

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)

Air Balance Inc. 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 A220 4" Aluminum Louver System

APPROVAL DOCUMENT: Drawing No. **1262**, titled "Model A220, 4" Louver System", sheets 1 through 7 of 7, dated 11/18/2003, with revision **C1** dated 07/05/2017, 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 # 18-0321.02 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. 20-0622.21 Expiration Date: July 27, 2023 Approval Date: August 27, 2020 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOAS

A. DRAWINGS "Submitted under NOA # 11-1117-16"

1. Drawing No. 1262, titled "Model A220, 4" Louver System, sheets 1 through 7 of 7, dated 11/18/2003, with revision A2 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 # 08-1030.04"

- 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 "A-220 4" Aluminum Louver", prepared by Hurricane Test Laboratory, Inc., Report No. **0198-0811-08**, dated 09/17/2008, signed and sealed by Vinu J. Abraham, P.E.

"Submitted under NOA No. 03-0514.13"

- 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 "A.U.I. EA-22 Architectural & Non-Architectural Fixed Louver", prepared by Hurricane Test Laboratory, Inc., Report No. **0199-0518-99** and **0199-0615-99**, dated 12/06/1999, signed and sealed by Vinu J. Abraham, P.E.

C. CALCULATIONS "Submitted under NOA # 13-0422-12"

- 1. Wood anchors calculations prepared by W.W. Schaefer Engineering & Consulting, P.A., dated 04/10/2013, signed and sealed by Warren W. Schaefer, P.E.
 - "Submitted under NOA # 08-1030.04"
- 2. Revision calculations prepared by W.W. Schaefer Engineering & Consulting, P.A., dated 04/17/2008, 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 # 14-0423-27"

1. Statement letter of code conformance to 2010 and 5th (2014) FBC issued by W. W. Schaefer Engineering & Consulting, P.A., dated 04/10/2014, signed and sealed by Warren W. Schaefer, P.E.

"Submitted under NOA # 13-0422-12"

2. No financial interest letter issued by W. W. Schaefer Engineering & Consulting, P.A, dated 04/10/2013, signed and sealed by Warren W. Schaefer, P.E.

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 20-0622.21
Expiration Date: July 27, 2023
Approval Date: August 27, 2020

E - 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. EVIDENCE SUBMITTED UNDER NOA # 17-0713.12

A. DRAWINGS

- 1. Drawing No. 1262, titled "Model A220, 4" Louver System, sheets 1 through 7 of 7, dated 11/18/2003, with revision C1 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.
- 2. Company name change request letter issued by W.W. Schaefer Engineering & Consulting, P.A., dated 07/05/2017, signed by Warren W. Schaefer, P.E.

Carlos M. Utrera, P.E. Product Control Examiner NOA No. 20-0622.21 Expiration Date: July 27, 2023

Approval Date: August 27, 2020

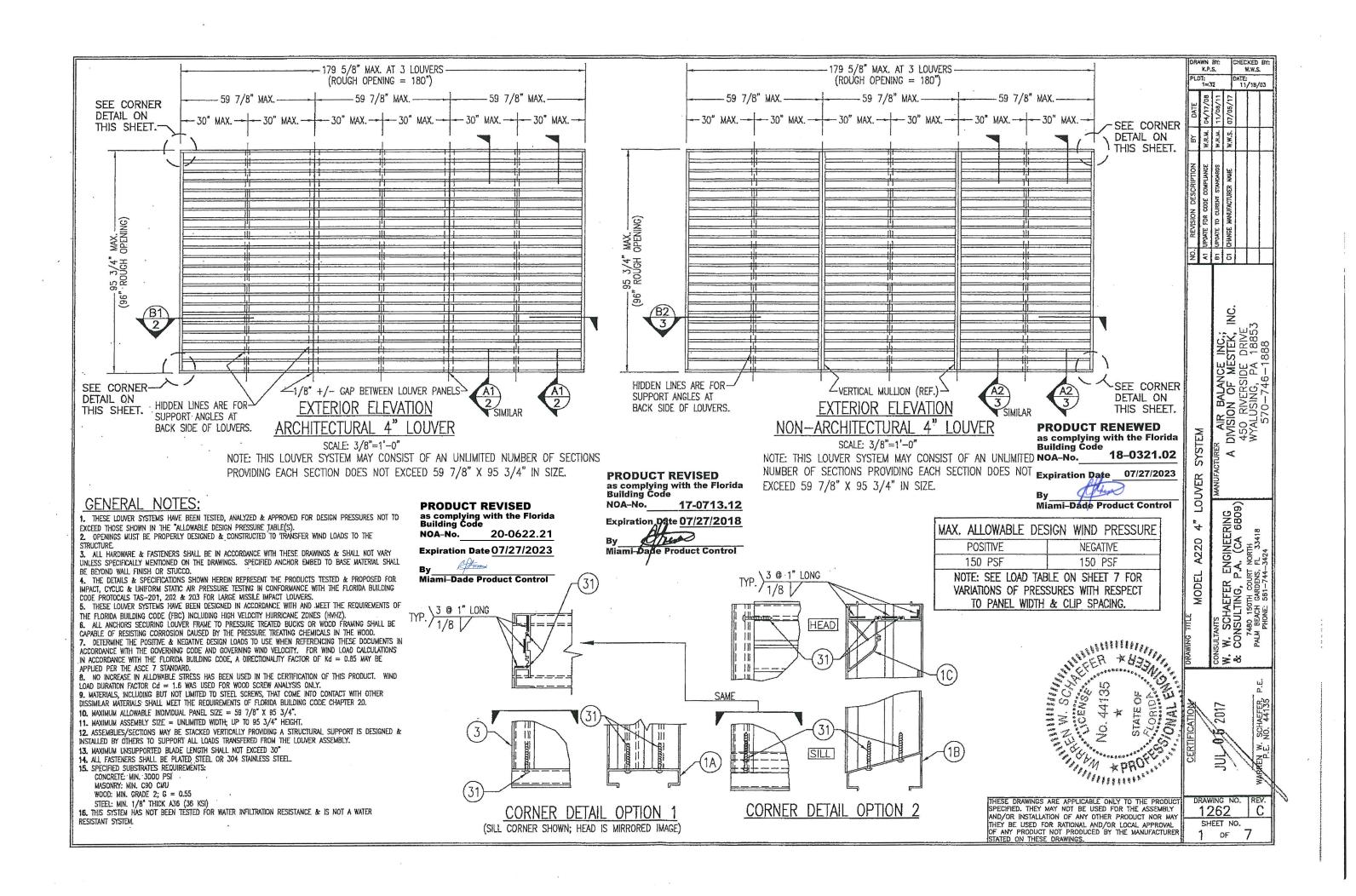
Air Balance, Inc. a division of Mestek, Inc.

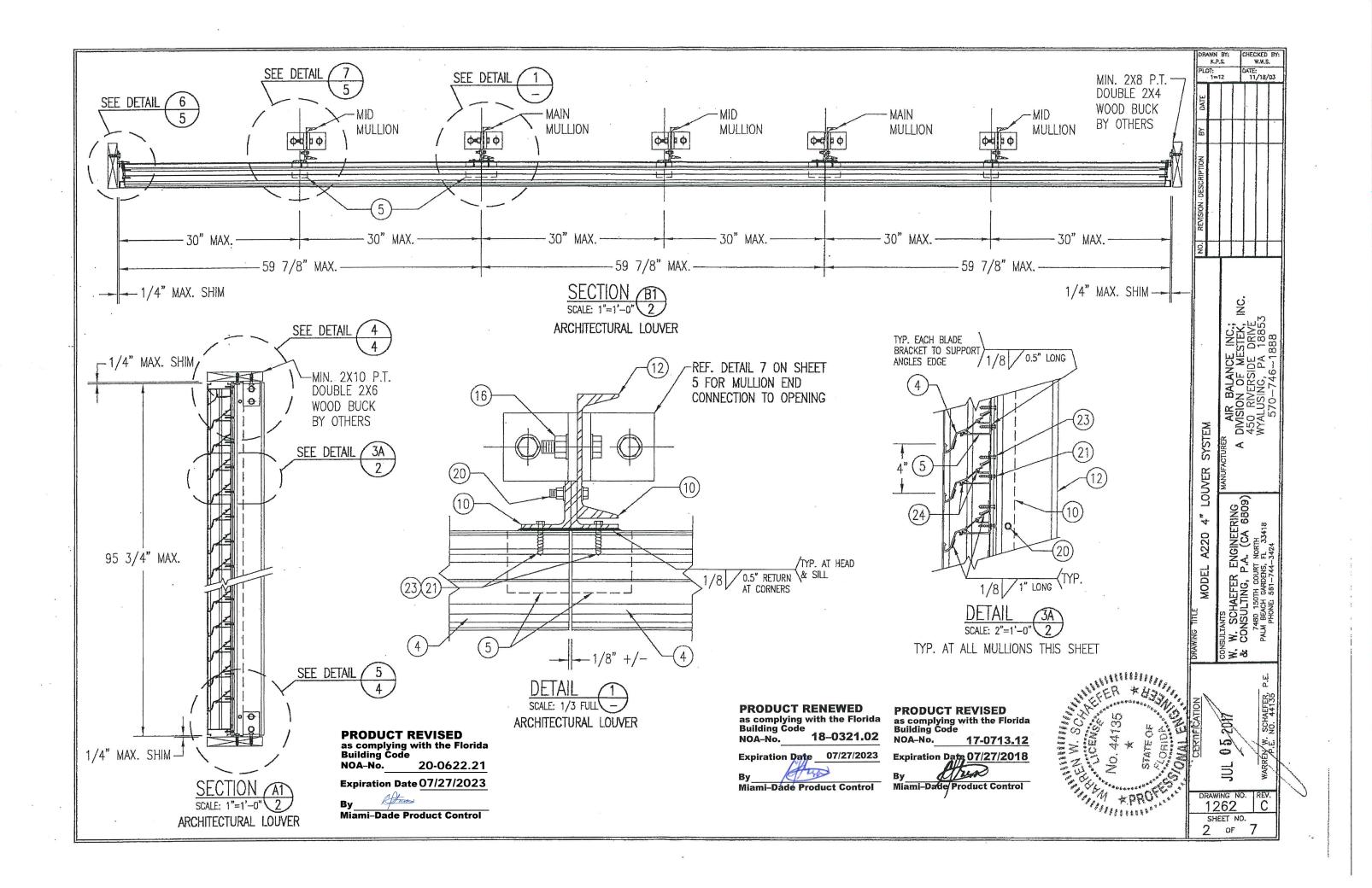
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

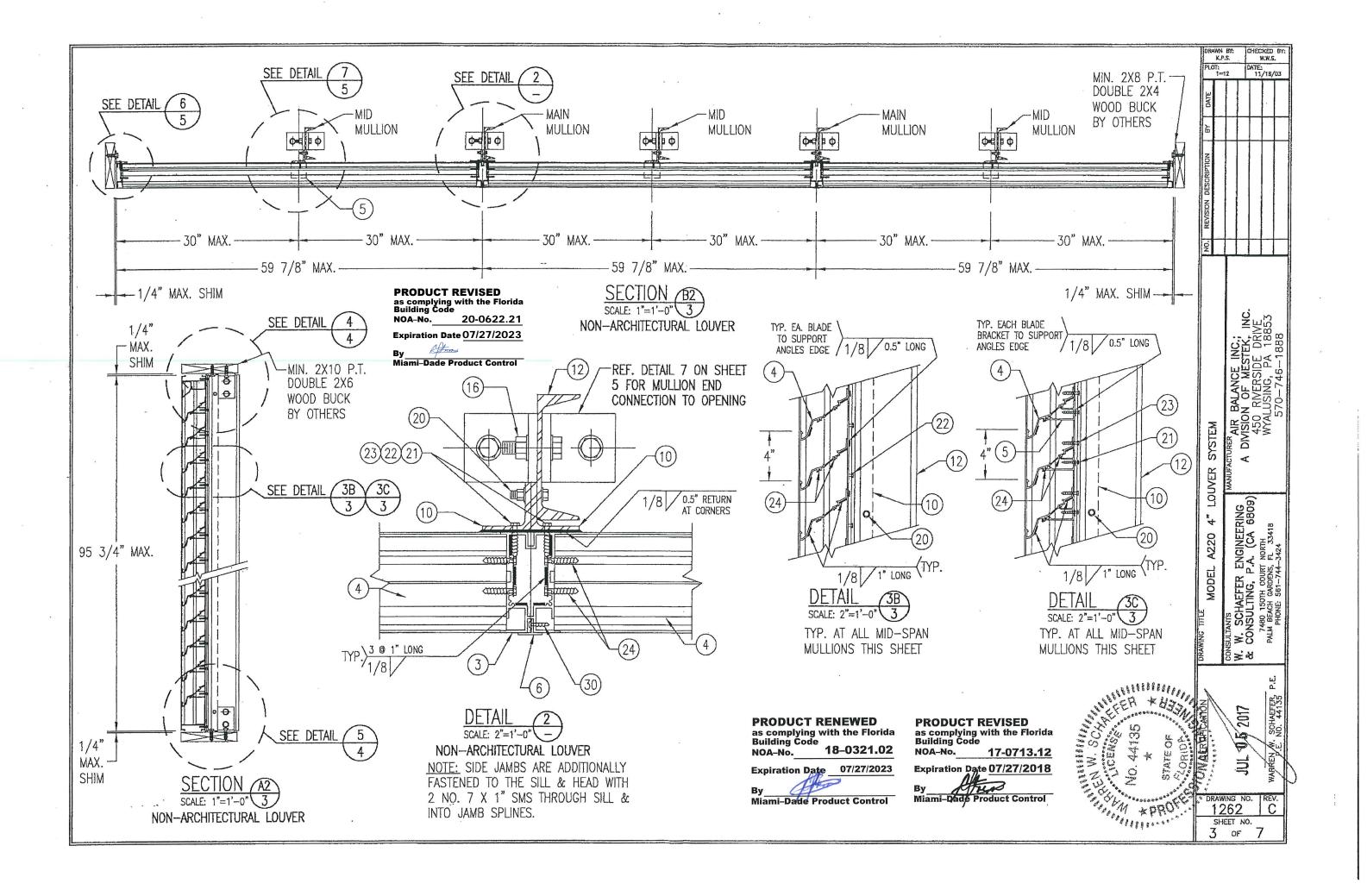
- 3. NEW EVIDENCE SUBMITTED
- A. DRAWINGS
 - 1. None.
- B. TESTS
 - 1. None.
- C. CALCULATIONS
 - 1. None.
- D. QUALITY ASSURANCE
 - 1. Miami-Dade Department of Regulatory and Economic Resources (RER)
- E. MATERIAL CERTIFICATIONS
 - 1. None.
- F. STATEMENTS
 - 1. Statement letter of code conformance to the 6th Edition (2017) and 7th Edition (2020) FBC issued by W. W. Schaefer Engineering & Consulting, P.A., dated 06/30/2020, signed and sealed by Warren W. Schaefer, P.E.
 - "Submitted under NOA # 18-0321-02"
 - 2. No financial interest letter issued by W. W. Schaefer Engineering & Consulting, P.A, dated 02/27/2018, signed and sealed by Warren W. Schaefer, P.E.

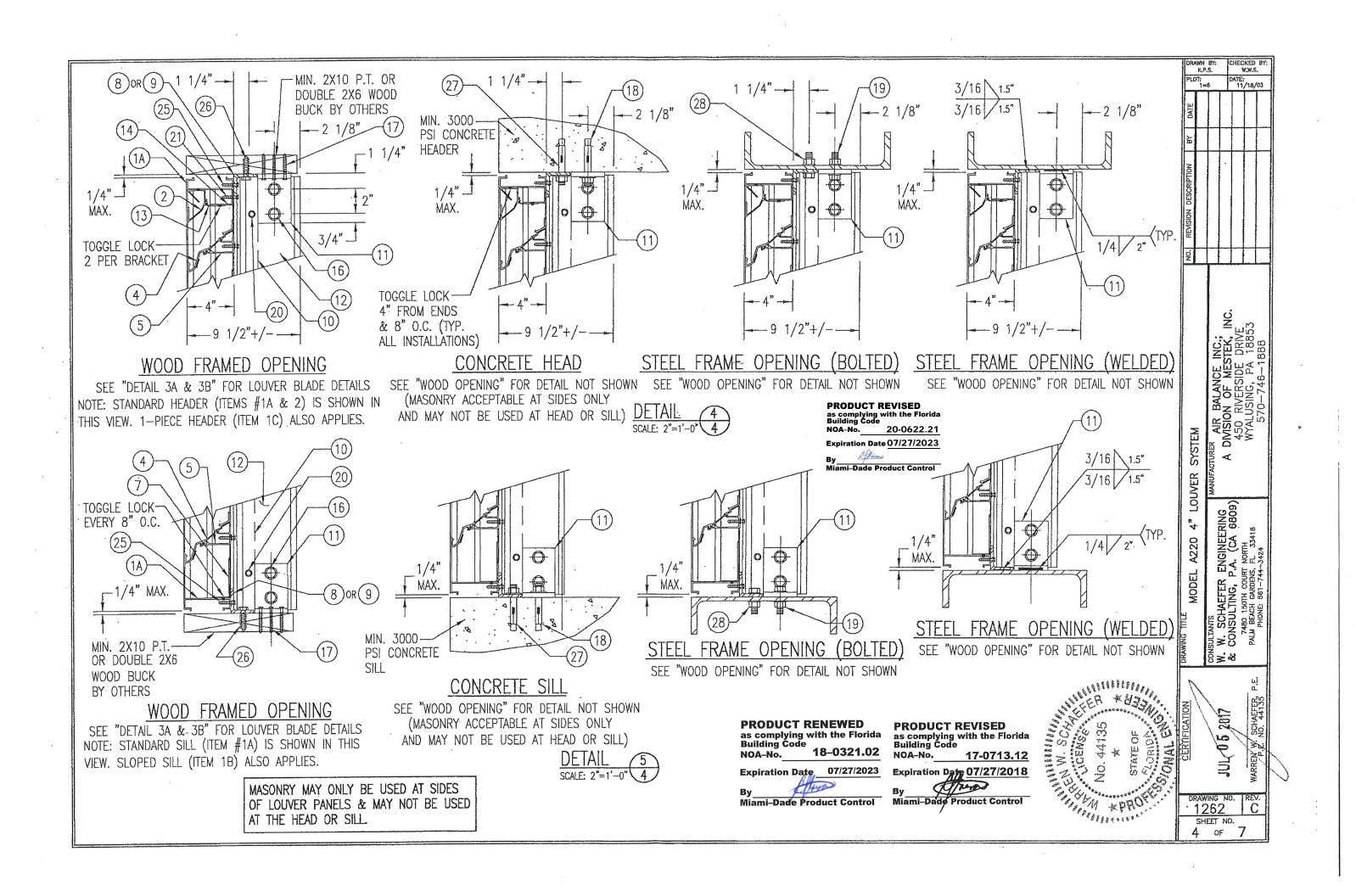
Carlos M. Utrera, P.E. Product Control Examiner NOA No. 20-0622.21 Expiration Date: July 27, 2023

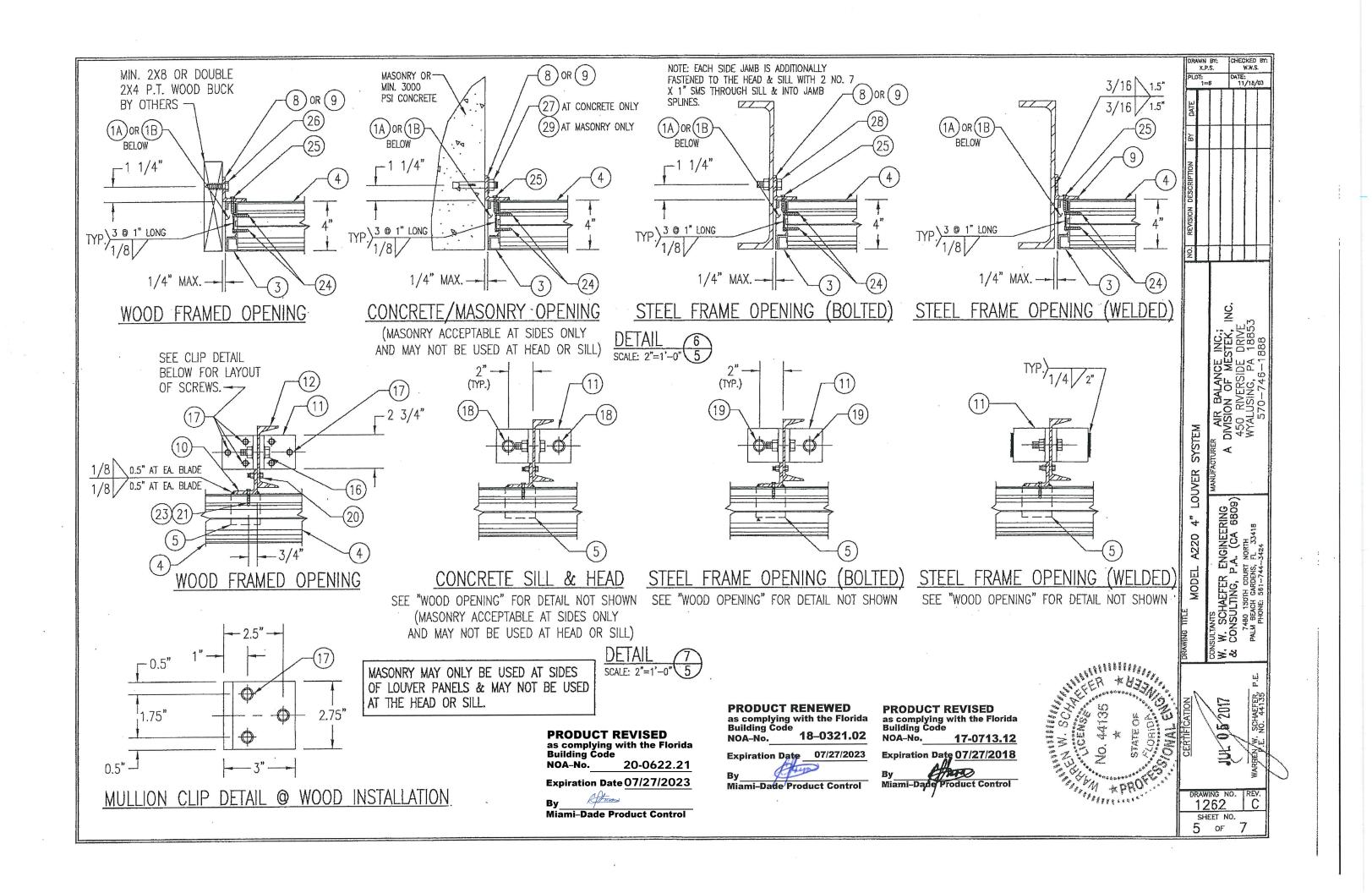
Approval Date: August 27, 2020

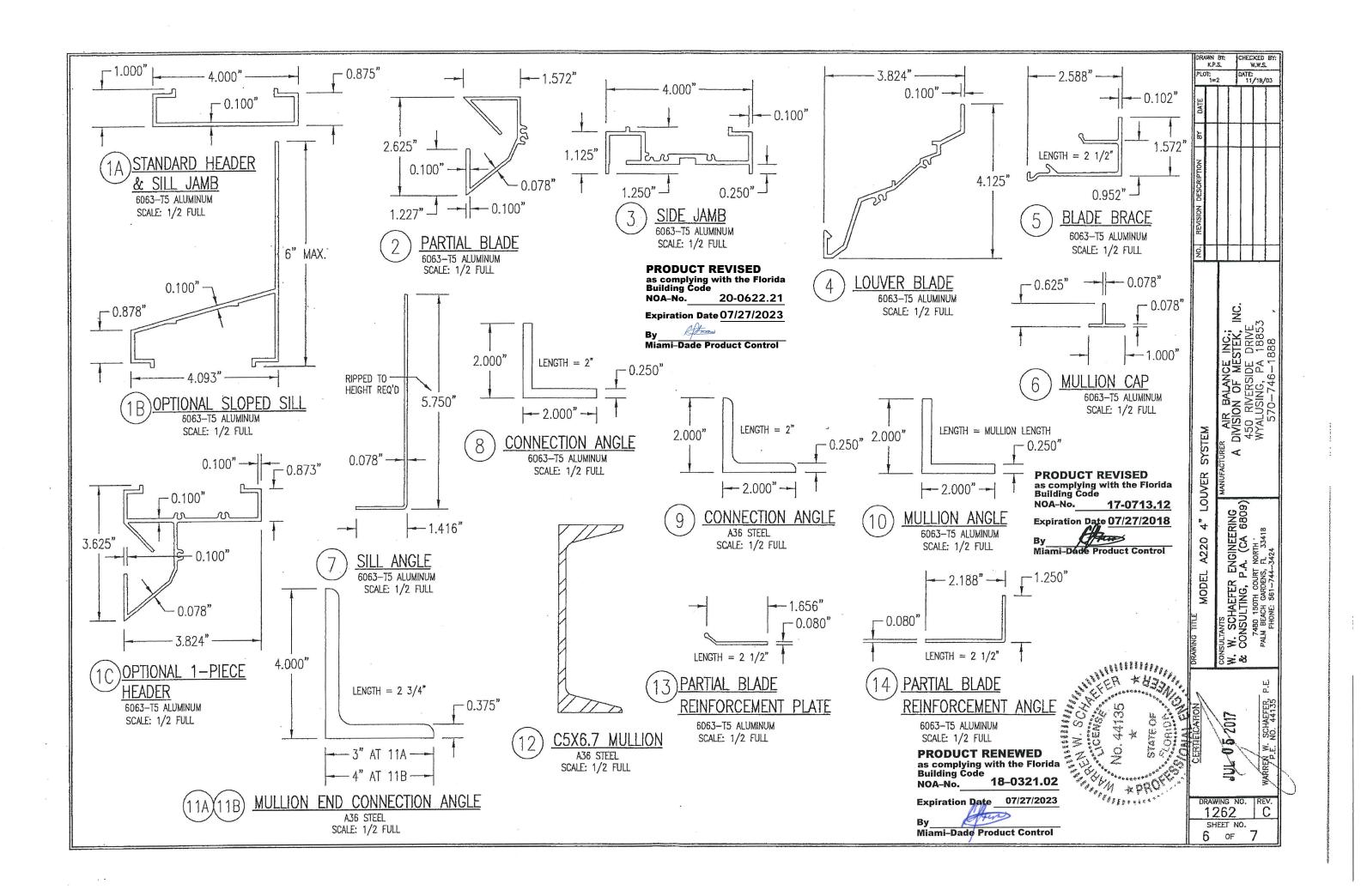












	ALLOWABLE WIND PRESSURE VS. JAMB CLIP SPACING AND PANEL WIDTH			
	PANEL WIDTH (INCHES)	CLIP SPACING (INCHES)	ALLOWABLE PRESSURE WITH MID SPAN MULLION (PSF)	ALLOWABLE PRESSURE WITHOUT MID SPAN MULLION (PSF)
	()	В .	150	150
		12	150	150
	16	16	150	140
	10	20	150	105
		24	150	70
		8	150	150
	20	12	150	140
		16	150	112
		20	150	84
		24	· 150	56
			150 .	140
	24	12	150	117
		16	150	93
		20	150	70
		24	125	47
		B B	150	82
		12	150	68
	28	16	150	54
	20 .	20	150	41
	£1	24	107	27
		8	150	62
	30	12	150	52
		16	150	41
		20	140	31
		24	93	_
		8	150	
	36	12	150	
		16	150	_
		20	125	_
		24	83	_
	42	8	150	_
		12	150	-
		16	142	-
		20	107	<u> </u>
		24	71	_
		В	150	-
		12	150	
	48	16	125	-
		20	93	_
		24	62	·
		В	150	-
		12	138	-
	54	16	111	
		20	83	-
		24	55	
	60	8	150	
		12	125	_
		16	100	-
		20	75	_
		24	50	-
			1 77	

MATERIAL LIST				
NO.	DESCRIPTION	NOTES/SPECIFICATIONS		
PARTS/EXTRUSIONS				
1A	STANDARD HEADER & SILL JAMB	6063-T5 ALUMINUM		
1B	OPTIONAL SLOPED SILL	6063-T5 ALUMINUM		
1C	OPTIONAL 1—PIECE HEADER	6063—T5 ALUMINUM		
2	PARTIAL BLADE & HEAD	6063-T5 ALUMINUM		
3	SIDE JAMB	6063-T5 ALUMINUM		
4	LOUVER BLADE	6063—T5 ALUMINUM		
5	BLADE SUPPORT BRACKET (2 1/2" LONG)	6063-T5 ALUMINUM		
6	MULLION CAP	6063—T5 ALUMINUM; FULL LENGTH OF MULLION JAMBS		
7	SILL ANGLE	6063—T5 ALUMINUM; FULL WIDTH OF PANEL		
8	L2X2X1/4 JAMB CONNECTION ANGLE 2" LONG	6063-T5 ALUMINUM; WITHIN 4" OF JAMB ENDS & SPACED PER LOAD TABLE ON SHT. 2		
9	L2X2X1/4 OPTIONAL JAMB CONNECTION ANGLE 2" LONG	A36 STEEL; WITHIN 4" OF JAMB ENDS & SPACED PER LOAD TABLE ON SHT. 2		
10	L2X2X1/4 CONTINUOUS MULLION CONNECTION ANGLE	6063-T5 ALUMINUM; FULL LENGTH OF CHANNEL MULLION		
11	L4X3X3/8 MULLION END CONNECTION ANGLE 2 3/4" LONG	A36 STEEL; 2 PER MULLION END		
12	C5X6.7 MULLION	A36 STEEL; FULL HEIGHT OF PANELS		
13	PARTIAL BLADE REINFORCEMENT PLATE (2 1/2" LONG)	6063—T5 ALUMINUM		
14	PARTIAL BLADE REINFORCEMENT ANGLE (2 1/2" LONG)	6063—T5 ALUMINUM		
15	5 OPEN			
FASTENERS FASTENERS				
16		WITH FLAT WASHERS, LOCK WASHER & NUT; 2 PER MULLION END		
17	NO. 14 S.S. SMS SCREWS	3 PER MULLION END CLIP WITH MIN. 1 1/2" WOOD EMBED		
18	5/8" X 2 1/4" SLEEVE ANCHOR WITH FLAT WASHER	USA KINGPIN ANCHOR; 1 PER CHANNEL END CONNECTION ANGLE INTO CONCRETE ONLY		
19	1/2" X 2" A307 HEX HEAD PLATED STEEL OR S/STL BOLT	WITH FLAT WASHERS, LOCK WASHER & NUT; 1 PER CHANNEL END CONNECTION ANGLE INTO STEEL FRAME		
20	5/16-18 UNC X 1 1/2" HEX HEAD STEEL OR S/STL BOLT	WITH FLAT WASHER, LOCK WASHER & NUT; WITHIN 4" OF MULLION ENDS & MAX. 8" O.C.		
21	NO. 8 X 3/4" SMS SCREW	1 AT EACH LOUVER BLADE SUPPORT BRACKET AT ARCHITECTURAL MAIN MULLIONS & ALL MID-SPAN MULLIONS		
22	NO. 14 X 1 1/4" HILTI TEK SCREW	WITHIN 3/4" OF MULLION ENDS & MAX. 4" O.C. INTO FRAME		
	NO. 14 X 1" SMS SCREW	1 AT EACH LOUVER BLADE AT ALL ARCHITECTURAL MAIN MULLIONS & ALL MID-SPAN MULLIONS		
	NO. 7 X 1" SMS SCREW	2 PER EACH LOUVER BLADE END THROUGH JAMB & INTO BLADE SPLINES		
	NO. 14 X 1 1/4" HILTI TEK SCREW	2 PER EACH HEAD, SILL & SIDE JAMB CONNECTION ANGLE		
	1/2" X 2" LAG SCREW WITH FLAT WASHER	1 PER EACH HEAD, SILL & SIDE JAMB CONNECTION ANGLE INTO WOOD FRAME		
	5/8" X 2 1/4" SLEEVE ANCHOR WITH FLAT WASHER	USA KINGPIN ANCHOR; 1 PER EACH HEAD, SILL & SIDE JAMB CONNECTION ANGLE INTO CONCRETE ONLY		
_	1/2" X 2" HEX HEAD A307 PLATED STEEL OR S/STL BOLT	WITH FLAT WASHERS, LOCK WASHER & NUT; 1 PER EA. JAMB CONNECTION ANGLE INTO STEEL FRAME		
	3/8" X 1 7/8" SLEEVE ANCHOR WITH FLAT WASHER	RED HEAD DYNABOLT WITH MIN 1 1/2" BLOCK/CONCRETE EMBED (1 PER FRAME SUPPORT CLIP)		
	NO. 8 X 1/2" SMS SCREW	WITHIN 2" OF MULLION ENDS & MAX. 12" O.C. (MULLION CAP TO MULLION)		
31	NO. 7 X 1" SMS SCREWS	2 PER FRAME CORNER THROUGH SILL/HEAD FRAME & INTO JAMB SPLINES		

PRESSURE TABLE NOTES:

- 1. WHEN THE PANEL WIDTH IS 30" OR LESS, NO MID SPAN MULLION IS REQUIRED PROVIDING COMPLIANCE WITH THE TABLE.
- 2. ALL PRESSURES IN THIS TABLE ARE FOR BOTH POSITIVE & NEGATIVE WIND PRESSURE.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 20-0622.21

Expiration Date 07/27/2023

By Amail Miami-Dade Product Control

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 18-0321.02

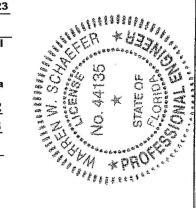
Expiration Date 07/27/2023

Miami-Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 17-0713.12

Expiration Date 07/27/2018

Miami-Dade Product Control



CERTIFICATION

HE DE STATE CONSULTANTS

CONSULTANTS

JUL 05 2017

W. W. SCHAEFER ENGINEERING

& CONSULTING, P.A. (CA 6809)

7480 150TH CONFIT HORTH
PALM BEACH CARDENS, F. 33418

PALM BEACH CARDENS, F. 33418

PALM BEACH CARDENS, F. 33418

7 of 7

A220 4" LOUVER SYSTEM

CHECKED BY: W.W.S. DATE: 11/18/03

NC.