



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/economy

Greenheck Fan Corporation
P.O. Box 410
Schofield, WI 54476

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 EHH-601D Aluminum Louver with and without VCD-40 Damper

APPROVAL DOCUMENT: Drawing No. **EHH-601D**, titled "EHH-601D Louver", sheets 1 through 21 of 21, dated 08/09/2017, prepared by Greenheck Fan Corporation, 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, Schofield, WI or Shelby, NC, 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 # 22-0816.10** 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.**




12/11/23

NOA No. 23-1013.09
Expiration Date: November 1, 2024
Approval Date: November 22, 2023
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOAs

A. DRAWINGS “Submitted under NOA # 10-0921.10”

1. Drawing No. **EGH-601D**, titled “EGH-601D Louver”, sheets 1 through 21 of 21, dated 08/25/2010, prepared by Greenheck Fan Corporation, signed and sealed by L. David Rice, P.E.

B. TESTS “Submitted under NOA # 08-0229.06”

1. Test report on Wind Driven Rain Resistance per FBC, TAS 100(A)-95, prepared by Architectural Testing, Inc., Test Report No. **79201.01-109-18**, dated 02/05/2008, signed and sealed by Michael D. Stremmel, P.E.

“Submitted under NOA # 07-0925.02”

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 Series/Model EGH-601D, fixed aluminum louvers, prepared by Architectural Testing, Inc., Test Report No. **74301.01-602-18**, dated 09/04/2007, signed and sealed by Joseph A. Reed, P.E.
3. Test report on Standard Test Methods for Tensile Testing of Metallic Materials, per ASTM E8-03, prepared by Architectural Testing, Inc., Test Report No. **74301.02-602-18**, dated 09/12/2007, signed and sealed by Joseph A. Reed, P.E.

C. CALCULATIONS “Submitted under NOA # 10-0921.10”

1. Structural calculations, prepared by Rice Engineering, dated 09/03/2010, signed and sealed by L. David Rice, 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 # 16-0201.03”

1. Statement letter of code conformance to the 5th edition (2014) FBC issued by Rice Engineering, dated 01/11/2016, signed and sealed by L. David Rice, P.E.
2. Statement letter of code conformance to 2010 FBC issued by Rice Engineering, dated 11/06/2012, signed and sealed by L. David Rice, P.E. **“Submitted under NOA # 12-0830.08”**
3. Statement letters of conformance and no financial interest issued by Rice Engineering, dated 09/03/2010, signed and sealed by L. David Rice, P.E. **“Submitted under NOA # 10-0921.10”**



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 23-1013.09

Expiration Date: November 1, 2024
Approval Date: November 22, 2023

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. EVIDENCE SUBMITTED UNDER NOA # 17-0919.05 AND # 22-0816.10

A. DRAWINGS

1. Drawing No. **EGH-601D**, titled "EGH-601D Louver", sheets 1 through 21 of 21, dated 08/09/2017, prepared by Greenheck Fan Corporation, signed and sealed by Wayne K. Helmila, 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.

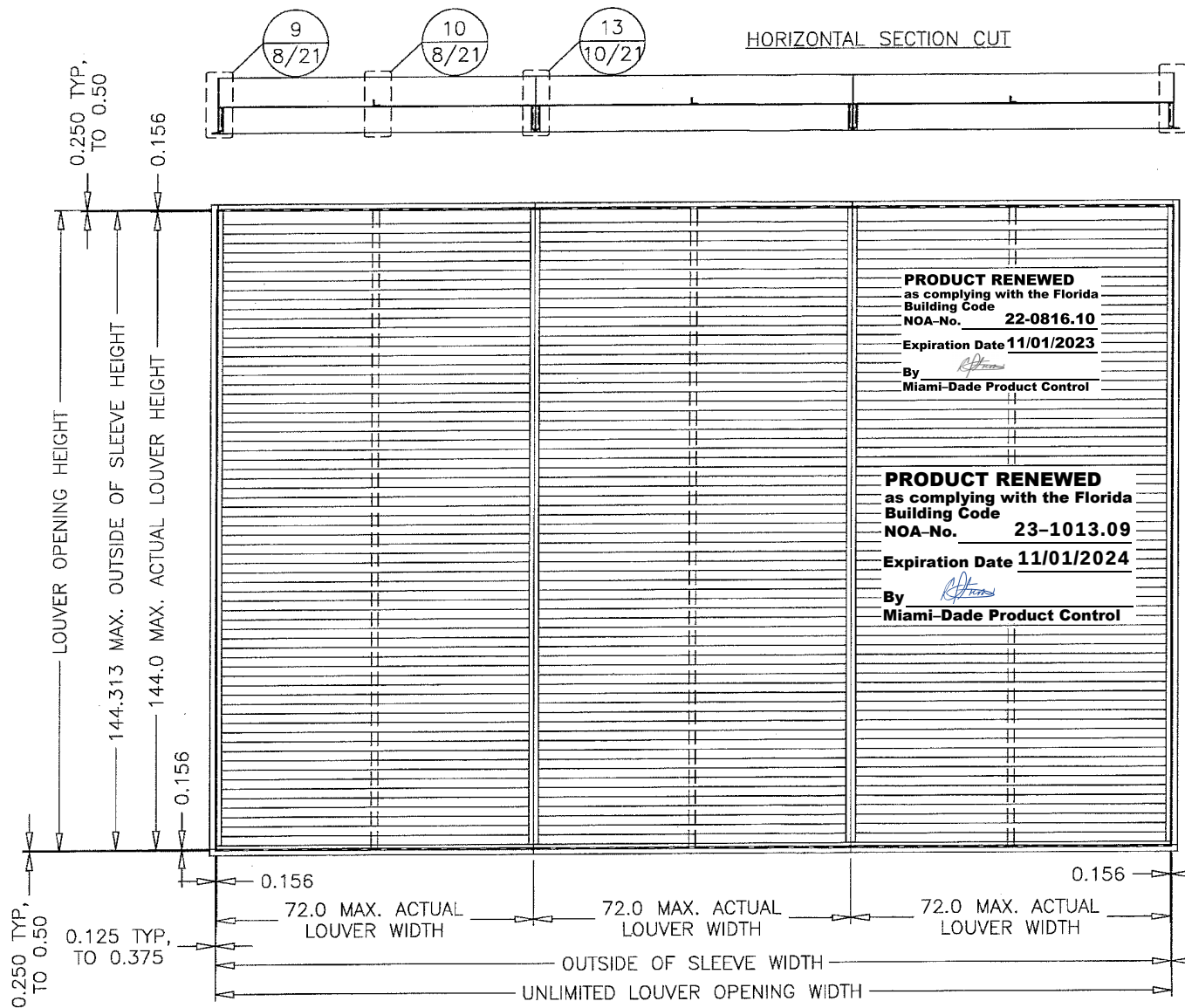
F. STATEMENTS

1. Statement letter of code conformance to the 7th Edition (2020) of the FBC, issued by Rice Engineering, dated 10/14/2021, signed and sealed by Wayne K. Helmila, P.E.
2. Testing contract email issued by Eric Jehn from Quast Consulting and Testing, Inc., and dated 08/11/2022.
3. Statement letter of code conformance to the 6th Edition (2017) FBC issued by Rice Engineering, dated 08/30/2017, signed and sealed by Wayne K. Helmila, P.E.
4. Statement letters of no financial interest issued by Rice Engineering, dated 08/30/2017, signed and sealed by Wayne K. Helmila, P.E.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 23-1013.09

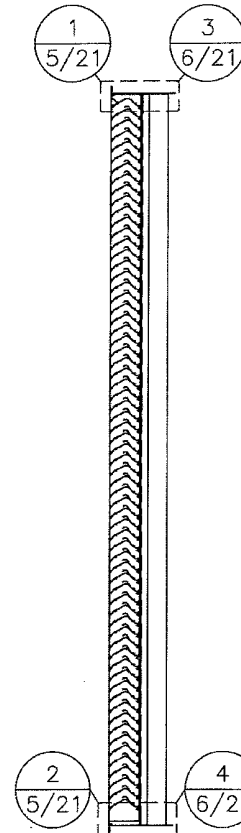
Expiration Date: November 1, 2024
Approval Date: November 22, 2023



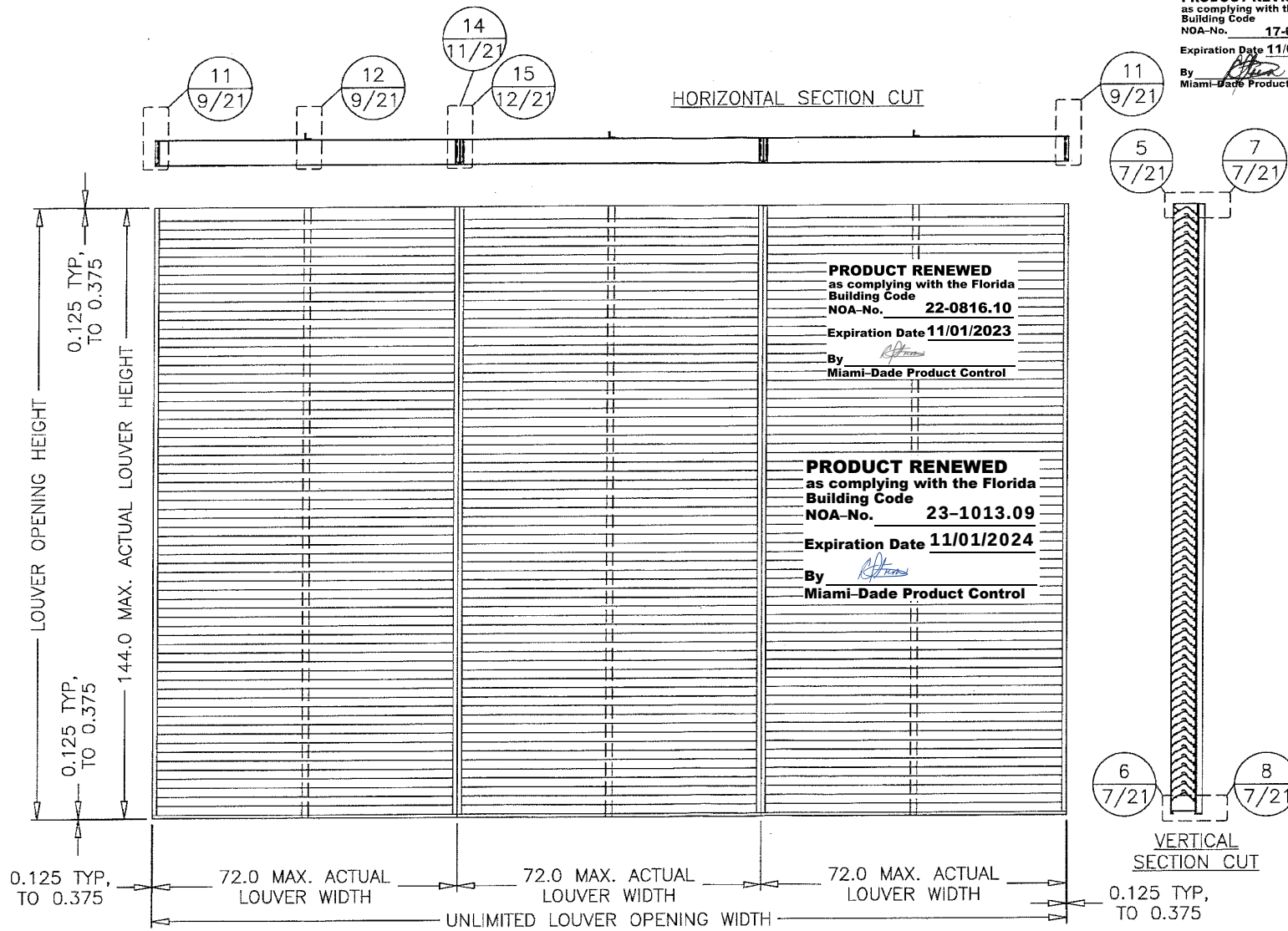
PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **22-0816.10**
Expiration Date **11/01/2023**
By *[Signature]*
Miami-Dade Product Control

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Building Code
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By *[Signature]*
Miami-Dade Product Control

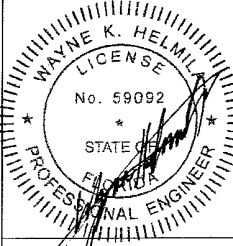
PRODUCT REVISED
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Building Code
NOA-No. **17-0919.05**
Expiration Date **11/01/2022**
By *[Signature]*
Miami-Dade Product Control



GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410 EHH-601D LOUVER FLANGE FRAME SLEEVE MOUNT ELEVATION	DRAWN BY MES	DATE 8/9/2017
	SCALE 1:24	SHEET NO. 1 OF 21
TITLE EHH-601D LOUVER FLANGE FRAME SLEEVE MOUNT ELEVATION		
LICENSE WAYNE K. HELMLA No. 59092 STATE OF FLORIDA PROFESSIONAL ENGINEER AUG 30 2017 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		



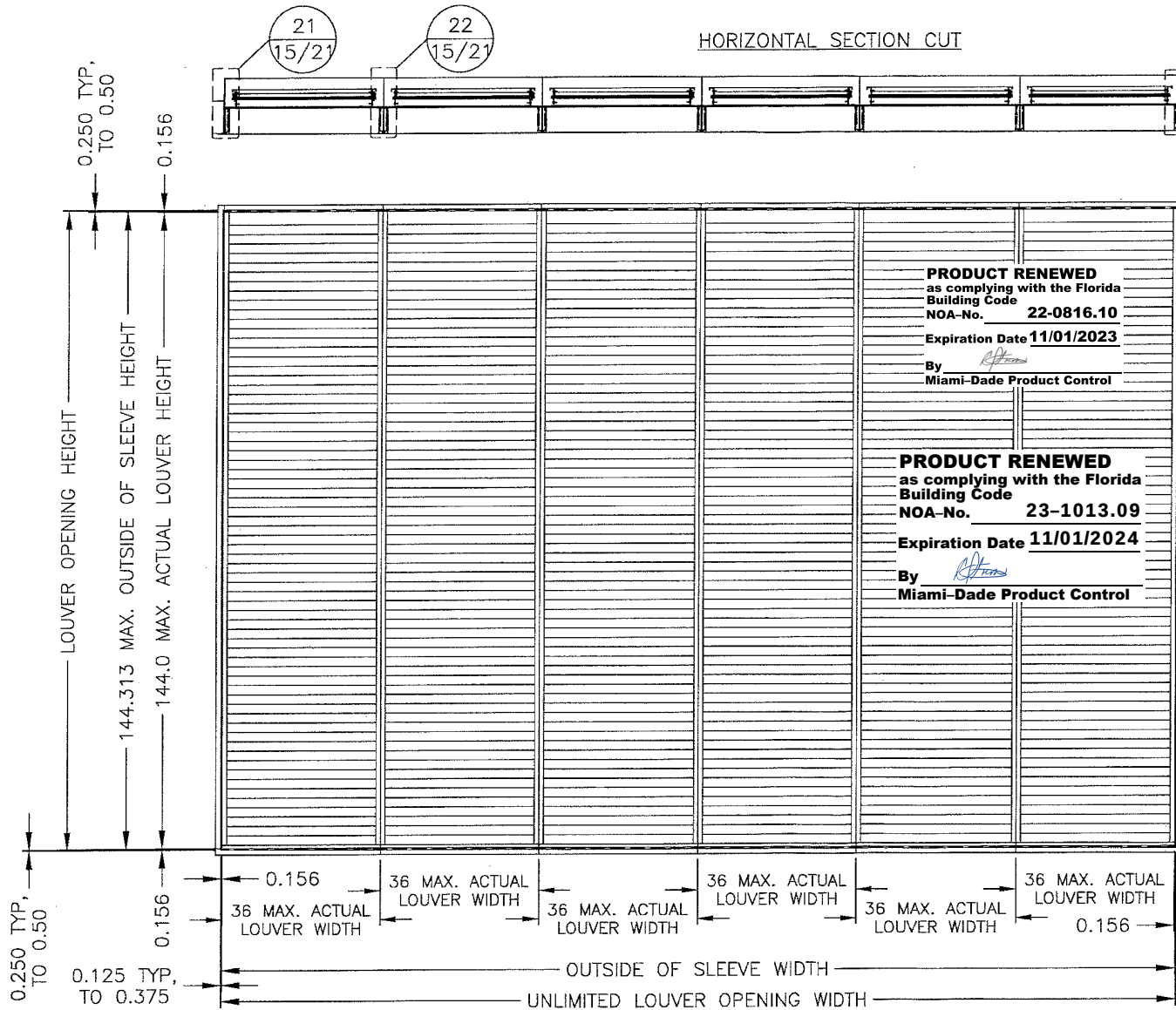
PRODUCT REVISED
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Building Code
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By *[Signature]*
Miami-Dade Product Control

GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410 	DRAWN BY MES	DATE 8/9/2017
	SCALE 1:24	SHEET NO. 2 OF 21
TITLE EHH-601D LOUVER CONTINUOUS ANGLE MOUNT ELEVATION		
		
RICE AUG 30 2017 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		

HORIZONTAL SECTION CUT

PRODUCT REVISED
as complying with the Florida
Building Code
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Expiration Date **11/01/2022**
By *[Signature]*
Miami-Dade Product Control

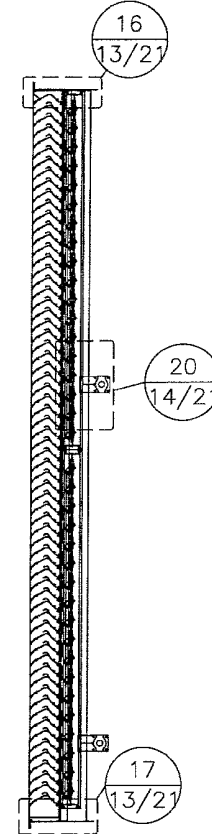
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SCALE 1:24	
SHEET NO. 3 OF 21	
CAD DRAWING NO. EHH-601D	



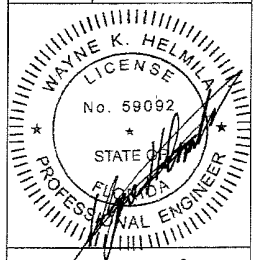
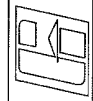
PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **22-0816.10**
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By *[Signature]*
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Miami-Dade Product Control

VERTICAL SECTION CUT

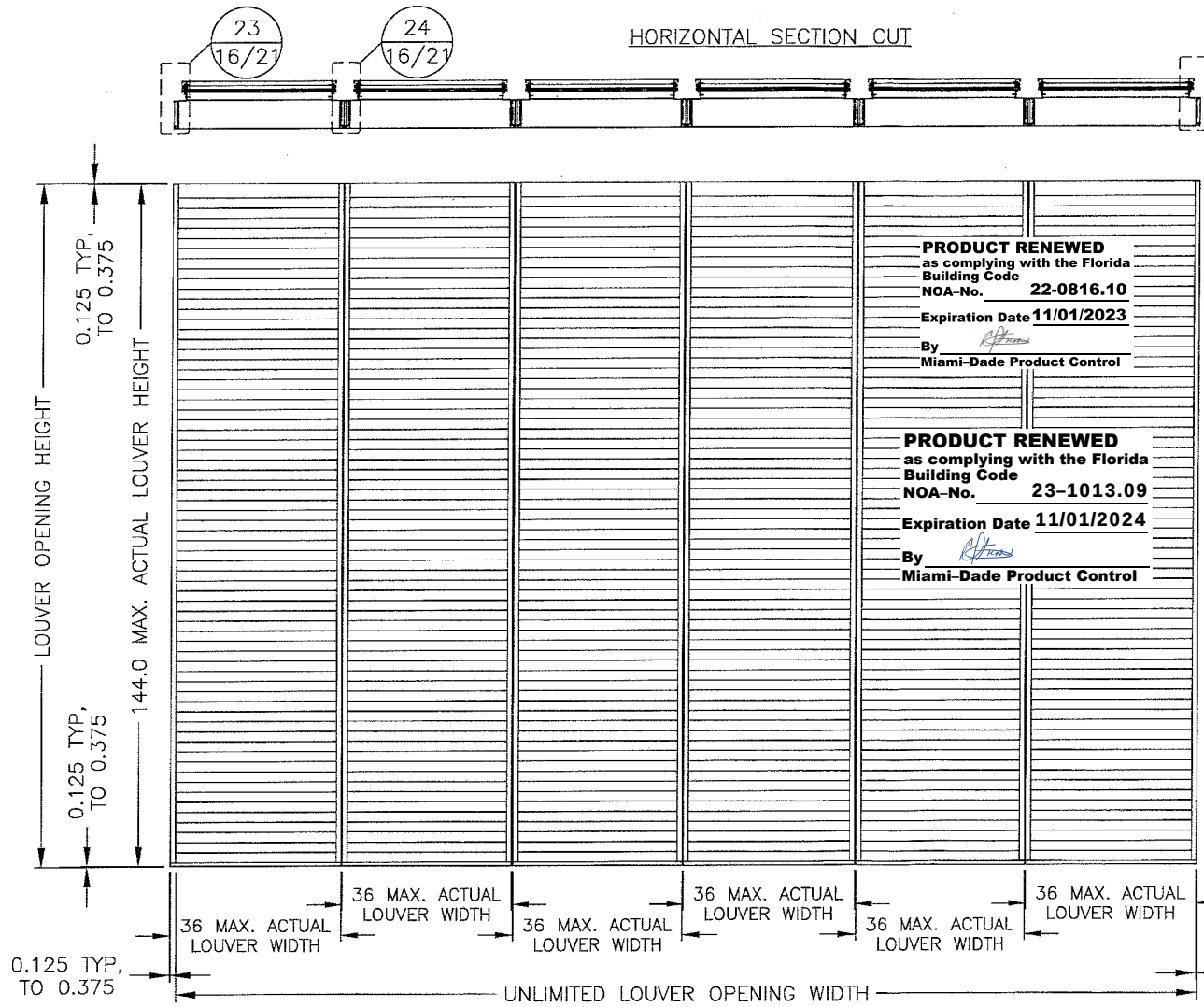


GREENHECK
P.O. BOX 410 SCHOFIELD,
WISCONSIN 54476-0410



RICE AUG 30 2017

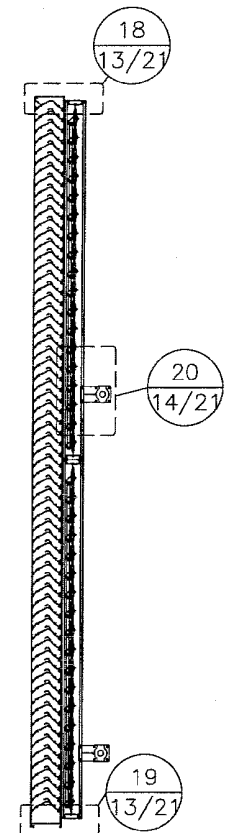
ENGINEERING
105 School Creek Trail
Luxemburg, WI 54217
Phone: (920) 617-1042
Fax: (920) 617-1100
www.rice-inc.com
Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmla
Registration No: 59092



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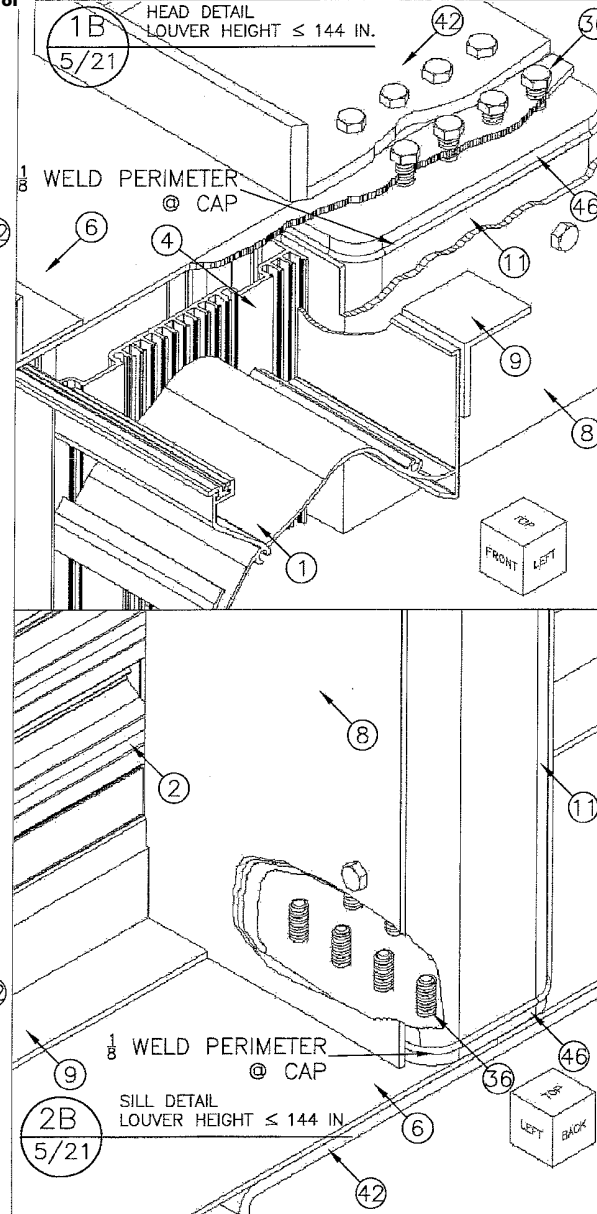
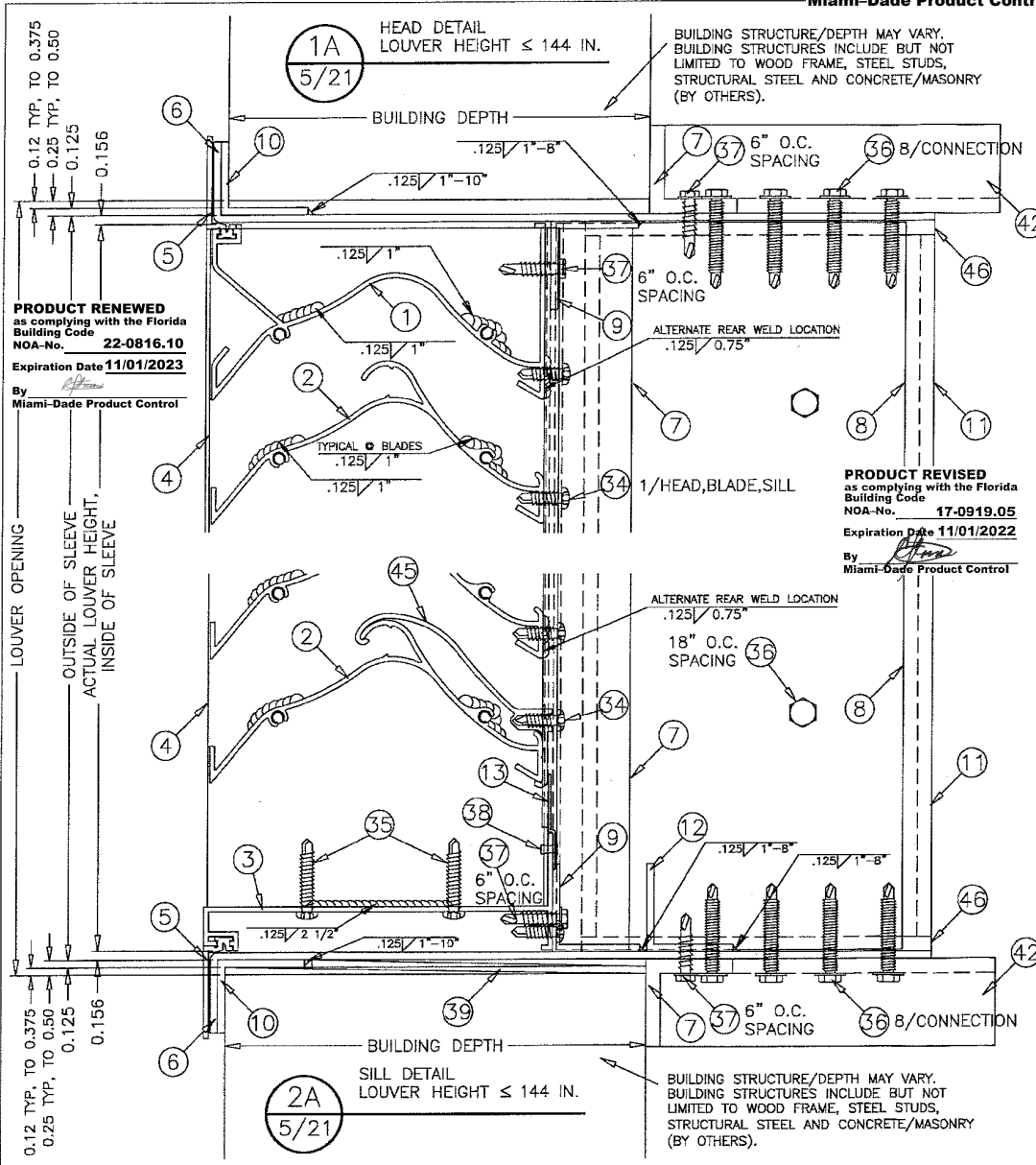


GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410 RICE ENGINEERING 105 School Creek Trail Luxemburg, WI 54217 Phone: (920) 617-1042 Fax: (920) 617-1100 www.rice-inc.com Florida Firm No: F-0100005061 Certificate of Authorization: #9090 Wayne K. Helmila Registration No: 59092	DRAWN BY MES SCALE 1:24 SHEET NO. 4 OF 21 CAD DRAWING NO. EHH-601D	DATE 8/9/2017 TITLE EHH-601D LOUVER W/VCD-40 CONTINUOUS ANGLE MOUNT ELEVATION
	LICENSE No. 59092 STATE OF FLORIDA PROFESSIONAL ENGINEER WAYNE K. HELMILA	

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DRAWN BY MES	DATE 8/9/2017	SHEET NO. 5 OF 21	CAD DRAWING NO. EHH-601D
SCALE 1:2			
GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410		EHH-601D LOUVER FLANGE FRAME SLEEVE MOUNT HEAD & SILL DETAILS, HS144"	
WAYNE K. HELMILA LICENSE No. 59092 STATE OF FLORIDA PROFESSIONAL ENGINEER		AUG 30 2017	
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	

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Miami-Dade Product Control

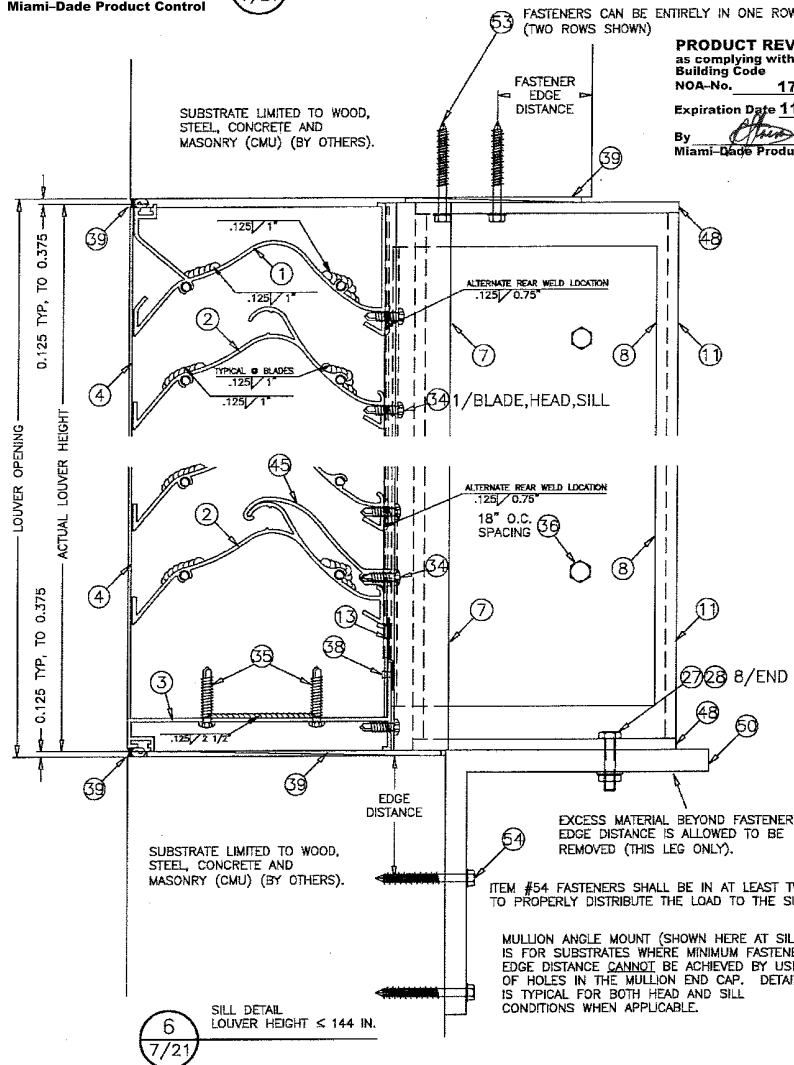
5
7/21
HEAD DETAIL
LOUVER HEIGHT ≤ 144 IN.

MULLION DIRECT MOUNT (SHOWN HERE AT HEAD) IS FOR SUBSTRATES WHERE MINIMUM FASTENER EDGE DISTANCE CAN BE ACHIEVED BY USE OF HOLES IN THE MULLION END CAP. DETAIL IS TYPICAL FOR BOTH HEAD AND SILL CONDITIONS WHEN APPLICABLE.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-0919.05**

Expiration Date **11/01/2022**

By *[Signature]*
Miami-Dade Product Control



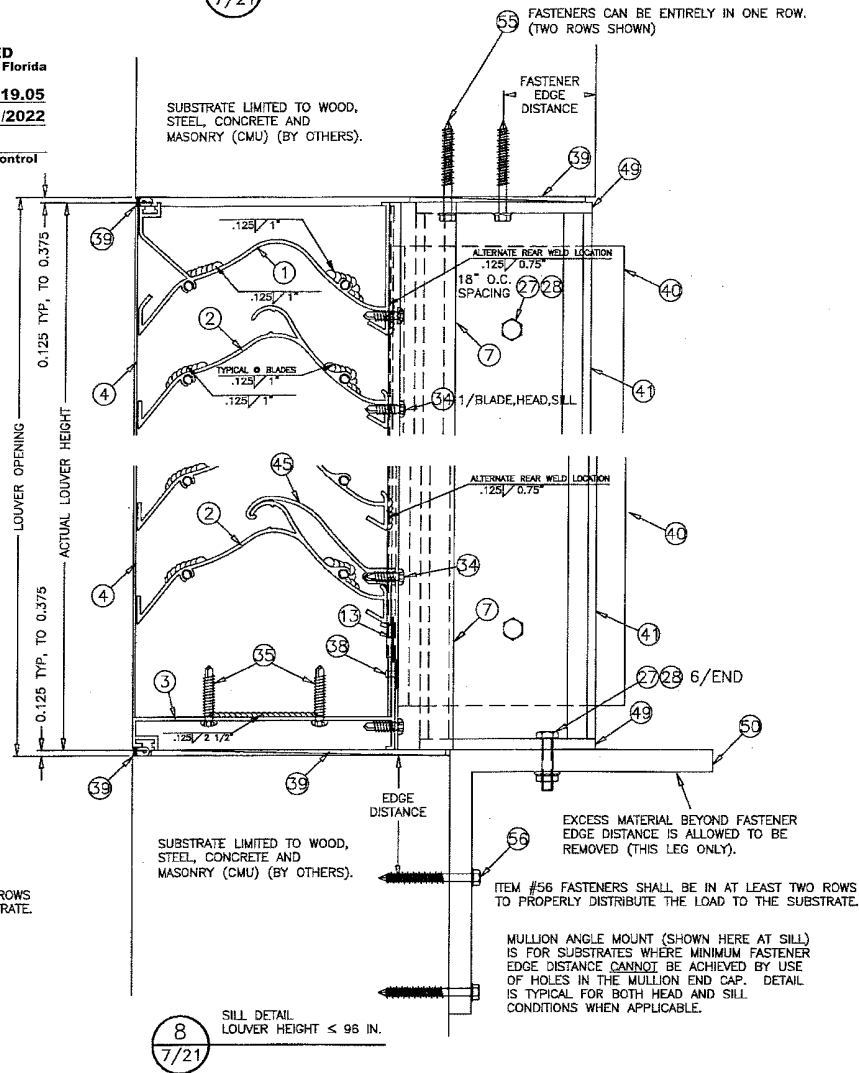
PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **23-1013.09**

Expiration Date **11/01/2024**

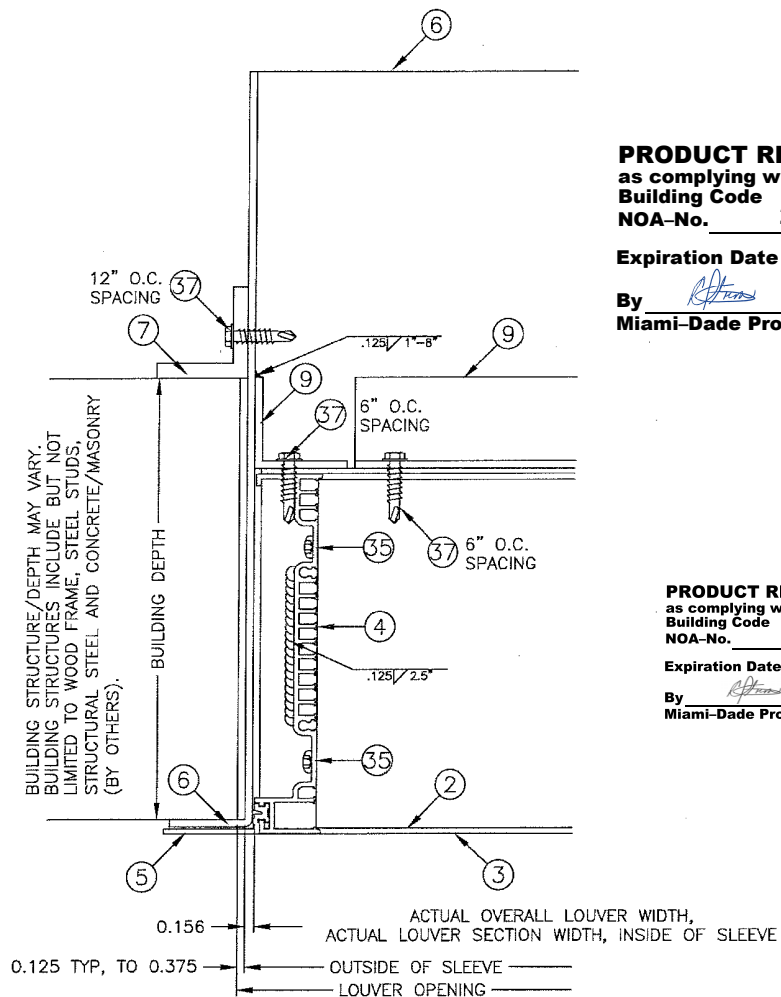
By *[Signature]*
Miami-Dade Product Control

7
7/21
HEAD DETAIL
LOUVER HEIGHT ≤ 96 IN.

MULLION DIRECT MOUNT (SHOWN HERE AT HEAD) IS FOR SUBSTRATES WHERE MINIMUM FASTENER EDGE DISTANCE CAN BE ACHIEVED BY USE OF HOLES IN THE MULLION END CAP. DETAIL IS TYPICAL FOR BOTH HEAD AND SILL CONDITIONS WHEN APPLICABLE.



DRAWN BY MES	DATE 8/9/2017	SHEET NO. 7 OF 21	CAD DRAWING NO. EHH-601D
	SCALE		
GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410		TITLE EHH-601D LOUVER CONTINUOUS ANGLE MOUNT HEAD & SILL DETAILS, HS144", HEAD & SILL DETAILS, HS96"	
LICENSE No. 59092 STATE OF FLORIDA PROFESSIONAL ENGINEER WAYNE K. HELMILA			
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-01000030501 Certificate of Authorization: #9090 Wayne K. Helmila Registration No: 59092			



PRODUCT RENEWED
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Expiration Date 11/01/2024

By [Signature]
Miami-Dade Product Control

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 22-0816.10

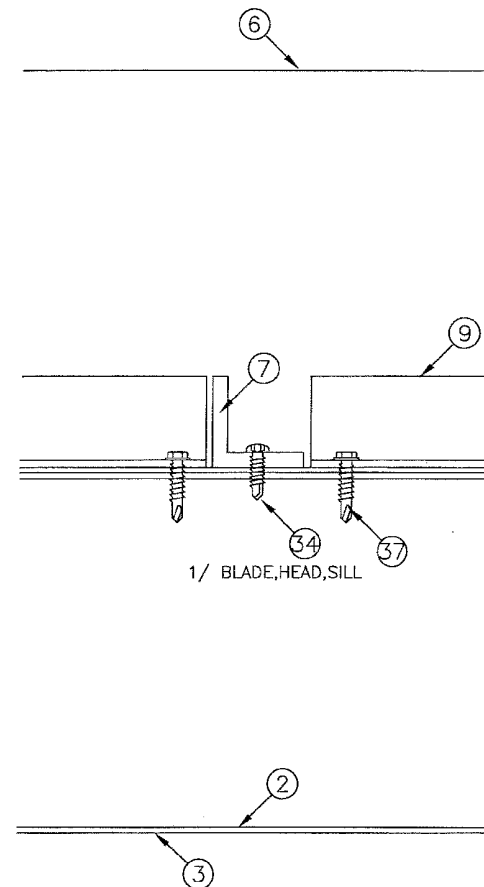
Expiration Date 11/01/2023

By [Signature]
Miami-Dade Product Control

PRODUCT REVISED
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Building Code
NOA-No. 17-0919.05

Expiration Date 11/01/2022

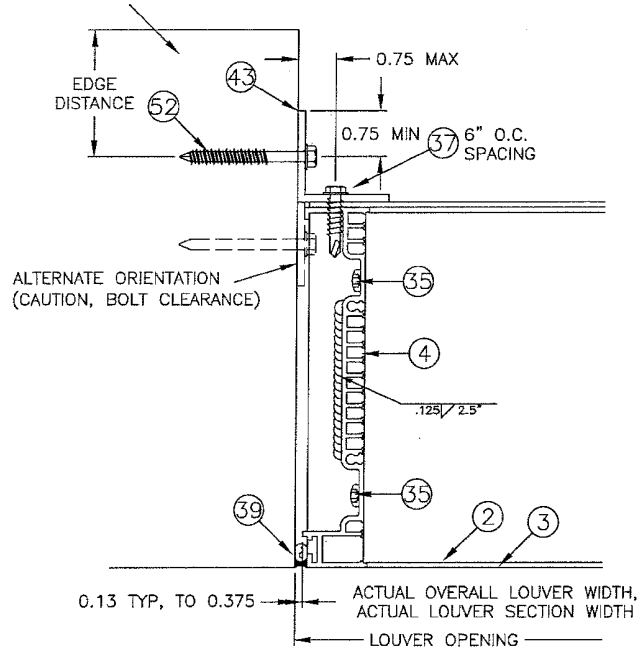
By [Signature]
Miami-Dade Product Control



SUPPORT DETAIL
LOUVER HEIGHT $\leq$ 144 IN.

DRAWN BY MES	DATE 8/9/2017	SCALE 1:2	SHEET NO. 8 OF 21	CAD DRAWING NO. EHH-601D
GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410		EHH-601D LOUVER FLANGE FRAME SLEEVE MOUNT JAMB DETAILS		
		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-0100005061 Certificate of Authorization: #9090 Wayne K. Helmila Registration No: 59092		

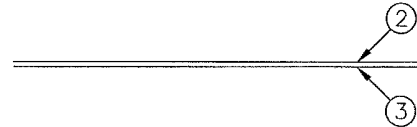
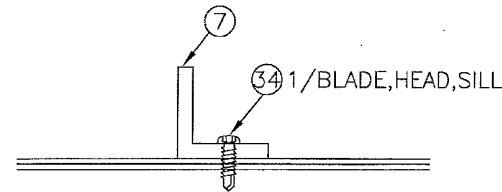
SUBSTRATE LIMITED TO WOOD,
STEEL, CONCRETE AND MASONRY
(CMU) (BY OTHERS).



11
9/21
JAMB DETAIL
LOUVER HEIGHT ≤ 144 IN.

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 23-1013.09
Expiration Date 11/01/2024
By [Signature]
Miami-Dade Product Control

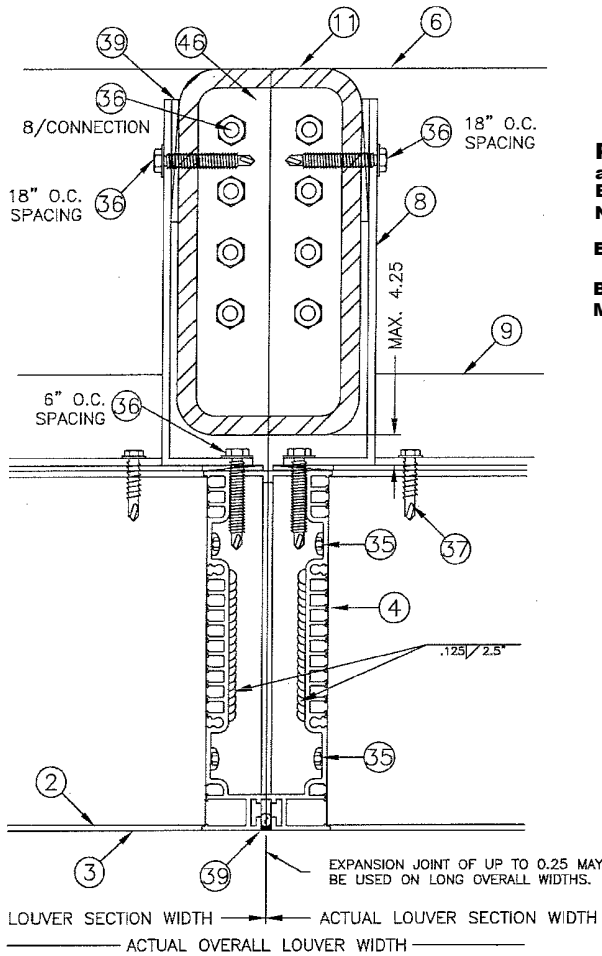
PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 22-0816.10
Expiration Date 11/01/2023
By [Signature]
Miami-Dade Product Control



12
9/21
SUPPORT DETAIL
LOUVER HEIGHT ≤ 96 IN.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 17-0919.05
Expiration Date 11/01/2022
By [Signature]
Miami-Dade Product Control

DRAWN BY MES	DATE 8/9/2017	SCALE 1:2	SHEET NO. 9 OF 21	CAD DRAWING NO. EHH-601D
GREENHECK P.O. BOX 410 SCHUFELDT, WISCONSIN 54476-0410		TITLE EHH-601D LOUVER CONTINUOUS ANGLE MOUNT JAMB DETAILS		
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				



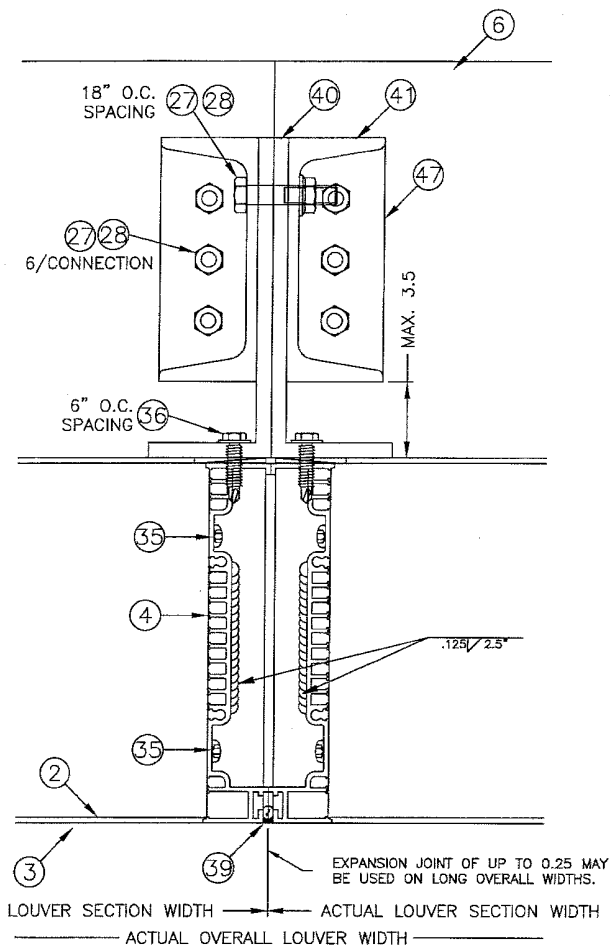
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Miami-Dade Product Control

13A
10/21

MULLION DETAIL
LOUVER HEIGHT ≤ 144 IN.

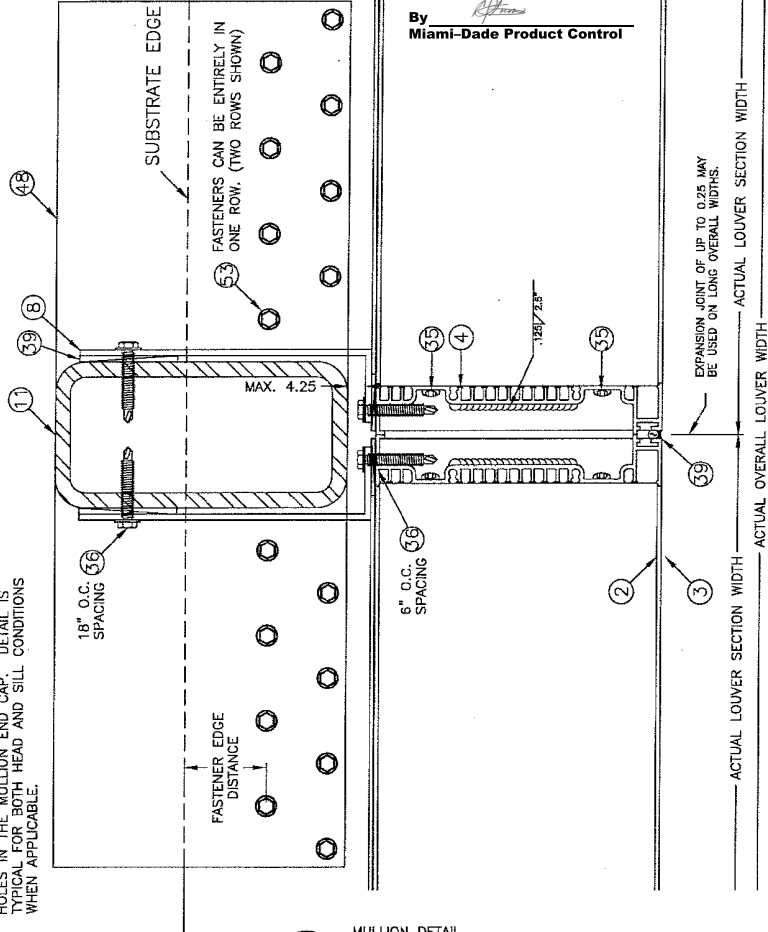


13B
10/21

MULLION DETAIL
LOUVER HEIGHT ≤ 96 IN.

DRAWN BY MES	DATE 8/9/2017	SCALE 1:2	SHEET NO. 10 OF 21	CAD DRAWING NO. EHH-601D
GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410				
TITLE EHH-601D LOUVER FLANGE FRAME SLEEVE MOUNT MULLION DETAILS				
WAYNE K. HELMLIA LICENSE No. 59092 STATE OF FLORIDA PROFESSIONAL ENGINEER AUG 9 0 2017				
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. Helmlia Registration No: 59092				

MULLION DIRECT MOUNT (SHOWN HERE AT SILL) IS FOR SUBSTRATES WHERE MINIMUM FASTENER EDGE DISTANCE CAN BE ACHIEVED BY USE OF HOLES IN THE MULLION END CAP. DETAIL IS TYPICAL FOR BOTH HEAD AND SILL CONDITIONS WHEN APPLICABLE.



14A
11/21

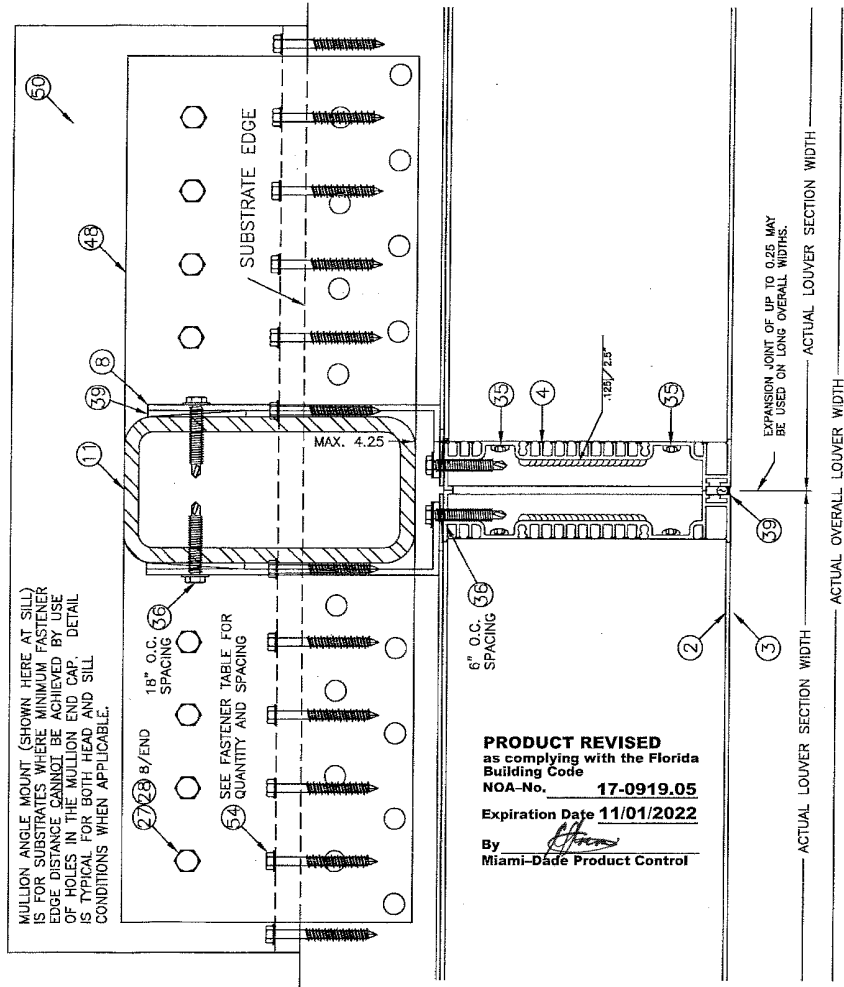
MULLION DETAIL
LOUVER HEIGHT ≤ 144 IN.

PRODUCT RENEWED
as complying with the Florida
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PRODUCT RENEWED
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Building Code
NOA-No. 23-1013.09
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By *[Signature]*
Miami-Dade Product Control

MULLION ANGLE MOUNT (SHOWN HERE AT SILL) IS FOR SUBSTRATES 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.



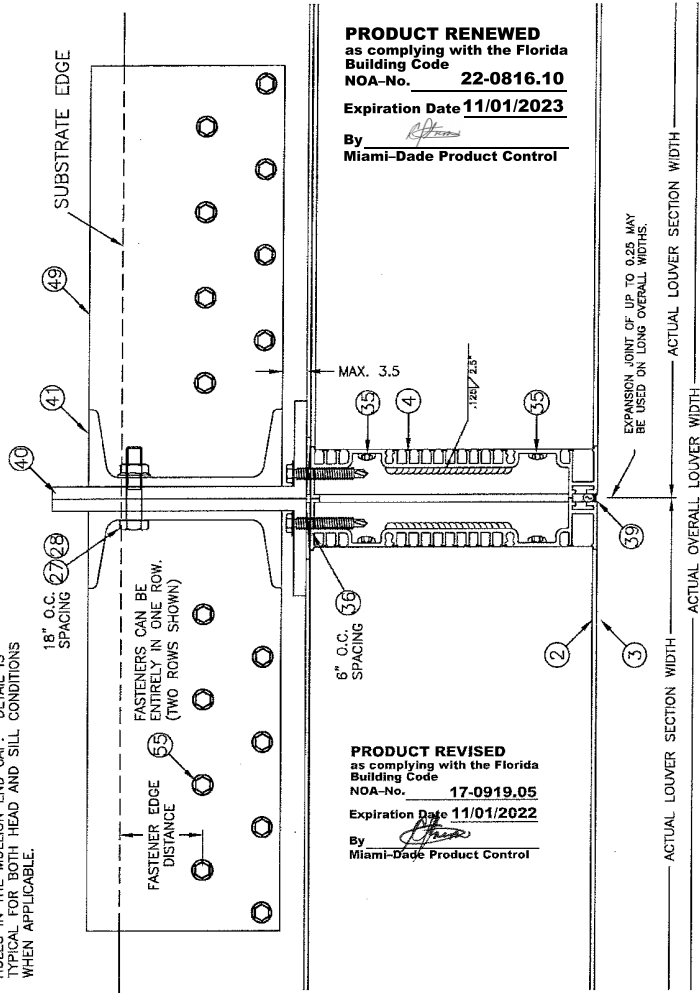
14B
11/21

MULLION DETAIL
LOUVER HEIGHT ≤ 144 IN.

PRODUCT REVISED
as complying with the Florida
Building Code
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GREENHECK P.O. BOX 410 SCHUFELD, WISCONSIN 54476-0410 TITLE EHH-601D LOUVER CONTINUOUS ANGLE MOUNT MULLION DETAILS, HS144"	DRAWN BY	MES	DATE	8/9/2017
	SCALE	1:2.5	SHEET NO.	11 OF 21
	CAD DRAWING NO. EHH-601D			
WAYNE K. HELMILA LICENSE No. 59092 STATE OF FLORIDA PROFESSIONAL ENGINEER AUG 30 2017 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				

MULLION DIRECT MOUNT (SHOWN HERE AT SILL)
IS FOR SUBSTRATES WHERE MINIMUM FASTENER
EDGE DISTANCE CAN BE ACHIEVED BY USE OF
HOLES IN THE MULLION END CAP. DETAIL IS
TYPICAL FOR BOTH HEAD AND SILL CONDITIONS
WHEN APPLICABLE.



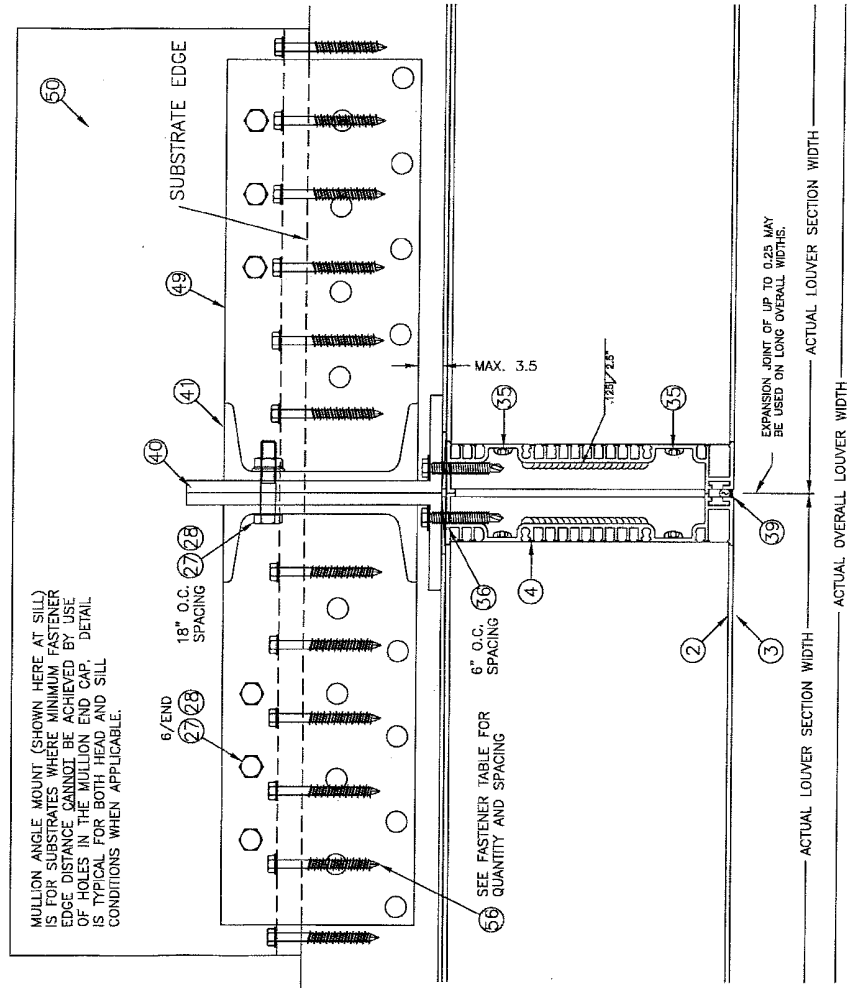
15A
12/21

MULLION DETAIL
LOUVER HEIGHT ≤ 96 IN.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-0919.05**
Expiration Date **11/01/2022**
By *[Signature]*
Miami-Dade Product Control

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **22-0816.10**
Expiration Date **11/01/2023**
By *[Signature]*
Miami-Dade Product Control

MULLION ANGLE MOUNT (SHOWN HERE AT SILL)
IS FOR SUBSTRATES 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.



15B
12/21

MULLION DETAIL
LOUVER HEIGHT ≤ 96 IN.

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **23-1013.09**
Expiration Date **11/01/2024**
By *[Signature]*
Miami-Dade Product Control

GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410 TITLE EHH-601D LOUVER CONTINUOUS ANGLE MOUNT MULLION DETAILS, H $\leq$ 96"	DRAWN BY MES	DATE 8/9/2017
	SCALE 1:2.5	SHEET NO. 12 OF 21
CAD DRAWING NO. EHH-601D		

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

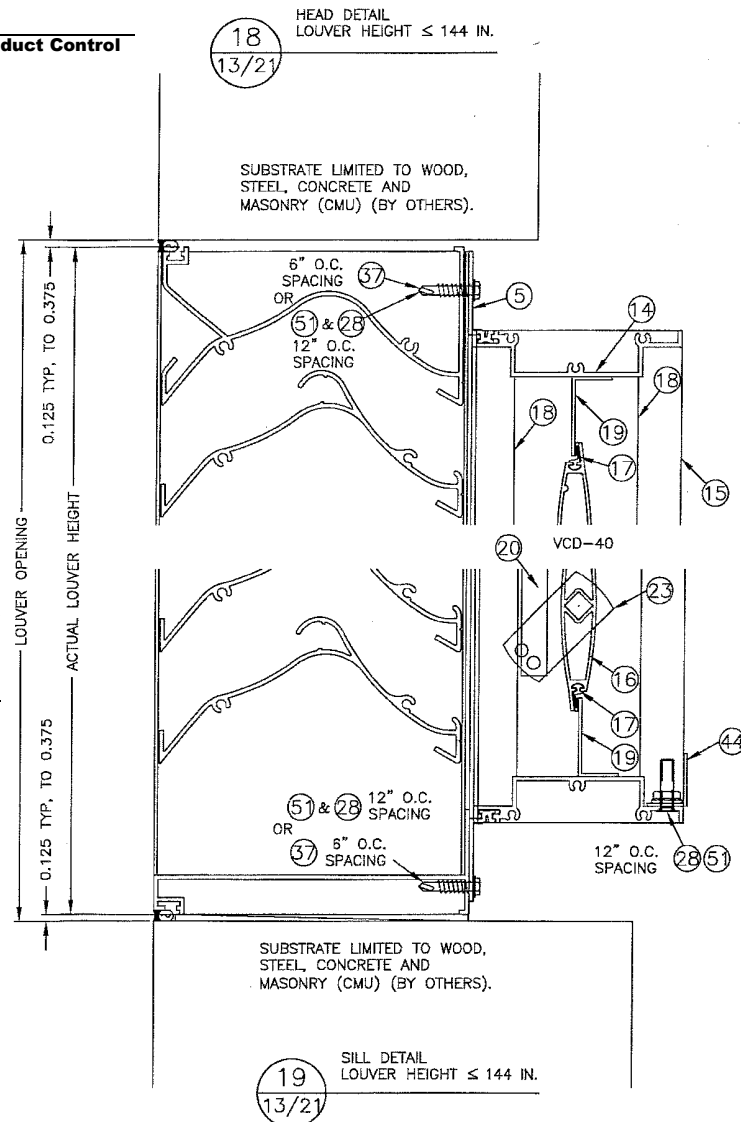
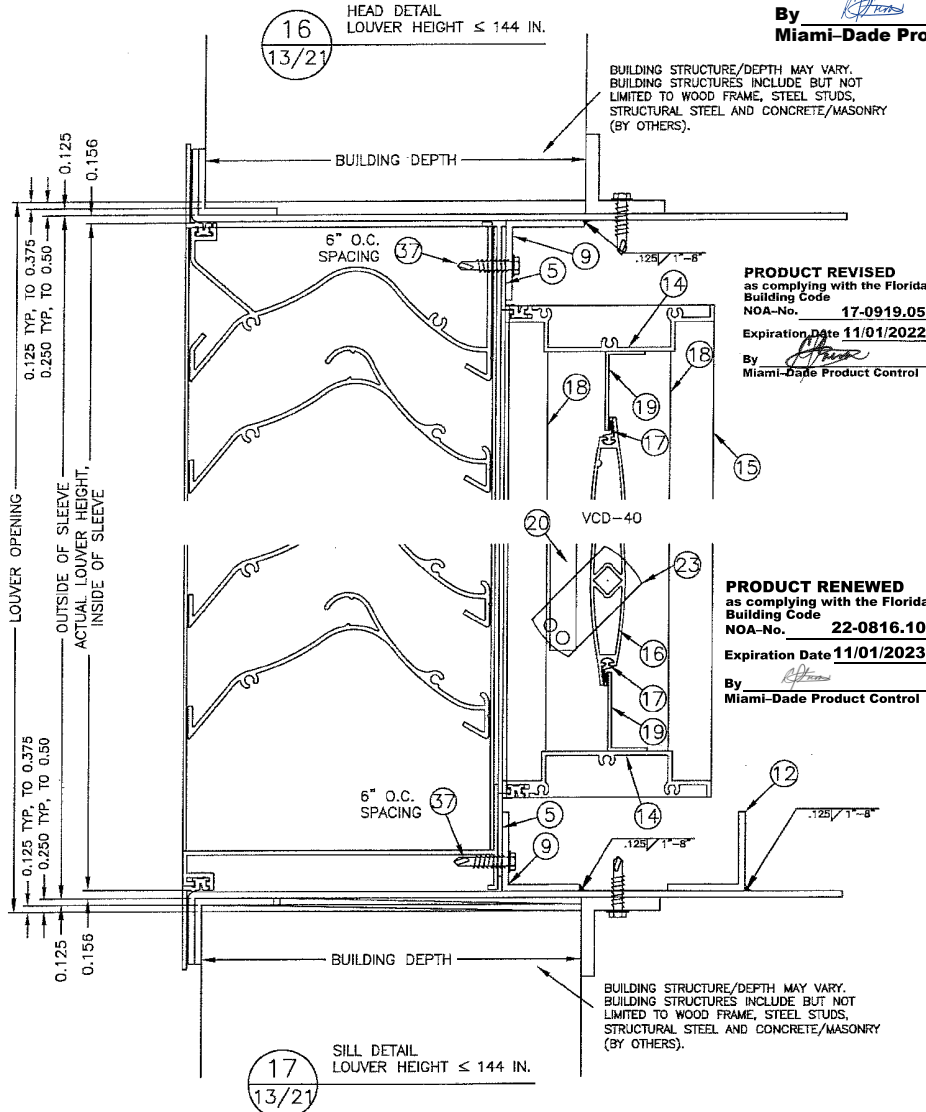
WAYNE K. HELMILA
LICENSE
No. 59092
STATE OF FLORIDA
PROFESSIONAL ENGINEER

AUG 30 2017

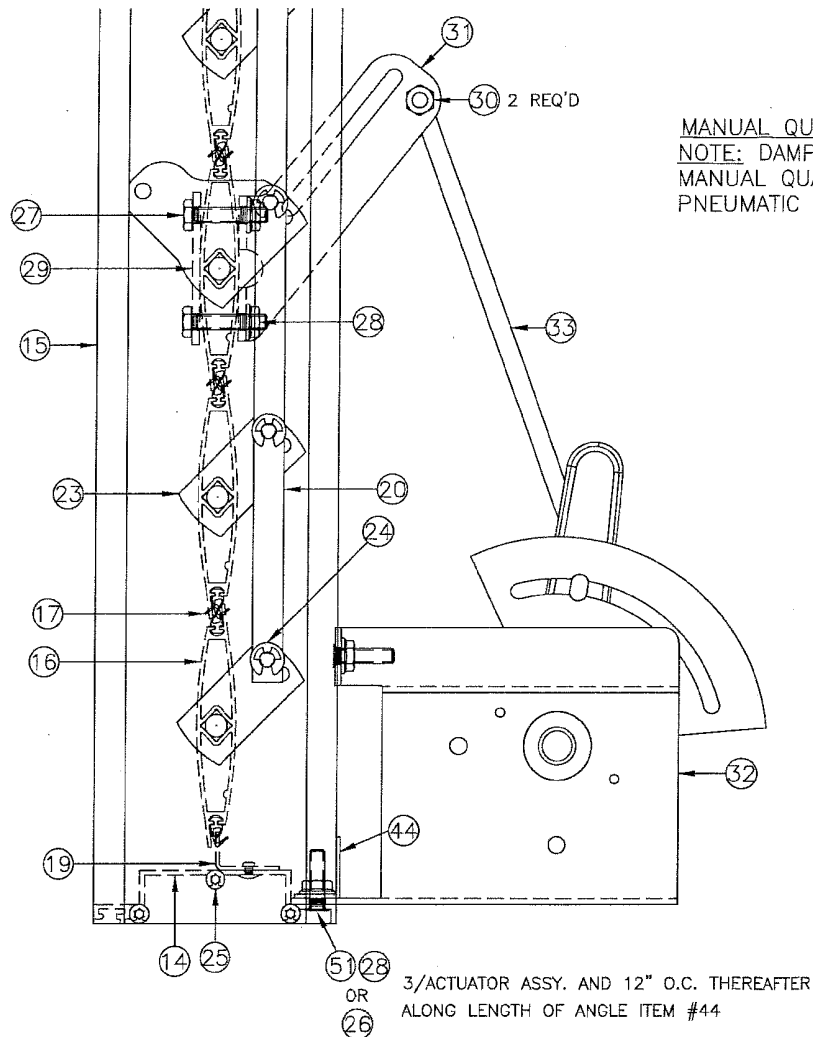
PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 23-1013.09

Expiration Date 11/01/2024

By *[Signature]*
Miami-Dade Product Control



DRAWN BY MES	DATE 8/9/2017	SHEET NO. 13 OF 21	CAD DRAWING NO. EHH-601D
	SCALE		
GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410		TITLE EHH-601D LOUVER W/VCD-40 FLANGE FRAME W/SLEEVE MOUNT, & CONTINUOUS ANGLE MOUNT HEAD & SILL DETAILS	
LICENSE No. 59092 STATE OF FLORIDA PROFESSIONAL ENGINEER WAYNE K. HELMILA		RICE AUG 30 2017 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	



MANUAL QUADRANT ACTUATOR AS SHOWN
NOTE: DAMPER MAY BE OPERATED BY
 MANUAL QUADRANT, AN ELECTRIC OR
 PNEUMATIC ACTUATOR.

PRODUCT RENEWED
 as complying with the Florida
 Building Code
 NOA-No. 23-1013.09
 Expiration Date 11/01/2024
 By [Signature]
 Miami-Dade Product Control

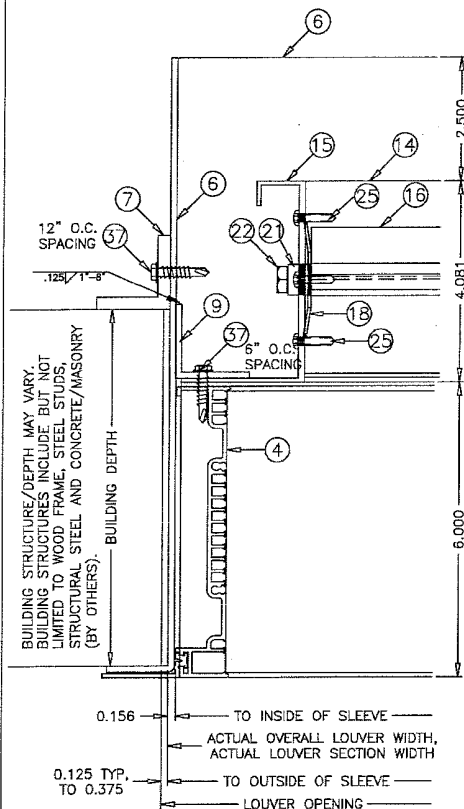
PRODUCT RENEWED
 as complying with the Florida
 Building Code
 NOA-No. 22-0816.10
 Expiration Date 11/01/2023
 By [Signature]
 Miami-Dade Product Control

PRODUCT REVISED
 as complying with the Florida
 Building Code
 NOA-No. 17-0919.05
 Expiration Date 11/01/2022
 By [Signature]
 Miami-Dade Product Control

ACTUATOR DETAIL
 LOUVER HEIGHT ≤ 144 IN.

20
 14/21

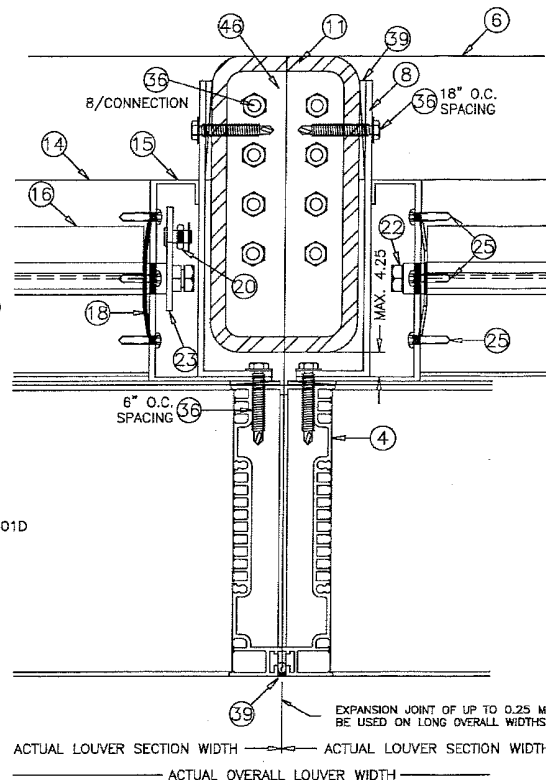
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GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410		TITLE VCD-40 DAMPER MANUAL QUAD ACTUATOR		
RICE ENGINEERING 105 School Creek Trail Luxemburg, WI 54217 Phone: (920) 617-1042 Fax: (920) 617-1100 www.rice-inc.com Florida Firm No: F-0100005061 Certificate of Authorization: #9090 Wayne K. Helmila Registration No: 59092				



21
15/21

JAMB DETAIL
LOUVER HEIGHT ≤ 144 IN.

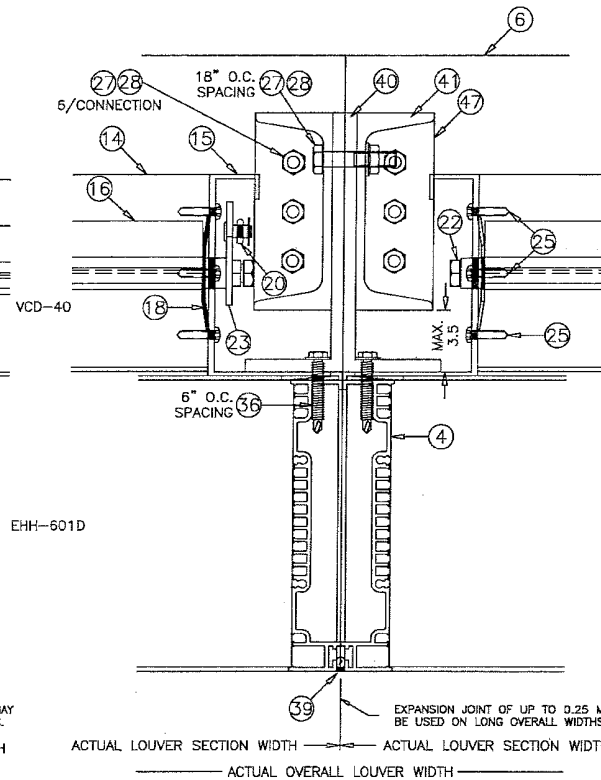
PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **23-1013.09**
Expiration Date **11/01/2024**
By RPT
Miami-Dade Product Control



22A
15/21

MULLION DETAIL
LOUVER HEIGHT ≤ 144 IN.

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **22-0816.10**
Expiration Date **11/01/2023**
By RPT
Miami-Dade Product Control

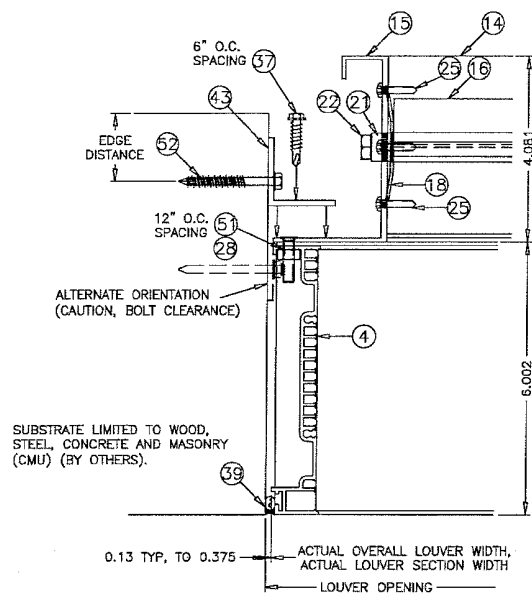


22B
15/21

MULLION DETAIL
LOUVER HEIGHT ≤ 96 IN.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-0919.05**
Expiration Date **11/01/2022**
By RPT
Miami-Dade Product Control

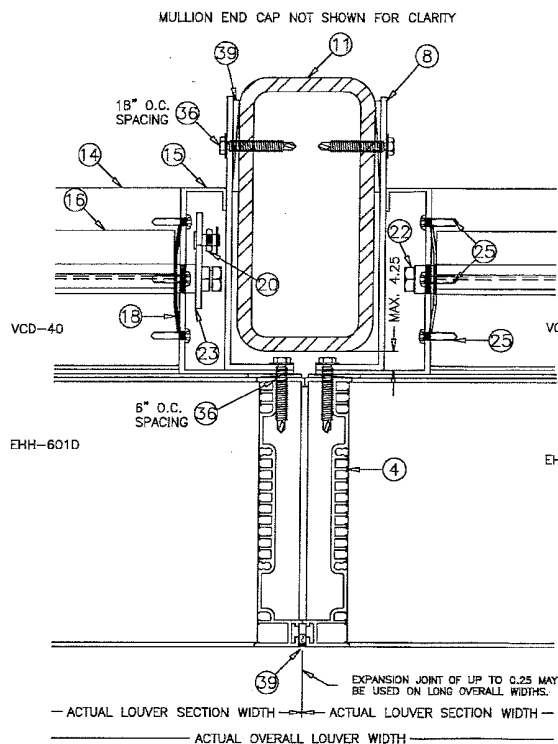
DRAWN BY MES	DATE 8/9/2017	SHEET NO. 15 OF 21	CAD DRAWING NO. EHH-601D
	SCALE		
GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410		TITLE EHH-601D LOUVER W/VCD-40 FLANGE FRAME SLEEVE MOUNT JAMB AND MULLION DETAILS	
		RICE AUG 30 2017 ENGINEERING 105 School Creek Trail Luxemburg, WI 54217 Phone: (920) 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	



23
16/21

JAMB DETAIL
LOUVER HEIGHT ≤ 144 IN.

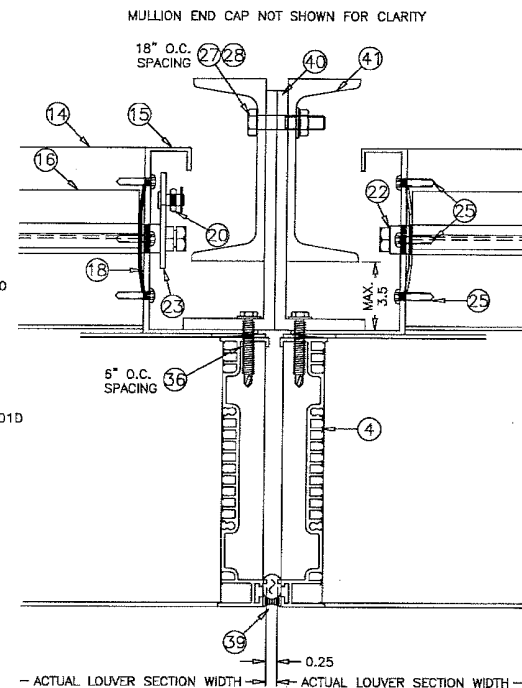
PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **23-1013.09**
Expiration Date **11/01/2024**
By *[Signature]*
Miami-Dade Product Control



24A
16/21

MULLION DETAIL
LOUVER HEIGHT ≤ 144 IN.

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **22-0816.10**
Expiration Date **11/01/2023**
By *[Signature]*
Miami-Dade Product Control



24B
16/21

MULLION DETAIL
LOUVER HEIGHT ≤ 96 IN.

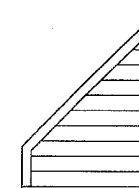
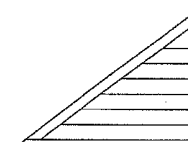
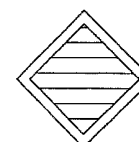
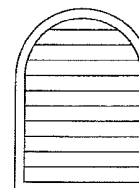
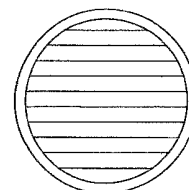
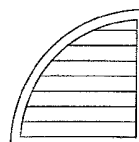
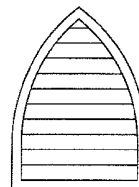
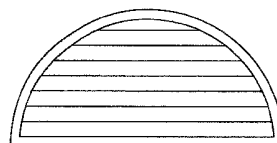
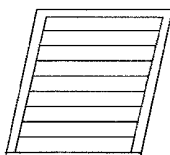
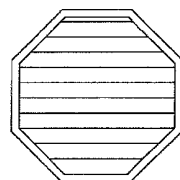
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-0919.05**
Expiration Date **11/01/2022**
By *[Signature]*
Miami-Dade Product Control

DRAWN BY MES	DATE 8/9/2017	SCALE	SHEET NO. 16 OF 21	CAD DRAWING NO. EHH-601D
GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410		TITLE EHH-601D LOUVER W/VCD-40 CONTINUOUS ANGLE MOUNT JAMB AND MULLION DETAILS		
RICE AUG 30 2017 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. Helmlia Registration No: 59092				

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 MAY BE STACKED VERTICALLY AND HORIZONTALLY THE SAME AS THE RECTANGULAR PANELS.
3. WHEN SECTIONS EXCEED 36" IN LENGTH BLADE SUPPORT ANGLE AND BRACKETS ARE REQUIRED.

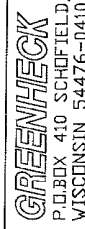
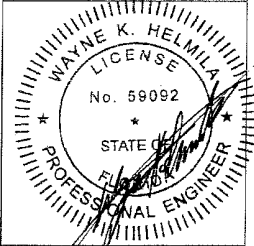
AVAILABLE SHAPES



PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **23-1013.09**
Expiration Date **11/01/2024**
By 
Miami-Dade Product Control

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **22-0816.10**
Expiration Date **11/01/2023**
By 
Miami-Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-0919.05**
Expiration Date **11/01/2022**
By 
Miami-Dade Product Control

DRAWN BY MES	DATE 8/9/2017	SCALE	SHEET NO. 17 OF 21	CAD DRAWING NO. EHH-601D
 P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410		TITLE EHH-601D LOUVER W/ AND W/O VCD-40 AVAILABLE SHAPES		
				
RICE AUG 30 2017 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. 23-1013.09
Expiration Date 11/01/2024
By *[Signature]*
Miami-Dade Product Control

ITEM	DESCRIPTION	MATERIAL	NOTES
1	LOUVER HEAD	6063-T5 ALUMINUM	
2	LOUVER BLADE	6063-T5 ALUMINUM	2.125" MAX. SPACING
3	LOUVER SILL	6063-T5 ALUMINUM	
4	LOUVER JAMB	6063-T5 ALUMINUM	
5	LOUVER/DAMPER FLANGE	6063-T5 ALUMINUM	
6	FORMED SLEEVE	5052-H32 ALUMINUM	1/8" FORMED SLEEVE-DEPTH VARIES
7A	1 1/2 X 1 1/2 X 1/4 ANGLE	6063-T5 ALUMINUM	BLADE SUPPORT ANGLE
7B	1 1/2 X 1 1/2 X 1/4 ANGLE	6063-T5 ALUMINUM	USED AT HEAD/SILL/JAMBS OF SLEEVE
8	1 1/2 X 6 X 1/8 ANGLE	6063-T5 ALUMINUM	JAMB ANGLE
9	1 1/2 X 1 1/2 X 1/8 ANGLE	6063-T5 ALUMINUM	USED AT HEAD/SILL/JAMBS OF LOUVER
10	1 1/2 X 1 1/2 X 1/8 ANGLE	6063-T5 ALUMINUM	USED AT HEAD/SILL OF SLEEVE FLANGE
11	3 X 6 X 5/16 STEEL TUBE	A36	
12	1 1/2 X 1 1/2 X 1/8 ANGLE	6063-T5 ALUMINUM	USED AT SILL AS BACK OF SILL PAN
13	LOUVER BLANK OFF	6063-T5 ALUMINUM	IF REQUIRED, SPANS SILL OPENING
14	DAMPER HEAD/SILL	6063-T5 ALUMINUM	
15	DAMPER JAMB	6063-T5 ALUMINUM	
16	DAMPER BLADE	6063-T5 ALUMINUM	3.75 MAX. SPACING
17	DAMPER BLADE SEAL	SILICONE/RUBBER TYPE	MATERIAL VARIES
18	DAMPER JAMB SEAL	SS	
19	DAMPER TOP/BOTTOM CLOSURE	ALUMINUM	
20A	DAMPER LINKAGE BAR	GALV. STEEL	
20B	DAMPER LINKAGE BAR	SS	
21A	DAMPER AXLE BUSHING	DELRIN	
21B	DAMPER AXLE BUSHING	BRONZE	
21C	DAMPER AXLE BUSHING	SS	
22A	NON-DRIVE DAMPER AXLE ASST.	ZC STEEL PIN W/ DELRIN BUSHING	
22B	NON-DRIVE DAMPER AXLE ASST.	ZC STEEL PIN W/ BRONZE BUSHING	
22C	NON-DRIVE DAMPER AXLE ASST.	ZC STEEL PIN W/ SS BUSHING	
22D	NON-DRIVE DAMPER AXLE ASST.	SS PIN W/ DELRIN BUSHING	
22E	NON-DRIVE DAMPER AXLE ASST.	SS PIN W/ BRONZE BUSHING	
22F	NON-DRIVE DAMPER AXLE ASST.	SS PIN W/ SS BUSHING	
23A	DRIVE SIDE DAMPER AXLE ASST.	ZC/GALV. STEEL	
23B	DRIVE SIDE DAMPER AXLE ASST.	SS	
24A	1/4 DIA. E-CLIP	2P	
24B	1/4 DIA. E-CLIP	SS	
25	#8 X .75 TYP TYPE AB SMS	SS	
26	#14 X .75 TEK	2P	
27A	1/4-20 X 1.25 HH CS	2P	
27B	1/4-20 X 1.5 HH CS	SS	
28A	1/4-20 SF NUT	2P	
28B	1/4-20 SF NUT	SS	
29	REINFORCING STRAP	18-8 SS	
30	1/4-20 X .562 BALL SWIVEL	2P	
31A	DAMPER BLADE DRIVE LEVER	SS	
31B	DAMPER BLADE DRIVE LEVER	GALV. STEEL	
32	DAMPER MANUAL QUAD ASSY.		
33	5/16 DIA. LINKAGE ROD	2P	
34	#10 X 3/4" TYP SMS 18-8 SS	18-8 SS	
35	#10 X 1 1/4" SMS 316 SS	316 SS	
36	1/4" DIA. SS SCREW		1 1/2" LONG
37	1/4" DIA. SS SCREW		2" LONG
38	1/8" DIA. BLIND RIVET	ALUMINUM	
39A	DEAD LOAD SHIMS		NOT BY MANUFACTURER
39B	SEALANT AND BACKER ROD		NOT BY MANUFACTURER
40	5 1/4 X 2 X 1/4 ANGLE	6063-T5 ALUMINUM	USED AT JAMB OF LOUVER/SLEEVE
41	4" CHANNEL	6061-T6 ALUMINUM	USED AT JAMB OF LOUVER/SLEEVE
42	MULLION SLEEVE BRACKET	5052-H32 ALUMINUM	
43	1 1/4 X 1 1/4 X 1/8 ANGLE	6063-T5 ALUMINUM	MIN SIZE, JAMB ATTACHMENT ANGLE
44	SILL JAM	ALUMINUM	
45	BLADE SUPPORT, OPTIONAL	6063-T5 ALUMINUM	
46	STEEL MULLION END CAP (SM)	STEEL	FACTORY WELDED TO MULLION
47	ALUMINUM MULLION END CAP (SM)	5052-H32 ALUMINUM	FACTORY WELDED TO MULLION
48	STEEL MULLION END CAP (LG)	STEEL	FACTORY WELDED TO MULLION
49	ALUM MULLION END CAP (LG)	5052-H32 ALUMINUM	FACTORY WELDED TO MULLION
50	MULLION MOUNTING ANG. BRACKET	STEEL 36 KSI, OR 6061-T6	MULLION MOUNTING ANGLE, H<144
51	1/4" DIA. THREAD STUD	SS OR PLATED STEEL	1/2" MIN. LONG

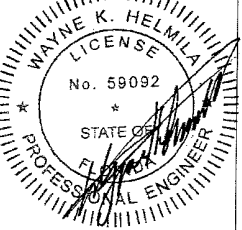
*EMBEDMENT DEPTH IS EQUAL TO OVERALL FASTENER LENGTH FOR CONCRETE/CMU FASTENERS.
IF SHIMS ARE USED, FASTENER LENGTH MUST BE INCREASED BY THICKNESS OF SHIMS.

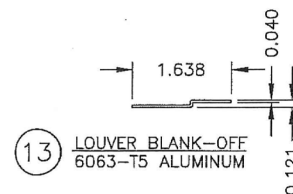
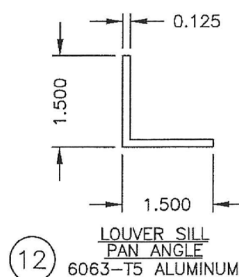
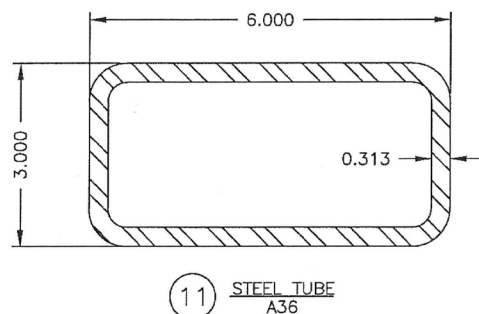
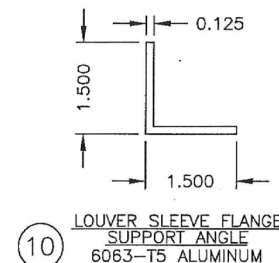
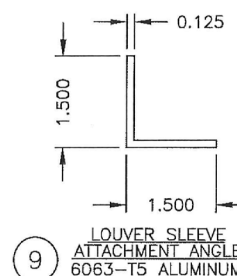
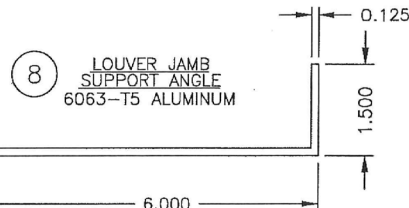
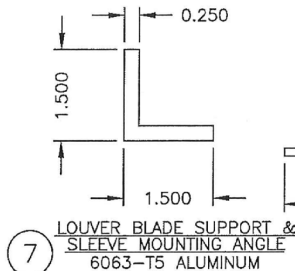
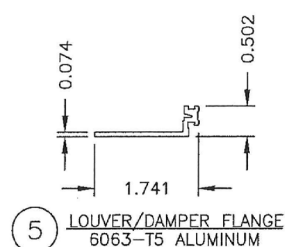
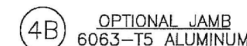
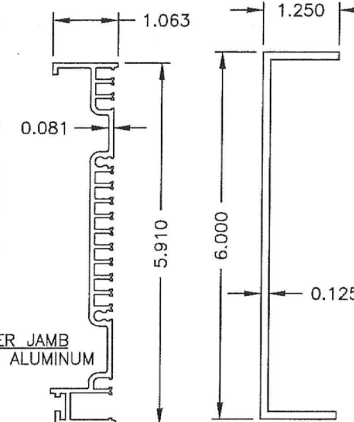
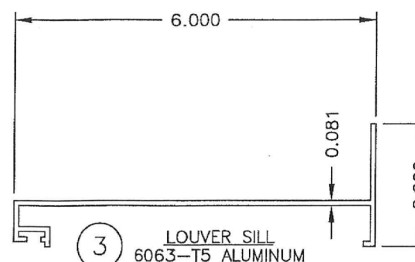
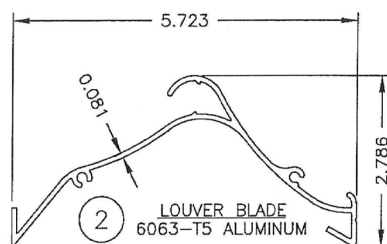
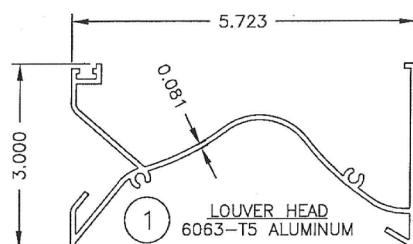
NOTE: THE CONTINUOUS ANGLE MOUNT FASTENERS DO NOT ACCOUNT FOR INSTALLATION INTO CRACKED CONCRETE. THE SLEEVE MOUNT STYLE SETUP DOES ACCOUNT FOR INSTALLATION AROUND CRACKED CONCRETE.

ITEM	CONCRETE	CMU	STEEL	WOOD	MIN.	FASTENER TYPE	ALL FASTENERS ARE STEEL OR STAINLESS
52	JAMB PERIMETER ANGLE FASTENER, HEIGHT <=144						DIAMETER # RQD. CENTERS EDGE EMBED.*
52A	X				2KSI	"POWERS WEDGE BOLT"	3/8 VARIES 6.00 1.215 3.500
52B	X				4KSI	"POWERS WEDGE BOLT"	3/8 VARIES 6.00 1.215 3.500
52C	X				2KSI	SCOTS TAPCON / TAPCON	1/4 VARIES 4.75 1.500 1.750
52D	X				4KSI	SCOTS TAPCON / TAPCON	1/4 VARIES 6.00 1.500 1.750
52E	X				1.5KSI	SCOTS TAPCON / TAPCON	1/4 VARIES 3.00 1.500 1.750
52F		X			65KSI Fy	BOLT/NUT OR TAPPING SCREW	1/4 VARIES 6.00 0.500 0.125
52G			X		SG 0.42	LAG	3/8 VARIES 6.00 1.500 2.375
53	MULLION END PLATE FASTENER, HEIGHT <=144						DIAMETER # RQD. CENTERS EDGE EMBED.*
53A	X				2KSI	"POWERS WEDGE BOLT"	3/8 8/END 1.50 1.75 3.500
53B	X				4KSI	"POWERS WEDGE BOLT"	3/8 8/END 1.50 1.75 3.500
53C	X				2KSI	SCOTS TAPCON / TAPCON	1/4 9/END 2.00 1.50 1.625
53E	X				4KSI	SCOTS TAPCON / TAPCON	1/4 8/END 2.00 1.50 1.625
53F		X			65KSI Fy	BOLT/NUT OR TAPPING SCREW	1/4 8/END 1.00 0.50 0.125
53G			X		SG 0.42	LAG	3/8 7/END 1.50 1.75 2.375
54	MULLION ANGLE MOUNT FASTENER, HEIGHT <=144						DIAMETER # RQD. CENTERS EDGE EMBED.* CENTER
54A	X				2KSI	"POWERS WEDGE BOLT"	3/8 12/ANG. 3.375 2.250 3.500 3.766
54B	X				4KSI	"POWERS WEDGE BOLT"	3/8 9/ANG. 3.375 2.250 3.500 3.766
54C	X				2KSI	SCOTS TAPCON / TAPCON	1/4 32/ANG. 2.000 1.500 1.750 3.375
54D	X				4KSI	SCOTS TAPCON / TAPCON	1/4 27/ANG. 2.000 1.500 1.750 3.375
54E	X				1.5KSI	SCOTS TAPCON / TAPCON	1/4 32/ANG. 2.000 1.500 1.750 3.375
54F		X			65KSI Fy	BOLT/NUT OR TAPPING SCREW	1/4 16/ANG. 1.000 0.500 0.125 3.000
54G		X			65KSI Fy	BOLT/NUT OR TAPPING SCREW	1/4 11/ANG. 1.000 0.500 0.188 3.000
54H		X			65KSI Fy	BOLT/NUT OR TAPPING SCREW	1/4 16/ANG. 1.000 0.500 0.188 3.000
54I		X			65KSI Fy	BOLT/NUT OR TAPPING SCREW	5/16 12/ANG. 1.000 0.625 0.125 3.000
54J			X		65KSI Fy	BOLT/NUT OR TAPPING SCREW	5/16 16/ANG. 1.000 0.625 0.125 3.766
54K			X		SG 0.42	LAG	3/8 16/ANG. 1.500 1.500 2.875 3.766
54L			X		SG 0.42	LAG	3/8 11/ANG. 1.500 1.500 2.875 3.000
55	MULLION END PLATE FASTENER, HEIGHT <=96						DIAMETER # RQD. CENTERS EDGE EMBED.*
55A	X				2KSI	"POWERS WEDGE BOLT"	3/8 5/CAP 1.50 1.6 3.500
55B	X				4KSI	"POWERS WEDGE BOLT"	3/8 5/CAP 1.50 1.6 3.500
55C	X				2KSI	"POWERS WEDGE BOLT"	3/8 5/CAP 2.00 1.75 3.500
55D	X				4KSI	"POWERS WEDGE BOLT"	3/8 5/CAP 2.00 1.75 3.500
55E	X				2KSI	SCOTS TAPCON / TAPCON	1/4 6/CAP 2.00 1.50 1.750
55F	X				4KSI	SCOTS TAPCON / TAPCON	1/4 6/CAP 2.00 1.50 1.750
55G		X			65KSI Fy	BOLT/NUT OR TAPPING SCREW	1/4 3/CAP 1.00 0.50 0.125
55H			X		SG 0.42	LAG	3/8 5/CAP 1.50 1.75 2.375
56	MULLION ANGLE MOUNT FASTENER, H<=96						DIAMETER # RQD. CENTERS EDGE EMBED.* CENTER
56A	X				2KSI	"POWERS WEDGE BOLT"	3/8 4/ANG. 3.375 2.25 3.500 3.766
56B	X				4KSI	"POWERS WEDGE BOLT"	3/8 3/ANG. 3.375 2.25 3.500 3.766
56C	X				2KSI	SCOTS TAPCON / TAPCON	1/4 11/ANG. 2.000 1.50 1.750 3.375
56D	X				4KSI	SCOTS TAPCON / TAPCON	1/4 9/ANG. 2.000 1.50 1.750 3.375
56E	X				1.5KSI	SCOTS TAPCON / TAPCON	1/4 11/ANG. 2.000 1.50 1.750 3.375
56F		X			65KSI Fy	BOLT/NUT OR TAPPING SCREW	1/4 7/ANG. 1.000 0.50 0.125 3.766
56G		X			65KSI Fy	BOLT/NUT OR TAPPING SCREW	1/4 6/ANG. 1.000 0.50 0.125 3.000
56H			X		SG 0.42	LAG	3/8 5/ANG. 1.500 1.50 2.875 3.766
56I			X		SG 0.42	LAG	3/8 4/ANG. 1.500 1.50 2.875 3.000

GENERAL NOTES:

- IT SHALL BE THE RESPONSIBILITY OF THE PERMIT HOLDER TO VERIFY THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE TO SUPPORT THE LOADS IMPOSED BY THE LOUVERS.
- THE LOUVER HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE HIGH VELOCITY HURRICANE ZONE (HVHZ) REQUIREMENTS OF THE CURRENT FLORIDA BUILDING CODE (FBC) TO TEST PROTOCOLS TAS 201-94 (IMPACT), TAS 202-94 (UNIFORM STATIC PRESSURE), TAS 203-94 (CYCLIC PRESSURE), AND, WITH VCD-40 DAMPER ATTACHED AND DAMPER BLADES FULLY CLOSED, TAS 100(A)-95 (HIGH VELOCITY WIND DRIVEN RAIN).
- LOUVER ASSEMBLY IS QUALIFIED FOR A MAXIMUM DESIGN LOAD OF +/- 150 PSF.
- MAXIMUM SINGLE SECTION SIZE IS 72" WIDE X 144" HIGH. MAXIMUM ASSEMBLED LOUVER SIZE IS UNLIMITED WIDE X 144" HIGH.
- 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.
- CONCRETE MASONRY SHALL BE ASTM C90, TYPE II, 2,000 PSI GROUT-FILLED.
- 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. ALSO SEE NOTE #1.
- THE CONTINUOUS ANGLE MOUNT STYLE UTILIZES A CONTINUOUS JAMB ANGLE THAT IS ATTACHED TO THE SUBSTRATE BY FASTENERS. IT MAY BE INSTALLED IN CONCRETE, CMU, STEEL, OR WOOD ACCORDING TO THE FASTENER SCHEDULE. ALSO SEE NOTE #1.
- LOUVER ASSEMBLY WITHOUT VCD-40 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, OR SUPPLIES.
- LOUVER ASSEMBLY WITH THE VCD-40 DAMPER MAY BE INSTALLED IN A LOCATION WHERE THE ROOM BEHIND THE LOUVER IS NOT DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM OR THE ROOM WILL HOUSE NON-WATER RESISTANT/WATER PROOF EQUIPMENT, COMPONENTS, OR SUPPLIES. DAMPER BLADES MUST BE FULLY CLOSED DURING EXTREME RAIN OR BLOWN-WATER WEATHER EVENTS IN ORDER TO COMPLY WITH NOTE #10.
- INSTALLER TO PROVIDE SEPARATION OF DISSIMILAR MATERIALS AS REQUIRED (SEE CURRENT FBC). SEE OLDER 2010 FBC, BUILDING, 2003.8.4 FOR MORE INFORMATION ON SEPARATION OF DISSIMILAR MATERIALS. ALL ALUMINUM, STAINLESS STEEL (SS) AND PLATED/COATED STEEL PARTS PROVIDED BY MANUFACTURER ARE INHERENTLY CORROSION RESISTANT OR HAVE A CORROSION RESISTANT COATING.
- THE VCD-40 MAY BE OPERATED BY THE MANUAL QUADRANT SHOWN ON PAGE 14/21 OR BY AN ELECTRIC OR PNEUMATIC ACTUATOR. THE DAMPER'S ACTUATOR IS NOT PART OF THIS APPROVAL.
- FRAME CONSTRUCTION. HEADS AND SILLS ARE SQUARE CUT. JAMBS SQUARE CUT @ HEAD AND SILL. CORNERS ARE SECURED WITH (2) #10x1-1/4 SMS AND SILICONE SEALED. BLADES ARE SECURED TO JAMBS WITH (2) #10x1-1/4 SMS AND WELDED @ EACH END.
- STEEL/STAINLESS-STEEL/ALUMINUM PARTS MAY BE MADE OUT OF ALTERNATE ALLOY THAT HAS EQUAL OR GREATER YIELD STRENGTH.
- BLADE SUPPORT ANGLE (AND OPTIONAL BLADE SUPPORT BRACKETS) ARE ONLY REQUIRED WHEN ACTUAL LOUVER SECTION WIDTH IS GREATER THAN 36 INCHES.

DRAWN BY MES	DATE 8/9/2017	SHEET NO. 18 OF 21	CAD DRAWING NO. EHH-601D
GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410			
EHH-601D LOUVER W/ AND W/O VCD-40 SLEEVE/CONTINUOUS MOUNT NOTES/BILL OF MATERIAL			
			
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-01000005081 Certificate of Authorization: #9090 Wayne K. Helmila Registration No: 59092			

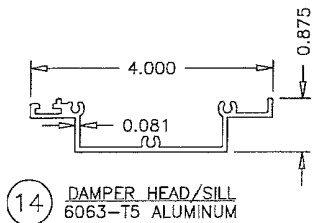


PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **22-0816.10**
Expiration Date **11/01/2023**
By *[Signature]*
Miami-Dade Product Control

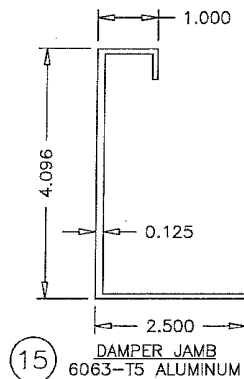
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NOA-No. **17-0919.05**
Expiration Date **11/01/2022**
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Miami-Dade Product Control

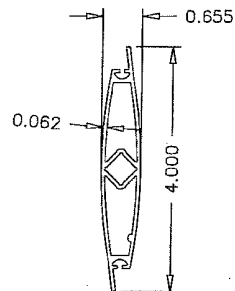
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GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410 TITLE EHH-601D LOUVER SLEEVE/CONTINUOUS MOUNT W/ AND W/O VCD-40 PART PROFILES				
RICE ENGINEERING 105 School Creek Trail Luxemburg, WI 54217 Phone: (920) 617-1042 Fax: (920) 617-1100 www.rice-inc.com Florida Firm No: F-01000005081 Certificate of Authorization: #9090 Wayne K. Helmila Registration No: 59092				



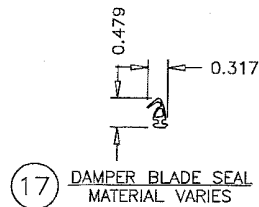
14 DAMPER HEAD/SILL
6063-T5 ALUMINUM



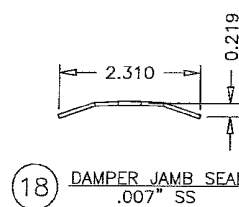
15 DAMPER JAMB
6063-T5 ALUMINUM



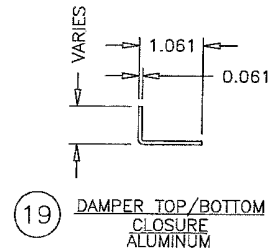
16 DAMPER BLADE
6063-T5 ALUMINUM



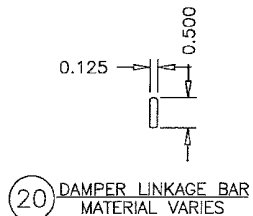
17 DAMPER BLADE SEAL
MATERIAL VARIES



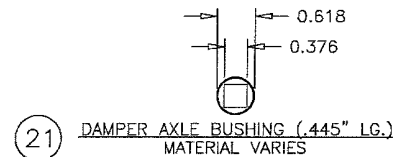
18 DAMPER JAMB SEAL
.007" SS



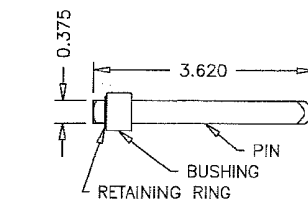
19 DAMPER TOP/BOTTOM
CLOSURE
ALUMINUM



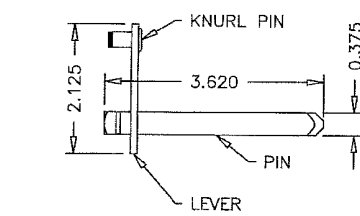
20 DAMPER LINKAGE BAR
MATERIAL VARIES



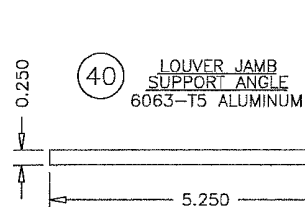
21 DAMPER AXLE BUSHING (.445" LG.)
MATERIAL VARIES



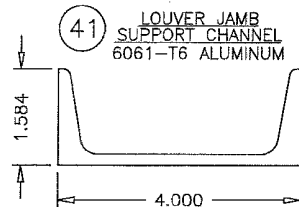
22 NON-DRIVE DAMPER AXLE ASSY.
MATERIAL VARIES



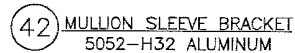
23 DRIVE-SIDE DAMPER AXLE ASSY.
MATERIAL VARIES



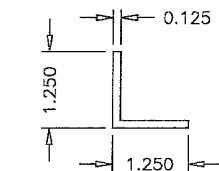
40 LOUVER JAMB
SUPPORT ANGLE
6063-T5 ALUMINUM



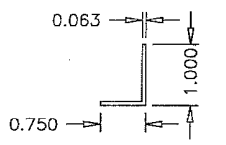
41 LOUVER JAMB
SUPPORT CHANNEL
6061-T6 ALUMINUM



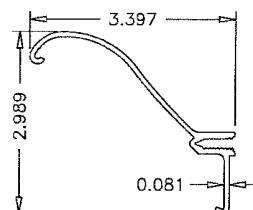
42 MULLION SLEEVE BRACKET
5052-H32 ALUMINUM



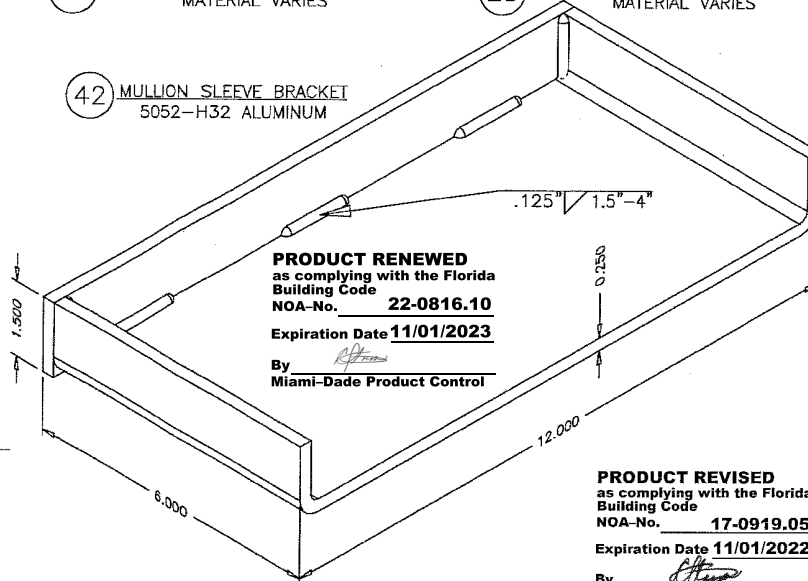
43 LOUVER JAMB
ATTACHMENT ANGLE
6063-T5 ALUMINUM



44 DAMPER SILL DAM
ALUMINUM



45 OPTIONAL BLADE
SUPPORT BRACKET
6063-T5 ALUMINUM



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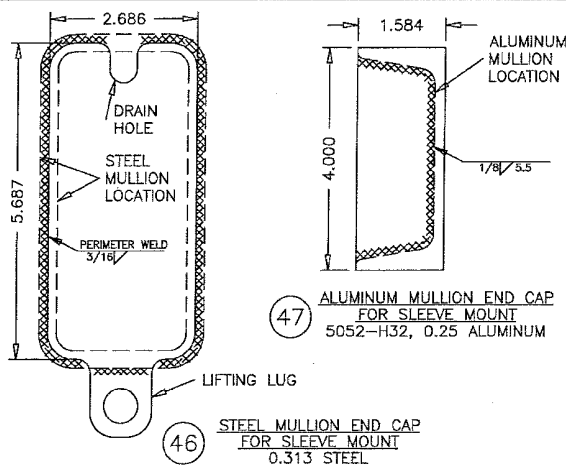
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **17-0919.05**
Expiration Date **11/01/2022**
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Building Code
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Expiration Date **11/01/2024**
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DRAWN BY MES	DATE 8/9/2017	SHEET NO. 20 OF 21	CAD DRAWING NO. EHH-601D
	SCALE 1:2		
GREENHECK P.O. BOX 410 SCHWITZELD, WISCONSIN 54476-0410 TITLE EHH-601D LOUVER SLEEVE/CONTINUOUS MOUNT W/ AND W/O VCD-40 PART PROFILES			
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			

Expiration Date 11/01/2024

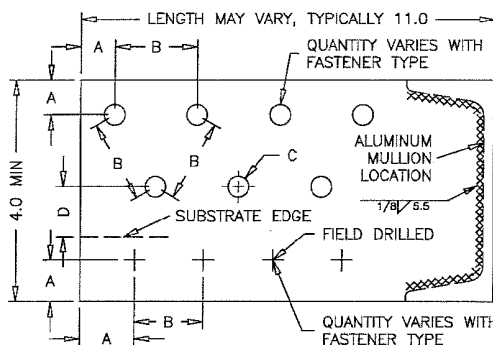
By *[Signature]*
Miami-Dade Product Control



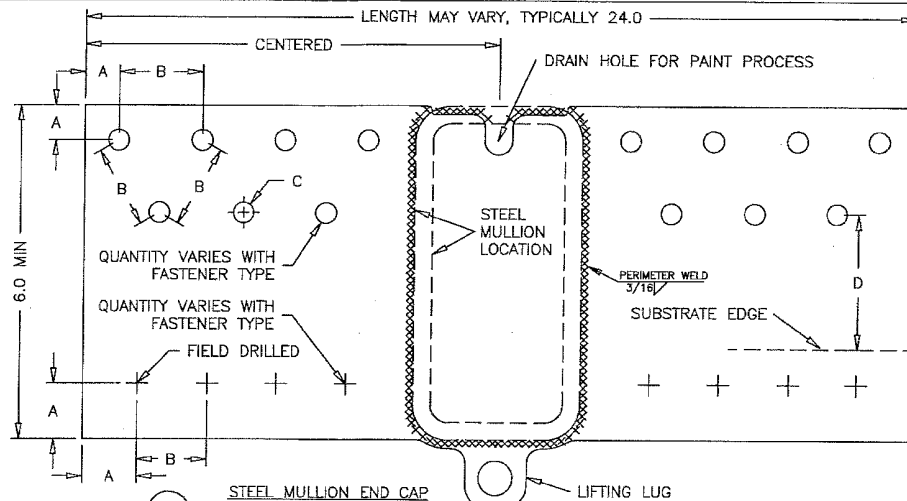
STEEL MULLION END CAP
FOR SLEEVE MOUNT
0.313 STEEL

ALUMINUM MULLION END CAP
FOR SLEEVE MOUNT
5052-H32, 0.25 ALUMINUM

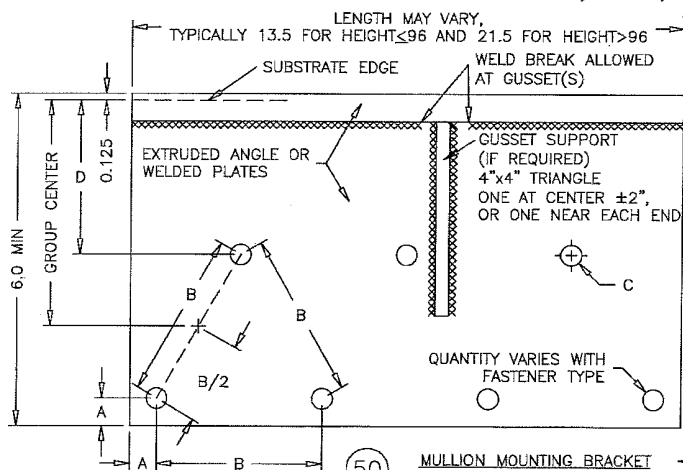
DIM. DESCRIPTION
A $\geq 0.375/0.50$ FOR $1/4\phi$ FASTENER IN ALUMINUM/STEEL
B $\geq 0.563/0.75$ FOR $3/8\phi$ FASTENER IN ALUMINUM/STEEL
C $\geq$ FASTENER SPACING DISTANCE
D $\geq$ FASTENER CLEARANCE HOLE DIAMETER
E $\geq$ FASTENER SUBSTRATE EDGE DISTANCE
GROUP CENTER = CENTER OF FASTENER HOLE PATTERN



ALUMINUM MULLION END CAP
FOR CONTINUOUS ANGLE MOUNT
5052-H32, 0.25 ALUMINUM



STEEL MULLION END CAP
FOR CONTINUOUS ANGLE MOUNT
0.313 STEEL



MULLION MOUNTING BRACKET
FOR CONTINUOUS ANGLE MOUNT
VARIES, SEE B.O.M. & TABLES BELOW

MULLION MOUNTING BRACKET TABLE, 1 OF 2									
LOUVER HEIGHT	SUBSTRATE LEG THK.	LOUVER LEG THK.	GUSSET THK.	MIN CUT LENGTH	MAT'L TYPE	PROCESS TYPE			
≤ 144	$\geq 1/2$	$\geq 1/2$	NA	16.5	6061-T6	EXTRUDED			
≤ 144	$\geq 7/16$	$\geq 7/16$	NA	24	A36	ROLLED			
≤ 144	$\geq 1/2$	$\geq 1/2$	NA	18.5	A36	ROLLED			
≤ 144	$\geq 5/16$	$\geq 1/4$	$\geq 5/16$	20	6061-T6	WELDED			
≤ 144	$\geq 5/16$	$\geq 3/16$	$\geq 5/16$	20	STEEL	WELDED			

MULLION MOUNTING BRACKET TABLE, 2 OF 2									
LOUVER HEIGHT	SUBSTRATE LEG THK.	LOUVER LEG THK.	GUSSET THK.	MIN CUT LENGTH	MAT'L TYPE	PROCESS TYPE			
≤ 96	$\geq 1/2$	$\geq 1/2$	NA	6.6	6061-T6	EXTRUDED			
≤ 96	$\geq 3/8$	$\geq 3/8$	NA	12.34	STEEL	ROLLED			
≤ 96	$\geq 7/16$	$\geq 7/16$	NA	9	STEEL	ROLLED			
≤ 96	$\geq 5/16$	$\geq 1/4$	$\geq 5/16$	9	6061-T6	WELDED			
≤ 96	$\geq 5/16$	$\geq 3/16$	$\geq 5/16$	9	STEEL	WELDED			

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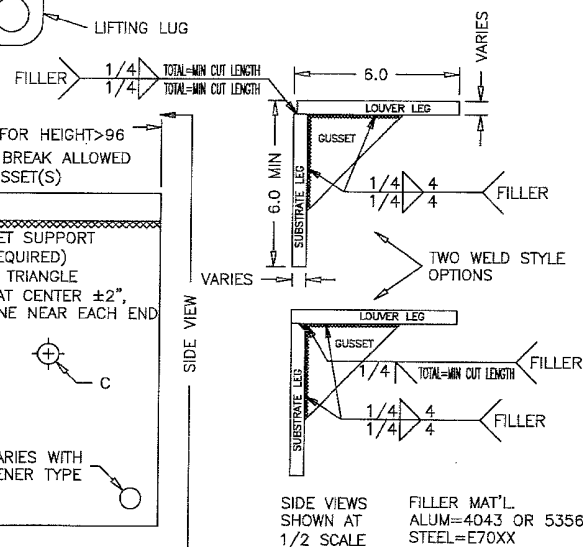
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NOA-No. 17-0919.05

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SIDE VIEWS
SHOWN AT
1/2 SCALE

FILLER MAT'L.
ALUM=4043 OR 5356
STEEL=E70XX

GREENHECK
P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410

WAYNE K. HELMILA
LICENSE No. 59092
STATE OF FLORIDA
PROFESSIONAL ENGINEER
AUG 30 2017

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

21 OF 21
SLEEVE/CONTINUOUS MOUNT
W/ AND W/O VCD-40
PART PROFILES

EHH-601D