



**BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908**

NOTICE OF ACCEPTANCE (NOA)

**Nystrom Incorporated
9300 73rd Avenue N.
Brooklyn Park, MN 55428**

SCOPE: This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami Dade County Product Control Division (in Miami-Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade county Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone.

DESCRIPTION: Wall Louver

APPROVAL DOCUMENT: Drawing No.1014, titled "653XPDC 6 inches Drainable Blade Louver" dated 01/18/01 with no revisions, prepared by W.W. Schaefer Engineering & Consulting, PA., signed and sealed by W. W. Schaefer, P.E., bearing the Miami-Dade County Product Control Renewal stamp with the NOA number and expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved or MDCPCA", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA 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 NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This a private label of NOA # 05-0913.02 consist of this page, evidence page as well as approval document mentioned above.

The submitted documentation was reviewed by **Candido F. Font PE.**


11/02/06



**NOA No: 06-0919.04
Expiration Date: June 28, 2007
Approval Date: November 2, 2006
Page 1**

Nystrom Incorporated

NOTICE OF ACCEPTANCE: EVIDENCE PAGE

A. DRAWINGS.

1. Drawing prepared by W. W. Schaefer Engineering & Consulting, P.A., titled "653XPDC 6" DRAINABLE BLADE LOUVER" Drawing No. 1014, dated 01/18/01 with no revisions, signed and sealed by W. W. Schaefer, PE.

B. TESTS.

1. Test report on Large Missile Impact Test per PA 201, Cyclic Wind Pressure Test per PA 203, and Uniform Static Air Pressure Test per PA 202 of "653XPDC 6" DRAINABLE BLADE LOUVER", No. specimens 1, 4, & 5, prepared by Hurricane Test Laboratory, Inc., report No. 0236-0103-01, dated 01/4, 5, & 8/2001, signed and sealed by V. J. Abraham, PE
2. Test report on Large Missile Impact Test per PA 201, Cyclic Wind Pressure Test per PA 203 and Uniform Static Air Pressure Test per PA 202 of "653XPDC 6" DRAINABLE BLADE LOUVER", specimen 1, prepared by Hurricane Test Laboratory, Inc., report No. 0236-1018-00, dated 10/26/00, signed and sealed by V. J. Abraham, PE.
3. Test report on Uniform Static Air Pressure Test per PA 202 of "653XPDC 6" DRAINABLE BLADE LOUVER", specimen 2, prepared by Hurricane Test Laboratory, Inc., report No. 0236-0103-01, dated 01/03/01, signed and sealed by V. J. Abraham, PE.
4. Revision to test report NO. 01-0215.03, prepared by Hurricane Testing Laboratory, Inc., dated 04/21/2001, signed and sealed by V. J. Abraham, PE.

C. CALCULATIONS.

1. Louver Blade, Mullion & Support Calculations of Industrial Louvers, 653XP 6", dated 01/22/01, pages 1 to 17 of 17, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed, dated and sealed by W. W. Schaefer, PE.

D. MATERIAL CERTIFICATIONS.

1. Extrusions drawings No. 60-021562-06B/12B, 16B/28B, prepared by Ruskin Manufacturing, on 04/22/98 & 04/23/98, signed and sealed by E. P. Hutson, PE.
2. Product Approval Notice of Acceptance No. 97-1023.04, issued by Miami-Dade County on 07/09/98, signed by C. D. PE.

E. STATEMENTS

1. Test compliance letter issued by Hurricane Test Laboratory, Inc., on 02/08/01, signed, dated and sealed by V. J. Abraham, PE.
2. Code compliance letter issued by W. W. Schaefer Engineering & Consulting, PA on 02/24/01, signed and sealed by W. W. Schaefer, PE.
3. No financial Interest letter issued by W. W. Schaefer Engineering & Consulting, PA, signed and sealed W. W. Schaefer, PE.
4. Private Labeling Agreement issued by Industrial Louvers, Inc. and Airline Louvers A Nystrom Louvers, Inc. Company, and signed by Michael R. Lanners & Scott R. Sustacek.
5. One year approval letter issued by Nystrom on 10/11/06 and signed by Jeff Gustafson.



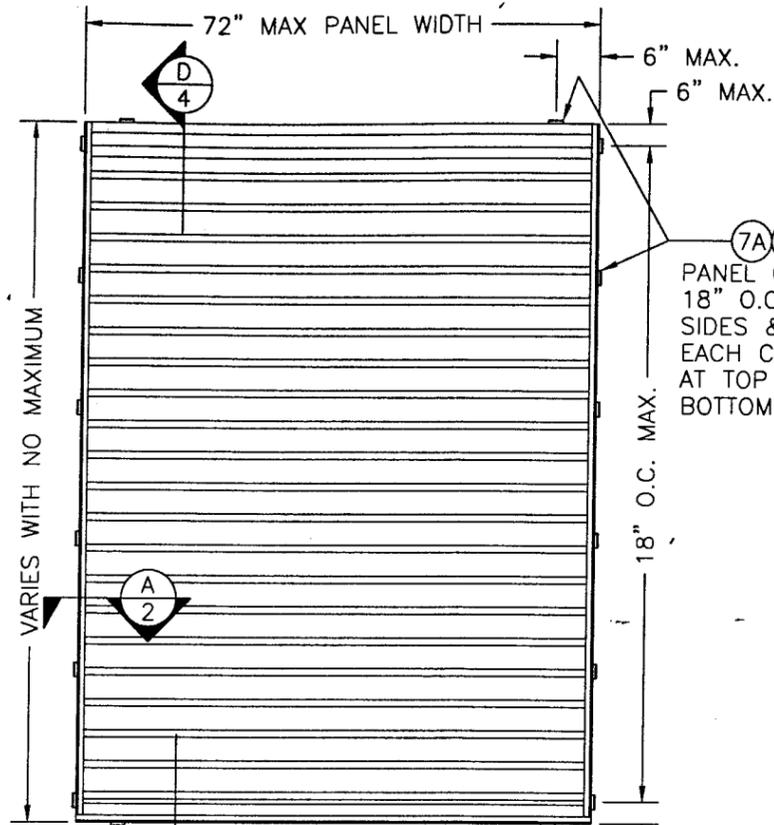
Candido F. Font PE.

Sr. Product Control Examiner

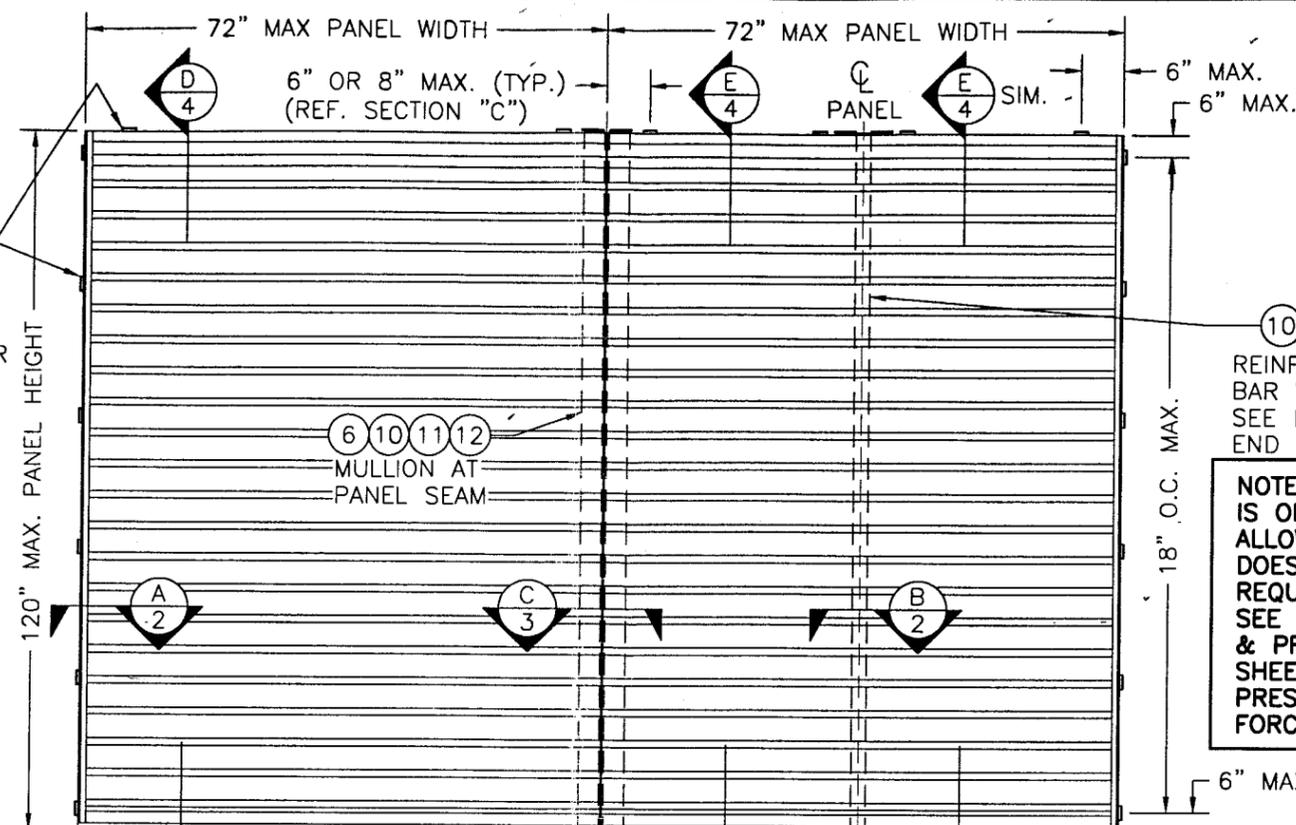
NOA No: 06-0919.04

Expiration Date: June 28, 2007

Approval: Date: November 2, 2006



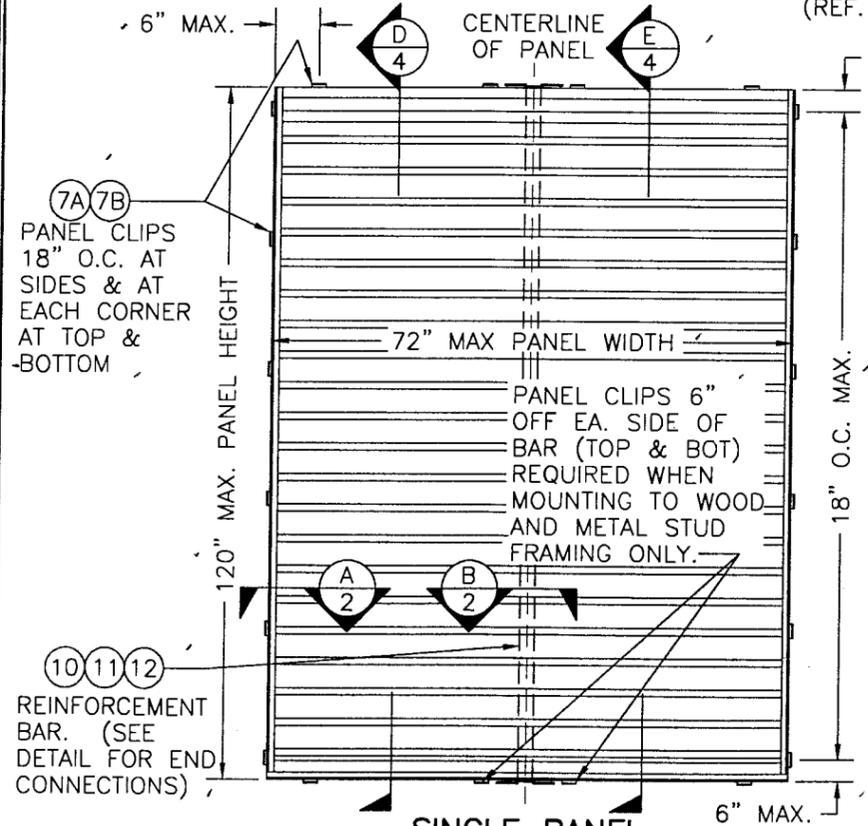
SINGLE PANEL WITHOUT REINFORCEMENT BAR



MULTIPLE PANEL WITH & WITHOUT REINFORCEMENT BARS

ALLOWABLE PRESSURES
 PRESSURES VARY WITH PANEL SIZE MULLION TYPE & REINFORCEMENT BAR TYPE & SHALL BE CONTROLLED BY THE LESSER OF THE ALLOWABLE PRESSURE FOR EACH OF THOSE APPLICABLE COMPONENTS. SEE PRESSURE TABLES ON SHEETS 6 & 7 FOR ALLOWABLE PRESSURES.

NOTE: REINFORCEMENT BAR IS ONLY REQUIRED WHEN ALLOWABLE PANEL LOAD DOES NOT MEET THE REQUIRED DESIGN LOAD. SEE "LOUVER PANEL SIZE & PRESSURE TABLE" ON SHEET 6 FOR ALLOWABLE PRESSURES ON UNREINFORCED PANELS.



SINGLE PANEL WITH REINFORCEMENT BAR

PANEL CLIPS 6" TO 8" OFF EA. SIDE OF BAR (TYP. TOP & BOTTOM) (REF. SECTION "C")

PANEL CLIPS 6" OFF EA. SIDE OF BAR TOP & BOTTOM) REQUIRED WHEN MOUNTING TO WOOD & METAL STUD FRAMING ONLY

NOTE: THIS LOUVER SYSTEM MAY CONSIST OF AN UNLIMITED NUMBER OF SECTIONS PROVIDING EACH SECTION DOES NOT EXCEED 72" X 120" IN SIZE.

GENERAL NOTES:

- 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 LOUVERS.
- THESE LOUVER SYSTEMS HAVE BEEN DESIGNED & TESTED IN ACCORDANCE WITH THE SOUTH FLORIDA BUILDING CODE 1994 EDITION AND MIAMI-DADE COUNTY PROTOCOLS PA-201, 202 & 203.
- EACH LOUVER ASSEMBLY SHALL BE PERMANENTLY LABELED AS FOLLOWS:
 INDUSTRIAL LOUVERS, INC.
 DELANO, MN
 MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED
- ALL CONCRETE SUBSTRATE SHALL BE MIN. 3000 PSI.
- ALL WOOD SUBSTRATE SHALL BE MIN. G = 0.55 DENSITY.
- ALL METAL STUD SUBSTRATE SHALL BE MIN. 16 GA. Fy = 33 ksi.
- ALL STRUCTURAL STEEL SUBSTRATE SHALL BE MIN. Fy = 36 ksi.
- PANEL WIDTHS & HEIGHTS ARE LIMITED AS SHOWN IN ELEVATIONS.
- PANELS MAY BE HORIZONTALLY STACKED TO AN UNLIMITED NUMBER. VERTICAL STACKING MAY OCCUR PROVIDING A STRUCTURAL SUPPORT IS DESIGNED & INSTALLED BY OTHERS TO SUPPORT ALL LOADS TRANSFERRED FROM THE LOUVER ASSEMBLY (SINGLE NON-REINFORCED PANEL MAY RUN TO UNLIMITED HEIGHT PER ELEVATION IF NO REINFORCEMENT BARS ARE REQUIRED).
- SEPARATION OF DISSIMILAR MATERIALS MUST BE MAINTAINED PER SECTION 3004.4 OF THE SOUTH FLORIDA BUILDING CODE 1994 EDITION.
- THIS SYSTEM HAS NOT BEEN TESTED FOR WATER INFILTRATION RESISTANCE AND IS NOT A WATER RESISTANT SYSTEM.
- THE LOUVER IS TO BE INSTALLED IN A LOCATION WHERE THE ROOM BEHIND THE LOUVER IS DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM, AND THE ROOM WILL HOUSE WATER RESISTANT/WATER PROOF EQUIPMENT, COMPONENTS OR SUPPLIES.

FASTENER SCHEDULE			
ANCHOR TYPE	SUBSTRATE	MINIMUM EMBEDMENT	MINIMUM EDGE DIST.
NO. 10 SCREW	WOOD	1 3/8"	3/4"
NO. 10 SCREW	METAL/STEEL	FULL	3/4"
NO. 14 SCREW	WOOD	1 3/4"	3/4"
NO. 12 SCREW	METAL/STEEL	FULL	3/4"
1/4" TAPCON	BLOCK/CONC.	1 1/4"	2 1/2"
RED HEAD 1/2" WEDGE	CONCRETE	3"	3"
HILTI 1/2" WEDGE	CONCRETE	3"	3 3/4"
5/16" LAG SCREW	WOOD	2.5"	3/4"

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE

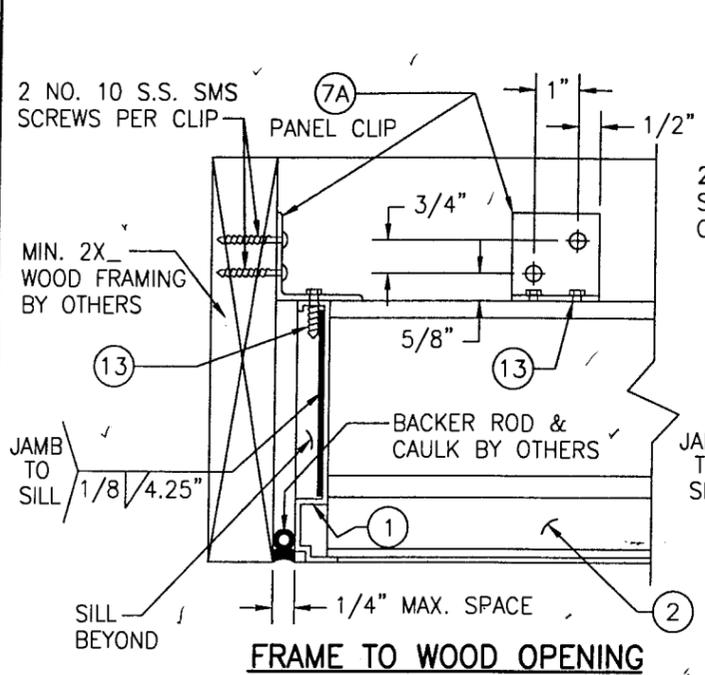
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 06/28/07

BY: [Signature]

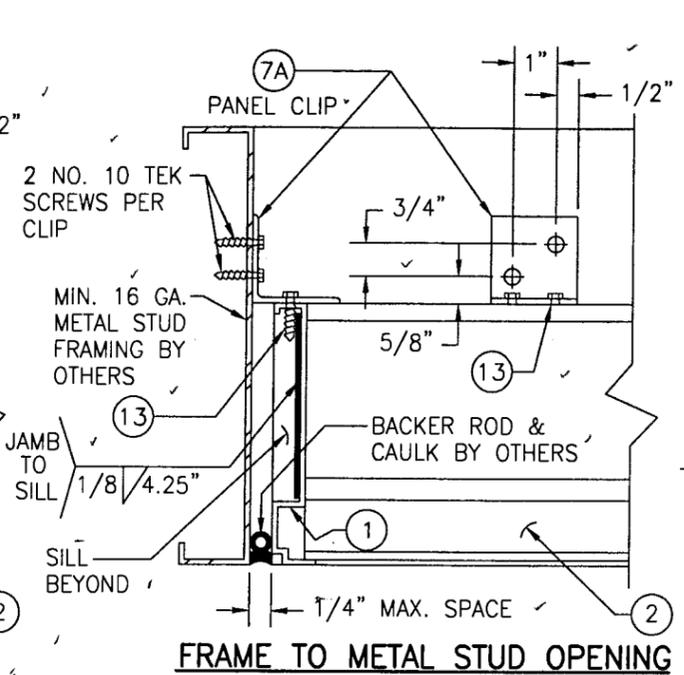
PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 01-10 29.04

EXTERIOR ELEVATIONS

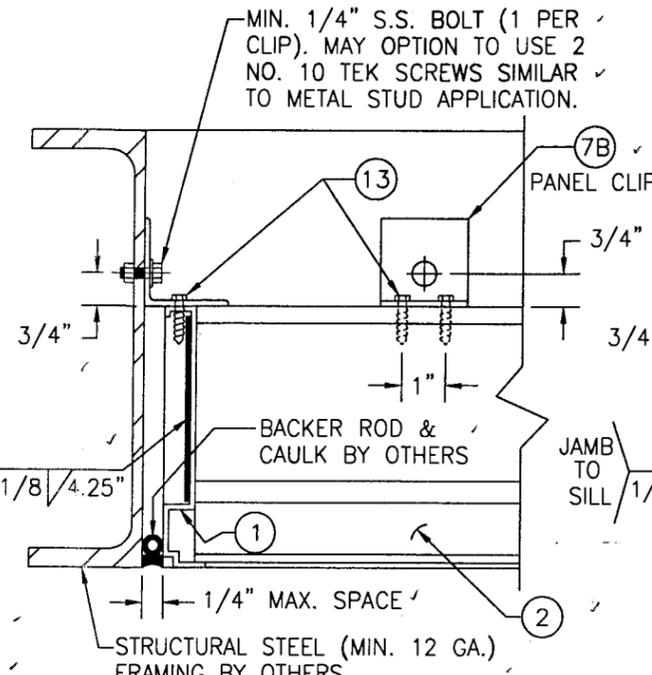
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PLOT: 1=24	DATE: 01/18/01
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE 653XPDC 6" DRAINABLE BLADE LOUVER	
MANUFACTURER (PRIVATE LABELER) NYSTROM, INC. 1701 MADISON STREET NE MINNEAPOLIS, MN 55413 612-781-7850	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903	
CERTIFICATION NOV 14 2001	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1014	REV.
SHEET NO. 1	OF 7



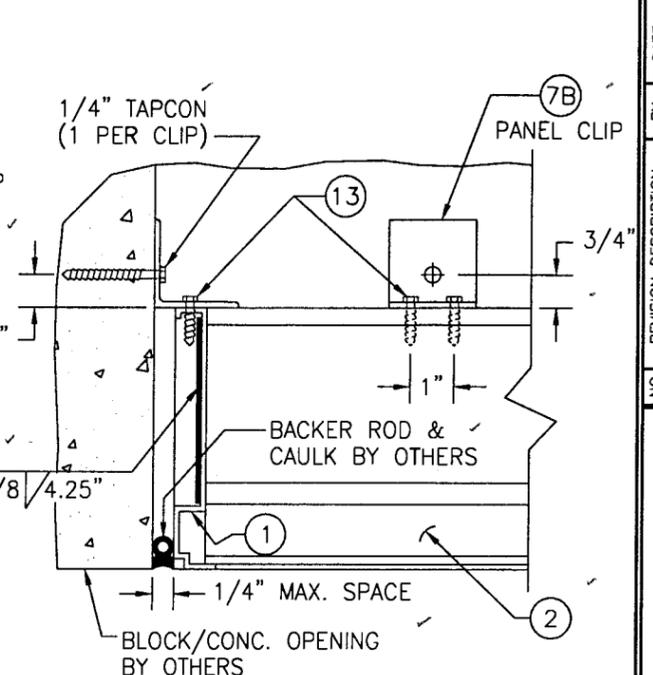
FRAME TO WOOD OPENING



FRAME TO METAL STUD OPENING



FRAME TO STRUCTURAL STEEL OPENING

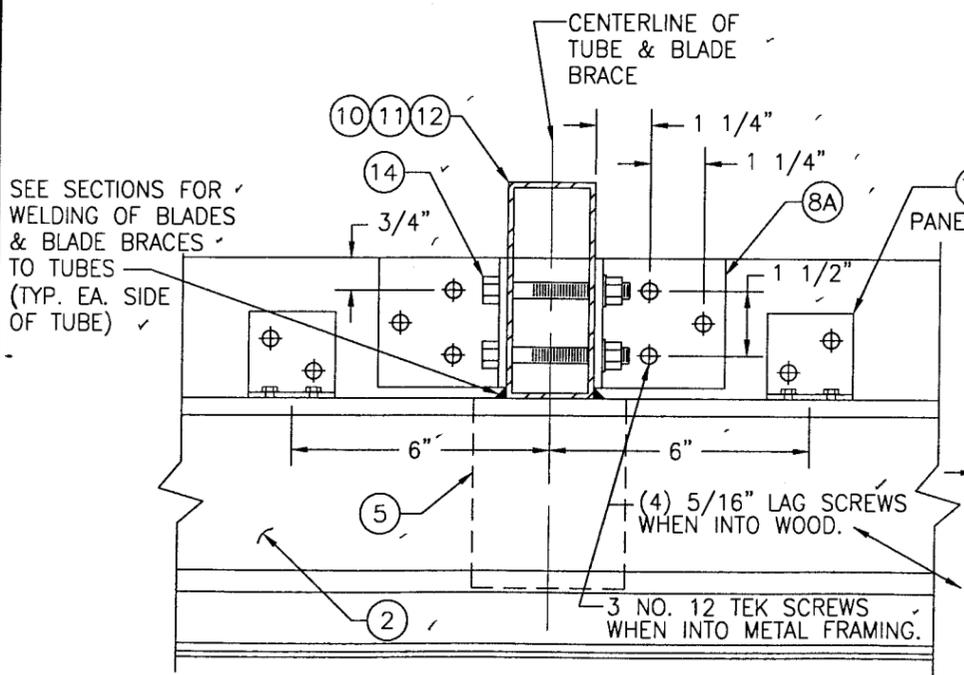


FRAME TO BLOCK/CONC. OPENING

SEE SHEET 4 FOR INSTRUCTION OF JOINING FRAME CORNERS

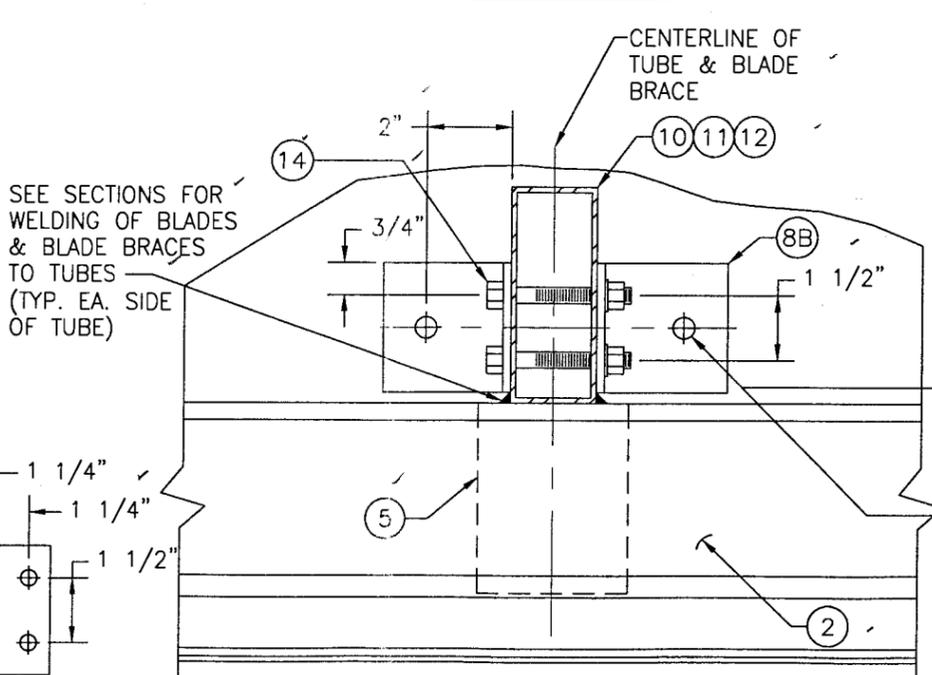
SECTIONS (A) 2
SCALE: 3"=1'-0"

SEE FASTENER SCHEDULE ON SHEET 1 FOR FASTENER EMBED & EDGE DISTANCE REQUIREMENTS.



REINFORCEMENT BAR TO WOOD OR METAL FRAME SILL/HEAD

SECTIONS (B) 2
SCALE: 3"=1'-0"



REINFORCEMENT BAR TO STRUCTURAL STEEL OR CONCRETE SILL/HEAD

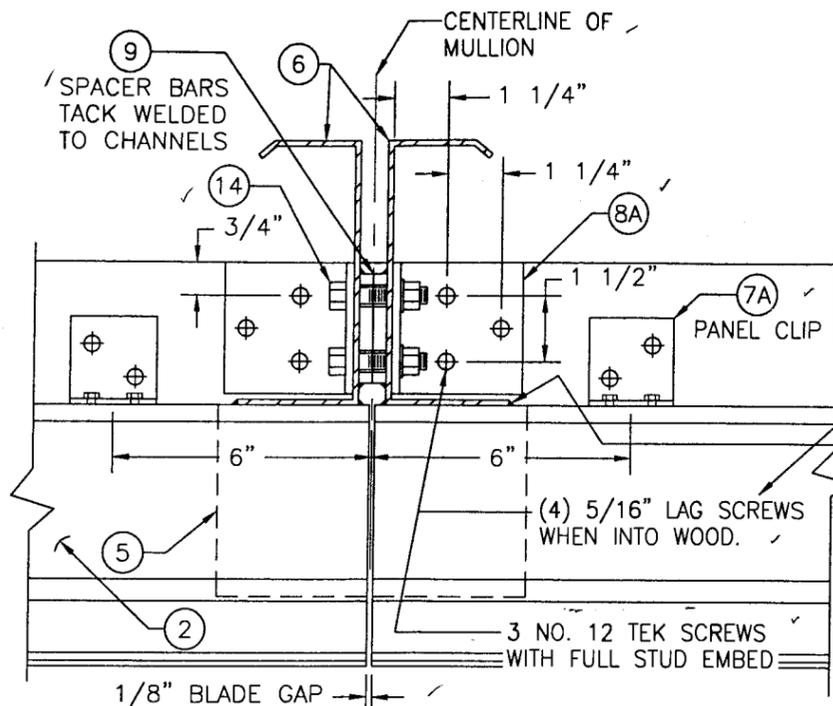
NOTE: NO FRAME CLIPS ARE REQUIRED ON EITHER SIDE OF THE REINFORCEMENT BAR (REF. SHEET 1)

1/2" X MIN. 4 1/4" GALV. WEDGE ANCHOR WHEN INTO CONCRETE. READ HEAD NO. WS-1242G

1/2" GALV. A307 OR S.S. BOLT WHEN TO STEEL (MAY OPTION TO CONNECT TO STEEL WITH 3 NO. 12 TEK SCREWS SAME AS TO METAL FRAMING)

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE: 06/28/02
BY: [Signature]
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-1029.04

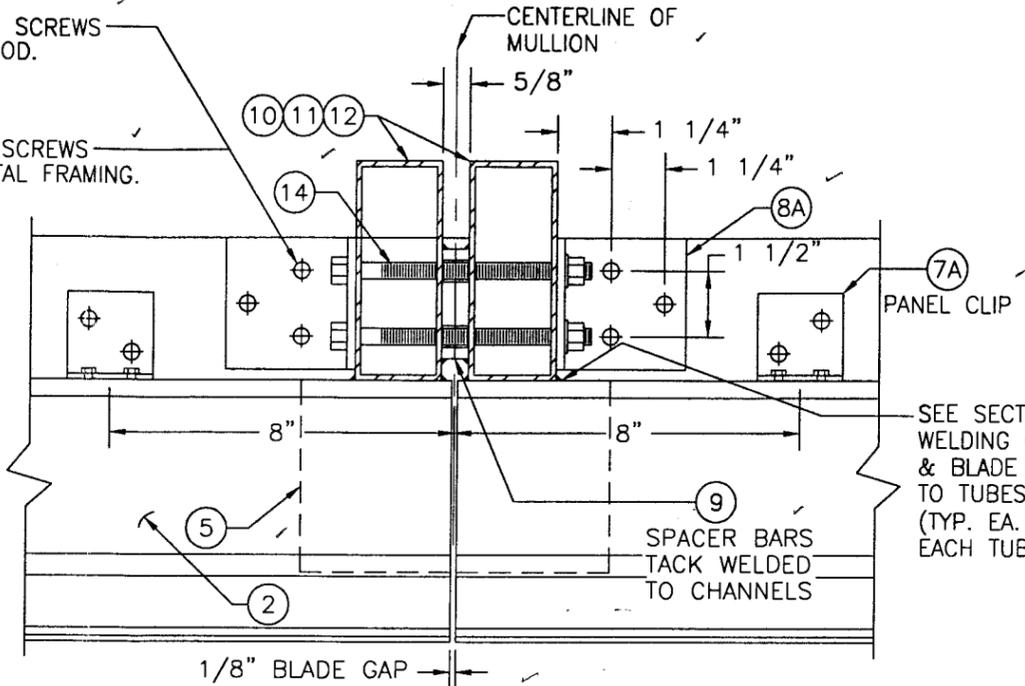
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PLOT: 1=24		DATE: 01/18/01	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: 653XPDC 6" DRAINABLE BLADE LOUVER			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		MANUFACTURER (PRIVATE LABELER): NYSTROM, INC.	
600 SANDTREE DRIVE, SUITE 203B PALM BEACH GARDENS, FL 33403 PHONE: 561-775-4902 FAX: 561-775-4903		1701 MADISON STREET NE MINNEAPOLIS, MN 55413 612-781-7850	
CERTIFICATION: NOV 14 2001		WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1014		REV. 	
SHEET NO. 2		OF 7	



DOUBLE CHANNEL MULLION TO WOOD OR METAL FRAME SILL/HEAD

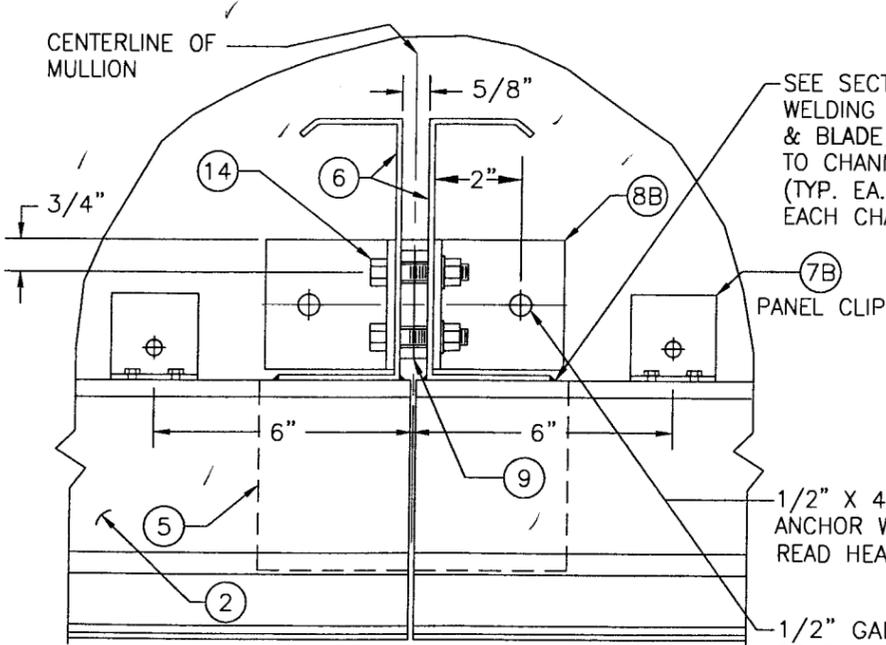
FOR CONNECTION OF BLADES TO MULLION, SEE "TYPICAL BLADE TO MULLION CONNECTION DETAIL" & SECTION "E" FOR DETAIL.

SEE FASTENER SCHEDULE ON SHEET 1 FOR FASTENER EMBED & EDGE DISTANCE REQUIREMENTS.



DOUBLE TUBE MULLION TO WOOD OR METAL FRAME SILL/HEAD

FOR CONNECTION OF BLADES TO MULLION, SEE "TYPICAL BLADE TO MULLION CONNECTION DETAIL" & SECTION "E" FOR DETAIL.



DOUBLE CHANNEL MULLION TO STRUCTURAL STEEL OR CONCRETE SILL/HEAD

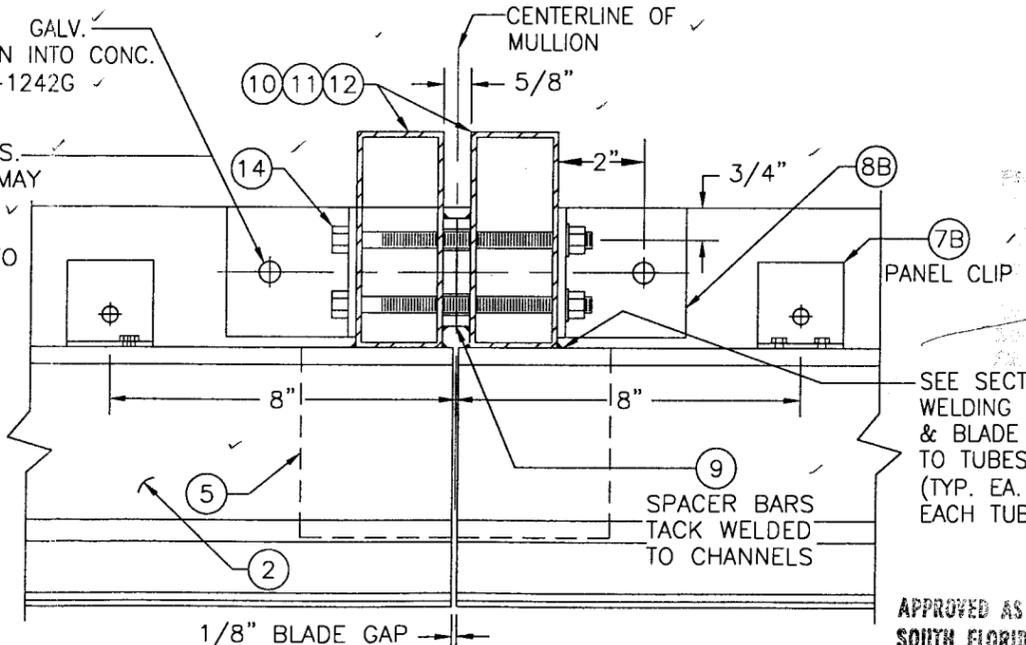
FOR CONNECTION OF BLADES TO MULLION, SEE "TYPICAL BLADE TO MULLION CONNECTION DETAIL" & SECTION "E" FOR DETAIL.

SEE SECTIONS FOR WELDING OF BLADES & BLADE BRACES TO CHANNELS. (TYP. EA. SIDE OF EACH CHANNEL)

1/2" X 4 1/4" GALV. WEDGE ANCHOR WHEN INTO CONCRETE. READ HEAD NO. WS-1242G

1/2" GALV. A307 OR S.S. BOLT WHEN TO STEEL (MAY OPTION TO CONNECT TO STEEL WITH 3 NO. 12 TEK SCREWS SAME AS TO METAL FRAMING)

SECTIONS C/3
SCALE: 3"=1'-0"



DOUBLE TUBE MULLION TO STRUCTURAL STEEL OR CONCRETE SILL/HEAD

FOR CONNECTION OF BLADES TO MULLION, SEE "TYPICAL BLADE TO MULLION CONNECTION DETAIL" & SECTION "E" FOR DETAIL.

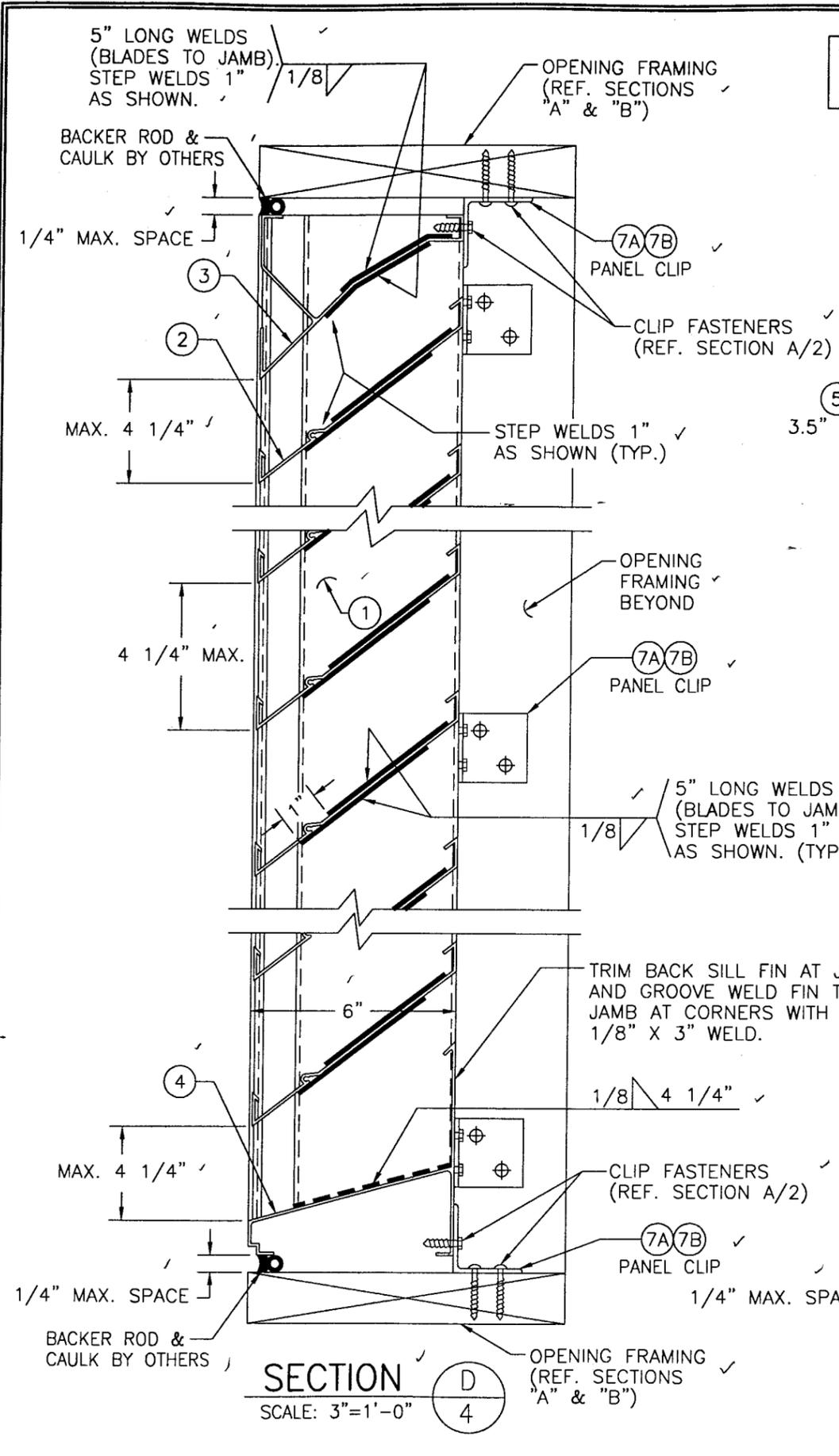
APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE

DATE: 06-09/19/04

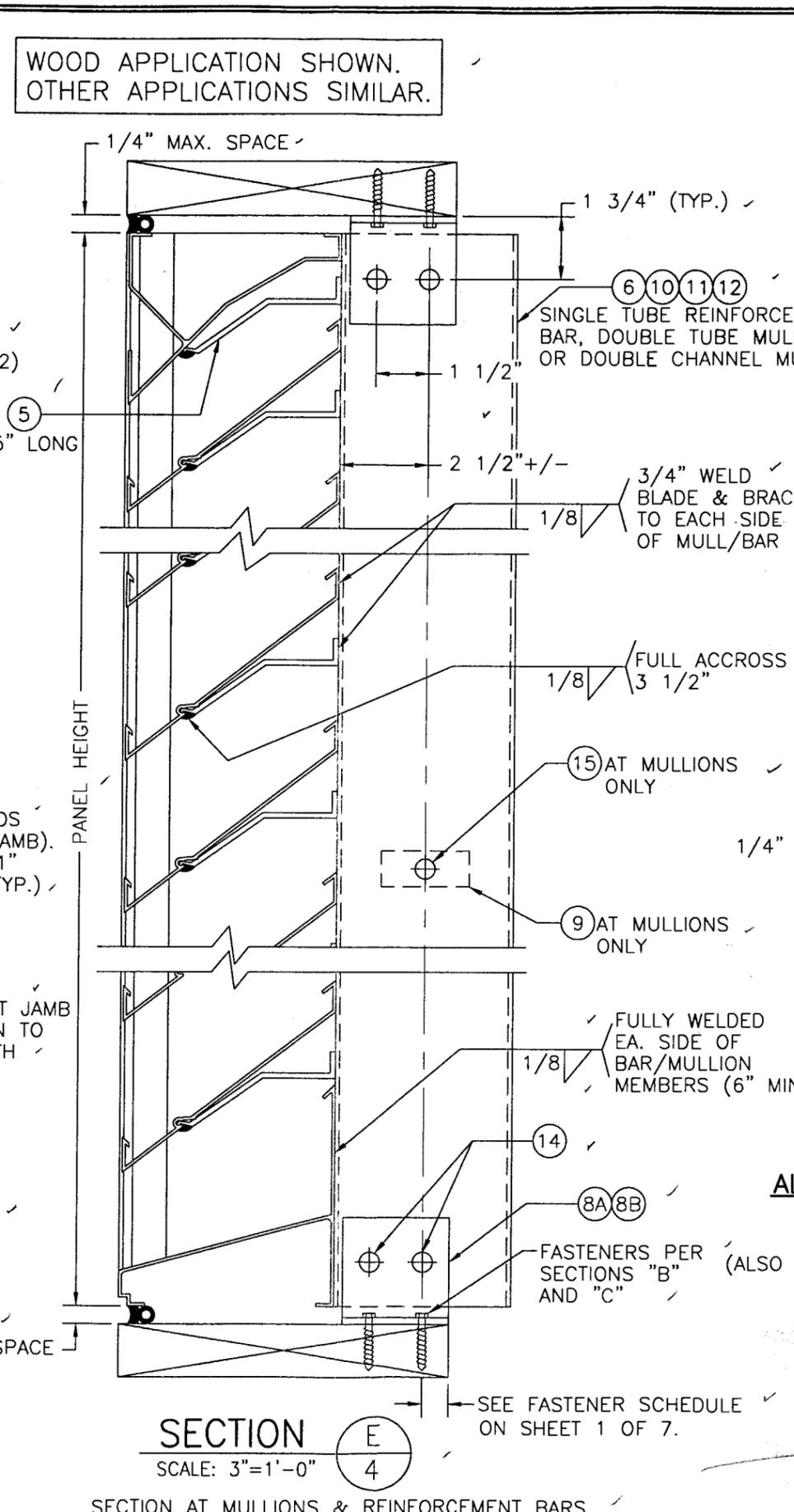
BY: [Signature]

PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-1029.04

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1-24	DATE: 01/18/01
DATE	
BY	
REVISION DESCRIPTION	
NO.	
653XPCD 6" DRAINABLE BLADE LOUVER	
MANUFACTURER (PRIVATE LABELER) NYSTROM, INC. 1701 MADISON STREET NE MINNEAPOLIS, MN 55413 612-781-7850	
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 14 2001	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1014	REV.
SHEET NO. 3	OF 7



SECTION D
SCALE: 3"=1'-0"



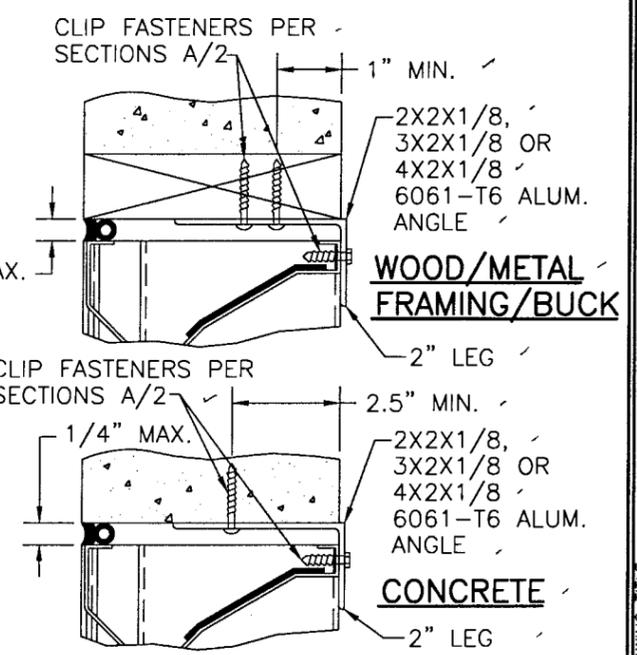
SECTION E
SCALE: 3"=1'-0"

SECTION AT MULLIONS & REINFORCEMENT BARS

CORNER CONSTRUCTION

TOP BLADE TO JAMB: BLADE IS BUTTED TO JAMB & WELDED WITH (2) 1/8" X 5" WELDS AS SHOWN IN SECTION "D".
 BOTTOM SILL TO JAMB: SILL FIN IS TRIMMED & JAMB SITS ON TOP OF SILL (BUTTED TO SILL). WELD OUTSIDE EDGE OF JAMB TO SILL WITH 1/8" X 5" WELD. ALSO GROOVE WELD FIN TO JAMB EDGE WITH 3" OF WELD.

SEE FASTENER SCHEDULE ON SHEET 1 FOR FASTENER EMBED & EDGE DISTANCE REQUIREMENTS.

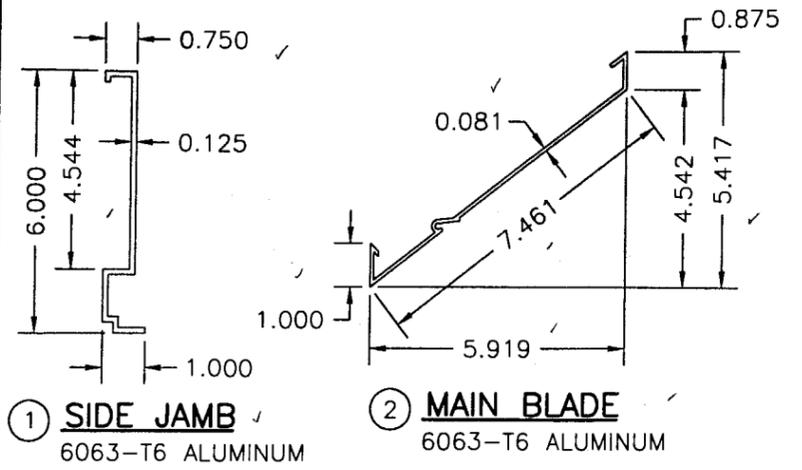


ALTERNATE PANEL CLIP CONNECTIONS

SEE SECTIONS FOR DETAIL NOT SHOWN (TYP. ALL SIDES OF PANELS)
 (ALSO APPLICABLE TO STRUCTURAL STEEL INSTALLATION)
 (CLIPS ARE TO BE 2" LONG)

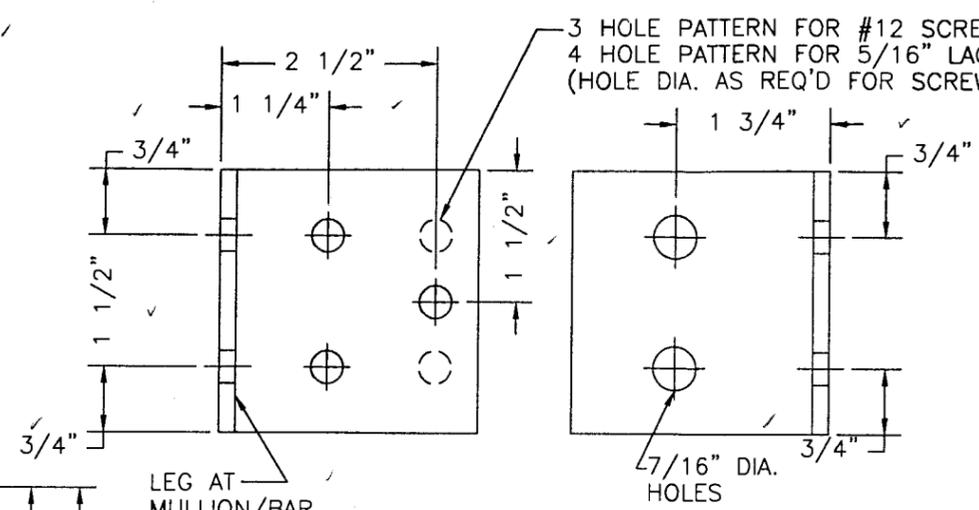
APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE: 06-09/19.04
 BY: [Signature]
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 01-1029.04

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: i-24	DATE: 01/18/01
DATE	BY
REVISION DESCRIPTION	NO.
653XPC 6" DRAINABLE BLADE LOUVER MANUFACTURER (PRIVATE LABELER) NYSTROM, INC. 1701 MADISON STREET NE MINNEAPOLIS, MN 55413 612-781-7850	
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 14 2001	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1014	REV.
SHEET NO. 4	OF 7

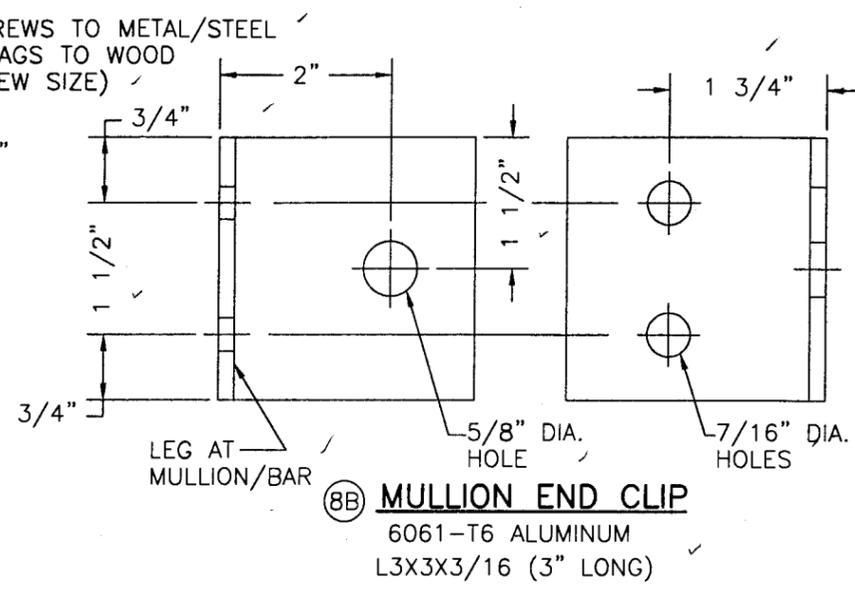


① **SIDE JAMB**
6063-T6 ALUMINUM

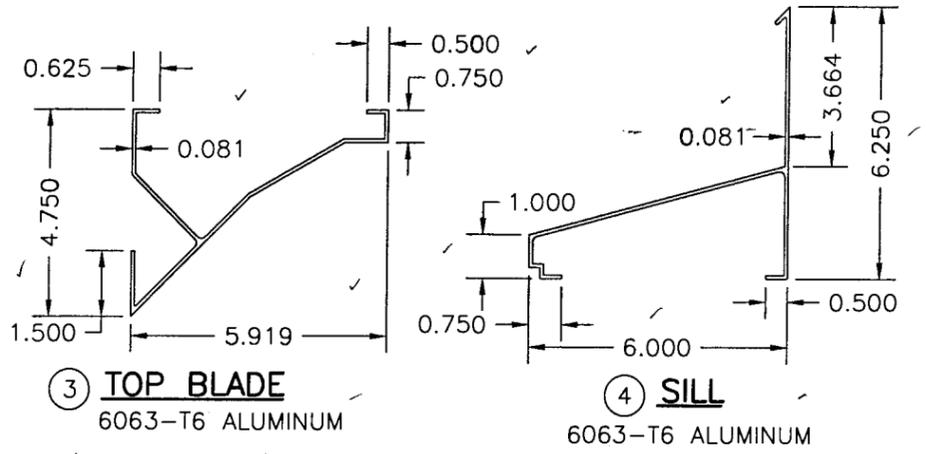
② **MAIN BLADE**
6063-T6 ALUMINUM



⑧A **MULLION END CLIP**
6061-T6 OR 6005-T5 ALUMINUM
L3X3X3/16 (3" LONG)

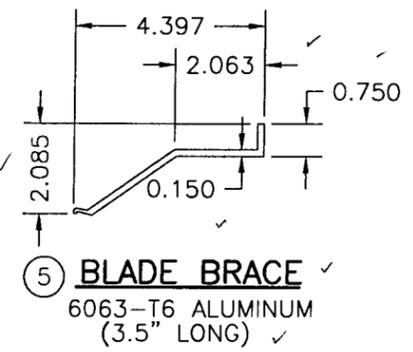


⑧B **MULLION END CLIP**
6061-T6 ALUMINUM
L3X3X3/16 (3" LONG)

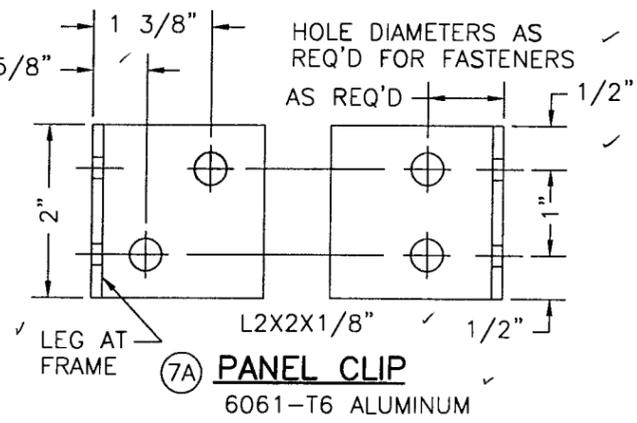


③ **TOP BLADE**
6063-T6 ALUMINUM

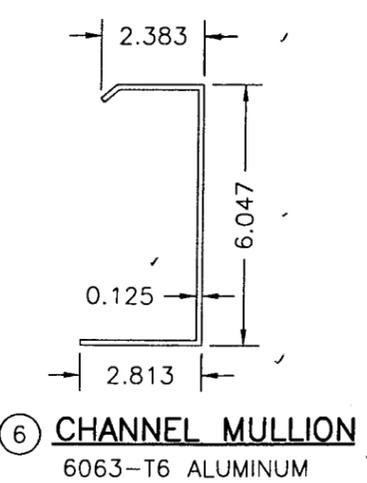
④ **SILL**
6063-T6 ALUMINUM



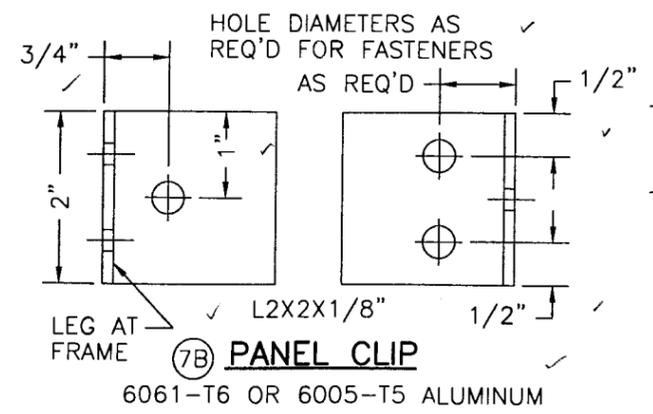
⑤ **BLADE BRACE**
6063-T6 ALUMINUM
(3.5" LONG)



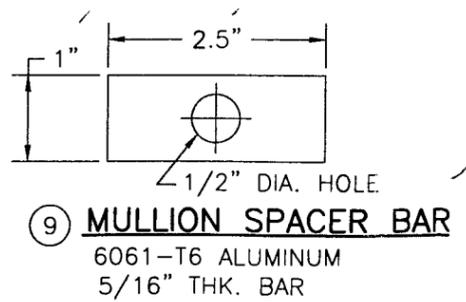
⑦A **PANEL CLIP**
6061-T6 ALUMINUM



⑥ **CHANNEL MULLION**
6063-T6 ALUMINUM



⑦B **PANEL CLIP**
6061-T6 OR 6005-T5 ALUMINUM



⑨ **MULLION SPACER BAR**
6061-T6 ALUMINUM
5/16" THK. BAR

BILL OF MATERIALS		
ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	SIDE JAMB	6063-T6 ALUMINUM
2	MAIN BLADE	6063-T6 ALUMINUM
3	TOP BLADE	6063-T6 ALUMINUM
4	SILL	6063-T6 ALUMINUM
5	BLADE BRACE	6063-T6 ALUMINUM
6	CHANNEL MULLION	6063-T6 ALUMINUM
7A	L2X2X1/8 PANEL CLIP	6061-T6 ALUMINUM; USED WITH WOOD & METAL FRAMED OPENINGS
7B	L2X2X1/8 PANEL CLIP	6061-T6 ALUMINUM; USED WITH STEEL & BLOCK/CONC. OPENINGS
8A	L3X3X3/16 MULLION END CLIP	6061-T6 ALUMINUM; USED WITH WOOD & METAL FRAMED HEAD SILL
8B	L3X3X3/16 MULLION END CLIP	6061-T6 ALUMINUM; USED WITH STEEL & CONCRETE HEAD/SILL
9	MULLION SPACER BAR	6061-T6 ALUMINUM; 2 BETWEEN MULLION MEMBERS AT EA. BOLT
10	4X2X1/8" TUBE MULLION/BAR	6061-T6 OR 6005-T5 ALUMINUM
11	5X2X1/8" TUBE MULLION/BAR	6061-T6 OR 6005-T5 ALUMINUM
12	6X2X1/8" TUBE MULLION/BAR	6061-T6 OR 6005-T5 ALUMINUM
13	NO. 14 TEK SCREWS BY HILTI	2 PER PANEL CLIP INTO FRAME (MIN. 1" LONG)
14	3/8" THRU-BOLT/THREADED ROD	GALV. A307 OR S.S.; 2 PER MULLION/REINFORCEMENT BAR END
15	3/8" SPACER BOLT/THREADED ROD	GALV. A307 OR S.S.; 1 @ 24" FROM ENDS & MAX. 24" O.C.

APPROVED AS COMPLYING WITH THE
SOUTH FLORIDA BUILDING CODE
DATE 06-09-04
BY 06/28/07
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 01-102904

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1=24	DATE: 01/18/01
NO.	REVISION DESCRIPTION
DATE	BY
DRAWING TITLE 653XPDC 6" DRAINABLE BLADE LOUVER	
MANUFACTURER (PRIVATE LABELER) NYSTROM, INC. 1701 MADISON STREET NE MINNEAPOLIS, MN 55413 612-781-7850	
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 14 2001 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1014	REV.
SHEET NO. 5	OF 7

MULLION PRESSURE TABLE 1.0
(APPLICABLE FOR MULLIONS AT SINGLE SPAN PANELS)
(SEE ELEVATION "A" ON THIS SHEET)

MULLION SPAN (PANEL HEIGHT) (INCHES)	LOAD WIDTH (SEE ELEVATION) (INCHES)	ALLOWABLE PRESSURE (PSF)			
		DOUBLE EXTR. CHANNEL	DOUBLE 4X2X1/8 TUBE	DOUBLE 5X2X1/8 TUBE	DOUBLE 6X2X1/8 TUBE
60	72	150.0	150.0	150.0	150.0
72	48	150.0	150.0	150.0	150.0
	60	150.0	150.0	150.0	150.0
	72	133.3	127.7	133.3	133.3
84	36	150.0	150.0	150.0	150.0
	48	150.0	120.6	150.0	150.0
	60	137.1	96.5	137.1	137.1
	72	114.3	80.4	114.3	114.3
96	36	150.0	107.7	150.0	150.0
	48	150.0	80.8	141.3	150.0
	60	120.0	64.6	113.0	120.0
	72	100.0	53.9	94.2	100.0
108	36	150.0	75.7	132.3	150.0
	48	133.3	56.8	99.2	133.3
	60	106.7	45.4	79.4	106.7
	72	88.9	37.8	66.2	88.9
120	36	150.0	55.2	96.5	150.0
	48	112.5	41.4	72.3	115.1
	60	90.0	33.1	57.9	92.1
	72	75.0	27.6	48.2	76.7

MULLION PRESSURE TABLE 2.0
(APPLICABLE FOR MULLIONS AT DOUBLE SPAN PANELS)
(SEE ELEVATION "B" ON THIS SHEET)

MULLION SPAN (PANEL HEIGHT) (INCHES)	(A+B)/2 (SEE ELEVATION) (INCHES)	ALLOWABLE PRESSURE (PSF)			
		DOUBLE EXTR. CHANNEL	DOUBLE 4X2X1/8 TUBE	DOUBLE 5X2X1/8 TUBE	DOUBLE 6X2X1/8 TUBE
84	36	150.0	150.0	150.0	150.0
	48	150.0	150.0	150.0	150.0
	60	150.0	150.0	150.0	150.0
	72	150.0	150.0	150.0	150.0
96	36	150.0	150.0	150.0	150.0
	48	150.0	150.0	150.0	150.0
	60	150.0	150.0	150.0	150.0
	72	150.0	143.7	150.0	150.0
108	36	150.0	150.0	150.0	150.0
	48	150.0	150.0	150.0	150.0
	60	150.0	121.1	150.0	150.0
	72	150.0	100.9	150.0	150.0
120	36	150.0	147.1	150.0	150.0
	48	150.0	110.3	150.0	150.0
	60	150.0	88.3	150.0	150.0
	72	150.0	73.6	128.6	150.0

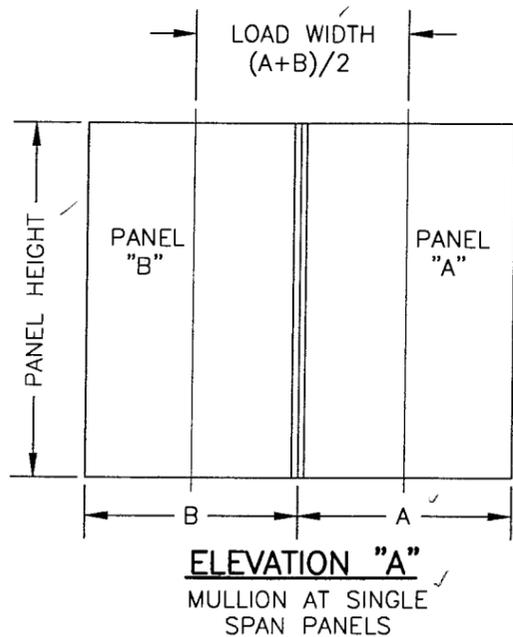
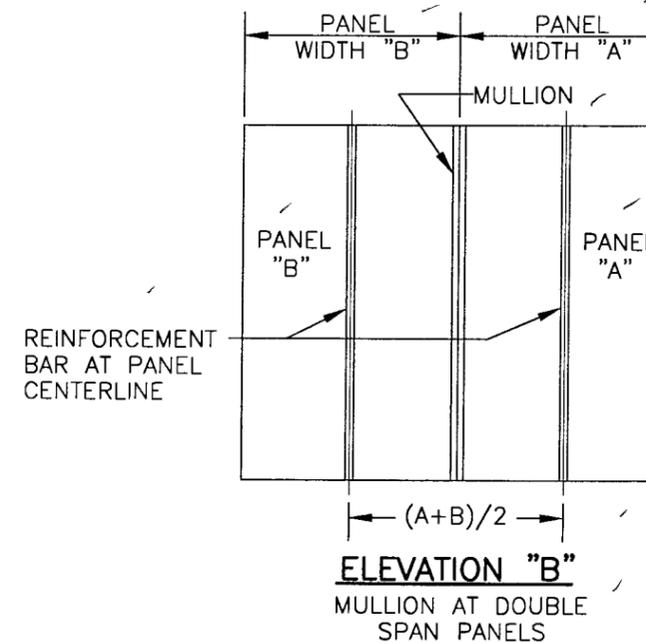


TABLE 4.0
LOUVER PANEL SIZE & PRESSURE TABLE
(APPLICABLE FOR SINGLE SPAN LOUVER PANELS)

PANEL WIDTH	ALLOWABLE DESIGN PRESSURE
36"	150.0 PSF
42"	128.5 PSF
48"	112.5 PSF
54"	100.0 PSF
60"	90.0 PSF
66"	81.9 PSF
72"	75.0 PSF



NOTE: PANEL WIDTHS MAY NOT EXCEED 72"
& PANEL HEIGHT MAY NOT EXCEED 120"

ALL PRESSURES IN TABLES ARE FOR BOTH POSITIVE & NEGATIVE DIRECTION.

NOTE: MAX. LOUVER WIDTH AND PRESSURE IS CONTROLLED BY TABLE 4.0. OTHER TABLES MUST CONFORM WITH TABLE 4.0 IN ORDER TO BE USED.

NOTE: PANEL WIDTHS MAY NOT EXCEED 72"
& PANEL HEIGHT MAY NOT EXCEED 120"

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PLOT: 1-24	DATE: 01/18/01
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BY	
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CERTIFICATION NOV 14 2001 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1014	REV.
SHEET NO. 6	OF 7

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
 DATE: 06-09/2003
 BY: [Signature]
 PRODUCT CONTROL DIVISION
 BUILDING CODE COMPLIANCE OFFICE
 ACCEPTANCE NO. 01-1029.04

REINFORCEMENT BAR PRESSURE TABLE 3.0

(APPLICABLE FOR REINFORCEMENT BARS)
(SEE ELEVATION "C" ON THIS SHEET)

BAR SPAN (PANEL HEIGHT) (INCHES)	PANEL WIDTH (SEE ELEVATION) (INCHES)	ALLOWABLE PRESSURE (PSF)		
		SINGLE 4X2X1/8 TUBE	SINGLE 5X2X1/8 TUBE	SINGLE 6X2X1/8 TUBE
60	36	150.0	150.0	150.0
	48	150.0	150.0	150.0
	60	150.0	150.0	150.0
	72	150.0	150.0	150.0
72	36	150.0	150.0	150.0
	48	150.0	150.0	150.0
	60	150.0	150.0	150.0
	72	150.0	150.0	150.0
84	36	150.0	150.0	150.0
	48	150.0	150.0	150.0
	60	150.0	150.0	150.0
	72	136.4	150.0	150.0
96	36	150.0	150.0	150.0
	48	150.0	150.0	150.0
	60	125.3	150.0	150.0
	72	104.4	146.1	150.0
108	36	150.0	150.0	150.0
	48	123.8	150.0	150.0
	60	99.0	138.6	150.0
	72	82.5	115.5	142.2
120	36	133.7	150.0	150.0
	48	100.3	140.3	150.0
	60	80.2	112.2	148.7
	72	66.8	93.5	123.9

LOAD TABLE INSTRUCTIONS

SINGLE PANELS

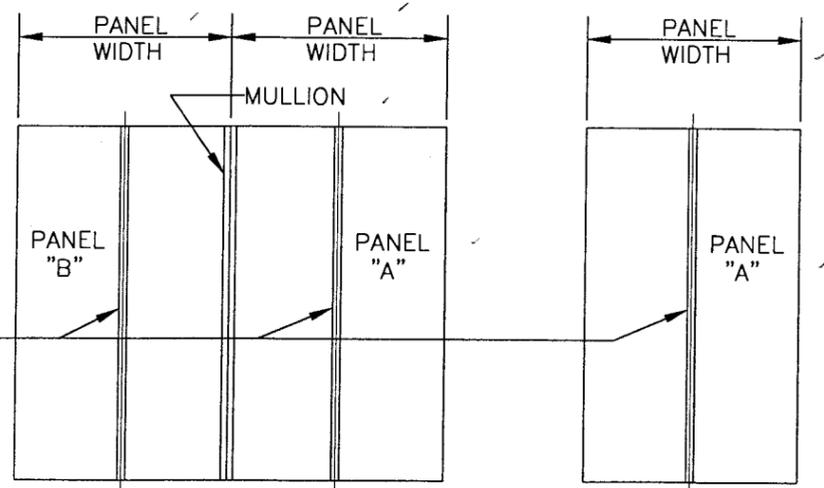
- GO TO "LOUVER PANEL SIZE & PRESSURE TABLE" ON SHEET 6 AND CHECK THE ALLOWABLE PRESSURE FOR THE PANEL IN SINGLE SPAN. IF THE ALLOWABLE PRESSURE IS GREATER THAN OR EQUAL TO THE REQUIRED PRESSURE, YOU ARE DONE. IF THE ALLOWABLE PRESSURE IS LESS THAN THE REQUIRED PRESSURE, CONTINUE TO NO. 2 BELOW FOR CHOOSING A REINFORCEMENT BAR.
- GO TO TABLE 3.0 ON THIS SHEET AND CHOOSE A BAR WHOSE ALLOWABLE PRESSURE AT THE APPLICABLE SPAN & PANEL WIDTH IS GREATER THAN OR EQUAL TO THE REQUIRED PRESSURE.

MULTIPLE PANELS

- GO TO "LOUVER PANEL SIZE & PRESSURE TABLE" ON SHEET 6 AND CHECK THE ALLOWABLE PRESSURE FOR PANELS IN SINGLE SPAN (NO REINFORCEMENT BARS). IF THE ALLOWABLE PRESSURE FOR THE PANEL IS GREATER THAN OR EQUAL TO THE REQUIRED PRESSURE, NO REINFORCEMENT BAR IS REQUIRED AND YOU MAY PROCEED TO NO. 3 BELOW FOR SIZING THE MULLIONS. IF A REINFORCEMENT BAR IS REQUIRED, CONTINUE TO NO. 2 BELOW.
- IF A SINGLE SPAN PANEL WILL NOT MEET PRESSURE REQUIREMENTS, GO TO TABLE 3.0 ON THIS SHEET AND CHOOSE A REINFORCEMENT BAR WHOSE ALLOWABLE PRESSURE AT THE APPLICABLE SPAN & PANEL WIDTH IS GREATER THAN OR EQUAL TO THE REQUIRED PRESSURE AND THEN SKIP TO NO. 4 BELOW.
- IF NO REINFORCEMENT BAR IS REQUIRED, GO TO TABLE 1.0 AND CHOOSE A MULLION WHOSE ALLOWABLE PRESSURE IS GREATER THAN OR EQUAL TO THE REQUIRED PRESSURE.
- IF A REINFORCEMENT BAR IS REQUIRED, GO TO TABLE 2.0 AND CHOOSE A MULLION WHOSE ALLOWABLE PRESSURE IS GREATER THAN OR EQUAL TO THE REQUIRED PRESSURE.

** IF THE MULLION WILL NOT SUPPORT THE REQUIRED DESIGN PRESSURE WHEN USING SINGLE SPAN PANELS, A REINFORCEMENT BAR MUST BE USED & SIZED ACCORDING TO THESE INSTRUCTIONS.

NOTE: THE LESSER ALLOWABLE PRESSURE OF THE MULLION, REINFORCEMENT BAR OR SINGLE PANEL WILL CONTROL.



MULTIPLE PANELS **SINGLE PANEL**

ELEVATION "C"
REINFORCEMENT BAR
(DOUBLE SPAN PANELS)

NOTE: PANEL WIDTHS MAY NOT EXCEED 72" & PANEL HEIGHT MAY NOT EXCEED 120"

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653XPDC 6" DRAINABLE BLADE LOUVER			
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CERTIFICATION NOV 14 2001	APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE DATE: 06-09/19/04 BY: [Signature] 06/28/07		
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	PRODUCT CONTROL DIVISION BUILDING CODE COMPLIANCE OFFICE ACCEPTANCE NO. 01-1029.04		
DRAWING NO. 1014	REV.		
SHEET NO. 7	OF 7		