

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

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. **1685-1**, titled "EA-52 Impact Louver System", sheets 1 through 10 of 10, dated 12/19/2024, prepared by Arrow United Industries a division of Mestek, Inc., signed and sealed by Wayne K. Helmila, 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 **renews and revises NOA # 23-0713.10** and consists of this page 1 and evidence pages E-1, E-2, E-3 and E-4, as well as approval document mentioned above.

The submitted documentation was reviewed by Carlos M. Utrera, P.E.



NOA No. 25-0106.05 Expiration Date: January 6, 2026 Approval Date: February 27, 2025 Page 1

02/19/25

#### 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 5<sup>th</sup> 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.

# 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 5<sup>th</sup> Edition (2014) and 6<sup>th</sup> 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.

# F. STATEMENTS

- Statement letter of code conformance to the 6<sup>th</sup> edition (2017) and 7<sup>th</sup> 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. Evidence submitted under NOA # # 23-0713.10

- 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

- Statement letter of code conformance to the 6<sup>th</sup> edition (2017) and 7<sup>th</sup> 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 7<sup>th</sup> edition (2020) and 8<sup>th</sup> 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.

# 5. NEW EVIDENCE SUBMITTED

# A. DRAWINGS

1. Drawing No. 1685-1, titled "EA-52 Impact Louver System", sheets 1 through 10 of 10, dated 12/19/2024, prepared by Arrow United Industries a division of Mestek, Inc., signed and sealed by Wayne K. Helmila, P.E.

# B. TESTS

1. None.

# C. CALCULATIONS

1. Louver A520 anchorage calculations, prepared by Rice Engineering, dated 01/13/2025, signed and sealed by Wayne K. Helmila, P.E.

# D. QUALITY ASSURANCE

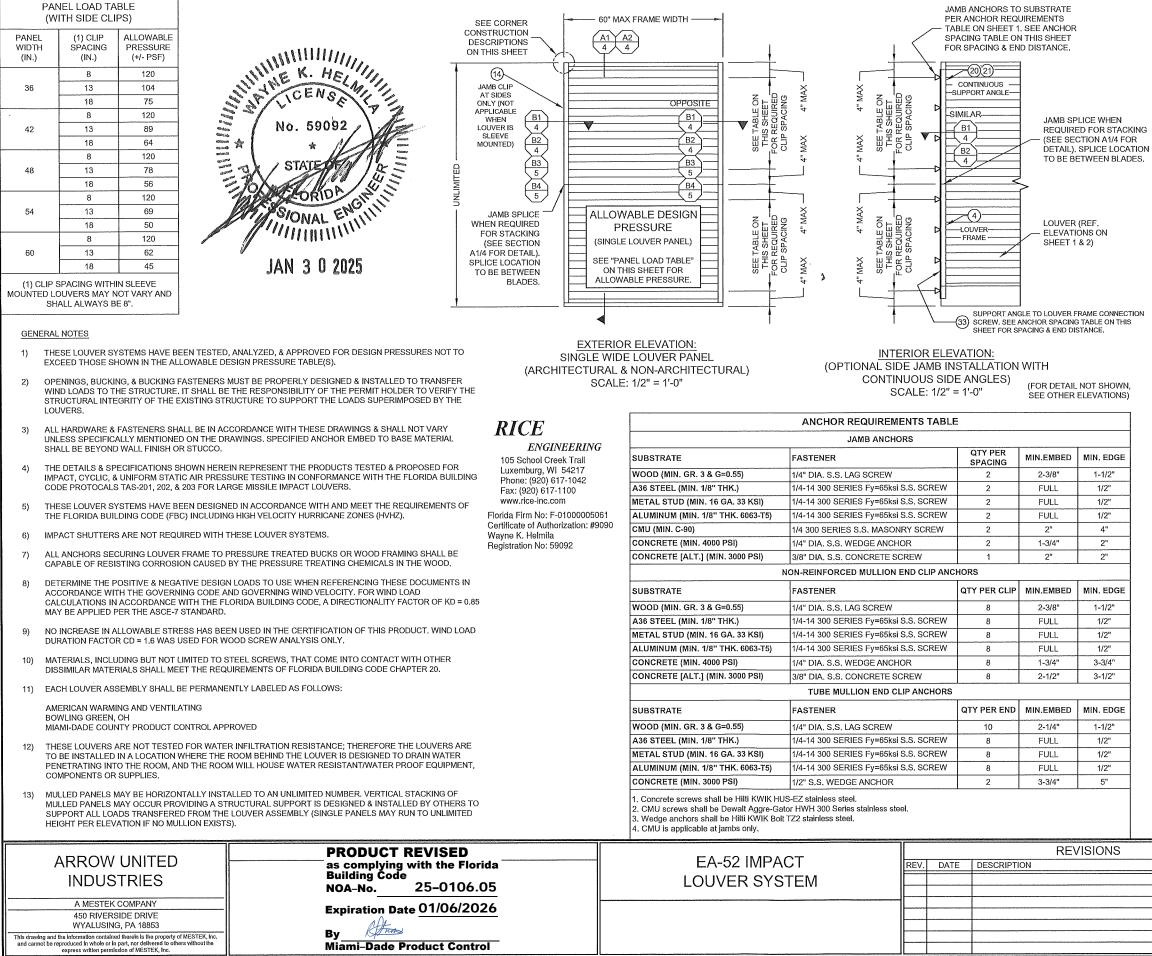
1. Miami-Dade County Department of Regulatory and Economic Resources (RER).

# E. MATERIAL CERTIFICATIONS

1. None.

# F. STATEMENTS

- 1. Statement letter of code conformance to the 8<sup>th</sup> edition (2023) of the FBC and of no financial interest, issued by Rice Engineering, dated 01/14/2025, signed and sealed by Wayne K. Helmila, P.E.
- 2. Verification test contract letter, issued by Intertek, dated 02/14/2025, signed by Austin L. Wilcox, product engineer.



Miami-Dade Product Control

		CHOR SPAC			
	ANGL	E TO	ANGLE TO	D LOUVER	
PANEL	SUBSTRAT	E ANCHORS	FRAME	SCREWS	ALLOWABLE
WIDTH (IN.)	SPACING	END DIST.	SPACING	END DIST.	PRESSURE (+/- PSF)
	(IN.)	(IN.)	(IN.)	(IN.)	
	8	4	4	2	120
36	13	7 1/2	7 1/2	3 3/4	104
	18	9	9	4 1/2	75
	8	4	4	2	120
42	13	7 1/2	7 1/2	3 3/4	89
	18	9	9	4 1/2	64
	8	4	4	2	120
48	13	7 1/2	7 1/2	3 3/4	78
	18	9	9	4 1/2	56
	8	4	4	2	120
54	13	7 1/2	7 1/2	3 3/4	69
	18	9	9	4 1/2	50
	8	4	4	2	120
60	13	7 1/2	7 1/2	3 3/4	62
	18	9	9	4 1/2	45

NOTE: SINGLE LOUVER PANELS MAY BE STACKED/SPLICED VERTICALLY OR THE LOUVER PANEL MAY RUN VERTICALLY TO INFINITE HEIGHT PROVIDING OPENING IS PROPERLY DESIGNED BY OTHERS TO SUPPORT THE LOUVER PANELS.

#### SLEEVE SPLICING NOTE FOR SLEEVE MOUNTED LOUVERS:

SLEEVE MAY BE SPLICED ALONG HORIZONTAL OR VERTICAL RUNS PROVIDING SPLICE DOES NOT OCCUR WITHIN 12" OF ANY VERTICAL MULLION CENTERLINE.

#### CORNER & BLADE END CONSTRUCTION:

FRAME HEAD: HORIZONTAL MEMBER IS SQUARE CUT, BUTTED TO VERTICAL MEMBERS, & FASTENED WITH TWO (2) NO. 7 X 1-1/4" SMS HEX HEAD SCREWS INTO THE HORIZONTAL MEMBERS SCREW SPLINES.

FRAME SILL: VERTICAL MEMBERS ARE ANGLE CUT, BUTTED TO HORIZONTAL MEMBER, & FASTENED WITH TWO (2) NO. 7 X 1-1/4" SMS SCREWS INTO THE VERTICAL MEMBERS SCREW SPLINES.

BLADE END: HORIZONTAL BLADES ARE SQUARE CUT, BUTTED TO VERTICAL MEMBERS, & FASTENED WITH TWO (2) NO. 7 OR NO. 8 X 1-1/4" SMS SCREWS INTO THE BLADE SCREW SPLINES.

> THESE DRAWINGS ARE APPLICABLE ONLY TO THE PRODUCT. SPECIFIED, THEY MAY NOT BE USED FOR THE ASSEMBLY AND/OR INSTALLATION OF ANY OTHER PRODUCT NOR MAY THEY BE USED FOR RATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS

	DATE: 19 DEC, 2024	SHEET No.:
BY	DRAWN BY: MTC	1 of 10
	CHECKED BY: JMC	
		SCALE: 1/2" = 1'-0"
		REV,
	1685-1	

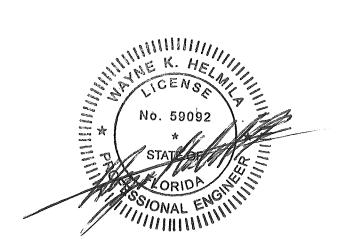
WITH NO TUBE MULLION         WITH 4" X 3" X 3/16" TUBE MULLION         WITH 4" X 3" X 1/4" TUBE MULLION           30.6         46.1         61.4           34.0         51.2         68.3           38.3         57.6         76.8           43.7         65.8         87.8           51.0         76.8         102.4           61.2         92.2         120.0           76.5         115.2         120.0           102.0         120.0         120.0	B1 B1 B1 B1 B1 B1 B1 B1 B1 B1
34.0         51.2         68.3           38.3         57.6         76.8           43.7         65.8         87.8           51.0         76.8         102.4           61.2         92.2         120.0           76.5         115.2         120.0	B1 F1 B1 B1
38.3         57.6         76.8           43.7         65.8         87.8           51.0         76.8         102.4           61.2         92.2         120.0           76.5         115.2         120.0	
43.7         65.8         87.8           51.0         76.8         102.4           61.2         92.2         120.0           76.5         115.2         120.0	$\begin{array}{c c} & & & & & & & & & & & & & & & & & & &$
51,0         76.8         102.4           61.2         92.2         120.0           76.5         115.2         120.0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
61.2         92.2         120.0           76.5         115.2         120.0	
76.5 115.2 120.0	
102.0 120.0 120.0	2 W H 5
42,0 63,2 84,3	
42.0         63.2         64.3           46.6         70.2         93.6	
40.0         70.2         30.0           52.5         79.0         105.3	NON-ARCHITECTURAL PANELS)
60.0         90.3         120.0	
70.0 105.3 120.0	
84.0 120.0 120.0	ON THIS SHEET.
104.9 120.0 120.0	
120.0 120.0 120.0	
56.3 90.0 120.0	FOR LOCATIONS OF JAMB CONTRACT CLIPS, SEE SINGLE PANEL
62.5 100.0 120.0	ELEVATION (NOTE THAT AULLION LOAD WIDTH AULLION LOA
	FRAME SPLICE DOES NOT     PANEL     PANEL       APPLY TO MULLED UNITS)     CENTERLINE     CENTERLINE
	EXTERIOR ELEVATION:
	MULTIPLE LOUVER PANELS
	(NON-ARCHITECTURAL)
	SCALE: 1/2" = 1'-0"
80.4 120.0 120.0	(3 PANEL UNIT SHOWN; MORE THAN
91.8 120.0 120.0	3 PANELS MAY BE MULLED/STACKED HORIZONTALLY)
107.1 120.0 120.0	
120.0 120.0 120.0	
75.0 120.0 120.0	
83.3 120.0 120.0	
	PRODUCT REVISED
	as complying with the Florida Building Code
112.5 120.0 120.0	NOA-No. 25-0106.05
120.0 120.0 120.0	
120.0 120.0 120.0	Expiration Date <u>01/06/2026</u>
	60.090.3120.070.0105.3120.084.0120.0120.0104.9120.0120.056.390.0120.062.5100.0120.070.3112.5120.093.8120.0120.0120.0120.0120.0112.5120.0120.093.8120.0120.0120.0120.0120.0121.5120.0120.0122.0120.0120.0120.0120.0120.0120.0120.0120.0120.0120.0120.071.4120.0120.093.8120.0120.0107.1120.0 <trr>1</trr>

	CERTIFICATION			REVISIONS
ARROW UNITED		EA-52 IMPACT	REV. DATE	DESCRIPTION
INDUSTRIES		LOUVER SYSTEM		
		LOOVENCOTOTEM		
A MESTEK COMPANY				
450 RIVERSIDE DRIVE				
WYALUSING, PA 18853				
This drawing and the information contained therein is the property of MESTEK, Inc.				
and cannot be reproduced in whole or in part, nor delivered to others without the				

RICE

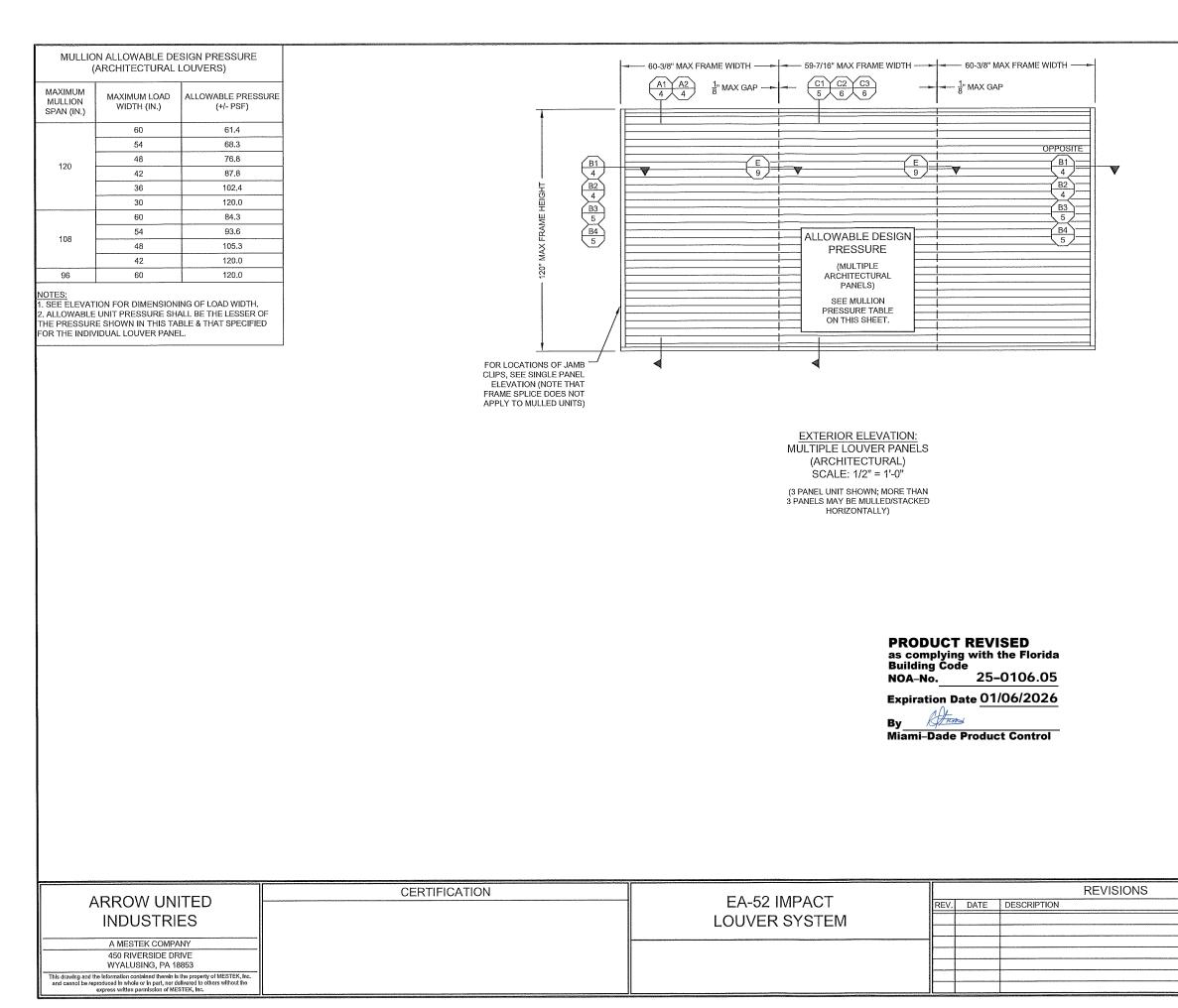
ENGINEERING 105 School Creek Trail Luxemburg, WI 54217 Phone: (920) 617-1042 Fax: (920) 617-1100 www.rice-inc.com

Florida Firm No: F-01000005061 Certificate of Authorization: #9090 Wayne K. Helmila Registration No: 59092



# JAN 3 0 2025

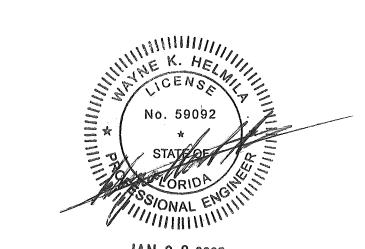
n na		DATE: 19 DEC, 2024	SHEET No.:
	BY	DRAWN BY: MTC	2 of 10
		CHECKED BY: JMC	
			SCALE; 1/2" = 1'-0"
			REV.
		1685-1	



RICE

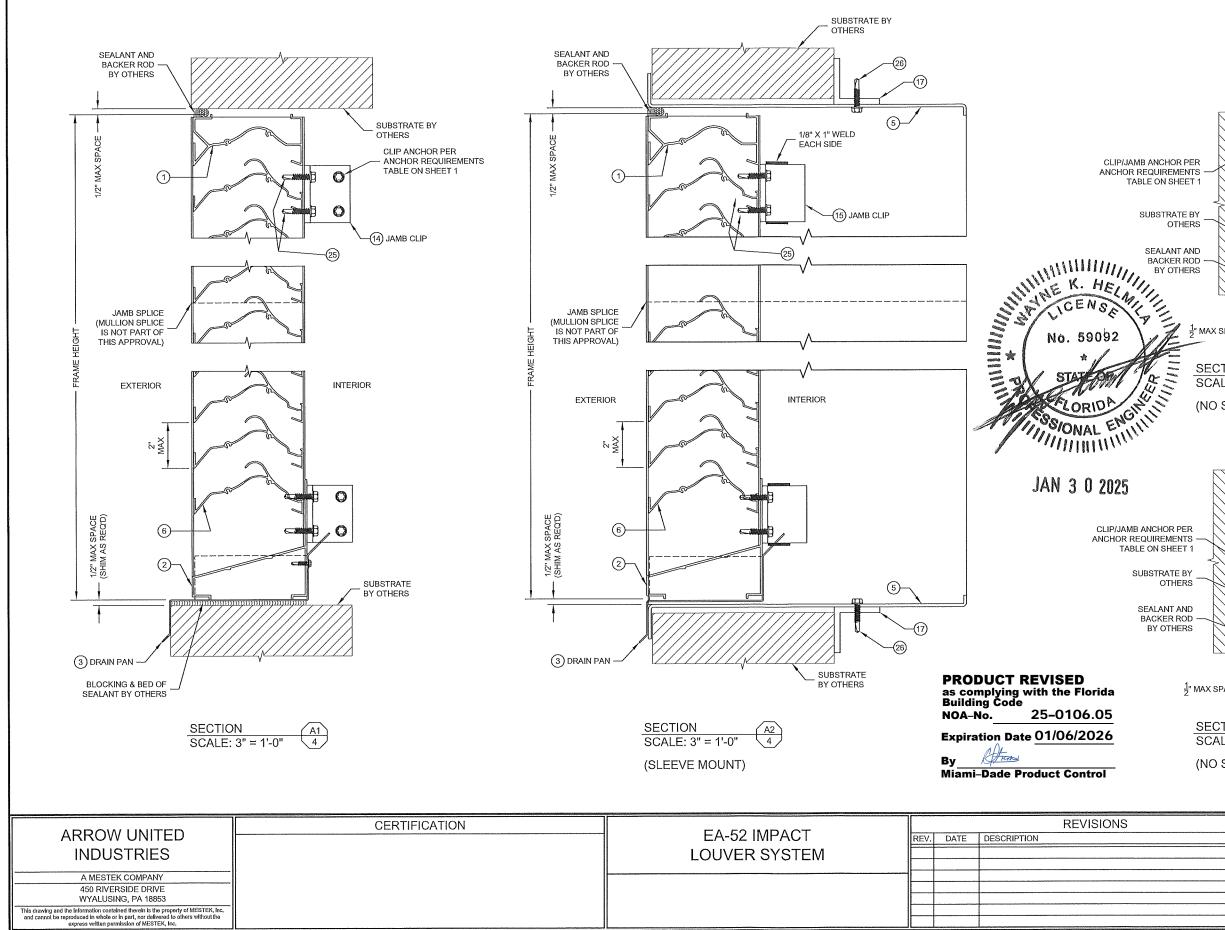
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Florida Firm No: F-01000005061 Certificate of Authorization: #9090 Wayne K. Helmila Registration No: 59092



JAN 3 0 2025

	DATE: 19 DEC, 2024	SHEET No.:
 BY	DRAWN BY: MTC	3 of 10
 	CHECKED BY: JMC	
		SCALE: 1/2" = 1'-0"
		REV.
	1685-1	State Base State



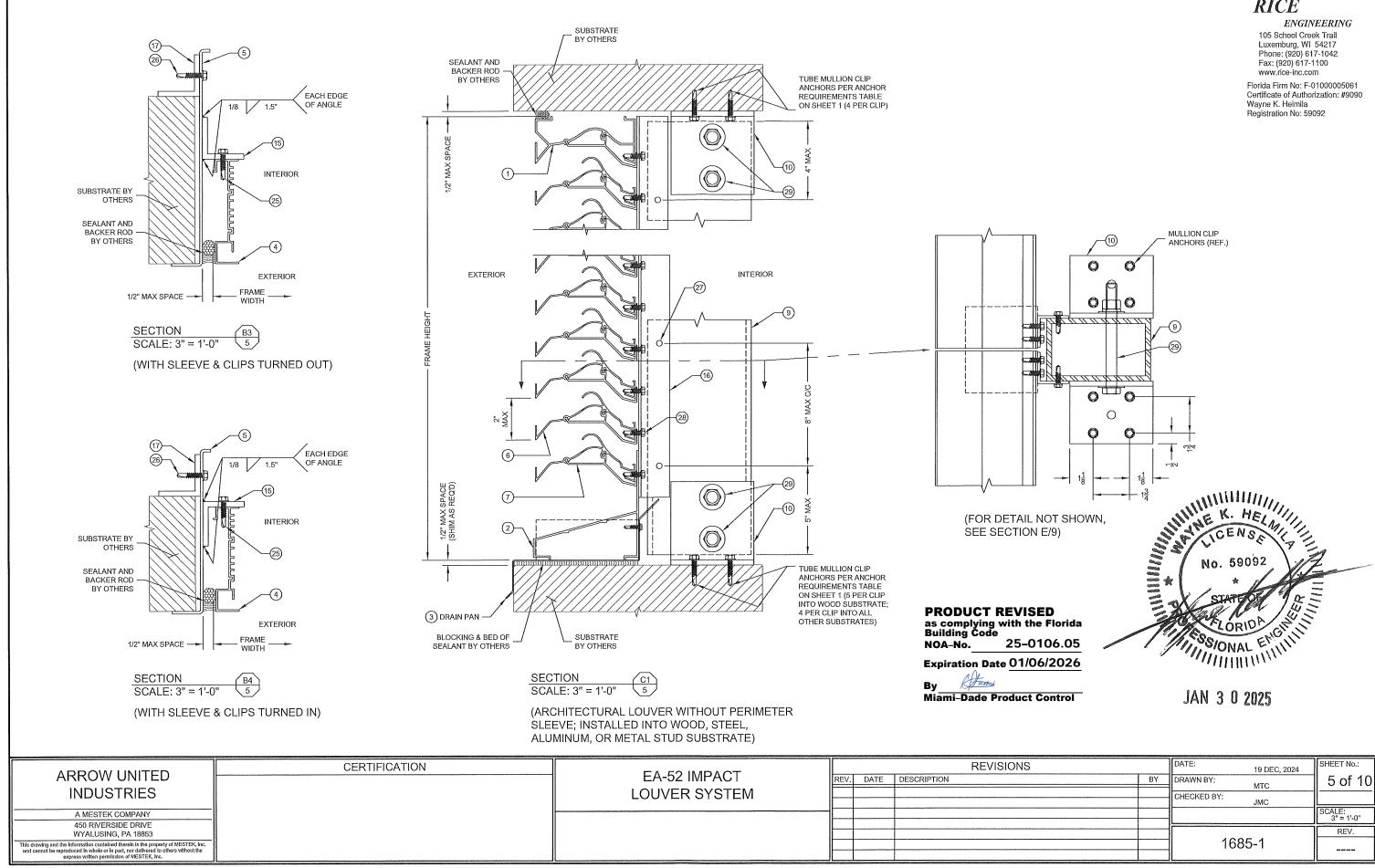
RICE ENGINEERING 105 School Creek Trail Luxemburg, WI 54217 Phone: (920) 617-1042 Fax: (920) 617-1100 www.rice-inc.com Florida Firm No: F-01000005061 Certificate of Authorization: #9090 Wayne K. Helmila Registration No: 59092 (14)(20) INTERIOR SUBSTRATE BY OTHERS -25(33) (4)EXTERIOR FRAME 1" MAX SPACE --WIDTH SECTION (B1 4) SCALE: 3" = 1'-0" (NO SLEEVE & CLIPS TURNED OUT) 18(21) INTERIOR OTHERS (25)33 SEALANT AND BACKER ROD BY OTHERS 4 EXTERIOR

1" MAX SPACE -WIDTH SECTION B2 4 SCALE: 3" = 1'-0"

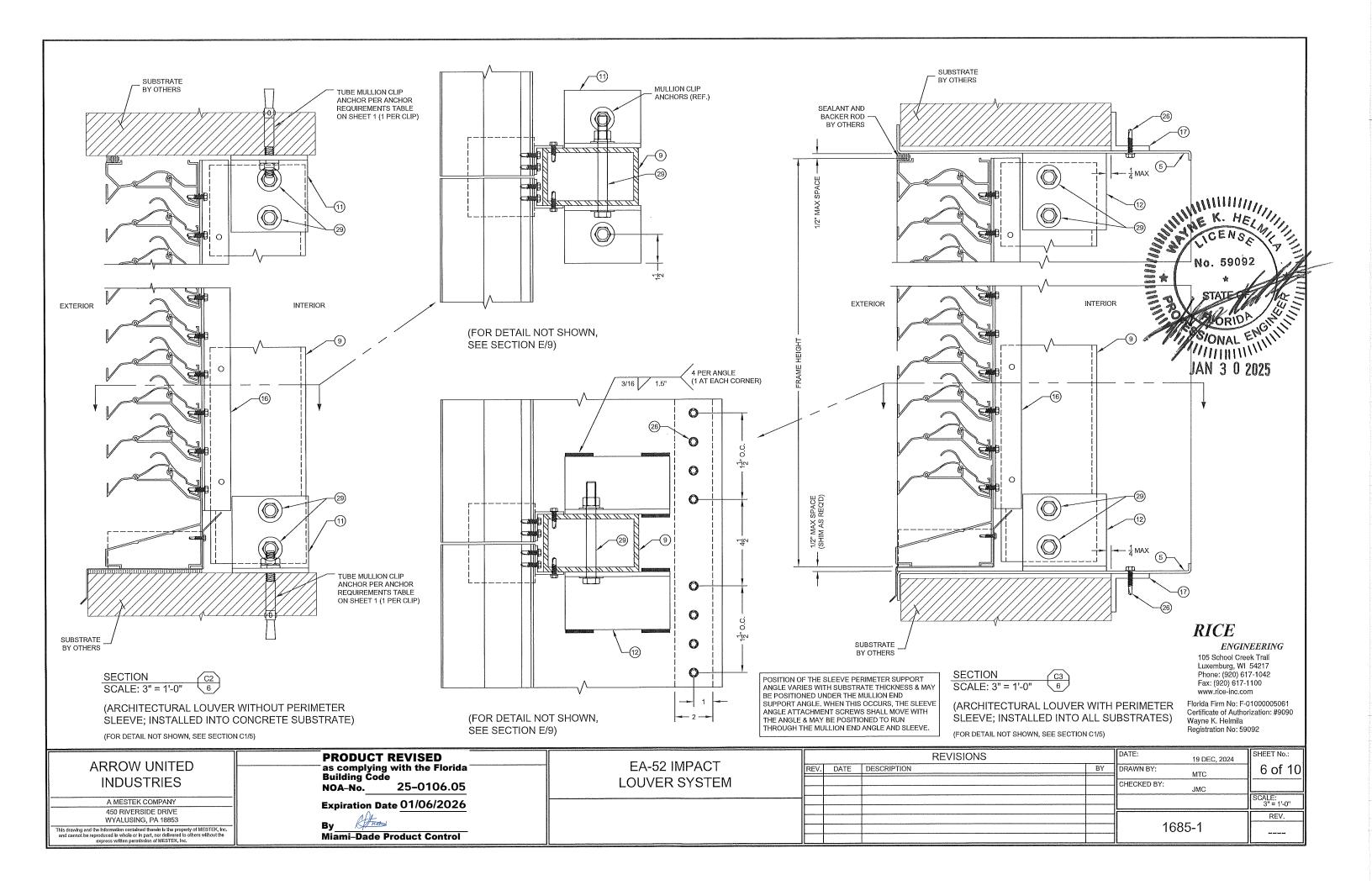
#### (NO SLEEVE & CLIPS TURNED IN)

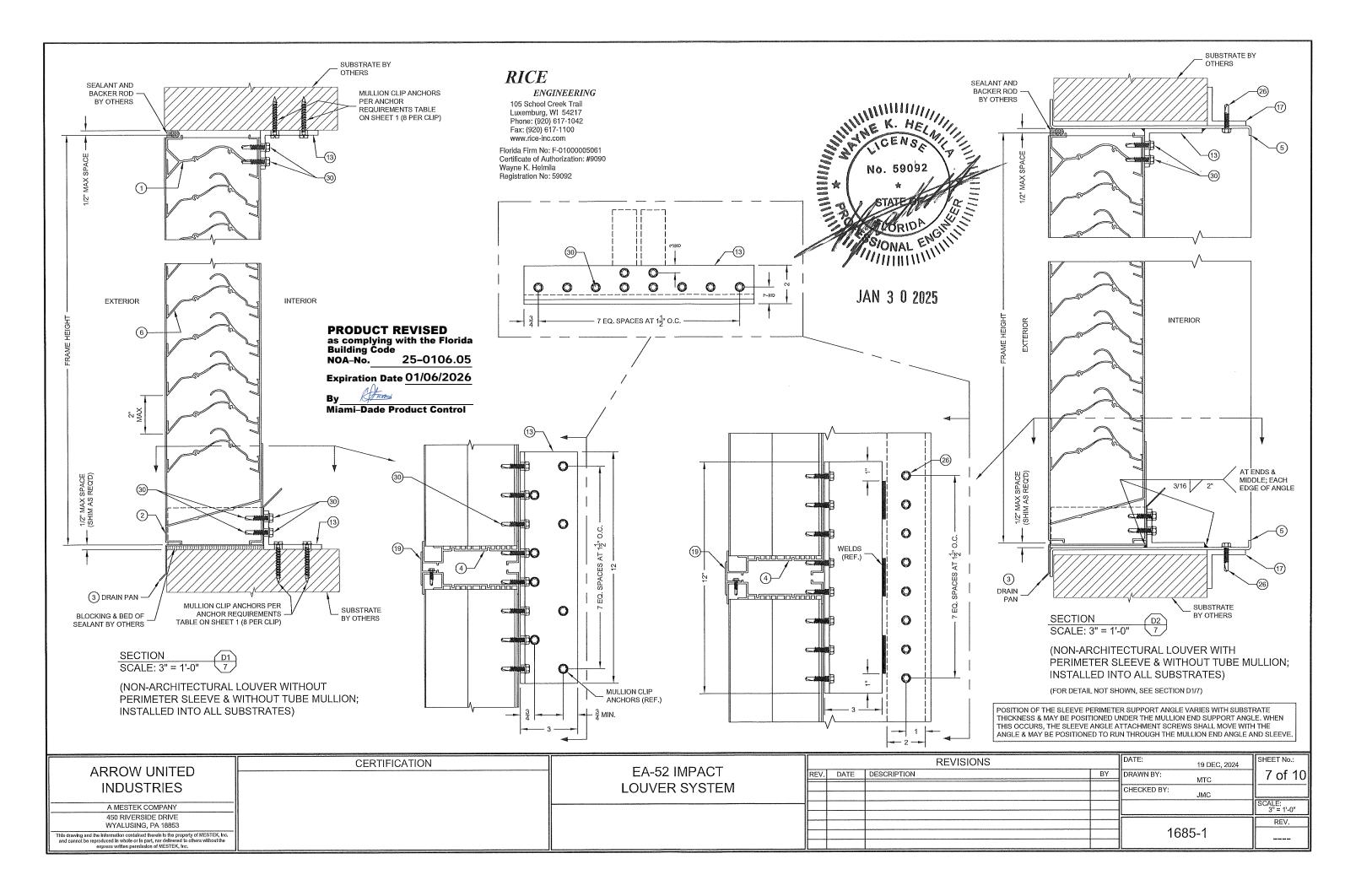
FRAME

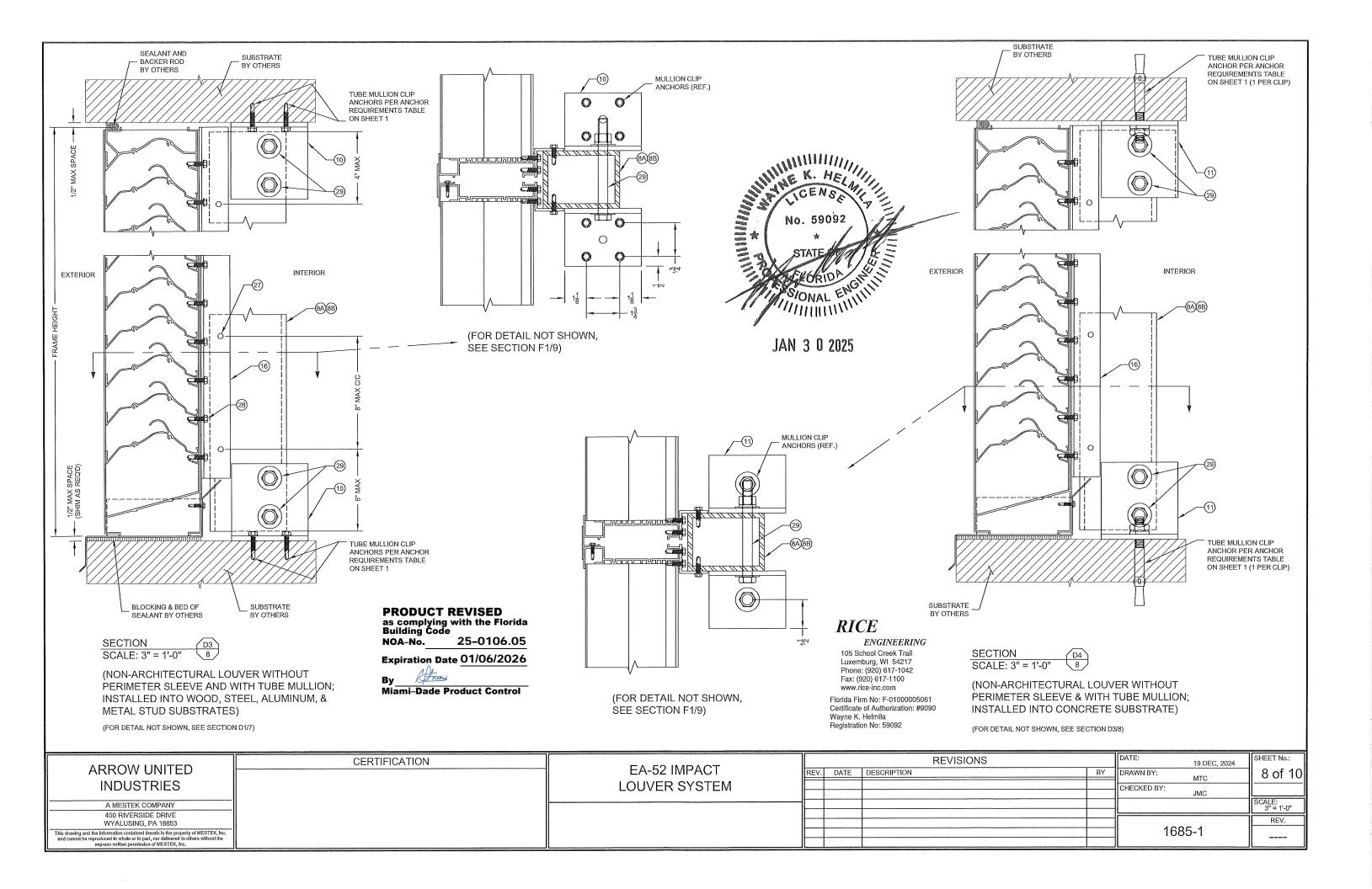
	DATE: 19 DEC, 2024	SHEET No.:
BY	DRAWN BY: MTC	4 of 10
 	CHECKED BY: JMC	
 		SCALE: 3" = 1'-0"
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 	1685-1	

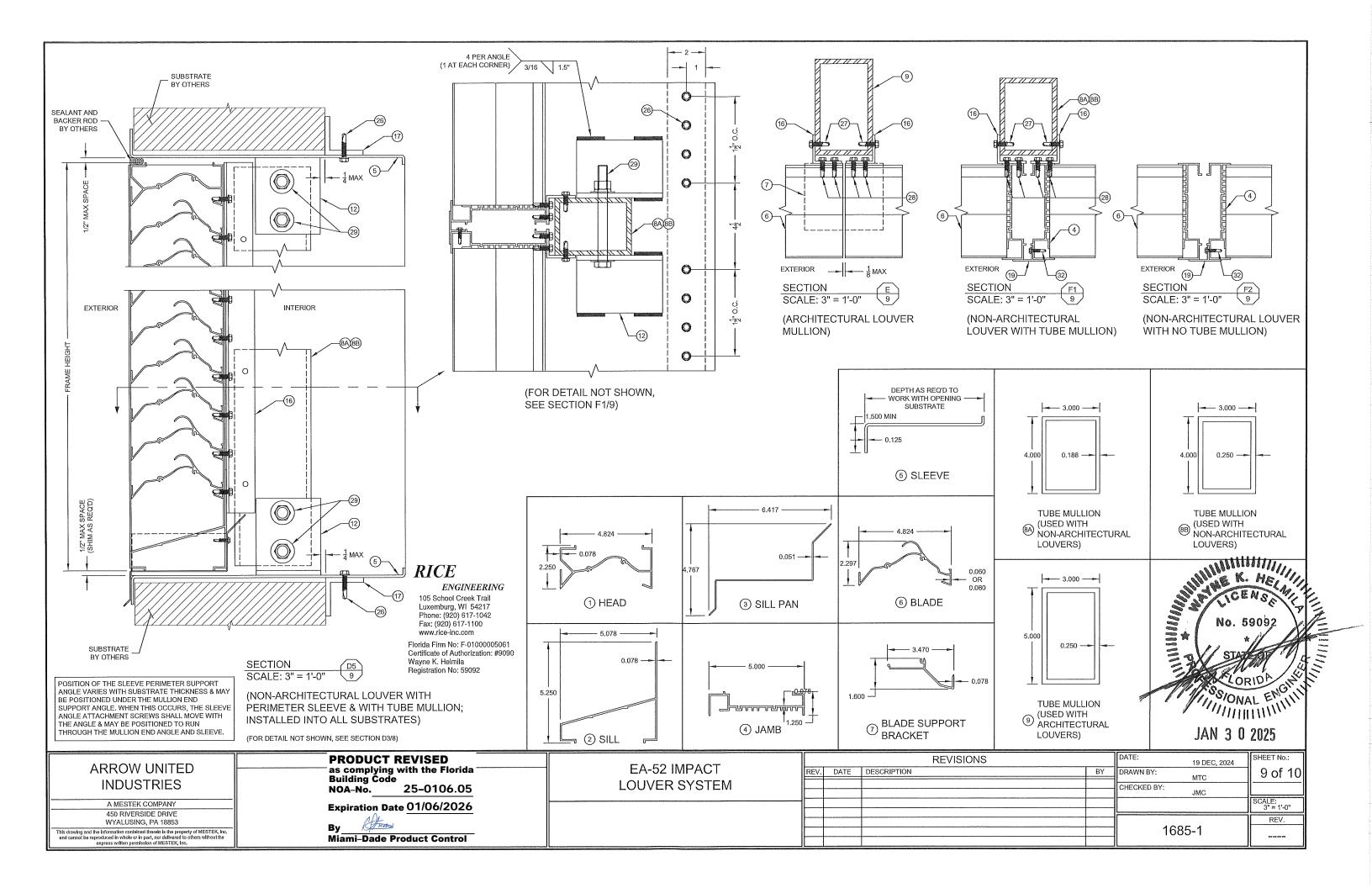


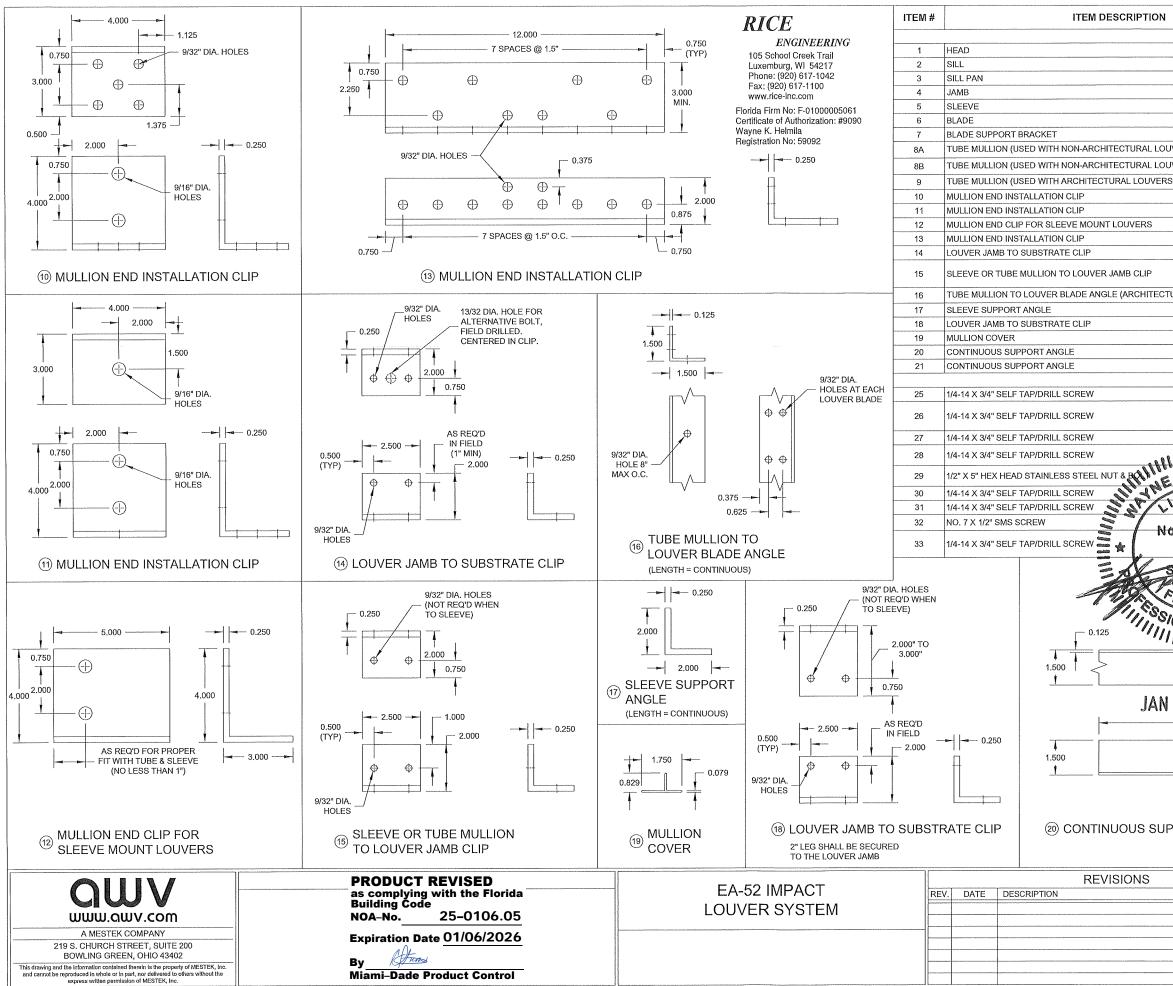
RICE











	MANUFACTURER/NOTES		
PARTS			
	6061-T6 ALUMINUM		
	6061-T6 ALUMINUM		
	5052-H32 ALUMINUM		
	6061-T6 ALUMINUM		
	5052-H32 ALUMINUM		
	6061-T6 ALUMINUM		
	6061-T6 ALUMINUM		
JVERS	6063-T6 OR 6061-T6 ALUMINUM		
JVERS	6063-T6 OR 6061-T6 ALUMINUM		
S	6063-T6 OR 6061-T6 ALUMINUM		
	6061-T6 ALUMINUM		
	6061-T6 ALUMINUM		
	6061-T6 ALUMINUM		
	6061-T6 ALUMINUM		
	6063-T5 ALUMINUM		
	6063-T5 ALUMINUM (WITHIN 4" OF SLEEVE CORNERS OR TUBE MULLION ENDS AND MAX 8" O.C.)		
FURAL LOUVERS)	6063-T5 ALUMINUM		
	6063-T5 ALUMINUM		
MISC. FASTENERS			
	2 PER CLIP		
	WITHIN 4" OF CORNERS & SLEEVE SPLICES. MAX 8" O.C. (CLUSTERED AT MULLION ENDS PER DETAILS)		
	8" O.C. PER SECTIONS		
K. HELNII GENSE	4 AT HEAD & 2 PER BLADE		
K. HE. 11.	2 PER MULLION END		
The last	10 PER CLIP		
VCENSX4 .	1 PER CLIP		
17	WITHIN 6" OF CORNERS & 24" MAX O.C.		
<del>o. 59092 \</del>	SEE ANGHOR SPACING/PRESSURE TABLE FOR SPACING		
* 11 Ar	REQS.		
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SIAMON TOS	antes hereix		
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LORIDAN	0.125		
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UNAL PUNI			
///////////////////////////////////////	1.500"		
CORIDA CORIDA ONAL ENGINITI	TO 3.000"		
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3 0 2025 CONTINUOUS			
3 0 2025 CONTINUOUS	CONTINUOUS 1.500 1.500 CONTINUOUS SUPPORT ANGLE 1.5" LEG SHALL BE SECURED		
3 0 2025 CONTINUOUS	CONTINUOUS 1.500 2) CONTINUOUS SUPPORT ANGLE		
3 0 2025 CONTINUOUS	CONTINUOUS CONTINUOUS CONTINUOUS SUPPORT ANGLE 1.5" LEG SHALL BE SECURED TO THE LOUVER JAMB		
3 0 2025 CONTINUOUS	CONTINUOUS CONTINUOUS CONTINUOUS SUPPORT ANGLE 1.5" LEG SHALL BE SECURED TO THE LOUVER JAMB DATE: 19 DEC, 2024 SHEET No.:		
3 0 2025 CONTINUOUS	CONTINUOUS CONTINUOUS CONTINUOUS SUPPORT ANGLE 1.5" LEG SHALL BE SECURED TO THE LOUVER JAMB		
3 0 2025	CONTINUOUS CONTINUOUS CONTINUOUS SUPPORT ANGLE 1.5" LEG SHALL BE SECURED TO THE LOUVER JAMB DATE: 19 DEC, 2024 DRAWN BY: MTC CHECKED BY: MTC CHECKED BY:		
3 0 2025 CONTINUOUS	CONTINUOUS 1.500 1.500 CONTINUOUS SUPPORT ANGLE 1.5" LEG SHALL BE SECURED TO THE LOUVER JAMB DATE: 19 DEC, 2024 DRAWN BY: MTC CHECKED BY: JMC		
3 0 2025 CONTINUOUS	CONTINUOUS CONTINUOUS CONTINUOUS SUPPORT ANGLE 1.5" LEG SHALL BE SECURED TO THE LOUVER JAMB DATE: 19 DEC, 2024 DRAWN BY: MTC CHECKED BY: MTC CHECKED BY:		
3 0 2025 CONTINUOUS	CONTINUOUS CONTINUOUS SUPPORT ANGLE 1.5° LEG SHALL BE SECURED TO THE LOUVER JAMB DATE: 19 DEC, 2024 DRAWN BY: MTC CHECKED BY: JMC SCALE: 3" = 1-0" REV.		
3 0 2025 CONTINUOUS	CONTINUOUS CONTINUOUS SUPPORT ANGLE 1.5" LEG SHALL BE SECURED TO THE LOUVER JAMB DATE: 19 DEC, 2024 DRAWN BY: MTC CHECKED BY: JMC SCALE: 3" = 1'-0"		