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

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

NOTICE OF ACCEPTANCE (NOA)

Air Balance, 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 A520 5" Aluminum Louver System

APPROVAL DOCUMENT: Drawing No. **1686-1**, titled "A520 Impact Louver System", sheets 1 through 10 of 10, dated 12/19/2024, prepared by Air Balance, a division of Mestek, Inc., signed and sealed by Wayne K. Helmila, P.E., bearing the Miami-Dade County Product Control renewal 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 **renews NOA # 25-0106.03** 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.**

MIAMI-DADE COUNTY APPROVED

10/02/25

NOA No. 25-0915.04
Expiration Date: January 6, 2031
Approval Date: October 9, 2025

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted under previous NOAs

A. DRAWINGS *"Submitted under NOA # 12-0105.02"*

1. Drawing No. **1686**, titled "A-520 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 # 14-0513.09"*

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 # 14-0513.09"*

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.
"Submitted under NOA # 12-0105.02"

3. Private label agreement dated 12/21/2011.

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 25-0915.04
Expiration Date: January 6, 2031
Approval Date: October 9, 2025

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. Evidence submitted under NOA # 17-0713.16

A. DRAWINGS

1. Drawing No. **1686**, titled "A520 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.

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.

3. Evidence *Submitted under NOA # 20-0622.24*

A. DRAWINGS "***Submitted under NOA # 19-0401.03"***

1. Drawing No. **1686**, titled "A520 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)

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 25-0915.04
Expiration Date: January 6, 2031
Approval Date: October 9, 2025

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

E. QUALITY ASSURANCE

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

F. MATERIAL CERTIFICATIONS

1. None.

G. 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 # 19-0401.03"

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 # 23-0713.05

A. DRAWINGS

1. None.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

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 7th edition (2020) and the 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.

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 25-0915.04
Expiration Date: January 6, 2031
Approval Date: October 9, 2025

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

5. EVIDENCE SUBMITTED UNDER NOA # 25-0106.03 AND NEW

A. DRAWINGS

1. Drawing No. **1686-1**, titled "A520 Impact Louver System", sheets 1 through 10 of 10, dated 12/19/2024, prepared by Air Balance, a division of Mestek, Inc., signed and sealed by Wayne K. Helmila, P.E.

B. TESTS

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-520 Aluminum Louvers, prepared by Intertek, Report No. **S2995.02-109-18**, dated 08/12/2025, signed and sealed by Tanya A. Dolby, P.E.

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 8th 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.

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 25-0915.04
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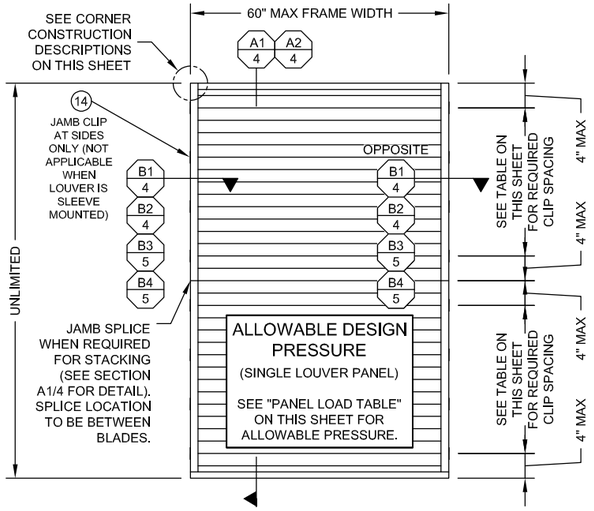
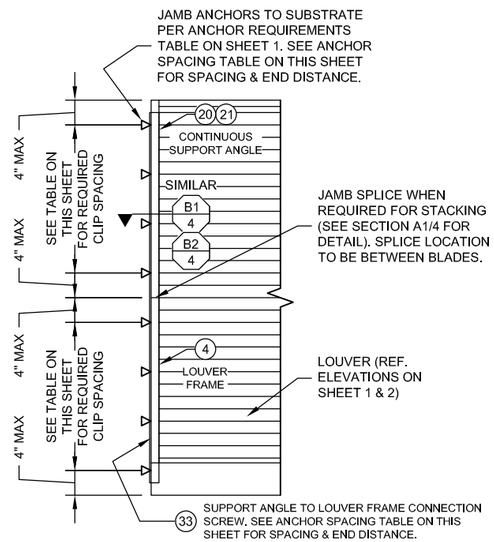
PANEL LOAD TABLE (WITH SIDE CLIPS)		
PANEL WIDTH (IN.)	(1) CLIP SPACING (IN.)	ALLOWABLE PRESSURE (+/- PSF)
36	8	120
	13	104
	18	75
42	8	120
	13	89
	18	64
48	8	120
	13	78
	18	56
54	8	120
	13	69
	18	50
60	8	120
	13	62
	18	45
(1) CLIP SPACING WITHIN SLEEVE MOUNTED LOUVERS MAY NOT VARY AND SHALL ALWAYS BE 8".		

WAYNE K. HELMILA LICENSE No. 59092 STATE OF FLORIDA PROFESSIONAL ENGINEER

01/14/2025
COA: 9090



EXTERIOR ELEVATION:
SINGLE WIDE LOUVER PANEL
(ARCHITECTURAL & NON-ARCHITECTURAL)
SCALE: 1/2" = 1'-0"



INTERIOR ELEVATION:
(OPTIONAL SIDE JAMB INSTALLATION WITH CONTINUOUS SIDE ANGLES)
SCALE: 1/2" = 1'-0"

(FOR DETAIL NOT SHOWN, SEE OTHER ELEVATIONS)

PANEL ANCHOR SPACING/PRESSURE TABLE (WITH CONTINUOUS SIDE SUPPORT ANGLE)					
PANEL WIDTH (IN.)	ANGLE TO SUBSTRATE ANCHORS		ANGLE TO LOUVER FRAME SCREWS		ALLOWABLE PRESSURE (+/- PSF)
	SPACING	END DIST.	SPACING	END DIST.	
	(IN.)	(IN.)	(IN.)	(IN.)	
36	8	4	4	2	120
	13	7 1/2	7 1/2	3 3/4	104
	18	9	9	4 1/2	75
42	8	4	4	2	120
	13	7 1/2	7 1/2	3 3/4	89
	18	9	9	4 1/2	64
48	8	4	4	2	120
	13	7 1/2	7 1/2	3 3/4	78
	18	9	9	4 1/2	56
54	8	4	4	2	120
	13	7 1/2	7 1/2	3 3/4	69
	18	9	9	4 1/2	50
60	8	4	4	2	120
	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.

GENERAL NOTES

1) THESE LOUVER SYSTEMS HAVE BEEN TESTED, ANALYZED, & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE ALLOWABLE DESIGN PRESSURE TABLE(S).

2) OPENINGS, BUCKING, & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE. 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.

3) ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.

4) THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR IMPACT, CYCLIC, & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH THE FLORIDA BUILDING CODE PROTOCALS TAS-201, 202, & 203 FOR LARGE MISSILE IMPACT LOUVERS.

5) THESE LOUVER SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ).

6) IMPACT SHUTTERS ARE NOT REQUIRED WITH THESE LOUVER SYSTEMS.

7) ALL ANCHORS SECURING LOUVER FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.

8) DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, A DIRECTIONALITY FACTOR OF KD = 0.85 MAY BE APPLIED PER THE ASCE-7 STANDARD.

9) NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE CERTIFICATION OF THIS PRODUCT. WIND LOAD DURATION FACTOR CD = 1.6 WAS USED FOR WOOD SCREW ANALYSIS ONLY.

10) MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE CHAPTER 20.

11) EACH LOUVER ASSEMBLY SHALL BE PERMANENTLY LABELED AS FOLLOWS:

AMERICAN WARMING AND VENTILATING
BOWLING GREEN, OH
MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED

12) THESE LOUVERS ARE NOT TESTED FOR WATER INFILTRATION RESISTANCE; THEREFORE THE LOUVERS ARE 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.

13) MULLED PANELS MAY BE HORIZONTALLY INSTALLED TO AN UNLIMITED NUMBER. VERTICAL STACKING OF MULLED PANELS MAY OCCUR PROVIDING A STRUCTURAL SUPPORT IS DESIGNED & INSTALLED BY OTHERS TO SUPPORT ALL LOADS TRANSFERED FROM THE LOUVER ASSEMBLY (SINGLE PANELS MAY RUN TO UNLIMITED HEIGHT PER ELEVATION IF NO MULLION EXISTS).

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

ANCHOR REQUIREMENTS TABLE				
JAMB ANCHORS				
SUBSTRATE	**FASTENER**	**QTY PER SPACING**	**MIN.EMBED**	**MIN. EDGE**
WOOD (MIN. GR. 3 & G=0.55)	1/4" DIA. S.S. LAG SCREW	2	2-3/8"	1-1/2"
A36 STEEL (MIN. 1/8" THK.)	1/4-14 300 SERIES Fy=65ksi S.S. SCREW	2	FULL	1/2"
METAL STUD (MIN. 16 GA. 33 KSI)	1/4-14 300 SERIES Fy=65ksi S.S. SCREW	2	FULL	1/2"
ALUMINUM (MIN. 1/8" THK. 6063-T5)	1/4-14 300 SERIES Fy=65ksi S.S. SCREW	2	FULL	1/2"
CMU (MIN. C-90)	1/4 300 SERIES S.S. MASONRY SCREW	2	2"	4"
CONCRETE (MIN. 4000 PSI)	1/4" DIA. S.S. WEDGE ANCHOR	2	1-3/4"	2"
CONCRETE [ALT.] (MIN. 3000 PSI)	3/8" DIA. S.S. CONCRETE SCREW	1	2"	2"
NON-REINFORCED MULLION END CLIP ANCHORS				
SUBSTRATE	**FASTENER**	**QTY PER CLIP**	**MIN.EMBED**	**MIN. EDGE**
WOOD (MIN. GR. 3 & G=0.55)	1/4" DIA. S.S. LAG SCREW	8	2-3/8"	1-1/2"
A36 STEEL (MIN. 1/8" THK.)	1/4-14 300 SERIES Fy=65ksi S.S. SCREW	8	FULL	1/2"
METAL STUD (MIN. 16 GA. 33 KSI)	1/4-14 300 SERIES Fy=65ksi S.S. SCREW	8	FULL	1/2"
ALUMINUM (MIN. 1/8" THK. 6063-T5)	1/4-14 300 SERIES Fy=65ksi S.S. SCREW	8	FULL	1/2"
CONCRETE (MIN. 4000 PSI)	1/4" DIA. S.S. WEDGE ANCHOR	8	1-3/4"	3-3/4"
CONCRETE [ALT.] (MIN. 3000 PSI)	3/8" DIA. S.S. CONCRETE SCREW	8	2-1/2"	3-1/2"
TUBE MULLION END CLIP ANCHORS				
SUBSTRATE	**FASTENER**	**QTY PER END**	**MIN.EMBED**	**MIN. EDGE**
WOOD (MIN. GR. 3 & G=0.55)	1/4" DIA. S.S. LAG SCREW	10	2-1/4"	1-1/2"
A36 STEEL (MIN. 1/8" THK.)	1/4-14 300 SERIES Fy=65ksi S.S. SCREW	8	FULL	1/2"
METAL STUD (MIN. 16 GA. 33 KSI)	1/4-14 300 SERIES Fy=65ksi S.S. SCREW	8	FULL	1/2"
ALUMINUM (MIN. 1/8" THK. 6063-T5)	1/4-14 300 SERIES Fy=65ksi S.S. SCREW	8	FULL	1/2"
CONCRETE (MIN. 3000 PSI)	1/2" S.S. WEDGE ANCHOR	2	3-3/4"	5"

1. Concrete screws shall be Hilti KWIK HUS-EZ stainless steel.
2. CMU screws shall be Dewalt Aggre-Gator HWH 300 Series stainless steel.
3. Wedge anchors shall be Hilti KWIK Bolt TZ2 stainless steel.
4. CMU is applicable at jambs only.

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.

AIR BALANCE
A MESTEK COMPANY
450 RIVERSIDE DRIVE
WYALUSING, PA 18853

CERTIFICATION

PRODUCT RENEWED
as complying with the Florida Building Code
NOA–No. 25–0915.04
Expiration Date 01/06/2031
By
Miami–Dade Product Control

A520 IMPACT
LOUVER SYSTEM

REVISIONS

REV.	DATE	DESCRIPTION	BY

DATE: 19 DEC, 2024
DRAWN BY: MTC
CHECKED BY: JMC

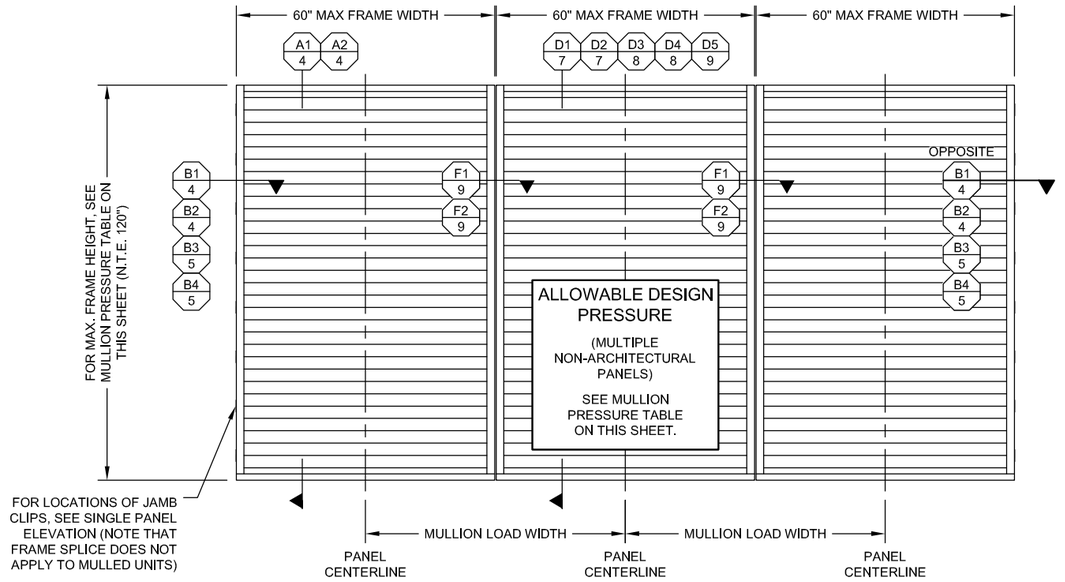
SHEET No.: 1 of 10
SCALE: 1/2" = 1'-0"
REV. ----

1686-1

MULLION ALLOWABLE DESIGN PRESSURE (NON-ARCHITECTURAL LOUVERS)

MAXIMUM MULLION SPAN (IN.)	MAXIMUM LOAD WIDTH (IN.)	ALLOWABLE PRESSURE (+/- PSF)		
		WITH NO TUBE MULLION	WITH 4" X 3" X 3/16" TUBE MULLION	WITH 4" X 3" X 1/4" 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

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.



EXTERIOR ELEVATION:
MULTIPLE LOUVER PANELS
(NON-ARCHITECTURAL)
SCALE: 1/2" = 1'-0"

(3 PANEL UNIT SHOWN; MORE THAN 3 PANELS MAY BE MULLED/STACKED HORIZONTALLY)

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

01/14/2025
COA: 9090

AIR BALANCE
A MESTEK COMPANY
450 RIVERSIDE DRIVE
WYALUSING, PA 18853

CERTIFICATION

PRODUCT RENEWED
as complying with the Florida Building Code
NOA–No. 25–0915.04
Expiration Date 01/06/2031
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Miami–Dade Product Control

A520 IMPACT
LOUVER SYSTEM

REVISIONS

REV.	DATE	DESCRIPTION	BY

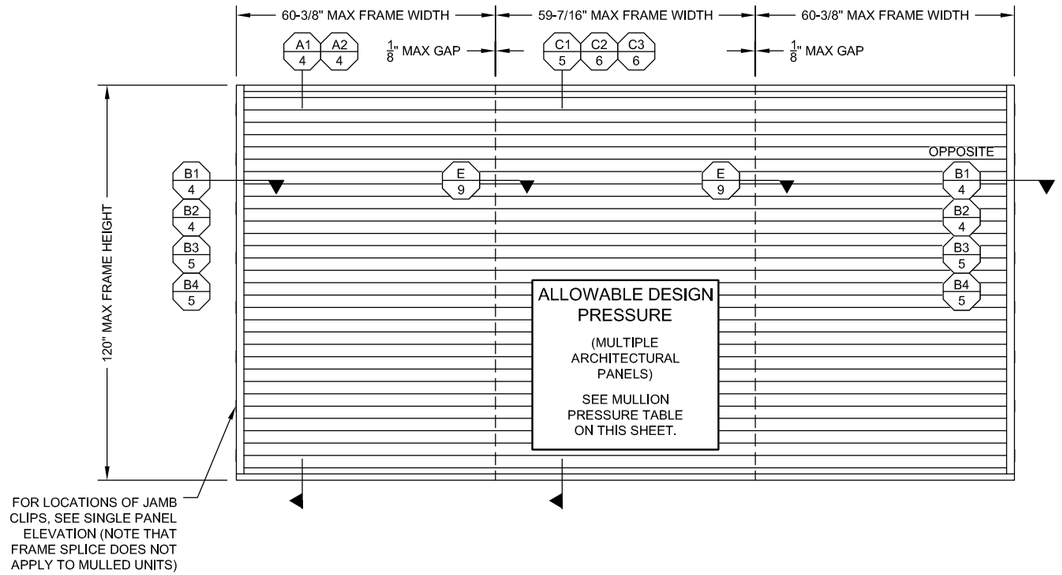
DATE: 19 DEC, 2024
DRAWN BY: MTC
CHECKED BY: JMC

1686-1

SHEET No.: 2 of 10
SCALE: 1/2" = 1'-0"
REV. ----

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
	30	120.0
108	60	84.3
	54	93.6
	48	105.3
	42	120.0
96	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.



EXTERIOR ELEVATION:
MULTIPLE LOUVER PANELS
(ARCHITECTURAL)
SCALE: 1/2" = 1'-0"

(3 PANEL UNIT SHOWN; MORE THAN 3 PANELS MAY BE MULLED/STACKED HORIZONTALLY)

RICE
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105 School Creek Trail
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Phone: (920) 617-1042
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www.rice-inc.com

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

WAYNE K. HELMILA LICENSE No. 59092 STATE OF FLORIDA PROFESSIONAL ENGINEER

01/14/2025
COA: 9090

AIR BALANCE
A MESTEK COMPANY
450 RIVERSIDE DRIVE
WYALUSING, PA 18853

CERTIFICATION

PRODUCT RENEWED
as complying with the Florida Building Code
NOA–No. 25–0915.04
Expiration Date 01/06/2031
By
Miami–Dade Product Control

A520 IMPACT
LOUVER SYSTEM

REVISIONS

REV.	DATE	DESCRIPTION	BY

DATE: 19 DEC, 2024
DRAWN BY: MTC
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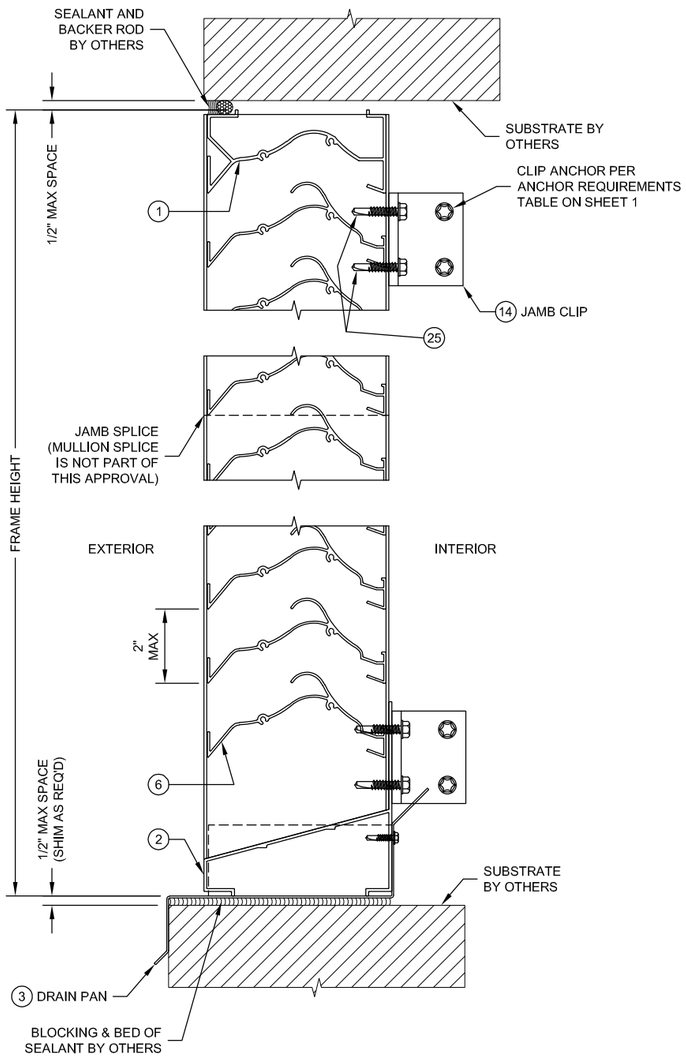
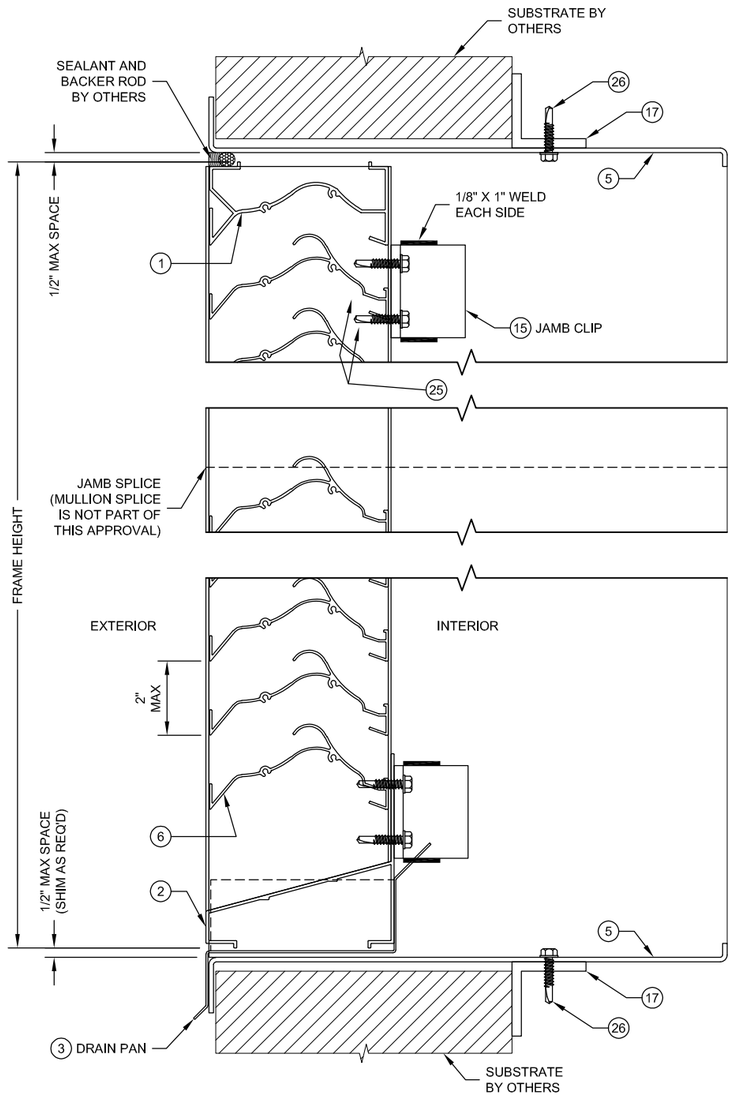
1686-1

SHEET No.: 3 of 10
SCALE: 1/2" = 1'-0"
REV. ----

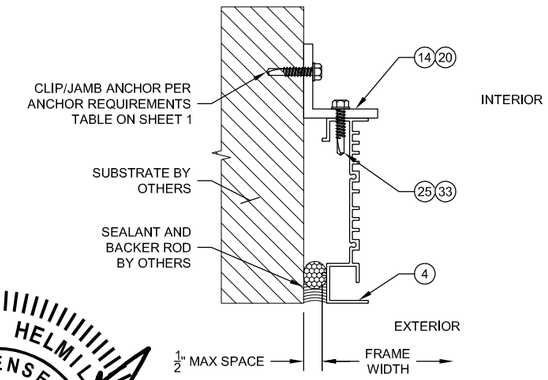


SECTION A1 4
SCALE: 3" = 1'-0"



SECTION A2 4
SCALE: 3" = 1'-0"

(SLEEVE MOUNT)



SECTION B1 4
SCALE: 3" = 1'-0"

(NO SLEEVE & CLIPS TURNED OUT)

WAYNE K. HELMILA
LICENSE
No. 59092
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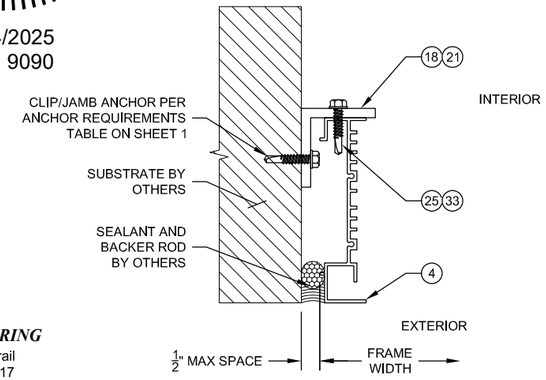
01/14/2025
COA: 9090



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

(NO SLEEVE & CLIPS TURNED IN)

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LOUVER SYSTEM

REVISIONS

REV.	DATE	DESCRIPTION	BY

DATE: 19 DEC, 2024
DRAWN BY: MTC
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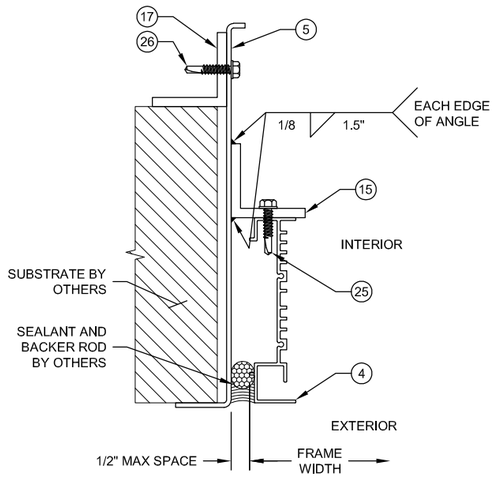
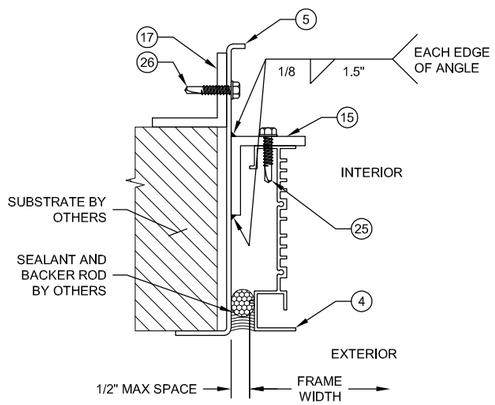
1686-1

SHEET No.: 4 of 10
SCALE: 3" = 1'-0"
REV. ----



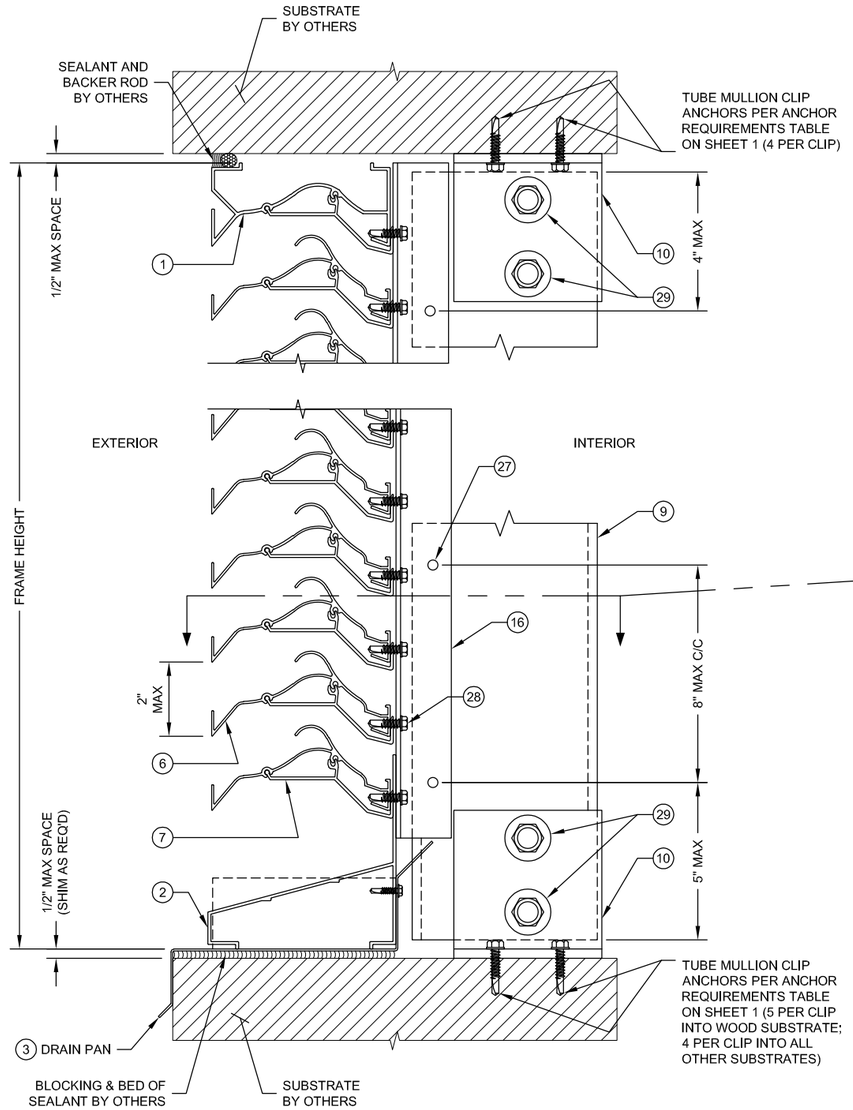
SECTION B3
SCALE: 3" = 1'-0" 5

(WITH SLEEVE & CLIPS TURNED OUT)



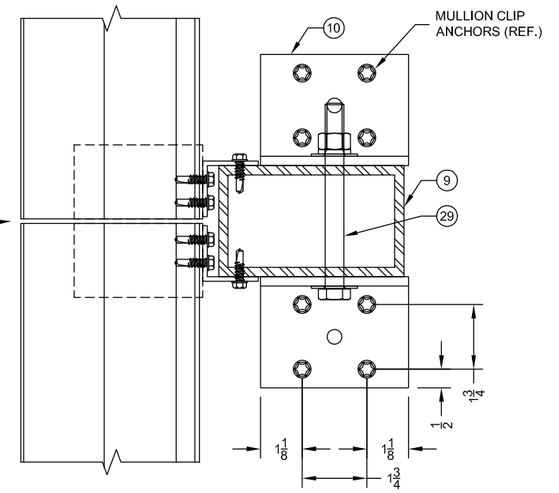
SECTION B4
SCALE: 3" = 1'-0" 5

(WITH SLEEVE & CLIPS TURNED IN)



SECTION C1
SCALE: 3" = 1'-0" 5

(ARCHITECTURAL LOUVER WITHOUT PERIMETER SLEEVE; INSTALLED INTO WOOD, STEEL, ALUMINUM, OR METAL STUD SUBSTRATE)



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

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01/14/2025
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A520 IMPACT
LOUVER SYSTEM

REVISIONS

REV.	DATE	DESCRIPTION	BY

DATE: 19 DEC, 2024
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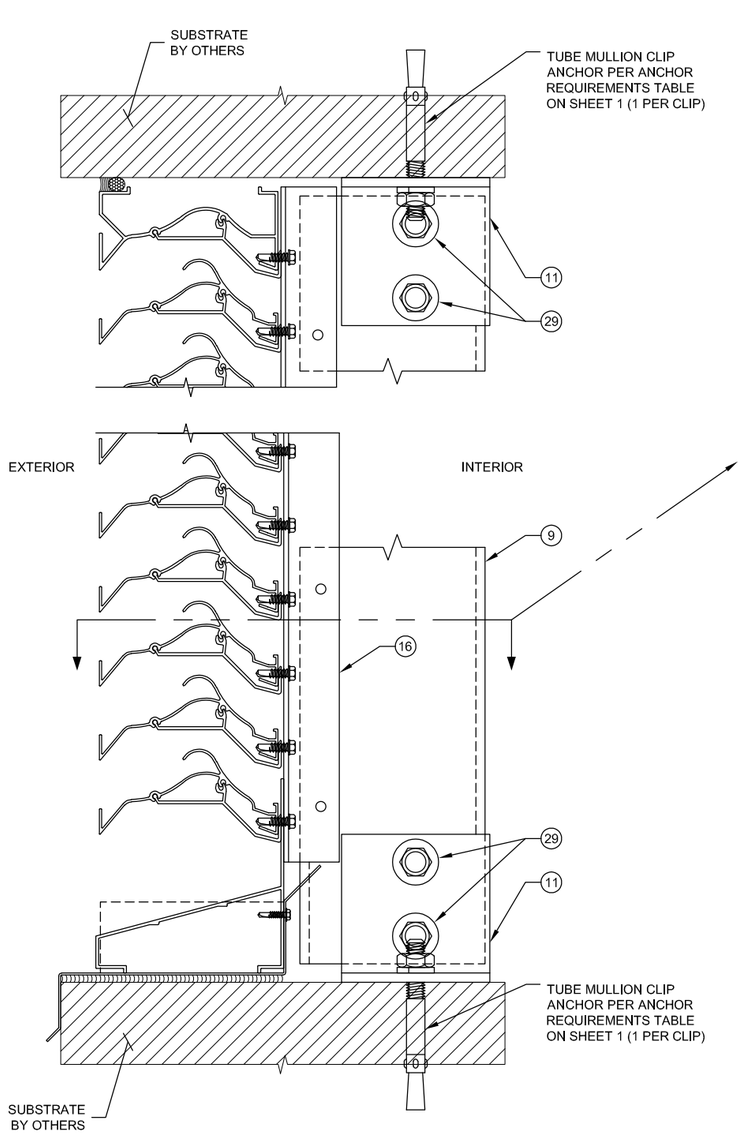
SHEET No.: 5 of 10
SCALE: 3" = 1'-0"
REV. ----

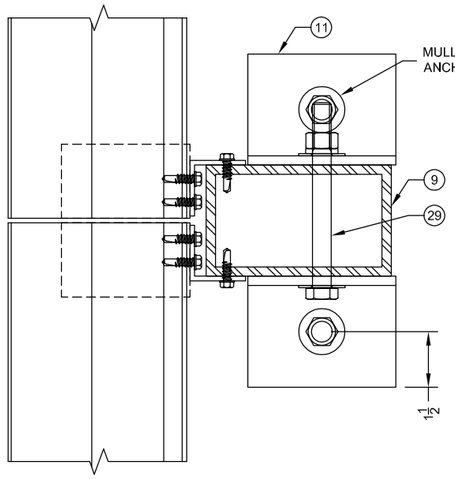
1686-1



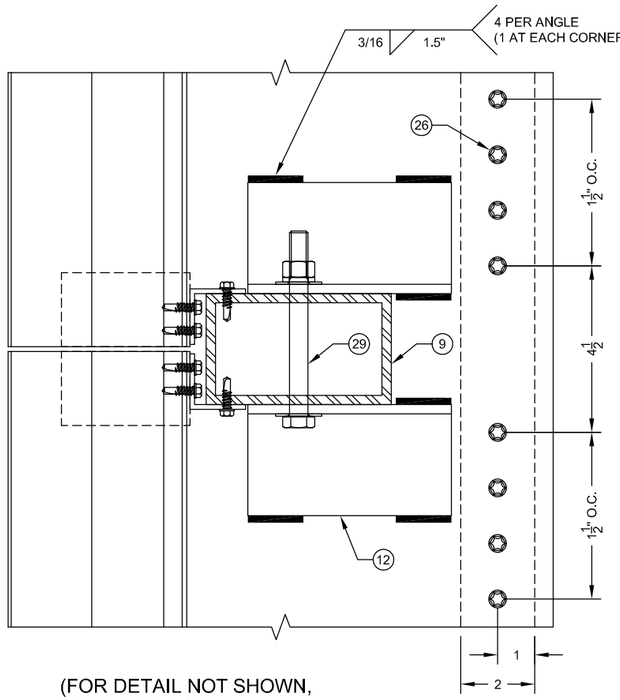
SECTION C2
SCALE: 3" = 1'-0" 6

(ARCHITECTURAL LOUVER WITHOUT PERIMETER SLEEVE; INSTALLED INTO CONCRETE SUBSTRATE)

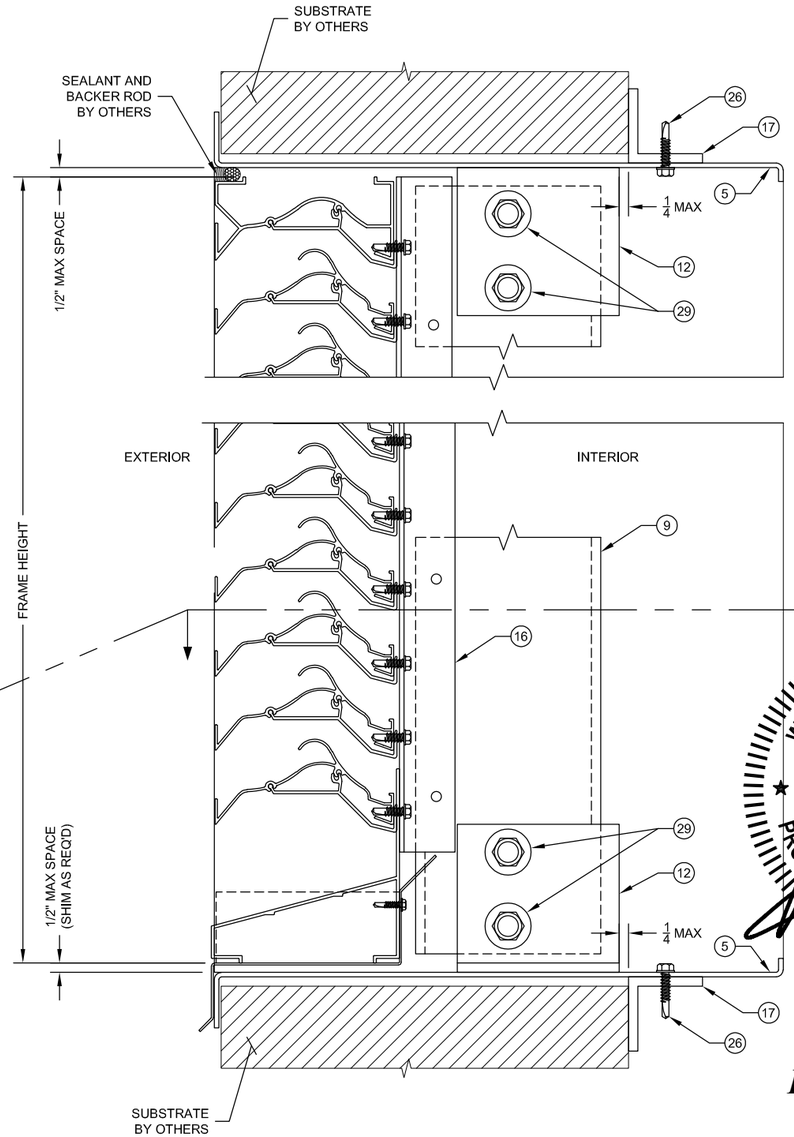
(FOR DETAIL NOT SHOWN, SEE SECTION C1/5)



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



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



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 C3
SCALE: 3" = 1'-0" 6

(ARCHITECTURAL LOUVER WITH PERIMETER SLEEVE; INSTALLED INTO ALL SUBSTRATES)

(FOR DETAIL NOT SHOWN, SEE SECTION C1/5)

WAYNE K. HELMIL
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No. 59092
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01/14/2025
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AIR BALANCE

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Miami–Dade Product Control

LE-54 IMPACT
LOUVER SYSTEM

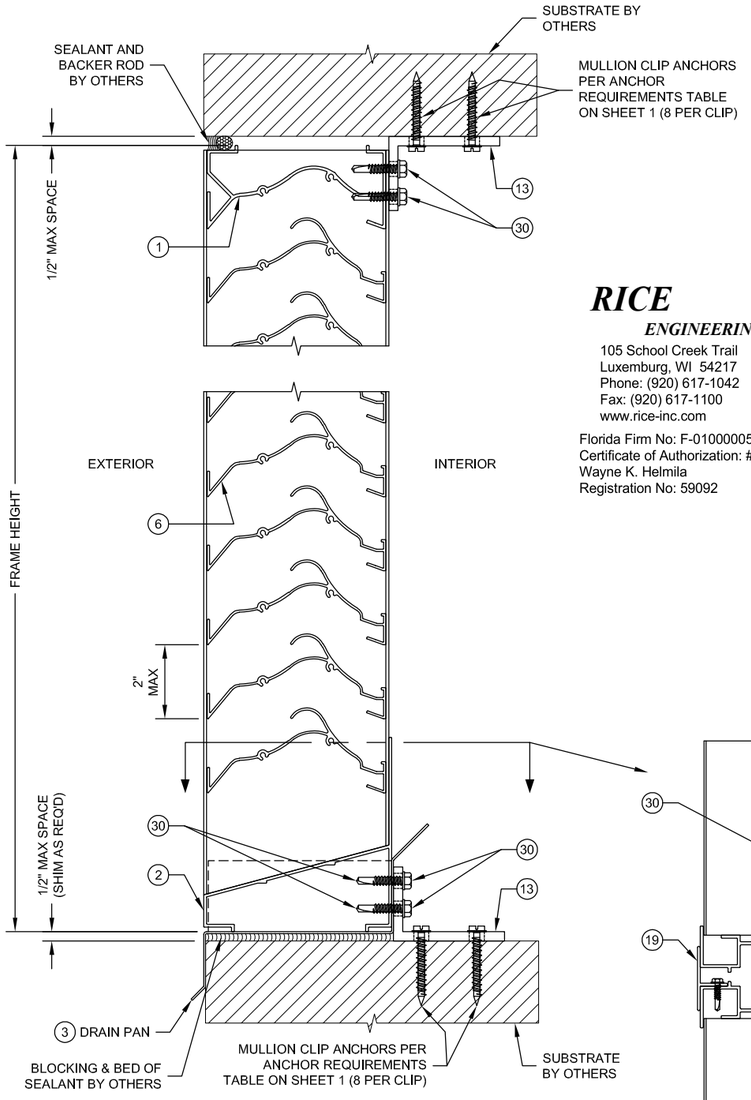
REVISIONS

REV.	DATE	DESCRIPTION	BY

DATE: 19 DEC, 2024
DRAWN BY: MTC
CHECKED BY: JMC

SHEET No.: 6 of 10
SCALE: 3" = 1'-0"
REV. ----

1686-1



SECTION
SCALE: 3" = 1'-0"
D1
7

(NON-ARCHITECTURAL LOUVER WITHOUT PERIMETER SLEEVE & WITHOUT TUBE MULLION; INSTALLED INTO ALL SUBSTRATES)

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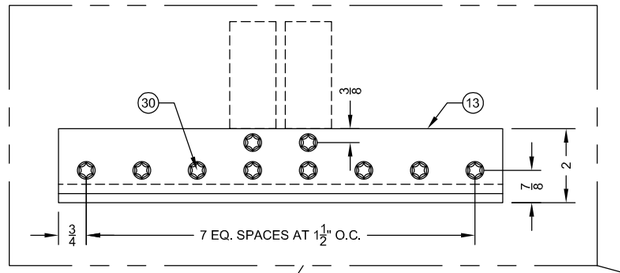
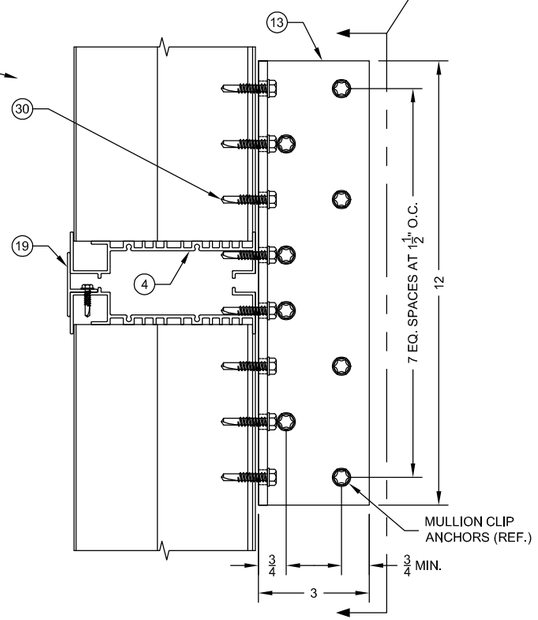
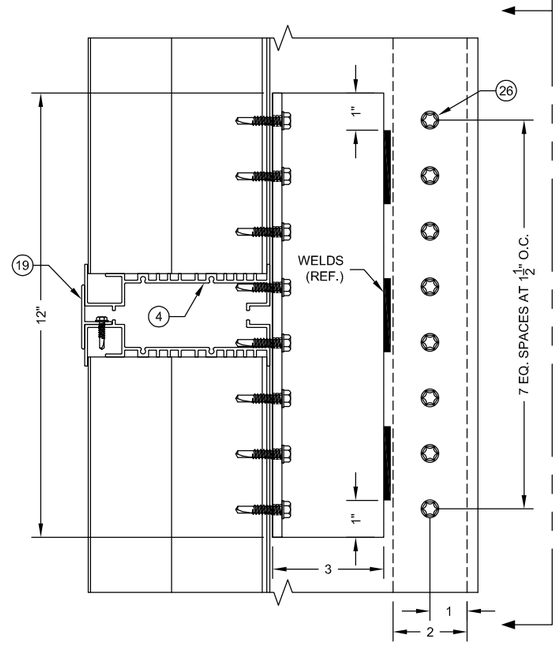
Wayne K. Helmila
Registration No: 59092

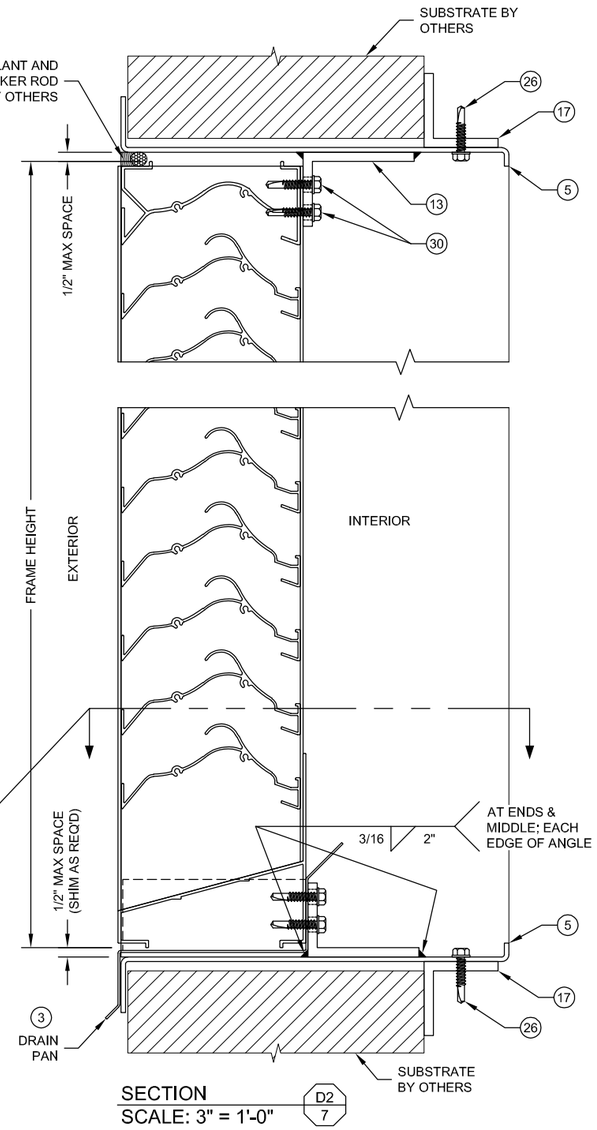






WAYNE K. HELMILA
LICENSE
No. 59092
STATE OF FLORIDA
PROFESSIONAL ENGINEER

01/14/2025
COA: 9090



SECTION
SCALE: 3" = 1'-0"
D2
7

(NON-ARCHITECTURAL LOUVER WITH PERIMETER SLEEVE & WITHOUT TUBE MULLION; INSTALLED INTO ALL SUBSTRATES)

(FOR DETAIL NOT SHOWN, SEE SECTION D1/7)

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.

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A520 IMPACT
LOUVER SYSTEM

REVISIONS

REV.	DATE	DESCRIPTION	BY

DATE: 19 DEC, 2024
DRAWN BY: MTC
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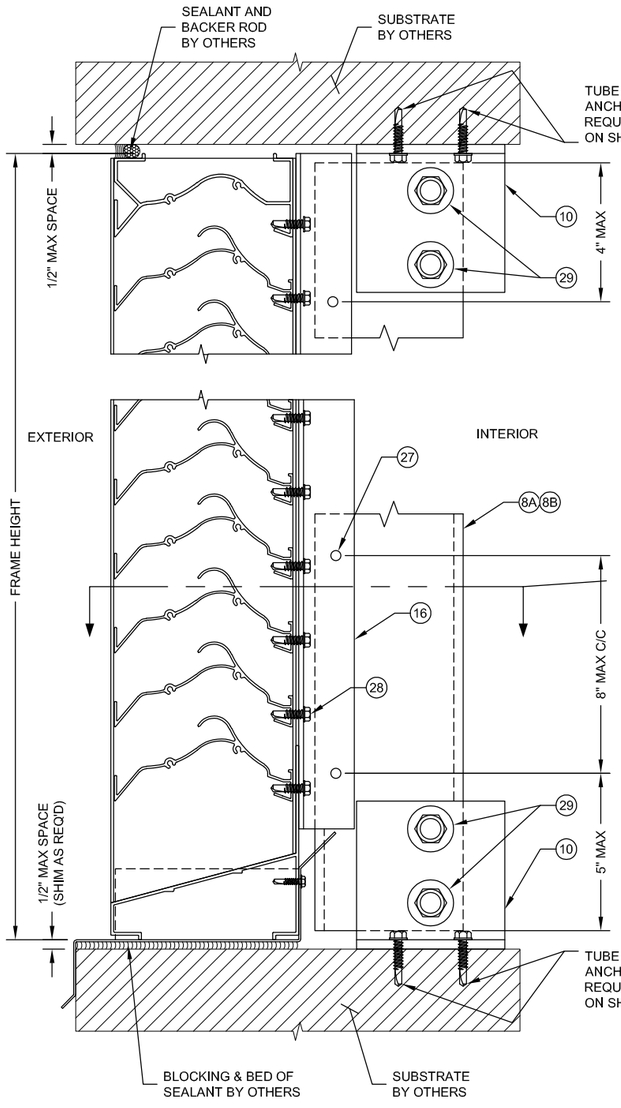
SHEET No.: 7 of 10
SCALE: 3" = 1'-0"

1686-1

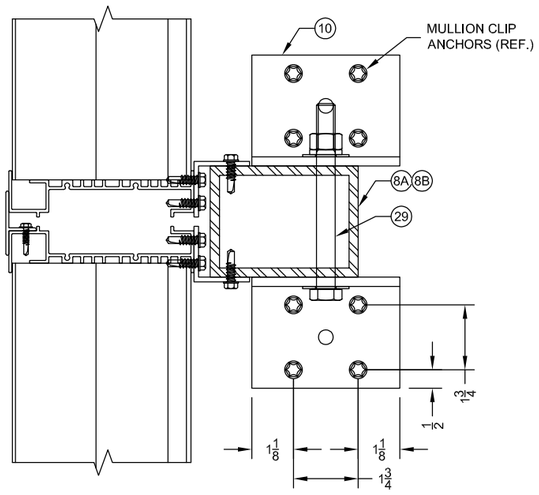
REV. ----



SECTION D3/8
SCALE: 3" = 1'-0"

(NON-ARCHITECTURAL LOUVER WITHOUT PERIMETER SLEEVE AND 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)

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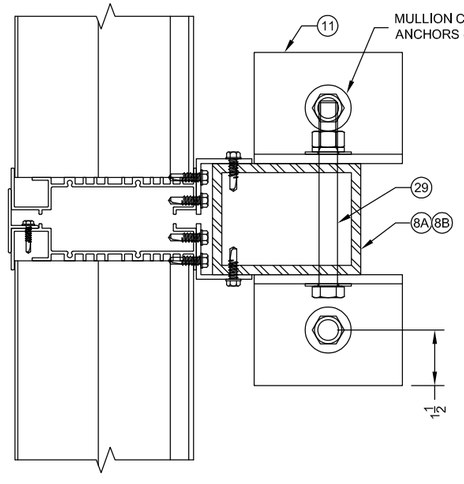
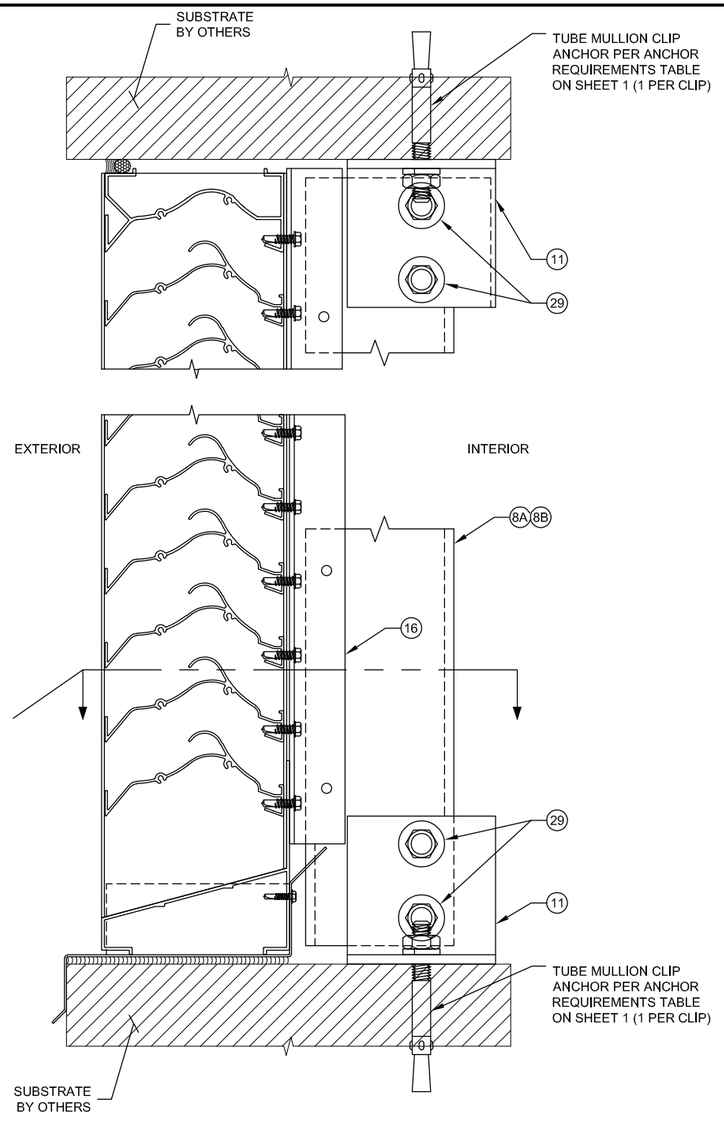
01/14/2025
COA: 9090



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



SECTION D4/8
SCALE: 3" = 1'-0"

(NON-ARCHITECTURAL LOUVER WITHOUT PERIMETER SLEEVE & WITH TUBE MULLION; INSTALLED INTO CONCRETE SUBSTRATE)

(FOR DETAIL NOT SHOWN, SEE SECTION D3/8)

AIR BALANCE
A MESTEK COMPANY
450 RIVERSIDE DRIVE
WYALUSING, PA 18853

CERTIFICATION

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A520 IMPACT
LOUVER SYSTEM

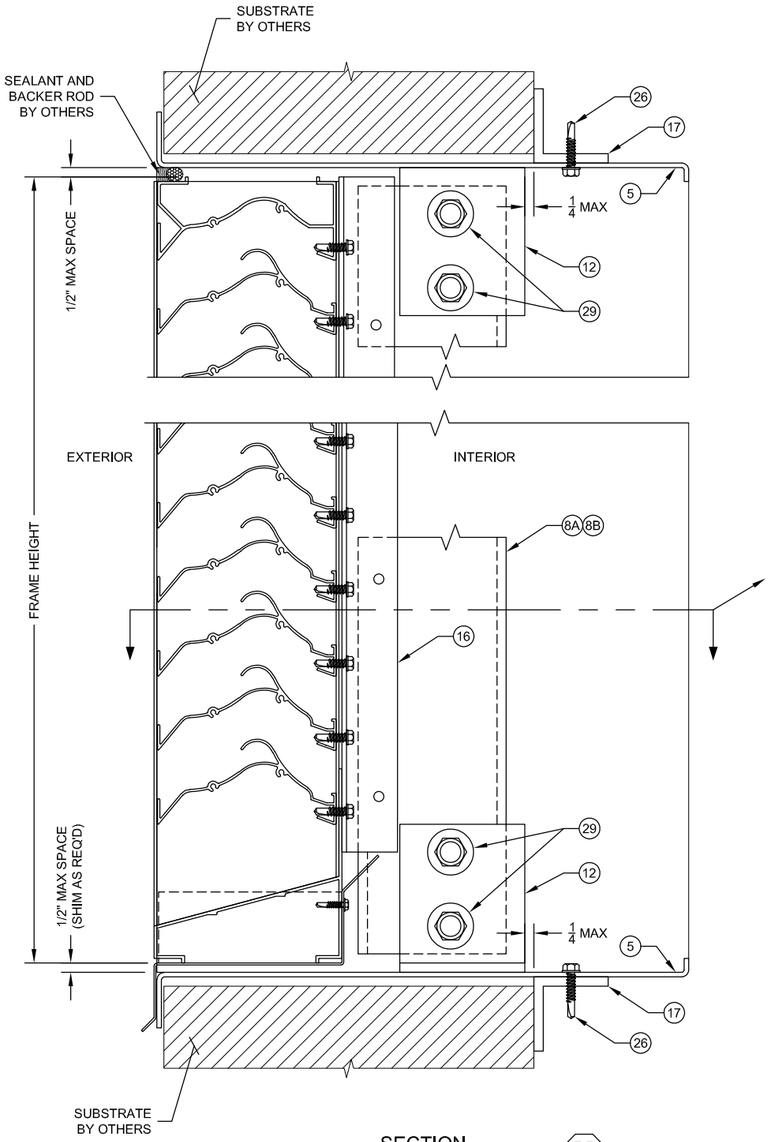
REVISIONS

REV.	DATE	DESCRIPTION	BY

DATE: 19 DEC, 2024
DRAWN BY: MTC
CHECKED BY: JMC

SHEET No.: 8 of 10
SCALE: 3" = 1'-0"
REV. ----

1686-1

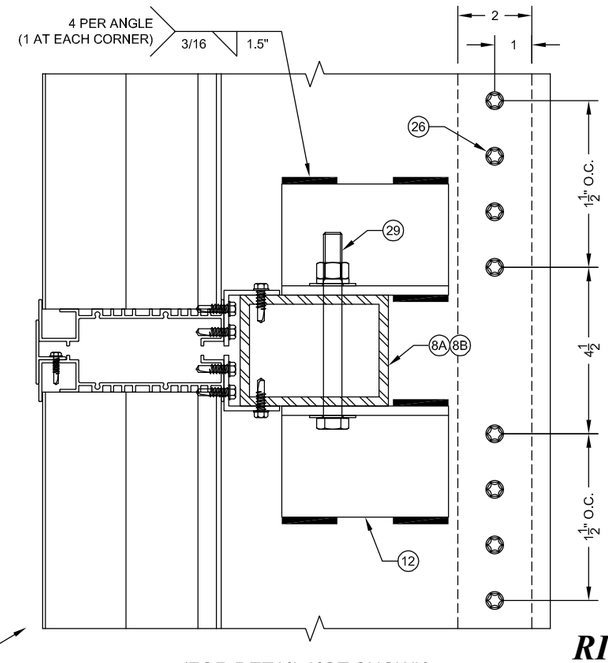


SECTION
SCALE: 3" = 1'-0"

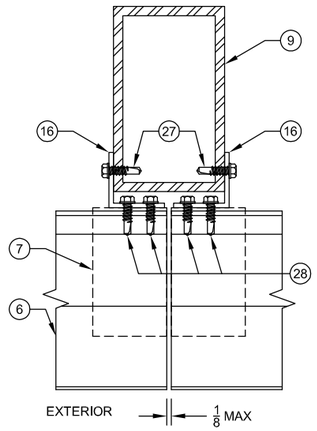
(NON-ARCHITECTURAL LOUVER WITH PERIMETER SLEEVE & WITH TUBE MULLION; INSTALLED INTO ALL SUBSTRATES)

(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.

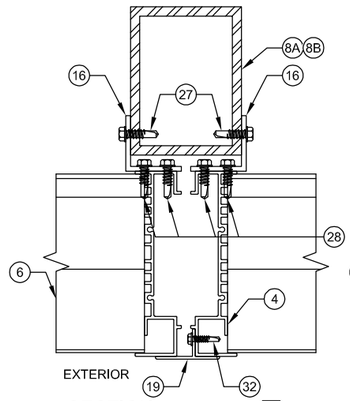


(FOR DETAIL NOT SHOWN, SEE SECTION F1/9)



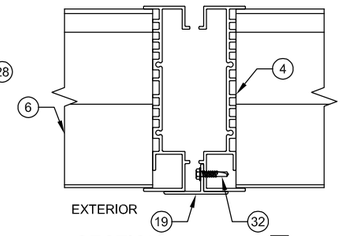
SECTION
SCALE: 3" = 1'-0"
E
9

(ARCHITECTURAL LOUVER MULLION)



SECTION
SCALE: 3" = 1'-0"
F1
9

(NON-ARCHITECTURAL LOUVER WITH TUBE MULLION)



SECTION
SCALE: 3" = 1'-0"
F2
9

(NON-ARCHITECTURAL LOUVER WITH NO TUBE MULLION)

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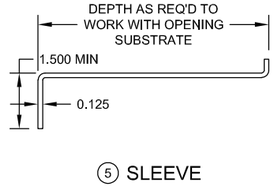
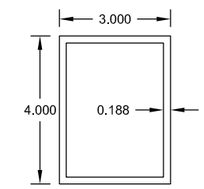
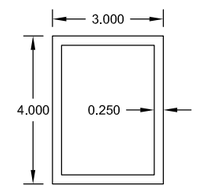


(5) SLEEVE

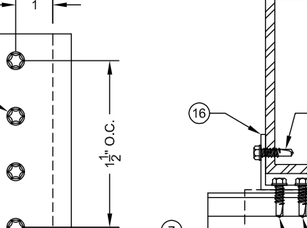


(8A) TUBE MULLION (USED WITH NON-ARCHITECTURAL LOUVERS)

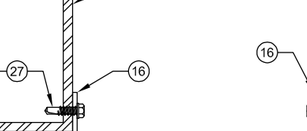


(8B) TUBE MULLION (USED WITH NON-ARCHITECTURAL LOUVERS)

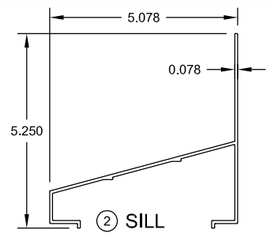
(1) HEAD



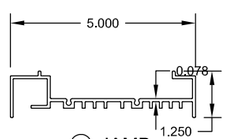
(3) SILL PAN



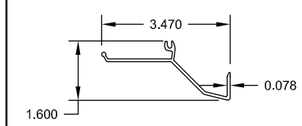
(6) BLADE



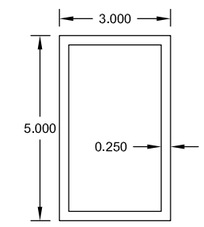
(2) SILL



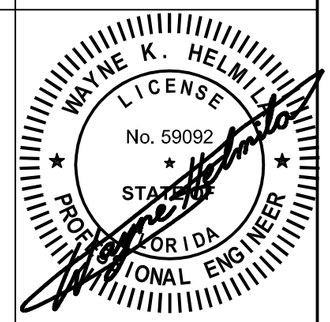
(4) JAMB



(7) BLADE SUPPORT BRACKET



(9) TUBE MULLION (USED WITH ARCHITECTURAL LOUVERS)



01/14/2025
COA: 9090

AIR BALANCE

A MESTEK COMPANY
450 RIVERSIDE DRIVE
WYALUSING, PA 18853

CERTIFICATION

PRODUCT RENEWED
as complying with the Florida Building Code
NOA–No. 25–0915.04
Expiration Date 01/06/2031
By
Miami–Dade Product Control

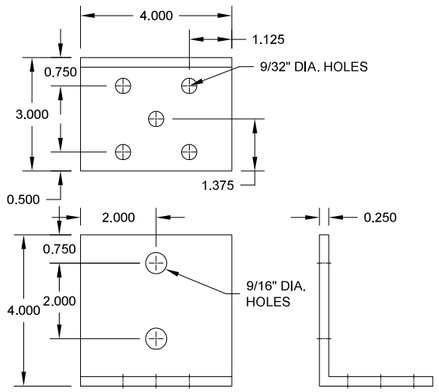
A520 IMPACT
LOUVER SYSTEM

REVISIONS

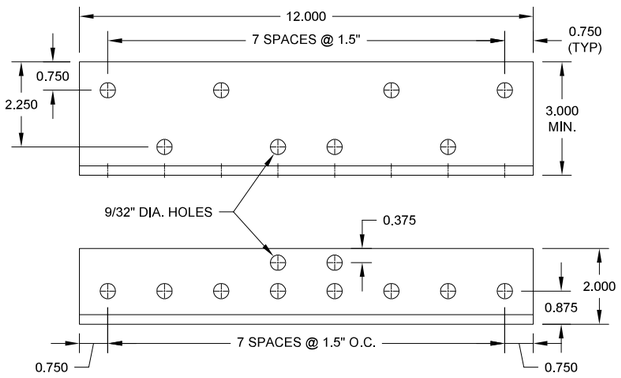
REV.	DATE	DESCRIPTION	BY

DATE:	19 DEC, 2024
DRAWN BY:	MTC
CHECKED BY:	JMC
	1686-1

SHEET No.: 9 of 10
SCALE: 3" = 1'-0"
REV. ----



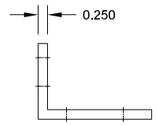
⑩ MULLION END INSTALLATION CLIP

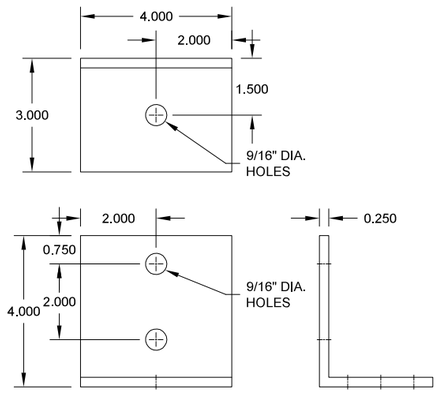


⑬ MULLION END INSTALLATION CLIP

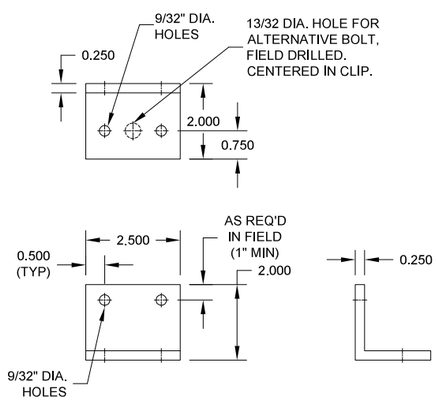
RICE
ENGINEERING
105 School Creek Trail
Luxemburg, WI 54217
Phone: (920) 617-1042
Fax: (920) 617-1100
www.rice-inc.com

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

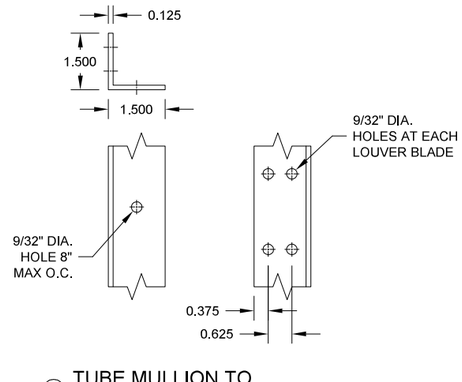




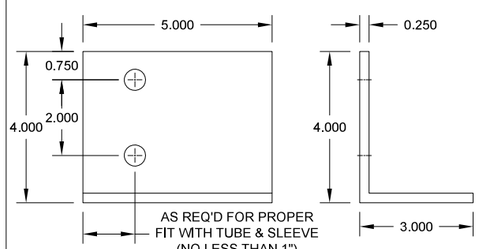
⑪ MULLION END INSTALLATION CLIP



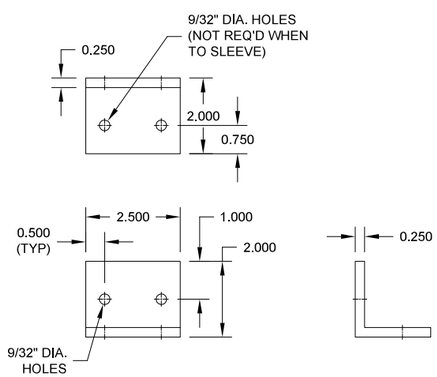
⑭ LOUVER JAMB TO SUBSTRATE CLIP



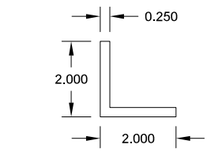
⑯ TUBE MULLION TO LOUVER BLADE ANGLE
(LENGTH = CONTINUOUS)



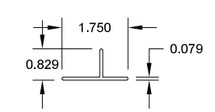
⑫ MULLION END CLIP FOR SLEEVE MOUNT LOUVERS



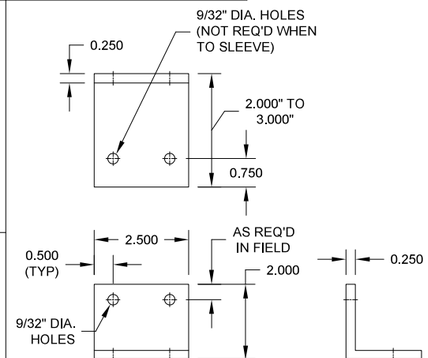
⑮ SLEEVE OR TUBE MULLION TO LOUVER JAMB CLIP



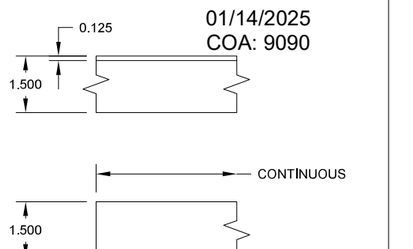
⑰ SLEEVE SUPPORT ANGLE
(LENGTH = CONTINUOUS)



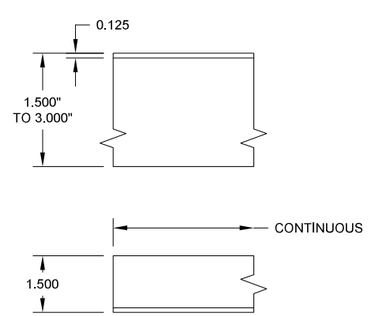
⑲ MULLION COVER



⑱ LOUVER JAMB TO SUBSTRATE CLIP
2" LEG SHALL BE SECURED TO THE LOUVER JAMB



⑳ CONTINUOUS SUPPORT ANGLE



㉑ CONTINUOUS SUPPORT ANGLE
1.5" LEG SHALL BE SECURED TO THE LOUVER JAMB

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
	PARTS	
1	HEAD	6061-T6 ALUMINUM
2	SILL	6061-T6 ALUMINUM
3	SILL PAN	5052-H32 ALUMINUM
4	JAMB	6061-T6 ALUMINUM
5	SLEEVE	5052-H32 ALUMINUM
6	BLADE	6061-T6 ALUMINUM
7	BLADE SUPPORT BRACKET	6061-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" OF SLEEVE CORNERS OR TUBE MULLION ENDS AND MAX 8" O.C.)
16	TUBE MULLION TO LOUVER BLADE ANGLE (ARCHITECTURAL LOUVERS)	6063-T5 ALUMINUM
17	SLEEVE SUPPORT ANGLE	6063-T5 ALUMINUM
18	LOUVER JAMB TO SUBSTRATE CLIP	6063-T5 ALUMINUM
19	MULLION COVER	6063-T5 ALUMINUM
20	CONTINUOUS SUPPORT ANGLE	6063-T5 ALUMINUM
21	CONTINUOUS SUPPORT ANGLE	6063-T5 ALUMINUM
	MISC. FASTENERS	
25	1/4-14 X 3/4" SELF TAP/DRILL SCREW	2 PER CLIP
26	1/4-14 X 3/4" SELF TAP/DRILL SCREW	WITHIN 4" OF CORNERS & SLEEVE SPLICES. MAX 8" O.C. (CLUSTERED AT MULLION ENDS PER DETAILS)
27	1/4-14 X 3/4" SELF TAP/DRILL SCREW	8" O.C. PER SECTIONS
28	1/4-14 X 3/4" SELF TAP/DRILL SCREW	4 AT HEAD & 2 PER BLADE
29	1/2" X 5" HEX HEAD STAINLESS STEEL NUT & B	2 PER MULLION END
30	1/4-14 X 3/4" SELF TAP/DRILL SCREW	10 PER CLIP
31	1/4-14 X 3/4" SELF TAP/DRILL SCREW	1 PER CLIP
32	NO. 7 X 1/2" SMS SCREW	WITHIN 6" OF CORNERS & 24" MAX O.C.
33	1/4-14 X 3/4" SELF TAP/DRILL SCREW	SEE ANCHOR SPACING/PRESSURE TABLE FOR SPACING REQS.

WAYNE K. HELMILA
LICENSE
No. 59092
STATE OF
PROFESSIONAL ENGINEER
FLORIDA

01/14/2025
COA: 9090

awv
www.awv.com
A MESTEK COMPANY
219 S. CHURCH STREET, SUITE 200
BOWLING GREEN, OHIO 43402

CERTIFICATION

PRODUCT RENEWED
as complying with the Florida Building Code
NOA–No. 25–0915.04
Expiration Date 01/06/2031
By
Miami–Dade Product Control

A520 IMPACT
LOUVER SYSTEM

REVISIONS

REV.	DATE	DESCRIPTION	BY

DATE:	19 DEC, 2024
DRAWN BY:	MTC
CHECKED BY:	JMC
	34656-STD

SHEET No.: 10 of 10
SCALE: 3" = 1'-0"
REV. ----