



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**

**Madden Manufacturing**  
1889 NW 22nd Street  
Pompano Beach FL 33069

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:

**20 Ga. Galvanized Steel Storm Panel 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.: 98-1110.05

Expires: 05/01/2003

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: 06/16/1999

1 of 3



**Madden Manufacturing Co.**

ACCEPTANCE No. : 98-1110.05

APPROVED : JUN 16 1999

EXPIRES : 05/01/2003

**NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS**

**1. SCOPE**

This revises and renews the Notice of Acceptance No. 96-0520.04, which was issued on May 1, 1997. It approves a 20 gauge galvanized steel storm panels 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 20 gauge galvanized steel storm panels shutter and its components shall be constructed in strict compliance with the following documents: Drawing No. 96-87, titled "20 Ga. Galvanized Steel Storm Panel", prepared by Knezevich & Associates, Inc., dated April 22, 1996, last revision #4 dated March 4, 1999, sheets 1 through 6 of 6, signed and sealed by V. J. Knezevich, P.E., 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 20 gauge galvanized steel storm panels 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

**Madden Manufacturing Co.**

**ACCEPTANCE No. :** 98-1110.05

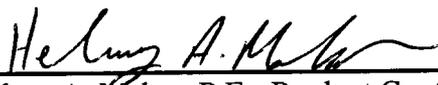
**APPROVED :** JUN 16 1999

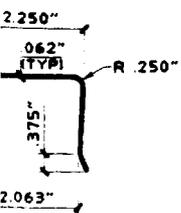
**EXPIRES :** 05/01/2003

**NOTICE OF ACCEPTANCE: STANDARD CONDITIONS**

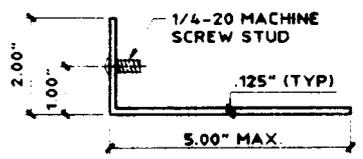
1. Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documents, including test-supporting data, engineering documents, are no older than eight (8) years.
2. Any and all approved products shall be permanently labeled with the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

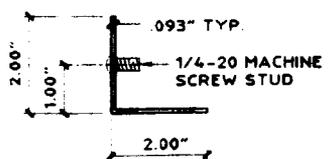
  
\_\_\_\_\_  
Helmy A. Makar, P.E. -Product Control Examiner  
Product Control Division



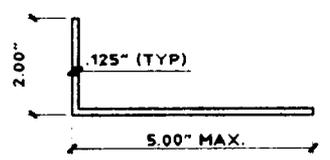
HEADER  
SCALE: 1/4" = 0'-1"



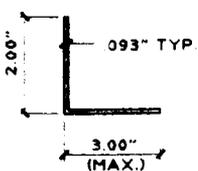
4a **STUDED ANGLE**  
SCALE: 1/4" = 0'-1"



6 **STUDED ANGLE**  
SCALE: 1/4" = 0'-1"



4 **ANGLE**  
SCALE: 1/4" = 0'-1"



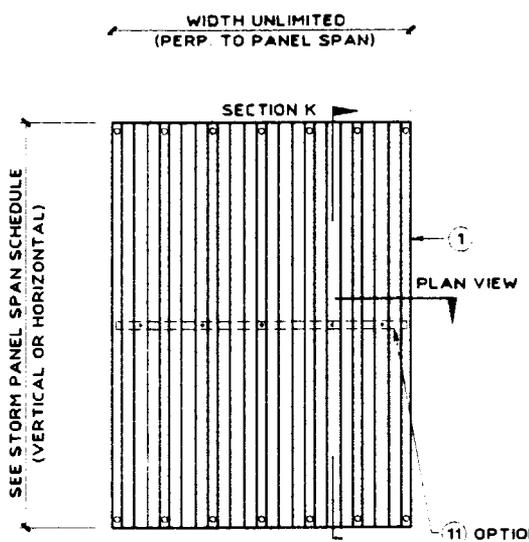
5 **ANGLE**  
SCALE: 1/4" = 0'-1"

- TOP MOUNT
- 2 3 4a
- 6 7 7a

1  
PLAN VIEW

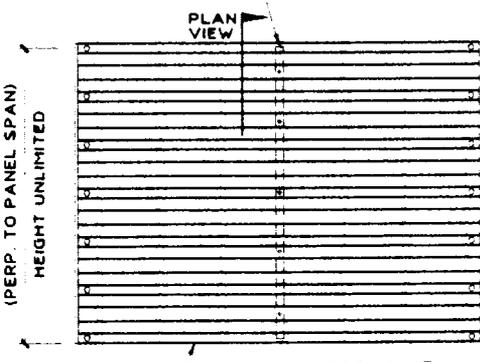
11 OPTIONAL STEEL BAR ON OUTSIDE OF PANELS - SEE NOTE 7

- BOTTOM MOUNT
- 4a 6 7 7a



SEE STORM PANEL SPAN SCHEDULE FOR MAX. PANEL SPANS (VERTICAL OR HORIZONTAL)

11 OPTIONAL STEEL BAR ON OUTSIDE OF PANELS SEE NOTE 7



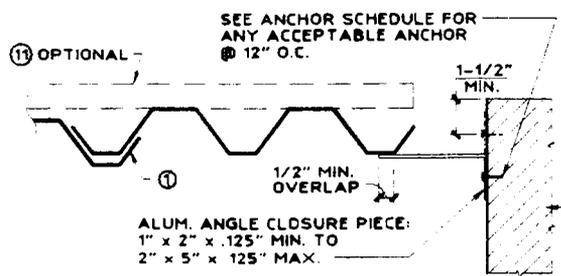
SIDE MOUNT  
4a 6 7 7a OR  
DIRECT MOUNT (TYP.)

**DIRECT MOUNT ELEVATION**

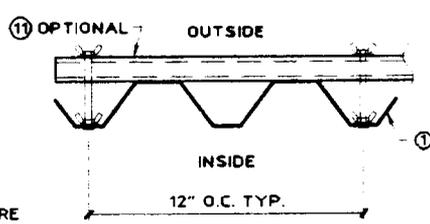
FOR ALL INSTALLATIONS SEE TABLE 2, PAGE 4 OF 6, FOR REQUIRED MIN. PANEL SEPARATION FROM GLASS.

**HORIZONTAL MOUNT ELEVATION**

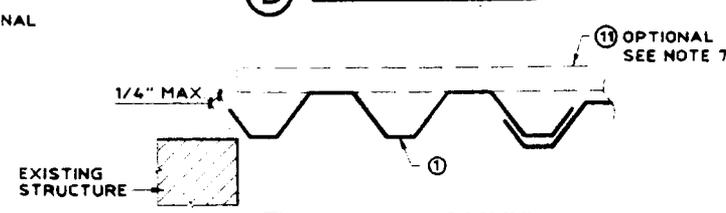
FOR ALL INSTALLATIONS SEE TABLE 2, PAGE 4 OF 6, FOR REQUIRED MIN. PANEL SEPARATION FROM GLASS.



B **TRAP MOUNT**

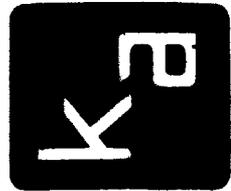


**TYPICAL BAR ATTACHMENT**  
(USE ONLY WHEN IMPROVED DEFLECTION REQUIRED)



D **FACE MOUNT**

CLOSURE DETAILS (PLAN)



**KNEZEVICH & ASSOCIATES, INC.**  
CONSULTING ENGINEERS • PRODUCT TESTING  
641 MOKENA DRIVE • MIAMI SPRINGS, FLORIDA 33166  
MIAMI (305) 883-9571 FT. LAUDERDALE (954) 677-9500  
FAX: (305) 883-9572  
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**20 GA. GALVANIZED STEEL STORM PANEL**  
**MADDEN MANUFACTURING CO.**  
1889 N.W. 22 ST.  
POMPANO BEACH, FL 33069  
(800) 272-2071

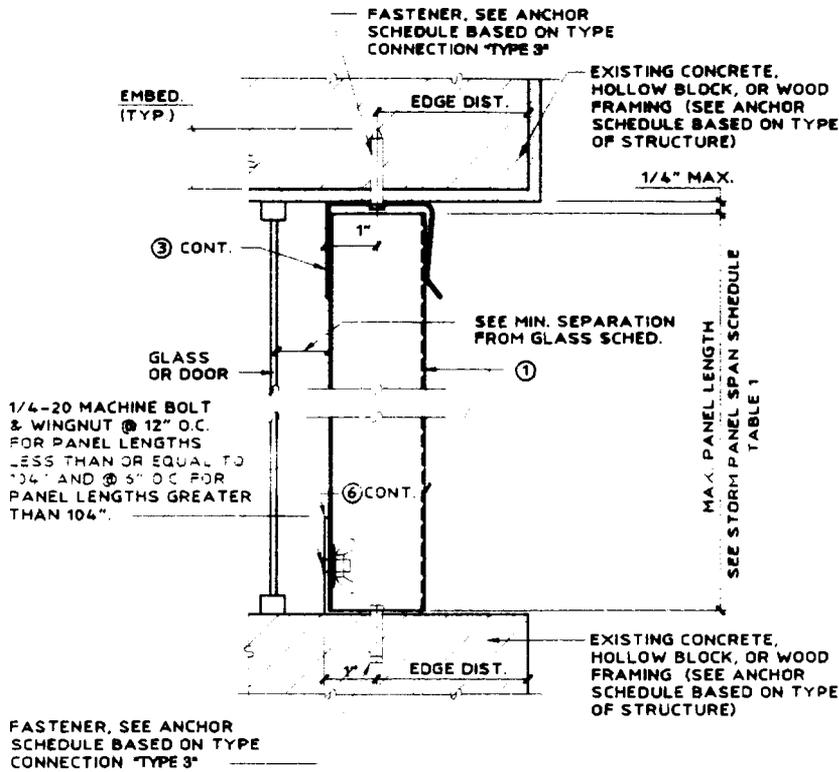
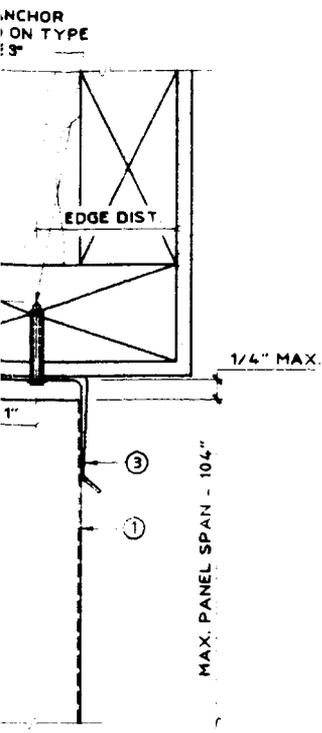
no.	date	description
1	04/24/99/VJK	GENERAL REVISION
2	03/04/97/VJK	GENERAL REVISION
3	06/17/99/VJK	REV. ANCHOR SCHEDULE
4	03/04/99/VJK	COUNTY COMMENTS

V.J. KNEZEVICH  
PROFESSIONAL ENGINEER  
FL License No. PE 0010983

**MAR 10 1999**

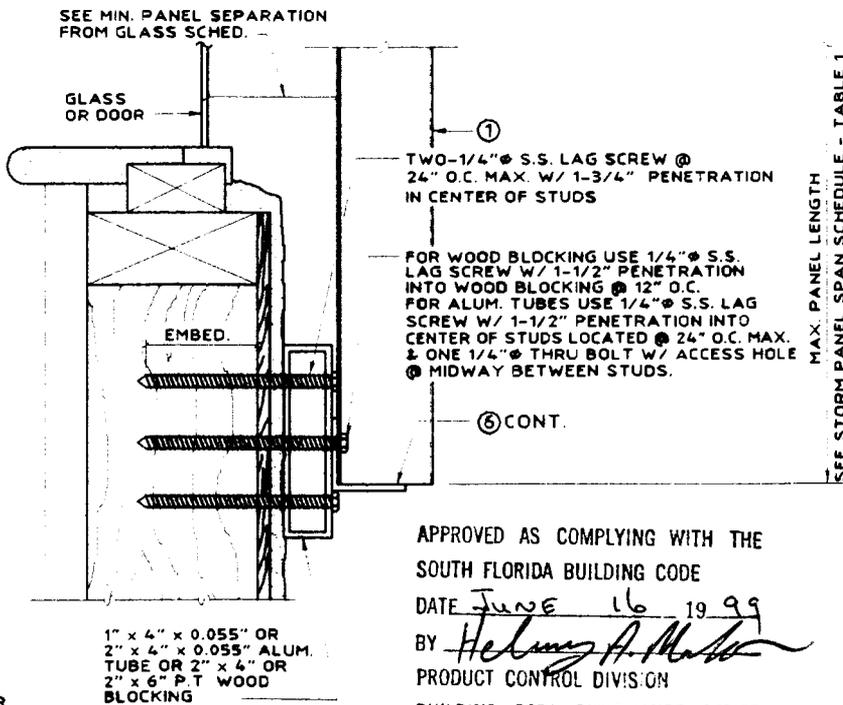
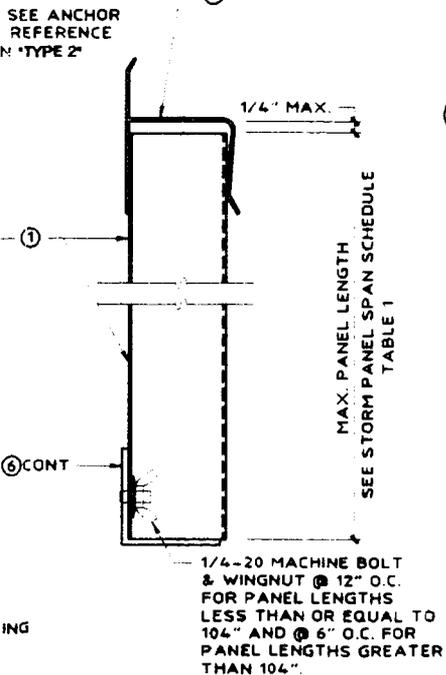
date	04/22/99
scale	AS NOTED
drawn by	H
design by	VJK
checked by	VJK
drawing no.	96-87
sheet	1 of 6

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE  
DATE June 16 1999  
BY Helmut A. Miller  
PRODUCT CONTROL DIVISION  
BUILDING CODE COMPLIANCE OFFICE  
ACCEPTANCE NO. 98-1110-05



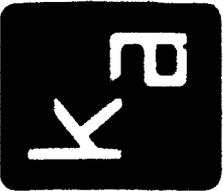
**CEILING/INSIDE MOUNT SECTION**  
 SCALE: 3" = 1'-0"

ING/ INSIDE SECTION



**WALL MOUNT SECTION (BOTTOM)**  
 SCALE: 3" = 1'-0"

SECTION



**KNEZEVICH & ASSOCIATES, INC.**  
 CONSULTING ENGINEERS • PRODUCT TESTING  
 641 MOKENA DRIVE MIAMI SPRINGS, FLORIDA 33166  
 MIAMI (305) 883-9571 FT. LAUDERDALE (954) 677-9500  
 FA X (305) 883-9572  
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**20 GA. GALVANIZED STEEL STORM PANEL**  
**MADDEN MANUFACTURING CO.**  
 1889 N.W. 22 ST.  
 POMPANO BEACH, FL 33069  
 (800) 272-2071

no	date	description
1	04/22/96	GENERAL REVISION
2	03/01/97	GENERAL REVISION
3	06/17/99	REV. ANCHOR SCHEDULE
4	03/06/99	COUNTY COMMENTS

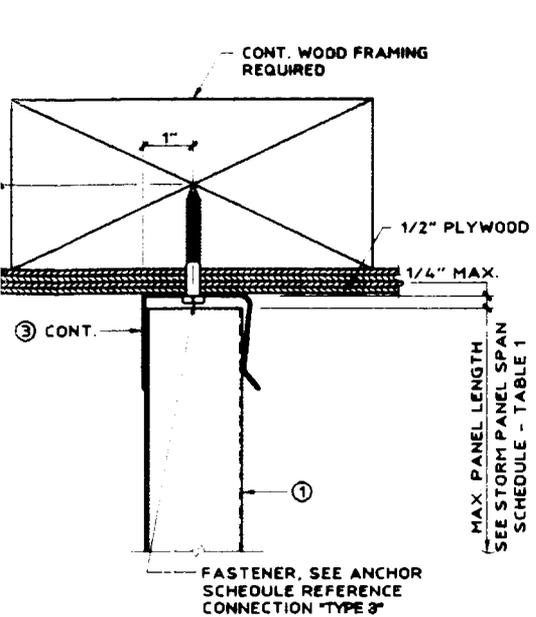
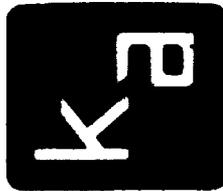
**V.J. KNEZEVICH**  
 PROFESSIONAL ENGINEER  
 FL License No: PE 0110983

**MAR 1 1999**

date	04/22/96
scale	AS NOTED
design by	VJK
checked by	VJK
drawing no.	96-87
sheet	2 of 6

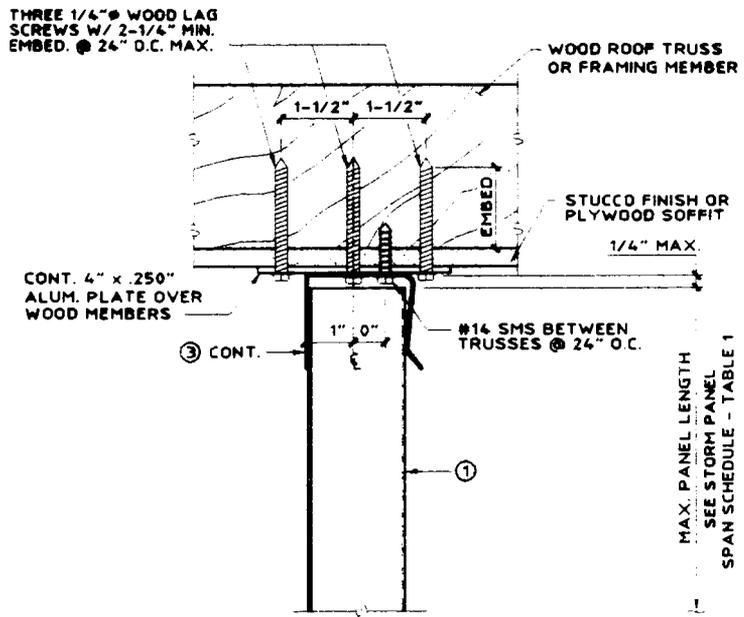
APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE  
 DATE JUNE 16 19 99  
 BY Helmut A. Mader  
 PRODUCT CONTROL DIVISION  
 BUILDING CODE COMPLIANCE OFFICE  
 ACCEPTANCE NO. 98-1110-05

J



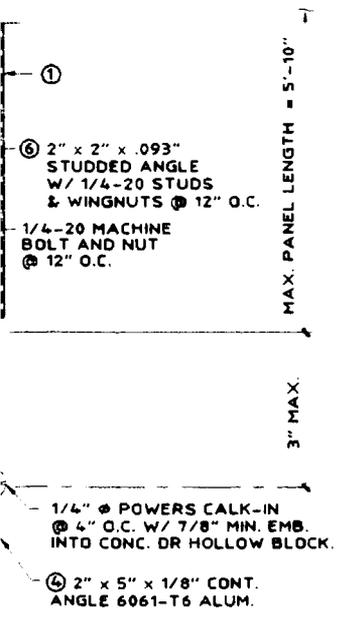
SOFFIT CONNECTION DETAIL

SCALE: 3" = 1'-0"



SOFFIT CONNECTION DETAIL

SCALE: 3" = 1'-0"

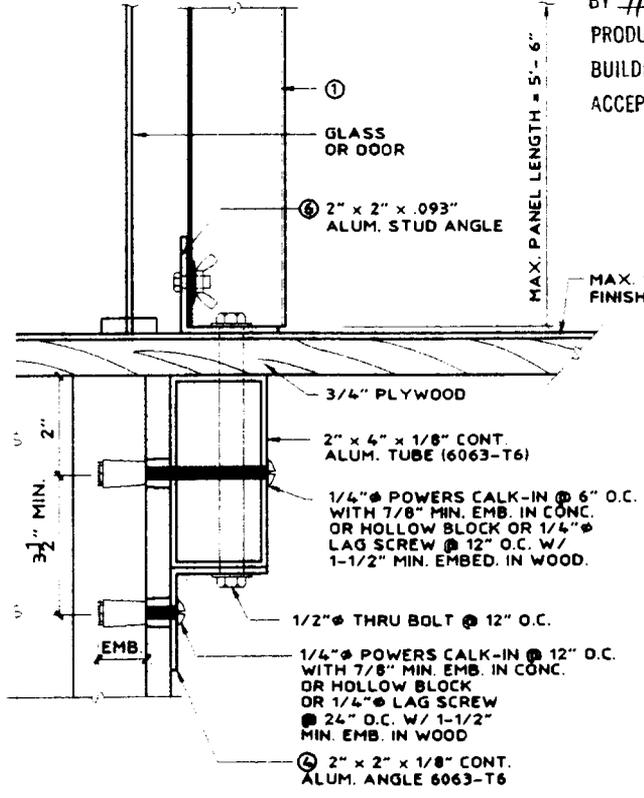


TAIL MAY BE USED AT BOTTOM OF PANEL.

LOAD ± 72 PSF

JOINT DETAIL

SCALE: 3" = 1'-0"



(MAX. DESIGN LOAD ± 72 PSF)

"PASS THRU" DETAIL

SCALE: 3" = 1'-0"

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE DATE June 16, 1999 BY Helmut A. Mader PRODUCT CONTROL DIVISION BUILDING CODE COMPLIANCE OFFICE ACCEPTANCE NO. 98-1110.05

**KNEZEVICH & ASSOCIATES, INC.**  
 CONSULTING ENGINEERS - PRODUCT TESTING  
 641 MOKENA DRIVE-MIAMI SPRINGS, FLORIDA 33166  
 MIAMI (305) 883-9571 FT. LAUDERDALE (954) 677-9500  
 FAX: (305) 883-9572  
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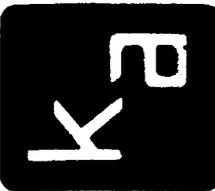
**20 GA. GALVANIZED STEEL STORM PANEL**  
**MADDEN MANUFACTURING CO.**  
 1889 N.W. 22 ST.  
 POMPANO BEACH, FL 33080  
 (800) 272-2071

no.	date	description
1	04/24/96/VJK	GENERAL REVISION
2	03/02/99/VJK	GENERAL REVISION
3	04/17/99/VJK	REV. ANCHOR SCHEDULE
4	03/04/99/VJK	COUNTY COMMENTS

**V.J. KNEZEVICH**  
 PROFESSIONAL ENGINEER  
 License No: PE 0010983

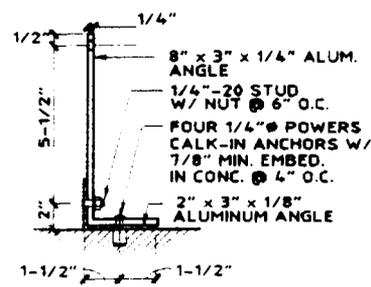
**MAR 10 1999**

date	04/22/96
scale	AS NOTED
design by	VJK
checked by	VJK
drawing no.	96-87
sheet	3 of 6



**MIN. STORM PANEL SEPARATION FROM GLASS SCHEDULE**

TABLE 2 POSITIVE DESIGN LOAD(W) (PSF)	ACTUAL SHUTTER SPAN (FT - IN)	MINIMUM SEPARATION FOR INSTALLATIONS 30' OR LESS ABOVE GRADE (INCHES)		MINIMUM SEPARATION FOR INSTALLATIONS GREATER THAN 30' ABOVE GRADE (INCHES)
		BAR	NO BAR	NO BAR
30.0	3 - 0	2-1/4	2-3/4	1-1/8
	4 - 0	2-1/4	2-3/4	1-1/8
	5 - 0	2-1/4	2-3/4	1-1/2
	7 - 0	2-1/4	2-3/4	1-1/4
	8 - 8	2-1/4	2-3/4	1-5/8
	12 - 0	3-1/4	3-1/4	2-3/8
40.0	3 - 0	2-1/4	2-3/4	1-1/8
	4 - 0	2-1/4	2-3/4	1-1/8
	5 - 0	2-1/4	2-3/4	1-1/8
	7 - 0	2-1/4	2-3/4	1-1/4
	8 - 8	2-1/4	2-3/4	1-1/2
	10 - 8	3-1/4	3-1/4	1-1/4
50.0	3 - 0	2-1/4	2-3/4	1-1/8
	4 - 0	2-1/4	2-3/4	1-1/8
	5 - 0	2-1/4	2-3/4	1-1/4
	7 - 0	2-1/4	2-3/4	1-3/8
	8 - 8	2-1/4	2-3/4	1-3/4
	9 - 7	3-1/4	3-1/4	2
60.0	3 - 0	2-1/4	2-3/4	1-1/8
	4 - 0	2-1/4	2-3/4	1-1/8
	5 - 0	2-1/4	2-3/4	1-1/8
	7 - 0	2-1/4	2-3/4	1-3/8
	8 - 8	2-1/4	2-3/4	1-7/8
	8 - 9	3-1/4	3-1/4	1-7/8
70.0	3 - 0	2-1/4	2-3/4	1-1/8
	4 - 0	2-1/4	2-3/4	1-1/8
	5 - 0	2-1/4	2-3/4	1-1/4
	6 - 0	2-1/4	2-3/4	1-1/4
	7 - 0	2-1/4	2-3/4	1-3/8
	7 - 10	2-1/4	2-3/4	1-3/4



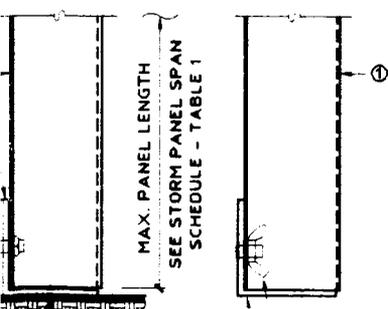
**INTERIOR FASTENING ANGLE ASSEMBLY**

SCALE: N.T.S.  
 CONCRETE, BRICK OR WOOD ANCHOR ON TYPE  
 CALK-IN @ 4" O.C. NEEDED IN CONC. CHECK



**NOTES:**

- ENTER TABLE 2 WITH POSITIVE DESIGN LOAD TO DETERMINE MIN. SEPARATION FROM GLASS.



- 1/4-20 MACHINE BOLT & WINGNUT @ 12" O.C. OR @ 6" O.C FOR PANEL LENGTHS GREATER THAN 104". (TYP. TOP & BOTTOM)
- 2" x 2" x .093" STUD ANGLE

USED AT PANEL BUILD-OUT

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE  
 DATE June 16 1999  
 BY Helmut A. Maden  
 PRODUCT CONTROL DIVISION  
 BUILDING CODE COMPLIANCE OFFICE  
 ACCEPTANCE NO. 98-1110.05

**KNEZEVICH & ASSOCIATES, INC.**  
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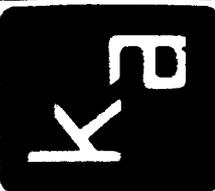
**20 GA. GALVANIZED STEEL STORM PANEL**  
**MADDEN MANUFACTURING CO.**  
 1889 N.W. 22 ST.  
 POMPANO BEACH, FL 33088  
 (800) 272-2071

revisions	no	date	description
	1	04/24/99/VJK	GENERAL REVISION
	2	03/02/99/VJK	GENERAL REVISION
	3	06/17/99/VJK	REV. ANCHOR SCHEDULE
	4	03/02/99/VJK	COUNTY COMMENTS

**V.J. KNEZEVICH**  
 PROFESSIONAL ENGINEER  
 License No. PE 0009883

**MAR 10 1999**  
 date 04/22/99

scale AS NOTED  
 design by VJK checked by VJK  
 drawing no. 96-87



SPAN	SPANS UP TO 12' - 0" (SEE NOTE 1)				
	1	2	3	4	5
5	12	9	12	12	8
12	12	9	12	12	8
10	12	9	12	12	8
8	12	9	12	12	8
8	12	9	12	12	8
8	12	9	12	12	8
6	12	4	6	12	3
4	12	4	6	12	3
4	12	4	6	12	3
3	12	4	6	12	3
3	12	4	6	12	3
12	12	10	12	12	9
11	12	10	12	12	9
10	12	10	12	12	9
9	12	10	12	12	9
9	12	10	12	12	9
6	12	4	8	12	4
5	12	4	8	12	4
4	12	4	8	12	4
4	12	4	8	12	4
4	12	4	8	12	4
10	12	7	11	12	6
8	12	7	11	12	6
7	12	7	11	12	6
6	12	7	11	12	6
6	12	7	11	12	6
5	10	3	6	10	3
4	10	3	6	10	3
3	10	3	6	10	3
3	10	3	6	10	3
3	10	3	6	10	3
12	12	12	12	12	12
12	12	12	12	12	12
12	12	12	12	12	12
12	12	12	12	12	12
12	12	12	12	12	12

## ANCHOR SCHEDULE

FASTENER MAXIMUM SPACING (INCHES) REQUIRED FOR VARIOUS DESIGN LOADS AND SPANS

EXISTING STRUCTURE	ANCHOR TYPE	LOAD (W) PSF MAX. (SEE NOTE 1)	MIN. 3/4" EDGE DISTANCE															
			SPANS UP TO 5' - 6" (SEE NOTE 1)					SPANS UP TO 7' - 6" (SEE NOTE 1)					SPANS UP TO 12' - 0" (SEE NOTE 1)					
			CONNECTION TYPE					CONNECTION TYPE					CONNECTION TYPE					
			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
WOOD	 1/4" Ø WOOD LAG W/ 1-3/4" MIN. THREAD PENETRATION SHEAR PARALLEL OR PERPENDICULAR TO WOOD GRAIN	48.0	12	12	11	12	12	12	12	8	12	11	12	8	5	12	7	
		62.0	12	12	9	12	12	12	11	6	12	9	12	8	5	12	7	
		72.0	12	12	7	12	10	12	8	5	12	7	12	8	5	12	7	
		92.0	12	9	6	12	8	12	8	5	12	7	12	8	5	12	7	
	200.0	12	8	5	12	7	12	8	5	12	7	12	8	5	12	7		
	 * 7/16" O.D. BRASS BUSHING W/ 7/8" MIN. PENETRATION & 1/4"-20 MACHINE SCREW	48.0	12	12	12	12	8	12	12	12	5	11	4	11	4	11	3	
		62.0	12	12	12	6	12	5	12	4	12	4	11	4	11	4	11	3
		72.0	12	8	12	5	12	4	12	3	11	4	11	4	11	3	11	3
		92.0	12	4	12	4	11	4	11	3	11	4	11	4	11	3	11	3
	200.0	11	4	11	3	11	4	11	3	11	4	11	3	11	4	11	3	
	 * 1/4" Ø ELCO MALE/FEMALE "PANELMATE" W/ 1-7/8" MIN. PENETRATION & 1/4"-20 SIDEWALK BOLT	48.0	12	12	12	12	12	12	12	12	12	12	12	9	9	12	8	
		62.0	12	12	12	12	12	12	12	11	12	10	12	9	9	12	8	
72.0		12	12	12	12	12	12	9	10	12	8	12	9	9	12	8		
92.0		12	10	10	12	9	12	9	9	12	8	12	9	9	12	8		
200.0	12	9	9	12	8	12	9	9	12	8	12	9	9	12	8			

**ANCHOR NOTES:**

- SPANS AND LOADS SHOWN HERE ARE FOR DETERMINING ANCHOR SPACING ONLY. ALLOWABLE STORM PANEL SPANS FOR SPECIFIC LOADS MUST BE LIMITED TO THOSE SHOWN IN TABLE 1, SHEET 6.
- ENTER ANCHOR SCHEDULE BASED ON THE EXISTING STRUCTURE MATERIAL, ANCHOR TYPE AND EDGE DISTANCE. SELECT DESIGN LOAD GREATER THAN OR EQUAL TO NEGATIVE DESIGN LOAD ON SHUTTER AND SELECT SPAN GREATER THAN OR EQUAL TO SHUTTER SPAN.
- EXISTING STRUCTURE MAY BE CONCRETE, HOLLOW BLOCK OR WOOD FRAMING. REFERENCE ANCHOR SCHEDULE FOR PROPER ANCHOR TYPE BASED ON TYPE OF EXISTING STRUCTURE AND APPROPRIATE CONNECTION TYPE. SEE MOUNTING SECTION DETAILS FOR IDENTIFICATION OF CONNECTION TYPE.
- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES WALL FINISH OR STUCCO.
- WHERE EXISTING STRUCTURE IS WOOD FRAMING, WOOD FRAMING CONDITIONS VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT PLYWOOD.
- WHERE LAG SCREWS FASTEN TO NARROW FACE OF STUD FRAMING, FASTENER SHALL BE LOCATED IN CENTER OF NOMINAL 2" x 4" (MIN.) WOOD STUD. 3/4" EDGE DISTANCE IS ACCEPTABLE FOR WOOD FRAMING. WOOD STUD SHALL BE "SOUTHERN PINE" G=0.55 OR GREATER DENSITY. LAG SCREWS SHALL HAVE PHILLIPS PAN HEAD OR HEX HEAD.
- MACHINE SCREWS SHALL HAVE MINIMUM OF 1/2" ENGAGEMENT OF THREADS IN BASE ANCHOR AND MAY HAVE EITHER A PAN HEAD, TRUSS HEAD, OR WAFER HEAD (SIDEWALK BOLT), U.O.N.
-  DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE USES.
- \*10. DESIGNATES ANCHORS WHICH ARE REMOVABLE BY REMOVING MACHINE SCREW, NUT OR WASHERED WINGNUT. REMOVABLE ANCHORS ARE REQUIRED FOR DIRECT MOUNT @ 6" O.C. OR 12" O.C. MAX. SPACING ONLY. SPACINGS SHALL NOT EXCEED VALUE SPECIFIED IN ANCHOR SCHEDULE. LOCATE FASTENER IN NARROW PORTION OF KEYHOLE SLOT OR KEYHOLE WASHER.
- 1/4"-20 TRUSS HEAD BOLTS MAY BE USED IN LIEU OF 1/4"-20 SIDEWALK BOLT IF  KEYHOLE WASHERS ARE USED.

**KNEZEVICH & ASSOCIATES, INC.**  
 CONSULTING ENGINEERS - PRODUCT TESTING  
 641 MOKENA DRIVE-MIAMI SPRINGS, FLORIDA 33166  
 MIAMI (305) 883-9571 FT. LAUDERDALE (954) 677-9500  
 FAX: (305) 883-9572  
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**0.063" ALUMINUM STORM PANEL**  
**MADDEN MANUFACTURING CO.**  
 1899 N.W. 22 ST.  
 POMPANO BEACH, FL 33068  
 (800) 272-2071

no.	date	description
1	02/04/99 VJK	GENERAL REVISION
2	06/17/99 VJK	REV. ANCHOR SCHEDULE
3	03/04/99 VJK	COUNTY COMMENTS

**V.J. KNEZEVICH**  
 PROFESSIONAL ENGINEER  
 FL License No: PE 0010983

**MAR 10 1999**  
 date 04/22/96

AS NOTED drawn by MC  
 design by VJK checked by VJK

drawing no. **96-88**  
 sheet 5 of 6

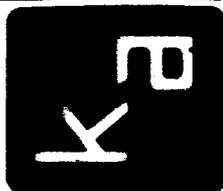
DISTANCE					
0	SPANS UP TO 12' - 0" (SEE NOTE 1)				
	CONNECTION TYPE				
5	1	2	3	4	5
4	8	3	5	8	
3	8	3	5	8	
	8	3	5	8	
	8	3	5	8	
	8	3	5	8	
6	12	4	6	12	3
4	12	4	6	12	3
4	12	4	6	12	3
3	12	4	6	12	3
3	12	4	6	12	3
6	12	4	7	12	4
4	12	4	7	12	4
4	12	4	7	12	4
4	12	4	7	12	4
4	12	4	7	12	4
4	8		5	8	
3	8		5	8	
	8		5	8	
	8		5	8	
	8		5	8	
4	8		5	8	
3	8		5	8	
	8		5	8	
	8		5	8	
	8		5	8	
5	10	3	6	10	3
4	10	3	6	10	3
3	10	3	6	10	3
3	10	3	6	10	3
3	10	3	6	10	3

TABLE 1	STORM PANEL SPAN	
	STORM PANEL SCHEDULE	
	NEGATIVE DESIGN LOAD W (PSF)	FOR ALL MOUNTING CONDITIONS L MAX. (FT-IN)
30.0	12 - 0	
35.0	11 - 5	
40.0	10 - 9	
45.0	10 - 1	
48.0	9 - 9	
50.0	9 - 7	
55.0	9 - 2	
60.0	8 - 9	
62.0	8 - 7	
65.0	8 - 5	
70.0	7 - 10	
72.0	7 - 7	
75.0	7 - 3	
80.0	6 - 10	
90.0	6 - 1	
100.0	5 - 6	
110.0	5 - 0	
120.0	4 - 7	
130.0	4 - 2	
140.0	3 - 11	
150.0	3 - 8	
160.0	3 - 5	
170.0	3 - 2	
180.0	3 - 0	
190.0	2 - 10	
200.0	2 - 9	

**NOTES:**

1. ENTER TABLE 1 WITH NEGATIVE DESIGN LOAD TO DETERMINE MAX. PANEL SPAN. POSITIVE LOADS LESS THAN OR EQUAL TO THE NEGATIVE LOAD ARE ACCEPTABLE.
2. FOR DESIGN LOADS BETWEEN TABULATED VALUES, USE NEXT HIGHER LOAD OR LINEAR INTERPOLATION MAY BE USED TO DETERMINE ALLOWABLE SPANS.

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE  
 DATE June 16 1999  
 BY Helmut A. Mader  
 PRODUCT CONTROL DIVISION  
 BUILDING CODE COMPLIANCE OFFICE  
 ACCEPTANCE NO. 98-1110.05



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**20 GA. GALVANIZED STEEL STORM PANEL**  
**MADDEN MANUFACTURING CO.**  
 1888 N.W. 22 ST.  
 POMPANO BEACH, FL 33068  
 (800) 272-2071

no	date	by	description
1	04/24/99	VJK	GENERAL REVISION
2	03/04/99	VJK	GENERAL REVISION
3	06/17/98	VJK	REV. ANCHOR SCHEDULE
4	03/04/99	VJK	COUNTY COMMENTS

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**MAR 10 1999**

date 04/22/99  
 scale AS NOTED drawn by H  
 design by VJK checked by VJK  
 drawing no. 96-87  
 sheet 6 of 6