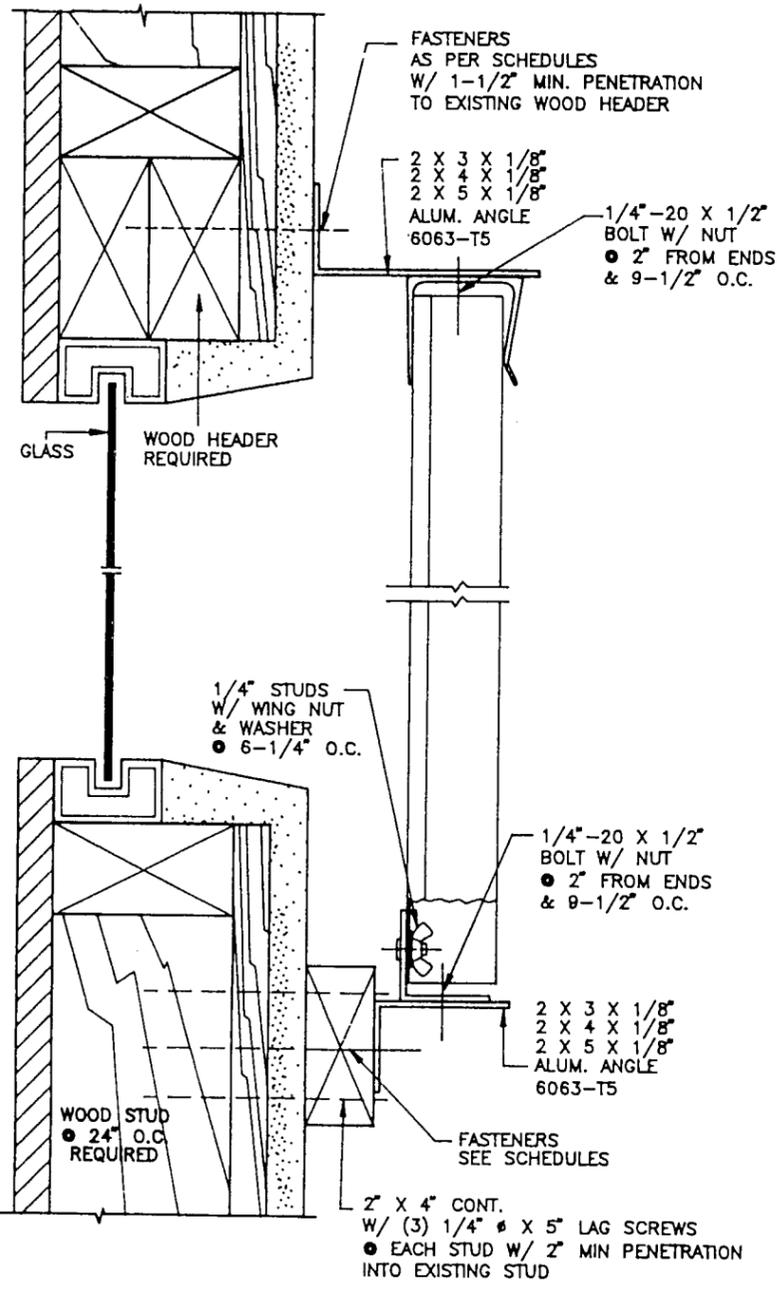
AL-FAROOQ CORPORATION
 ENGINEERS, PLANNERS & PRODUCT TESTING
 1235 SW 87 AVE
 MIAMI, FLORIDA 33174
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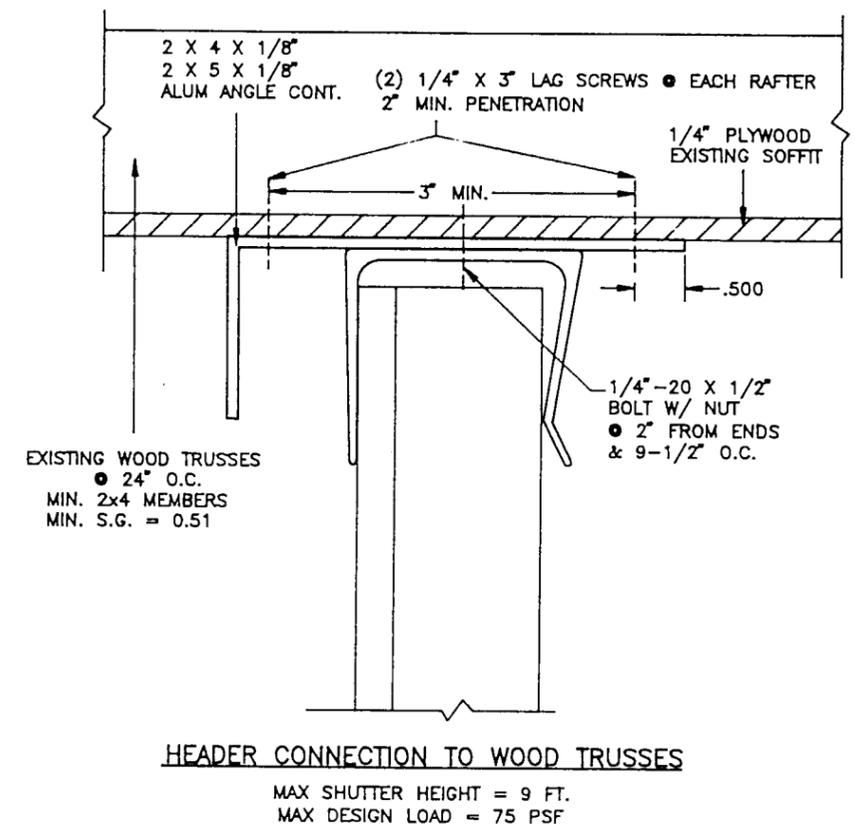
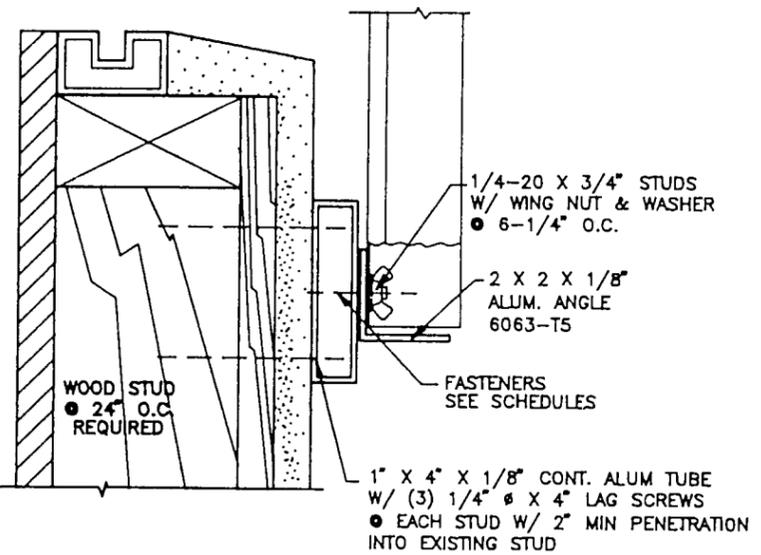
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B	12.17.94	T.H.	COMPLETE REVISION

date: 07-07-94	scale: 1/2" = 1"
design by: HMMB	drawn by: HMMB
checked by:	

drawing no.
94-51
 sheet 3 of 4



INSTALLATION DETAIL ON EXISTING WOOD BUCKS
 MAX. SHUTTER HEIGHT = 9 FT.
 MAX. DESIGN LOAD = 105 PSF
 OTHER CONDITIONS SIMILAR
 FOR FASTENERS SEE SCHEDULES ON SHEET 2
 SCALE : 1/4" = 1"

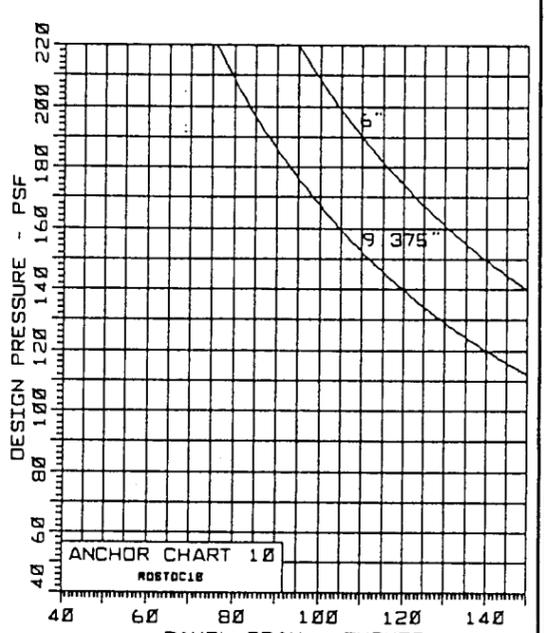
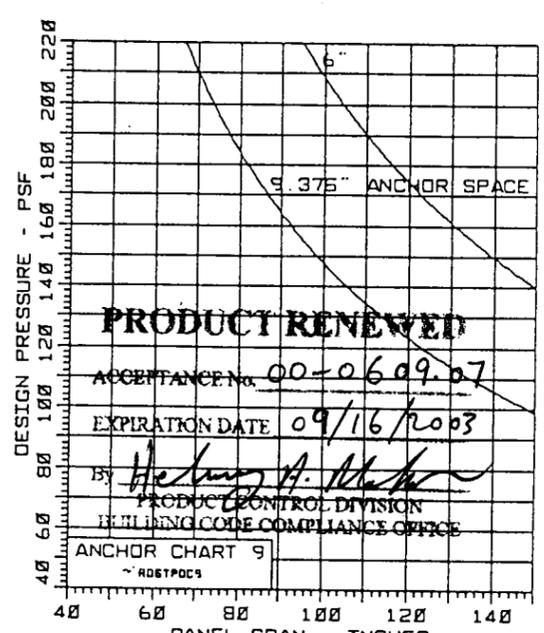
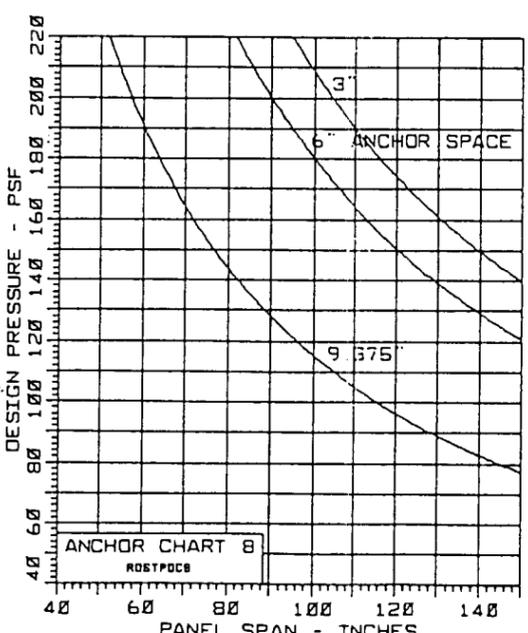
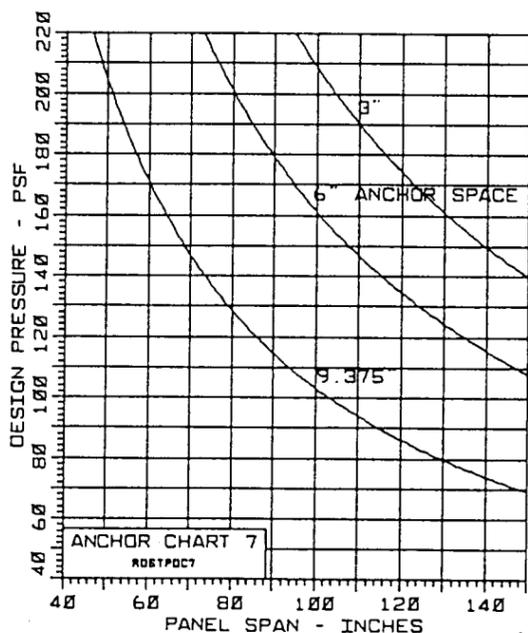
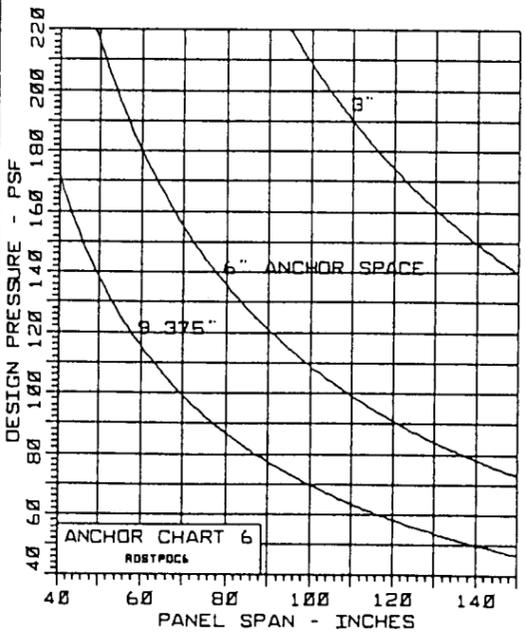
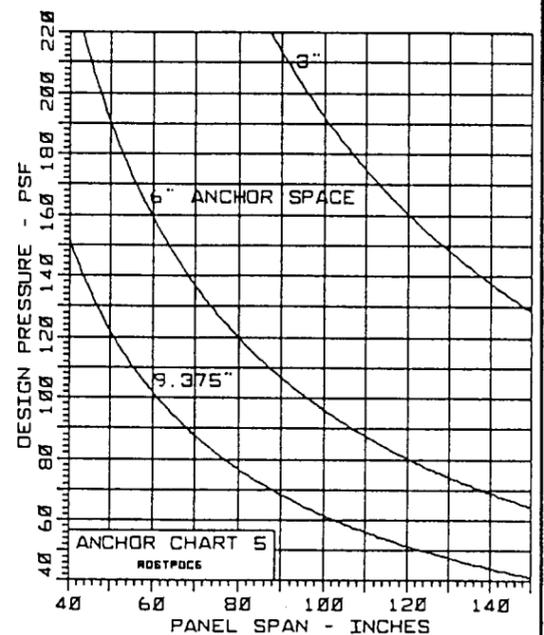
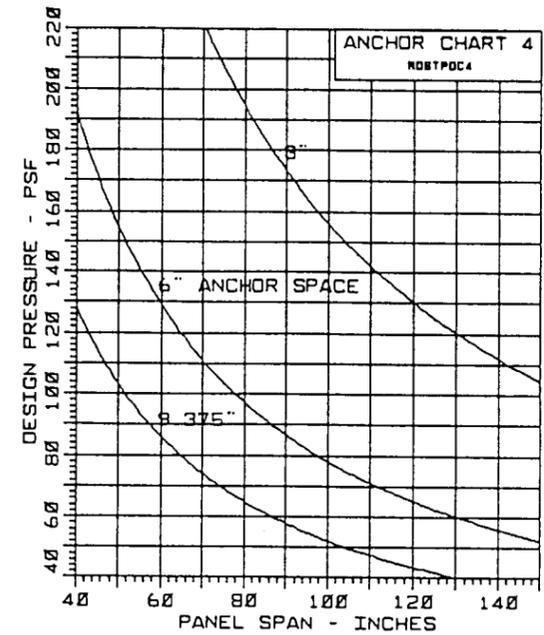
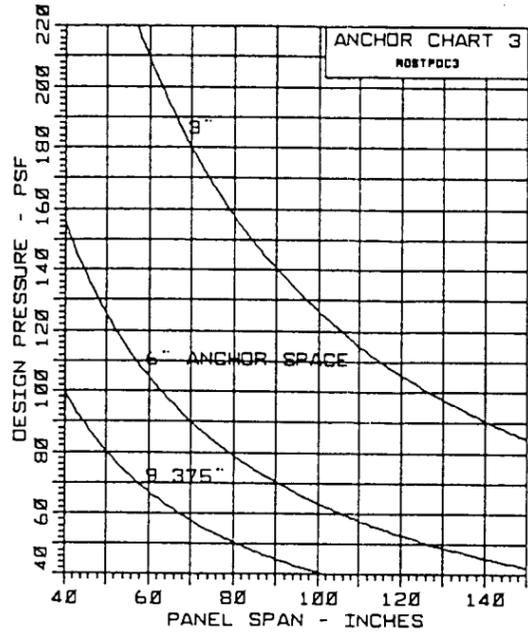
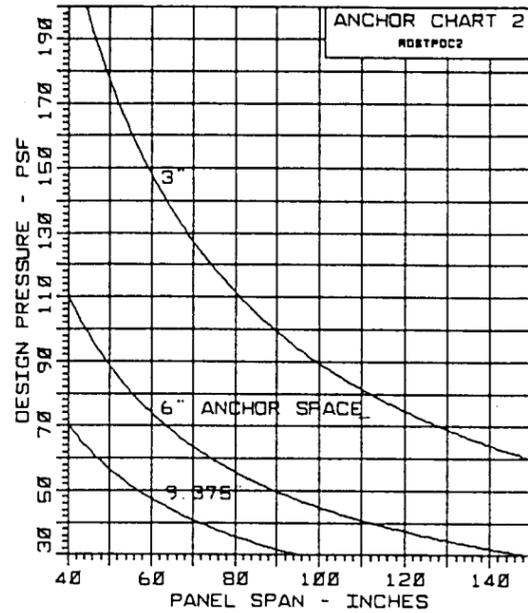
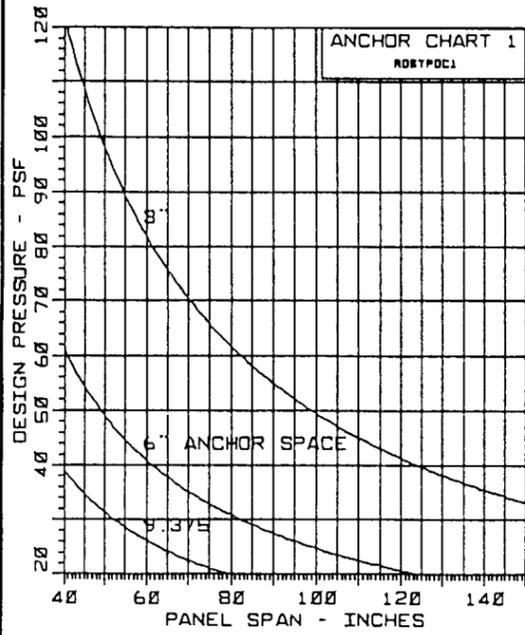


PRODUCT RENEWED
 ACCEPTANCE No. 00-0609.07
 EXPIRATION DATE 09/16/2003
 By Humayoun A. Farooq
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE

PRODUCT RENEWED
 ACCEPTANCE No. 97-0721.02
 EXPIRATION DATE SEPTEMBER 16, 2008
 By Manuel Sery
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE

ENGINEER: HUMAYOUN FAROOQ
 PE # 18557
 SEP 10 1997

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE JULY 06, 1995
 BY Manuel Sery
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 94-1230.03



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 = 9.37 O.C. (FROM CHART)
FOR 2" EDGE DIST. SPACING = 9.37 X .71 = 6.65 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" HILTI METAL HIT ANCHORS/NAIL PIN
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./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.)

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

PRODUCT RENEWED
ACCEPTANCE No. 97-0721.02
EXPIRATION DATE SEPTEMBER 16, 2000
By Manuel Perez
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE

ENGINEER: HUMAYOUN FAROOQ
PE # 16557
SEP 10 1997

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE JULY 06 1995
BY Manuel Perez
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 94-1230.03

af c

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

STORM PANEL DETAILS
ROLLADEN INC.
550 ANSIN BOULEVARD
HALLANDALE, FL. 33009

no.	date	by	description
A	8.29.94	T.H.	COMPLETE REVISION SHEET # 3 ADDED
B	12.17.94	T.H.	COMPLETE REVISION
C	03.17.95	T.H.	GL SEPARATION REVISED
D	4.4.95	T.H.	ANCHOR GRAPHIS REVISED

revisions:

date: 07-07-94
scale: 1/2" = 1"
design by:
drawn by: HAMD
checked by:

drawing no. **94-51**
sheet 4 of 4