

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

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www.miamidade.gov/economy

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-64 6" Aluminum Louver System

APPROVAL DOCUMENT: Drawing No. **1464**, titled "EA-64 Louver System", sheets 1 through 15 of 15, dated 12/02/2005, with revision C1 dated 02/26/2019, 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 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 # 19-0306.02 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 Carlos M. Utrera, P.E.

MIAMI-DADE COUNTY
APPROVED

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NOA No. 20-0622.15 Expiration Date: April 22, 2024 Approval Date: August 20, 2020 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted under previous NOAs

A. DRAWINGS "Submitted under NOA # 11-1117.09"

1. Drawing No. 1464, titled "EA-64 Louver System", sheets 1 through 15 of 15, dated 12/02/2005, with revision A1 dated 11/07/2011, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E.

B. TESTS "Submitted under NOA No. 08-1224.03"

	Test Report	Test Standard	Test Date	<u>Signature</u>
1.	HTL 0198-0508-03	TAS 201,202 & 203	05/15-10/03	V.J.Abraham, P.E.
2.	HTL.0198-0618-03	TAS 201, 202 & 203	06/06-25/03	V.J.Abraham, P.E.
3.	HTL 0198-0804-03	TAS 201, 202 & 203	08/06-08/03	V.J.Abraham, P.E.
4.	HTL 0198-0508-03	TAS 201, 202 & 203	05/08-13/03	V.J.Abraham, P.E.
5.	HTL 0198-0804-03	TAS 201, 202 & 203	08/08-11/03	V.J.Abraham, P.E.
6.	HTL 0198-0324-03	TAS 201, 202 & 203	03/24-26/03	V.J.Abraham, P.E.
7.	HTL 0198-0324-03	TAS 201, 202 & 203	03/24-04/16	V.J.Abraham, P.E.
8.	HTL 0198-0324-03	TAS 201, 202 & 203	03/24-24/03	V.J.Abraham, P.E.
9.	HTL 0198-0324-03	TAS 201, 202 & 203	03/25-04/21	V.J.Abraham, P.E.
10.	HTL 0198-0128-03	TAS 201, 202 & 203	02/10-04/21	V.J.Abraham, P.E.
11.	HTL 0198-0508-03	TAS 202	05/13-13/03	V.J.Abraham, P.E.
12.	HTL 0198-0324-03	TAS 202	03/27-27/03	V.J.Abraham, P.E.
13.	HTL 0198-0324-03	TAS 201 & 203	03/24-04/21	V.J.Abraham, P.E.
14.	HTL G198-0101-05	TAS 201, 202 & 203	02/15/05	V.J.Abraham, P.E.
15.	AWV/AUI-011-02-01	TAS 100 (A)-95	05/13/08	Duc T. Nguyen, P.E.
16.	ATI 45720.03-122-18	TAS 100 (A)-95	01/16/09	J.A. Reed, P.E.

C. CALCULATIONS "Submitted under NOA No. 08-1224.03"

1. Anchoring calculations prepared by W.W. Schaefer Engineering & Consulting, P.A., dated 12/17/2008, 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 #14-0423.22"

- 1. Statement letter of code conformance to 2010 and 5th edition (2014) FBC issued by W. W. Schaefer Engineering & Consulting, P.A., dated 04/10/2014, signed and sealed by Warren W. Schaefer, P.E.
- No financial interest letter issued by W. W. Schaefer Engineering & Consulting, P.A, dated 09/04/2013, signed and sealed by Warren W. Schaefer, P.E.

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 20-0622.15
Expiration Date: April 22, 2024
Approval Date: August 20, 2020

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 2. Evidence submitted under NOA # 17-0713.04
- A. DRAWINGS
 - 1. Drawing No. 1464, titled "EA-64 Louver System", sheets 1 through 15 of 15, dated 12/02/2005, 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.

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 20-0622.15 Expiration Date: April 22, 2024

Approval Date: August 20, 2020

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. New evidence submitted

A. DRAWINGS "Submitted under NOA # 19-0306.02"

1. Drawing No. 1464, titled "EA-64 Louver System", sheets 1 through 15 of 15, dated 12/02/2005, with revision C1 dated 02/26/2019, prepared by W. W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren. W. Schaefer, P.E.

B. TESTS "Submitted under NOA # 19-0306.02"

- 1. Test report 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 an EA-64 Louver, prepared by Intertek, Test Report No. **J3223.01-109-18**, dated 02/26/2019, signed and sealed by Daniel C. Culbert, P.E.

C. CALCULATIONS "Submitted under NOA # 19-0306.02"

1. Anchoring calculations prepared by W.W. Schaefer Engineering & Consulting, P.A., dated 02/26/2019, 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

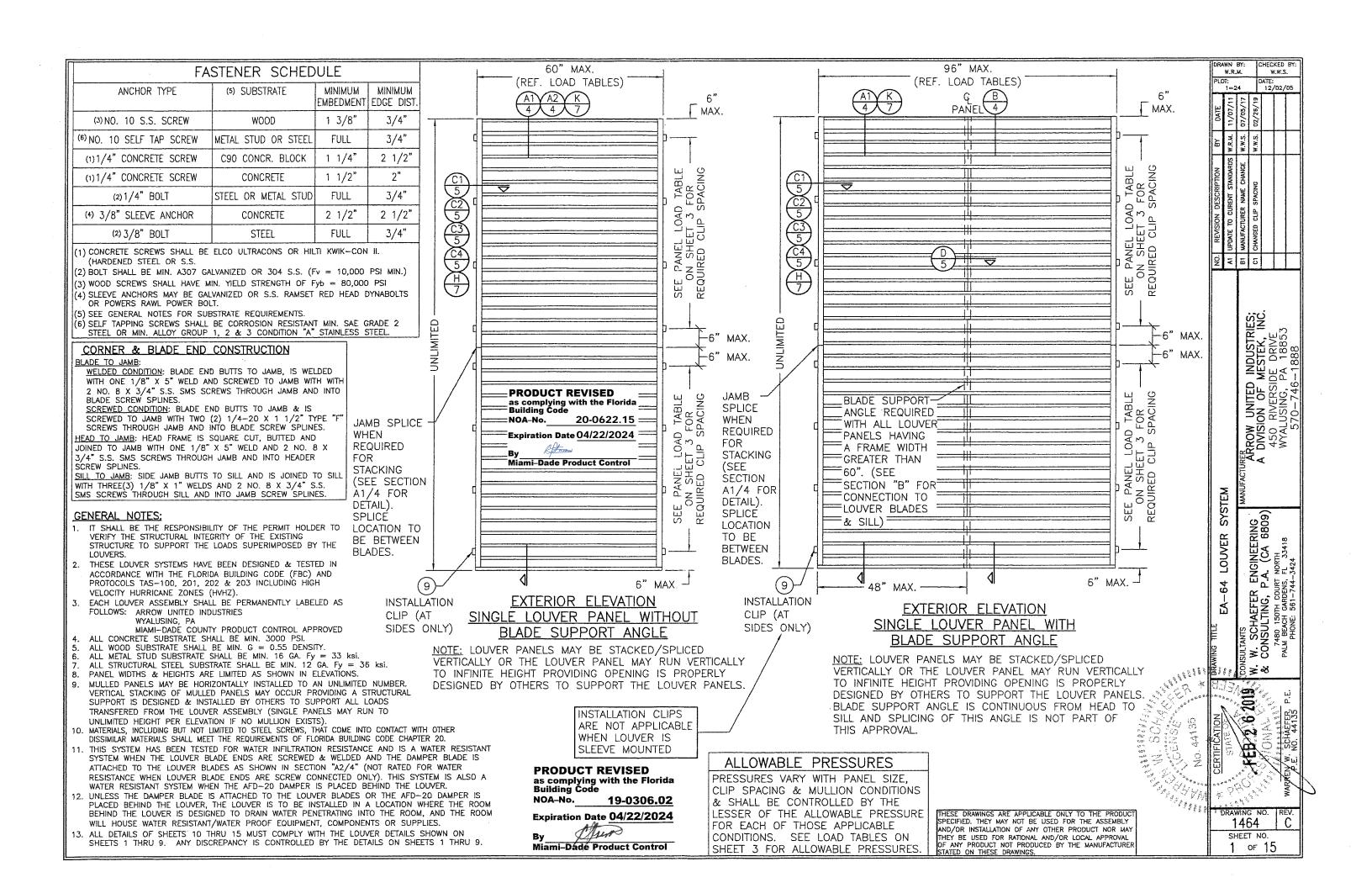
Statement letter of code conformance to the 6th Edition (2017) and 7th Edition (2020) FBC issued by W. W. Schaefer Engineering & Consulting, P.A., dated 06/03/2020, signed and sealed by Warren W. Schaefer, P.E.

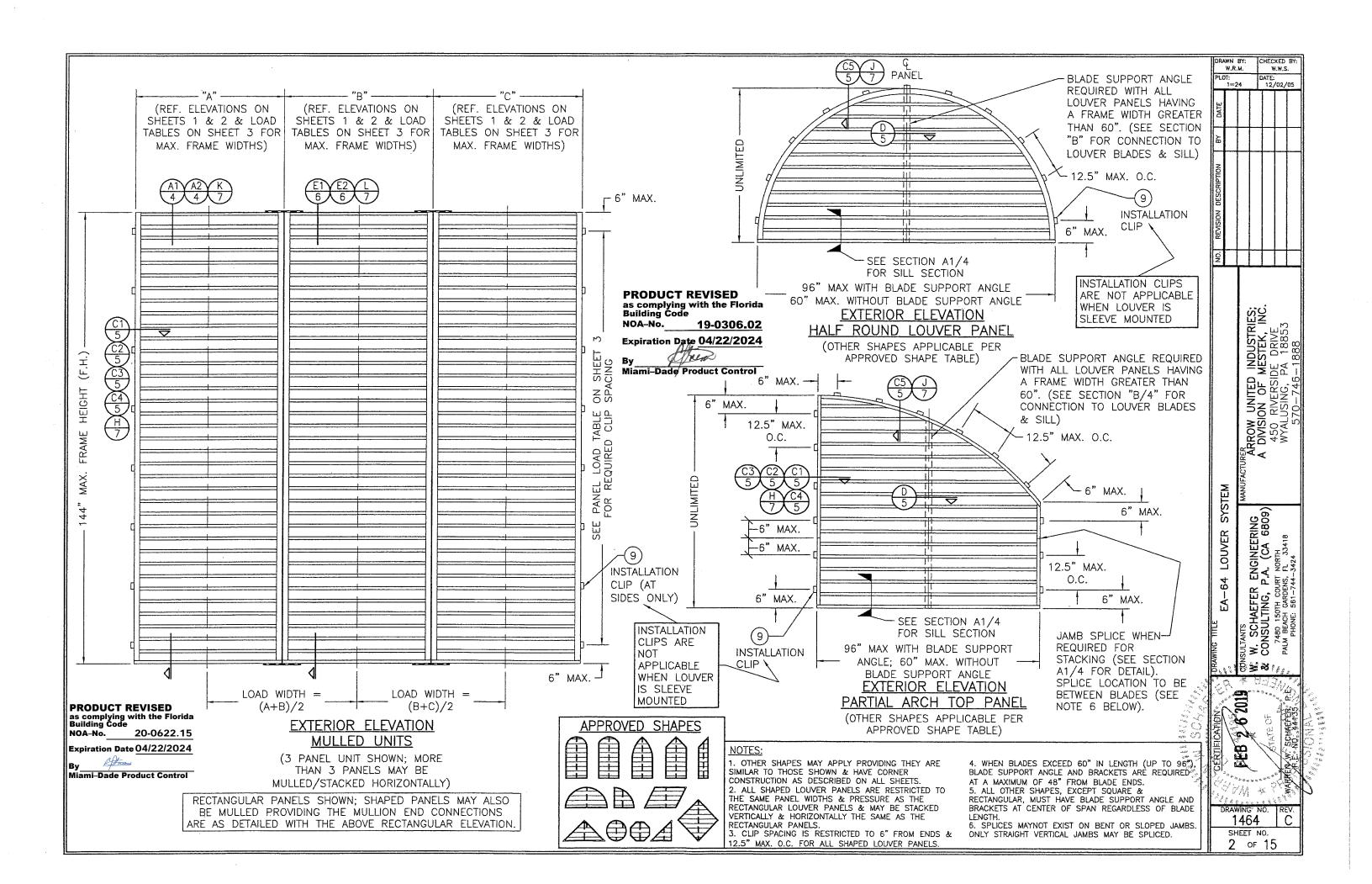
"Submitted under NOA # 19-0306.02"

2. Statement letter of no financial interest issued by W. W. Schaefer Engineering & Consulting, P.A., dated 02/26/2019, signed and sealed by Warren W. Schaefer, P.E.

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 20-0622.15 Expiration Date: April 22, 2024

Approval Date: August 20, 2020





			MULL	ION LOA	AD TABLE (SEI	E INSTR	RUCTION	IS BELOW)			- 1.	
MULLION SPAN (IN.)	LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)	MULLION SPAN (IN.)	LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)		MULLION SPAN (IN.)	LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)		MULLION SPAN (IN.)	LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)
18"	96"	180.0		96"	65.7	1 t		96"	47.0			96"	32.9
	96"	164.3	60"	90"	70.1	1		90"	50.1		120"	90"	35.1
24"	90"	175.3		84"	75.1	1		84"	53.7			84"	37.6
	84"	180.0		78"	80.9	1	84"	78"	57.8			78"	40.4
	96"	131.5		72"	87.6	1		72"	62.6			72"	43.8
	90"	140.2		66"	95.6	1		66"	68.3			66"	47.8
30"	84"	150.2		60"	105.2			60"	75.1			60"	52.6
	78"	161.8		54"	116.9			54"	83.5			54"	58.4
	72"	175.3		48"	131.5			48"	93.9			48"	65.7
	66"	180.0		42"	150.2			42"	107.3			42"	75.1
	96"	109.6		36"	175.3			36"	125.2			36"	87.6
	90"	116.9		30"	180.0			30"	150.2			30"	105.2
	84"	125.2		96"	59.8			24"	180.0			24"	131.5
36"	78 "	134.8		90"	63.7			96"	41.1			18"	175.3
30	72"	146.1		84"	68.3			90"	43.8			96"	27.2
	66"	159.3		78"	73.5			84"	47.0			90"	29.0
	60"	175.3	72"	72"	79.7		96"	78"	50.6		132"	84"	31.1
	54"	180.0		66"	86.9			72"	54.8			78"	33.5
	96"	93.9		60"	95.6			66"	59.8			72"	36.3
	90"	100.2		54"	106.2			60"	65.7			66"	39.6
	84"	107.3		48"	119.5			54"	73.0			60"	43.6
	78"	115.6		42"	136.6			48"	82.2			54"	48.4
42"	72"	125.2		36"	159.3			42"	93.9			48"	54.4
	66"	136.6		30"	180.0			36"	109.6			42"	62.2
	60"	150.2		96"	54.8			30"	131.5			36"	72.6
	54"	166.9		90"	58.4			24"	164.3			30"	87.1
	48"	180.0		84"	62.6	l		18"	180.0			24"	108.9
	96"	82.2		78"	67.4			96"	36.5	l		18"	145.2
	90"	87.6		72"	73.0			90"	39.0			72"	28.0
	84"	93.9		66"	79.7		-	84"	41.7			66"	30.5
	78"	101.1		60 " 54"	87.6			78 " 72"	44.9			60" 54"	33.5
48"	72" 66"	109.6		48"	97.4			66"	48.7			48"	37.3
	60"	119.5		42"	109.6 125.2		108"	60"	53.1			42"	41.9
	54"	131.5		36"	146.1		100	54"	58.4 64.9			36"	47.9
	48"	146.1 164.3		30"	175.3		-	48"	73.0			30"	55.9 67.1
	42"	180.0		24"	180.0			42"	83.5			24"	83.9
	44	180.0		24	100.0		}	36"	97.4			18"	111.8
							-	30"	116.9	L		10	0.111
							}	24"	146.1			PRODUC'	Γ REVISED
										ng with the Florida			
						<u>L</u>		10	100.0			NOA-No.	20-0622.15
1. DETER	1. DETERMINE REQUIRED DESIGN PRESSURE OF THE LOUVER ASSEMBLY. 2. DETERMINE THE PROJUED MULLION SPAN OF THE LOUVER ASSEMBLY. 2. DETERMINE THE PROJUED MULLION SPAN OF THE LOUVER ASSEMBLY. Expiration Date 04/22/2024												

Huns Miami-Dade Product Control

2. DETERMINE THE REQUIRED MULLION SPAN OF THE LOUVER ASSEMBLY.

3. DETERMINE THE <u>PANEL WIDTH</u> "A" & "B" AND THE MULLION <u>LOAD WIDTH</u>. 4. GO TO THE <u>MULLION LOAD TABLE</u> AND CHECK THE ALLOWABLE PRESSURE FOR THE RESPECTIVE <u>MULLION</u>

SPAN/LOAD WIDTH. 5. GO TO THE PANEL LOAD TABLE AND CHECK THE ALLOWABLE PRESSURE FOR EACH PANEL WIDTH.
6. IF ALL THE ALLOWABLE PRESSURES OF INSTRUCTIONS 4 & 5 ARE GREATER THAN THE REQUIRED DESIGN PRESSURE, THE ASSEMBLY IS ACCEPTABLE.

7. IF ANY ALLOWABLE PRESSURE OF INSTRUCTIONS 4 & 5 ARE LESS THAN THE REQUIRED DESIGN PRESSURE, THE ASSEMBLY IS NOT ACCEPTABLE UNLESS THE ASSEMBLY SIZE OR PRESSURE IS REDUCED AND INSTRUCTIONS FROM 1 TO 7 ARE FOLLOWED AGAIN.

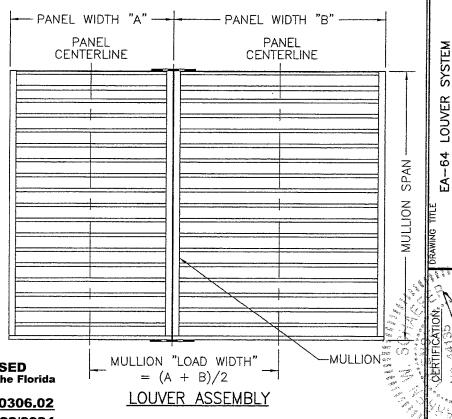
NOTE: CLIP SPACING SHOWN SHALL BE REDUCED TO 9.5" & 15" RESPECFULLY WHEN SUBSTRATE IS CMU.

	PANEL LOAD TABLE									
	PANEL WIDTH (IN.)	(1) CLIP SPACING (IN.)	(2) ALLOWABLE PRESSURE (+/- PSF)	PANEL WIDTH (IN.)	(1) CLIP SPACING (IN.)	(2) ALLOWABLE PRESSURE (+/- PSF)				
۰,	36"	12.5"	180.0	72"	12.5"	100.0				
1		20"	127.3	12	20"	63.6				
	42"	12.5"	154.3	78"	12.5"	92.3				
		∠20" <	109.1		20"	58.7				
	48"	12.5"	120.0	84"	12.5"	85.0				
		<u>/</u> 20" <	95.5	04	20"	54.5				
	54"	12.5"	106.7	90"	12.5"	.80.0				
	J 1	20"	84.8	90	20"	50.9				
	60"	\ 12.5" <i>\</i>	90.0	96"	12.5"	75.0				
	- 00	20"	76.4	90	(20")	47.7				
	66"	\ 12.5" /	109.1							
		20"	69.4	-						

(1) ALL SHAPED LOUVER PANELS ARE RESTRICTED TO A FRAME CLIP SPACING OF 12.5" OR 9.5" O.C. 20" & 15" CLIP SPACING IS ONLY ALLOWED ON RECTANGULAR & SQUARE SHAPE LOUVERS.

(2) PRESSURES RELATING TO 12.5" & 9.5" CLIP SPACINGS SHALL BE APPLICABLE TO ALL SLEEVE MOUNTED LOUVERS

LOAD TABLE NOTE (APPLICABLE TO MULLION & PANEL LOAD TABLES): THE LESSER LOAD FROM THE MULLION LOAD TABLE & THE PANEL LOAD TABLE SHALL CONTROL AS THE ALLOWABLE FOR THE ENTIRE MULLED UNIT.



PRODUCT REVISED as complying with the Florida Building Code NOA-No. <u> 19-0306.02</u>

Expiration Date <u>04/22/2024</u>

By Miami-Dade Product Control

= (A + B)/2

LOUVER ASSEMBLY

ARROW UNITED INDUSTRIES;
A DIVISION OF MESTEK, INC.
450 RIVERSIDE DRIVE
WYALUSING, PA 18853
570-746-1888 SYSTEM JUSULTANTS

1. W. SCHAEFER ENGINEERING

2. CONSULTING, P.A. (CA 6809)

7480 150TH COURT NORTH
PALM BEACH CARDENS, FL 33418
PHONE: 551-744-5424 LOUVER EA-64 6 2019

DRAWING NO.

SHEET NO.

3 of 15

CHECKED BY: W.W.S.

DATE: 12/02/05

W.R.M.

1=24

