



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

Gulfstream Aluminum and Shutter Corporation
3001 SE Gran Park Way
Stuart, FL 34997

Your application for Notice of Acceptance (NOA) of:

Impact Aluminum Bahama 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.: 00-0411.11
EXPIRES: 03/08/2004

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: 03/08/2001

Gulfstream Aluminum and Shutter Corp.

ACCEPTANCE No. : 00-0411.11

APPROVED : 03/08/2001

EXPIRES : 03/08/2004

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

This approves an Extruded Aluminum Bahama 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 Bahama Shutter and its components shall be constructed in strict compliance with the following documents: Drawing No. 1001, titled "Impact Bahama Shutter", prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E., dated November 17, 2000, sheets 1 through 10 of 10, 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 Bahama 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

Gulfstream Aluminum and Shutter Corp.

ACCEPTANCE No. : 00-0411.11

APPROVED : 03/08/2001

EXPIRES : 03/08/2004

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



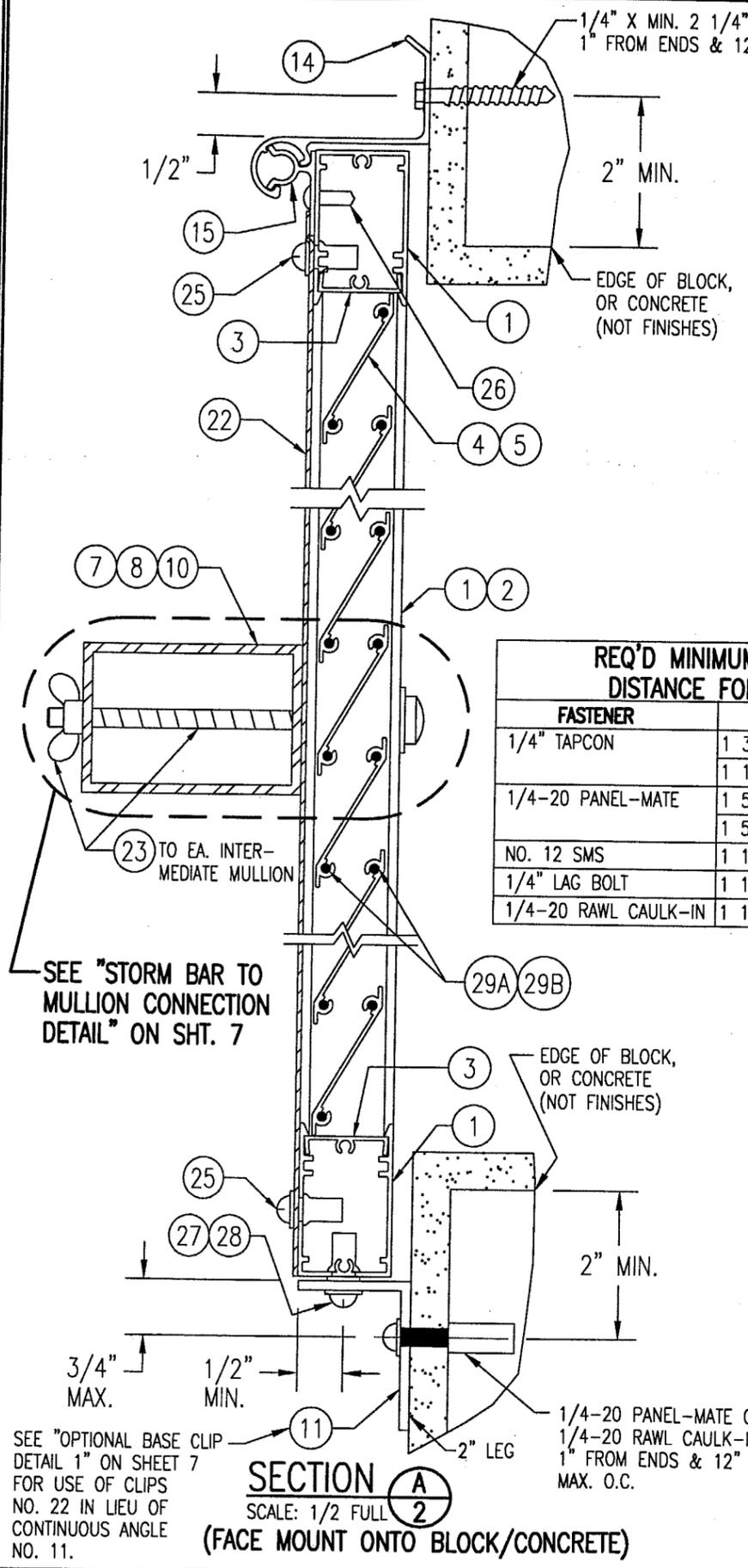
Helmy A. Makar, P.E.- Product Control Examiner
Product Control Division

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 11/17/00
DATE	
BY	
REVISION DESCRIPTION	
NO.	

(DADE)
IMPACT BAHAMA SHUTTERS
MANUFACTURER
GULFSTREAM ALUMINUM & SHUTTER CORP.
3001 S.E. GRAN PARK WAY
STUART, FLORIDA 34997
(561)287-6476

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

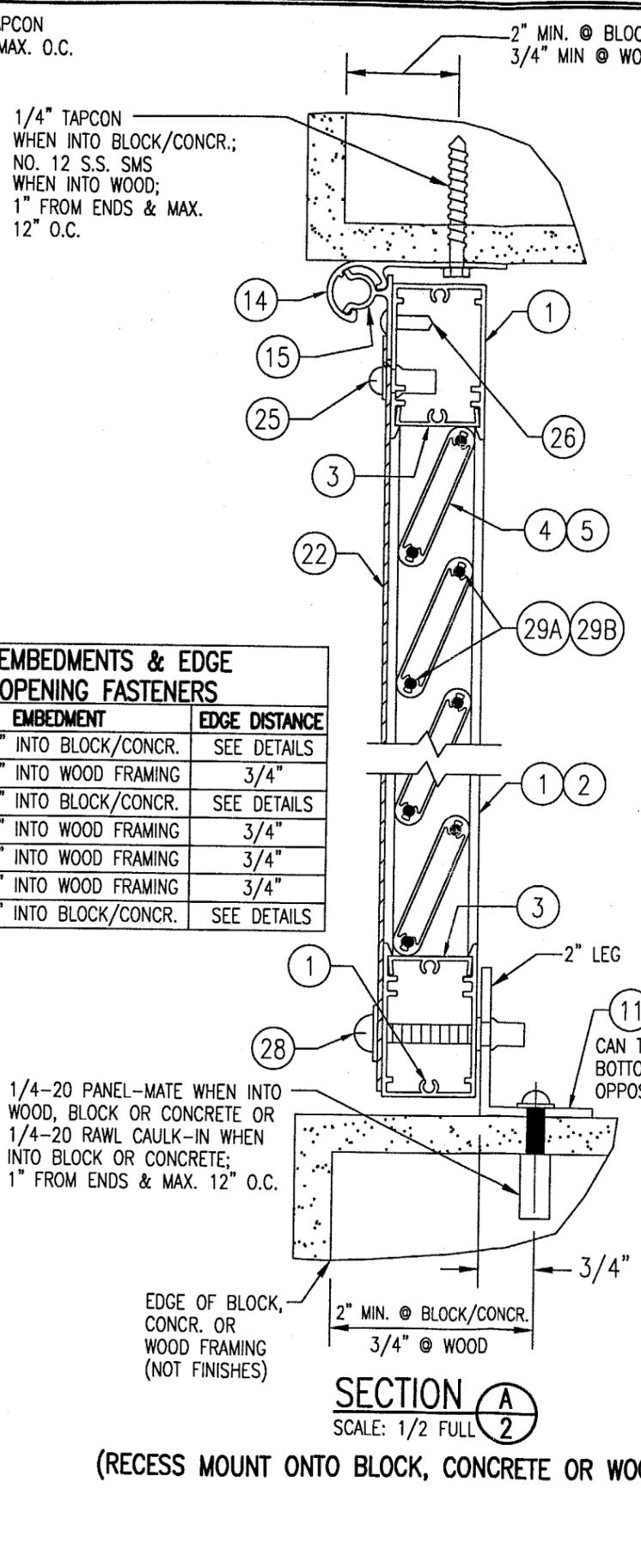
CERTIFICATION
NOV 20 2000
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135
DRAWING NO. 1001
REV.
SHEET NO. 2 OF 10



SECTION A
SCALE: 1/2 FULL
(FACE MOUNT ONTO BLOCK/CONCRETE)

SEE "OPTIONAL BASE CLIP DETAIL 1" ON SHEET 7 FOR USE OF CLIPS NO. 22 IN LIEU OF CONTINUOUS ANGLE NO. 11.

REQ'D MINIMUM EMBEDMENTS & EDGE DISTANCE FOR OPENING FASTENERS		
FASTENER	EMBEDMENT	EDGE DISTANCE
1/4" TAPCON	1 3/4" INTO BLOCK/CONCR.	SEE DETAILS
	1 1/2" INTO WOOD FRAMING	3/4"
1/4-20 PANEL-MATE	1 5/8" INTO BLOCK/CONCR.	SEE DETAILS
	1 5/8" INTO WOOD FRAMING	3/4"
NO. 12 SMS	1 1/2" INTO WOOD FRAMING	3/4"
1/4" LAG BOLT	1 1/2" INTO WOOD FRAMING	3/4"
1/4-20 RAWL CAULK-IN	1 1/2" INTO BLOCK/CONCR.	SEE DETAILS

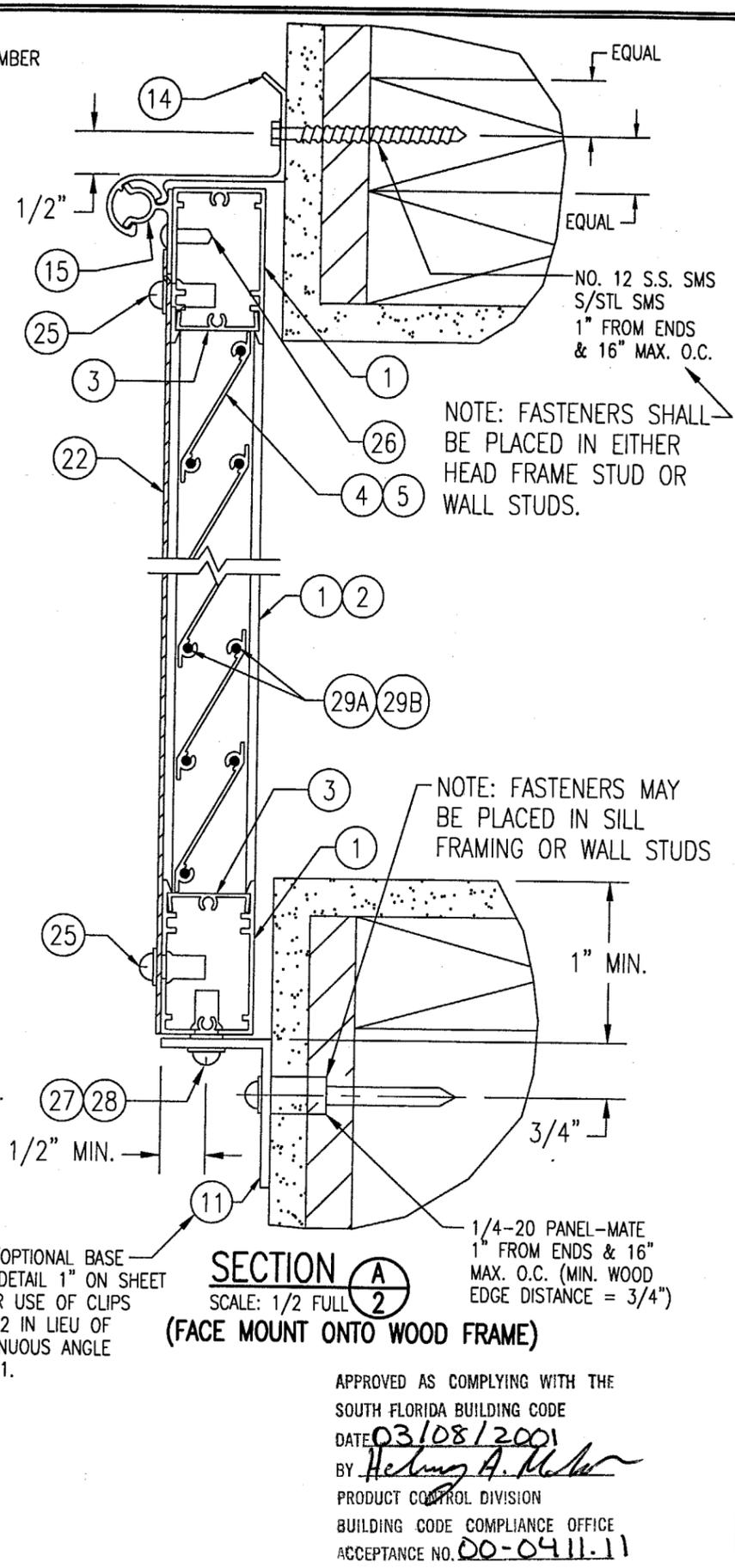


SECTION A
SCALE: 1/2 FULL
(RECESS MOUNT ONTO BLOCK, CONCRETE OR WOOD FRAME)

EDGE OF BLOCK, CONCR. OR WOOD FRAMING (NOT FINISHES)

1/4-20 PANEL-MATE WHEN INTO WOOD, BLOCK OR CONCRETE OR 1/4-20 RAWL CAULK-IN WHEN INTO BLOCK OR CONCRETE; 1" FROM ENDS & MAX. 12" O.C.

SEE "OPTIONAL BASE CLIP DETAIL 1" ON SHEET 7 FOR USE OF CLIPS NO. 22 IN LIEU OF CONTINUOUS ANGLE NO. 11.

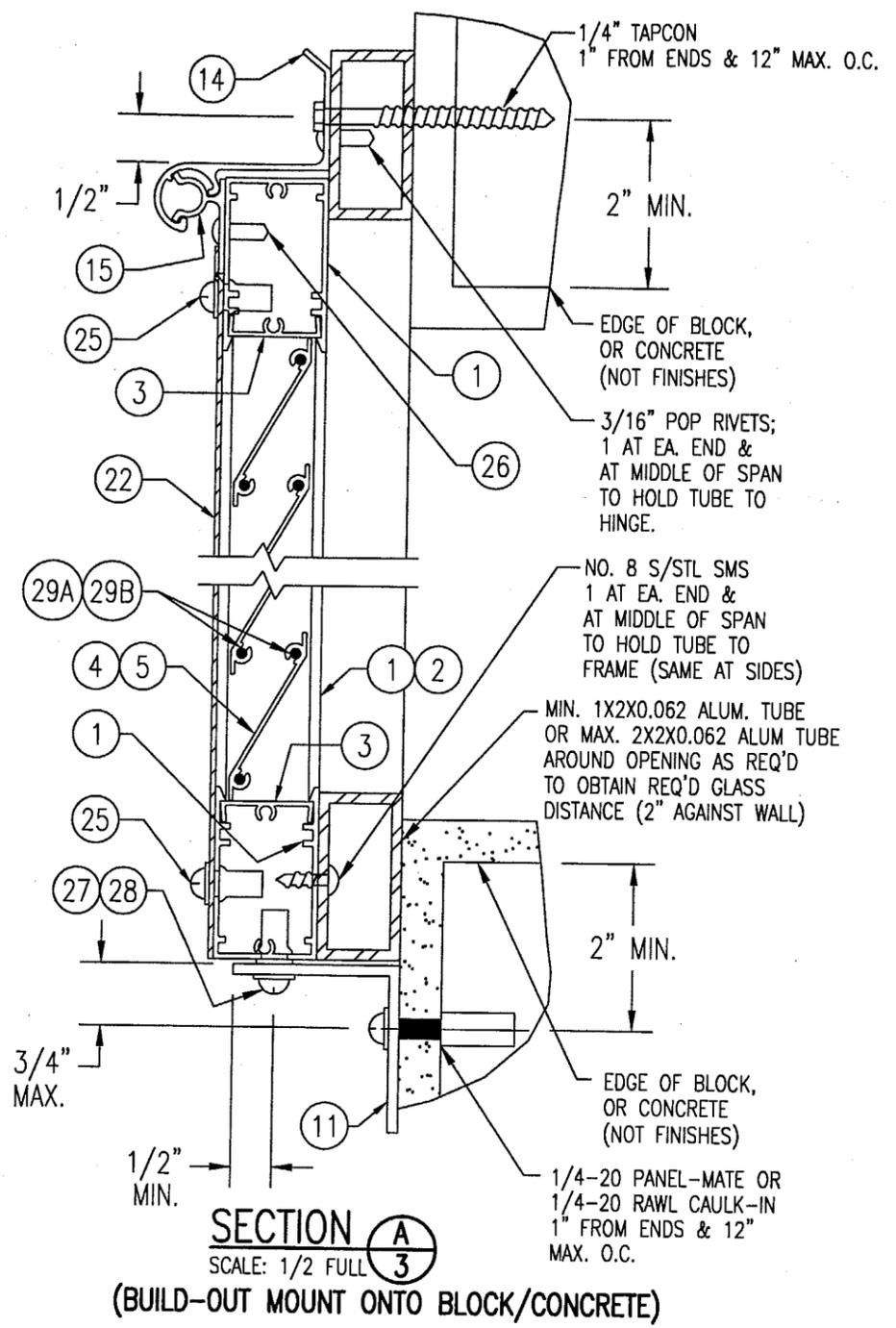


SECTION A
SCALE: 1/2 FULL
(FACE MOUNT ONTO WOOD FRAME)

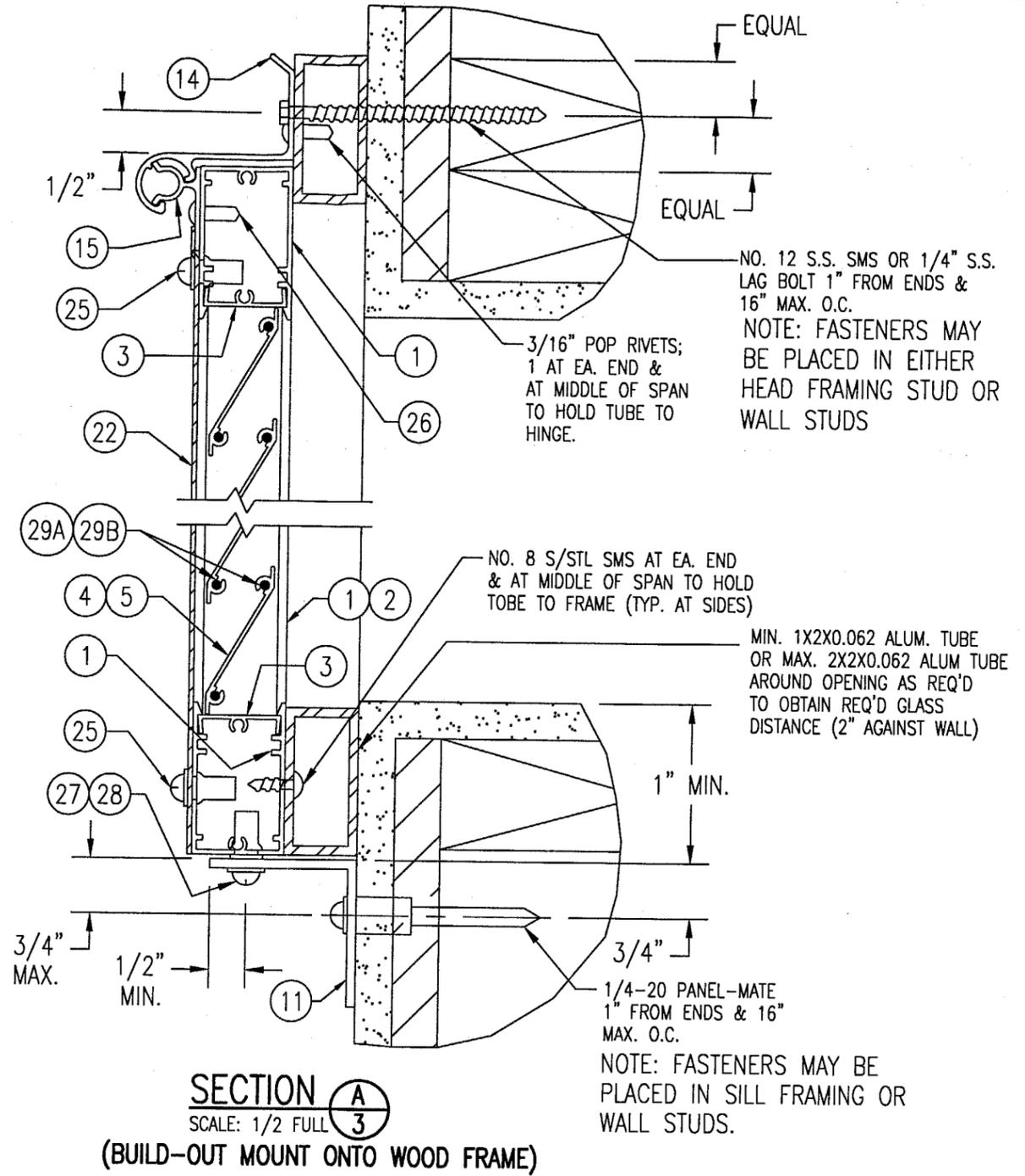
NOTE: FASTENERS MAY BE PLACED IN SILL FRAMING OR WALL STUDS

NOTE: FASTENERS SHALL BE PLACED IN EITHER HEAD FRAME STUD OR WALL STUDS.

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE 03/08/2001
BY *Heung A. Ma*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 00-0411.11



SECTION A (3)
 SCALE: 1/2 FULL
 (BUILD-OUT MOUNT ONTO BLOCK/CONCRETE)



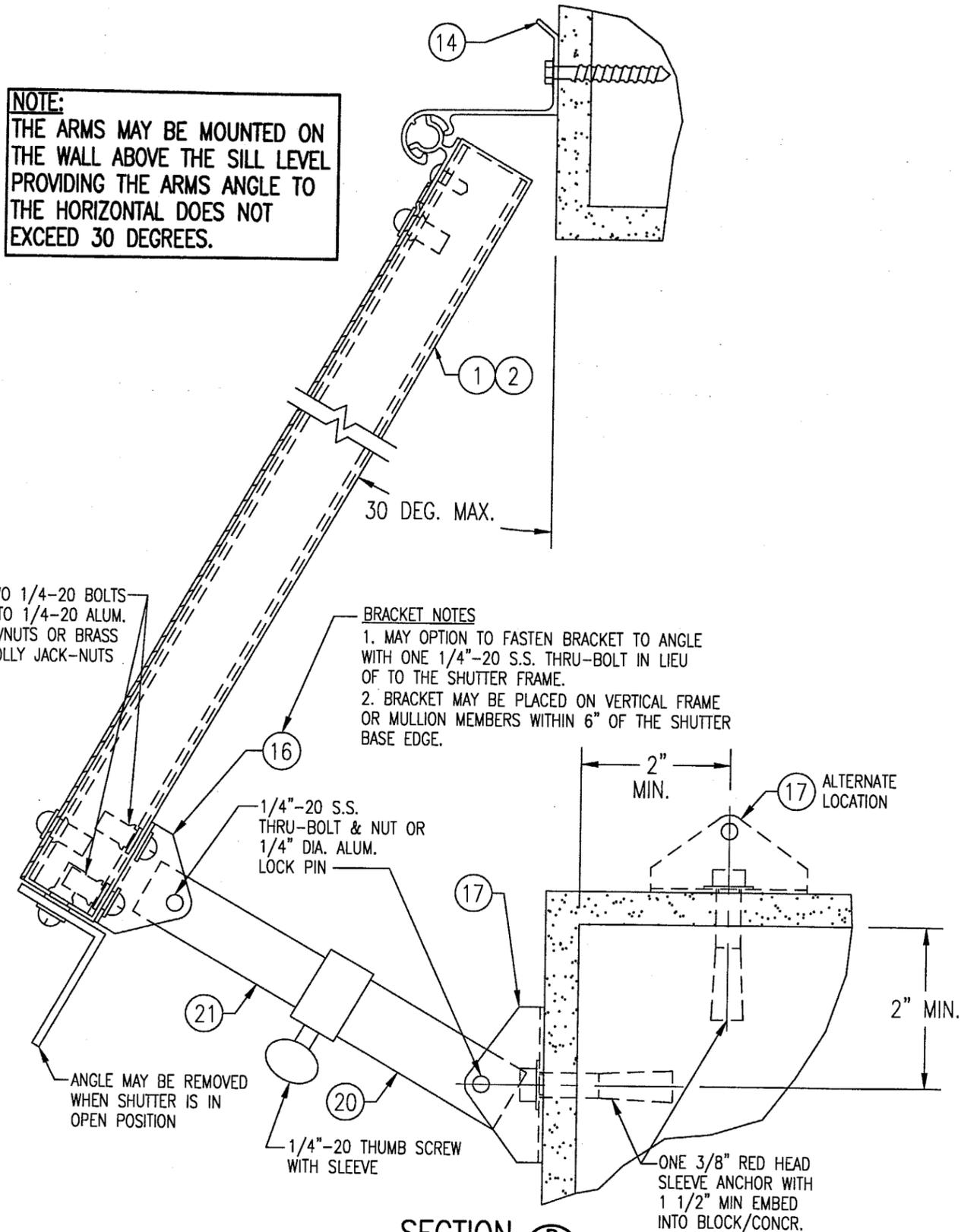
SECTION A (3)
 SCALE: 1/2 FULL
 (BUILD-OUT MOUNT ONTO WOOD FRAME)

FOR FASTENER EDGE DISTANCE & SPACING REQUIREMENTS, SEE SHEET 2.

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE 03/08/2001
 BY *Warren W. Schaefer*
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 00-0411.11

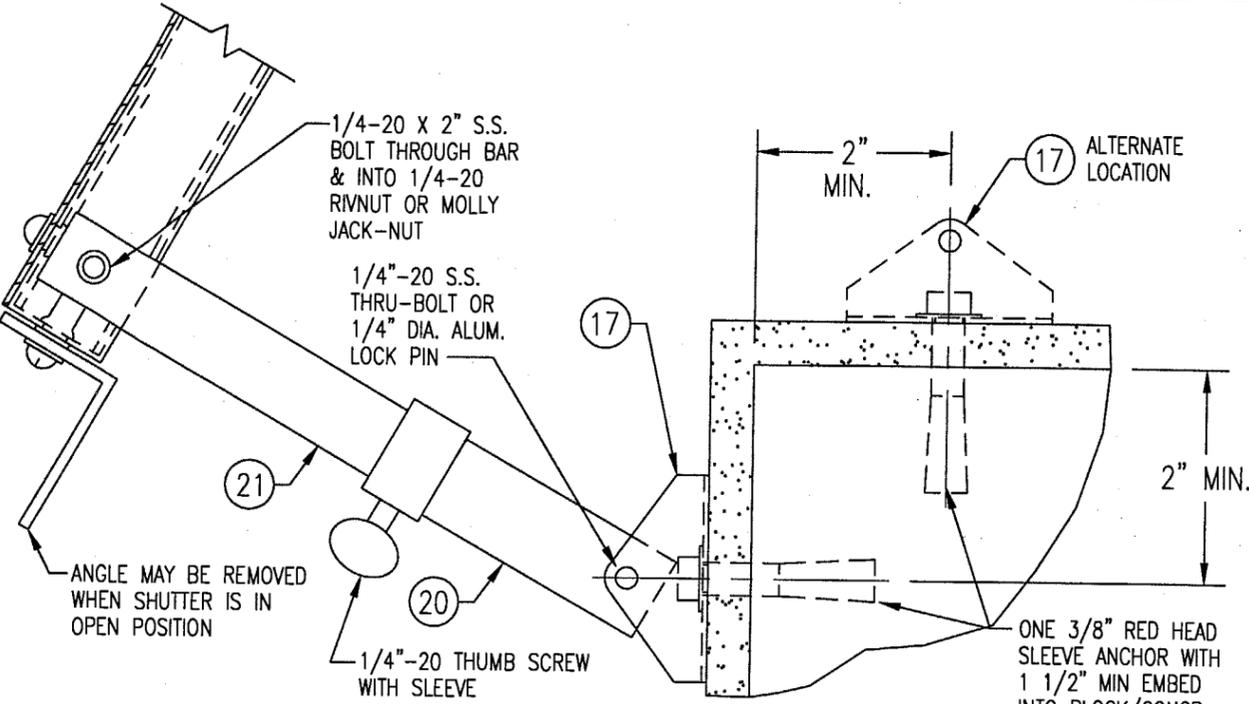
DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1-2		DATE: 11/17/00	
NO.	REVISION DESCRIPTION	BY	DATE
IMPACT BAHAMA SHUTTERS (DADE)			
MANUFACTURER GULFSTREAM ALUMINUM & SHUTTER CORP. 3001 S.E. GRAN PARK WAY STUART, FLORIDA 34997 (561)287-6476			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903			
DRAWING TITLE		DRAWING NO.	
IMPACT BAHAMA SHUTTERS		1001	
CERTIFICATION		REV.	
NOV 20 2000			
WARREN W. SCHAEFER, P.E.		SHEET NO.	
P.E. NO. 44135		3 OF 10	

NOTE:
THE ARMS MAY BE MOUNTED ON THE WALL ABOVE THE SILL LEVEL PROVIDING THE ARMS ANGLE TO THE HORIZONTAL DOES NOT EXCEED 30 DEGREES.

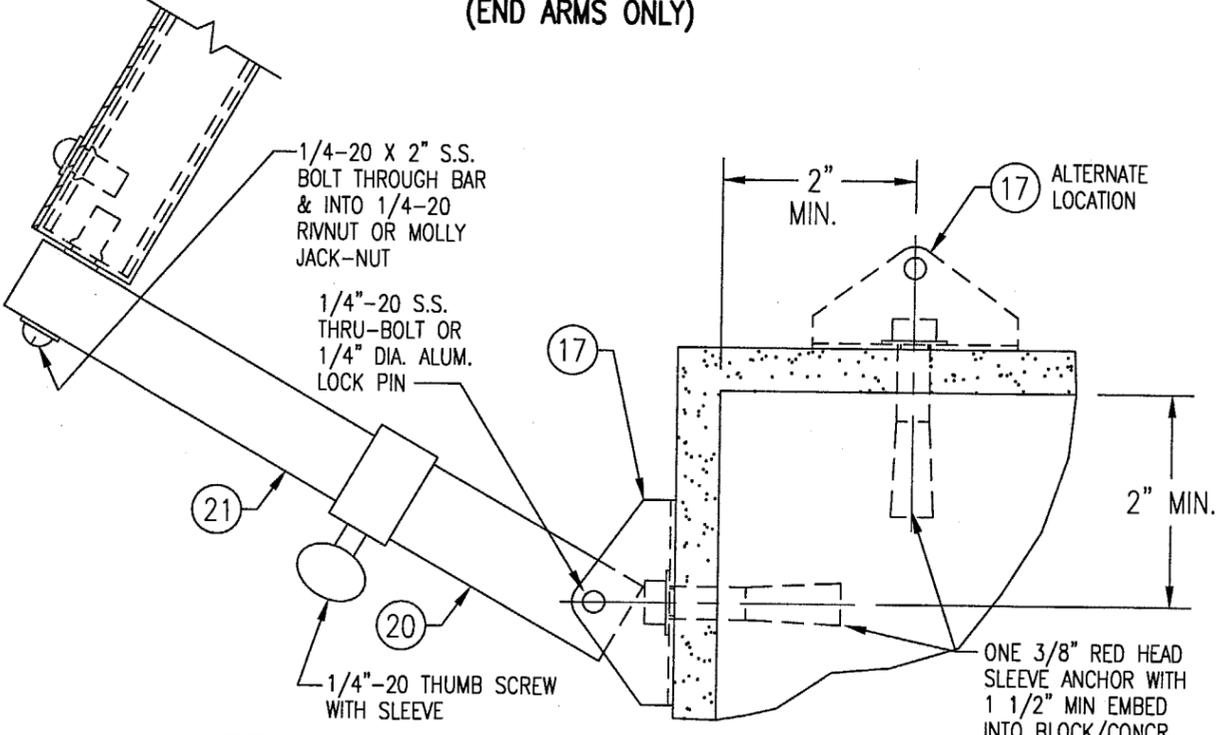


SECTION B
SCALE: 1/2 FULL
4

(OPEN SHUTTER AT FACE MOUNT CONDITION TO BLOCK/CONCRETE)
SEE "ARM SPACING TABLE" ON SHEET 1 FOR SPACING OF ARMS



ALTERNATE TO SECTION B ON THIS SHEET
(END ARMS ONLY)



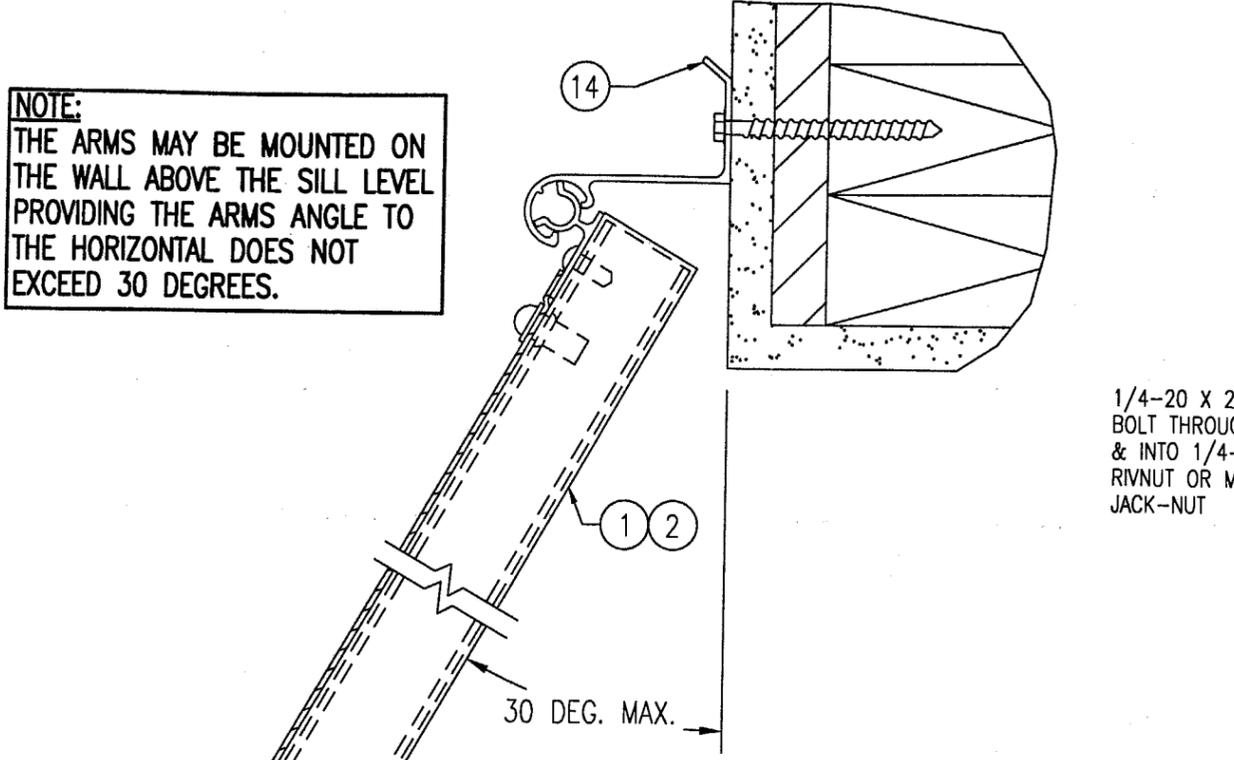
ALTERNATE TO SECTION B ON THIS SHEET

FOR FASTENER EDGE DISTANCE & SPACING REQUIREMENTS, SEE SHEET 2.

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE 03/08/2001
BY *Heung A. Moh*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 00-0411-11

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 11/17/00
NO.	REVISION DESCRIPTION
DATE	BY
NO.	REVISION DESCRIPTION
(DADE)	
IMPACT BAHAMA SHUTTERS	
MANUFACTURER	
W. W. SCHAEFER ENGINEERING GULFSTREAM ALUMINUM & SHUTTER CORP.	
3001 S.E. GRAN PARK WAY	
STUART, FLORIDA 34997	
(561)287-6476	
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	NOV 20 2000
WARREN W. SCHAEFER, P.E.	P.E. NO. 44135
DRAWING NO.	REV.
1001	
SHEET NO.	
4	OF 10

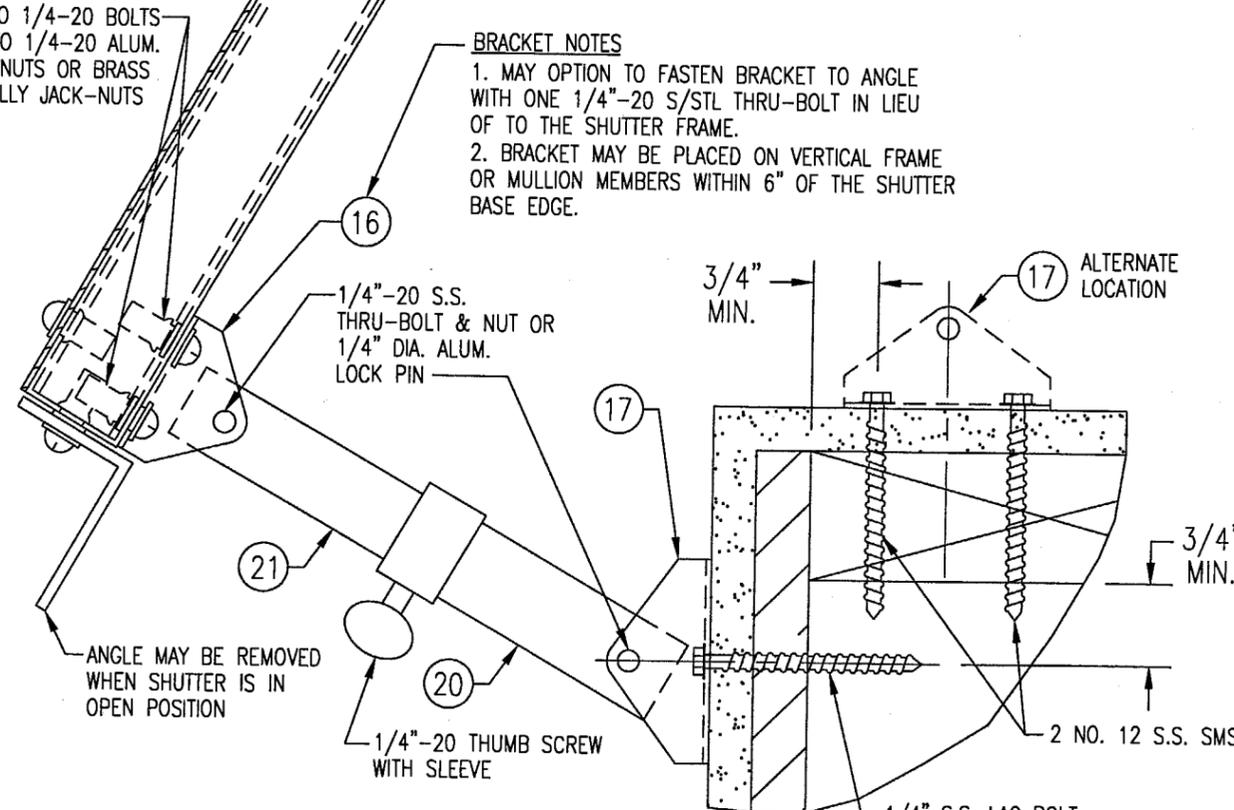
NOTE:
THE ARMS MAY BE MOUNTED ON THE WALL ABOVE THE SILL LEVEL PROVIDING THE ARMS ANGLE TO THE HORIZONTAL DOES NOT EXCEED 30 DEGREES.



TWO 1/4-20 BOLTS INTO 1/4-20 ALUM. RIVNUTS OR BRASS MOLLY JACK-NUTS

BRACKET NOTES

1. MAY OPTION TO FASTEN BRACKET TO ANGLE WITH ONE 1/4"-20 S/STL THRU-BOLT IN LIEU OF TO THE SHUTTER FRAME.
2. BRACKET MAY BE PLACED ON VERTICAL FRAME OR MULLION MEMBERS WITHIN 6" OF THE SHUTTER BASE EDGE.

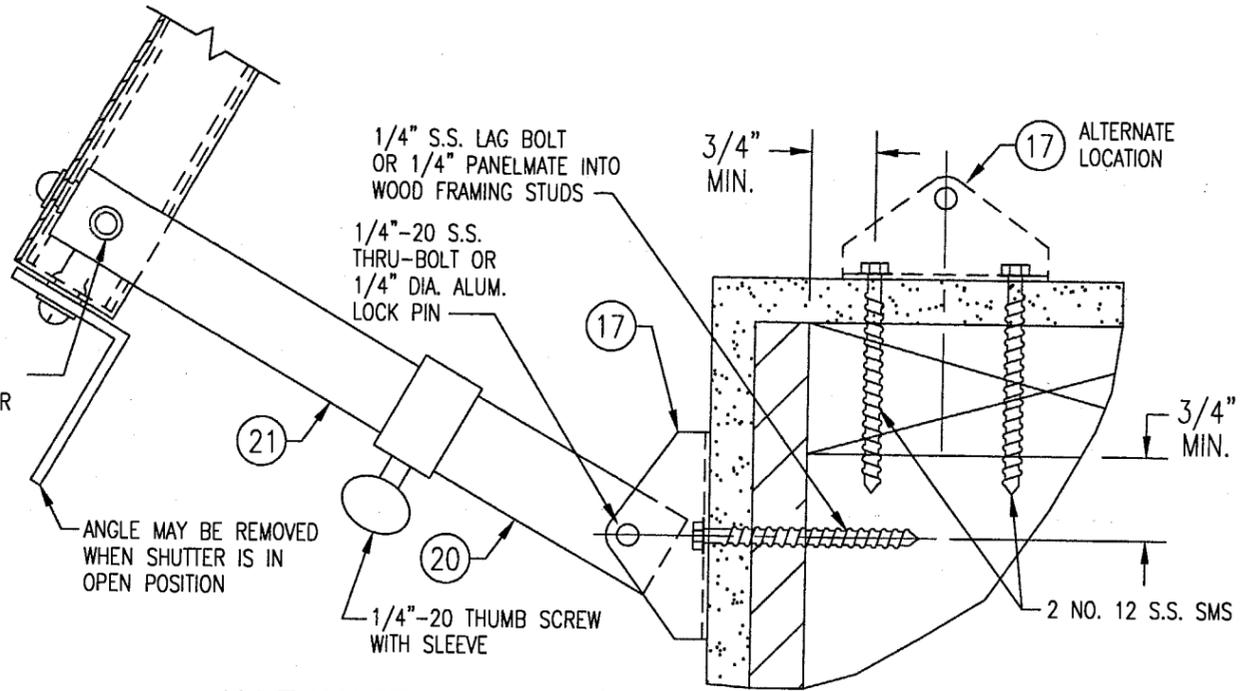


SECTION B

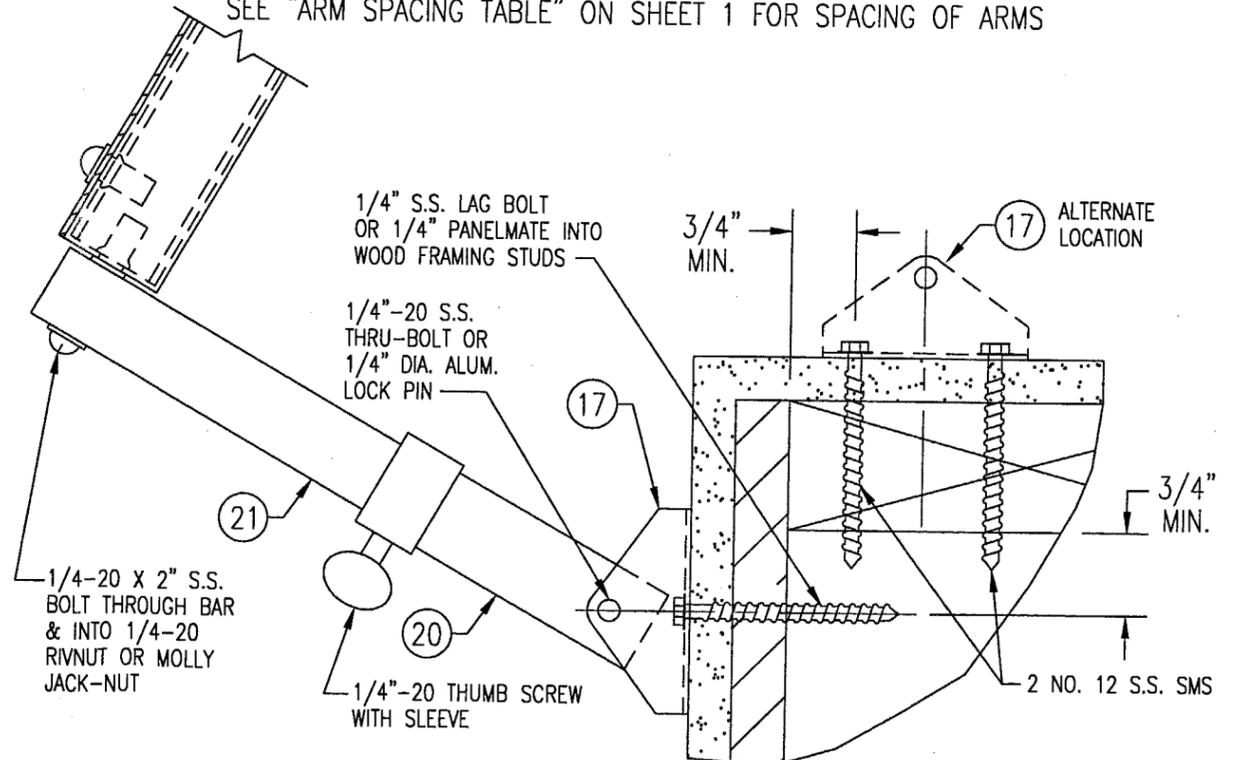
SCALE: 1/2 FULL

(OPEN SHUTTER AT FACE MOUNT CONDITION TO WOOD FRAMING)
SEE "ARM SPACING TABLE" ON SHEET 1 FOR SPACING OF ARMS

1/4-20 X 2" S.S. BOLT THROUGH BAR & INTO 1/4-20 RIVNUT OR MOLLY JACK-NUT



ALTERNATE TO SECTION B ON THIS SHEET (END ARMS ONLY)
SEE "ARM SPACING TABLE" ON SHEET 1 FOR SPACING OF ARMS



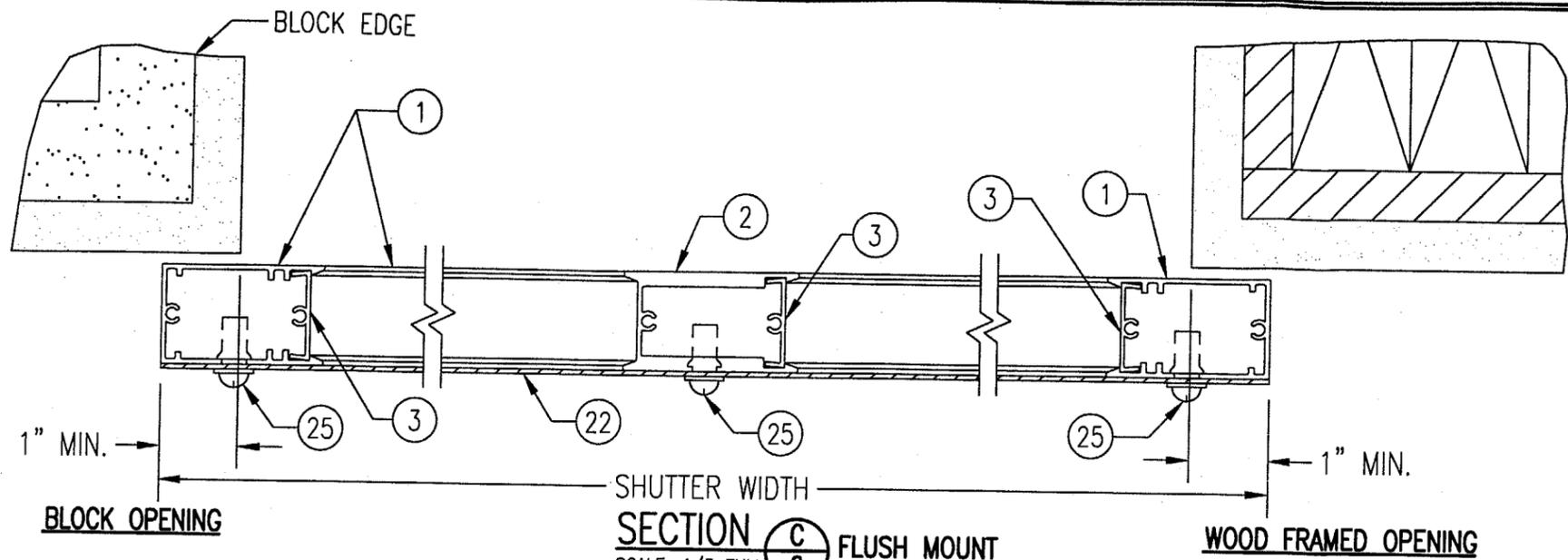
ALTERNATE TO SECTION B ON THIS SHEET

SEE "ARM SPACING TABLE" ON SHEET 1 FOR SPACING OF ARMS

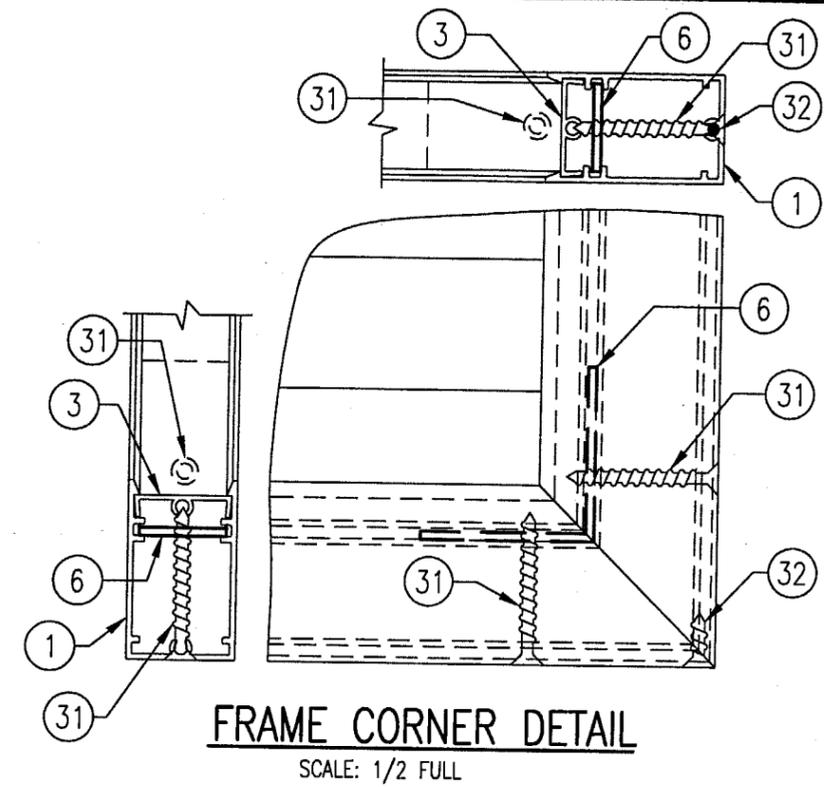
FOR FASTENER EDGE DISTANCE & SPACING REQUIREMENTS, SEE SHEET 2.

APPROVED BY: *Warren W. Schaefer*
DATE: 03/08/2001
BY: *Warren W. Schaefer*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 00-0411-11

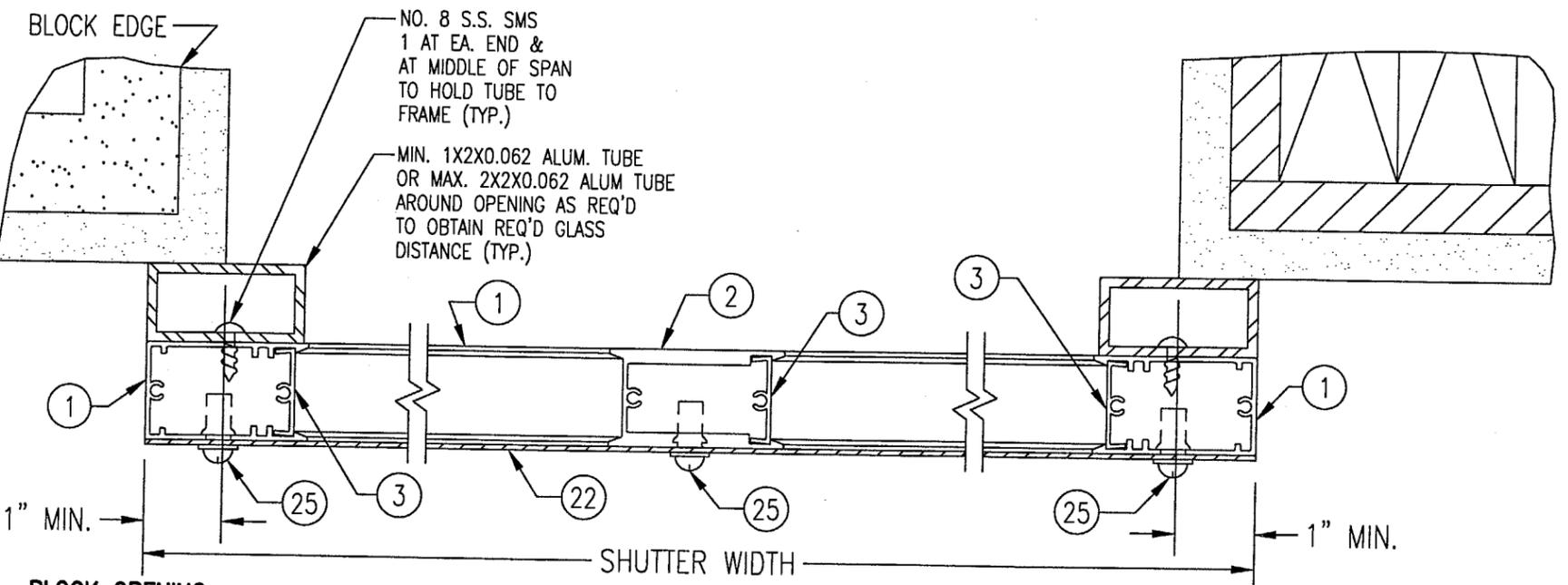
DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1-2	DATE: 11/17/00
DATE	
BY	
REVISION DESCRIPTION	
NO.	
(DATE)	
IMPACT BAHAMA SHUTTERS	
CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.	
3001 S.E. GRAN PARK WAY STUART, FLORIDA 34997 (561)287-6476	
CERTIFICATION	
NOV 20 2000	
WARREN W. SCHAEFER, P.E.	
P.E. NO. 44135	
DRAWING NO.	REV.
1001	
SHEET NO.	
5	OF 10



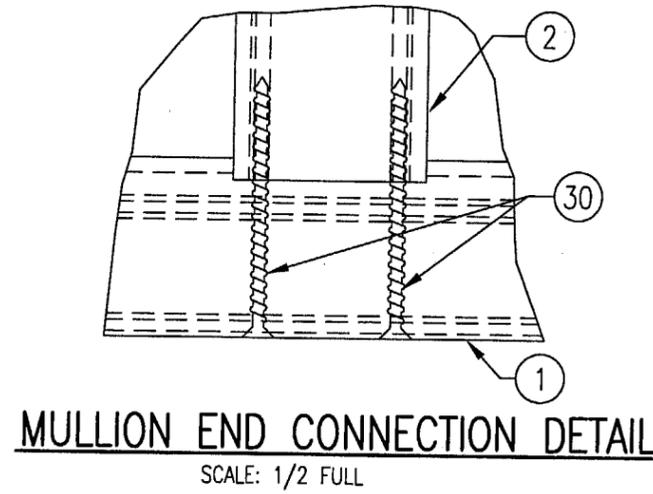
SECTION **C** FLUSH MOUNT
 SCALE: 1/3 FULL
 STORM BAR & ARMS NOT SHOWN FOR CLARITY!
 3 & 4 PANEL SHUTTERS SIMILAR



FRAME CORNER DETAIL
 SCALE: 1/2 FULL



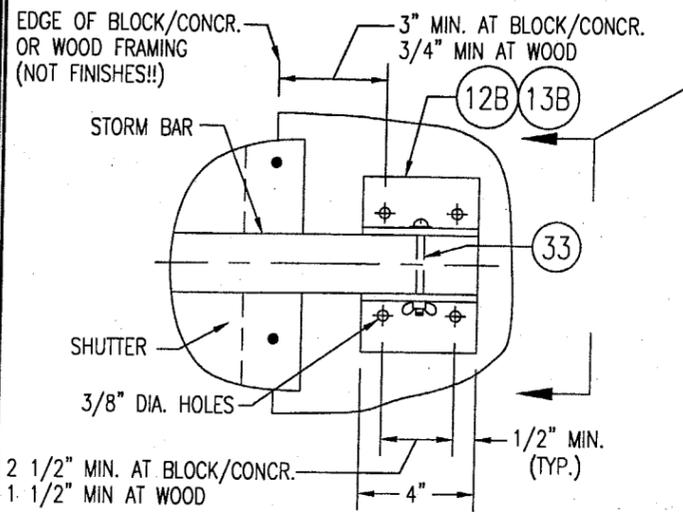
SECTION **C** BUILD-OUT
 SCALE: 1/3 FULL
 STORM BAR & ARMS NOT SHOWN FOR CLARITY!
 3 & 4 PANEL SHUTTERS SIMILAR



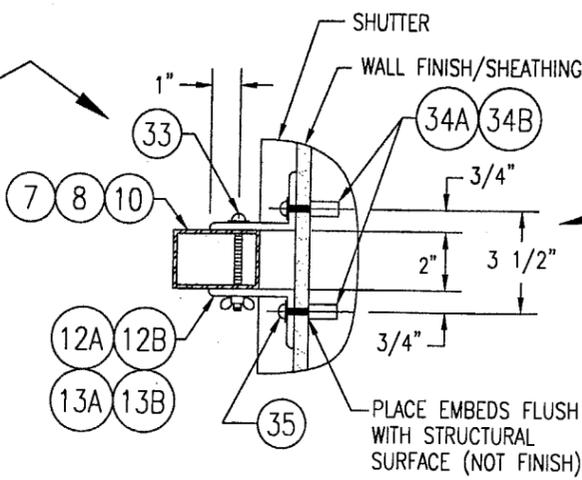
MULLION END CONNECTION DETAIL
 SCALE: 1/2 FULL

APPROVED AS COMPLYING WITH THE
 SOUTH FLORIDA BUILDING CODE
 DATE: 03/08/2001
 BY: *Heather A. Meier*
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 00-0411.11

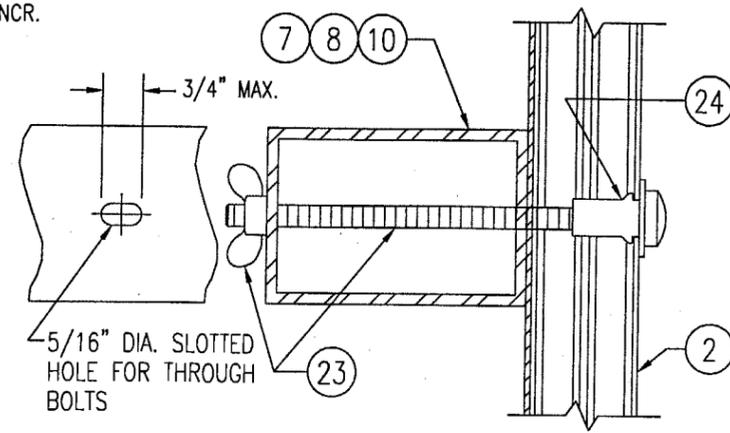
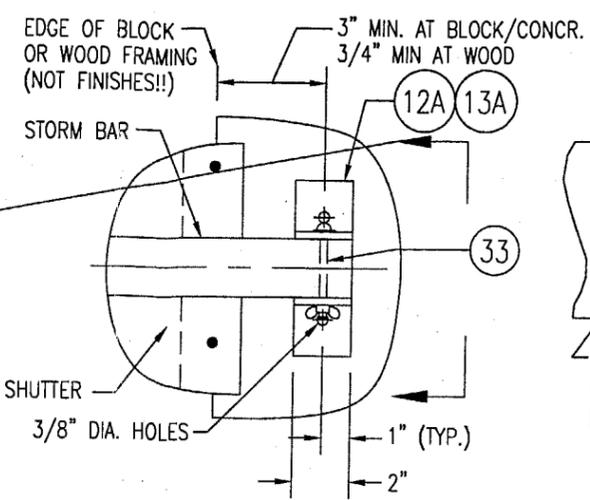
DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 11/17/00	
NO.	REVISION DESCRIPTION	DATE	BY
(DAE)			
IMPACT BAHAMA SHUTTERS			
MANUFACTURER GULFSTREAM ALUMINUM & SHUTTER CORP. 3001 S.E. GRAN PARK WAY STUART, FLORIDA 34997 (561)287-6476			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903			
CERTIFICATION NOV 20 2000		WARREN W. SCHAEFER, P.E. P.E. NO. 44153	
DRAWING NO. 1001	REV.		
SHEET NO. 6 OF 10			



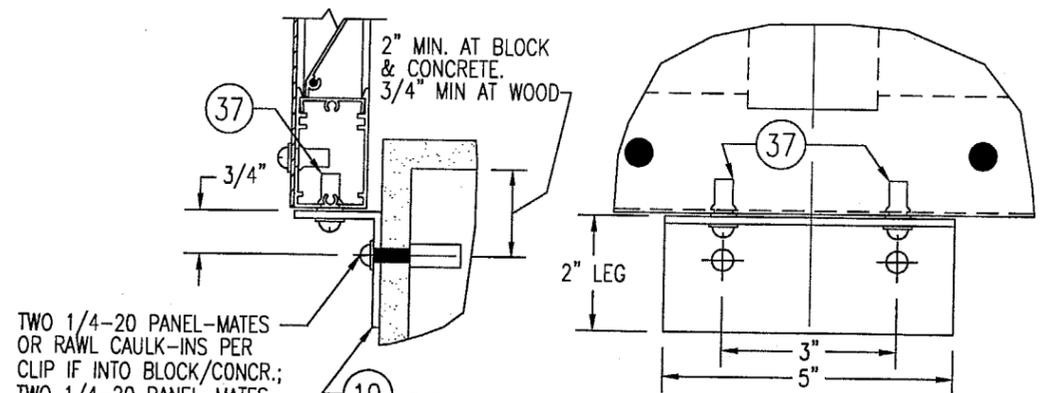
STORM BAR END CONNECTION "A"
SCALE: 2"=1'-0"



STORM BAR END CONNECTION "B"
SCALE: 2"=1'-0"



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

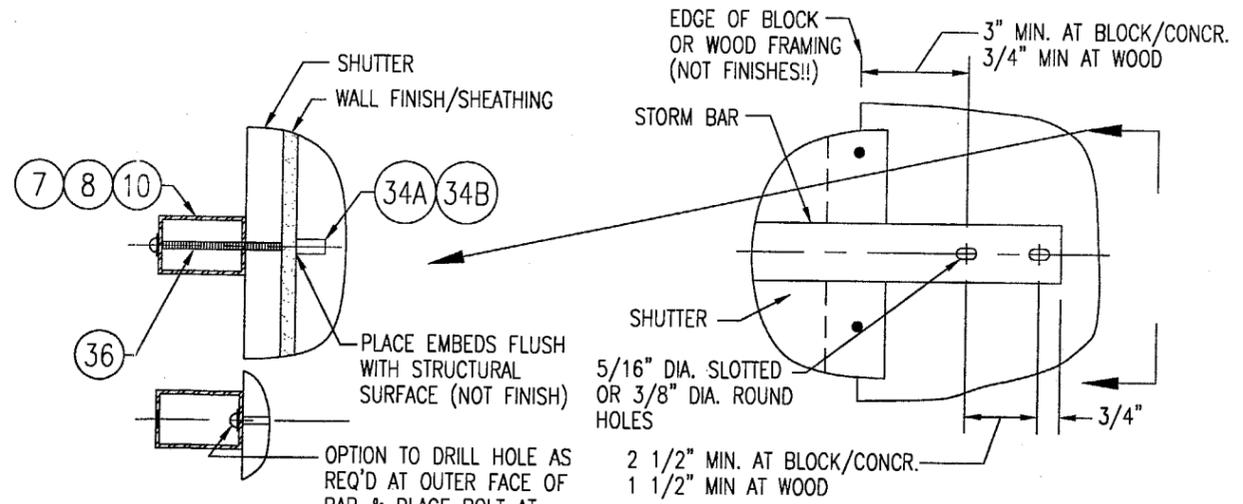


TWO 1/4-20 PANEL-MATES OR RAWL CAULK-INS PER CLIP IF INTO BLOCK/CONCR.; TWO 1/4-20 PANEL-MATES PER CLIP IF INTO WOOD. (SEE SHEET 2 FOR EMBED REQUIREMENTS)

OPTIONAL BASE CLIP DETAIL 1

NOTE: CLIPS MAY ONLY BE USED WITH WOOD FRAMING IF ATTACHED TO A CONTINUOUS SILL MEMBER

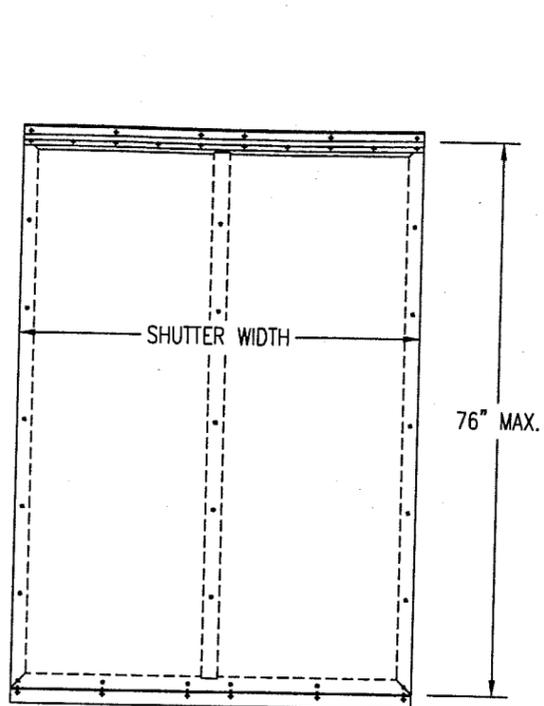
PLACE 1 CLIP AT EACH CORNER & MULLION LOCATION



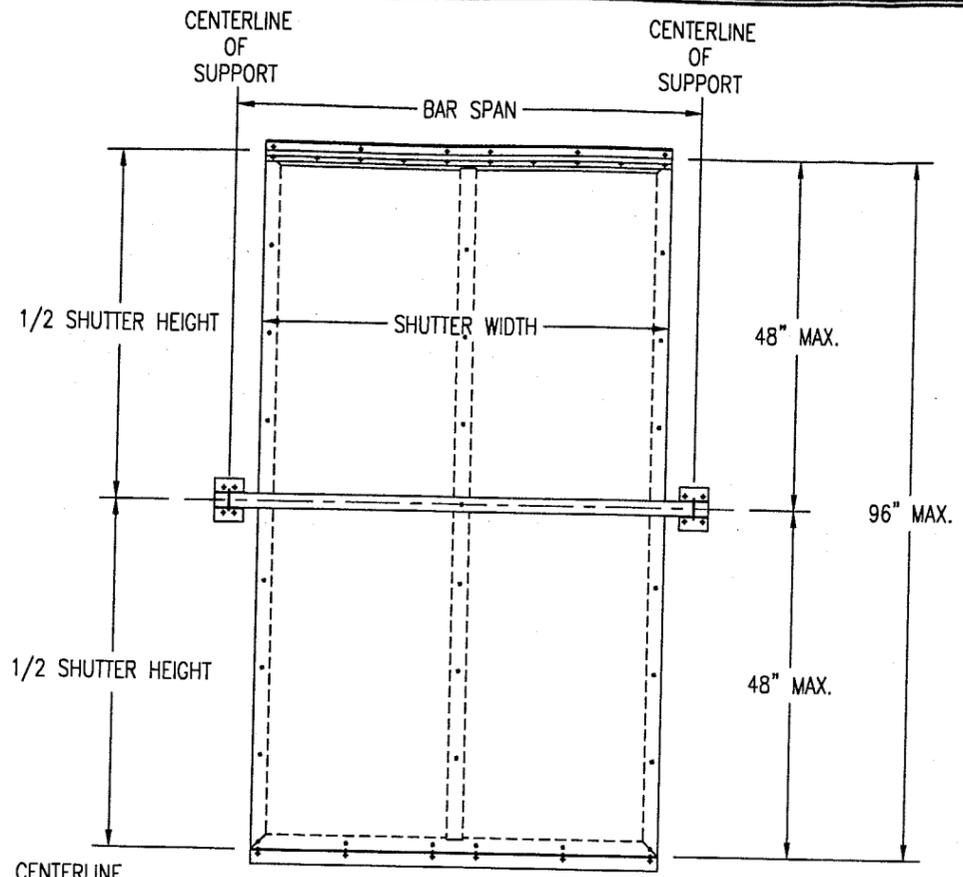
STORM BAR END CONNECTION "C"
SCALE: 2"=1'-0"

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE 03/08/2001
BY *Heung A. Mak*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 00-0411-11

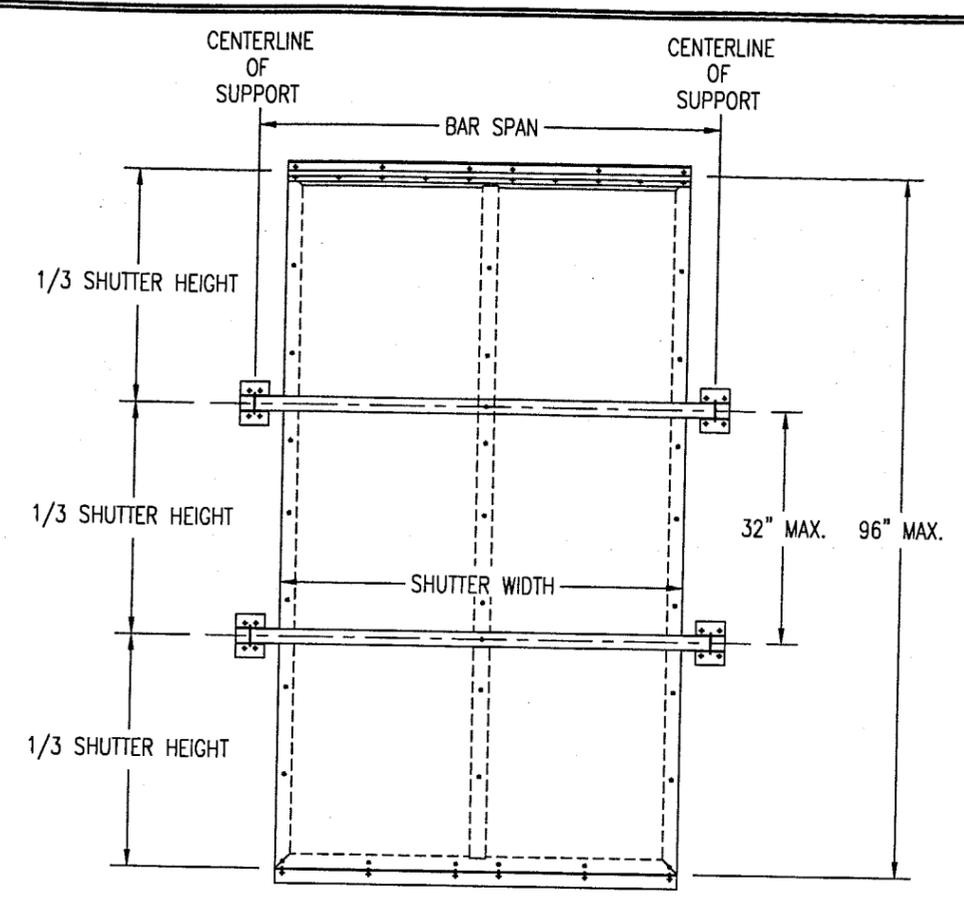
DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1-3		DATE: 11/17/00	
NO.	REVISION DESCRIPTION	DATE	BY
DRAWING TITLE: IMPACT BAHAMA SHUTTERS			
MANUFACTURER: GULFSTREAM ALUMINUM & SHUTTER CORP.			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.			
3001 S.E. GRAN PARK WAY STUART, FLORIDA 34997 (561)287-6476			
600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903			
CERTIFICATION: NOV 20 2000			
WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1001		REV.	
SHEET NO. 7		OF 10	



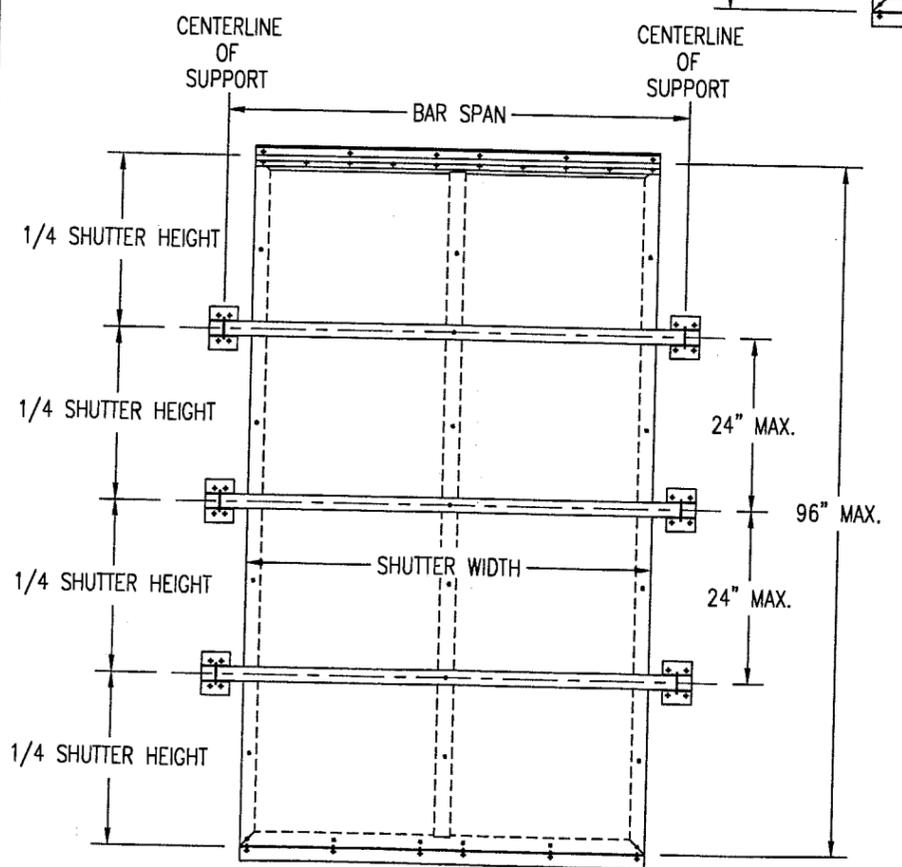
NO BARS
(SINGLE SPAN SHUTTER)



SINGLE BAR
(TWO SPAN SHUTTER)



TWO BARS
(THREE SPAN SHUTTER)



THREE BARS
(FOUR SPAN SHUTTER)

ALLOWABLE PRESSURE TABLE FOR SINGLE SPAN SHUTTERS		
SHUTTER HEIGHT	PRESSURE (PSF)	
	POS	NEG
60" & LESS	80.0	80.0
62"	73.0	76.2
64"	64.3	71.7
66"	56.9	67.4
68"	50.5	63.5
70"	44.9	58.8
72"	40.1	52.5
74"	36.0	46.3
76"	32.3	40.0

NOTE:
1. ALL SHUTTERS MUST BE PLACED A MIN. DISTANCE OF 2.25" AWAY FROM THE GLASS.

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE: 03/08/2001
BY: *Warren W. Schaeffer*
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 00-0411.11

DRAWN BY: W.W.S. CHECKED BY: W.W.S.
PLOT: 1=24 DATE: 11/17/00

NO.	REVISION DESCRIPTION	BY	DATE

(DADE)
IMPACT BAHAMA SHUTTERS
MANUFACTURER
GULFSTREAM ALUMINUM & SHUTTER CORP.
3001 S.E. GRAN PARK WAY
STUART, FLORIDA 34997
(561)287-6476

CONSULTANTS
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
NOV 20 2000
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO. 1001
SHEET NO. 9 OF 10

PRESSURE LOAD TABLE FOR STORM BARS & BAR END CONNECTIONS							
SHUTTER WIDTH (IN)	BAR SPACING (IN)	ALLOWABLE PRESSURES (PSF) AS CONTROLLED BY BARS			ALLOWABLE PRESSURE (PSF) AS CONTROLLED BY CONNECTIONS		
		TS2X2X1/8	TS3X2X1/8	TS5X2X1/8	CONN "A"		CONN "B" & "C"
					WOOD/CONC./BLOCK	WOOD	
36	42	80	80	80	80	80	80
	48	80	80	80	80	80	70
42	36	80	80	80	80	80	80
	42	80	80	80	80	80	69
48	48	80	80	80	80	80	60
	30	80	80	80	80	80	80
48	36	80	80	80	80	80	70
	42	80	80	80	80	80	60
	48	70	80	80	80	70	53
54	30	80	80	80	80	80	75
	36	71	80	80	80	80	62
	42	61	80	80	80	71	53
60	48	54	80	80	80	62	47
	24	75	80	80	80	80	80
	30	60	80	80	80	80	67
60	36	50	80	80	80	75	56
	42	43	80	80	80	64	48
	48	37	80	80	80	56	42
	24	54	80	80	80	80	77
66	30	33	80	80	80	80	61
	36	36	80	80	80	68	51
	42	31	80	80	80	58	44
	48	27	73	80	79	51	38
	24	40	80	80	80	80	70
72	30	32	80	80	80	75	56
	36	27	72	80	80	62	47
	42	-	61	80	80	53	40
	48	-	54	80	73	47	35
	24	30	80	80	80	80	65
78	30	-	65	80	80	69	52
	36	-	54	80	80	57	43
	42	-	46	80	77	49	37
	48	-	41	80	67	43	32
	24	-	62	80	80	80	60
84	30	-	50	80	80	64	48
	36	-	42	80	80	53	40
	42	-	36	80	71	46	34
	48	-	31	80	62	40	30
90	24	-	49	80	80	75	56
	30	-	39	80	80	60	45
	36	-	32	80	77	50	37
	42	-	28	80	66	43	32
	48	-	-	80	58	37	28

1. ALL PRESSURES ARE FOR BOTH POSITIVE & NEGATIVE AND ARE PSF.
2. REF. SHEET 7 FOR CONNECTION TYPES.

PRESSURE LOAD TABLE FOR STORM BARS & BAR END CONNECTIONS							
SHUTTER WIDTH (IN)	BAR SPACING (IN)	ALLOWABLE PRESSURES (PSF) AS CONTROLLED BY BARS			ALLOWABLE PRESSURE (PSF) AS CONTROLLED BY CONNECTIONS		
		TS2X2X1/8	TS3X2X1/8	TS5X2X1/8	CONN "A"		CONN "B" & "C"
					WOOD/CONC./BLOCK	WOOD	
96	24	-	39	80	80	70	53
	30	-	31	80	80	56	42
	36	-	26	80	73	47	35
	42	-	-	80	62	40	30
	48	-	-	70	54	35	26
102	24	-	31	80	80	66	50
	30	-	25	80	80	53	40
	36	-	-	75	68	44	33
	42	-	-	64	59	38	28
108	48	-	-	56	51	33	-
	24	-	-	80	80	62	47
	30	-	-	73	77	50	37
	36	-	-	61	64	41	31
112	42	-	-	52	55	36	27
	48	-	-	46	48	31	-
	24	-	-	80	80	60	45
	30	-	-	64	75	48	36
112	36	-	-	53	62	40	30
	42	-	-	46	53	34	26
	48	-	-	40	47	30	-

LOAD TABLE INSTRUCTIONS:

1. SELECT AN OVERALL SHUTTER SIZE (TOTAL WIDTH & HEIGHT).
2. DETERMINE THE REQUIRED DESIGN WIND PRESSURE FOR THE SHUTTER (OBTAIN FROM A FLORIDA REGISTERED ENGINEER).
3. IF THE SHUTTER HEIGHT IS LESS THAN OR EQUAL TO 76", GO TO "PRESSURE TABLE FOR SINGLE SPAN SHUTTERS" ON SHEET 9 AND COMPARE THE REQUIRED DESIGN PRESSURE TO THE ALLOWABLE PRESSURES IN THE TABLE. IF ALLOWABLE PRESSURE IS EQUAL TO OR GREATER THAN THAT REQUIRED, NO BAR IS REQUIRED & YOU ARE FINISHED. IF ALLOWABLE PRESSURE IS LESS THAN REQUIRED, STORM BAR(S) ARE NEEDED, SO CONTINUE TO NUMBER 4 BELOW.
4. IF BARS ARE REQUIRED, GO TO LOAD TABLES ON THIS SHEET.
5. GO TO APPLICABLE SHUTTER WIDTH IN TABLE AND CHOOSE THE DESIRED BAR SPACING.
6. GO ACROSS THE TABLE AND CHOOSE THE BAR AND CONNECTION WHO'S ALLOWABLE PRESSURE IS GREATER THAN OR EQUAL TO THE REQUIRED PRESSURE. IF THE DESIRED BAR AND/OR CONNECTION TYPE DOES NOT MEET THE REQUIRED SHUTTER DESIGN PRESSURE, CHOOSE ANOTHER BAR SPACING AND CHECK THE BAR TYPE & CONNECTION AGAIN. REPEAT UNTIL DESIRED & CORRECT BAR & CONNECTION TYPE ARE DETERMINED (NOTE THAT THE LESSER PRESSURE OF THE BAR, CONNECTION TYPE, OR MAXIMUM ALLOWABLE OF +/-80 PSF SHALL CONTROL THE SHUTTER).

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE 03/08/2001
 BY Warren W. Schaefer
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 00-0411.11

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1-1	DATE: 11/17/00
DATE	
BY	
REVISION DESCRIPTION	
NO.	
(DADE)	
IMPACT BAHAMA SHUTTERS	
MANUFACTURER	
GULFSTREAM ALUMINUM & SHUTTER CORP.	
3001 S.E. GRAN PARK WAY	
STUART, FLORIDA 34997	
(561)287-6476	
CONSULTANTS	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.	
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PALM BEACH GARDENS, FL 33403	
PHONE: 561-775-4902 FAX: 561-775-4903	
DRAWING TITLE	
IMPACT BAHAMA SHUTTERS	
CERTIFICATION	
NOV 20 2000	
WARREN W. SCHAEFER P.E.	
P.E. NO. 44135	
DRAWING NO.	REV.
1001	
SHEET NO.	
10 OF 10	