



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

All Broward Hurricane Panel Co.
450 West McNab Road
Ft. Lauderdale ,FL 33309

Your application for Notice of Acceptance (NOA) of:

0.050" 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.

Raul Rodriguez
Chief Product Control Division

ACCEPTANCE NO.: 00-0808.04
EXPIRES: 12/21/2003

**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: 12/21/2000

All Broward Hurricane Panel, Inc.

ACCEPTANCE No. : 00-0808.04

APPROVED : 12/21/2000

EXPIRES : 12/21/2003

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

This approves an 0.050" 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 0.050" aluminum storm panel shutter and its components shall be constructed in strict compliance with the following documents: Drawing No. 00-11, titled "0.050" Storm Panel Details", prepared by Al-Farooq Corporation, dated June 7, 2000, last revision #B dated November 30, 2000, sheets 1 through 4 of 4, 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 0.050" 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".

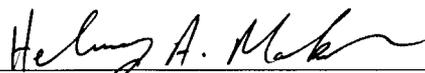
6. BUILDING PERMIT REQUIREMENTS

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

All Broward Hurricane Panel, Inc.

ACCEPTANCE No. : 00-0808.04

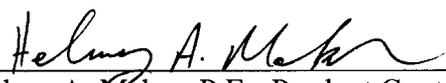
APPROVED : 12/21/2000

EXPIRES : 12/21/2003

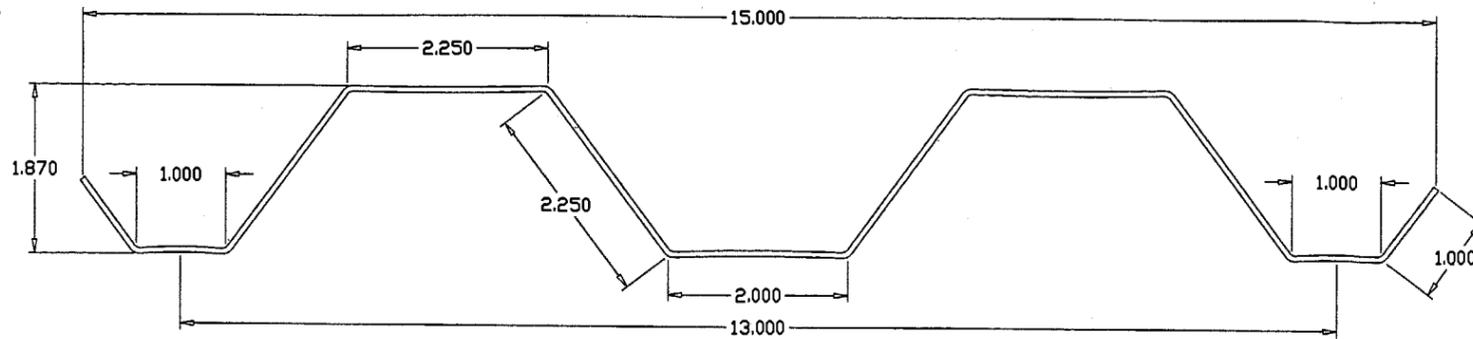
NOTICE OF ACCEPTANCE: STANDARD CONDITIONS

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.

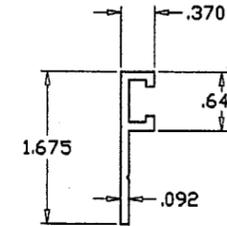
END OF THIS ACCEPTANCE



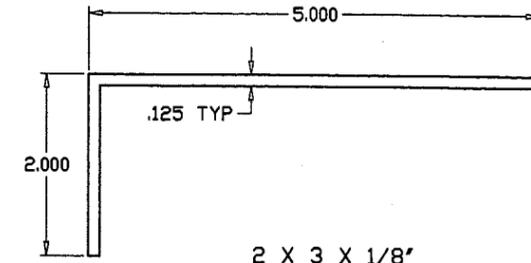
Helmy A. Makar, P.E.- Product Control Examiner
Product Control Division



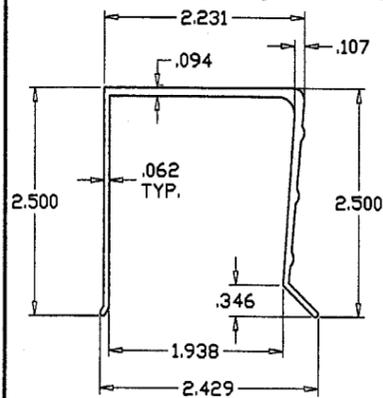
ROLL FORMED PANEL ALUMINUM (5052-H34)
OR (3004-H34)
.050 IN. THICKNESS



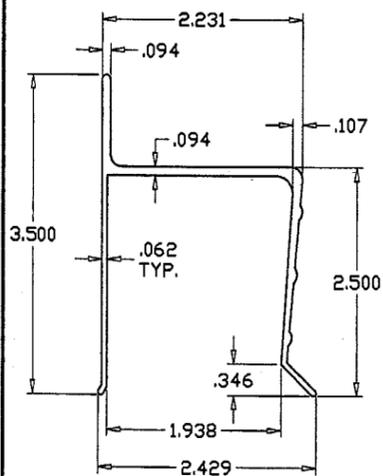
F-TRACK
6063-T6



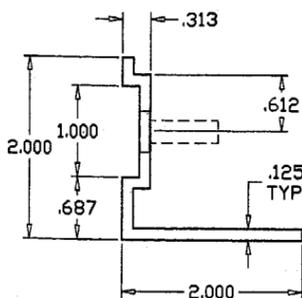
2 X 3 X 1/8"
2 X 4 X 1/8"
2 X 5 X 1/8"
BUILT-OUT ANGLES
6063-T6



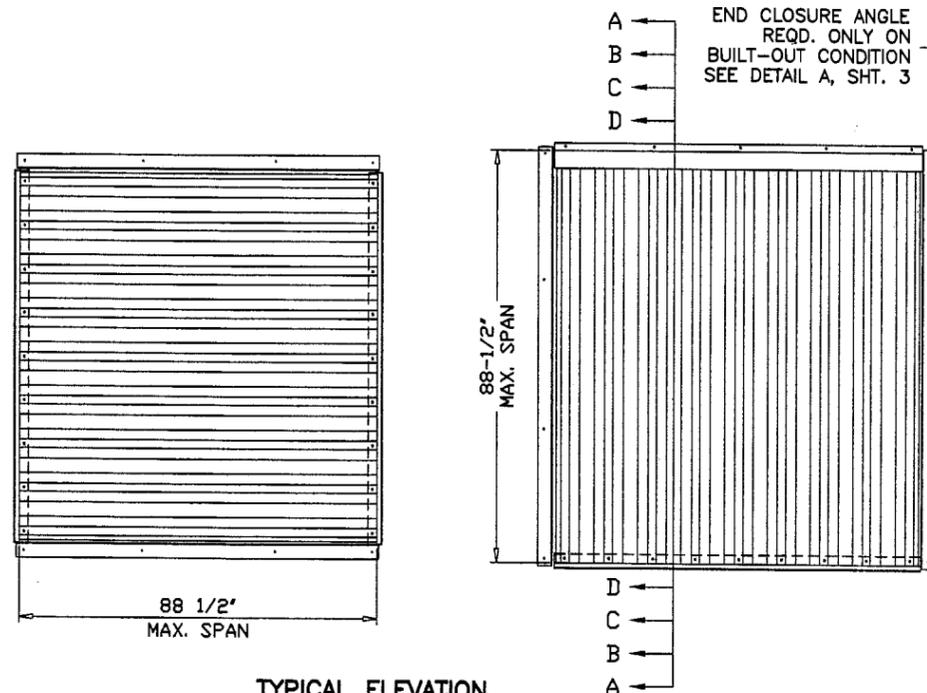
CEILING HEADER
6063-T5



WALL HEADER
6063-T5



STUDED ANGLE
6063-T6



TYPICAL ELEVATION

PANELS CAN BE INSTALLED VERTICALLY
OR HORIZONTALLY USING APPLICABLE
ANCHORING DETAILS.

**MAX. DESIGN LOAD RATING = +76.4 PSF
-97.0 PSF**

ALL BROWARD HURRICANE PANEL INC., FT. LAUDERDALE FL.
"MIAMI DADE COUNTY PRODUCT CONTROL APPROVED"

TYPICAL ANCHORS

- ANCHOR (A) = 1/4" DIA. ITW TAPCONS
1-3/4" EMBEDMENT INTO CONC.
1-1/4" EMBEDMENT INTO BLOCK
- ANCHOR (D) = 1/4" RAWL CALK-IN,
TOTAL ANCHOR BODY INTO CONC. OR BLOCK
- ANCHOR (E) = 1/4" DIA. LAG SCREWS
1-1/2" MIN PENETRATION INTO WOOD(S.G.=0.55)
- ANCHOR (F) = 1/4" DIA. PANELMATE ANCHORS (ELCO-TEXTRON)
1-7/8" EMBEDMENT TO CONC.
1-1/4" EMBEDMENT TO BLOCK
1-1/2" MIN PENETRATION INTO WOOD(S.G.=0.55)

NOTE: ANCHORS EMBEDMENT SHOWN IS BEYOND WALL & FLOOR COVERINGS (STUCCO, TILES, ETC.)

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE: 12/21/2000
BY: *Helmy A. Helmy*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 00-0808.04

GENERAL NOTES

1. THIS STRUCTURE IS DESIGNED AS PER THE SOUTH FLORIDA BUILDING CODE 1994 EDITION FOR MIAMI 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. ANCHORS SHALL BE AS SHOWN ON DETAILS. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.
5. ALL BOLTS SHALL BE STAINLESS STEEL, ALUMINUM ALLOY 2024-T4 OR 7075-T6, OR PLATED STEEL. WING NUTS TO BE OF ZINC ALLOY.

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

NOV 30 2000

FOR INSTALLATION DETAILS SEE SHEET 2 THRU 4.

AL-FAROOQ CORPORATION
ENGINEERS, PLANNERS & PRODUCT DESIGN
1235 SW 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

AL BROWARD HURRICANE PANEL INC.
450 WEST MCNAB ROAD
FT. LAUDERDALE, FL. 33309
TEL (800) 432-1803 FAX. (954) 973-3928

no	date	by	description
A	11.07.00		REV. PER BCCO COMMENTS
B	11.30.00		REV. PER BCCO COMMENTS

date: 06-07-00
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
00-11

sheet 1 of 4

PANELS\00-11AB

WALL MOUNTS

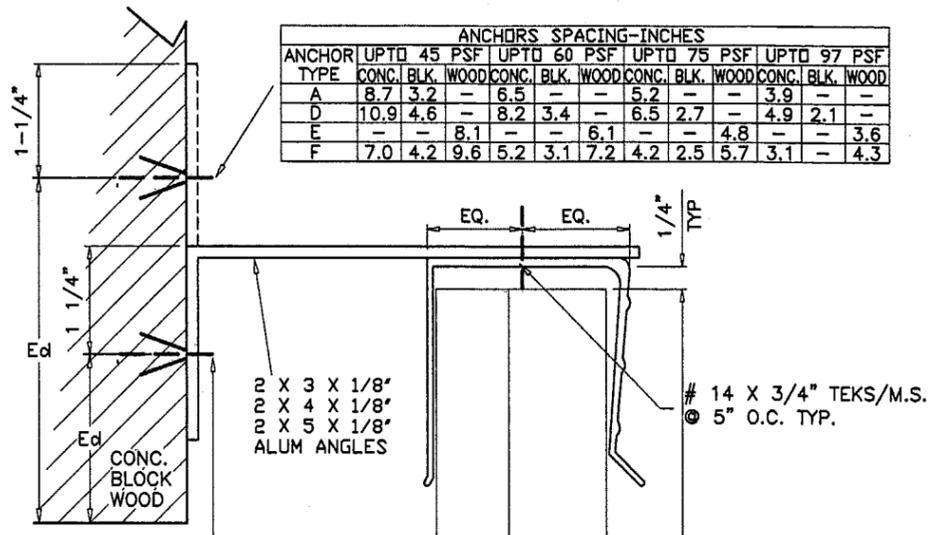
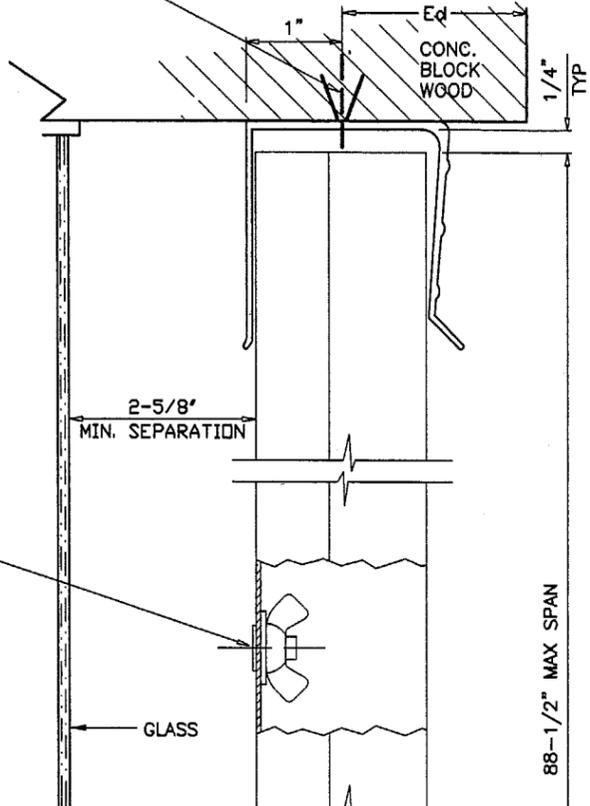
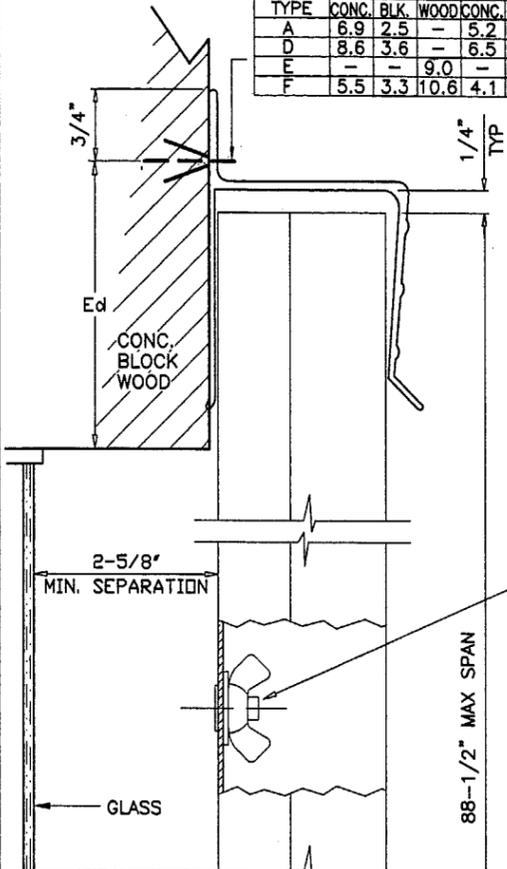
INSIDE MOUNTS

BUILT-OUT

ANCHORS SPACING-INCHES												
ANCHOR TYPE	UPTD 45 PSF		UPTD 60 PSF		UPTD 75 PSF		UPTD 97 PSF		CONC.		WOOD	
	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD
A	6.9	2.5	-	5.2	-	4.1	-	3.1	-	-	-	-
D	8.6	3.6	-	6.5	-	5.2	-	2.2	-	3.9	-	-
E	-	-	9.0	-	2.5	6.7	-	5.4	-	-	-	4.0
F	5.5	3.3	10.6	4.1	-	8.0	3.3	2.0	6.4	2.5	-	4.8

ANCHORS SPACING-INCHES												
ANCHOR TYPE	UPTD 45 PSF		UPTD 60 PSF		UPTD 75 PSF		UPTD 97 PSF		CONC.		WOOD	
	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD
A	10.0	4.2	-	7.5	3.2	-	6.0	2.5	-	4.5	-	-
D	11.6	5.9	-	8.7	4.4	-	7.0	3.5	-	5.2	2.6	-
E	-	-	7.1	-	5.4	-	4.3	-	-	-	-	3.2
F	8.9	4.7	12.3	6.7	3.5	9.2	5.4	2.8	5.2	4.0	-	5.5

ANCHORS SPACING-INCHES												
ANCHOR TYPE	UPTD 45 PSF		UPTD 60 PSF		UPTD 75 PSF		UPTD 97 PSF		CONC.		WOOD	
	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD
A	8.7	3.2	-	6.5	-	5.2	-	3.9	-	-	-	-
D	10.9	4.6	-	8.2	3.4	-	6.5	2.7	-	4.9	2.1	-
E	-	-	8.1	-	6.1	-	4.8	-	-	-	-	3.6
F	7.0	4.2	9.6	5.2	3.1	7.2	4.2	2.5	5.7	3.1	-	4.3



PANELS AT LAP JOINTS FASTENED AT MIDSPAN WITH 1/4-20 M.S. & WING NUTS

PANELS AT LAP JOINTS FASTENED AT MIDSPAN WITH 1/4-20 M.S. & WING NUTS

SECTION A-A

SECTION B-B

SECTION C-C

ANCHORS SPACING-INCHES												
ANCHOR TYPE	UPTD 45 PSF		UPTD 60 PSF		UPTD 75 PSF		UPTD 97 PSF		CONC.		WOOD	
	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD
A	13	5.8	-	9.8	4.3	-	7.9	3.5	-	5.9	2.6	-
D	13	7.9	-	11.1	6.0	-	8.9	4.8	-	6.7	3.6	-
E	-	-	8.2	-	6.1	-	4.9	-	-	-	-	3.7
F	12.1	6.1	13	9.1	4.6	11.3	7.3	3.7	6.4	5.5	2.8	6.8

ANCHORS SPACING-INCHES												
ANCHOR TYPE	UPTD 45 PSF		UPTD 60 PSF		UPTD 75 PSF		UPTD 97 PSF		CONC.		WOOD	
	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD
A	13	10.1	-	13	7.7	-	13	6.2	-	12.6	4.7	-
D	13	13	-	13	10.9	-	13	8.8	-	13	6.6	-
E	-	-	13	-	13	-	13	-	-	13	-	13
F	13	12.7	13	13	9.7	13	13	7.9	13	10.1	6	13

ANCHORS SPACING-INCHES												
ANCHOR TYPE	UPTD 45 PSF		UPTD 60 PSF		UPTD 75 PSF		UPTD 97 PSF		CONC.		WOOD	
	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD	CONC.	BLK.	WOOD
A	7.9	2.9	-	6.1	-	6.1	-	6.1	-	-	-	-
D	9.8	4.2	-	7.6	3.2	-	7.6	3.2	-	7.6	3.2	-
E	-	-	9.7	-	7.6	-	7.6	-	-	-	-	7.6
F	6.3	3.8	11.9	4.9	2.9	9.3	4.9	2.9	9.3	4.9	2.9	9.3

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

Ed = TYPICAL EDGE DISTANCE CONC. & BLOCK = 2" MIN. WOOD = 1-1/4" MIN.

HEADER AND SILL DETAILS CAN BE USED IN ANY COMBINATIONS.

Engr: DR. HUMAYOUN FAROOQ
STRUCTURES
FLA. PE # 16557
[Signature]
NOV 30 2000

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE 12/21/2000
BY *[Signature]*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 00-080804

revisions:	no	date	by	description

date: 06-07-00
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no. 00-11
sheet 2 of 4

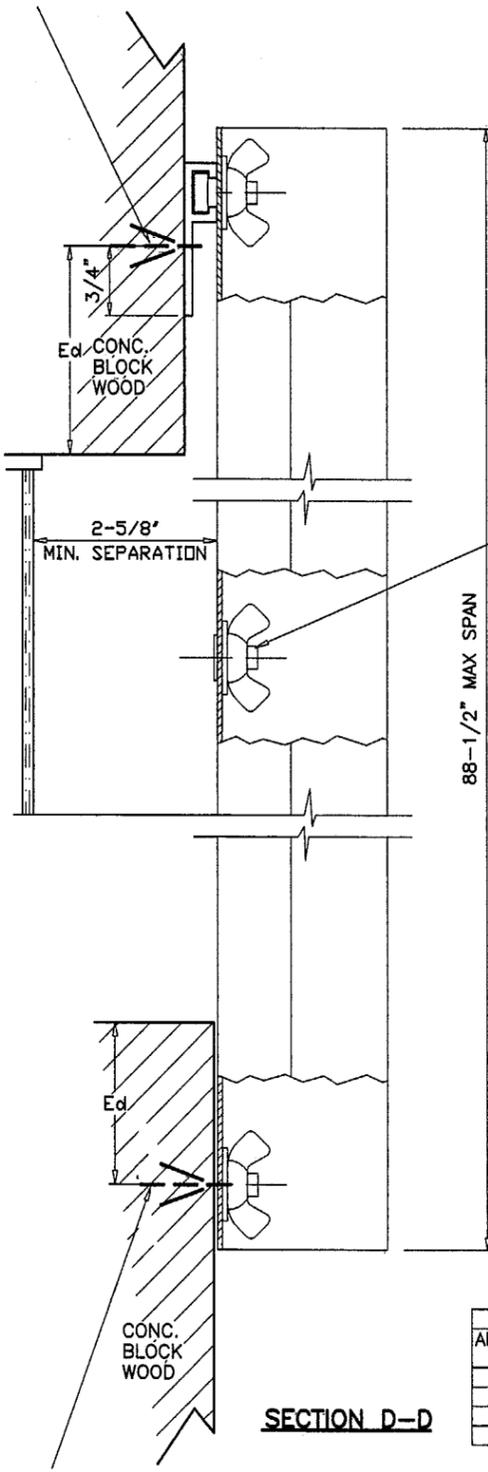
.050" STORM PANEL DETAILS
ALL BROWARD HURRICANE PANEL INC.
450 WEST MCNAB ROAD
FT. LAUDERDALE, FL. 33309
TEL. (800) 432-1803 FAX. (954) 973-3928

AL-FAROOQ CORPORATION
ENGINEERS, PLANNERS & PRODUCT DESIGN
1235 SW 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

afC
PANELS 00-11AB

WALL MOUNTS

ANCHORS SPACING-INCHES											
ANCHOR TYPE	UPTD 45 PSF		UPTD 60 PSF		UPTD 75 PSF		UPTD 97 PSF				
	CONC.	BLK. WOOD	CONC.	BLK. WOOD							
A	13	5.9	12.1	4.4	9.7	3.5	7.2	-	-	-	-
D	13	8.4	13	6.3	12.1	5.0	9.0	3.8	-	-	-
E	-	-	13	-	11.2	-	8.9	-	-	6.7	-
F	12.8	7.7	13	9.6	5.8	13.0	7.7	4.6	10.6	5.8	3.5



PANELS AT LAP JOINTS FASTENED AT MIDSPAN WITH 1/4"-20 M.S. & WING NUTS

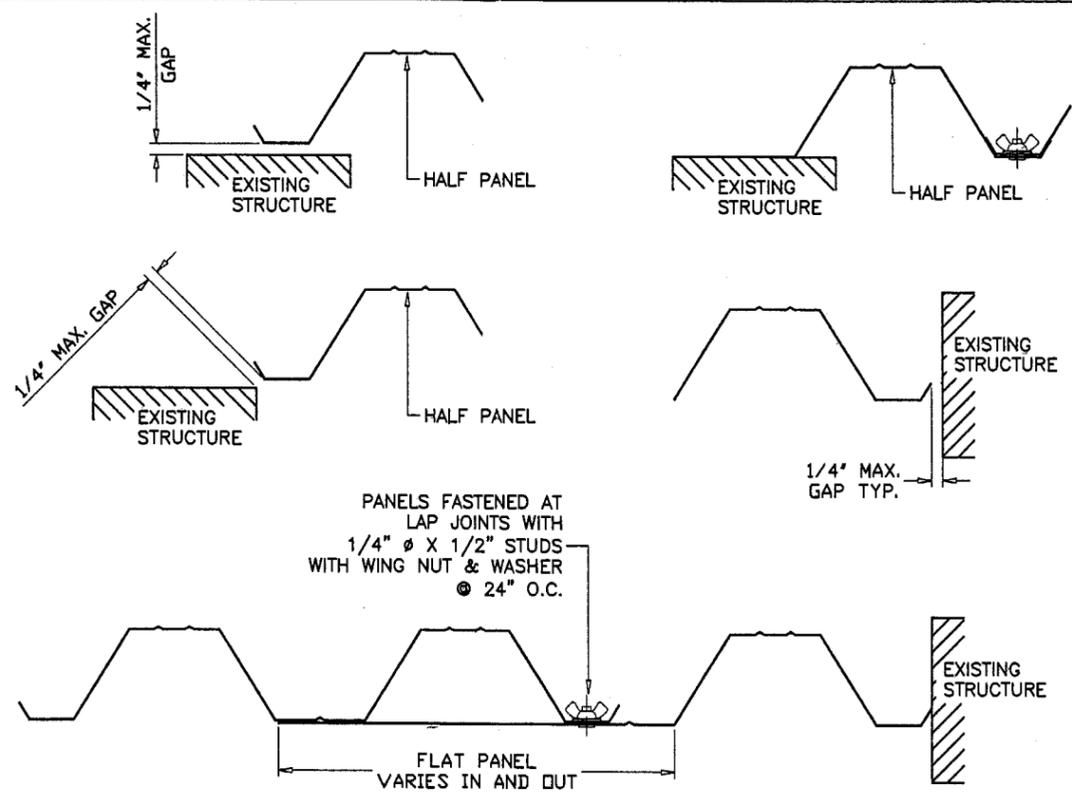
88-1/2" MAX SPAN

ANCHORS SPACING-INCHES											
ANCHOR TYPE	UPTD 45 PSF		UPTD 60 PSF		UPTD 75 PSF		UPTD 97 PSF				
	CONC.	BLK. WOOD	CONC.	BLK. WOOD							
A	9.0	3.7	6.8	2.8	5.4	-	4.1	-	-	-	-
D	10.5	5.2	7.9	3.9	6.3	3.1	4.7	-	-	-	-
E	-	-	6.7	-	5.1	-	4.0	-	-	3.0	-
F	8.0	4.2	11.3	6.0	3.2	8.5	4.8	2.5	6.8	3.6	5.1

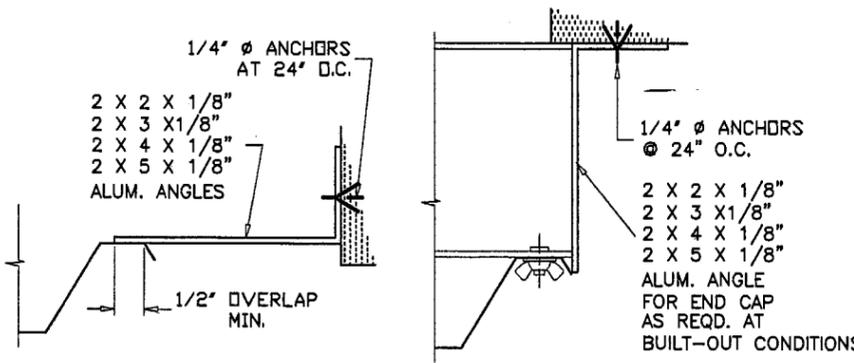
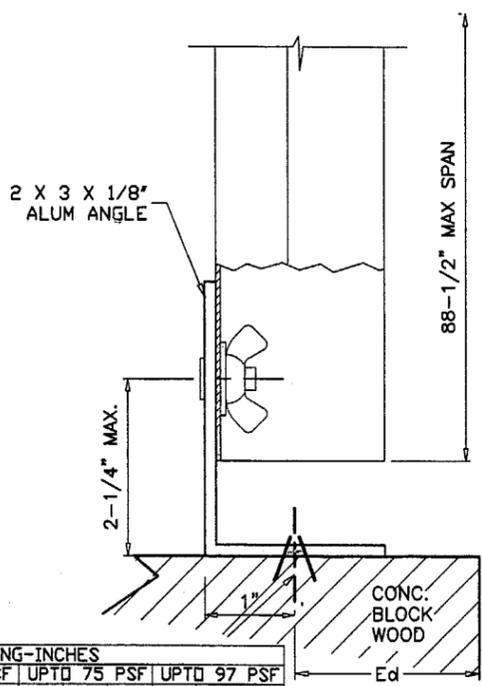
SECTION D-D

ALT. ANGLE HEADER SIMILAR

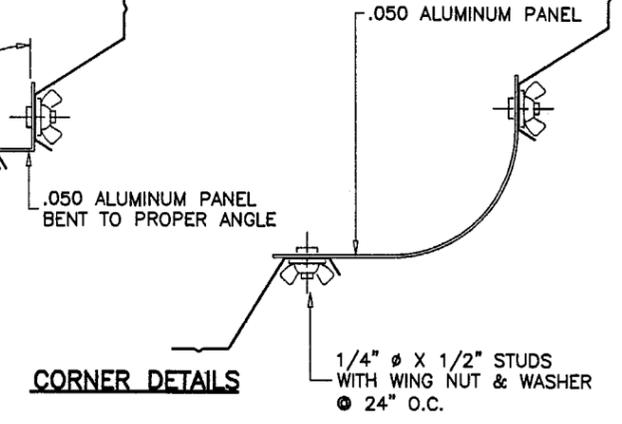
ANCHORS SPACING-INCHES											
ANCHOR TYPE	UPTD 45 PSF		UPTD 60 PSF		UPTD 75 PSF		UPTD 97 PSF				
	CONC.	BLK. WOOD	CONC.	BLK. WOOD							
D	13	13	13	10.9	13	8.8	13	6.6	-	-	-
F	13	12.7	13	13	9.7	13	13	7.9	13	10.1	6.0



TRAP WINDOW DETAIL
HALF PANEL TO BE USED IN SHORTER OPENING AS REQD.



DETAIL D
END CAP BUILT-OUT CONDITION



CORNER DETAILS

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

[Signature]

NOV 30 2000

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE 12/21/2000
BY *[Signature]*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 00-0808.04

afc

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ENGINEERS, PLANNERS & PRODUCT DESIGN
1235 SW 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

.050" STORM PANEL DETAILS

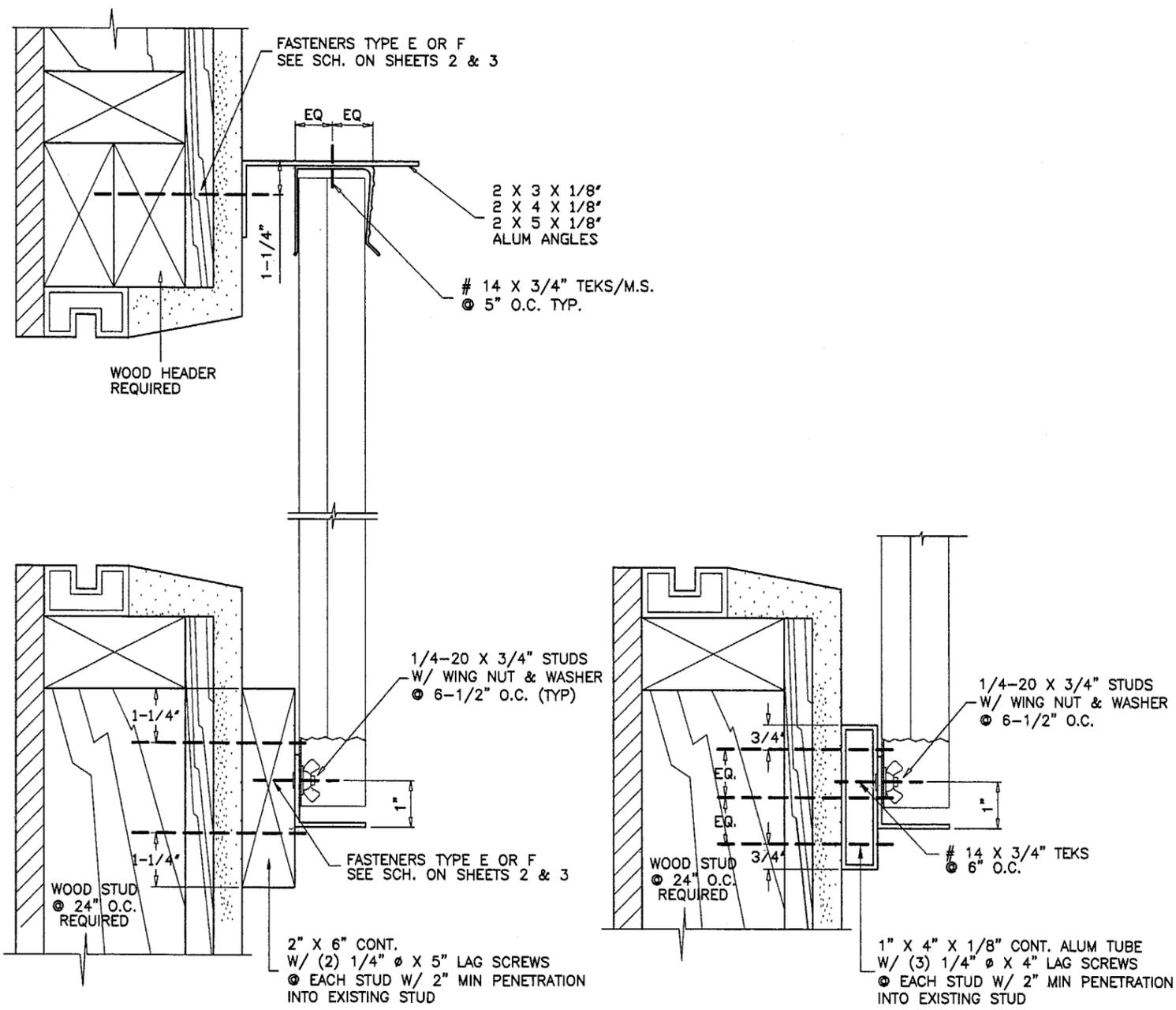
ALL BROWARD HURRICANE PANEL INC.
450 WEST MCNAB ROAD
FT. LAUDERDALE, FL. 33309
TEL (800) 432-1803 FAX. (954) 973-3928

no.	date	by	description

revisions:

date: 06-07-00
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no. 00-11
sheet 3 of 4



INSTALLATION DETAIL ON EXISTING WOOD STUDS (1/4"=1")

FOR SHUTTER HEIGHT OF 88-1/2" MAX. DESIGN LOAD = +76.4 PSF
 = -97.0 PSF

ABOVE DETAILS SHOWS CONNECTION OF 2X6 BUCK & 1X4 ALUM TUBE TO WOOD STUDS TO PROVIDE A CONTINUOUS SURFACE FOR SHUTTER INSTALLATION.

FOR INSTALLATION DETAILS OF HEADER/SILL TO CONTINUOUS WOOD MEMBERS SEE SHEETS 2 & 3.

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

[Signature]

NOV 30 2000

APPROVED AS COMPLYING WITH THE
 SOUTH FLORIDA BUILDING CODE
 DATE 12/21/2000
 BY *[Signature]*
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 00-0808.04

afc

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 ENGINEERS, PLANNERS & PRODUCT DESIGN
 1235 SW 87 AVE
 MIAMI, FLORIDA 33174
 TEL. (305) 264-8100 FAX. (305) 262-6978
 PANELS\00-11AB

.050" STORM PANEL DETAILS
ALL BROWARD HURRICANE PANEL INC.
 450 WEST MCNAB ROAD
 FT. LAUDERDALE, FL. 33309
 TEL. (800) 432-1803 FAX. (954) 973-3928

no	date	by	description

date: 06-07-00
 scale: 1/2" = 1"
 dr. by: HAMID
 chk. by:

drawing no. 00-11
 sheet 4 of 4