



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

Arrow United Industries a division of Mestek, Inc.

450 Riverside Drive

Wyalusing, PA 18853

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section 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 Section (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. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section 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: Model EA-52 5" Aluminum Louver System

APPROVAL DOCUMENT: Drawing No. **1685**, titled "EA-52 Impact Louver System", sheets 1 through 10 of 10, dated 07/23/2009, with revision C1 dated 03/14/2019, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren. W. Schaefer, P.E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

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, model/series, and following statement: "Miami-Dade County Product Control Approved", 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 NOA **revises NOA #20-0622.16** and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**



Helmy A. Makar
09/14/2023

NOA No. 23-0713.10
Expiration Date: 01/06/2025
Approval Date: 09/14/2023

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted under previous NOAs

A. DRAWINGS “Submitted under NOA # 11-1117.10”

1. Drawing No. **1685**, titled “EA-52 Impact Louver System”, sheets 1 through 10 of 10, dated 07/23/2009, with revision A1 dated 11/08/2011, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.

B. TESTS “Submitted under NOA # 09-1015.09”

1. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram, of “EA-52 Aluminum Louver Systems”, prepared by Hurricane Test Laboratory, Inc., Report No. **0198-0305-09**, dated 09/29/2009, signed and sealed by Vinu J. Abraham, P.E.
2. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram, of “EA-52 Aluminum Louver Systems”, prepared by Hurricane Test Laboratory, Inc., Report No. **0198-0715-09**, dated 09/30/2009, signed and sealed by Vinu J. Abraham, P.E.

C. CALCULATIONS “Submitted under NOA #14-0513.07”

1. Wood screw calculations prepared by W.W. Schaefer Engineering & Consulting, P.A., dated 04/14/2014, signed and sealed by Warren W. Schaefer, P.E.

“Submitted under NOA # 09-1015.09”
2. Structural calculations prepared by W.W. Schaefer Engineering & Consulting, P.A., dated 10/06/2009, signed and sealed by Warren W. Schaefer, P.E.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS “Submitted under NOA #14-0513.07”

1. Statement letter of code conformance to 2010 and 5th edition (2014) FBC issued by W. W. Schaefer Engineering & Consulting, P.A., dated 04/14/2014, signed and sealed by Warren W. Schaefer, P.E.
2. No financial interest letter issued by W. W. Schaefer Engineering & Consulting, P.A., dated 04/14/2014, signed and sealed by Warren W. Schaefer, P.E.



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 23-0713.10
Expiration Date: 01/06/2025
Approval Date: 09/14/2023

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. Evidence submitted under NOA # 17-0713.05

A. DRAWINGS

1. Drawing No. **1685**, titled "EA-52 Impact Louver System", sheets 1 through 10 of 10, dated 07/23/2009, with revision B1 dated 07/05/2017, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Statement letter of code conformance to the 5th Edition (2014) and 6th Edition (2017) FBC issued by W. W. Schaefer Engineering & Consulting, P.A., dated 07/05/2017, signed and sealed by Warren W. Schaefer, P.E.

3. Evidence submitted under NOA #20-0622.16

A. DRAWINGS "Submitted under NOA # 19-0401.01"

1. Drawing No. **1685**, titled "EA-52 Impact Louver System", sheets 1 through 10 of 10, dated 07/23/2009, with revision C1 dated 03/14/2019, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.

B. TESTS

1. None.

C. CALCULATIONS


1. None.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. None.



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 23-0713.10
Expiration Date: 01/06/2025
Approval Date: 09/14/2023

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS

1. Statement letter of code conformance to the 6th edition (2017) and 7th edition (2020) of the FBC issued by W. W. Schaefer Engineering & Consulting, P.A., dated 06/03/2020, signed and sealed by Warren W. Schaefer, P.E.

“Submitted under NOA # 19-0401.01”

2. Statement letter of no financial interest issued by W. W. Schaefer Engineering & Consulting, P.A., dated 03/14/2019, signed and sealed by Warren W. Schaefer, P.E.

4. New Evidence submitted

A. DRAWINGS

1. None.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Statement letter of code conformance to the 6th edition (2017) and 7th edition (2020) of the FBC issued by W. W. Schaefer Engineering & Consulting, P.A., dated 06/03/2020, signed and sealed by Warren W. Schaefer, P.E.

“Submitted under NOA # 19-0401.01”

2. Statement letter of no financial interest issued by W. W. Schaefer Engineering & Consulting, P.A., dated 03/14/2019, signed and sealed by Warren W. Schaefer, P.E.
3. Statement letter of code conformance to the 7th edition (2020) and 8th edition (2023) of the FBC issued by W. W. Schaefer Engineering & Consulting, P.A., dated 07/01/2023, signed and sealed by Warren W. Schaefer, P.E.



Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 23-0713.10
Expiration Date: 01/06/2025
Approval Date: 09/14/2023

PANEL WIDTH (IN.)	(1) CLIP SPACING (IN.)	ALLOWABLE PRESSURE (+/- PSF)
36	8	120
	13	104
	18	75
42	8	120
	13	89
	18	64
48	8	120
	13	78
	18	56
54	8	120
	13	69
	18	50
60	8	120
	13	62
	18	45

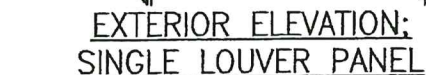
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 23-071
Expiration Date 01/06/
By H. G. A. M. M.
Miami Dade Product Control

UNLIMITED

14

JAMB CLIP AT SIDES ONLY (NOT APPLICABLE WHEN LOUVER IS SLEEVE MOUNTED)

JAMB SPLICE WHEN REQUIRED FOR STACKS (SEE SECTION A1/4 FOR DETAIL). SPLICE LOCATION TO BE BETWEEN BLADES

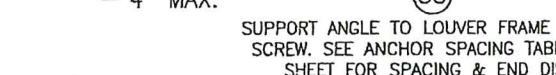


SCALE: $1/2" = 1'-0"$

Diagram illustrating the dimensions and text layout for a sheet of paper. The diagram shows a horizontal line representing the top edge of the paper. Below this line, there are two vertical lines. The distance between these two vertical lines is labeled "4\" MAX." and "4\" MAX.".


SEE TABLE ON THIS SHEET FOR REQUIRED CLIP SPACING

SEE TABLE ON THIS SHEET FOR REQUIRED CLIP SPACING



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

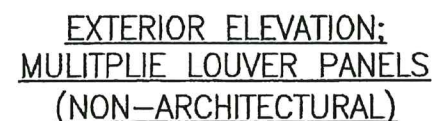
6 (FOR DETAIL NOT SHOWN, SEE OTHER ELEVATIONS)

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-0622.16**
Expiration Date **01/06/2025**
By 
Miami-Dade Product Control

DRAWING NO.		REV.	
1685		C	
SHEET NO.			
1 OF 10			
CERTIFICATION MAR 14 2019 WARREN W. SCHAEFFER, P.E. P.E. NO. 44135			
DRAWING TITLE			
EA-52 IMPACT LOUVER SYSTEM			
CONSULTANTS		MANUFACTURER	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)		ARROW UNITED INDUSTRIES; A DIVISION OF MESTEK, INC.	
7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		450 RIVERSIDE DRIVE WYALUSING, PA 18853 570-746-1888	
DATE		DATE	
MAR 14 2019		07/23/09	
BY		BY	
WARREN W. SCHAEFFER, P.E.		W.W.S.	
P.E. NO. 44135		W.W.S.	
NO.		NO.	
1		1	
REVISION DESCRIPTION		REVISION DESCRIPTION	
UPDATE CONSULTANTS &		UPDATE CONSULTANTS &	
MANUFACTURERS ADDRESS		MANUFACTURERS ADDRESS	
B1 MANUFACTURER NAME CHANGE		B1 MANUFACTURER NAME CHANGE	
C1 REMOVED RED HEAD TAPCONS		C1 REMOVED RED HEAD TAPCONS	
DATE		DATE	
07/23/09		07/23/09	
BY		BY	
W.W.S.		W.W.S.	
W.W.S.		W.W.S.	
NO.		NO.	
1		1	
REVISION DESCRIPTION		REVISION DESCRIPTION	
UPDATE CONSULTANTS &		UPDATE CONSULTANTS &	
MANUFACTURERS ADDRESS		MANUFACTURERS ADDRESS	
B1 MANUFACTURER NAME CHANGE		B1 MANUFACTURER NAME CHANGE	
C1 REMOVED RED HEAD TAPCONS		C1 REMOVED RED HEAD TAPCONS	
DATE		DATE	
07/23/09		07/23/09	
BY		BY	
W.W.S.		W.W.S.	
W.W.S.		W.W.S.	
NO.		NO.	
1		1	
REVISION DESCRIPTION		REVISION DESCRIPTION	
UPDATE CONSULTANTS &		UPDATE CONSULTANTS &	
MANUFACTURERS ADDRESS		MANUFACTURERS ADDRESS	
B1 MANUFACTURER NAME CHANGE		B1 MANUFACTURER NAME CHANGE	
C1 REMOVED RED HEAD TAPCONS		C1 REMOVED RED HEAD TAPCONS	
DATE		DATE	
07/23/09		07/23/09	
BY		BY	
W.W.S.		W.W.S.	
W.W.S.		W.W.S.	
NO.		NO.	
1		1	
REVISION DESCRIPTION		REVISION DESCRIPTION	
UPDATE CONSULTANTS &		UPDATE CONSULTANTS &	
MANUFACTURERS ADDRESS		MANUFACTURERS ADDRESS	
B1 MANUFACTURER NAME CHANGE		B1 MANUFACTURER NAME CHANGE	
C1 REMOVED RED HEAD TAPCONS		C1 REMOVED RED HEAD TAPCONS	
DATE		DATE	
07/23/09		07/23/09	
BY		BY	
W.W.S.		W.W.S.	
W.W.S.		W.W.S.	
NO.		NO.	
1		1	
REVISION DESCRIPTION		REVISION DESCRIPTION	
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MANUFACTURERS ADDRESS		MANUFACTURERS ADDRESS	
B1 MANUFACTURER NAME CHANGE		B1 MANUFACTURER NAME CHANGE	
C1 REMOVED RED HEAD TAPCONS		C1 REMOVED RED HEAD TAPCONS	
DATE		DATE	
07/23/09		07/23/09	
BY		BY	
W.W.S.		W.W.S.	
W.W.S.		W.W.S.	
NO.		NO.	
1		1	
REVISION DESCRIPTION		REVISION DESCRIPTION	
UPDATE CONSULTANTS &		UPDATE CONSULTANTS &	
MANUFACTURERS ADDRESS		MANUFACTURERS ADDRESS	
B1 MANUFACTURER NAME CHANGE		B1 MANUFACTURER NAME CHANGE	
C1 REMOVED RED HEAD TAPCONS		C1 REMOVED RED HEAD TAPCONS	
DATE		DATE	
07/23/09		07/23/09	
BY		BY	
W.W.S.		W.W.S.	
W.W.S.		W.W.S.	
NO.		NO.	
1		1	
REVISION DESCRIPTION		REVISION DESCRIPTION	
UPDATE CONSULTANTS &		UPDATE CONSULTANTS &	
MANUFACTURERS ADDRESS		MANUFACTURERS ADDRESS	
B1 MANUFACTURER NAME CHANGE		B1 MANUFACTURER NAME CHANGE	
C1 REMOVED RED HEAD TAPCONS		C1 REMOVED RED HEAD TAPCONS	
DATE		DATE	
07/23/09		07/23/09	
BY		BY	
W.W.S.		W.W.S.	
W.W.S.		W.W.S.	
NO.		NO.	
1		1	
REVISION DESCRIPTION		REVISION DESCRIPTION	
UPDATE CONSULTANTS &		UPDATE CONSULTANTS &	
MANUFACTURERS ADDRESS		MANUFACTURERS ADDRESS	
B1 MANUFACTURER NAME CHANGE		B1 MANUFACTURER NAME CHANGE	
C1 REMOVED RED HEAD TAPCONS		C1 REMOVED RED HEAD TAPCONS	
DATE		DATE	
07/23/09		07/23/09	
BY		BY	
W.W.S.		W.W.S.	
W.W.S.		W.W.S.	
NO.		NO.	
1		1	
REVISION DESCRIPTION		REVISION DESCRIPTION	
UPDATE CONSULTANTS &		UPDATE CONSULTANTS &	
MANUFACTURERS ADDRESS		MANUFACTURERS ADDRESS	
B1 MANUFACTURER NAME CHANGE		B1 MANUFACTURER NAME CHANGE	
C1 REMOVED RED HEAD TAPCONS		C1 REMOVED RED HEAD TAPCONS	
DATE			

MAXIMUM MULLION SPAN (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)		
		WITH NO TUBE MULLION	WITH 4"x3"x3/16" TUBE MULLION	WITH 4"x3"x1/4" TUBE MULLION
120	60	30.6	46.1	61.4
	54	34.0	51.2	68.3
	48	38.3	57.6	76.8
	42	43.7	65.8	87.8
	36	51.0	76.8	102.4
	30	61.2	92.2	120.0
	24	76.5	115.2	120.0
	18	102.0	120.0	120.0
108	60	42.0	63.2	84.3
	54	46.6	70.2	93.6
	48	52.5	79.0	105.3
	42	60.0	90.3	120.0
	36	70.0	105.3	120.0
	30	84.0	120.0	120.0
	24	104.9	120.0	120.0
	18	120.0	120.0	120.0
96	60	56.3	90.0	120.0
	54	62.5	100.0	120.0
	48	70.3	112.5	120.0
	42	80.4	120.0	120.0
	36	93.8	120.0	120.0
	30	112.5	120.0	120.0
	24	120.0	120.0	120.0
84	60	64.3	120.0	120.0
	54	71.4	120.0	120.0
	48	80.4	120.0	120.0
	42	91.8	120.0	120.0
	36	107.1	120.0	120.0
	30	120.0	120.0	120.0
72	60	75.0	120.0	120.0
	54	83.3	120.0	120.0
	48	93.8	120.0	120.0
	42	107.1	120.0	120.0
	36	120.0	120.0	120.0
60	60	90.0	120.0	120.0
	54	100.0	120.0	120.0
	48	112.5	120.0	120.0
	42	120.0	120.0	120.0
48	60	112.5	120.0	120.0
	54	120.0	120.0	120.0
42	60	120.0	120.0	120.0

FOR LOCATIONS OF—
JAMB CLIPS, SEE
SINGLE PANEL
ELEVATION (NOTE
THAT FRAME SPLICE
DOES NOT APPLY TO
MULLED UNITS)



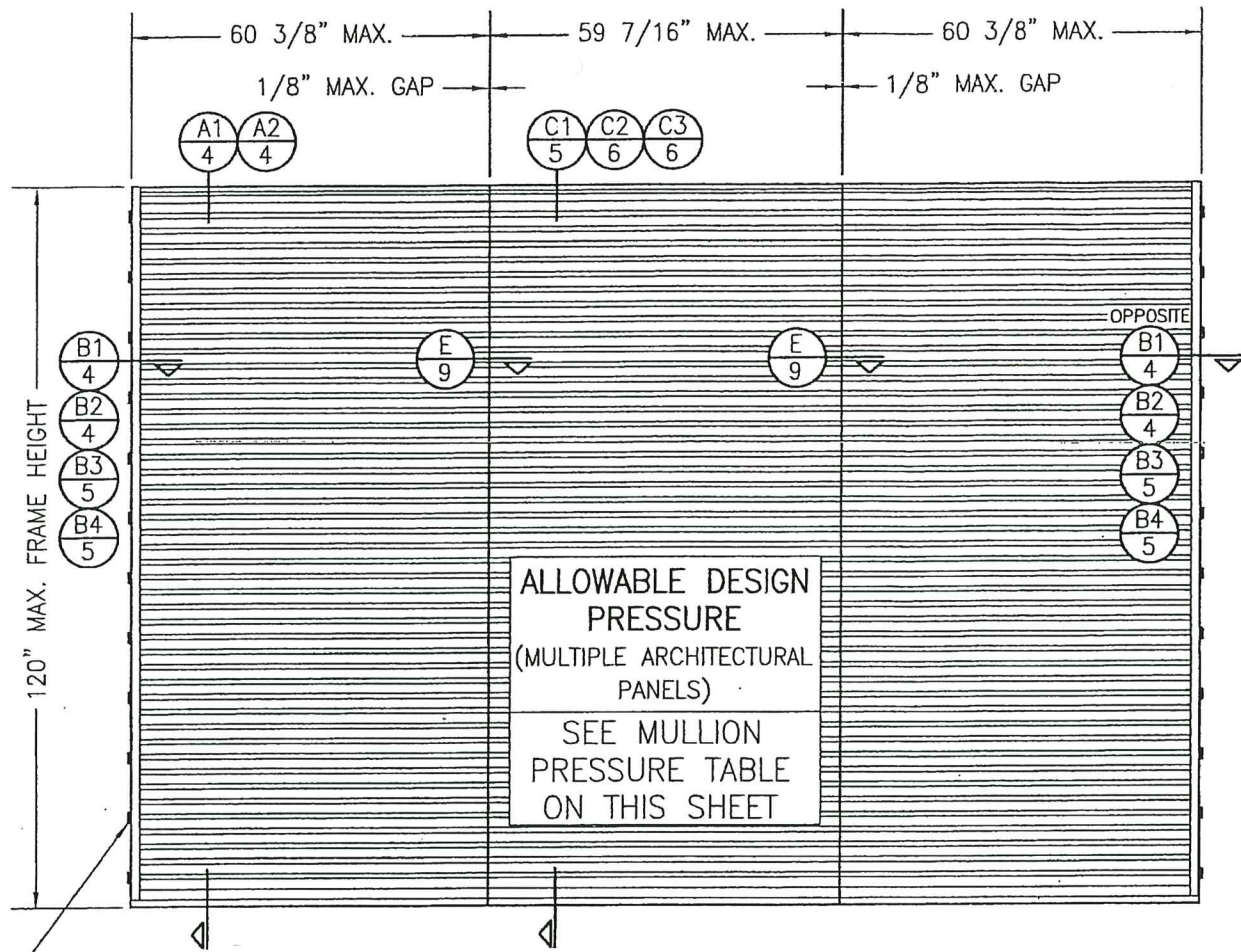
PRODUCT REVISED
as complying with the Florida
Building Code **23-0713.10**
Acceptance No. _____
Expiration Date **06 JAN 2025**
By *Helya A. Mobar*
Miami Dade Product Control

Expiration Date 01/06/2025
By [Signature]
Miami-Dade Product Control

DRAWING NO.	REV
1685	C
SHEET NO.	
2 OF 10	

MULLION ALLOWABLE DESIGN PRESSURE (ARCHITECTURAL LOUVERS)		
MAXIMUM MULLION SPAN (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)
120	60	61.4
	54	68.3
	48	76.8
	42	87.8
	36	102.4
108	30	120.0
	60	84.3
	54	93.6
	48	105.3
96	42	120.0
	60	120.0

NOTES:
1. SEE ELEVATION FOR DIMENSIONING OF LOAD WIDTH.
2. ALLOWABLE UNIT PRESSURE SHALL BE THE LESSER OF THE PRESSURE SHOWN IN THIS TABLE & THAT SPECIFIED FOR THE INDIVIDUAL LOUVER PANEL.



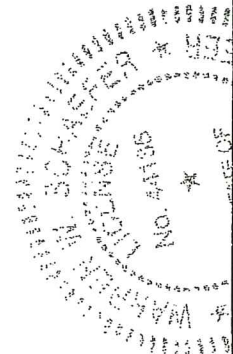
FOR LOCATIONS OF JAMB CLIPS,
SEE SINGLE PANEL ELEVATION
(NOTE THAT FRAME SPLICE
DOES NOT APPLY TO MULLED
UNITS)

EXTERIOR ELEVATION:
MULTIPLE LOUVER PANELS
(ARCHITECTURAL)
SCALE: 1/2" = 1'-0"
(3 PANEL UNIT SHOWN; MORE THAN
3 PANELS MAY BE MULLED/STACKED
HORIZONTALLY)

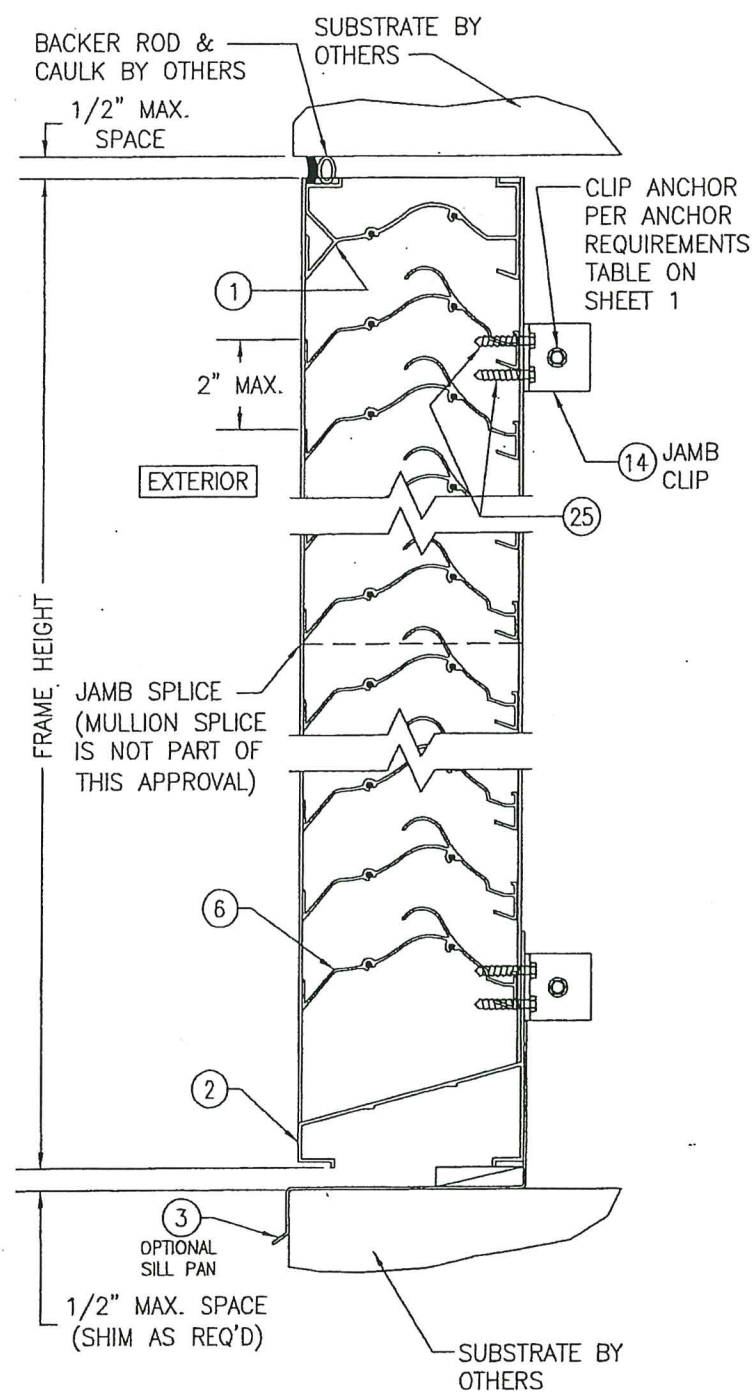
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0713.10
Expiration Date 06 JAN 2025
By *[Signature]*
Miami-Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0622.16
Expiration Date 01/06/2025
By *[Signature]*
Miami-Dade Product Control

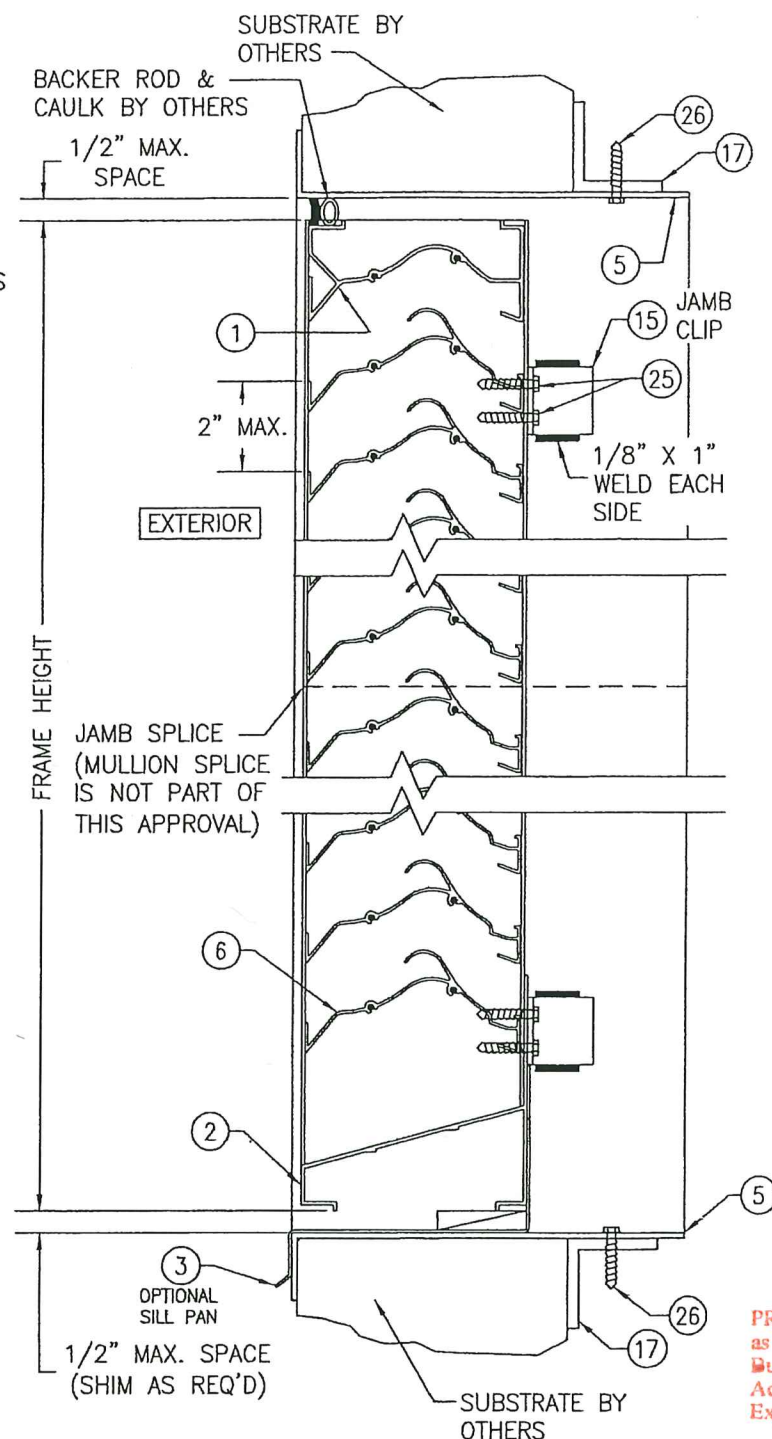
PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 19-0401.01
Expiration Date 01/06/2025
By *[Signature]*
Miami-Dade Product Control



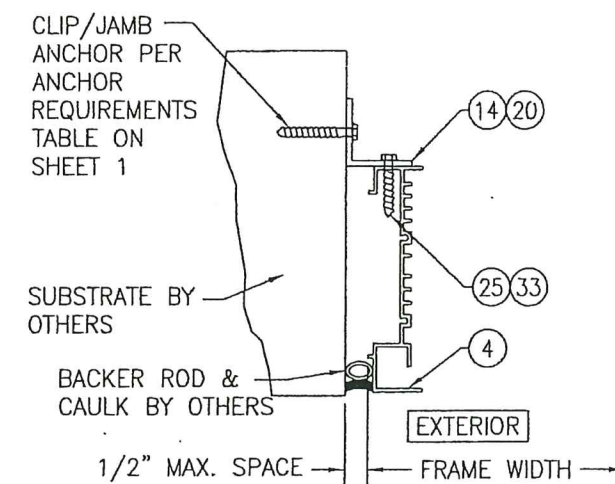
DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=24		DATE: 07/23/09	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: EA-52 IMPACT LOUVER SYSTEM MANUFACTURER: ARROW UNITED INDUSTRIES; A DIVISION OF MESTEK, INC. 450 RIVERSIDE DRIVE WYALUSING, PA 18853 570-746-1888 CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424 CERTIFICATION: <i>[Signature]</i> WARREN W. SCHAEFER 2019 P.E. NO. 4136 DRAWING NO. 1685 SHEET NO. 3 OF 10 REV. C			



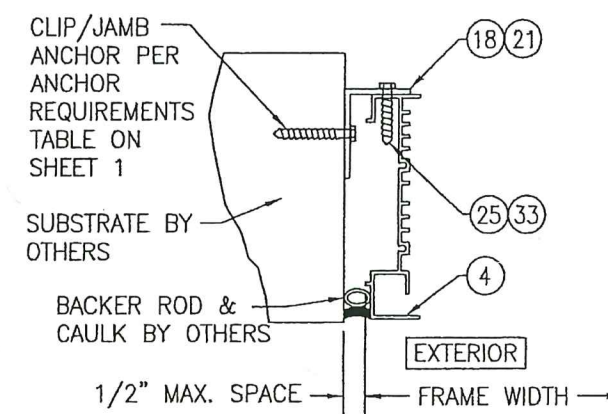
SECTION A1
SCALE: 1/2 FULL 4



SECTION A2
SCALE: 1/2 FULL 4
(SLEEVE MOUNT)





SECTION B1
4
SCALE: 1/2" FULL
(NO SLEEVE & CLIPS TURNED OUT)



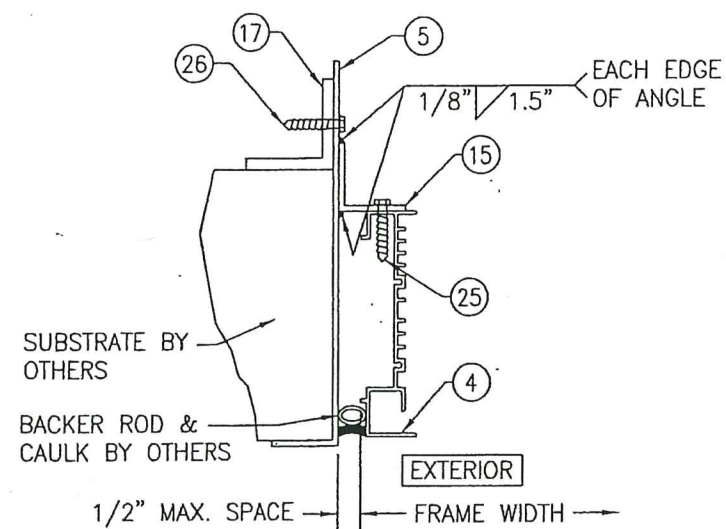
SECTION B2
4
SCALE: 1/2 FULL
LEEVE & CLIPS TURNED IN)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0713-10
Expiration Date 06 JAN 2025
By *Helga A. Melon*
Miami Dade Product Control

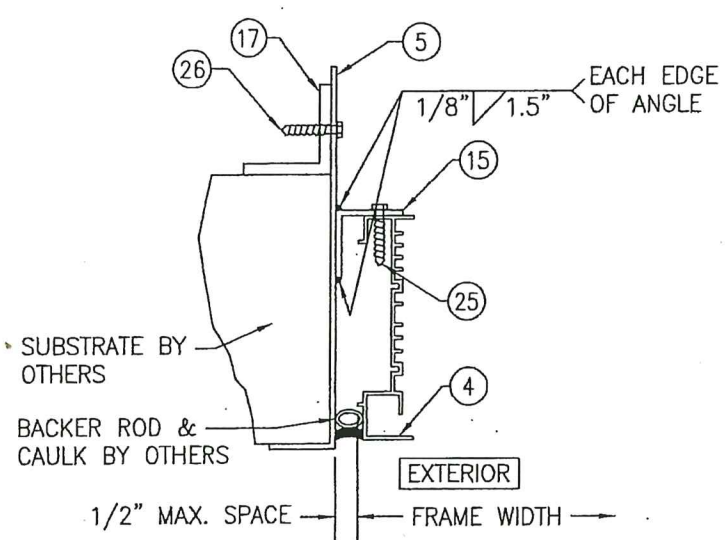
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0622.16
Expiration Date 01/06/2025
By 
Miami-Dade Product Control

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 19-0401.01
Expiration Date 01/06/2025
By 
Miami-Dade Product Control

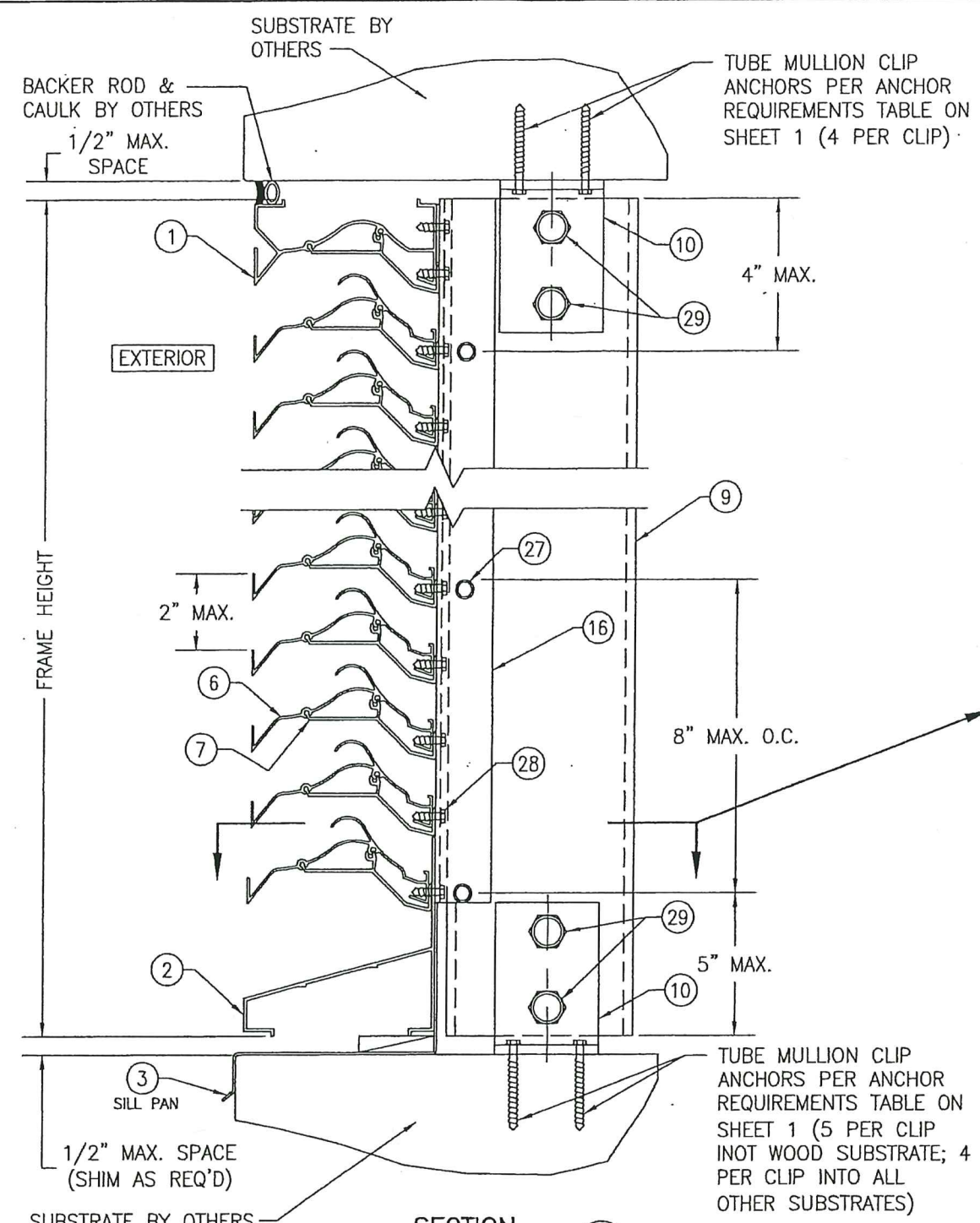
DRAWING NO.		REV.	
1685		C	
SHEET NO.			
4 OF 10			
DRAWING TITLE			
EA-52 IMPACT LOUVER SYSTEM			
CONSULTANTS		MANUFACTURER	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)		ARROW UNITED INDUSTRIES; A DIVISION OF MESTEK, INC.	
7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		450 RIVERSIDE DRIVE WYALUSING, PA 18853 570 746 1888	
CERTIFICATION		P.E.	
MAR 14 2019		WARREN W. SCHAEFER	
FLORENCE, SC			
DRAWN BY:		CHECKED BY:	
W.R.M.		W.W.S.	
PLOT:		DATE:	
1=4		07/23/09	
NO.	REVISION DESCRIPTION	BY	DATE



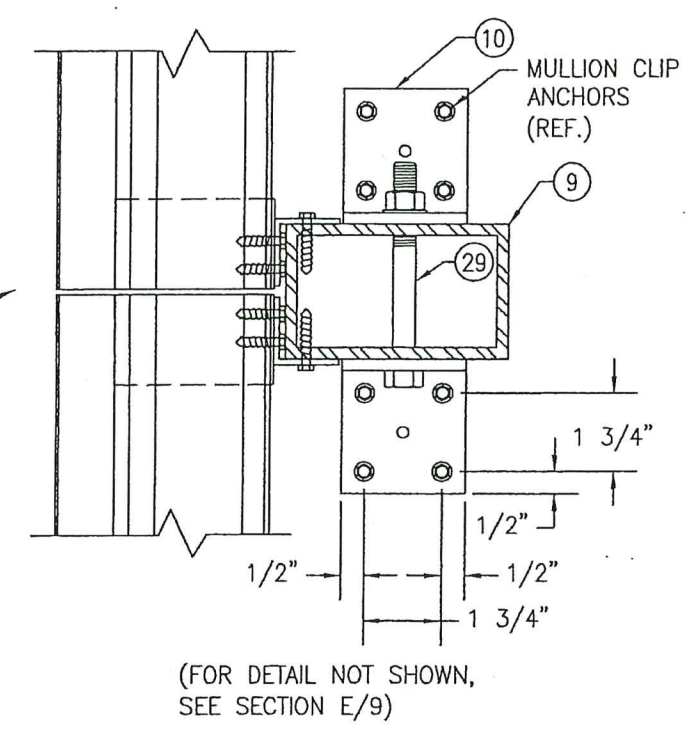
SECTION B3
SCALE: 1/2 FULL
(WITH SLEEVE & CLIPS TURNED OUT)



SECTION B4
SCALE: 1/2 FULL
(WITH SLEEVE & CLIPS TURNED IN)



SECTION C1
SCALE: 1/2 FULL
(ARCHITECTURAL LOUVER WITHOUT PERIMETER SLEEVE; INSTALLED INTO WOOD, STEEL, ALUMINUM, OR METAL STUD SUBSTRATE)



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0622.16
Expiration Date 01/06/2025

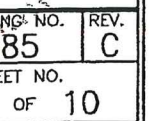
By *[Signature]*
Miami-Dade Product Control

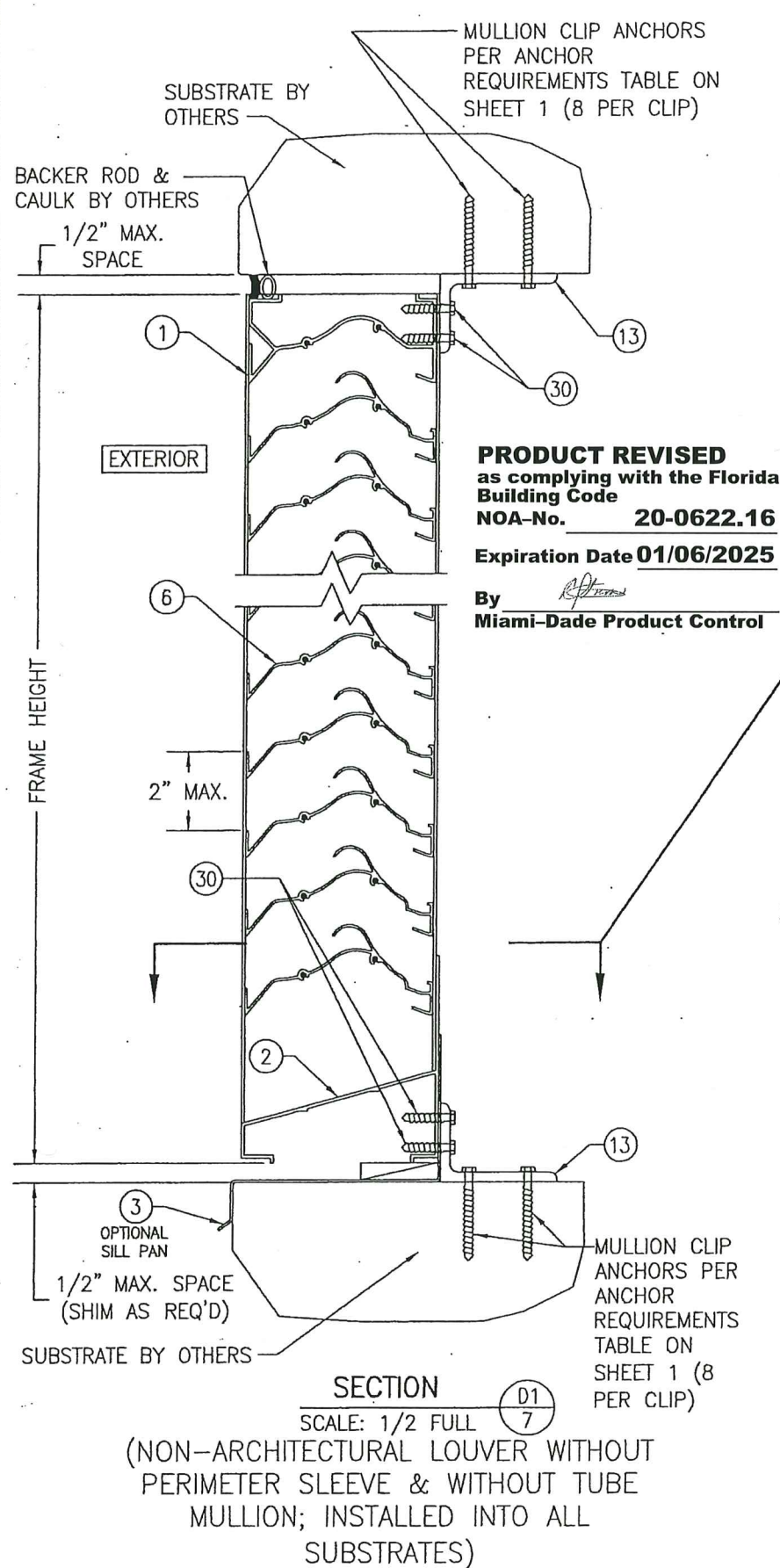
PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 19-0401.01
Expiration Date 01/06/2025

By *[Signature]*
Miami-Dade Product Control

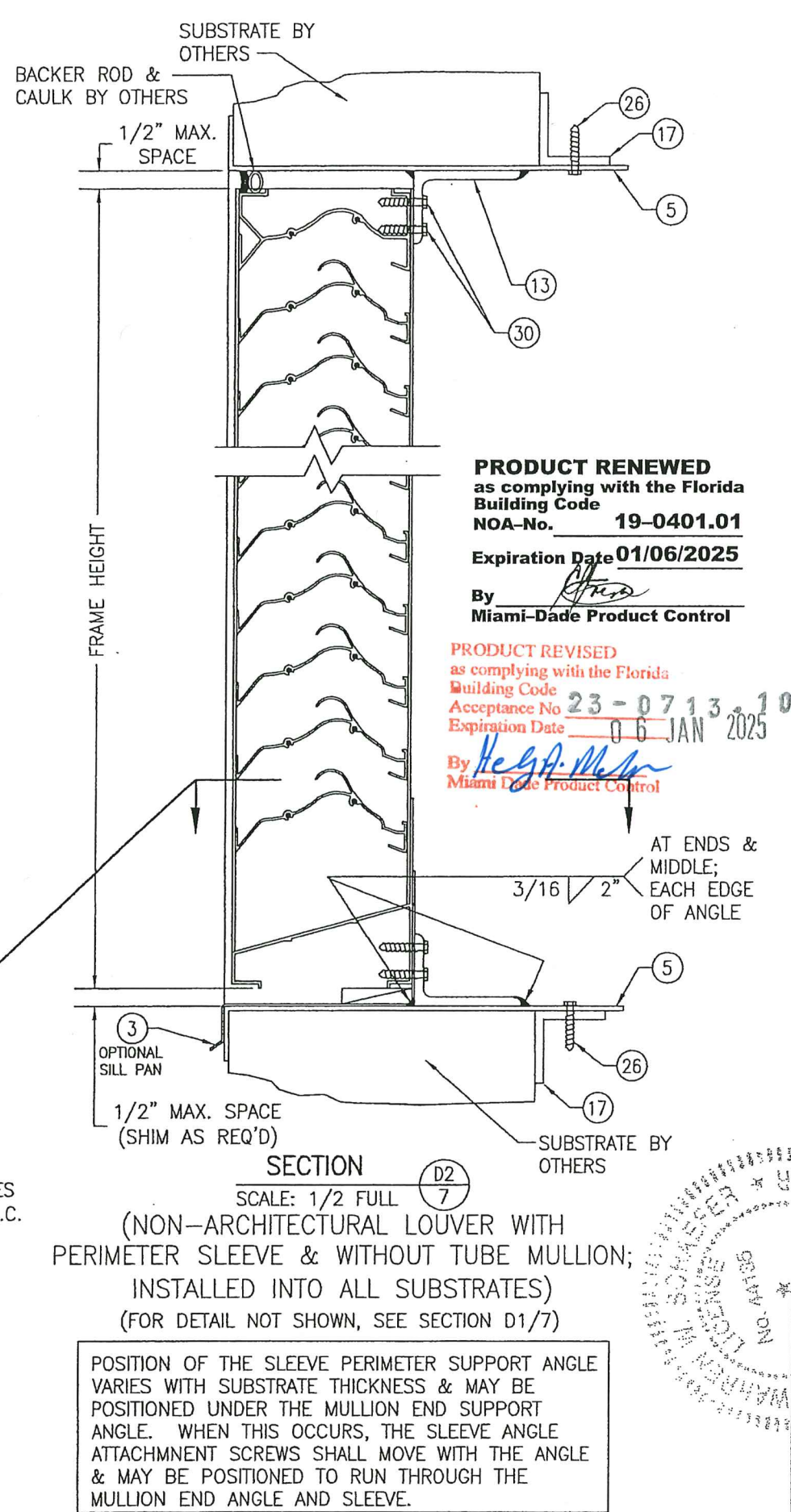
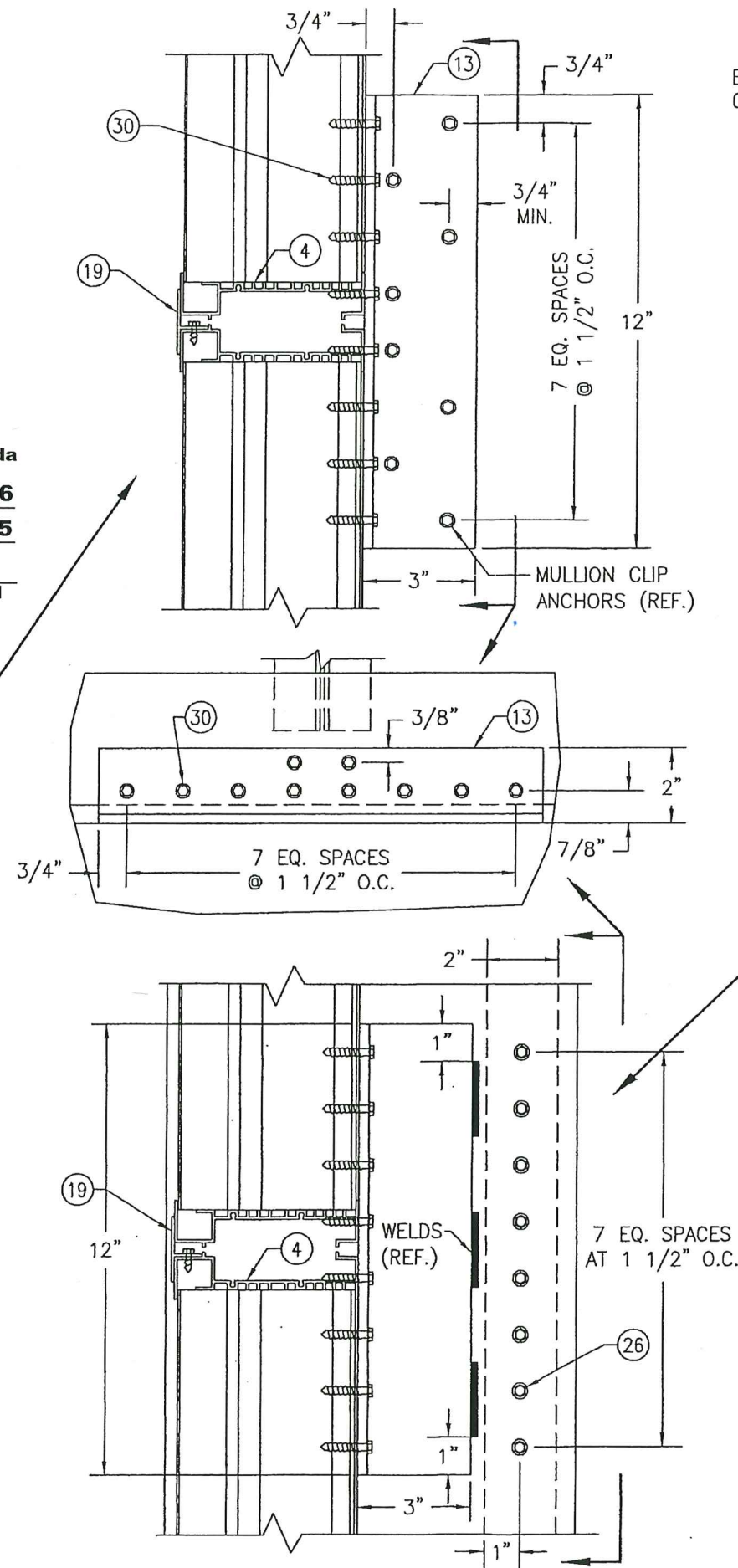
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 23-0713.10
Expiration Date 06 JAN 2025
By *[Signature]*
Miami-Dade Product Control

DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=4		DATE: 07/23/09	
NO.	REVISION DESCRIPTION	BY	DATE
DRAWING TITLE: EA-52 IMPACT LOUVER SYSTEM MANUFACTURER: ARROW UNITED INDUSTRIES; A DIVISION OF MESTEK, INC. 450 RIVERSIDE DRIVE, WYALUSING, PA 18853 570-746-1888 CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH, PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
CERTIFICATION: MAR 14 2019 WARREN W. SCHAEFER, P.E. P.E. NO. 44135		DRAWING NO. 1685 SHEET NO. 5 OF 10	





PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. **20-0622.16**
Expiration Date **01/06/2025**
By *[Signature]*
Miami-Dade Product Control



PRODUCT RENEWED
as complying with the Florida Building Code
NOA-No. **19-0401.01**
Expiration Date **01/06/2025**
By *[Signature]*
Miami-Dade Product Control

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No. **23-0713-10**
Expiration Date **06 JAN 2025**
By *[Signature]*
Miami-Dade Product Control

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=4	DATE: 07/23/09
NO.	REVISION DESCRIPTION
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DRAWING TITLE: **EA-52 IMPACT LOUVER SYSTEM**

MANUFACTURER: **ARROW UNITED INDUSTRIES; A DIVISION OF MESTEK, INC.**

CONSULTANTS: **W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)**

7480 150TH COURT NORTH, PALM BEACH GARDENS, FL 33418
PHONE: 561-744-3424

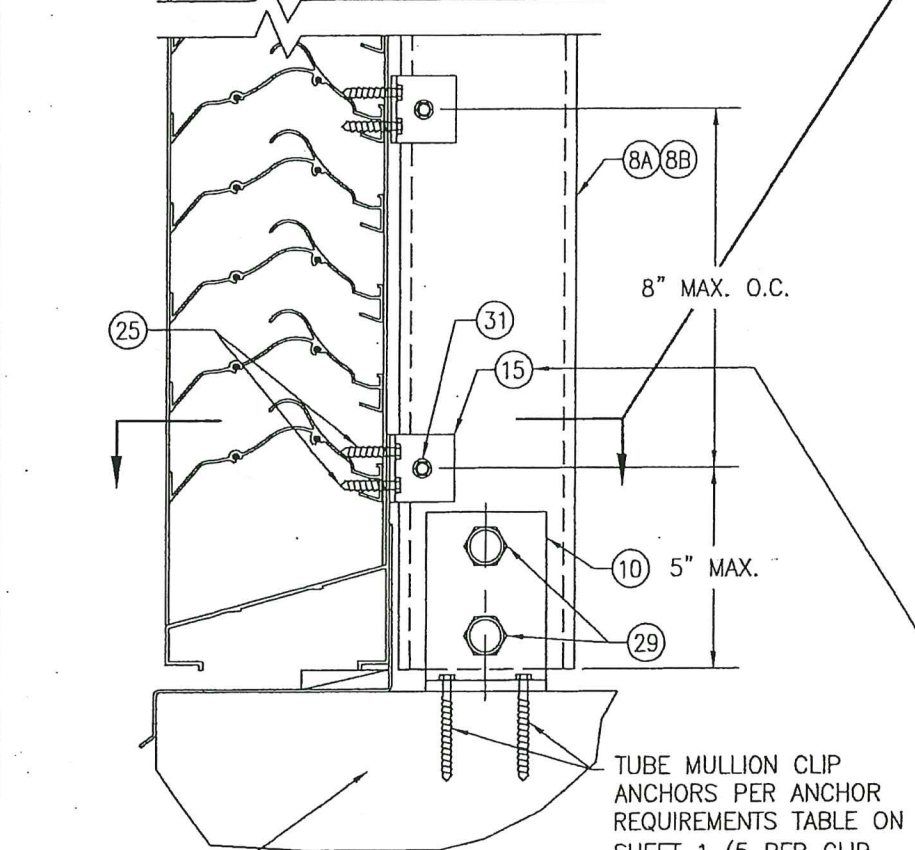
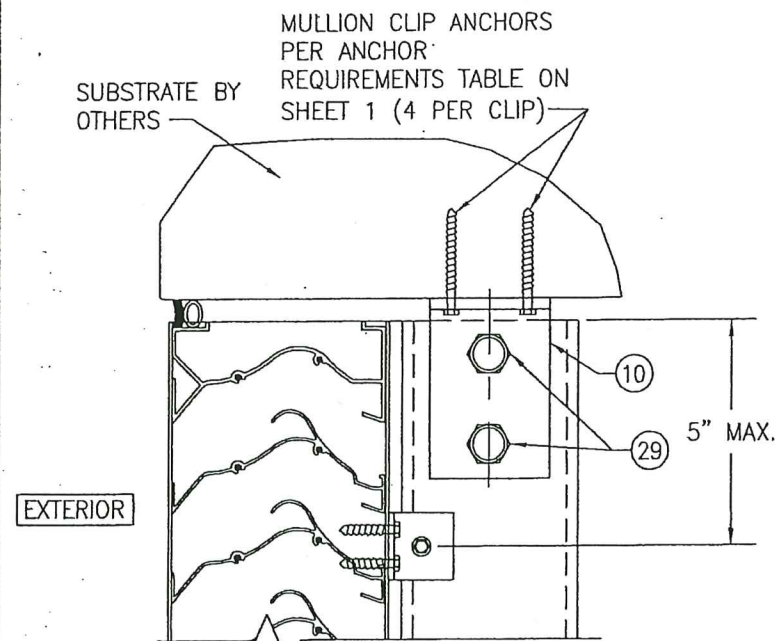
CERTIFICATION: **MAR 14 2019**

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

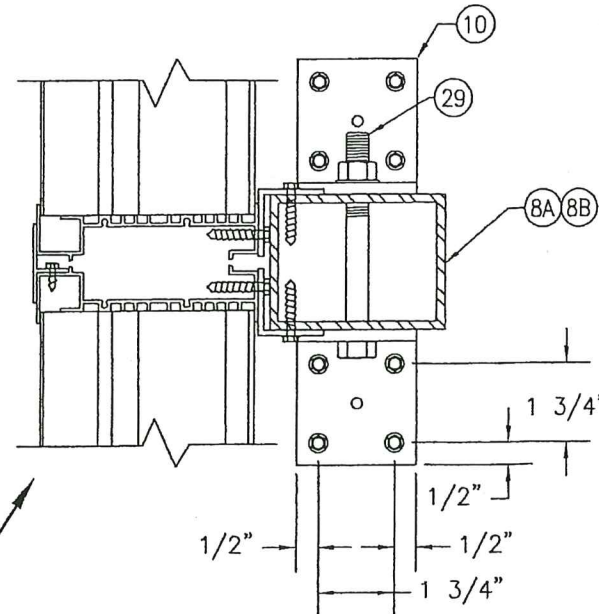
DRAWING NO. **1685**

SHEET NO. **7 OF 10**

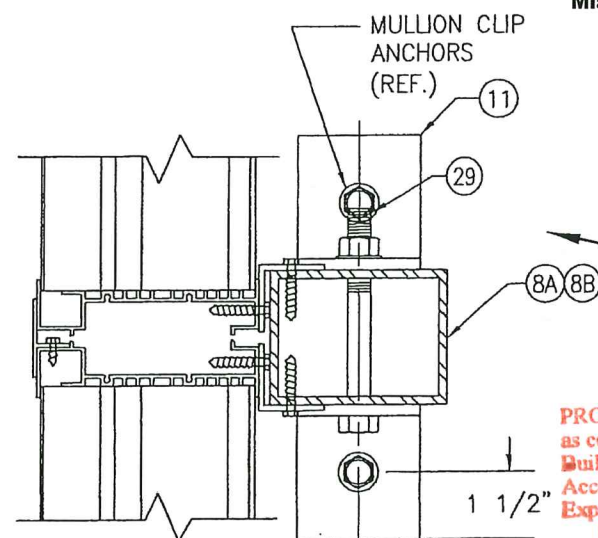
POSITION OF THE SLEEVE PERIMETER SUPPORT ANGLE VARIES WITH SUBSTRATE THICKNESS & MAY BE POSITIONED UNDER THE MULLION END SUPPORT ANGLE. WHEN THIS OCCURS, THE SLEEVE ANGLE ATTACHMENT SCREWS SHALL MOVE WITH THE ANGLE & MAY BE POSITIONED TO RUN THROUGH THE MULLION END ANGLE AND SLEEVE.



SECTION D3
SCALE: 1/2 FULL
(NON-ARCHITECTURAL LOUVER WITHOUT PERIMETER SLEEVE & WITH TUBE MULLION; INSTALLED INTO WOOD, STEEL, ALUMINUM & METAL STUD SUBSTRATES)
(FOR DETAIL NOT SHOWN, SEE SECTION D1/7)



(FOR DETAIL NOT SHOWN, SEE SECTION F1/9)



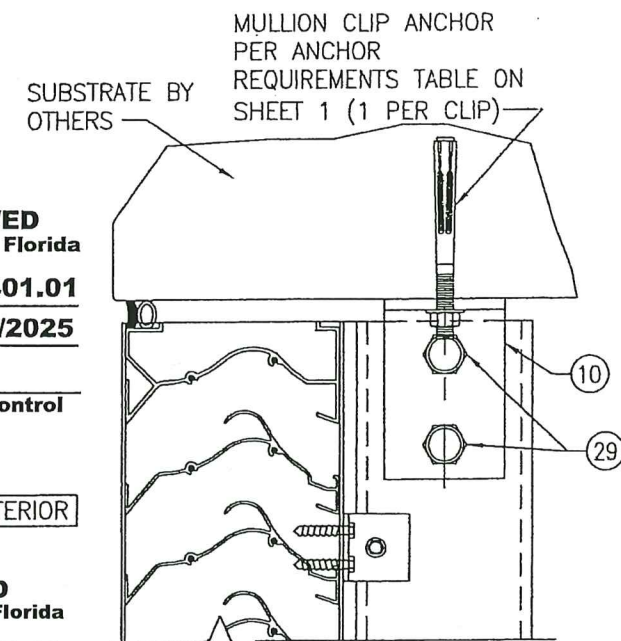
(FOR DETAIL NOT SHOWN, SEE SECTION F1/9)

OPTION: USE A CONTINUOUS 1 1/2" X 1 1/2" X 1/8" 6063-T5 ALUMINUM ANGLE IN LIEU OF INDIVIDUAL ANGLES PART #15. ATTACH CONTINUOUS ANGLE TO TUBE MULLION WITH 1/4-14 X 3/4" SELF TAP/DRILL SCREW WITHIN 5" OF TUBE ENDS & 8" MAX. O.C. ATTACH CONTINUOUS ANGLE TO LOUVER FRAME WITH 1/4-14 X 3/4" SELF TAP/DRILL SCREWS WITHIN 5" OF FRAME ENDS & 4" O.C.

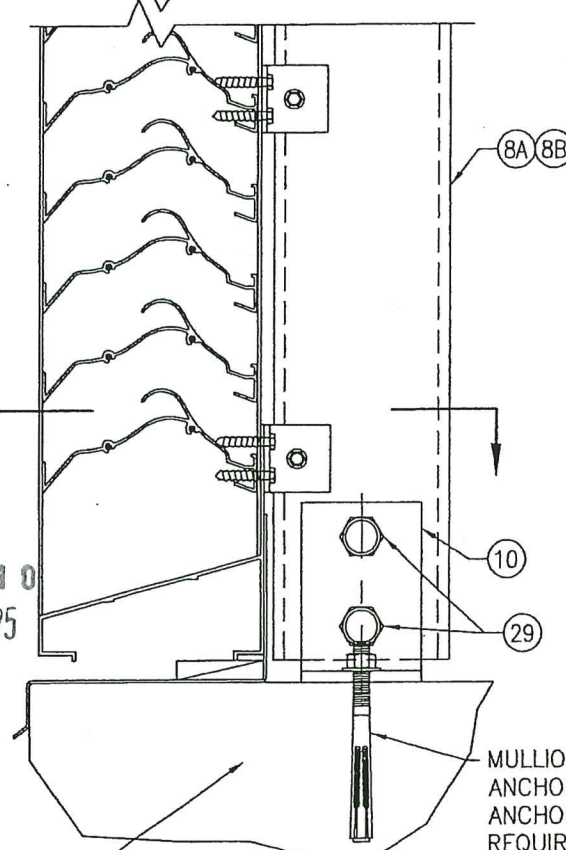
PRODUCT RENEWED
as complying with the Florida Building Code
NOA-No. **19-0401.01**
Expiration Date **01/06/2025**
By *[Signature]*
Miami-Dade Product Control

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. **20-0622.16**
Expiration Date **01/06/2025**
By *[Signature]*
Miami-Dade Product Control

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No. **23-0713.10**
Expiration Date **06 JAN 2025**
By *[Signature]*
Miami-Dade Product Control

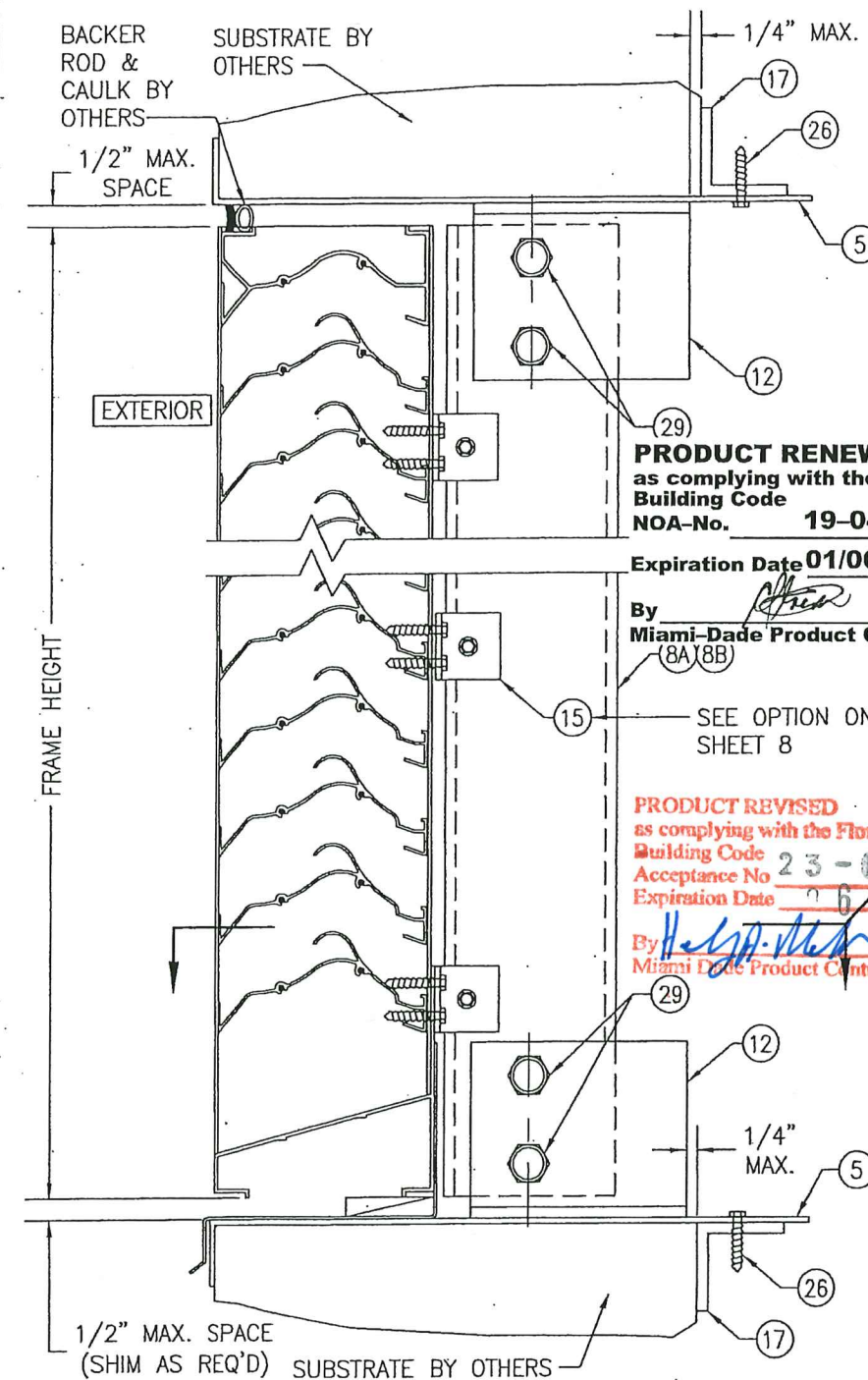


EXTERIOR



SECTION D4
SCALE: 1/2 FULL
(NON-ARCHITECTURAL LOUVER WITHOUT PERIMETER SLEEVE & WITH TUBE MULLION; INSTALLED INTO CONCRETE SUBSTRATE)
(FOR DETAIL NOT SHOWN, SEE SECTION D3/8)

DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=4	DATE: 07/23/09
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE EA-52 IMPACT LOUVER SYSTEM	
MANUFACTURER ARROW UNITED INDUSTRIES; A DIVISION OF MESTEK, INC. 450 RIVERSIDE DRIVE WYALUSING, PA 18853 570-746-1888	
CONSULTANTS W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
CERTIFICATION MAR 14 2019 W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1685	REV. C
SHEET NO. 8 OF 10	



PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **19-0401.01**
Expiration Date **01/06/2025**

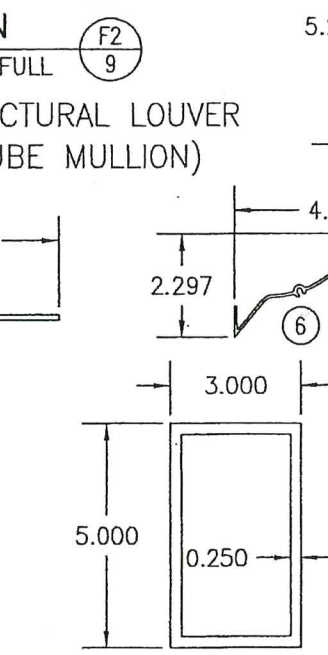
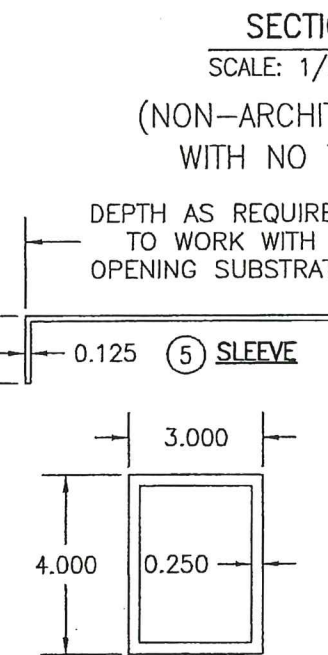
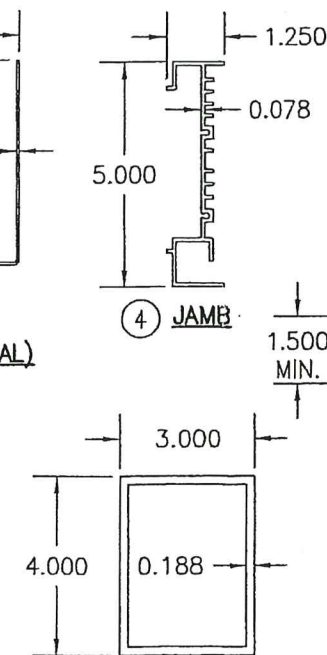
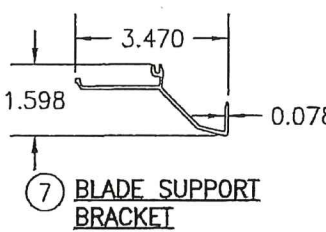
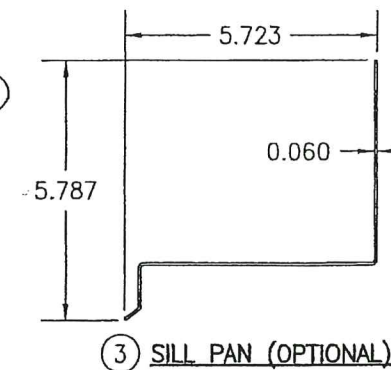
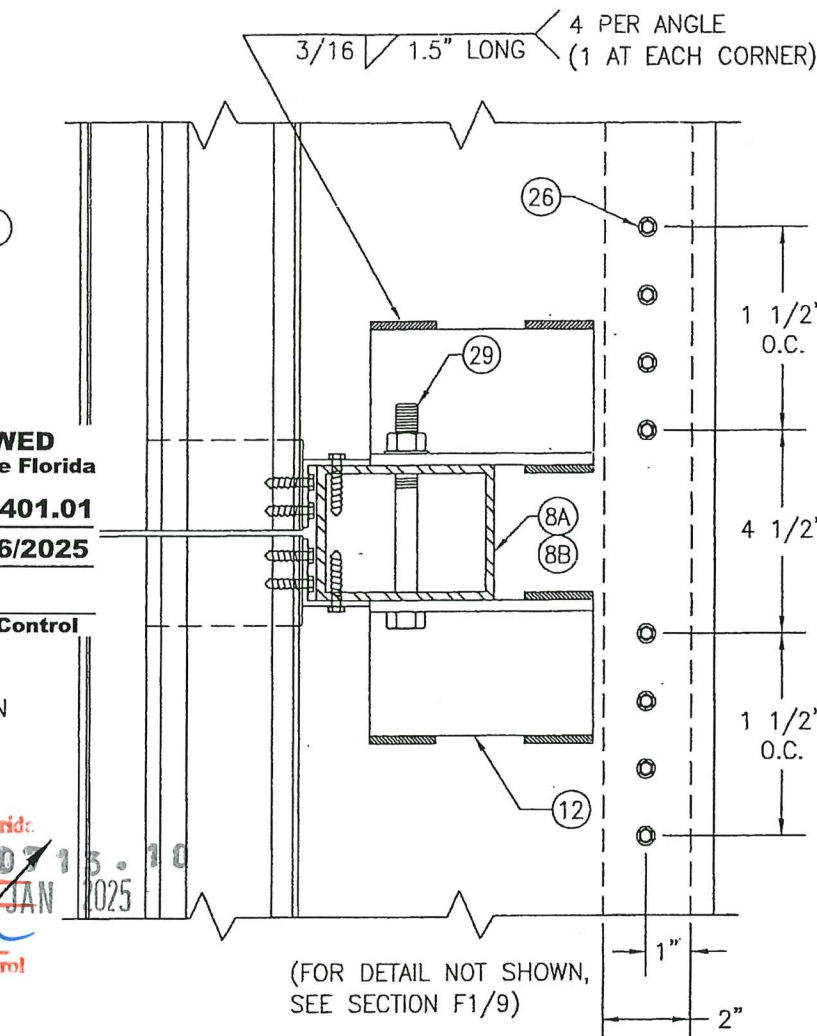
By *[Signature]*
Miami-Dade Product Control
(8A)(8B)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. **23-0215-10**
Expiration Date **26 JAN 2025**
By *[Signature]*
Miami-Dade Product Control

SEE OPTION ON
SHEET 8

SECTION D5
SCALE: 1/2 FULL
(NON-ARCHITECTURAL LOUVER WITH
PERIMETER SLEEVE & WITH TUBE MULLION;
INSTALLED INTO ALL SUBSTRATES)
(FOR DETAIL NOT SHOWN, SEE SECTION D3/8)

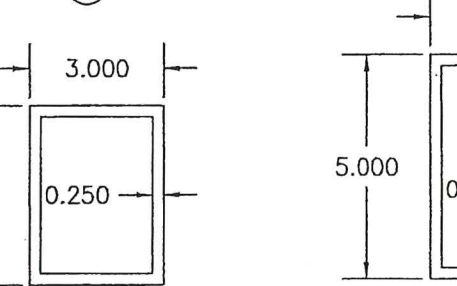
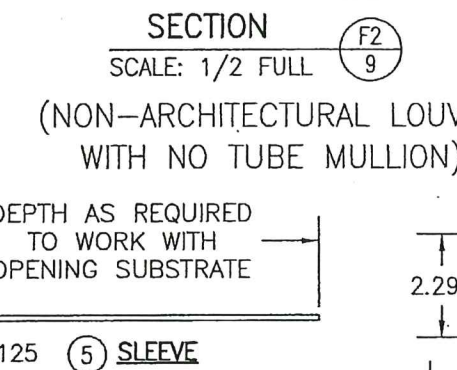
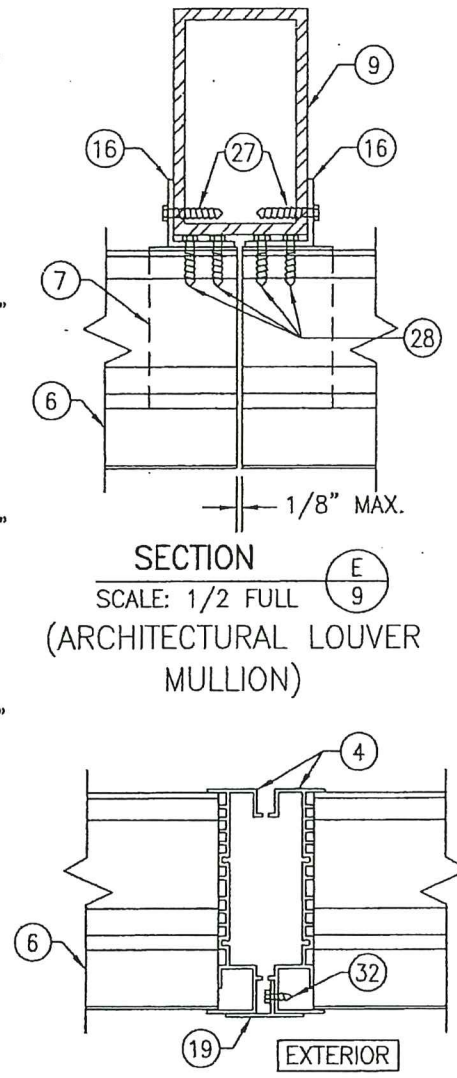
POSITION OF THE SLEEVE PERIMETER SUPPORT ANGLE
VARIES WITH SUBSTRATE THICKNESS & MAY BE
POSITIONED UNDER THE MULLION END SUPPORT
ANGLE. WHEN THIS OCCURS, THE SLEEVE ANGLE
ATTACHMENT SCREWS SHALL MOVE WITH THE ANGLE
& MAY BE POSITIONED TO RUN THROUGH THE
MULLION END ANGLE AND SLEEVE.



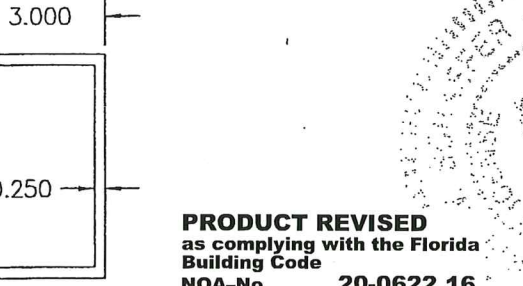
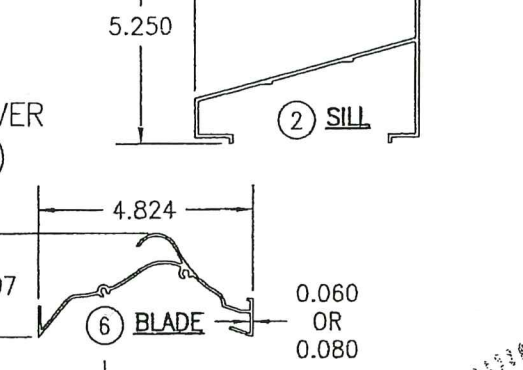
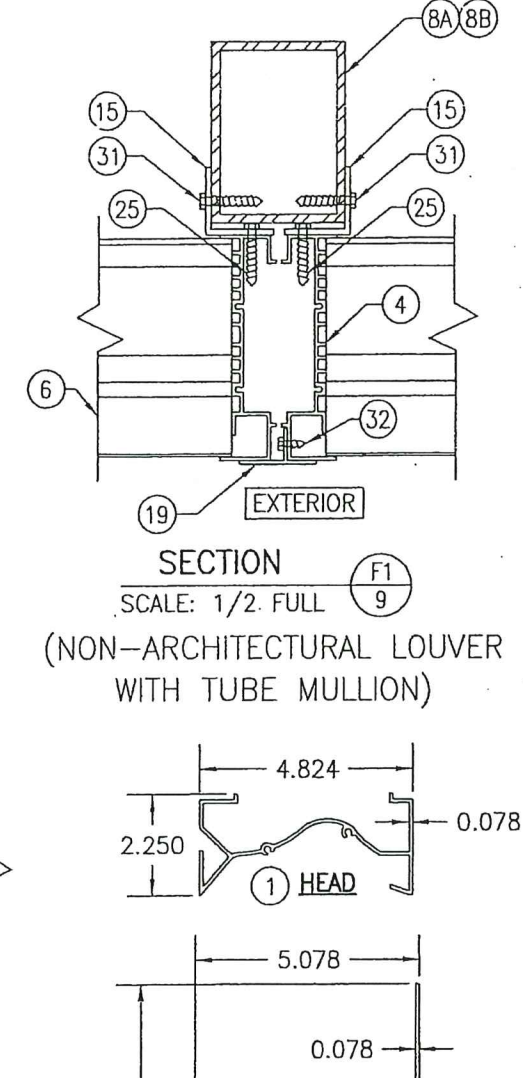
8A TUBE MULLION (USED
WITH NON-
ARCHITECTURAL LOUVERS)

8B TUBE MULLION (USED
WITH NON-
ARCHITECTURAL LOUVERS)

9 TUBE MULLION (USED
WITH ARCHITECTURAL
LOUVERS)



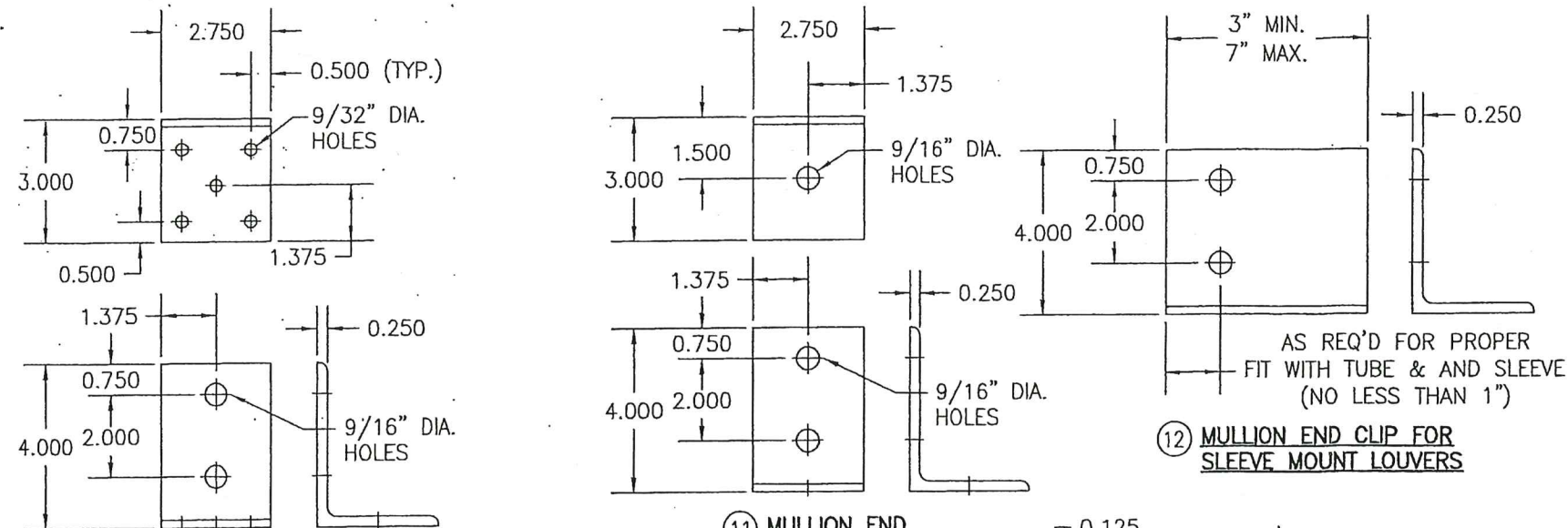
SECTION E9
SCALE: 1/2 FULL
(ARCHITECTURAL LOUVER
MULLION)



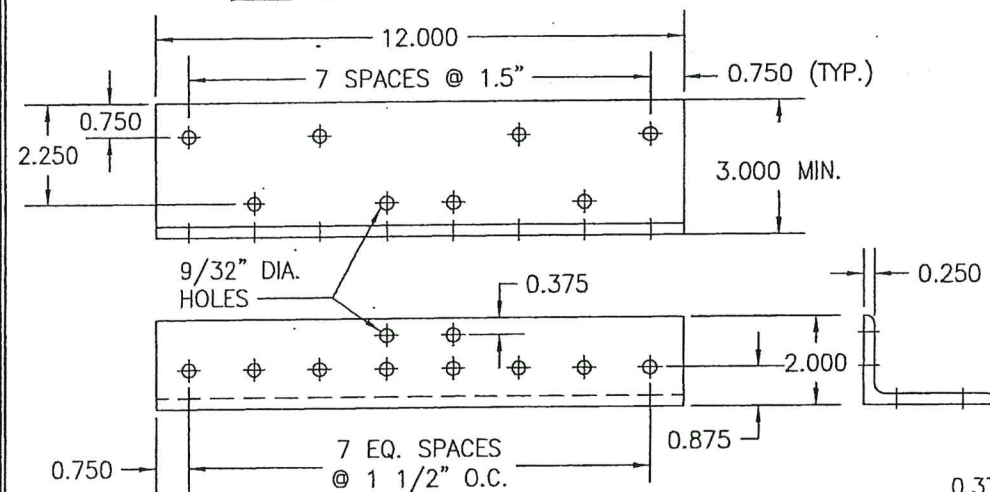
SECTION F1
SCALE: 1/2 FULL
(NON-ARCHITECTURAL LOUVER
WITH TUBE MULLION)

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **20-0622.16**
Expiration Date **01/06/2025**
By *[Signature]*
Miami-Dade Product Control

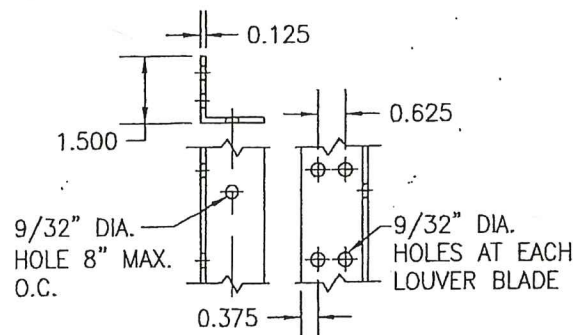
DRAWN BY: W.R.M.	CHECKED BY: W.W.S.
PLOT: 1=4	DATE: 07/23/09
DATE	BY
REVISION DESCRIPTION	NO.
<p>DRAWING TITLE EA-52 IMPACT LOUVER SYSTEM</p> <p>MANUFACTURER ARROW UNITED INDUSTRIES; A DIVISION OF MESTEK, INC. 450 RIVERSIDE DRIVE WYALUSING, PA 18853 570-746-1888</p> <p>CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424</p> <p>CERTIFICATION MAR 14 2011 W. W. SCHAEFER, P.E. P.E. NO. 44135</p>	
DRAWING NO. 1685	REV. C
SHEET NO. 9	OF 10



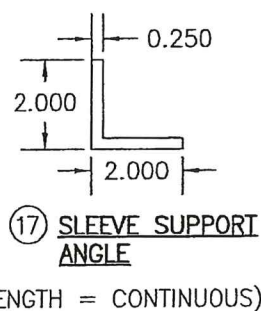
⑩ MULLION END INSTALLATION CLIP



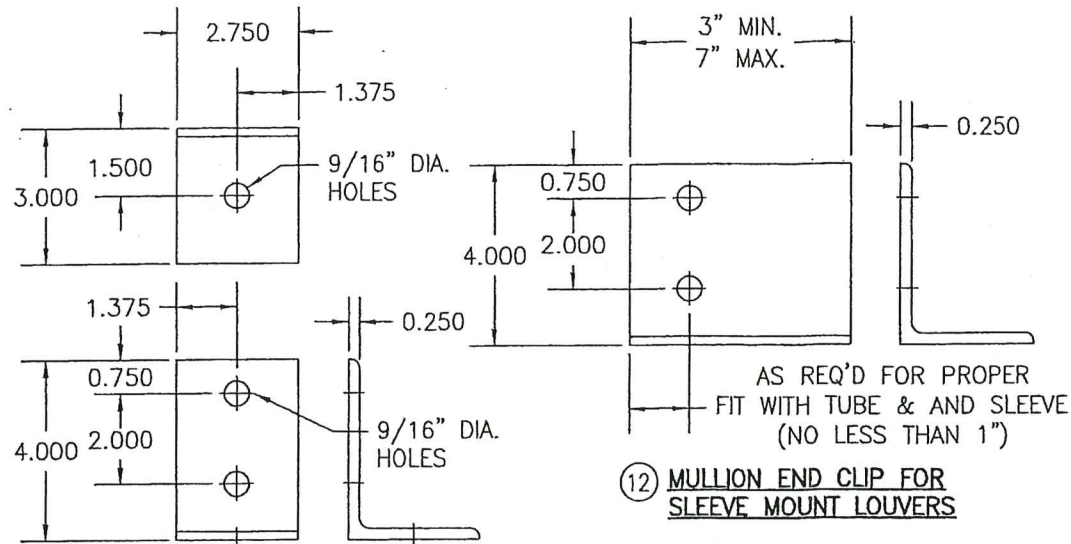
⑬ MULLION END INSTALLATION CLIP



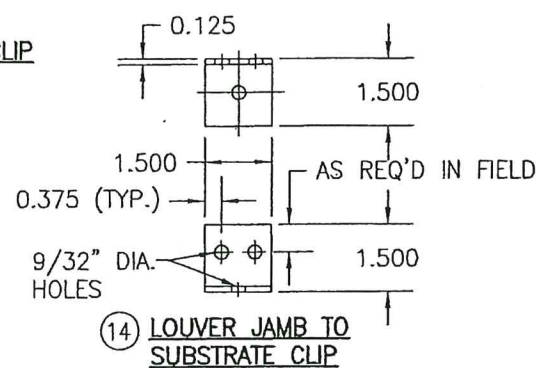
⑯ TUBE MULLION TO LOUVER BLADE ANGLE (ARCHITECTURAL LOUVER) (LENGTH = CONTINUOUS)



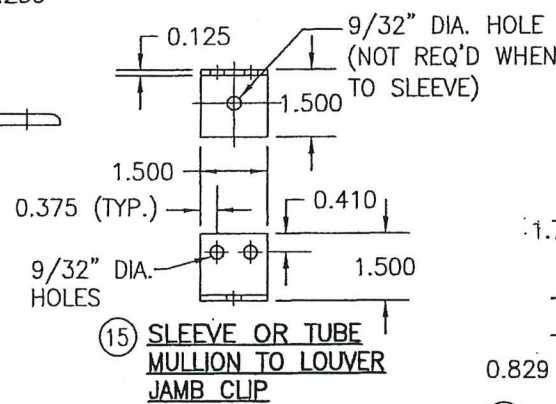
⑰ SLEEVE SUPPORT ANGLE (LENGTH = CONTINUOUS)



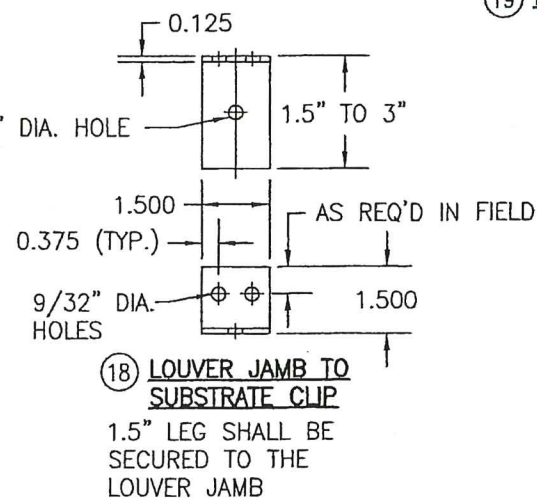
⑪ MULLION END INSTALLATION CLIP



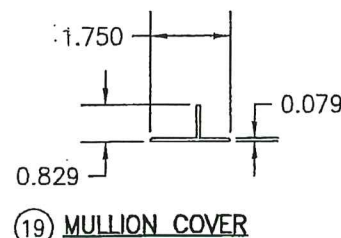
⑭ LOUVER JAMB TO SUBSTRATE CLIP



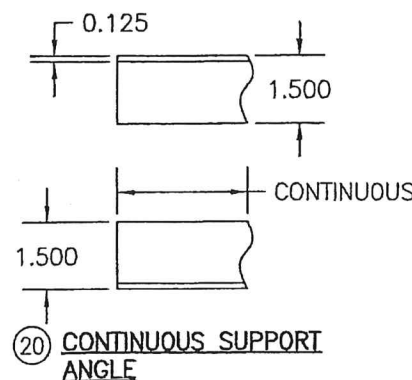
⑮ SLEEVE OR TUBE MULLION TO LOUVER JAMB CLIP



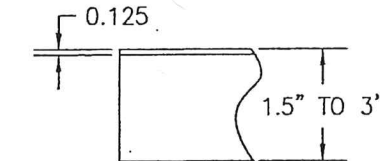
⑱ LOUVER JAMB TO SUBSTRATE CLIP 1.5\"/>



⑲ MULLION COVER



⑳ CONTINUOUS SUPPORT ANGLE



㉑ CONTINUOUS SUPPORT ANGLE 1.5\"/>

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	HEAD	6063-T6 ALUMINUM
2	SILL	6063-T6 ALUMINUM
3	SILL PAN	6063-T5 ALUMINUM
4	JAMB	6063-T6 ALUMINUM
5	SLEEVE	5052-H32 ALUMINUM
6	BLADE	6063-T6 ALUMINUM
7	BLADE SUPPORT BRACKET	6063-T6 ALUMINUM
8A	TUBE MULLION (USED WITH NON-ARCHITECTURAL LOUVERS)	6063-T6 OR 6061-T6 ALUMINUM
8B	TUBE MULLION (USED WITH NON-ARCHITECTURAL LOUVERS)	6063-T6 OR 6061-T6 ALUMINUM
9	TUBE MULLION (USED WITH ARCHITECTURAL LOUVERS)	6063-T6 OR 6061-T6 ALUMINUM
10	MULLION END INSTALLATION CLIP	6061-T6 ALUMINUM
11	MULLION END INSTALLATION CLIP	6061-T6 ALUMINUM
12	MULLION END CLIP FOR SLEEVE MOUNT LOUVERS	6061-T6 ALUMINUM
13	MULLION END INSTALLATION CLIP	6061-T6 ALUMINUM
14	LOUVER JAMB TO SUBSTRATE CLIP	6063-T5 ALUMINUM
15	SLEEVE OR TUBE MULLION TO LOUVER JAMB CLIP	6063-T5 ALUMINUM (WITHIN 4\"/>

PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. **20-0622.16**
Expiration Date **01/06/2025**
By *[Signature]*
Miami-Dade Product Control

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No. **23-0713**
Expiration Date **06 JAN 2025**
By *[Signature]*
Miami-Dade Product Control

PRODUCT RENEWED
as complying with the Florida Building Code
NOA-No. **19-0401.01**
Expiration Date **01/06/2025**
By *[Signature]*
Miami-Dade Product Control

DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=4		DATE: 07/23/09	
DATE	BY	REVISION DESCRIPTION	NO.
DRAWING TITLE: EA-52 IMPACT LOUVER SYSTEM MANUFACTURER: ARROW UNITED INDUSTRIES; A DIVISION OF MESTEK, INC. 450 RIVERSIDE DRIVE WYALISING, PA 18853 570-746-1888 CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424 CERTIFICATION: MAR 14 2019 WARREN W. SCHAEFER, P.E. P.E. NO. 44135			
DRAWING NO. 1685		REV. C	
SHEET NO. 10 OF 10			