



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

Greenheck Fan Corporation
1110 Greenheck Drive (PO 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 EHV-901D Aluminum Louver

APPROVAL DOCUMENT: Drawing No. **EHV-901D**, titled "EHV-901D Standard and Recessed Jamb", sheets 1 through 11 of 11, dated 05/23/16, with Revision 1 dated 07/18/16, prepared by the manufacturer, signed and sealed by Chander P. Nangia, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, Schofield, WI or Shelby, NC, model/ series, and the statement reading: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

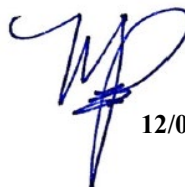
ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises NOA No. 21-0526.06** 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 **Manuel Perez, P.E.**




12/04/23

NOA No. 23-1030.03
Expiration Date: July 28, 2026
Approval Date: December 14, 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. 16-0607.11)
2. Drawing No. **EHV-901D**, titled "EHV-901D, Standard and Recessed Jamb", sheets 1 through 11 of 11, dated 05/23/16, with Revision 1 dated 07/18/16, prepared by the manufacturer, signed and sealed by Chander P. Nangia, P.E.
(Submitted under NOA No. 16-0607.11)

B. TESTS


1. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of Model EHV-901D (Visible/Recessed Jamb) aluminum louvers, prepared by Quast Consulting & Testing, Inc, Report No. **QCT16-3863.01**, dated 06/01/16, signed and sealed by Brian M. Sasman, P.E.
(Submitted under NOA No. 16-0607.11)
2. Test Report on High Velocity Wind Driven Rain Resistance per AMCA 550-15 (Equivalent to AMCA 550-08/09) of a Model EHV-901D (Standard/Visible Jamb) aluminum louver, prepared by Intertek/Architectural Testing, Inc, Test Report No. **F5235.02-801-44**, dated 03/02/16, signed and sealed by Tyler Westerling, P.E.
(Submitted under NOA No. 16-0607.11)
3. Test Report on High Velocity Wind Driven Rain Resistance per AMCA 550-15 (Equivalent to AMCA 550-08/09) of a Model EHV-901D (Recessed Jamb) aluminum louver, prepared by Intertek/Architectural Testing, Inc, Test Report No. **F5235.03-801-44**, dated 03/02/16, signed and sealed by Tyler Westerling, P.E.
(Submitted under NOA No. 16-0607.11)

C. CALCULATIONS

1. Structural load calculations prepared by manufacturer, dated 05/25/16, signed and sealed by Chander P. Nangia, P.E.
(Submitted under NOA No. 16-0607.11)
2. Structural load calculations (addendum) prepared by manufacturer, dated 07/05/16, signed and sealed by Chander P. Nangia, P.E.
(Submitted under NOA No. 16-0607.11)

D. QUALITY ASSURANCE

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


Manuel Perez, P.E.
Product Control Examiner
NOA No. 23-1030.03
Expiration Date: July 28, 2026
Approval Date: December 14, 2023

Greenheck Fan Corporation

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Statement letter of code conformance to the **FBC 7th Edition (2020)** and of no financial interest, dated May 13, 2021, issued by manufacturer, signed and sealed by Chander P. Nangia, P.E.
(Submitted under NOA No. 21-0526.06)

G. OTHERS

1. Notice of Acceptance No. **19-0516.09**, issued to Greenheck Fan Corporation for their Model EHV-901D Aluminum Louver, approved on 06/27/19 and expiring on 07/28/21.

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. None.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

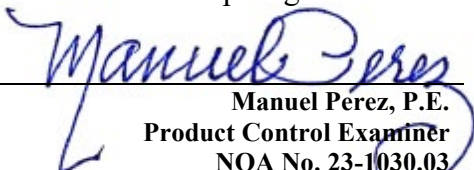
1. None.

F. STATEMENTS

1. Statement letter of code conformance to the **FBC 8th edition (2023)** and of no financial interest, dated October 16, 2023, issued by manufacturer, signed and sealed by Robert V. Nangia, P.E.

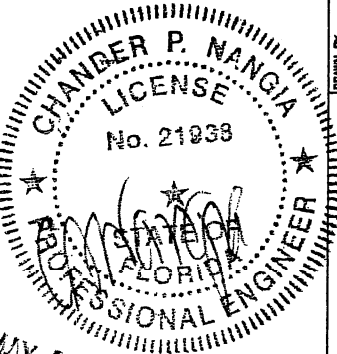
G. OTHERS

1. Notice of Acceptance No. **21-0526.06**, issued to Greenheck Fan Corporation for their Model EHV-901D Aluminum Louver, approved on 07/22/21 and expiring on 07/28/26.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 23-1030.03
Expiration Date: July 28, 2026
Approval Date: December 14, 2023

CHANDLER P. NANGIA P.E.
7423 HOLLOW RIDGE DR.
HOUSTON, TX 77025
FLORIDA FE # 21938

STRUCTURAL ONLY



Approved as complying with the
Florida Building Code
Date 07/28/2016
NOA# 16-0607.11
Miami Dade Product Control

By [Signature]

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-1030.03
Expiration Date: 07/28/2026

By Manuel Perez
Miami Dade Product Control

MAY 26 2018

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

EHV-901D,
ELEVATION

TITLE:

PAGE NOTES:
• MULTI-HIGH ASSEMBLIES ARE PERMITTED AS-LONG-AS EACH LOUVER SECTION HAS SUITABLE SUBSTRATES ABOVE AND/OR BELOW EACH LOUVER SECTION ASSEMBLY AND EACH LOUVER SECTION IS INSTALLED PER DETAILS HEREIN (REFERENCE PAGES 2 & 4 OF 11).

PRODUCT RENEWED
as complying with the Florida
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NOA-No. 21-0526.06

Expiration Date 07/28/2026

By Ishaq I. Chande
Miami Dade Product Control

UNLIMITED OVERALL LENGTH (MULTI SECTIONS WIDE)

60.0 MAX. ACTUAL
LOUVER SECTION WIDTH

60.0 MAX. ACTUAL
LOUVER SECTION WIDTH

60.0 MAX. ACTUAL
LOUVER SECTION WIDTH

DETAIL # 1
PAGE # 2

A-A

B-B

5

4

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as complying with the Florida
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NOA-No. 19-0516.09
Expiration Date 07/28/2021
By [Signature]
Miami Dade Product Control

OPTIONAL RECESSED END JAMB

OPTIONAL RECESSED MULLION

TYP. VISIBLE MULLION

TYP. STANDARD END JAMB

3
3

4
3

7
5

8
5

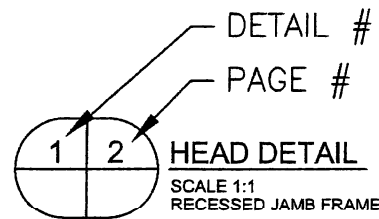
2
2

4
6

A-A: OPTIONAL
RECESSED JAMB

B-B: STANDARD
VISIBLE JAMB

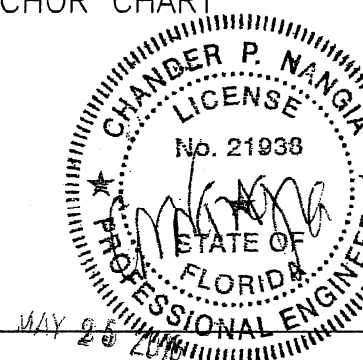
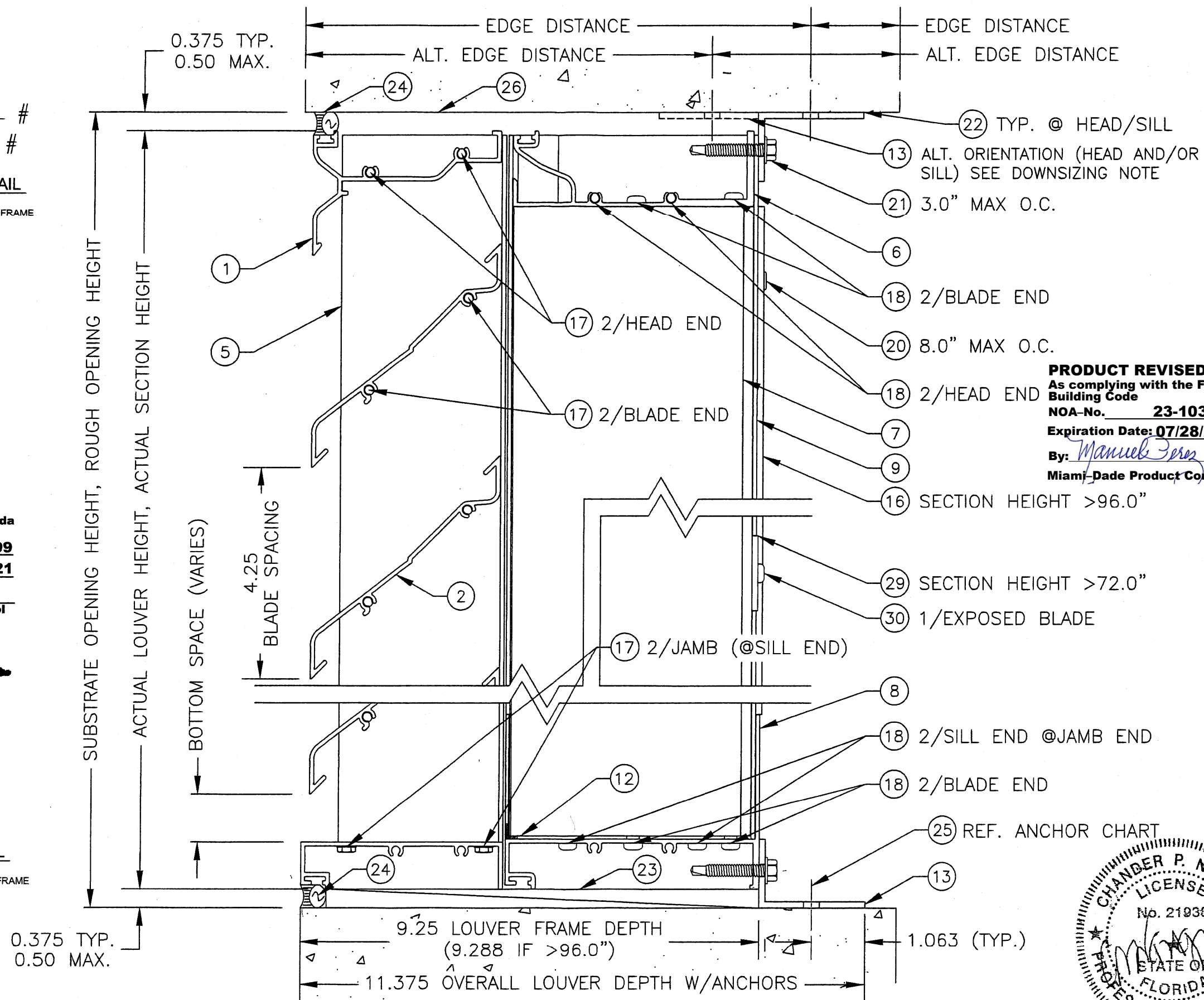
120.0 MAXIMUM ACTUAL LOUVER SECTION HEIGHT
(MULTIPLE-HIGH SECTIONS --> SEE PAGE NOTES)



PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **21-0526.06**
Expiration Date **07/28/2026**
By Ishag I. Chande
Miami-Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **19-0516.09**
Expiration Date **07/28/2021**
By [Signature]
Miami-Dade Product Control

Approved as complying with the
Florida Building Code
Date 07/28/2016
NOA# 16-0607.11
Miami-Dade Product Control
By [Signature]



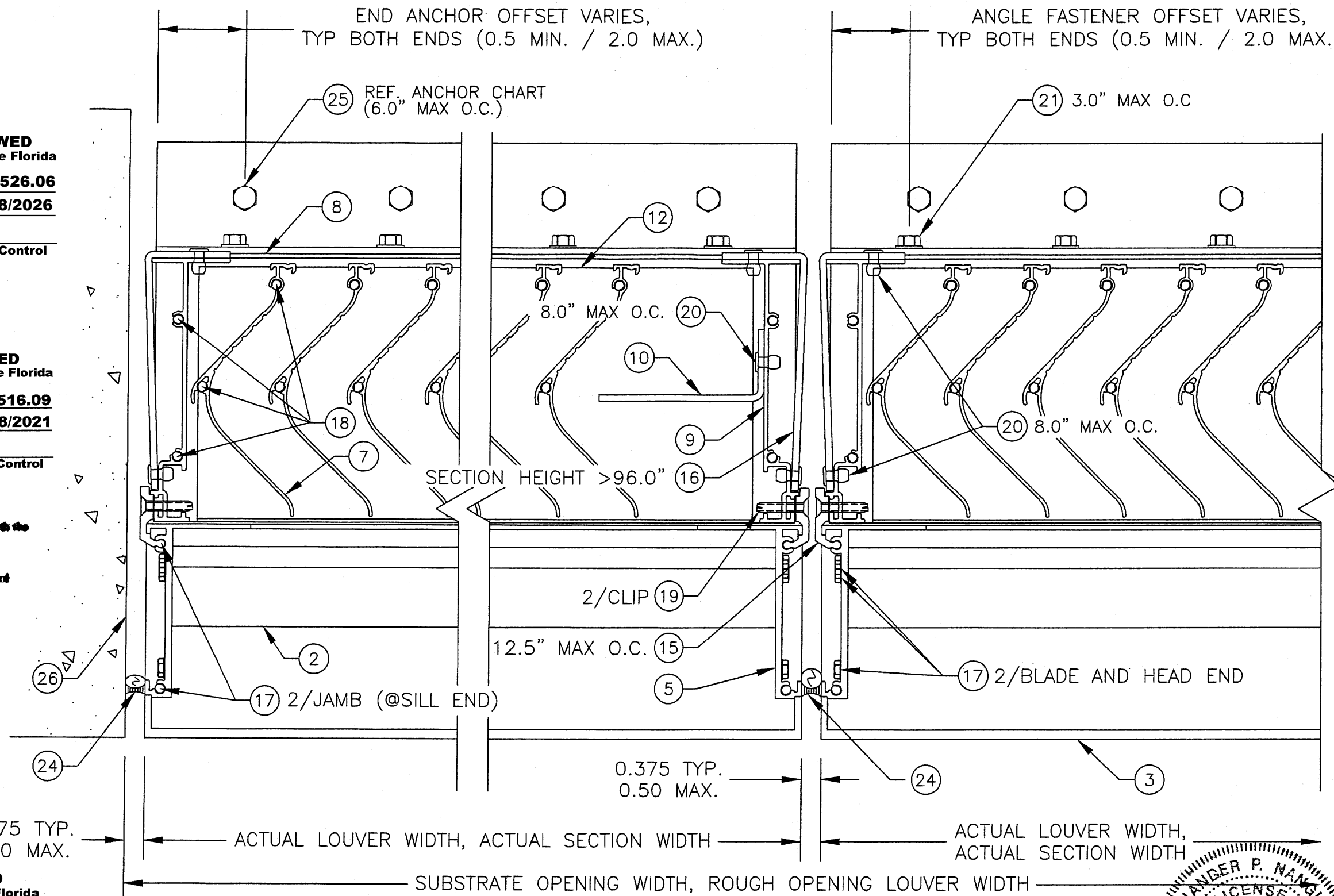
DATE 5/23/2016	DRAWN BY NAH	SCALE 1:1	SHEET NO. 2 OF 11	JOB DRAWING NO. EVH-901D
GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410				
TITLE: EHV-901D, RECESSED JAMB, HEAD & SILL DETAILS				
STANDARD LOUVER HEIGHT DOWNSIZING IS 0.375 PER END (0.750 OVERALL TOTAL) WHEN ORDERED BASED ON ROUGH OPENING SIZING. MULTI-HIGH ASSEMBLIES ARE PERMITTED AS-LONG-AS EACH LOUVER SECTION'S WIDTH/HEIGHT ARE WITHIN THE ALLOWABLE MAXIMUMS AND SUITABLE SUBSTRATES SURROUNDS EACH LOUVER SECTION ASSEMBLY PERIMETER AND EACH LOUVER SECTION IS INSTALLED PER DETAILS.				

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **21-0526.06**
Expiration Date **07/28/2026**
By Ishaq I. Chande
Miami-Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **19-0516.09**
Expiration Date **07/28/2021**
By [Signature]
Miami-Dade Product Control

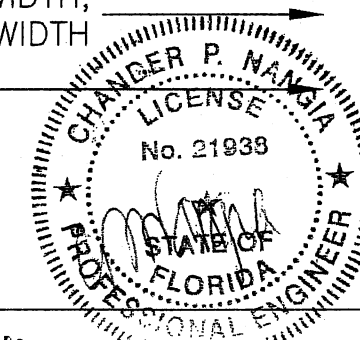
Approved as complying with the
Florida Building Code
Date 07/28/2016
NOA# 16-0607.11
Miami-Dade Product Control
By [Signature]

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. **23-1030.03**
Expiration Date: **07/28/2026**
By: Manuel Perez
Miami-Dade Product Control



3 3 JAMB DETAIL
SCALE 1:1
RECESSED JAMB FRAME

4 3 MULLION DETAIL
SCALE 1:1
RECESSED JAMB FRAME



MAY 25 2016

DATE	5/23/2016
DRAWN BY	NAH
SCALE	1:1
SHEET NO.	3 OF 11
FIG. DRAWING NO.	EHV-901D
GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410	
TITLE: EHV-901D, RECESSED JAMB, JAMB & MULLION DETAILS	
PAGE NOTES: • STANDARD LOUVER WIDTH DOWNSIZING IS 0.375 PER END (0.750 OVERALL TOTAL) WHEN ORDERED BASED ON ROUGH OPENING SIZING.	

As complying with the Florida Building Code

Expiration Date: 07/28/2026



HEAD DETAIL
SCALE 1:1
STANDARD JAMB FRAME

as complying with the Florida Building Code

Expiration Date07/28/2026

as complying with the Florida Building Code

Expiration Date 07/28/2021



SILL DETAIL
SCALE 1:1
STANDARD JAMB FRAME


By Chase

Technical drawing of a louver assembly showing cross-sections and dimensions. The drawing includes the following labels and dimensions:

- Dimensions:**
 - 0.375 TYP. 0.50 MAX. (Top and Bottom Left)
 - 9.25 LOUVER FRAME DEPTH (9.288 IF >96.0")
 - 11.375 OVERALL LOUVER DEPTH W/ANCHORS
 - 1.063 (Bottom Right)
 - 4.25 BLADE SPACING
- Labels:**
 - EDGE DISTANCE
 - ALT. EDGE DISTANCE
 - 22 TYP. @ HEAD/SILL
 - 13 ALT. ORIENTATION (HEAD AND/OR SILL) SEE DOWNSIZING NOTE
 - 21 3.0" MAX O.C.
 - 6
 - 18 2/BLADE END
 - 20 8.0" MAX O.C.
 - 18 2/HEAD END
 - 7
 - 9
 - 16 SECTION HEIGHT >96.0"
 - 29 SECTION HEIGHT >72.0"
 - 30 1/EXPOSED BLADE
 - 17 2/JAMB (@SILL END)
 - 8
 - 18 2/SILL END @JAMB END
 - 18 2/BLADE END
 - 25 REF. ANCHOR CHART
 - 13
 - 24
 - 23
 - 17 2/HEAD END
 - 17 2/BLADE END
 - 4
 - 2
 - 1
 - 26
- Other Text:**
 - SUBSTRATE OPENING HEIGHT, ROUGH OPENING HEIGHT
 - ACTUAL LOUVER HEIGHT, ACTUAL SECTION HEIGHT
 - BOTTOM SPACE (VARIES)

A circular professional engineer seal for Chandler P. Mangia. The outer ring contains the text "CHANDLER P. MANGIA" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. Inside the ring, the word "LICENSE" is at the top, "No. 21938" is in the center, and "STATE OF FLORIDA" is at the bottom. A stylized signature is written across the center of the seal.

MAY 25 2016

 GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410	DRAWN BY NAH		DATE 5/23/2016
	SCALE 1:1		
	SHEET NO. 4 OF 11		
TITLE: EHV-901D, STANDARD JAMB, HEAD & SILL DETAILS			
CAD DRAWING NO. EHV-901D			

PAGE NOTES:

- STANDARD LOUVER HEIGHT DOWNSIZING IS 0.375 PER END (0.750 OVERALL TOTAL) WHEN ORDERED BASED ON ROUGH OPENING SIZING.

● MULTI-HIGH ASSEMBLIES ARE PERMITTED AS-LONG-AS EACH LOUVER SECTION'S WIDTH/HEIGHT ARE WITHIN THE ALLOWABLE MAXIMUMS AND SUITABLE SUBSTRATES SURROUNDS EACH LOUVER SECTION ASSEMBLY PERIMETER AND EACH LOUVER SECTION IS INSTALLED PER DETAILS.

ANGLE FASTENER OFFSET VARIES,
TYP BOTH ENDS (0.5 MIN. / 2.0 MAX.)

END ANCHOR OFFSET VARIES,
TYP BOTH ENDS (0.5 MIN. / 2.0 MAX.)

REF. ANCHOR CHART
(6.0" MAX O.C.)

3.0" MAX O.C.

8.0" MAX O.C.

8.0" MAX O.C.

SECTION HEIGHT > 96.0"

2/BLADE AND HEAD END

2/CLIP

12.5" MAX O.C.

2/JAMB (@SILL END)

0.375 TYP.
0.50 MAX.

0.375 TYP.
0.50 MAX.

ACTUAL LOUVER WIDTH,
ACTUAL SECTION WIDTH

ACTUAL LOUVER WIDTH, ACTUAL SECTION WIDTH

SUBSTRATE OPENING WIDTH, ROUGH OPENING LOUVER WIDTH

7 5 MULLION DETAIL
SCALE 1:1
STANDARD JAMB FRAME

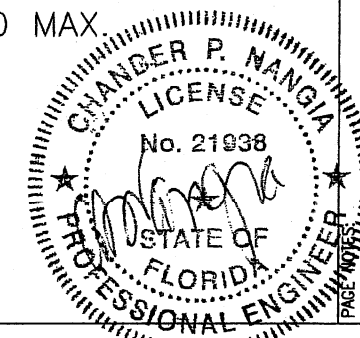
8 5 JAMB DETAIL
SCALE 1:1
STANDARD JAMB FRAME

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. **23-1030.03**
Expiration Date: **07/28/2026**
By: *Manuel Ferns*
Miami-Dade Product Control

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **21-0526.06**
Expiration Date **07/28/2026**
By: *Ishay L. Chandra*
Miami-Dade Product Control

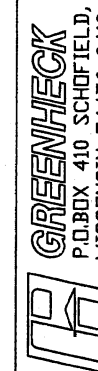
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **19-0516.09**
Expiration Date **07/28/2021**
By: *[Signature]*
Miami-Dade Product Control

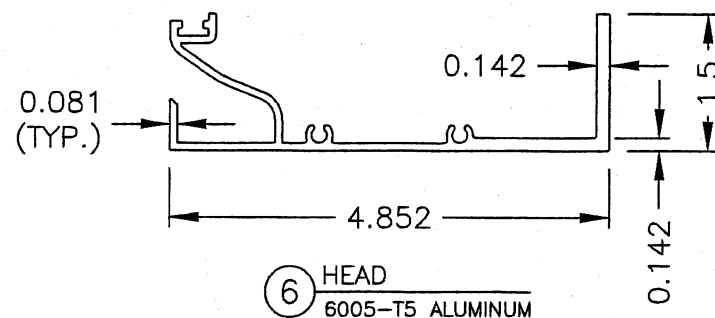
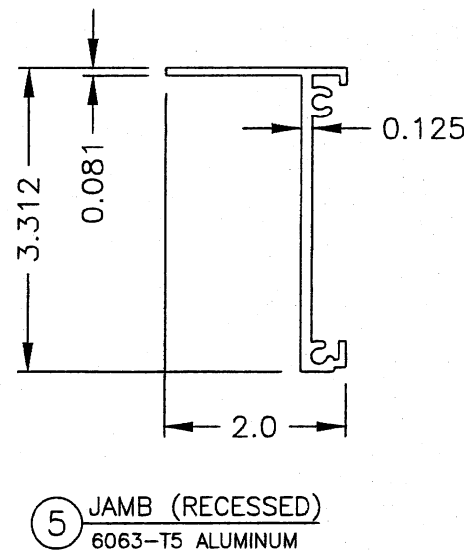
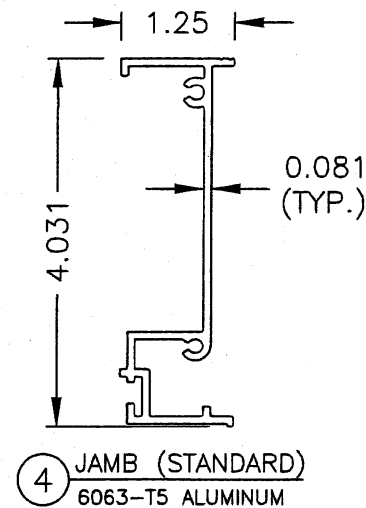
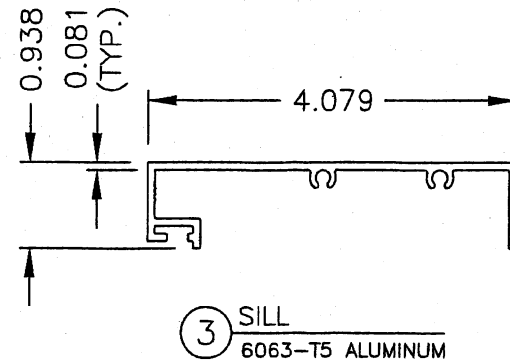
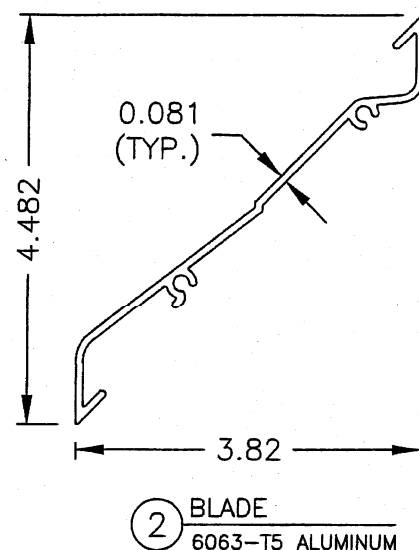
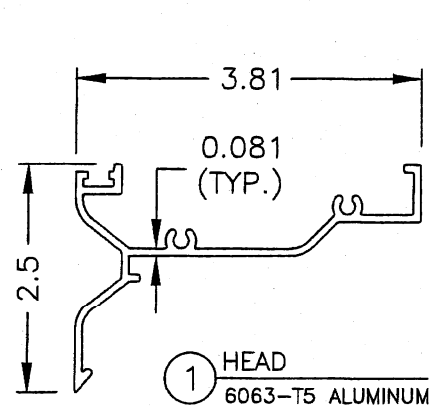
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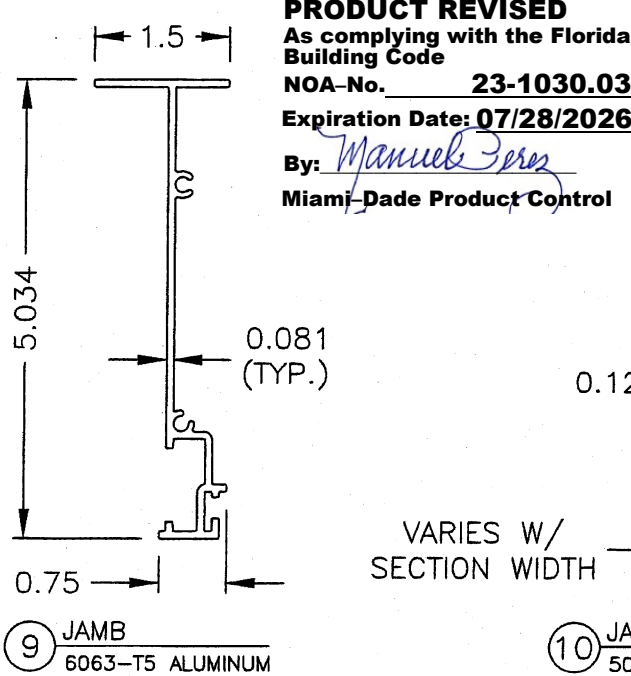
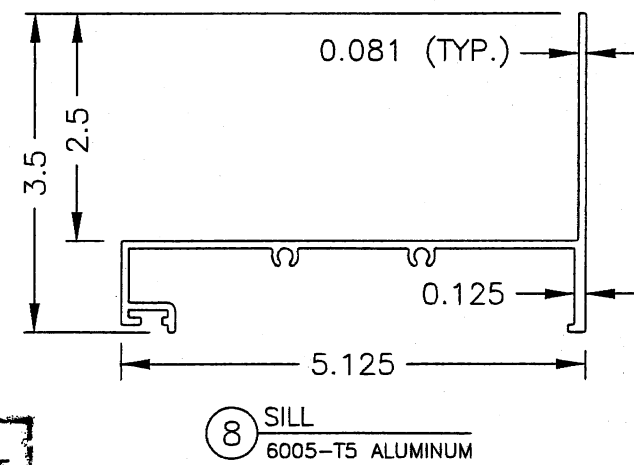
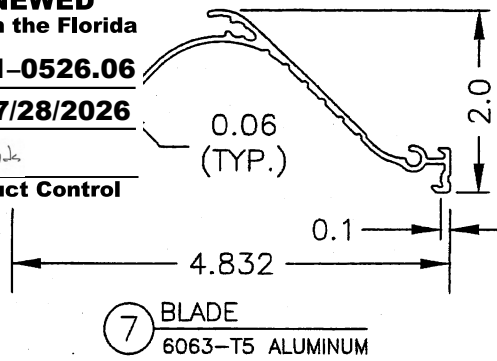
MAY 25 2016

DATE	5/23/2016	SHEET NO.	5 OF 11	EAD DRAWING NO.	EHV-901D
DRAWN BY	NAH				
SCALE	1:1	TITLE: EHV-901D, STANDARD JAMB, JAMB & MULLION DETAILS			



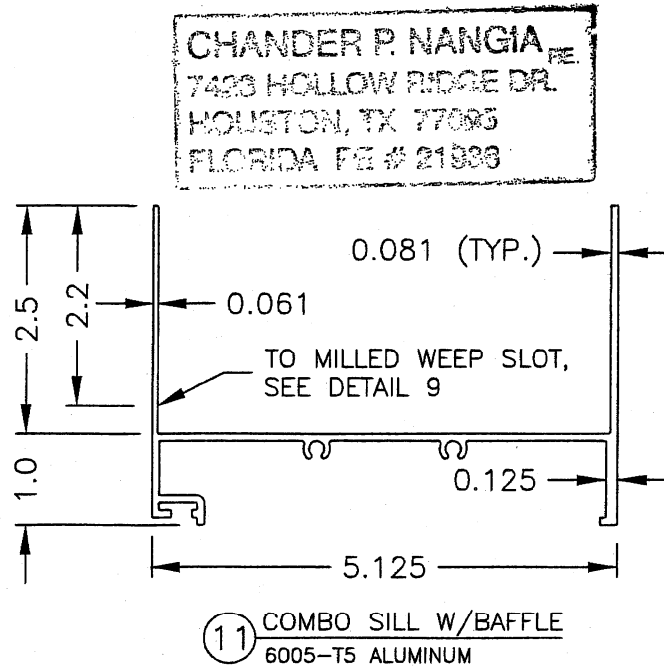
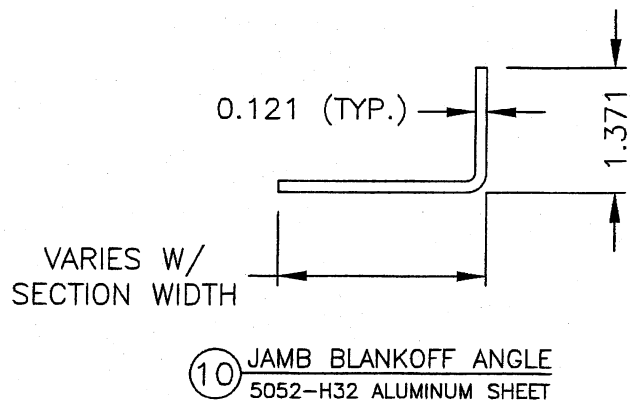


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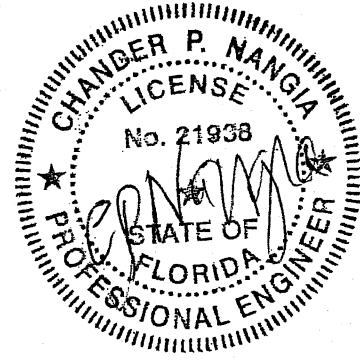
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Miami-Dade Product Control

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NOA-No. **19-0516.09**
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By: *[Signature]*
Miami-Dade Product Control



CHANDER P. NANGIA
7423 HOLLOW RIDGE DR.
HOUSTON, TX 77085
FLORIDA FE # 21938

Approved as complying with the
Florida Building Code
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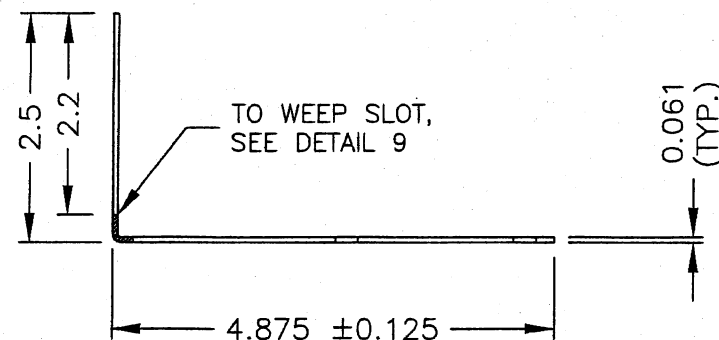


JUL 18 2016

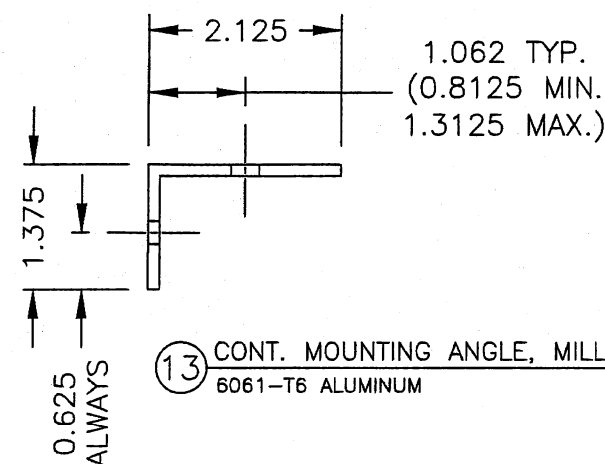
REVISION	BY	DATE	SYM
REVISED PAGE NOTE DOWNSIZING VALUES REMOVED PAGE NOTE STRAP REFERENCE	MES	7/18/2016	1

PAGE NOTES:
STANDARD LOUVER WIDTH DOWNSIZING IS 0.375 PER END (0.750
OVERALL TOTAL) WHEN ORDERED BASED ON ROUGH OPENING SIZING.

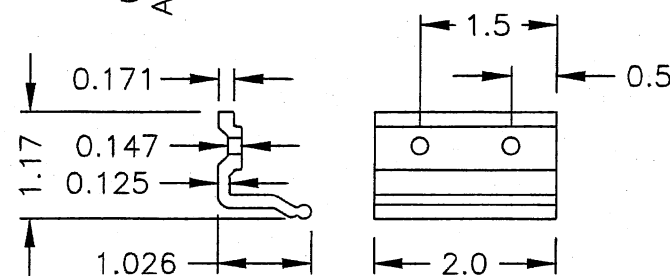
 P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410	DATE	5/23/2016
	DRAWN BY	NAH
	SCALE	1:1
	SHEET NO.	6 OF 11
TITLE:		EHV-901D, PART PROFILES
CADD DRAWING NO.		EHV-901D



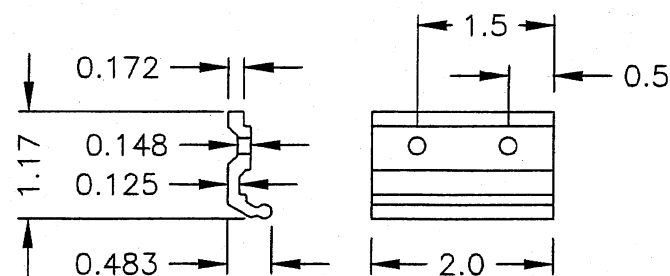
12 SILL BAFFLE
5052-H32 ALUMINUM SHEET OR 6063-T5 ALUM.



13 CONT. MOUNTING ANGLE, MILL
6061-T6 ALUMINUM



14 STANDARD LOUVER JAMB CLIP, MILL
6061-T6 ALUMINUM



15 RECESSED LOUVER JAMB CLIP, MILL
6061-T6 ALUMINUM

9 7 SILL BAFFLE LAYOUT DETAIL
SCALE 1:1
TYPICAL ITEMS 8 AND 11

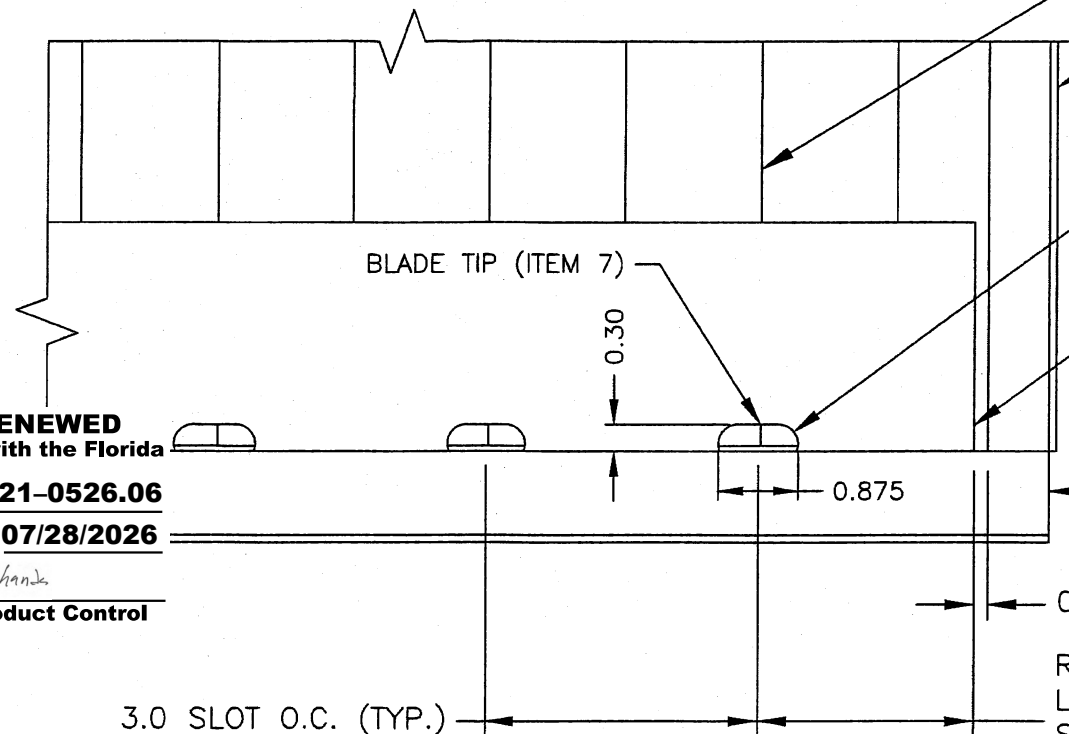
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Expiration Date **07/28/2021**
By *[Signature]*
Miami-Dade Product Control

REVISION	BY	DATE	SYM
ADDED ITEM 29 REVISED PAGE NOTE STRAP REFERENCE	MES	7/18/2016	1

Approved as complying with the
Florida Building Code
Date **07/28/2016**
NOA **16-0607.11**
Miami-Dade Product Control
By *[Signature]*

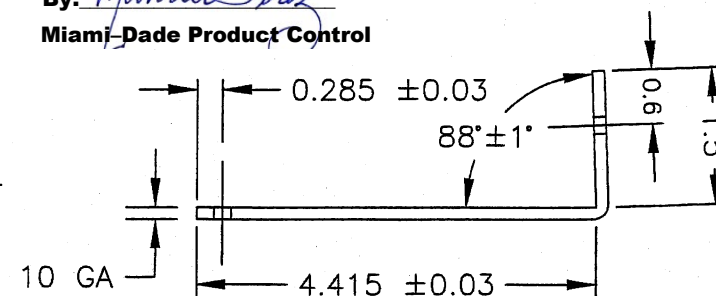
PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **21-0526.06**
Expiration Date **07/28/2026**
By *[Signature]*
Miami-Dade Product Control

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. **23-1030.03**
Expiration Date: **07/28/2026**
By: *[Signature]*
Miami-Dade Product Control

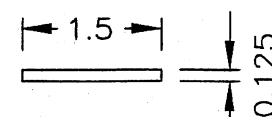


WEEP SLOTS:
PUNCH SIZE: 0.438"x0.375"
OVERALL SIZE: 0.30"x0.875"

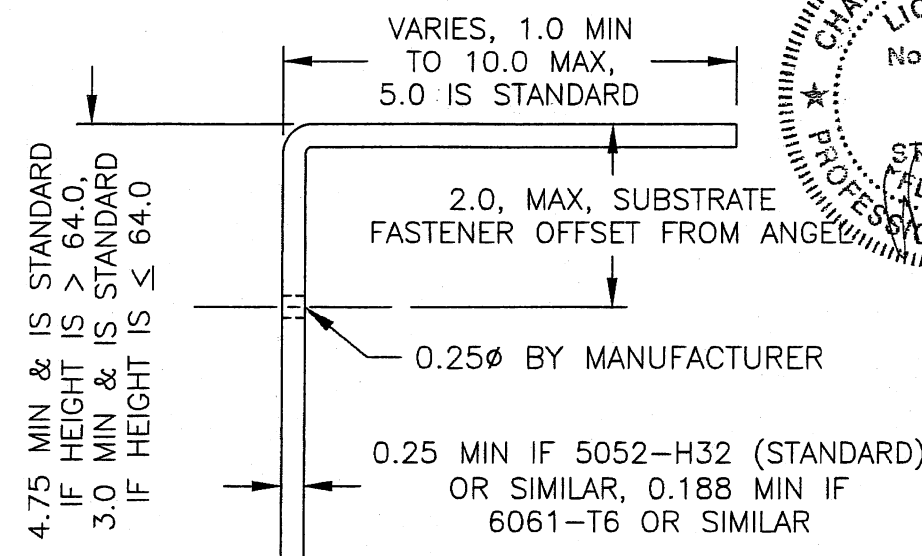
SILL BAFFLE SETUP ALLOWED TO
BE INCORPORATED INTO ALTERNATE
SILL EXTRUSION (SEE ITEM 11)



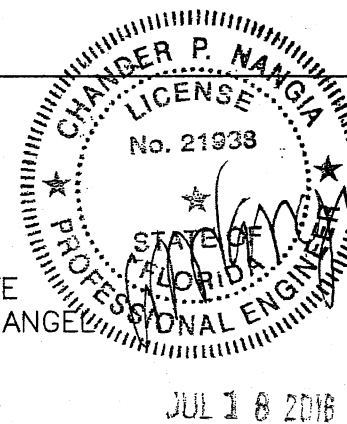
16 JAMB REINFORCEMENT ANGLE, MILL
300 SERIES STAINLESS STEEL, ONLY
WHEN SECTION HEIGHT > 96.0



29 BLADE SUPPORT STRAP (SEE PAGE NOTES)
ALLOY VARIES, ALUMINUM
WHEN SECTION HEIGHT > 72.0

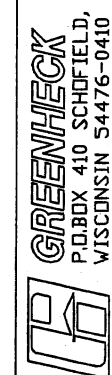


32 SECONDARY CONTINUOUS MOUNTING ANGLE, MILL FINISH
0.188 6061-T6 OR 0.25 5052-H32 ALUMINUM



PAGE NOTES:
• ITEM 29 STRAP IS NOT REQUIRED FOR NOA. PER MANUFACTURER, ITEM 29 STRAP IS NOT REQUIRED TO PASS AMCA 540 IMPACT LEVEL D (50 ft/s), BUT IS REQUIRED TO PASS AMCA 540 IMPACT LEVEL E (80 ft/s). MIAMI-DADE COUNTY DEPT. OF P.E.R. DOES NOT CURRENTLY EVALUATE OR ENDORSE AMCA 540 PERFORMANCE.

• ALL SHEET METAL PARTS ARE SHOWN AT ACTUAL THICKNESS



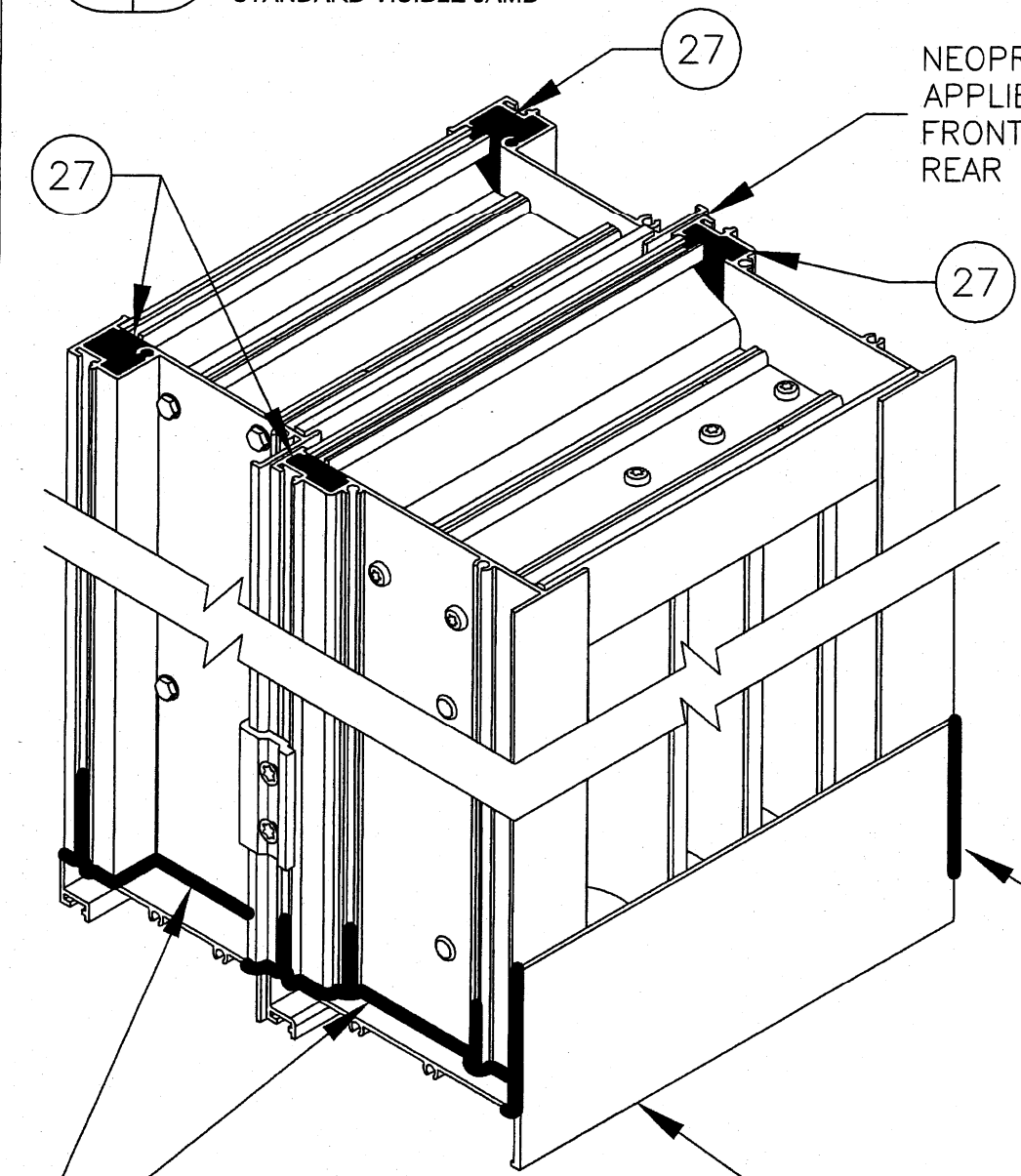
EHV-901D,
PART PROFILES & SILL BAFFLE DETAIL

DATE 5/23/2016
DRAWN BY NAH
SCALE 1:1
SHEET NO. 7 OF 11
JOB DRAWING NO. EHV-901D

10 8

FACTORY SEALING DETAIL

STANDARD VISIBLE JAMB



NEOPRENE TAPE AND SEALANT
APPLIED TO REAR FACE OF
FRONT MODULE PRIOR TO
REAR MODULE ATTACHMENT

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. 21-0526.06
Expiration Date 07/28/2026
By Ishag I. Chande
Miami-Dade Product Control

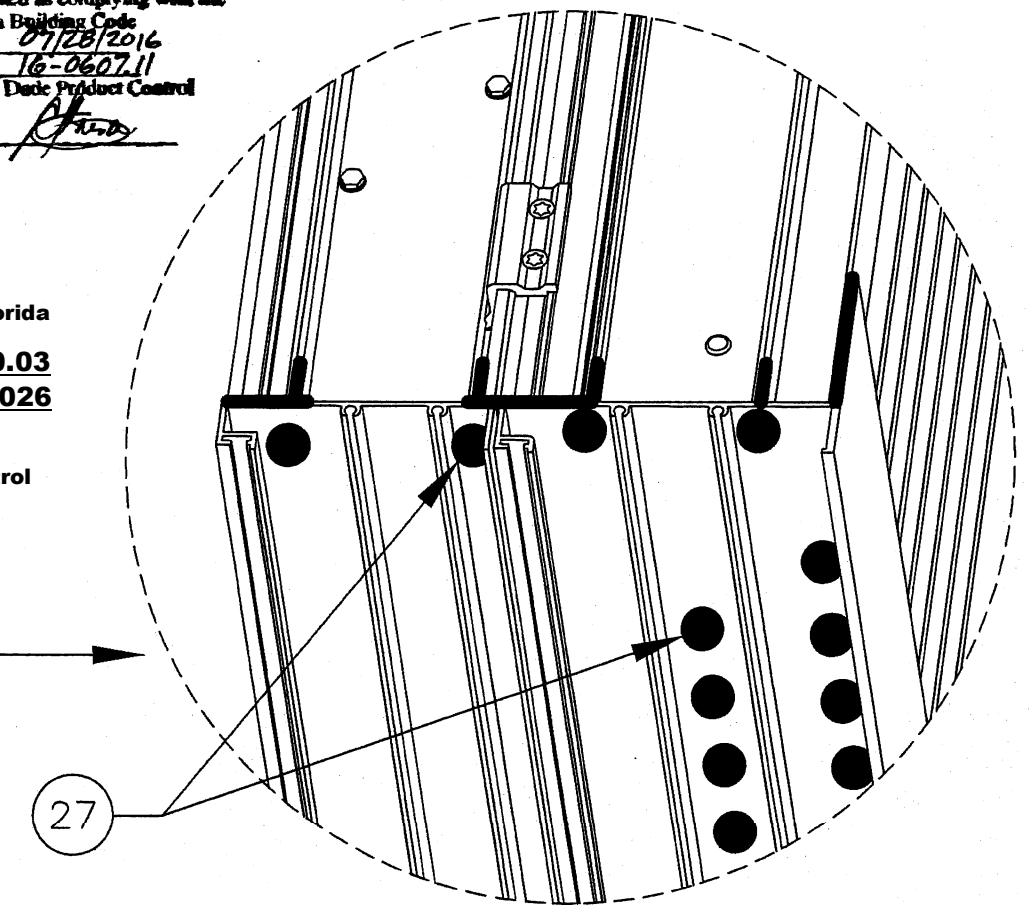
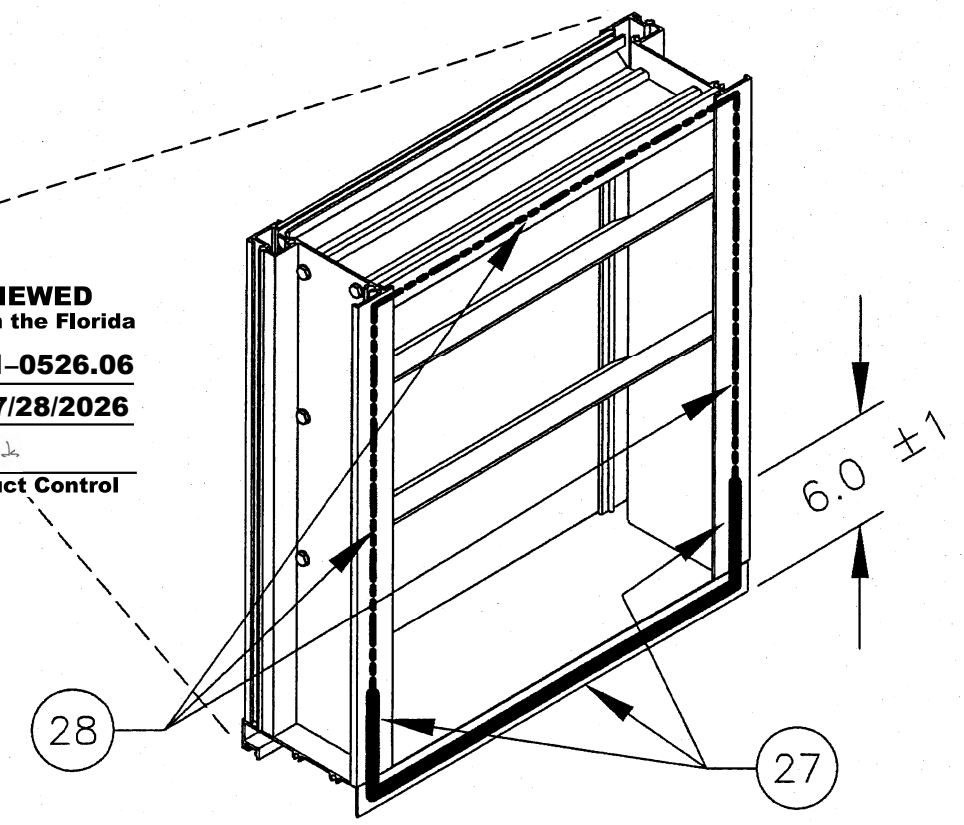
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 19-0516.09
Expiration Date 07/28/2021
By [Signature]
Miami-Dade Product Control

Approved as complying with the
Florida Building Code
Date 07/28/2016
NOA# 16-0607.11
Miami-Dade Product Control
By [Signature]

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. 23-1030.03
Expiration Date: 07/28/2026
By: Manuel Perez
Miami-Dade Product Control

SEAL ALL FASTENERS UNDER SILLS
(TYPICAL BOTH LOUVER MODULES)

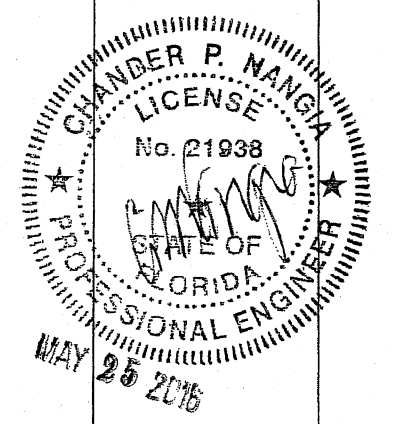
27 STANDARD SEAL AT JAMB/SILL
CONNECTIONS (TYP. BOTH ENDS)



DATE	5/23/2016
DRAWN BY	NAH
SCALE	
SHEET NO.	8 OF 11
QAD DRAWING NO.	EHV-901D

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

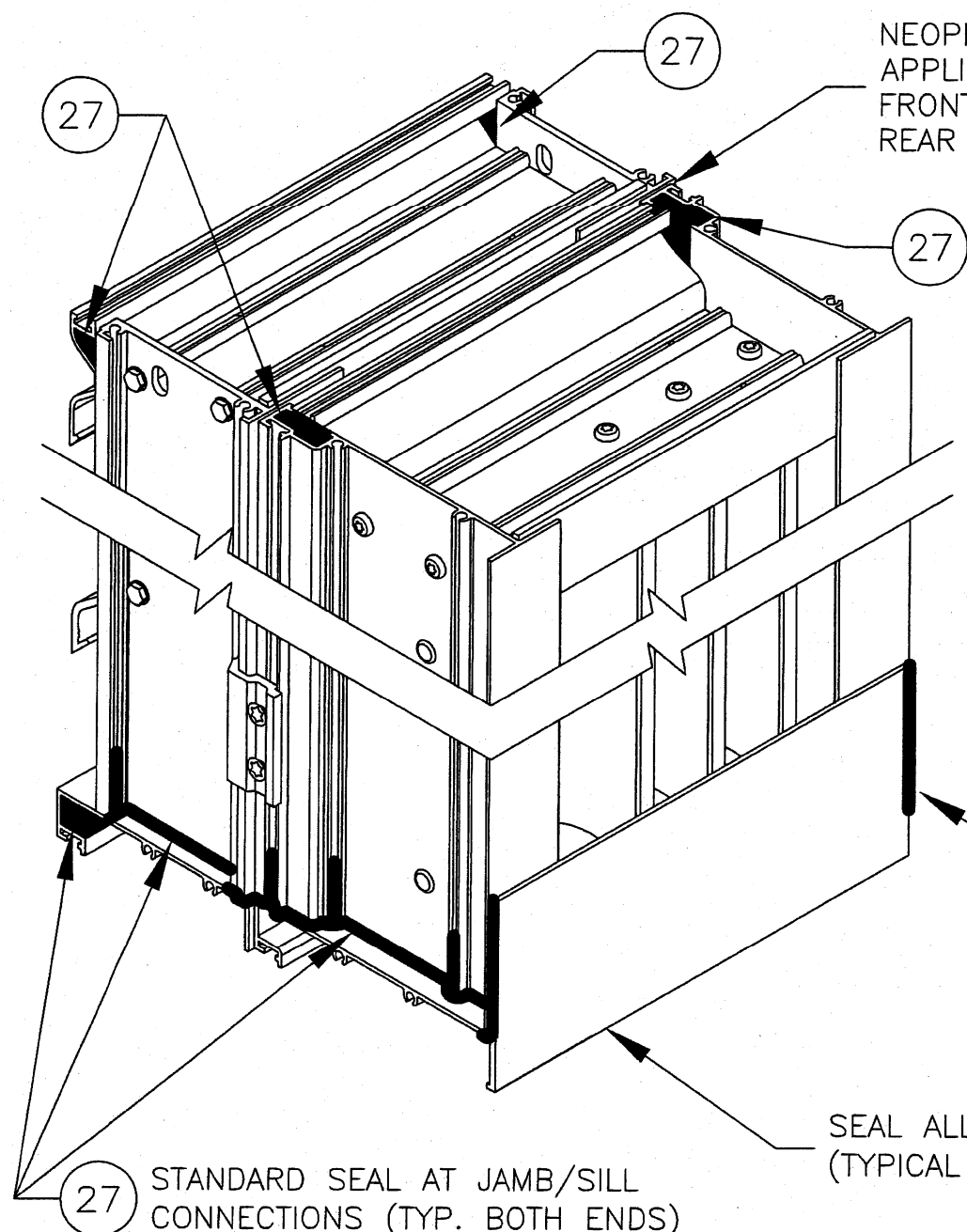
TITLE:
EHV-901D, STANDARD JAMB,
SEALING DETAILS



PAGE NOTES:

FACTORY SEALING DETAIL

RECESSED JAMB



NEOPRENE TAPE AND SEALANT
APPLIED TO REAR FACE OF
FRONT MODULE PRIOR TO
REAR MODULE ATTACHMENT

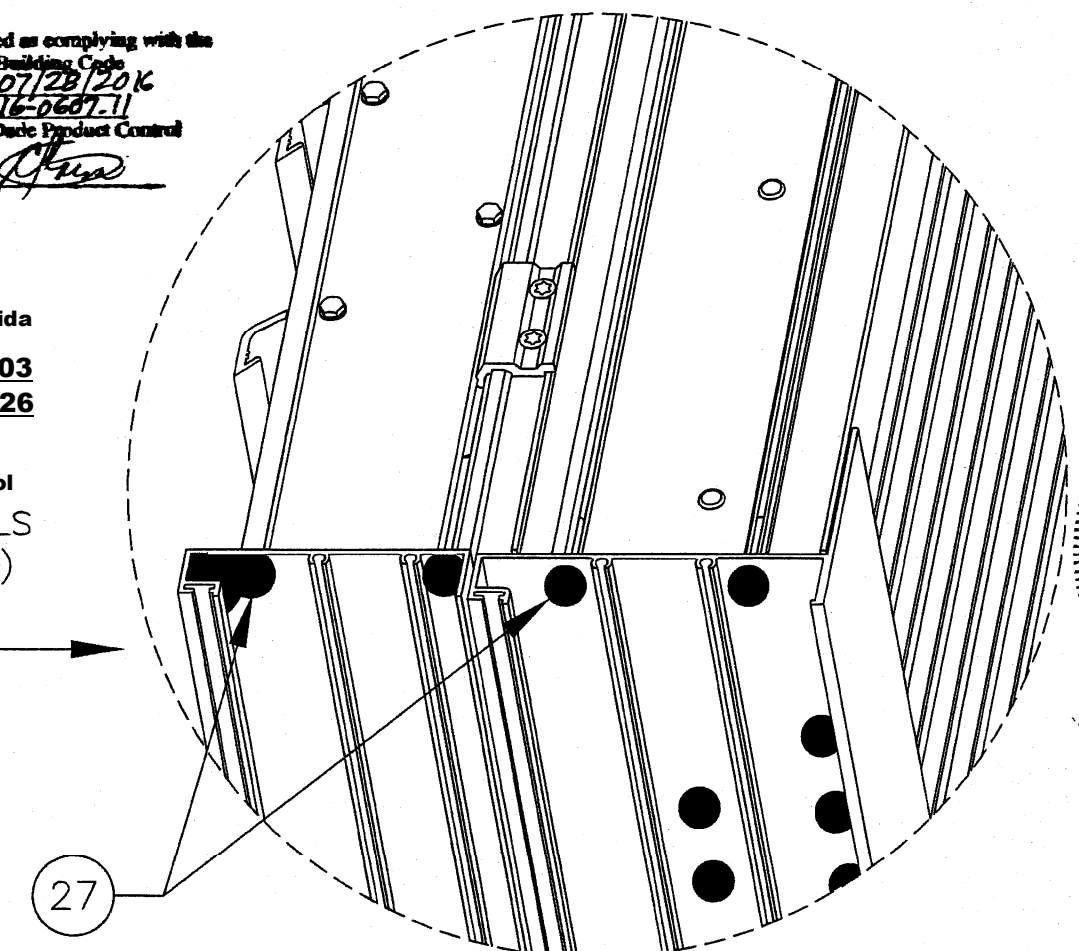
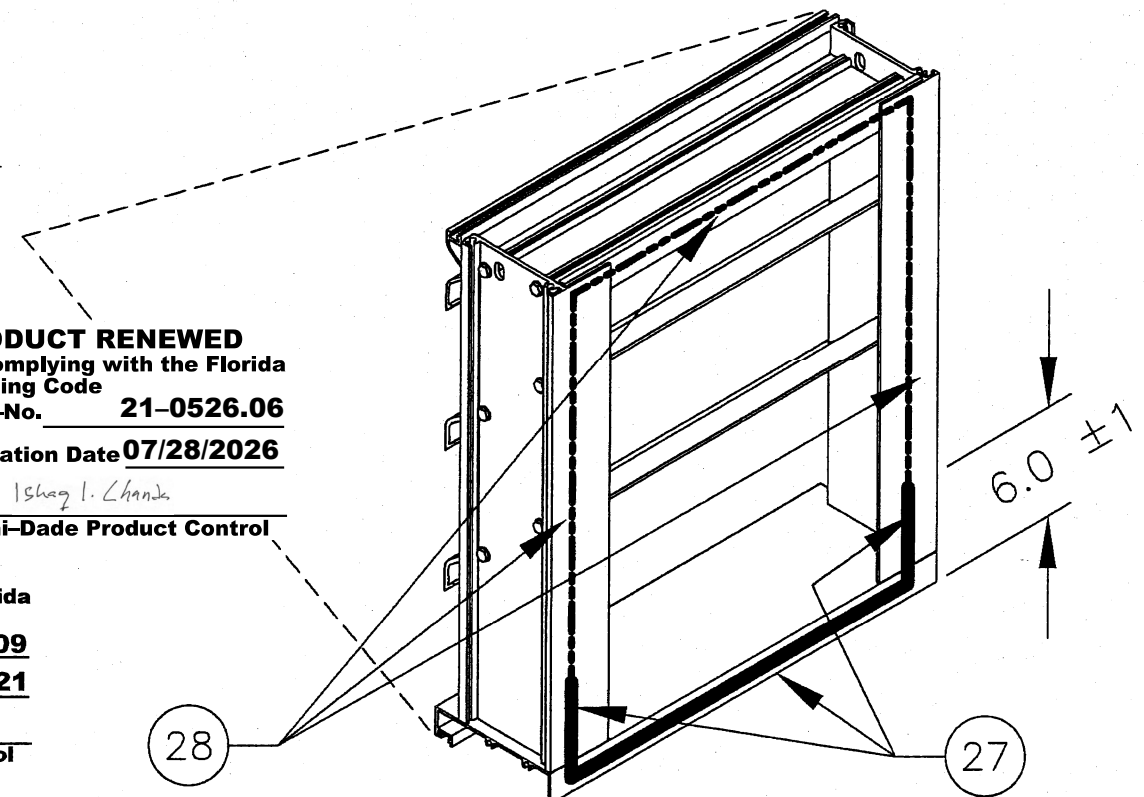
PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **21-0526.06**
Expiration Date **07/28/2026**
By Ishaq I. Chande
Miami-Dade Product Control

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **19-0516.09**
Expiration Date **07/28/2021**
By [Signature]
Miami-Dade Product Control

Approved as complying with the
Florida Building Code
Date **07/28/2016**
NOA# **16-0687.11**
Miami Dade Product Control
By [Signature]

PRODUCT REVISED
As complying with the Florida
Building Code
NOA-No. **23-1030.03**
Expiration Date: **07/28/2026**
By: Manuel Perez
Miami-Dade Product Control

SEAL ALL FASTENERS UNDER SILLS
(TYPICAL BOTH LOUVER MODULES)



DATE	5/23/2016
DRAWN BY	NAH
SCALE	
SHEET NO.	9 OF 11
CAD DRAWING NO.	EHV-901D

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

TITLE: EHV-901D, RECESSED JAMB,
SEALING DETAILS

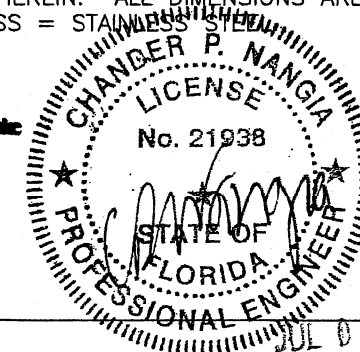
PAGE NOTES:

CHANDER P. NANGIA
LICENSE
No. 21908
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
MAY 25 2016

ITEM	DESCRIPTION	MATERIAL	INTERNAL ID#	NOTES
1	HEAD	6063-T5 ALUMINUM	125312	FRONT MODULE
2	BLADE	6063-T5 ALUMINUM	125049	FRONT MODULE (4.25 O.C. SPACING)
3	SILL	6063-T5 ALUMINUM	125917	FRONT MODULE
4	JAMB (STANDARD)	6063-T5 ALUMINUM	125046	FRONT MODULE (W/STANDARD JAMB OPTION)
5	JAMB (RECESSED)	6063-T5 ALUMINUM	125300	FRONT MODULE (W/RECESSED JAMB OPTION)
6	HEAD	6005-T5 ALUMINUM	126069	REAR MODULE
7	BLADE	6005-T5 ALUMINUM	126016	REAR MODULE (1.5 O.C. SPACING)
8	SILL	6005-T5 ALUMINUM	126070	REAR MODULE
9	JAMB	6063-T5 ALUMINUM	126015	REAR MODULE
10	JAMB BLANKOFF ANGLE	5052-H32 ALUMINUM	100175	REAR MODULE
11	COMBINATION SILL WITH BAFFLE	6005-T5 ALUMINUM	N/A	ALLOWED TO REPLACE ITEMS 8 AND 10
12	SILL BAFFLE	5052-H32 ALUMINUM	100172	REAR MODULE
13	CONTINUOUS MOUNTING ANGLE, PRIMARY	6061-T6 ALUMINUM	125967	REAR MODULE, AT HEAD AND SILL ONLY, MILL
14	STANDARD LOUVER JAMB CLIP	6061-T6 ALUMINUM	126128	12.5 MAX. CLIP SPACING (STANDARD JAMBS ONLY)
15	RECESSED LOUVER JAMB CLIP	6061-T6 ALUMINUM	126127	12.5 MAX. CLIP SPACING (RECESSED JAMBS ONLY)
16	JAMB REINFORCEMENT ANGLE	300 SERIES SS	190232	REQUIRED WHEN SECTION HEIGHT > 96.0, MILL
17	#10-16x2.25 SCREW	300 SERIES SS	416351	FRONT MODULE (FRAME CORNERS AND BLADE ENDS)
18	#10-16x1.25 SCREW	300 SERIES SS	416196	REAR MODULE (FRAME CORNERS AND BLADE ENDS)
19	#10x1.0L SCREW	300 SERIES SS	416462	TWO PER CLIP, TYPICAL BOTH CLIP STYLES
20	0.188Ø RIVET	300 SERIES SS		8.0 MAX CENTERS
21	1/4-20 SCREW, HILTI KWIK-FLEX, PROVIDED BY LOUVER MANUFACTURER	COATED STEEL	416581	3.0 MAX CENTERS, 0.5 MIN THREAD
22	SHIM/SEPARATE DISSIMILAR MAT'L'S AS REQ'D	VARIES	N/A	BY OTHERS AS NEEDED
23	SHIM, NON-COMPRESSIBLE	VARIES	N/A	BY OTHERS, OPTIONAL
24	SEALANT AND BACKER ROD	VARIES	N/A	BY OTHERS, OPTIONAL
25	SUBSTRATE FASTENER - SEE ANCHOR TABLE (PRIMARY MOUNTING ANGLE)	SEE ANCHOR TABLE	N/A	BY OTHERS, MINIMUM OF ONE TYPE REQUIRED, SEE ANCHOR TABLE FOR ADDITIONAL INFORMATION
26	SUBSTRATE - GROUT FILLED CMU	GROUT FILLED CMU	N/A	BY OTHERS, MINIMUM OF ONE SUBSTRATE TYPE REQUIRED, SEE ANCHOR TABLE FOR NEEDED EDGE DISTANCE, SPACING, EMBEDMENT, ETC. IT IS THE RESPONSIBILITY OF THE PERMIT HOLDER TO VERIFY AND TO FACILITATE SEPARATION OF DISSIMILAR MATERIALS.
	SUBSTRATE - CONCRETE	CONCRETE	N/A	
	SUBSTRATE - STEEL STUD	STEEL	N/A	
	SUBSTRATE - STRUCTURAL STEEL	STEEL	N/A	
	SUBSTRATE - WOOD	WOOD	N/A	
27	SEALANT	VARIOUS	N/A	FACTORY APPLIED
28	NEOPRENE TAPE	VARIOUS	N/A	FACTORY APPLIED
29	BLADE SUPPORT STRAP	ALUMINUM	N/A	NOT REQUIRED FOR NOA, BUT IS ON UNITS > 72, IS NOT ATTACHED TO JAMBS, CENTERED ON BLADE
30	#10x0.75 SCREW	0 SERIES SS	416108	ONE PER EXPOSED REAR BLADE, USED WITH ITEM 29
31	1/4-14 SCREW, 0.5 MIN THREAD	300/400 SERIES SS	416708	ONLY PROVIDED IF ORDERED WITH ITEM #33, OTHER FASTENER TYPES (BY OTHERS) ALLOWED AS PER FASTENER TABLE FOR ALUMINUM SUBSTRATE.
32	SECONDARY CONTINUOUS MOUNTING ANGLE	VARIES, ALUMINUM	VARIES	0.188 OR 0.25 THICK AS MAT'L TYPE REQUIRES, AT HEAD AND OR SILL ONLY, OPTIONAL, MILL
33	SUBSTRATE FASTENER FOR SECONDARY MOUNTING ANGLE (SEE FASTENER TABLE)	SEE ANCHOR TABLE	N/A	BY OTHERS, MINIMUM OF ONE TYPE REQUIRED, SEE ANCHOR TABLE FOR ADDITIONAL INFORMATION

- IT IS THE RESPONSIBILITY OF THE PERMIT HOLDER TO VERIFY THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURE TO SUPPORT THE LOADS IMPOSED BY THE LOUVER ASSEMBLY. THE LOUVER MANUFACTURER DOES NOT DETERMINE THE STRUCTURAL INTEGRITY OF THE SUBSTRATE STRUCTURE.
- THE LOUVER HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH MIAMI-DADE COUNTY PROTOCOLS (AND QUALIFIED IN ACCORDANCE WITH THE CURRENT FLORIDA BUILDING CODE AND TEST PROTOCOLS/STANDARDS THEREIN):
TAS-201 (LARGE MISSILE IMPACT), TAS-202 (UNIFORM STATIC WIND PRESSURE), TAS-203 (UNIFORM CYCLIC WIND PRESSURE), AND ANSI/AMCA STANDARD 550-15 [EQUIVALENT TO AMCA STANDARD 550-08 AND ANSI/AMCA STANDARD 550-09] (HIGH VELOCITY WIND DRIVEN RAIN)
- THIS LOUVER HAS BEEN DESIGNED, TESTED, AND APPROVED TO WITHSTAND DESIGN PRESSURES OF UP TO AND INCLUDING +/-130PSF.

Approved as complying with the
Florida Building Code
Date: 07/28/2016
NOA# 16-0526.06
Miami-Dade Product Control
By: *[Signature]*



- THE MAXIMUM SINGLE SECTION SIZE IS 60.0" WIDE BY 120.0" INCHES HIGH. SECTIONS MAY BE MOUNTED TO CREATE A MULTI-WIDE ASSEMBLY WITHOUT ANY ADDITIONAL FIELD SUPPORT. SINGLE/MULTIPLE-WIDE ASSEMBLIES MAY BE STACKED TO CREATE A MULTI-HIGH ASSEMBLY PROVIDED THERE IS ADEQUATE SUBSTRATE (DESIGNED AND BY OTHERS) AT THE HEAD AND SILL OF EACH SECTION TO SECURE THE HEAD AND SILL MOUNTING ANGLES TO THE SUBSTRATE AS NOTED HEREIN.
- GENERAL LOUVER CONSTRUCTION: HEAD, SILL, JAMBS, AND BLADES FOR ALL CASES ARE EXTRUDED ALUMINUM. THE FRONT MODULE BLADE SPACING IS 4.25". THE REAR MODULE BLADE SPACING IS 1.5". BLADES, HEADS, JAMBS, AND SILLS ARE SECURED WITH TWO SCREWS PER END (TYPICAL FRONT AND REAR MODULES).
- DUE TO PASSING ANSI/AMCA STANDARD 550, THE LOUVER IS DESIGNED TO PREVENT WIND-DRIVEN RAIN FROM PENETRATING THE SPACE BEHIND THE LOUVER. AS SUCH, THE LOUVER MAY BE INSTALLED IN A LOCATION WHERE THE SPACE/ROOM BEHIND THE LOUVER IS NOT DESIGNED TO DRAIN WATER PENETRATING INTO THE ROOM OR THE ROOM WILL HOUSE NON-WATER RESISTANT/PROOF EQUIPMENT, COMPONENTS, OR SUPPLIES.
- INSTALLER TO PROVIDE SEPARATION OF DIS-SIMILAR MATERIALS AS REQUIRED (SEE CURRENT FLORIDA BUILDING CODE). SEE OLDER 2010 FL BUILDING CODE SECTION 2003.8.4 FOR ADDITIONAL INFORMATION ON SEPARATION OF DIS-SIMILAR MATERIALS.
- ALL ALUMINUM, STAINLESS STEEL (SS), AND PLATED/COATED STEEL PARTS PROVIDED BY MANUFACTURER ARE INHERENTLY CORROSION RESISTANT OR HAVE A CORROSION RESISTANT COATING.
- STEEL, STAINLESS STEEL, AND ALUMINUM PARTS MAY BE MADE OUT OF ALTERNATE ALLOYS THAT HAVE EQUAL OR GREATER YIELD STRENGTH. PART DIMENSIONS ARE MINIMUMS UNLESS DEFINED OTHERWISE.
- THE PART'S INTERNAL ID# SHOWN ON THIS PAGE ARE FOR FACTORY USE AND TRACKING PURPOSES AND MAY BE UPDATED AT ANY TIME. ANY UPDATES WILL NOT ALTER THE ITEM AS DESCRIBED HEREIN. ALL DIMENSIONS ARE IMPERIAL. SS = STAINLESS STEEL

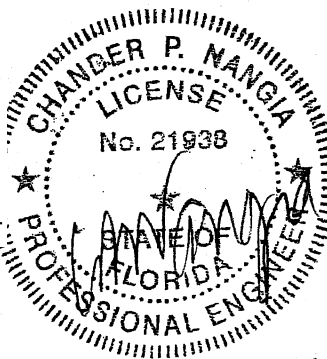
GREENHECK P.O. BOX 410 SCHOFIELD, WISCONSIN 54476-0410	DATE 5/23/2016	SCALE 1:1	SHEET NO. 10 OF 11	EHV-901D ITEM DESCRIPTIONS & GENERAL NOTES
	DRAWN BY NAH			
PRODUCT REVISED As complying with the Florida Building Code NOA-No. 23-1030.03 Expiration Date: 07/28/2026 By: <i>Manuel Jara</i> Miami-Dade Product Control				

PAGE NOTES:

ITEM 25, SUBSTRATE FASTENER FOR CONTINUOUS MOUNTING ANGLE, PRIMARY											
ITEM 26, SUBSTRATE		THICKNESS MIN.	DIA.	TYPE (ALL FASTENERS ARE HEX HEAD STYLE)	MAT'L	SPACING MAX.	EDGE MIN.	EMBED. MIN.	WASHER/FLANGE MIN.	ANGLE HOLE MAX.	SUBSTRATE HOLE MAX.
WOOD	G ≥ 0.42	3	1/4	LAG SCREW	*	3	1 1/2	2 7/8	NA	1/4	SEE FASTENER MANUFACTURER INSTRUCTIONS
		6	3/8				13/16 AT HEAD	3/8			
STEEL	A36	16 GA	1/4-20	BOLT W/ NUT OR THREAD CUTTING/TAPPING SCREW	*	3	3/4	16 GA	NA	5/16	5/16 FOR BOLT & NUT CONNECTION
		14 GA	3/8-16				13/32	3/8 FOR BOLT & NUT CONNECTION			
ALUMINUM	6063-T5	1/8	1/4-20	BOLT W/ NUT OR THREAD CUTTING/TAPPING SCREW	*	3	1/2	1/8	NA	5/16	1/4
		0.132	3/8-16				0.132	3/4 AT NUT	13/32	3/8	
CONCRETE	NOTE 4	2 KSI	1/4	BUILDUP TAPCON (BLUE, WHITE, OR 410 SS)	VARIABLES	3	2 3/8	1 1/2	NA	1/4	SEE FASTENER MANUFACTURER INSTRUCTIONS
		3 KSI		BUILDUP TAPCON (BLUE, WHITE, OR 410 SS)	VARIABLES		1 1/2	1 3/4		1/4	
		2.9 KSI		ELCO AGGRE-GATOR	300 SS		1 1/2	1 3/8		1/4	
		3.4 KSI		ELCO ULTRACON SS4	410 SS		2 1/2	1 3/4		1/4	
		3.4 KSI		ELCO CRETE-FLEX SS4, SMALL HEAD	410 SS		2 1/2	1 3/4		1/4	
		2.5 KSI		ELCO CRETE-FLEX SS4, FLANGED HEAD	410 SS		2 1/2	1 3/4		1/4	
		2 KSI		POWERS 316 STAINLESS STEEL WEDGE-BOLT	316 SS		2	1 7/8		5/16	
		2 KSI		POWERS WEDGE-BOLT PLUS	STEEL		1 1/2	1 1/2		5/16	
		2.5 KSI		POWERS 316 STAINLESS STEEL WEDGE-BOLT	316 SS		1 1/4	2 3/8		7/16	
		2 KSI		POWERS WEDGE-BOLT PLUS	STEEL		1 1/8	1 1/2		7/16	
GROUT FILLED CMU	NOTE 1 NOTE 2 NOTE 3	1/4	3/8	CRACKED OR UNCRACKED, POWERS WEDGE-BOLT PLUS	STEEL	6	1 3/4	2 1/8	NA	1/4	SEE FASTENER MANUFACTURER INSTRUCTIONS
		2.5 KSI		ELCO AGGRE-GATOR	300 SS		2	2		1/4	
				ELCO ULTRACON SS4	410 SS	3	2 1/2	2		1/4	
				POWERS WEDGE-BOLT PLUS	STEEL	6	2	2 1/2		7/16	
ITEM 33, SECONDARY CONTINUOUS MOUNTING ANGLE, FASTENER											
ITEM 26, SUBSTRATE		THICKNESS MIN.	DIA.	TYPE (ALL FASTENERS ARE HEX HEAD STYLE)	MAT'L	SPACING MAX.	EDGE MIN.	EMBED. MIN.	WASHER/FLANGE MIN.	ANGLE HOLE MAX.	SUBSTRATE HOLE MAX.
WOOD	G ≥ 0.42	3	1/4	LAG SCREW	*	3	1 1/2	2 7/8	NA	1/4	SEE FASTENER MANUFACTURER INSTRUCTIONS
STEEL	A36	0.0677	1/4-20	BOLT W/ NUT OR THREAD CUTTING/TAPPING SCREW	*	3	3/4	0.0677	NA	1/4	1/4 FOR BOLT & NUT CONNECTION
		0.138					0.138	0.6 AT NUT	1/4	1/4 FOR BOLT & NUT CONNECTION	
ALUMINUM	6063-T5 6005-T5 6061-T6	1/8	1/4-20	BOLT W/ NUT OR THREAD CUTTING/TAPPING SCREW	*	3	1/2	1/8	NA	1/4	1/4 FOR BOLT & NUT CONNECTION
CONCRETE	NOTE 4	2 KSI	1/4	BUILDUP TAPCON (BLUE, WHITE, OR 410 SS)	VARIABLES	3	1 1/2	1 3/4	NA	1/4	SEE FASTENER MANUFACTURER INSTRUCTIONS
		2.9 KSI		ELCO ULTRACON SS4	410 SS		1	1 3/4		1/4	
		3.4 KSI		ELCO CRETE-FLEX SS4, SMALL OR LARGE HEAD	410 SS		1	1 3/4		1/4	
		4 KSI		POWERS 316 STAINLESS STEEL WEDGE-BOLT	316 SS		1 3/4	1 7/8		5/16	
GROUT FILLED CMU	NOTE 1		1/4	POWERS WEDGE-BOLT PLUS	STEEL	3	2	1 1/2	NA	5/16	SEE FASTENER MANUFACTURER INSTRUCTIONS
				ELCO AGGRE-GATOR	300 SS		2	2		1/4	
NOTE * LAG SCREWS SHALL HAVE STRENGTHS OF MINIMUM GRADE 1 STEEL, OTHER BOLT AND SCREWS SHALL HAVE STRENGTHS OF MINIMUM GRADE 2 STEEL.											
NOTE 1: CONCRETE MASONRY (CMU) SHALL BE > THE FOLLOWING: 6" WIDE, CMU CONFORMING TO ASTM C-90 FILLED WITH 4,747 KSI GROUT.											
NOTE 2: CONCRETE MASONRY (CMU) SHALL BE > THE FOLLOWING: 6" WIDE, 2 KSI CMU CONFORMING TO ASTM C-90 WITH 1624 KSI GROUT.											
NOTE 3: CONCRETE MASONRY (CMU) SHALL BE > THE FOLLOWING: 6" WIDE, GRADE N, TYPE II, LIGHT-WEIGHT/MEDIUM-WEIGHT/NORMAL-WEIGHT CMU CONFORMING TO ASTM C-90. MORTAR MUST BE TYPE N.											
NOTE 4: VARIES WITH SIZE OF FASTENER USED, SEE FASTENER MANUFACTURER'S INSTRUCTIONS.											
SS = STAINLESS STEEL											

12 11

PRODUCT RENEWED
as complying with the Florida
Building Code
NOA-No. **21-0526.06**
Expiration Date **07/28/2026**
By Ismael I. Chanda
Miami-Dade Product Control



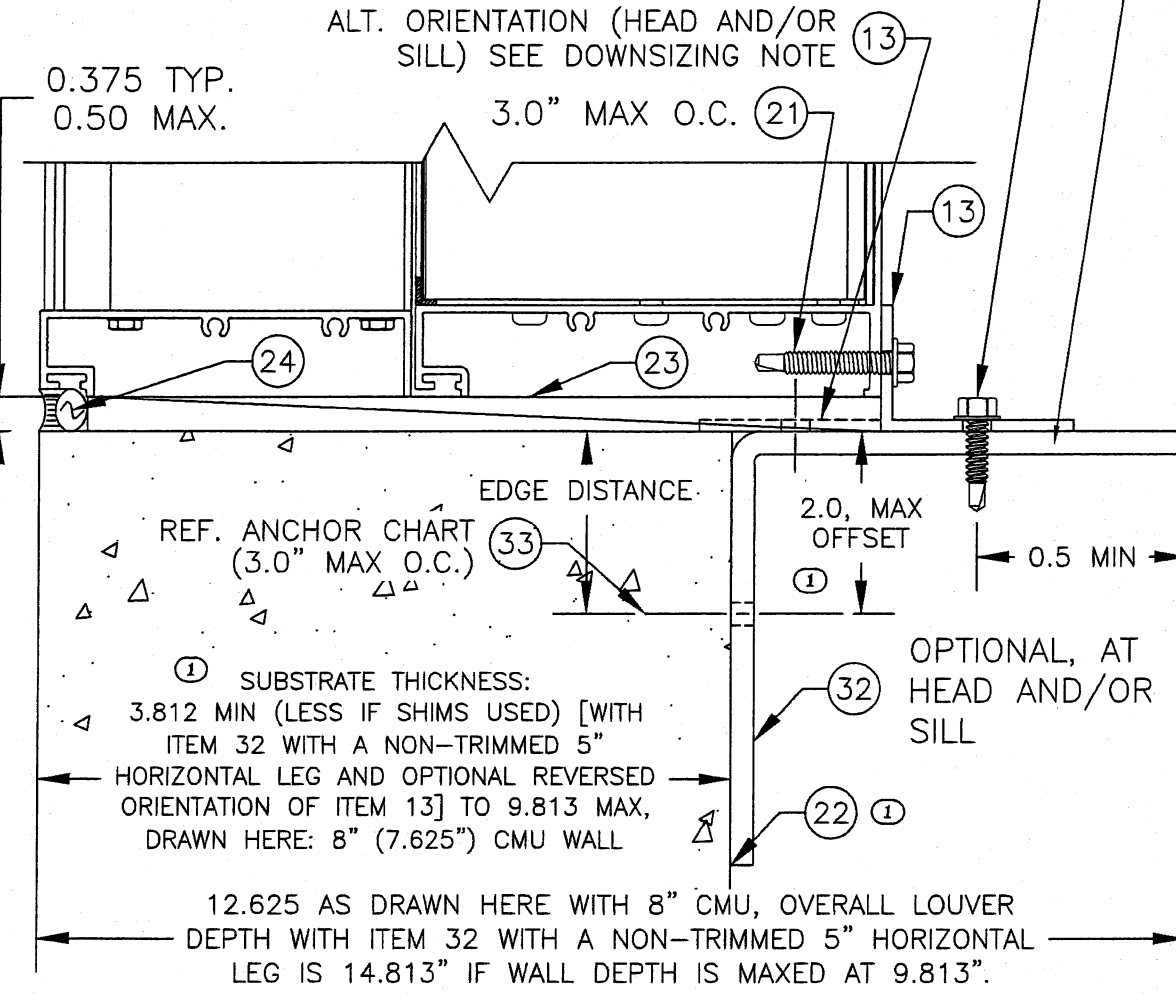
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **19-0516.09**
Expiration Date **07/28/2021**
By [Signature]
Miami-Dade Product Control

REVISION
ADDED ANGLE OFFSET, REDUCED FONT
SIZE, CORRECTED CALLOUT #
BY MCS DATE 7/18/2016 SYN 1
DATE 5/23/2016
DRAWN BY NAH
SCALE

Approved as complying with the
Florida Building Code
Date 07/28/2016
NOA 16-0607.11
Miami-Dade Product Control
By [Signature]
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. **23-1030.03**
Expiration Date: **07/28/2026**
By: Manuel Perez
Miami-Dade Product Control

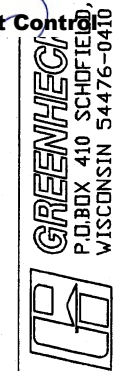
EXTRA MAT'L ON ITEM 32 ALLOWED TO BE
TRIMMED, MUST MAINTAIN MIN EDGE DISTANCE

- 31 TYP. 3.0" MAX O.C. OR
- 25 FOR ALUM SUBSTRATE



OPTIONAL SECONDARY CONTINUOUS MOUNTING ANGLE
STANDARD OR RECESSED JAMB FRAME, HEAD IS TYPICAL OF SHOWN SILL SETUP

- PAGE NOTES:
- STANDARD LOUVER HEIGHT DOWNSIZING IS 0.375 PER END (0.750 OVERALL TOTAL) WHEN ORDERED BASED ON ROUGH OPENING SIZING.
 - MULTI-HIGH ASSEMBLIES ARE PERMITTED AS LONG-AS EACH LOUVER SECTION'S WIDTH/HEIGHT ARE WITHIN THE ALLOWABLE MAXIMUMS AND SUITABLE SUBSTRATES SURROUNDS EACH LOUVER SECTION ASSEMBLY PERIMETER AND EACH LOUVER SECTION IS INSTALLED PER DETAILS.



TITLE:
EHV-901D, SUBSTRATE & ANCHOR
TABLES, & SECONDARY MTG. ANGLE

SHEET NO.
11 OF 11
JOB DRAWING NO.
EHV-901D