MIAMI-DADE COUNTY
DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

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

NOTICE OF ACCEPTANCE (NOA)

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: Series Vektor-H/HS Steel Rooftop Exhaust Fans

APPROVAL DOCUMENT: Drawing No. **VK-H-3001**, titled "Vektor-H 9-36, Vektor-HS 9-36", sheets 1 through 10 of 10, dated 01/09/2024, 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, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

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

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

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

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.
This NOA **revises** & **renews NOA # 22-0217.03** and consists of this page 1 and evidence pages E-1, E-2, E-3, E-4 and E-5, as well as approval document mentioned above.
The submitted documentation was reviewed by **Ishaq I. Chanda, P.E.**

Ishaq I. Chanda

MIAMI-DADE COUNTY APPROVED

NOA No. 24-0123.02
Expiration Date: August 28, 2029
Approval Date: February 22, 2024

Greenheck Fan Corporation

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted under NOA #14-0325.05

A. DRAWINGS

1. Drawing No. **VK-H-1001**, titled "Vektor-H 9-36, Vektor-HS 9-36", sheets 1 through 10 of 10, dated 01/2014, prepared by Greenheck Fan Corporation, signed and sealed by L. David Rice, P.E.

B. TESTS

1. Test reports on 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) ASTM E72 (Modified)
along with marked-up drawings and installation diagram of Series/Model Vektor-H/HS Laboratory Exhaust Systems, prepared by Architectural Testing, Inc., Test Report No. **C7244.01-602-18**, dated 02/14/2014, signed and sealed by Shawn G. Collins, P.E.

C. CALCULATIONS

1. Anchor verification calculations prepared by Rice Engineering, dated 02/26/2014, 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

1. Statement letter of code conformance to the 6th edition (2017) FBC issued by Rice Engineering, dated 02/21/2018, signed and sealed by Wayne K. Helmila, P.E.

2. Statement letter of no financial interest issued by Rice Engineering, dated 02/25/2014, signed and sealed by L. David Rice, P.E.

3. Laboratory compliance letter issued by Architectural Testing, Inc., for Test Reports No. **C7244.01-602-18**, dated 02/14/2014, signed and sealed by Shawn G. Collins, P.E.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0123.02
Expiration Date: August 28, 2029
Approval Date: February 22, 2024

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. Evidence submitted under #18-0322.11

A. DRAWINGS

1. Drawing No. **VK-H-1001**, titled "Vektor-H 9-36, Vektor-HS 9-36", sheets 1 through 10 of 10, dated 02/2018, prepared by Greenheck Fan Corporation, signed and sealed by Wayne K. Helmila, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. Anchor calculations prepared by Rice Engineering, dated 02/21/2018, signed and sealed by Wayne K. Helmila, P.E.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Statement letter of code conformance to the 6th edition (2017) FBC issued by Rice Engineering, dated 02/21/2018, signed and sealed by Wayne K. Helmila, P.E.

3. Evidence submitted under previous approval.

A. DRAWINGS

1. Drawing No. **VK-H-1001**, titled "Vektor-H 9-36, Vektor-HS 9-36", sheets 1 through 10 of 10, dated 02/2018, prepared by Greenheck Fan Corporation, signed and sealed by Wayne K. Helmila, P.E.

B. TESTS

1. None.

C. CALCULATIONS (submitted under #18-0322.11)

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0123.02
Expiration Date: August 28, 2029
Approval Date: February 22 , 2024

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. Evidence submitted under previous NOA (continued)

F. STATEMENTS

1. Statement letter of code conformance to the 6th edition (2017) FBC issued by Rice Engineering, dated 05/30/2019, signed and sealed by Wayne K. Helmila, P.E.

2. Statement letter dated May 13, 2019 for Renewal with "No change", issued by Greenheck Fan Corporation, signed by Mark VanderKooy, P.E.

G. OTHER

1. This NOA **renews NOA #18-0322.11,** expiring 08/28/2024

4. Evidence submitted under NOA # 20-1123.07

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 7th edition (2020) FBC issued by Rice Engineering, dated SEP 24, 2020, signed and sealed by Wayne K. Helmila, P.E.

G. OTHER

1. This NOA **revises NOA #19-0520.03,** expiring 08/28/2024.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0123.02
Expiration Date: August 28, 2029
Approval Date: February 22, 2024

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

5. Evidence submitted under previous approval

A. DRAWINGS

1. Drawing No. **VK-H-3001**, titled "Vektor-H 9-36, Vektor-HS 9-36", sheets 1 through 10 of 10, dated 01/2022, prepared by Greenheck Fan Corporation, signed and sealed by Wayne K. Helmila, P.E. on 02/07/2022.

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. None.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0129.03
Expiration Date: August 28, 2029
Approval Date: February 22, 2024

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

6. New Evidence submitted

A. DRAWINGS

1. Drawing No. **VK-H-3001**, titled "Vektor-H 9-36, Vektor-HS 9-36", sheets 1 through 10 of 10, dated 01/2022, prepared by Greenheck Fan Corporation, signed and sealed by Wayne K. Helmila, P.E. on 02/07/2022.

B. TESTS

1. None.

C. CALCULATIONS

1. Summary of design criteria, computer generated engineering analysis dated 01/09/2024, prepared by Rice Engineering, signed sealed by Wayne K. Helmila, P.E.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

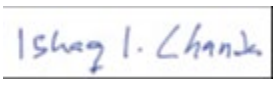
F. STATEMENTS

1. Statement letters of conformance to FBC 2023(**8th** Edition) & "Renewal with No product or drawing changes" dated 01/09/24, prepared Rice Engineering, signed sealed by Wayne K. Helmila, P.E.

2. Renewal request statement letter by Greenheck Fan Corp. "Renewal with No product or drawing changes" dated 01/09/24, prepared, signed sealed by Mark Vanderkooy, P.E. Engineering Manager.

G. OTHER

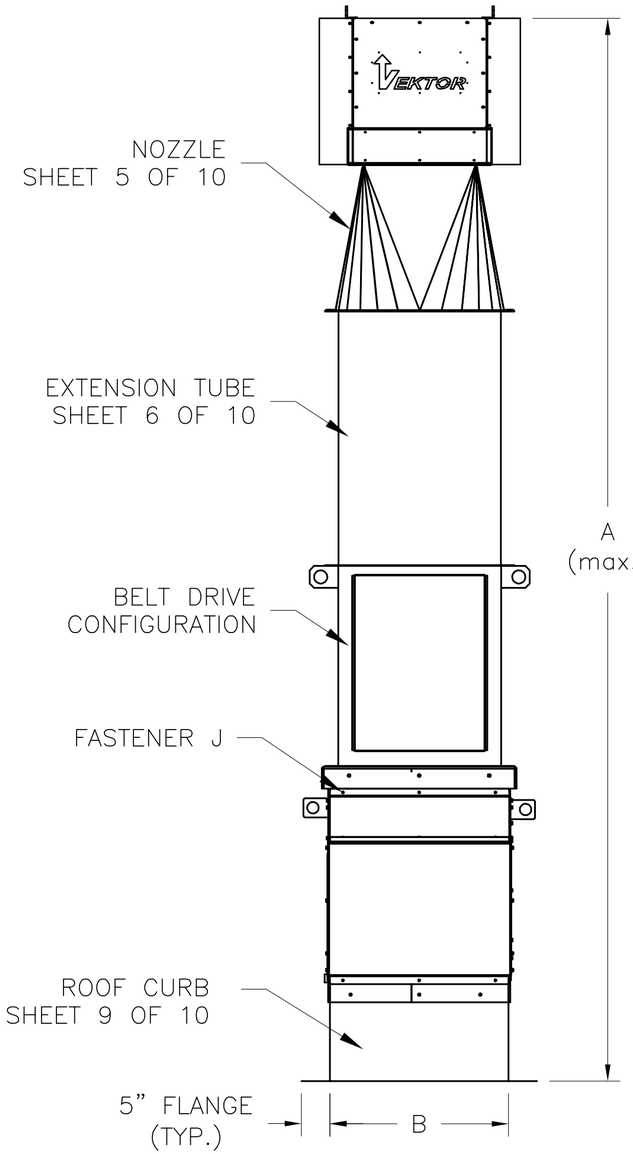
1. This NOA **revises** FBC 2023 updates **& renews NOA # 22-0217.03**, expiring 08/28/2029.



Ishaq I. Chanda, P.E.
Product Control Unit Supervisor
NOA No. 24-0129.03
Expiration Date: August 28, 2029
Approval Date: February 22, 2024

DESIGN LIMITS
Max. Design Load:
±140 psf (6.7 Kpa)
Max Overall Enclosure:
67.63 x 107.25 in. (1718 x2724 mm)
Max. Overall Unit Height:
167 in. (4242 mm)

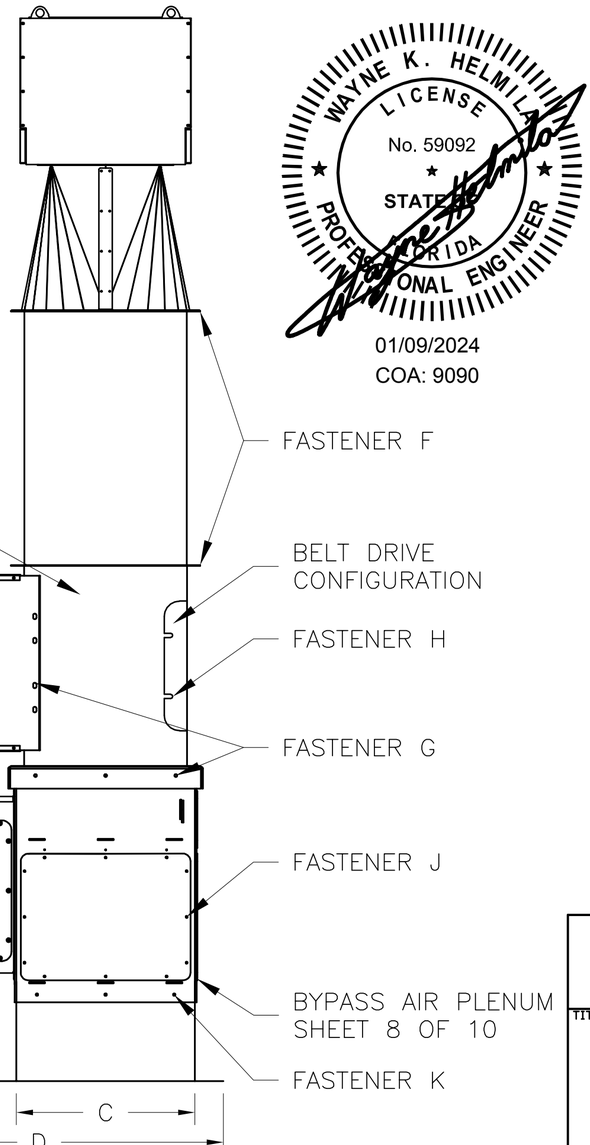
UNIT	FASTENER F DESCRIPTION	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER G DESCRIPTION	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER H DESCRIPTION	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER J DESCRIPTION	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER K DESCRIPTION	BELT DRIVE QTY	DIRECT DRIVE QTY
VEKTOR–H 9	SCR,CS,HH,.313–18X1,SS,316,W/EPDM,WSHR WSHR,FLAT,.045X.35X.745,SS,316 NUT,HEX,.313–18,SS,316	16		SCR,CS,HH,.313–18X1,SS,316,W/EPDM,WSHR	16		SCR,CS,HH,.313–18X1,SS,316,W/EPDM,WSHR NUT,HEX,.375–16,SS,316 WSHR,FLAT,.05X.406X.875,SS,316	6		SCR,TEK,HWH,#12–14X.875,SS,410	52		SCR,TCS,IHWH,.313–18X1,TYP–23,MECH ZP	12	
VEKTOR–H 10			16						24			56			12
VEKTOR–H 12						16		6							
VEKTOR–H 13											52				
VEKTOR–H 14					16			6							
VEKTOR–H 16		16	40		20			8	38		52			16	16
VEKTOR–H 18						20					70	74			
VEKTOR–H 20					20			8						20	
VEKTOR–H 22		8									70				
VEKTOR–H 24								10			72			24	
VEKTOR–H 30		16						12							
VEKTOR–H 36											78			28	



RICE
ENGINEERING
105 School Creek Trail
Luxemburg, WI 54217
Phone: (920) 617-1042
Fax: (920) 617-1100
***.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. 24-0123.02
Expiration Date 08/28/2029
By Ishaq I. Chanda
Miami–Dade Product Control



01/09/2024
COA: 9090

ALL DIMENSIONS ARE IN INCHES
WEIGHTS DO NOT INCLUDE MOTOR AND DRIVES

UNIT	A (max.)	B	C	D	MAX WEIGHT (LBS.)
VEKTOR–H 9	146.00	21.63	21.63	72.50	608
VEKTOR–H 10	146.00	21.63	21.63	72.50	608
VEKTOR–H 12	146.00	21.63	21.63	72.50	618
VEKTOR–H 13	146.50	23.63	23.63	71.50	671
VEKTOR–H 14	144.00	27.63	27.63	76.50	641
VEKTOR–H 16	146.50	27.63	27.63	76.50	813
VEKTOR–H 18	146.00	33.63	33.63	82.50	981
VEKTOR–H 20	144.00	33.63	33.63	82.50	812
VEKTOR–H 22	145.25	39.63	39.63	88.50	1241
VEKTOR–H 24	146.00	45.63	45.63	94.75	1520
VEKTOR–H 30	155.50	51.63	51.63	100.50	1870
VEKTOR–H 36	167.00	57.63	57.63	107.25	2323

NOTES:
1. MODELS VEKTOR–H & VEKTOR–HS HAS BEEN SUCCESSFULLY TESTED IN ACCORDANCE WITH MIAMI DADE TEST PROTOCOL TAS–201 (LARGE MISSILE IMPACT), AND TAS–202 (STATIC LOADING).
2. ROOF STRUCTURE MUST BE DESIGNED TO WITHSTAND THE WEIGHT AND LOADING TRANSMITTED BY LABORATORY EXHAUST FAN. FASTENERS SHALL BE SPECIFIED AND INSTALLED AS DETAILED.
3. DESIGN, TESTING, AND INSTALLATION CONFORMS TO FLORIDA BUILDING CODE.
4. DESIGN PRESSURE = +/– 140 PSF LARGE MISSILE IMPACT RESISTANT.
5. TESTED FOR AREAS INCLUDING HIGH VELOCITY HURRICANE ZONES.
6. THESE FANS HAVE NOT BEEN TESTED FOR WIND DRIVEN RAIN TEST PER FLORIDA BUILDING CODE, TAS–100 (A)–95.
7. THIS APPROVAL IS FOR THE STRUCTURAL CAPACITY AND IMPACT RATING OF THE EXTERIOR HOUSNG ONLY, IT DOES NOT INCLUDE ANY INTERIOR MECHANISM OR ELECTRICAL PART.

Wayne K Helmila

Digitally signed by Wayne K Helmila
DN: CN=Wayne K Helmila, dnQualifier=A01410C0000018CDB8F4AFB001A652B, O=Wisconsin, C=US
Date: 2024.01.09 15:58:57-06'00'

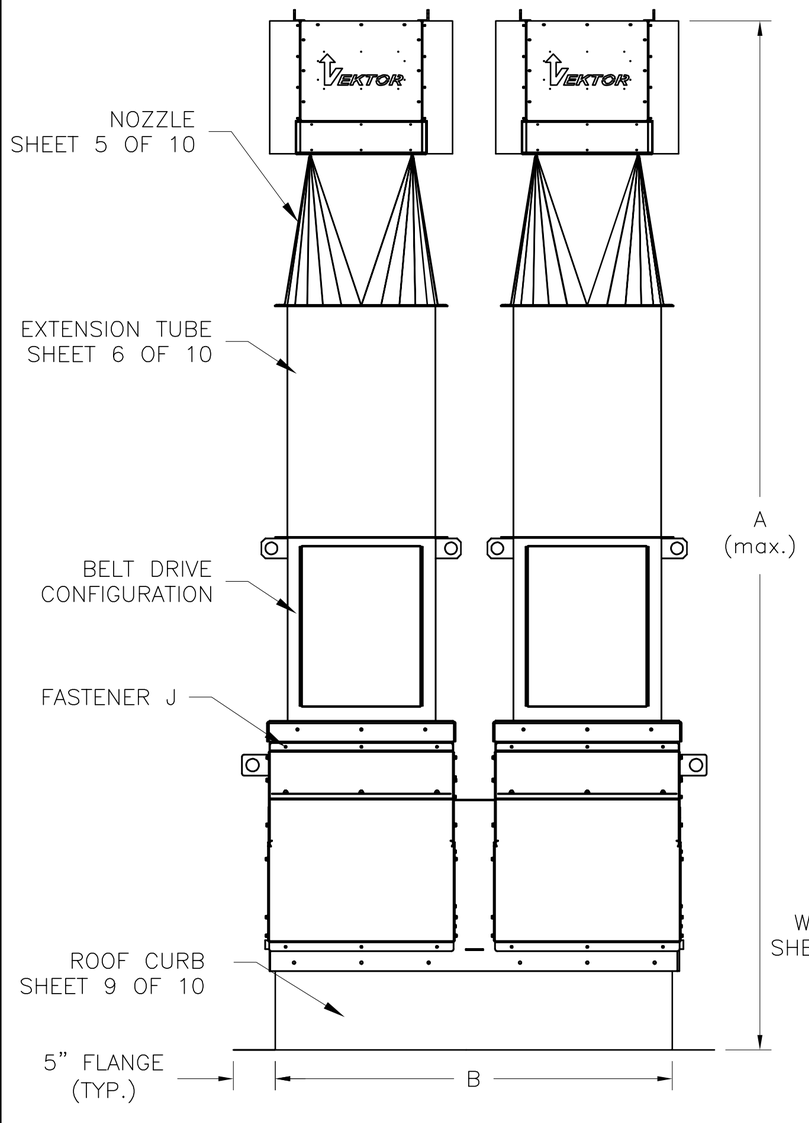
GREENHECK
P.O.BOX 410 SCHOFIELD, WISCONSIN 54476-0410

TITLE
VEKTOR–H 9–36
VEKTOR–HS 9–36
1X1 ASSEMBLY
SHEET 1 OF 10

DRAWN BY	ECO
OERTEL	
DATE	ENG. REF.
12/2023	NOA TESTING
SUPERSEDES	
SCALE	
CAD DRAWING NO.	B
VK–H–3001	

DESIGN LIMITS
Max. Design Load:
±140 psf (6.7 Kpa)
Max Overall Enclosure:
130.50 x 107.25 in. (3315 x 2724mm)
Max. Overall Unit Height:
167 in. (4242 mm)

UNIT	FASTENER F DESCRIPTION	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER G DESCRIPTION	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER H DESCRIPTION	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER J DESCRIPTION	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER K DESCRIPTION	BELT DRIVE QTY	DIRECT DRIVE QTY
VEKTOR–H 9	SCR,CS,HH,.313–18X1,SS, 316,W/EPDM,WSHR	32	32	SCR,CS,HH,.313–18X1,SS, 316,W/EPDM,WSHR	32	32	SCR,CS,HH,.313–18X1,SS, 316,W/EPDM,WSHR	12	48	SCR,TEK,HWH,#12–14X.875, SS,410	80	88	SCR,TCS,IHWH,.313–18X1, TYP–23,MECH ZP	18	18
VEKTOR–H 10														20	20
VEKTOR–H 12														24	24
VEKTOR–H 13							NUT,HEX,.375–16,SS,316	12						26	26
VEKTOR–H 14														32	
VEKTOR–H 16	WSHR,FLAT,.045X.35X.745, SS,316	32	80		32			16	76		80			36	
VEKTOR–H 18					40	40					108	116		38	
VEKTOR–H 20	NUT,HEX,.313–18,SS,316						WSHR,FLAT,.05X.406X.875, SS,316							44	
VEKTOR–H 22		16			40			16			108			32	
VEKTOR–H 24								20			112			36	
VEKTOR–H 30		32						24						38	
VEKTOR–H 36											120			44	



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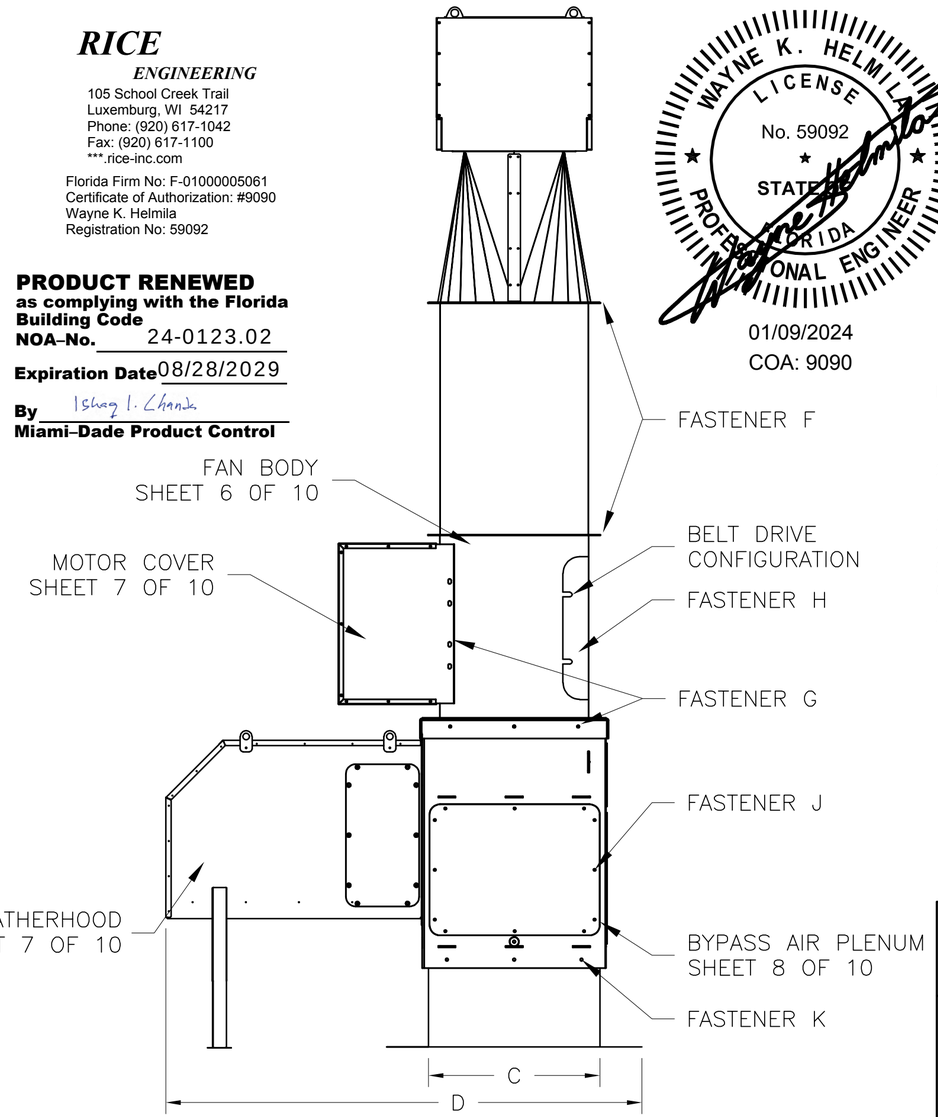
Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092

PRODUCT RENEWED
as complying with the Florida Building Code
NOA–No. 24-0123.02
Expiration Date 08/28/2029
By Ishaq I. Chanda
Miami–Dade Product Control



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

01/09/2024
COA: 9090

ALL DIMENSIONS ARE IN INCHES
WEIGHTS DO NOT INCLUDE MOTOR AND DRIVES

UNIT	A (max.)	B	C	D	MAX WEIGHT (LBS.)
VEKTOR–H 9	146.00	48.50	21.63	72.50	1137
VEKTOR–H 10	146.00	48.50	21.63	72.50	1137
VEKTOR–H 12	146.00	48.50	21.63	72.50	1157
VEKTOR–H 13	146.50	52.50	23.63	71.50	1274
VEKTOR–H 14	144.00	60.50	27.63	76.50	1213
VEKTOR–H 16	146.50	60.50	27.63	76.50	1549
VEKTOR–H 18	146.00	72.50	33.63	82.50	1863
VEKTOR–H 20	144.00	72.50	33.63	82.50	1519
VEKTOR–H 22	145.25	84.50	39.63	88.50	2371
VEKTOR–H 24	146.00	96.50	45.63	94.75	2917
VEKTOR–H 30	155.50	108.50	51.63	100.50	3586
VEKTOR–H 36	167.00	120.50	57.63	107.25	4439

NOTES:
1. MODELS VEKTOR–H & VEKTOR–HS HAS BEEN SUCCESSFULLY TESTED IN ACCORDANCE WITH MIAMI DADE TEST PROTOCOL TAS–201 (LARGE MISSILE IMPACT), AND TAS–202 (STATIC LOADING).
2. ROOF STRUCTURE MUST BE DESIGNED TO WITHSTAND THE WEIGHT AND LOADING TRANSMITTED BY LABORATORY EXHAUST FAN. FASTENERS SHALL BE SPECIFIED AND INSTALLED AS DETAILED.
3. DESIGN, TESTING, AND INSTALLATION CONFORMS TO FLORIDA BUILDING CODE.
4. DESIGN PRESSURE = +/– 140 PSF LARGE MISSILE IMPACT RESISTANT.
5. TESTED FOR AREAS INCLUDING HIGH VELOCITY HURRICANE ZONES.
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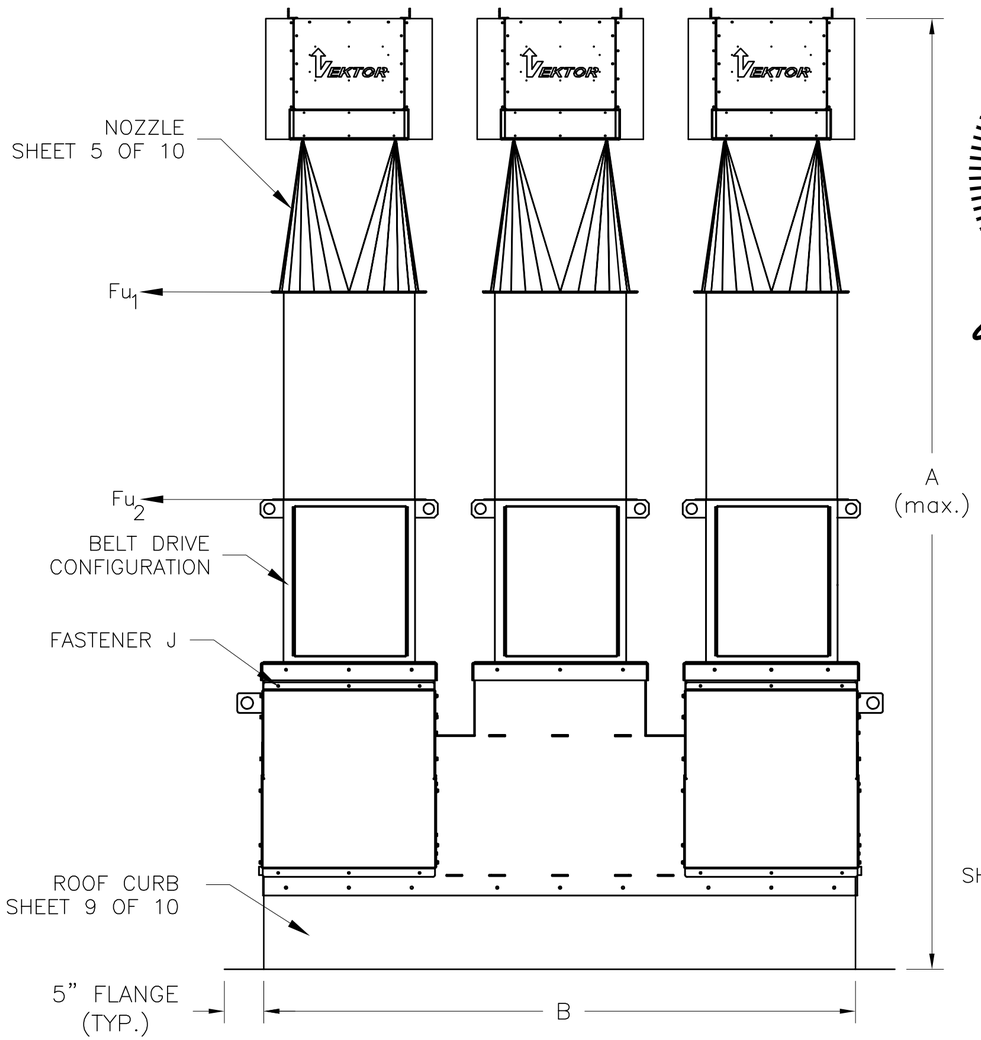
GREENHECK
P.O.BOX 410 SCHOFIELD, WISCONSIN 54476-0410

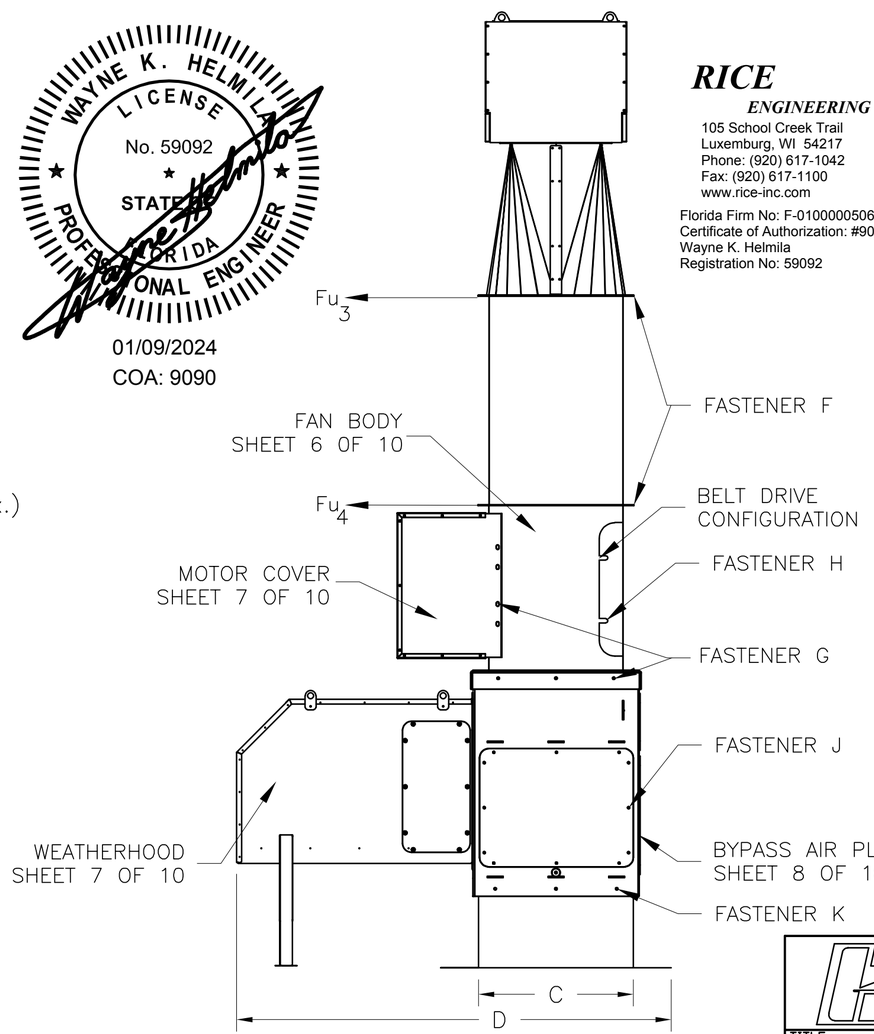
TITLE
VEKTOR–H 9–36
VEKTOR–HS 9–36
2X1 ASSEMBLY
SHEET 2 OF 10

DRAWN BY: OERTEL	ECO:
DATE: 12/2023	ENG. REF.: NOA TESTING
SUPERSEDES:	
SCALE: 1/20	
CAD DRAWING NO.: VK–H–3001	B

DESIGN LIMITS
Max. Design Load:
±140 psf (6.7 Kpa)
Max Overall Enclosure:
183.38 x 107.25 in. (4658 x 2724mm)
Max. Overall Unit Height:
167 in. (4242 mm)

UNIT	FASTENER F	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER G	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER H	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER J	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER K	BELT DRIVE QTY	DIRECT DRIVE QTY
	DESCRIPTION			DESCRIPTION			DESCRIPTION			DESCRIPTION			DESCRIPTION		
VEKTOR–H 9	SCR,CS,HH,.313–18X1,SS, 316,W/EPDM,WSHR	48		SCR,CS,HH,.313–18X1,SS, 316,W/EPDM,WSHR	48		SCR,CS,HH,.313–18X1,SS, 316,W/EPDM,WSHR	18		SCR,TEK,HWH,#12–14X.875, SS,410	102		SCR,TCS,IHWH,.313–18X1, TYP–23,MECH ZP	26	
VEKTOR–H 10			48			48			72			114			26
VEKTOR–H 12															
VEKTOR–H 13								18							
VEKTOR–H 14	WSHR,FLAT,.045X.35X.745, SS,316						NUT,HEX,.375–16,SS,316				102			32	
VEKTOR–H 16		48	120		48			24	180						32
VEKTOR–H 18					60	60					138	150		36	
VEKTOR–H 20	NUT,HEX,.313–18,SS,316						WSHR,FLAT,.05X.406X.875, SS,316								36
VEKTOR–H 22		24			60			24			138			42	
VEKTOR–H 24								30			142			48	
VEKTOR–H 30		48						36						54	
VEKTOR–H 36											152			58	





WAYNE K. HELMILA
LICENSE
No. 59092
STATE OF FLORIDA
PROFESSIONAL ENGINEER
01/09/2024
COA: 9090

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

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

ALL DIMENSIONS ARE IN INCHES
WEIGHTS DO NOT INCLUDE MOTOR AND DRIVES

UNIT	A (max.)	B	C	D	MAX WEIGHT (LBS.)
VEKTOR–H 9	146.00	75.38	21.63	72.50	1591
VEKTOR–H 10	146.00	75.38	21.63	72.50	1591
VEKTOR–H 12	146.00	75.38	21.63	72.50	1621
VEKTOR–H 13	146.50	81.38	23.63	71.50	1781
VEKTOR–H 14	144.00	93.38	27.63	76.50	1740
VEKTOR–H 16	146.50	93.38	27.63	76.50	2161
VEKTOR–H 18	146.00	111.38	33.63	82.50	2638
VEKTOR–H 20	144.00	111.38	33.63	82.50	2240
VEKTOR–H 22	145.25	129.38	39.63	88.50	3316
VEKTOR–H 24	146.00	147.38	45.63	94.75	4085
VEKTOR–H 30	155.50	165.38	51.63	100.50	5026
VEKTOR–H 36	167.00	183.38	57.63	107.25	6230

NOTES:
1. MODELS VEKTOR–H & VEKTOR–HS HAS BEEN SUCCESSFULLY TESTED IN ACCORDANCE WITH MIAMI DADE TEST PROTOCOL TAS–201 (LARGE MISSILE IMPACT), AND TAS–202 (STATIC LOADING).
2. ROOF STRUCTURE MUST BE DESIGNED TO WITHSTAND THE WEIGHT AND LOADING TRANSMITTED BY LABORATORY EXHAUST FAN. FASTENERS SHALL BE SPECIFIED AND INSTALLED AS DETAILED.
3. DESIGN, TESTING, AND INSTALLATION CONFORMS TO FLORIDA BUILDING CODE.
4. DESIGN PRESSURE = +/– 140 PSF LARGE MISSILE IMPACT RESISTANT.
5. TESTED FOR AREAS INCLUDING HIGH VELOCITY HURRICANE ZONES.
6. THESE FANS HAVE NOT BEEN TESTED FOR WIND DRIVEN RAIN TEST PER FLORIDA BUILDING CODE, TAS–100 (A)–95.
7. THIS APPROVAL IS FOR THE STRUCTURAL CAPACITY AND IMPACT RATING OF THE EXTERIOR HOUSNG ONLY, IT DOES NOT INCLUDE ANY INTERIOR MECHANISM OR ELECTRICAL PART.

PRODUCT RENEWED
as complying with the Florida Building Code
NOA–No. 24-0123.02
Expiration Date 08/28/2029
By Ishaq I. Chanda
Miami–Dade Product Control

Fu_1 = Horizontal parallel ultimate force per each Vektor–H9
Fu_2 = Horizontal parallel ultimate force per each Vektor–H36
Fu_3 = Horizontal perpendicular ultimate force per each Vektor–H9
Fu_4 = Horizontal perpendicular ultimate force per each Vektor–H36

Fu_1 = 2,385 lbf
Fu_2 = 7,108 lbf
Fu_3 = 1,925 lbf
Fu_4 = 6,169 lbf

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

TITLE
VEKTOR–H 9–36
VEKTOR–HS 9–36
3X1 ASSEMBLY
SHEET 3 OF 10

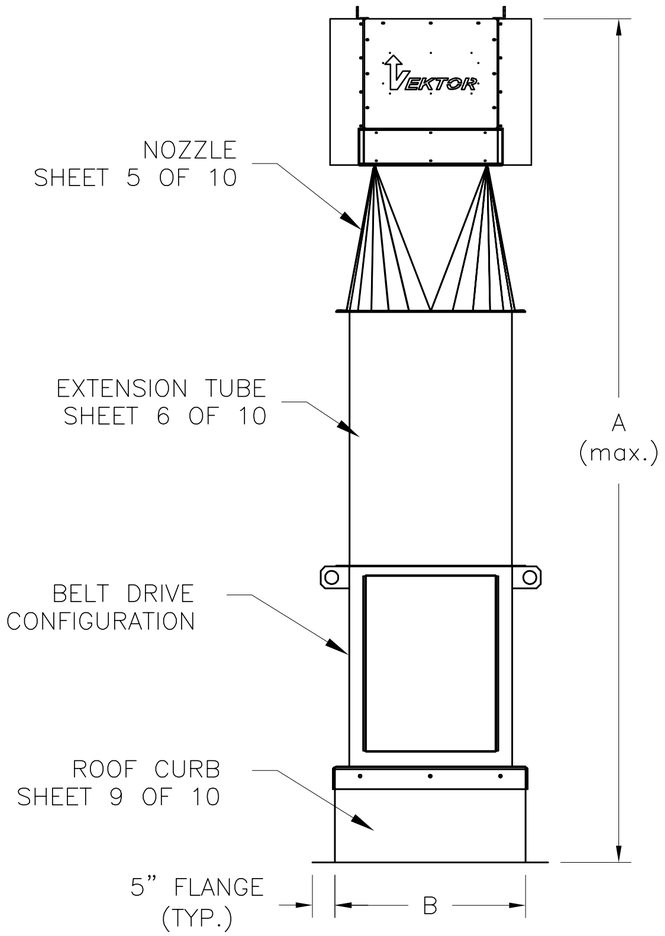
DRAWN BY	ECO
OERTEL	
DATE	ENG. REF.
12/2023	NOA TESTING
SUPERSEDES	
SCALE	

CAD DRAWING NO. B
VK–H–3001

DESIGN LIMITS
Max. Design Load:
±140 psf (6.7 Kpa)
Max Overall Enclosure:
67.63 x 75.50 in. (1718 x 1918 mm)
Max. Overall Unit Height:
167 in. (4242 mm)

UNIT	FASTENER F	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER G	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER H	BELT DRIVE QTY	DIRECT DRIVE QTY	FASTENER K	BELT DRIVE QTY	DIRECT DRIVE QTY
	DESCRIPTION			DESCRIPTION			DESCRIPTION			DESCRIPTION		
VEKTOR–H 9	SCR,CS,HH,.313–18X1,SS, 316,W/EPDM,WSHR	16		SCR,CS,HH,.313–18X1,SS, 316,W/EPDM,WSHR	4		SCR,CS,HH,.313–18X1,SS, 316,W/EPDM,WSHR	6		SCR,TCS,IHWH,.313–18X1, TYP–23,MECH ZP	12	
VEKTOR–H 10			16			16			24			12
VEKTOR–H 12												
VEKTOR–H 13								6				
VEKTOR–H 14	WSHR,FLAT,.045X.35X.745, SS,316						NUT,HEX,.375–16,SS,316					
VEKTOR–H 16		16	40		4	20		8	38		16	16
VEKTOR–H 18							WSHR,FLAT,.05X.406X.875, SS,316					
VEKTOR–H 20	NUT,HEX,.313–18,SS,316											
VEKTOR–H 22		16						8			20	
VEKTOR–H 24		16			4			10			24	
VEKTOR–H 30		32						12				
VEKTOR–H 36											28	

PRODUCT RENEWED
as complying with the Florida Building Code
NOA–No. 24-0123.02
Expiration Date 08/28/2029
By Ishaq I. Chanda
Miami–Dade Product Control



RICE
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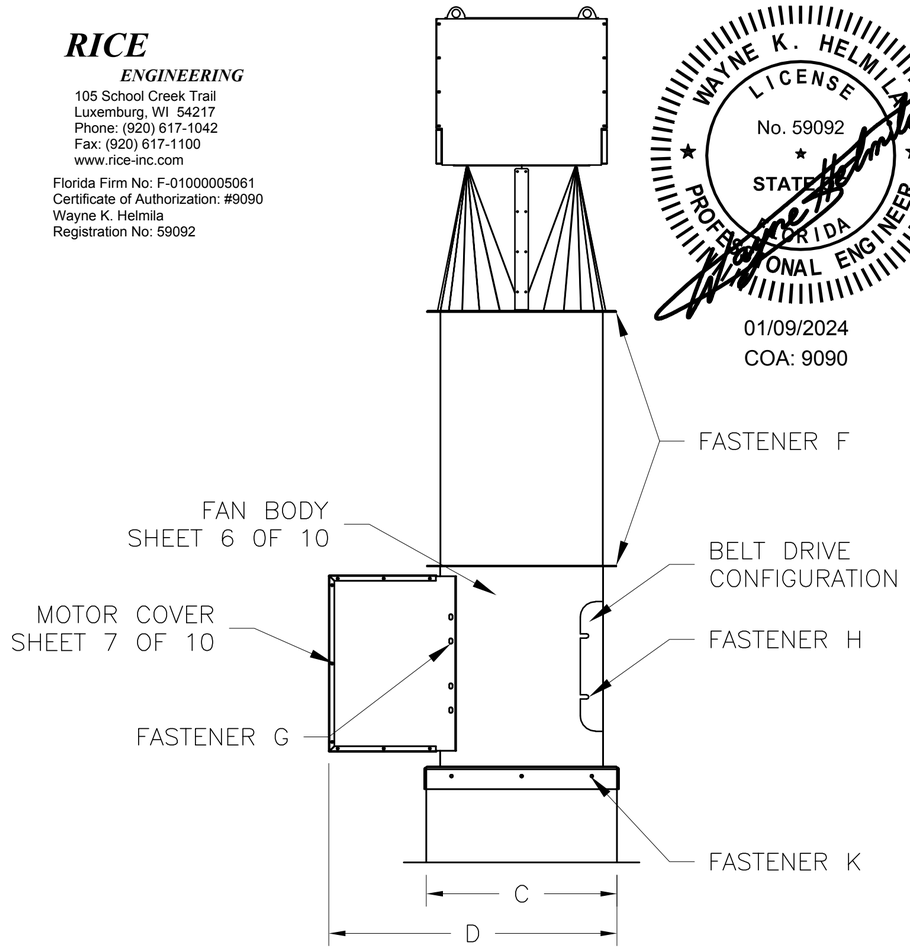
www.rice-inc.com

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



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

01/09/2024
COA: 9090

ALL DIMENSIONS ARE IN INCHES
WEIGHTS DO NOT INCLUDE MOTOR AND DRIVES

UNIT	A (max.)	B	C	D	MAX WEIGHT (LBS.)
VEKTOR–H 9	146.00	21.63	21.63	33.75	407
VEKTOR–H 10	146.00	21.63	21.63	33.75	407
VEKTOR–H 12	146.00	21.63	21.63	33.75	417
VEKTOR–H 13	146.50	23.63	23.63	36.75	451
VEKTOR–H 14	144.00	27.63	27.63	40.00	606
VEKTOR–H 16	146.50	27.63	27.63	40.00	559
VEKTOR–H 18	146.00	33.63	33.63	48.25	665
VEKTOR–H 20	144.00	33.63	33.63	48.25	757
VEKTOR–H 22	145.25	39.63	39.63	53.75	829
VEKTOR–H 24	146.00	45.63	45.63	59.75	1009
VEKTOR–H 30	154.00	51.63	51.63	68.25	1259
VEKTOR–H 36	144.00	57.63	57.63	75.50	1537

NOTES:
1. MODELS VEKTOR–H & VEKTOR–HS HAS BEEN SUCCESSFULLY TESTED IN ACCORDANCE WITH MIAMI DADE TEST PROTOCOL TAS–201 (LARGE MISSILE IMPACT), AND TAS–202 (STATIC LOADING).
2. ROOF STRUCTURE MUST BE DESIGNED TO WITHSTAND THE WEIGHT AND LOADING TRANSMITTED BY LABORATORY EXHAUST FAN. FASTENERS SHALL BE SPECIFIED AND INSTALLED AS DETAILED.
3. DESIGN, TESTING, AND INSTALLATION CONFORMS TO FLORIDA BUILDING CODE.
4. DESIGN PRESSURE = +/– 140 PSF LARGE MISSILE IMPACT RESISTANT.
5. TESTED FOR AREAS INCLUDING HIGH VELOCITY HURRICANE ZONES.
6. THESE FANS HAVE NOT BEEN TESTED FOR WIND DRIVEN RAIN TEST PER FLORIDA BUILDING CODE, TAS–100 (A)–95.
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GREENHECK
P.O.BOX 410 SCHOFIELD, WISCONSIN 54476-0410

TITLE
VEKTOR–H 9–36
VEKTOR–HS 9–36
1X1 ASSEMBLY (NO PLENUM)
SHEET 4 OF 10

DRAWN BY	ECO
OERTEL	
DATE	ENG. REF.
12/2023	NOA TESTING
SUPERSEDES	
SCALE	
CAD DRAWING NO.	B
VK–H–3001	

ALL DIMENSIONS ARE IN INCHES.

FASTENER F=SCR,CS,HH,.313–18X1,SS,316, W/EPDM,WSHR
WSHR,FLAT,.045X.35X.745,SS,316
NUT,HEX,.313–18,SS,316

FASTENER J=SCR,TEK,HWH,#12–14X.875,SS,410

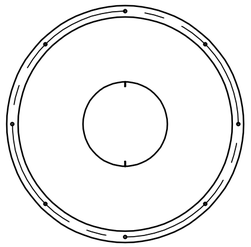
FASTENER L= RVT,BLIND,DOME,.187,.126–.25,SS

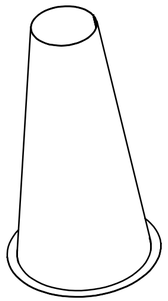
HRS POCS=HOT ROLLED STEEL, PICKLED AND OILED COMMERCIAL STEEL
CRS DS=COLD ROLLED STEEL, DRAWING STEEL
HRS POCS & CRS DS MATERIALS ARE COVERED WITH AN ELECTROSTATIC POWDER COATING

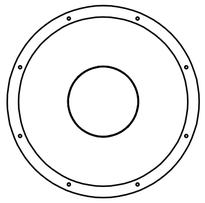
UNIT SIZE	A	B	C	MATERIAL CONE	MATERIAL FLANGE
VEKTOR–H 9	43.00	18.38	21.63	16 GA. CRS DS	10 GA HRS POCS
VEKTOR–H 10	43.00	18.38	21.63		
VEKTOR–H 12	43.00	18.38	21.63		
VEKTOR–H 13	43.00	20.38	23.63		
VEKTOR–H 14	43.00	24.38	27.63		
VEKTOR–H 16	43.00	24.38	27.63		
VEKTOR–H 18	43.00	30.38	33.63		
VEKTOR–H 20	43.00	30.38	33.63		
VEKTOR–H 22	43.00	36.38	39.63		
VEKTOR–H 24	43.00	42.50	45.75		
VEKTOR–H 30	43.00	48.50	52.75		
VEKTOR–H 36	43.00	55.00	59.25		

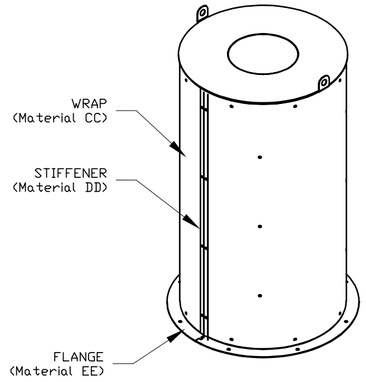
UNIT SIZE	A	B	C	QTY. W	MATERIAL WRAP	MATERIAL STIFFENER	MATERIAL FLANGE
VEKTOR–H 9	43.00	18.38	21.63	40	18 GA. CRS DS	18 GA. CRS DS	10 GA HRS POCS
VEKTOR–H 10	43.00	18.38	21.63	40			
VEKTOR–H 12	43.00	18.38	21.63	40			
VEKTOR–H 13	43.00	20.38	23.63	40			
VEKTOR–H 14	43.00	24.38	27.63	44			
VEKTOR–H 16	43.00	24.38	27.63	44			
VEKTOR–H 18	43.00	30.38	33.63	44			
VEKTOR–H 20	43.00	30.38	33.63	44			
VEKTOR–H 22	43.00	36.38	39.63	52			
VEKTOR–H 24	43.00	42.50	45.75	52			
VEKTOR–H 30	43.00	48.50	52.75	58			
VEKTOR–H 36	43.00	55.00	59.25	58			

UNIT SIZE	A	B	C	D	E	QTY. X	QTY. Y	QTY. Z	MATERIAL EXTR PNL	MATERIAL TRANSN PNL	MATERIAL SD CVR	MATERIAL FLG's
VEKTOR–H 9	43.00	21.50	18.38	21.63	25.04	22	42	16	16 GA. CRS DS	14 GA. CRS DS	16 GA. CRS DS	10 GA HRS POCS
VEKTOR–H 10	43.00	21.50	18.38	21.63	25.04	22	42	16				
VEKTOR–H 12	43.00	21.50	18.38	21.63	25.04	22	42	16				
VEKTOR–H 13	43.00	21.50	20.38	23.63	25.04	22	42	16				
VEKTOR–H 16	43.00	21.50	24.38	27.63	29.57	26	44	16				
VEKTOR–H 18	43.00	21.50	30.38	33.63	33.33	26	44	16				
VEKTOR–H 22	43.00	21.50	36.38	39.63	37.64	26	46	16				
VEKTOR–H 24	43.00	21.50	42.50	45.75	44.03	30	46	32				
VEKTOR–H 30	43.00	21.50	48.50	52.75	47.48	30	50	32			14 GA. CRS DS	
VEKTOR–H 36	43.00	21.50	55.00	59.25	58.43	30	54	32				









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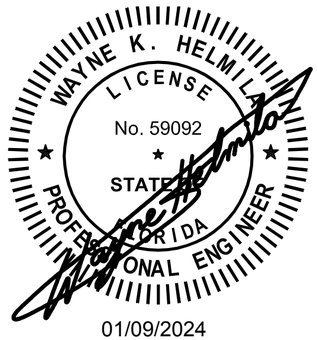
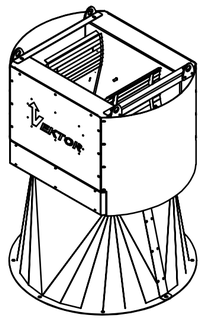
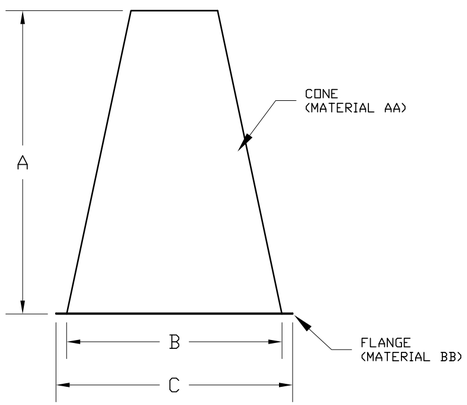
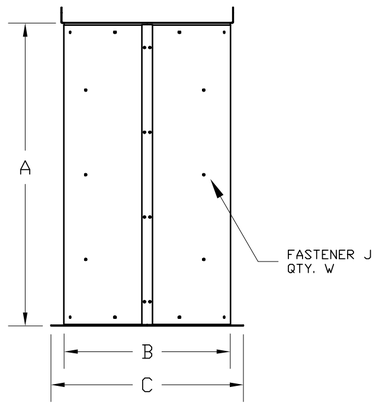


01/09/2024
COA: 9090



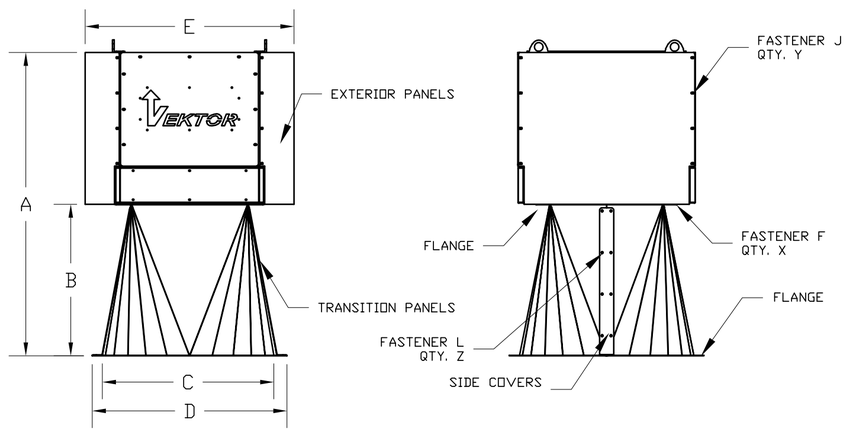


VEKTOR–H NOZZLE



VEKTOR–H ATTENUATING NOZZLE

PRODUCT RENEWED
as complying with the Florida Building Code
NOA–No. 24-0123.02
Expiration Date 08/28/2029
By Ishaq I. Chanda
Miami–Dade Product Control



VEKTOR–HS "SAVVE" NOZZLE

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

TITLE
VEKTOR–H 9–36
VEKTOR–HS 9–36
NOZZLES
SHEET 5 OF 10

DRAWN BY	ECO
OERTEL	
DATE	ENG. REF.
12/2023	NOA TESTING
SUPERSEDES	
SCALE	
CAD DRAWING NO.	B
VK–H–3001	

ALL DIMENSIONS ARE IN INCHES.

HRS POCS=HOT ROLLED STEEL, PICKLED AND OILED COMMERCIAL STEEL

CRS DS=COLD ROLLED STEEL, DRAWING STEEL

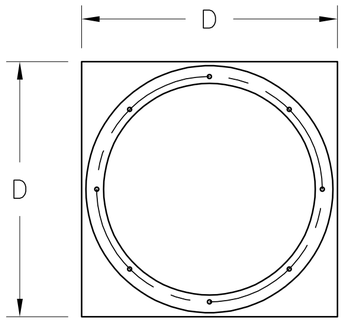
HRS POCS & CRS DS MATERIALS ARE COVERED WITH AN ELECTROSTATIC POWDER COATING

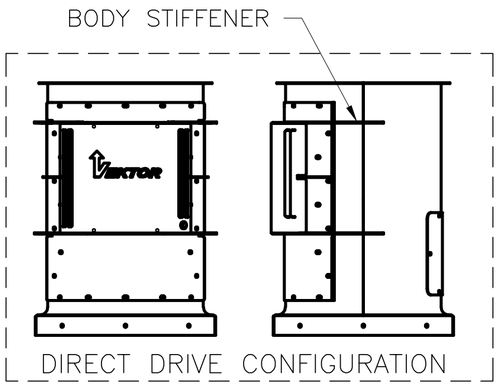
	BELT DRIVE	DIRECT DRIVE				DIRECT DRIVE BODY STIFFENER QTY	MATERIAL		
UNIT SIZE	A	A	B	C	D		OUTR TUBE	CURB PNL	ACS PNL
VEKTOR–H 9	25.50	XXX	18.65	21.65	22.00	XXX	12 GA. HRS POCS	12 GA. HRS POCS	12 GA. HRS POCS
VEKTOR–H 10	25.50	31.50	18.65	21.65	22.00	4			
VEKTOR–H 12	25.50	31.50	18.65	21.65	22.00				
VEKTOR–H 13	27.00	32.50	20.58	23.58	24.00				
VEKTOR–H 14	XXX	37.50	24.58	27.58	28.00	6			
VEKTOR–H 16	31.00	37.50	24.58	27.58	28.00				
VEKTOR–H 18	33.50	41.50	30.58	33.58	34.00	8			
VEKTOR–H 20	XXX	41.50	30.58	33.58	34.00				
VEKTOR–H 22	37.75	XXX	36.58	39.58	40.00	XXX	10 GA. HRS POCS		10 GA. HRS POCS
VEKTOR–H 24	42.00	XXX	42.79	45.79	46.00	XXX			
VEKTOR–H 30	51.00	XXX	48.77	52.77	52.00	XXX			
VEKTOR–H 36	56.50	XXX	55.27	59.27	58.00	XXX			

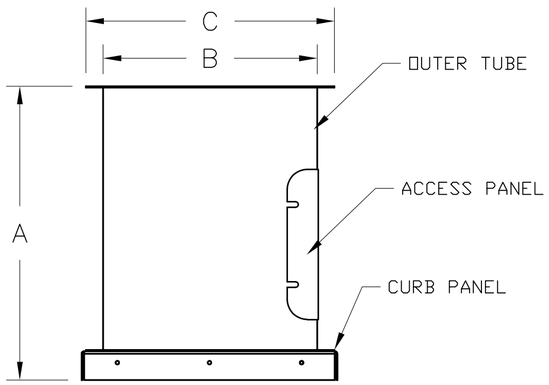
A_1 =DIMENSION IN RELATION TO SHEETS 1,2, & 3 OF 10

A_2 =DIMENSION IN RELATION TO SHEET 4 OF 10

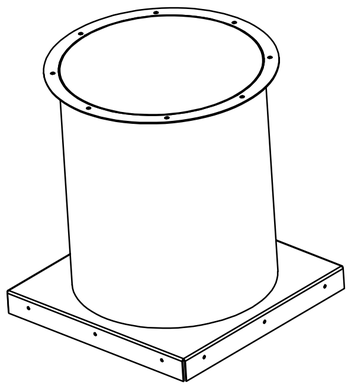
	BELT DRIVE		DIRECT DRIVE				MATERIAL
UNIT SIZE	A_1	A_2	A_1	A_2	B	C	EXTENSION
VEKTOR–H 9	29.00	55.50	XXX	XXX	18.65	21.65	12 GA. HRS POCS
VEKTOR–H 10	29.00	55.50	21.00	48.00	18.65	21.65	
VEKTOR–H 12	29.00	55.50	21.00	48.00	18.65	21.65	
VEKTOR–H 13	27.00	55.00	19.00	47.00	20.58	23.58	
VEKTOR–H 14	XXX	XXX	12.00	42.00	24.58	27.58	
VEKTOR–H 16	21.00	51.00	12.00	42.00	24.58	27.58	
VEKTOR–H 18	17.00	48.00	7.00	38.00	30.58	33.58	
VEKTOR–H 20	XXX	XXX	7.00	38.00	30.58	33.58	
VEKTOR–H 22	9.00	43.00	XXX	XXX	36.58	39.58	
VEKTOR–H 24	N/A	37.00	XXX	XXX	42.77	45.77	
VEKTOR–H 30	N/A	40.00	XXX	XXX	48.77	52.77	
VEKTOR–H 36	N/A	46.00	XXX	XXX	55.27	59.27	







FAN BODY



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PRODUCT RENEWED
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NOA–No. 24-0123.02
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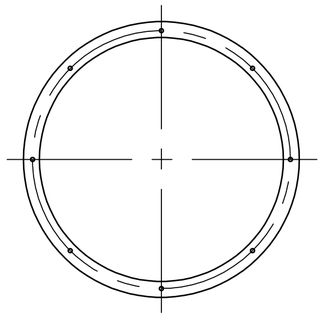
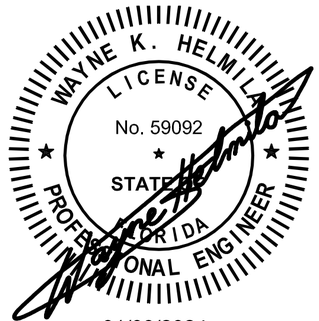
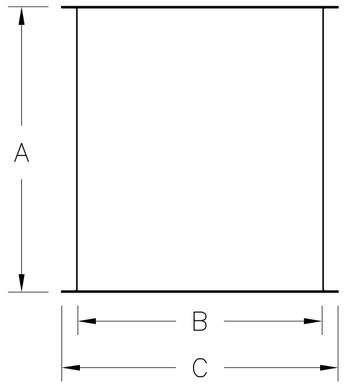
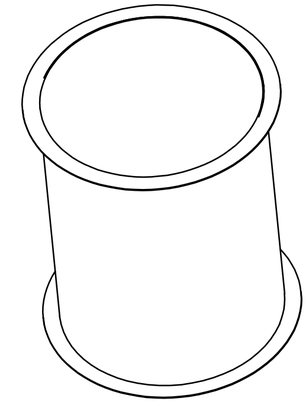
By Ishaq I. Chanda
Miami–Dade Product Control





01/09/2024
COA: 9090





EXTENSION

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

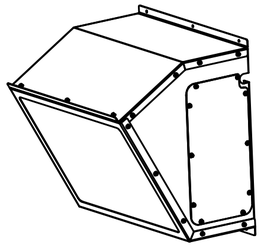
TITLE	VK–H 9–36 VK–HS 9–36 FAN BODY & EXTENSION SHEET 6 OF 10
DRAWN BY	OERTEL
ECO	
DATE	12/2023
ENG. REF.	NOA TESTING
SUPERSEDES	
SCALE	
CAD DRAWING NO.	VK–H–3001
	B

ALL DIMENSIONS ARE IN INCHES.

UNIT SIZE	A	B	C	QTY. X	FASTENER J DESCRIPTION	MATERIAL PANELS/DOORS
VEKTOR–H 9	17.88	24.50	22.25	38	SCR,TEK,HWH, #12–14X.875, SS,410	14 GA CRS DS
VEKTOR–H 10	17.88	24.50	22.25	38		
VEKTOR–H 12	17.88	24.50	22.25	38		
VEKTOR–H 13	21.00	25.50	24.18	38		
VEKTOR–H 14	22.00	27.50	28.00	40		
VEKTOR–H 16	22.00	27.50	28.00	40		
VEKTOR–H 18	22.25	28.25	34.13	40		
VEKTOR–H 20	22.25	28.25	34.13	40		
VEKTOR–H 22	23.50	31.50	40.13	40		
VEKTOR–H 24	24.88	34.50	46.13	44		
VEKTOR–H 30	26.50	37.50	52.13	44		
VEKTOR–H 36	28.75	43.50	58.13	44		

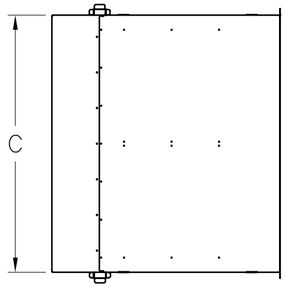
UNIT SIZE	A	B	C	QTY. Y	QTY. Z	FASTENER G DESCRIPTION	FASTENER J DESCRIPTION	MATERIAL PANELS/DOOR/LEGS
VEKTOR–H 9	48.00	24.50	22.25	8	58	SCR,CS,HH, .313–18X1, SS,316, W/EPDM,WSHR	SCR,TEK,HWH, #12–14X.875, SS,410	16 GA. GVNL CSB
VEKTOR–H 10	48.00	24.50	22.25	8	58			
VEKTOR–H 12	48.00	24.50	22.25	8	58			
VEKTOR–H 13	48.00	25.50	24.18	8	62			
VEKTOR–H 14	48.00	27.50	28.00	8	62			
VEKTOR–H 16	48.00	27.50	28.00	8	62			
VEKTOR–H 18	48.00	28.25	34.13	8	62			
VEKTOR–H 20	48.00	28.25	34.13	8	62			
VEKTOR–H 22	48.00	31.50	40.13	8	64			
VEKTOR–H 24	48.00	34.50	46.13	8	72			
VEKTOR–H 30	48.00	37.50	52.13	8	72			
VEKTOR–H 36	48.00	43.50	58.13	8	74			

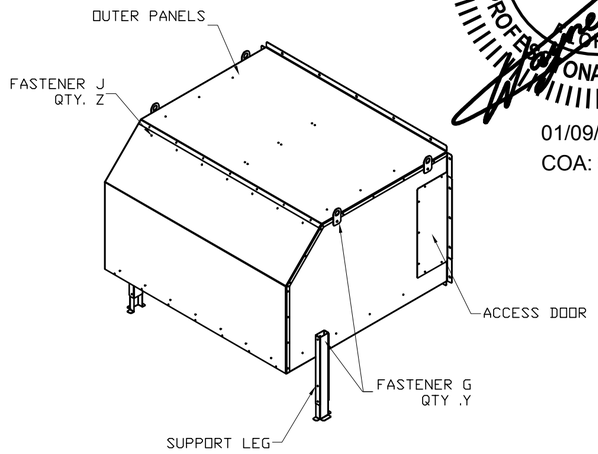
UNIT SIZE	A	B	C	QTY W.	FASTENER J DESCRIPTION	MATERIAL PANELS
VEKTOR–H 9	14.50	20.13	14.75	16	SCR,TEK,HWH, #12–14X.875, SS,410	18 GA. GVNL CSB
VEKTOR–H 10	14.50	20.13	14.75	16		
VEKTOR–H 12	14.50	20.13	14.75	16		
VEKTOR–H 13	14.50	20.13	14.75	16		
VEKTOR–H 16	15.13	21.13	16.00	16		
VEKTOR–H 18	16.75	22.25	16.00	18		
VEKTOR–H 22	17.75	26.63	22.75	20		
VEKTOR–H 24	17.75	28.13	22.75	20		
VEKTOR–H 30	19.50	30.63	22.75	24		
VEKTOR–H 36	21.00	34.63	22.75	36		



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

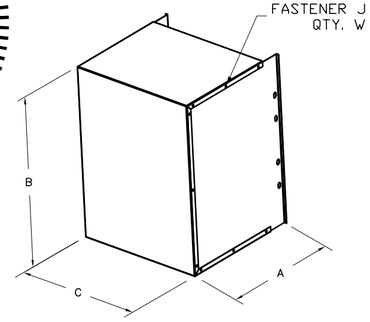
Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092



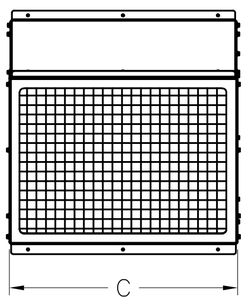


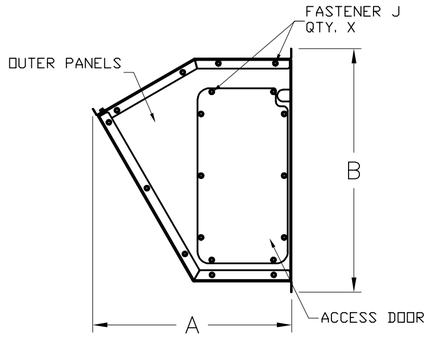
WAYNE K. HELMILA
LICENSE
No. 59092
STATE OF FLORIDA
PROFESSIONAL ENGINEER

01/09/2024
COA: 9090

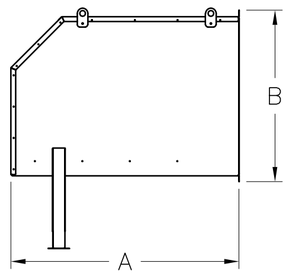


MOTOR COVER
(BELT DRIVE CONFIGURATION ONLY)





STANDARD WEATHERHOOD



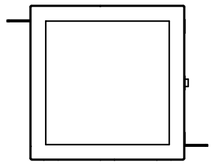
ATTENUATING WEATHERHOOD

PRODUCT RENEWED
as complying with the Florida Building Code
NOA–No. 24-0123.02
Expiration Date 08/28/2029
By Ishaq I. Chanda
Miami–Dade Product Control

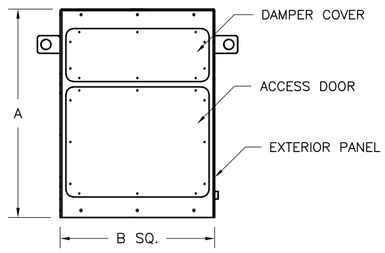
GREENHECK
P.O.BOX 410 SCHOFIELD, WISCONSIN 54476–0410

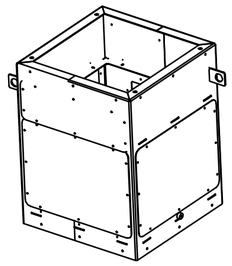
TITLE	VK–H 9–36 VK–HS 9–36 WEATHERHOODS & MOTOR COVER SHEET 7 OF 10
DRAWN BY	OERTEL
DATE	12/2023
SUPERSEDES	
SCALE	
ECO	
ENG. REF.	NOA TESTING
CAD DRAWING NO.	VK–H–3001
	B

ALL DIMENSIONS ARE IN INCHES
HRS POCS=HOT ROLLED STEEL, PICKLED AND OILED COMMERCIAL STEEL
HRS POCS MATERIALS ARE COVERED WITH AN ELECTROSTATIC POWDER COATING



UNIT SIZE	A	B	MATERIAL		
			EXTR PNL's	ACS DR	DMPR CVR
VEKTOR–H 9	29.50	21.88	12 GA. HRS POCS	12 GA. HRS POCS	12 GA. HRS POCS
VEKTOR–H 10	29.50	21.88			
VEKTOR–H 12	29.50	21.88			
VEKTOR–H 13	30.50	23.88			
VEKTOR–H 14	32.50	27.88			
VEKTOR–H 16	32.50	27.88			
VEKTOR–H 18	33.50	33.88			
VEKTOR–H 20	33.50	33.88			
VEKTOR–H 22	36.50	39.88			
VEKTOR–H 24	39.50	45.88			
VEKTOR–H 30	42.50	51.88			
VEKTOR–H 36	48.50	57.88			

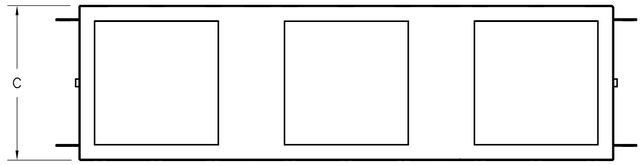




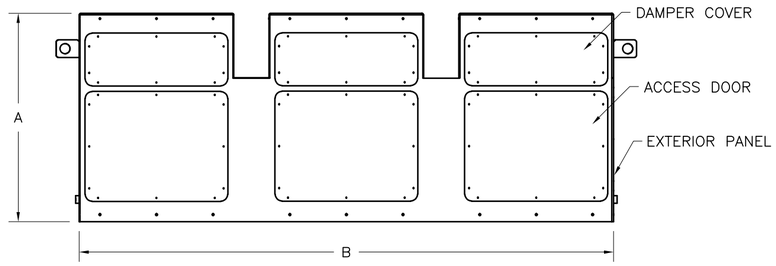
1X1 BYPASS AIR PLENUM

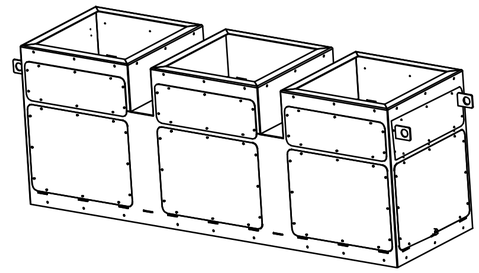
RICE
ENGINEERING
105 School Creek Trail
Luxemburg, WI 54217
Phone: (920) 617-1042
Fax: (920) 617-1100
www.rice-inc.com

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

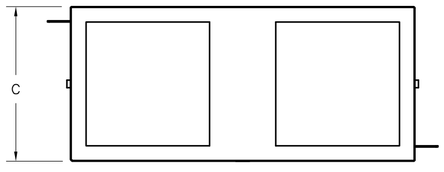


UNIT SIZE	A	B	C	MATERIAL		
				EXTR PNL's	ACS DR	DMPR CVR
VEKTOR–H 9	29.50	75.58	21.88	12 GA. HRS POCS	12 GA. HRS POCS	12 GA. HRS POCS
VEKTOR–H 10	29.50	75.58	21.88			
VEKTOR–H 12	29.50	75.58	21.88			
VEKTOR–H 13	30.50	81.58	23.88			
VEKTOR–H 14	32.50	93.58	27.88			
VEKTOR–H 16	32.50	93.58	27.88			
VEKTOR–H 18	33.50	111.58	33.88			
VEKTOR–H 20	33.50	111.58	33.88			
VEKTOR–H 22	36.50	129.58	39.88			
VEKTOR–H 24	39.50	147.58	45.88			
VEKTOR–H 30	42.50	165.58	51.88			
VEKTOR–H 36	48.50	183.58	57.88			

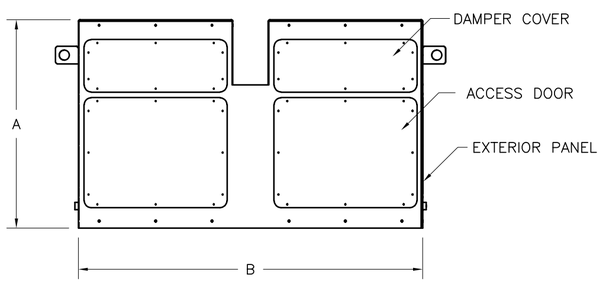


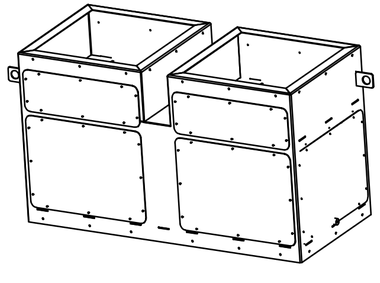


3X1 BYPASS AIR PLENUM



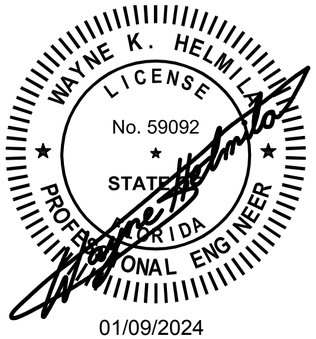
UNIT SIZE	A	B	C	MATERIAL		
				EXTR PNL's	ACS DR	DMPR CVR
VEKTOR–H 9	29.50	48.71	21.88	12 GA. HRS POCS	12 GA. HRS POCS	12 GA. HRS POCS
VEKTOR–H 10	29.50	48.71	21.88			
VEKTOR–H 12	29.50	48.71	21.88			
VEKTOR–H 13	30.50	52.71	23.88			
VEKTOR–H 14	32.50	60.71	27.88			
VEKTOR–H 16	32.50	60.71	27.88			
VEKTOR–H 18	33.50	72.71	33.88			
VEKTOR–H 20	33.50	72.71	33.88			
VEKTOR–H 22	36.50	84.71	39.88			
VEKTOR–H 24	39.50	96.71	45.88			
VEKTOR–H 30	42.50	108.71	51.88			
VEKTOR–H 36	48.50	120.71	57.88			





2X1 BYPASS AIR PLENUM

PRODUCT RENEWED
as complying with the Florida Building Code
NOA–No. 24-0123.02
Expiration Date 08/28/2029
By Ishaq I. Chanda
Miami–Dade Product Control



01/09/2024
COA: 9090

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

DRAWN BY: OERTEL	ECO:
DATE: 12/2023	ENG. REF.: NOA TESTING
SUPERSEDES:	
SCALE:	

TITLE
VK–H 9–36
VK–HS 9–36
BYPASS AIR PLENUMS
SHEET 8 OF 10

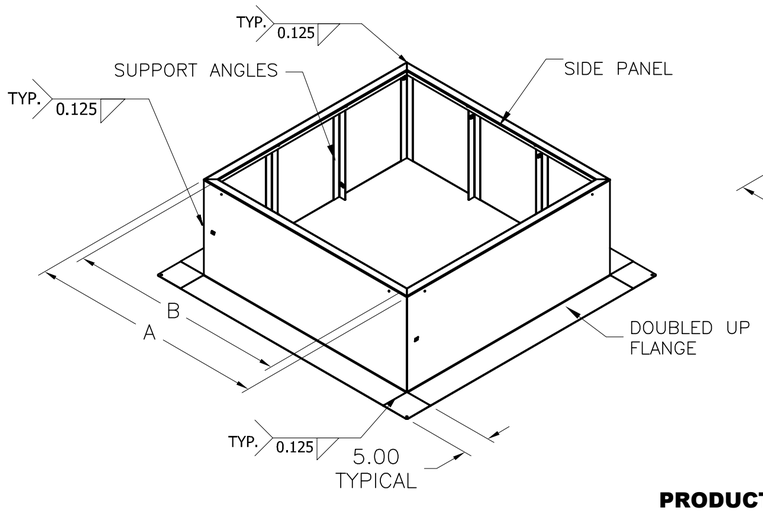
CAD DRAWING NO. B
VK–H–3001

ALL DIMENSIONS ARE IN INCHES.
MAX. ROOF CURB HEIGHT IS 24 INCHES.
ALL WELDS ARE TYPICAL FOR 1x1, 2x1, & 3x1

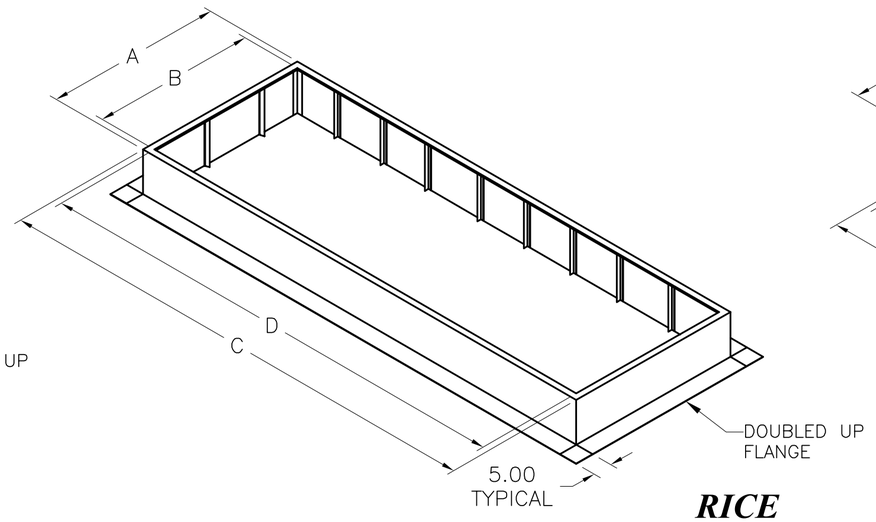
UNIT	ACTUAL OUTSIDE (SQ.) A	ACTUAL INSIDE (SQ.) B	MATERIAL
VEKTOR–H 9	21.00	17.50	12 GA. GALV
VEKTOR–H 10	21.00	17.50	
VEKTOR–H 12	21.00	17.50	
VEKTOR–H 13	23.00	19.50	
VEKTOR–H 14	27.00	23.50	
VEKTOR–H 16	27.00	23.50	
VEKTOR–H 18	33.00	29.50	
VEKTOR–H 20	33.00	29.50	
VEKTOR–H 22	39.00	35.50	
VEKTOR–H 24	45.00	41.50	
VEKTOR–H 30	51.00	47.50	
VEKTOR–H 36	57.00	53.50	

UNIT	ACTUAL OUTSIDE A	ACTUAL INSIDE B	ACTUAL OUTSIDE C	ACTUAL INSIDE D	MATERIAL
VEKTOR–H 9	21.00	17.50	48.00	44.50	12 GA. GALV
VEKTOR–H 10	21.00	17.50	48.00	44.50	
VEKTOR–H 12	21.00	17.50	48.00	44.50	
VEKTOR–H 13	23.00	19.50	52.00	48.50	
VEKTOR–H 14	27.00	23.50	60.00	56.50	
VEKTOR–H 16	27.00	23.50	60.00	56.50	
VEKTOR–H 18	33.00	29.50	72.00	68.50	
VEKTOR–H 20	33.00	29.50	72.00	68.50	
VEKTOR–H 22	39.00	35.50	84.00	80.50	
VEKTOR–H 24	45.00	41.50	96.00	92.50	
VEKTOR–H 30	51.00	47.50	108.00	104.50	
VEKTOR–H 36	57.00	53.50	120.00	116.50	

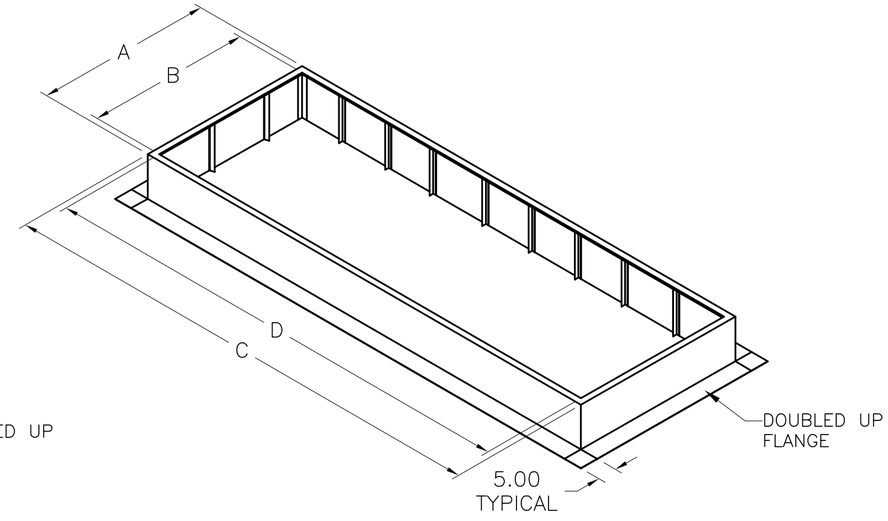
UNIT	ACTUAL OUTSIDE A	ACTUAL INSIDE B	ACTUAL OUTSIDE C	ACTUAL INSIDE D	MATERIAL
VEKTOR–H 9	21.00	17.50	74.00	70.50	12 GA. GALV
VEKTOR–H 10	21.00	17.50	74.00	70.50	
VEKTOR–H 12	21.00	17.50	74.00	70.50	
VEKTOR–H 13	23.00	19.50	80.00	76.50	
VEKTOR–H 14	27.00	23.50	92.00	88.50	
VEKTOR–H 16	27.00	23.50	92.00	88.50	
VEKTOR–H 18	33.00	29.50	110.00	106.50	
VEKTOR–H 20	33.00	29.50	110.00	106.50	
VEKTOR–H 22	39.00	35.50	128.00	124.50	
VEKTOR–H 24	45.00	41.50	146.00	142.50	
VEKTOR–H 30	51.00	47.50	164.00	160.50	
VEKTOR–H 36	57.00	53.50	182.00	178.50	



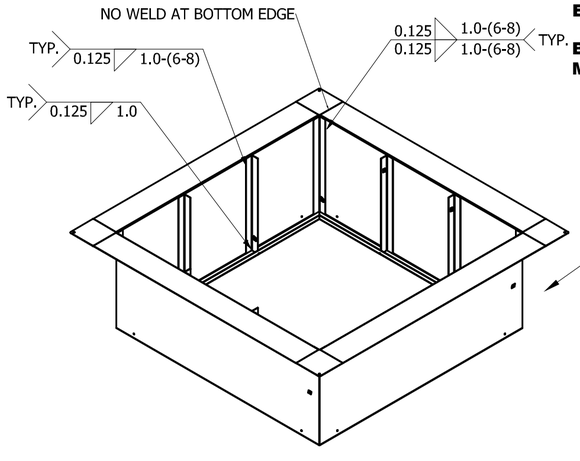
1X1 ROOF CURB



2X1 ROOF CURB



3X1 ROOF CURB



BOTTOM VIEW SHOWN FOR CLARITY

PRODUCT RENEWED
as complying with the Florida Building Code
NOA–No. 24-0123.02
Expiration Date 08/28/2029
By Ishaq I. Chanda
Miami–Dade Product Control

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

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

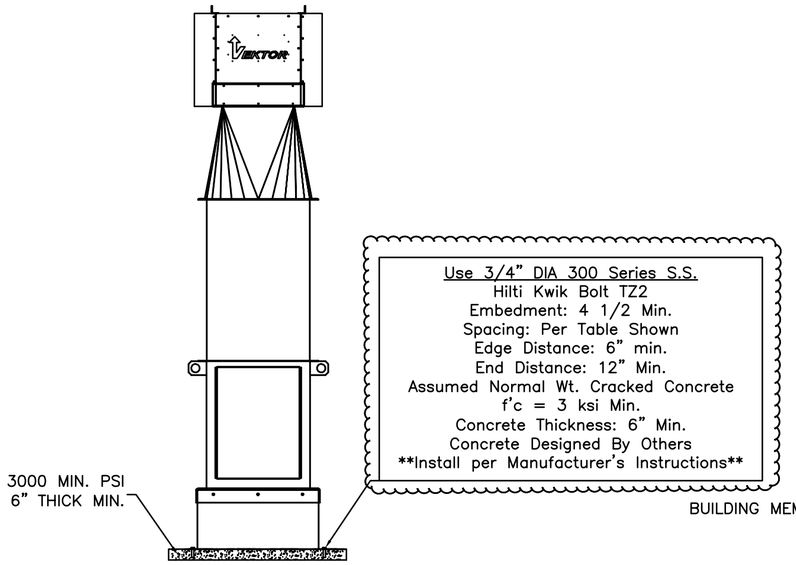
01/09/2024
COA: 9090

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

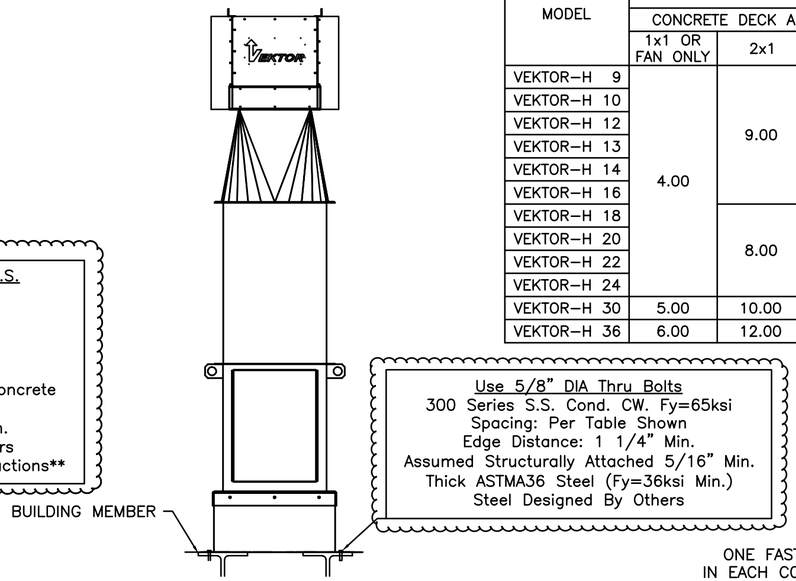
DRAWN BY	OERTEL
DATE	12/2023
SUPERSEDES	
SCALE	
ECO	
ENG. REF.	NOA TESTING
CAD DRAWING NO.	VK–H–3001 B

TITLE
VK–H 9–36
VK–HS 9–36
ROOF CURBS
SHEET 9 OF 10

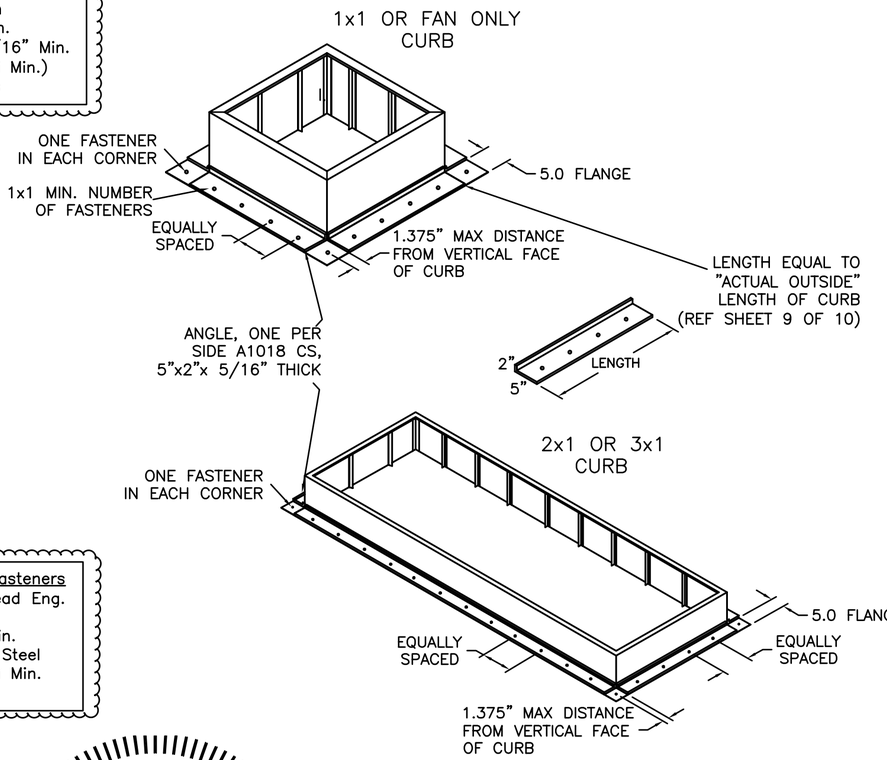
MODEL	MINIMUM NUMBER OF FASTENERS PER SIDE TO ATTACH CURB TO STRUCTURE (excludes 4 corner fasteners) USE ONE 2"x2"x1/4" SQUARE WASHER UNDER ALL FASTENERS											
	CONCRETE DECK ANCHORING			STEEL ANCHORING THRU BOLTS			TIMBER ANCHORING			STEEL ANCHORING–SELF DRILL/TAP		
	1x1 OR FAN ONLY	2x1	3x1	1x1 OR FAN ONLY	2x1	3x1	1x1 OR FAN ONLY	2x1	3x1	1x1 OR FAN ONLY	2x1	3x1
VEKTOR–H 9	4.00	9.00	14.00	2.00	5.00	8.00	5.00	10.00	16.00	7.00	13.00	20.00
VEKTOR–H 10												
VEKTOR–H 12												
VEKTOR–H 13												
VEKTOR–H 14												
VEKTOR–H 16												
VEKTOR–H 18		8.00	13.00									19.00
VEKTOR–H 20												
VEKTOR–H 22												
VEKTOR–H 24			14.00				6.00					
VEKTOR–H 30	5.00	10.00	15.00	3.00	6.00	9.00		12.00	18.00	8.00	14.00	22.00
VEKTOR–H 36	6.00	12.00	18.00		7.00	11.00	8.00	14.00	22.00	9.00	17.00	26.00

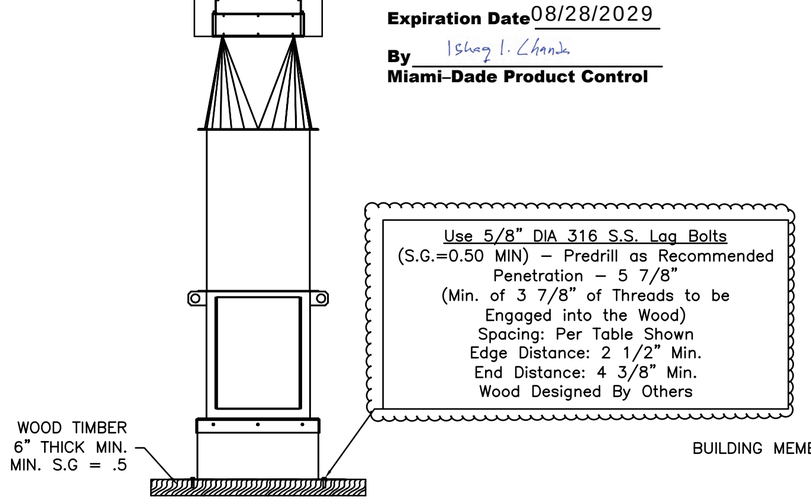


CONCRETE DECK ANCHORING

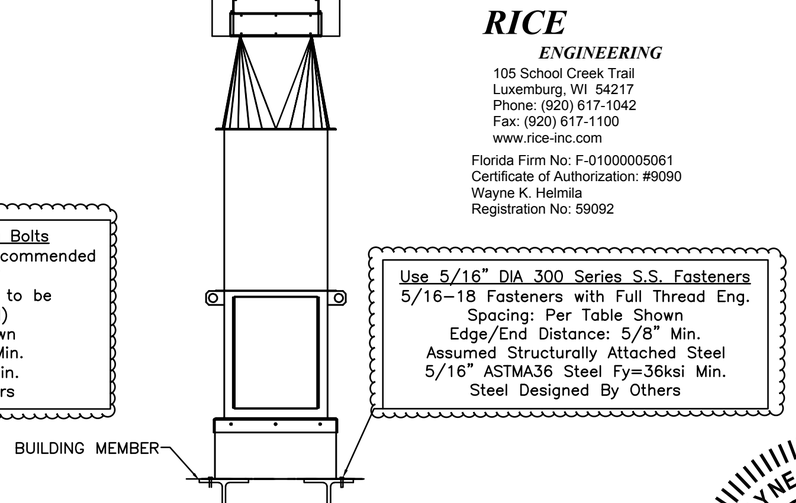


STEEL ANCHORING–THRU BOLTS





TIMBER ANCHORING



STEEL ANCHORING–SELF DRILL/TAP FASTENERS

PRODUCT RENEWED
as complying with the Florida Building Code
NOA–No. 24-0123.02
Expiration Date 08/28/2029
By Ishaq I. Chanda
Miami–Dade Product Control

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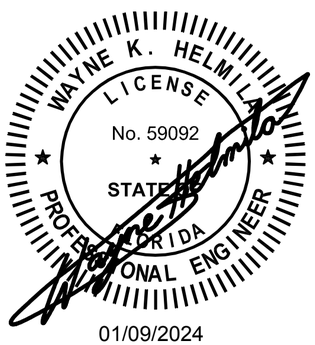
Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092



01/09/2024
COA: 9090

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

TITLE
VEKTOR–H 9–36
VEKTOR–HS 9–36
ROOF CURB INSTALLATION
SHEET 10 OF 10

DRAWN BY: OERTEL	ECO:
DATE: 12/2023	ENG. REF.: NOA TESTING
SUPERSEDES:	
SCALE: 1/25	
CAD DRAWING NO.: VK–H–3001	B