



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

Folding Shutter Corporation
7089 Hemstreet Place
West Palm Beach ,FL 33413

Your application for Notice of Acceptance (NOA) of:

"Impact" Aluminum Colonial 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.: 01-0209.09
EXPIRES: 10/25/2006

**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: 10/25/2001

Folding Shutter Corporation

ACCEPTANCE No. : 01-0209.09

APPROVED : 10/25/2001

EXPIRES : 10/25/2006

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

This approves an Extruded Aluminum Hinged Bi-Fold Colonial 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 Extruded Aluminum Hinged Bi-Fold Colonial Shutter and its components shall be constructed in strict compliance with the following documents: Drawing No. 1017, titled "Impact Colonial Shutter (Dade)", prepared by W. W. Schaefer Engineering & Consulting, P.A., dated November 22, 2000, signed and sealed by Warren W. Schaefer, P.E. on September 24, 2001, sheets 1 through 7 of 7, 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, must be protected against corrosion, contamination and damage at all times.

4. INSTALLATION

This Extruded Aluminum Hinged Bi-Fold Colonial 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".

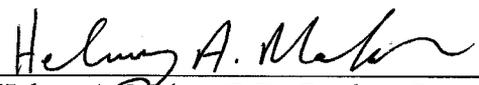
6. BUILDING PERMIT REQUIREMENTS

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

Folding Shutter Corporation

ACCEPTANCE No. : 01-0209.09

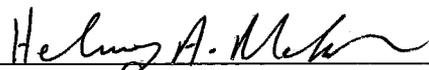
APPROVED : 10/25/2001

EXPIRES : 10/25/2006

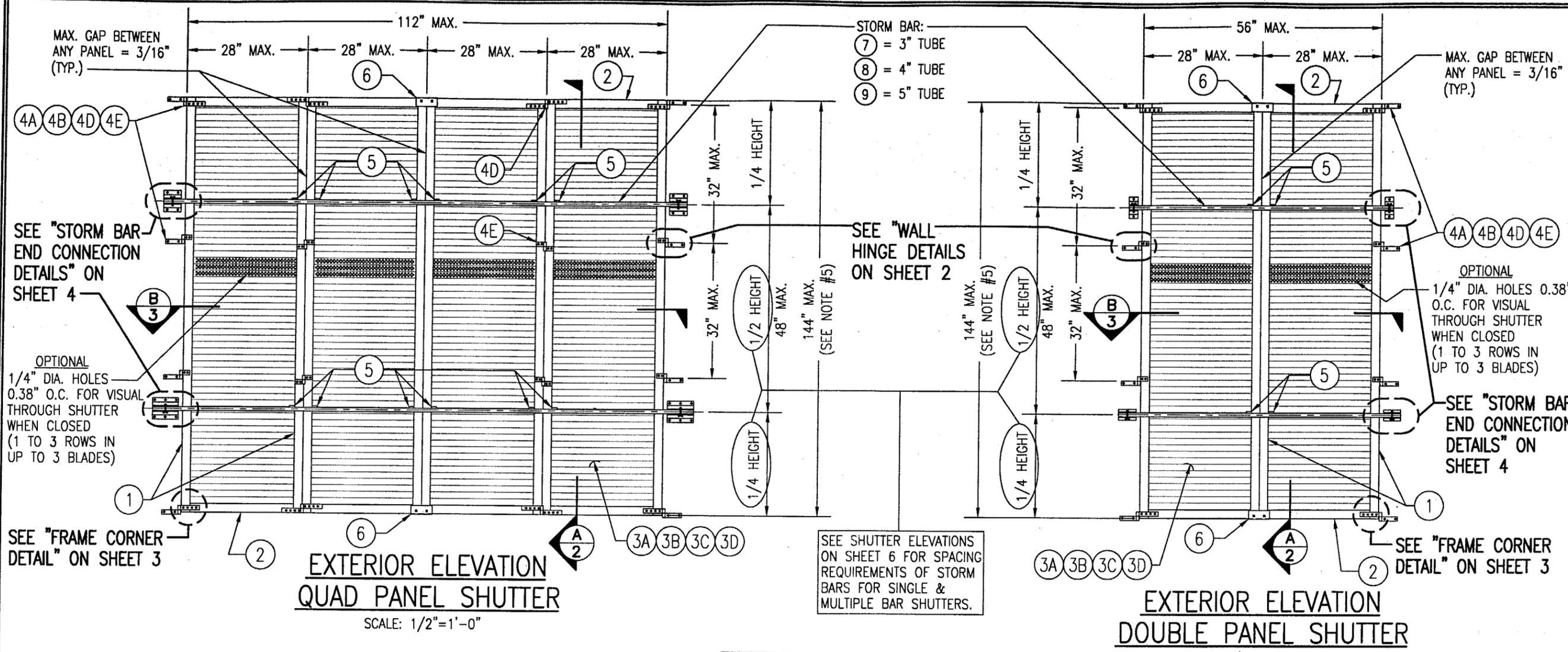
NOTICE OF ACCEPTANCE: STANDARD CONDITIONS

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



**EXTERIOR ELEVATION
QUAD PANEL SHUTTER**

SCALE: 1/2"=1'-0"

**EXTERIOR ELEVATION
DOUBLE PANEL SHUTTER**

SCALE: 1/2"=1'-0"

NOTE: SINGLE & THREE PANEL SHUTTERS ARE ALSO PART OF THIS APPROVAL. SINGLE PANEL SHUTTERS WILL COMPLY WITH THE DOUBLE PANEL SHUTTER REQUIREMENTS & THE THREE PANEL SHUTTERS WILL COMPLY WITH THE QUAD PANEL SHUTTER REQUIREMENTS.

MAX. ALLOWABLE DESIGN WIND LOADS

POSITIVE	NEGATIVE
80 PSF	80 PSF

SEE SHUTTER ELEVATIONS ON SHEET 6 & STORM BAR LOAD TABLES ON SHEET 7 FOR LOADS AS CONTROLLED BY SHUTTER SPAN & STORM BAR SPACING.

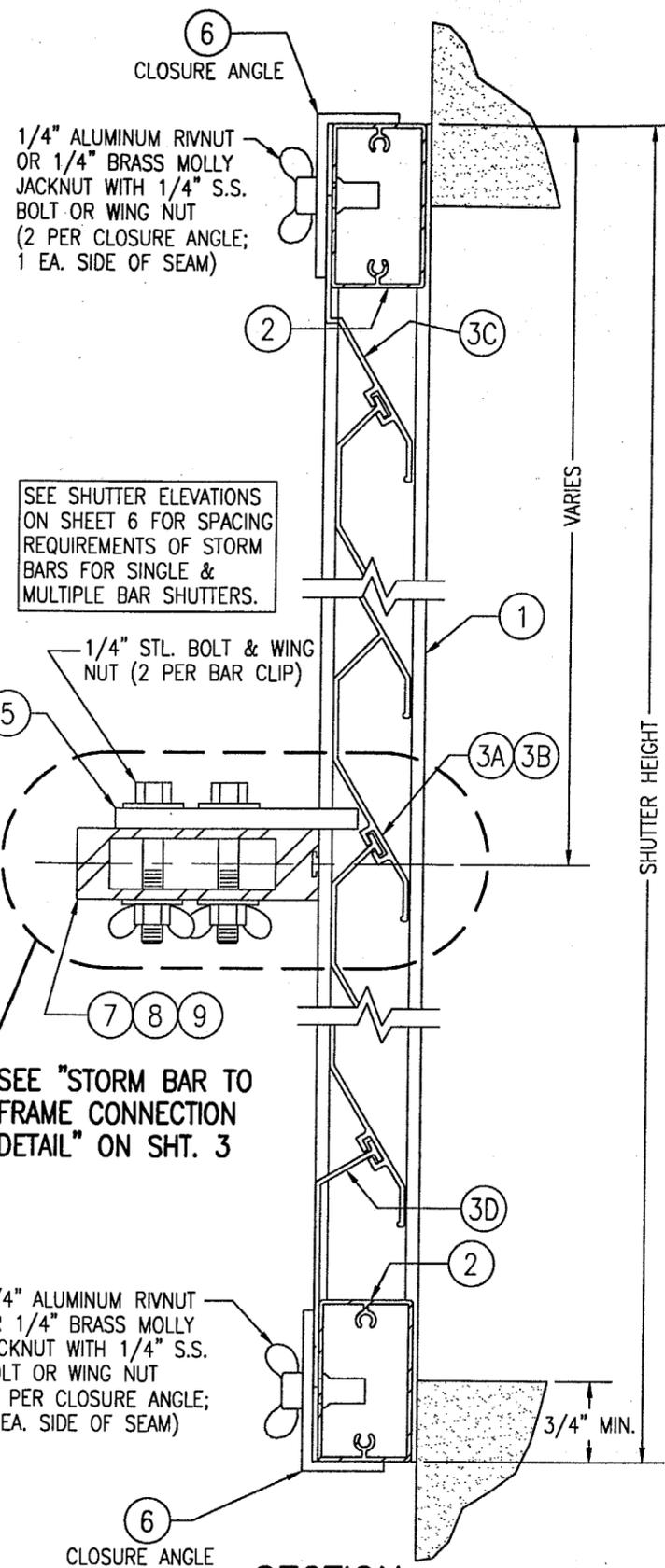
STORM BAR NOTE: THE NUMBER OF STORM BARS REQUIRED WITH EACH SHUTTER TYPICALLY VARIES FROM 1 TO 4 & IS DEPENDENT ON SHUTTER SIZE & REQUIRED DESIGN PRESSURE. SEE ELEVATION SKETCHES & LOAD TABLES ON SHEETS 6 & 7 FOR STORM BAR REQUIREMENTS.

GENERAL NOTES:

1. ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T5 ALLOY UNLESS SHOWN OTHERWISE ON THESE DRAWINGS.
2. IT SHALL BE THE RESPONSIBILITY OF THE PERMIT HOLDER TO VERIFY THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE TO SUPPORT THE LOADS SUPERIMPOSED BY THE SHUTTERS.
3. THESE SHUTTER SYSTEMS ARE DESIGNED TO WITHSTAND WIND PRESSURES, IN THE OPEN POSITION, RESULTING FROM WIND SPEEDS UP TO 110 MPH IN ACCORDANCE WITH THE SOUTH FLORIDA BUILDING CODE 1994 EDITION. SEE WALL CLIP DETAILS FOR EACH 75 MPH & 110 MPH WIND SPEED CONDITIONS (THE SHUTTER MUST BE CLOSED WHEN WIND SPEEDS ARE IN EXCESS OF 75 MPH). WHEN CLOSED, THE OWNER SHALL BE RESPONSIBLE FOR SECURING THE SHUTTER AS REQ'D.
4. THESE SHUTTER SYSTEMS HAVE BEEN DESIGNED & TESTED IN ACCORDANCE WITH THE SOUTH FLORIDA BUILDING CODE 1994 EDITION AND DADE COUNTY PROTOCOLS PA-201, 202 & 203.
5. SHUTTER WIDTH SHALL BE RESTRICTED BY THE MAXIMUM DIMENSIONS SHOWN. SHUTTER HEIGHT MAY EXCEED 96" (UP TO 144" MAX.) PROVIDING THE REQUIRED NUMBER & SPACING OF STORM BARS ARE USED.
6. EACH SHUTTER SHALL HAVE A LEGIBLE & READILY VISIBLE MARKING INSTRUCTING THE OWNER/TENNANT TO SECURE THE SHUTTER WITH BRACKETS & STORM BARS, PER THESE APPROVED DRAWINGS, DURING PERIODS OF HURRICANE WARNINGS.
7. EACH SHUTTER ASSEMBLY SHALL BE PERMANENTLY LABELED AS FOLLOWS:
FOLDING SHUTTER CORPORATION
WEST PALM BEACH, FLORIDA
MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED
8. ALL CONCRETE SUBSTRATE SHALL BE MIN. 3000 PSI.
9. ALL WOOD SUBSTRATE SHALL HAVE MIN. G = 0.55 DENSITY.
10. SHUTTERS MUST BE PLACED SUCH THAT THE MINIMUM DISTANCE BETWEEN THE SHUTTER AND THE GLASS IT PROTECTS IS 2.625" (2 5/8").

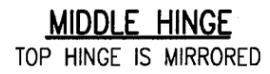
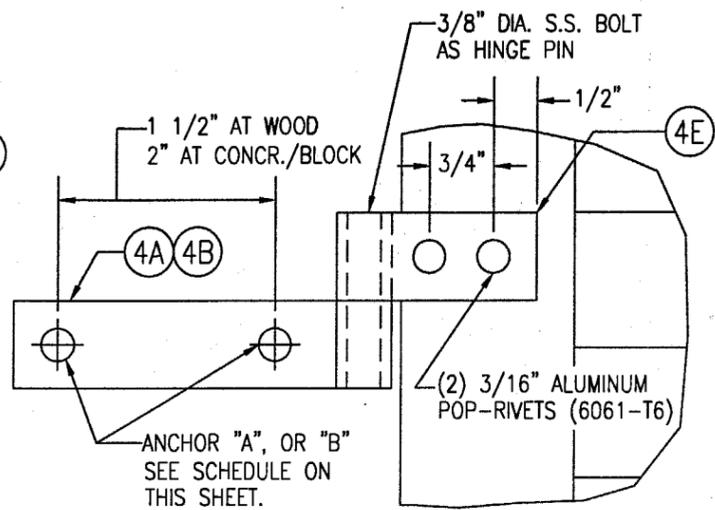
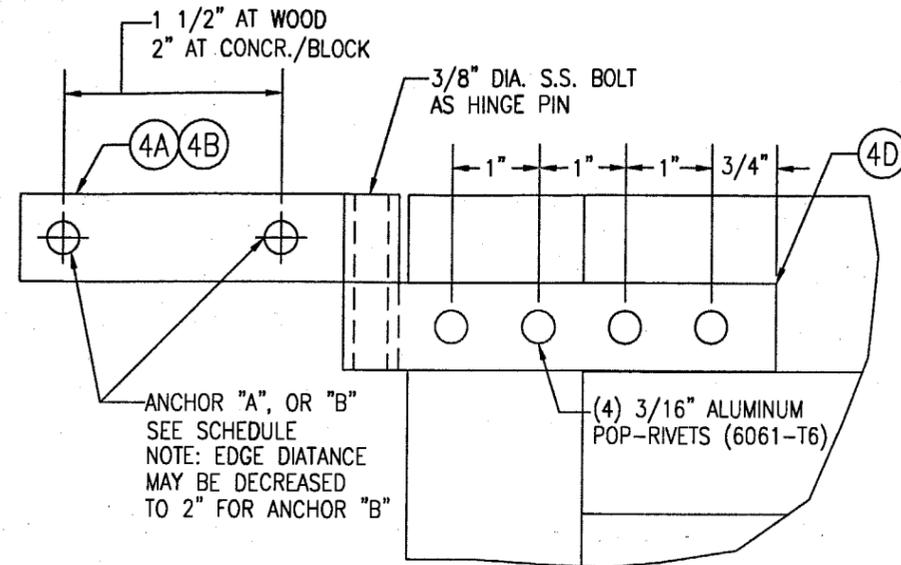
APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE 10/25/2001
BY *Warren W. Schaefer*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0209-09

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1-24	DATE: 11/22/00
DATE	
BY	
REVISION DESCRIPTION	
NO.	
IMPACT COLONIAL SHUTTER (DADE)	
MANUFACTURER FOLDING SHUTTER CORPORATION 7089 HEMSTREET PLACE WEST PALM BEACH, FLORIDA 33413 561-683-4811	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903	
DRAWING TITLE	
CERTIFICATION SEP 24 2001 <i>Warren W. Schaefer</i> WARREN W. SCHAEFER, P.E. P.C. NO. 44135	
DRAWING NO. 1017	REV.
SHEET NO. 1 OF 7	



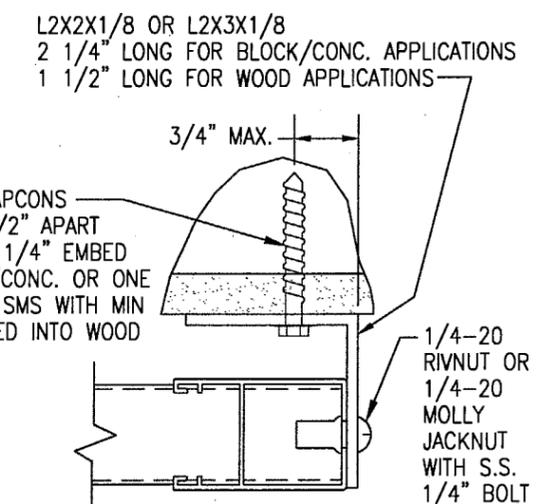
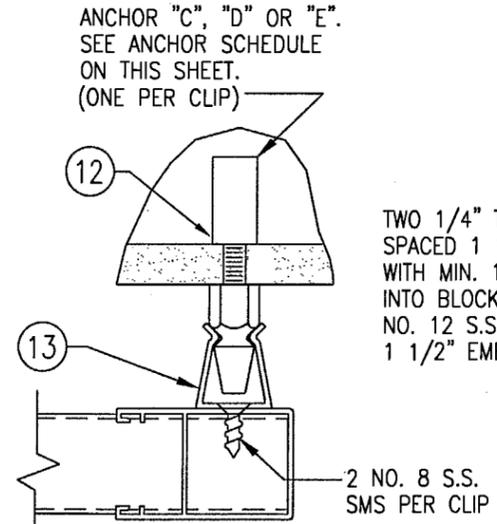
SHUTTER HEIGHT

VARIES



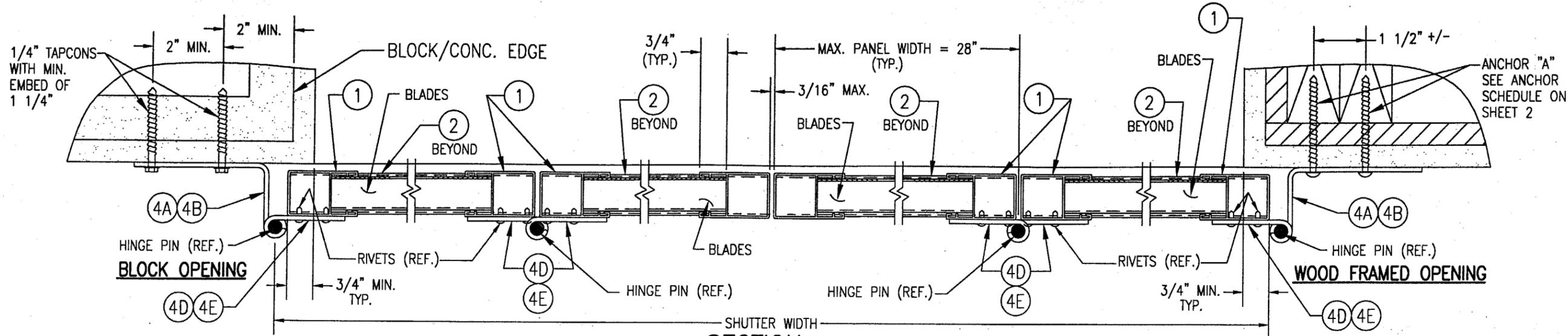
ANCHOR SCHEDULE				
ANCHOR NO.	ANCHOR TYPE	SUBSTRATE	MINIMUM EMBEDMENT	MINIMUM EDGE DIST.
A	NO. 12 S.S. SMS SCREW	WOOD	1 1/2"	3/4"
B	1/4" TAPCON	CONCRETE OR FILLED BLOCK	1 3/4"	3"
C	1/4-20 RAWL CAULK-IN	CONCRETE/BLOCK	7/8"	3"
D	1/4-20 PANELMATE (MALE OR FEMALE)	WOOD	1 7/8"	3/4"
E	1/4-20 PANELMATE (MALE OR FEMALE)	CONCRETE/BLOCK	1 1/4"	3"

NOTE: 1/4" STL. OR S.S. BOLTS SHALL BE USED WITH ANCHORS C, D & E.



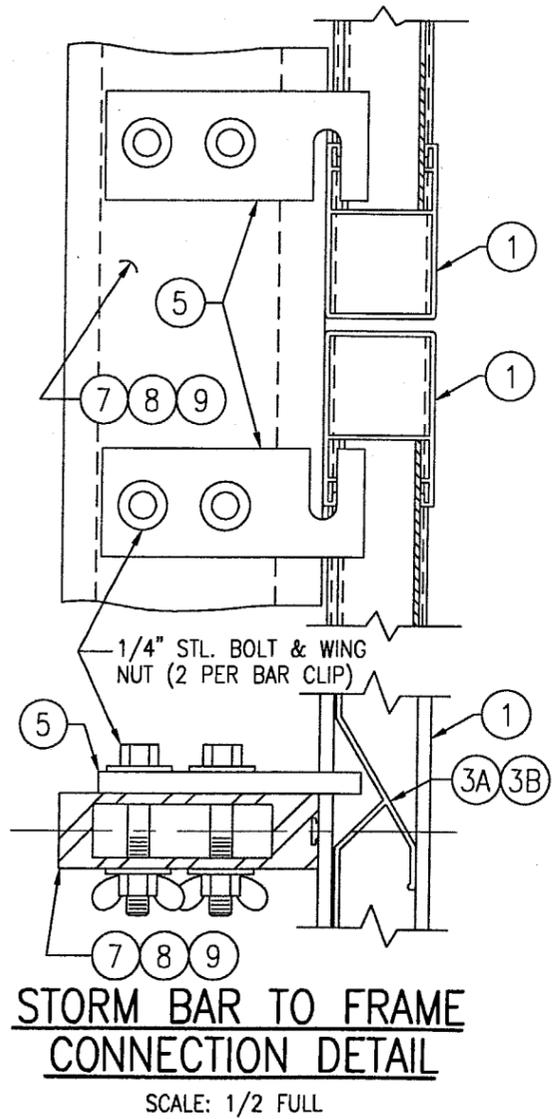
APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE 10/25/2001
BY *Warren W. Schaefer*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0209.09

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.	PLOT: 1=2	DATE: 11/22/00
IMPACT COLONIAL SHUTTER (DADE)			
MANUFACTURER FOLDING SHUTTER CORPORATION 7089 HEMSTREET PLACE WEST PALM BEACH, FLORIDA 33413 561-683-4811			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903			
CERTIFICATION SEP 24 2001 WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1017		REV.	
SHEET NO. 2 OF 7			

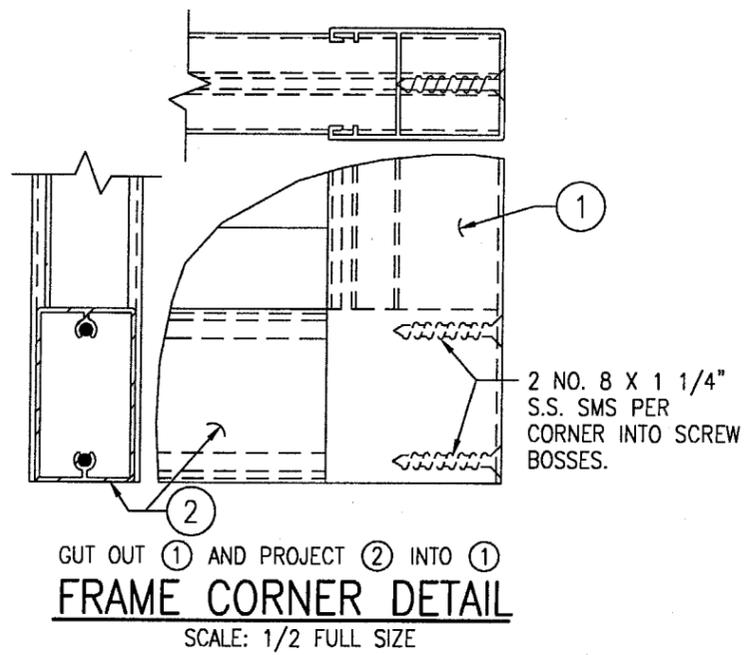


SECTION B
SCALE: 1/3 FULL

STORM BAR NOT SHOWN FOR CLARITY!



STORM BAR TO FRAME CONNECTION DETAIL
SCALE: 1/2 FULL



FRAME CORNER DETAIL
SCALE: 1/2 FULL SIZE

DRAWN BY:	W.W.S.	CHECKED BY:	W.W.S.
PLOT:	1=2	DATE:	11/22/00
NO.		REVISION DESCRIPTION	

DRAWING TITLE: **IMPACT COLONIAL SHUTTER (DADE)**

MANUFACTURER: **FOLDING SHUTTER CORPORATION**
7089 HEMSTREET PLACE
WEST PALM BEACH, FLORIDA 33413
561-683-4811

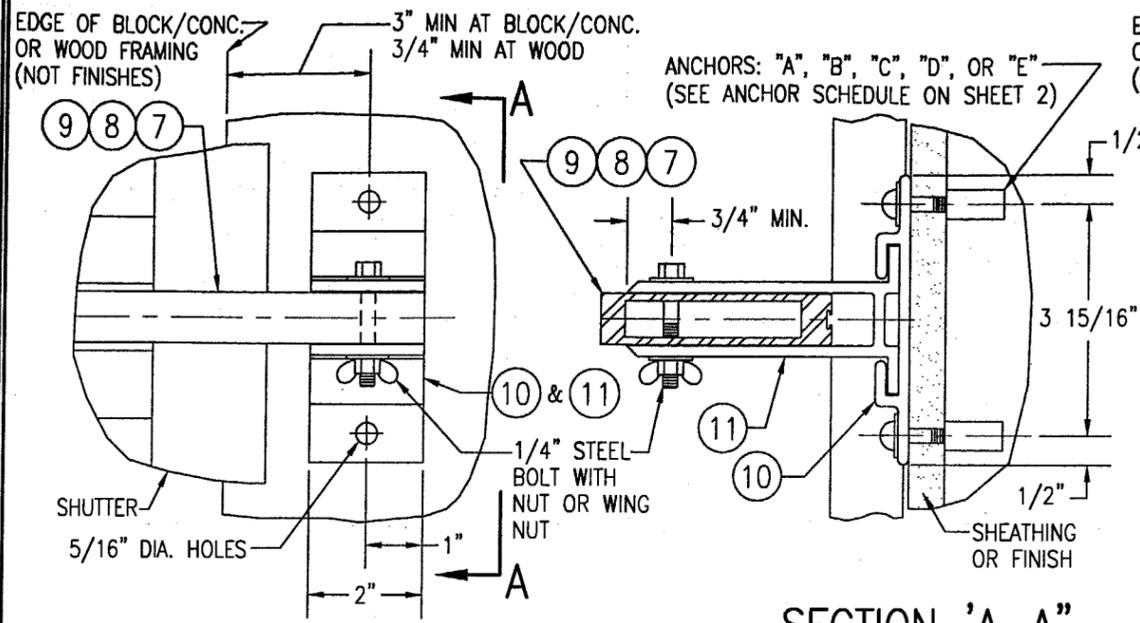
CONSULTANTS: **W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.**
600 SANDTREE DRIVE, SUITE 203B
PALM BEACH GARDENS, FL 33403
PHONE: 561-775-4902 FAX: 561-775-4903

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE 10/25/2001
BY *William A. M...*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-0209-09

CERTIFICATION
SEP 24 2001

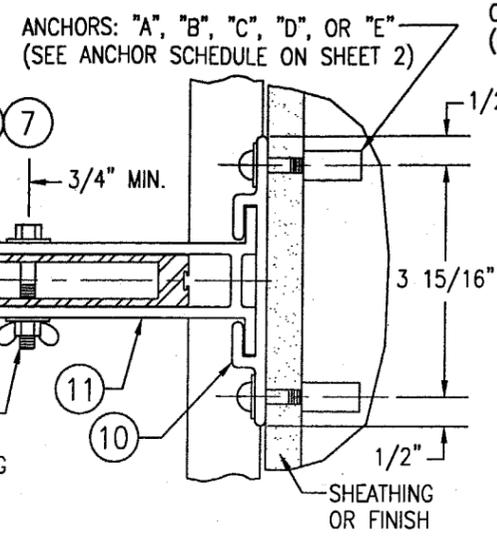
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. 1017
SHEET NO. 3 OF 7



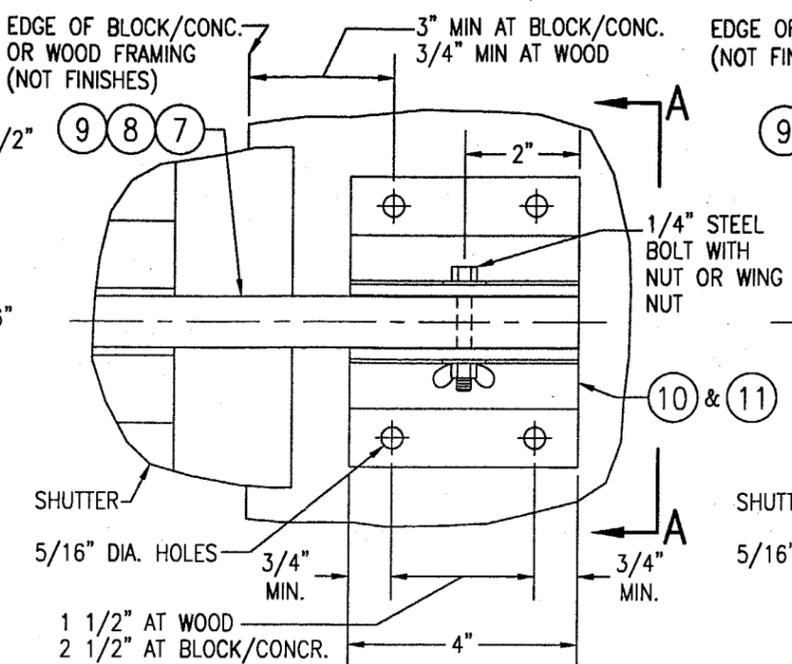
STORM BAR END CONNECTION "A"

SCALE: 1/3 FULL SIZE



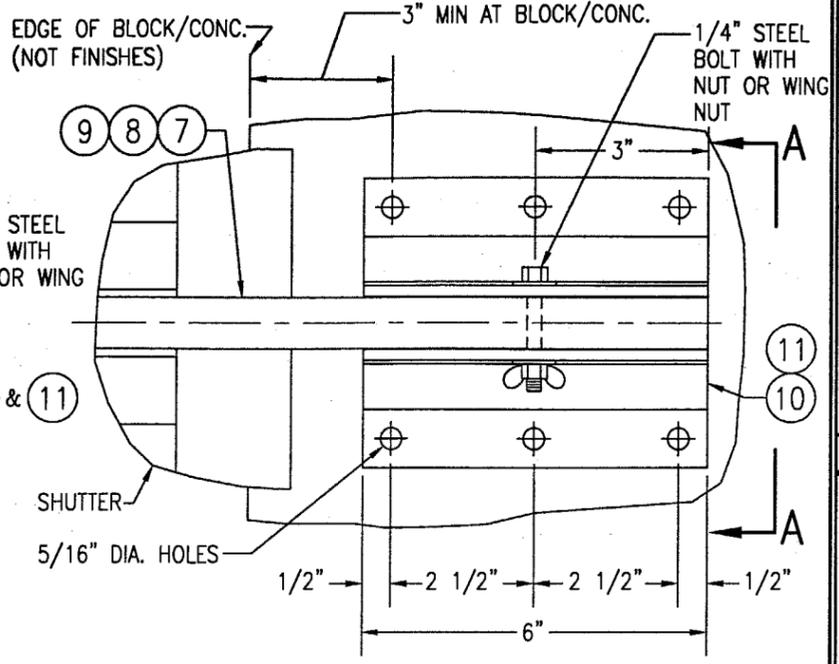
SECTION 'A-A'

SCALE: 1/3 FULL SIZE



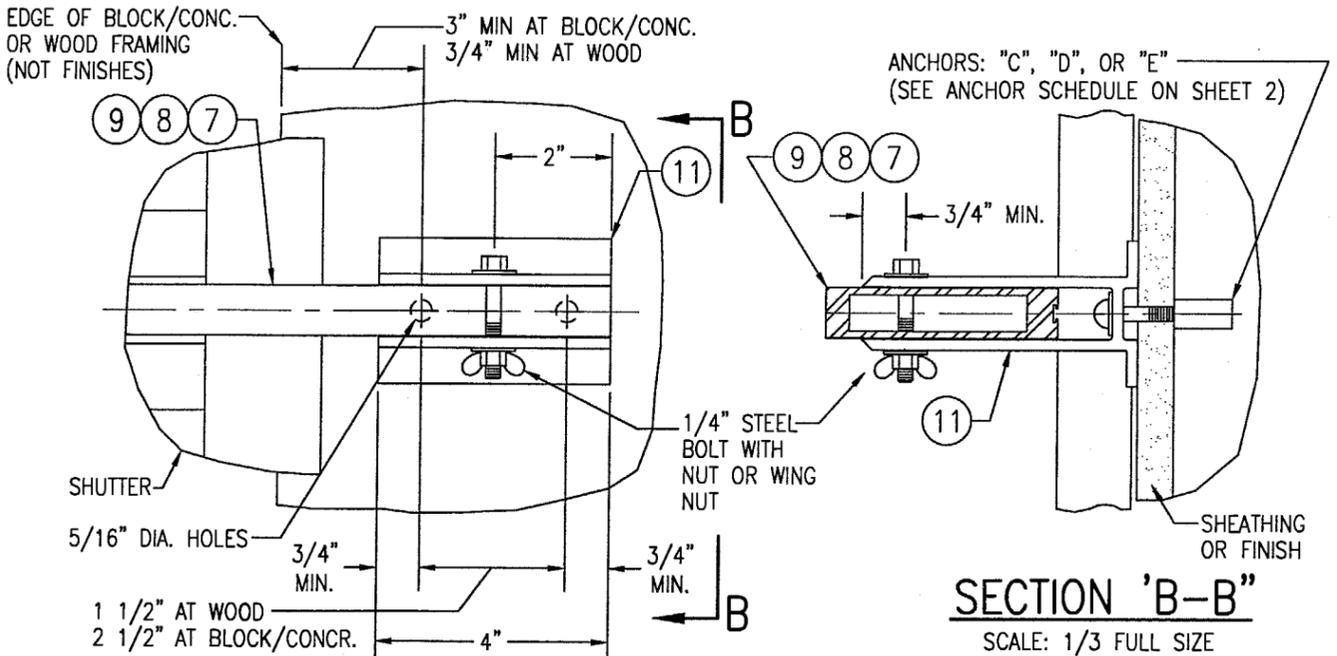
STORM BAR END CONNECTION "C"

SCALE: 1/3 FULL SIZE



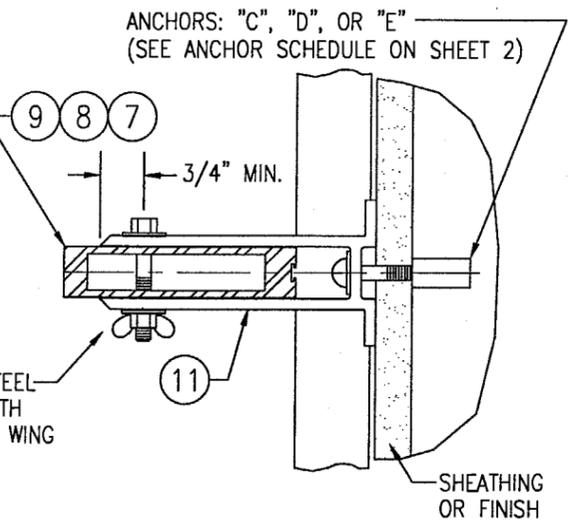
STORM BAR END CONNECTION "D"

SCALE: 1/3 FULL SIZE



STORM BAR END CONNECTION "B"

SCALE: 1/3 FULL SIZE



SECTION 'B-B'

SCALE: 1/3 FULL SIZE

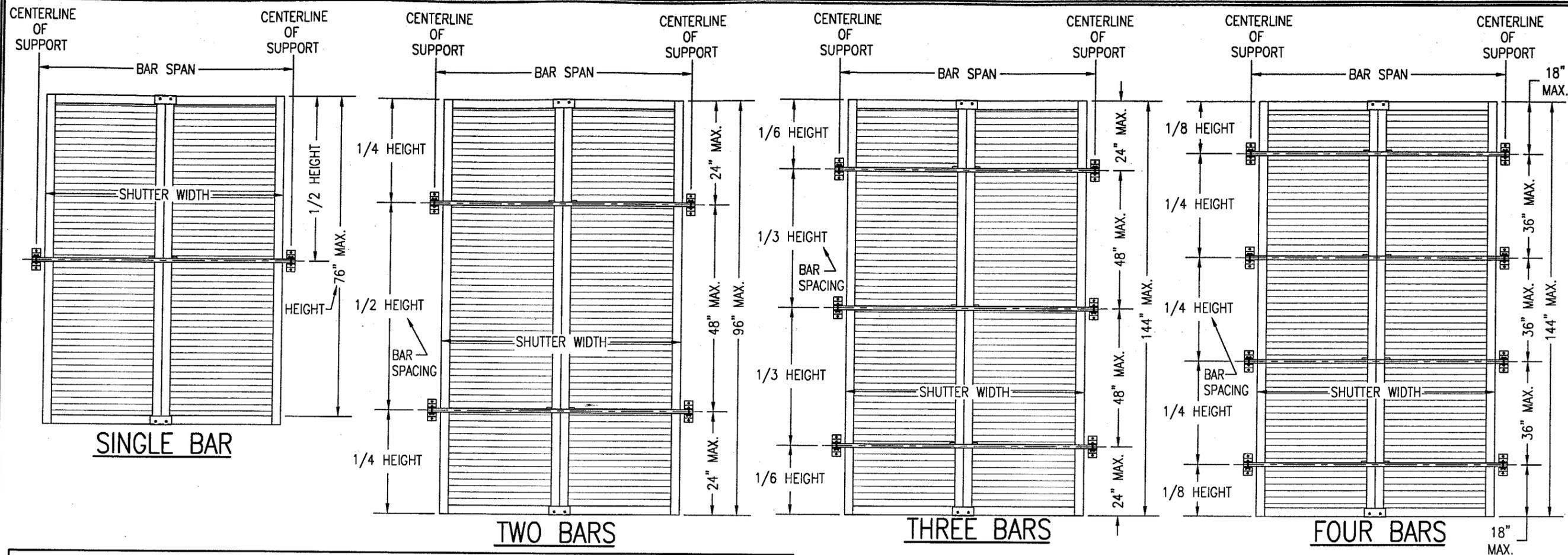
DRAWN BY:	W.W.S.	CHECKED BY:	W.W.S.
PLOT:	1-3	DATE:	11/22/00
NO.		REVISION DESCRIPTION	
BY		DATE	

IMPACT COLONIAL SHUTTER (DADE)
 MANUFACTURER
FOLDING SHUTTER CORPORATION
 7089 HEMSTREET PLACE
 WEST PALM BEACH, FLORIDA 33413
 561-683-4811

CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
 600 SANDTREE DRIVE, SUITE 203B
 PALM BEACH GARDENS, FL 33403
 PHONE: 561-775-4902 FAX: 561-775-4903

CERTIFICATION	SEP 24 2001
DRAWING NO.	1017
REV.	
SHEET NO.	4 OF 7

APPROVED AS COMPLYING WITH THE
 SOUTH FLORIDA BUILDING CODE
 DATE 10/25/2001
 BY *Warren W. Schaefer*
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
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DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1-24	DATE: 11/22/00
NO.	REVISION DESCRIPTION

IMPACT COLONIAL SHUTTER (DADE)
MANUFACTURER
FOLDING SHUTTER CORPORATION
 7089 HEMSTREET PLACE
 WEST PALM BEACH, FLORIDA 33413
 561-683-4811

LOAD TABLE INSTRUCTIONS:

1. DETERMINE THE SIZE OF THE SHUTTER.
2. DETERMINE WHAT THE REQUIRED DESIGN POSITIVE & NEGATIVE WIND LOADS ARE FOR THE SHUTTER.
3. IF THE SHUTTER HEIGHT IS 76" OR LESS, GO TO THE PRESSURE TABLE ON THIS SHEET. IF THE REQUIRED LOADS ARE LESS THAN OR EQUAL TO THOSE IN THE TABLE, ONLY ONE BAR IS REQUIRED. IF NOT, MORE THAN ONE BAR IS REQUIRED.
4. IF THE SHUTTER HEIGHT IS GREATER THAN 76", DO NOT USE THE TABLE ON THIS SHEET & GO TO THE STORM BAR LOAD TABLES ON SHEET 7.
5. IF ONLY ONE BAR IS REQUIRED, GO TO THE STORM BAR LOAD TABLES ON SHEET 7. FIND THE APPLICABLE SHUTTER WIDTH IN THE 1ST COLUMN & SHUTTER HEIGHT IN THE 2ND COLUMN. GO ACROSS THE STORM BAR COLUMNS UNTIL YOU HAVE A BAR WHICH MEETS THE REQUIRED PRESSURE. THEN GO ACROSS THE CONNECTION COLUMNS UNTIL YOU HAVE A CONNECTION THAT MEETS THE REQUIRED PRESSURE. USE THAT BAR & THAT CONNECTION. NOTE THAT IF YOU DECIDE THAT THE BAR &/OR CONNECTION IS TOO LARGE FOR YOUR LIKING, ADD A BAR & GO TO INSTRUCTION NUMBER 6 BELOW.
6. IF MORE THAN ONE BAR IS REQUIRED, GO TO THE STORM BAR LOAD TABLES ON SHEET 7. FIND THE APPLICABLE SHUTTER WIDTH IN THE 1ST COLUMN & STORM BAR SPACING IN THE 2ND COLUMN. GO ACROSS THE STORM BAR COLUMNS UNTIL YOU HAVE A BAR WHICH MEETS THE REQUIRED PRESSURE. THEN GO ACROSS THE CONNECTION COLUMNS UNTIL YOU HAVE A CONNECTION THAT MEETS THE REQUIRED PRESSURE. USE THAT BAR & THAT CONNECTION. NOTE THAT IF YOU DECIDE THAT THE BAR &/OR CONNECTION IS TOO LARGE FOR YOUR LIKING, ADD ANOTHER BAR & START AGAIN WITH INSTRUCTION NUMBER 6.

NOTE THAT WHEN MORE THAN ONE BAR IS USED WITH ONE SHUTTER, THE MAXIMUM BAR SPACING MAY NOT EXCEED 48".

ALLOWABLE PRESSURE TABLE FOR SINGLE BAR SHUTTERS

SHUTTER HEIGHT	PRESSURE (PSF)	
	POSITIVE	NEGATIVE
54" & LESS	80.0	80.0
58"	75.4	75.4
62"	66.0	66.0
66"	58.3	58.3
70"	51.8	51.8
74"	46.3	46.3
76"	40.0	40.0

SINGLE BAR SHUTTER PRESSURE TABLE NOTES:

1. THE SHUTTER MUST BE PLACED A MIN. DISTANCE OF 2.5" AWAY FROM THE GLASS IT PROTECTS.
2. SEE INSTRUCTIONS ON THIS SHEET FOR USE OF ALL LOAD TABLES.

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE 10/25/2001
 BY *Warren W. Schaefer*
 PRODUCT CONTROL DIVISION
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 ACCEPTANCE NO. 01-0209.09

DRAWING TITLE
IMPACT COLONIAL SHUTTER (DADE)
CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.
 600 SANDTREE DRIVE, SUITE 203B
 PALM BEACH GARDENS, FL 33403
 PHONE: 561-775-4902 FAX: 561-775-4903

CERTIFICATION
SEP 24 2001
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DRAWING NO. 1017	REV.
SHEET NO. 6	OF 7

