



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

## NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION  
11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599  
[www.miamidade.gov/building](http://www.miamidade.gov/building)

**N.I. Illinois, LLC dba SAFE-AIR DOWCO**  
**1855 South 54<sup>th</sup> Ave.**  
**Cicero, IL 60804**

**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 1606DHPM Aluminum Louver w/ and w/o Damper – L.M.I.**

**APPROVAL DOCUMENT:** Drawing No. **1606DHPM**, titled “1606DHPM Louver w/ and w/o Damper”, sheets 1 through 21 of 21, prepared by Rice Engineering, dated 09/11/18, 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, state, model/ series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**LIMITATION:** This system is 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/waterproof equipment, components, or supplies.

**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 No. 21-0825.04** and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

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



**NOA No. 23-0928.03**  
**Expiration Date: August 30, 2028**  
**Approval Date: November 9, 2023**  
**Page 1**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's**

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.  
*(Submitted under NOA No. 18-0117.12)*
2. Drawing No. **1606DHPM**, titled "1606DHPM Louver w/ and w/o Damper", sheets 1 through 21 of 21, dated 09/11/18, prepared by Rice Engineering, signed and sealed by Wayne K. Helmila, P.E.  
*(Submitted under NOA No. 18-1217.02)*

**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 installation diagram of Model 1606 DHPM Louver System, prepared by Intertek, Test Report No. **H1900.01-801-18-R2**, dated 09/21/17 and revised on 05/23/18, signed and sealed by Tyler Westerling, P.E.  
*(Submitted under NOA No. 18-1217.02)*
2. Test Report on Wind Driven Rain Resistance per TAS 100(A)-95 on a Model 1606 DHPM Aluminum Louver with damper, prepared by Intertek, Test Report No. **H0222.04-801-18**, dated 09/27/17, signed and sealed by Tyler Westerling, P.E.  
*(Submitted under NOA No. 18-1217.02)*
3. Test Report on High Velocity Wind Driven Rain Resistance per ANSI/AMCA 550-09 on a Model 1606 DHPM Aluminum Louver, prepared by Intertek, Test Report No. **H0222.03-801-18**, dated 09/28/17, signed and sealed by Tyler Westerling, P.E.  
*(Submitted under NOA No. 18-1217.02)*

**C. CALCULATIONS**

1. Louver structural calculations dated 11/03/17, prepared by Rice Engineering, signed and sealed by Wayne K. Helmila, P.E.  
*(Submitted under NOA No. 18-1217.02)*

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. None.



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**Carlos M. Utrera, P.E.**  
**Product Control Examiner**  
**NOA No. 23-0928.03**  
**Expiration Date: August 30, 2028**  
**Approval Date: November 9, 2023**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's (CONTINUED)**

**F. STATEMENTS**

1. Statement letter of code conformance to the **FBC 6<sup>th</sup> Edition (2017)** issued by Rice Engineering, dated 04/16/18, signed and sealed by Wayne K. Helmila, P.E.  
*(Submitted under NOA No. 18-1217.02)*
2. Statement letter of no financial interest issued by Rice Engineering, dated 04/16/18, signed and sealed by Wayne K. Helmila, P.E.  
*(Submitted under NOA No. 18-1217.02)*
3. Private Labeling Agreement document in conformance to Product Control guidelines dated December 3, 2018, signed by Steve Nailor and David Soden.  
*(Submitted under NOA No. 18-1217.02)*

**2. EVIDENCE SUBMITTED UNDER NOA # 21-0825.04**

**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 conformance, complying with the **FBC 7<sup>th</sup> Edition (2020)**, issued by Rice Engineering, dated 08/16/21, signed and sealed by Wayne K. Helmila, P.E.



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**Carlos M. Utrera, P.E.**  
**Product Control Examiner**  
**NOA No. 23-0928.03**  
**Expiration Date: August 30, 2028**  
**Approval Date: November 9, 2023**

DRAWING INDEX:

- |  |                              |
|--|------------------------------|
| 1. INDEX TO DRAWINGS AND NOTES.  |                              |
| 2. 1606DHPM LOUVER- FLANGE FRAME SLEEVE MOUNT  |                              |
| 3. 1606DHPM LOUVER- CONTINUOUS ANGLE MOUNT   | 2) THIS                      |
| 4. 1606DHPM / DAMPER- FLANGE FRAME SLEEVE MOUNT  | PRE                          |
| 5. 1606DHPM / DAMPER- CONTINUOUS ANGLE MOUNT   |                              |
| 6. 1606DHPM LOUVER- FLANGE FRAME SLEEVE MOUNT<br>HEAD & SILL DETAIL                              | 3) THIS<br>WITH              |
| 7. 1606DHPM LOUVER- CONTINUOUS ANGLE MOUNT<br>HEAD & SILL DETAIL.                                | 4) LOU<br>CON<br>DIST<br>NOT |
| 8. 1606DHPM LOUVER- BLADE SUPPORT DETAIL.  |                              |
| 9. 1606DHPM LOUVER- FLANGE FRAME SLEEVE MOUNT<br>JAMB DETAIL                                     |                              |
| 10. 1606DHPM LOUVER- CONTINUOUS ANGLE MOUNT<br>JAMB DETAIL.                                      | 5) MAXI                      |
| 11. 1606DHPM LOUVER- FLANGE FRAME SLEEVE MOUNT<br>MULLION DETAIL.                                | 6) MAXI<br>MUL               |
| 12. 1606DHPM LOUVER- CONTINUOUS ANGLE MOUNT<br>MULLION DETAIL.                                   | 7) SEC<br>SUIT<br>OTH        |
| 13. 1606DHPM LOUVER / DAMPER FLANGE FRAME W/ SLEEVE &<br>MULLION ANGLE MOUNT HEAD & SILL DETAIL. |                              |
| 14. 1606DHPM / DAMPER- FLANGE FRAME SLEEVE MOUNT<br>JAMB AND MULLION DETAIL                      |                              |
| 15. 1606DHPM LOUVER / DAMPER CONTINUOUS ANGLE MOUNT<br>JAMB AND MULLION DETAIL.                  |                              |
| 16. 1606DHPM LOUVER W/ AND W/O DAMPER- SLEEVE / CONTINUOUS MOUNT<br>PART PROFILES.               |                              |
| 17. 1606DHPM LOUVER W/ AND W/O DAMPER- SLEEVE / CONTINUOUS MOUNT<br>PART PROFILES.               |                              |
| 18. MULLION ANGLE BACK OF THE WALL MOUNT   |                              |
| 19. 1606DHPM LOUVER W/ AND W/O DAMPER AVAILABLE SHAPES   |                              |
| 20. 1606DHPM LOUVER W/ AND W/O DAMPER- SLEEVE / CONTINUOUS MOUNT<br>BILL OF MATERIAL.            |                              |
| 21. 1606DHP LOUVER W/ AND W/O DAMPER - NOTES AND FASTENER SCHEDULE                               |                              |

NOTES:

- 1) THE I606DHPM HAS BEEN TESTED IN ACCORDANCE WITH THE MIAMI-DADE COUNTY PROTOCOLS TAS - 100 (A), TAS-201, 202, & 203 FOR LARGE MISSILE IMPACT, UNIFORM PRESSURE AND CYCLIC WIND PRESSURE.
- 2) THIS LOUVER SYSTEM IS APPROVED FOR APPLICATIONS WITH DESIGN PRESSURES OF +/- 150 PSF OR LESS
- 3) THIS LOUVER SYSTEM IS NON-BEARING AND IS NOT DESIGNED TO WITHSTAND BUILDING DEAD LOADS.
- 4) LOUVER ANCHORS ARE REVIEWED FOR ATTACHMENT INTO STEEL, CONCRETE, MASONRY, OR TIMBER SUBSTRUCTURE. MINIMUM EDGE DISTANCE AND EMBEDMENT REQUIREMENTS ARE SHOWN. SAFE AIR DOES NOT DETERMINE THE STRUCTURE INTEGRITY OF THE SUBSTRUCTURE.
- 5) MAXIMUM SINGLE SECTION SIZE : 72" WIDE X 120" HIGH.
- 6) MAXIMUM ASSEMBLED LOUVER SIZE UNLIMITED WIDE X 120" HIGH. MAX. MULLION SPACING IS 72".
- 7) SECTIONS OR ASSEMBLIES MAY BE STACKED VERTICALLY PROVIDING A SUITABLE STRUCTURAL SUPPORT IS DESIGNED AND INSTALLED BY OTHERS TO SUPPORT ALL LOADS TRANSFERRED FROM THE LOUVER.

TESTS PERFORMED:

TAS-100 (A) WIND DRIVEN RAIN RESISTANCE  
TAS-201 LARGE MISSILE IMPACT  
TAS-202 UNIFORM STATIC AIR PRESSURE TEST  
TAS-203 CYCLIC WIND PRESUSRE TEST  
DESIGN PRESSURE RATING 150 PSF

CHK BY: MASTourian

WN BY: fcortinas

**Safe-Air**  
**DOWCO®**  
NI ILLINOIS, LLC.  
1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel. 708-652-9100 Fax 708-652-9100

COA: 9090

***RICE***

***ENGINEERING***

105 School Creek  
TrailLuxemburg, WI  
54217Phone: (920)  
617-1042Fax: (920)  
617-1100www.rice-

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

SHEET: 1 OF 21

DWG NO:	1606DHPM	REV	-
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1606DHPM LOUVER  
W/ AND W/O DAMPER  
INDEX

**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0928.03

**Expiration Date** 08/30/2028

**By** \_\_\_\_\_  
**Miami-Dade Product Control**

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. **21-0825.04**

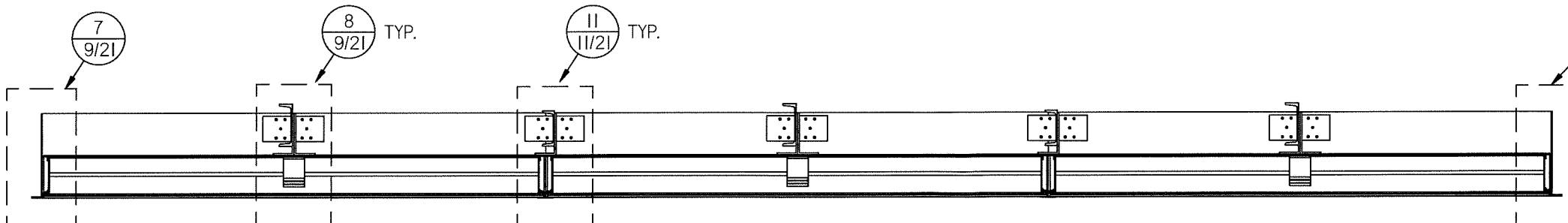
**Expiration Date: 08/30/2023**

By: Manuel Perez  
Miami-Dade Product Control

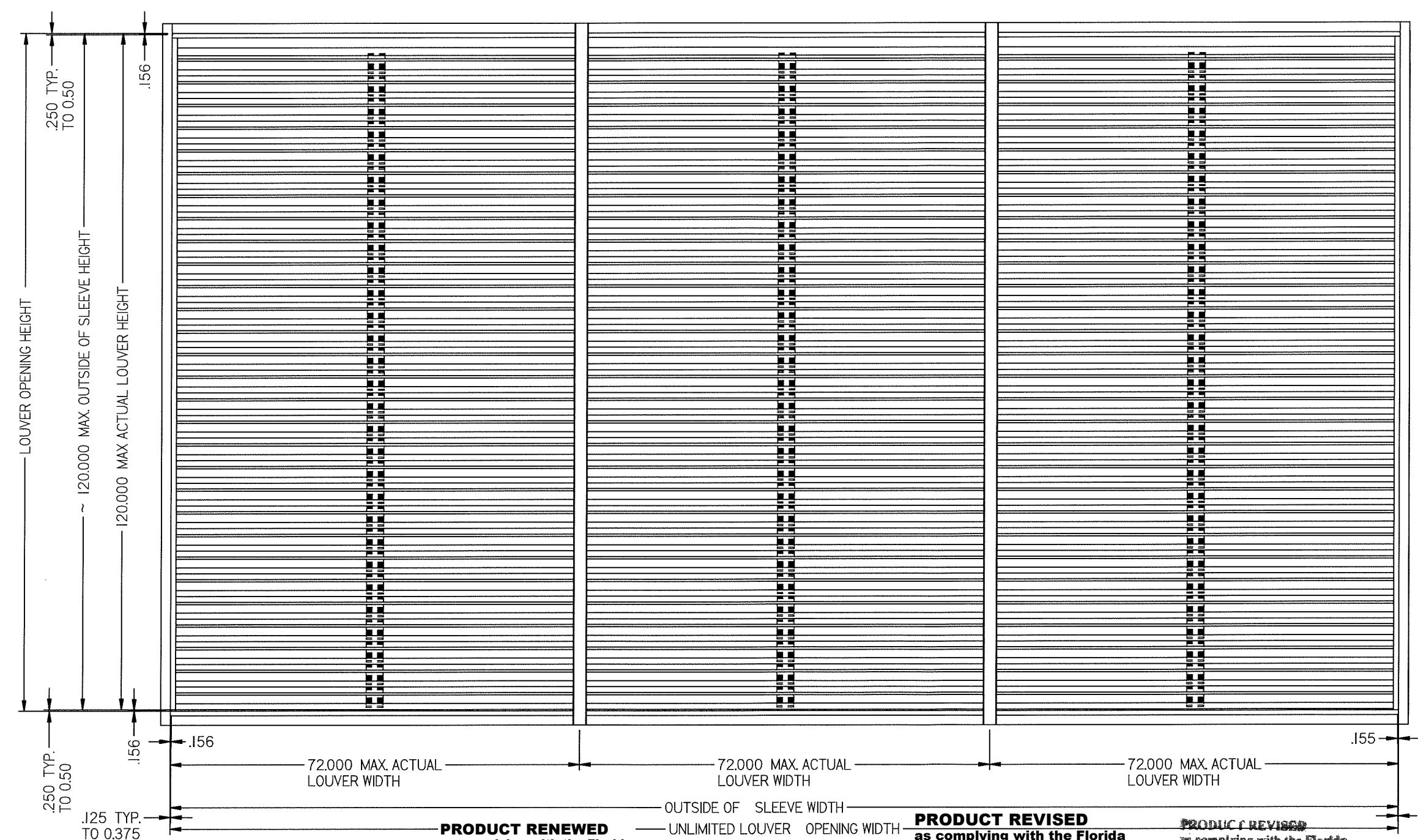
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No 18-1217-02  
Expiration Date AUG 30, 2023  
B. (Chang) L. (Chang)  
ME and Field Product Control



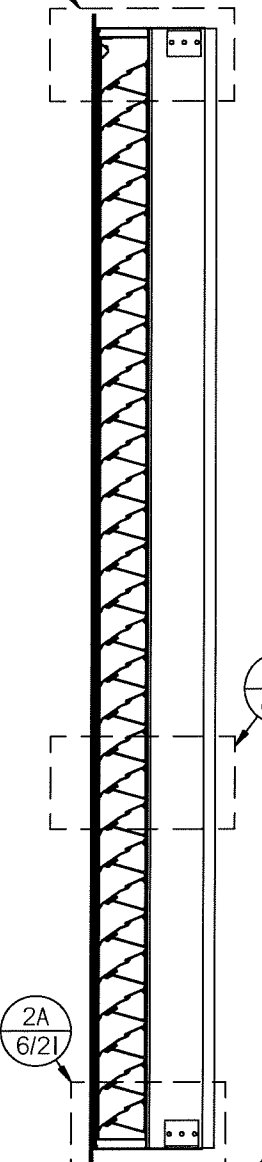
HORIZONTAL CROSS SECTION



ELEVATION



VERTICAL CROSS SECTION



**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0928.03  
Expiration Date 08/30/2028  
By *[Signature]*  
Miami-Dade Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0825.04  
Expiration Date: 08/30/2023  
By: *Manuel Perez*  
Miami-Dade Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. 18-1217.02  
Expiration Date 8/30/2023  
By: *Ismael L. Hernandez*  
Miami-Dade Product Control



**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

DWN BY: f.cortinas CHK BY: Mastourian  
DATE: 9/11/2018 SCALE: NTS  
SHEET: 2 OF 21  
DWG NO: 1606DHPM  
REV -

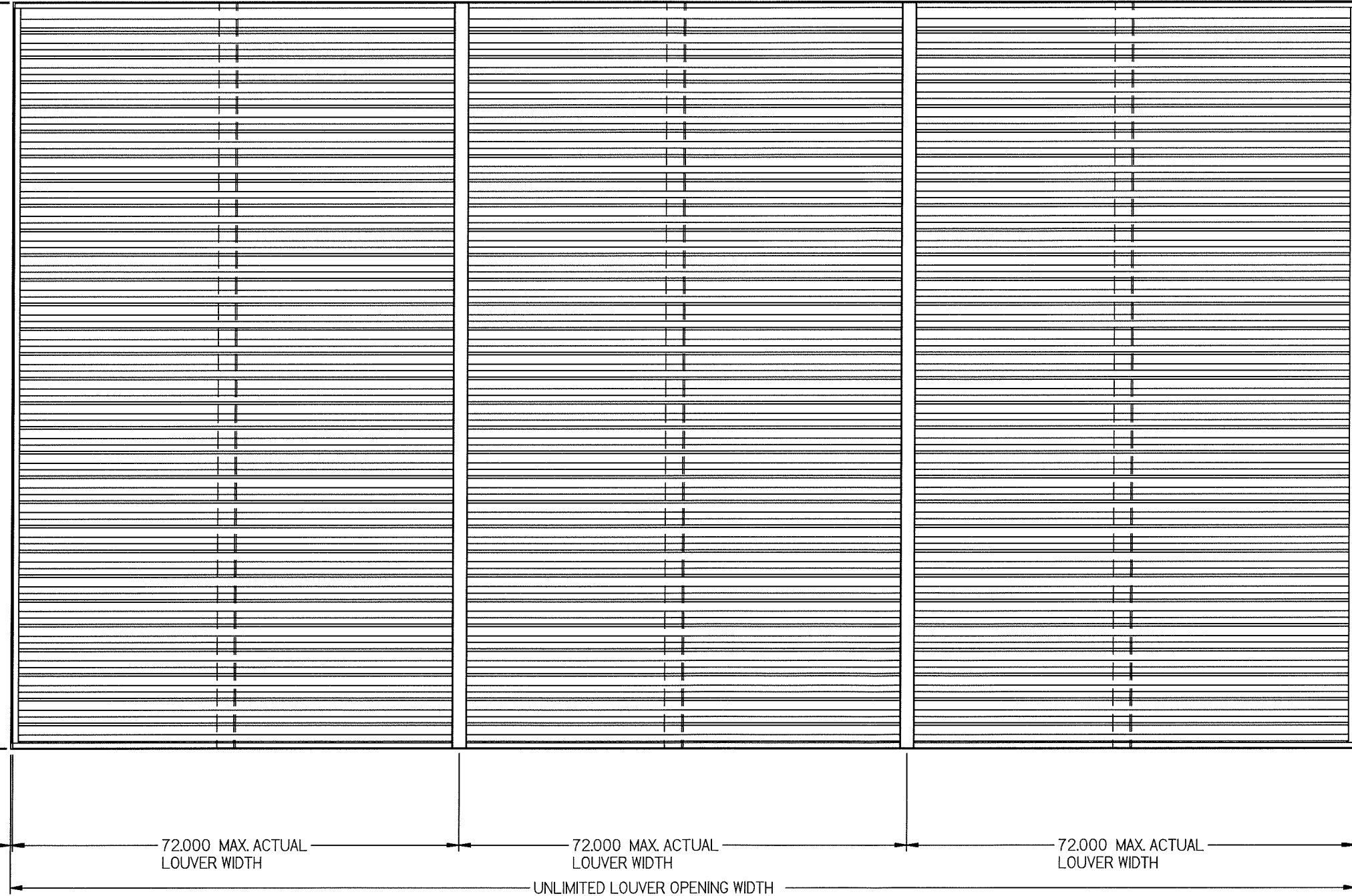
TITLE: 1606DHPM LOUVER  
FLANGE FRAME  
SLEEVE MOUNT

HORIZONTAL CROSS SECTION

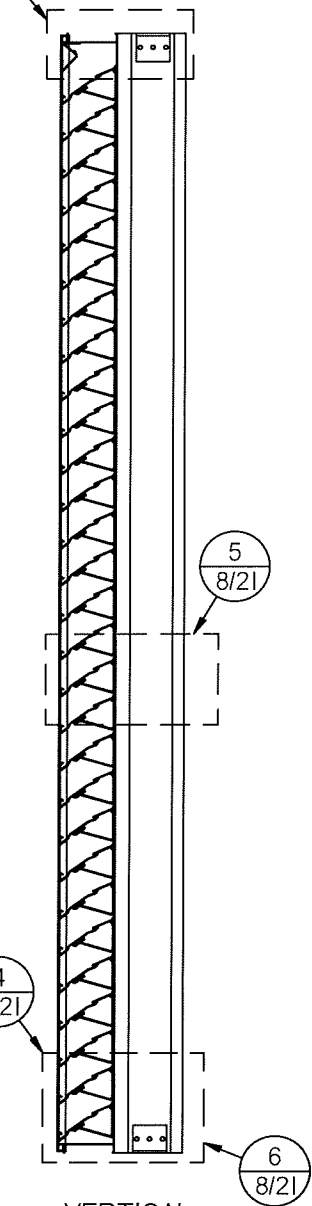
**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0928.03  
Expiration Date 08/30/2028  
By *[Signature]*  
Miami-Dade Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0825.04  
Expiration Date: 08/30/2023  
By: *Manuel Perez*  
Miami-Dade Product Control

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 18-1217-02  
Expiration Date 8/30/2023  
*[Signature]*  
Miami-Dade Product Control



ELEVATION

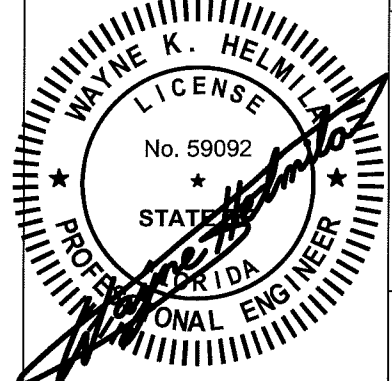


VERTICAL CROSS SECTION



1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel. 708-652-9100 Fax 708-652-9100

TITLE:  
1606DHPM LOUVER  
CONTINUOUS ANGLE MOUNT



COA: 9090

**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

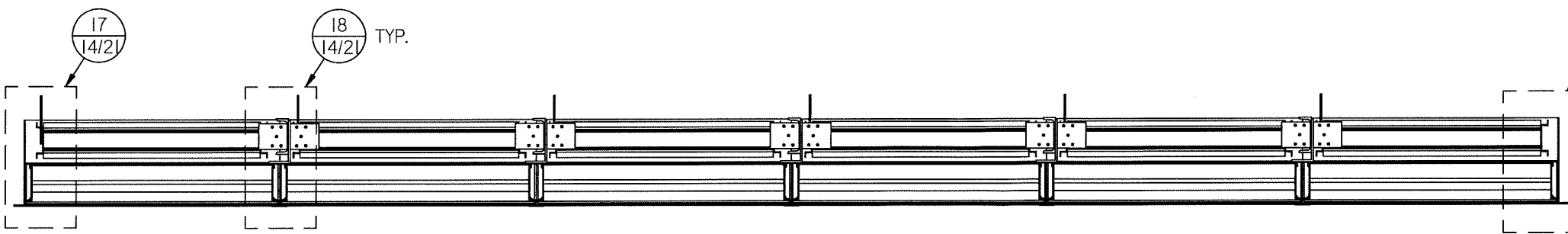
DWN BY: fcortinas CHK BY: Mastourian

DATE: 9/11/2018 SCALE: NTS

SHEET: 3 OF 21

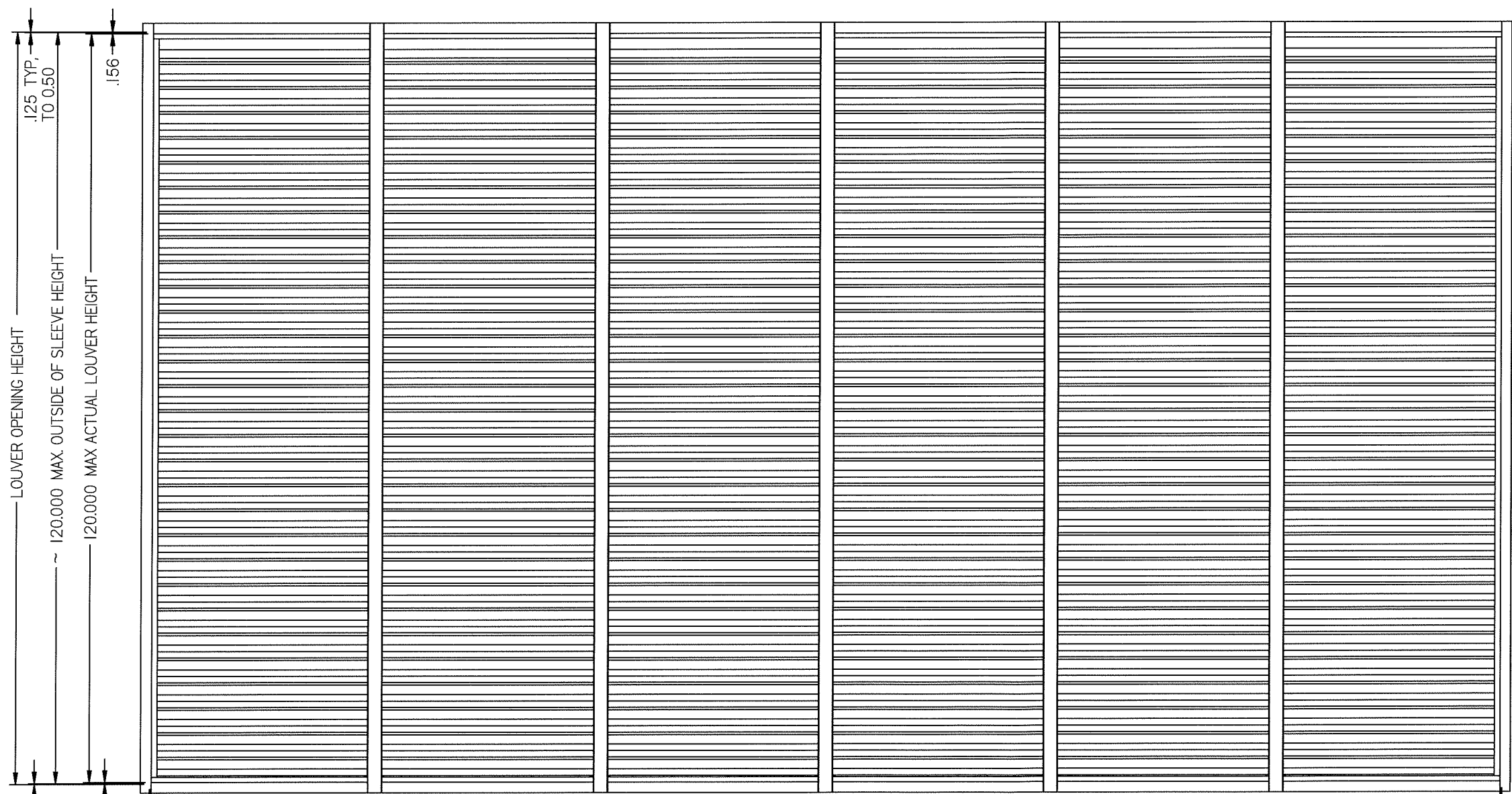
DWG NO: 1606DHPM



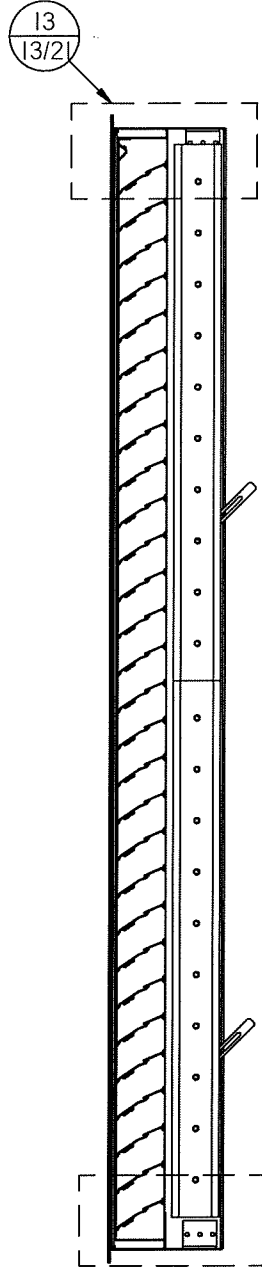


HORIZONTAL CROSS SECTION

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 18-1217.02  
Expiration Date 2/30/2023  
*Ismael I. Chaves*  
Miami-Dade Product Control



ELEVATION



VERTICAL CROSS SECTION

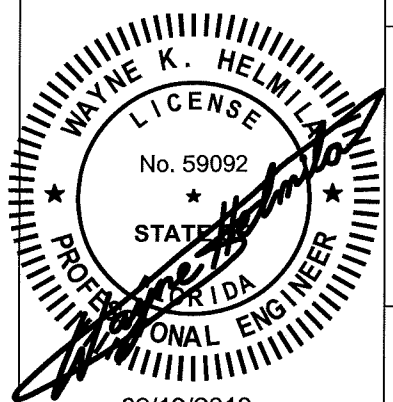
**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0928.03  
Expiration Date 08/30/2028  
By: *[Signature]*  
Miami-Dade Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0825.04  
Expiration Date: 08/30/2023  
By: *Manuel Perez*  
Miami-Dade Product Control



1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel. 708-652-9100 Fax 708-652-9100

TITLE: **1606DHPM / DAMPER  
FLANGE FRAME  
SLEEVE MOUNT**



02/19/2019  
COA: 9090

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

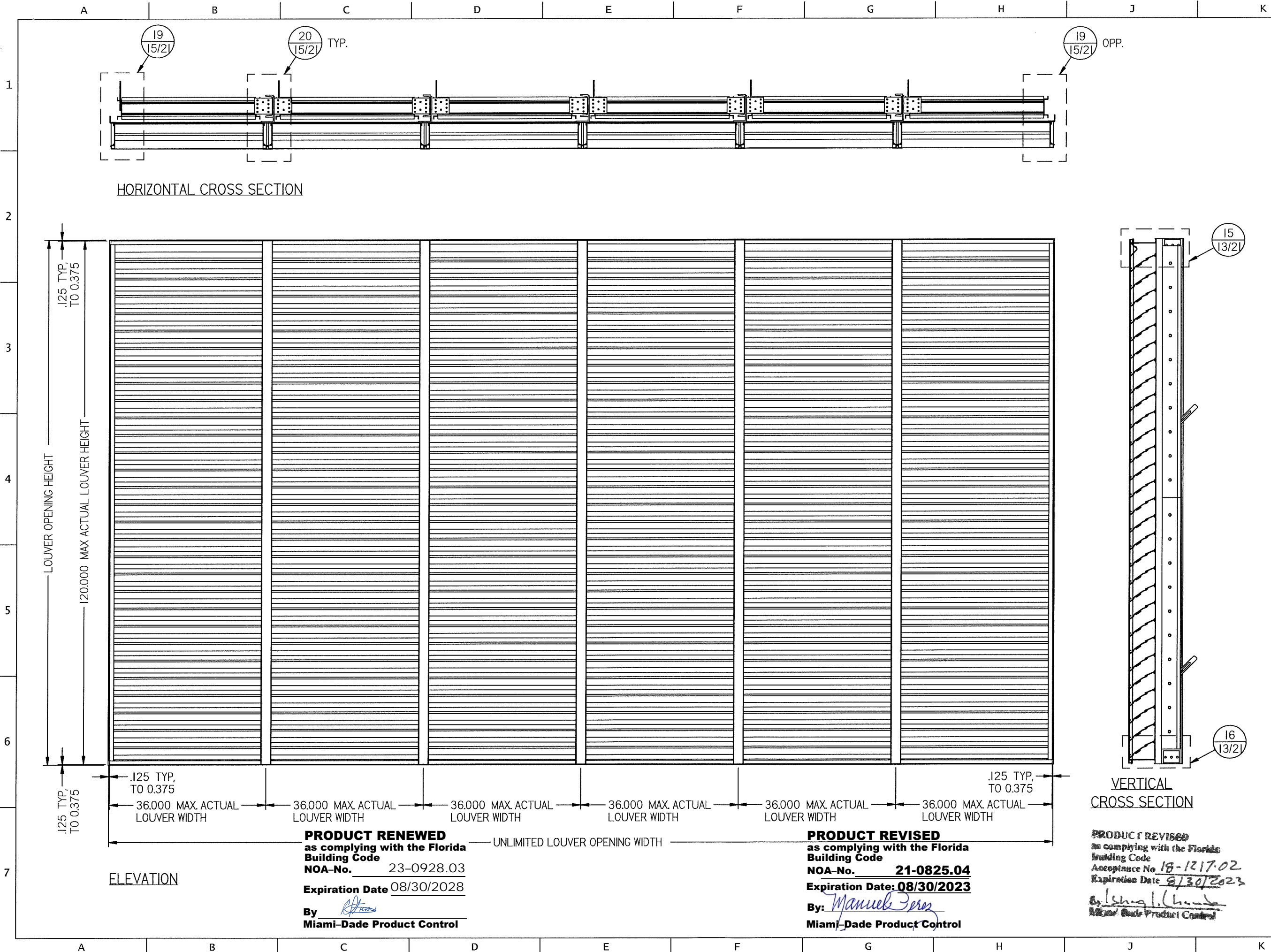
Florida Firm No: F-01000005061  
Certificate of Authorization: #9090  
Wayne K. Helmila  
Registration No: 59092

DWN BY: f cortinas CHK BY: Mastourian

DATE: 9/11/2018 SCALE: NTS


SHEET: 4 OF 21

DWG NO: **1606DHPM**

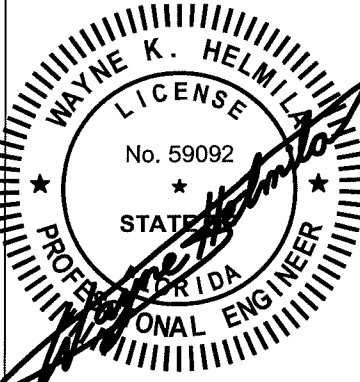


DWN BY: f cortinas		CHK BY: Mastourian	
DATE: 9/11/2018		SCALE: NTS	
SHEET: 5 OF 21			
DWG NO: 1606DHPM		REV: -	

 SAFE-AIR DOWCO N ILLINOIS, LLC. 1855 SOUTH 54TH AVE. CICERO, IL 60804 Tel. 708-652-9100 Fax 708-652-9100	TITLE: 1606DHPM / DAMPER CONTINUOUS ANGLE MOUNT
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 02/19/2019 COA: 9090	<b>RICE</b> 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
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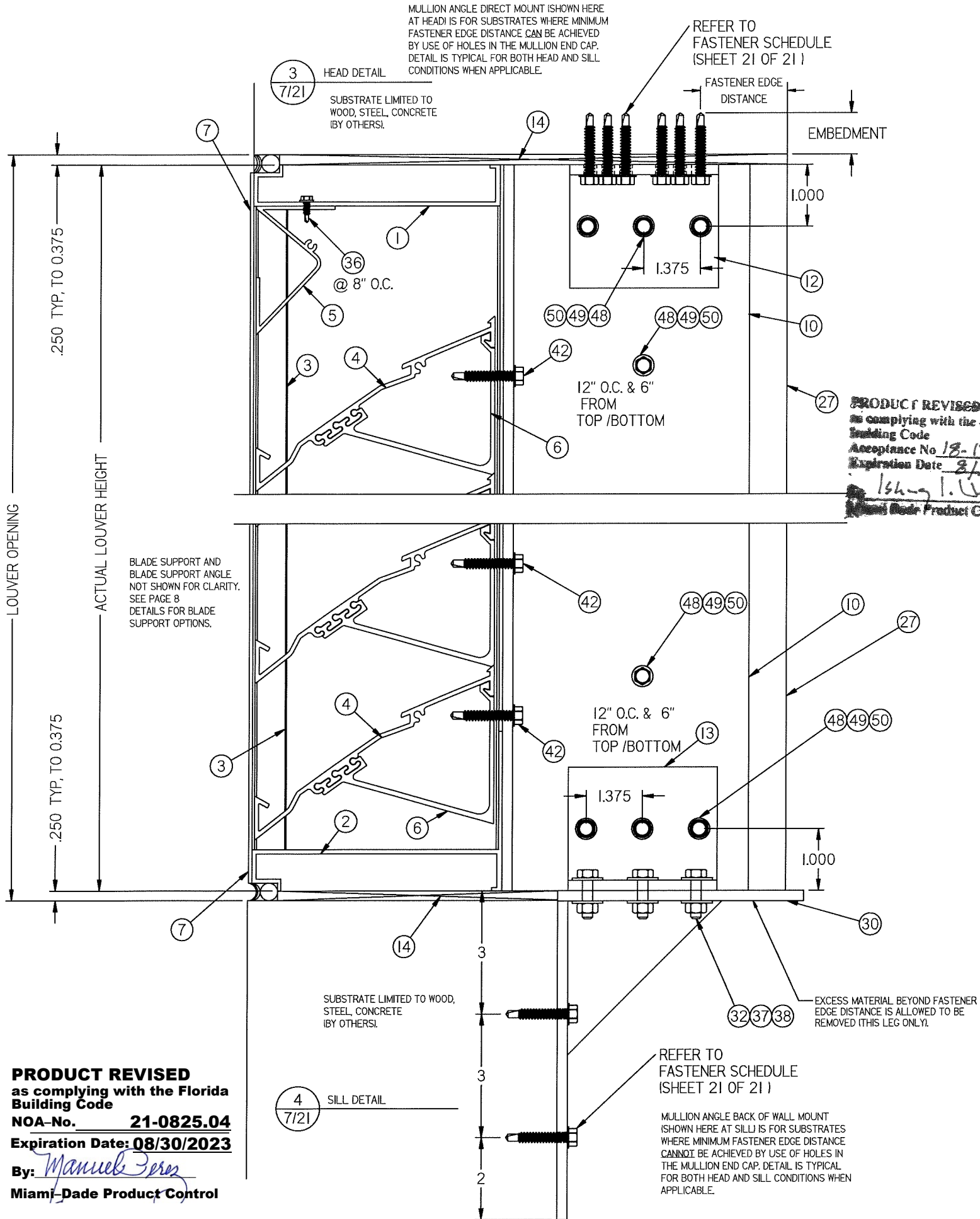
PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 18-1217-02  
Expiration Date 8/30/2023  
By: Manuel Jerez  
Miami-Dade Product Control





1  
2  
3  
4  
5  
6  
7

A B C D E F G H J K L



**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0928.03  
Expiration Date 08/30/2028  
By *Manuel Perez*  
Miami-Dade Product Control

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Expiration Date: 08/30/2023  
By *Manuel Perez*  
Miami-Dade Product Control

DWN BY: fcortinas		CHK BY: Mastourian
DATE: 9/11/2018		SCALE: NTS
SHEET: 7 OF 21		
DWG NO: 1606DHPM		
REV -		

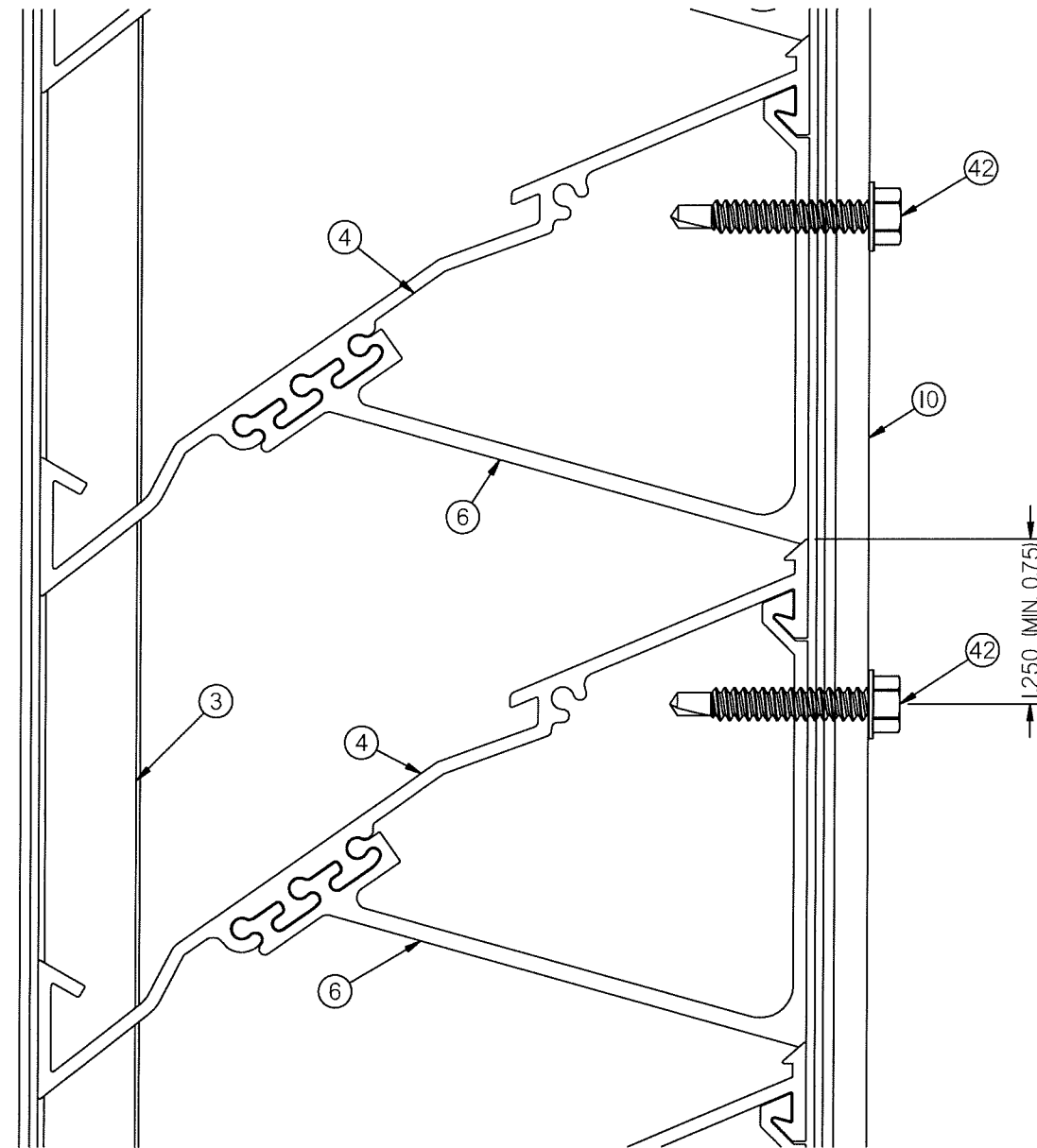
NI ILLINOIS, LLC.  
1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel: 708-652-9100 Fax 708-652-9100

TITLE: 1606DHPM LOUVER  
MULLION ANGLE MOUNT  
HEAD & SILL DETAILS

WAYNE K. HELMILA  
LICENSE  
No. 59092  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
02/19/2019  
COA: 9090

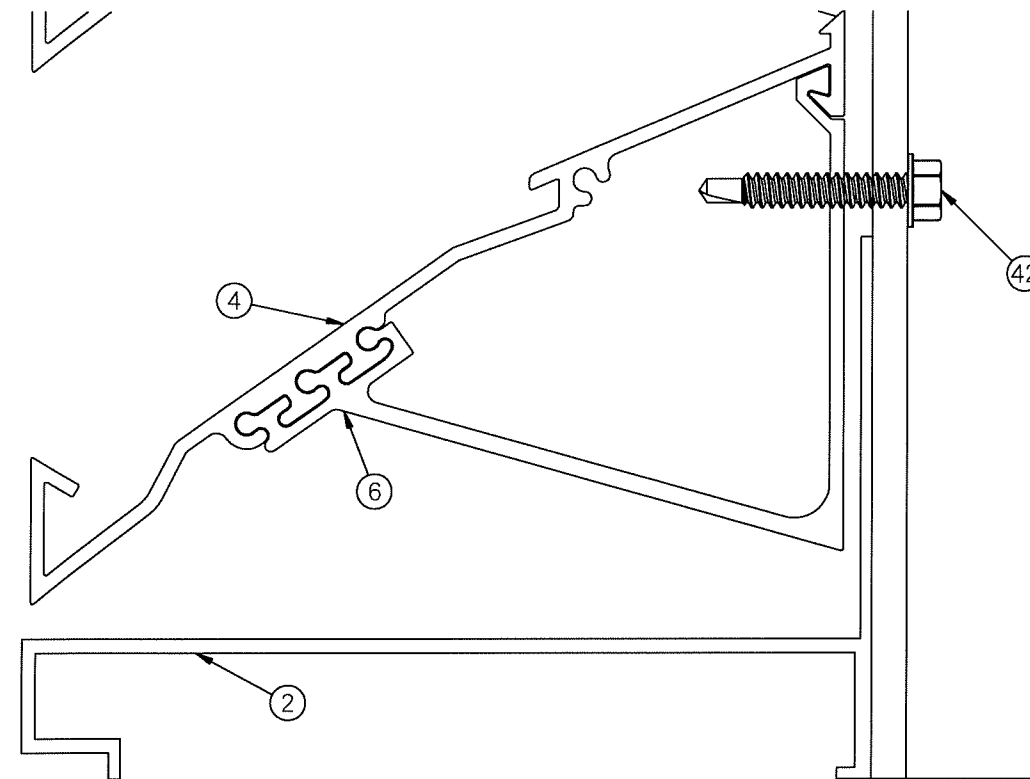
**RICE**  
ENGINEERING  
105 School Creek Trail  
Luxemburg, WI 54217  
Phone: (920) 617-1042  
Fax: (920) 617-1100  
www.rice-inc.com  
Florida Firm No: F-01000005061  
Certificate of Authorization: #9090  
Wayne K. Helmila  
Registration No: 59092

A B C D E F G H J K L



5 BLADE SUPPORT DETAIL  
8/21

NOTE: THE BLADE SUPPORT ANGLE (ITEM 10) IS NOT SHOWN IN THE DETAILS IN ORDER TO IMPROVE CLARITY. THE BLADE SUPPORT ANGLE IS ATTACHED TO THE BLADE SUPPORT BRACE (ITEM 6).  
BLADE SUPPORT BRACKET 6 (SHOWN) IS ANY OF THE DRAWINGS FOR DETAIL 6.



6 BOTTOM BLADE SUPPORT DETAIL  
8/21

**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0928.03  
Expiration Date 08/30/2028  
By [Signature]  
Miami-Dade Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0825.04  
Expiration Date: 08/30/2023  
By Manuel Perez  
Miami-Dade Product Control

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 18-1217.02  
Expiration Date 8/30/2023  
By Khay L. Chandra  
Miami-Dade Product Control

**safe·AIR**  
**DOVCO**  
N ILLINOIS, LLC.  
1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel. 708-652-9100 Fax 708-652-9100  
TITLE: **1606DHPM LOUVER  
BLADE SUPPORT DETAIL**

**WAYNE K. HELMILA**  
LICENSE  
No. 59092  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
02/19/2019

COA: 9090  
**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

DWN BY: fcortinas  
CHK BY: Mastourian  
DATE: 9/11/2018  
SCALE: NTS  
SHEET: 8 OF 21  
DWG NO: **1606DHPM**  
REV: -





SUBSTRATE LIMITED TO WOOD,  
STEEL, CONCRETE AND MASONRY  
(CMU) (BY OTHERS).

EMBEDMENT

REFER TO  
FASTENER SCHEDULE  
(SHEET 21 OF 21)

9B

1.000 MIN.

EDGE  
DISTANCE

42 3" O.C.  
SPACING

40 4 PER BLADE @ EACH END

ALTERNATE ORIENTATION  
(CAUTION, BOLT CLEARANCE)

.625

14

4

2

.125 TYP, TO 0.375

ACTUAL OVERALL LOUVER WIDTH,  
ACTUAL LOUVER SECTION WIDTH,

LOUVER OPENING

9  
10/21

JAMB DETAIL

REFER TO  
FASTENER SCHEDULE  
(SHEET 21 OF 21)

27

12

10

48

49

50

42

42

42

42

@ 6" O.C.

SUPPORT NOT ATTACHED  
AT HEAD AND SILL AS  
TO ALLOW IT TO "FLOAT"  
DURING BLADE LOADING.

6

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. **21-0825.04**  
Expiration Date: **08/30/2023**  
By: *Manuel Perez*  
Miami-Dade Product Control

4.500

4

2

MULLION ANGLE DIRECT MOUNT

10  
10/21

SUPPORT DETAIL

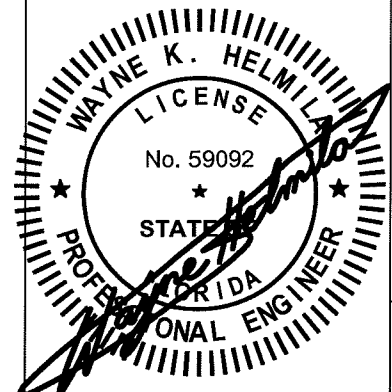
**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. **23-0928.03**  
Expiration Date **08/30/2028**  
By: *R. H. [Signature]*  
Miami-Dade Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. **18-1217-02**  
Expiration Date **8/30/2023**  
By: *Isaac J. [Signature]*  
Miami-Dade Product Control



NI ILLINOIS, LLC.  
1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel. 708-652-9100 Fax 708-652-9100

TITLE: 1606DHPM LOUVER  
COUNTINOUS ANGLE MOUNT  
JAMB DETAIL



COA: 9090

**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

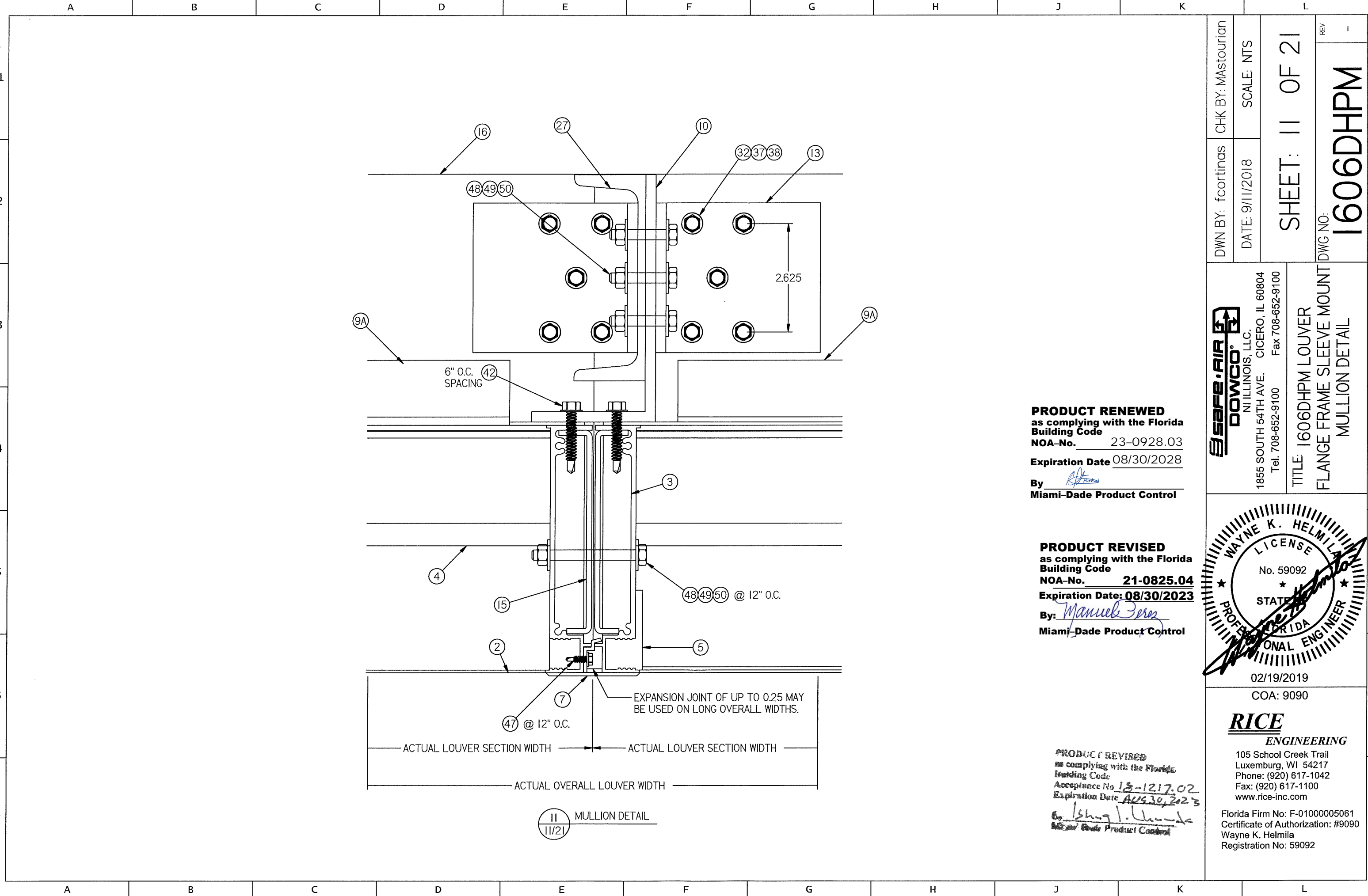
DWN BY: fcoirtinas

DATE: 9/11/2018

SCALE: NTS

SHEET: 10 OF 21

CHK BY: Mastourian  
DWG NO: 1606DHPM  
REV -



**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0928.03  
Expiration Date 08/30/2028  
By: [Signature]  
Miami-Dade Product Control

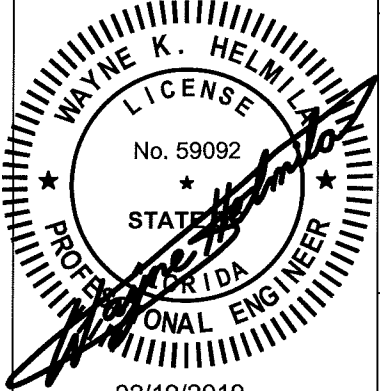
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0825.04  
Expiration Date: 08/30/2023  
By: Manuel Perez  
Miami-Dade Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. 18-1217.02  
Expiration Date AUG 30, 2023  
By: [Signature]  
Miami-Dade Product Control



NI ILLINOIS, LLC.  
1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel. 708-652-9100 Fax 708-652-9100

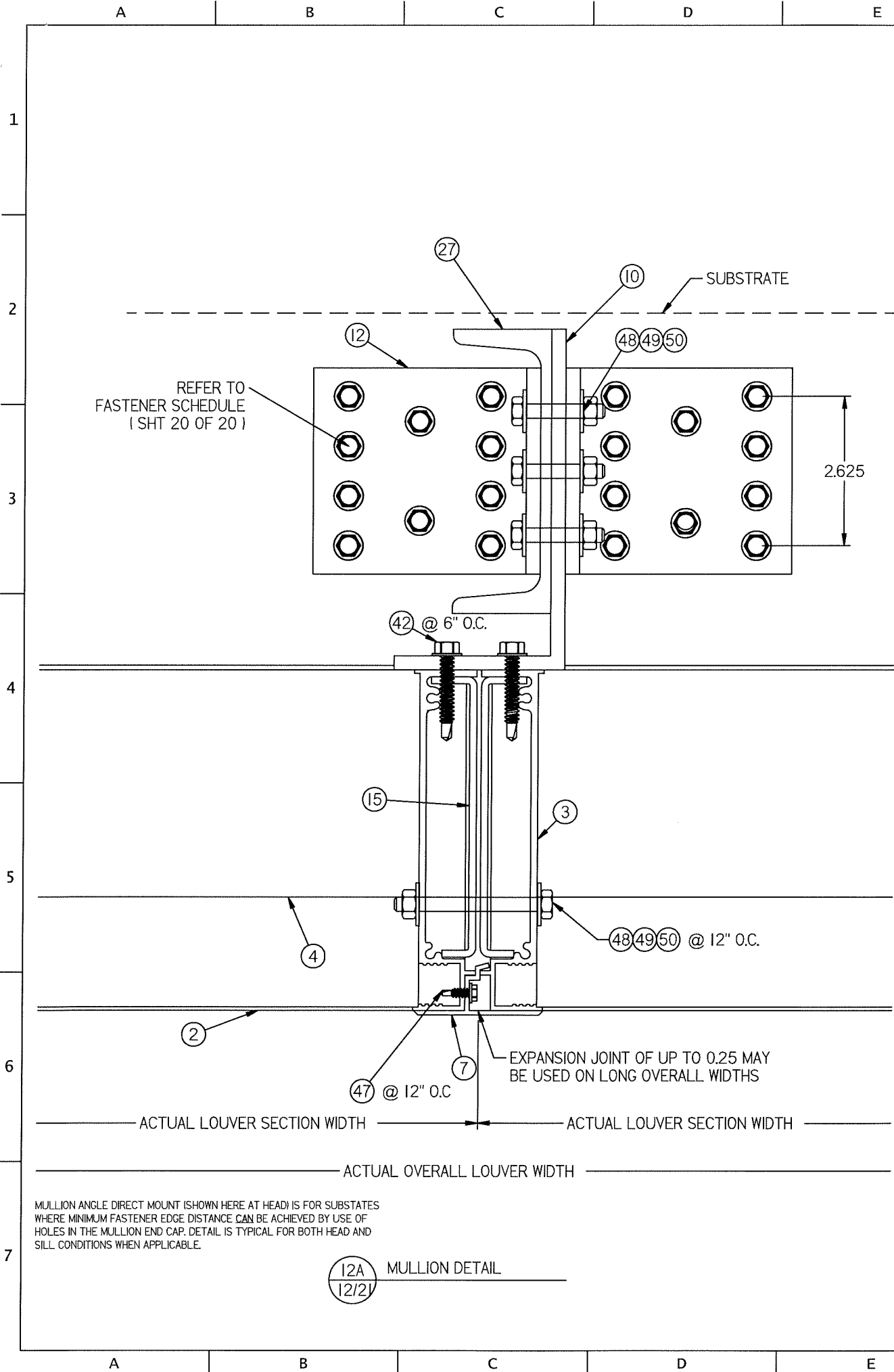
TITLE: 1606DHPM LOUVER  
FLANGE FRAME SLEEVE MOUNT  
MULLION DETAIL



COA: 9090  
**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

DWN BY: fcortinas  
CHK BY: Mastourian  
DATE: 9/11/2018  
SCALE: NTS  
SHEET: 11 OF 21  
DWG NO: 1606DHPM  
REV: -



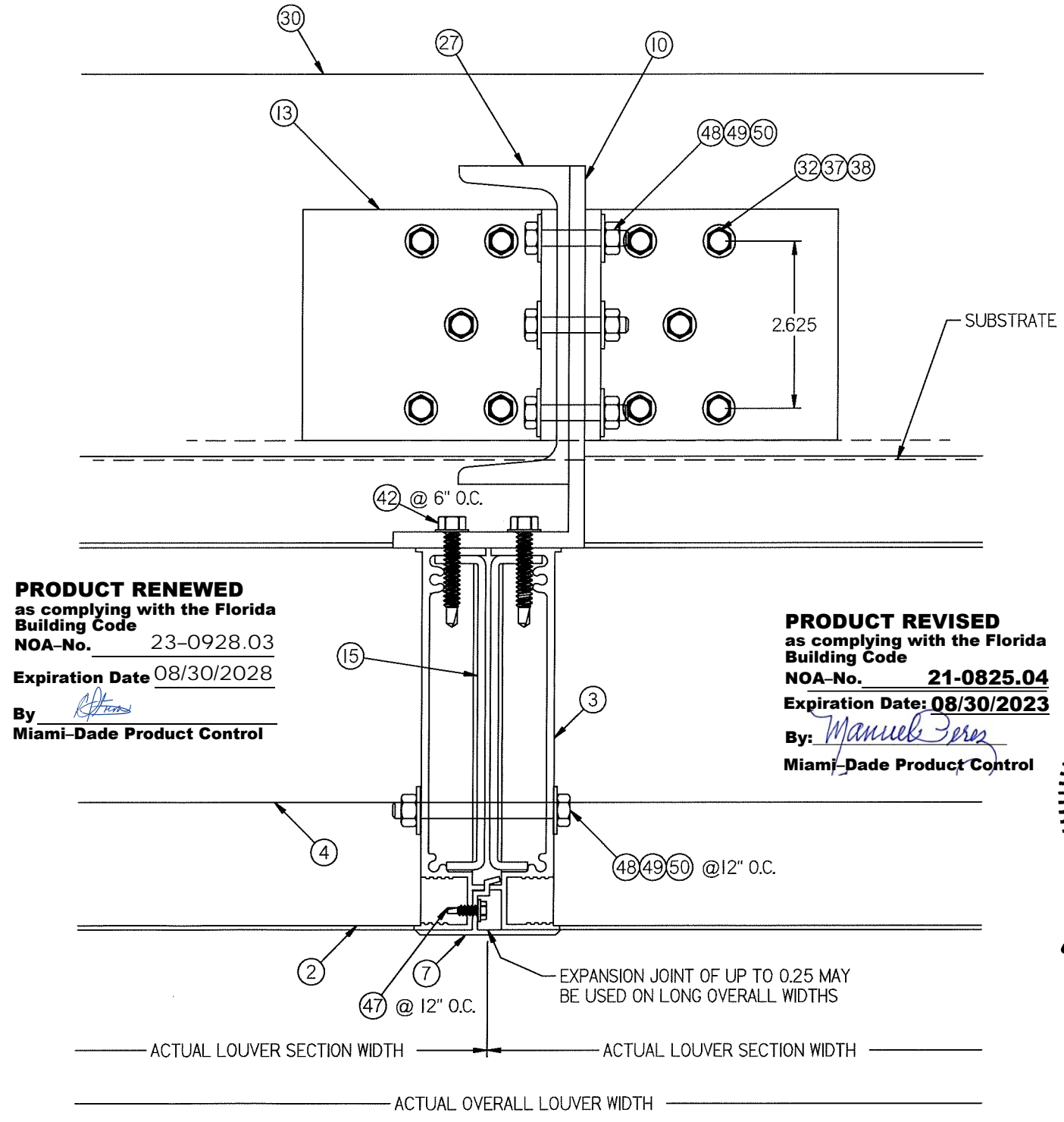


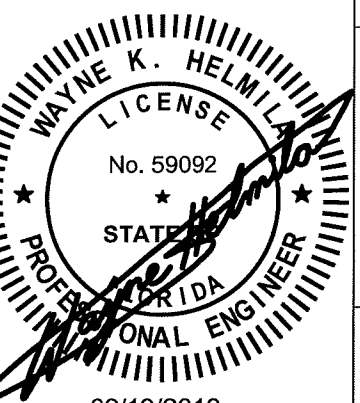
**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0928.03  
Expiration Date 08/30/2028  
By *[Signature]*  
Miami-Dade Product Control

MULLION ANGLE BACK OF WALL MOUNT (SHOWN HERE AT SILL) IS FOR  
SUBSTATES WHERE MINIMUM FASTENER EDGE DISTANCE CANNOT BE  
ACHIEVED BY USE OF HOLES IN THE MULLION END CAP. DETAIL IS  
TYPICAL FOR BOTH HEAD AND SILL CONDITIONS WHEN APPLICABLE.

**12B** MULLION DETAIL  
12/21

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. 18-1217-02  
Expiration Date 8/30/2023  
By *[Signature]*  
Miami-Dade Product Control



DWN BY: fcoortinas	CHK BY: Mastourian
DATE: 9/11/2018	SCALE: NTS
SHEET: 12 OF 21	
DWG NO: 1606DHPM	
REV: -	
<b>SAFE-AIR</b> <b>DOWCO</b> NI ILLINOIS, LLC. 1855 SOUTH 54TH AVE. CICERO, IL 60804 Tel. 708-652-9100 Fax 708-652-9100	
TITLE: 1606DHPM LOUVER COUNTINOUS ANGLE MOUNT MULLION DETAIL	
	
COA: 9090	
<b>RICE</b> 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. Helmla Registration No: 59092	

SUBSTRATE LIMITED TO WOOD,  
STEEL, CONCRETE (BY OTHERS)

5356 FILLER  
ALLOY  
@ JAMBS &  
MULLION  
LOCATIONS

.125 8" @ 6" O.C.

.125 8" @ 12" O.C.

.125 8" @ 8" O.C.

.125 8" @ 6" O.C.

.125 8" @ 6" O.C.

.125 8" @ 6" O.C.

.125 8" @ 6" O.C.

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.125 8" @ 6" O.C.

BUILDING STRUCTURE / DEPTH MAY VARY.  
BUILDING STRUCTURES INCLUDE BUT NOT  
LIMITED TO WOOD FRAME, STRUCTURAL STEEL,  
AND CONCRETE (BY OTHERS).

5356 FILLER  
ALLOY  
@ JAMBS &  
MULLION  
LOCATIONS

.125 8" @ 6" O.C.

.125 8" @ 12" O.C.

.125 8" @ 8" O.C.

.125 8" @ 6" O.C.

.125 8" @ 6" O.C.

.125 8" @ 6" O.C.

.125 8" @ 6" O.C.

.125 8" @ 6" O.C.

.125 8" @ 6" O.C.

HEAD DETAIL

13  
13/21

**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0928.03  
Expiration Date 08/30/2028  
By *RHT*  
Miami-Dade Product Control

2010 DAMPER

SILL DETAIL

14  
13/21

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0825.04  
Expiration Date: 08/30/2023  
By: *Manuel Perez*  
Miami-Dade Product Control

REFER TO  
FASTENER SCHEDULE  
(SHT 21 OF 21)

HEAD DETAIL

15  
13/21

EMBEDMENT

1.000

1.375

1.000

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REFER TO  
FASTENER SCHEDULE  
(SHEET 21 OF 21)

SILL DETAIL

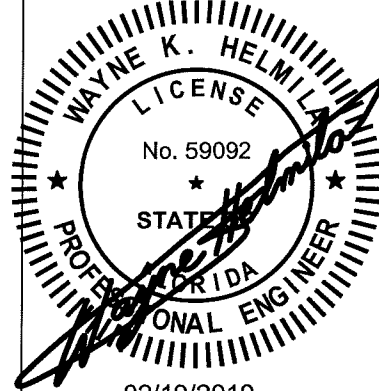
16  
13/21

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. 15-1217.02  
Expiration Date: 8/30/2023  
By: *Manuel Perez*  
Miami-Dade Product Control



1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel. 708-652-9100 Fax 708-652-9100

TITLE: 1606DHPM LOUVER / DAMPER  
FLANGE FRAME W/SLEEVE  
MULLION ANGLE MOUNT  
HEAD & SILL DETAIL



02/19/2019

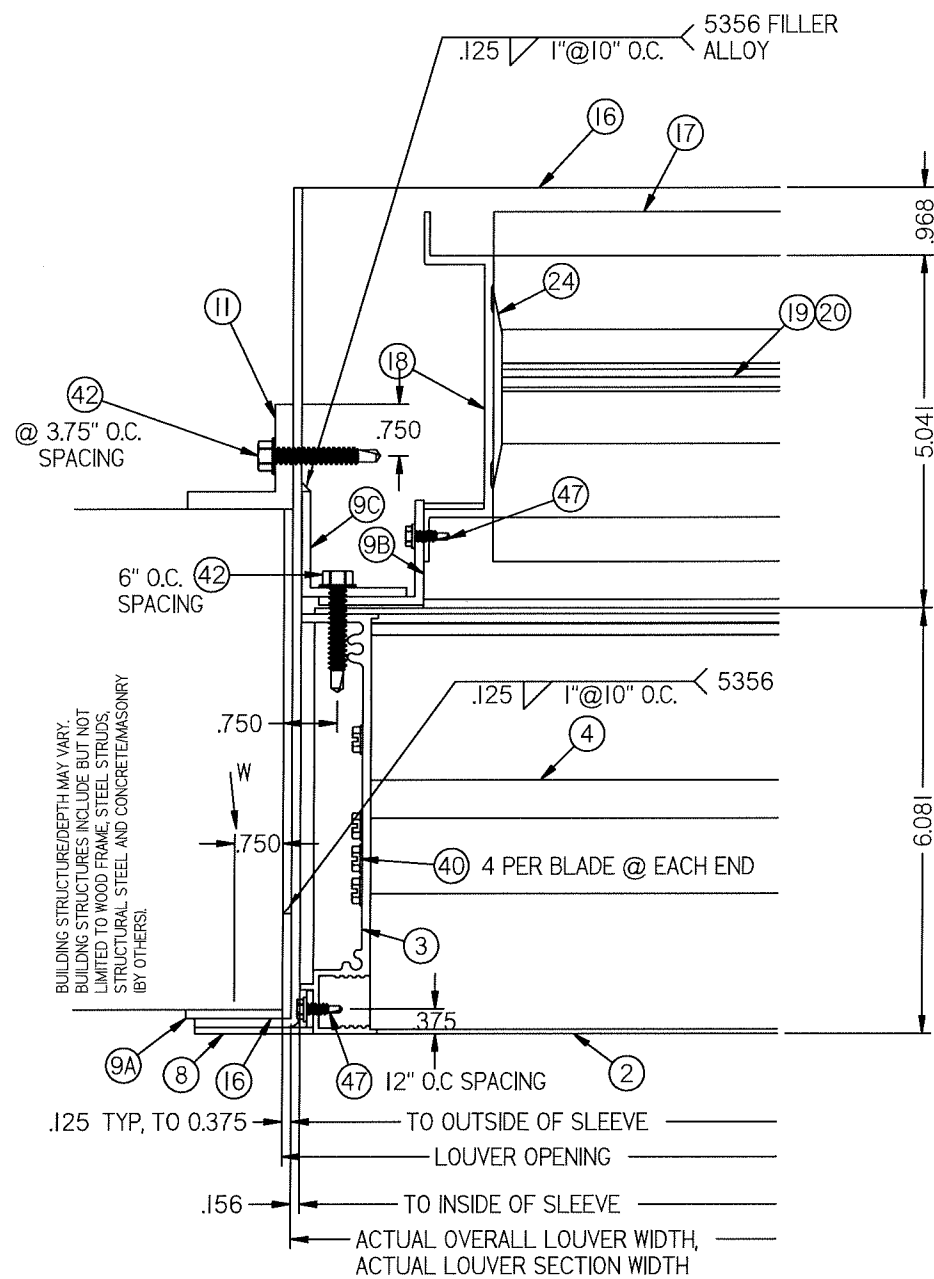
COA: 9090

**RICE**

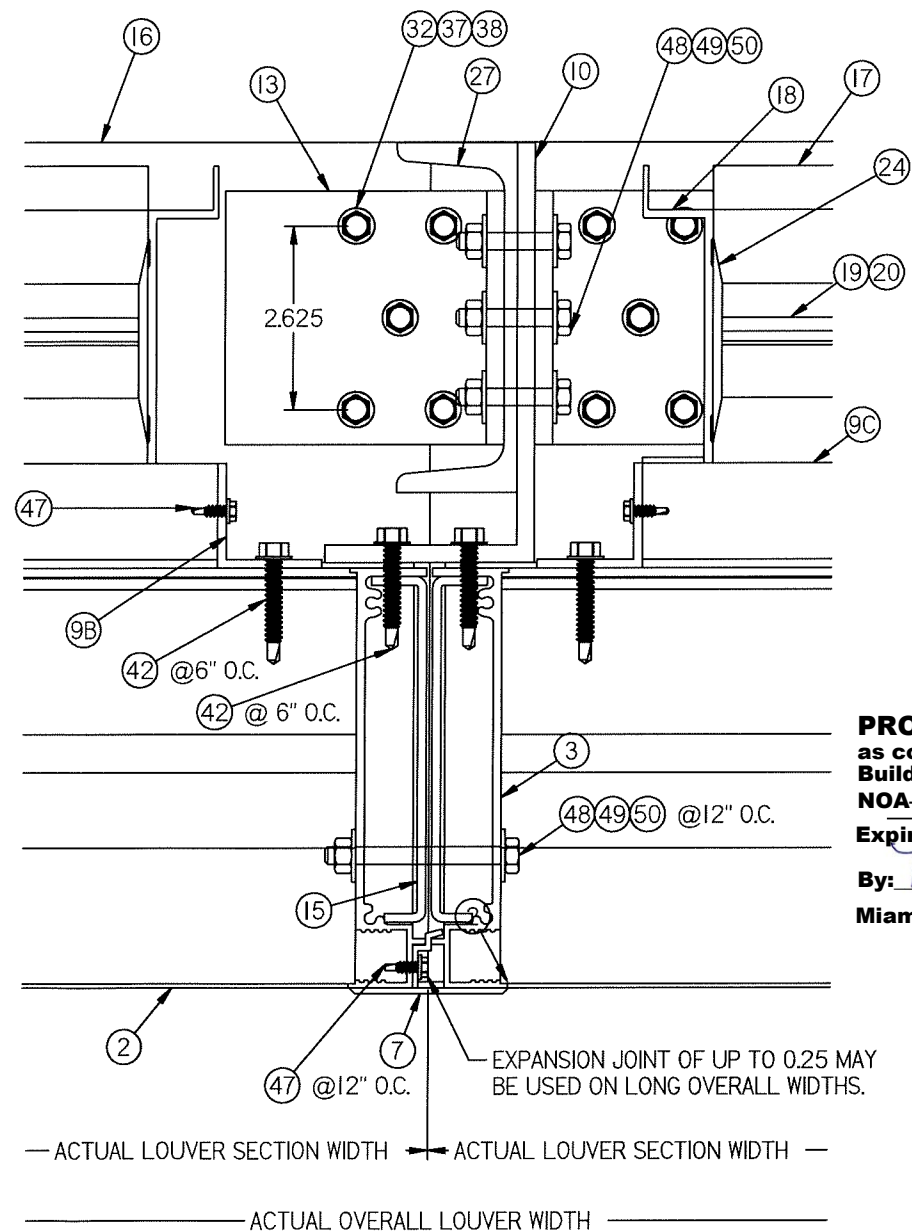
ENGINEERING

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



**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0928.03  
Expiration Date 08/30/2028  
By *[Signature]*  
Miami-Dade Product Control

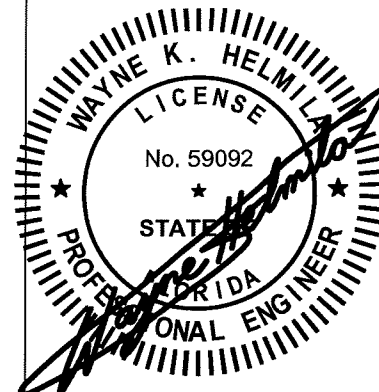


**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0825.04  
Expiration Date: 08/30/2023  
By: *[Signature]*  
Miami-Dade Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. 18-1217.02  
Expiration Date 8/30/2023  
By: *[Signature]*  
Miami-Dade Product Control



NI ILLINOIS, LLC.  
1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel. 708-652-9100 Fax 708-652-9100



**RICE**

ENGINEERING

105 School Creek Trail  
Luxemburg, WI 54217  
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www.rice-inc.com

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

DWN BY: fcoortinas  
DATE: 9/11/2018  
CHK BY: Mastourian  
SCALE: NTS  
SHEET: 14 OF 21  
DWG NO: 1606DHPM  
REV: -



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REFER TO  
FASTENER SCHEDULE  
(SHEET 21 OF 21)

EDGE  
DISTANCE

ALTERNATE ORIENTATION  
(CAUTION, BOLT CLEARANCE)

SUBSTRATE LIMITED TO WOOD,  
STEEL, CONCRETE AND MASONRY  
(CMU) (BY OTHERS).

.125 TYP, TO 0.375

19 JAMB DETAIL  
15/21

**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0928.03  
Expiration Date 08/30/2028  
By *[Signature]*  
Miami-Dade Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0825.04  
Expiration Date: 08/30/2023  
By *Manuel Perez*  
Miami-Dade Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. 18-1217-02  
Expiration Date 8/30/2023  
By *[Signature]*  
Miami-Dade Product Control

20 MULLION DETAIL  
15/21

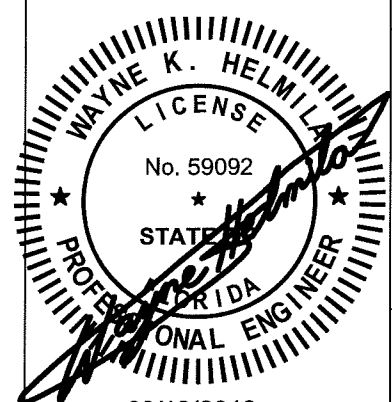
REFER TO  
FASTENER SCHEDULE  
(SHT 20 of 20)

EXPANSION JOINT OF UP TO 0.25 MAY  
BE USED ON LONG OVERALL WIDTHS.

— ACTUAL LOUVER SECTION WIDTH —  
— ACTUAL LOUVER SECTION WIDTH —  
— ACTUAL OVERALL LOUVER WIDTH —



NI ILLINOIS, LLC.  
1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel. 708-652-9100 Fax 708-652-9100



02/19/2019

COA: 9090

**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

DWN BY: fcortinas CHK BY: Mastourian

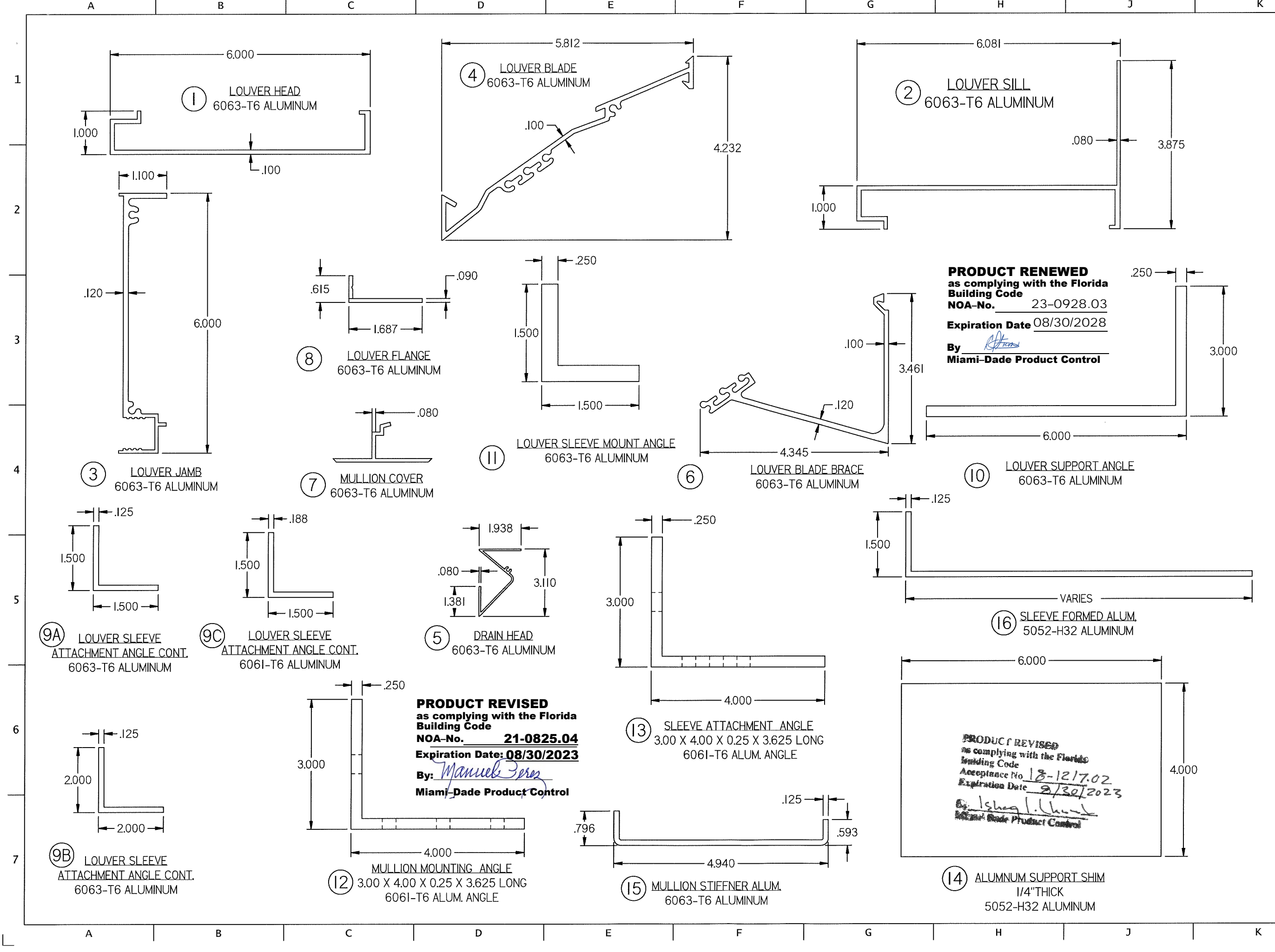
DATE: 9/11/2018

SCALE: NTS

SHEET: 15 OF 21

DWG NO: 1606DHPM

REV -



DWN BY: fcortinas		CHK BY: Mastourian
DATE: 9/11/2018		SCALE: NTS
SHEET: 16 OF 21		
DWG NO: 1606DHPM		REV: 1

NI ILLINOIS, LLC.  
1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel. 708-652-9100 Fax 708-652-9100

TITLE: 1606DHPM LOUVER,  
W/ AND W/O DAMPER  
SLEEVE/CONTINUOUS MOUNT  
PART PROFILES

COA: 9090

**RICE**  
ENGINEERING

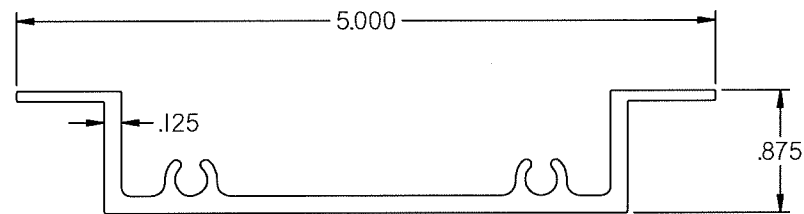
105 School Creek Trail  
Luxemburg, WI 54217  
Phone: (920) 617-1042  
Fax: (920) 617-1100  
www.rice-inc.com

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

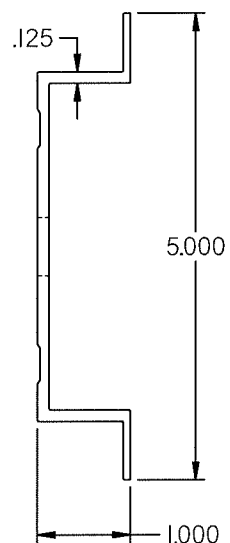
**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0928.03  
Expiration Date 08/30/2028  
By *[Signature]*  
Miami-Dade Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0825.04  
Expiration Date: 08/30/2023  
By: *Manuel Perez*  
Miami-Dade Product Control

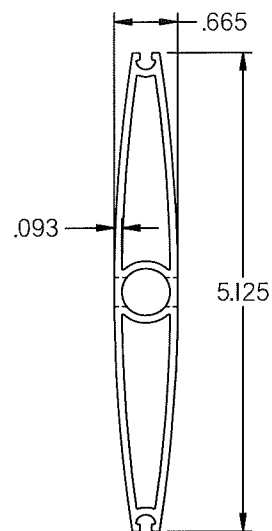
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. 18-1217.02  
Expiration Date 9/30/2023  
By: *[Signature]*  
Miami-Dade Product Control



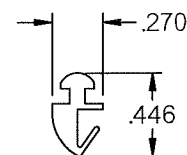
(17) DAMPER HEAD/SILL  
6063-T6 ALUMINUM



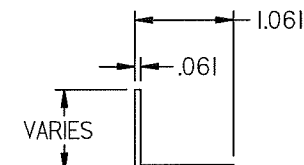
(18) DAMPER JAMB  
6063-T6 ALUMINUM



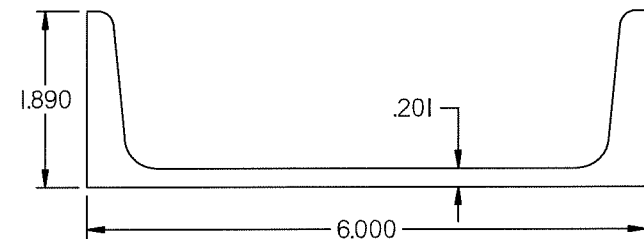
(19) DAMPER BLADE  
6063-T6 ALUMINUM



(20) DAMPER BLADE SEAL  
MATERIAL VARIES



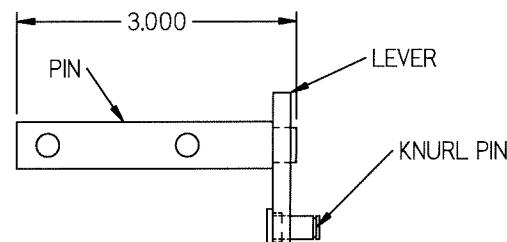
(21) DAMPER TOP/BOTTOM  
CLOSER  
ALUMINUM



(27) LOUVER BRACE  
SUPPORT CHANNEL  
C6X8.2 ASTM A36 STEEL CHANNEL



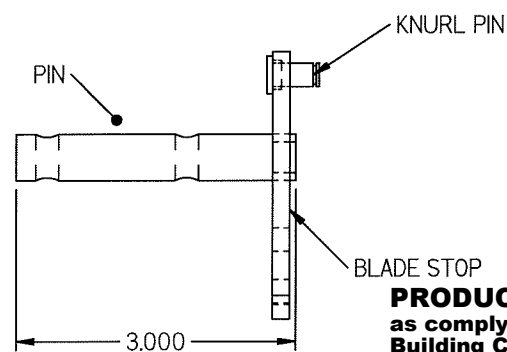
(22) DAMPER BUSHING  
MATERIAL VARIES



(25) NON DRIVE DAMPER AXEL ASM  
MATERIAL VARIES



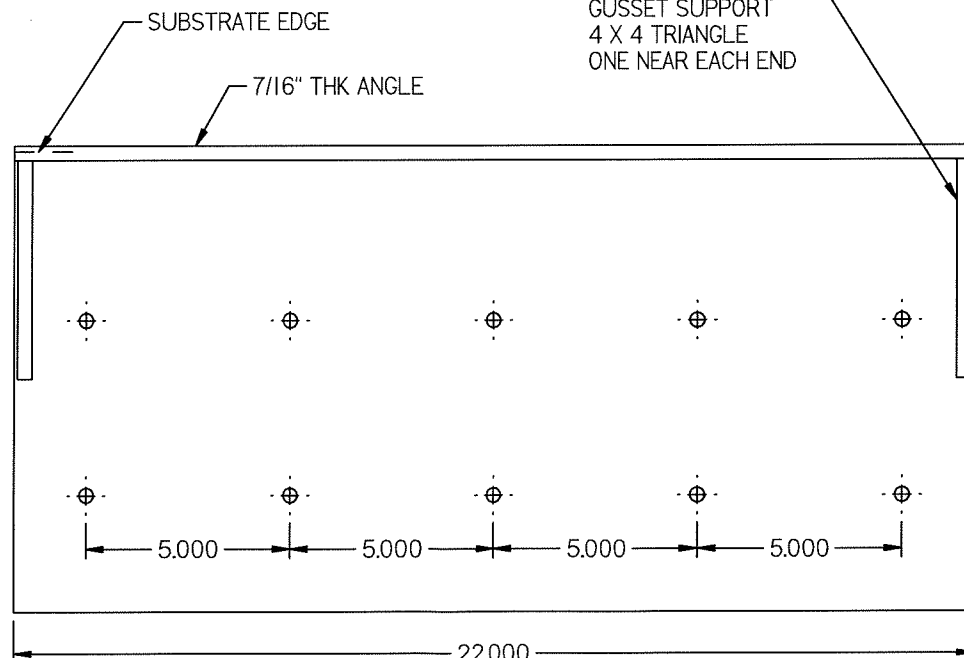
(23) DAMPER LINKAGE BAR  
MATERIAL VARIES



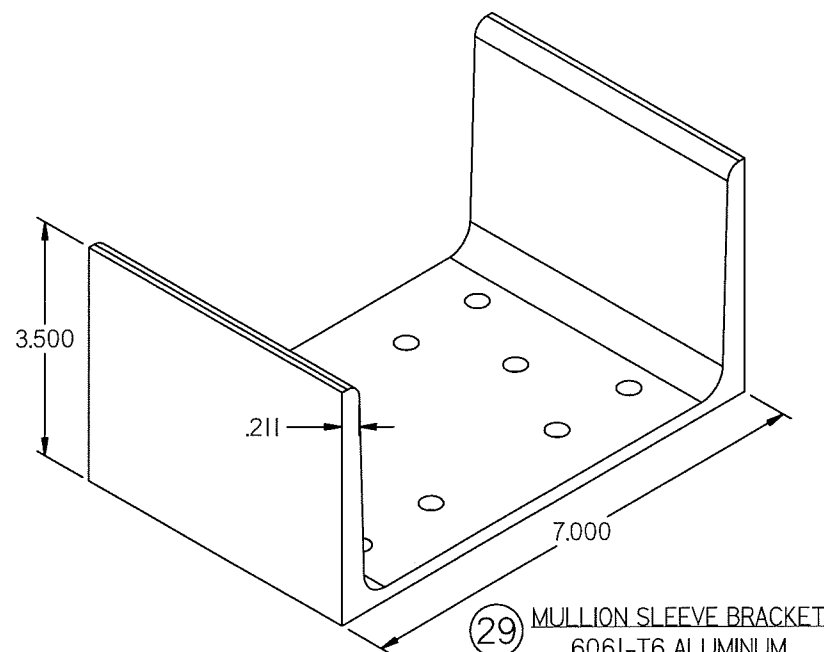
(26) DRIVE SIDE DAMPER AXLE ASM  
MATERIAL VARIES



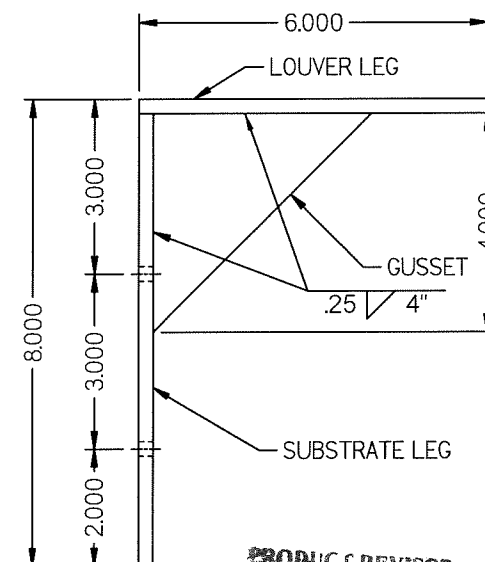
(24) DAMPER JAMB SEAL  
STAINLESS STEEL



(30) MULLION MOUNTING BRACKET  
FOR MULLION ANGLE BACK OF WALL MOUNT  
ASTM A36



(29) MULLION SLEEVE BRACKET  
6061-T6 ALUMINUM



1/2" DIA HILTI KWIK HUS-EZ ANCHOR

USE (10) 1/2" HILTI KWIK HUS-EZ  
4-1/4" EMBEDMENT  
5" SPACING (HORIZ.) / 3" SPACING (VERT.)  
3" MIN. EDGE / END DISTANCE  
SPACING AS SHOWN  
ASSUME:  $f_c' = 4000$  PSI UNCRACKED CONCRETE

**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0928.03  
Expiration Date 08/30/2028  
By *[Signature]*  
Miami-Dade Product Control

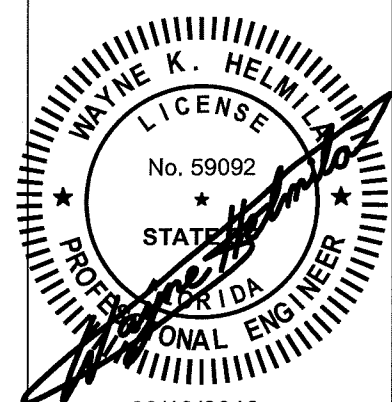
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. 18-1217.02  
Expiration Date 8/30/2023  
By *[Signature]*  
Miami-Dade Product Control

**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
NOA-No. 21-0825.04  
Expiration Date: 08/30/2023  
By: *[Signature]*  
Miami-Dade Product Control



NI ILLINOIS, LLC.  
1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel. 708-652-9100 Fax 708-652-9100

TITLE: 1606DHPM LOUVER  
W/ AND W/O DAMPER  
SLEEVE/CONTINUOUS MOUNT  
PART PROFILES



02/19/2019

COA: 9090

**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

DWN BY: fcorinas

DATE: 9/11/2018

SCALE: NTS

SHEET: 17 OF 21

DWG NO:

1606DHPM

REV

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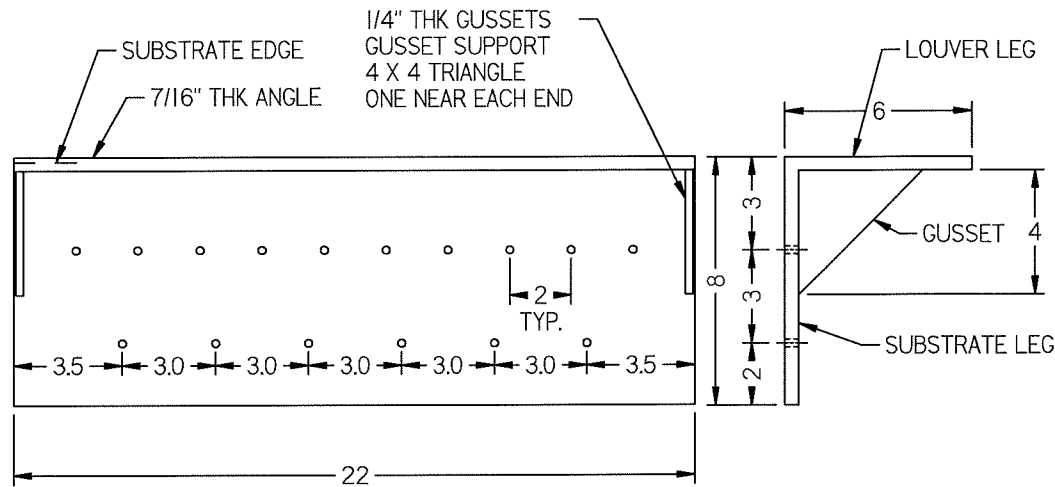
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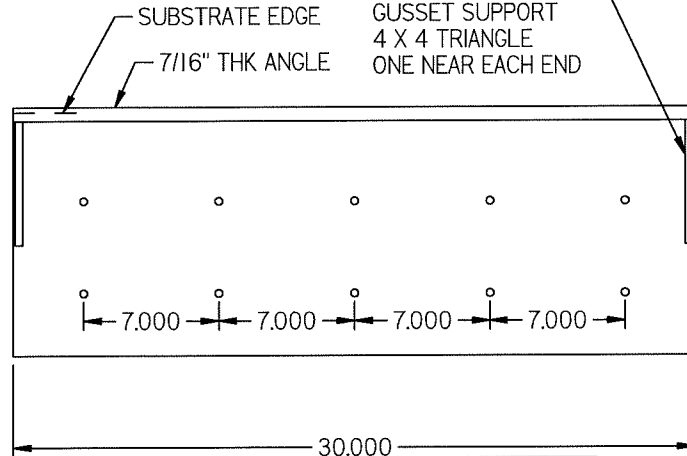


1/4" DIA LAG SCREWS ANCHORS:

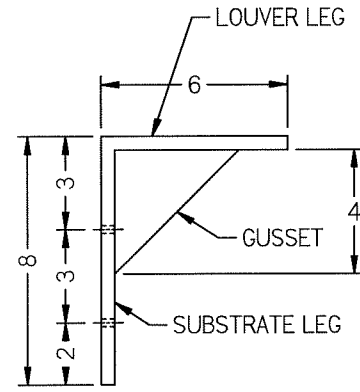
USE (16) 1/4" DIA. X 6" LONG  
STANDARD HEX LAG SCREW  
6" FULL THREAD ENGAGEMENT  
1" MIN. EDGE/END DISTANCE  
SPACING AS SHOWN  
ASSUME: SPRUCE/PINE/FIR, SG=0.42



1/4" THK GUSSETS  
GUSSET SUPPORT  
4 X 4 TRIANGLE  
ONE NEAR EACH END

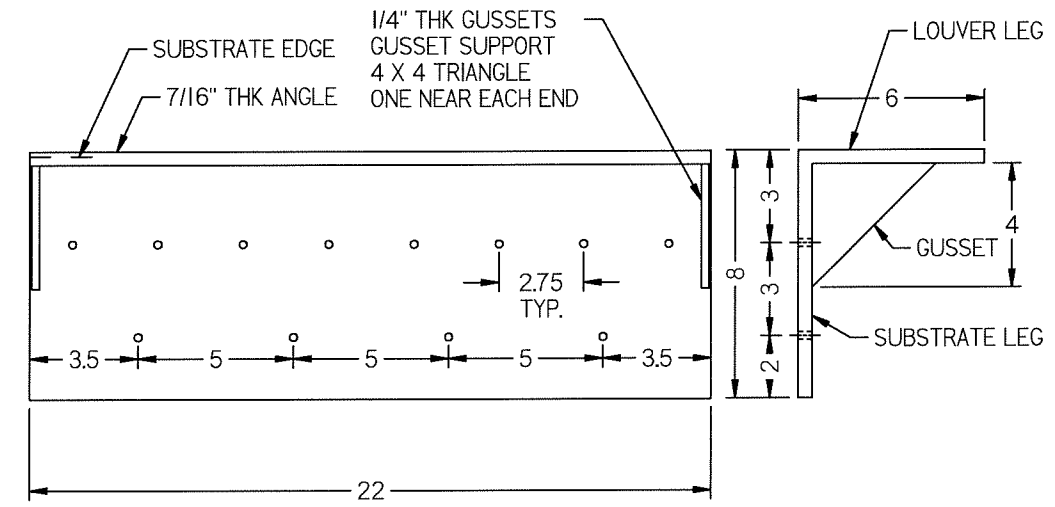


USE (10) 1/2" DIA. HILTI KWIK BOLT TZ  
3 5/8" EMBEDMENT  
7" SPACING (HORIZ.) / 3" SPACING (VERT.)  
3" MIN. EDGE DISTANCE  
4" MIN. END DISTANCE  
ASSUME FC' : 4000 PSI CRACKED CONCRETE



3/8" DIA. LAG SCREWS ANCHORS:

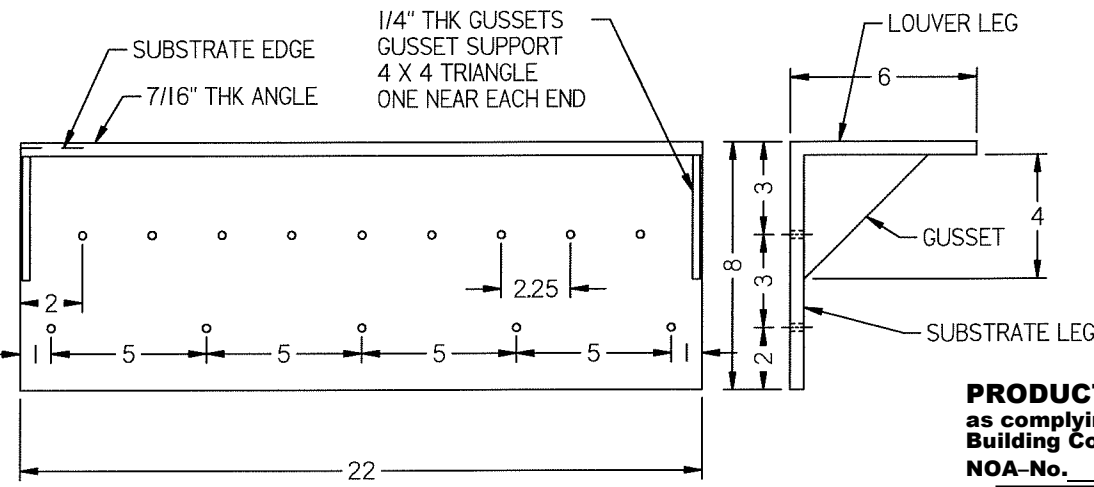
USE (12) 3/8" DIA. X 6" LONG  
STANDARD HEX LAG SCREW  
6" FULL THREAD ENGAGEMENT  
1-1/2" MIN. EDGE/END DISTANCE  
SPACING AS SHOWN  
ASSUME: SPRUCE/PINE/FIR, SG=0.42



**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
NOA-No. 23-0928.03  
Expiration Date 08/30/2028  
By *[Signature]*  
Miami-Dade Product Control

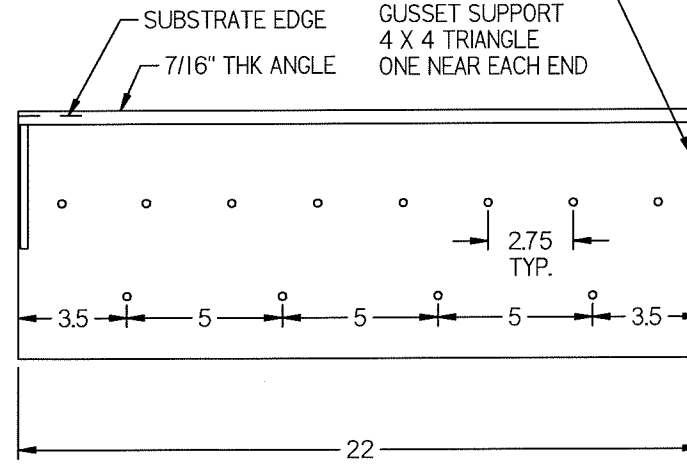
1/4-20 DIA. S.S. ELCO DRIL-FLEX ANCHORS:

USE (14) 1/4-20 DIA. S.S. ELCO DRIL-FLEX  
FULL THREAD ENGAGEMENT  
1" MIN. EDGE/END DISTANCE  
SPACING AS SHOWN  
ASSUME: 1/4" STEEL (A-36)



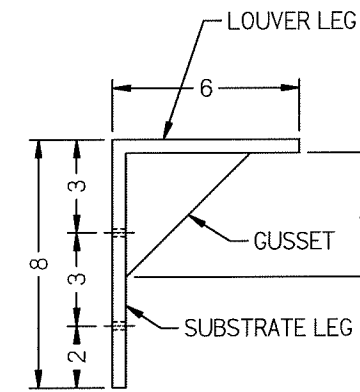
**PRODUCT REVISED**  
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NOA-No. 21-0825.04  
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1/4" THK GUSSETS  
GUSSET SUPPORT  
4 X 4 TRIANGLE  
ONE NEAR EACH END



5/16-24 DIA. S.S. ELCO DRIL-FLEX ANCHOR

USE (12) 5/16" DIA. S.S. ELCO DRIL-FLEX  
FULL THREAD ENGAGEMENT  
1" MIN. EDGE/END DISTANCE  
SPACING AS SHOWN  
ASSUME: 1/4" STEEL (A36)



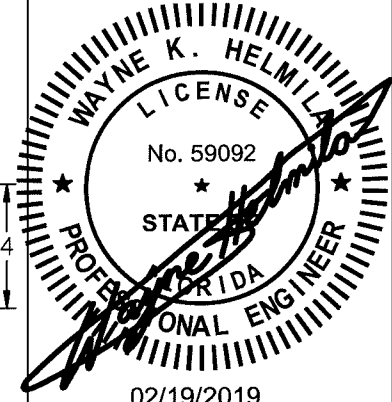
**PRODUCT REVISED**  
as complying with the Florida  
Building Code  
Acceptance No. 18-1217.02  
Expiration Date 8/30/2023  
By: *[Signature]*  
Miami-Dade Product Control



NI ILLINOIS, LLC.  
1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel. 708-652-9100 Fax 708-652-9100



TITLE: MULLION ANGLES  
BACK OF THE WALL MOUNT



COA: 9090

**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

DWN BY: fcorinas

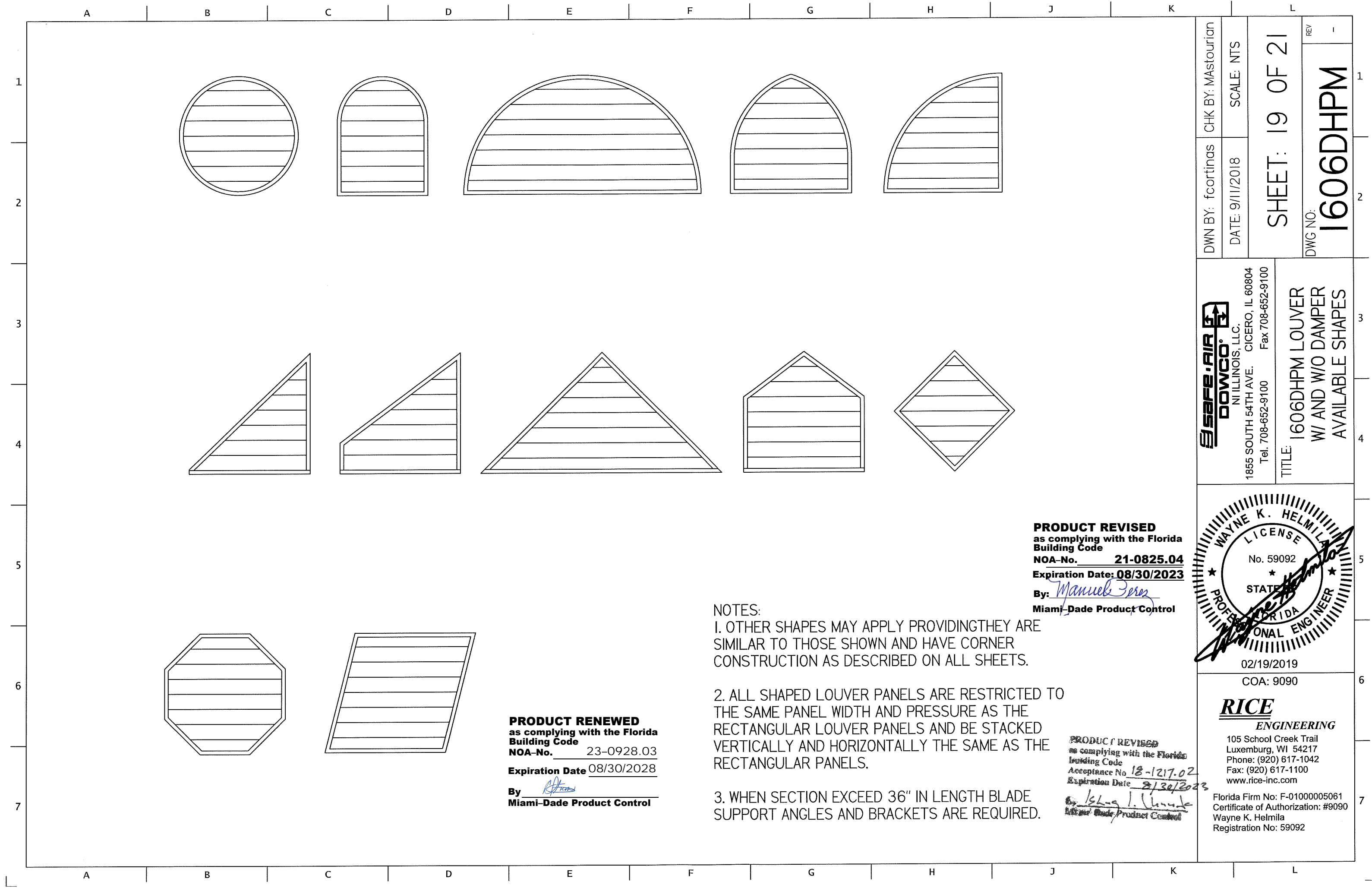
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CHK BY: Mastourian

SCALE: NTS

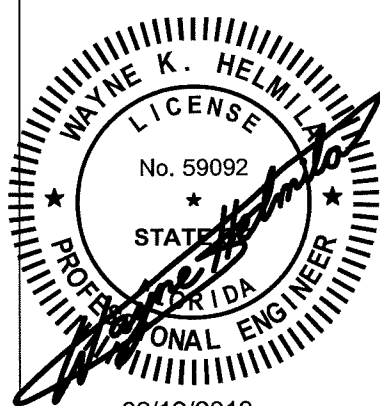
SHEET: 18 OF 21

DWG NO: 1606DHPM



NI ILLINOIS, LLC.  
1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel. 708-652-9100 Fax 708-652-9100

TITLE: 1606DHPM LOUVER  
W/ AND W/O DAMPER  
AVAILABLE SHAPES



02/19/2019  
COA: 9090

**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

**PRODUCT REVISED**  
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Expiration Date: 08/30/2023  
By: Manuel Perez  
Miami-Dade Product Control

**PRODUCT REVISED**  
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Acceptance No. 18-1217.02  
Expiration Date: 8/30/2023  
By: Isaac J. Llanusa  
Miami-Dade Product Control

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NOA-No. 23-0928.03  
Expiration Date 08/30/2028  
By: [Signature]  
Miami-Dade Product Control

NOTES:  
1. OTHER SHAPES MAY APPLY PROVIDING THEY ARE  
SIMILAR TO THOSE SHOWN AND HAVE CORNER  
CONSTRUCTION AS DESCRIBED ON ALL SHEETS.

2. ALL SHAPED LOUVER PANELS ARE RESTRICTED TO  
THE SAME PANEL WIDTH AND PRESSURE AS THE  
RECTANGULAR LOUVER PANELS AND BE STACKED  
VERTICALLY AND HORIZONTALLY THE SAME AS THE  
RECTANGULAR PANELS.

3. WHEN SECTION EXCEED 36" IN LENGTH BLADE  
SUPPORT ANGLES AND BRACKETS ARE REQUIRED.

1	BILL OF MATERIALS	
	ITEM	DESCRIPTION
	1	C6-139 LOUVER HEAD
	2	C6-140 LOUVER SILL
	3	C6-141 LOUVER JAMB
	4	C6-142 LOUVER BLADE
	5	C6-168 LOUVER DRAIN
	6	C6-143 LOUVER BLADE BRACE
	7	C6-104 MULLION COVER
	8	C6-096 LOUVER FLANGE
2	9A	C6-176 1 1/2 X 1 1/2 X 1/8 ANGLE CONT.
	9B	C6-160 2 X 2 X 1/8 ANGLE CONT.
	9C	1 1/2 X 1 1/2 X 3/16 ANGLE CONT.
	10	C6-161B 6 X 3 X 1/4 ANGLE
	11	1 1/2 X 1 1/2 X 1/4 ANGLE
	12	4 X 3 X 1/4 X 3 5/8 LONG ANGLE
	13	4 X 3 X 1/4 3 5/8 LONG ANGLE
	14	6 X 4 X 1/4 ALUMINNM SUPPORT SHIM
	15	MULLION STIFFENER ALUM
	16	FORMED SLEEVE 1/8 THK
3	17	B2-610 DAMPER HEAD/SILL
	18	B2-609 DAMPER JAMB
	19	B2-527 DAMPER BLADE
	20	DAMPER BLADE SEAL
	21	DAMPER TOP/BOTTOM CLOSURE
	22	DAMPER BUSHING
	23	DAMPER LINKAGE BAR
	24	DAMPER JAMB SEAL
	25	NON DRIVE DAMPER AXEL ASM
	26	DRIVE SIDE DAMPER AXLE ASM
4	27	C6X8.2 STEEL CHANNEL
	28	
	29	7" X 21" ALUMINIUM SLEEVE BRACKET
	30	MULLION MOUNTING ANGLE BRACKET
	31	C6-180
	32	C6-181
	33	C6-182
	34	C6-183
	35	C6-184
	36	C6-185
5	37	C6-186
	38	C6-187
	39	C6-188
	40	C6-189
	41	C6-192
	42	C6-193
	43	C6-194
	44	C6-195
	45	C6-196
	46	C6-197
6	47	C6-198
	48	
	49	
	50	
	PRODUCT RENEWED as complying with the Florida Building Code NOA-No. 23-0928.03 Expiration Date 08/30/2028 By [Signature] Miami-Dade Product Control	
	PRODUCT REVISED as complying with the Florida Building Code NOA-No. 21-0825.04 Expiration Date: 08/30/2023 By: [Signature] Miami-Dade Product Control	
	[Seal: WAYNE K. HELMILA LICENSE No. 59092 STATE OF FLORIDA PROFESSIONAL ENGINEER 02/19/2019 COA: 9090]	
	[Seal: 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]	



	A	B	C	D	E	F	G	H	J	K	L
	*EMBEDMENT DEPTH IS EQUAL TO OVERALL LENGTH FOR CONCRETE /CMU FASTENERS. IF SHIMS ARE USED, FASTENER LENGTH MUST BE INCREASED BY THICKNESSOF SHIMS										
	LOUVER MODEL I606DHPM FASTENER SCHEDULE										
1	WOOD	STEEL STUD	STEEL	CONCRETE	CMU	MIN.	FASTENER TYPE				
	JAMB ANGLE MOUNT FASTENER, WIDTH ≤ 72 INCHES							DIAMETER	# Rqd	CENTERS	EDGE
	X					SG 0.42	LAG SCREW (300 SERIES SS- COND. CW- Fy = 65ksi)	1/4"	1	3"	2"
	X					SG 0.42	LAG SCREW (300 SERIES SS- COND. CW- Fy = 65ksi)	3/8"	1	5"	2"
		X				16 Ga.	ELCO DRILL-FLEX DRILLING SCREWS (300 SERIES SS- COND. CW- Fy= 65ksi)	1/4"	1	4-1/2"	2"
			X			A-36	ELCO DRILL-FLEX DRILLING SCREWS (300 SERIES SS- COND. CW- Fy= 65ksi)	1/4"	1	13-1/2"	2"
			X			A-36	ELCO DRILL-FLEX DRILLING SCREWS (300 SERIES SS- COND. CW- Fy= 65ksi)	5/16"	1	16"	2"
			X-CRACKED			4ksi	HILTI KWIK HUS-EZ	1/4"	1	5-3/4"	4"
			X-CRACKED			4ksi	HILTI KWIK HUS-EZ	3/8"	1	8"	4"
2					X	1.5ksi	HILTI KWIK -CON II+	1/4"	1	4-3/4"	1-1/2"
					X	1.5ksi	HILTI KWIK-BOLT3+	3/8"	1	8"	4"
	MULLION ANGLE MOUNT FASTENERS, HEIGHT ≤ 120 INCHES										
	X					SG 0.42	LAG SCREW (300 SERIES SS- COND. CW- Fy = 65ksi)	1/4"	10	VARIES	2"
	X					SG 0.42	LAG SCREW (300 SERIES SS- COND. CW- Fy = 65ksi)	1/2"	6	VARIES	2"
			X			A-36	ELCO DRILL-FLEX DRILLING SCREWS (300 SERIES SS- COND. CW- Fy= 65ksi)	1/4"	4	VARIES	2"
			X			A-36	ELCO DRILL-FLEX DRILLING SCREWS (300 SERIES SS- COND. CW- Fy= 65ksi)	5/16"	2	2-3/4"	2"
			X-UNCRAKED			4ksi	HILTI KWIK BOLT 3 - C.S. **	3/8"	2	4"	7
3			X-CRACKED			4ksi	HILTI KWIK BOLT TZ **	3/8"	2	4"	7"
	MULLION ANGLE MOUNT BACK OF WALL FASTENERS, HEIGHT ≤ 120 INCHES										
	X					SG 0.42	LAG SCREW (300 SERIES SS- COND. CW- Fy = 65ksi)	1/4"	16	VARIES	1"
	X					SG 0.42	LAG SCREW (300 SERIES SS- COND. CW- Fy = 65ksi)	3/8"	12	VARIES	1-1/2"
			X			A-36	ELCO DRILL-FLEX DRILLING SCREWS (300 SERIES SS- COND. CW- Fy= 65ksi)	1/4"	14	VARIES	1"
			X			A-36	ELCO DRILL-FLEX DRILLING SCREWS (300 SERIES SS- COND. CW- Fy= 65ksi)	5/16"	12	VARIES	1"
			X-UNCRAKED			4ksi	HILTI KWIK HUS-EZ **	1/2"	10	VARIES	3"
4			X-CRACKED			4ksi	HILTI KWIK BOLT TZ **	1/2"	10	VARIES	3"
	GENERAL NOTES:										
	1. IT SHALL BE THE RESPONSIBILITY OF THE ENGINEER OF RECORD TO VERIFY THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE TO SUPPORT THE LOADS IMPOSED BY THE LOUVER(S).										
	2. THE I606DHPM WITH /WITHOUT DAMPER HAVE BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC) AND TEST PROTOCOLS TAS 100(A) WIND DRIVEN RAIN, TAS-201 (IMPACT), TAS-202 (UNIFORM STATIC PRESSURE) , AND TAS-203 (CYCLIC FATIGUE).										
	3. MAXIMUM SINGLE SECTION SIZE IS 72" WIDE X 120" HIGH.										
	4. MAXIMUM ASSEMBLED LOUVER SIZE IS UNLIMITED WIDE X 120" HIGH.										
	5. SECTIONS OR ASSEMBLIES MAY BE STACKED VERTICALLY PROVIDING A SUITABLE STRUCTURAL SUPPORT IS DESIGNED AND INSTALLED BY OTHERS TO SUPPORT ALL LOADS TRANSFERRED FROM THE LOUVER.										
5	6. CMU SHALL BE ASTM C90, TYPE II, 2000 MIN PSI GROUT-FILLED.										
	7. THE SLEEVE MOUNT STYLE LOUVER UTILIZES AN ANCHORLESS INSTALLATION METHOD THAT DOES NOT REQUIRE THE USE OF FASTENERS INTO THE SUBSTRATE. IT MAY BE INSTALLED IN ANY SUBSTRATE THAT WILL WITHSTAND THE LOADS TRANSFERRED TO IT BY THE LOUVER. SAFE AIR DOES NOT DETERMINE THE STRUCTURAL INTERGRITY OF THE SUBSTRATE STRUCTURE.										
	8. THE CONTINUOUS ANGLE MOUNT STYLE UTILIZES A CONTINUOUS JAMB ANGLETHAT IS ATTACHED TO THE SUBSTRATE BY FASTENERS. IT MAY BE INSTALLED IN CONCRETE, CMU, STEEL, OR WOOD ACCORDING TO THE FASTENER SCHEDULE. SAFE AIR DOES NOT DETERMINE THE STRUCTRAL INTERGRITY OF THE SUBSTRATE SUCTURE.										
	9. LOUVER ASSEMBLY IS QUALIFIEDFOR A MAXIMUM DESIGN LOAD OF +/- 150 PSF.										
	10. LOUVER ASSEMBLY WITH AND WITHOUT DAMPER SHALL ONLY 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, AND / OR SUPPLIES.										
6	11. INSTALLER TO PROVIDE SEPERATION OF DISSIMILAR MATERIALS AS REQUIRED.										
	12. THE 2020 DAMPER MAY BE OPERATED BY A MANUAL QUADRANT OR BY AN ELECTRIC OR PNEUMATIC ACTUATOR, THE DAMPER'S ACTUATOR IS NOT PART OF THIS APPROVAL, BUT SHALL BE CERTIFIED BY AN INDEPENDENT TESTING AGENCY.										
	13. FRAME CONSTRUCTION, HEAD AND SILL ARE SQUARE CUT, JAMBS ARE SQUARE CUT @ HEAD AND SILL. CORNERS ARE SECURED WITH (2) #10-24 x 1 1/2 HW, BLADES ARE SECURED TO JAMBS WITH (4) #10-24 X 1 1/2 HW, @ EACH END.										
	14. STEEL / STAINLESS-STEEL/ ALUMINIUM PARTS MAY BE MADE OUT OF ALTERNATE ALLOY THA HAS EQUAL OR GREATER YIELD STRENGTH.										
	15. BLADE SUPPORT ANGLE AND BLADE SUPPORT BRACE ONLY REQUIRED WHEN ACTUAL LOUVER SECTION WIDTH IS GREATER THAN 36 INCHES.										
	16. THREAD PENETRATION LENGTH SIGNIFIES THE REQUIRED LENGTH OF THE THREADED PORTION OF THE FASTENER INTO THE WOOD SUBSTRATE PROVIDING FULL CONTACT WITH WOOD. LAG SCREW TIP CANNOT BE CONSIDERED PART OF THE THREADED PORTION OF THE SCREW. LAG SCREWS ARE NOT TO BE INSTALLED AT WOOD JOINTS/SPLICES WHERE THE LAG SCREW COULD FALL BETWEEN MEMEBERS.										
7	** NOTE ENGINEER OF RECORD ( EOR ) IS RESPONSIBLE FOR DETERMINING IF CONCRETE IS TO BE CONSIDERED CRACKED OR UNCRACKED.										
	A	B	C	D	E	F	G	H	J	K	L

DWN BY: fcoirtinas

DATE: 9/11/2018

CHK BY: Mastourian

SCALE: NTS

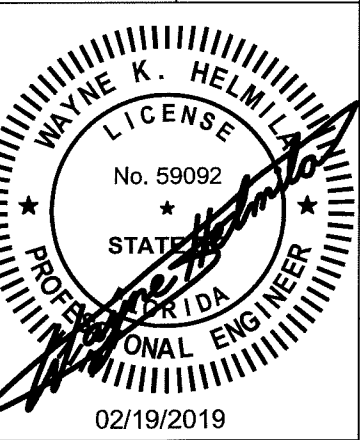
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DWG NO: I606DHPM



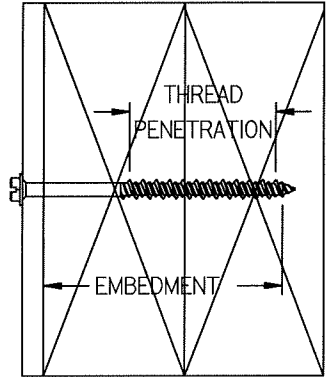
ILLLINOIS, LLC.  
1855 SOUTH 54TH AVE. CICERO, IL 60804  
Tel. 708-652-9100 Fax 708-652-9100


TITLE: I606DHPM LOUVER  
W/ AND W/O DAMPER  
NOTES AND  
FASTENER SCHEDULE





COA: 9090

**RICE**  
ENGINEERING  
105 School Creek Trail  
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www.rice-inc.com  
  
Florida Firm No: F-01000005061  
Certificate of Authorization: #9090  
Wayne K. Helmila  
Registration No: 59092



**PRODUCT RENEWED**  
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Miami-Dade Product Control