



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

CaptiveAire Systems, Inc.
4641 Paragon Park Road
Raleigh, NC 27616

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: Utility Set Exhaust and A Series Supply Steel Rooftop Fans

APPROVAL DOCUMENT: Drawing No. **NOA2**, titled "Steel Utility Set Exhaust and A Series Steel Supply Fans", sheets 1 through 30 of 30, dated 08/25/2008, with revision 7 dated 07/14/2023, prepared by CaptiveAire Systems, Inc, signed and sealed by Wayne K. Helmila, P.E. on 03/07/2024, 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, one of the following manufacturing locations: Youngsville, NC; Muskogee, OK; Redding, CA; West Union, IA; Bedford, PA; Groveland, FL; Indianapolis, IN, model/ series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

LIMITATION: These fans cannot be installed within the ridge area, FBC 1523.6.5.2.13.

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 and revises** **NOA # 21-0318.10** 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 **Carlos M. Utrera, P.E.**




03/27/24

NOA No. 24-0104.06
Expiration Date: March 4, 2029
Approval Date: April 4, 2024
Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. Evidence submitted under previous NOA's

A. DRAWINGS “Submitted under NOA # 16-0407.02”

1. Drawing No. NOA2, titled “Steel Utility Set Exhaust and A Series Steel Supply Fans”, sheets 1 through 16 of 16, dated 08/25/2008, with revision 4 dated 10/14/2013, prepared by CaptiveAire Systems, Inc., signed and sealed by L. David Rice, P.E. on 03/22/2016.

B. TESTS “Submitted under NOA # 14-0317.04”

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 Series/Model USBI 11 and USBI 36 roof mounted exhaust fans, prepared by Architectural Testing, Inc., Test Report No. D2865.01-109-18, dated 12/12/2013, signed and sealed by Michael D. Stremmel, P.E.

“Submitted under NOA No. 12-0724.02”

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 CASRE roof mounted exhaust fan, prepared by Architectural Testing, Inc., Test Report No. B9460.01-109-18, dated 05/31/2012, signed and sealed by Michael D. Stremmel, P.E.

“Submitted under NOA No. 08-1124.08”

3. 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 HRE-24, high velocity roof fan, BI-36CARM, roof mounted exhaust fan and A5-925, modular down discharge blower, prepared by Architectural Testing, Inc., Test Report No. 83748.01-109-18, dated 10/07/2008, with Revision 1 dated 01/06/2009, signed and sealed by Michael D. Stremmel, P.E.

C. CALCULATIONS “Submitted under NOA # 14-0317.04”

1. Anchor verification calculations prepared by Rice Engineering, dated 02/21/2014, signed and sealed by L. David Rice, P.E.

“Submitted under NOA No. 12-0724.02”

2. Anchor verification calculations prepared by Rice Engineering, dated 07/05/2012, signed and sealed by L. David Rice, P.E.

“Submitted under NOA No. 08-1124.08”

3. Anchor verification calculations, prepared by Rice Engineering, dated 11/12/2008, with revision dated 01/20/2008, signed and sealed by L. David Rice, P.E.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 24-0104.06
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS “Submitted under NOA # 16-0407.02”

1. Statement letter of code conformance to the 5th edition (2014) FBC issued by Rice Engineering, dated 02/18/2016, signed and sealed by L. David Rice, P.E.

“Submitted under NOA # 14-0317.04”

2. Statement letters of code conformance to 2010 FBC and of no financial interest issued by Rice Engineering, dated 01/17/2014, signed and sealed by L. David Rice, P.E.

“Submitted under NOA No. 08-1124.08”

3. Laboratory compliance letter issued by Architectural Testing, Inc., for Test Reports No. 83748.01-109-18, dated 10/08/2008, signed and sealed by Michael D. Stremmel, P.E.

2. Evidence submitted under NOA # 18-0118.11

A. DRAWINGS

1. Drawing No. NOA2, titled “Steel Utility Set Exhaust and A Series Steel Supply Fans”, sheets 1 through 21 of 21, dated 08/25/2008, with revision 5 dated 11/29/2017, prepared by CaptiveAire Systems, Inc., signed and sealed by Wayne K. Helmila, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. Anchor verification calculations prepared by Rice Engineering, dated 12/12/2017, 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 6th edition (2017) FBC, dated 12/12/2017, issued by Rice Engineering, signed and sealed by Wayne K. Helmila, P.E.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 24-0104.06
Expiration Date: March 4, 2029
Approval Date: April 4, 2024

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. Evidence submitted under NOA #19-0130.12

A. DRAWINGS

1. Drawing No. **NOA2**, titled “Steel Utility Set Exhaust and A Series Steel Supply Fans”, sheets 1 through 21 of 21, dated 08/25/2008, with revision 5 dated 11/29/2017, prepared by CaptiveAire Systems, Inc., signed and sealed by Wayne K. Helmila, P.E. on 01/11/2019.

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 6th edition (2017) FBC, dated 01/11/2019, issued by Rice Engineering, signed and sealed by Wayne K. Helmila, P.E.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 24-0104.06
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

4. Evidence submitted under previous approval

A. DRAWINGS

1. Drawing No. **NOA2**, titled “Steel Utility Set Exhaust and A Series Steel Supply Fans”, sheets 1 through 22 of 22, dated 08/25/2008, with revision 6 dated 03/26/2019, prepared by CaptiveAire Systems, Inc, signed and sealed by Wayne K. Helmila, P.E. on 06/06/2019.

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.



Carlos M. Utrera, P.E.
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

5. Evidence submitted under NOA # 21-0318.10 and new

A. DRAWINGS

1. Drawing No. **NOA2**, titled “Steel Utility Set Exhaust and A Series Steel Supply Fans”, sheets 1 through 30 of 30, dated 08/25/2008, with revision 7 dated 07/14/2023, prepared by CaptiveAire Systems, Inc, signed and sealed by Wayne K. Helmila, P.E. on 03/07/2024.

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
along with marked-up drawings and installation diagram of A5-36D, CASRE-24DD, and USBI-36DD Ventilators, prepared by Intertek, Test Report No. **P7484.01-109-18**, dated 08/25/2023, revised on 09/15/2023, signed and sealed by Tanya A. Dolby, P.E.

C. CALCULATIONS

1. Anchor verification calculations, prepared by Rice Engineering, dated 11/21/2023, signed and sealed by Wayne K. Helmila, P.E.
2. Anchor verification calculations, prepared by Rice Engineering, dated 03/10/2021, 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.

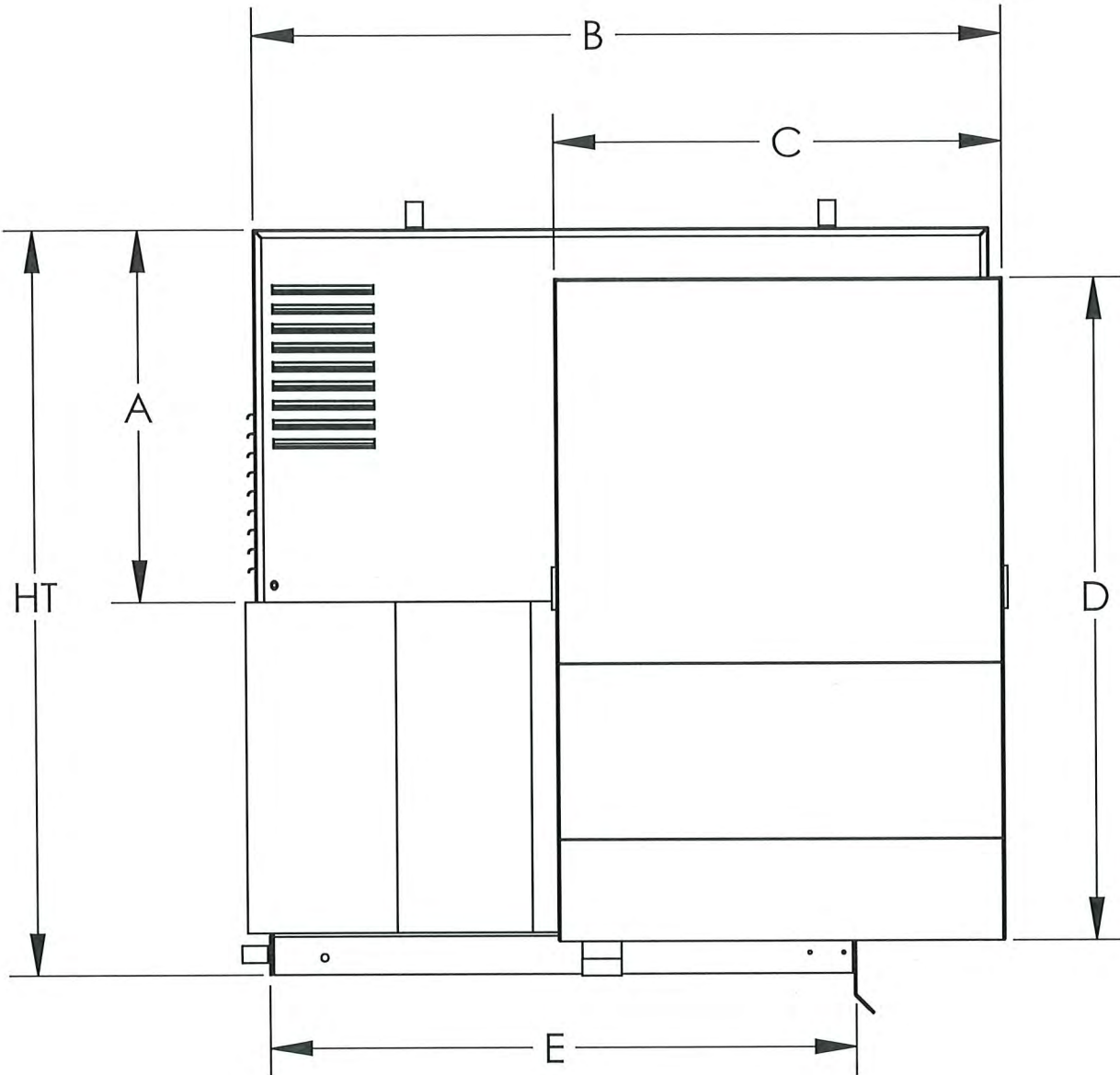
F. STATEMENTS

1. Statement letter of code conformance to the 8th Edition (2023) of the FBC , issued by Rice Engineering, dated 11/14/2023, signed and sealed by Wayne K. Helmila, P.E.
2. Statement letter of code conformance to the 7th Edition (2020) of the FBC , issued by Rice Engineering, dated March 10, 2021, signed and sealed by Wayne K. Helmila, P.E.



Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 24-0104.06
Expiration Date: March 4, 2029
Approval Date: April 4, 2024

Dimensional Data - Steel Utility Set Exhaust



Revision History				
#	Description	Revised by	ECN#	Date
0	Testing TAS - 201, 202, 203	N Perry	1446	8/25/08
1	Changes Per Dade County	N Perry	1446	12/30/08
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brand to Drawings	JJH	3061	3/26/19
7	Added Multiple Brands	CAG	3189	7/14/23

- General Notes:
1. This approval is for the structural capacity and impact rating of the exterior housing only; it does not include any interior mechanism or electrical part.
 2. These fans have not been wind tested for Wind Driven Rain Test per Florida Building code, TAS100 (A)-95.


DESIGN PRESSURE +30.0 / -130.0 PSF
LARGE MISSILE IMPACT RESISTANT

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



MAR 07 2024

FAN MODEL	HT(in)	A(in)	B(in)	C(in)	D(in)	E(in)	WEIGHT(lbs)
HRE13	30-15/16	17-3/4	23-1/2	14-3/4	25-1/2	21-1/2	147
HRE16	34-1/4	18-1/4	29-1/4	17-7/8	29-1/2	25-1/2	204
HRE20	40-1/16	21-3/4	36-3/8	21-1/2	33-7/8	29-1/2	251
HRE24	43-5/8	21-3/4	43-1/4	26-1/4	38-3/4	34-1/2	362

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Expiration Date 03/04/2029
By 
Miami-Dade Product Control

SEE PAGE 30 FOR ALTERNATE BRANDS

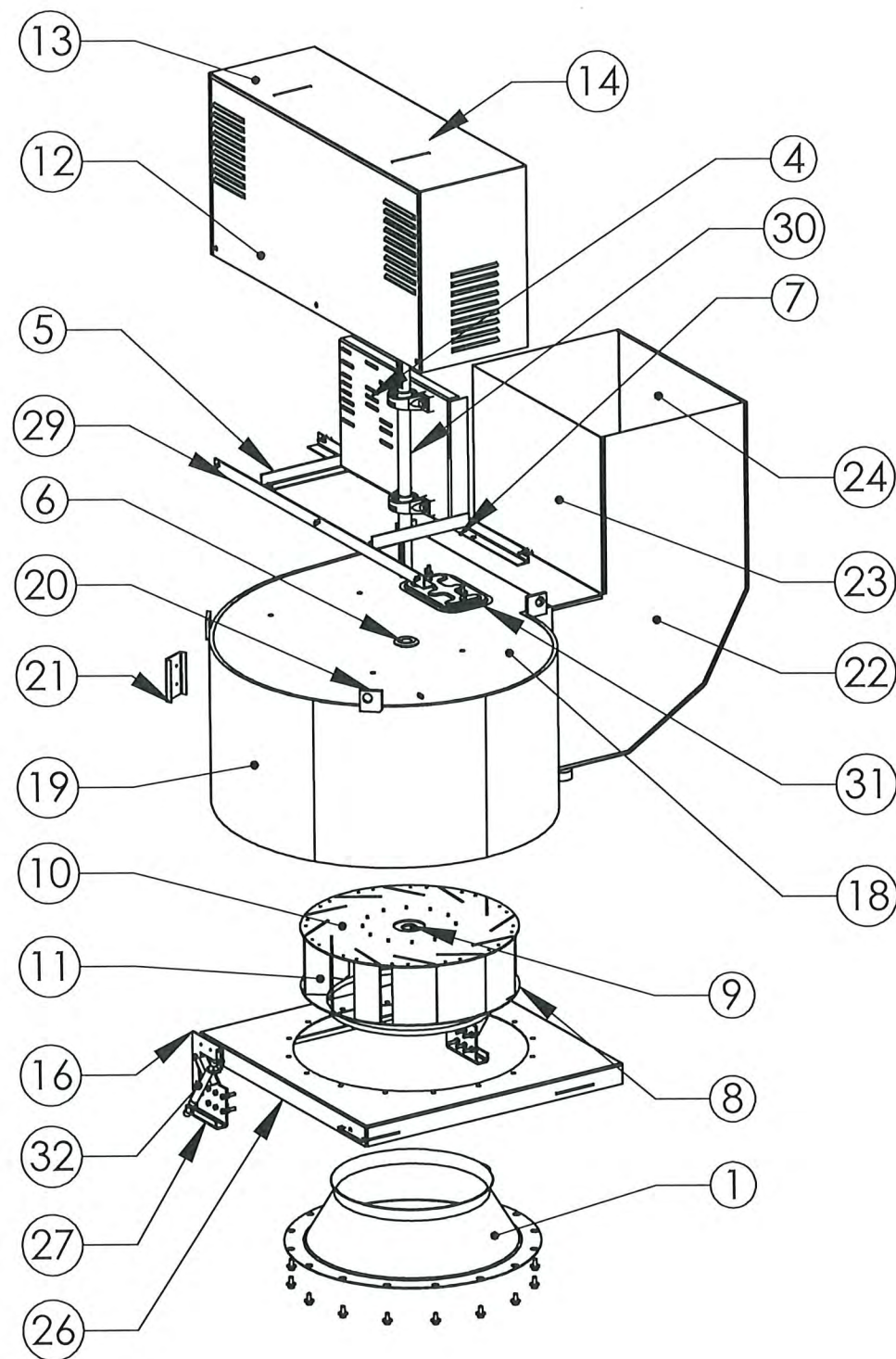
- Notes:
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 2. Tested for areas including high velocity hurricane zones.
 3. Tested under Miami-Dade County Notification number ATI 08034.

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in inches. Standard Tolerances are: Fractions: $\pm 1/16$ Decimal: $.XX \pm .05$ $.XXX \pm .015$ Angles: $\pm 1^\circ$
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: HRE SERIES	
	Drawn By: N Perry	
	Drawing Number: NOA2-1	
	Sheet: 1 of 30	



Exploded Material View - Steel Utility Set Exhaust



- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 - 2. Tested for areas including high velocity hurricane zones.
 - 3. Tested under Miami-Dade County Notification number ATI 08034.

Material: N/A
Blank Size: N/A x N/A
Weight: N/A lbs

Part Number: N/A
MACOLA Number: N/A
Drawing Name: HRE SERIES
Drawn By: N Perry
Drawing Number: NOA2-2
Sheet: 2 of 30

Unless Otherwise Specified
Dimensions are in Inches.
Standard Tolerances are:
Fractions: $\pm 1/16$
Decimal: $.XX \pm .05$
 $.XXX \pm .015$
Angles: $\pm 1^\circ$


Revision History				
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6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
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Item Number	Description	Material
1	INLET, STL	12G. HRP&O
2	BAFFLE (NOT SHOWN)	16G. HRP&O
3	BRG SUPPORT (NOT SHOWN)	1-1/2x1-1/2x1/8 ANGLE IRON
4	MOTOR P'FORM	11G. HRP&O
5	DRIVE FRAME, SIDE RAIL	1-1/2x1-1/2x1/8 ANGLE IRON
6	VINYL SEALING GROMMET - 1-7/16"	VINYL
7	VIBRATION ISOLATOR	RUBBER
8	SHROUD, STL	12G. HRP&O
9	HUBPLT	A-36 H.R. C.D. STRESS PROOF
10	BACK PLATE	8G. HRP&O
11	BLADE	10G. HRP&O INX50
12	DRIVE COVER SIDE	20G. GALV G90
13	DRIVE COVER TOP	20G. GALV G90
14	HANDLE	11G. HRP&O
15	CURB BRKT RH, FORMED (NOT SHOWN)	3/16 HRP&O
16	CURB BRKT LH, FORMED	3/16 HRP&O
17	END, OPEN, LASER (NOT SHOWN)	14G. HRPO
18	END, CLOSED, LASER	14G. HRPO
19	SCROLL, FORMED	16G. HRP&O
20	MOTOR P'FORM LUG	3/8 FLAT BAR (HR)
21	DISCONNECT BRKT	12G. HRP&O
22	EXHAUST DUCT SIDE	16G. HRP&O
23	EXHAUST DUCT TOP	16G. HRP&O
24	EXHAUST DUCT BOTTOM	16G. HRP&O
25	BI DRAIN FTG (NOT SHOWN)	BLACK IRON PIPE
26	LIFTING FRAME CAP	12G. HRP&O
27	PIVOT BRKT LH	3/16 HRP&O
28	PIVOT BRKT RH (NOT SHOWN)	3/16 HRP&O
29	DRIVE FRAME, BOTTOM RAIL	1-1/2x1-1/2x1/8 ANGLE IRON
30	SHAFT	1-7/16 C1045 HSDF
31	CLEANOUT DOOR	HOT DIPPED GALV
32	GAS SHOCK	N/A

RICE
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105 School Creek Trail
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www.rice-inc.com

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

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0104.06
Expiration Date 03/04/2029
By 
Miami-Dade Product Control



MAR 07 2024

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994



Installation - Steel Utility Set Exhaust

RICE
ENGINEERING

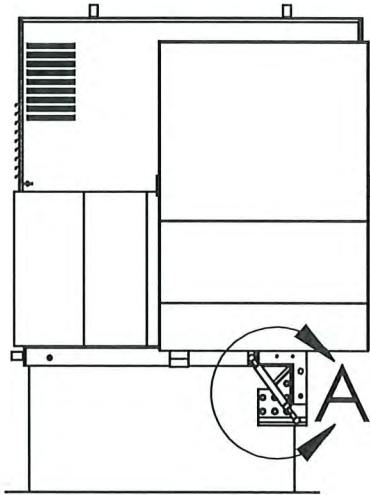
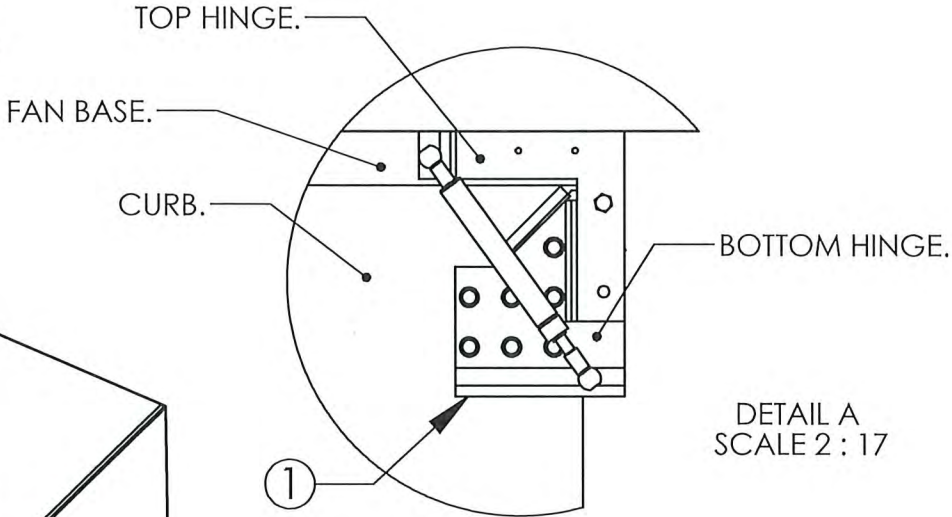
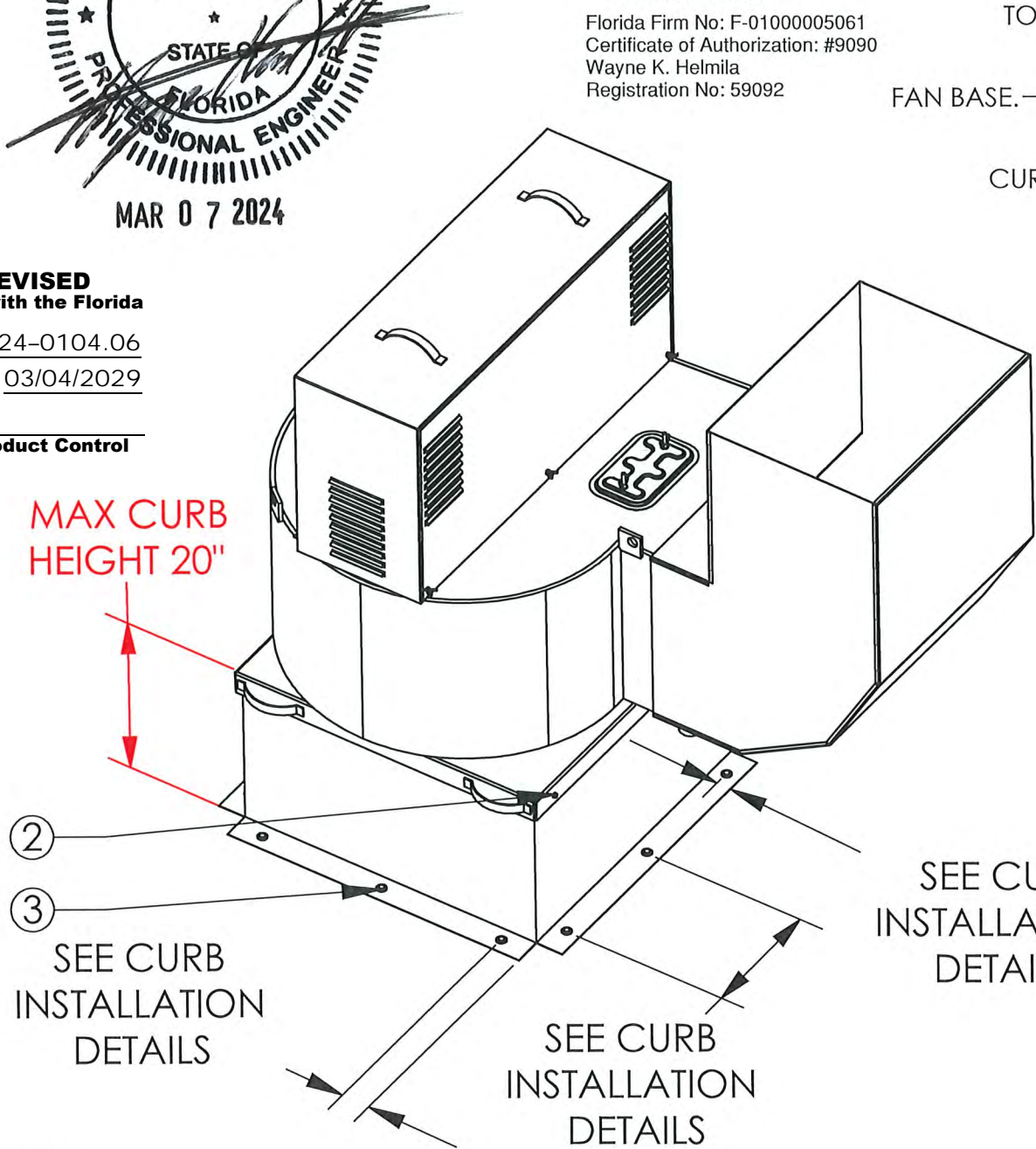
105 School Creek Trail
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1. ALL HRE FANS COME WITH A HINGE KIT STANDARD. THE TOP HINGE IS FACTORY INSTALLED. THE BOTTOM HINGE SHOULD BE INSTALLED PER DIRECTIONS PROVIDED WITH HARDWARE.
2. SECURE FAN BASE TO CURB USING 5/16"-18 X 2" ZINC PLATED STEEL SELF DRILLING SCREWS (ELCO DRIL-FLEX OR BETTER) THROUGH PRE-PUNCHED HOLES IN THE FAN BASE. SEE PAGE 4 FOR QTY.
3. SECURE CURB TO ROOF FRAMING MEMBERS BY DRILLING 1/4" DIA PILOT HOLES IN THE CURB FLANGE AT LOCATIONS SHOWN IN THE DIAGRAM. SEE PAGE 4 FOR FASTENER TYPE AND QTY.

- Notes:
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 2. Tested for areas including high velocity hurricane zones.
 3. Tested under Miami-Dade County Notification number ATI 08034.

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: $\pm 1/16$ Decimal: $.XX \pm .05$ $.XXX \pm .015$ Angles: $\pm 1^\circ$
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: HRE SERIES	
	Drawn By: N Perry	
	Drawing Number: NOA2-3	
	Sheet: 3 of 30	



Miami-Dade County - Roof Curb Installation Guide For Model HRE

Revision History				
#	Description	Revised by	ECN#	Date
0	Testing TAS - 201, 202, 203	N Perry	1446	8/25/08
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2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternative Brand to Drawings	JJH	3061	3/26/19
7	Updated TZ to TZ2 Anchor	JJH	--	3/8/21
8	Added Multiple Brands	CAG	3189	7/14/23

INSTALLATION FASTENER TYPES				
	Fan To Curb	Wood (SG = 0.42 Min.)	Steel (12 Gauge Min.)	Concrete (2500 psi Min. Cracked Concrete)
Fastener	5/16"-18 x 2" Self Drilling Screw (ELCO DRIL-FLEX OR BETTER)	3/8" Dia. Zinc Plated Lag Bolt	1/4"-14 Dril-Flex Self Drilling Screw	3/8" Dia. SS Hilti Kwik Bolt TZ2 Expansion Anchor
Minimum Thread Penetration	N/A	2"	12 Gauge	2"
Minimum Edge Distance	N/A	1-1/2"	3/8"	3"
Minimum End Distance	N/A	2-5/8"	3/8"	3"
Minimum Spacing	N/A	1-1/2"	3/4"	6"

FASTENERS FOR WOOD & STEEL SUBSTRATES: SEAL WITH LIQUID PROSOCO FLASHING IF FASTENERS ARE EXPOSED TO EXTERIOR CONDITIONS. SEE NOTE 4.

INSTALLATION FASTENER QTY								
	Curb to Fan		Wood		Steel		Concrete	
Fan Model	Per Side	Total	Per Side	Total	Per Side	Total	Per Side	Total
HRE13	3	12	3	12	3	12	3	12
HRE16	3	12	4	16	4	16	3	12
HRE20	3	12	5	20	4	16	4	16
HRE24	3	12	5	20	5	20	4	16

RICE

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SEE PAGE 30 FOR ALTERNATE BRANDS



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Notes:

1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
2. Tested for areas including high velocity hurricane zones.
3. Tested under Miami-Dade County Notification number ATI 08034.
4. Wood fastener penetration of 2" to be into wood framing below decking.

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: HRE SERIES	
	Drawn By: N Perry	
	Drawing Number: NOA2-4	
	Sheet: 4 of 30	

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994



Dimensional Data - Steel Utility Set Exhaust



RICE
ENGINEERING

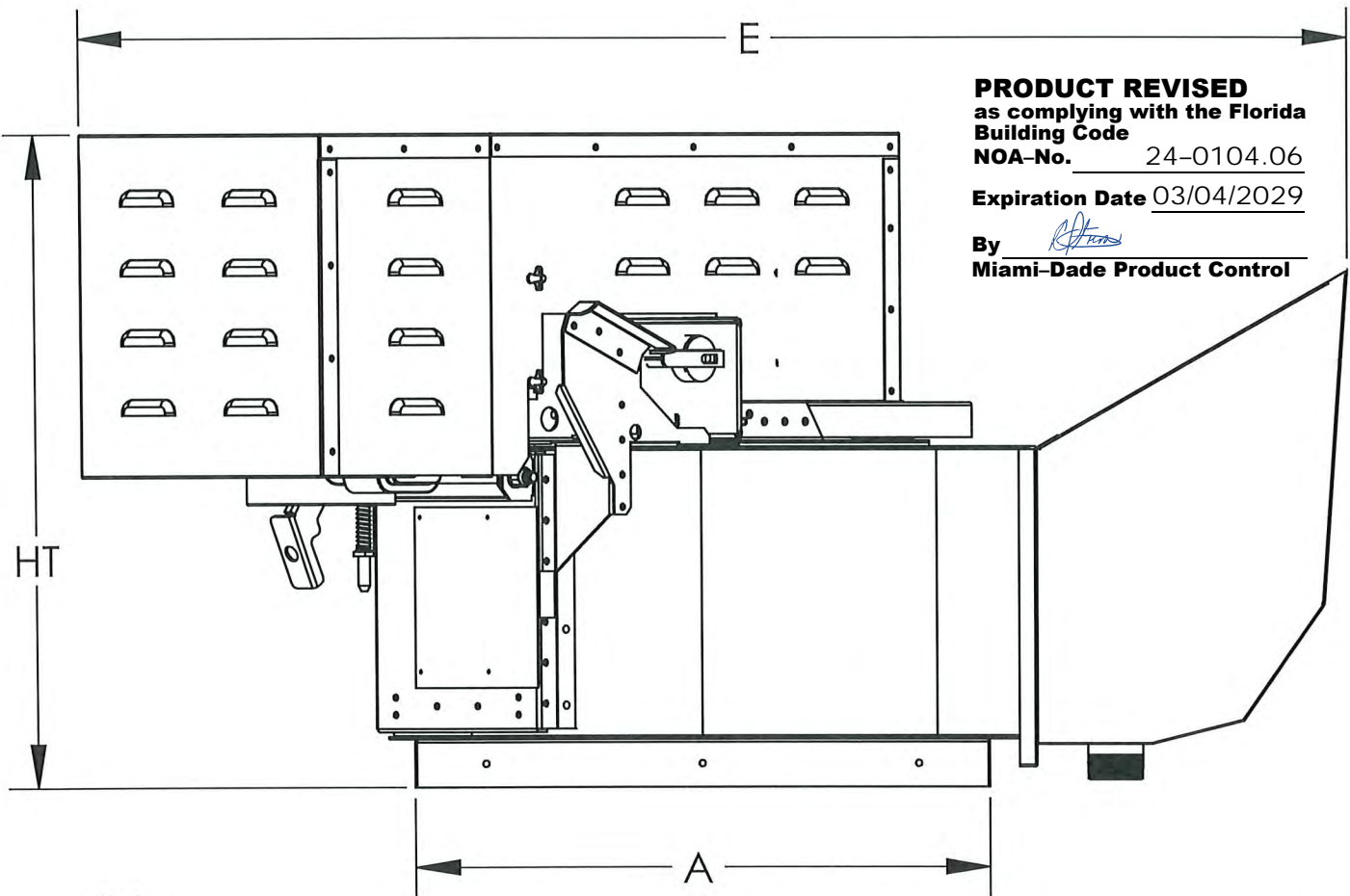
105 School Creek Trail
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Phone: (920) 617-1042
Fax: (920) 617-1100
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Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092

Revision History				
#	Description	Revised by	ECN#	Date
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Updated Design Pressure Parameters	CAG	3189	7/14/23

General Notes:

1. This approval is for the structural capacity and impact rating of the exterior housing only; it does not include any interior mechanism or electrical part.
2. These fans have not been wind tested for Wind Driven Rain Test per Florida Building code, TAS100 (A)-95.



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0104.06
Expiration Date 03/04/2029
By *[Signature]*
Miami-Dade Product Control

FAN MODEL	HT(in)	A(in)	E(in)	WEIGHT(lbs)
RE13BD	27	21	49	191
RE13DD	28-1/4	21	42	163
RE15BD	28	24-3/4	54	229
RE15DD	29-3/8	24-3/4	46	198
RE18BD	29-1/2	28	58	264
RE18DD	30-7/8	28	51	228
RE20BD	32	28	64	323
RE20DD	32	28	56	302
RE24BD	36	33	73	414
RE24DD	36	33	65	389

DESIGN PRESSURE: +150.0 / -150.0 PSF
LARGE MISSILE IMPACT RESISTANT

SEE PAGE 30 FOR ALTERNATE BRANDS

- Notes:
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 2. Tested for areas including high velocity hurricane zones.
 3. Tested under Miami-Dade County Notification numbers ATI 12024 & 22081.

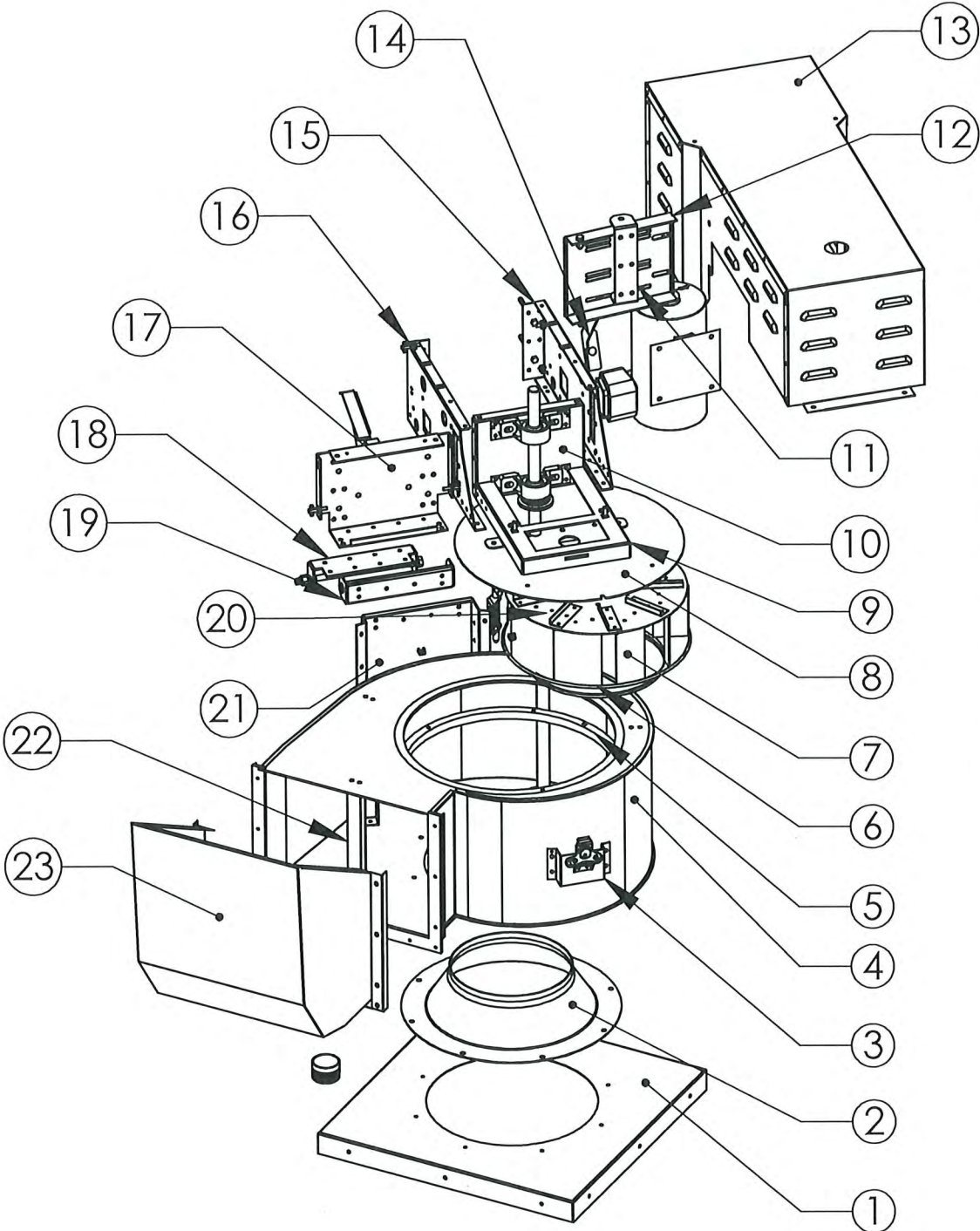
Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°
Blank Size: N/A x N/A	MACOLA/AX Number: N/A	
Weight: N/A lbs	Drawing Name: RE SERIES	
	Drawn By: N Perry	
	Drawing Number: NOA2-5	
	Sheet: 5 of 30	

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994



Exploded Material View - Steel Utility Set Exhaust

Revision History				
#	Description	Revised by	ECN#	Date
1	Changes Per Dade County	N Perry	1446	12/30/08
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Updated Design Pressure Parameters	CAG	3189	7/14/23



Item Number	Description	Material
1	FAN BASE	16 GA GALVANIZED G90 STEEL
2	SPUN INLET	.080 1100-0 ALUMINUM
3	LATCH PLATE	16 GA GALVANIZED G90 STEEL
4	SCROLL HOUSING ASSEMBLY	20 GA ALUMINIZED STEEL
5	SCROLL SUPPORT RING	5/8 X 3/4 X 1/8 GALVANIZED STEEL G90 STEEL
6	WHEEL VENTURI	.080 3003-0 ALUMINUM
7	WHEEL BLADE	.080 5052-H32 ALUMINUM
8	TOP PLATE	12 GA GALVANIZED G90 STEEL
9	LIFTING HANDLE	12 GA GALVANIZED G90 STEEL
10	BEARING PLATE	12 GA GALVANIZED G90 STEEL
11	MOTOR PIVOT PLATE	10 GA GALVANIZED G90 STEEL
12	MOTOR PLATE	12 GA GALVANIZED G90 STEEL
13	MOTOR COVER	20 GA GALVANIZED G90 STEEL
14	LOCK PLATE	10 GA GALVANIZED G90 STEEL
15	SUPPORT PLATE RIGHT	12 GA GALVANIZED G90 STEEL
16	SUPPORT PLATE LEFT	12 GA GALVANIZED G90 STEEL
17	SUPPORT END PLATE	10 GA GALVANIZED G90 STEEL
18	FAN PIVOT PLATE A	10 GA GALVANIZED G90 STEEL
19	FAN PIVOT PLATE B	10 GA GALVANIZED G90 STEEL
20	WHEEL BLADE TOP	16 GA GALVANIZED G90 STEEL
21	POWER PACK BACK SUPPORT	10 GA GALVANIZED G90 STEEL
22	SCROLL SUPPORT	16 GA GALVANIZED G90 STEEL
23	GREASE SCOOP	18 GA ALUMINIZED G90 STEEL

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



MAR 07 2024

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0104.06

Expiration Date 03/04/2029

By 
Miami-Dade Product Control

- Notes:
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 2. Tested for areas including high velocity hurricane zones.
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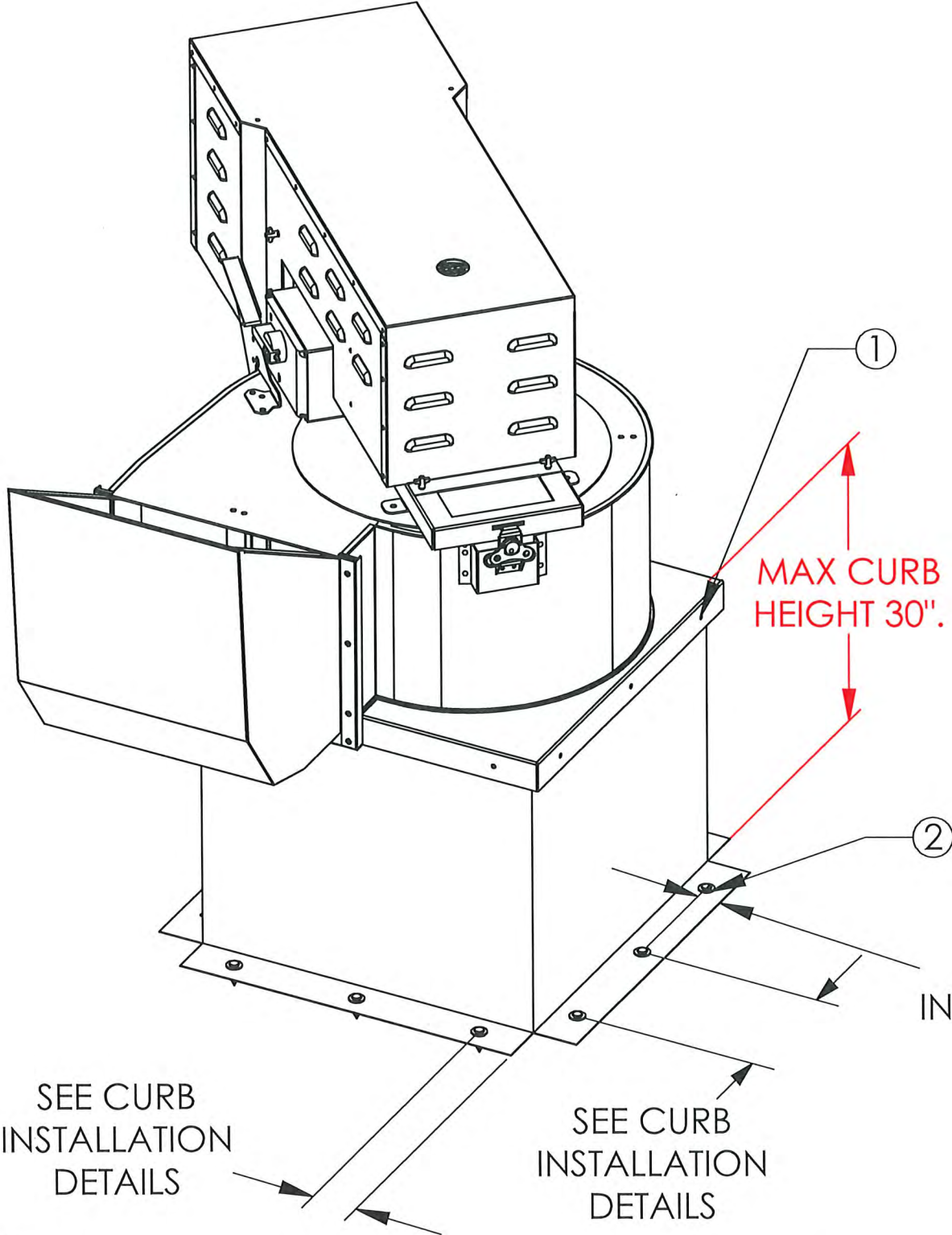
CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: $\pm 1/16$ Decimal: $.XX \pm .05$ $.XXX \pm .015$ Angles: $\pm 1^\circ$
Blank Size: N/A x N/A	MACOLA/AX Number: N/A	
Weight: N/A lbs	Drawing Name: RE SERIES	
	Drawn By: N Perry	
	Drawing Number: NOA2-6	
	Sheet: 6 of 30	



Installation - Steel Utility Set Exhaust

Revision History				
#	Description	Revised by	ECN#	Date
1	Changes Per Dade County	N Perry	1446	12/30/08
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Updated Design Pressure Parameters	CAG	3189	7/14/23



1. SECURE FAN BASE TO CURB USING 5/16"-18 X 2" ZINC PLATED STEEL SELF DRILLING SCREWS (ELCO DRIL-FLEX OR BETTER) THROUGH PRE-PUNCHED HOLES IN THE FAN BASE. SEE PAGE 8 FOR QTY.

2. SECURE CURB TO ROOF FRAMING MEMBERS BY DRILLING 1/4" DIA PILOT HOLES IN THE CURB FLANGE AT LOCATIONS SHOWN IN THE DIAGRAM. SEE PAGE 8 FOR FASTENER TYPE AND QTY.

RICE ENGINEERING

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MAR 07 2024

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0104.06
Expiration Date 03/04/2029
By [Signature]
Miami-Dade Product Control

- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 - 2. Tested for areas including high velocity hurricane zones.
 - 3. Tested under Miami-Dade County Notification number ATI 12024 & 22081.

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°
Blank Size: N/A x N/A	MACOLA/AX Number: N/A	
Weight: N/A lbs	Drawing Name: RE SERIES	
	Drawn By: N Perry	
	Drawing Number: NOA2-7	
	Sheet: 7 of 30	



Miami-Dade County - Roof Curb Installation Guide For Model RE

Revision History				
#	Description	Revised by	ECN#	Date
1	Changes Per Dade County	N Perry	1446	12/30/08
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Updated TZ to TZ2 Anchor	JJH	--	3/8/21
8	Updated Design Pressure Parameters	CAG	3189	7/14/23

INSTALLATION FASTENER TYPES				
	Fan To Curb	Wood (SG = 0.42 Min.)	Steel (12 Gauge Min.)	Concrete (2500 psi Min. Cracked Concrete)
Fastener	5/16"-18 x 2" Self Drilling Screw (ELCO DRIL-FLEX OR BETTER)	3/8" Dia. Zinc Plated Lag Bolt	1/4"-14 Dril-Flex Self Drilling Screw	3/8" Dia. SS Hilti Kwik Bolt TZ2 Expansion Anchor
Minimum Thread Penetration	N/A	2"	12 Gauge	2"
Minimum Edge Distance	N/A	1-1/2"	3/8"	3"
Minimum End Distance	N/A	2-5/8"	3/8"	3"
Minimum Spacing	N/A	1-1/2"	3/4"	4-1/2"

FASTENERS FOR WOOD & STEEL SUBSTRATES: SEAL WITH LIQUID PROSOCO FLASHING IF FASTENERS ARE EXPOSED TO EXTERIOR CONDITIONS. SEE NOTE 4.

INSTALLATION FASTENER QTY								
Fan Model	Curb to Fan		Wood		Steel		Concrete	
	Per Side	Total	Per Side	Total	Per Side	Total	Per Side	Total
RE13BD	3	12	7	28	7	28	5	20
RE13DD	3	12	6	24	6	24	5	20
RE15BD	3	12	7	28	7	28	5	20
RE15DD	3	12	6	24	6	24	5	20
RE18BD	3	12	7	28	7	28	6	24
RE18DD	3	12	7	28	7	28	5	20
RE20BD	4	16	8	32	8	32	6	24
RE20DD	4	16	7	28	7	28	6	24
RE24BD	5	20	9	36	9	36	7	28
RE24DD	4	16	9	36	8	32	7	28




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

SEE PAGE 30 FOR ALTERNATE BRANDS

- Notes:
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 2. Tested for areas including high velocity hurricane zones.
 3. Tested under Miami-Dade County Notification numbers ATI 08034 & 22081.
 4. Wood fastener penetration of 2" to be into wood framing below decking.

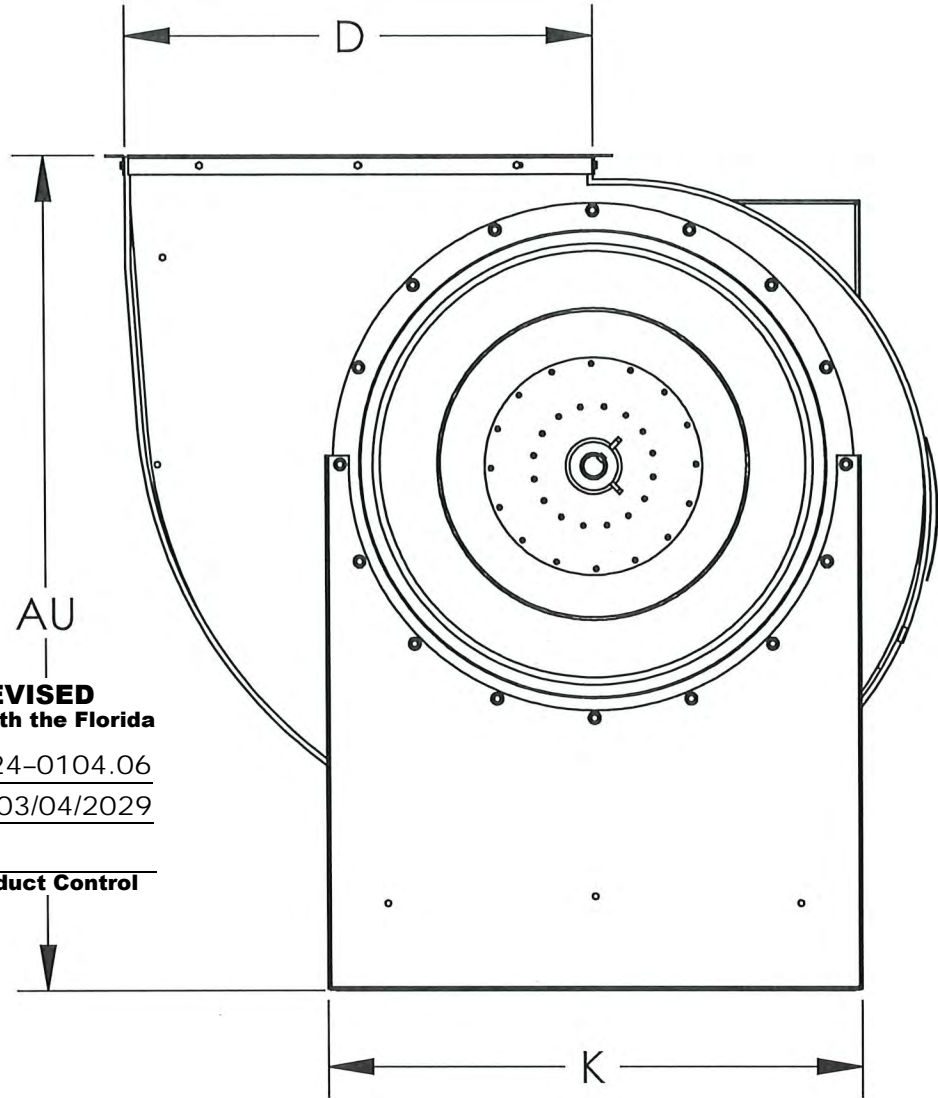
PRODUCT REVISED
as complying with the Florida Building Code
NOA-No. 24-0104.06
Expiration Date 03/04/2029
By 
Miami-Dade Product Control


CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: RE SERIES	
	Drawn By: N/A	
	Drawing Number: NOA2-8	
	Sheet: 8 of 30	



Dimensional Data - Steel Utility Set Exhaust



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as complying with the Florida
Building Code
NOA-No. 24-0104.06
Expiration Date 03/04/2029
By 
Miami-Dade Product Control

DESIGN PRESSURE +30.0 / -130.0 PSF
LARGE MISSILE IMPACT RESISTANT

General Notes:

- 1. This approval is for the structural capacity and impact rating of the exterior housing only; it does not include any interior mechanism or electrical part.
- 2. These fans have not been wind tested for Wind Driven Rain Test per Florida Building code, TAS100 (A)-95.

Notes:

- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
- 2. Tested for areas including high velocity hurricane zones.
- 3. Tested under Miami-Dade County Notification number ATI 08034.

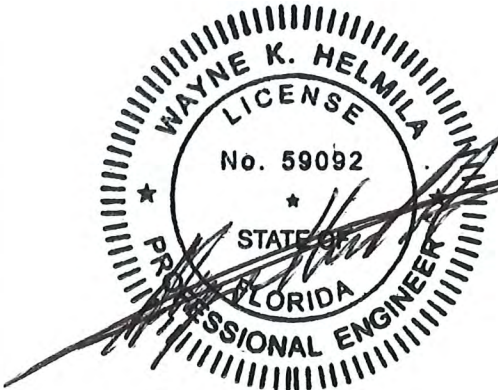
Revision History				
#	Description	Revised by	ECN#	Date
1	Changes Per Dade County	N Perry	1446	12/30/08
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Added Multiple Brands	CAG	3189	7/14/23

FAN MODEL	AU (in)	D (in)	K (in)	WEIGHT (lbs)
BI10	23-5/8	11-5/16	13-3/16	90
BI12	30-1/16	13	16-9/16	165
BI13	30-13/16	14-3/8	16-9/16	170
BI15	31-13/16	15-3/4	16-9/16	180
BI16	34-11/16	17-5/8	16-7/16	200
BI18	35-13/16	19-3/8	16-9/16	220
BI20	42-15/16	21-1/4	25-1/4	405
BI22	44-3/8	23-5/8	25-1/4	430
BI24	49-13/16	26	29-15/16	500
BI27	51-7/16	28-5/8	28-15/16	525
BI30	64-11/16	31-3/4	43-3/8	800
BI33	65-5/8	34-7/8	43-3/8	875
BI36	68-13/16	38-5/8	43-3/8	915
CB10	23-1/2	8-1/4	13	60
CB12	24-1/16	13-1/8	16	110
CB15	29-1/8	16-1/8	19	140
CB18	35-1/2	19-9/16	22-5/8	210
CB20	38-7/8	21-7/16	22-5/8	250
CB22	42-7/8	23-13/16	26-1/8	320
CB24	49-9/16	26-3/16	26-1/8	380
CB27	52	29	30-3/8	450
CB30	59-1/4	32-3/16	39	750
CB36	71-3/8	39-1/8	47	990
USI100	20-11/16	11-1/4	9-1/16	99
USI137	27-3/8	15-5/8	12-7/8	161
USI161	32-1/4	18-1/8	15-1/8	203
USI200	38-3/4	22-3/8	15-1/2	237
USI245	48-9/16	27-3/8	18-1/2	375
USI270	46-3/8	30-1/8	18-1/2	383
USI300	56-5/8	33-7/16	21-3/4	585
USI330	58-1/2	36-3/4	21-3/4	592
USI365	62-3/4	40-5/8	22-3/8	714

SEE PAGE 30 FOR ALTERNATE BRANDS

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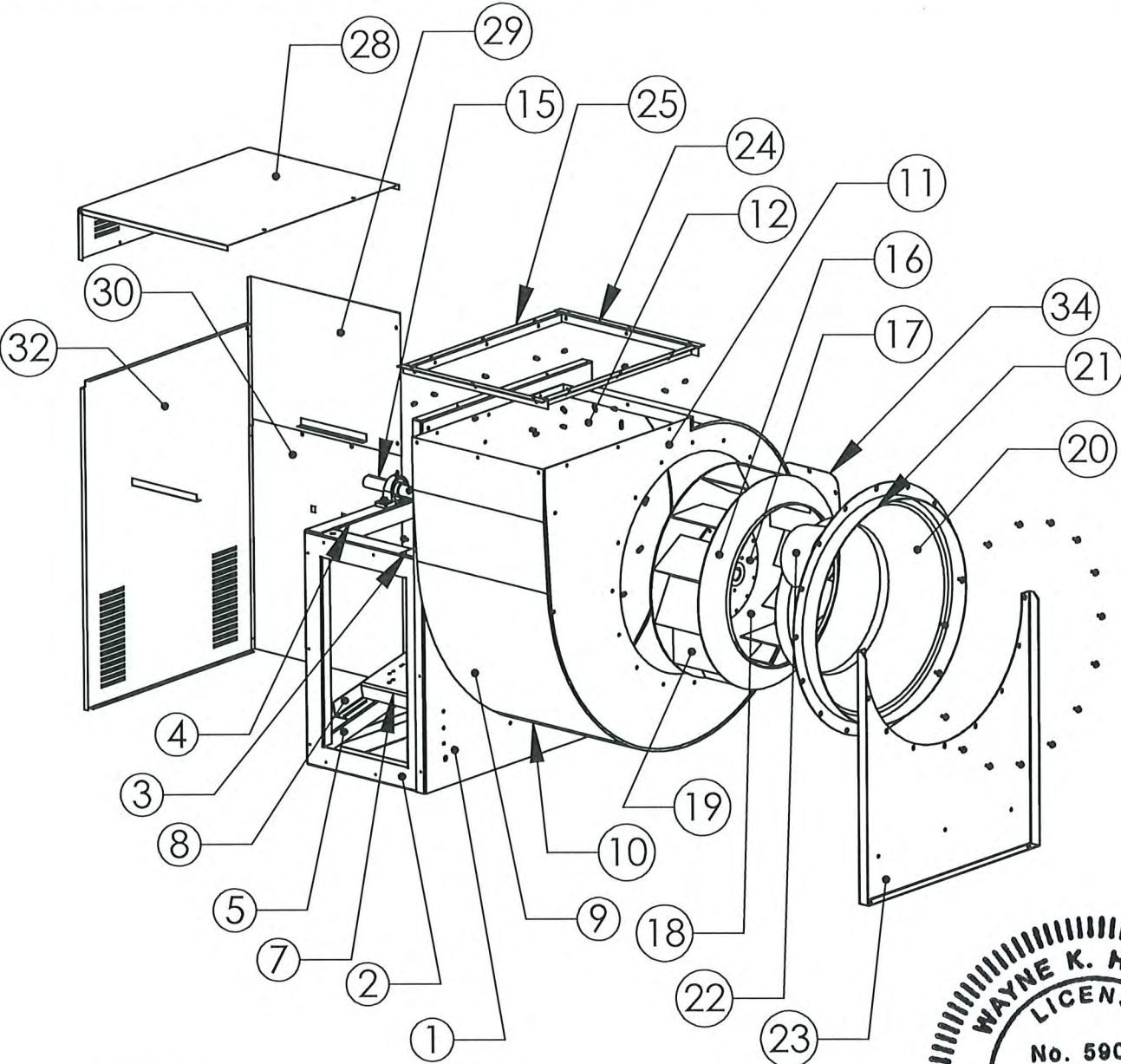
MAR 07 2024

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: $\pm 1/16$ Decimal: $.XX \pm .05$ $.XXX \pm .015$ Angles: $\pm 1^\circ$
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: BI, CB, USI, SERIES	
	Drawn By: N Perry	
	Drawing Number: NOA2-9	
	Sheet: 9 of 30	



Exploded Material View - Steel Utility Set Exhaust



RICE
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Wayne K. Helmila
Registration No: 59092

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0104.06

Expiration Date 03/04/2029

By 
Miami-Dade Product Control



Revision History				
#	Description	Revised by	ECN#	Date
0	Testing TAS - 201, 202, 203	N Perry	1446	8/25/08
1	Changes Per Dade County	N Perry	1446	12/30/08
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Added Multiple Brands	CAG	3189	7/14/23

Item Number	Description	Material
1	BACK PANEL	11G. HRP&O
2	CAB SIDE	11G. HRP&O
3	BRG SUPPT/INNER	11G. HRP&O
4	BRG SUPPT/OUTER FRAME	11G. HRP&O
5	BRG SUPPT/OUTER FRAME	11G. HRP&O
6	STRTH ANGLE (NOT SHOWN)	2X2X1/8 ANGLE IRON
7	MOTOR P'FORM BASE	3/16 HRP&O
8	MOTOR SLIDE RAIL	11G. HRP&O
9	SCROLL, FLG SIDE	16G. HRP&O
10	SCROLL, BTM SIDE	16G. HRP&O
11	END OPEN,LASER	14G. HRP&O
12	END CLOSED,LASER	14G. HRP&O
13	BI DRAIN FTG (NOT SHOWN)	BLACK IRON PIPE
14	ALUM SHAFT SLEEVE (NOT SHOWN)	3/16 ALUM
15	SHAFT	C1045 HSDF
16	SHROUD,ALUM	5052-H32 ALUM
17	HUBPLATE ALUM	2024-T351 ALUM
18	BACKPLATE	1/4G 5052-H32 ALUM
19	BLADE	3/16G 5052-H32 ALUM
20	INLET,STL	12G. HRP&O
21	COLLAR-INLET	12G. HRP&O
22	BAFFLE LASER	14G. HRP&O
23	LEG	11G. HRP&O
24	DISCH FLNG HORZ	12G. HRP&O
25	DISCH FLNG VERT	12G. HRP&O
26	9212 SIDE DISCH. FLANGE (NOT SHOWN)	18G. G90
27	CAB COVER TOP SIDE LH (NOT SHOWN)	20G. G90
28	CAB COVER TOP	20G. G90
29	CAB COVER TOP SIDE RH	20G. G90
30	CAB COVER BTM SIDE RH	20G. G90
31	CAB COVER BTM SIDE LH (NOT SHOWN)	20G. G90
32	CAB COVER BACK	20G. G90
33	HANDLE BI'S (NOT SHOWN)	11G. HRP&O
34	CLEANOUT DOOR	16G. HRP&O

Notes:

1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
2. Tested for areas including high velocity hurricane zones.
3. Tested under Miami-Dade County Notification number ATI 08034.

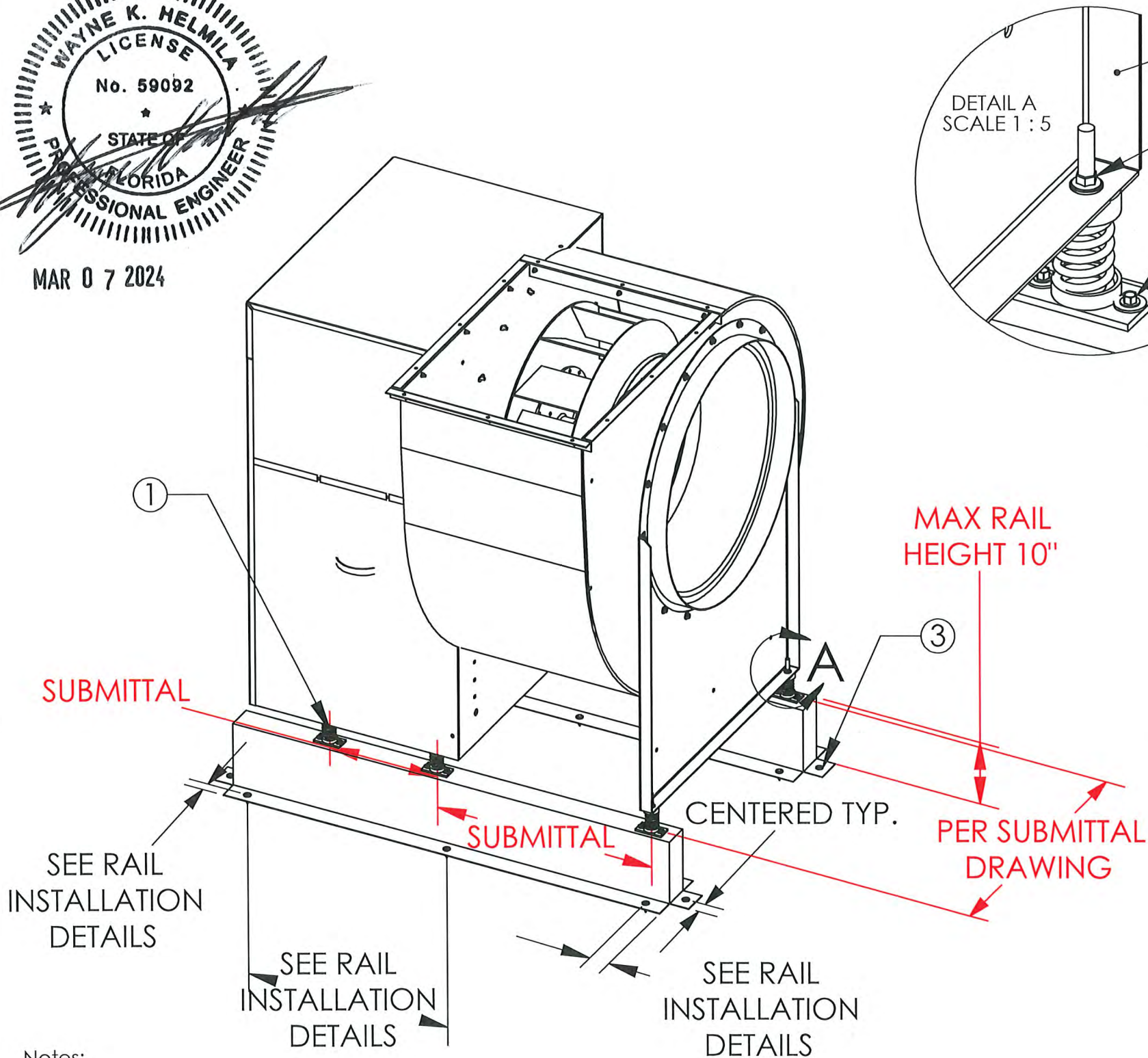
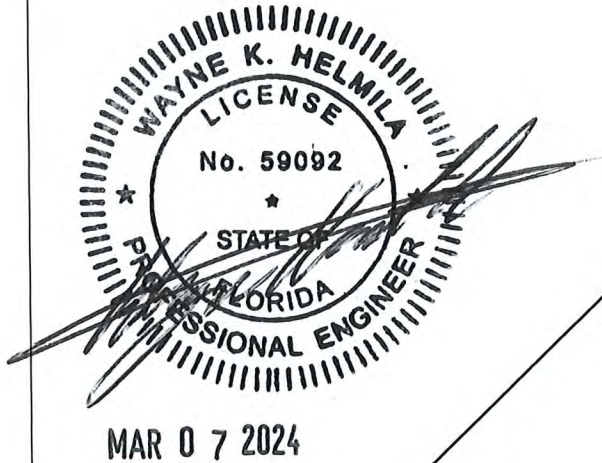
Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: $\pm 1/16$ Decimal: $.XX \pm .05$ $.XXX \pm .015$ Angles: $\pm 1^\circ$
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: BI, CB, USI, SERIES	
	Drawn By: N Perry	
	Drawing Number: NOA2-10	
	Sheet: 10 of 30	

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
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THE PERFORMANCE COMPANY

Installation - Steel Utility Set Exhaust

Revision History				
#	Description	Revised by	ECN#	Date
1	Changes Per Dade County	N Perry	1446	12/30/08
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
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6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Added Multiple Brands	CAG	3189	7/14/23



1. LOCATE VIBRATION ISOLATORS AS NEEDED ON THE RAIL CENTER ON THE RAIL AND SECURE WITH 5/16-18 X 1 1/2" SELF DRILLING SCREWS AND APPROPRIATE SIZED WASHERS ALL HARDWARE SHOULD BE STEEL ZINC PLATED.

2. THE VIBRATION ISOLATOR IS BOLTED TO THE FAN PER THE INSTRUCTION GUIDE SUPPLIED WITH THE ISOLATOR.

3. SECURE RAIL TO ROOF FRAMING MEMBERS BY DRILLING 1/4" DIA PILOT HOLES IN THE RAIL FLANGE AT LOCATIONS SHOWN IN THE DIAGRAM. SEE PAGE 12 FOR FASTENER TYPE AND QTY.

RICE
ENGINEERING

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0104.06
Expiration Date 03/04/2029

By [Signature]
Miami-Dade Product Control

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

- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 - 2. Tested for areas including high velocity hurricane zones.
 - 3. Tested under Miami-Dade County Notification number ATI 08034.

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Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: BI, CB, USI, SERIES	
	Drawn By: N Perry	
	Drawing Number: NOA2-11	
	Sheet: 11 of 30	



Miami-Dade County - Roof Curb Installation Guide For Model BI, CB, USI

Revision History				
#	Description	Revised by	ECN#	Date
1	Changes Per Dade County	N Perry	1446	12/30/08
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Changed TZ to TZ2 Anchor	JJH	--	3/8/21
8	Added Multiple Brands	CAG	3189	7/14/23

INSTALLATION FASTENER TYPES PER RAIL			
	Wood (SG = 0.42 Min.)	Steel (12 Gauge Min.)	Concrete (2500 psi Min. Cracked Concrete)
Fastener	3/8" Dia. Zinc Plated Lag Bolt	1/4"-14 Dril-Flex Self Drilling Screw	3/8" Dia. SS Hilti Kwik Bolt TZ2 Expansion Anchor
Minimum Thread Penetration	2"	12 Gauge	2-5/16"
Minimum Edge Distance	1-1/2"	3/8"	3"
Minimum End Distance	2-5/8"	3/8"	4"
Minimum Spacing	1-1/2"	3/4"	12"

RICE

ENGINEERING

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

FASTENERS FOR WOOD & STEEL SUBSTRATES: SEAL WITH LIQUID PROSOCO FLASHING IF FASTENERS ARE EXPOSED TO EXTERIOR CONDITIONS. SEE NOTE 4.

INSTALLATION FASTENER QTY PER RAIL									
Fan Model	Wood			Steel			Concrete		
	Long Side	Short Side	Total	Long Side	Short Side	Total	Long Side	Short Side	Total
BI10	2	1	6	2	1	6	2	1	6
BI12	2	1	6	2	1	6	2	1	6
BI13	2	1	6	2	1	6	2	1	6
BI15	2	1	6	2	1	6	2	1	6
BI16	3	1	8	2	1	6	2	1	6
BI18	3	1	8	2	1	6	2	1	6
BI20	4	1	10	3	1	8	3	1	8
BI22	4	1	10	3	1	8	3	1	8
BI24	4	1	10	3	1	8	3	1	8
BI27	4	1	10	3	1	8	3	1	8
BI30	6	1	14	4	1	10	5	1	12
BI33	6	1	14	4	1	10	5	1	12
BI36	6	1	14	4	1	10	5	1	12

INSTALLATION FASTENER QTY PER RAIL									
Fan Model	Wood			Steel			Concrete		
	Long Side	Short Side	Total	Long Side	Short Side	Total	Long Side	Short Side	Total
CB10	2	1	6	2	1	6	2	1	6
CB12	2	1	6	2	1	6	2	1	6
CB15	2	1	6	2	1	6	2	1	6
CB18	2	1	6	2	1	6	2	1	6
CB20	3	1	8	2	1	6	2	1	6
CB22	3	1	8	2	1	6	2	1	6
CB24	3	1	8	3	1	8	3	1	8
CB27	4	1	10	3	1	8	3	1	8
CB30	5	1	12	3	1	8	4	1	10
CB36	7	1	16	4	1	10	5	1	12
USI100	2	1	6	2	1	6	2	1	6
USI137	2	1	6	2	1	6	2	1	6
USI161	2	1	6	2	1	6	2	1	6
USI200	3	1	8	3	1	8	3	1	8
USI245	4	1	10	4	1	10	3	1	8
USI270	5	1	12	4	1	10	4	1	10
USI300	6	1	14	5	1	12	5	1	12
USI330	6	1	14	5	1	12	5	1	12
USI365	7	1	16	6	1	14	5	1	12



SEE PAGE 30 FOR ALTERNATE BRANDS

Notes:

1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
2. Tested for areas including high velocity hurricane zones.
3. Tested under Miami-Dade County Notification number ATI 08034.
4. Wood fastener penetration of 2" to be into wood framing below decking.


Material: N/A
Blank Size: N/A x N/A
Weight: N/A lbs

Part Number: N/A
MACOLA Number: N/A
Drawing Name: BI, CB, USI, SERIES
Drawn By: N Perry
Drawing Number: NOA2-12
Sheet: 12 of 30

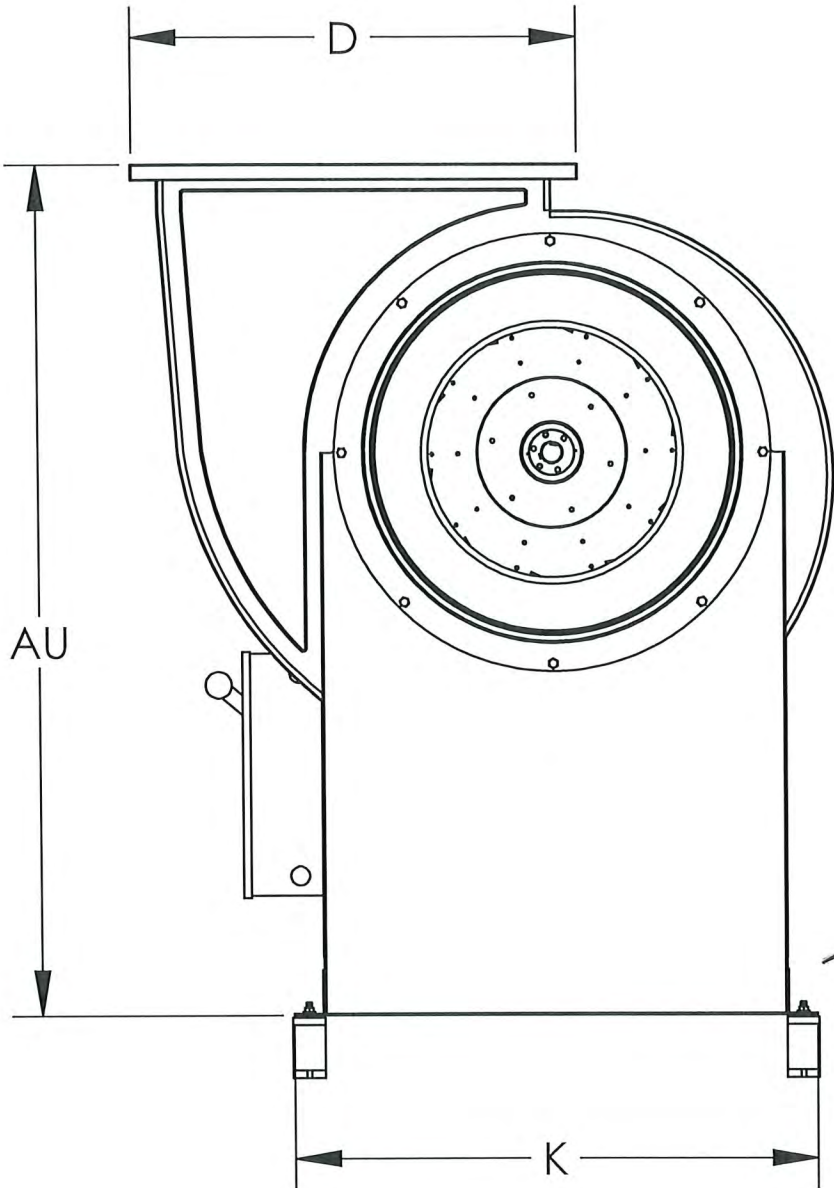
Unless Otherwise Specified
Dimensions are in Inches.
Standard Tolerances are:
Fractions: $\pm 1/16$
Decimal: $.XX \pm .05$
 $.XXX \pm .015$
Angles: $\pm 1^\circ$

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
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CAPTIVEAIRE
THE PERFORMANCE COMPANY

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0104.06
Expiration Date 03/04/2029
By 
Miami-Dade Product Control

Dimensional Data - Steel Utility Set Exhaust



- Notes:
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 2. Tested for areas including high velocity hurricane zones.
 3. Tested under Miami-Dade County Notification number ATI 08034.

Material: N/A	Part Number: N/A
Blank Size: N/A x N/A	MACOLA/AX Number: N/A
Weight: N/A lbs	Drawing Name: USBI SERIES
	Drawn By: N Perry
	Parent Assembly: NOA2-13
	Sheet: 13 of 30

Revision History				
#	Description	Revised by	ECN#	Date
1	Changes Per Dade County	N Perry	1446	12/30/08
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Added Multiple Brands	CAG	3189	7/14/23

- General Notes:
1. This approval is for the structural capacity and impact rating of the exterior housing only; it does not include any interior mechanism or electrical part.
 2. These fans have not been wind tested for Wind Driven Rain Test per Florida Building code, TAS100 (A)-95.

FAN MODEL	AU (in)	D (in)	K (in)	WEIGHT (lbs)
USBI11	27-1/8	12	17-5/8	165
USBI13	31-3/8	14	19-5/8	190
USBI15	35-3/4	16-3/8	22	235
USBI18	42-1/8	19-1/2	26-1/4	318
USBI20	47-7/8	21-1/2	27-7/8	373
USBI24	56-3/8	25-3/4	34-7/8	684
USBI30	61-7/8	32	41-5/8	999
USBI36	69-1/4	38-5/8	47-3/8	1280

SEE PAGE 30 FOR ALTERNATE BRANDS

DESIGN PRESSURE: +112.5 / -112.5 PSF

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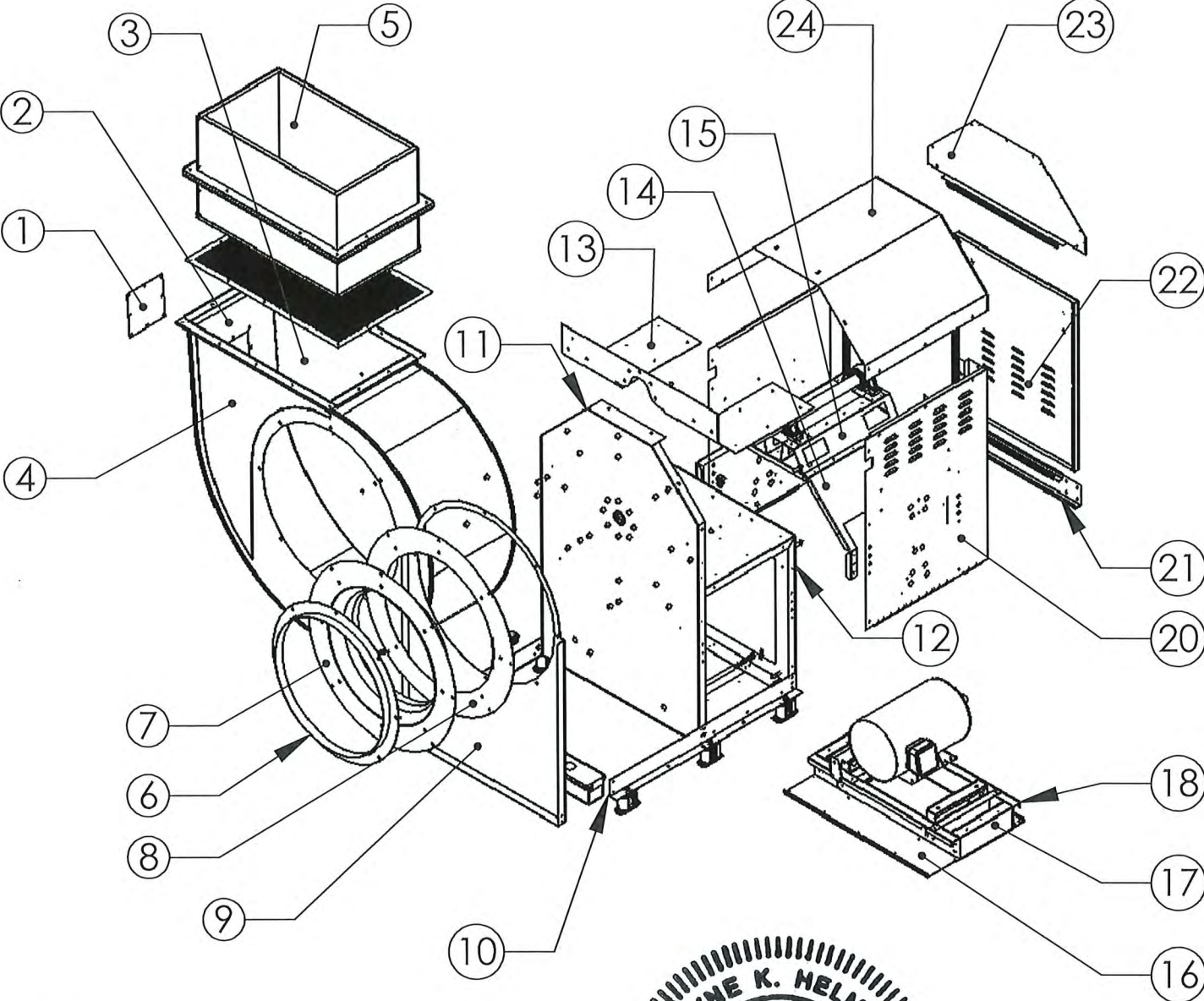
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NOA-No. 24-0104.06
Expiration Date 03/04/2029
By [Signature]
Miami-Dade Product Control

RICE
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Wayne K. Helmila
Registration No: 59092

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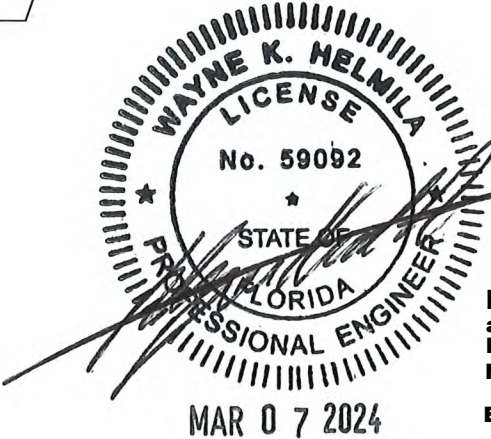
Exploded Material View - Steel Utility Set Exhaust




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- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 - 2. Tested for areas including high velocity hurricane zones.
 - 3. Tested under Miami-Dade County Notification number ATI 08034.

Material: N/A	Part Number: N/A
Blank Size: N/A x N/A	MACOLA/AX Number: N/A
Weight: N/A lbs	Drawing Name: USBI SERIES
	Drawn By: N Perry
	Parent Assembly: NOA2-14
	Sheet: 14 of 30

Unless Otherwise Specified
Dimensions are in Inches.
Standard Tolerances are:
Fractions: $\pm 1/16$
Decimal: .XX \pm .05
.XXX \pm .015
Angles: $\pm 1^\circ$

Revision History				
#	Description	Revised by	ECN#	Date
1	Changes Per Dade County	N Perry	1446	12/30/08
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4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Added Multiple Brands	CAG	3189	7/14/23

Item Number	Description	Material
1	SCROLL ACCESS DOOR	16 GA GALV
2	WRAPPER	20 GA ALUMINIZED
3	SCROLL BOTTOM	16 GA ALUMINIZED
4	SCROLL TOP	16 GA ALUMINIZED
5	DISCHARGE COVER	20 GA GALV
6	INLET ANGLE RING	2X2X1/8 ANGLE IRON
7	WHEEL INLET	.080 1100-0 ALUM
8	INLET SUPPORT RING	14 GA GALV
9	FRONT SCROLL SUPPORT	12 GA GALV
10	SIDE RAIL	12 GA GALV
11	VERTICAL SUPPORT	14 GA GALV
12	BEARING PLATE SUPPORT	14 GA GALV
13	TOP SUPPORT PLATE	14 GA GALV
14	INSIDE SUPPORT	12 GA GALV
15	BEARING PLATE	12 GA GALV
16	LEFT SIDE MOTOR PLATE	12 GA GALV
17	END CAP PLATE	12 GA GALV
18	RIGHT SIDE MOTOR PLATE	12 GA GALV
19	MOTOR PLATE	10 GA GALV
20	MOTOR COVER SIDE	20 GA GALV
21	MOTOR COVER BOTTOM	20 GA GALV
22	MOTOR COVER ACCESS DOOR	20 GA GALV
23	MOTOR COVER TOP FRONT	20 GA GALV
24	MOTOR COVER TOP	20 GA GALV
25	WHEEL BLADE BOTTOM	.080 ALUM 3003-0
26	WHEEL PRIMARY BLADE	.080 ALUM 5052-H32
27	WHEEL BLADE TOP	16 GA GALV

DESIGN PRESSURE: +112.5 / -112.5 PSF
LARGE MISSILE IMPACT RESISTANT

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Installation - Steel Utility Set Exhaust

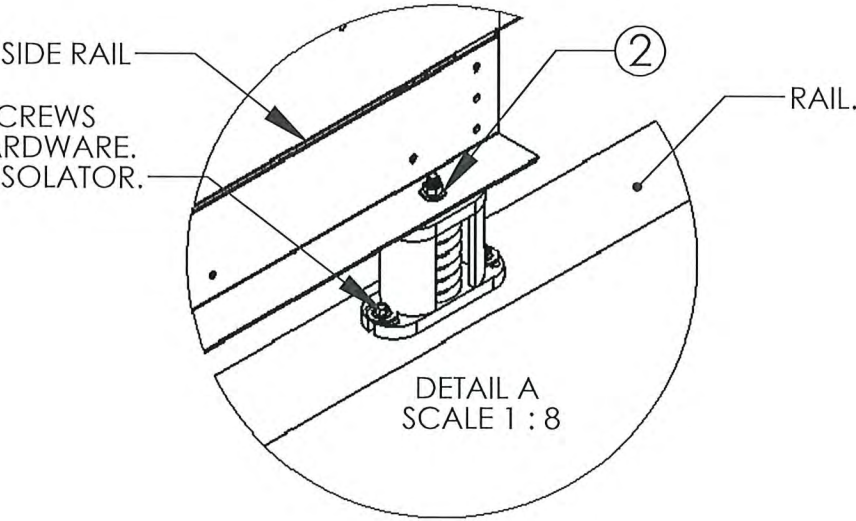
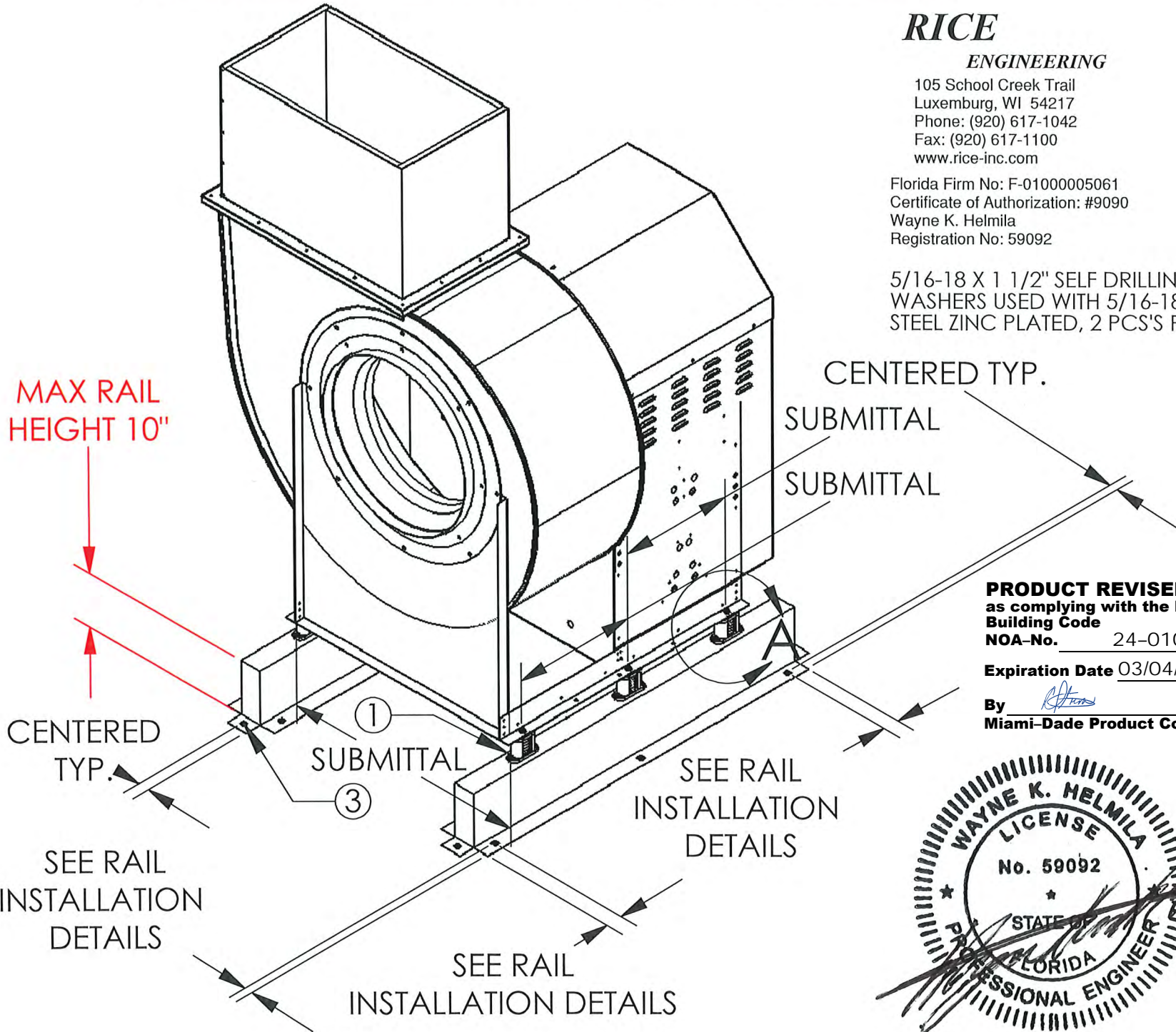
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Florida Firm No: F-01000005061
Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092

5/16-18 X 1 1/2" SELF DRILLING SCREWS
WASHERS USED WITH 5/16-18 HARDWARE.
STEEL ZINC PLATED, 2 PCS'S PER ISOLATOR.

Revision History				
#	Description	Revised by	ECN#	Date
1	Changes Per Dade County	N Perry	1446	12/30/08
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brand to Drawings	JJH	3061	3/26/19
7	Added Multiple Brands	CAG	3189	7/14/23



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- 1. LOCATE VIBRATION ISOLATORS AS NEEDED ON THE RAIL CENTER ON THE RAIL AND SECURE WITH 5/16-18 X 1 1/2" SELF DRILLING SCREWS AND APPROPRIATE SIZED WASHERS ALL HARDWARE SHOULD BE STEEL ZINC PLATED.
- 2. THE VIBRATION ISOLATOR IS BOLTED TO THE FAN PER THE INSTRUCTION GUIDE SUPPLIED WITH THE ISOLATOR.
- 3. SECURE RAIL TO ROOF FRAMING MEMBERS BY DRILLING 1/4" DIA PILOT HOLES IN THE RAIL FLANGE AT LOCATIONS SHOWN IN THE DIAGRAM. SEE PAGE 16 FOR FASTENER TYPE AND QTY.

- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 - 2. Tested for areas including high velocity hurricane zones.
 - 3. Tested under Miami-Dade County Notification number ATI 08034.

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°
Blank Size: N/A x N/A	MACOLA/AX Number: N/A	
Weight: N/A lbs	Drawing Name: USBI SERIES	
	Drawn By: N Perry	
	Parent Assembly: NOA2-15	
	Sheet: 15 of 30	
<div>CaptiveAire, Inc. commercial kitchen ventilation 4641 Paragon Park Road, Raleigh, NC 27616 P 800.334.925 F 919.227.5994</div> <div>CAPTIVEAIRE THE PERFORMANCE COMPANY</div>		

Miami-Dade County - Roof Curb Installation Guide For Model USBI

Revision History				
#	Description	Revised by	ECN#	Date
1	Changes Per Dade County	N Perry	1446	12/30/08
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Changed TZ to TZ2 Anchor	JJH	--	3/8/21
8	Added Multiple Brands	CAG	3189	7/14/23

INSTALLATION FASTENER TYPES PER RAIL			
	Wood (SG = 0.42 Min.)	Steel (12 Gauge Min.)	Concrete (2500 psi Min. Cracked Concrete)
Fastener	3/8" Dia. Zinc Plated Lag Bolt	1/4"-14 Dril-Flex Self Drilling Screw	3/8" Dia. SS Hilti Kwik Bolt TZ2 Expansion Anchor
Minimum Thread Penetration	2-5/16"	12 Gauge	2-5/16
Minimum Edge Distance	1-1/2"	3/8"	3"
Minimum End Distance	2-5/8"	3/8"	4"
Minimum Spacing	1-1/2"	3/4"	7"

RICE
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Wayne K. Helmila
Registration No: 59092

FASTENERS FOR WOOD & STEEL SUBSTRATES: SEAL WITH LIQUID PROSOCO FLASHING IF FASTENERS ARE EXPOSED TO EXTERIOR CONDITIONS. SEE NOTE 4.

INSTALLATION FASTENER QTY PER RAIL									
Fan Model	Wood			Steel			Concrete		
	Long Side	Short Side	Total	Long Side	Short Side	Total	Long Side	Short Side	Total
USBI11	2	1	6	2	1	6	2	1	6
USBI13	2	1	6	2	1	6	2	1	6
USBI15	2	1	6	2	1	6	2	1	6
USBI18	3	1	8	2	1	6	3	1	8
USBI20	3	1	8	2	1	6	4	1	10
USBI24	4	1	10	3	1	8	5	1	12
USBI30	4	1	10	3	1	8	6	1	14
USBI36	5	1	12	3	1	8	7	1	16



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NOA-No. 24-0104.06
Expiration Date 03/04/2029
By 
Miami-Dade Product Control

SEE PAGE 30 FOR ALTERNATE BRANDS

- Notes:
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 2. Tested for areas including high velocity hurricane zones.
 3. Tested under Miami-Dade County Notification number ATI 08034.
 4. Wood fastener penetration of 2-5/16" to be into wood framing below decking.

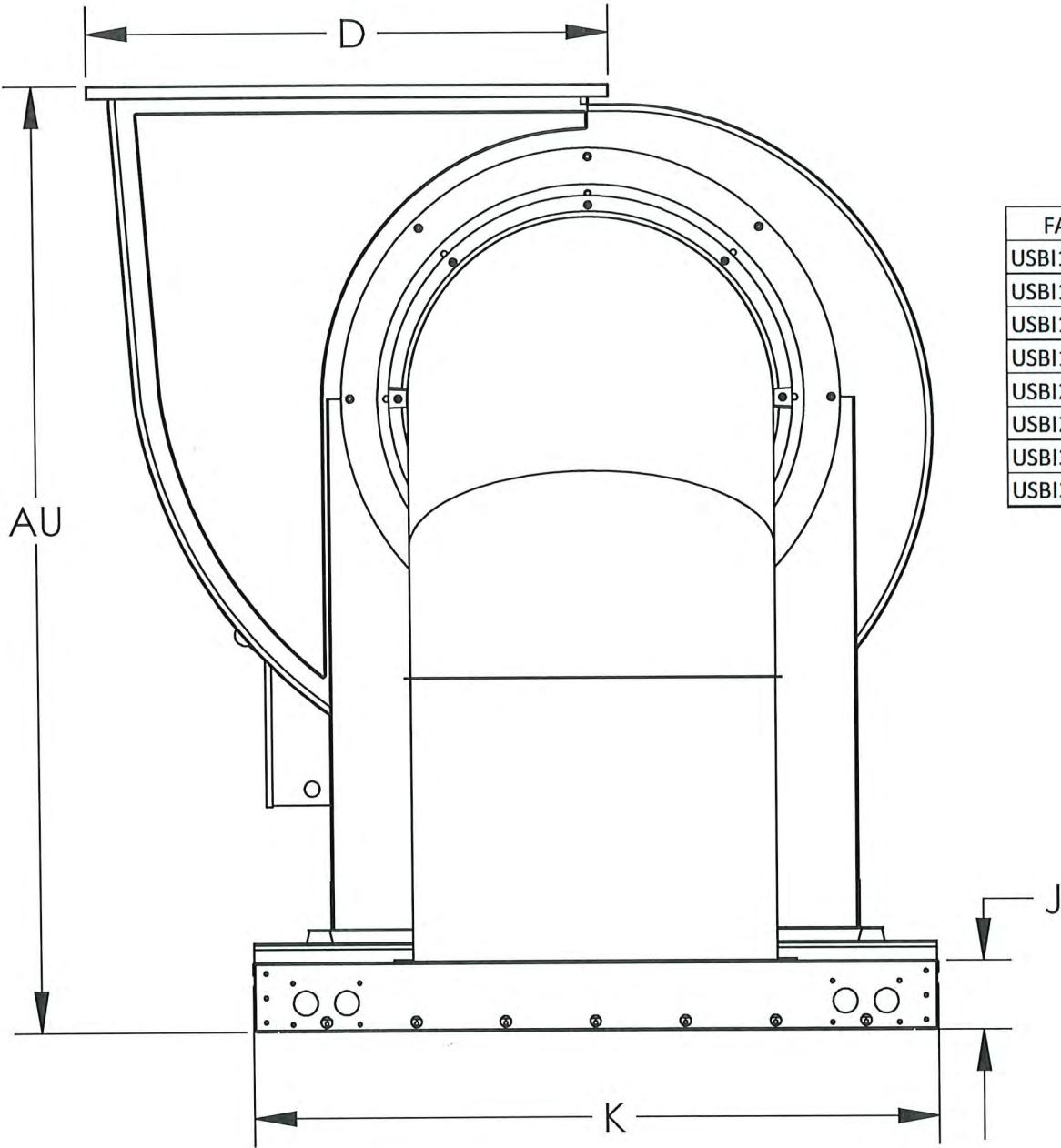
Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: $\pm 1/16$ Decimal: $.XX \pm .05$ $.XXX \pm .015$ Angles: $\pm 1^\circ$
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: USBI SERIES	
	Drawn By: N Perry	
	Drawing Number: NOA2-16	
	Sheet: 16 of 30	

CaptiveAire, Inc. commercial kitchen ventilation
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Revision History				
#	Description	Revised by	ECN#	Date
0	Testing TAS - 201, 202	CAG	3189	7/14/23

Dimensional Data - Steel Utility Set Duct Sled Exhaust



- General Notes:
- 1. This approval is for the structural capacity and impact rating of the exterior housing only; it does not include any interior mechanism or electrical part.
 - 2. These fans have not been wind tested for Wind Driven Rain Test per Florida Building code, TAS100 (A)-95.

FAN MODEL	AU (in)	D (in)	J (in)	K (in)	WEIGHT (lbs)	CURB LENGTH (in)	CURB WIDTH (in)
USBI11DUCTSLED1	35-3/8	14-3/4	5-5/8	32-11/16	299	59	27
USBI13DUCTSLED1	39-5/16	16-13/16	5-5/8	32-11/16	359	61	27
USBI15DUCTSLED1	43-15/16	18-7/8	5-5/8	32-11/16	427	64	27
USBI18DUCTSLED2	50-1/4	22-1/8	5-5/8	36-1/4	551	74	31
USBI20DUCTSLED2	56-1/16	24-3/16	5-5/8	36-1/4	585	74	31
USBI24DUCTSLED3	64-1/2	29-13/16	5-5/8	47-3/4	1028	94	42.5
USBI30DUCTSLED3	70	36-3/16	5-5/8	47-3/4	1266	94	42.5
USBI36DUCTSLED4	77-5/16	42-7/8	5-5/8	56-1/4	1831	108	51

DESIGN PRESSURE: +150.0 / -150.0 PSF
LARGE MISSILE IMPACT RESISTANT

SEE PAGE 30 FOR ALTERNATE BRANDS

RICE
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Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092

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NOA-No. 24-0104.06
Expiration Date 03/04/2029
By [Signature]
Miami-Dade Product Control

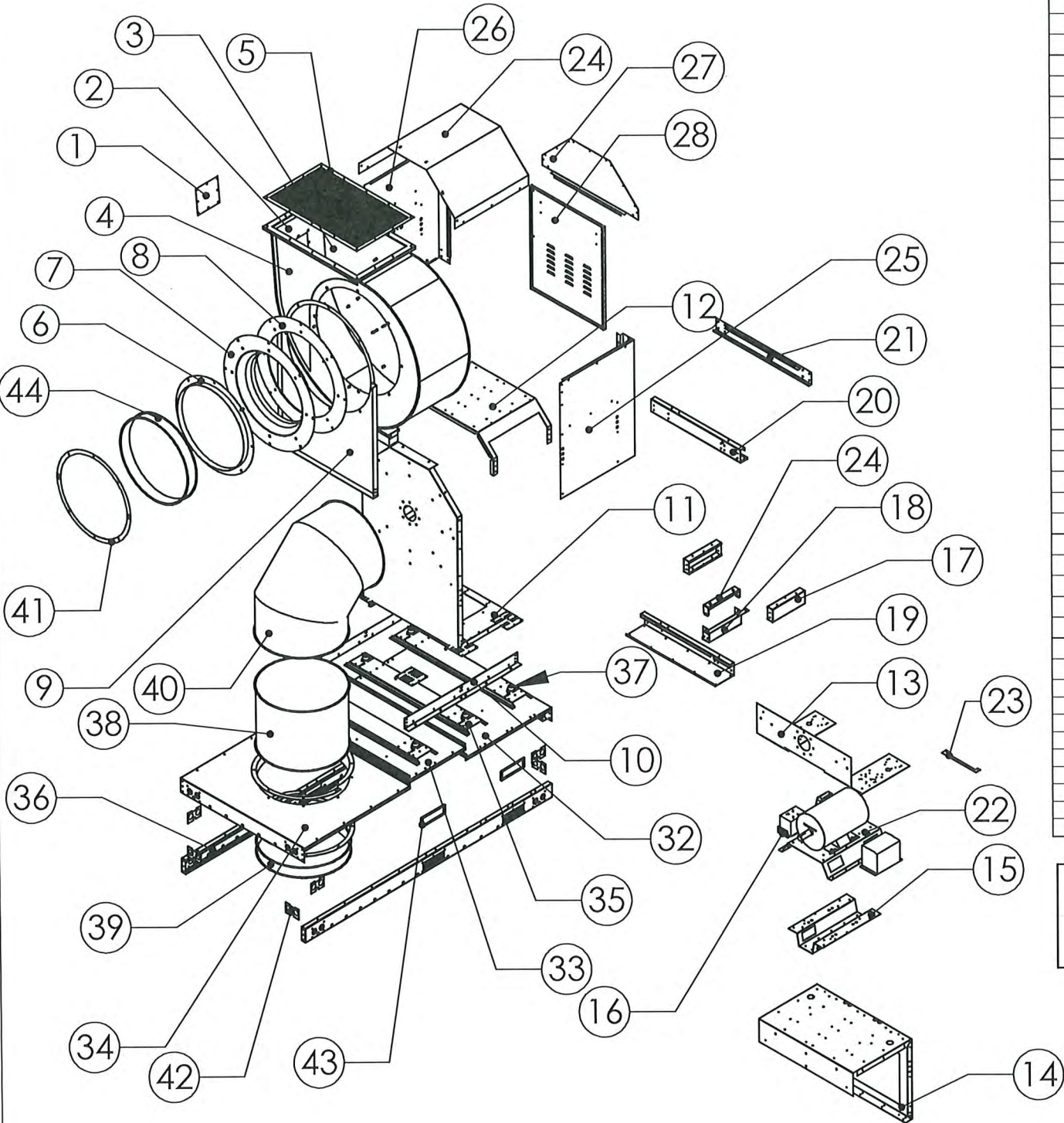


- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202.
 - 2. Tested for areas including high velocity hurricane zones.
 - 3. Tested under Miami-Dade County Notification number ATI 22081.

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Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches.	 THE PERFORMANCE COMPANY
Blank Size: N/A x N/A	MACOLA/AX Number: N/A	Standard Tolerances are: Fractions: ±1/16	
Weight: N/A lbs	Drawing Name: USBI DUCT SLED SERIES	Decimal: .XX±.05	
	Drawn By: C Galindo	.XXX±.015	
	Parent Assembly: NOA2-17	Angles: ±1°	
	Sheet: 17 of 30		

Exploded Material View -
Steel Utility Set Duct Sled Exhaust



- Notes:
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202.
 2. Tested for areas including high velocity hurricane zones.
 3. Tested under Miami-Dade County Notification number ATI 22081.

Material: N/A
Blank Size: N/A x N/A
Weight: N/A lbs

Part Number: N/A
MACOLA/AX Number: N/A
Drawing Name: USBI DUCT SLED SERIES
Drawn By: C Galindo
Parent Assembly: NOA2-18
Sheet: 18 of 30

Unless Otherwise Specified
Dimensions are in Inches.
Standard Tolerances are:
Fractions: $\pm 1/16$
Decimal: $.XX \pm .05$
 $.XXX \pm .015$
Angles: $\pm 1^\circ$

Revision History				
#	Description	Revised by	ECN#	Date
0	Testing TAS - 201, 202	CAG	3189	7/14/23

Item Number	Description	Material
1	SCROLL ACCESS DOOR	16 GA GALV
2	WRAPPER	20 GA ALUMINIZED
3	SCROLL BOTTOM	16 GA ALUMINIZED
4	SCROLL TOP	16 GA ALUMINIZED
5	DISCHARGE COVER	20 GA GALV
6	INLET ANGLE RING	2X2X1/8 ANGLE IRON
7	WHEEL INLET	.080 1100-0 ALUM
8	INLET SUPPORT RING	14 GA GALV
9	FRONT SCROLL SUPPORT	12 GA GALV
10	SIDE RAIL	12 GA GALV
11	VERTICAL SUPPORT	14 GA GALV
12	INNER SUPPORT	12 GA GALV
13	TOP SUPPORT PLATE	12 GA GALV
14	MOTOR SUPPORT PLATE	14 GA GALV
15	MOTOR PLATE SIFFENER	12 GA GALV
16	LINE/LOAD REACTOR MOUNT	18 GA GALV
17	MOTOR END CAP	12 GA GALV
18	MOTOR PIVOT PLATE FRONT	12 GA GALV
19	MOTOR PLATE RIGHT SIDE	12 GA GALV
20	MOTOR PLATE LEFT SIDE	12 GA GALV
21	MOTOR COVER BOTTOM	20 GA GALV
22	MOTOR PLATE SUPPORT	12 GA GALV
23	MOTOR LOCATION PLATE	12 GA GALV
24	MOTOR PIVOT PLATE	12 GA GALV
25	MOTOR COVER LEFT SIDE	20 GA GALV
26	MOTOR COVER RIGHT SIDE	20 GA GALV
27	MOTOR COVER FRONT	20 GA GALV
28	MOTOR COVER FRONT PANEL	20 GA GALV
29	WHEEL BLADE BOTTOM	.080 ALUM 3003-0
30	WHEEL PRIMARY BLADE	.080 ALUM 5052-H32
31	WHEEL BLADE TOP	16 GA GALV
32	DUCT SLED FAN SIDE	14 GA GALV
33	DUCT SLED FAN SIDE	14 GA GALV
34	DUCT SLED DUCT SIDE	14 GA GALV
35	FAN MOUNTING RAIL	14 GA GALV
36	SLED MOUNTING RAIL	14 GA GALV
37	RUBBER VIBRATION ISOLATOR	NEOPRENE
38	STRAIGHT DUCT	20 GA 430 SS, 2B FINISH
39	DUCT RISER	20 GA 430 SS, 2B FINISH
40	DUCT ELBOW	20 GA 430 SS, 2B FINISH
41	DUCT MOUNTING RINGS	12 GA GALV
42	LIFTING HOLE PROTECTOR	12 GA GALV
43	FORK POCKET PROTECTOR	12 GA GALV
44	DUCT CONNECTION	20 GA 430 SS, 2B FINISH

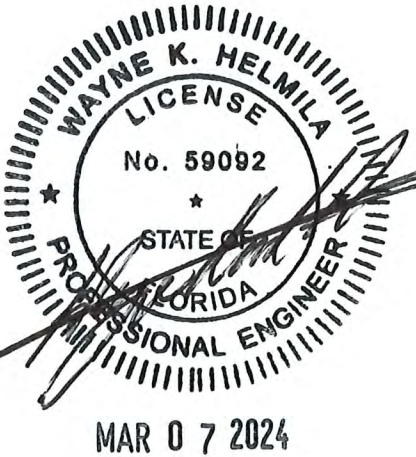
DESIGN PRESSURE: +150.0 / -150.0 PSF
LARGE MISSILE IMPACT RESISTANT


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



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0104.06
Expiration Date 03/04/2029
By 
Miami-Dade Product Control

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994



Installation - Steel Utility Set Duct Sled Exhaust

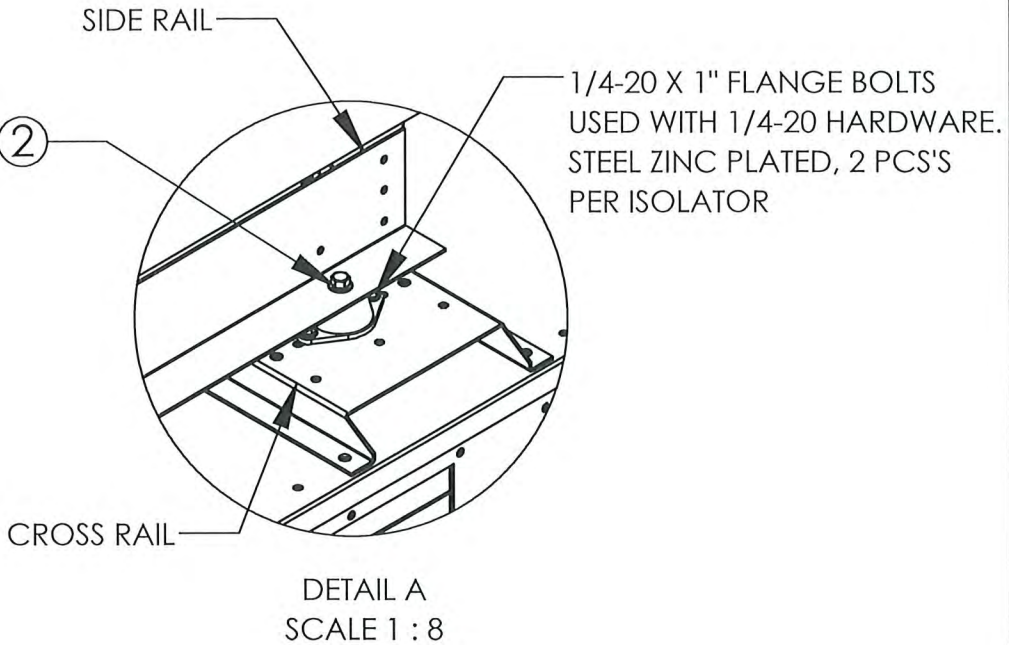
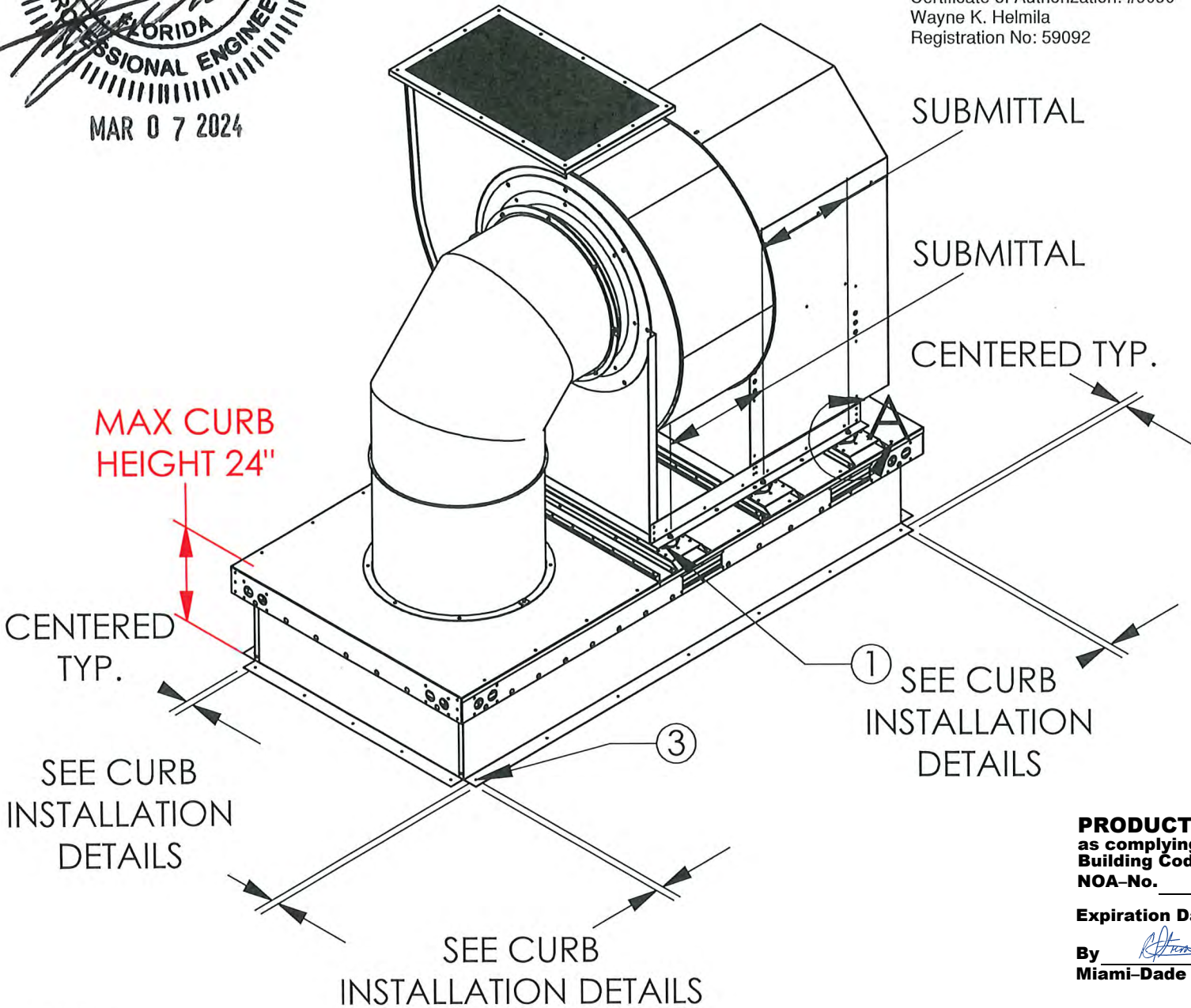
Revision History				
#	Description	Revised by	ECN#	Date
0	Testing TAS - 201, 202	CAG	3189	7/14/23



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




- 1. LOCATE VIBRATION ISOLATORS AS NEEDED ON THE CROSS RAILS AND SECURE WITH 1/4"-20 X 1" BOLTS AND APPROPRIATE SIZED NUTS. ALL HARDWARE SHOULD BE STEEL ZINC PLATED.
- 2. THE VIBRATION ISOLATOR IS BOLTED TO THE FAN PER THE INSTRUCTION GUIDE SUPPLIED WITH THE ISOLATOR.
- 3. SECURE CURB TO ROOF FRAMING MEMBERS BY DRILLING 1/4" DIA PILOT HOLES IN THE CURB FLANGE AT LOCATIONS SHOWN IN THE DIAGRAM. SEE PAGE 20 FOR FASTENER TYPE AND QTY.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0104.06
Expiration Date 03/04/2029
By [Signature]
Miami-Dade Product Control

- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202.
 - 2. Tested for areas including high velocity hurricane zones.
 - 3. Tested under Miami-Dade County Notification number ATI 22081.

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches.	 THE PERFORMANCE COMPANY
Blank Size: N/A x N/A	MACOLA/AX Number: N/A	Standard Tolerances are:	
Weight: N/A lbs	Drawing Name: USBI DUCT SLED SERIES	Fractions: ±1/16	
	Drawn By: C Galindo	Decimal: .XX±.05	
	Parent Assembly: NOA2-19	.XXX±.015	
	Sheet: 19 of 30	Angles: ±1°	

Miami-Dade County - Roof Curb
Installation Guide For Model USBI Duct Sled

Revision History				
#	Description	Revised by	ECN#	Date
0	Testing TAS - 201, 202	CAG	3189	7/14/23

INSTALLATION FASTENER TYPES				
	Fan to Curb	Wood (SG = 0.42 Min.)	Steel (12 Gauge Min.)	Concrete (2500 psi Min. Cracked Concrete)
Fastener	5/16"-18 x 2" Self Drilling Screw (ELCO DRIL-FLEX OR BETTER)	3/8" Dia. Zinc Plated Lag Bolt	1/4"-14 Dril-Flex Self Drilling Screw	3/8" Dia. SS Hilti Kwik Bolt TZ2 Expansion Anchor
Minimum Thread Penetration	N/A	2"	12 Gauge	2"
Minimum Edge Distance	N/A	1-1/2"	3/8"	3"
Minimum End Distance	N/A	2-5/8"	3/8"	3"
Minimum Spacing	N/A	1-1/2"	3/4"	4-1/2"

FASTENERS FOR WOOD & STEEL SUBSTRATES: SEAL WITH LIQUID PROSOCO FLASHING IF FASTENERS ARE EXPOSED TO EXTERIOR CONDITIONS. SEE NOTE 4.

INSTALLATION FASTENER QTY												
Fan Model	Fan to Curb			Wood			Steel			Concrete		
	Long Side	Short Side	Total	Long Side	Short Side	Total	Long Side	Short Side	Total	Long Side	Short Side	Total
USBI11DUCTSLED1	8	3	22	10	4	28	9	4	26	8	3	22
USBI13DUCTSLED1	8	3	22	11	5	32	10	4	28	9	4	26
USBI15DUCTSLED1	8	3	22	14	6	40	12	5	34	11	4	30
USBI18DUCTSLED2	8	4	24	16	6	44	15	6	42	13	5	36
USBI20DUCTSLED2	10	4	28	18	7	50	17	7	48	15	6	42
USBI24DUCTSLED3	13	6	38	22	10	64	19	8	54	18	8	52
USBI30DUCTSLED3	14	6	40	25	11	72	22	10	64	20	9	58
USBI36DUCTSLED4	17	7	48	28	13	82	24	11	70	23	11	68

SEE PAGE 30 FOR ALTERNATE BRANDS

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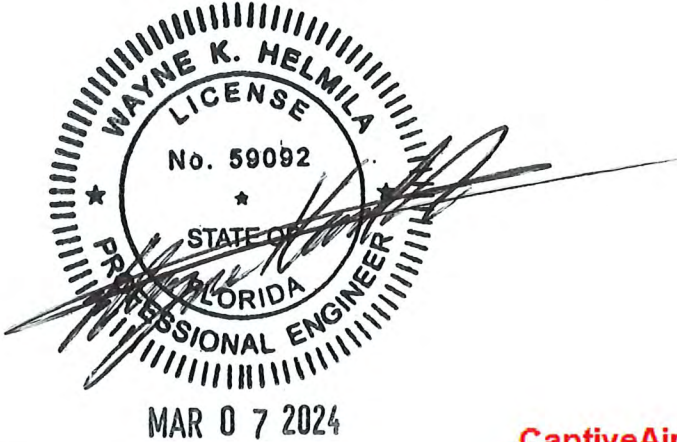
105 School Creek Trail
Luxemburg, WI 54217
Phone: (920) 617-1042
Fax: (920) 617-1100
www.rice-inc.com

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

Notes:

1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202.
2. Tested for areas including high velocity hurricane zones.
3. Tested under Miami-Dade County Notification number ATI 22081.
4. Wood fastener penetration of 2" to be into wood framing below decking.

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: $\pm 1/16$ Decimal: $.XX \pm .05$ $.XXX \pm .015$ Angles: $\pm 1^\circ$
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: USBI DUCT SLED SERIES	
	Drawn By: C Galindo	
	Drawing Number: NOA2-20	
	Sheet: 20 of 30	



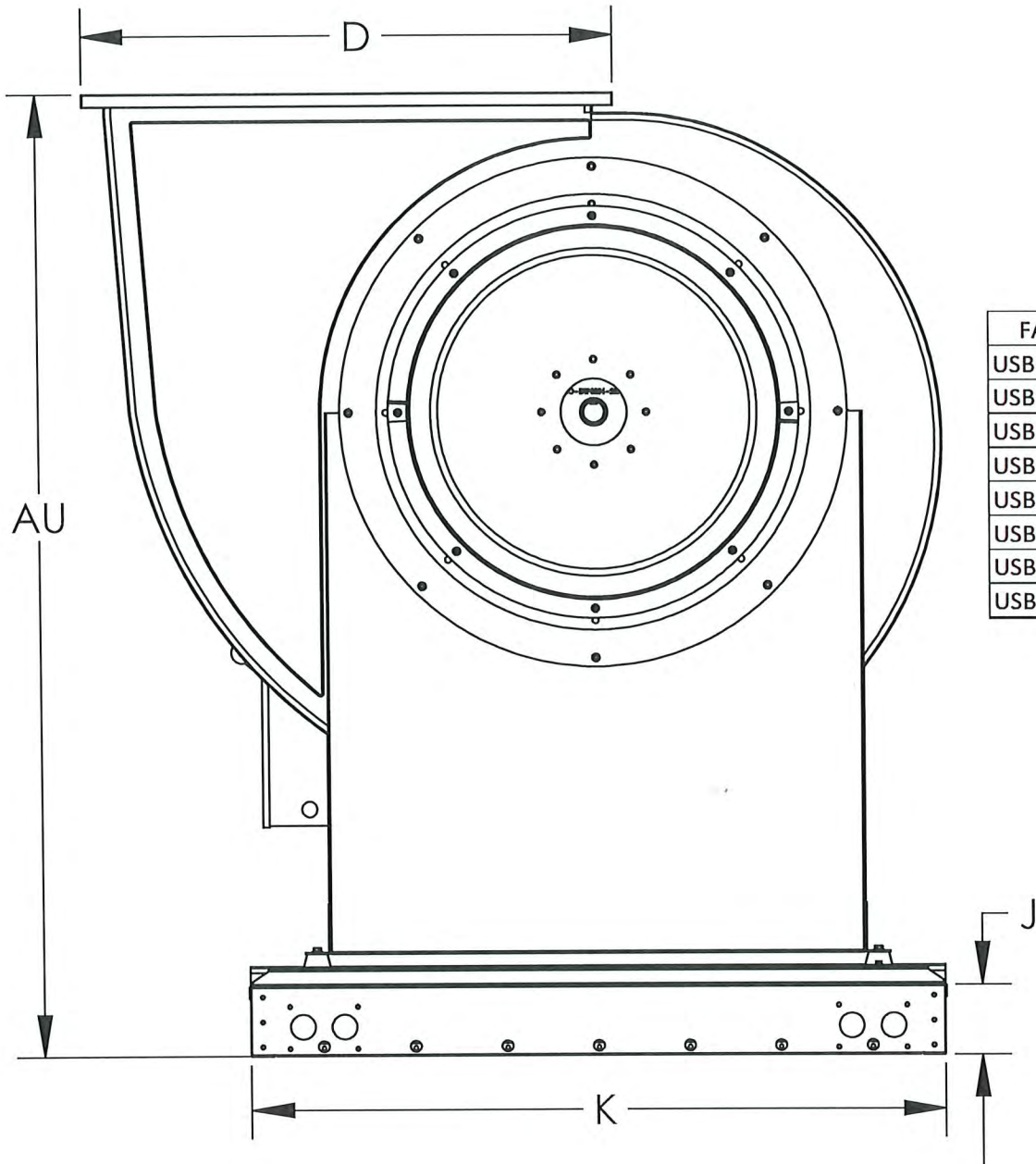
PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0104.06
Expiration Date 03/04/2029
By *[Signature]*
Miami-Dade Product Control

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994



Revision History				
#	Description	Revised by	ECN#	Date
0	Testing TAS - 201, 202	CAG	3189	7/14/23

Dimensional Data - Steel Utility Set Fan Sled Exhaust



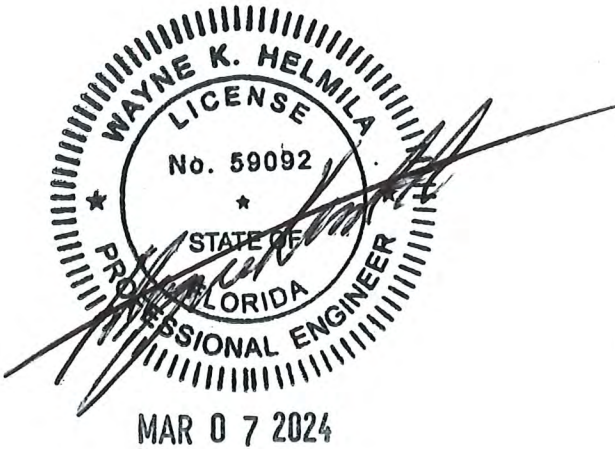
- General Notes:
- 1. This approval is for the structural capacity and impact rating of the exterior housing only; it does not include any interior mechanism or electrical part.
 - 2. These fans have not been wind tested for Wind Driven Rain Test per Florida Building code, TAS100 (A)-95.

FAN MODEL	AU (in)	D (in)	J (in)	K (in)	WEIGHT (lbs)	CURB LENGTH (in)	CURB WIDTH (in)
USBI11FANSLED1	35-3/8	14-3/4	5-5/8	32-11/6	240	41	27
USBI13FANSLED1	39-5/16	16-13/16	5-5/8	32-11/16	299	41	27
USBI15FANSLED1	43-15/16	18-7/8	5-5/8	32-11/16	335	41	27
USBI18FANSLED2	50-1/4	22-1/8	5-5/8	36-1/4	447	45	31
USBI20FANSLED2	56-1/16	24-3/16	5-5/8	36-1/4	472	45	31
USBI24FANSLED3	64-1/2	29-13/16	5-5/8	47-3/4	724	52	42.5
USBI30FANSLED3	70	36-3/16	5-5/8	47-3/4	1149	55	42.5
USBI36FANSLED4	77-5/16	42-7/8	5-5/8	56-1/4	1660	62	51

DESIGN PRESSURE: +150.0 / -150.0 PSF
LARGE MISSILE IMPACT RESISTANT

SEE PAGE 30 FOR ALTERNATE BRANDS

RICE
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105 School Creek Trail
Luxemburg, WI 54217
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Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092



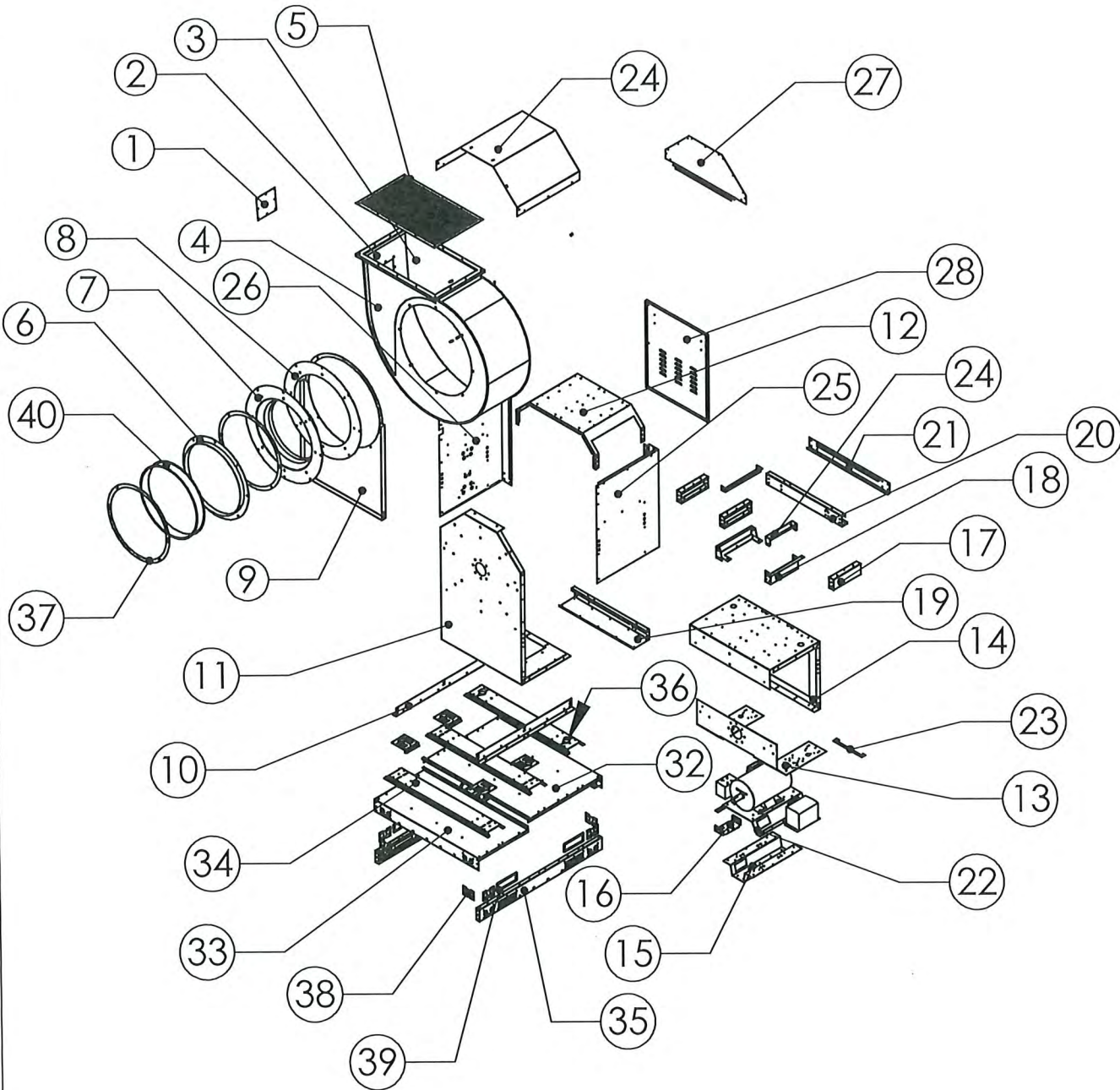
- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202.
 - 2. Tested for areas including high velocity hurricane zones.
 - 3. Tested under Miami-Dade County Notification number ATI 22081.

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0104.06
Expiration Date 03/04/2029
By *[Signature]*
Miami-Dade Product Control

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches.	
Blank Size: N/A x N/A	MACOLA/AX Number: N/A	Standard Tolerances are:	
Weight: N/A lbs	Drawing Name: USBI FAN SLED SERIES	Fractions: $\pm 1/16$	
	Drawn By: C Galindo	Decimal: .XX $\pm .05$	
	Parent Assembly: NOA2-21	.XXX $\pm .015$	
	Sheet: 21 of 30	Angles: $\pm 1^\circ$	

Exploded Material View -
Steel Utility Set Fan Sled Exhaust



Revision History				
#	Description	Revised by	ECN#	Date
0	Testing TAS - 201, 202	CAG	3189	7/14/23

Item Number	Description	Material
1	SCROLL ACCESS DOOR	16 GA GALV
2	WRAPPER	20 GA ALUMINIZED
3	SCROLL BOTTOM	16 GA ALUMINIZED
4	SCROLL TOP	16 GA ALUMINIZED
5	DISCHARGE COVER	20 GA GALV
6	INLET ANGLE RING	2X2X1/8 ANGLE IRON
7	WHEEL INLET	.080 1100-0 ALUM
8	INLET SUPPORT RING	14 GA GALV
9	FRONT SCROLL SUPPORT	12 GA GALV
10	SIDE RAIL	12 GA GALV
11	VERTICAL SUPPORT	14 GA GALV
12	INNER SUPPORT	12 GA GALV
13	TOP SUPPORT PLATE	12 GA GALV
14	MOTOR SUPPORT PLATE	14 GA GALV
15	MOTOR PLATE SIFFENER	12 GA GALV
16	LINE/LOAD REACTOR MOUNT	18 GA GALV
17	MOTOR END CAP	12 GA GALV
18	MOTOR PIVOT PLATE FRONT	12 GA GALV
19	MOTOR PLATE RIGHT SIDE	12 GA GALV
20	MOTOR PLATE LEFT SIDE	12 GA GALV
21	MOTOR COVER BOTTOM	20 GA GALV
22	MOTOR PLATE SUPPORT	12 GA GALV
23	MOTOR LOCATION PLATE	12 GA GALV
24	MOTOR PIVOT PLATE	12 GA GALV
25	MOTOR COVER LEFT SIDE	20 GA GALV
26	MOTOR COVER RIGHT SIDE	20 GA GALV
27	MOTOR COVER FRONT	20 GA GALV
28	MOTOR COVER FRONT PANEL	20 GA GALV
29	WHEEL BLADE BOTTOM	.080 ALUM 3003-0
30	WHEEL PRIMARY BLADE	.080 ALUM 5052-H32
31	WHEEL BLADE TOP	16 GA GALV
32	DUCT SLED FAN SIDE	14 GA GALV
33	DUCT SLED DUCT SIDE	14 GA GALV
34	FAN MOUNTING RAIL	14 GA GALV
35	SLED MOUNTING RAIL	14 GA GALV
36	RUBBER VIBRATION ISOLATOR	NEOPRENE
37	DUCT MOUNTING RINGS	12 GA GALV
38	LIFTING HOLE PROTECTOR	12 GA GALV
39	FORK POCKET PROTECTOR	12 GA GALV
40	DUCT CONNECTION	20 GA 430 SS, 2B FINISH

RICE
ENGINEERING

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



DESIGN PRESSURE: +150.0 / -150.0 PSF

LARGE MISSILE IMPACT RESISTANT

PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0104.06

Expiration Date 03/04/2029

By 
Miami-Dade Product Control

- Notes:
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202.
 2. Tested for areas including high velocity hurricane zones.
 3. Tested under Miami-Dade County Notification number ATI 22081.

Material: N/A	Part Number: N/A
Blank Size: N/A x N/A	MACOLA/AX Number: N/A
Weight: N/A lbs	Drawing Name: USBI FAN SLED SERIES
	Drawn By: C Galindo
	Parent Assembly: NOA2-22
	Sheet: 22 of 30

Unless Otherwise Specified
Dimensions are in Inches.

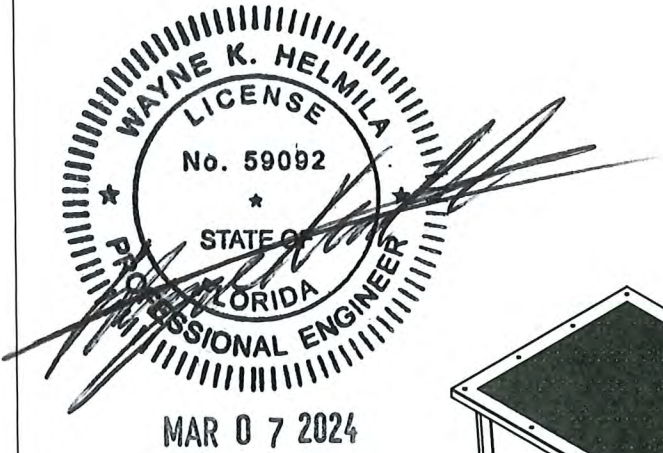
Standard Tolerances are:
Fractions: $\pm 1/16$
Decimal: $.XX \pm .05$
 $.XXX \pm .015$
Angles: $\pm 1^\circ$



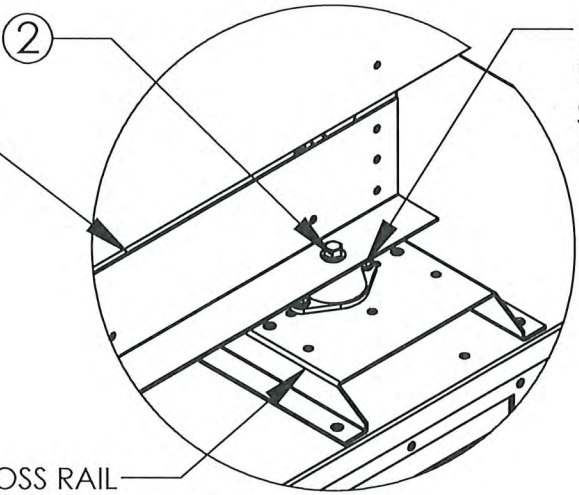
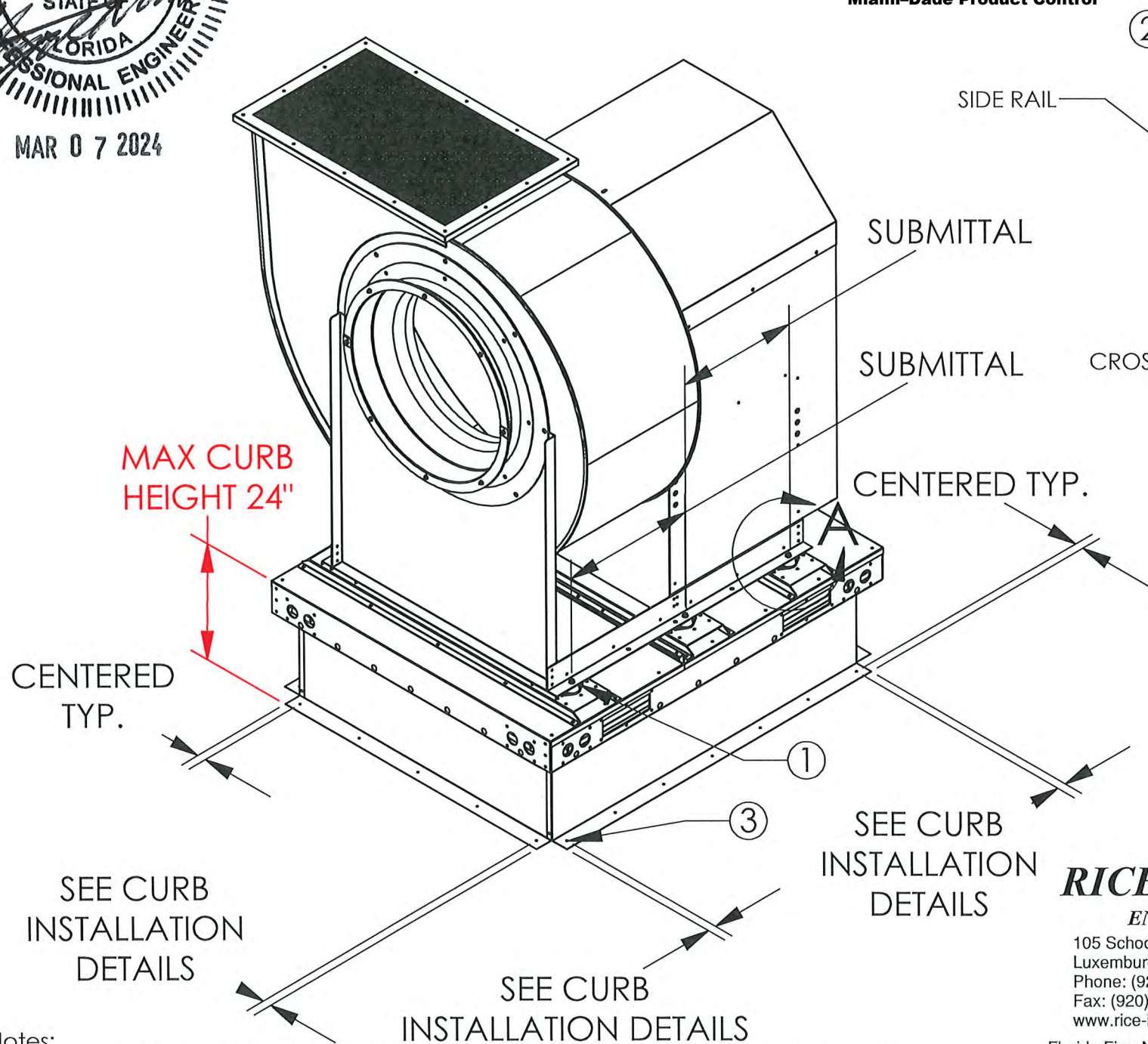
CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994

Installation - Steel Utility Set Fan Sled Exhaust

Revision History				
#	Description	Revised by	ECN#	Date
0	Testing TAS - 201, 202	CAG	3189	7/14/23



PRODUCT REVISED
as complying with the Florida
Building Code
NOA-No. 24-0104.06
Expiration Date 03/04/2029
By *[Signature]*
Miami-Dade Product Control



DETAIL A
SCALE 1 : 8

1. LOCATE VIBRATION ISOLATORS AS NEEDED ON THE CROSS RAILS AND SECURE WITH 1/4"-20 X 1" BOLTS AND APPROPRIATE SIZED NUTS. ALL HARDWARE SHOULD BE STEEL ZINC PLATED.
2. THE VIBRATION ISOLATOR IS BOLTED TO THE FAN PER THE INSTRUCTION GUIDE SUPPLIED WITH THE ISOLATOR.
3. SECURE CURB TO ROOF FRAMING MEMBERS BY DRILLING 1/4" DIA PILOT HOLES IN THE CURB FLANGE AT LOCATIONS SHOWN IN THE DIAGRAM. SEE PAGE 24 FOR FASTENER TYPE AND QTY.

- Notes:
1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202.
 2. Tested for areas including high velocity hurricane zones.
 3. Tested under Miami-Dade County Notification number ATI 22081.

RICE
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105 School Creek Trail
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P 800.334.925 | F 919.227.5994

Material: N/A	Part Number: N/A
Blank Size: N/A x N/A	MACOLA/AX Number: N/A
Weight: N/A lbs	Drawing Name: USBI FAN SLED SERIES
	Drawn By: C Galindo
	Parent Assembly: NOA2-23
	Sheet: 23 of 30

Unless Otherwise Specified
Dimensions are in Inches.
Standard Tolerances are:
Fractions: ±1/16
Decimal: .XX±.05
.XXX±.015
Angles: ±1°



Miami-Dade County - Roof Curb Installation Guide For Model USBI Fan Sled

Revision History				
#	Description	Revised by	ECN#	Date
0	Testing TAS - 201, 202	CAG	3189	7/14/23

INSTALLATION FASTENER TYPES				
	Fan to Curb	Wood (SG = 0.42 Min.)	Steel (12 Gauge Min.)	Concrete (2500 psi Min. Cracked Concrete)
Fastener	5/16"-18 x 2" Self Drilling Screw (ELCO DRIL-FLEX OR BETTER)	3/8" Dia. Zinc Plated Lag Bolt	1/4"-14 Dril-Flex Self Drilling Screw	3/8" Dia. SS Hilti Kwik Bolt TZ2 Expansion Anchor
Minimum Thread Penetration	N/A	2"	12 Gauge	2"
Minimum Edge Distance	N/A	1-1/2"	3/8"	3"
Minimum End Distance	N/A	2-5/8"	3/8"	3"
Minimum Spacing	N/A	1-1/2"	3/4"	4-1/2"

FASTENERS FOR WOOD & STEEL SUBSTRATES: SEAL WITH LIQUID PROSOCO FLASHING IF FASTENERS ARE EXPOSED TO EXTERIOR CONDITIONS. SEE NOTE 4.

INSTALLATION FASTENER QTY												
Fan Model	Fan to Curb			Wood			Steel			Concrete		
	Long Side	Short Side	Total	Long Side	Short Side	Total	Long Side	Short Side	Total	Long Side	Short Side	Total
USBI11FANSLED1	4	3	14	6	4	20	6	4	20	5	3	16
USBI13FANSLED1	4	3	14	7	4	22	7	4	22	6	4	20
USBI15FANSLED1	5	3	16	8	5	26	8	5	26	6	4	20
USBI18FANSLED2	6	4	20	9	6	30	9	6	30	7	5	24
USBI20FANSLED2	7	5	24	10	7	34	10	7	34	8	5	26
USBI24FANSLED3	9	7	32	11	9	40	11	9	40	9	7	32
USBI30FANSLED3	10	9	38	14	11	50	13	10	46	12	9	42
USBI36FANSLED4	12	12	48	16	13	58	15	12	54	13	11	48

SEE PAGE 30 FOR ALTERNATE BRANDS

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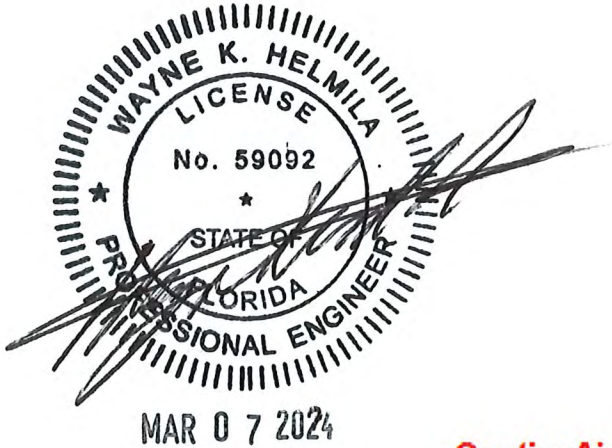
ENGINEERING

105 School Creek Trail
Luxemburg, WI 54217
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Fax: (920) 617-1100
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Florida Firm No: F-01000005061
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Notes:

1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202.
2. Tested for areas including high velocity hurricane zones.
3. Tested under Miami-Dade County Notification number ATI 22081.
4. Wood fastener penetration of 2" to be into wood framing below decking.



PRODUCT REVISED
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NOA-No. 24-0104.06
Expiration Date 03/04/2029
By *[Signature]*
Miami-Dade Product Control

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4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994

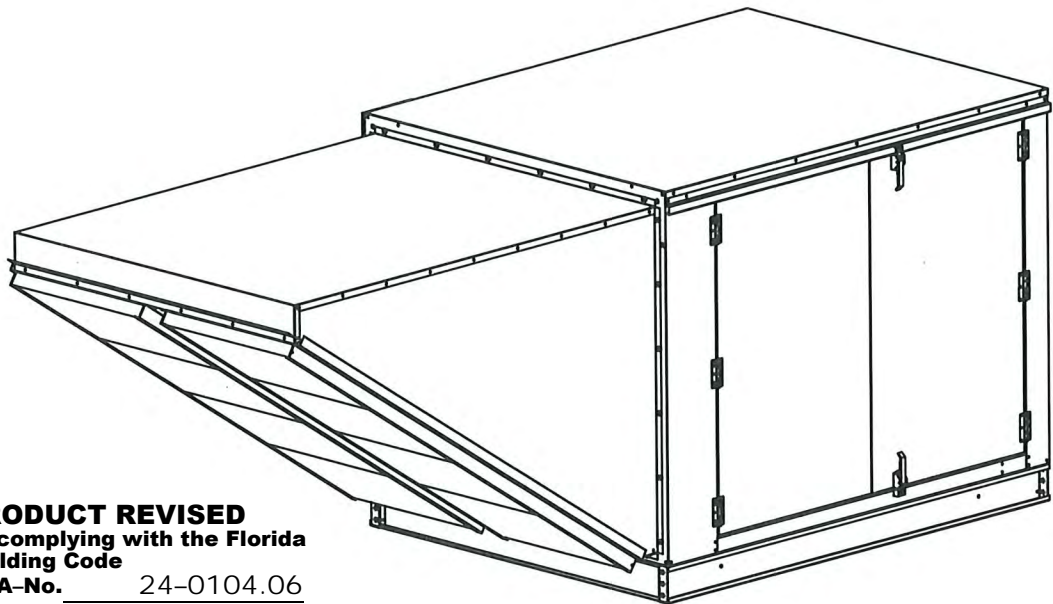
Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: $\pm 1/16$ Decimal: $.XX \pm .05$ $.XXX \pm .015$ Angles: $\pm 1^\circ$
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: USBI FAN SLED SERIES	
	Drawn By: C Galindo	
	Drawing Number: NOA2-24	
	Sheet: 24 of 30	

CAPTIVEAIRE
THE PERFORMANCE COMPANY

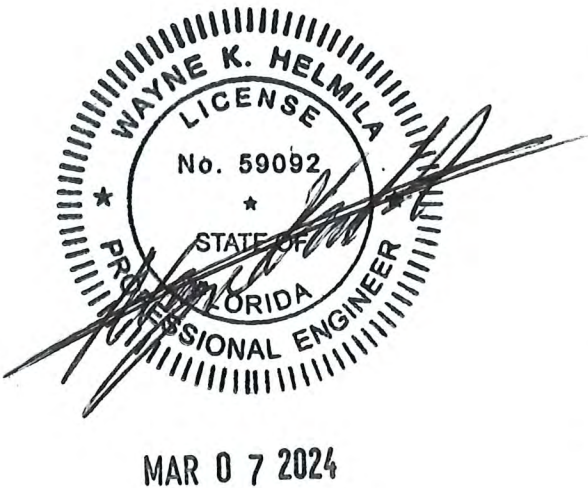
Dimensional Data - A Series Steel Supply Fans

General Notes:

- 1. This approval is for the structural capacity and impact rating of the exterior housing only; it does not include any interior mechanism or electrical part.
- 2. These fans have not been wind tested for Wind Driven Rain Test per Florida Building code, TAS100 (A)-95.



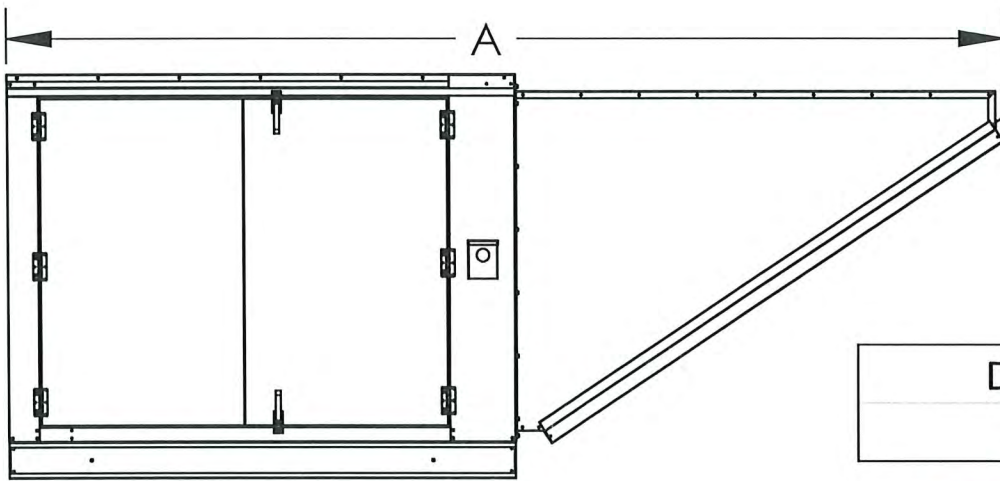
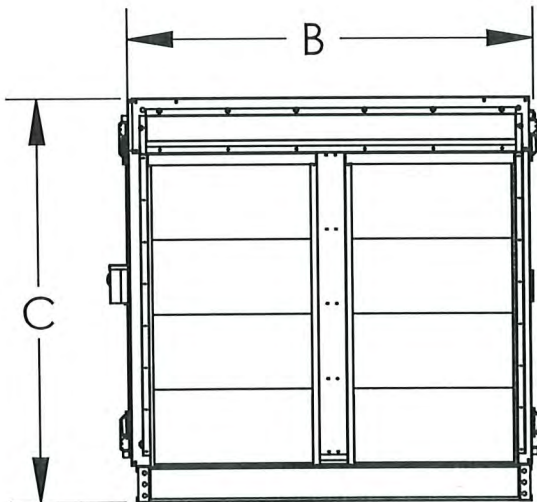
PRODUCT REVISED
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Expiration Date 03/04/2029
By [Signature]
Miami-Dade Product Control



Revision History				
#	Description	Revised by	ECN#	Date
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Updated Design Pressure Parameters	CAG	3189	7/14/23

HOUSING SIZE		A	B	C	WEIGHT (lbs)
		LENGTH (in)	WIDTH (in)	HEIGHT (in)	
MODULAR	1	76 1/2	27 3/8	26	250
	2	93 3/4	37 3/8	33	425
	3	96 3/4	41 3/8	38	525
	4	140 9/16	48 7/16	46 1/8	945
	5	145 9/16	59 3/16	53 1/8	1330
DIRECT FIRED	1.D	118 3/4	27 3/8	26	595
	2.D	136	37 3/8	33	810
	3.D	139	41 3/8	38	975
	4.D	194 7/8	48 7/16	46 1/8	1635
	5.D	199 7/8	59 3/16	53 1/8	2160
ELECTRIC	1.E	118 3/4	27 3/8	26	550
	2.E	136	37 3/8	33	805
	3.E	139	41 3/8	38	975
	4.E	194 7/8	48 7/16	46 1/8	1665
	5.E	199 7/8	59 3/16	53 1/8	2170
INDIRECT	1.I	149 1/8	36 11/16	48 3/4	925
	2.I	172 3/8	52 11/16	52 3/4	1315
	3.I	210 7/8	52 11/16	54 3/8	1995
STANDARD	1	57 7/8	26	28	210
	2	69 1/4	36	35	290

SEE PAGE 30 FOR ALTERNATE BRANDS



- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 - 2. Tested for areas including high velocity hurricane zones.
 - 3. Tested under Miami-Dade County Notification numbers ATI 08034 & 22081.

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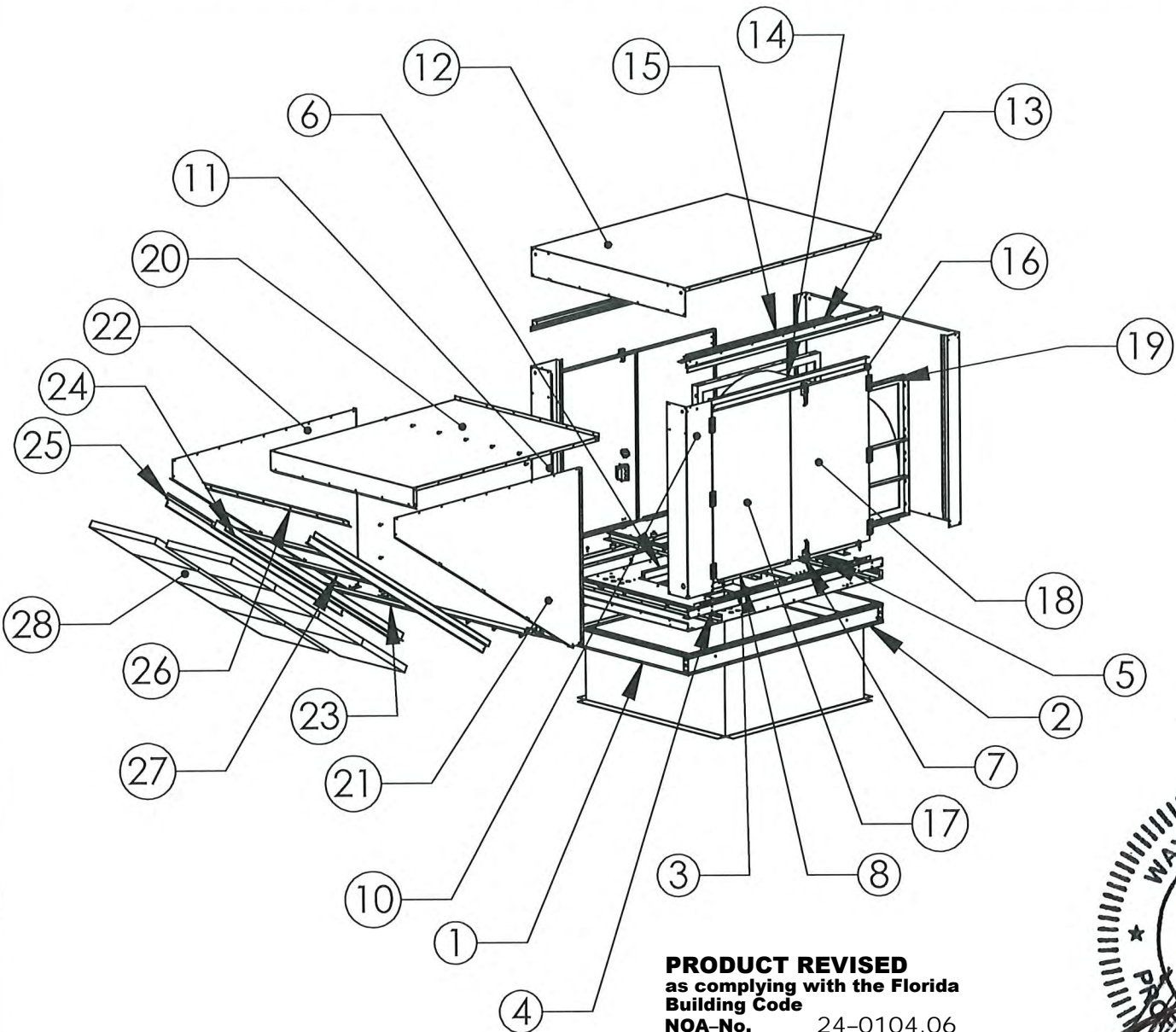
DESIGN PRESSURE: +100.0 / -100.0 PSF
LARGE MISSILE IMPACT RESISTANT

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: SUPPLY	
	Drawn By: N Perry	
	Drawing Number: NOA2-25	
	Sheet: 25 of 30	



Materials - A Series Steel Supply Fans



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Expiration Date 03/04/2029
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DESIGN PRESSURE: +100.0 / -100.0 PSF
LARGE MISSILE IMPACT RESISTANT

- Notes:
- 1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
 - 2. Tested for areas including high velocity hurricane zones.
 - 3. Tested under Miami-Dade County Notification numbers ATI 08034 & 22081.

Revision History				
#	Description	Revised by	ECN#	Date
1	Changes Per Dade County	N Perry	1446	12/30/08
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Updated Design Pressure Parameters	CAG	3189	7/14/23

RICE
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Certificate of Authorization: #9090
Wayne K. Helmila
Registration No: 59092



Item Number	Description	Material
1	End Flashing	18 Ga Galvanized G90
2	Main Rail	12 Ga Galvanized G90
3	Bottom	18 Ga Galvanized G90
4	Bottom Side	18 Ga Galvanized G90
5	Horizontal Support	10 Ga Galvanized G90
6	Discharge Cap	18 Ga Galvanized G90
7	Door Hook Back	18 Ga Galvanized G90
8	Door Hook Front	18 Ga Galvanized G90
9	Door Cup	18 Ga Galvanized G90
10	Right Front Post	18 Ga Galvanized G90
11	Left Front Post	18 Ga Galvanized G90
12	Lid	18 Ga Galvanized G90
13	Drip Rail	18 Ga Galvanized G90
14	Door Support	18 Ga Galvanized G90
15	Lid Support	14 Ga Galvanized G90
16	Back	18 Ga Galvanized G90
17	Door	18 Ga Galvanized G90
18	Back Door	18 Ga Galvanized G90
19	Blower	Steel
20	Awning Top	18 Ga Galvanized G90
21	Awning Right Side	18 Ga Galvanized G90
22	Awning Left Side	18 Ga Galvanized G90
23	Awning Bottom	18 Ga Galvanized G90
24	Awning Middle	18 Ga Galvanized G90
25	Awning Outside Rail	18 Ga Galvanized G90
26	Awning Rain Guard	18 Ga Galvanized G90
27	Awning Rail Spports	18 Ga Galvanized G90
28	20 X 25 X 2 Filters	Aluminum Mesh

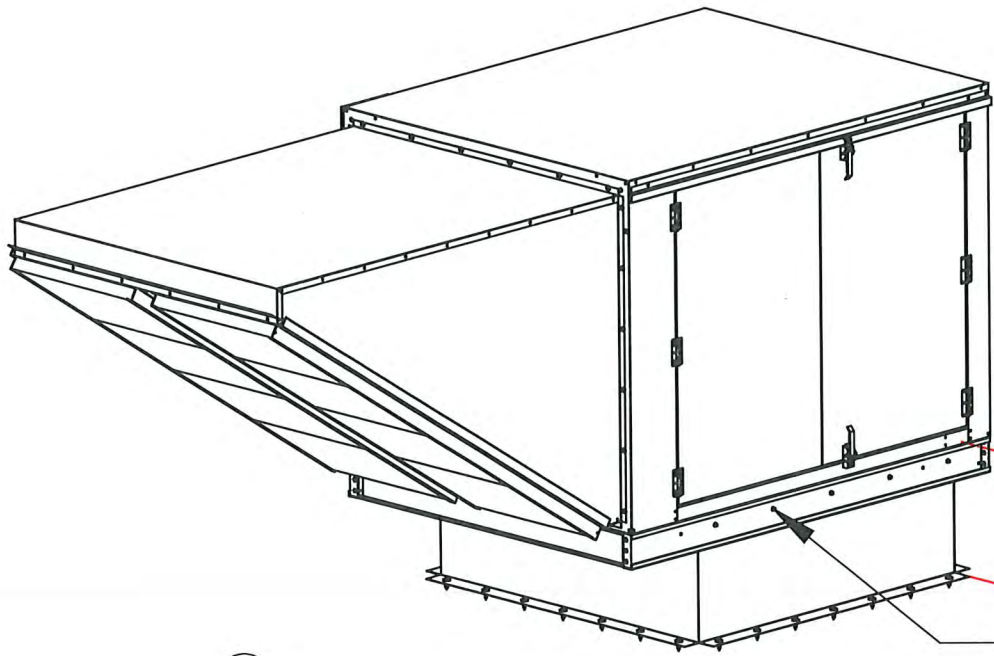
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4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994

Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: $\pm 1/16$ Decimal: .XX $\pm .05$.XXX $\pm .015$ Angles: $\pm 1^\circ$
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: SUPPLY	
	Drawn By: N Perry	
	Drawing Number: NOA2-26	
	Sheet: 26 of 30	



Installation - A Series Steel Supply Fans

Revision History				
#	Description	Revised by	ECN#	Date
1	Changes Per Dade County	N Perry	1446	12/30/08
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Updated Design Pressure Parameters	CAG	3189	7/14/23

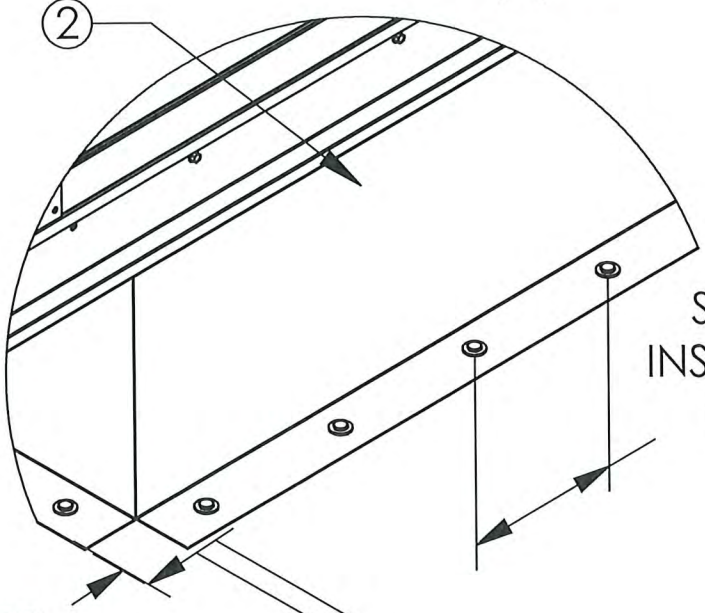


MAX CURB
HEIGHT 24"

1. SECURE FAN BASE TO TOP OF CURB USING 1/4"-14 X 1-1/2" ZINC PLATED STEEL SELF DRILLING SCREWS (A307 OR BETTER) THROUGH FAN RAILS. SEE PAGE 28 FOR QTY.

2. SECURE CURB TO ROOF FRAMING MEMBERS BY DRILLING 1/4" DIA PILOT HOLES IN CURB AT LOCATION SHOWN IN BOTTOM LEFT DIAGRAM. SEE PAGE 28 FOR FASTENER TYPE AND QTY.

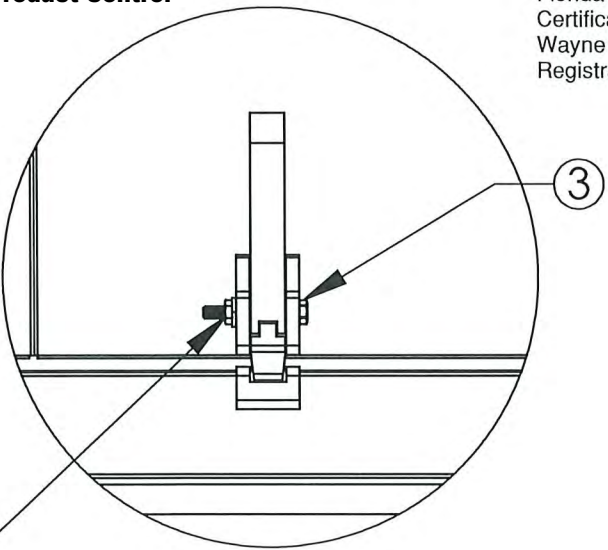
3. SECURE DOOR HANDLES BY INSTALLING 1/4"-20 X 2" ZINC PLATED STEEL BOLT THROUGH EACH DOOR HANDLE. SECURE BOLT WITH 1/4"-20 ZINC PLATED FLANGE NUT. TIGHTEN WITH IMPACT WRENCH. **RICE**



SEE CURB
INSTALLATION
DETAILS

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Registration No: 59092



SECURE WITH
1/4"-20 BOLT
AND FLANGE NUT



SEE CURB
INSTALLATION
DETAILS

SEE CURB
INSTALLATION
DETAILS

- Notes:
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Material: N/A	Part Number: A5-36D
Blank Size: N/A x N/A	MACOLA Number: N/A
Weight: N/A lbs	Drawing Name: SUPPLY
	Drawn By: N Perry
	Drawing Number: NOA2-27
	Sheet: 27 of 30

Unless Otherwise Specified
Dimensions are in Inches.
Standard Tolerances are:
Fractions: $\pm 1/16$
Decimal: $.XX \pm .05$
 $.XXX \pm .015$
Angles: $\pm 1^\circ$



Miami-Dade County - Roof Curb Installation Guide For Model A Series

Revision History				
#	Description	Revised by	ECN#	Date
2	HRE Dim Changes	N Perry	2181	11/19/10
3	Added RE Fan To NOA 2	N Perry	2152	4/27/12
4	Added USBI Fan To NOA 2	N Perry	2490	10/14/13
5	Updated Per FBC 2017	J Hess	2997	11/29/17
6	Added Alternate Brands to Drawings	JJH	3061	3/26/19
7	Changed TZ to TZ2 Anchor	JJH	--	3/8/21
8	Updated Design Pressure Parameters	CAG	3189	7/14/23

INSTALLATION FASTENER TYPES				
	Fan To Curb	Wood (SG = 0.42 Min.)	Steel (12 Gauge Min.)	Concrete (2500 psi Min. Cracked Concrete)
Fastener	1/4"-14 x 1-1/2" Self Drilling Screw (A307 OR BETTER)	3/8" Dia. Zinc Plated Lag Bolt	1/4"-14 Dril-Flex Self Drilling Screw	3/8" Dia. SS Hilti Kwik Bolt TZ2 Expansion Anchor
Minimum Thread Penetration	N/A	2"	12 Gauge	2-1/2"
Minimum Edge Distance	N/A	1-1/2"	3/8"	3"
Minimum End Distance	N/A	2-5/8"	3/8"	4"
Minimum Spacing	N/A	1-1/2"	3/4"	6"

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FASTENERS FOR WOOD & STEEL SUBSTRATES: SEAL WITH LIQUID PROSOCO FLASHING IF FASTENERS ARE EXPOSED TO EXTERIOR CONDITIONS. SEE NOTE 4.

INSTALLATION FASTENER QTY												
Fan Model	Curb to Fan			Wood			Steel			Concrete		
	Long Side	Short Side	Total	Long Side	Short Side	Total	Long Side	Per Side	Total	Long Side	Short Side	Total
Modular 1	2	2	8	4	3	14	3	2	10	3	2	10
Modular 2	2	2	8	5	4	18	4	3	14	4	3	14
Modular 3	3	2	10	5	5	20	5	4	18	4	4	16
Modular 4	5	4	18	9	6	30	7	5	24	7	5	24
Modular 5	7	5	24	10	8	36	8	6	28	8	6	28
Direct Fired 1	5	2	14	8	3	22	6	2	16	6	2	16
Direct Fired 2	4	2	12	9	4	26	6	2	16	7	3	20
Direct Fired 3	5	2	14	10	5	30	7	3	20	8	4	24
Direct Fired 4	9	3	24	16	6	44	11	4	30	13	5	36
Direct Fired 5	10	4	28	18	8	52	11	5	32	14	6	40
Electric 1	5	2	14	8	3	22	6	2	16	6	2	16
Electric 2	4	2	12	9	4	26	6	2	16	8	3	22
Electric 3	5	2	14	10	5	30	7	3	20	8	4	24
Electric 4	9	3	24	16	6	44	10	4	28	13	5	36
Electric 5	10	4	28	18	8	52	11	5	32	14	6	40
Indirect 1	9	4	26	14	6	40	12	5	34	12	5	34
Indirect 2	9	5	28	15	8	46	10	5	30	11	6	34
Indirect 3	12	4	32	22	8	60	13	5	36	19	7	52
Standard 1	2	2	8	4	3	14	3	2	10	3	2	10
Standard 2	3	2	10	4	4	16	4	3	14	4	3	14

SEE PAGE 30 FOR ALTERNATE BRANDS



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By 
Miami-Dade Product Control

Notes:

1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
2. Tested for areas including high velocity hurricane zones.
3. Tested under Miami-Dade County Notification numbers ATI 08034 & 22081.
4. Wood fastener penetration of 2" to be into wood framing below decking.

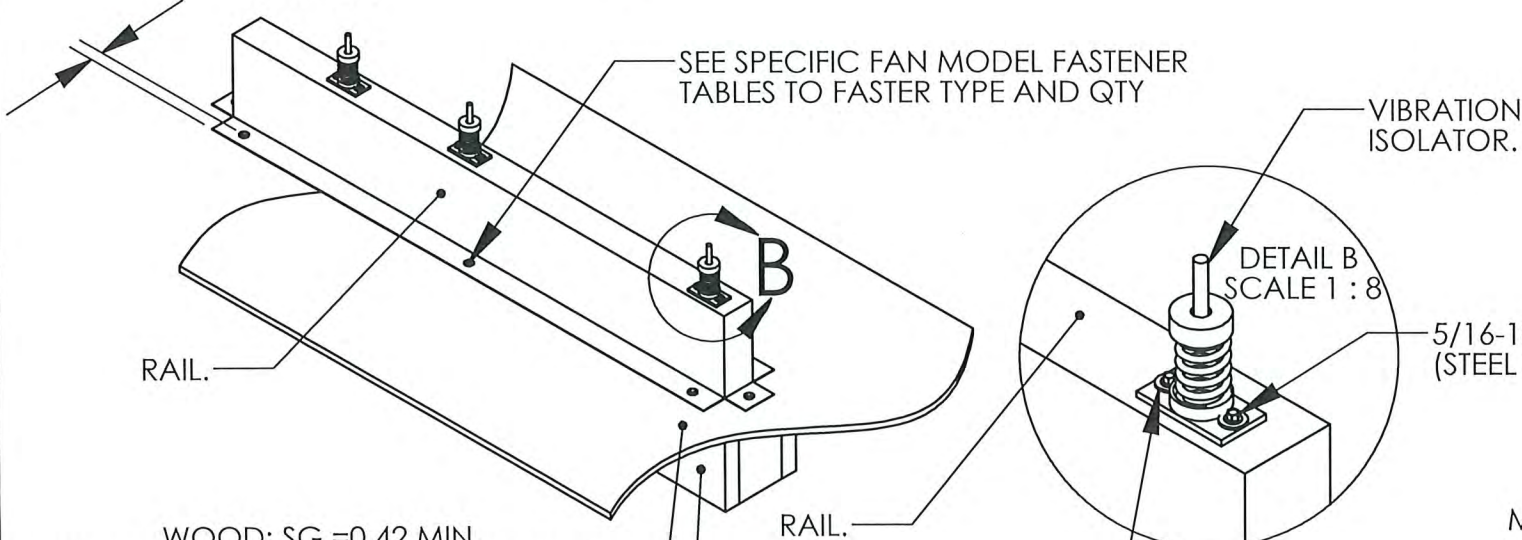
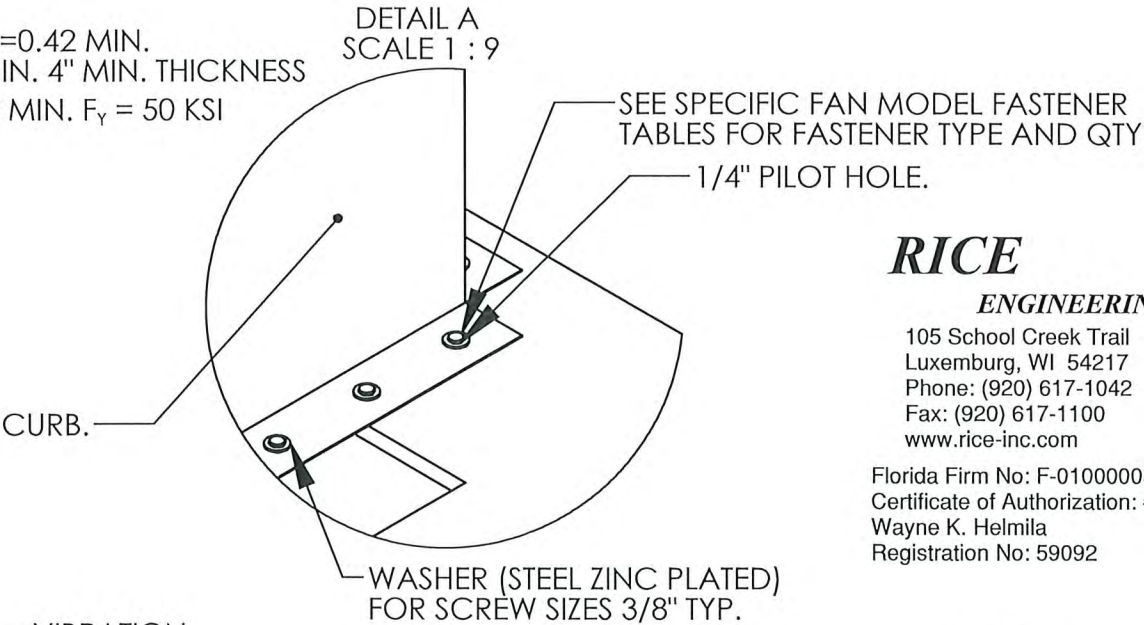
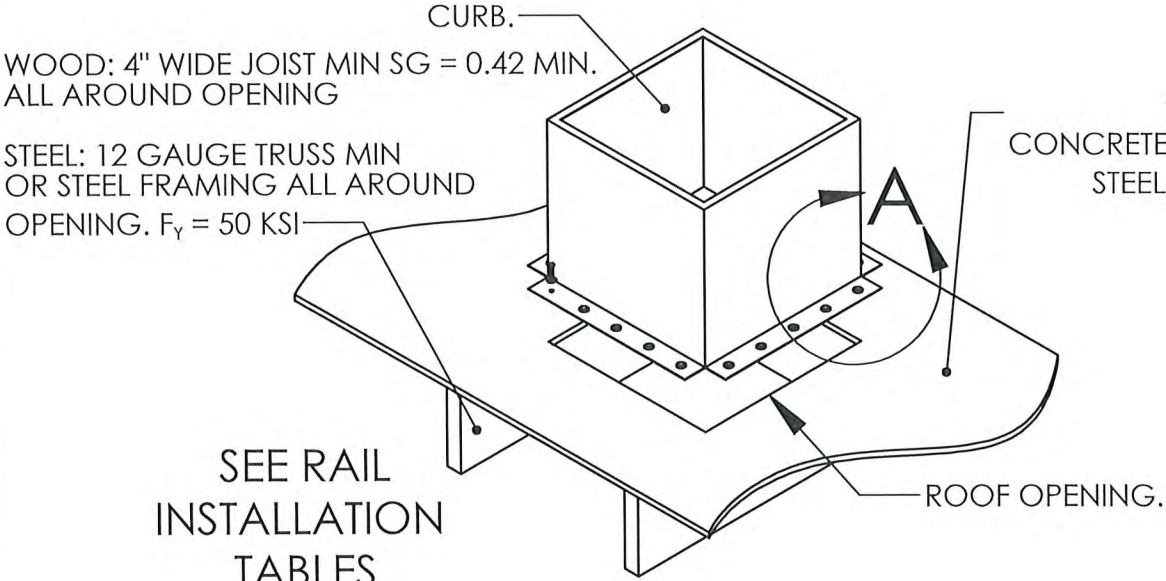
Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: $\pm 1/16$ Decimal: $.XX \pm .05$ $.XXX \pm .015$ Angles: $\pm 1^\circ$
Blank Size: N/A x N/A	MACOLA Number: N/A	
Weight: N/A lbs	Drawing Name: SUPPLY	
	Drawn By: N Perry	
	Drawing Number: NOA2-28	
	Sheet: 28 of 30	

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Miami-Dade County - Curb / Rail Installation Guide

CaptiveAire, Inc. commercial kitchen ventilation
4641 Paragon Park Road, Raleigh, NC 27616
P 800.334.925 | F 919.227.5994



WOOD: SG =0.42 MIN.
CONCRETE: 2500 PSI MIN. 4" MIN. THICKNESS
STEEL: 12 GAUGE MIN. F_y = 50 KSI

WOOD: 4" WIDE JOISTS MIN SG = 0.42 MIN.
AT EACH SIDE OF RAIL

WASHER (STEEL ZINC PLATED)
FOR SCREW SIZES 5/16-18"
(2) PLC'S TYP.

Installation Instructions.

1. Drill 1/4" pilot holes in the curb/rail flanges per this document.
2. Seal the bottom of the curb/rail flange to the roof decking using an approved sealant.
3. Secure the curb/rail to the roof Framing using hardware per Fan Installation Sheet for specific model.
4. Rails are used to support many different pieces of equipment both exhaust and supply.
5. Exhaust fans may be mounted directly to the rail or to vibration isolators mounted on the rail.
6. Vibration isolators are located per the sumittal drawing and mounted to the rail using listed hardware.

Notes:

1. Tested in accordance to Florida Building Code test protocol TAS-201, TAS-202, TAS203.
2. Tested for areas including high velocity hurricane zones.
3. Tested under Miami-Dade County Notification number ATI 08033 (NOA1) & ATI 08034 (NOA2).

Material: N/A
Blank Size: N/A x N/A
Weight: N/A lbs

Part Number: N/A
MACOLA Number: N/A
Drawing Name: CURB/RAIL INSTALLATION
Drawn By: N Perry
Drawing Number: NOA2-29
Sheet: 29 of 30

Unless Otherwise Specified
Dimensions are in Inches.
Standard Tolerances are:
Fractions: ±1/16
Decimal: .XX±.05
.XXX±.015
Angles: ±1°



RICE ENGINEERING

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ALTERNATE BRANDS

NOTE: THE DETAILED UNITS CAN BE LISTED UNDER THE FOLLOWING ALTERNATE BRANDS: ADVANCED HOOD SYSTEMS (AH-), AEROLATOR (AR-), AQUAMTIC (AM-), ECON AIR (EA-), FLOAIRE (FA), GREASEMASTER (GM), K-TECH (K), LDI (LA-), RUPP AIR (RA), STRATOVENT (SV-), SUNAIR (SA-), THERMOTEK (T), AND VENTILATION DIRECT (VX).

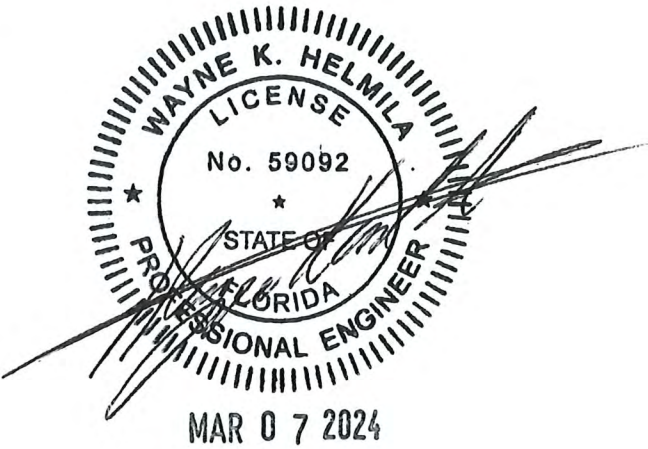
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STEEL UTILITY SETS	A-SERIES STEEL SUPPLY FANS	
CAS FAN MODEL	CAS FAN MODEL	
HRE13	MODULAR	1
HRE16		2
HRE20		3
HRE24		4
RE13BD		5
RE13DD	DIRECT FIRED	1.D
RE15BD		2.D
RE15DD		3.D
RE18BD		4.D
RE18DD		5.D
RE20BD	ELECTRIC	1.E
RE20DD		2.E
RE24BD		3.E
RE24DD		4.E
BI10		5.E
BI12	INDIRECT	1.I
BI13		2.I
BI15		3.I
BI16	STANDARD	1
BI18		2
BI20		N/A
BI22		N/A
BI24		N/A
BI27		N/A
BI30		N/A
BI33		N/A
BI36		N/A
CB10		N/A
CB12		N/A
CB15		N/A
CB18		N/A
CB20		N/A
CB22		N/A
CB24		N/A
CB27		N/A
CB30		N/A
CB36		N/A
USI137		N/A
USI161		N/A
USI200		N/A
USI245		N/A
USI270		N/A
USI300		N/A
USI330		N/A
USI365		N/A
USBI11		N/A
USBI13		N/A
USBI15		N/A
USBI18		N/A
USBI20		N/A
USBI24		N/A
USBI30		N/A
USBI36		N/A
USBIDUCTSLED11		N/A
USBIFANSLED11		N/A
USBIDUCTSLED13		N/A
USBIFANSLED13		N/A
USBIDUCTSLED15		N/A
USBIFANSLED15		N/A
USBIDUCTSLED18		N/A
USBIFANSLED18		N/A
USBIDUCTSLED20		N/A
USBIFANSLED20		N/A
USBIDUCTSLED24		N/A
USBIFANSLED24		N/A
USBIDUCTSLED30		N/A
USBIFANSLED30		N/A
USBIDUCTSLED36		N/A
USBIFANSLED36		N/A

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Material: N/A	Part Number: N/A	Unless Otherwise Specified Dimensions are in Inches. Standard Tolerances are: Fractions: ±1/16 Decimal: .XX±.05 .XXX±.015 Angles: ±1°
Blank Size: N/A	MACOLA Number: N/A	
Weight: N/A	Drawing Name: ALTERNATE BRANDS	
	Drawn By: CAG	
	Drawing Number: NOA2-30	
	Sheet: 30 of 30	

